200 West Mercer St. • Suite 401 • Seattle, WA 98119
Phone: 206.378.1364 • Fax: 206. 973.3048 • www.windwardenv.com

MEMORANDUM

To: Ravi Sanga, USEPA

From: Susan McGroddy, Windward Environmental on behalf of the Port of Seattle

cc: Doug Hotchkiss, Port of Seattle, Pete Rude, City of Seattle, Jeff Stern and Debra Williston, King County

Subject: Results of the additional PAH analysis for intertidal surface sediment samples from EW

Date: February 14, 2011

INTRODUCTION

The polycyclic aromatic hydrocarbon (PAH) concentrations in the East Waterway (EW) intertidal multi-increment sampling (MIS) samples were highly variable (Table 1). Of the three area-wide MIS replicate samples, EW09-ITSED-AWMIS-03 contained substantially higher concentrations of PAHs than the other two area-wide MIS samples and were higher than the PAH concentrations in the single public access area intertidal sediment sample. The PAH concentrations reported for this MIS replicate sample were sufficiently high to result in a preliminary estimate of excess cancer risk greater than 1×10^{-6} for direct contact associated with tribal clamming reasonable maximum exposure (RME) scenario in the HHRA. This variance suggests that one or more sediment grab samples within the MIS sample (AWMIS-03) contained elevated PAH concentrations relative to the grab samples that went into the other replicate MIS samples.

This memo was prepared to provide the sampling design and results for the additional PAH analyses that were conducted in order to identify the area with elevated PAH concentrations. The results of these analyses will be used in the nature and extent evaluation in the Remedial Investigation and the Feasibility Study and will not be used in the risk assessments.

Table 1. PAH results for MIS intertidal surface sediment samples

Chemical	Concentration (µg/kg dw)			
	Area-Wide MIS Samples			Public Access Area Sample
	EW09-ITSED-AWMIS-01	EW09-ITSED-AWMIS-02	EW09-ITSED-AWMIS-03	EW09-ITSED-PAMIS-01
1-Methylnaphthalene	35	57	640	690
2-Chloronaphthalene	20 U	19 U	20 U	20 U
2-Methylnaphthalene	35	61	740	11 J
Acenaphthene	44	74	820	29
Acenaphthylene	62	40	20 U	19 J
Anthracene	240	170 J	1,100	140
Benzo(a)anthracene	480	320	1,500	290
Benzo(a)pyrene	550	320	1,400	270
Benzo(b)fluoranthene	550	300	1,000	310
Benzo(g,h,i)perylene	170	110	440	58
Benzo(k)fluoranthene	550	300	1,000	310
Total benzofluoranthenes	1,100	600	2,000	620
Chrysene	740	450 J	1,500	440
Dibenzo(a,h)anthracene	110	60	260	45
Dibenzofuran	27	44	340	10 J
Fluoranthene	790	850 J	3,700	580
Fluorene	74	100	940	20
Indeno(1,2,3-cd)pyrene	200	120	480	71
Naphthalene	28	85 J	850	14 J
Phenanthrene	560	800 J	5,100	180
Pyrene	690	720	3,900	510
Total HPAHs	4,830	3,550 J	15,200	2,880
Total LPAHs	1,010	1,270 J	8,800	400 J
Total cPAHs	780	450 J	1,900	390
Total PAHs	5,840	4,820 J	24,000	3,290 J

DL – detection limit
dw – dry weight
cPAH – carcinogenic polycyclic aromatic hydrocarbon
HPAH – high-molecular-weight polycyclic aromatic hydrocarbon
J – estimated concentration
LPAH – low-molecular-weight polycyclic aromatic hydrocarbon
MIS – multi-increment sampling
PAH – polycyclic aromatic hydrocarbon
U – not detected at reporting limit shown

SAMPLE DESIGN

Archived sediment volume from discrete sampling points used to create the MIS samples were combined by geographic subarea to create 15 composites to represent beach areas. Locations of discrete points and associated composite area are presented on Maps 1-3. Areas 1 and 3 were divided by subarea because of the size of these sampling areas (Map 1). Subarea 3D was combined with Subarea 3C because only two samples are available for Subarea 3D.

The archive jars were collected(August 17-20, 2009) and archived frozen at ARI. The frozen archive jars for each location were defrosted and homogenized. Then, the entire contents of the 8 oz jars were combined and thoroughly homogenized. A subsample of this homogenate was analyzed as the intertidal composite sample. The discrete samples that were included in each of the intertidal area composites are identified in Table 2.

Each composite sample was analyzed for PAHs by EPA 8270-SIM and total organic carbon following the protocols described in the Surface Sediment QAPP (Windward 2009). The data will be used to support the nature and extent evaluation of PAHs in the SRI and for development of remedial alternatives in the FS.

Table 2. Intertidal area composite ID and individual samples for each composite

Intertidal Area Composite ID	Individual Sample IDs	
EW10-01A-COMP	EW09-1A-ITSD01 EW09-1A-ITSD02 EW09-1A-ITSD03 EW09-1A-ITSD04 EW09-1A-ITSD05 EW09-1A-ITSD06 EW09-1A-ITSD07	EW09-1A-ITSD08 EW09-1A-ITSD09 EW09-1A-ITSD10 EW09-1A-ITSD11 EW09-1A-ITSD12 EW09-1A-ITSD13
EW10-01B-COMP	EW09-1B-ITSD01 EW09-1B-ITSD02 EW09-1B-ITSD03 EW09-1B-ITSD04 EW09-1B-ITSD05 EW09-1B-ITSD06 EW09-1B-ITSD07	EW09-1B-ITSD08 EW09-1B-ITSD09 EW09-1B-ITSD10 EW09-1B-ITSD11 EW09-1B-ITSD12 EW09-1B-ITSD13
EW10-01C-COMP	EW09-1C-ITSD01 EW09-1C-ITSD02 EW09-1C-ITSD03 EW09-1C-ITSD04 EW09-1C-ITSD05 EW09-1C-ITSD06	EW09-1C-ITSD07 EW09-1C-ITSD08 EW09-1C-ITSD09 EW09-1C-ITSD10 EW09-1C-ITSD11 EW09-1C-ITSD12

Intertidal Area Composite ID	Individual Sample IDs	
EW10-02-COMP	EW09-2-ITSD01 EW09-2-ITSD02 EW09-2-ITSD03 EW09-2-ITSD04 EW09-2-ITSD05	EW09-2-ITSD06 EW09-2-ITSD07 EW09-2-ITSD08 EW09-2-ITSD09
EW10-03A-COMP	EW09-3A-ITSD01 EW09-3A-ITSD02 EW09-3A-ITSD03 EW09-3A-ITSD04 EW09-3A-ITSD05 EW09-3A-ITSD06 EW09-3A-ITSD07	EW09-3A-ITSD08 EW09-3A-ITSD09 EW09-3A-ITSD10 EW09-3A-ITSD11 EW09-3A-ITSD12 EW09-3A-ITSD13
EW10-03B-COMP	EW09-3B-ITSD01 EW09-3B-ITSD02 EW09-3B-ITSD03 EW09-3B-ITSD04 EW09-3B-ITSD05 EW09-3B-ITSD06 EW09-3B-ITSD07	EW09-3B-ITSD08 EW09-3B-ITSD09 EW09-3B-ITSD10 EW09-3B-ITSD11 EW09-3B-ITSD12 EW09-3B-ITSD13
EW10-03C-COMP	EW09-3C-ITSD01 EW09-3C-ITSD02 EW09-3C-ITSD03 EW09-3C-ITSD04 EW09-3C-ITSD05 EW09-3C-ITSD06 EW09-3C-ITSD07 EW09-3C-ITSD08 EW09-3C-ITSD09	EW09-3C-ITSD10 EW09-3C-ITSD11 EW09-3C-ITSD12 EW09-3C-ITSD13 EW09-3C-ITSD14 EW09-3D-ITSD01 EW09-3D-ITSD02
EW10-04-COMP	EW09-4-ITSD01 EW09-4-ITSD02 EW09-4-ITSD03	EW09-4-ITSD04 EW09-4-ITSD05 EW09-4-ITSD06
EW10-05-COMP	EW09-5-ITSD01 EW09-5-ITSD02 EW09-5-ITSD03	
EW10-06-COMP	EW09-6-ITSD01 EW09-6-ITSD02 EW09-6-ITSD03	
EW10-07-COMP	EW09-7-ITSD01 EW09-7-ITSD02 EW09-7-ITSD03	EW09-7-ITSD04 EW09-7-ITSD05 EW09-7-ITSD06
EW10-08-COMP	EW09-8-ITSD01 EW09-8-ITSD02 EW09-8-ITSD03	EW09-8-ITSD04 EW09-8-ITSD05 EW09-8-ITSD06
EW10-09-COMP	EW09-9-ITSD01 EW09-9-ITSD02 EW09-9-ITSD03	EW09-9-ITSD04 EW09-9-ITSD05 EW09-9-ITSD06

Intertidal Area Composite ID	Individual Sample IDs	
EW10-10-COMP	EW09-10-ITSD01 EW09-10-ITSD02 EW09-10-ITSD03 EW09-10-ITSD04 EW09-10-ITSD05	EW09-10-ITSD06 EW09-10-ITSD07 EW09-10-ITSD08 EW09-10-ITSD09
EW10-11-COMP	EW09-11-ITSD01 EW09-11-ITSD02 EW09-11-ITSD03 EW09-11-ITSD04 EW09-11-ITSD05 EW09-11-ITSD06 EW09-11-ITSD07	EW09-11-ITSD08 EW09-11-ITSD09 EW09-11-ITSD10 EW09-11-ITSD11 EW09-11-ITSD12 EW09-11-ITSD13 EW09-11-ITSD14

RESULTS

Results of the additional PAH analysis of intertidal surface sediment is presented in Table 3. All 21 PAHs were detected at 7 of the 15 composite locations and at least 6 PAHs were detected at all composite locations. The highest concentrations were found at locations EW10-05-COMP and EW10-06-COMP with total PAH concentrations of 52,000 and 260,000 µg/kg respectively. Maps 1-3 present the total PAH concentrations for all locations.

Table 3. PAH results for intertidal surface sediment composite samples

Chemical	Concentration (µg/kg dw)														
	EW10-01A-COMP	EW10-01B-COMP	EW10-01C-COMP	EW10-02-COMP	EW10-03A-COMP	EW10-03B-COMP	EW10-03C-COMP	EW10-04-COMP	EW10-05-COMP	EW10-06-COMP	EW10-07-COMP	EW10-08-COMP	EW10-09-COMP	EW10-10-COMP	EW10-11-COMP
1-Methylnaphthalene	20 UJ	21 UJ	20 UJ	24 UJ	14 J	19 UJ	20 UJ	86 J	290 J	4,400 J	38 J	27 J	14 J	10 J	19 UJ
2-Methylnaphthalene	20 UJ	21 UJ	20 UJ	24 UJ	16 J	19 UJ	15 J	91 J	430 J	5,200 J	50 J	23 J	16 J	16 J	19 UJ
Acenaphthene	20 UJ	21 UJ	20 UJ	24 UJ	50 J	19 UJ	27 J	170 J	890 J	5,600 J	230 J	61 J	18 J	16J	42 J
Acenaphthylene	20 UJ	21 UJ	20 UJ	24 UJ	37 J	19 UJ	22 J	130 J	130 J	80 UJ	43 J	20 J	20 J	19 UJ	19 UJ
Anthracene	20 UJ	21 UJ	20 UJ	44 J	390 J	32 J	160 J	390 J	2,300 J	11,000 J	340 J	80 J	72 J	67 J	41 J
Benzo(a)anthracene	20 UJ	21 UJ	20 UJ	98 J	1,800 J	82 J	360 J	980 J	2,300 J	16,000 J	680 J	150 J	170 J	96 J	120 J
Benzo(a)pyrene	20 UJ	11 J	20 UJ	160 J	1,800 J	110 J	450 J	1,400 J	3,200 J	12,000 J	790 J	150 J	220 J	71 J	120 J
Benzo(g,h,i)perylene	20 UJ	21 UJ	20 UJ	80 J	440 J	39 J	130 J	640 J	940 J	2,200 J	170 J	45 J	62 J	43 J	27 J
Chrysene	13 J	17 J	13 J	200 J	2,800 J	230 J	850 J	1,600 J	4,400 J	17,000 J	1,400 J	200 J	240 J	170 J	180 J
Dibenzo(a,h)anthracene	20 UJ	21 UJ	20 UJ	36 J	240 J	23 J	68 J	190 J	460 J	1,300 J	79 J	26 J	34 J	19 UJ	16 J
Dibenzofuran	20 UJ	21 UJ	20 UJ	24 UJ	20 J	19 UJ	29 J	93 J	640 J	2,100 J	61 J	36 J	16 J	14 J	19 UJ
Fluoranthene	18 J	20 J	15 J	200 J	5,200 J	150 J	1,000 J	3,500 J	11,000 J	44,000 J	3,000 J	410 J	380 J	290 J	240 J
Fluorene	20 UJ	21 UJ	20 UJ	24 UJ	44 J	19 UJ	64 J	210 J	1,100 J	8,300 J	90 J	37 J	21 J	18 J	11 J
Indeno(1,2,3-cd)pyrene	20 UJ	21 UJ	20 UJ	74 J	460 J	40 J	140 J	540 J	1,000 J	2,500 J	180 J	52 J	69 J	35 J	30 J
Naphthalene	20 UJ	21 UJ	20 UJ	24 UJ	24 J	19 UJ	12 J	240 J	980 J	5,600 J	97 J	49 J	19 J	20 J	16 J
Phenanthrene	20 UJ	21 UJ	20 UJ	86 J	340 J	62 J	380 J	2,600 J	7,900 J	62,000 J	460 J	150 J	200 J	81 J	71 J
Pyrene	20 J	51 J	16 J	340 J	5,100 J	180 J	1,000 J	3,800 J	9,100 J	52,000 J	2,900 J	370 J	480 J	220 J	390 J
Total benzofluoranthenes	22 J	30 J	23 J	360 J	3,400 J	260 J	1,200 J	2,400 J	6,300 J	20,000 J	2,000 J	320 J	460 J	180 J	280 J
Total HPAHs	73 J	129 J	67 J	1,550 J	21,200 J	1,110 J	5,200 J	15,100 J	39,000 J	167,000 J	11,200 J	1,720 J	2,120 J	1,105 J	1,400 J
Total LPAHs	20 UJ	21 UJ	20 UJ	130 J	890 J	94 J	670 J	3,700 J	13,300 J	93,000 J	1,260 J	400 J	350 J	228 J	181 J
Total cPAHs	18 J	20 J	18 J	230 J	2,500 J	160 J	660 J	1,900 J	4,400 J	17,000 J	1,100 J	210 J	310 J	108 J	170 J
Total PAHs	73 J	129 J	67 J	1,680 J	22,100 J	1,210 J	5,900 J	18,800 J	52,000 J	260,000 J	12,500 J	2,120 J	2,470 J	1,333 J	1,580 J

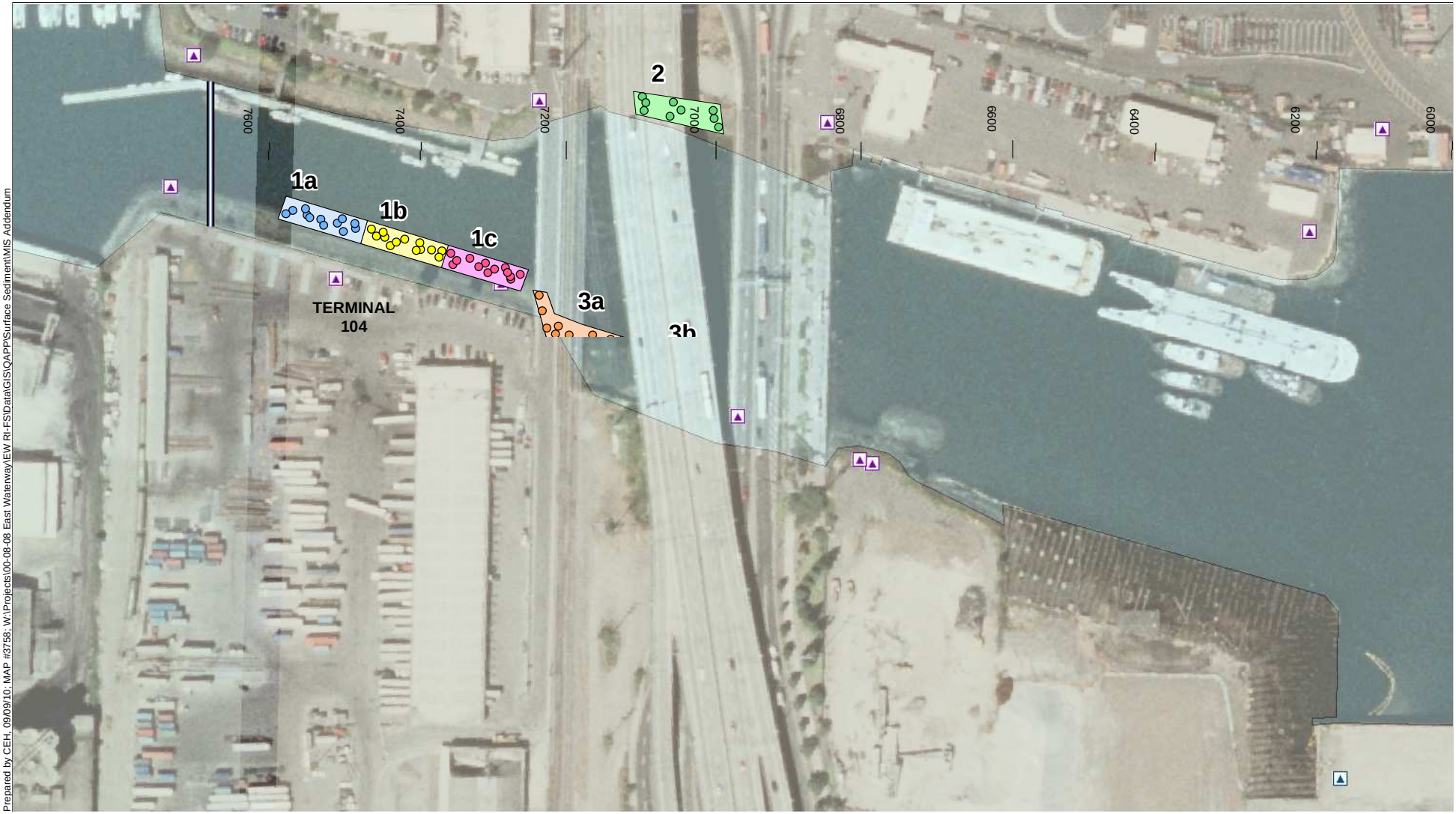
dw – dry weight
HPAH – high-molecular-weight polycyclic aromatic hydrocarbon
J – estimated concentration
LPAH – low-molecular-weight polycyclic aromatic hydrocarbon
PAH – polycyclic aromatic hydrocarbon
U – not detected at reporting limit shown

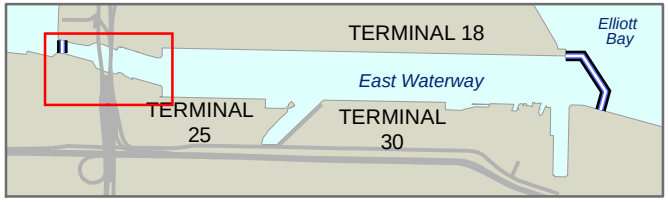
DATA VALIDATION

Independent, summary-level data validation was performed on all results by EcoChem. The data validation report is Attachment 1. Data validation included a review of all quality control summary forms, including initial calibration, continuing calibration verification (CCV), internal standard, surrogate, laboratory control sample (LCS), matrix spike/ matrix spike duplicate (MS/MSD), and standard reference material (SRM) summary forms. All sample results were qualified with a J, indicating an estimated value, due to exceedance of sample hold times. No other qualifiers were applied to the data as a result of data validation. Based on the information reviewed, the overall data quality was considered acceptable for all uses, as qualified.

REFERENCES

Windward. 2009. Quality assurance project plan: intertidal MIS sediment sampling. East Waterway Operable Unit supplemental remedial investigation/feasibility study. Windward Environmental LLC, Seattle, WA.

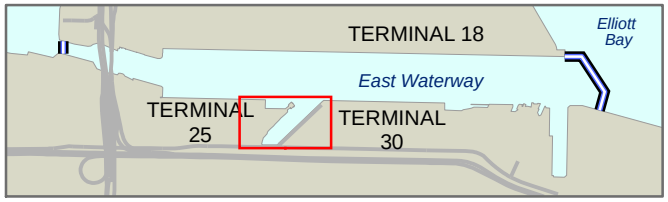




0 300
Scale in feet

Map 1
Intertidal Surface Sediment Sampling Areas
East Waterway Study Area

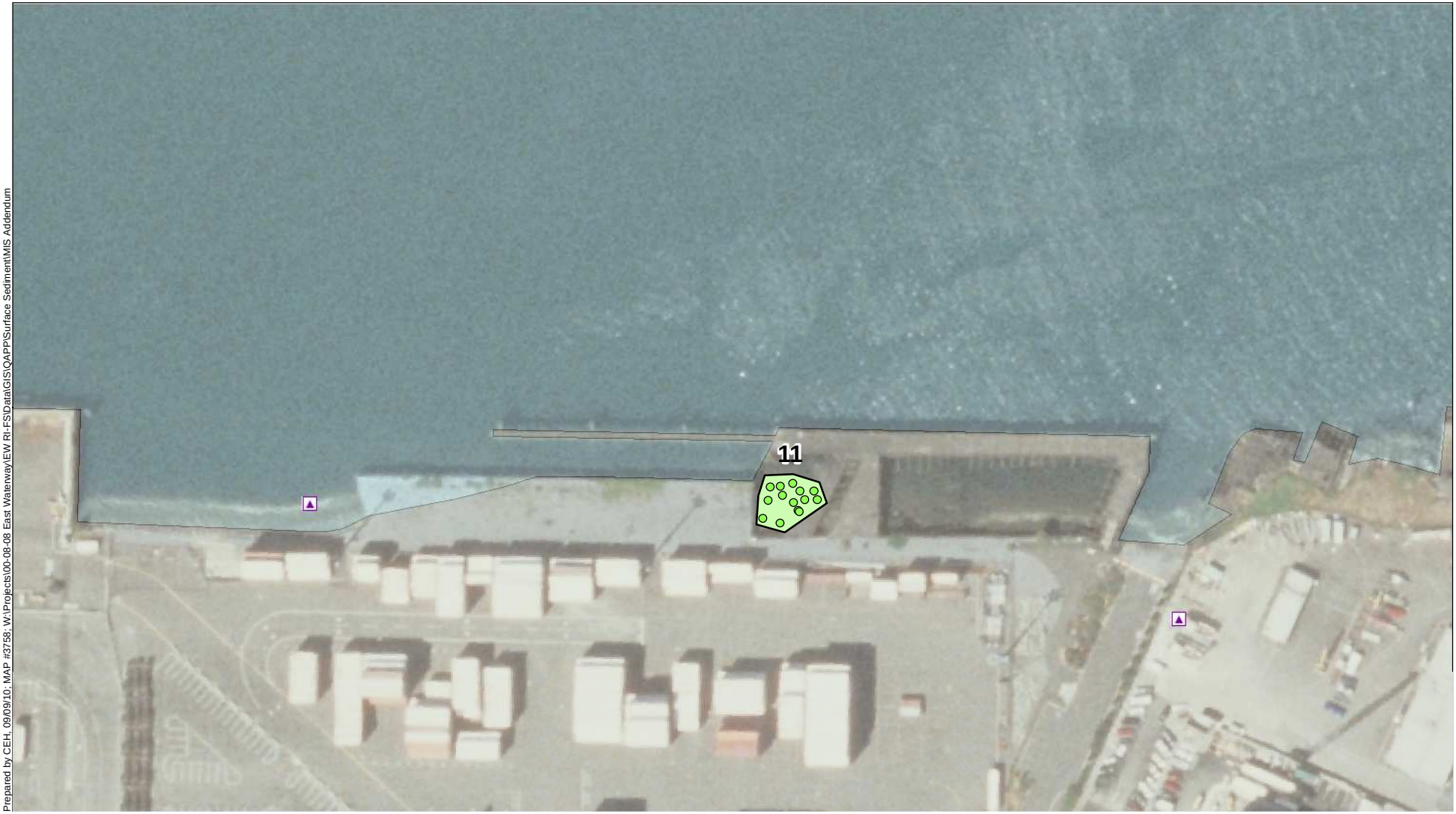
Prepared by CEH, 09/09/10; MAP #3758; W:\Projects\00-08-08 East Waterway\EW RI-FS\Data\GIS\QAPP\Surface Sediment\MIS Addendum



0 300
Scale in feet

Map 2
Intertidal Surface Sediment Sampling Areas
East Waterway Study Area

Prepared by CEH, 09/09/10; MAP #3758; W:\Projects\00-08-08 East Waterway\EW RI-FS\Data\GIS\QAPP\Surface Sediment\MS Addendum

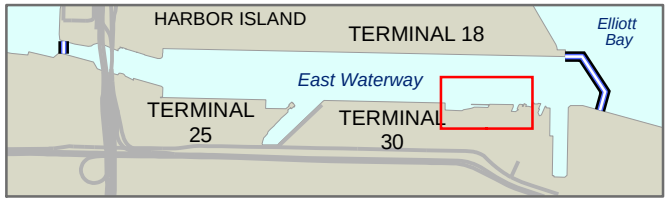


Prepared by CEH, 09/09/10; MAP #3758; W:\Projects\00-08-08 East Waterway\EW RI-FS\Data\GIS\QAPP\Surface Sediment\MS Addendum

0 300

Scale in feet

- Intertidal Surface Sediment Sampling Location
- Intertidal Surface Sediment Areas of Interest
- Storm Drain
- East Waterway Study Area Boundary



Map 3
Intertidal Surface Sediment Sampling Areas
East Waterway Study Area

Table of Contents: ARI Job SH20

Client: Windward Environmental, LLC

Project: 09-08-09-46 EW RI/FS Surface Sediment

	Page From:	Page To:
Inventory Sheet		
Cover Letter	1	1
Chain of Custody Documentation	2	7
Case Narrative, Data Qualifiers, Control Limits	8	17
Semivolatile PAH Analysis		
Report and Summary QC Forms	18	30
Geotechnical Analysis		
Report and Summary QC Forms	NA	NA
Total Solids		
Report and Summary QC Forms	31	33
Semivolatile PAH Raw Data		
Extractions Bench Sheets and Notes	34	36
Initial Calibration	37	163
Run Logs, Continuing Calibrations, and Raw Data	164	228
Geotechnical Raw Data		
Analyst Notes and Raw Data	NA	NA

Signature

February-07-2011
Date

Analytical Resources, Incorporated
Analytical Chemists and Consultants

February 9, 2011

Susan McGroddy
Windward Environmental
200 West Mercer Street Suite 401
Seattle, WA 98119

RE: Project: (MIS) Intertidal Sediments – Additional Testing
ARI Job No: SH20

Dear Susie:

Please find enclosed Chain-of-Custody (COC) records, sample receipt documentation, and the final data package for samples from the project referenced above.

Sample receipt and details of these analyses are discussed in the Case Narrative.

An electronic copy of this package will remain on file with ARI. Should you have any questions or problems, please feel free to contact me at your convenience.

Sincerely,

ANALYTICAL RESOURCES, INC.

Susan Dunnihoo
Director, Client Services
sue@arilabs.com
206-695-6207

Enclosures

cc: eFile SH20

SD/sdrd

4611 South 134th Place, Suite 100 • Tukwila WA 98168 • **206-695-6200** • **206-695-6201** fax

Chain of Custody Documentation

ARI Job ID: SH20

CHAIN-OF-CUSTODY/TEST REQUEST FORM

№ 2743

Project/Client Name: EW R1/FS Surface Sediment MIS
Project Number: 09-08-09-46
Contact Name: Marina Mitchell
Sampled By: CL, JF, RB, MY

Ship to: ARI
Attn: Sue Dunniveo
Shipper: Windward Env
Form filled out by: Clements

Shipping Date: 8.19.09
Airbill Number:
Turnaround requested:

Sample Collection Date (m/d/y)	Time	Sample Identification	Volume of Sample / # of Containers	Matrix	Test(s) Requested (check test(s) required): Archive							Comments / Instructions [Jar tag number(s)]
8.19.09	927	EW09-04-1TSED01	2	sediment	X							
	934	EW09-04-1TSED02										
	940	EW09-04-1TSED03										
	946	EW09-04-1TSED04										NOTE:
	950	EW09-04-1TSED05										Archive all
	956	EW09-04-1TSED06										samples frozen
	1010	EW09-05-1TSED01										until further
	1015	EW09-05-1TSED02										instructions
	1020	EW09-05-1TSED03										
	1033	EW09-06-1TSED01										
	1040	EW09-06-1TSED02										
	1045	EW09-06-1TSED03										
		Total Number of Containers		Purchase Order / Statement of Work #								

1) Released by:	1) Rec'd by:	2) Released by:	2) Rec'd by:
Print name: Joanna Florer	J. Peterson	Print name:	
Signature:	Company: ARI	Signature:	Company:
Company: Windward		Company:	
Date/Time: 8/19/09 1705	Date/Time: 8/19/09 1705	Date/Time:	Date/Time:

* Distribution: White copies accompany shipment; yellow retained by consignor.

To be completed by Laboratory upon sample receipt:

Date of receipt:	Laboratory W.O. #:
Condition upon receipt:	Time of receipt:
Cooler temperature:	Received by:

Windward environmental LLC
200 West Mercer Street
Suite 401
Seattle, WA 98119
Tel: (206) 378-1364
Fax: (206) 217-9343

SH20:00003

2 of 4

CHAIN-OF-CUSTODY/TEST REQUEST FORM

№ 2761

Project/Client Name: EW P1/P5 Surface Sediment MIS
Project Number: 09-08-09-46
Contact Name: Manna Mitchell
Sampled By: CL, JF, RB, MY

Ship to: ARI
Attn: Sue Dunnihoo
Shipper: Windward Env
Form filled out by: Clarenz

Shipping Date: 8.19.09
Airbill Number:
Turnaround requested:

Sample Collection Date (m/d/y)	Time	Sample Identification	Volume of Sample / # of Containers	Matrix	Test(s) Requested (check test(s) required): Archive							Comments / Instructions [Jar tag number(s)]
8.19.09	1115	EW09-09-1TSED01	2	Sediment	X							
	1123	EW09-09-1TSED02										
	1128	EW09-09-1TSED03										
	1134	EW09-09-1TSED04										NOTE:
	1140	EW09-09-1TSED05										Archive all
	1145	EW09-09-1TSED06										samples frozen
	1140	EW09-08-1TSED01										until further
	1143	EW09-08-1TSED02										instructions
	1146	EW09-08-1TSED03										
	1150	EW09-08-1TSED04										
	1153	EW09-08-1TSED05										
	1156	EW09-08-1TSED06										
		Total Number of Containers	[illegible]	Purchase Order / Statement of Work #								

1) Released by:	1) Rec'd by:	2) Released by:	2) Rec'd by:
Print name: Joanna Florer	J. Peterson	Print name:	
Signature:	Company: ARI	Signature:	Company:
Company: Windward		Company:	
Date/Time: 8/19/09 1705	Date/Time: 8/19/09 1708	Date/Time:	Date/Time:

* Distribution: White copies accompany shipment; yellow retained by consignor.

To be completed by Laboratory upon sample receipt:

Date of receipt:	Laboratory W.O. #:
Condition upon receipt:	Time of receipt:
Cooler temperature:	Received by:

Windward environmental LLC
200 West Mercer Street
Suite 401
Seattle, WA 98119
Tel: (206) 378-1364
Fax: (206) 217-9343

SH20 : 00004

3 of 4

CHAIN-OF-CUSTODY/TEST REQUEST FORM

№ 2742

Project/Client Name: EWR1/FS Surface Sediment MIS
Project Number: 09-08-09-46
Contact Name: Manna Mitchell
Sampled By: CL, JE, RB, MY

Ship to: ARI
Attn: Sue Dunnihoo
Shipper: Windward Env.
Form filled out by: Clarenz

Shipping Date: 8-19-09
Airbill Number:
Turnaround requested:

Sample Collection Date (m/d/y)	Time	Sample Identification	Volume of Sample / # of Containers	Matrix	Test(s) Requested (check test(s) required): Archive							Comments / Instructions [Jar tag number(s)]
8-19-09	1105	EW09-07-1BED01	2	Sediment	X							
	1108	EW09-07-1BED02										
	1111	EW09-07-1BED03										
	1115	EW09-07-1BED04										NOTE
	1118	EW09-07-1BED05										Archive all
	1120	EW09-07-1BED06										samples frozen
	945	EW09-10-1BED01										until further
	950	EW09-10-1BED02										instructions
	1000	EW09-10-1BED03										
	1005	EW09-10-1BED04										
	1010	EW09-10-1BED05										
	1015	EW09-10-1BED06										
		Total Number of Containers		Purchase Order / Statement of Work #								

1) Released by:	1) Rec'd by:	2) Released by:	2) Rec'd by:
Print name: Joanna Florer	J. Peterson	Print name:	
Signature:	Company: ARI	Signature:	Company:
Company: Windward		Company:	
Date/Time: 8/19/09 1705	Date/Time: 8/19/09 1705	Date/Time:	Date/Time:

* Distribution: White copies accompany shipment; yellow retained by consignor.

To be completed by Laboratory upon sample receipt:

Date of receipt:	Laboratory W.O. #:
Condition upon receipt:	Time of receipt:
Cooler temperature:	Received by:

Windward environmental LLC
200 West Mercer Street
Suite 401
Seattle, WA 98119
Tel: (206) 378-1364
Fax: (206) 217-9343

SH20 : 00085

CHAIN-OF-CUSTODY/TEST REQUEST FORM

№ 2744

Project/Client Name: EWRI/PS Surface Sediment MIS
Project Number: 09-08-09-46
Contact Name: Manna Mitchell
Sampled By: CL, JF, RB, MY

Ship to: ARI
Attn: Sue Dunnihoo
Shipper: Windward Env
Form filled out by: L Lorenz

Shipping Date:
Airbill Number:
Turnaround requested:

Sample Collection Date (m/d/y)	Time	Sample Identification	Volume of Sample / # of Containers	Matrix	Test(s) Requested (check test(s) required): Archive							Comments / Instructions [Jar tag number(s)]
8-19-09	1020	EW09-10-1TSED07	2	Sediment	X							
↓	1030	EW09-10-1TSED08	↓	↓	↓							
↓	1035	EW09-10-1TSED09	↓	↓	↓							
												NOTE: Archive all samples frozen until further instructions
		Total Number of Containers		Purchase Order / Statement of Work #								

1) Released by:	1) Rec'd by:	2) Released by:	2) Rec'd by:
Print name: Joanna Florer	J. Peterson	Print name:	
Signature:	Company: ARI	Signature:	Company:
Company: Windward		Company:	
Date/Time: 8/19/09 1705	Date/Time: 8/19/09 1705	Date/Time:	Date/Time:

* Distribution: White copies accompany shipment; yellow retained by consignor.

To be completed by Laboratory upon sample receipt:

Date of receipt::	Laboratory W.O. #:
Condition upon receipt:	Time of receipt:
Cooler temperature:	Received by:

Windward environmental LLC
200 West Mercer Street
Suite 401
Seattle, WA 98119
Tel: (206) 378-1364
Fax: (206) 217-9343

SH20.00006

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Cooler Receipt Form

ARI Client: Windward
COC No(s): 2743, 2761, 2742, 2744 ~~NA~~ JW
Assigned ARI Job No: PL29

Project Name: EW RI/FS Surface Sed. MTS
Delivered by: Fed-Ex UPS Courier Hand Delivered Other: _____
Tracking No: _____ NA

Preliminary Examination Phase:

Were intact, properly signed and dated custody seals attached to the outside of to cooler?	YES	NO
Were custody papers included with the cooler?	YES	NO
Were custody papers properly filled out (ink, signed, etc.)	YES	NO
Temperature of Cooler(s) (°C) (recommended 2.0-6 0 °C for chemistry)	1.4 4.2	

If cooler temperature is out of compliance fill out form 00070F — Temp Gun ID#: 1018860

Cooler Accepted by: JP Date: 8/19/09 Time: 1705

Complete custody forms and attach all shipping documents

Log-In Phase:

Was a temperature blank included in the cooler?		YES	NO
What kind of packing material was used? ... Bubble Wrap Wet Ice Gel Packs Baggies Foam Block Paper Other: _____			
Was sufficient ice used (if appropriate)?	NA	YES	NO
Were all bottles sealed in individual plastic bags?		YES	NO
Did all bottles arrive in good condition (unbroken)?		YES	NO
Were all bottle labels complete and legible?		YES	NO
Did the number of containers listed on COC match with the number of containers received?		YES	NO
Did all bottle labels and tags agree with custody papers?		YES	NO
Were all bottles used correct for the requested analyses?		YES	NO
Do any of the analyses (bottles) require preservation? (attach preservation sheet, excluding VOCs)	NA	YES	NO
Were all VOC vials free of air bubbles?	NA	YES	NO
Was sufficient amount of sample sent in each bottle?		YES	NO

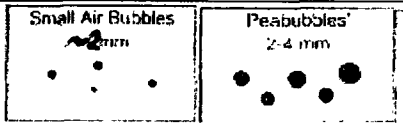
Samples Logged by: JW Date: 8/20/09 Time: 1430

*** Notify Project Manager of discrepancies or concerns ***

Sample ID on Bottle	Sample ID on COC	Sample ID on Bottle	Sample ID on COC

Additional Notes, Discrepancies, & Resolutions:

By: Date:

Small Air Bubbles ~2 mm	Peabubbles 2-4 mm	LARGE Air Bubbles > 4 mm
		

Small → "sm"
Peabubbles → "pb"
Large → "lg"
Headspace → "hs"

Case Narrative, Data Qualifiers, Control Limits

ARI Job ID: SH20

Case Narrative

Client: Windward Environmental, LLC
Project: (MIS) Intertidal Sediments
Matrix: Sediment
ARI Job No.: SH20

Sample receipt

Nine sediment samples originally logged under ARI job PL29 were removed from frozen archive and composited by the Geotechnical laboratory to create one composite following the project plan for composite preparation. For details regarding original sample receipt, please refer to the Cooler Receipt Form.

The composite was re-logged under ARI job SH20 and analyzed for PAHs, as requested.

PAH by 8270

The sample was initially screened to determine if a response was present that would affect sample analysis. Based on the screen, no modifications were required. The sample and associated laboratory QC were extracted and analyzed within method recommended holding times for samples stored frozen, using internal standard methods.

Initial and continuing calibrations were within method requirements. The internal standard areas were within accepted limits.

The surrogate percent recoveries were within control limits.

The method blank was clean at the reporting limit. The LCS was run in duplicate. LCS percent recoveries and RPD were within control limits.

.

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Client: Windward Environmental, LLC.	**ARI Job No.:** SH20
Client Project: EW RI/FS Surface Sediment	**Client Project No.:** 09-08-09-46

Case Narrative

1. Nine sediment samples were submitted for homogenization of sediments for sediment composites according to Analytical Resources, Inc. Standard Operating Procedure. The sediment was received in 8 oz glass jars.
2. One composite was produced. Nine sub-samples were homogenized to produce the composite. The composite sample was distributed into appropriate sample jars as requested by the client.
3. There were no other noted anomalies in the samples or methods on this project.

Approved by: Gwenna Santo Date: 2/3/11
Title: *Geotechnical Laboratory Manager*

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Data Reporting Qualifiers

Effective 7/10/2009

Inorganic Data

U Indicates that the target analyte was not detected at the reported concentration

* Duplicate RPD is not within established control limits

B Reported value is less than the CRDL but ≥ the Reporting Limit

N Matrix Spike recovery not within established control limits

NA Not Applicable, analyte not spiked

H The natural concentration of the spiked element is so much greater than the concentration spiked that an accurate determination of spike recovery is not possible

L Analyte concentration is ≤5 times the Reporting Limit and the replicate control limit defaults to ±1 RL instead of the normal 20% RPD

Organic Data

U Indicates that the target analyte was not detected at the reported concentration

* Flagged value is not within established control limits

B Analyte detected in an associated Method Blank at a concentration greater than one-half of ARI's Reporting Limit or 5% of the regulatory limit or 5% of the analyte concentration in the sample.

J Estimated concentration when the value is less than ARI's established reporting limits

D The spiked compound was not detected due to sample extract dilution

E Estimated concentration calculated for an analyte response above the valid instrument calibration range. A dilution is required to obtain an accurate quantification of the analyte.

Q Indicates a detected analyte with an initial or continuing calibration that does not meet established acceptance criteria (<20%RSD, <20%Drift or minimum RRF).

S Indicates an analyte response that has saturated the detector. The calculated concentration is not valid; a dilution is required to obtain valid quantification of the analyte

SH20:00011

NA The flagged analyte was not analyzed for

NR Spiked compound recovery is not reported due to chromatographic interference

NS The flagged analyte was not spiked into the sample

M Estimated value for an analyte detected and confirmed by an analyst but with low spectral match parameters. This flag is used only for GC-MS analyses

M2 The sample contains PCB congeners that do not match any standard Aroclor pattern. The PCBs are identified and quantified as the Aroclor whose pattern most closely matches that of the sample. The reported value is an estimate.

N The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification"

Y The analyte is not detected at or above the reported concentration. The reporting limit is raised due to chromatographic interference. The Y flag is equivalent to the U flag with a raised reporting limit.

Y Estimated Maximum Possible Concentration (EMPC) defined in EPA Statement of Work DLM02.2 as a value "calculated for 2,3,7,8-substituted isomers for which the quantitation and /or confirmation ion(s) has signal to noise in excess of 2.5, but does not meet identification criteria" **(Dioxin/Furan analysis only)**

C The analyte was positively identified on only one of two chromatographic columns. Chromatographic interference prevented a positive identification on the second column

P The analyte was detected on both chromatographic columns but the quantified values differ by ≥40% RPD with no obvious chromatographic interference

X Analyte signal includes interference from polychlorinated diphenyl ethers. **(Dioxin/Furan analysis only)**

Z Analyte signal includes interference from the sample matrix or perfluorokerosene ions. **(Dioxin/Furan analysis only)**

Geotechnical Data

A The total of all fines fractions. This flag is used to report total fines when only sieve analysis is requested and balances total grain size with sample weight.

F Samples were frozen prior to particle size determination

SM Sample matrix was not appropriate for the requested analysis. This normally refers to samples contaminated with an organic product that interferes with the sieving process and/or moisture content, porosity and saturation calculations

SS Sample did not contain the proportion of "fines" required to perform the pipette portion of the grain size analysis

W Weight of sample in some pipette aliquots was below the level required for accurate weighting

SURR SOLUTIONS

LABEL	SOLN ID	TEST	CONC. UG/ML	SOLVENT	EXP.
A	1780-2	ABN	100/150	MEOH	05/15/11
B	1771-1	SIM PNA	15/75	ACETONE	10/05/11
C	1705-4	SIM ABN	25/37.5	MEOH	03/08/11
D	1795-4	LOW PCB	0.2	ACETONE	12/16/11
E	1771-3	HERB	62.5	MEOH	10/06/11
F	1791-3	PCP	12.5	ACETONE	12/09/11
G	1758-4	1,4DIOXANE	100	MEOH	02/11/11
H	1723-2	OP-PEST	25	MEOH	04/02/11
I	1771-2	LOW S. PNA	1.5	ACETONE	10/05/11
J	1787-2	TBT-PORE	0.125	MECL2	11/27/11
K	1795-2	MED PCB	20	ACETONE	12/16/11
L	1785-4	TBT	2.5	MECL2	11/27/11
M	1767-1	EPH	1500	MECL2	06/02/11
N	1795-3	PCB	2	ACETONE	12/16/11
O	1792-1	TPH	450	MECL2	08/05/11
P	1768-1	HCID	2250	MECL2	08/05/11
Q	NA	EDB	1	MEOH	NA
R	1757-3	RESIN ACID	250	ACETONE	08/14/11
S*	1568-5	PBDE	.25	MEOH	01/13/11
T	1768-2	ALKYL PNA	10	MEOH	07/22/11
U	NA	CONGENER	2.5	ACETONE	NA
V	1791-4	LOW PCP	1.25	ACETONE	12/09/11
*reverified solution					

LCS SOLUTIONS

LABL	SOLN ID	TEST	CONC. UG/ML	SOLVENT	EXP.
1	1789-3	PCB 1660	20	ACETONE	12/03/11
2#	NA	BCOC PEST	10	ACETONE	NA
3	1793-3	PEST	01/02/10	ACETONE	12/15/11
4	1806-2	LOW PEST	.1/.2/1	ACETONE	12/15/11
5	1779-1	EPH	1500	MECL2	11/11/11
6	1702-2	PCP	12.5/125	ACETONE	02/18/11
7	1789-2	ABN	100	MEOH	10/01/11
8	1785-3	TBT	2.5	MECL2	11/27/11
9	1786-3	PORE TBT	.125/.25	MECL2	11/27/11
10	1790-1	ABN ACID	100/200	MEOH	06/07/11
11	1777-2	TPHD	15000	ACETONE	11/01/11
12	1790-2	ABN BASE	200	MEOH	06/07/11
13	1716-2	LOW PCB	2	ACETONE	03/30/11
14	1753-3	LOW ABN ACID	10/20	MEOH	01/28/11
15	1771-4	SIM PNA	15/75	MEOH	01/29/11
16	1776-2	DIOXANE	100	MEOH	04/09/11
17	1772-3	1248 PCB	10	ACETONE	05/01/11
18	1771-5	LOW SIM PNA	1.5	ACETONE	01/29/11
19	1746-3	AK103	7500	ACETONE	12/01/10
20	1775-3	PNA	100	ACETONE	08/14/11
21	1725-1	SKY/BHT	100	MEOH	03/18/11
22	1781-1	HERB	05 to 4000	MEOH	04/15/11
23	1753-4	LW ABN BASE	20	MEOH	01/29/11
24	1758-2	LOW ABN	10	ACETONE	01/13/11
25#	NA	DIPHENYL	100	MEOH	NA
26	1789-1	OP-PEST	25	MEOH	04/02/11
27	NA	STEROLS	200	MEOH	NA
28#	1807-1	ADD. PEST	2	ACETONE	08/31/11
29#	NA	DECANES	100	MEOH	NA

LCS SOLUTIONS

30	NA	EDB/DBCP	0.2	MEOH	NA
31	1707-3	TERPINEOL	100	MEOH	03/19/11
32	1758-1	GUAIACOL	50-200	ACETONE	01/08/11
33	NA	RETENE	100	MEOH	NA
34	NA	CONGENERS	2.5	ACETONE	NA
35	NA	ALKYL PNA A	10	MEOH	NA
36	NA	ALKYL PNA B	10	MEOH	NA
37	1773-1	CAR/PERY	100	ACETONE	10/14/11
50	1757-4	FULL RESIN	250	ACETONE	08/14/11
51	1772-1	DDTS	0.01	ACETONE	04/24/11
52	NA	1232 PCB	20	ACETONE	NA
53	1780-1	DALAPON	50	MEOH	05/07/11
54	1753-1	T-CHLORDANE	10	ACETONE	07/21/11
55	1753-2	TOXAPHENE	50	ACETONE	07/21/11
#=PROJECT SPECIFIC SOLUTION					
*=REVERIFIED SOLUTION					

Summary of Laboratory Control Limits

Default limits of 30-160% recovery and 30% RPD apply for all organic analytes when laboratory generated control limits are not available on ARI's web site. Default limits for all inorganic analytes are 75-125% recovery and 25% RPD.

ARI's laboratory generated Quality Control Limits may be superseded by project specific data quality objectives (DQO) provided by ARI's clients. The use of project specific DQO must be approved by ARI's Laboratory and QA Program Managers.

Semivolatile PAH Analysis
Report and Summary QC Forms

ARI Job ID: SH20

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA PNAs by 8270D PNA GC/MS

Sample ID: EW10-10-COMP
SAMPLE

Lab Sample ID: SH20A
LIMS ID: 11-2133
Matrix: Sediment
Data Release Authorized:
Reported: 02/08/11

QC Report No: SH20-Windward Environmental, LLC
Project: EW RI/FS Surface Sediment
09-08-09-46
Date Sampled: 08/19/10
Date Received: 08/19/10

Date Extracted: 02/04/11
Date Analyzed: 02/07/11 16:59
Instrument/Analyst: NT6/JZ
GPC Cleanup: No
Alumina: No
Silica Gel: Yes

Sample Amount: 25.9 g-dry-wt
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00
Percent Moisture: 22.2%

CAS Number	Analyte	RL	Result	
91-20-3	Naphthalene	19	20	
91-57-6	2-Methylnaphthalene	19	16	J
90-12-0	1-Methylnaphthalene	19	10	J
208-96-8	Acenaphthylene	19	< 19	U
83-32-9	Acenaphthene	19	16	J
86-73-7	Fluorene	19	18	J
85-01-8	Phenanthrene	19	81	
120-12-7	Anthracene	19	67	
206-44-0	Fluoranthene	19	290	
129-00-0	Pyrene	19	220	
56-55-3	Benzo(a)anthracene	19	96	
218-01-9	Chrysene	19	170	
50-32-8	Benzo(a)pyrene	19	71	
193-39-5	Indeno(1,2,3-cd)pyrene	19	35	
53-70-3	Dibenz(a,h)anthracene	19	< 19	U
191-24-2	Benzo(g,h,i)perylene	19	43	
132-64-9	Dibenzofuran	19	14	J
TOTBFA	Total Benzofluoranthenes	19	180	

Reported in µg/kg (ppb)

Semivolatile Surrogate Recovery

d14-p-Terphenyl	37.4%
2-Fluorobiphenyl	37.6%

FORM I

ANALYTICAL RESOURCES INCORPORATED

SW8270 PNA SURROGATE RECOVERY SUMMARY

Matrix: Sediment

QC Report No: SH20-Windward Environmental, LLC
Project: EW RI/FS Surface Sediment
09-08-09-46

Client ID	TER	FBP	TOT OUT
MB-020411	74.4%	48.0%	0
LCS-020411	66.4%	49.6%	0
LCSD-020411	71.2%	47.2%	0
EW10-10-COMP	37.4%	37.6%	0

	LCS/MB LIMITS	QC LIMITS
(TER) = d14-p-Terphenyl	(30-160)	(30-160)
(FBP) = 2-Fluorobiphenyl	(30-160)	(30-160)

Prep Method: SW3546
Log Number Range: 11-2133 to 11-2133

FORM-II SW8270 PNA

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA PNAs by SW8270D GC/MS

Sample ID: LCS-020411
LCS/LCSD

Lab Sample ID: LCS-020411
LIMS ID: 11-2133
Matrix: Sediment
Data Release Authorized: MW
Reported: 02/08/11

QC Report No: SH20-Windward Environmental, LLC
Project: EW RI/FS Surface Sediment 09-08-09-46
Date Sampled: NA
Date Received: 08/19/10

Date Extracted LCS/LCSD: 02/04/11

Date Analyzed LCS: 02/07/11 15:21
LCSD: 02/07/11 15:54
Instrument/Analyst LCS: NT6/JZ
LCSD: NT6/JZ
GPC Cleanup: No
Silica Gel Cleanup: Yes

Sample Amount LCS: 25.0 g
LCSD: 25.0 g
Final Extract Volume LCS: 0.50 mL
LCSD: 0.50 mL
Dilution Factor LCS: 1.00
LCSD: 1.00
Alumina Cleanup: No

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Naphthalene	248	500	49.6%	237	500	47.4%	4.5%
2-Methylnaphthalene	225	500	45.0%	221	500	44.2%	1.8%
1-Methylnaphthalene	242	500	48.4%	234	500	46.8%	3.4%
Acenaphthylene	279	500	55.8%	276	500	55.2%	1.1%
Acenaphthene	264	500	52.8%	261	500	52.2%	1.1%
Fluorene	297	500	59.4%	298	500	59.6%	0.3%
Phenanthrene	334	500	66.8%	341	500	68.2%	2.1%
Anthracene	338	500	67.6%	350	500	70.0%	3.5%
Fluoranthene	371	500	74.2%	390	500	78.0%	5.0%
Pyrene	354	500	70.8%	376	500	75.2%	6.0%
Benzo(a)anthracene	355	500	71.0%	376	500	75.2%	5.7%
Chrysene	350	500	70.0%	373	500	74.6%	6.4%
Benzo(a)pyrene	321	500	64.2%	347	500	69.4%	7.8%
Indeno(1,2,3-cd)pyrene	312	500	62.4%	341	500	68.2%	8.9%
Dibenz(a,h)anthracene	315	500	63.0%	335	500	67.0%	6.2%
Benzo(g,h,i)perylene	302	500	60.4%	328	500	65.6%	8.3%
Dibenzofuran	278	500	55.6%	279	500	55.8%	0.4%
Total Benzofluoranthenes	720	1000	72.0%	766	1000	76.6%	6.2%

Semivolatile Surrogate Recovery

	LCS	LCSD
d14-p-Terphenyl	66.4%	71.2%
2-Fluorobiphenyl	49.6%	47.2%

Results reported in µg/kg
RPD calculated using sample concentrations per SW846.

4B
SEMIVOLATILE METHOD BLANK SUMMARY

BLANK NO.

SH20MBS1

Lab Name: ANALYTICAL RESOURCES, INC

Client: WINDWARD

ARI Job No: SH20

Project: EW RI/FS SURFACE SED

Lab File ID: 02071105

Date Extracted: 02/04/11

Instrument ID: NT6

Date Analyzed: 02/07/11

Matrix: SOLID

Time Analyzed: 1449

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	SH20LCSS1	SH20LCSS1	02071106	02/07/11
02	SH20LCSDS1	SH20LCSDS1	02071107	02/07/11
03	EW10-10-COMP	SH20A	02071109	02/07/11
04				
05				
06				
07				
08				
09				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				

FORM IV SV

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA PNAs by 8270D PNA GC/MS

Sample ID: MB-020411
METHOD BLANK

Lab Sample ID: MB-020411
LIMS ID: 11-2133
Matrix: Sediment
Data Release Authorized:
Reported: 02/08/11

QC Report No: SH20-Windward Environmental, LLC
Project: EW RI/FS Surface Sediment 09-08-09-46
Date Sampled: NA
Date Received: NA

Date Extracted: 02/04/11
Date Analyzed: 02/07/11 14:49
Instrument/Analyst: NT6/JZ
GPC Cleanup: No
Alumina: No
Silica Gel: Yes

Sample Amount: 25.0 g
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00
Percent Moisture: NA

CAS Number	Analyte	RL	Result
91-20-3	Naphthalene	20	< 20 U
91-57-6	2-Methylnaphthalene	20	< 20 U
90-12-0	1-Methylnaphthalene	20	< 20 U
208-96-8	Acenaphthylene	20	< 20 U
83-32-9	Acenaphthene	20	< 20 U
86-73-7	Fluorene	20	< 20 U
85-01-8	Phenanthrene	20	< 20 U
120-12-7	Anthracene	20	< 20 U
206-44-0	Fluoranthene	20	< 20 U
129-00-0	Pyrene	20	< 20 U
56-55-3	Benzo(a)anthracene	20	< 20 U
218-01-9	Chrysene	20	< 20 U
50-32-8	Benzo(a)pyrene	20	< 20 U
193-39-5	Indeno(1,2,3-cd)pyrene	20	< 20 U
53-70-3	Dibenz(a,h)anthracene	20	< 20 U
191-24-2	Benzo(g,h,i)perylene	20	< 20 U
132-64-9	Dibenzofuran	20	< 20 U
TOTBFA	Total Benzofluoranthenes	20	< 20 U

Reported in µg/kg (ppb)

Semivolatile Surrogate Recovery

d14-p-Terphenyl	74.4%
2-Fluorobiphenyl	48.0%

FORM I

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: ANALYTICAL RESOURCES, INC Client: WINDWARD ENVIRONMENTAL, LLC.

Instrument ID: NT6 Project: EW RI/FS SURFACE SEDIMENT

DFTPP Injection Date: 01/28/11 DFTPP Injection Time: 0950

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	35.6
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	34.3
70	Less than 2.0% of mass 69	0.2 (0.6)1
127	10.0 - 80.0% of mass 198	44.3
197	Less than 2.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	7.3
275	10.0 - 60.0% of mass 198	25.1
365	Greater than 1.0% of mass 198	2.96
441	0.0 - 24.0% of mass 442	11.8 (14.7)2
442	50.0 - 200.0% of mass 198	80.2
443	15.0 - 24.0% of mass 442	15.0 (18.7)2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	IC250128	IC250128	01281101	01/28/11	0950
02	IC010128	IC010128	01281102	01/28/11	1023
03	IC050128	IC050128	01281103	01/28/11	1056
04	IC100128	IC100128	01281104	01/28/11	1129
05	IC400128	IC400128	01281105	01/28/11	1202
06	IC600128	IC600128	01281106	01/28/11	1235
07	IC800128	IC800128	01281107	01/28/11	1308
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

FORM V SV

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: ANALYTICAL RESOURCES, INC Client: WINDWARD ENVIRONMENTAL, LLC.

Instrument ID: NT6 Project: EW RI/FS SURFACE SEDIMENT

DFTPP Injection Date: 02/07/11 DFTPP Injection Time: 1238

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	44.8
68	Less than 2.0% of mass 69	0.2 (0.6)1
69	Mass 69 relative abundance	38.4
70	Less than 2.0% of mass 69	0.2 (0.5)1
127	10.0 - 80.0% of mass 198	51.4
197	Less than 2.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	8.3
275	10.0 - 60.0% of mass 198	22.3
365	Greater than 1.0% of mass 198	2.84
441	0.0 - 24.0% of mass 442	10.4 (14.5)2
442	50.0 - 200.0% of mass 198	71.6
443	15.0 - 24.0% of mass 442	13.7 (19.2)2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	CC0207	CC0207	02071101	02/07/11	1238
02	SH20MBS1	SH20MBS1	02071105	02/07/11	1449
03	SH20LCSS1	SH20LCSS1	02071106	02/07/11	1521
04	SH20LCSDS1	SH20LCSDS1	02071107	02/07/11	1554
05	EW10-10-COMP	SH20A	02071109	02/07/11	1659
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

FORM V SV

6B

SEMIVOLATILE 8270-D INITIAL CALIBRATION DATA

Lab Name: ANALYTICAL RESOURCES, INC — Client: WINDWARD ENVIRONMENTAL, L

ARI Job No: SH20 — Project: EW RI/FS SURFACE SEDIMEN

Instrument ID: NT6 — Calibration Date: 01/28/11

LAB FILE ID: RRF1 =01281102 RRF5 =01281103 RRF10 =01281104
RRF25 =01281101 RRF40 =01281105 RRF60 =01281106
RRF80 =01281107

COMPOUND	RRF 1	RRF 5	RRF 10	RRF 25	RRF 40	RRF 60	RRF 80	___ RRF	%RSD /R^2
Naphthalene	1.186	1.085	1.046	1.069	0.989	0.932	0.883	1.027	9.9
2-Methylnaphthalene	0.697	0.605	0.630	0.660	0.621	0.598	0.585	0.628	6.2
Acenaphthylene	1.920	1.874	1.786	1.846	1.721	1.656	1.586	1.770	6.9
Acenaphthene	1.227	1.168	1.129	1.157	1.090	1.071	1.066	1.130	5.2
Dibenzofuran	1.902	1.683	1.728	1.807	1.697	1.632	1.605	1.722	6.0
Fluorene	1.396	1.319	1.270	1.311	1.229	1.199	1.183	1.272	5.9
Phenanthrene	1.274	1.150	1.116	1.142	1.070	1.047	1.038	1.120	7.3
Anthracene	1.259	1.189	1.147	1.195	1.106	1.052	1.023	1.139	7.4
Fluoranthene	1.171	1.113	1.111	1.189	1.107	1.086	1.052	1.118	4.2
Pyrene	1.351	1.266	1.187	1.203	1.111	1.030	1.000	1.164	10.8
Benzo(a)anthracene	1.122	1.042	1.008	1.063	0.990	0.975	0.968	1.024	5.4
Chrysene	1.128	1.038	0.984	1.014	0.963	0.912	0.914	0.993	7.6
Benzo(b)fluoranthene	1.251	1.155	1.126	1.193	1.179	1.134	1.134	1.167	3.8
Benzo(k)fluoranthene	1.282	1.232	1.179	1.272	1.139	1.101	1.068	1.182	7.1
Benzo(a)pyrene	1.118	1.113	1.081	1.150	1.094	1.070	1.061	1.098	2.8
Indeno(1,2,3-cd)pyrene	1.361	1.334	1.323	1.382	1.321	1.333	1.356	1.344	1.7
Dibenzo(a,h)anthracene	1.114	1.097	1.076	1.160	1.100	1.085	1.073	1.101	2.7
Benzo(g,h,i)perylene	1.271	1.213	1.185	1.243	1.180	1.191	1.197	1.211	2.8
1-methylnaphthalene	0.678	0.624	0.596	0.614	0.590	0.573	0.559	0.605	6.5
Carbazole	1.086	1.026	0.938	0.970	0.892	0.893	0.894	0.957	7.9
Perylene	1.212	1.044	1.036	1.094	1.030	0.987	0.983	1.055	7.4
Total Benzofluoranthenes	1.208	1.132	1.101	1.161	1.095	1.054	1.033	1.112	5.5
Terphenyl-d14	0.804	0.678	0.704	0.736	0.711	0.662		0.716	7.0
2-Fluorobiphenyl	1.472	1.284	1.327	1.391	1.321	1.254		1.342	5.9

<- Outside QC limits: %RSD <20% or R^2 > 0.990

FORM VI SV-1

7B

SEMIVOLATILE 8270-D CONTINUING CALIBRATION CHECK

Lab Name: ANALYTICAL RESOURCES, INC

Client: WINDWARD ENVIRONMENTAL, LLC.

ARI Job No: SH20

Project: EW RI/FS SURFACE SEDIMENT

Instrument ID: NT6

Cont. Calib. Date: 02/07/11

Init. Calib. Date: 01/28/11

Cont. Calib. Time: 1238

COMPOUND	CalAmt or ARF	CC Amt or RF	MIN RRF	CURVE TYPE	%D or Drift
Naphthalene	1.027	1.076	0.700	AVRG	4.8
2-Methylnaphthalene	0.628	0.667	0.400	AVRG	6.2
Acenaphthylene	1.770	1.917	0.900	AVRG	8.3
Acenaphthene	1.130	1.195	0.900	AVRG	5.8
Dibenzofuran	1.722	1.898	0.800	AVRG	10.2
Fluorene	1.272	1.364	0.900	AVRG	7.2
Phenanthrene	1.120	1.186	0.700	AVRG	5.9
Anthracene	1.139	1.201	0.700	AVRG	5.4
Fluoranthene	1.118	1.239	0.600	AVRG	10.8
Pyrene	1.164	1.212	0.600	AVRG	4.1
Benzo(a)anthracene	1.024	1.070	0.800	AVRG	4.5
Chrysene	0.993	1.048	0.700	AVRG	5.5
Benzo(b)fluoranthene	1.167	1.185	0.700	AVRG	1.5
Benzo(k)fluoranthene	1.182	1.365	0.700	AVRG	15.5
Benzo(a)pyrene	1.098	1.155	0.700	AVRG	5.2
Indeno(1,2,3-cd)pyrene	1.344	1.312	0.500	AVRG	-2.4
Dibenzo(a,h)anthracene	1.101	1.092	0.400	AVRG	-0.8
Benzo(g,h,i)perylene	1.211	1.164	0.500	AVRG	-3.9
1-methylnaphthalene	0.605	0.623	0.010	AVRG	3.0
Carbazole	0.957	1.084	0.010	AVRG	13.3
Perylene	1.055	1.104	0.010	AVRG	4.6
Total Benzofluoranthenes	1.112	1.198	0.010	AVRG	7.7
Terphenyl-d14	0.716	0.724	0.010	AVRG	1.1
2-Fluorobiphenyl	1.342	1.384	0.010	AVRG	3.1

<- Exceeds QC limit of 20% D

* RF less than minimum RF

FORM VII SV-1

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: ANALYTICAL RESOURCES, INC — Client: WINDWARD ENVIRONMENTAL, LLC.

ARI Job No: SH20 — Project: EW RI/FS SURFACE SEDIMENT

Ical Midpoint ID: 01281101 — Ical Date: 01/28/11

Instrument ID: NT6 — Cont. Cal Date: 02/07/11

		IS1(DCB) AREA #	RT #	IS2(NPT) AREA #	RT #	IS3(ANT) AREA #	RT #
	ICAL MIDPT	458851	7.33	1522936	9.39	864539	12.23
	UPPER LIMIT	917702		3045872		1729078	
	LOWER LIMIT	229426		761468		432270	
	CCAL	363971	6.72	1237715	8.78	717006	11.61
	UPPER LIMIT		7.22		9.28		12.11
	LOWER LIMIT		6.22		8.28		11.11
01	SH20MBS1			1513746	8.78	915745	11.61
02	SH20LCSS1			1700361	8.78	1010568	11.61
03	SH20LCSDS1			1665027	8.78	995377	11.61
04	EW10-10-COMP			1559277	8.78	915578	11.61
05							
06							
07							
08							
09							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							
25							

IS1 = 1,4-Dichlorobenzene-d4
IS2 = Naphthalene-d8
IS3 = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area from Ical midpoint
AREA LOWER LIMIT = - 50% of internal standard area from Ical midpoint
RT UPPER LIMIT = + 0.50 minutes of internal standard RT from Cont. Cal
RT LOWER LIMIT = - 0.50 minutes of internal standard RT from Cont. Cal

* Values outside of QC limits.

FORM VIII SV-1

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: ANALYTICAL RESOURCES, INC — Client: WINDWARD ENVIRONMENTAL, LLC.

ARI Job No: SH20 — Project: EW RI/FS SURFACE SEDIMENT

Ical Midpoint ID: 01281101 — Ical Date: 01/28/11

Instrument ID: NT6 — Cont. Cal Date: 02/07/11

		IS4(PHN) AREA #	RT #	IS5(CRY) AREA #	RT #	IS6(PRY) AREA #	RT #
	ICAL MIDPT	1378528	14.58	1421586	18.86	1361193	21.00
	UPPER LIMIT	2757056		2843172		2722386	
	LOWER LIMIT	689264		710793		680596	
	CCAL	1226170	13.93	1320527	18.17	1184370	20.28
	UPPER LIMIT		14.43		18.67		20.78
	LOWER LIMIT		13.43		17.67		19.78
01	SH20MBS1	1525595	13.93	1568644	18.16	1426065	20.28
02	SH20LCSS1	1695547	13.93	1742960	18.17	1578866	20.28
03	SH20LCSDS1	1655040	13.93	1686812	18.16	1530936	20.28
04	EW10-10-COMP	1554074	13.93	2112159	18.18	2120479	20.31
05							
06							
07							
08							
09							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							
25							

IS4 = Phenanthrene-d10
IS5 = Chrysene-d12
IS6 = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area from Ical midpoint
AREA LOWER LIMIT = - 50% of internal standard area from Ical midpoint
RT UPPER LIMIT = + 0.50 minutes of internal standard RT from Cont. Cal
RT LOWER LIMIT = - 0.50 minutes of internal standard RT from Cont. Cal

* Values outside of QC limits.

FORM VIII SV-2

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: ANALYTICAL RESOURCES, INC

Client: WINDWARD ENVIRONMENTAL, LLC.

ARI Job No: SH20

Project: EW RI/FS SURFACE SEDIMENT

Ical Midpoint ID: 01281101

Ical Date: 01/28/11

Instrument ID: NT6

Cont. Cal Date: 02/07/11

		IS7 AREA #	RT #	AREA #	RT #	AREA #	RT #
	ICAL MIDPT	1679951	20.09				
	UPPER LIMIT	3359902					
	LOWER LIMIT	839976					
	CCAL	1604720	19.47				
	UPPER LIMIT		19.97				
	LOWER LIMIT		18.97				
01	SH20MBS1						
02	SH20LCSS1						
03	SH20LCSDS1						
04	EW10-10-COMP						
05							
06							
07							
08							
09							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							
25							

IS7 = Di-n-octylphthalate-d4

AREA UPPER LIMIT = +100% of internal standard area from Ical midpoint
AREA LOWER LIMIT = - 50% of internal standard area from Ical midpoint
RT UPPER LIMIT = + 0.50 minutes of internal standard RT from Cont. Cal
RT LOWER LIMIT = - 0.50 minutes of internal standard RT from Cont. Cal

* Values outside of QC limits.

FORM VIII SV-3

Total Solids

ARI Job ID: SH20

Extractions Total Solids-extts
Data By: Allison J. Benny
Created: 2/ 3/11

Worklist: 2310
Analyst: RVR
Comments:

Oven ID:_____

Balance ID:_____

Samples In: Date:_____ Time:_____ Temp:_____ Analyst:_____

Samples Out: Date:_____ Time:_____ Temp:_____ Analyst:_____

	ARI ID CLIENT ID	Tare Wt (g)	Wet Wt (g)	Dry Wt (g)	% Solids	pH
1.	SH20A 11-2133 EW10-10-COMP	1.17	12.20	9.75	77.8	NR

Extractions Total Solids-extts
Data By: Allison J. Benny
Created: 2/ 3/11

Worklist: 2310
Analyst: AJB
Comments:

Oven ID: 015

Balance ID: 24150347

Samples In: Date: 2/3/11 Time: 14:30 Temp: 100 Analyst: AJB

Samples Out: Date: 2/4/11 Time: 05:40 Temp: 94° Analyst: RP

	ARI ID CLIENT ID	Tare Wt (g)	Wet Wt (g)	Dry Wt (g)	% Solids	pH
1.	SH20A 11-2133 EW10-10-COMP	1.17	12.20	9.75		NR

Semivolatile PAH Raw Data
Extraction Bench Sheets and Notes

ARI Job ID: SH20

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Organic Extractions Benchsheet

(8270) PNA-Soil/Sediment
Microwave (3546) (SOP # 3304S)

P3DDA (2ϕ ppb)
~~In-House (67ppb)~~

Preparation Test PNA # 4
ARI Job No(s) SH2ϕ

Batch set up by: ~~SH~~

Bottle #	Extraction Requirements	Verify Client ID	Volume Extracted (dry wt)	Turbo Vap 1 2 3 **Exchange 5mL Hexane**	(REQ) ~~(Opt)~~ Silica Gel Clean (1:1) Y N	TurboVap 1 2 3	Final Effective Volume	Volume to Lab	Comments
	SH2ϕ MBS	Date 2/4/11	~~7.50g~~ ~~25.77g~~				0.5mL	0.5mL	1ϕg actual
	SBS		↓				↓	↓	
	SBS Dup.		↓				↓	↓	
	QLS		↓				↓	↓	
2	A	checked	33.28						

Analyst/Date: AB 2/4/11 → TS 2-7-11

Standard	Standard ID	Volume	Expiration Date	Analyst	Witness
BAN Surrogate	A2	125µL	7/12/11	AB	WW
8270 PNA Spike	20	125µL	8/14/11	AB	WW
QLS Spike	6	50µL	8/14/11	AB	WW
Extraction Time: 12:15			Balance ID: 21754520		

SPECIAL INSTRUCTIONS: 1. Weigh into 100mL beakers-dry with Sodium Sulfate. 2. Transfer to microwave vessel. 3. Add 20mL DCM to the vessel (if needed-Add 5mL increments until solvent is 1" above soil layer). 4. Add surr/spike. 5. Mix samples thoroughly before microwaving. 6. Microwave on appropriate power setting determined by # of samples. 7. After microwave-let cool 10-15 min. 8. Collect into turbo tube with sm. funnel containing glasswool and 1" sodium sulfate. 9. Add (2) 10mL DCM rinses to vessel and transfer to turbo tube. 10. TurboVap to 4mL then Add 5mL Hexane and TurboVap. 11. Silica Clean-up-~~Root Beer Color~~? (All ~~or none~~) Y / N. 12. TurboVap (if Silica Clean). 13. Vial in DCM.
A. Need Total Solids Y / N B. ~~Archive~~/Freeze Y / N

3059F

Revision 3
12/20/2010

SH20 : 00035

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Organic Extractions Laboratory Analyst Notes

ARI Job No.: SH20

Client ID: Windward Environmental, LLC

Parameter: 8270 PNA PSDDA

Client Project: EW RI/FS Surface Sediment

Note problems, concerns, corrective actions	Analyst/Date
Screens: Soil/Sediment/Solid/Other:	
☐ No Anomalies (standard soil/sediment)	
☒ Wet sediment/sludge= A AB	
☒ Standing Water Decanted=A	AB 2/3/11
☐ Standing Water Homogenized (Shared samples)=	↓
☐ Clay (Difficult to homogenize/Mixed with Kitchen Aid)=	
☒ Rocks/Organics= A	AB 2/3/11
☐ Oily, obvious fuel/sulfur odors=	
☐ Other (Details)=	
Aqueous:	
☐ No Anomalies	
☐ Turbid/Color=	
☐ Particulates=	
☐ Emulsions=	
☐ Other (Details)=	
☒ Other Notes/Comments=	
At vialing after 5mL Hexane exchange filtered MBS, SBS, SBD, QLS with 0.45 filter. Filtered Sample A with GDX stacked with 0.45 filter, then blew down again before SPE clean up.	2-7-11 TS

3056F

Revision 007
02/25/10

SH20 : 00036

Semivolatile PAH Raw Data
Initial Calibration

ARI Job ID: SH20

Analytical Resources, Incorporated
Analytical Chemists and Consultants

GC/MS SVOA Analyst Notes / Corrective Action Log

ARI Project ID: Curve Client ID: ✓

ARI SOP: **801S**(SIM-PNA) **802S**(Butyl Tins) **804S**(SVOA-8270D) **805S**(op-Pest)

Parameter(s): 8270

Instrument: NT-2 NT-4 NT-6 NT-8 NT11

Curve Date: 1/28/11 Analysis Start Date: 1/28/11

DFTPP Tune Meets Criteria?	YES / NO	Internal Standard Meets Criteria?	YES / NO
DDT Breakdown <20%?	YES / NO / NA	Method Blank In Control?	YES / NO / NA
Peak Tailing Factor ≤2?	YES / NO / NA	LCS / LCSD Recovery In Control?	YES / NO
ICal acceptable?	YES / NO	CCal acceptable?	YES / NO
Q flag applied?	YES / NO	Q flag applied?	YES / NO
Surrogate Recovery in Control?	YES / NO	Special Analysis Criteria Met?	YES / NO / NA
Manual Integrations for ICal?	YES / NO	Manual Integrations for Samples?	Yes /NO

Detail problems, corrective actions and/or other pertinent information below (use reverse side when necessary):

LCS: 2,4-Dinitrophenol recovery @ 133%.

Compounds 2,4-Dinitrophenol & Benzidine: Quadratic curve fit used.

Additional Details on Reverse: Yes / No

Analyst: [signature] **Date:** 01/28/11

Reviewer: [signature] **Date:** 1/31/11

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 28-JAN-2011 09:50
End Cal Date : 28-JAN-2011 13:08
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem2/nt6.i/20110128.b/SW846012811.m
Cal Date : 28-Jan-2011 14:30 jianqing
Curve Type : Average

Calibration File Names:
Level 1: /chem2/nt6.i/20110128.b/01281102.D
Level 2: /chem2/nt6.i/20110128.b/01281103.D
Level 3: /chem2/nt6.i/20110128.b/01281104.D
Level 4: /chem2/nt6.i/20110128.b/01281101.D
Level 5: /chem2/nt6.i/20110128.b/01281105.D
Level 6: /chem2/nt6.i/20110128.b/01281106.D
Level 7: /chem2/nt6.i/20110128.b/01281107.D

01/28/11

Compound	1.000 Level 1	5.000 Level 2	10.000 Level 3	25.000 Level 4	40.000 Level 5	60.000 Level 6	___ RRF	% RSD
	80.000 Level 7							
186 Carbaryl	+++++	0.32632	0.38393	0.46814	0.49446	0.47679		
	0.49461						0.44071	15.772
179 n-Decane	1.43255	1.28633	1.33955	1.43771	1.35853	1.36058		
	1.34854						1.36626	3.897
180 n-Octadecane	0.47983	0.41648	0.43750	0.46824	0.43745	0.42631		
	0.43455						0.44291	5.139
169 4-tert-Butylphenol	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
170 N,N-Dimethylaniline	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
171 2,3-Dimethylaniline	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 28-JAN-2011 09:50
End Cal Date : 28-JAN-2011 13:08
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem2/nt6.i/20110128.b/SW846012811.m
Cal Date : 28-Jan-2011 14:30 jianqing
Curve Type : Average

Compound	1.000 Level 1 / 80.000 Level 7	5.000 Level 2	10.000 Level 3	25.000 Level 4	40.000 Level 5	60.000 Level 6	RRF	% RSD
172 2,4-Dimethylaniline	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
173 2,5-Dimethylaniline	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
174 2,6-Dimethylaniline	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
175 3,4-Dimethylaniline	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
176 3,5-Dimethylaniline	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
177 p-Benzoquinone	0.04272 / 0.07722	0.05327	0.06672	0.07284	0.07327	0.07522	0.06589	19.742
168 Pentachlorobenzene	0.56947 / 0.55034	0.54558	0.52766	0.56280	0.54182	0.54561	0.54904	2.512
145 4,4'-DDE	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
146 4,4'-DDD	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 28-JAN-2011 09:50
End Cal Date : 28-JAN-2011 13:08
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem2/nt6.i/20110128.b/SW846012811.m
Cal Date : 28-Jan-2011 14:30 jianqing
Curve Type : Average

Compound	1.000 Level 1 / 80.000 Level 7	5.000 Level 2	10.000 Level 3	25.000 Level 4	40.000 Level 5	60.000 Level 6	RRF	% RSD
135 2,3,5,6-Tetrachlorophenol	0.37682	0.27050	0.32930	0.33230	0.34443	0.35210		
	0.36457						0.33857	10.171
136 2,3,4,5-tetrachlorophenol	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
133 Butylatedhydroxytoluene	1.06623	0.96176	0.98181	1.01184	0.95636	0.92946		
	0.94233						0.97854	4.812
132 3,6-Dimethylphenanthrene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
131 1-Methylphenanthrene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
130 Dibenzothiophene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
129 1-Methylfluorene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
128 N-Hexadecane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
127 2-Isopropylnaphthalene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 28-JAN-2011 09:50
End Cal Date : 28-JAN-2011 13:08
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem2/nt6.i/20110128.b/SW846012811.m
Cal Date : 28-Jan-2011 14:30 jianqing
Curve Type : Average

Compound	1.000 Level 1 80.000 Level 7	5.000 Level 2	10.000 Level 3	25.000 Level 4	40.000 Level 5	60.000 Level 6	RRF	% RSD
126 N-Tetradecane	+++++ +++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
144 alpha-Terpineol	0.30063 0.27753	0.27200	0.27441	0.28844	0.28175	0.27602	0.28154	3.554
125 Safrole	+++++ +++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
124 3,4-Dimethylphenol	+++++ +++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
123 Acetophenone	1.81509 1.63815	1.69852	1.63737	1.70703	1.63876	1.66126	1.68517	3.812
122 Furfuraldehyde	+++++ +++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
143 1,4-Dioxane	0.68402 0.60031	0.60557	0.56702	0.61800	0.58835	0.59504	0.60833	6.068
121 Quinoline	+++++ +++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
120 2,3,4,6-Tetrachlorophenol	0.40192 0.43391	0.36572	0.39790	0.45424	0.45627	0.42698	0.41956	7.839

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 28-JAN-2011 09:50
End Cal Date : 28-JAN-2011 13:08
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem2/nt6.i/20110128.b/SW846012811.m
Cal Date : 28-Jan-2011 14:30 jianqing
Curve Type : Average

Compound	1.000 Level 1 80.000 Level 7	5.000 Level 2	10.000 Level 3	25.000 Level 4	40.000 Level 5	60.000 Level 6	___ RRF	% RSD
178 2-Benzyl-4-Chlorophenol	0.20421 0.22636	0.19162	0.20895	0.22933	0.22016	0.22197	0.21466	6.331
119 7,12-Dimethylbenz(a)anthracen	+++++ +++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
118 Triphenyl Phosphate	0.17707 0.19086	0.16889	0.17770	0.19235	0.18657	0.18448	0.18256	4.610
117 Butyl Diphenyl Phosphate	0.19344 0.16516	0.17472	0.17460	0.18319	0.17346	0.16579	0.17577	5.629
116 Dibutyl Phenyl Phosphate	0.60440 0.59389	0.55656	0.57434	0.61624	0.59093	0.58305	0.58849	3.333
115 Tributyl Phosphate	0.91160 0.81423	0.83152	0.84433	0.87556	0.82979	0.79180	0.84269	4.728
114 Beta-Pinene	+++++ +++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
113 Diphenyl Oxide	0.98141 0.90185	0.87616	0.90485	0.96162	0.90701	0.89013	0.91758	4.222
112 Biphenyl	1.68489 1.36038	1.49242	1.53983	1.59016	1.47303	1.40881	1.50707	7.276

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 28-JAN-2011 09:50
End Cal Date : 28-JAN-2011 13:08
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem2/nt6.i/20110128.b/SW846012811.m
Cal Date : 28-Jan-2011 14:30 jianqing
Curve Type : Average

Compound	1.000 Level 1 / 80.000 Level 7	5.000 Level 2	10.000 Level 3	25.000 Level 4	40.000 Level 5	60.000 Level 6	RRF	% RSD
111 Azobenzene (1,2-DP-Hydrazine)	1.32129	1.31018	1.24837	1.31236	1.23161	1.30509		
	1.29214						1.28872	2.697
110 Tetrachloroguaiacol	0.14815	0.12480	0.13952	0.15650	0.15155	0.14959		
	0.15081						0.14585	7.260
109 3,4,5-Trichloroguaiacol	0.15062	0.12298	0.13792	0.14767	0.14180	0.13605		
	0.13936						0.13949	6.432
181 3,4,6-Trichloroguaiacol	0.53126	0.45255	0.51366	0.53821	0.53881	0.52142		
	0.49934						0.51361	5.919
108 4,5,6-Trichloroguaiacol	0.22725	0.20327	0.21654	0.24142	0.23544	0.23069		
	0.22966						0.22632	5.616
184 3,4-Dichloroguaiacol	0.43308	0.42534	0.46367	0.48149	0.48117	0.47520		
	0.46016						0.46002	4.926
107 4,5-Dichloroguaiacol	0.31488	0.26614	0.29518	0.31258	0.30396	0.29741		
	0.29273						0.29755	5.459
182 4,6-Dichloroguaiacol	0.60387	0.51322	0.56119	0.59057	0.58641	0.57120		
	0.54462						0.56730	5.450
185 4-Chloroguaiacol	0.50594	0.44775	0.47350	0.51150	0.50651	0.51088		
	0.50159						0.49395	4.894

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 28-JAN-2011 09:50
End Cal Date : 28-JAN-2011 13:08
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem2/nt6.i/20110128.b/SW846012811.m
Cal Date : 28-Jan-2011 14:30 jianqing
Curve Type : Average

Compound	1.000 Level 1 80.000 Level 7	5.000 Level 2	10.000 Level 3	25.000 Level 4	40.000 Level 5	60.000 Level 6	___ RRF	% RSD
106 Guaiacol	1.09675 1.00226	1.01558	1.01602	1.06548	1.02856	1.02148	1.03516	3.246
105 1-methylnaphthalene	0.67841 0.55930	0.62379	0.59577	0.61389	0.58957	0.57307	0.60483	6.492
151 1,2,4,5-Tetrachlorobenzene	0.67163 0.62997	0.62336	0.61417	0.64729	0.61033	0.61655	0.63047	3.483
152 Benzo(e)pyrene	+++++ +++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
153 Chlorpyrifos	+++++ +++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
154 Diazinon	+++++ +++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
155 Kelthane	+++++ +++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
156 Methyl Parathion	+++++ +++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
157 Ethyl Parathion	+++++ +++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 28-JAN-2011 09:50
End Cal Date : 28-JAN-2011 13:08
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem2/nt6.i/20110128.b/SW846012811.m
Cal Date : 28-Jan-2011 14:30 jianqing
Curve Type : Average

Compound	1.000 Level 1 / 80.000 Level 7	5.000 Level 2	10.000 Level 3	25.000 Level 4	40.000 Level 5	60.000 Level 6	RRF	% RSD
167 2,2',4,4',5-Pentabromobipheny	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
3 Phenol	1.67642 / 1.41581	1.42942	1.42239	1.53688	1.49820	1.42225	1.48591	6.457
4 Bis(2-Chloroethyl)ether	1.38443 / 1.20127	1.25249	1.20861	1.27510	1.18853	1.18428	1.24210	5.736
6 2-Chlorophenol	1.45074 / 1.20762	1.21380	1.22748	1.30854	1.28229	1.19842	1.26984	7.065
7 1,3-Dichlorobenzene	1.72355 / 1.52928	1.64504	1.58888	1.64872	1.55564	1.55222	1.60619	4.312
9 1,4-Dichlorobenzene	1.68449 / 1.52108	1.68886	1.60260	1.67822	1.58314	1.56675	1.61788	4.111
11 Benzyl alcohol	0.97063 / 0.89927	0.85909	0.90172	0.96395	0.92046	0.91190	0.91815	4.221
12 1,2-Dichlorobenzene	1.67388 / 1.38329	1.54843	1.49884	1.54430	1.43162	1.41283	1.49903	6.695
13 2-Methylphenol	1.39245 / 1.20032	1.18967	1.21291	1.31430	1.29529	1.21821	1.26045	5.990

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 28-JAN-2011 09:50
End Cal Date : 28-JAN-2011 13:08
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem2/nt6.i/20110128.b/SW846012811.m
Cal Date : 28-Jan-2011 14:30 jianqing
Curve Type : Average

Compound	1.000 Level 1 / 80.000 Level 7	5.000 Level 2	10.000 Level 3	25.000 Level 4	40.000 Level 5	60.000 Level 6	RRF	% RSD
14 2,2'-oxybis(1-Chloropropane)	1.62140	1.49941	1.46624	1.54242	1.45348	1.45910		
	1.42681						1.49555	4.463
15 4-Methylphenol	1.41224	1.25557	1.25718	1.36484	1.32501	1.24453		
	1.21763						1.29671	5.545
16 N-Nitroso-di-n-propylamine	0.87245	0.86987	0.83700	0.87114	0.81855	0.80632		
	0.78377						0.83701	4.257
17 Hexachloroethane	0.61051	0.58818	0.56806	0.58758	0.55433	0.54550		
	0.53729						0.57021	4.639
19 Nitrobenzene	0.45092	0.40486	0.39995	0.41699	0.39780	0.38921		
	0.39472						0.40778	5.135
20 Isophorone	0.65120	0.63610	0.61485	0.63255	0.61090	0.60933		
	0.61615						0.62444	2.524
21 2-Nitrophenol	0.19665	0.18924	0.19954	0.21614	0.21424	0.20195		
	0.20739						0.20359	4.739
22 2,4-Dimethylphenol	0.37031	0.32179	0.33043	0.35412	0.35334	0.32805		
	0.33496						0.34186	5.155
23 Bis(2-Chloroethoxy)methane	0.48225	0.44617	0.43426	0.44615	0.42552	0.42310		
	0.42462						0.44030	4.751

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 28-JAN-2011 09:50
End Cal Date : 28-JAN-2011 13:08
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem2/nt6.i/20110128.b/SW846012811.m
Cal Date : 28-Jan-2011 14:30 jianqing
Curve Type : Average

Compound	1.000 Level 1	5.000 Level 2	10.000 Level 3	25.000 Level 4	40.000 Level 5	60.000 Level 6	RRF	% RSD
	80.000 Level 7							
24 Benzoic acid	+++++	0.19925	0.23918	0.28269	0.28850	0.28152		
	0.28751						0.26311	13.822
25 2,4-Dichlorophenol	0.31969	0.29839	0.31363	0.33078	0.32787	0.30573		
	0.31073						0.31526	3.704
26 1,2,4-Trichlorobenzene	0.42633	0.40262	0.38877	0.40224	0.37936	0.37407		
	0.37210						0.39221	4.975
28 Naphthalene	1.18553	1.08502	1.04622	1.06905	0.98907	0.93207		
	0.88267						1.02709	9.891
29 4-Chloroaniline	0.49523	0.45584	0.46239	0.45421	0.42502	0.40381		
	0.39301						0.44136	8.135
30 Hexachlorobutadiene	0.23395	0.21659	0.21673	0.22642	0.21900	0.21706		
	0.21768						0.22106	3.007
31 4-Chloro-3-methylphenol	0.26372	0.25173	0.27194	0.29319	0.29578	0.27620		
	0.27038						0.27470	5.684
32 2-Methylnaphthalene	0.69739	0.60464	0.62968	0.66003	0.62101	0.59811		
	0.58528						0.62802	6.221
33 Hexachlorocyclopentadiene	+++++	0.27770	0.32524	0.38863	0.38895	0.39597		
	0.42497						0.36691	14.862

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 28-JAN-2011 09:50
End Cal Date : 28-JAN-2011 13:08
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem2/nt6.i/20110128.b/SW846012811.m
Cal Date : 28-Jan-2011 14:30 jianqing
Curve Type : Average

Compound	1.000 Level 1	5.000 Level 2	10.000 Level 3	25.000 Level 4	40.000 Level 5	60.000 Level 6	RRF	% RSD
	80.000 Level 7							
34 2,4,6-Trichlorophenol	0.38706	0.36007	0.38970	0.43492	0.44029	0.43538		
	0.44782						0.41361	8.230
35 2,4,5-Trichlorophenol	0.37105	0.41840	0.45103	0.51212	0.50624	0.46554		
	0.47776						0.45745	10.886
37 2-Chloronaphthalene	1.30073	1.25647	1.20745	1.25835	1.15528	1.13977		
	1.12584						1.20627	5.627
38 2-Nitroaniline	0.28015	0.32539	0.33174	0.38069	0.35455	0.35613		
	0.35757						0.34089	9.501
39 Dimethylphthalate	1.35170	1.32643	1.28171	1.32181	1.24039	1.21698		
	1.19971						1.27696	4.630
40 Acenaphthylene	1.92010	1.87375	1.78579	1.84660	1.72102	1.65646		
	1.58601						1.76996	6.864
41 2,6-Dinitrotoluene	0.28825	0.31333	0.30734	0.33271	0.31499	0.31235		
	0.31805						0.31243	4.256
43 3-Nitroaniline	0.33054	0.31218	0.31667	0.31760	0.26579	0.25303		
	0.23613						0.29028	12.938
44 Acenaphthene	1.22748	1.16793	1.12926	1.15669	1.08989	1.07142		
	1.06562						1.12976	5.216

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 28-JAN-2011 09:50
End Cal Date : 28-JAN-2011 13:08
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem2/nt6.i/20110128.b/SW846012811.m
Cal Date : 28-Jan-2011 14:30 jianqing
Curve Type : Average

Compound	1.000 Level 1	5.000 Level 2	10.000 Level 3	25.000 Level 4	40.000 Level 5	60.000 Level 6	___ RRF	% RSD
	80.000 Level 7							
45 2,4-Dinitrophenol	+++++	0.04321	0.09329	0.13353	0.16996	0.17401		
	0.18704						0.13351	41.846 <-
46 Dibenzofuran	1.90226	1.68347	1.72808	1.80712	1.69701	1.63198		
	1.60545						1.72220	5.977
47 4-Nitrophenol	0.13675	0.13035	0.13894	0.16073	0.15726	0.14732		
	0.15039						0.14596	7.633
48 2,4-Dinitrotoluene	0.33960	0.37697	0.37539	0.41065	0.39084	0.39890		
	0.39435						0.38381	5.999
49 Fluorene	1.39588	1.31871	1.26995	1.31130	1.22925	1.19873		
	1.18345						1.27247	5.926
50 Diethylphthalate	1.29341	1.21399	1.17466	1.21178	1.12431	1.09186		
	1.07258						1.16894	6.682
51 4-Chlorophenyl-phenylether	0.69548	0.67377	0.66067	0.69626	0.66294	0.66331		
	0.67043						0.67469	2.248
52 4-Nitroaniline	0.28714	0.29446	0.28037	0.28462	0.26890	0.26934		
	0.27589						0.28010	3.371
53 4,6-Dinitro-2-methylphenol	+++++	0.09154	0.12434	0.15315	0.15840	0.15208		
	0.15810						0.13960	19.162

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 28-JAN-2011 09:50
End Cal Date : 28-JAN-2011 13:08
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem2/nt6.i/20110128.b/SW846012811.m
Cal Date : 28-Jan-2011 14:30 jianqing
Curve Type : Average

Compound	1.000 Level 1 / 80.000 Level 7	5.000 Level 2	10.000 Level 3	25.000 Level 4	40.000 Level 5	60.000 Level 6	RRF	% RSD
54 N-Nitrosodiphenylamine	0.62747	0.60048	0.58531	0.61370	0.58136	0.57147		
	0.57909						0.59412	3.446
56 4-Bromophenyl-phenylether	0.26261	0.25236	0.24884	0.26424	0.24983	0.25493		
	0.26443						0.25675	2.673
57 Hexachlorobenzene	0.28504	0.26677	0.26966	0.29090	0.28010	0.28391		
	0.29181						0.28117	3.471
58 Pentachlorophenol	0.13900	0.14873	0.16753	0.18549	0.18949	0.18424		
	0.19202						0.17236	12.279
60 Phenanthrene	1.27356	1.15033	1.11579	1.14193	1.07021	1.04678		
	1.03771						1.11947	7.258
61 Anthracene	1.25882	1.18902	1.14664	1.19476	1.10579	1.05151		
	1.02327						1.13854	7.364
62 Carbazole	1.08618	1.02600	0.93768	0.96984	0.89175	0.89346		
	0.89391						0.95697	7.896
63 Di-n-butylphthalate	1.33105	1.25062	1.20500	1.26002	1.18145	1.12431		
	1.08895						1.20591	6.899
64 Fluoranthene	1.17061	1.11268	1.11095	1.18944	1.10670	1.08591		
	1.05170						1.11829	4.242

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 28-JAN-2011 09:50
End Cal Date : 28-JAN-2011 13:08
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem2/nt6.i/20110128.b/SW846012811.m
Cal Date : 28-Jan-2011 14:30 jianqing
Curve Type : Average

Compound	1.000 Level 1 / 80.000 Level 7	5.000 Level 2	10.000 Level 3	25.000 Level 4	40.000 Level 5	60.000 Level 6	RRF	% RSD
65 Pyrene	1.35139	1.26587	1.18714	1.20329	1.11071	1.03006		
	0.99970						1.16402	10.830
67 Butylbenzylphthalate	0.53354	0.52548	0.50492	0.52601	0.49302	0.47528		
	0.47547						0.50482	4.835
68 Benzo(a)anthracene	1.12224	1.04219	1.00783	1.06302	0.98986	0.97477		
	0.96836						1.02404	5.415
70 3,3'-Dichlorobenzidine	0.46147	0.40840	0.42521	0.43177	0.38533	0.37958		
	0.37798						0.40996	7.660
71 Chrysene	1.12838	1.03779	0.98389	1.01416	0.96300	0.91239		
	0.91394						0.99336	7.635
72 bis(2-Ethylhexyl)phthalate	0.56526	0.58272	0.57474	0.60567	0.57939	0.56482		
	0.56650						0.57701	2.513
73 Di-n-octylphthalate	1.09001	1.04658	1.00032	1.04987	0.97833	0.94625		
	0.92709						1.00549	5.915
74 Benzo(b)fluoranthene	1.25077	1.15473	1.12621	1.19278	1.17916	1.13425		
	1.13399						1.16741	3.800
75 Benzo(k)fluoranthene	1.28234	1.23221	1.17938	1.27242	1.13931	1.10104		
	1.06798						1.18210	7.090

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 28-JAN-2011 09:50
End Cal Date : 28-JAN-2011 13:08
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem2/nt6.i/20110128.b/SW846012811.m
Cal Date : 28-Jan-2011 14:30 jianqing
Curve Type : Average

Compound	1.000 Level 1 / 80.000 Level 7	5.000 Level 2	10.000 Level 3	25.000 Level 4	40.000 Level 5	60.000 Level 6	RRF	% RSD	
76 Benzo(a)pyrene	1.11844	1.11282	1.08118	1.14959	1.09455	1.07006			
	1.06062						1.09818	2.824	
78 Indeno(1,2,3-cd)pyrene	1.36140	1.33430	1.32333	1.38179	1.32097	1.33294			
	1.35649						1.34446	1.679	
79 Dibenzo(a,h)anthracene	1.11409	1.09750	1.07634	1.15961	1.10024	1.08534			
	1.07292						1.10086	2.690	
80 Benzo(g,h,i)perylene	1.27095	1.21265	1.18496	1.24282	1.17991	1.19125			
	1.19678						1.21133	2.788	
90 N-Nitrosodimethylamine	0.82562	0.76397	0.75763	0.80328	0.77423	0.78602			
	0.79425						0.78643	3.011	
91 Aniline	2.04793	1.82974	1.90338	1.95627	1.88256	1.81193			
	1.79078						1.88894	4.790	
92 1,2-Diphenylhydrazine	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	
93 Benzidine	+++++	0.42084	0.31285	0.20859	0.22566	0.21858			
	0.21782						0.26739	31.580	<-
96 p-Cymene	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 28-JAN-2011 09:50
End Cal Date : 28-JAN-2011 13:08
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem2/nt6.i/20110128.b/SW846012811.m
Cal Date : 28-Jan-2011 14:30 jianqing
Curve Type : Average

Compound	1.000 Level 1 / 80.000 Level 7	5.000 Level 2	10.000 Level 3	25.000 Level 4	40.000 Level 5	60.000 Level 6	RRF	% RSD
97 Caffeine	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
98 Retene	0.45166 / 0.40098	0.40739	0.41439	0.43094	0.41580	0.39706	0.41689	4.541
99 Perylene	1.21157 / 0.98261	1.04456	1.03563	1.09449	1.03041	0.98714	1.05520	7.443
100 3-beta-Coprostanol	0.05391 / 0.06348	0.05391	0.05492	0.06194	0.06317	0.06091	0.05889	7.536
101 Cholesterol	0.05354 / 0.03779	0.03285	0.03616	0.04049	0.03919	0.03835	0.03977	16.472
102 beta-Sitosterol	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
103 Pyridine	1.24688 / 1.38529	1.37041	1.34736	1.45929	1.34546	1.35850	1.35903	4.631
187 Total Benzofluoranthenes	1.20810 / 1.03294	1.13230	1.10137	1.16146	1.09488	1.05396	1.11214	5.459
$ 1 2-Fluorophenol	1.23214 / +++++	1.12241	1.15351	1.27134	1.20727	1.19220	1.19648	4.476

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 28-JAN-2011 09:50
End Cal Date : 28-JAN-2011 13:08
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem2/nt6.i/20110128.b/SW846012811.m
Cal Date : 28-Jan-2011 14:30 jianqing
Curve Type : Average

Compound	1.000 Level 1	5.000 Level 2	10.000 Level 3	25.000 Level 4	40.000 Level 5	60.000 Level 6	RRF	% RSD
	80.000 Level 7							
$ 137 d8-1,4-Dioxane	0.56993	0.52902	0.50554	0.53842	0.51255	0.51703		
	0.51763						0.52716	4.123
$ 2 Phenol-d5	1.56630	1.41172	1.45146	1.55498	1.50262	1.45305		
	+++++						1.49002	4.157
$ 5 2-Chlorophenol-d4	1.39439	1.21326	1.23119	1.29956	1.24270	1.19628		
	+++++						1.26290	5.813
$ 10 1,2-Dichlorobenzene-d4	0.97938	0.85485	0.87157	0.91107	0.88029	0.84298		
	+++++						0.89002	5.576
$ 18 Nitrobenzene-d5	0.40259	0.35116	0.37501	0.38616	0.38350	0.36702		
	+++++						0.37757	4.664
$ 36 2-Fluorobiphenyl	1.47255	1.28381	1.32686	1.39133	1.32142	1.25434		
	+++++						1.34172	5.887
$ 55 2,4,6-Tribromophenol	0.17844	0.16410	0.18519	0.20488	0.21049	0.20487		
	+++++						0.19133	9.578
$ 66 Terphenyl-d14	0.80362	0.67850	0.70433	0.73558	0.71145	0.66178		
	+++++						0.71588	7.002
$ 85 p-Cresol-d4	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++

Analytical Resources, Inc.

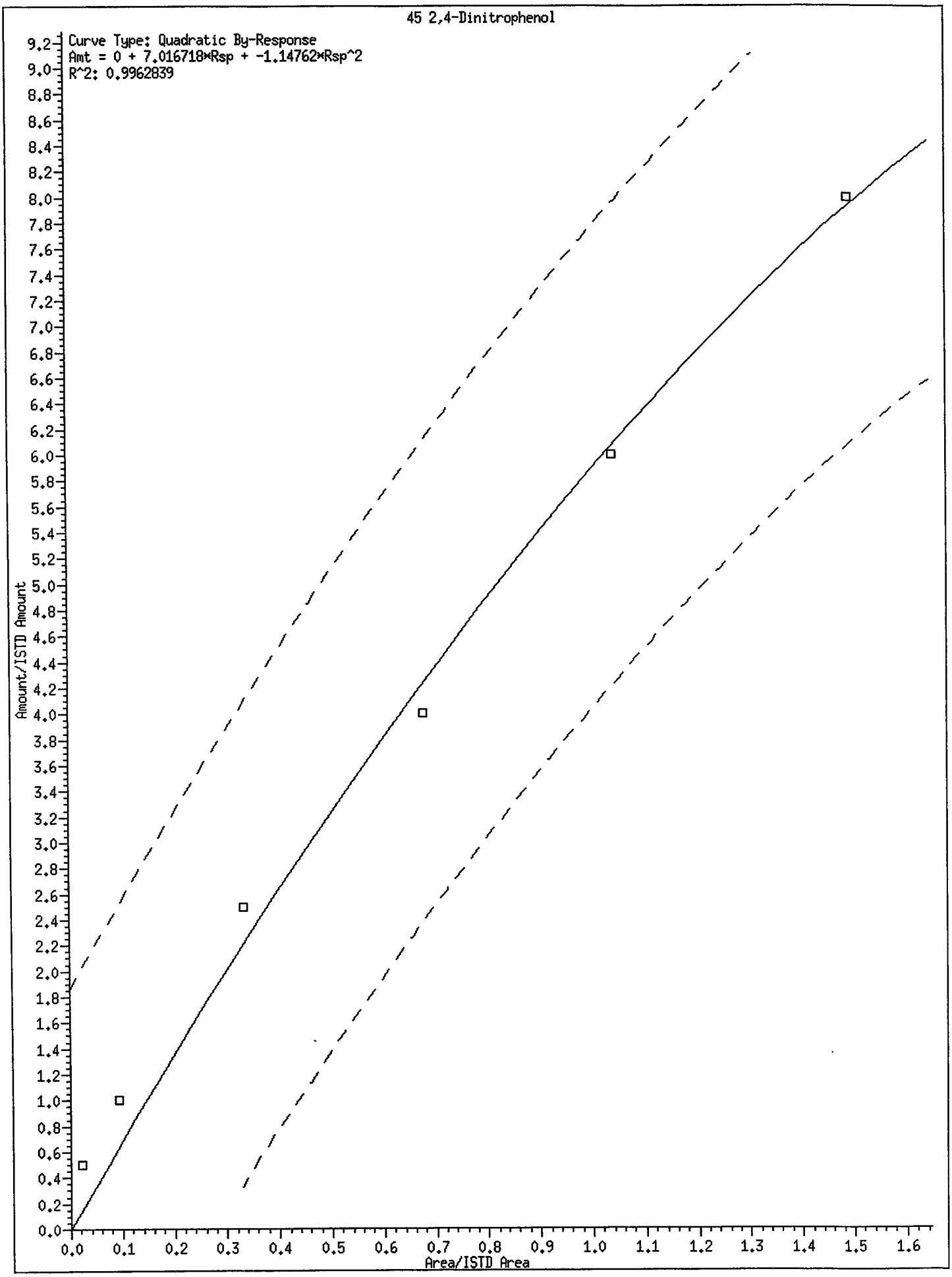
INITIAL CALIBRATION DATA

Start Cal Date : 28-JAN-2011 09:50
End Cal Date : 28-JAN-2011 13:08
Quant Method : ISTD
Origin : Force
Target Version : 3.50
Integrator : HP RTE
Method file : /chem2/nt6.i/20110128.b/SW846012811.m
Cal Date : 28-Jan-2011 14:30 jianqing

01/28/11

Compound	1 Level 1 / 80 Level 7	5 Level 2	10 Level 3	25 Level 4	40 Level 5	60 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
39 Dimethylphthalate	1.35170 1.19971	1.32643	1.28171	1.32181	1.24039	1.21698	AVRG		1.27696		4.62960
40 Acenaphthylene	1.92010 1.58601	1.87375	1.78579	1.84660	1.72102	1.65646	AVRG		1.76996		6.86373
41 2,6-Dinitrotoluene	0.28825 0.31805	0.31333	0.30734	0.33271	0.31499	0.31235	AVRG		0.31243		4.25565
43 3-Nitroaniline	0.33054 0.23613	0.31218	0.31667	0.31760	0.26579	0.25303	AVRG		0.29028		12.93783
44 Acenaphthene	1.22748 1.06562	1.16793	1.12926	1.15669	1.08989	1.07142	AVRG		1.12976		5.21635
45 2,4-Dinitrophenol	+++++ 1237172	19856	107789	288595	598795	897820	QUAD	0.000e+00	7.01672	-1.14762	0.99628
46 Dibenzofuran	1.90226 1.60545	1.68347	1.72808	1.80712	1.69701	1.63198	AVRG		1.72220		5.97684

SH29:000056


45 2,4-Dinitrophenol
Curve Type: Quadratic By-Response
Amt = 0 + 7.016718*Rsp + -1.14762*Rsp^2
R^2: 0.9962839
Amount/ISTD Amount
Area/ISTD Area

Analytical Resources, Inc.

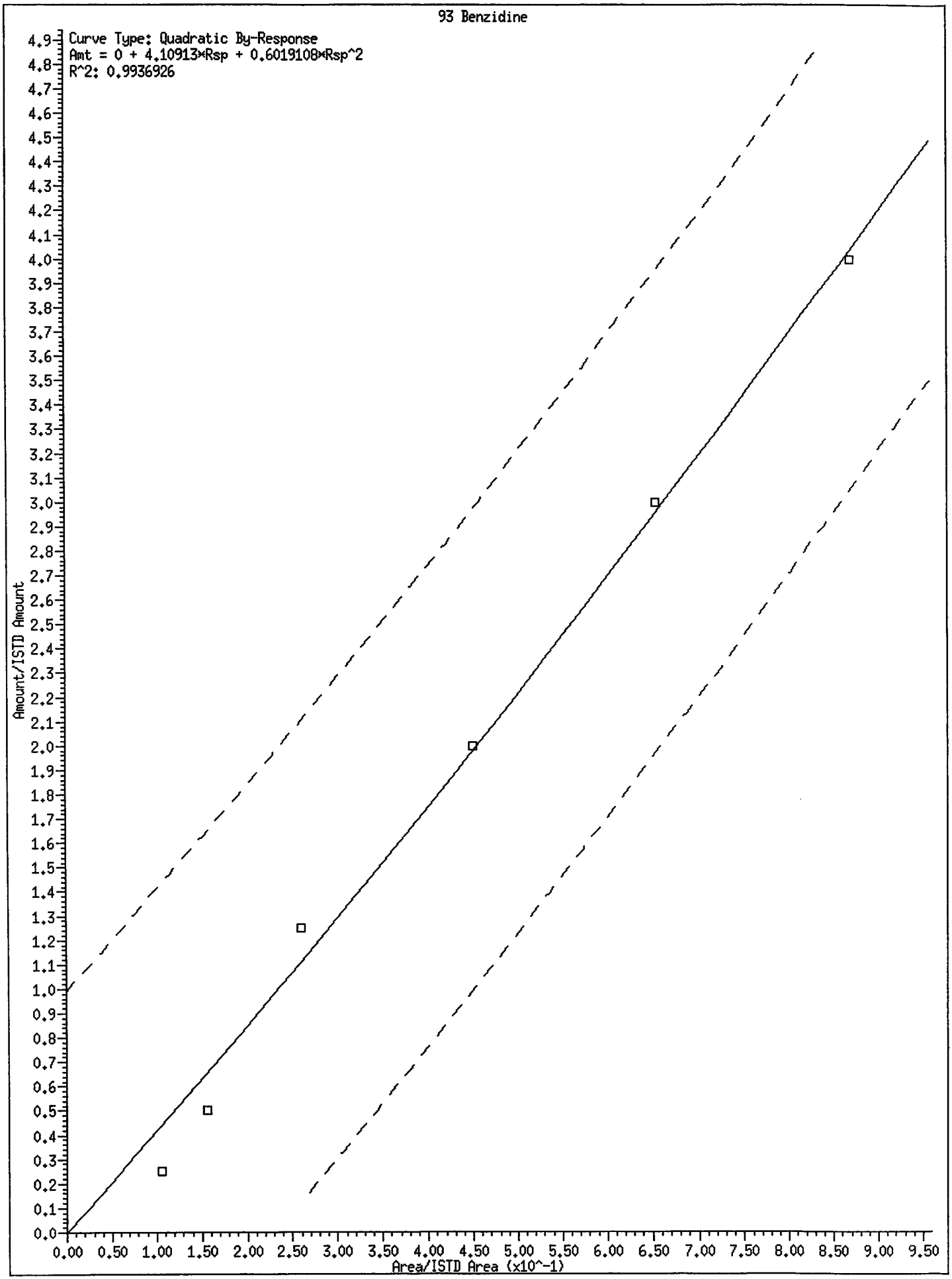
INITIAL CALIBRATION DATA

Start Cal Date : 28-JAN-2011 09:50
End Cal Date : 28-JAN-2011 13:08
Quant Method : ISTD
Origin : Force
Target Version : 3.50
Integrator : HP RTE
Method file : /chem2/nt6.i/20110128.b/SW846012811.m
Cal Date : 28-Jan-2011 14:30 jianqing

01/28/11

Compound	1 Level 1	5 Level 2	10 Level 3	25 Level 4	40 Level 5	60 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	80 Level 7										
80 Benzo(g,h,i)perylene	1.27095 1.19678	1.21265	1.18496	1.24282	1.17991	1.19125	AVRG		1.21133		2.78831
90 N-Nitrosodimethylamine	0.82562 0.79425	0.76397	0.75763	0.80328	0.77423	0.78602	AVRG		0.78643		3.01071
91 Aniline	2.04793 1.79078	1.82974	1.90338	1.95627	1.88256	1.81193	AVRG		1.88894		4.79045
92 1,2-Diphenylhydrazine	+++++ +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00
93 Benzidine	+++++ 1247927	144604	280078	370665	661877	982924	QUAD	0.000e+00	4.10913	0.60191	0.99369
96 p-Cymene	+++++ +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00
97 Caffeine	+++++ +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00

SH26:00058


93 Benzidine
Curve Type: Quadratic By-Response
Amt = 0 + 4.10913*Rsp + 0.6019108*Rsp^2
R^2: 0.9936926
Amount/ISTD Amount
Area/ISTD Area (x10^-1)

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 28-JAN-2011 09:50
End Cal Date : 28-JAN-2011 13:08
Quant Method : ISTD
Origin : Force
Target Version : 3.50
Integrator : HP RTE
Method file : /chem2/nt6.i/20110128.b/SW846012811.m
Cal Date : 28-Jan-2011 14:30 jianqing

Curve	Formula	Units
Averaged	Amt = Rsp/m1	Response
Quad	Amt = b + m1*Rsp + m2*Rsp^2	Response

SH28 : 00060

Analytical Resources, Inc.
RETENTION TIME SUMMARY REPORT

Method File: /chem2/nt6.i/20110127.b/SW846012711.m
Batch File: /chem2/nt6.i/20110127.b
Inst ID: nt6.i

ID:	RT01	RT02	RT03	RT04	RT05	RT06	RT07
FILENAME:	01271101	01271102	01271103	01271104	01271105	01271106	01271107
INJ.DATE:	27-JAN-2011	27-JAN-2011	27-JAN-2011	27-JAN-2011	27-JAN-2011	27-JAN-2011	27-JAN-2011
INJ.TIME:	17:53	18:26	18:59	19:32	20:04	20:37	21:10

01/28/11

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
$ 1 2-Fluorophenol	5.402	5.402	5.397	5.398	5.402	5.407	+++++	5.402	2.402-8.402	5.402	0.004
186 Carbaryl	15.507	15.497	15.497	15.498	15.508	15.518	15.529	15.507	12.507-18.507	15.508	0.012
179 n-Decane	7.287	7.288	7.288	7.289	7.293	7.292	7.293	7.287	4.287-10.287	7.290	0.003
180 n-Octadecane	14.669	14.669	14.669	14.665	14.674	14.674	14.675	14.669	11.669-17.669	14.671	0.004
169 4-tert-Butylphenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	18.531	15.531-21.531	+++++	+++++
170 N,N-Dimethylaniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	16.634	13.634-19.634	+++++	+++++
171 2,3-Dimethylaniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	17.609	14.609-20.609	+++++	+++++
172 2,4-Dimethylaniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	16.863	13.863-19.863	+++++	+++++
173 2,5-Dimethylaniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	20.605	17.605-23.605	+++++	+++++
174 2,6-Dimethylaniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	17.015	14.015-20.015	+++++	+++++
175 3,4-Dimethylaniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	17.609	14.609-20.609	+++++	+++++
176 3,5-Dimethylaniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	17.562	14.562-20.562	+++++	+++++
177 p-Benzoquinone	6.064	6.070	6.065	6.066	6.070	6.075	6.076	6.064	3.064-9.064	6.069	0.005
168 Pentachlorobenzene	12.677	12.672	12.671	12.673	12.677	12.682	12.688	12.677	9.677-15.677	12.677	0.006
145 4,4'-DDE	+++++	+++++	+++++	+++++	+++++	+++++	+++++	47.212	44.212-50.212	+++++	+++++
146 4,4'-DDD	+++++	+++++	+++++	+++++	+++++	+++++	+++++	47.746	44.746-50.746	+++++	+++++
147 4,4'-DDT	+++++	+++++	+++++	+++++	+++++	+++++	+++++	48.216	45.216-51.216	+++++	+++++

Reviewer 1 _____ Date: _____
Reviewer 2 _____ Date: 1/31/11

SIC 0000 1

Analytical Resources, Inc.
RETENTION TIME SUMMARY REPORT

Method File: /chem2/nt6.i/20110127.b/SW846012711.m
Batch File: /chem2/nt6.i/20110127.b
Inst ID: nt6.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
148 Dieldrin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	47.281	44.281-50.281	+++++	+++++
149 TCMX	+++++	+++++	+++++	+++++	+++++	+++++	+++++	43.387	40.387-46.387	+++++	+++++
150 DCBP	+++++	+++++	+++++	+++++	+++++	+++++	+++++	50.989	47.989-53.989	+++++	+++++
138 Chlorobenzilate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	67.733	64.733-70.733	+++++	+++++
139 Isodrin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	65.067	62.067-68.067	+++++	+++++
140 Diallate A	+++++	+++++	+++++	+++++	+++++	+++++	+++++	65.487	62.487-68.487	+++++	+++++
141 Diallate B	+++++	+++++	+++++	+++++	+++++	+++++	+++++	65.487	62.487-68.487	+++++	+++++
142 1,2-Dibromo-3-Chloropr	+++++	+++++	+++++	+++++	+++++	+++++	+++++	49.917	46.917-52.917	+++++	+++++
135 2,3,5,6-Tetrachlorophe	12.853	12.853	12.848	12.849	12.853	12.858	12.864	12.853	9.853-15.853	12.854	0.006
136 2,3,4,5-tetrachlorophe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	39.317	36.317-42.317	+++++	+++++
$ 137 d8-1,4-Dioxane	1.962	1.968	1.963	1.969	1.968	1.978	1.984	1.962	0.000-4.962	1.970	0.008
* 134 Di-n-octylphthalate-d4	20.181	20.176	20.176	20.177	20.181	20.180	20.187	20.181	17.181-23.181	20.180	0.004
133 Butylatedhydroxytoluen	12.538	12.533	12.533	12.534	12.538	12.537	12.544	12.538	9.538-15.538	12.537	0.004
132 3,6-Dimethylphenanthre	+++++	+++++	+++++	+++++	+++++	+++++	+++++	65.450	62.450-68.450	+++++	+++++
131 1-Methylphenanthrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	64.400	61.400-67.400	+++++	+++++
130 Dibenzothiophene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	62.100	59.100-65.100	+++++	+++++
129 1-Methylfluorene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	54.912	51.912-57.912	+++++	+++++
128 N-Hexadecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	54.212	51.212-57.212	+++++	+++++
127 2-Isopropylnaphthalene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	57.650	54.650-60.650	+++++	+++++
126 N-Tetradecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	56.750	53.750-59.750	+++++	+++++
144 alpha-Terpineol	9.552	9.547	9.547	9.548	9.552	9.562	9.563	9.552	6.552-12.552	9.553	0.007
125 Safrole	+++++	+++++	+++++	+++++	+++++	+++++	+++++	52.166	49.166-55.166	+++++	+++++

SH26 : 00002

Analytical Resources, Inc.
RETENTION TIME SUMMARY REPORT

Method File: /chem2/nt6.i/20110127.b/SW846012711.m
Batch File: /chem2/nt6.i/20110127.b
Inst ID: nt6.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
124 3,4-Dimethylphenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	50.617	47.617-53.617	+++++	+++++
123 Acetophenone	8.131	8.126	8.126	8.128	8.137	8.142	8.148	8.131	5.131-11.131	8.134	0.008
122 Furfuraldehyde	+++++	+++++	+++++	+++++	+++++	+++++	+++++	43.467	40.467-46.467	+++++	+++++
143 1,4-Dioxane	2.005	2.006	2.000	2.007	2.005	2.015	2.027	2.005	0.000-5.005	2.009	0.009
121 Quinoline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	54.500	51.500-57.500	+++++	+++++
120 2,3,4,6-Tetrachlorophe	12.922	12.923	12.922	12.919	12.928	12.933	12.934	12.922	9.922-15.922	12.926	0.006
178 2-Benzyl-4-Chloropheno	15.470	15.465	15.459	15.466	15.476	15.480	15.492	15.470	12.470-18.470	15.473	0.011
119 7,12-Dimethylbenz(a)an	+++++	+++++	+++++	+++++	+++++	+++++	+++++	47.069	44.069-50.069	+++++	+++++
118 Triphenyl Phosphate	18.541	18.536	18.536	18.532	18.536	18.541	18.547	18.541	15.541-21.541	18.538	0.005
117 Butyl Diphenyl Phospha	16.949	16.945	16.950	16.946	16.950	16.954	16.955	16.949	13.949-19.949	16.950	0.004
116 Dibutyl Phenyl Phospha	15.288	15.278	15.278	15.285	15.294	15.299	15.310	15.288	12.288-18.288	15.290	0.012
115 Tributyl Phosphate	13.584	13.564	13.569	13.576	13.590	13.595	13.607	13.584	10.584-16.584	13.583	0.015
114 Beta-Pinene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	48.950	45.950-51.950	+++++	+++++
113 Diphenyl Oxide	11.608	11.603	11.603	11.605	11.609	11.613	11.614	11.608	8.608-14.608	11.608	0.005
112 Biphenyl	11.411	11.400	11.406	11.407	11.411	11.416	11.417	11.411	8.411-14.411	11.410	0.006
111 Azobenzene (1,2-DP-Hyd	13.478	13.467	13.467	13.474	13.478	13.483	13.489	13.478	10.478-16.478	13.477	0.008
110 Tetrachloroguaiacol	14.642	14.643	14.637	14.638	14.648	14.652	14.659	14.642	11.642-17.642	14.646	0.008
109 3,4,5-Trichloroguaiaco	13.029	13.024	13.024	13.025	13.029	13.034	13.040	13.029	10.029-16.029	13.029	0.006
181 3,4,6-Trichloroguaiaco	13.141	13.136	13.136	13.138	13.142	13.146	13.153	13.141	10.141-16.141	13.142	0.006
108 4,5,6-Trichloroguaiaco	14.060	14.060	14.055	14.056	14.060	14.065	14.071	14.060	11.060-17.060	14.061	0.006
184 3,4-Dichloroguaiacol	11.491	11.491	11.491	11.492	11.491	11.496	11.502	11.491	8.491-14.491	11.494	0.004
107 4,5-Dichloroguaiacol	12.292	12.282	12.287	12.288	12.292	12.302	12.303	12.292	9.292-15.292	12.292	0.008
182 4,6-Dichloroguaiacol	12.292	12.282	12.287	12.288	12.292	12.302	12.303	12.292	9.292-15.292	12.292	0.008
185 4-Chloroguaiacol	10.423	10.418	10.418	10.419	10.423	10.422	10.429	10.423	7.423-13.423	10.422	0.004

S120 : 00003

Analytical Resources, Inc.
RETENTION TIME SUMMARY REPORT

Method File: /chem2/nt6.i/20110127.b/SW846012711.m
Batch File: /chem2/nt6.i/20110127.b
Inst ID: nt6.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
106 Guaiacol	8.409	8.404	8.399	8.405	8.409	8.414	8.420	8.409	5.409-11.409	8.409	0.007
105 1-methylnaphthalene	10.791	10.792	10.791	10.787	10.791	10.796	10.802	10.791	7.791-13.791	10.793	0.005
151 1,2,4,5-Tetrachloroben	10.962	10.963	10.962	10.964	10.962	10.967	10.968	10.962	7.962-13.962	10.964	0.003
152 Benzo(e)pyrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	30.943	27.943-33.943	+++++	+++++
153 Chlorpyrifos	+++++	+++++	+++++	+++++	+++++	+++++	+++++	23.442	20.442-26.442	+++++	+++++
154 Diazinon	+++++	+++++	+++++	+++++	+++++	+++++	+++++	21.968	18.968-24.968	+++++	+++++
155 Kelthane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	23.466	20.466-26.466	+++++	+++++
156 Methyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	22.866	19.866-25.866	+++++	+++++
157 Ethyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	23.413	20.413-26.413	+++++	+++++
158 Ethion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	24.952	21.952-27.952	+++++	+++++
159 4-Nonylphenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	21.721	18.721-24.721	+++++	+++++
160 Tetraethyl Tin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	18.159	15.159-21.159	+++++	+++++
161 1,2,3-Trichloronaphtha	+++++	+++++	+++++	+++++	+++++	+++++	+++++	36.246	33.246-39.246	+++++	+++++
162 1,2,3,4-Tetrachloronap	+++++	+++++	+++++	+++++	+++++	+++++	+++++	37.506	34.506-40.506	+++++	+++++
163 1,2,3,5,8-Pentachloron	+++++	+++++	+++++	+++++	+++++	+++++	+++++	38.893	35.893-41.893	+++++	+++++
164 1,2,3,4,6,7-Hexachloro	+++++	+++++	+++++	+++++	+++++	+++++	+++++	39.681	36.681-42.681	+++++	+++++
165 1,2,3,4,5,6,7-Heptachl	+++++	+++++	+++++	+++++	+++++	+++++	+++++	41.123	38.123-44.123	+++++	+++++
166 Octachloronaphthalene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	42.253	39.253-45.253	+++++	+++++
167 2,2',4,4',5-Pentabromo	+++++	+++++	+++++	+++++	+++++	+++++	+++++	42.033	39.033-45.033	+++++	+++++
$ 2 Phenol-d5	7.031	7.021	7.021	7.027	7.037	7.041	7.099	7.031	4.031-10.031	7.068	0.102
3 Phenol	7.047	7.042	7.042	7.043	7.053	7.063	7.064	7.047	4.047-10.047	7.051	0.009
4 Bis(2-Chloroethyl)ethe	7.111	7.101	7.106	7.107	7.112	7.116	7.117	7.111	4.111-10.111	7.110	0.006
5 2-Chlorophenol-d4	7.116	7.106	7.111	7.113	7.117	7.122	+++++	7.116	4.116-10.116	7.114	0.005

01/28/11

1 0000 : 0 2 H 9

Analytical Resources, Inc.
RETENTION TIME SUMMARY REPORT

Method File: /chem2/nt6.i/20110127.b/SW846012711.m
Batch File: /chem2/nt6.i/20110127.b
Inst ID: nt6.i

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
	6 2-Chlorophenol	7.138	7.133	7.133	7.134	7.144	7.143	7.149	7.138	4.138-10.138	7.139	0.006
	7 1,3-Dichlorobenzene	7.351	7.347	7.346	7.348	7.352	7.357	7.358	7.351	4.351-10.351	7.351	0.005
*	8 1,4-Dichlorobenzene-d4	7.416	7.411	7.416	7.417	7.416	7.421	7.422	7.416	4.416-10.416	7.417	0.004
	9 1,4-Dichlorobenzene	7.442	7.437	7.437	7.439	7.443	7.447	7.448	7.442	4.442-10.442	7.442	0.005
$	10 1,2-Dichlorobenzene-d4	7.715	7.715	7.710	7.716	7.715	7.720	7.722	7.715	4.715-10.715	7.673	0.111
	11 Benzyl alcohol	7.725	7.721	7.720	7.722	7.731	7.736	7.742	7.725	4.725-10.725	7.728	0.008
	12 1,2-Dichlorobenzene	7.736	7.731	7.736	7.732	7.736	7.741	7.742	7.736	4.736-10.736	7.736	0.004
	13 2-Methylphenol	7.987	7.982	7.977	7.983	7.987	7.997	8.004	7.987	4.987-10.987	7.988	0.009
	14 2,2'-oxybis(1-Chloropr	7.992	7.988	7.993	7.994	7.998	7.997	8.004	7.992	4.992-10.992	7.995	0.005
	15 4-Methylphenol	8.222	8.217	8.217	8.218	8.228	8.232	8.239	8.222	5.222-11.222	8.225	0.008
	16 N-Nitroso-di-n-propyla	8.211	8.201	8.201	8.202	8.217	8.227	8.233	8.211	5.211-11.211	8.213	0.013
	17 Hexachloroethane	8.227	8.223	8.222	8.229	8.228	8.227	8.228	8.227	5.227-11.227	8.226	0.003
$	18 Nitrobenzene-d5	8.361	8.356	8.356	8.357	8.361	8.371	+++++	8.361	5.361-11.361	8.360	0.006
	19 Nitrobenzene	8.388	8.383	8.383	8.384	8.393	8.398	8.399	8.388	5.388-11.388	8.390	0.007
	20 Isophorone	8.783	8.773	8.772	8.774	8.783	8.793	8.800	8.783	5.783-11.783	8.783	0.011
	21 2-Nitrophenol	8.911	8.906	8.906	8.907	8.911	8.916	8.917	8.911	5.911-11.911	8.911	0.005
	22 2,4-Dimethylphenol	9.055	9.050	9.050	9.052	9.061	9.066	9.067	9.055	6.055-12.055	9.057	0.007
	23 Bis(2-Chloroethoxy)met	9.199	9.195	9.194	9.196	9.200	9.205	9.211	9.199	6.199-12.199	9.200	0.006
	24 Benzoic acid	9.322	9.179	9.216	9.265	9.365	9.408	9.462	9.322	6.322-12.322	9.317	0.103
	25 2,4-Dichlorophenol	9.301	9.301	9.296	9.297	9.301	9.306	9.312	9.301	6.301-12.301	9.302	0.006
	26 1,2,4-Trichlorobenzene	9.418	9.419	9.419	9.420	9.424	9.424	9.425	9.418	6.418-12.418	9.421	0.003
*	27 Naphthalene-d8	9.472	9.467	9.467	9.468	9.472	9.472	9.478	9.472	6.472-12.472	9.471	0.004
	28 Naphthalene	9.499	9.494	9.499	9.500	9.504	9.504	9.510	9.499	6.499-12.499	9.501	0.005
	29 4-Chloroaniline	9.664	9.659	9.659	9.661	9.665	9.669	9.670	9.664	6.664-12.664	9.664	0.005

01/28/11

5H29 : 98965

Analytical Resources, Inc.
RETENTION TIME SUMMARY REPORT

Method File: /chem2/nt6.i/20110127.b/SW846012711.m
Batch File: /chem2/nt6.i/20110127.b
Inst ID: nt6.i

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
	30 Hexachlorobutadiene	9.840	9.830	9.835	9.837	9.841	9.840	9.841	9.840	6.840-12.840	9.838	0.004
	31 4-Chloro-3-methylpheno	10.497	10.498	10.492	10.494	10.498	10.508	10.509	10.497	7.497-13.497	10.499	0.006
	32 2-Methylnaphthalene	10.626	10.621	10.620	10.622	10.626	10.631	10.632	10.626	7.626-13.626	10.625	0.005
	33 Hexachlorocyclopentadi	11.010	11.011	11.010	11.012	11.010	11.015	11.016	11.010	8.010-14.010	11.012	0.003
	34 2,4,6-Trichlorophenol	11.149	11.149	11.149	11.145	11.149	11.154	11.160	11.149	8.149-14.149	11.151	0.005
	35 2,4,5-Trichlorophenol	11.202	11.203	11.203	11.199	11.203	11.207	11.214	11.202	8.202-14.202	11.204	0.005
$	36 2-Fluorobiphenyl	11.282	11.278	11.277	11.279	11.283	11.288	11.614	11.282	8.282-14.282	11.329	0.126
	37 2-Chloronaphthalene	11.395	11.390	11.390	11.391	11.395	11.400	11.401	11.395	8.395-14.395	11.394	0.005
	38 2-Nitroaniline	11.646	11.636	11.635	11.637	11.646	11.651	11.657	11.646	8.646-14.646	11.644	0.008
	39 Dimethylphthalate	12.036	12.025	12.031	12.032	12.041	12.051	12.058	12.036	9.036-15.036	12.039	0.012
	40 Acenaphthylene	12.068	12.057	12.063	12.064	12.068	12.073	12.074	12.068	9.068-15.068	12.067	0.006
	41 2,6-Dinitrotoluene	12.116	12.106	12.111	12.112	12.121	12.126	12.132	12.116	9.116-15.116	12.118	0.009
*	42 Acenaphthene-d10	12.319	12.319	12.319	12.320	12.319	12.324	12.325	12.319	9.319-15.319	12.321	0.003
	43 3-Nitroaniline	12.324	12.314	12.308	12.315	12.324	12.334	12.341	12.324	9.324-15.324	12.323	0.012
	44 Acenaphthene	12.372	12.367	12.367	12.368	12.372	12.377	12.378	12.372	9.372-15.372	12.372	0.005
	45 2,4-Dinitrophenol	12.484	+++++	12.517	12.481	12.490	12.500	12.506	12.484	9.484-15.484	12.496	0.014
	46 Dibenzofuran	12.634	12.624	12.629	12.630	12.634	12.639	12.645	12.634	9.634-15.634	12.633	0.007
	47 4-Nitrophenol	12.660	12.672	12.655	12.652	12.656	12.666	12.672	12.660	9.660-15.660	12.662	0.008
	48 2,4-Dinitrotoluene	12.735	12.730	12.730	12.732	12.741	12.751	12.757	12.735	9.735-15.735	12.740	0.011
	49 Fluorene	13.184	13.179	13.179	13.180	13.190	13.194	13.201	13.184	10.184-16.184	13.187	0.008
	50 Diethylphthalate	13.195	13.179	13.179	13.186	13.195	13.200	13.206	13.195	10.195-16.195	13.191	0.010
	51 4-Chlorophenyl-phenyle	13.232	13.222	13.227	13.228	13.232	13.237	13.238	13.232	10.232-16.232	13.231	0.006
	52 4-Nitroaniline	13.307	13.297	13.296	13.298	13.312	13.328	13.345	13.307	10.307-16.307	13.312	0.018
	53 4,6-Dinitro-2-methylph	13.387	13.393	13.376	13.378	13.393	13.403	13.414	13.387	10.387-16.387	13.392	0.013

01/28/11

SH25 : 00066

Analytical Resources, Inc.
RETENTION TIME SUMMARY REPORT

Method File: /chem2/nt6.i/20110127.b/SW846012711.m
Batch File: /chem2/nt6.i/20110127.b
Inst ID: nt6.i

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
	54 N-Nitrosodiphenylamine	13.440	13.430	13.430	13.431	13.441	13.445	13.457	13.440	10.440-16.440	13.439	0.010
$	55 2,4,6-Tribromophenol	13.606	13.606	13.601	13.602	13.612	13.611	+++++	13.606	10.606-16.606	13.606	0.004
	56 4-Bromophenyl-phenylet	14.001	13.996	13.996	13.997	14.001	14.006	14.012	14.001	11.001-17.001	14.002	0.006
	57 Hexachlorobenzene	14.204	14.199	14.199	14.200	14.210	14.209	14.215	14.204	11.204-17.204	14.205	0.006
	58 Pentachlorophenol	14.508	14.514	14.503	14.505	14.509	14.514	14.520	14.508	11.508-17.508	14.510	0.006
*	59 Phenanthrene-d10	14.674	14.669	14.669	14.670	14.674	14.679	14.685	14.674	11.674-17.674	14.675	0.006
	60 Phenanthrene	14.711	14.707	14.706	14.708	14.712	14.717	14.728	14.711	11.711-17.711	14.713	0.008
	61 Anthracene	14.786	14.776	14.776	14.777	14.787	14.791	14.798	14.786	11.786-17.786	14.784	0.008
	62 Carbazole	15.080	15.075	15.070	15.076	15.080	15.085	15.091	15.080	12.080-18.080	15.080	0.007
	63 Di-n-butylphthalate	15.833	15.834	15.833	15.835	15.839	15.838	15.844	15.833	12.833-18.833	15.837	0.004
	64 Fluoranthene	16.634	16.629	16.629	16.631	16.635	16.639	16.646	16.634	13.634-19.634	16.635	0.006
	65 Pyrene	16.981	16.971	16.971	16.978	16.982	16.987	16.993	16.981	13.981-19.981	16.980	0.008
$	66 Terphenyl-d14	17.329	17.324	17.324	17.325	17.329	17.334	17.324	17.329	14.329-20.329	17.327	0.004
	67 Butylbenzylphthalate	18.231	18.226	18.232	18.228	18.232	18.236	18.243	18.231	15.231-21.231	18.232	0.006
	68 Benzo(a)anthracene	18.936	18.931	18.931	18.933	18.937	18.947	18.953	18.936	15.936-21.936	18.938	0.008
*	69 Chrysene-d12	18.963	18.958	18.958	18.959	18.963	18.968	18.974	18.963	15.963-21.963	18.963	0.006
	70 3,3'-Dichlorobenzidine	18.974	18.969	18.969	18.965	18.974	18.979	18.980	18.974	15.974-21.974	18.973	0.006
	71 Chrysene	19.000	18.995	18.995	18.997	19.006	19.011	19.017	19.000	16.000-22.000	19.003	0.008
	72 bis(2-Ethylhexyl)phtha	19.246	19.247	19.246	19.242	19.246	19.251	19.252	19.246	16.246-22.246	19.247	0.003
	73 Di-n-octylphthalate	20.191	20.187	20.186	20.188	20.192	20.196	20.197	20.191	17.191-23.191	20.191	0.005
	74 Benzo(b)fluoranthene	20.587	20.571	20.571	20.572	20.587	20.597	20.603	20.587	17.587-23.587	20.584	0.013
	75 Benzo(k)fluoranthene	20.613	20.608	20.603	20.610	20.624	20.634	20.641	20.613	17.613-23.613	20.619	0.014
	76 Benzo(a)pyrene	21.025	21.014	21.014	21.016	21.025	21.035	21.041	21.025	18.025-24.025	21.024	0.011
	77 Perylene-d12	21.105	21.100	21.100	21.101	21.105	21.110	21.116	21.105	18.105-24.105	21.105	0.006

01/28/11

3120 : 00067

Analytical Resources, Inc.
RETENTION TIME SUMMARY REPORT

Method File: /chem2/nt6.i/20110127.b/SW846012711.m
Batch File: /chem2/nt6.i/20110127.b
Inst ID: nt6.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
78 Indeno(1,2,3-cd)pyrene	22.472	22.451	22.451	22.458	22.478	22.488	22.499	22.472	19.472-25.472	22.471	0.019
79 Dibenzo(a,h)anthracene	22.493	22.483	22.483	22.484	22.504	22.515	22.526	22.493	19.493-25.493	22.498	0.017
80 Benzo(g,h,i)perylene	22.798	22.777	22.777	22.784	22.804	22.824	22.836	22.798	19.798-25.798	22.800	0.023
$ 85 p-Cresol-d4	+++++	+++++	+++++	+++++	+++++	+++++	+++++	51.633	48.633-54.633	+++++	+++++
$ 86 Anthracene-d10	+++++	+++++	+++++	+++++	+++++	+++++	+++++	63.533	60.533-66.533	+++++	+++++
$ 87 Fluoranthene-d10	+++++	+++++	+++++	+++++	+++++	+++++	+++++	60.273	57.273-63.273	+++++	+++++
$ 88 Dibenz(a,h)anthracene-	+++++	+++++	+++++	+++++	+++++	+++++	+++++	78.600	75.600-81.600	+++++	+++++
$ 89 Diphenyl-d10	+++++	+++++	+++++	+++++	+++++	+++++	+++++	50.841	47.841-53.841	+++++	+++++
90 N-Nitrosodimethylamine	2.523	2.518	2.513	2.520	2.534	2.550	2.561	2.523	0.000-5.523	2.531	0.018
91 Aniline	6.972	6.967	6.967	6.969	6.973	6.977	6.984	6.972	3.972-9.972	6.973	0.006
92 1,2-Diphenylhydrazine	+++++	+++++	+++++	+++++	+++++	+++++	+++++	56.160	53.160-59.160	+++++	+++++
93 Benzidine	16.907	16.907	16.907	16.908	16.912	16.912	16.918	16.907	13.907-19.907	16.910	0.004
$ 95 D10-1-methylnaphthalen	+++++	+++++	+++++	+++++	+++++	+++++	+++++	52.075	49.075-55.075	+++++	+++++
96 p-Cymene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	49.250	46.250-52.250	+++++	+++++
97 Caffeine	+++++	+++++	+++++	+++++	+++++	+++++	+++++	61.202	58.202-64.202	+++++	+++++
98 Retene	17.564	17.559	17.559	17.560	17.564	17.569	17.570	17.564	14.564-20.564	17.563	0.005
99 Perylene	21.137	21.127	21.132	21.133	21.142	21.153	21.159	21.137	18.137-24.137	21.140	0.012
100 3-beta-Coprostanol	21.922	21.917	21.917	21.918	21.928	21.932	21.933	21.922	18.922-24.922	21.924	0.007
101 Cholesterol	22.103	22.093	22.093	22.095	22.104	22.109	22.115	22.103	19.103-25.103	22.102	0.008
102 beta-Sitosterol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	21.369	18.369-24.369	+++++	+++++
103 Pyridine	2.502	2.529	2.507	2.509	2.507	2.512	2.524	2.502	0.000-5.502	2.513	0.010
187 Total Benzofluoranthen	20.613	20.608	20.603	20.610	20.624	20.634	20.641	20.613	17.613-23.613	20.619	0.014

SH20:00068

Analytical Resources Inc.: Organics Instrument Log

NT-6 Serial No.:GC=US00036167, MS=US81221575

Date: 1/28/11 Analysis: 8270 Analyst: [illegible]

GC Program: [illegible] Column No: 181970 Column Type: 28-5MS

Instrument Tune (.U or .CT.): 100928 EM Voltage: 1482

Calibration File: 01281101 Curve Date: 1/28/11

IS/SS	Ical/Ccal	LCS/ICV
1762-1	1810-1, 1811-1	1781-3, 1784-1
	1761-1, 1812-1	1782-1, 1764-1
	26623, 26082	1783-1, 26623
	1813-1	1813-1, 26082

INTERNAL STANDARD SUMMARY FOR DATABATCH - /chem2/nt6.i/20110128.b

	Time	Filename	LabID	ClientId	DF																
1	0950	01281101.D	IC250128	IC250128	1	7.33	458851	9.39	1522936	12.23	864539	14.58	1378528	18.86	1421586	21.00	1361193	20.09	1679951		
2	1023	01281102.D	IC010128	IC010128	1	7.33	463845	9.38	1519325	12.23	896651	14.58	1405130	18.85	1318435	21.00	1276686	20.09	1624726		
3	1056	01281103.D	IC050128	IC050128	1	7.33	476583	9.38	1592302	12.23	919033	14.58	1466888	18.86	1374430	20.99	1325976	20.09	1669893		
4	1129	01281104.D	IC100128	IC100128	1	7.33	607509	9.39	1998438	12.23	1155381	14.58	1827126	18.86	1790469	21.00	1760832	20.09	2137569		
5	1202	01281105.D	IC400128	IC400128	1	7.33	456542	9.39	1520056	12.23	880784	14.58	1417279	18.86	1466560	21.00	1383320	20.09	1679881		
6	1235	01281106.D	IC600128	IC600128	1	7.34	446993	9.39	1507799	12.24	859945	14.59	1382617	18.87	1498939	21.00	1419623	20.09	1698794		
7	1308	01281107.D	IC800128	IC800128	1	7.34	450771	9.39	1488273	12.24	826815	14.59	1311823	18.87	1432316	21.01	1394111	20.10	1623058		
8	1340	01281108.D	ICV0128	ICV0128	1	7.33	447403	9.39	1519745	12.23	866200	14.58	1402226	18.86	1425631	21.00	1357012	20.09	1635357		
9	1413	01281109.D	SD65MBW1	SD65MBW1	1	7.33	483290	9.38	1625174	12.23	970333	14.58	1580399	18.86	1509697	20.08	1794247	20.99	1453572		
10	1446	01281110.D	SD65A	LOD1	1	7.33	500956	9.39	1679042	12.23	995261	14.58	1589311	18.86	1503118	20.08	1814490	20.99	1423140		
11	1518	01281111.D	SD65B	LOD2	1	7.33	500796	9.39	1681449	12.23	975856	14.58	1548302	18.86	1440111	20.08	1740355	20.99	1361902		
12	1551	01281112.D	SD65C	LOD3	1	7.33	515132	9.38	1700524	12.23	995478	14.58	1572901	18.86	1499982	20.08	1836190	20.99	1455209		
13	1624	01281113.D	SF58MBW1	SF58MBW1	1	7.33	433455	9.38	1446637	12.23	838304	14.58	1317577	18.85	1229552	20.09	1479421	21.00	1216069		
14	1656	01281114.D	SF40A	RCB191-01201	5	7.33	420099	9.39	1405014	12.23	831380	14.58	1316337	18.86	1571030	20.10	2023432	21.01	1738455		

[illegible] 01/28/11

Maintenance / Comments

Maintenance Verification (Identify ICal or CCal that demonstrates the instrument is in control):

Every line must contain information or be lined out. Make all entries legible. Start a new page for each QC period.

MANUAL INTEGRATION SUMMARY FOR DATABATCH - /chem2/nt6.i/20110128.b

ARI Job No.: IC25 Method: SW846012811.m Instrument: nt6.i Date: 28-JAN-2011

01/29/11

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
0950	01281101.D	IC250128	IC250128	1	NO MANUAL INTEGRATION
1023	01281102.D	IC010128	IC010128	1	2,4-Dinitrophenol, 4-Nitrophenol, 2,4-Dinitrotoluene, 3-beta-Coprostanol, Cholesterol, 1,2-Dichlorobenzene-d4,
1056	01281103.D	IC050128	IC050128	1	NO MANUAL INTEGRATION
1129	01281104.D	IC100128	IC100128	1	NO MANUAL INTEGRATION
1202	01281105.D	IC400128	IC400128	1	4-Nitrophenol, Benzidine,
1235	01281106.D	IC600128	IC600128	1	Benzoic acid, 4-Nitrophenol,
1308	01281107.D	IC800128	IC800128	1	Benzoic acid, 4-Nitrophenol, Benzidine,
1340	01281108.D	ICV0128	ICV0128	1	NO MANUAL INTEGRATION

SH26 : 00078

Data File: /chem2/nt6.i/20110128.b/tune.b/01281101.D

Date : 28-JAN-2011 09:50

Client ID: DFTPP0128

Instrument: nt6.i

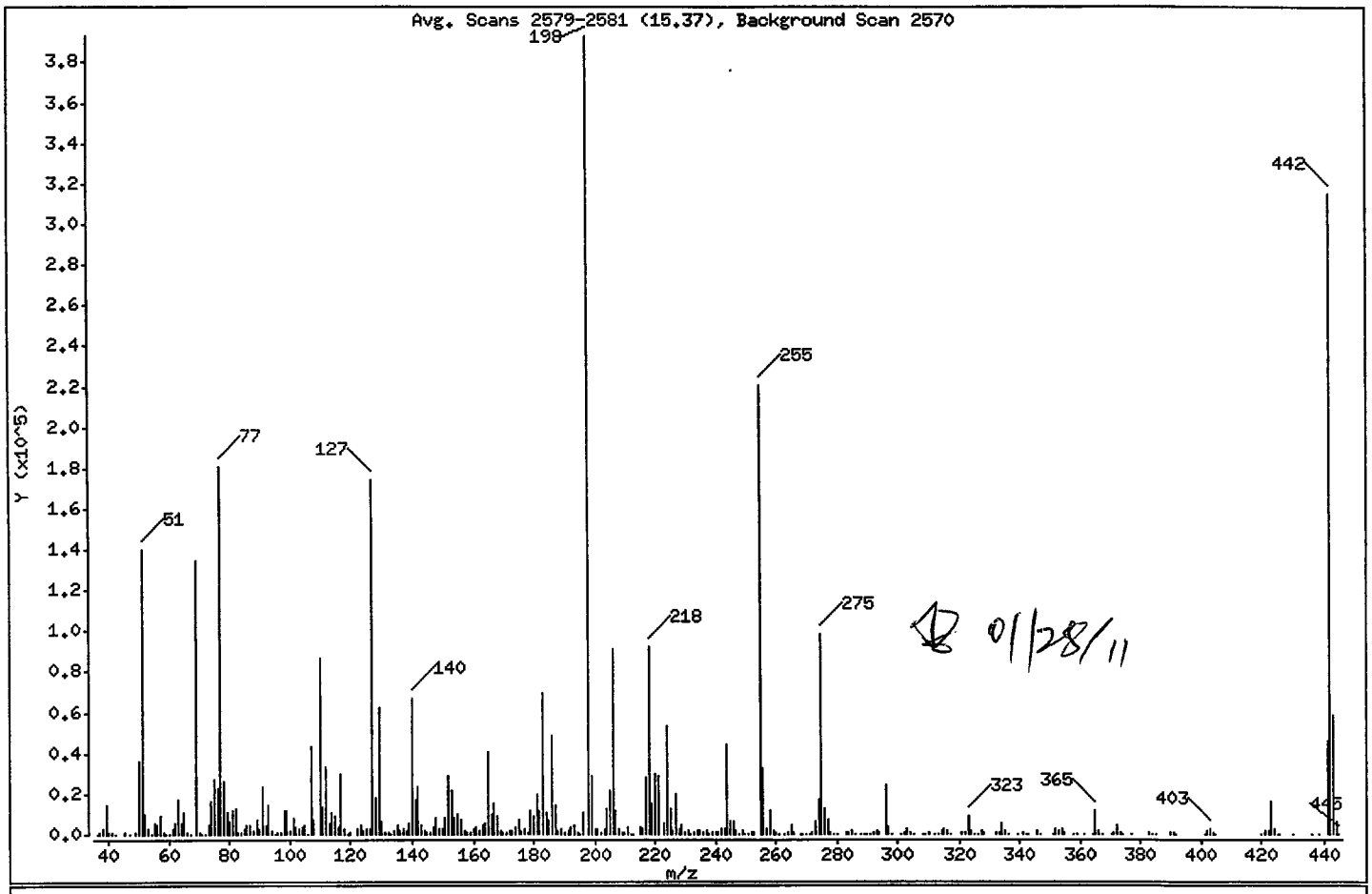
Sample Info: DFTPP0128

Operator: JZ

Column phase: ZB-5msi

Column diameter: 0.25

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	10.00 - 80.00% of mass 198	35.65
68	Less than 2.00% of mass 69	0.00 (0.00)
69	Mass 69 relative abundance	34.31
70	Less than 2.00% of mass 69	0.22 (0.64)
127	10.00 - 80.00% of mass 198	44.33
197	Less than 2.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	7.29
275	10.00 - 60.00% of mass 198	25.10
365	Greater than 1.00% of mass 198	2.96
441	0.01 - 24.00% of mass 442	11.79 (14.70)
442	50.00 - 200.00% of mass 198	80.25
443	15.00 - 24.00% of mass 442	14.99 (18.68)

Data File: /chem2/nt6.i/20110128.b/tune.b/01281101.D

Date : 28-JAN-2011 09:50

Client ID: DFTPP0128 Instrument: nt6.i

Sample Info: DFTPP0128

Operator: JZ

Column phase: ZB-5msi Column diameter: 0.25

Data File: 01281101.D

Spectrum: Avg. Scans 2579-2581 (15.37), Background Scan 2570

Location of Maximum: 198.00

Number of points: 323

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	221	124.00	2073	206.00	91600	296.00	24488
37.00	915	125.00	2918	207.00	11603	297.00	3685
38.00	2936	126.00	2336	208.00	2701	298.00	256
39.00	14889	127.00	174208	209.00	1004	301.00	273
40.00	1121	128.00	18096	210.00	1296	302.00	563
41.00	1033	129.00	62184	211.00	3846	303.00	3056
42.00	311	130.00	5878	212.00	305	304.00	867
45.00	496	131.00	1152	213.00	301	305.00	52
47.00	139	132.00	766	215.00	3480	308.00	400
49.00	1294	133.00	259	216.00	2363	309.00	226
50.00	36568	134.00	1451	217.00	27920	310.00	544
51.00	140096	135.00	4634	218.00	92280	312.00	61
52.00	9958	136.00	1936	219.00	14995	313.00	252
53.00	2874	137.00	2669	220.00	29528	314.00	1473
54.00	388	138.00	1366	221.00	29280	315.00	2962
55.00	5159	139.00	5130	223.00	5398	316.00	1602
56.00	4068	140.00	66928	224.00	53632	317.00	289
57.00	9026	141.00	16760	225.00	12635	321.00	915
58.00	490	142.00	23720	226.00	1542	322.00	587
59.00	109	143.00	4493	227.00	19864	323.00	8755
60.00	381	144.00	2006	228.00	2727	324.00	1584
61.00	2698	145.00	639	229.00	4586	325.00	57
62.00	5589	146.00	1333	230.00	717	326.00	149
63.00	17608	147.00	3685	231.00	2032	327.00	1530
64.00	5525	148.00	8018	232.00	428	328.00	855
65.00	10974	149.00	2450	233.00	484	332.00	627
66.00	1240	150.00	2934	234.00	1415	333.00	993
67.00	357	151.00	8190	235.00	1391	334.00	5765
69.00	134848	152.00	28648	236.00	996	335.00	1363
70.00	861	153.00	22024	237.00	1545	336.00	141
71.00	259	154.00	7828	238.00	332	339.00	174
72.00	268	155.00	10015	239.00	849	341.00	1014
73.00	4122	156.00	7039	240.00	704	342.00	312
74.00	16116	157.00	1405	241.00	1276	343.00	58
75.00	27464	158.00	1338	242.00	2846	346.00	2033

Data File: /chem2/nt6.i/20110128.b/tune.b/01281101.D

Date : 28-JAN-2011 09:50

Client ID: DFTPP0128 Instrument: nt6.i

Sample Info: DFTPP0128

Operator: JZ

Column phase: ZB-5msi Column diameter: 0.25

Data File: 01281101.D

Spectrum: Avg. Scans 2579-2581 (15.37), Background Scan 2570

Location of Maximum: 198.00

Number of points: 323

m/z	Y	m/z	Y	m/z	Y	m/z	Y
76.00	22936	159.00	1023	243.00	2923	347.00	374
77.00	180608	160.00	2512	244.00	44056	351.00	68
78.00	26168	161.00	3970	245.00	5890	352.00	2552
79.00	10432	162.00	1803	246.00	6577	353.00	1823
80.00	6636	163.00	4770	247.00	1738	354.00	2775
81.00	11345	164.00	5194	248.00	319	355.00	595
82.00	12616	165.00	41056	249.00	1631	358.00	53
83.00	1233	166.00	9691	250.00	392	359.00	252
84.00	660	167.00	15319	251.00	333	361.00	111
85.00	2736	168.00	9103	252.00	497	364.00	50
86.00	4226	169.00	1845	253.00	1038	365.00	11653
87.00	4156	170.00	688	255.00	220160	366.00	1876
88.00	1641	171.00	536	256.00	32248	367.00	64
89.00	7216	172.00	1411	257.00	2827	370.00	146
90.00	2660	173.00	1698	258.00	11469	371.00	655
91.00	23680	174.00	3637	259.00	1735	372.00	4322
92.00	4315	175.00	6815	260.00	453	373.00	1027
93.00	14643	176.00	1946	261.00	332	374.00	230
94.00	1529	177.00	2592	263.00	212	377.00	190
95.00	133	178.00	795	264.00	475	383.00	1334
96.00	1009	179.00	12040	265.00	4596	384.00	242
97.00	604	180.00	9130	266.00	643	385.00	56
98.00	11555	181.00	19904	268.00	138	390.00	672
99.00	11832	182.00	11618	269.00	143	391.00	566
100.00	1603	183.00	69480	270.00	228	392.00	326
101.00	7873	184.00	11135	271.00	365	401.00	316
102.00	3374	185.00	6778	272.00	467	402.00	1946
103.00	2806	186.00	48792	273.00	6475	403.00	2767
104.00	3542	187.00	14412	274.00	17520	404.00	996
105.00	4310	188.00	1579	275.00	98664	405.00	144
106.00	329	189.00	2740	276.00	12860	420.00	59
107.00	43080	190.00	554	277.00	7094	421.00	2111
108.00	7317	191.00	1552	278.00	1011	422.00	1895
110.00	86808	192.00	3997	279.00	348	423.00	15850
111.00	13974	193.00	4407	280.00	54	424.00	3062

Data File: /chem2/nt6.i/20110128.b/tune.b/01281101.D

Date : 28-JAN-2011 09:50

Client ID: DFTPP0128

Instrument: nt6.i

Sample Info: DFTPP0128

Operator: JZ

Column phase: ZB-5msi

Column diameter: 0.25

Data File: 01281101.D

Spectrum: Avg. Scans 2579-2581 (15.37), Background Scan 2570

Location of Maximum: 198.00

Number of points: 323

m/z	Y	m/z	Y	m/z	Y	m/z	Y
112.00	33272	194.00	974	283.00	795	425.00	344
113.00	5294	195.00	239	284.00	601	426.00	56
114.00	11223	196.00	10596	285.00	1359	430.00	57
115.00	8988	198.00	393024	286.00	298	436.00	58
116.00	3391	199.00	28632	288.00	106	438.00	173
117.00	29840	200.00	2305	289.00	364	441.00	46352
118.00	2341	201.00	3118	290.00	282	442.00	315392
119.00	436	202.00	474	291.00	143	443.00	58912
120.00	523	203.00	2668	292.00	454	444.00	6024
122.00	2771	204.00	12871	293.00	1748	445.00	379
123.00	4363	205.00	21840	294.00	520		

Data File: /chem2/nt6.i/20110128.b/tune.b/01281101.D

Date : 28-JAN-2011 09:50

Client ID: DFTPP0128

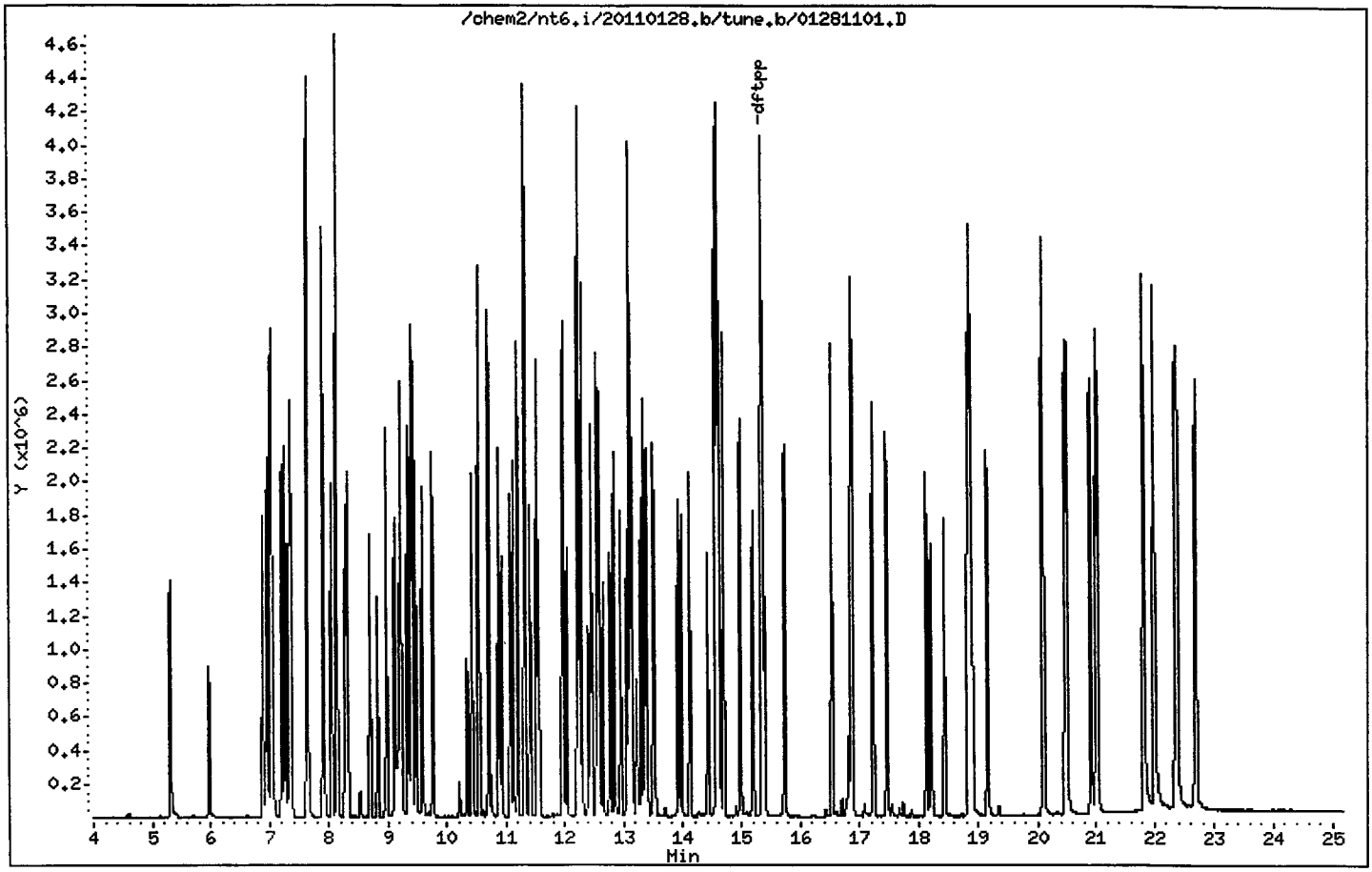
Instrument: nt6.i

Sample Info: DFTPP0128

Operator: JZ

Column phase: ZB-5msi

Column diameter: 0.25



Analytical Resources Inc.
ABN by sw846 8270C
DDT Breakdown Report

Data file: /chem2/nt6.i/20110128.b/ddt.b/01281101.D ARI ID: CC0128
Method: /chem2/nt6.i/20110128.b/ddt.b/sw846ddt.m Misc: 10-
Analysis Date: 28-JAN-2011 09:50 Instrument: nt6.i

COMPOUND	RT	AREA
Pentachlorophenol	14.422	319624
Benzidine	16.815	364233
4,4'-DDE	----	----
4,4'-DDD	17.744	25797
4,4'-DDT	18.214	574750

$$\text{DDT Percent Breakdown} = \frac{(\text{DDE Area} + \text{DDD Area}) * 100}{(\text{DDE Area} + \text{DDD Area} + \text{DDT Area})}$$

$$\text{DDT Percent Breakdown} = \frac{(0 + 25797) * 100}{(0 + 25797 + 574750)}$$

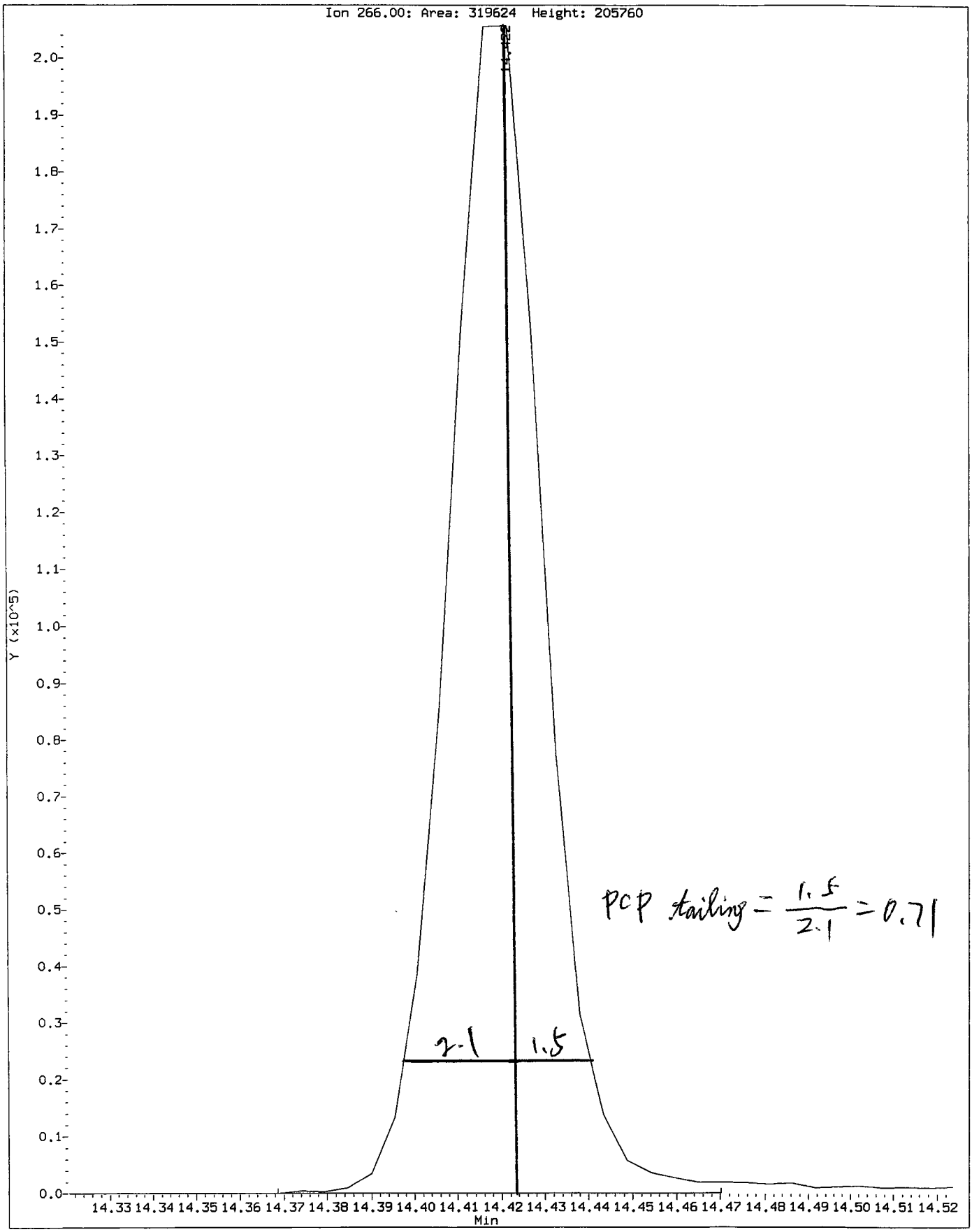
DDT Percent Breakdown = 4.3 %

01/28/11

SH20:00076

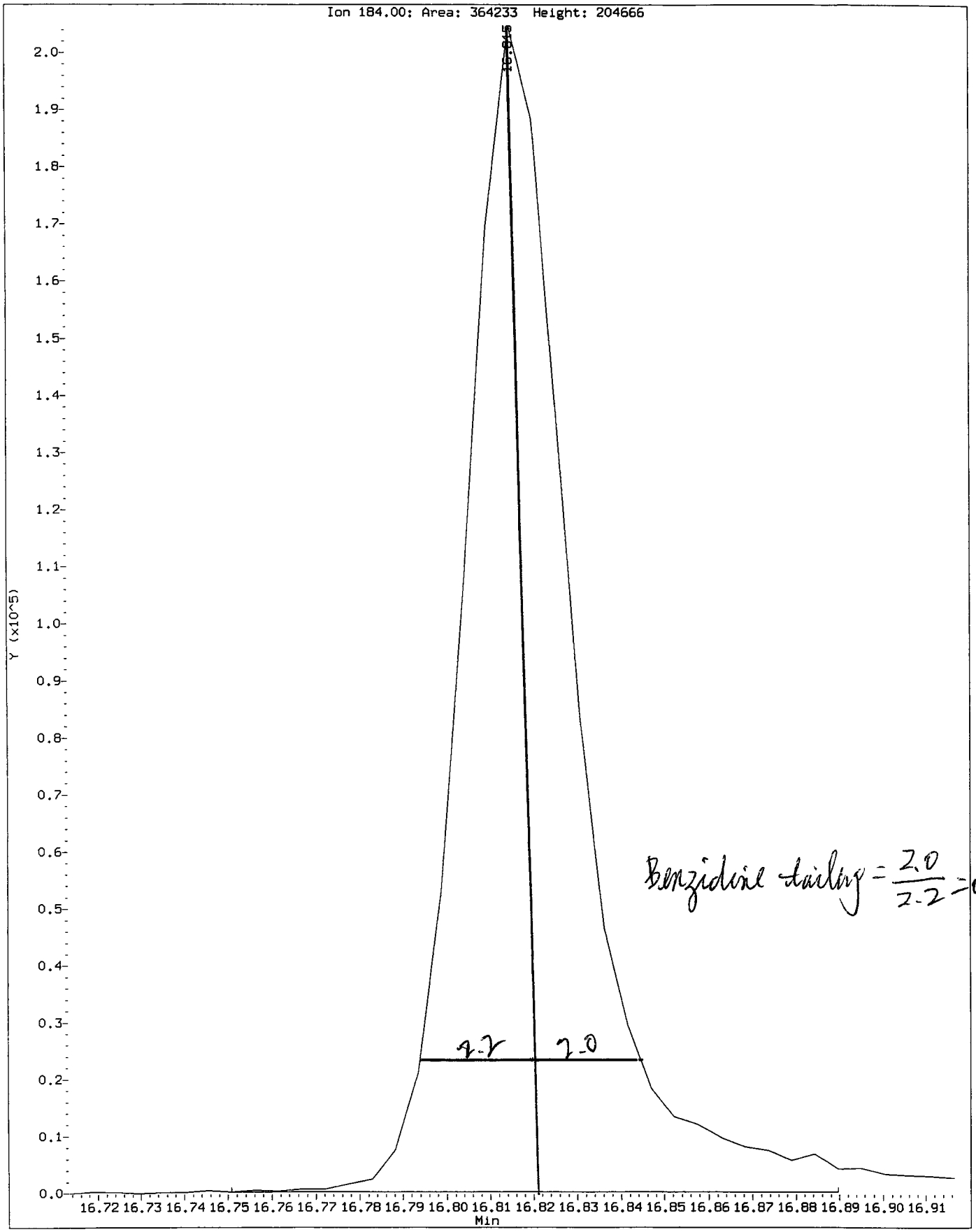
Data File: /chem2/nt6.i/20110128.b/ddt.b/01281101.D
Injection Date: 28-JAN-2011 09:50
Instrument: nt6.i
Client Sample ID: CC0128

Compound: Pentachlorophenol
CAS Number: 87-86-5



Data File: /chem2/nt6.i/20110128.b/ddt.b/01281101.D
Injection Date: 28-JAN-2011 09:50
Instrument: nt6.i
Client Sample ID: CC0128

Compound: Benzidine
CAS Number:



Benzidine tailing = $\frac{2.0}{2.2}$ = 0.91

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem2/nt6.i/20110128.b/01281102.D
Lab Smp Id: IC010128 Client Smp ID: IC010128
Inj Date : 28-JAN-2011 10:23
Operator : JZ Inst ID: nt6.i
Smp Info : IC010128
Misc Info : 10-
Comment : 1ul Injection
Method : /chem2/nt6.i/20110128.b/SW846012811.m 01/28/11
Meth Date : 28-Jan-2011 18:10 jianqing Quant Type: ISTD
Cal Date : 28-JAN-2011 10:23 Cal File: 01281102.D
Als bottle: 2 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 3.50
Processing Host: cserv3

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
$ 1 2-Fluorophenol	112	5.308	5.308	(0.724)	28576	1.00000	1.030
$ 2 Phenol-d5	99	6.943	6.943	(0.948)	36326	1.00000	1.051
3 Phenol	94	6.964	6.964	(0.950)	38880	1.00000	1.128
$ 5 2-Chlorophenol-d4	132	7.028	7.028	(0.959)	32339	1.00000	1.104
4 Bis(2-Chloroethyl)ether	93	7.023	7.023	(0.958)	32108	1.00000	1.115
6 2-Chlorophenol	128	7.050	7.050	(0.962)	33646	1.00000	1.142
7 1,3-Dichlorobenzene	146	7.263	7.263	(0.991)	39973	1.00000	1.073
* 8 1,4-Dichlorobenzene-d4	152	7.327	7.327	(1.000)	463845	20.0000	
9 1,4-Dichlorobenzene	146	7.354	7.354	(1.004)	39067	1.00000	1.041
$ 10 1,2-Dichlorobenzene-d4	152	7.626	7.626	(1.041)	22714	1.00000	1.100(M)
12 1,2-Dichlorobenzene	146	7.648	7.648	(1.044)	38821	1.00000	1.117
11 Benzyl alcohol	108	7.637	7.637	(1.042)	22511	1.00000	1.057
14 2,2'-oxybis(1-Chloropropane)	45	7.910	7.910	(1.079)	37604	1.00000	1.084
13 2-Methylphenol	108	7.899	7.899	(1.078)	32294	1.00000	1.105
17 Hexachloroethane	117	8.139	8.139	(1.111)	14159	1.00000	1.071
16 N-Nitroso-di-n-propylamine	70	8.123	8.123	(1.109)	20234	1.00000	1.042
15 4-Methylphenol	108	8.139	8.139	(1.111)	32753	1.00000	1.089
$ 18 Nitrobenzene-d5	82	8.273	8.273	(0.882)	30583	1.00000	1.066
19 Nitrobenzene	77	8.299	8.299	(0.884)	34255	1.00000	1.106
20 Isophorone	82	8.695	8.695	(0.927)	49469	1.00000	1.043
21 2-Nitrophenol	139	8.823	8.823	(0.940)	14939	1.00000	0.9659
22 2,4-Dimethylphenol	107	8.972	8.972	(0.956)	28131	1.00000	1.083
23 Bis(2-Chloroethoxy)methane	93	9.117	9.117	(0.972)	36635	1.00000	1.095
24 Benzoic acid	105	9.101	9.101	(0.970)	22745	2.00000	1.138(H)
25 2,4-Dichlorophenol	162	9.213	9.213	(0.982)	24286	1.00000	1.014
26 1,2,4-Trichlorobenzene	180	9.336	9.336	(0.995)	32387	1.00000	1.087

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
* 27 Naphthalene-d8	136	9.384	9.384	(1.000)	1519325	20.0000	
28 Naphthalene	128	9.410	9.410	(1.003)	90060	1.00000	1.154
29 4-Chloroaniline	127	9.576	9.576	(1.020)	37621	1.00000	1.122
30 Hexachlorobutadiene	225	9.752	9.752	(1.039)	17772	1.00000	1.058
31 4-Chloro-3-methylphenol	107	10.420	10.420	(1.110)	20034	1.00000	0.9600
32 2-Methylnaphthalene	141	10.537	10.537	(1.123)	52978	1.00000	1.110
33 Hexachlorocyclopentadiene	237	10.927	10.927	(0.893)	8548	1.00000	0.5197
34 2,4,6-Trichlorophenol	196	11.061	11.061	(0.904)	17353	1.00000	0.9358
35 2,4,5-Trichlorophenol	196	11.120	11.120	(0.909)	16635	1.00000	0.8111
$ 36 2-Fluorobiphenyl	172	11.194	11.194	(0.915)	66018	1.00000	1.098
37 2-Chloronaphthalene	162	11.306	11.306	(0.924)	58315	1.00000	1.078
38 2-Nitroaniline	65	11.552	11.552	(0.945)	12560	1.00000	0.8218
39 Dimethylphthalate	163	11.947	11.947	(0.977)	60600	1.00000	1.059
40 Acenaphthylene	152	11.974	11.974	(0.979)	86083	1.00000	1.085
41 2,6-Dinitrotoluene	165	12.028	12.028	(0.983)	12923	1.00000	0.9226
* 42 Acenaphthene-d10	164	12.230	12.230	(1.000)	896651	20.0000	
43 3-Nitroaniline	138	12.225	12.225	(1.000)	14819	1.00000	1.139
44 Acenaphthene	153	12.279	12.279	(1.004)	55031	1.00000	1.086
45 2,4-Dinitrophenol	184	12.396	12.396	(1.014)	610	2.00000	0.09546 (M)
46 Dibenzofuran	168	12.540	12.540	(1.025)	85283	1.00000	1.105
47 4-Nitrophenol	109	12.567	12.567	(1.028)	6131	1.00000	0.9369 (M)
48 2,4-Dinitrotoluene	165	12.642	12.642	(1.034)	15225	1.00000	0.8848 (M)
50 Diethylphthalate	149	13.096	13.096	(1.071)	57987	1.00000	1.106
49 Fluorene	166	13.090	13.090	(1.070)	62581	1.00000	1.097
51 4-Chlorophenyl-phenylether	204	13.138	13.138	(1.074)	31180	1.00000	1.031
52 4-Nitroaniline	138	13.208	13.208	(1.080)	12873	1.00000	1.025
53 4,6-Dinitro-2-methylphenol	198	13.283	13.283	(0.911)	5987	2.00000	0.6104
54 N-Nitrosodiphenylamine	169	13.347	13.347	(0.915)	44084	1.00000	1.056
$ 55 2,4,6-Tribromophenol	330	13.512	13.512	(1.105)	8000	1.00000	0.9327
56 4-Bromophenyl-phenylether	248	13.913	13.913	(0.954)	18450	1.00000	1.023
57 Hexachlorobenzene	284	14.111	14.111	(0.968)	20026	1.00000	1.014
58 Pentachlorophenol	266	14.415	14.415	(0.989)	9766	1.00000	0.8065
* 59 Phenanthrene-d10	188	14.581	14.581	(1.000)	1405130	20.0000	
60 Phenanthrene	178	14.613	14.613	(1.002)	89476	1.00000	1.138
61 Anthracene	178	14.682	14.682	(1.007)	88440	1.00000	1.106
62 Carbazole	167	14.981	14.981	(1.027)	76311	1.00000	1.135
63 Di-n-butylphthalate	149	15.745	15.745	(1.080)	93515	1.00000	1.104
64 Fluoranthene	202	16.535	16.535	(1.134)	82243	1.00000	1.047
65 Pyrene	202	16.877	16.877	(0.895)	89086	1.00000	1.161
$ 66 Terphenyl-d14	244	17.230	17.230	(0.914)	52976	1.00000	1.123
67 Butylbenzylphthalate	149	18.138	18.138	(0.962)	35172	1.00000	1.057
68 Benzo(a)anthracene	228	18.832	18.832	(0.999)	73980	1.00000	1.096
* 69 Chrysene-d12	240	18.853	18.853	(1.000)	1318435	20.0000	
70 3,3'-Dichlorobenzidine	252	18.869	18.869	(1.001)	30421	1.00000	1.126
71 Chrysene	228	18.896	18.896	(1.002)	74385	1.00000	1.136
72 bis(2-Ethylhexyl)phthalate	149	19.158	19.158	(0.954)	45920	1.00000	0.9796
* 134 Di-n-octylphthalate-d4	153	20.087	20.087	(1.000)	1624726	20.0000	

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
73 Di-n-octylphthalate	149	20.098	20.098	(1.001)	88548	1.00000	1.084
74 Benzo(b)fluoranthene	252	20.472	20.472	(0.975)	79842	1.00000	1.071
75 Benzo(k)fluoranthene	252	20.504	20.504	(0.977)	81857	1.00000	1.085
187 Total Benzofluoranthenes	252	20.504	20.504	(0.977)	154236	2.00000	2.173
76 Benzo(a)pyrene	252	20.910	20.910	(0.996)	71395	1.00000	1.018
* 77 Perylene-d12	264	20.995	20.995	(1.000)	1276686	20.0000	
78 Indeno(1,2,3-cd)pyrene	276	22.341	22.341	(1.064)	86904	1.00000	1.013
79 Dibenzo(a,h)anthracene	278	22.368	22.368	(1.065)	71117	1.00000	1.012
80 Benzo(g,h,i)perylene	276	22.656	22.656	(1.079)	81130	1.00000	1.049
90 N-Nitrosodimethylamine	74	2.424	2.424	(0.331)	19148	1.00000	1.050
103 Pyridine	79	2.435	2.435	(0.332)	28918	1.00000	0.9175
91 Aniline	93	6.884	6.884	(0.939)	47496	1.00000	1.084
105 1-methylnaphthalene	141	10.703	10.703	(1.141)	51536	1.00000	1.122
93 Benzidine	184	16.813	16.813	(0.892)	32320	1.00000	2.022
111 Azobenzene (1,2-DP-Hydrazine)	77	13.384	13.384	(1.094)	59237	1.00000	1.025
143 1,4-Dioxane	88	1.933	1.933	(0.264)	15864	1.00000	1.124
$ 137 d8-1,4-Dioxane	96	1.896	1.896	(0.259)	13218	1.00000	1.081
144 alpha-Terpineol	59	9.469	9.469	(1.009)	22838	1.00000	1.068
177 p-Benzoquinone	82	5.976	5.976	(0.637)	3245	1.00000	0.6482
98 Retene	219	17.470	17.470	(0.927)	29774	1.00000	1.083
99 Perylene	252	21.027	21.027	(1.002)	77340	1.00000	1.148
133 Butylatedhydroxytoluene	205	12.449	12.449	(1.018)	47802	1.00000	1.090
115 Tributyl Phosphate	99	13.486	13.486	(0.925)	64046	1.00000	1.082
116 Dibutyl Phenyl Phosphate	175	15.195	15.195	(1.042)	42463	1.00000	1.027
117 Butyl Diphenyl Phosphate	94	16.861	16.861	(0.894)	12752	1.00000	1.101
118 Triphenyl Phosphate	326	18.442	18.442	(0.978)	11673	1.00000	0.9699
123 Acetophenone	105	8.043	8.043	(1.098)	42096	1.00000	1.077
179 n-Decane	57	7.205	7.205	(0.983)	33224	1.00000	1.049
180 n-Octadecane	57	14.586	14.586	(1.000)	33711	1.00000	1.083
168 Pentachlorobenzene	250	12.583	12.583	(1.029)	25531	1.00000	1.037
113 Diphenyl Oxide	170	11.520	11.520	(0.942)	43999	1.00000	1.070
112 Biphenyl	154	11.323	11.323	(0.926)	75538	1.00000	1.118
120 2,3,4,6-Tetrachlorophenol	232	12.839	12.839	(1.050)	18019	1.00000	0.9579
135 2,3,5,6-Tetrachlorophenol	232	12.765	12.765	(1.044)	16894	1.00000	1.113
151 1,2,4,5-Tetrachlorobenzene	216	10.879	10.879	(0.890)	30111	1.00000	1.065
110 Tetrachloroguaiacol	247	14.549	14.549	(0.998)	20817	2.00000	2.032
109 3,4,5-Trichloroguaiacol	213	12.936	12.936	(0.887)	10582	1.00000	1.080
181 3,4,6-Trichloroguaiacol	211	13.048	13.048	(1.781)	12321	1.00000	1.034 (H)
108 4,5,6-Trichloroguaiacol	213	13.972	13.972	(1.142)	10188	1.00000	1 004
184 3,4-Dichloroguaiacol	192	11.408	11.408	(1.557)	10044	1.00000	0.9414
107 4,5-Dichloroguaiacol	192	12.204	12.204	(0.998)	28234	2.00000	2.116
182 4,6-Dichloroguaiacol	192	12.204	12.204	(1.666)	28010	2.00000	2.129
185 4-Chloroguaiacol	115	10.340	10.340	(1.411)	5867	0.50000	0.5121
186 Carbaryl	144	15.403	15.403	(1.056)	19259	1.00000	0.6220
178 2-Benzyl-4-Chlorophenol	218	15.371	15.371	(1.054)	14347	1.00000	0.9513
106 Guaiacol	124	8.321	8.321	(1.136)	25436	1.00000	1.059
100 3-beta-Coprostanol	215	21.823	21.823	(1.039)	8603	2.50000	2.289 (M)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
101 Cholesterol	107	21.999	21.999	(1.048)	8545	2.50000	3.366 (M)

QC Flag Legend

M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt6.i
Lab File ID: 01281102.D
Lab Smp Id: IC010128
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem2/nt6.i/20110128.b/SW846012811.m
Misc Info: 10-

Calibration Date: 28-JAN-2011
Calibration Time: 09:50
Client Smp ID: IC010128
Level:
Sample Type:

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	458851	229426	917702	463845	1.09
27 Naphthalene-d8	1522936	761468	3045872	1519325	-0.24
42 Acenaphthene-d10	864539	432270	1729078	896651	3.71
59 Phenanthrene-d10	1378528	689264	2757056	1405130	1.93
69 Chrysene-d12	1421586	710793	2843172	1318435	-7.26
134 Di-n-octylphthala	1679951	839976	3359902	1624726	-3.29
77 Perylene-d12	1361193	680596	2722386	1276686	-6.21

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	7.33	6.83	7.83	7.33	-0.10
27 Naphthalene-d8	9.39	8.89	9.89	9.38	-0.02
42 Acenaphthene-d10	12.23	11.73	12.73	12.23	-0.01
59 Phenanthrene-d10	14.58	14.08	15.08	14.58	-0.01
69 Chrysene-d12	18.86	18.36	19.36	18.85	-0.04
134 Di-n-octylphthala	20.09	19.59	20.59	20.09	-0.01
77 Perylene-d12	21.00	20.50	21.50	21.00	-0.01

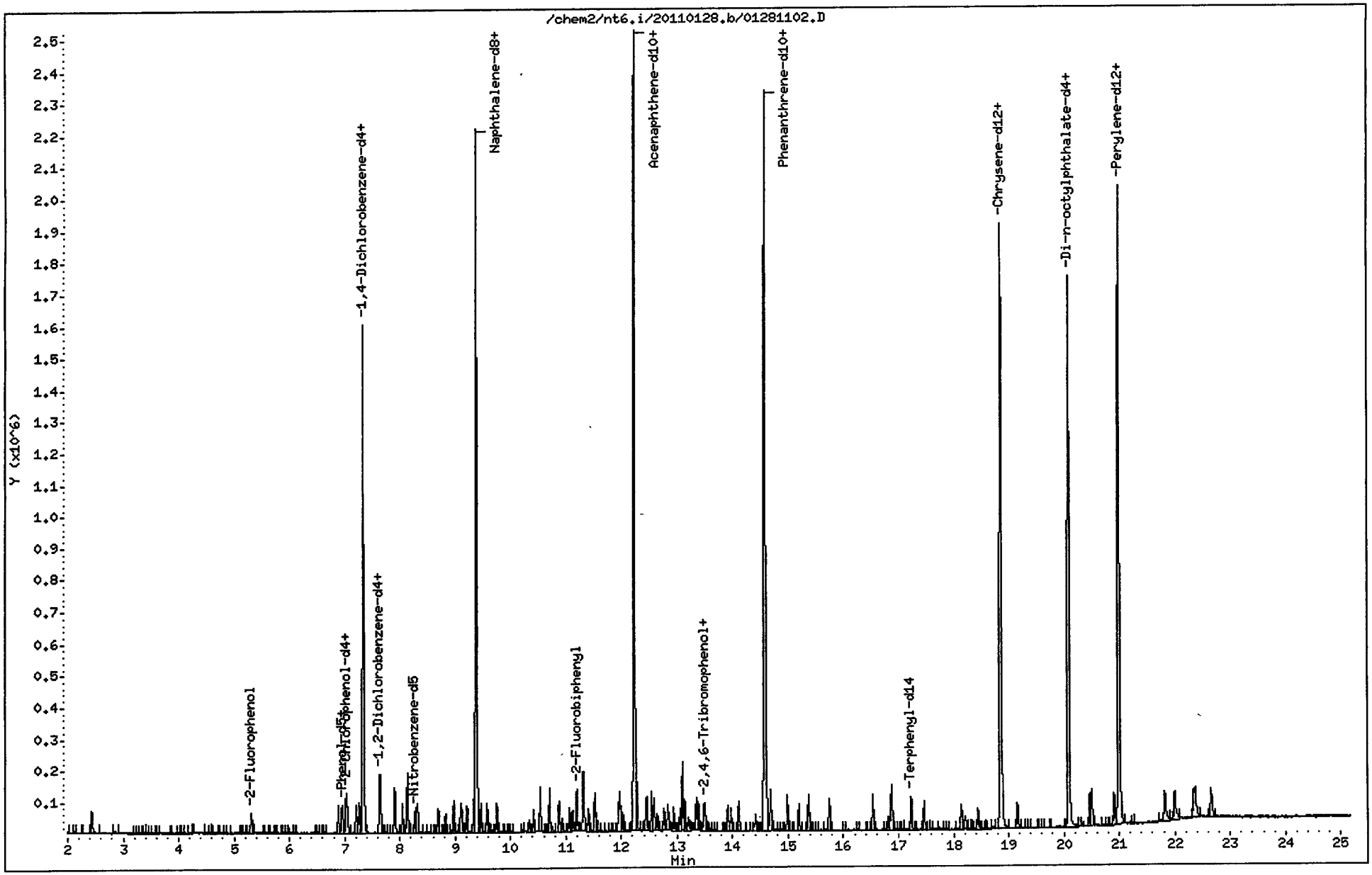
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem2/nt6.i/20110128.b/01281102.D
Date : 28-JAN-2011 10:23
Client ID: IC010128
Sample Info: IC010128

Instrument: nt6.i

Operator: JZ
Column diameter: 0.32

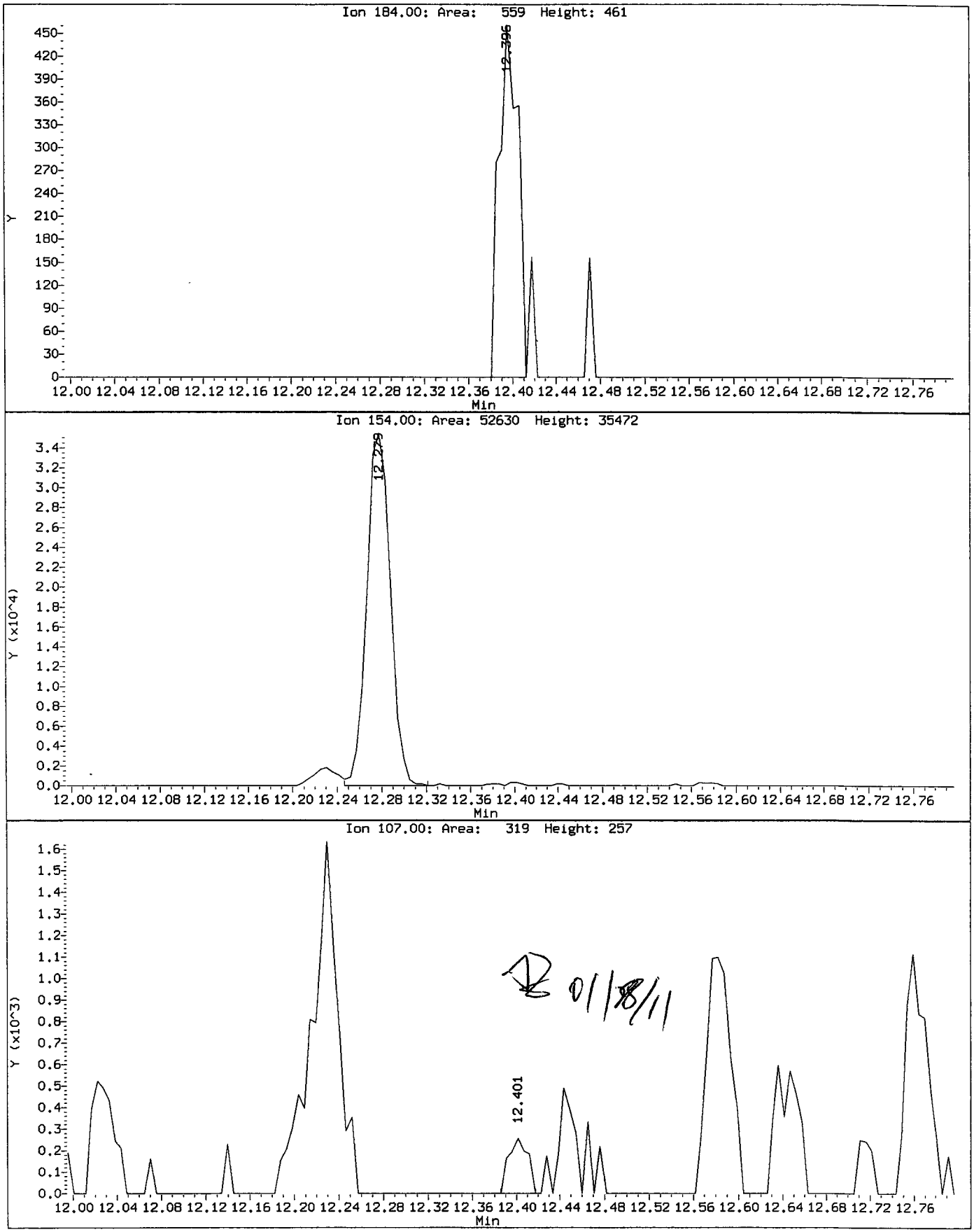
Column phase: ZB-5msi



SH20 : 00081

Data File: /chem2/nt6.i/20110128.b/01281102.D
Injection Date: 28-JAN-2011 10:23
Instrument: nt6.i
Client Sample ID: IC010128

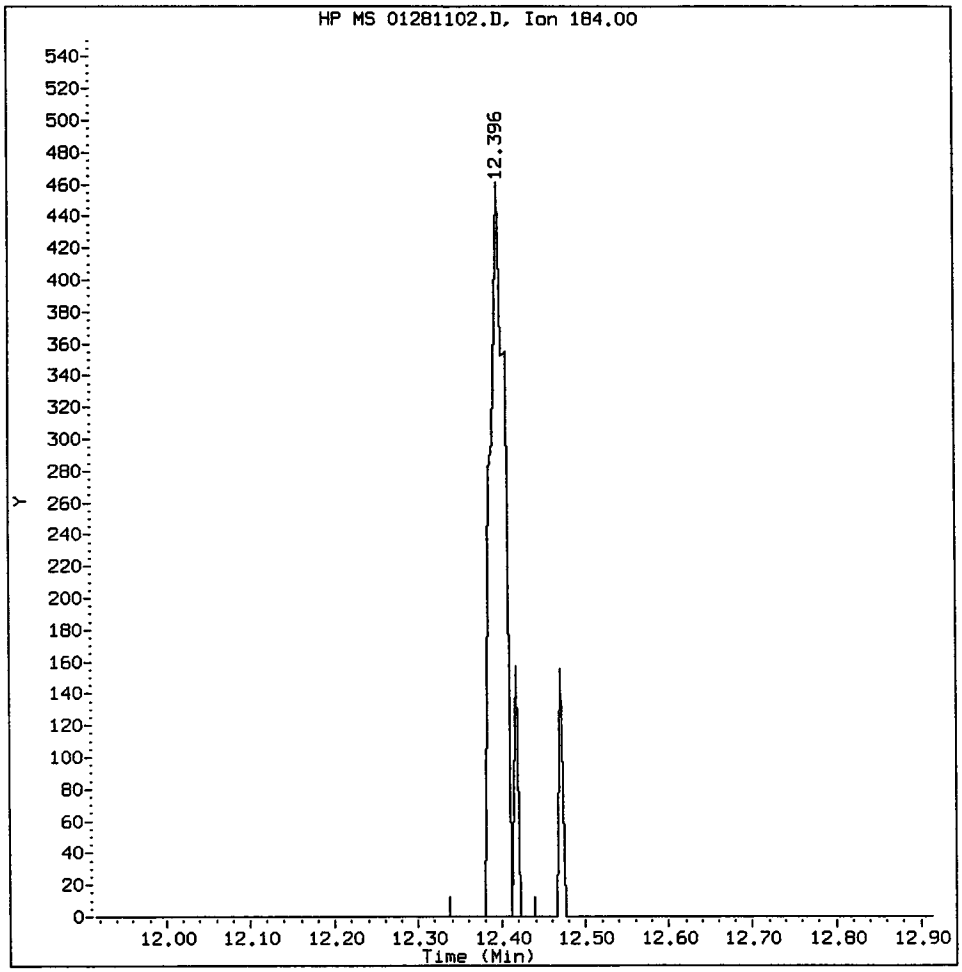
Compound: 2,4-Dinitrophenol
CAS Number: 51-28-5



SH20 : 00085

IC010128, /chem2/nt6.i/20110128.b/01281102.D

2,4-Dinitrophenol Amount: 0.00 Area: 610



MANUAL INTEGRATION for 2,4-Dinitrophenol

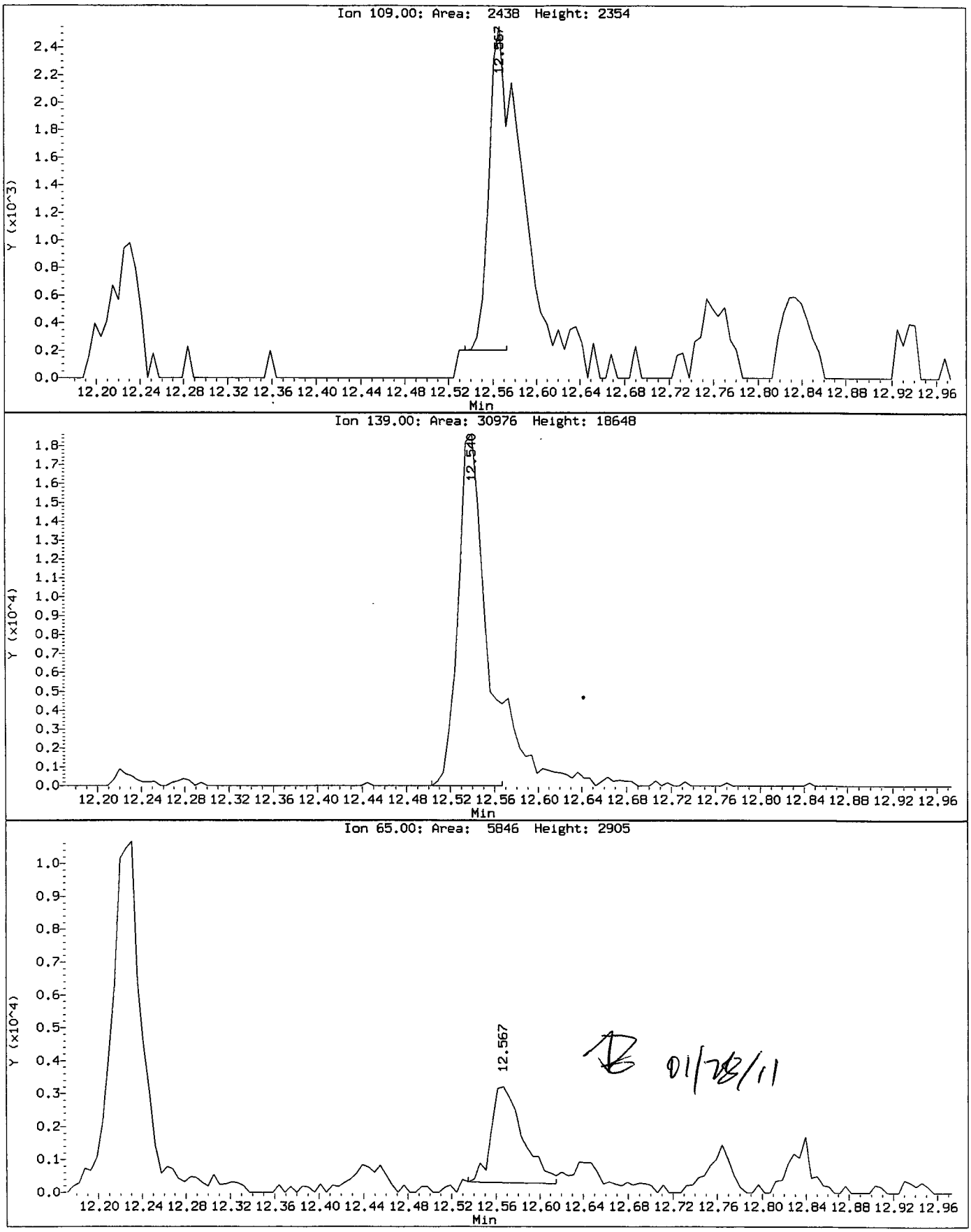
1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

5. Other _____

Analyst: _____ Date: 01/28/11

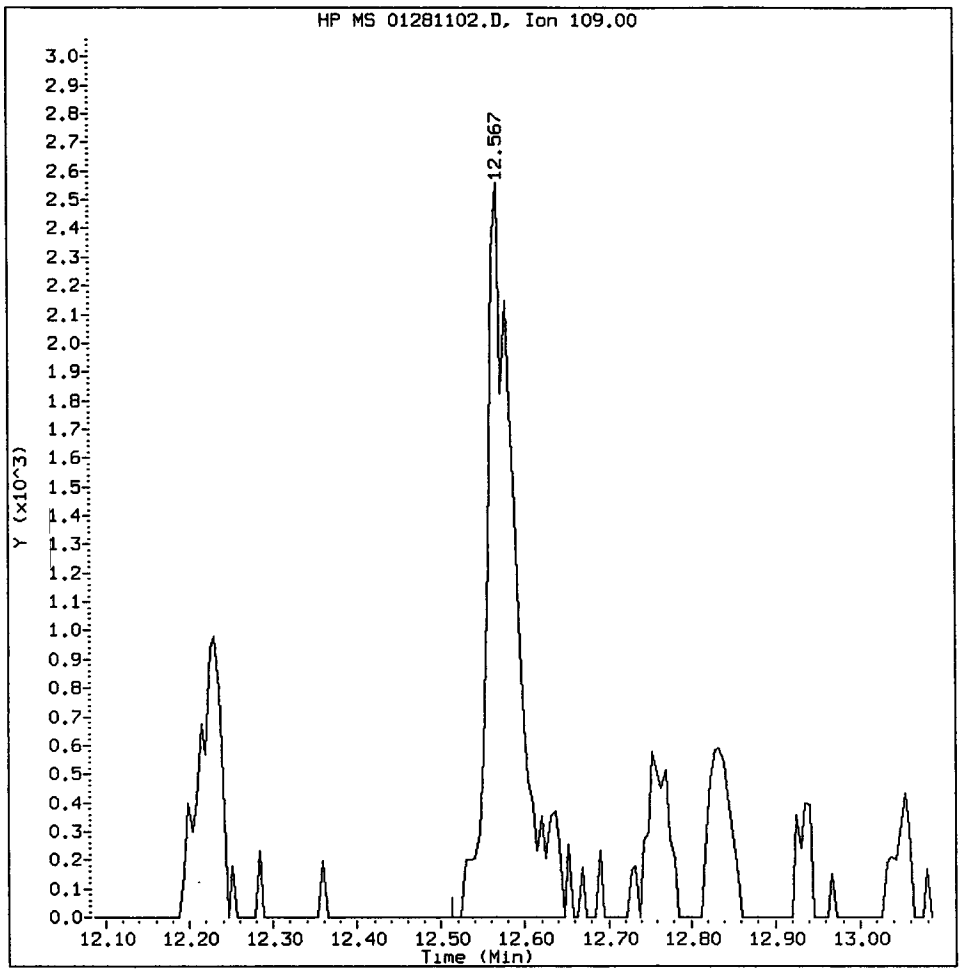
Data File: /chem2/nt6.i/20110128.b/01281102.D
Injection Date: 28-JAN-2011 10:23
Instrument: nt6.i
Client Sample ID: IC010128

Compound: 4-Nitrophenol
CAS Number: 100-02-7



IC010128, /chem2/nt6.i/20110128.b/01281102.D

4-Nitrophenol Amount: 1.00 Area: 6131



MANUAL INTEGRATION for 4-Nitrophenol

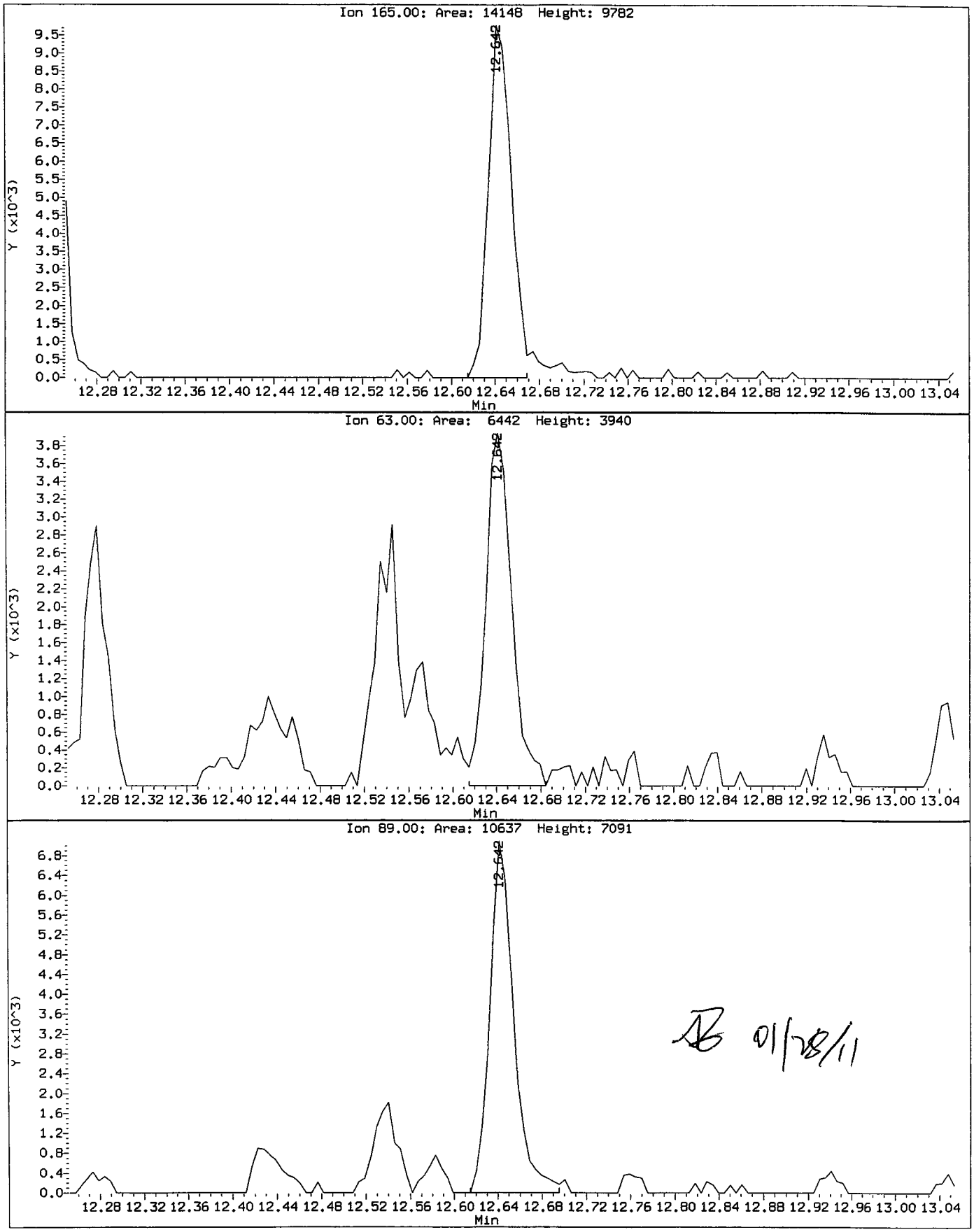
1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

5. Other _____

Analyst: _____ Date: 01/28/11

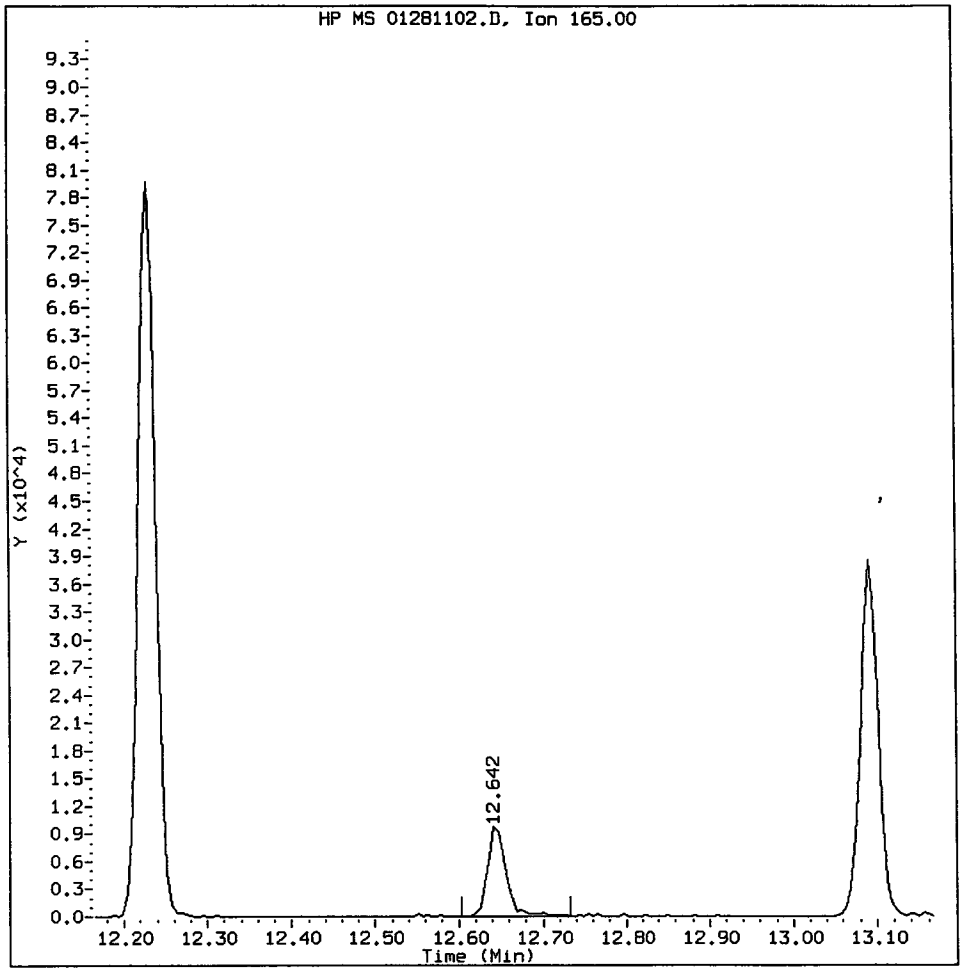
Data File: /chem2/nt6.i/20110128.b/01281102.D
Injection Date: 28-JAN-2011 10:23
Instrument: nt6.i
Client Sample ID: IC010128

Compound: 2,4-Dinitrotoluene
CAS Number: 121-14-2



IC010128, /chem2/nt6.i/20110128.b/01281102.D

2,4-Dinitrotoluene Amount: 1.00 Area: 15225



MANUAL INTEGRATION for 2,4-Dinitrotoluene

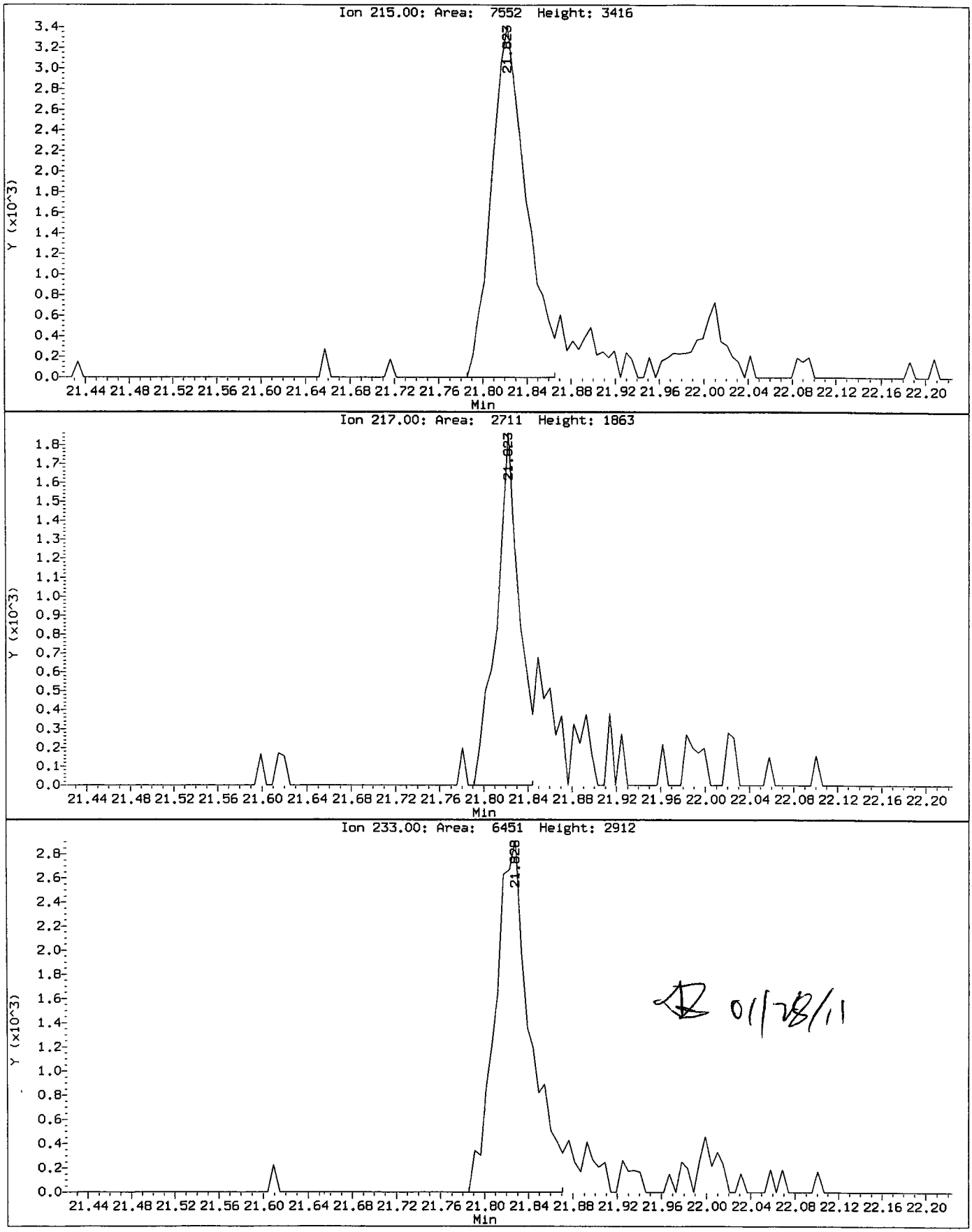
1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

5. Other _____

Analyst: _____ Date: 01/28/11

Data File: /chem2/nt6.i/20110128.b/01281102.D
Injection Date: 28-JAN-2011 10:23
Instrument: nt6.i
Client Sample ID: IC010128

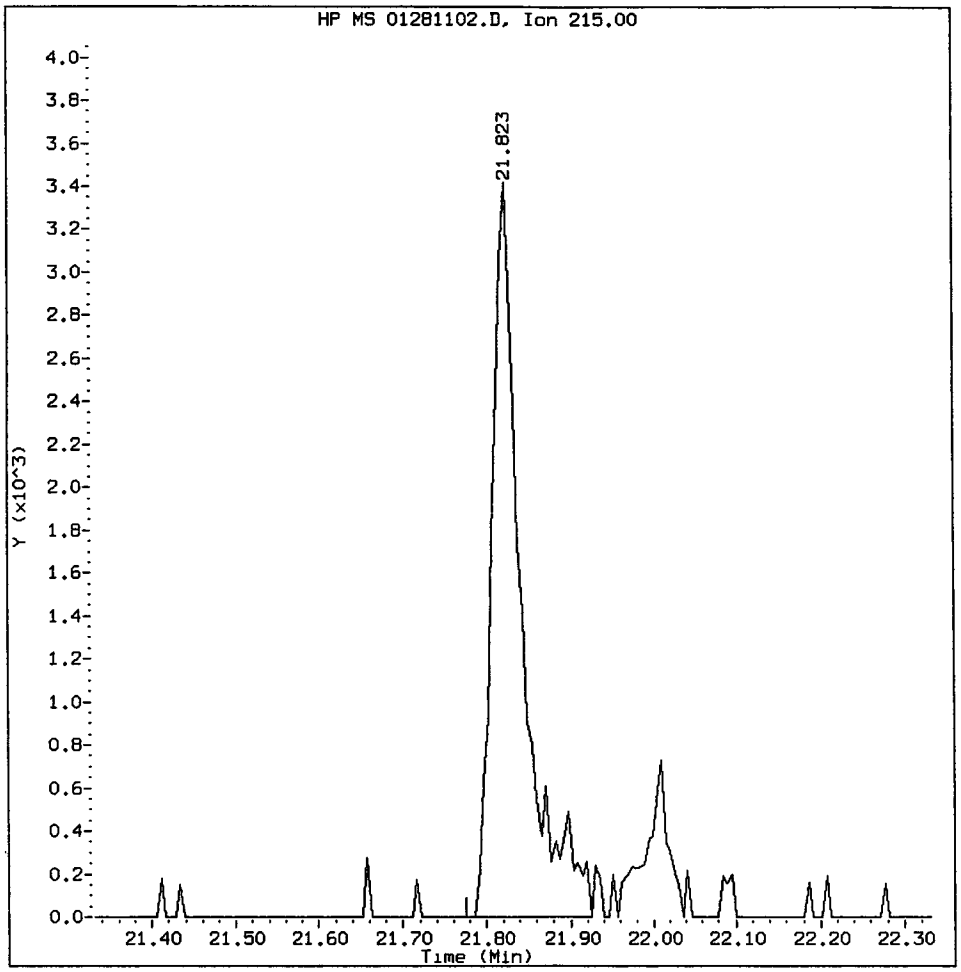
Compound: 3-beta-Coprostanol
CAS Number:



SH20 : 00091

IC010128, /chem2/nt6.i/20110128.b/01281102.D

3-beta-Coprostanol Amount: 2.50 Area: 8603



MANUAL INTEGRATION for 3-beta-Coprostanol

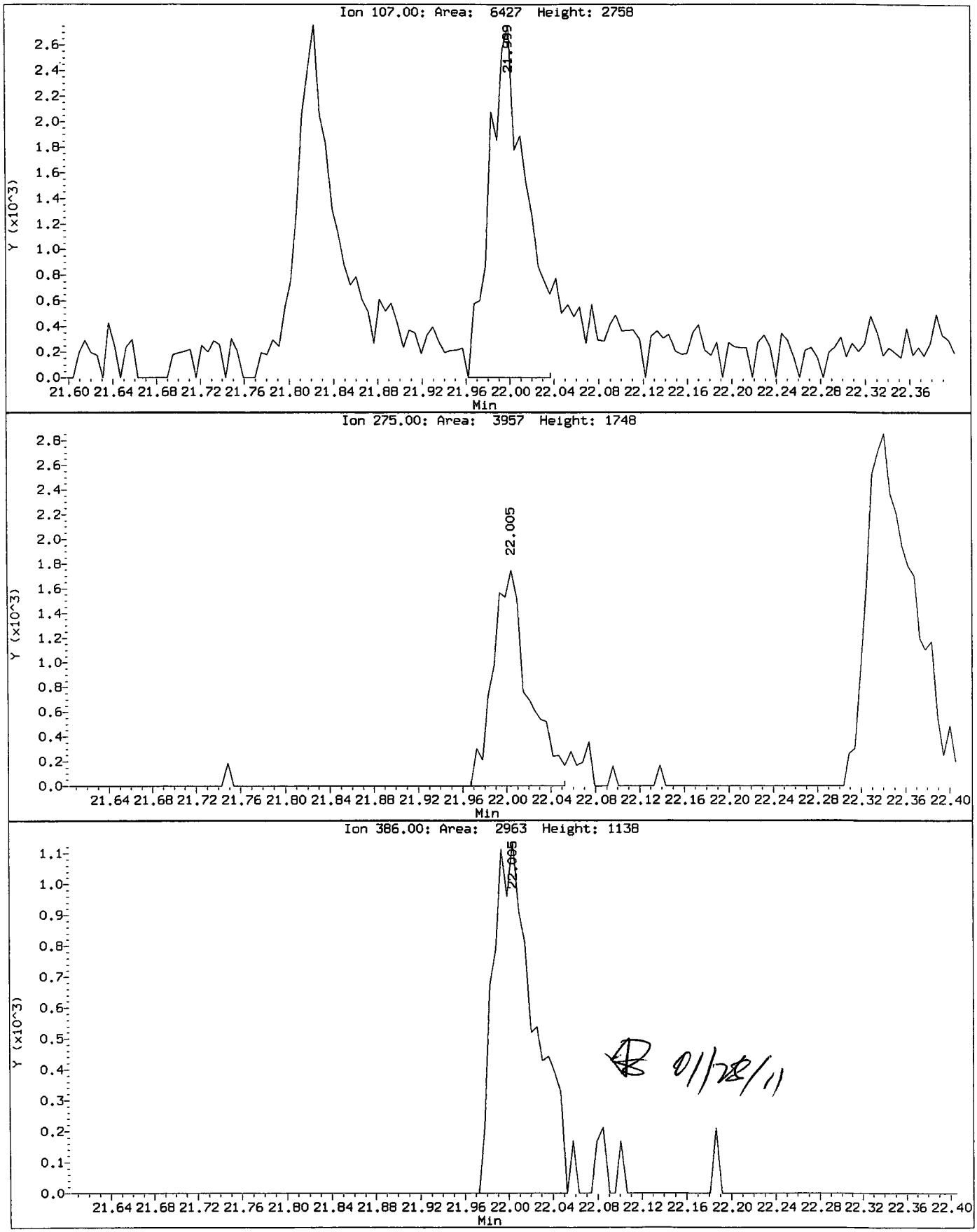
1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

5. Other _____

Analyst: _____ Date: 01/28/11

Data File: /chem2/nt6.i/20110128.b/01281102.D
Injection Date: 28-JAN-2011 10:23
Instrument: nt6.i
Client Sample ID: IC010128

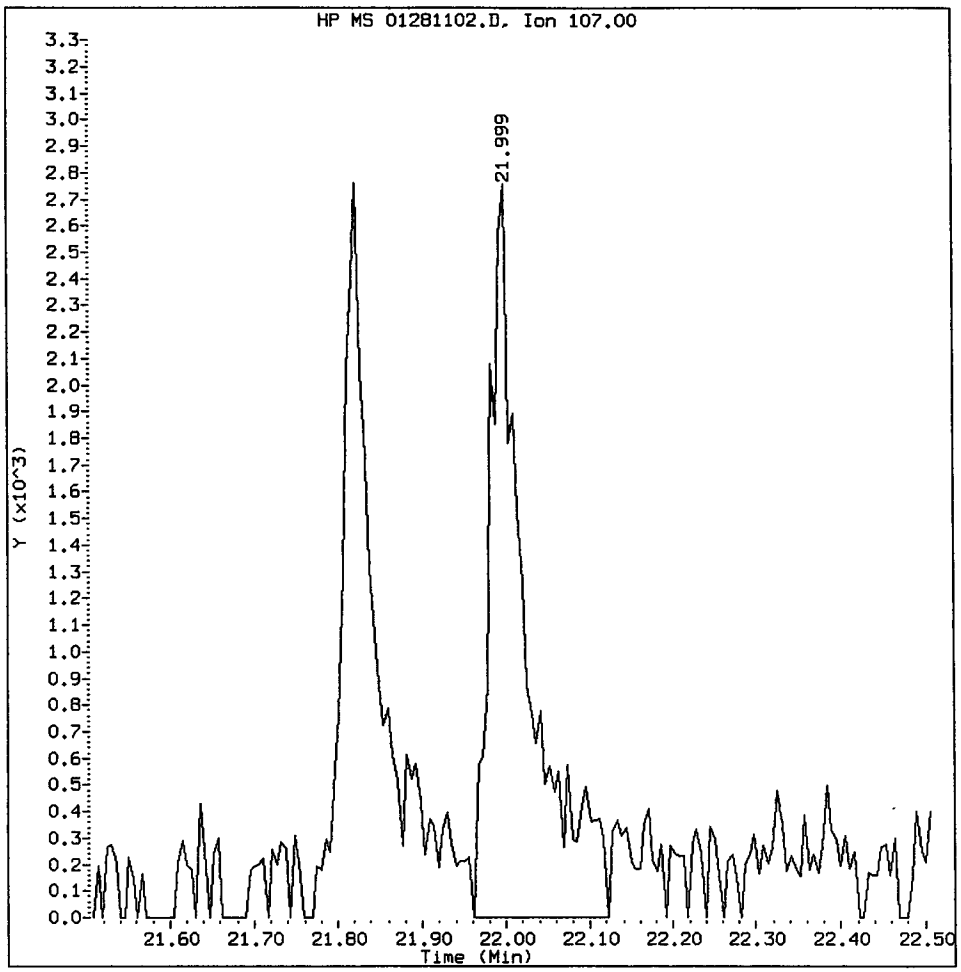
Compound: Cholesterol
CAS Number:



SH20 : 00093

IC010128, /chem2/nt6.i/20110128.b/01281102.D

Cholesterol Amount: 2.50 Area: 8545



MANUAL INTEGRATION for Cholesterol

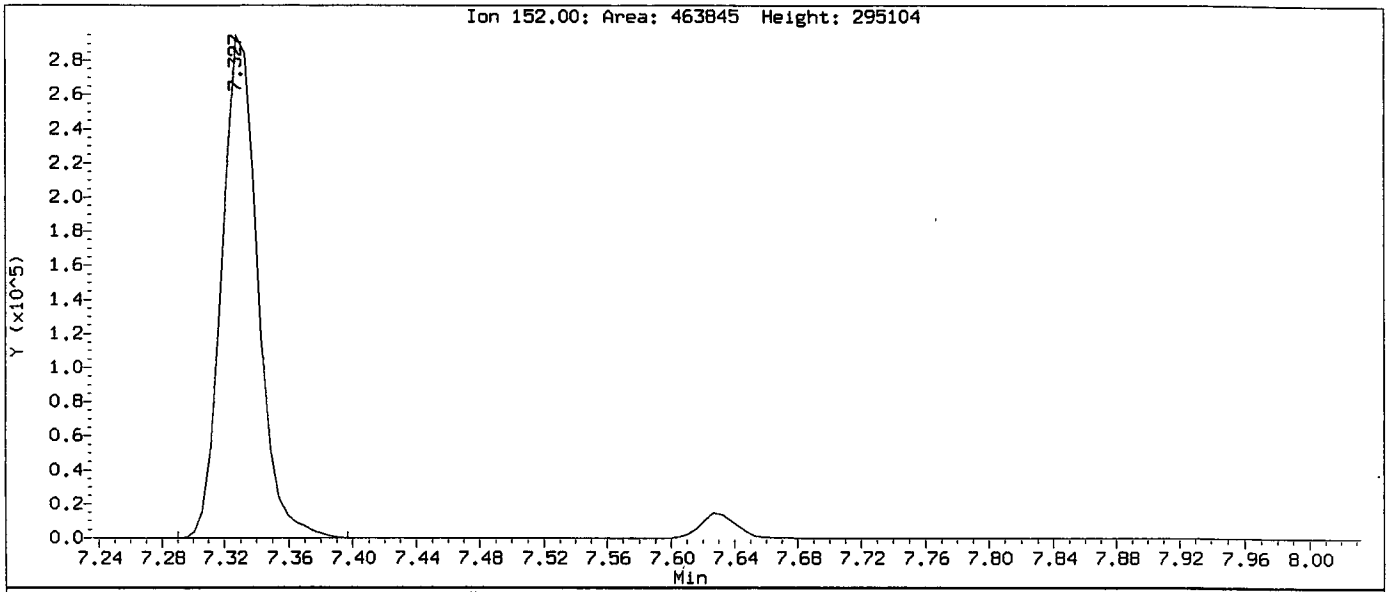
1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

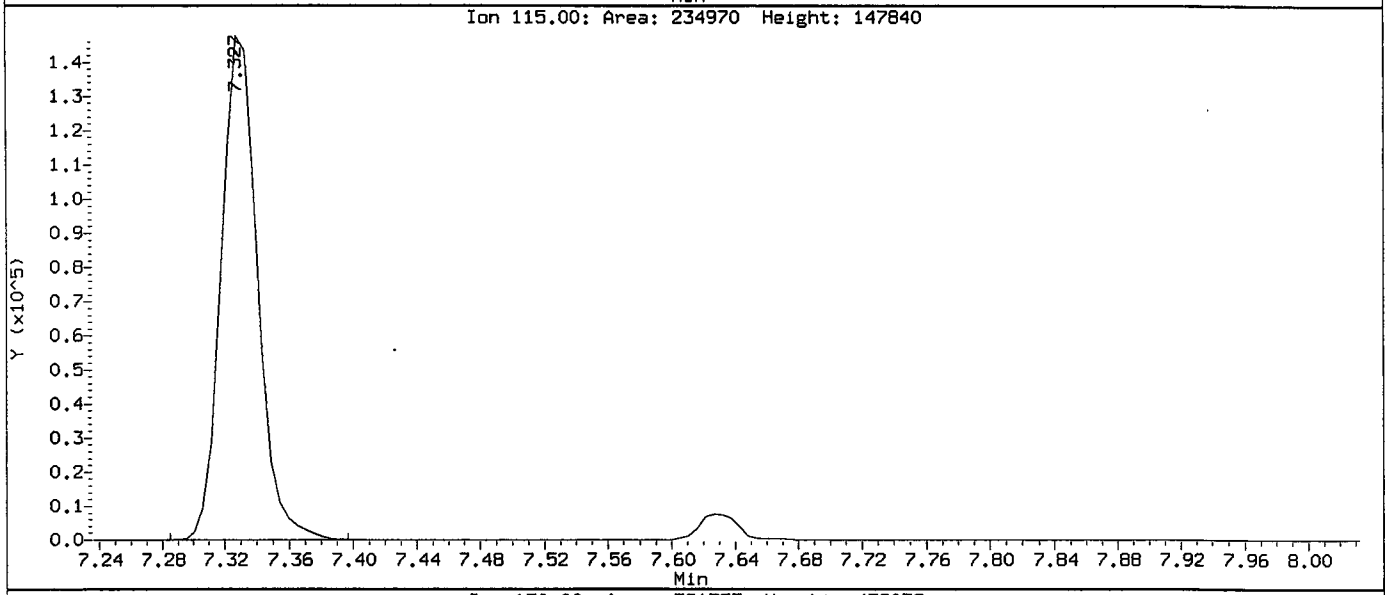
5. Other _____

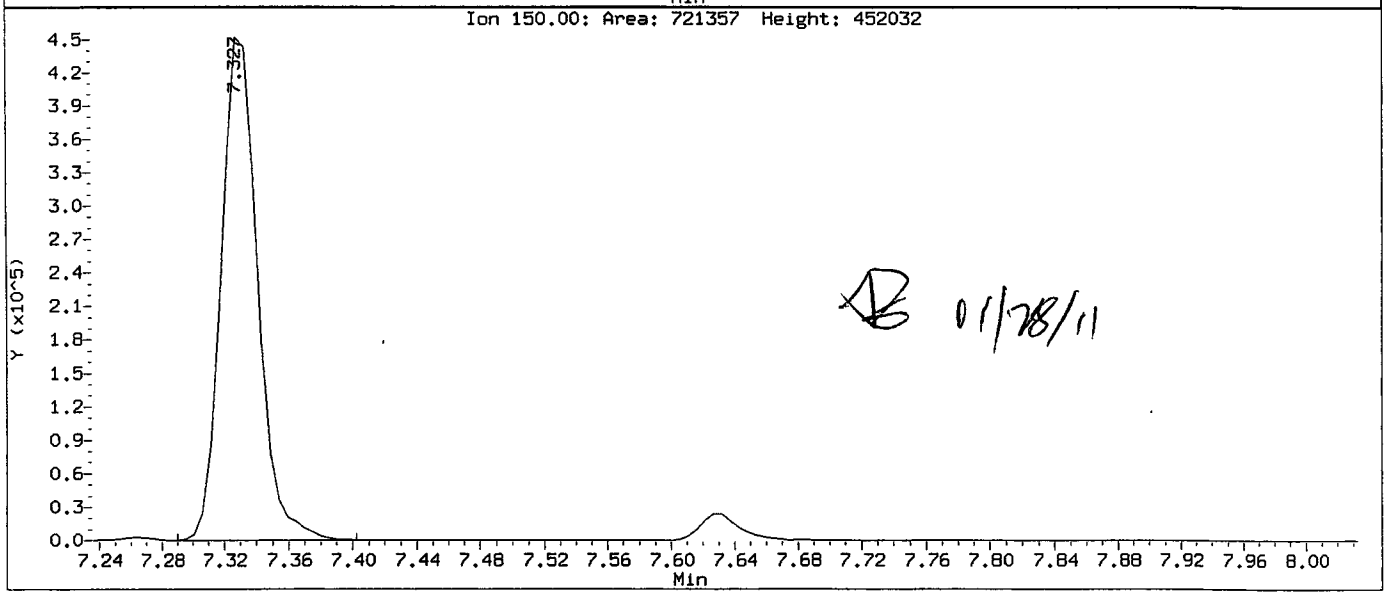
Analyst: _____ Date: 01/28/11

Data File: /chem2/nt6.i/20110128.b/01281102.D
Injection Date: 28-JAN-2011 10:23
Instrument: nt6.i
Client Sample ID: IC010128

Compound: 1,2-Dichlorobenzene-d4
CAS Number: 2199-69-1



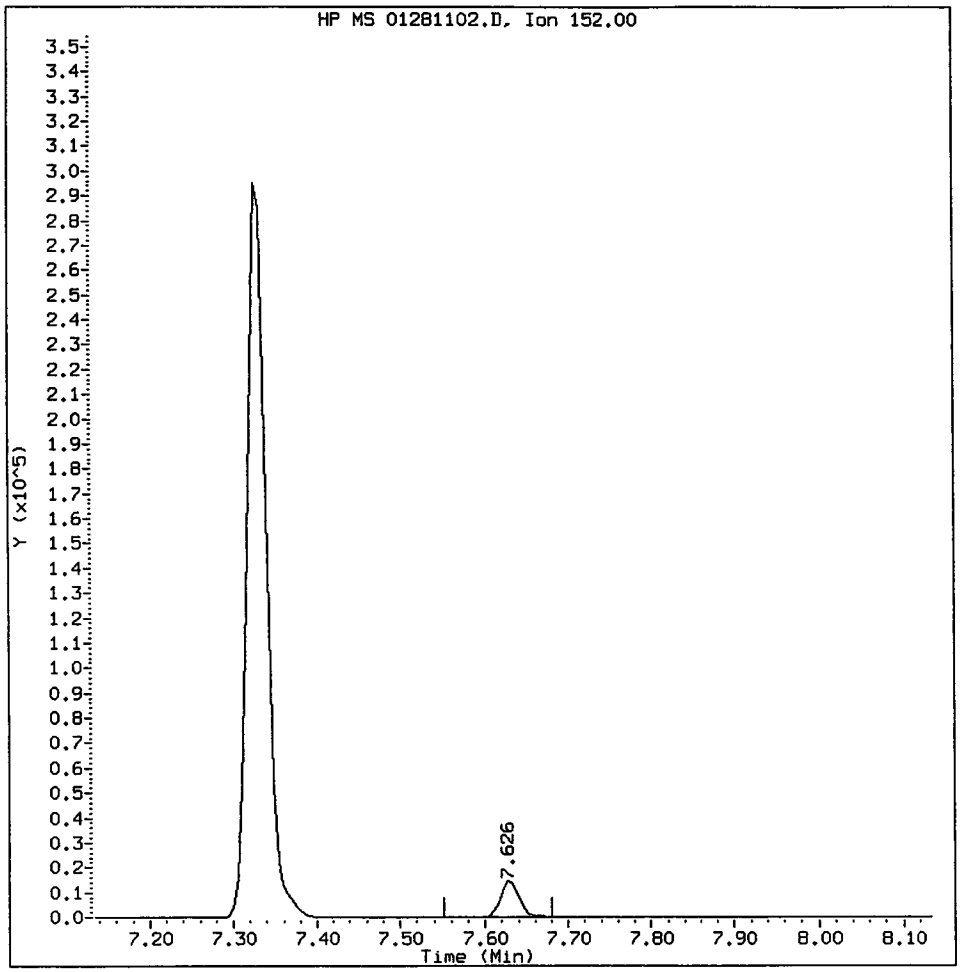




AB 01/28/11

IC010128, /chem2/nt6.i/20110128.b/01281102.D

1,2-Dichlorobenzene-d4 Amount: 1.00 Area: 22714



MANUAL INTEGRATION for 1,2-Dichlorobenzene-d4

1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation
5. Other IR1 correction

Analyst: AD Date: 01/28/11

CO-ELUTION SUMMARY FOR FILE - 01281102.D

Lab ID: IC010128, Method: SW846012811.m, Instrument: nt6.i, Date: 28-JAN-2011

RT	CO-ELUTION COMPOUNDS
	NO CO-ELUTIONS

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem2/nt6.i/20110128.b/01281103.D
Lab Smp Id: IC050128 Client Smp ID: IC050128
Inj Date : 28-JAN-2011 10:56
Operator : JZ Inst ID: nt6.i
Smp Info : IC050128
Misc Info : 10-
Comment : 1ul Injection
Method : /chem2/nt6.i/20110128.b/SW846012811.m
Meth Date : 28-Jan-2011 16:14 jianqing Quant Type: ISTD
Cal Date : 28-JAN-2011 10:56 Cal File: 01281103.D
Als bottle: 3 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 3.50

01/28/11

		QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
	Compounds						AMOUNTS	
$	1 2-Fluorophenol	112	5.308	5.322	(0.724)	133730	5.00000	4.767
$	2 Phenol-d5	99	6.948	6.967	(0.948)	168201	5.00000	4.740
	3 Phenol	94	6.964	6.988	(0.950)	170309	5.00000	4.602
$	5 2-Chlorophenol-d4	132	7.028	7.036	(0.958)	144555	5.00000	4.653
	4 Bis(2-Chloroethyl)ether	93	7.023	7.036	(0.958)	149229	5.00000	4.750
	6 2-Chlorophenol	128	7.049	7.063	(0.961)	144619	5.00000	4.555
	7 1,3-Dichlorobenzene	146	7.263	7.271	(0.991)	196000	5.00000	4.883
*	8 1,4-Dichlorobenzene-d4	152	7.332	7.341	(1.000)	476583	20.0000	
	9 1,4-Dichlorobenzene	146	7.354	7.362	(1.003)	201221	5.00000	5.006
$	10 1,2-Dichlorobenzene-d4	152	7.626	7.635	(1.040)	101852	5.00000	4.661
	12 1,2-Dichlorobenzene	146	7.653	7.661	(1.044)	184489	5.00000	4.805
	11 Benzyl alcohol	108	7.637	7.661	(1.042)	102357	5.00000	4.695
	14 2,2'-oxybis(1-Chloropropane)	45	7.915	7.923	(1.079)	178648	5.00000	4.805
	13 2-Methylphenol	108	7.904	7.923	(1.078)	141744	5.00000	4.607
	17 Hexachloroethane	117	8.144	8.147	(1.111)	70079	5.00000	4.907
	16 N-Nitroso-di-n-propylamine	70	8.123	8.147	(1.108)	103641	5.00000	4.993
	15 4-Methylphenol	108	8.139	8.163	(1.110)	149596	5.00000	4.706
$	18 Nitrobenzene-d5	82	8.273	8.286	(0.882)	139787	5.00000	4.659
	19 Nitrobenzene	77	8.299	8.318	(0.884)	161165	5.00000	4.731
	20 Isophorone	82	8.694	8.713	(0.927)	253214	5.00000	4.941
	21 2-Nitrophenol	139	8.823	8.836	(0.940)	75331	5.00000	4.904
	22 2,4-Dimethylphenol	107	8.978	8.991	(0.957)	128095	5.00000	4.649
	23 Bis(2-Chloroethoxy)methane	93	9.116	9.130	(0.972)	177611	5.00000	4.806
	24 Benzoic acid	105	9.148	9.344	(0.975)	158637	10.0000	10.00
	25 2,4-Dichlorophenol	162	9.213	9.226	(0.982)	118782	5.00000	4.828
	26 1,2,4-Trichlorobenzene	180	9.335	9.344	(0.995)	160275	5.00000	4.857
*	27 Naphthalene-d8	136	9.383	9.392	(1.000)	1592302	20.0000	

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
28 Naphthalene	128	9.416	9.424	(1.003)	431919	5.00000	4.779
29 4-Chloroaniline	127	9.581	9.589	(1.021)	181460	5.00000	4.793
30 Hexachlorobutadiene	225	9.757	9.760	(1.040)	86218	5.00000	4.807
31 4-Chloro-3-methylphenol	107	10.420	10.428	(1.110)	100208	5.00000	4.884
32 2-Methylnaphthalene	141	10.537	10.545	(1.123)	240691	5.00000	4.644
33 Hexachlorocyclopentadiene	237	10.927	10.930	(0.893)	63804	5.00000	5.000
34 2,4,6-Trichlorophenol	196	11.061	11.074	(0.904)	82730	5.00000	4.819
35 2,4,5-Trichlorophenol	196	11.119	11.128	(0.909)	96131	5.00000	5.300
$ 36 2-Fluorobiphenyl	172	11.194	11.202	(0.915)	294967	5.00000	4.658
37 2-Chloronaphthalene	162	11.306	11.314	(0.924)	288685	5.00000	4.913
38 2-Nitroaniline	65	11.552	11.571	(0.945)	74761	5.00000	5.374
39 Dimethylphthalate	163	11.947	11.966	(0.977)	304758	5.00000	4.953
40 Acenaphthylene	152	11.974	11.982	(0.979)	430509	5.00000	4.939
41 2,6-Dinitrotoluene	165	12.027	12.046	(0.983)	71990	5.00000	5.208
* 42 Acenaphthene-d10	164	12.230	12.238	(1.000)	919033	20.0000	
43 3-Nitroaniline	138	12.225	12.249	(1.000)	71725	5.00000	4.857
44 Acenaphthene	153	12.278	12.292	(1.004)	268341	5.00000	4.876
45 2,4-Dinitrophenol	184	12.390	12.415	(1.013)	19856	10.0000	10.00
46 Dibenzofuran	168	12.540	12.554	(1.025)	386791	5.00000	4.695
47 4-Nitrophenol	109	12.567	12.586	(1.028)	29950	5.00000	4.880
48 2,4-Dinitrotoluene	165	12.647	12.666	(1.034)	86612	5.00000	5.261
50 Diethylphthalate	149	13.101	13.120	(1.071)	278924	5.00000	4.842
49 Fluorene	166	13.090	13.104	(1.070)	302985	5.00000	4.858
51 4-Chlorophenyl-phenylether	204	13.138	13.152	(1.074)	154805	5.00000	4.921
52 4-Nitroaniline	138	13.208	13.237	(1.080)	67655	5.00000	5.063
53 4,6-Dinitro-2-methylphenol	198	13.288	13.317	(0.911)	67140	10.0000	10.00
54 N-Nitrosodiphenylamine	169	13.347	13.360	(0.915)	220208	5.00000	4.890
$ 55 2,4,6-Tribromophenol	330	13.512	13.526	(1.105)	37703	5.00000	4.791
56 4-Bromophenyl-phenylether	248	13.913	13.921	(0.954)	92545	5.00000	4.900
57 Hexachlorobenzene	284	14.110	14.119	(0.968)	97830	5.00000	4.834
58 Pentachlorophenol	266	14.415	14.423	(0.989)	54543	5.00000	5.169
* 59 Phenanthrene-d10	188	14.580	14.589	(1.000)	1466888	20.0000	
60 Phenanthrene	178	14.612	14.626	(1.002)	421852	5.00000	4.746
61 Anthracene	178	14.687	14.701	(1.007)	436038	5.00000	4.857
62 Carbazole	167	14.981	14.994	(1.027)	376255	5.00000	4.858
63 Di-n-butylphthalate	149	15.745	15.753	(1.080)	458629	5.00000	4.844
64 Fluoranthene	202	16.535	16.543	(1.134)	408046	5.00000	4.873
65 Pyrene	202	16.877	16.891	(0.895)	434964	5.00000	4.837
$ 66 Terphenyl-d14	244	17.230	17.238	(0.914)	233138	5.00000	4.578
67 Butylbenzylphthalate	149	18.137	18.146	(0.962)	180558	5.00000	4.962
68 Benzo(a)anthracene	228	18.832	18.845	(0.999)	358106	5.00000	4.815
* 69 Chrysene-d12	240	18.859	18.867	(1.000)	1374430	20.0000	
70 3,3'-Dichlorobenzidine	252	18.869	18.877	(1.001)	140331	5.00000	4.695
71 Chrysene	228	18.896	18.909	(1.002)	356591	5.00000	4.791
72 bis(2-Ethylhexyl)phthalate	149	19.158	19.160	(0.954)	243271	5.00000	5.076
* 134 Di-n-octylphthalate-d4	153	20.087	20.090	(1.000)	1669893	20.0000	
73 Di-n-octylphthalate	149	20.098	20.106	(1.001)	436921	5.00000	4.898

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
74 Benzo(b)fluoranthene	252	20.472	20.490	(0.975)	382787	5.00000	4.800
75 Benzo(k)fluoranthene	252	20.504	20.528	(0.977)	408470	5.00000	4.900
187 Total Benzofluoranthenes	252	20.504	20.528	(0.977)	750699	10.0000	9.676
76 Benzo(a)pyrene	252	20.910	20.928	(0.996)	368893	5.00000	4.987
* 77 Perylene-d12	264	20.995	21.003	(1.000)	1325976	20.0000	
78 Indeno(1,2,3-cd)pyrene	276	22.341	22.370	(1.064)	442314	5.00000	4.950
79 Dibenzo(a,h)anthracene	278	22.373	22.397	(1.066)	363814	5.00000	4.962
80 Benzo(g,h,i)perylene	276	22.661	22.691	(1.079)	401986	5.00000	4.883
90 N-Nitrosodimethylamine	74	2.424	2.454	(0.331)	91024	5.00000	4.806
103 Pyridine	79	2.419	2.422	(0.330)	163278	5.00000	5.236
91 Aniline	93	6.884	6.897	(0.939)	218006	5.00000	4.719
105 1-methylnaphthalene	141	10.708	10.716	(1.141)	248316	5.00000	4.790
93 Benzidine	184	16.813	16.821	(0.892)	144604	5.00000	5.000
111 Azobenzene (1,2-DP-Hydrazine)	77	13.384	13.398	(1.094)	301025	5.00000	4.979
143 1,4-Dioxane	88	1.933	1.941	(0.264)	72151	5.00000	4.696
$ 137 d8-1,4-Dioxane	96	1.895	1.904	(0.258)	63031	5.00000	4.814
144 alpha-Terpineol	59	9.469	9.482	(1.009)	108278	5.00000	4.750
177 p-Benzoquinone	82	5.976	5.984	(0.637)	21204	5.00000	5.550
98 Retene	219	17.465	17.473	(0.926)	139983	5.00000	4.742
99 Perylene	252	21.027	21.046	(1.002)	346264	5.00000	4.630
133 Butylatedhydroxytoluene	205	12.449	12.457	(1.018)	220972	5.00000	4.742
115 Tributyl Phosphate	99	13.491	13.515	(0.925)	304935	5.00000	4.770
116 Dibutyl Phenyl Phosphate	175	15.195	15.213	(1.042)	204101	5.00000	4.794
117 Butyl Diphenyl Phosphate	94	16.856	16.864	(0.894)	60034	5.00000	4.746
118 Triphenyl Phosphate	326	18.442	18.450	(0.978)	58033	5.00000	4.882
123 Acetophenone	105	8.043	8.062	(1.097)	202372	5.00000	4.834
179 n-Decane	57	7.204	7.213	(0.983)	153261	5.00000	4.731
180 n-Octadecane	57	14.586	14.594	(1.000)	152731	5.00000	4.647
168 Pentachlorobenzene	250	12.583	12.596	(1.029)	125351	5.00000	4.893
113 Diphenyl Oxide	170	11.520	11.528	(0.942)	201304	5.00000	4.717
112 Biphenyl	154	11.322	11.331	(0.926)	342895	5.00000	4.697
120 2,3,4,6-Tetrachlorophenol	232	12.834	12.847	(1.049)	84028	5.00000	4.764
135 2,3,5,6-Tetrachlorophenol	232	12.764	12.773	(1.044)	62149	5.00000	4.179
151 1,2,4,5-Tetrachlorobenzene	216	10.879	10.887	(0.890)	143222	5.00000	4.814
110 Tetrachloroguaiacol	247	14.548	14.562	(0.998)	91537	10.0000	9.145
109 3,4,5-Trichloroguaiacol	213	12.941	12.949	(0.888)	45099	5.00000	4.495
181 3,4,6-Trichloroguaiacol	211	13.047	13.061	(1.779)	53919	5.00000	4.600(H)
108 4,5,6-Trichloroguaiacol	213	13.971	13.980	(1.142)	46703	5.00000	4.722
184 3,4-Dichloroguaiacol	192	11.408	11.416	(1.556)	50677	5.00000	4.955
107 4,5-Dichloroguaiacol	192	12.204	12.217	(0.998)	122295	10.0000	9.161
182 4,6-Dichloroguaiacol	192	12.204	12.217	(1.664)	122295	10.0000	9.189
185 4-Chloroguaiacol	115	10.340	10.348	(1.410)	26674	2.50000	2.347
186 Carbaryl	144	15.408	15.427	(1.057)	119669	5.00000	5.000
178 2-Benzyl-4-Chlorophenol	218	15.371	15.395	(1.054)	70272	5.00000	4.841
106 Guaiacol	124	8.326	8.339	(1.135)	121002	5.00000	4.808
100 3-beta-Coprostanol	215	21.823	21.831	(1.039)	44674	12.5000	12.50
101 Cholesterol	107	21.994	22.007	(1.048)	27225	12.5000	9.506

QC Flag Legend

H - Operator selected an alternate compound hit.

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt6.i
Lab File ID: 01281103.D
Lab Smp Id: IC050128
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem2/nt6.i/20110128.b/SW846012811.m
Misc Info: 10-

Calibration Date: 28-JAN-2011
Calibration Time: 09:50
Client Smp ID: IC050128
Level:
Sample Type:

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	458851	229426	917702	476583	3.86
27 Naphthalene-d8	1522936	761468	3045872	1592302	4.55
42 Acenaphthene-d10	864539	432270	1729078	919033	6.30
59 Phenanthrene-d10	1378528	689264	2757056	1466888	6.41
69 Chrysene-d12	1421586	710793	2843172	1374430	-3.32
134 Di-n-octylphthala	1679951	839976	3359902	1669893	-0.60
77 Perylene-d12	1361193	680596	2722386	1325976	-2.59

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	7.33	6.83	7.83	7.33	-0.03
27 Naphthalene-d8	9.39	8.89	9.89	9.38	-0.02
42 Acenaphthene-d10	12.23	11.73	12.73	12.23	-0.02
59 Phenanthrene-d10	14.58	14.08	15.08	14.58	-0.01
69 Chrysene-d12	18.86	18.36	19.36	18.86	-0.01
134 Di-n-octylphthala	20.09	19.59	20.59	20.09	-0.01
77 Perylene-d12	21.00	20.50	21.50	20.99	-0.01

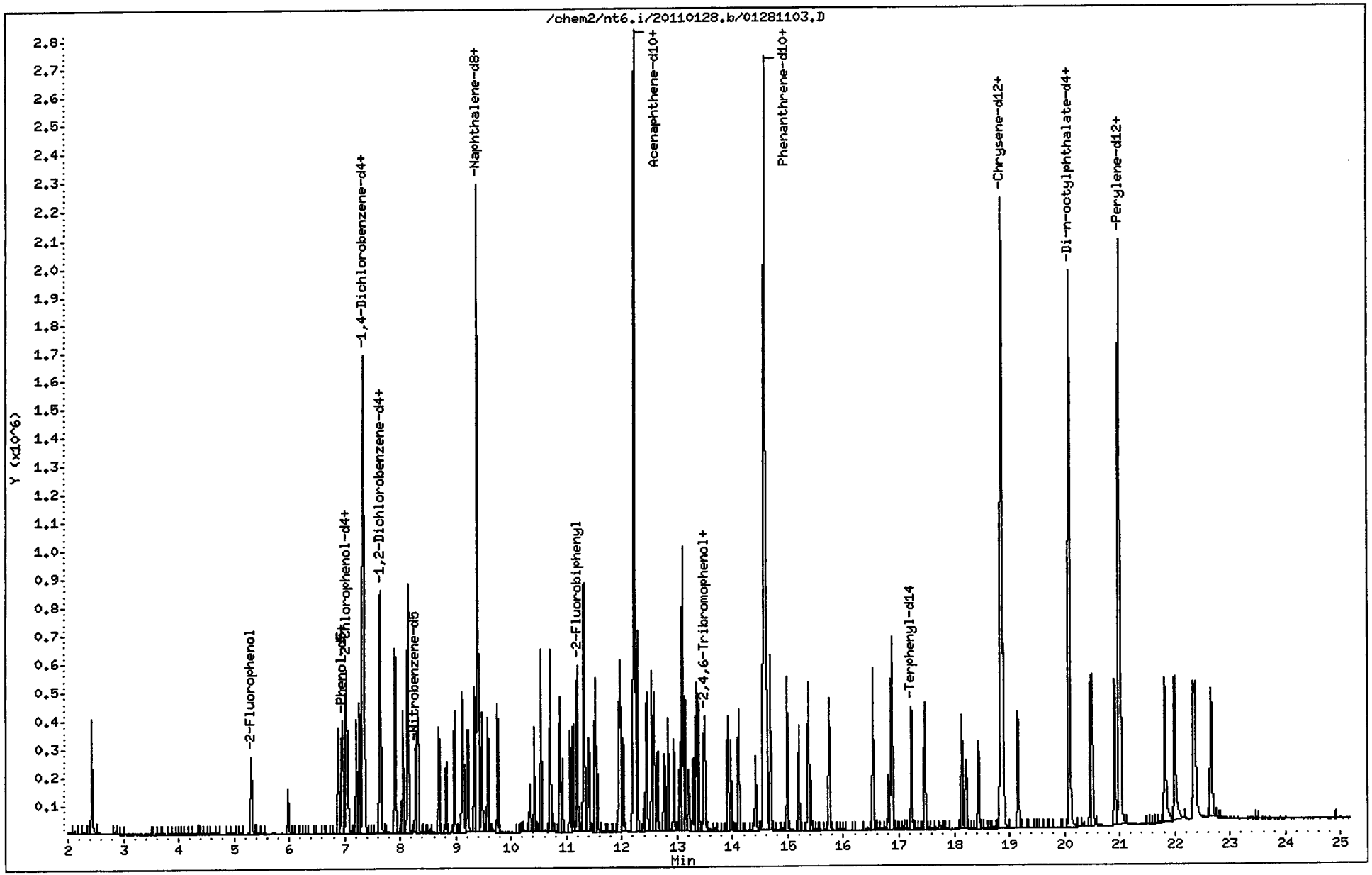
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem2/nt6.i/20110128.b/01281103.D
Date : 28-JAN-2011 10:56
Client ID: IC050128
Sample Info: IC050128

Instrument: nt6.i

Operator: JZ
Column diameter: 0.32

Column phase: ZB-5msi



SH20:001103

CO-ELUTION SUMMARY FOR FILE - 01281103.D

Lab ID: IC050128, Method: SW846012811.m, Instrument: nt6.i, Date: 28-JAN-2011

RT	CO-ELUTION COMPOUNDS
	NO CO-ELUTIONS

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem2/nt6.i/20110128.b/01281104.D
Lab Smp Id: IC100128 Client Smp ID: IC100128
Inj Date : 28-JAN-2011 11:29
Operator : JZ Inst ID: nt6.i
Smp Info : IC100128
Misc Info : 10-
Comment : 1ul Injection
Method : /chem2/nt6.i/20110128.b/SW846012811.m
Meth Date : 28-Jan-2011 16:14 jianqing Quant Type: ISTD
Cal Date : 28-JAN-2011 11:29 Cal File: 01281104.D
Als bottle: 4 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 3.50

9/28/11

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
$ 1 2-Fluorophenol	112	5.311	5.322	(0.725)	350385	10.0000	9.865
$ 2 Phenol-d5	99	6.951	6.967	(0.948)	440888	10.0000	9.830
3 Phenol	94	6.967	6.988	(0.950)	432057	10.0000	9.423
$ 5 2-Chlorophenol-d4	132	7.031	7.036	(0.959)	373978	10.0000	9.622
4 Bis(2-Chloroethyl)ether	93	7.026	7.036	(0.958)	367121	10.0000	9.429
6 2-Chlorophenol	128	7.053	7.063	(0.962)	372852	10.0000	9.461
7 1,3-Dichlorobenzene	146	7.266	7.271	(0.991)	482628	10.0000	9.615
* 8 1,4-Dichlorobenzene-d4	152	7.330	7.341	(1.000)	607509	20.0000	
9 1,4-Dichlorobenzene	146	7.357	7.362	(1.004)	486796	10.0000	9.662
$ 10 1,2-Dichlorobenzene-d4	152	7.629	7.635	(1.041)	264742	10.0000	9.663
12 1,2-Dichlorobenzene	146	7.651	7.661	(1.044)	455279	10.0000	9.524
11 Benzyl alcohol	108	7.640	7.661	(1.042)	273901	10.0000	9.904
14 2,2'-oxybis(1-Chloropropane)	45	7.912	7.923	(1.079)	445377	10.0000	9.589
13 2-Methylphenol	108	7.907	7.923	(1.079)	368426	10.0000	9.588
17 Hexachloroethane	117	8.142	8.147	(1.111)	172551	10.0000	9.646
16 N-Nitroso-di-n-propylamine	70	8.126	8.147	(1.109)	254244	10.0000	9.735
15 4-Methylphenol	108	8.142	8.163	(1.111)	381874	10.0000	9.609
$ 18 Nitrobenzene-d5	82	8.276	8.286	(0.882)	374719	10.0000	9.967
19 Nitrobenzene	77	8.302	8.318	(0.884)	399636	10.0000	9.555
20 Isophorone	82	8.698	8.713	(0.927)	614371	10.0000	9.697
21 2-Nitrophenol	139	8.826	8.836	(0.940)	199389	10.0000	10.23
22 2,4-Dimethylphenol	107	8.975	8.991	(0.956)	330167	10.0000	9.694
23 Bis(2-Chloroethoxy)methane	93	9.120	9.130	(0.972)	433917	10.0000	9.560
24 Benzoic acid	105	9.200	9.344	(0.980)	477991	20.0000	21.82
25 2,4-Dichlorophenol	162	9.216	9.226	(0.982)	313383	10.0000	10.10
26 1,2,4-Trichlorobenzene	180	9.339	9.344	(0.995)	388469	10.0000	9.578
* 27 Naphthalene-d8	136	9.387	9.392	(1.000)	1998438	20.0000	

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	28 Naphthalene	128	9.419	9.424	(1.003)	1045403	10.0000	9.463
	29 4-Chloroaniline	127	9.579	9.589	(1.020)	462026	10.0000	9.814
	30 Hexachlorobutadiene	225	9.755	9.760	(1.039)	216559	10.0000	9.744
	31 4-Chloro-3-methylphenol	107	10.417	10.428	(1.110)	271725	10.0000	10.36
	32 2-Methylnaphthalene	141	10.540	10.545	(1.123)	629188	10.0000	9.779
	33 Hexachlorocyclopentadiene	237	10.930	10.930	(0.893)	187887	10.0000	10.79
	34 2,4,6-Trichlorophenol	196	11.064	11.074	(0.904)	225126	10.0000	10.28
	35 2,4,5-Trichlorophenol	196	11.117	11.128	(0.909)	260556	10.0000	10.91
$	36 2-Fluorobiphenyl	172	11.197	11.202	(0.915)	766515	10.0000	9.749
	37 2-Chloronaphthalene	162	11.309	11.314	(0.924)	697530	10.0000	9.622
	38 2-Nitroaniline	65	11.555	11.571	(0.945)	191643	10.0000	10.62
	39 Dimethylphthalate	163	11.950	11.966	(0.977)	740433	10.0000	9.710
	40 Acenaphthylene	152	11.977	11.982	(0.979)	1031633	10.0000	9.602
	41 2,6-Dinitrotoluene	165	12.030	12.046	(0.983)	177548	10.0000	10.14
*	42 Acenaphthene-d10	164	12.233	12.238	(1.000)	1155381	20.0000	
	43 3-Nitroaniline	138	12.228	12.249	(1.000)	182938	10.0000	9.902
	44 Acenaphthene	153	12.281	12.292	(1.004)	652362	10.0000	9.612
	45 2,4-Dinitrophenol	184	12.394	12.415	(1.013)	107789	20.0000	27.34
	46 Dibenzofuran	168	12.543	12.554	(1.025)	998295	10.0000	9.756
	47 4-Nitrophenol	109	12.565	12.586	(1.027)	80262	10.0000	10.27
	48 2,4-Dinitrotoluene	165	12.645	12.666	(1.034)	216862	10.0000	10.31
	50 Diethylphthalate	149	13.104	13.120	(1.071)	678591	10.0000	9.571
	49 Fluorene	166	13.093	13.104	(1.070)	733638	10.0000	9.562
	51 4-Chlorophenyl-phenylether	204	13.141	13.152	(1.074)	381663	10.0000	9.764
	52 4-Nitroaniline	138	13.211	13.237	(1.080)	161969	10.0000	9.758
	53 4,6-Dinitro-2-methylphenol	198	13.291	13.317	(0.911)	227186	20.0000	23.04
	54 N-Nitrosodiphenylamine	169	13.350	13.360	(0.915)	534714	10.0000	9.684
$	55 2,4,6-Tribromophenol	330	13.515	13.526	(1.105)	106984	10.0000	10.53
	56 4-Bromophenyl-phenylether	248	13.916	13.921	(0.954)	227330	10.0000	9.774
	57 Hexachlorobenzene	284	14.113	14.119	(0.968)	246352	10.0000	9.848
	58 Pentachlorophenol	266	14.413	14.423	(0.988)	153048	10.0000	11.04
*	59 Phenanthrene-d10	188	14.583	14.589	(1.000)	1827126	20.0000	
	60 Phenanthrene	178	14.616	14.626	(1.002)	1019344	10.0000	9.457
	61 Anthracene	178	14.685	14.701	(1.007)	1047526	10.0000	9.570
	62 Carbazole	167	14.984	14.994	(1.027)	856628	10.0000	9.224
	63 Di-n-butylphthalate	149	15.748	15.753	(1.080)	1100844	10.0000	9.547
	64 Fluoranthene	202	16.533	16.543	(1.134)	1014927	10.0000	9.819
	65 Pyrene	202	16.880	16.891	(0.895)	1062769	10.0000	9.361
$	66 Terphenyl-d14	244	17.233	17.238	(0.914)	630537	10.0000	9.664
	67 Butylbenzylphthalate	149	18.141	18.146	(0.962)	452026	10.0000	9.686
	68 Benzo(a)anthracene	228	18.835	18.845	(0.999)	902245	10.0000	9.531
*	69 Chrysene-d12	240	18.862	18.867	(1.000)	1790469	20.0000	
	70 3,3'-Dichlorobenzidine	252	18.872	18.877	(1.001)	380664	10.0000	9.850
	71 Chrysene	228	18.899	18.909	(1.002)	880813	10.0000	9.370
	72 bis(2-Ethylhexyl)phthalate	149	19.161	19.160	(0.954)	614269	10.0000	10.01
*	134 Di-n-octylphthalate-d4	153	20.090	20.090	(1.000)	2137569	20.0000	
	73 Di-n-octylphthalate	149	20.101	20.106	(1.001)	1069126	10.0000	9.567

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
74 Benzo(b)fluoranthene	252	20.475	20.490	(0.975)	991533	10.0000	9.567
75 Benzo(k)fluoranthene	252	20.507	20.528	(0.977)	1038341	10.0000	9.578
187 Total Benzofluoranthenes	252	20.507	20.528	(0.977)	1939333	20.0000	19.20
76 Benzo(a)pyrene	252	20.913	20.928	(0.996)	951887	10.0000	9.792
* 77 Perylene-d12	264	20.998	21.003	(1.000)	1760832	20.0000	
78 Indeno(1,2,3-cd)pyrene	276	22.344	22.370	(1.064)	1165085	10.0000	9.878
79 Dibenzo(a,h)anthracene	278	22.376	22.397	(1.066)	947630	10.0000	9.821
80 Benzo(g,h,i)perylene	276	22.659	22.691	(1.079)	1043259	10.0000	9.690
90 N-Nitrosodimethylamine	74	2.427	2.454	(0.331)	230135	10.0000	9.683
103 Pyridine	79	2.411	2.422	(0.329)	409266	10.0000	10.20
91 Aniline	93	6.887	6.897	(0.940)	578161	10.0000	9.877
105 1-methylnaphthalene	141	10.706	10.716	(1.141)	595309	10.0000	9.417
93 Benzidine	184	16.811	16.821	(0.891)	280078	10.0000	8.528
111 Azobenzene (1,2-DP-Hydrazine)	77	13.387	13.398	(1.094)	721173	10.0000	9.653
143 1,4-Dioxane	88	1.930	1.941	(0.263)	172236	10.0000	9.162
$ 137 d8-1,4-Dioxane	96	1.898	1.904	(0.259)	153559	10.0000	9.452
144 alpha-Terpineol	59	9.472	9.482	(1.009)	274198	10.0000	9.719
177 p-Benzoquinone	82	5.974	5.984	(0.636)	66671	10.0000	12.30
98 Retene	219	17.468	17.473	(0.926)	370972	10.0000	9.762
99 Perylene	252	21.030	21.046	(1.002)	911787	10.0000	9.438
133 Butylatedhydroxytoluene	205	12.452	12.457	(1.018)	567180	10.0000	9.786
115 Tributyl Phosphate	99	13.494	13.515	(0.925)	771351	10.0000	9.790
116 Dibutyl Phenyl Phosphate	175	15.198	15.213	(1.042)	524692	10.0000	9.929
117 Butyl Diphenyl Phosphate	94	16.859	16.864	(0.894)	156306	10.0000	9.651
118 Triphenyl Phosphate	326	18.445	18.450	(0.978)	159087	10.0000	10.18
123 Acetophenone	105	8.046	8.062	(1.098)	497358	10.0000	9.536
179 n-Decane	57	7.207	7.213	(0.983)	406894	10.0000	9.902
180 n-Octadecane	57	14.589	14.594	(1.000)	399687	10.0000	9.840
168 Pentachlorobenzene	250	12.586	12.596	(1.029)	304826	10.0000	9.636
113 Diphenyl Oxide	170	11.523	11.528	(0.942)	522724	10.0000	9.827
112 Biphenyl	154	11.325	11.331	(0.926)	889547	10.0000	9.793
120 2,3,4,6-Tetrachlorophenol	232	12.837	12.847	(1.049)	229862	10.0000	10.24
135 2,3,5,6-Tetrachlorophenol	232	12.762	12.773	(1.043)	190233	10.0000	10.12
151 1,2,4,5-Tetrachlorobenzene	216	10.877	10.887	(0.889)	354799	10.0000	9.651
110 Tetrachloroguaiacol	247	14.546	14.562	(0.997)	254926	20.0000	20.30
109 3,4,5-Trichloroguaiacol	213	12.938	12.949	(0.887)	126001	10.0000	10.05
181 3,4,6-Trichloroguaiacol	211	13.051	13.061	(1.780)	156028	10.0000	10.29(H)
108 4,5,6-Trichloroguaiacol	213	13.969	13.980	(1.142)	125091	10.0000	10.04
184 3,4-Dichloroguaiacol	192	11.406	11.416	(1.556)	140843	10.0000	10.52
107 4,5-Dichloroguaiacol	192	12.207	12.217	(0.998)	341045	20.0000	20.21
182 4,6-Dichloroguaiacol	192	12.207	12.217	(1.665)	340927	20.0000	20.06
185 4-Chloroguaiacol	115	10.337	10.348	(1.410)	71914	5.00000	4.977
186 Carbaryl	144	15.411	15.427	(1.057)	350748	10.0000	10.81
178 2-Benzyl-4-Chlorophenol	218	15.374	15.395	(1.054)	190893	10.0000	10.37
106 Guaiacol	124	8.324	8.339	(1.136)	308620	10.0000	9.743
100 3-beta-Coprostanol	215	21.821	21.831	(1.039)	120883	25.0000	25.31
101 Cholesterol	107	21.997	22.007	(1.048)	79591	25.0000	22.13

QC Flag Legend

H - Operator selected an alternate compound hit.

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt6.i
Lab File ID: 01281104.D
Lab Smp Id: IC100128
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem2/nt6.i/20110128.b/SW846012811.m
Misc Info: 10-

Calibration Date: 28-JAN-2011
Calibration Time: 09:50
Client Smp ID: IC100128
Level:
Sample Type:

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	458851	229426	917702	607509	32.40
27 Naphthalene-d8	1522936	761468	3045872	1998438	31.22
42 Acenaphthene-d10	864539	432270	1729078	1155381	33.64
59 Phenanthrene-d10	1378528	689264	2757056	1827126	32.54
69 Chrysene-d12	1421586	710793	2843172	1790469	25.95
134 Di-n-octylphthala	1679951	839976	3359902	2137569	27.24
77 Perylene-d12	1361193	680596	2722386	1760832	29.36

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	7.33	6.83	7.83	7.33	-0.06
27 Naphthalene-d8	9.39	8.89	9.89	9.39	0.01
42 Acenaphthene-d10	12.23	11.73	12.73	12.23	0.01
59 Phenanthrene-d10	14.58	14.08	15.08	14.58	0.01
69 Chrysene-d12	18.86	18.36	19.36	18.86	0.01
134 Di-n-octylphthala	20.09	19.59	20.59	20.09	0.01
77 Perylene-d12	21.00	20.50	21.50	21.00	0.01

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem2/nt6.i/20110128.b/01281104.D

Date : 28-JAN-2011 11:29

Client ID: IC100128

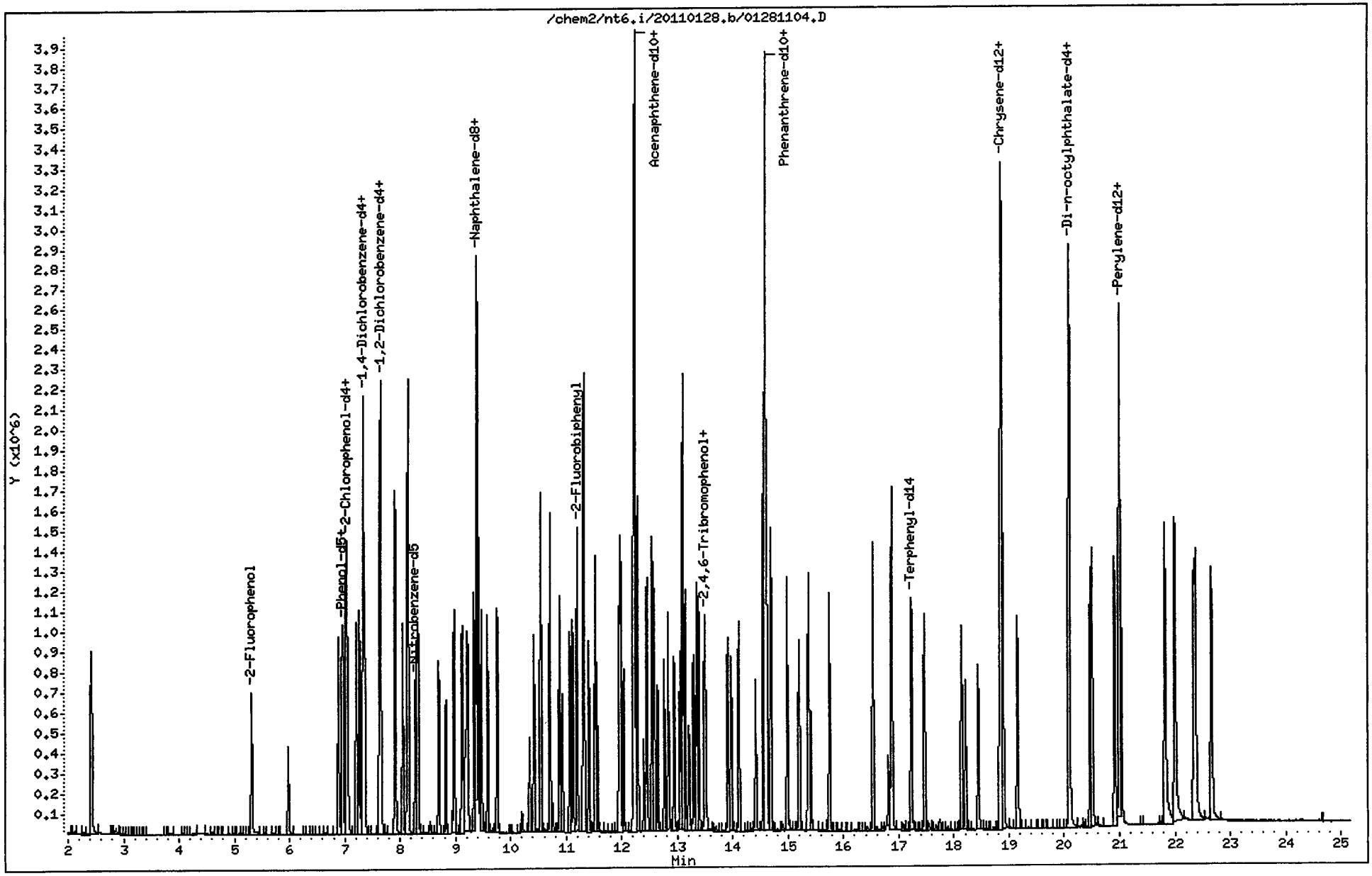
Sample Info: IC100128

Column phase: ZB-5msi

Instrument: nt6.i

Operator: JZ

Column diameter: 0.32



SH20:001100

CO-ELUTION SUMMARY FOR FILE - 01281104.D

Lab ID: IC100128, Method: SW846012811.m, Instrument: nt6.i, Date: 28-JAN-2011

RT	CO-ELUTION COMPOUNDS
	NO CO-ELUTIONS

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem2/nt6.i/20110128.b/01281101.D
Lab Smp Id: IC250128 Client Smp ID: IC250128
Inj Date : 28-JAN-2011 09:50
Operator : JZ Inst ID: nt6.i
Smp Info : IC250128
Misc Info : 10-
Comment : 1ul Injection
Method : /chem2/nt6.i/20110128.b/SW846012811.m
Meth Date : 28-Jan-2011 16:14 jianqing Quant Type: ISTD
Cal Date : 28-JAN-2011 09:50 Cal File: 01281101.D
Als bottle: 1 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 3.50

01/28/11

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
$	1 2-Fluorophenol	112	5.310	5.322	(0.724)	729196	25.0000	26.60
$	2 Phenol-d5	99	6.955	6.967	(0.948)	891879	25.0000	25.98
	3 Phenol	94	6.971	6.988	(0.950)	881497	25.0000	25.34
$	5 2-Chlorophenol-d4	132	7.030	7.036	(0.958)	745383	25.0000	25.29
	4 Bis(2-Chloroethyl)ether	93	7.030	7.036	(0.958)	731353	25.0000	24.90
	6 2-Chlorophenol	128	7.057	7.063	(0.962)	750530	25.0000	25.16
	7 1,3-Dichlorobenzene	146	7.265	7.271	(0.991)	945646	25.0000	24.96
*	8 1,4-Dichlorobenzene-d4	152	7.334	7.341	(1.000)	458851	20.0000	
	9 1,4-Dichlorobenzene	146	7.356	7.362	(1.003)	962566	25.0000	25.22
$	10 1,2-Dichlorobenzene-d4	152	7.634	7.635	(1.041)	522555	25.0000	25.19
	12 1,2-Dichlorobenzene	146	7.655	7.661	(1.044)	885753	25.0000	24.65
	11 Benzyl alcohol	108	7.644	7.661	(1.042)	552887	25.0000	26.09
	14 2,2'-oxybis(1-Chloropropane)	45	7.917	7.923	(1.079)	884679	25.0000	25.16
	13 2-Methylphenol	108	7.911	7.923	(1.079)	753833	25.0000	25.72
	17 Hexachloroethane	117	8.146	8.147	(1.111)	337012	25.0000	24.96
	16 N-Nitroso-di-n-propylamine	70	8.130	8.147	(1.109)	499657	25.0000	25.25
	15 4-Methylphenol	108	8.146	8.163	(1.111)	782821	25.0000	25.80
$	18 Nitrobenzene-d5	82	8.280	8.286	(0.882)	735121	25.0000	25.49
	19 Nitrobenzene	77	8.307	8.318	(0.885)	793810	25.0000	24.93
	20 Isophorone	82	8.702	8.713	(0.927)	1204163	25.0000	24.96
	21 2-Nitrophenol	139	8.825	8.836	(0.940)	411466	25.0000	26.96
	22 2,4-Dimethylphenol	107	8.980	8.991	(0.957)	674120	25.0000	25.72
	23 Bis(2-Chloroethoxy)methane	93	9.124	9.130	(0.972)	849314	25.0000	24.66
	24 Benzoic acid	105	9.257	9.344	(0.986)	1076311	50.0000	58.80
	25 2,4-Dichlorophenol	162	9.220	9.226	(0.982)	629697	25.0000	26.20
	26 1,2,4-Trichlorobenzene	180	9.337	9.344	(0.995)	765732	25.0000	24.83
*	27 Naphthalene-d8	136	9.385	9.392	(1.000)	1522936	20.0000	

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
28 Naphthalene	128	9.418	9.424	(1.003)	2035124	25.0000	24.38
29 4-Chloroaniline	127	9.583	9.589	(1.021)	864674	25.0000	24.32
30 Hexachlorobutadiene	225	9.759	9.760	(1.040)	431026	25.0000	25.34
31 4-Chloro-3-methylphenol	107	10.422	10.428	(1.110)	558131	25.0000	27.13
32 2-Methylnaphthalene	141	10.539	10.545	(1.123)	1256481	25.0000	25.47
33 Hexachlorocyclopentadiene	237	10.929	10.930	(0.893)	419977	25.0000	29.39
34 2,4,6-Trichlorophenol	196	11.068	11.074	(0.905)	470002	25.0000	27.67
35 2,4,5-Trichlorophenol	196	11.121	11.128	(0.909)	553434	25.0000	29.22
$ 36 2-Fluorobiphenyl	172	11.201	11.202	(0.916)	1503571	25.0000	25.41
37 2-Chloronaphthalene	162	11.308	11.314	(0.924)	1359871	25.0000	25.05
38 2-Nitroaniline	65	11.559	11.571	(0.945)	411401	25.0000	28.88
39 Dimethylphthalate	163	11.955	11.966	(0.977)	1428447	25.0000	25.03
40 Acenaphthylene	152	11.981	11.982	(0.979)	1995569	25.0000	24.87
41 2,6-Dinitrotoluene	165	12.035	12.046	(0.984)	359548	25.0000	26.80
* 42 Acenaphthene-d10	164	12.232	12.238	(1.000)	864539	20.0000	
43 3-Nitroaniline	138	12.238	12.249	(1.000)	343227	25.0000	24.87
44 Acenaphthene	153	12.286	12.292	(1.004)	1250005	25.0000	24.71
45 2,4-Dinitrophenol	184	12.398	12.415	(1.014)	288595	50.0000	74.17
46 Dibenzofuran	168	12.547	12.554	(1.026)	1952909	25.0000	25.38
47 4-Nitrophenol	109	12.574	12.586	(1.028)	173692	25.0000	28.36
48 2,4-Dinitrotoluene	165	12.654	12.666	(1.034)	443774	25.0000	27.33
50 Diethylphthalate	149	13.108	13.120	(1.072)	1309535	25.0000	24.76
49 Fluorene	166	13.098	13.104	(1.071)	1417087	25.0000	24.76
51 4-Chlorophenyl-phenylether	204	13.146	13.152	(1.075)	752430	25.0000	25.54
52 4-Nitroaniline	138	13.220	13.237	(1.081)	307576	25.0000	24.82
53 4,6-Dinitro-2-methylphenol	198	13.300	13.317	(0.912)	527816	50.0000	62.25
54 N-Nitrosodiphenylamine	169	13.354	13.360	(0.916)	1057503	25.0000	25.29
$ 55 2,4,6-Tribromophenol	330	13.519	13.526	(1.105)	221404	25.0000	27.97
56 4-Bromophenyl-phenylether	248	13.915	13.921	(0.954)	455332	25.0000	25.70
57 Hexachlorobenzene	284	14.118	14.119	(0.968)	501272	25.0000	26.15
58 Pentachlorophenol	266	14.422	14.423	(0.989)	319624	25.0000	28.95
* 59 Phenanthrene-d10	188	14.582	14.589	(1.000)	1378528	20.0000	
60 Phenanthrene	178	14.620	14.626	(1.003)	1967726	25.0000	24.39
61 Anthracene	178	14.694	14.701	(1.008)	2058766	25.0000	24.95
62 Carbazole	167	14.988	14.994	(1.028)	1671186	25.0000	24.13
63 Di-n-butylphthalate	149	15.752	15.753	(1.080)	2171222	25.0000	24.97
64 Fluoranthene	202	16.537	16.543	(1.134)	2049587	25.0000	25.95
65 Pyrene	202	16.884	16.891	(0.895)	2138225	25.0000	24.03
$ 66 Terphenyl-d14	244	17.237	17.238	(0.914)	1307112	25.0000	25.17
67 Butylbenzylphthalate	149	18.145	18.146	(0.962)	934714	25.0000	25.17
68 Benzo(a)anthracene	228	18.839	18.845	(0.999)	1888973	25.0000	25.10
* 69 Chrysene-d12	240	18.861	18.867	(1.000)	1421586	20.0000	
70 3,3'-Dichlorobenzidine	252	18.877	18.877	(1.001)	767246	25.0000	25.00
71 Chrysene	228	18.903	18.909	(1.002)	1802136	25.0000	24.35
72 bis(2-Ethylhexyl)phthalate	149	19.160	19.160	(0.954)	1271871	25.0000	26.01
* 134 Di-n-octylphthalate-d4	153	20.089	20.090	(1.000)	1679951	20.0000	
73 Di-n-octylphthalate	149	20.100	20.106	(1.001)	2204666	25.0000	25.08

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
74 Benzo(b)fluoranthene	252	20.479	20.490	(0.975)	2029512	25.0000	25.25
75 Benzo(k)fluoranthene	252	20.516	20.528	(0.977)	2165011	25.0000	25.62
187 Total Benzofluoranthenes	252	20.516	20.528	(0.977)	3952424	50.0000	50.46
76 Benzo(a)pyrene	252	20.917	20.928	(0.996)	1956017	25.0000	25.76
* 77 Perylene-d12	264	20.997	21.003	(1.000)	1361193	20.0000	
78 Indeno(1,2,3-cd)pyrene	276	22.354	22.370	(1.065)	2351102	25.0000	25.58
79 Dibenzo(a,h)anthracene	278	22.386	22.397	(1.066)	1973074	25.0000	26.07
80 Benzo(g,h,i)perylene	276	22.674	22.691	(1.080)	2114647	25.0000	25.30
90 N-Nitrosodimethylamine	74	2.431	2.454	(0.332)	460733	25.0000	25.50
103 Pyridine	79	2.410	2.422	(0.329)	836997	25.0000	26.90
91 Aniline	93	6.886	6.897	(0.939)	1122045	25.0000	25.28
105 1-methylnaphthalene	141	10.710	10.716	(1.141)	1168649	25.0000	24.44
93 Benzidine	184	16.815	16.821	(0.892)	370665	25.0000	16.60
111 Azobenzene (1,2-DP-Hydrazine)	77	13.391	13.398	(1.095)	1418237	25.0000	25.28
143 1,4-Dioxane	88	1.929	1.941	(0.263)	354465	25.0000	24.97
$ 137 d8-1,4-Dioxane	96	1.897	1.904	(0.259)	308818	25.0000	25.13
144 alpha-Terpineol	59	9.476	9.482	(1.010)	549097	25.0000	25.40
177 p-Benzoquinone	82	5.978	5.984	(0.637)	138671	25.0000	30.93
98 Retene	219	17.472	17.473	(0.926)	765767	25.0000	25.28
99 Perylene	252	21.034	21.046	(1.002)	1862257	25.0000	24.95
133 Butylatedhydroxytoluene	205	12.457	12.457	(1.018)	1093466	25.0000	25.16
115 Tributyl Phosphate	99	13.498	13.515	(0.926)	1508735	25.0000	25.28
116 Dibutyl Phenyl Phosphate	175	15.207	15.213	(1.043)	1061888	25.0000	26.21
117 Butyl Diphenyl Phosphate	94	16.863	16.864	(0.894)	325519	25.0000	25.23
118 Triphenyl Phosphate	326	18.444	18.450	(0.978)	341807	25.0000	26.86
123 Acetophenone	105	8.050	8.062	(1.098)	979092	25.0000	24.89
179 n-Decane	57	7.212	7.213	(0.983)	824616	25.0000	26.16
180 n-Octadecane	57	14.593	14.594	(1.001)	806859	25.0000	25.98
168 Pentachlorobenzene	250	12.590	12.596	(1.029)	608199	25.0000	25.52
113 Diphenyl Oxide	170	11.522	11.528	(0.942)	1039196	25.0000	25.82
112 Biphenyl	154	11.324	11.331	(0.926)	1718441	25.0000	25.21
120 2,3,4,6-Tetrachlorophenol	232	12.841	12.847	(1.050)	490889	25.0000	28.04
135 2,3,5,6-Tetrachlorophenol	232	12.766	12.773	(1.044)	359103	25.0000	25.39
151 1,2,4,5-Tetrachlorobenzene	216	10.881	10.887	(0.890)	699508	25.0000	25.32
110 Tetrachloroguaiacol	247	14.556	14.562	(0.998)	539336	50.0000	55.01
109 3,4,5-Trichloroguaiacol	213	12.943	12.949	(0.888)	254453	25.0000	26.41
181 3,4,6-Trichloroguaiacol	211	13.055	13.061	(1.780)	308700	25.0000	26.44(H)
108 4,5,6-Trichloroguaiacol	213	13.973	13.980	(1.142)	260899	25.0000	27.17
184 3,4-Dichloroguaiacol	192	11.410	11.416	(1.556)	276167	25.0000	26.70
107 4,5-Dichloroguaiacol	192	12.211	12.217	(0.998)	675598	50.0000	52.59
182 4,6-Dichloroguaiacol	192	12.211	12.217	(1.665)	677459	50.0000	52.06
185 4-Chloroguaiacol	115	10.341	10.348	(1.410)	146689	12.5000	13.19
186 Carbaryl	144	15.416	15.427	(1.057)	806679	25.0000	29.80
178 2-Benzyl-4-Chlorophenol	218	15.383	15.395	(1.055)	395177	25.0000	27.49
106 Guaiacol	124	8.328	8.339	(1.135)	611122	25.0000	25.41
100 3-beta-Coprostanol	215	21.825	21.831	(1.039)	263461	62.5000	68.92
101 Cholesterol	107	22.001	22.007	(1.048)	172213	62.5000	62.08

QC Flag Legend

H - Operator selected an alternate compound hit.

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt6.i
Lab File ID: 01281101.D
Lab Smp Id: IC250128
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem2/nt6.i/20110128.b/SW846012811.m
Misc Info: 10-

Calibration Date: 28-JAN-2011
Calibration Time: 09:50
Client Smp ID: IC250128
Level:
Sample Type:

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	458851	229426	917702	458851	0.00
27 Naphthalene-d8	1522936	761468	3045872	1522936	0.00
42 Acenaphthene-d10	864539	432270	1729078	864539	0.00
59 Phenanthrene-d10	1378528	689264	2757056	1378528	0.00
69 Chrysene-d12	1421586	710793	2843172	1421586	0.00
134 Di-n-octylphthala	1679951	839976	3359902	1679951	0.00
77 Perylene-d12	1361193	680596	2722386	1361193	0.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	7.33	6.83	7.83	7.33	0.00
27 Naphthalene-d8	9.39	8.89	9.89	9.39	0.00
42 Acenaphthene-d10	12.23	11.73	12.73	12.23	0.00
59 Phenanthrene-d10	14.58	14.08	15.08	14.58	0.00
69 Chrysene-d12	18.86	18.36	19.36	18.86	0.00
134 Di-n-octylphthala	20.09	19.59	20.59	20.09	0.00
77 Perylene-d12	21.00	20.50	21.50	21.00	0.00

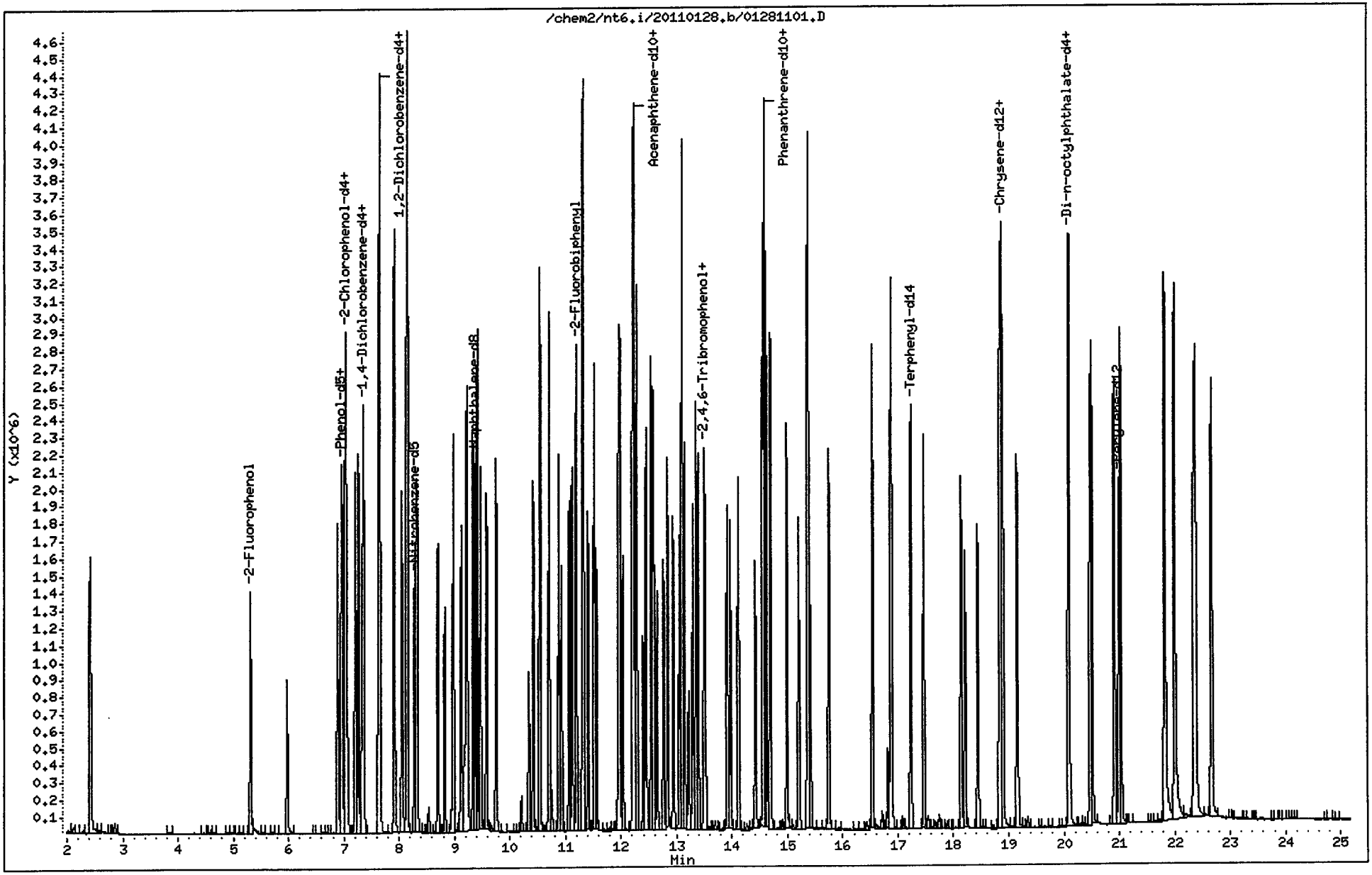
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem2/nt6.i/20110128.b/01281101.D
Date : 28-JAN-2011 09:50
Client ID: IC250128
Sample Info: IC250128

Instrument: nt6.i

Operator: JZ
Column diameter: 0.32

Column phase: ZB-5msi



SH20:00117

CO-ELUTION SUMMARY FOR FILE - 01281101.D

Lab ID: IC250128, Method: SW846012811.m, Instrument: nt6.i, Date: 28-JAN-2011

RT	CO-ELUTION COMPOUNDS
	NO CO-ELUTIONS

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem2/nt6.i/20110128.b/01281105.D
Lab Smp Id: IC400128 Client Smp ID: IC400128
Inj Date : 28-JAN-2011 12:02
Operator : JZ Inst ID: nt6.i
Smp Info : IC400128
Misc Info : 10-
Comment : 1ul Injection
Method : /chem2/nt6.i/20110128.b/SW846012811.m
Meth Date : 28-Jan-2011 16:14 jianqing Quant Type: ISTD
Cal Date : 28-JAN-2011 12:02 Cal File: 01281105.D
Als bottle: 5 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 3.50

01/28/11

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
$ 1 2-Fluorophenol	112	5.316	5.322	(0.725)	1102339	40.0000	40.36
$ 2 Phenol-d5	99	6.961	6.967	(0.949)	1372018	40.0000	40.34
3 Phenol	94	6.982	6.988	(0.952)	1367981	40.0000	40.33
$ 5 2-Chlorophenol-d4	132	7.036	7.036	(0.959)	1134692	40.0000	39.36
4 Bis(2-Chloroethyl)ether	93	7.036	7.036	(0.959)	1085230	40.0000	38.27
6 2-Chlorophenol	128	7.057	7.063	(0.962)	1170837	40.0000	40.39
7 1,3-Dichlorobenzene	146	7.271	7.271	(0.991)	1420428	40.0000	38.74
* 8 1,4-Dichlorobenzene-d4	152	7.335	7.341	(1.000)	456542	20.0000	
9 1,4-Dichlorobenzene	146	7.362	7.362	(1.004)	1445538	40.0000	39.14
$ 10 1,2-Dichlorobenzene-d4	152	7.634	7.635	(1.041)	803783	40.0000	39.56
12 1,2-Dichlorobenzene	146	7.655	7.661	(1.044)	1307187	40.0000	38.20
11 Benzyl alcohol	108	7.655	7.661	(1.044)	840459	40.0000	40.10
14 2,2'-oxybis(1-Chloropropane)	45	7.917	7.923	(1.079)	1327146	40.0000	38.87
13 2-Methylphenol	108	7.917	7.923	(1.079)	1182707	40.0000	41.11
17 Hexachloroethane	117	8.147	8.147	(1.111)	506154	40.0000	38.89
16 N-Nitroso-di-n-propylamine	70	8.141	8.147	(1.110)	747405	40.0000	39.12
15 4-Methylphenol	108	8.157	8.163	(1.112)	1209846	40.0000	40.87
$ 18 Nitrobenzene-d5	82	8.280	8.286	(0.882)	1165894	40.0000	40.63
19 Nitrobenzene	77	8.312	8.318	(0.885)	1209342	40.0000	39.02
20 Isophorone	82	8.708	8.713	(0.927)	1857213	40.0000	39.13
21 2-Nitrophenol	139	8.830	8.836	(0.940)	651311	40.0000	42.09
22 2,4-Dimethylphenol	107	8.985	8.991	(0.957)	1074194	40.0000	41.34
23 Bis(2-Chloroethoxy)methane	93	9.124	9.130	(0.972)	1293640	40.0000	38.66
24 Benzoic acid	105	9.300	9.344	(0.990)	1754148	80.0000	87.72
25 2,4-Dichlorophenol	162	9.220	9.226	(0.982)	996761	40.0000	41.60
26 1,2,4-Trichlorobenzene	180	9.343	9.344	(0.995)	1153282	40.0000	38.69
* 27 Naphthalene-d8	136	9.391	9.392	(1.000)	1520056	20.0000	

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
28 Naphthalene	128	9.423	9.424	(1.003)	3006880	40.0000	38.52
29 4-Chloroaniline	127	9.589	9.589	(1.021)	1292100	40.0000	38.52
30 Hexachlorobutadiene	225	9.760	9.760	(1.039)	665797	40.0000	39.63
31 4-Chloro-3-methylphenol	107	10.427	10.428	(1.110)	899193	40.0000	43.07
32 2-Methylnaphthalene	141	10.545	10.545	(1.123)	1887925	40.0000	39.55
33 Hexachlorocyclopentadiene	237	10.929	10.930	(0.893)	685161	40.0000	42.40
34 2,4,6-Trichlorophenol	196	11.068	11.074	(0.905)	775607	40.0000	42.58
35 2,4,5-Trichlorophenol	196	11.122	11.128	(0.909)	891781	40.0000	44.27
$ 36 2-Fluorobiphenyl	172	11.202	11.202	(0.916)	2327765	40.0000	39.39
37 2-Chloronaphthalene	162	11.314	11.314	(0.925)	2035098	40.0000	38.31
38 2-Nitroaniline	65	11.565	11.571	(0.945)	624571	40.0000	41.60
39 Dimethylphthalate	163	11.960	11.966	(0.978)	2185023	40.0000	38.85
40 Acenaphthylene	152	11.982	11.982	(0.979)	3031691	40.0000	38.89
41 2,6-Dinitrotoluene	165	12.040	12.046	(0.984)	554873	40.0000	40.33
* 42 Acenaphthene-d10	164	12.233	12.238	(1.000)	880784	20.0000	
43 3-Nitroaniline	138	12.243	12.249	(1.001)	468209	40.0000	36.63
44 Acenaphthene	153	12.286	12.292	(1.004)	1919908	40.0000	38.59
45 2,4-Dinitrophenol	184	12.409	12.415	(1.014)	598795	80.0000	84.80
46 Dibenzofuran	168	12.548	12.554	(1.026)	2989404	40.0000	39.42
47 4-Nitrophenol	109	12.580	12.586	(1.028)	277023	40.0000	43.16(M)
48 2,4-Dinitrotoluene	165	12.660	12.666	(1.035)	688486	40.0000	40.73
50 Diethylphthalate	149	13.114	13.120	(1.072)	1980541	40.0000	38.47
49 Fluorene	166	13.103	13.104	(1.071)	2165412	40.0000	38.64
51 4-Chlorophenyl-phenylether	204	13.146	13.152	(1.075)	1167811	40.0000	39.30
52 4-Nitroaniline	138	13.226	13.237	(1.081)	473686	40.0000	38.40
53 4,6-Dinitro-2-methylphenol	198	13.306	13.317	(0.912)	898013	80.0000	90.77
54 N-Nitrosodiphenylamine	169	13.354	13.360	(0.916)	1647888	40.0000	39.14
$ 55 2,4,6-Tribromophenol	330	13.520	13.526	(1.105)	370787	40.0000	44.01
56 4-Bromophenyl-phenylether	248	13.915	13.921	(0.954)	708148	40.0000	38.92
57 Hexachlorobenzene	284	14.118	14.119	(0.968)	793968	40.0000	39.85
58 Pentachlorophenol	266	14.422	14.423	(0.989)	537107	40.0000	43.98
* 59 Phenanthrene-d10	188	14.583	14.589	(1.000)	1417279	20.0000	
60 Phenanthrene	178	14.620	14.626	(1.003)	3033576	40.0000	38.24
61 Anthracene	178	14.695	14.701	(1.008)	3134415	40.0000	38.85
62 Carbazole	167	14.989	14.994	(1.028)	2527710	40.0000	37.27
63 Di-n-butylphthalate	149	15.752	15.753	(1.080)	3348897	40.0000	39.19
64 Fluoranthene	202	16.538	16.543	(1.134)	3137001	40.0000	39.59
65 Pyrene	202	16.885	16.891	(0.895)	3257853	40.0000	38.17
$ 66 Terphenyl-d14	244	17.237	17.238	(0.914)	2086765	40.0000	39.75
67 Butylbenzylphthalate	149	18.145	18.146	(0.962)	1446083	40.0000	39.07
68 Benzo(a)anthracene	228	18.840	18.845	(0.999)	2903384	40.0000	38.66
* 69 Chrysene-d12	240	18.861	18.867	(1.000)	1466560	20.0000	
70 3,3'-Dichlorobenzidine	252	18.877	18.877	(1.001)	1130221	40.0000	37.60
71 Chrysene	228	18.904	18.909	(1.002)	2824600	40.0000	38.78
72 bis(2-Ethylhexyl)phthalate	149	19.160	19.160	(0.954)	1946607	40.0000	40.16
* 134 Di-n-octylphthalate-d4	153	20.089	20.090	(1.000)	1679881	20.0000	
73 Di-n-octylphthalate	149	20.100	20.106	(1.001)	3286970	40.0000	38.92

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
74 Benzo(b)fluoranthene	252	20.485	20.490	(0.975)	3262306	40.0000	40.40
75 Benzo(k)fluoranthene	252	20.517	20.528	(0.977)	3152063	40.0000	38.55
187 Total Benzofluoranthenes	252	20.517	20.528	(0.977)	6058262	80.0000	78.76
76 Benzo(a)pyrene	252	20.923	20.928	(0.996)	3028227	40.0000	39.87
* 77 Perylene-d12	264	21.003	21.003	(1.000)	1383320	20.0000	
78 Indeno(1,2,3-cd)pyrene	276	22.359	22.370	(1.065)	3654656	40.0000	39.30
79 Dibenzo(a,h)anthracene	278	22.391	22.397	(1.066)	3043965	40.0000	39.98
80 Benzo(g,h,i)perylene	276	22.680	22.691	(1.080)	3264393	40.0000	38.96
90 N-Nitrosodimethylamine	74	2.442	2.454	(0.333)	706934	40.0000	39.38
103 Pyridine	79	2.416	2.422	(0.329)	1228522	40.0000	39.60
91 Aniline	93	6.892	6.897	(0.940)	1718934	40.0000	39.86
105 1-methylnaphthalene	141	10.710	10.716	(1.140)	1792347	40.0000	38.99
93 Benzidine	184	16.815	16.821	(0.892)	661877	40.0000	39.54(M)
111 Azobenzene (1,2-DP-Hydrazine)	77	13.397	13.398	(1.095)	2169571	40.0000	38.23
143 1,4-Dioxane	88	1.935	1.941	(0.264)	537214	40.0000	38.69
$ 137 d8-1,4-Dioxane	96	1.903	1.904	(0.259)	468003	40.0000	38.89
144 alpha-Terpineol	59	9.477	9.482	(1.009)	856565	40.0000	40.03
177 p-Benzoquinone	82	5.984	5.984	(0.637)	222748	40.0000	44.48
98 Retene	219	17.472	17.473	(0.926)	1219597	40.0000	39.90
99 Perylene	252	21.040	21.046	(1.002)	2850767	40.0000	39.06
133 Butylatedhydroxytoluene	205	12.457	12.457	(1.018)	1684697	40.0000	39.09
115 Tributyl Phosphate	99	13.504	13.515	(0.926)	2352096	40.0000	39.39
116 Dibutyl Phenyl Phosphate	175	15.208	15.213	(1.043)	1675031	40.0000	40.17
117 Butyl Diphenyl Phosphate	94	16.863	16.864	(0.894)	508789	40.0000	39.48
118 Triphenyl Phosphate	326	18.450	18.450	(0.978)	547240	40.0000	40.88
123 Acetophenone	105	8.056	8.062	(1.098)	1496322	40.0000	38.90
179 n-Decane	57	7.212	7.213	(0.983)	1240452	40.0000	39.77
180 n-Octadecane	57	14.588	14.594	(1.000)	1239983	40.0000	39.51
168 Pentachlorobenzene	250	12.596	12.596	(1.030)	954460	40.0000	39.47
113 Diphenyl Oxide	170	11.528	11.528	(0.942)	1597756	40.0000	39.54
112 Biphenyl	154	11.330	11.331	(0.926)	2594850	40.0000	39.10
120 2,3,4,6-Tetrachlorophenol	232	12.842	12.847	(1.050)	803750	40.0000	43.50
135 2,3,5,6-Tetrachlorophenol	232	12.767	12.773	(1.044)	606731	40.0000	40.69
151 1,2,4,5-Tetrachlorobenzene	216	10.881	10.887	(0.890)	1075139	40.0000	38.72
110 Tetrachloroguaiacol	247	14.556	14.562	(0.998)	859130	80.0000	83.13
109 3,4,5-Trichloroguaiacol	213	12.948	12.949	(0.888)	401954	40.0000	40.67
181 3,4,6-Trichloroguaiacol	211	13.055	13.061	(1.780)	491977	40.0000	41.96(H)
108 4,5,6-Trichloroguaiacol	213	13.974	13.980	(1.142)	414735	40.0000	41.61
184 3,4-Dichloroguaiacol	192	11.410	11.416	(1.556)	439349	40.0000	41.84
107 4,5-Dichloroguaiacol	192	12.211	12.217	(0.998)	1070876	80.0000	81.72
182 4,6-Dichloroguaiacol	192	12.211	12.217	(1.665)	1070876	80.0000	82.70
185 4-Chloroguaiacol	115	10.342	10.348	(1.410)	231243	20.0000	20.51
186 Carbaryl	144	15.421	15.427	(1.058)	1401564	40.0000	44.88
178 2-Benzyl-4-Chlorophenol	218	15.389	15.395	(1.055)	624057	40.0000	41.03
106 Guaiacol	124	8.334	8.339	(1.136)	939158	40.0000	39.74
100 3-beta-Coprostanol	215	21.825	21.831	(1.039)	436956	100.000	107.3
101 Cholesterol	107	22.001	22.007	(1.048)	271045	100.000	98.54

QC Flag Legend

M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt6.i
Lab File ID: 01281105.D
Lab Smp Id: IC400128
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem2/nt6.i/20110128.b/SW846012811.m
Misc Info: 10-

Calibration Date: 28-JAN-2011
Calibration Time: 09:50
Client Smp ID: IC400128
Level:
Sample Type:

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	458851	229426	917702	456542	-0.50
27 Naphthalene-d8	1522936	761468	3045872	1520056	-0.19
42 Acenaphthene-d10	864539	432270	1729078	880784	1.88
59 Phenanthrene-d10	1378528	689264	2757056	1417279	2.81
69 Chrysene-d12	1421586	710793	2843172	1466560	3.16
134 Di-n-octylphthala	1679951	839976	3359902	1679881	0.00
77 Perylene-d12	1361193	680596	2722386	1383320	1.63

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	7.33	6.83	7.83	7.33	0.01
27 Naphthalene-d8	9.39	8.89	9.89	9.39	0.06
42 Acenaphthene-d10	12.23	11.73	12.73	12.23	0.00
59 Phenanthrene-d10	14.58	14.08	15.08	14.58	0.00
69 Chrysene-d12	18.86	18.36	19.36	18.86	0.00
134 Di-n-octylphthala	20.09	19.59	20.59	20.09	0.00
77 Perylene-d12	21.00	20.50	21.50	21.00	0.03

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem2/nt6.i/20110128.b/01281105.D

Date : 28-JAN-2011 12:02

Client ID: IC400128

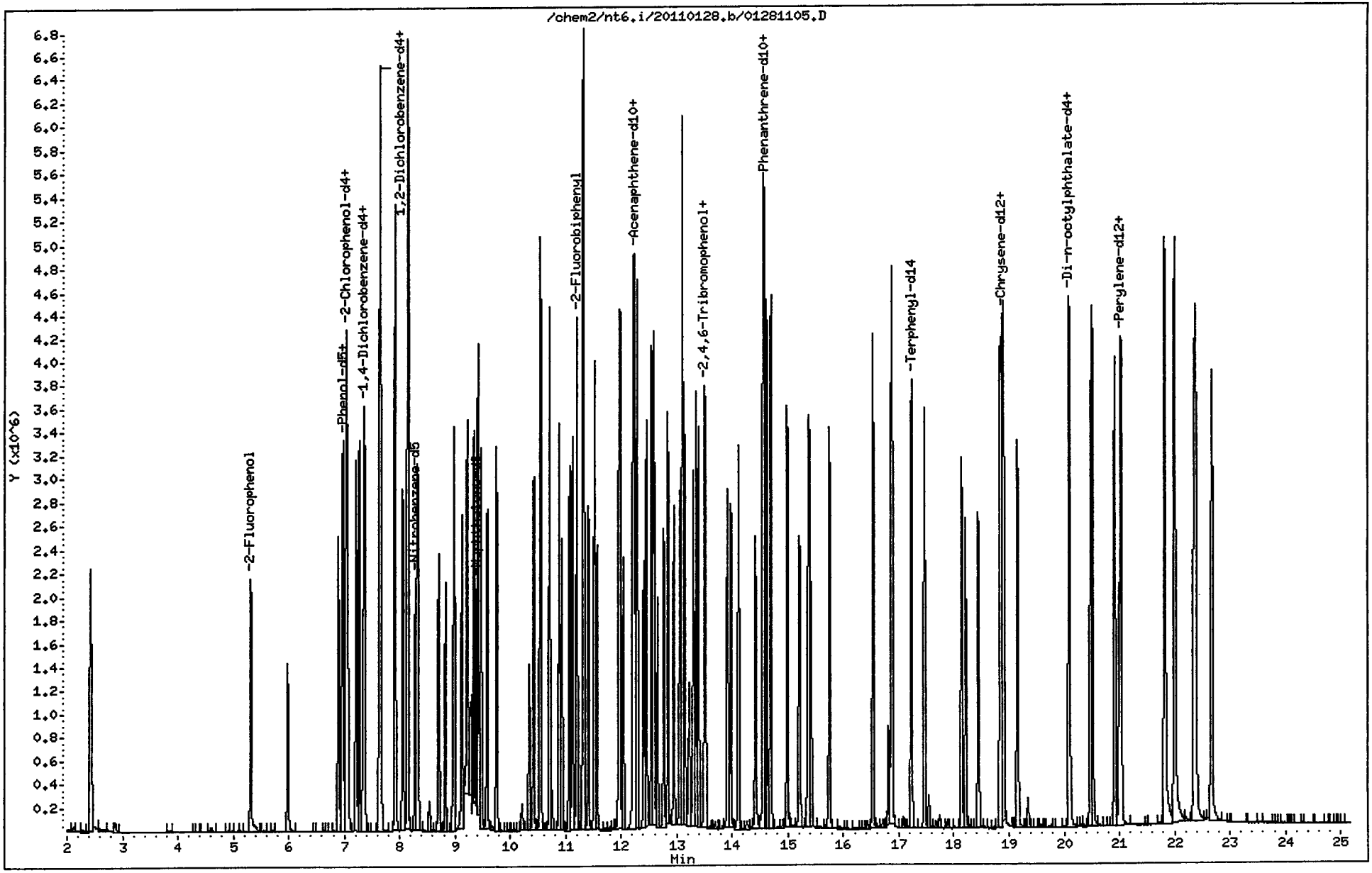
Sample Info: IC400128

Column phase: ZB-5msi

Instrument: nt6.i

Operator: JZ

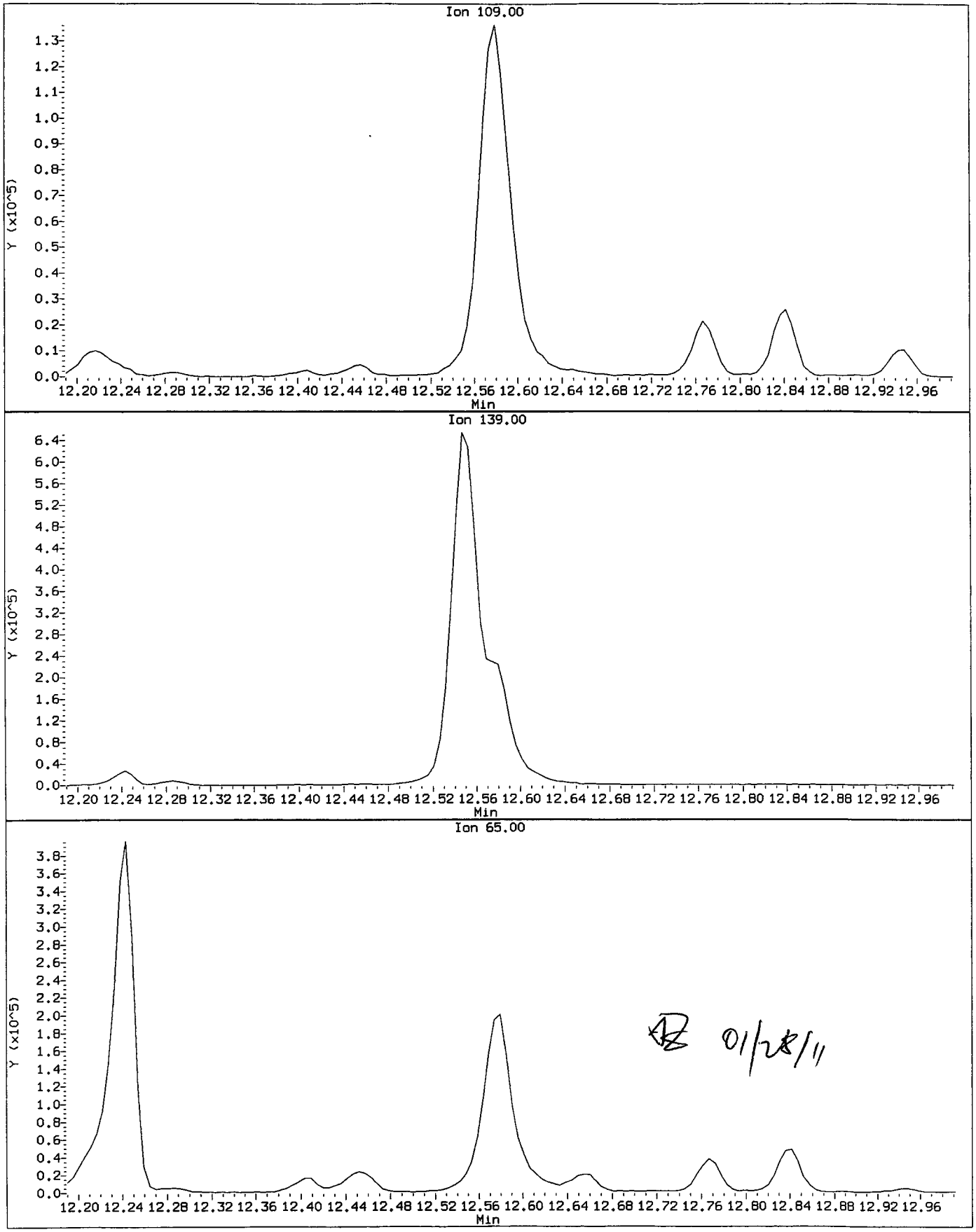
Column diameter: 0.32



SH20 : 00124

Data File: /chem2/nt6.i/20110128.b/01281105.D
Injection Date: 28-JAN-2011 12:02
Instrument: nt6.i
Client Sample ID: IC400128

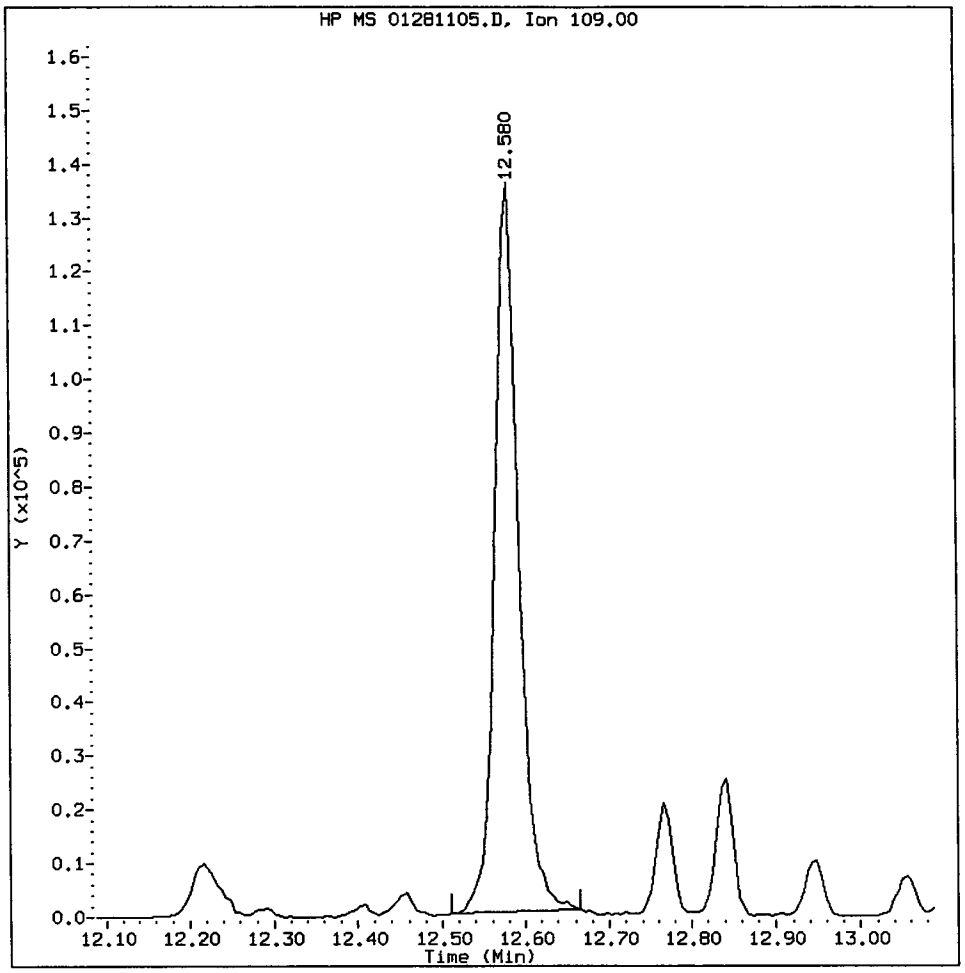
Compound: 4-Nitrophenol
CAS Number: 100-02-7



SH20 : 00125

IC400128, /chem2/nt6.i/20110128.b/01281105.D

4-Nitrophenol Amount: 43.16 Area: 277023



MANUAL INTEGRATION for 4-Nitrophenol

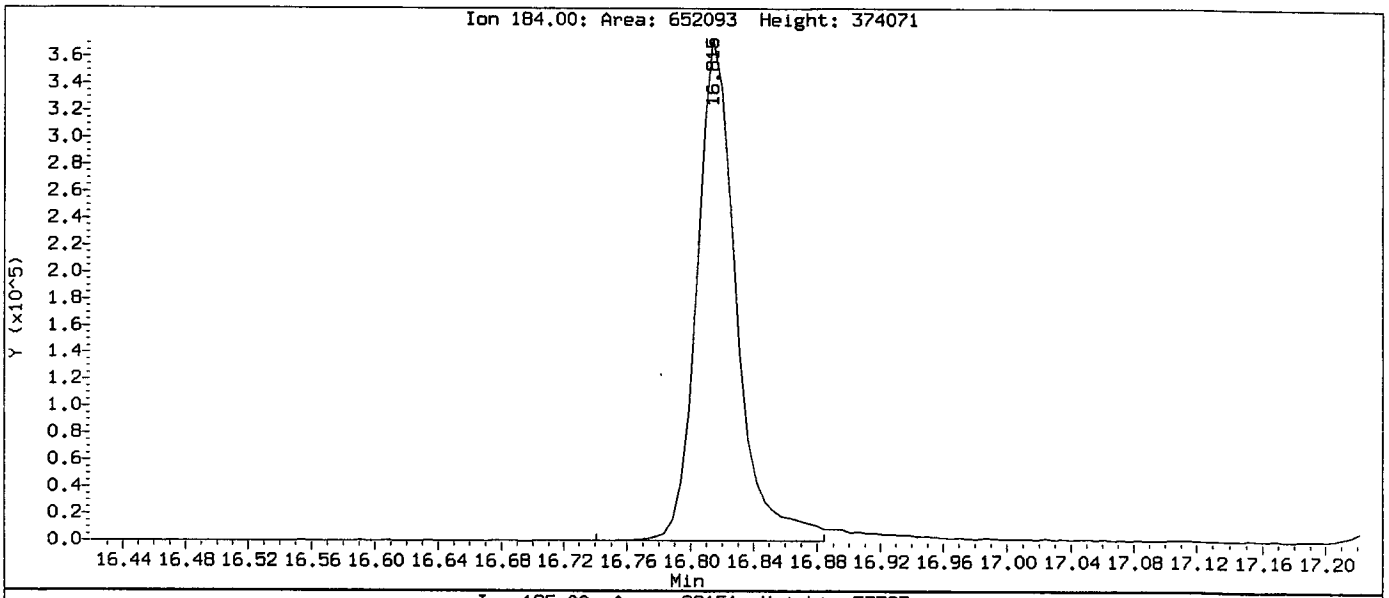
1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

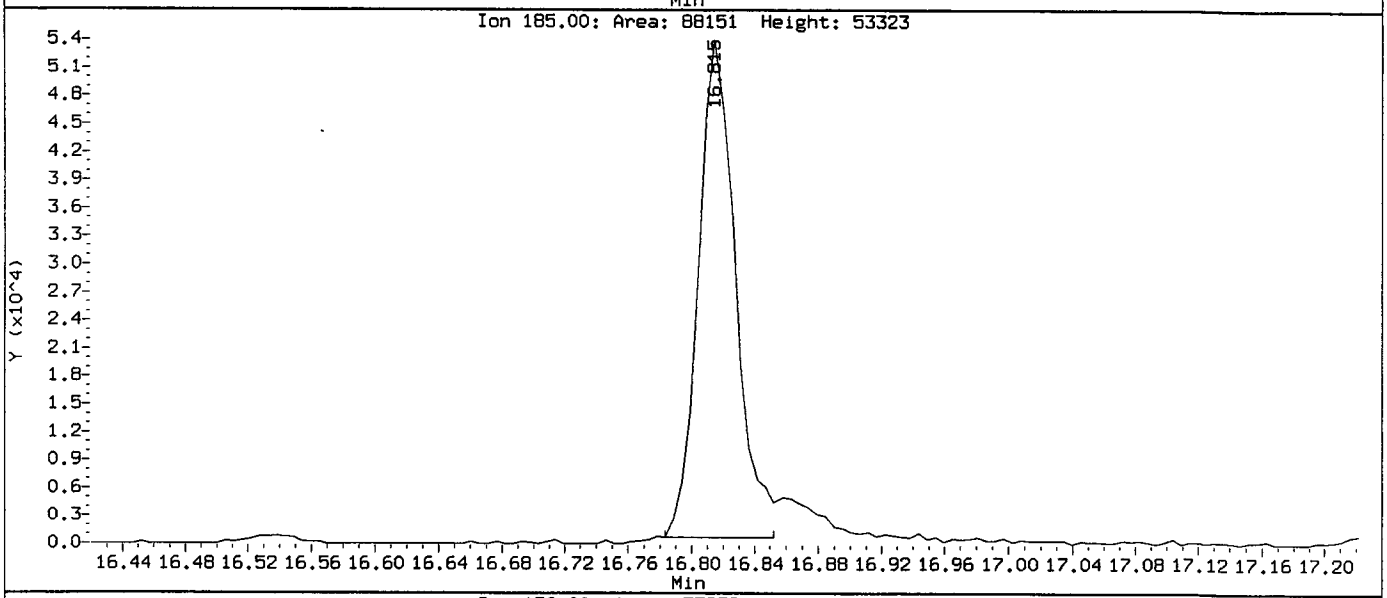
5. Other _____

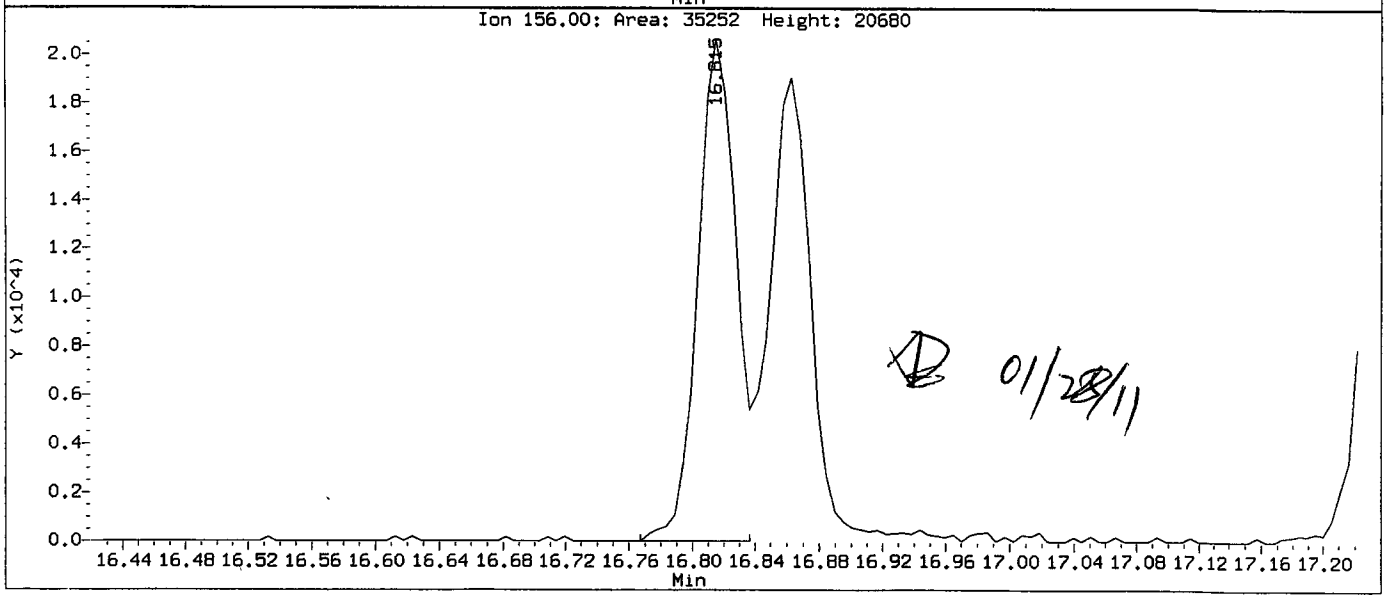
Analyst: AZ Date: 01/28/11

Data File: /chem2/nt6.i/20110128.b/01281105.D
Injection Date: 28-JAN-2011 12:02
Instrument: nt6.i
Client Sample ID: IC400128

Compound: Benzidine
CAS Number:



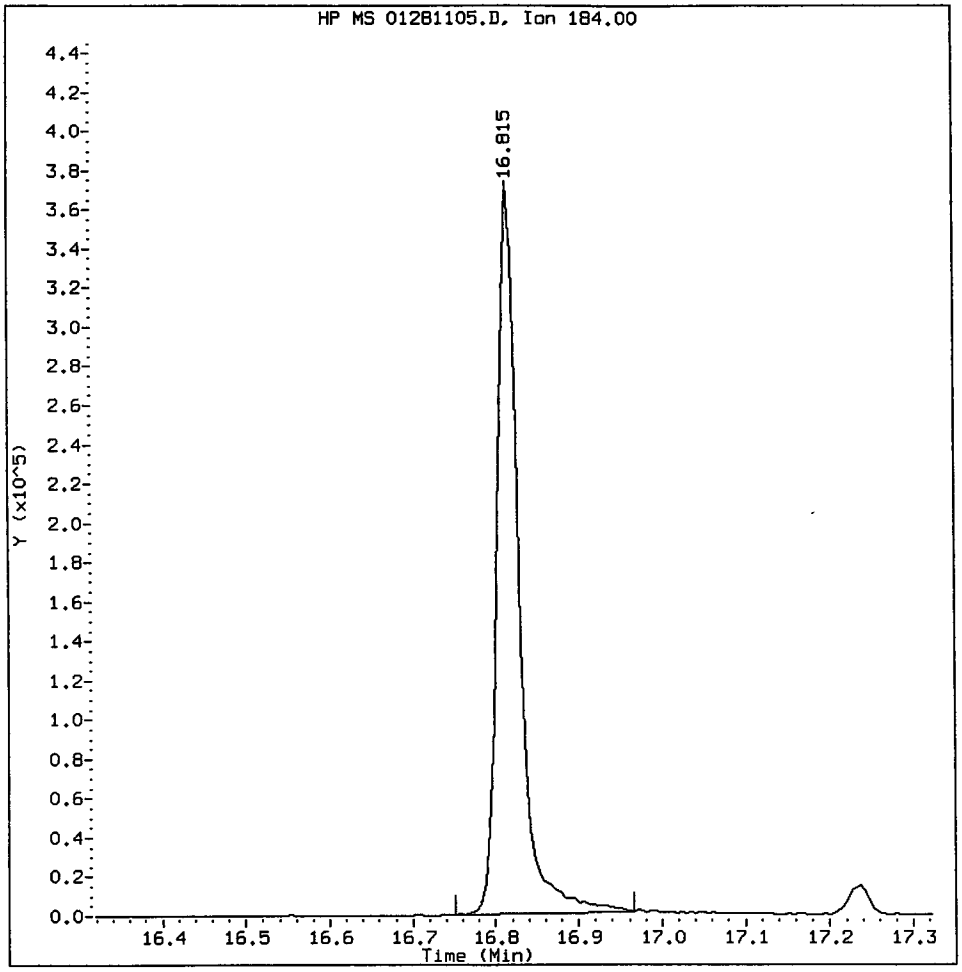




SH20:00127

IC400128, /chem2/nt6.i/20110128.b/01281105.D

Benzidine Amount: 39.54 Area: 661877



MANUAL INTEGRATION for Benzidine

1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

5. Other _____

Analyst: AB Date: 01/28/11

CO-ELUTION SUMMARY FOR FILE - 01281105.D

Lab ID: IC400128, Method: SW846012811.m, Instrument: nt6.i, Date: 28-JAN-2011

RT	CO-ELUTION COMPOUNDS
7.655	1,2-Dichlorobenzene and Benzyl alcohol
7.917	2,2'-oxybis(1-Chloropropane) and 2-Methylphenol

checked ok

01/28/11

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem2/nt6.i/20110128.b/01281106.D
Lab Smp Id: IC600128 Client Smp ID: IC600128
Inj Date : 28-JAN-2011 12:35
Operator : JZ Inst ID: nt6.i
Smp Info : IC600128
Misc Info : 10-
Comment : 1ul Injection
Method : /chem2/nt6.i/20110128.b/SW846012811.m
Meth Date : 28-Jan-2011 16:14 jianqing Quant Type: ISTD
Cal Date : 28-JAN-2011 12:35 Cal File: 01281106.D
Als bottle: 6 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 3.50

01/28/11

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
							AMOUNTS	
$	1 2-Fluorophenol	112	5.322	5.322	(0.725)	1598711	60.0000	59.79
$	2 Phenol-d5	99	6.967	6.967	(0.949)	1948512	60.0000	58.51
	3 Phenol	94	6.988	6.988	(0.952)	1907209	60.0000	57.43
$	5 2-Chlorophenol-d4	132	7.036	7.036	(0.959)	1604186	60.0000	56.84
	4 Bis(2-Chloroethyl)ether	93	7.036	7.036	(0.959)	1588096	60.0000	57.21
	6 2-Chlorophenol	128	7.063	7.063	(0.962)	1607053	60.0000	56.63
	7 1,3-Dichlorobenzene	146	7.271	7.271	(0.991)	2081497	60.0000	57.98
*	8 1,4-Dichlorobenzene-d4	152	7.341	7.341	(1.000)	446993	20.0000	
	9 1,4-Dichlorobenzene	146	7.362	7.362	(1.003)	2100980	60.0000	58.10
$	10 1,2-Dichlorobenzene-d4	152	7.635	7.635	(1.040)	1130412	60.0000	56.83
	12 1,2-Dichlorobenzene	146	7.661	7.661	(1.044)	1894575	60.0000	56.55
	11 Benzyl alcohol	108	7.661	7.661	(1.044)	1222841	60.0000	59.59
	14 2,2'-oxybis(1-Chloropropane)	45	7.923	7.923	(1.079)	1956625	60.0000	58.54
	13 2-Methylphenol	108	7.923	7.923	(1.079)	1633597	60.0000	57.99
	17 Hexachloroethane	117	8.147	8.147	(1.110)	731508	60.0000	57.40
	16 N-Nitroso-di-n-propylamine	70	8.147	8.147	(1.110)	1081264	60.0000	57.80
	15 4-Methylphenol	108	8.163	8.163	(1.112)	1668889	60.0000	57.59
$	18 Nitrobenzene-d5	82	8.286	8.286	(0.882)	1660158	60.0000	58.32
	19 Nitrobenzene	77	8.318	8.318	(0.886)	1760552	60.0000	57.27
	20 Isophorone	82	8.713	8.713	(0.928)	2756230	60.0000	58.55
	21 2-Nitrophenol	139	8.836	8.836	(0.941)	913496	60.0000	59.52
	22 2,4-Dimethylphenol	107	8.991	8.991	(0.957)	1483885	60.0000	57.58
	23 Bis(2-Chloroethoxy)methane	93	9.130	9.130	(0.972)	1913866	60.0000	57.66
	24 Benzoic acid	105	9.344	9.344	(0.995)	2546839	120.000	128.4(M)
	25 2,4-Dichlorophenol	162	9.226	9.226	(0.982)	1382924	60.0000	58.19
	26 1,2,4-Trichlorobenzene	180	9.344	9.344	(0.995)	1692054	60.0000	57.22
*	27 Naphthalene-d8	136	9.392	9.392	(1.000)	1507799	20.0000	

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
28 Naphthalene	128	9.424	9.424	(1.003)	4216132	60.0000	54.45
29 4-Chloroaniline	127	9.589	9.589	(1.021)	1826596	60.0000	54.90
30 Hexachlorobutadiene	225	9.760	9.760	(1.039)	981865	60.0000	58.92
31 4-Chloro-3-methylphenol	107	10.428	10.428	(1.110)	1249358	60.0000	60.33
32 2-Methylnaphthalene	141	10.545	10.545	(1.123)	2705482	60.0000	57.14
33 Hexachlorocyclopentadiene	237	10.930	10.930	(0.893)	1021528	60.0000	64.75
34 2,4,6-Trichlorophenol	196	11.074	11.074	(0.905)	1123216	60.0000	63.16
35 2,4,5-Trichlorophenol	196	11.128	11.128	(0.909)	1201004	60.0000	61.06
$ 36 2-Fluorobiphenyl	172	11.202	11.202	(0.915)	3235983	60.0000	56.09
37 2-Chloronaphthalene	162	11.314	11.314	(0.924)	2940425	60.0000	56.69
38 2-Nitroaniline	65	11.571	11.571	(0.945)	918768	60.0000	62.68
39 Dimethylphthalate	163	11.966	11.966	(0.978)	3139613	60.0000	57.18
40 Acenaphthylene	152	11.982	11.982	(0.979)	4273396	60.0000	56.15
41 2,6-Dinitrotoluene	165	12.046	12.046	(0.984)	805819	60.0000	59.98
* 42 Acenaphthene-d10	164	12.238	12.238	(1.000)	859945	20.0000	
43 3-Nitroaniline	138	12.249	12.249	(1.001)	652775	60.0000	52.30
44 Acenaphthene	153	12.292	12.292	(1.004)	2764094	60.0000	56.90
45 2,4-Dinitrophenol	184	12.415	12.415	(1.014)	897820	120.000	121.5
46 Dibenzofuran	168	12.554	12.554	(1.026)	4210247	60.0000	56.86
47 4-Nitrophenol	109	12.586	12.586	(1.028)	380055	60.0000	60.56(M)
48 2,4-Dinitrotoluene	165	12.666	12.666	(1.035)	1029091	60.0000	62.36
50 Diethylphthalate	149	13.120	13.120	(1.072)	2816817	60.0000	56.04
49 Fluorene	166	13.104	13.104	(1.071)	3092531	60.0000	56.52
51 4-Chlorophenyl-phenylether	204	13.152	13.152	(1.075)	1711230	60.0000	58.99
52 4-Nitroaniline	138	13.237	13.237	(1.082)	694860	60.0000	57.70
53 4,6-Dinitro-2-methylphenol	198	13.317	13.317	(0.913)	1261581	120.000	130.7
54 N-Nitrosodiphenylamine	169	13.360	13.360	(0.916)	2370393	60.0000	57.71
$ 55 2,4,6-Tribromophenol	330	13.526	13.526	(1.105)	528525	60.0000	64.25
56 4-Bromophenyl-phenylether	248	13.921	13.921	(0.954)	1057429	60.0000	59.58
57 Hexachlorobenzene	284	14.119	14.119	(0.968)	1177614	60.0000	60.58
58 Pentachlorophenol	266	14.423	14.423	(0.989)	764209	60.0000	64.14
* 59 Phenanthrene-d10	188	14.589	14.589	(1.000)	1382617	20.0000	
60 Phenanthrene	178	14.626	14.626	(1.003)	4341889	60.0000	56.10
61 Anthracene	178	14.701	14.701	(1.008)	4361509	60.0000	55.41
62 Carbazole	167	14.994	14.994	(1.028)	3705927	60.0000	56.02
63 Di-n-butylphthalate	149	15.753	15.753	(1.080)	4663451	60.0000	55.94
64 Fluoranthene	202	16.543	16.543	(1.134)	4504213	60.0000	58.26
65 Pyrene	202	16.891	16.891	(0.895)	4631974	60.0000	53.09
$ 66 Terphenyl-d14	244	17.238	17.238	(0.914)	2975896	60.0000	55.47
67 Butylbenzylphthalate	149	18.146	18.146	(0.962)	2137227	60.0000	56.49
68 Benzo(a)anthracene	228	18.845	18.845	(0.999)	4383356	60.0000	57.11
* 69 Chrysene-d12	240	18.867	18.867	(1.000)	1498939	20.0000	
70 3,3'-Dichlorobenzidine	252	18.877	18.877	(1.001)	1706885	60.0000	55.55
71 Chrysene	228	18.909	18.909	(1.002)	4102865	60.0000	55.11
72 bis(2-Ethylhexyl)phthalate	149	19.160	19.160	(0.954)	2878550	60.0000	58.73
* 134 Di-n-octylphthalate-d4	153	20.090	20.090	(1.000)	1698794	20.0000	
73 Di-n-octylphthalate	149	20.106	20.106	(1.001)	4822459	60.0000	56.46

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
74 Benzo(b)fluoranthene	252	20.490	20.490	(0.976)	4830633	60.0000	58.30
75 Benzo(k)fluoranthene	252	20.528	20.528	(0.977)	4689184	60.0000	55.89
187 Total Benzofluoranthenes	252	20.528	20.528	(0.977)	8977368	120.000	113.7
76 Benzo(a)pyrene	252	20.928	20.928	(0.996)	4557253	60.0000	58.46
* 77 Perylene-d12	264	21.003	21.003	(1.000)	1419623	20.0000	
78 Indeno(1,2,3-cd)pyrene	276	22.370	22.370	(1.065)	5676820	60.0000	59.49
79 Dibenzo(a,h)anthracene	278	22.397	22.397	(1.066)	4622307	60.0000	59.15
80 Benzo(g,h,i)perylene	276	22.691	22.691	(1.080)	5073389	60.0000	59.01
90 N-Nitrosodimethylamine	74	2.454	2.454	(0.334)	1054039	60.0000	59.97
103 Pyridine	79	2.422	2.422	(0.330)	1821717	60.0000	59.98
91 Aniline	93	6.897	6.897	(0.940)	2429766	60.0000	57.55
105 1-methylnaphthalene	141	10.716	10.716	(1.141)	2592225	60.0000	56.85
93 Benzidine	184	16.821	16.821	(0.892)	982924	60.0000	59.07
111 Azobenzene (1,2-DP-Hydrazine)	77	13.398	13.398	(1.095)	3366929	60.0000	60.76
143 1,4-Dioxane	88	1.941	1.941	(0.264)	797936	60.0000	58.69
$ 137 d8-1,4-Dioxane	96	1.904	1.904	(0.259)	693333	60.0000	58.85
144 alpha-Terpineol	59	9.482	9.482	(1.010)	1248534	60.0000	58.82
177 p-Benzoquinone	82	5.984	5.984	(0.637)	340252	60.0000	68.49
98 Retene	219	17.473	17.473	(0.926)	1785490	60.0000	57.15
99 Perylene	252	21.046	21.046	(1.002)	4204115	60.0000	56.13
133 Butylatedhydroxytoluene	205	12.457	12.457	(1.018)	2397860	60.0000	56.99
115 Tributyl Phosphate	99	13.515	13.515	(0.926)	3284263	60.0000	56.38
116 Dibutyl Phenyl Phosphate	175	15.213	15.213	(1.043)	2418398	60.0000	59.45
117 Butyl Diphenyl Phosphate	94	16.864	16.864	(0.894)	745530	60.0000	56.60
118 Triphenyl Phosphate	326	18.450	18.450	(0.978)	829586	60.0000	60.63
123 Acetophenone	105	8.062	8.062	(1.098)	2227719	60.0000	59.15
179 n-Decane	57	7.213	7.213	(0.983)	1824514	60.0000	59.75
180 n-Octadecane	57	14.594	14.594	(1.000)	1768266	60.0000	57.75
168 Pentachlorobenzene	250	12.596	12.596	(1.029)	1407575	60.0000	59.62
113 Diphenyl Oxide	170	11.528	11.528	(0.942)	2296393	60.0000	58.21
112 Biphenyl	154	11.331	11.331	(0.926)	3634486	60.0000	56.09
120 2,3,4,6-Tetrachlorophenol	232	12.847	12.847	(1.050)	1101527	60.0000	61.06
135 2,3,5,6-Tetrachlorophenol	232	12.773	12.773	(1.044)	908352	60.0000	62.40
151 1,2,4,5-Tetrachlorobenzene	216	10.887	10.887	(0.890)	1590597	60.0000	58.68
110 Tetrachloroguaiacol	247	14.562	14.562	(0.998)	1240975	120.000	123.1
109 3,4,5-Trichloroguaiacol	213	12.949	12.949	(0.888)	564319	60.0000	58.52
181 3,4,6-Trichloroguaiacol	211	13.061	13.061	(1.779)	699219	60.0000	60.91(H)
108 4,5,6-Trichloroguaiacol	213	13.980	13.980	(1.142)	595135	60.0000	61.16
184 3,4-Dichloroguaiacol	192	11.416	11.416	(1.555)	637235	60.0000	61.98
107 4,5-Dichloroguaiacol	192	12.217	12.217	(0.998)	1534522	120.000	119.9
182 4,6-Dichloroguaiacol	192	12.217	12.217	(1.664)	1531927	120.000	120.8
185 4-Chloroguaiacol	115	10.348	10.348	(1.410)	342543	30.0000	31.03
186 Carbaryl	144	15.427	15.427	(1.057)	1977660	60.0000	64.91
178 2-Benzyl-4-Chlorophenol	218	15.395	15.395	(1.055)	920685	60.0000	62.04
106 Guaiacol	124	8.339	8.339	(1.136)	1369784	60.0000	59.21
100 3-beta-Coprostanol	215	21.831	21.831	(1.039)	648500	150.000	155.1
101 Cholesterol	107	22.007	22.007	(1.048)	408335	150.000	144.7

QC Flag Legend

M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt6.i
Lab File ID: 01281106.D
Lab Smp Id: IC600128
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem2/nt6.i/20110128.b/SW846012811.m
Misc Info: 10-

Calibration Date: 28-JAN-2011
Calibration Time: 09:50
Client Smp ID: IC600128
Level:
Sample Type:

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	458851	229426	917702	446993	-2.58
27 Naphthalene-d8	1522936	761468	3045872	1507799	-0.99
42 Acenaphthene-d10	864539	432270	1729078	859945	-0.53
59 Phenanthrene-d10	1378528	689264	2757056	1382617	0.30
69 Chrysene-d12	1421586	710793	2843172	1498939	5.44
134 Di-n-octylphthala	1679951	839976	3359902	1698794	1.12
77 Perylene-d12	1361193	680596	2722386	1419623	4.29

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	7.33	6.83	7.83	7.34	0.09
27 Naphthalene-d8	9.39	8.89	9.89	9.39	0.07
42 Acenaphthene-d10	12.23	11.73	12.73	12.24	0.05
59 Phenanthrene-d10	14.58	14.08	15.08	14.59	0.04
69 Chrysene-d12	18.86	18.36	19.36	18.87	0.03
134 Di-n-octylphthala	20.09	19.59	20.59	20.09	0.00
77 Perylene-d12	21.00	20.50	21.50	21.00	0.03

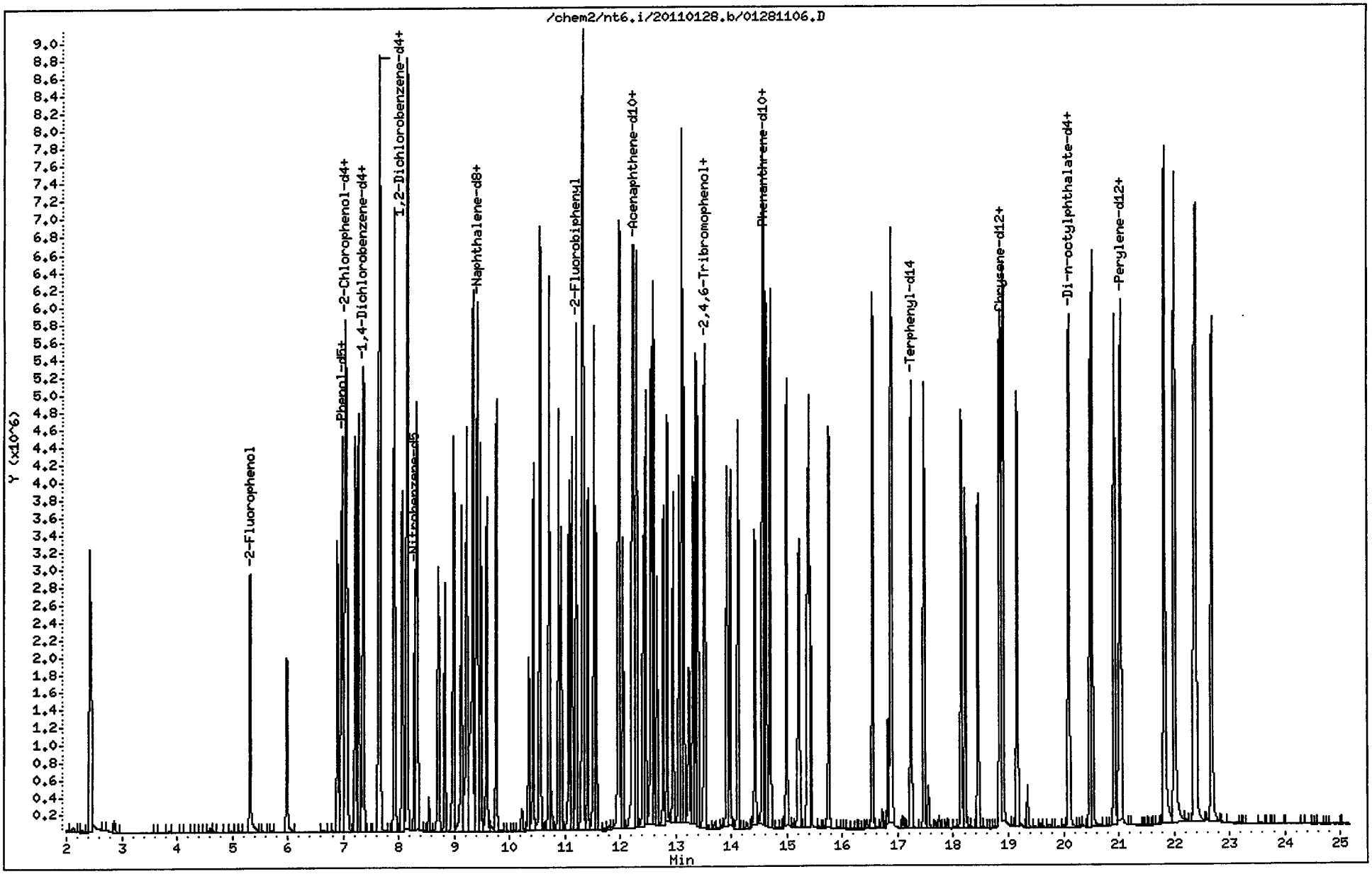
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem2/nt6.i/20110128.b/01281106.D
Date : 28-JAN-2011 12:35
Client ID: IC600128
Sample Info: IC600128

Instrument: nt6.i

Operator: JZ
Column diameter: 0.32

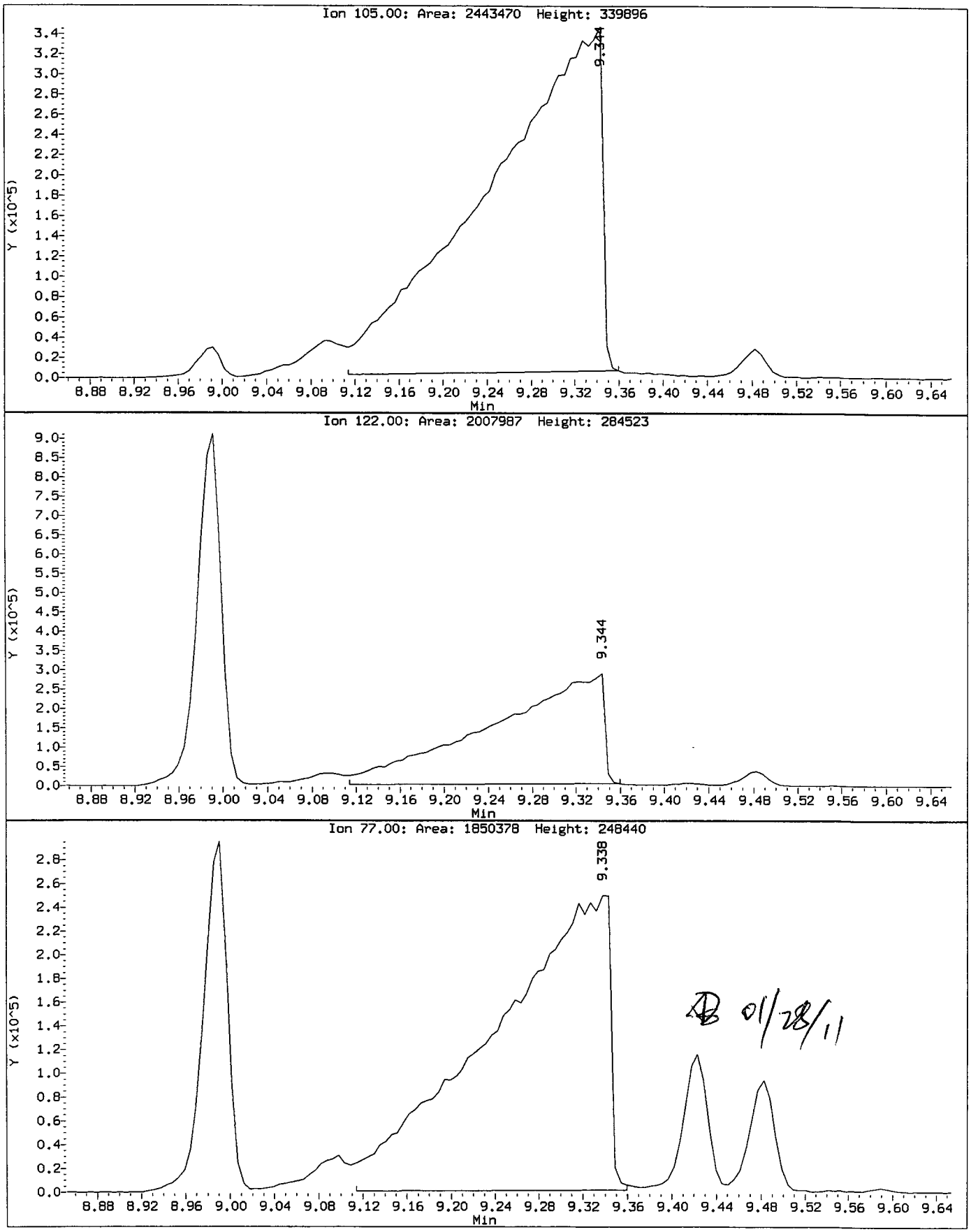
Column phase: ZB-5msi



SH20:00135

Data File: /chem2/nt6.i/20110128.b/01281106.D
Injection Date: 28-JAN-2011 12:35
Instrument: nt6.i
Client Sample ID: IC600128

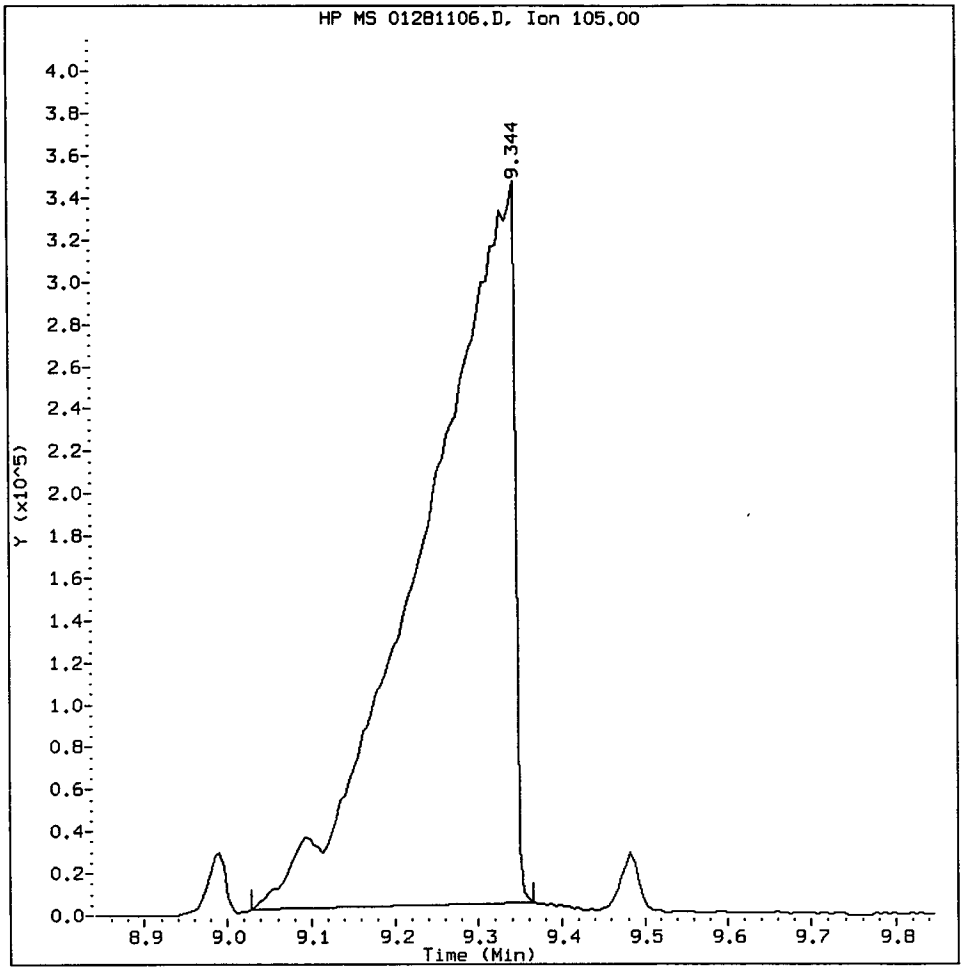
Compound: Benzoic acid
CAS Number: 65-85-0



SH20 : 00136

IC600128, /chem2/nt6.i/20110128.b/01281106.D

Benzoic acid Amount: 128.40 Area: 2546839



MANUAL INTEGRATION for Benzoic acid

1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

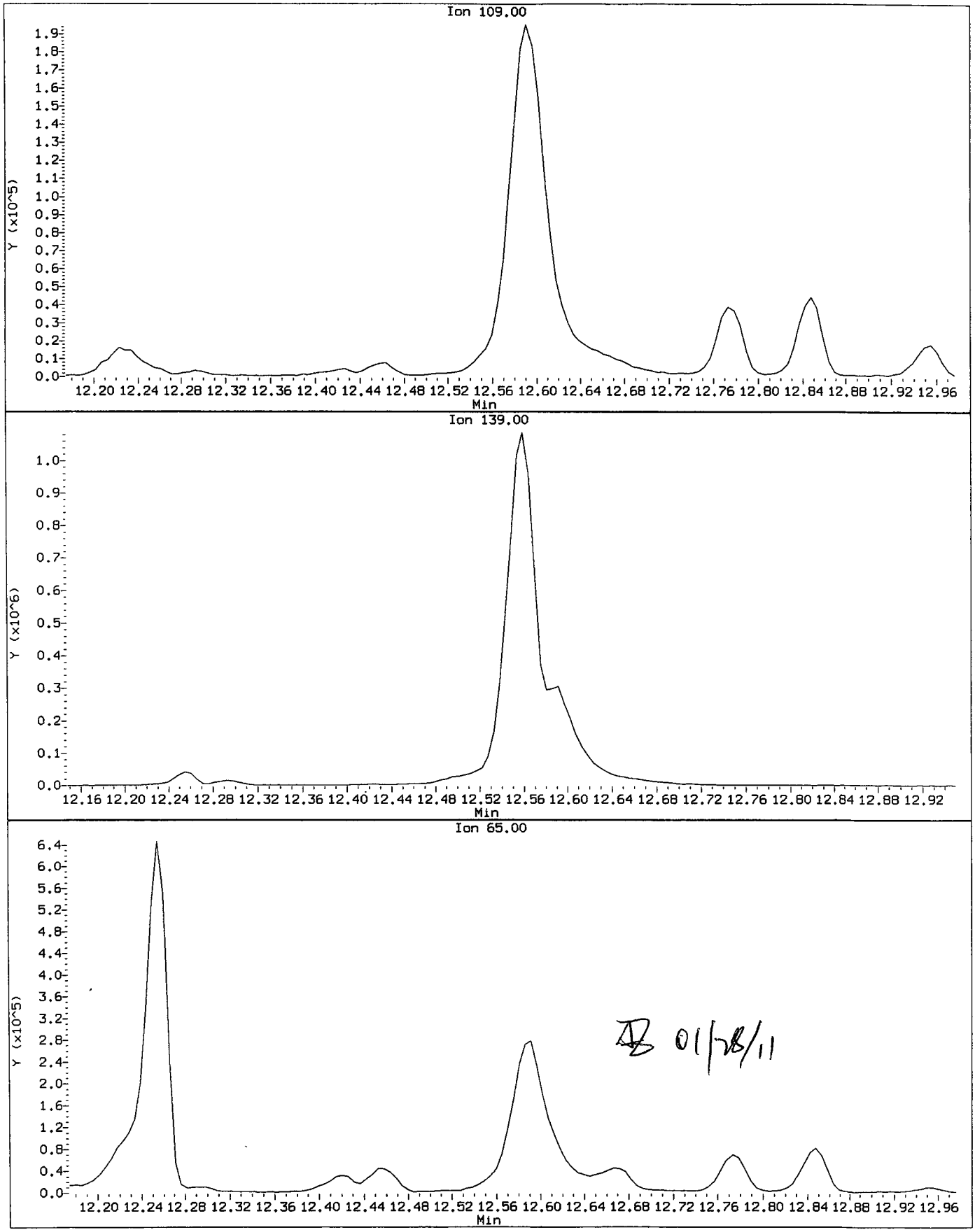
5. Other _____

Analyst: AZ Date: 01/28/11

SH20:00137

Data File: /chem2/nt6.i/20110128.b/01281107.D
Injection Date: 28-JAN-2011 13:08
Instrument: nt6.i
Client Sample ID: IC800128

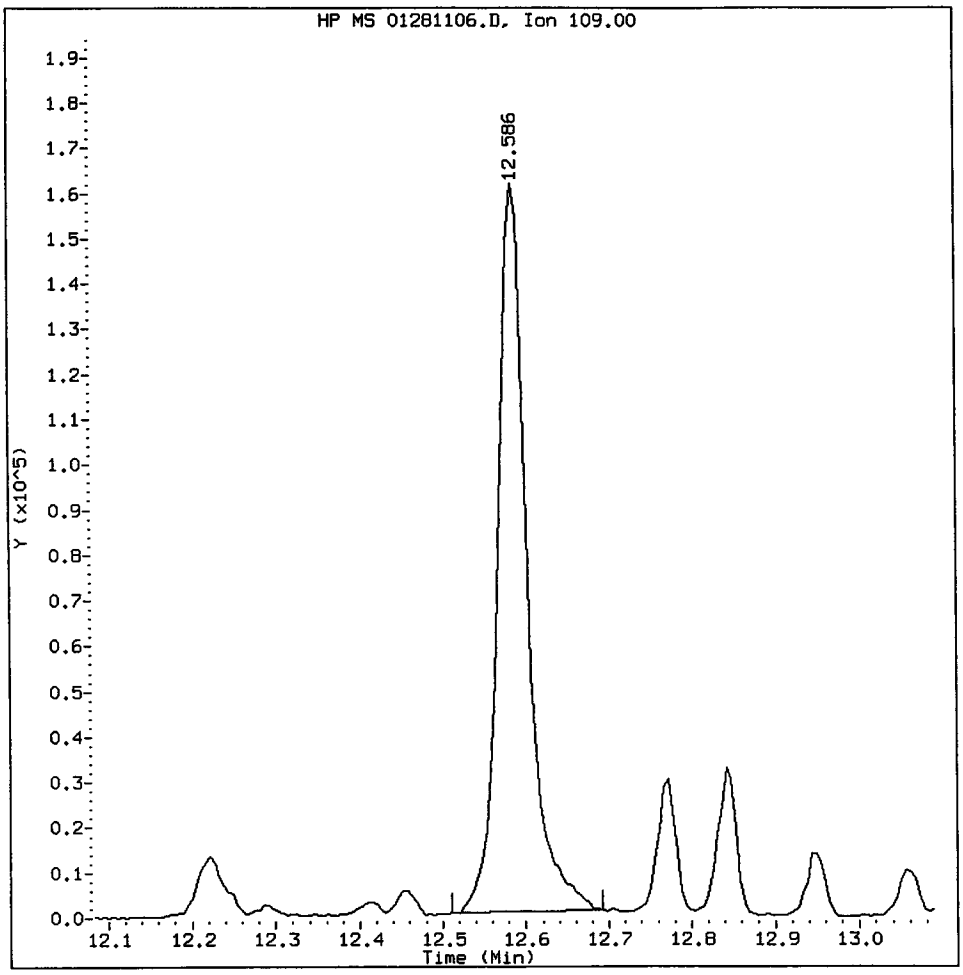
Compound: 4-Nitrophenol
CAS Number: 100-02-7



SH20.00138

IC600128, /chem2/nt6.i/20110128.b/01281106.D

4-Nitrophenol Amount: 60.56 Area: 380055



MANUAL INTEGRATION for 4-Nitrophenol

1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

5. Other _____

Analyst: _____ Date: 01/28/11

CO-ELUTION SUMMARY FOR FILE - 01281106.D

Lab ID: IC600128, Method: SW846012811.m, Instrument: nt6.i, Date: 28-JAN-2011

RT	CO-ELUTION COMPOUNDS
7.661	1,2-Dichlorobenzene and Benzyl alcohol
7.923	2,2'-oxybis(1-Chloropropane) and 2-Methylphenol

checked ok

01/28/11

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem2/nt6.i/20110128.b/01281107.D
Lab Smp Id: IC800128 Client Smp ID: IC800128
Inj Date : 28-JAN-2011 13:08
Operator : JZ Inst ID: nt6.i
Smp Info : IC800128
Misc Info : 10-
Comment : 1ul Injection
Method : /chem2/nt6.i/20110128.b/SW846012811.m
Meth Date : 28-Jan-2011 16:14 jianqing Quant Type: ISTD
Cal Date : 28-JAN-2011 13:08 Cal File: 01281107.D
Als bottle: 7 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 3.50

01/28/11

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
$ 1 2-Fluorophenol	112	Compound Not Detected.					
$ 2 Phenol-d5	99	Compound Not Detected.					
3 Phenol	94	6.989	6.988	(0.952)	2552833	80.0000	76.23
$ 5 2-Chlorophenol-d4	132	Compound Not Detected.					
4 Bis(2-Chloroethyl)ether	93	7.037	7.036	(0.959)	2165988	80.0000	77.37
6 2-Chlorophenol	128	7.063	7.063	(0.962)	2177448	80.0000	76.08
7 1,3-Dichlorobenzene	146	7.272	7.271	(0.991)	2757423	80.0000	76.17
* 8 1,4-Dichlorobenzene-d4	152	7.341	7.341	(1.000)	450771	20.0000	
9 1,4-Dichlorobenzene	146	7.368	7.362	(1.004)	2742630	80.0000	75.21
$ 10 1,2-Dichlorobenzene-d4	152	Compound Not Detected.					
12 1,2-Dichlorobenzene	146	7.656	7.661	(1.043)	2494188	80.0000	73.82
11 Benzyl alcohol	108	7.667	7.661	(1.044)	1621461	80.0000	78.36
14 2,2'-oxybis(1-Chloropropane)	45	7.923	7.923	(1.079)	2572658	80.0000	76.32
13 2-Methylphenol	108	7.929	7.923	(1.080)	2164280	80.0000	76.18
17 Hexachloroethane	117	8.148	8.147	(1.110)	968776	80.0000	75.38
16 N-Nitroso-di-n-propylamine	70	8.153	8.147	(1.111)	1413197	80.0000	74.91
15 4-Methylphenol	108	8.169	8.163	(1.113)	2195491	80.0000	75.12
$ 18 Nitrobenzene-d5	82	Compound Not Detected.					
19 Nitrobenzene	77	8.319	8.318	(0.886)	2349787	80.0000	77.44
20 Isophorone	82	8.719	8.713	(0.928)	3667974	80.0000	78.94
21 2-Nitrophenol	139	8.837	8.836	(0.941)	1234594	80.0000	81.49
22 2,4-Dimethylphenol	107	8.997	8.991	(0.958)	1994077	80.0000	78.39
23 Bis(2-Chloroethoxy)methane	93	9.136	9.130	(0.973)	2527793	80.0000	77.15
24 Benzoic acid	105	9.381	9.344	(0.999)	3423168	160.000	174.8(M)
25 2,4-Dichlorophenol	162	9.232	9.226	(0.983)	1849817	80.0000	78.85
26 1,2,4-Trichlorobenzene	180	9.344	9.344	(0.995)	2215133	80.0000	75.90
* 27 Naphthalene-d8	136	9.392	9.392	(1.000)	1488273	20.0000	

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	28 Naphthalene	128	9.430	9.424	(1.004)	5254593	80.0000	68.75
	29 4-Chloroaniline	127	9.595	9.589	(1.022)	2339632	80.0000	71.24
	30 Hexachlorobutadiene	225	9.761	9.760	(1.039)	1295845	80.0000	78.78
	31 4-Chloro-3-methylphenol	107	10.434	10.428	(1.111)	1609584	80.0000	78.74
	32 2-Methylnaphthalene	141	10.551	10.545	(1.123)	3484223	80.0000	74.56
	33 Hexachlorocyclopentadiene	237	10.936	10.930	(0.894)	1405494	80.0000	92.66
	34 2,4,6-Trichlorophenol	196	11.075	11.074	(0.905)	1481057	80.0000	86.62
	35 2,4,5-Trichlorophenol	196	11.128	11.128	(0.909)	1580086	80.0000	83.55
$	36 2-Fluorobiphenyl	172	Compound Not Detected.					
	37 2-Chloronaphthalene	162	11.320	11.314	(0.925)	3723449	80.0000	74.67
	38 2-Nitroaniline	65	11.577	11.571	(0.946)	1182572	80.0000	83.91
	39 Dimethylphthalate	163	11.977	11.966	(0.979)	3967750	80.0000	75.16
	40 Acenaphthylene	152	11.988	11.982	(0.979)	5245354	80.0000	71.69
	41 2,6-Dinitrotoluene	165	12.052	12.046	(0.985)	1051886	80.0000	81.44
*	42 Acenaphthene-d10	164	12.239	12.238	(1.000)	826815	20.0000	
	43 3-Nitroaniline	138	12.255	12.249	(1.001)	780957	80.0000	65.08
	44 Acenaphthene	153	12.292	12.292	(1.004)	3524293	80.0000	75.46
	45 2,4-Dinitrophenol	184	12.426	12.415	(1.015)	1237172	160.000	224.2
	46 Dibenzofuran	168	12.559	12.554	(1.026)	5309633	80.0000	74.58
	47 4-Nitrophenol	109	12.591	12.586	(1.029)	497367	80.0000	83.88(M)
	48 2,4-Dinitrotoluene	165	12.672	12.666	(1.035)	1304217	80.0000	82.20
	50 Diethylphthalate	149	13.126	13.120	(1.072)	3547309	80.0000	73.41
	49 Fluorene	166	13.110	13.104	(1.071)	3913972	80.0000	74.40
	51 4-Chlorophenyl-phenylether	204	13.152	13.152	(1.075)	2217293	80.0000	79.49
	52 4-Nitroaniline	138	13.254	13.237	(1.083)	912441	80.0000	78.80
	53 4,6-Dinitro-2-methylphenol	198	13.323	13.317	(0.913)	1659219	160.000	181.2
	54 N-Nitrosodiphenylamine	169	13.366	13.360	(0.916)	3038649	80.0000	77.98
$	55 2,4,6-Tribromophenol	330	Compound Not Detected.					
	56 4-Bromophenyl-phenylether	248	13.921	13.921	(0.954)	1387544	80.0000	82.39
	57 Hexachlorobenzene	284	14.124	14.119	(0.968)	1531228	80.0000	83.03
	58 Pentachlorophenol	266	14.429	14.423	(0.989)	1007569	80.0000	89.13
*	59 Phenanthrene-d10	188	14.594	14.589	(1.000)	1311823	20.0000	
	60 Phenanthrene	178	14.632	14.626	(1.003)	5445173	80.0000	74.16
	61 Anthracene	178	14.707	14.701	(1.008)	5369378	80.0000	71.90
	62 Carbazole	167	15.000	14.994	(1.028)	4690603	80.0000	74.73
	63 Di-n-butylphthalate	149	15.759	15.753	(1.080)	5714050	80.0000	72.24
	64 Fluoranthene	202	16.549	16.543	(1.134)	5518594	80.0000	75.24
	65 Pyrene	202	16.891	16.891	(0.895)	5727543	80.0000	68.71
$	66 Terphenyl-d14	244	Compound Not Detected.					
	67 Butylbenzylphthalate	149	18.151	18.146	(0.962)	2724095	80.0000	75.35
	68 Benzo(a)anthracene	228	18.851	18.845	(0.999)	5547977	80.0000	75.65
*	69 Chrysene-d12	240	18.873	18.867	(1.000)	1432316	20.0000	
	70 3,3'-Dichlorobenzidine	252	18.883	18.877	(1.001)	2165524	80.0000	73.76
	71 Chrysene	228	18.915	18.909	(1.002)	5236219	80.0000	73.60
	72 bis(2-Ethylhexyl)phthalate	149	19.161	19.160	(0.953)	3677846	80.0000	78.54
*	134 Di-n-octylphthalate-d4	153	20.096	20.090	(1.000)	1623058	20.0000	
	73 Di-n-octylphthalate	149	20.106	20.106	(1.001)	6018857	80.0000	73.76

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
74 Benzo(b)fluoranthene	252	20.502	20.490	(0.976)	6323654	80.0000	77.71
75 Benzo(k)fluoranthene	252	20.534	20.528	(0.977)	5955503	80.0000	72.28
187 Total Benzofluoranthenes	252	20.534	20.528	(0.977)	11520270	160.000	148.6
76 Benzo(a)pyrene	252	20.934	20.928	(0.996)	5914465	80.0000	77.26
* 77 Perylene-d12	264	21.009	21.003	(1.000)	1394111	20.0000	
78 Indeno(1,2,3-cd)pyrene	276	22.382	22.370	(1.065)	7564406	80.0000	80.72
79 Dibenzo(a,h)anthracene	278	22.408	22.397	(1.067)	5983082	80.0000	77.97
80 Benzo(g,h,i)perylene	276	22.702	22.691	(1.081)	6673757	80.0000	79.04
90 N-Nitrosodimethylamine	74	2.470	2.454	(0.336)	1432099	80.0000	80.80
103 Pyridine	79	2.427	2.422	(0.331)	2497800	80.0000	81.55
91 Aniline	93	6.898	6.897	(0.940)	3228919	80.0000	75.84
105 1-methylnaphthalene	141	10.717	10.716	(1.141)	3329547	80.0000	73.98
93 Benzidine	184	16.822	16.821	(0.891)	1247927	80.0000	65.17(M)
111 Azobenzene (1,2-DP-Hydrazine)	77	13.403	13.398	(1.095)	4273432	80.0000	80.21
143 1,4-Dioxane	88	1.952	1.941	(0.266)	1082401	80.0000	78.94
$ 137 d8-1,4-Dioxane	96	1.915	1.904	(0.261)	933328	80.0000	78.55
144 alpha-Terpineol	59	9.488	9.482	(1.010)	1652150	80.0000	78.86
177 p-Benzoquinone	82	5.990	5.984	(0.638)	459727	80.0000	93.76
98 Retene	219	17.473	17.473	(0.926)	2297347	80.0000	76.95
99 Perylene	252	21.052	21.046	(1.002)	5479478	80.0000	74.50
133 Butylatedhydroxytoluene	205	12.458	12.457	(1.018)	3116530	80.0000	77.04
115 Tributyl Phosphate	99	13.521	13.515	(0.926)	4272486	80.0000	77.30
116 Dibutyl Phenyl Phosphate	175	15.219	15.213	(1.043)	3116293	80.0000	80.73
117 Butyl Diphenyl Phosphate	94	16.870	16.864	(0.894)	946247	80.0000	75.17
118 Triphenyl Phosphate	326	18.456	18.450	(0.978)	1093464	80.0000	83.63
123 Acetophenone	105	8.068	8.062	(1.099)	2953724	80.0000	77.77
179 n-Decane	57	7.218	7.213	(0.983)	2431538	80.0000	78.96
180 n-Octadecane	57	14.594	14.594	(1.000)	2280200	80.0000	78.49
168 Pentachlorobenzene	250	12.602	12.596	(1.030)	1820117	80.0000	80.19
113 Diphenyl Oxide	170	11.529	11.528	(0.942)	2982667	80.0000	78.63
112 Biphenyl	154	11.331	11.331	(0.926)	4499119	80.0000	72.21
120 2,3,4,6-Tetrachlorophenol	232	12.848	12.847	(1.050)	1435063	80.0000	82.74
135 2,3,5,6-Tetrachlorophenol	232	12.778	12.773	(1.044)	1205713	80.0000	86.14
151 1,2,4,5-Tetrachlorobenzene	216	10.888	10.887	(0.890)	2083466	80.0000	79.94
110 Tetrachloroguaiacol	247	14.568	14.562	(0.998)	1582737	160.000	165.5
109 3,4,5-Trichloroguaiacol	213	12.955	12.949	(0.888)	731241	80.0000	79.93
181 3,4,6-Trichloroguaiacol	211	13.067	13.061	(1.780)	900346	80.0000	77.78(H)
108 4,5,6-Trichloroguaiacol	213	13.985	13.980	(1.143)	759559	80.0000	81.18
184 3,4-Dichloroguaiacol	192	11.416	11.416	(1.555)	829716	80.0000	80.03
107 4,5-Dichloroguaiacol	192	12.223	12.217	(0.999)	1936282	160.000	157.4
182 4,6-Dichloroguaiacol	192	12.223	12.217	(1.665)	1964001	160.000	153.6
185 4-Chloroguaiacol	115	10.348	10.348	(1.410)	452202	40.0000	40.62
186 Carbaryl	144	15.433	15.427	(1.057)	2595345	80.0000	89.78
178 2-Benzyl-4-Chlorophenol	218	15.401	15.395	(1.055)	1187762	80.0000	84.36
106 Guaiacol	124	8.340	8.339	(1.136)	1807160	80.0000	77.46
100 3-beta-Coprostanol	215	21.837	21.831	(1.039)	884943	200.000	215.6
101 Cholesterol	107	22.013	22.007	(1.048)	526767	200.000	190.0

QC Flag Legend

M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt6.i
Lab File ID: 01281107.D
Lab Smp Id: IC800128
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem2/nt6.i/20110128.b/SW846012811.m
Misc Info: 10-

Calibration Date: 28-JAN-2011
Calibration Time: 09:50
Client Smp ID: IC800128
Level:
Sample Type:

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	458851	229426	917702	450771	-1.76
27 Naphthalene-d8	1522936	761468	3045872	1488273	-2.28
42 Acenaphthene-d10	864539	432270	1729078	826815	-4.36
59 Phenanthrene-d10	1378528	689264	2757056	1311823	-4.84
69 Chrysene-d12	1421586	710793	2843172	1432316	0.75
134 Di-n-octylphthala	1679951	839976	3359902	1623058	-3.39
77 Perylene-d12	1361193	680596	2722386	1394111	2.42

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	7.33	6.83	7.83	7.34	0.09
27 Naphthalene-d8	9.39	8.89	9.89	9.39	0.07
42 Acenaphthene-d10	12.23	11.73	12.73	12.24	0.05
59 Phenanthrene-d10	14.58	14.08	15.08	14.59	0.08
69 Chrysene-d12	18.86	18.36	19.36	18.87	0.06
134 Di-n-octylphthala	20.09	19.59	20.59	20.10	0.03
77 Perylene-d12	21.00	20.50	21.50	21.01	0.06

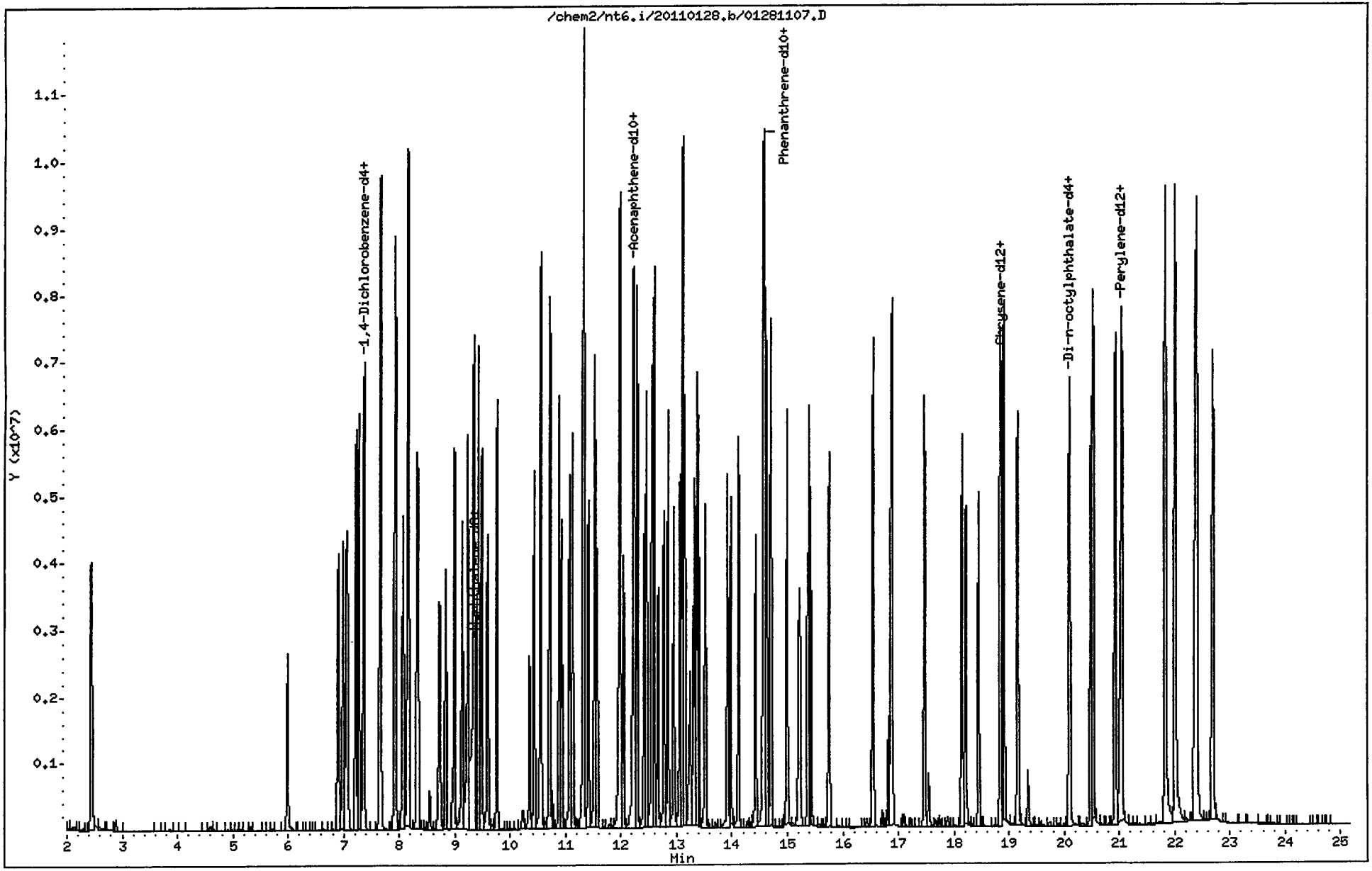
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem2/nt6.i/20110128.b/01281107.D
Date : 28-JAN-2011 13:08
Client ID: IC800128
Sample Info: IC800128

Column phase: ZB-5msi

Instrument: nt6.i

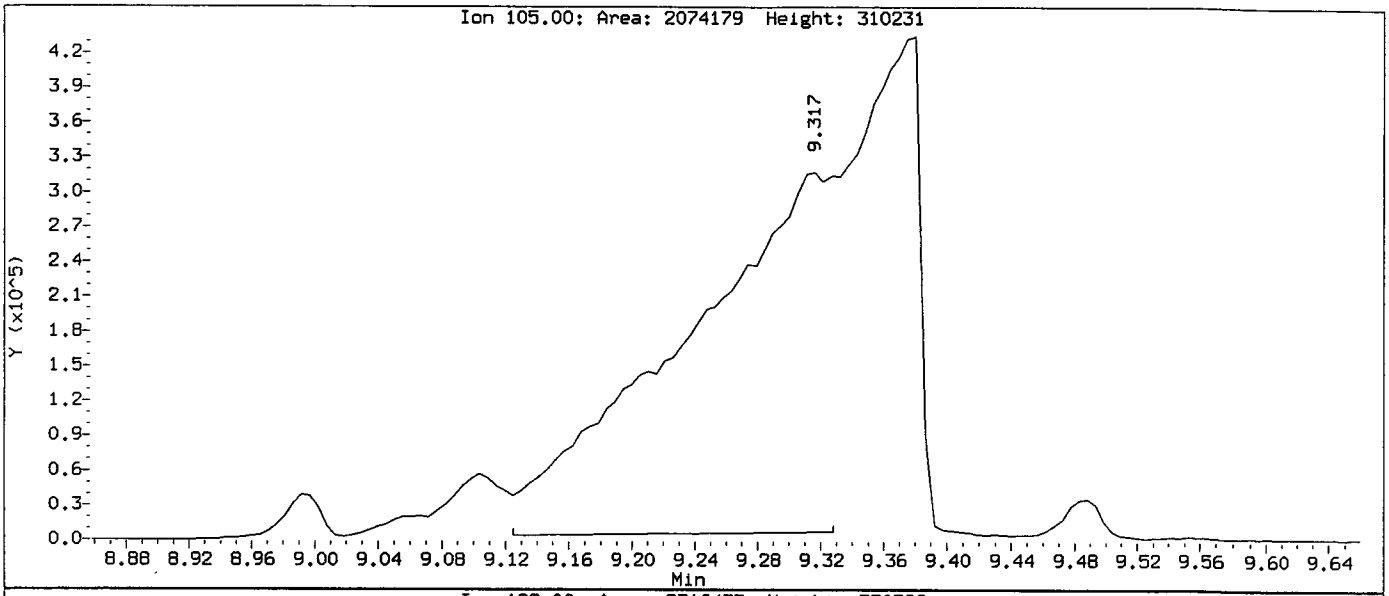
Operator: JZ
Column diameter: 0.32

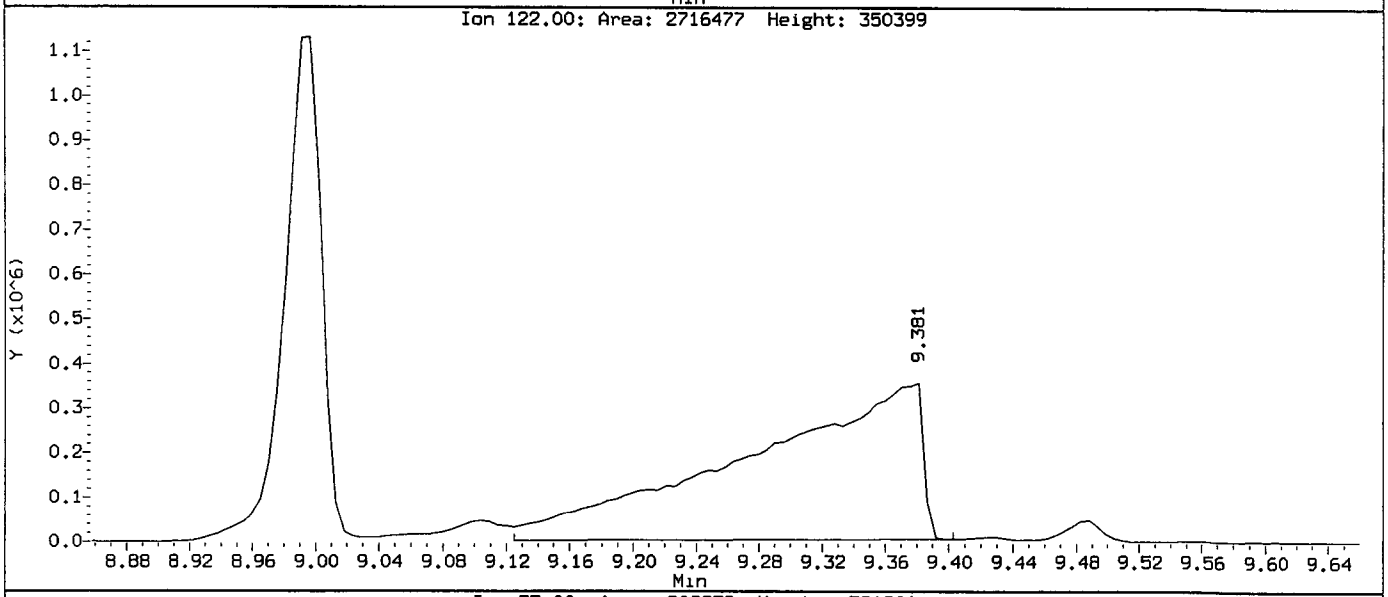


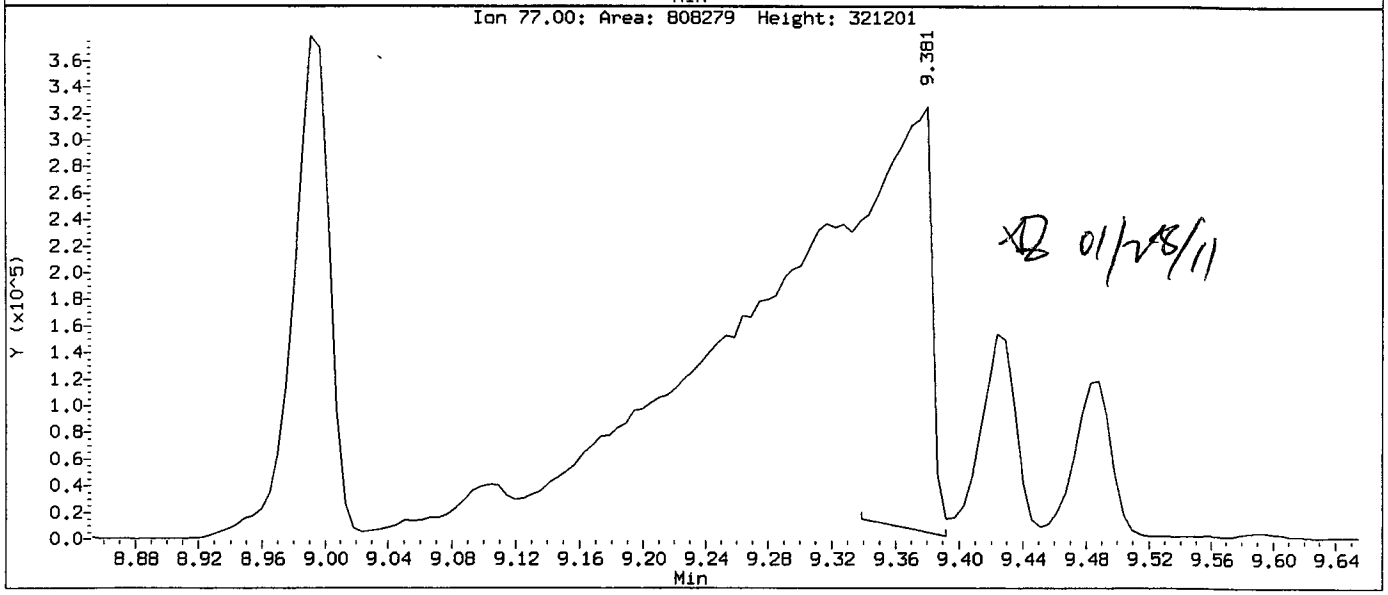
SH20:00146

Data File: /chem2/nt6.i/20110128.b/01281107.D
Injection Date: 28-JAN-2011 13:08
Instrument: nt6.i
Client Sample ID: IC800128

Compound: Benzoic acid
CAS Number: 65-85-0





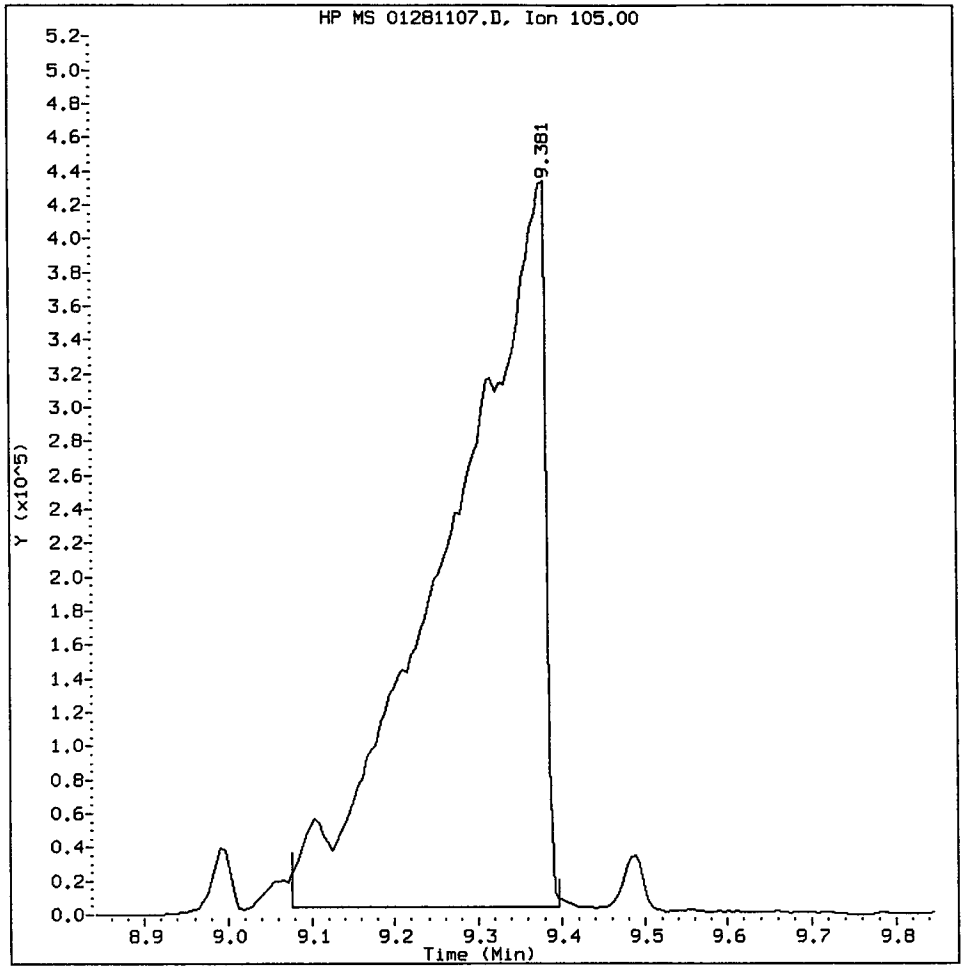


XB 01/28/11

SH20:00147

IC800128, /chem2/nt6.i/20110128.b/01281107.D

Benzoic acid Amount: 174.84 Area: 3423168



MANUAL INTEGRATION for Benzoic acid

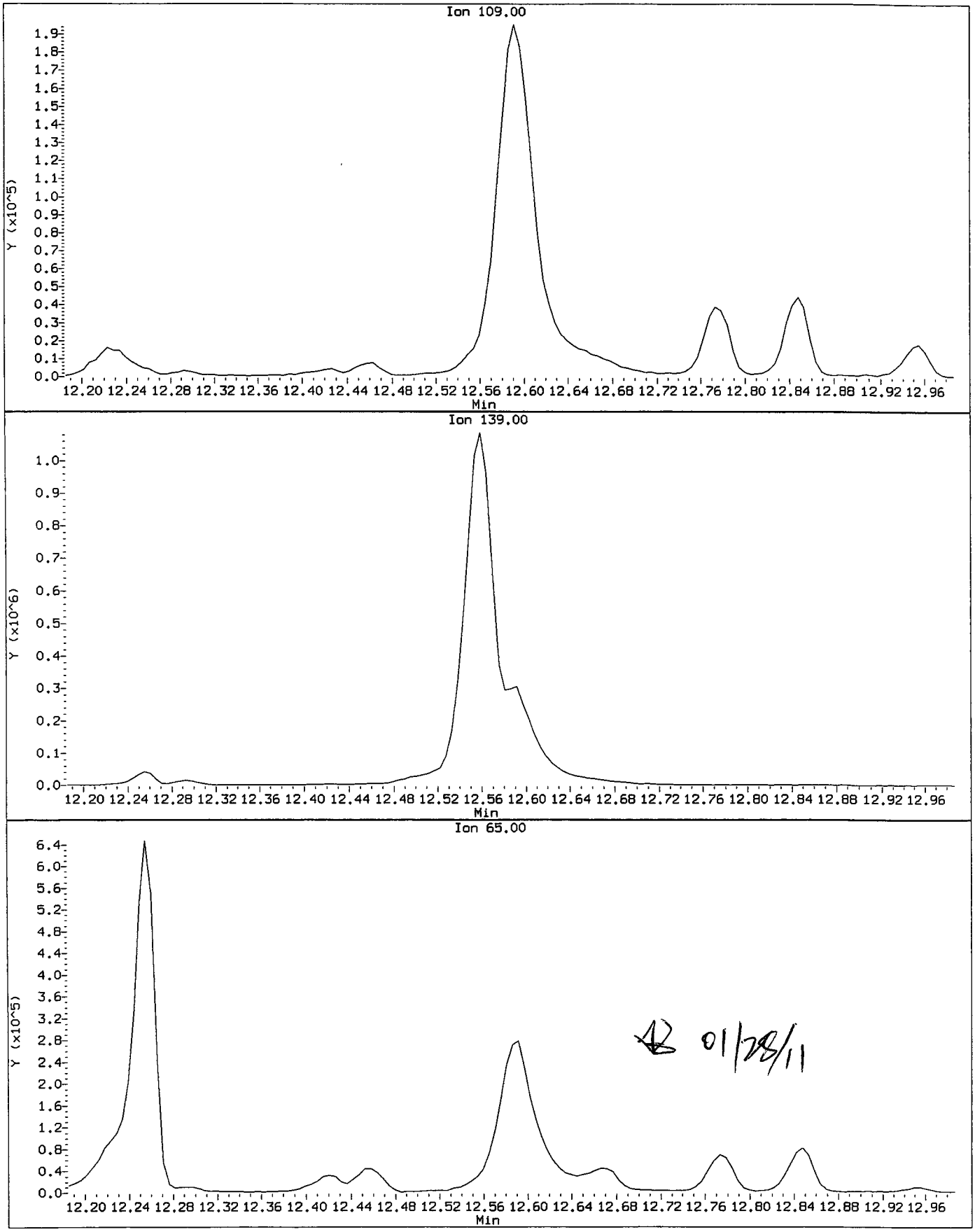
1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

5. Other _____

Analyst: AD Date: 01/28/11

Data File: /chem2/nt6.i/20110128A.b/01281107.D
Injection Date: 28-JAN-2011 13:08
Instrument: nt6.i
Client Sample ID: IC800128

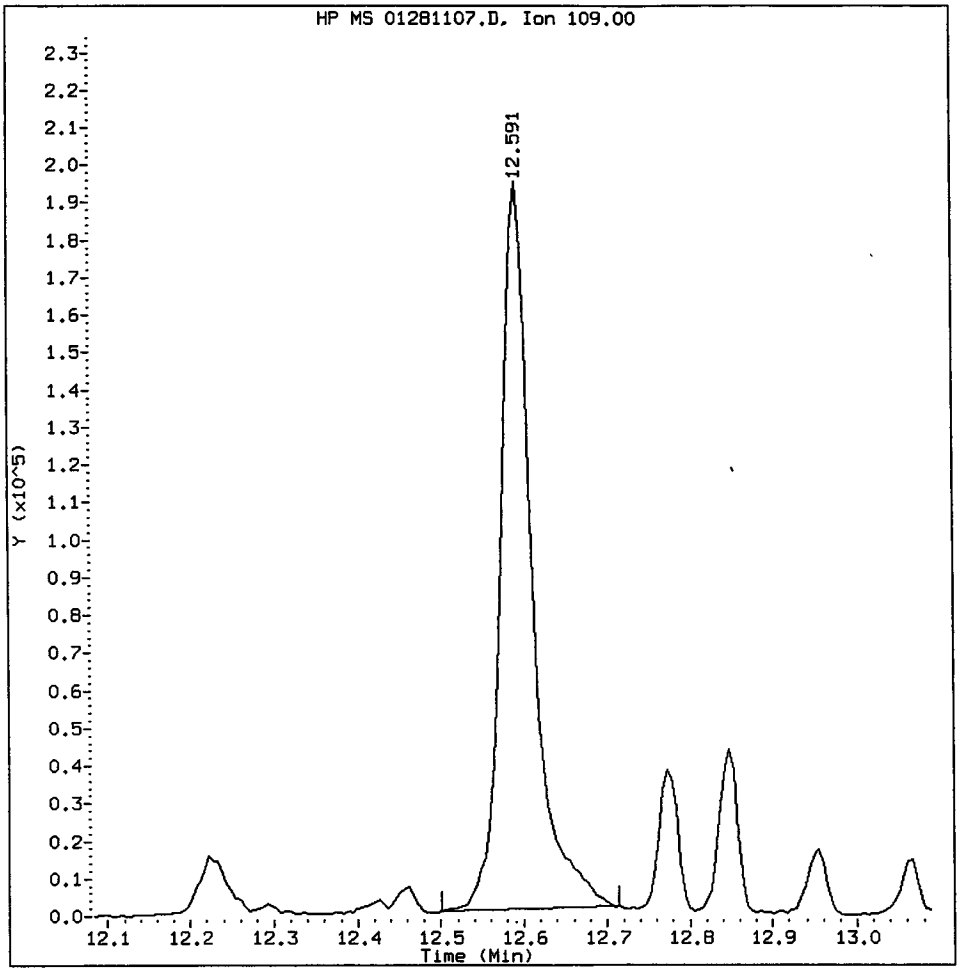
Compound: 4-Nitrophenol
CAS Number: 100-02-7



SH20:00149

IC800128, /chem2/nt6.i/20110128.b/01281107.D

4-Nitrophenol Amount: 83.88 Area: 497367



MANUAL INTEGRATION for 4-Nitrophenol

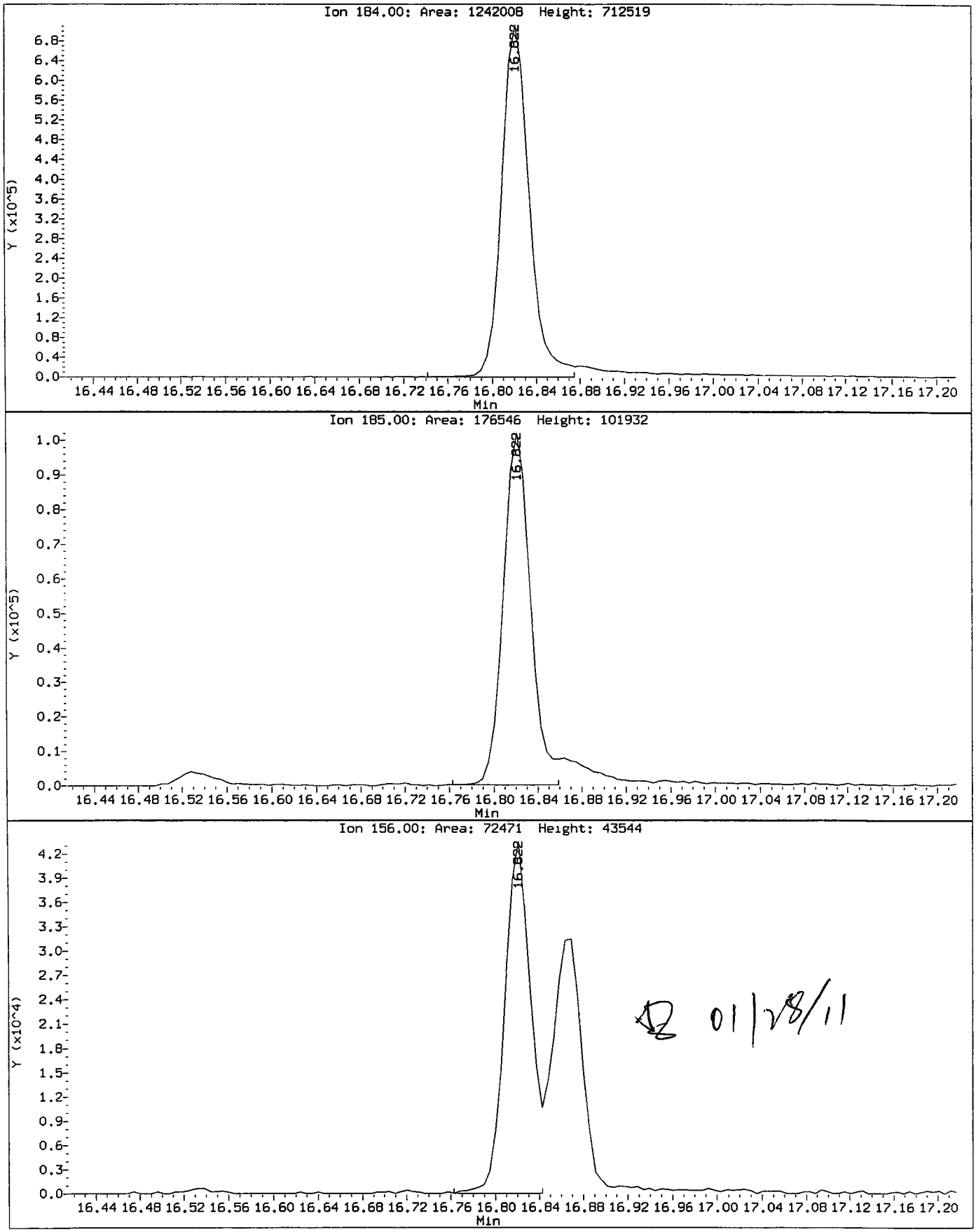
1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

5. Other _____

Analyst: _____ Date: _____

Data File: /chem2/nt6.i/20110128.b/01281107.D
Injection Date: 28-JAN-2011 13:08
Instrument: nt6.i
Client Sample ID: IC800128

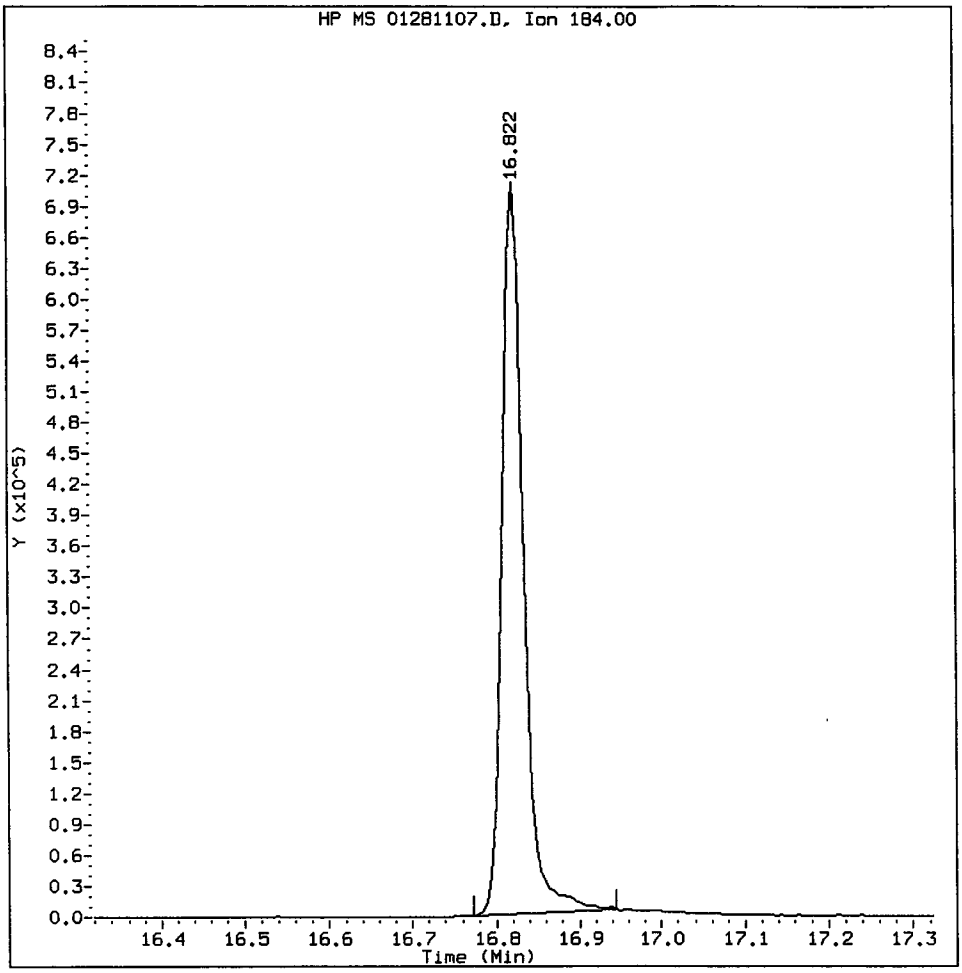
Compound: Benzidine
CAS Number:



01/28/11

IC800128, /chem2/nt6.i/20110128.b/01281107.D

Benzidine Amount: 65.17 Area: 1247927



MANUAL INTEGRATION for Benzidine

1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

5. Other _____

Analyst: _____ Date: 01/28/11

CO-ELUTION SUMMARY FOR FILE - 01281107.D

Lab ID: IC800128, Method: SW846012811.m, Instrument: nt6.i, Date: 28-JAN-2011

RT	CO-ELUTION COMPOUNDS
	NO CO-ELUTIONS

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem2/nt6.i/20110128.b/01281108.D
Lab Smp Id: ICV0128 Client Smp ID: ICV0128
Inj Date : 28-JAN-2011 13:40
Operator : JZ Inst ID: nt6.i
Smp Info : ICV0128
Misc Info : 10-
Comment : 1ul Injection
Method : /chem2/nt6.i/20110128.b/SW846012811.m
Meth Date : 28-Jan-2011 16:39 jianqing Quant Type: ISTD
Cal Date : 28-JAN-2011 12:35 Cal File: 01281106.D
Als bottle: 8 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 3.50

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
$	1 2-Fluorophenol	112	5.313	5.322	(0.725)	678727	25.3584	25.36(R)
$	2 Phenol-d5	99	6.953	6.967	(0.948)	844639	25.3401	25.34(R)
	3 Phenol	94	6.974	6.988	(0.951)	886577	26.6720	26.67
$	5 2-Chlorophenol-d4	132	7.033	7.036	(0.959)	697262	24.6808	24.68(R)
	4 Bis(2-Chloroethyl)ether	93	7.033	7.036	(0.959)	779504	28.0538	28.05
	6 2-Chlorophenol	128	7.054	7.063	(0.962)	745880	26.2573	26.26
	7 1,3-Dichlorobenzene	146	7.268	7.271	(0.991)	959812	26.7129	26.71
*	8 1,4-Dichlorobenzene-d4	152	7.332	7.341	(1.000)	447403	20.0000	
	9 1,4-Dichlorobenzene	146	7.359	7.362	(1.004)	967210	26.7243	26.72
$	10 1,2-Dichlorobenzene-d4	152	7.631	7.635	(1.041)	491645	24.6935	24.69(R)
	12 1,2-Dichlorobenzene	146	7.652	7.661	(1.044)	908493	27.0922	27.09
	11 Benzyl alcohol	108	7.647	7.661	(1.043)	449094	21.8654	21.87
	14 2,2'-oxybis(1-Chloropropane)	45	7.919	7.923	(1.080)	972688	29.0739	29.07
	13 2-Methylphenol	108	7.909	7.923	(1.079)	675370	23.9523	23.95
	17 Hexachloroethane	117	8.144	8.147	(1.111)	351208	27.5337	27.53
	16 N-Nitroso-di-n-propylamine	70	8.133	8.147	(1.109)	541783	28.9350	28.93
	15 4-Methylphenol	108	8.149	8.163	(1.111)	689932	23.7845	23.78
$	18 Nitrobenzene-d5	82	8.277	8.286	(0.882)	708727	24.7023	24.70(R)
	19 Nitrobenzene	77	8.309	8.318	(0.885)	838502	27.0608	27.06
	20 Isophorone	82	8.699	8.713	(0.927)	1409770	29.7110	29.71
	21 2-Nitrophenol	139	8.827	8.836	(0.940)	401258	25.9369	25.94
	22 2,4-Dimethylphenol	107	8.982	8.991	(0.957)	665226	25.6086	25.61
	23 Bis(2-Chloroethoxy)methane	93	9.121	9.130	(0.972)	881592	26.3501	26.35
	24 Benzoic acid	105	9.255	9.344	(0.986)	1041553	52.0958	52.10
	25 2,4-Dichlorophenol	162	9.217	9.226	(0.982)	602191	25.1376	25.14
	26 1,2,4-Trichlorobenzene	180	9.340	9.344	(0.995)	796636	26.7299	26.73
*	27 Naphthalene-d8	136	9.388	9.392	(1.000)	1519745	20.0000	

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
28 Naphthalene	128	9.420	9.424	(1.003)	2261860	28.9812	28.98
29 4-Chloroaniline	127	9.580	9.589	(1.020)	717251	21.3864	21.39
30 Hexachlorobutadiene	225	9.757	9.760	(1.039)	460445	27.4111	27.41
31 4-Chloro-3-methylphenol	107	10.424	10.428	(1.110)	541656	25.9488	25.95
32 2-Methylnaphthalene	141	10.542	10.545	(1.123)	1025203	21.4831	21.48
33 Hexachlorocyclopentadiene	237	10.932	10.930	(0.893)	409100	25.7444	25.74
34 2,4,6-Trichlorophenol	196	11.065	11.074	(0.904)	455791	25.4442	25.44
35 2,4,5-Trichlorophenol	196	11.119	11.128	(0.909)	477028	24.0776	24.08
$ 36 2-Fluorobiphenyl	172	11.199	11.202	(0.915)	1426327	24.5454	24.55(R)
37 2-Chloronaphthalene	162	11.311	11.314	(0.924)	1418286	27.1476	27.15
38 2-Nitroaniline	65	11.557	11.571	(0.945)	323284	21.8969	21.90
39 Dimethylphthalate	163	11.957	11.966	(0.977)	1525981	27.5920	27.59
40 Acenaphthylene	152	11.979	11.982	(0.979)	2170016	28.3081	28.31
41 2,6-Dinitrotoluene	165	12.037	12.046	(0.984)	372942	27.5612	27.56
* 42 Acenaphthene-d10	164	12.235	12.238	(1.000)	866200	20.0000	
43 3-Nitroaniline	138	12.235	12.249	(1.000)	283585	22.5570	22.56
44 Acenaphthene	153	12.283	12.292	(1.004)	1413273	28.8837	28.88
45 2,4-Dinitrophenol	184	12.400	12.415	(1.014)	448432	66.4996	66.50(R)
46 Dibenzofuran	168	12.545	12.554	(1.025)	1610702	21.5946	21.59
47 4-Nitrophenol	109	12.571	12.586	(1.028)	170503	26.9715	26.97
48 2,4-Dinitrotoluene	165	12.652	12.666	(1.034)	469961	28.2718	28.27
50 Diethylphthalate	149	13.111	13.120	(1.072)	1436712	28.3784	28.38
49 Fluorene	166	13.100	13.104	(1.071)	1602922	29.0855	29.09
51 4-Chlorophenyl-phenylether	204	13.143	13.152	(1.074)	791926	27.1012	27.10
52 4-Nitroaniline	138	13.218	13.237	(1.080)	253983	20.9363	20.94
53 4,6-Dinitro-2-methylphenol	198	13.298	13.317	(0.912)	563291	57.5506	57.55
54 N-Nitrosodiphenylamine	169	13.351	13.360	(0.915)	1087446	26.1061	26.11
$ 55 2,4,6-Tribromophenol	330	13.517	13.526	(1.105)	217144	26.2049	26.20(R)
56 4-Bromophenyl-phenylether	248	13.917	13.921	(0.954)	486996	27.0539	27.05
57 Hexachlorobenzene	284	14.115	14.119	(0.968)	539549	27.3698	27.37
58 Pentachlorophenol	266	14.419	14.423	(0.989)	302662	25.0462	25.05
* 59 Phenanthrene-d10	188	14.585	14.589	(1.000)	1402226	20.0000	
60 Phenanthrene	178	14.622	14.626	(1.003)	2253417	28.7104	28.71
61 Anthracene	178	14.692	14.701	(1.007)	2265066	28.3755	28.38
62 Carbazole	167	14.986	14.994	(1.027)	1704674	25.4070	25.41
63 Di-n-butylphthalate	149	15.749	15.753	(1.080)	2335294	27.6208	27.62
64 Fluoranthene	202	16.534	16.543	(1.134)	2353031	30.0114	30.01
65 Pyrene	202	16.882	16.891	(0.895)	2429755	29.2836	29.28
$ 66 Terphenyl-d14	244	17.234	17.238	(0.914)	1251827	24.5318	24.53(R)
67 Butylbenzylphthalate	149	18.142	18.146	(0.962)	992450	27.5802	27.58
68 Benzo(a)anthracene	228	18.836	18.845	(0.999)	2095598	28.7087	28.71
* 69 Chrysene-d12	240	18.863	18.867	(1.000)	1425631	20.0000	
70 3,3'-Dichlorobenzidine	252	18.874	18.877	(1.001)	619790	21.2091	21.21
71 Chrysene	228	18.901	18.909	(1.002)	1999668	28.2405	28.24
72 bis(2-Ethylhexyl)phthalate	149	19.157	19.160	(0.953)	1345813	28.5243	28.52
* 134 Di-n-octylphthalate-d4	153	20.092	20.090	(1.000)	1635357	20.0000	
73 Di-n-octylphthalate	149	20.097	20.106	(1.000)	2245258	27.3089	27.31

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
74 Benzo(b)fluoranthene	252	20.482	20.490	(0.975)	2426484	30.6336	30.63
75 Benzo(k)fluoranthene	252	20.514	20.528	(0.977)	2343185	29.2146	29.21
187 Total Benzofluoranthenes	252	20.514	20.528	(0.977)	4496522	59.5884	59.59
76 Benzo(a)pyrene	252	20.919	20.928	(0.996)	1967949	26.4111	26.41
* 77 Perylene-d12	264	21.000	21.003	(1.000)	1357012	20.0000	
78 Indeno(1,2,3-cd)pyrene	276	22.356	22.370	(1.065)	2772381	30.3914	30.39
79 Dibenzo(a,h)anthracene	278	22.383	22.397	(1.066)	2263697	30.3062	30.31
80 Benzo(g,h,i)perylene	276	22.671	22.691	(1.080)	2466646	30.0117	30.01
90 N-Nitrosodimethylamine	74	2.439	2.454	(0.333)	497308	28.2681	28.27
103 Pyridine	79	2.418	2.422	(0.330)	931817	30.6502	30.65
91 Aniline	93	6.888	6.897	(0.940)	985824	23.3299	23.33
105 1-methylnaphthalene	141	10.707	10.716	(1.141)	1183631	25.7539	25.75
93 Benzidine	184	16.812	16.821	(0.891)	399429	23.9707	23.97
111 Azobenzene (1,2-DP-Hydrazine)	77	13.389	13.398	(1.094)	1481356	26.5407	26.54
143 1,4-Dioxane	88	1.937	1.941	(0.264)	298121	21.9071	21.91
$ 137 d8-1,4-Dioxane	96	1.900	1.904	(0.259)	270235	22.9155	22.92(R)
144 alpha-Terpineol	59	9.474	9.482	(1.009)	546182	25.5302	25.53
177 p-Benzoquinone	82	5.981	5.984	(0.637)	139575	27.8751	27.88
98 Retene	219	17.469	17.473	(0.926)	749989	25.2382	25.24
99 Perylene	252	21.032	21.046	(1.002)	1797620	25.1078	25.11
133 Butylatedhydroxytoluene	205	12.454	12.457	(1.018)	1044273	24.6403	24.64
115 Tributyl Phosphate	99	13.495	13.515	(0.925)	1505672	25.4844	25.48
116 Dibutyl Phenyl Phosphate	175	15.205	15.213	(1.042)	1043744	25.2970	25.30
117 Butyl Diphenyl Phosphate	94	16.860	16.864	(0.894)	320260	25.5619	25.56
118 Triphenyl Phosphate	326	18.447	18.450	(0.978)	334248	25.6851	25.69
123 Acetophenone	105	8.053	8.062	(1.098)	1053758	27.9530	27.95
179 n-Decane	57	7.209	7.213	(0.983)	698504	22.8543	22.85
180 n-Octadecane	57	14.590	14.594	(1.000)	720844	23.2134	23.21
168 Pentachlorobenzene	250	12.587	12.596	(1.029)	656072	27.5905	27.59
113 Diphenyl Oxide	170	11.525	11.528	(0.942)	828427	20.8461	20.85
112 Biphenyl	154	11.327	11.331	(0.926)	1448074	22.1854	22.19
120 2,3,4,6-Tetrachlorophenol	232	12.764	12.847	(1.043)	345877	19.0343	19.03
135 2,3,5,6-Tetrachlorophenol	232	12.764	12.773	(1.043)	345877	23.5875	23.59
151 1,2,4,5-Tetrachlorobenzene	216	10.878	10.887	(0.889)	690317	25.2811	25.28
110 Tetrachloroguaiacol	247	14.553	14.562	(0.998)	498757	48.7758	48.78
109 3,4,5-Trichloroguaiacol	213	12.945	12.949	(0.888)	232178	23.7413	23.74
181 3,4,6-Trichloroguaiacol	211	13.052	13.061	(1.780)	284615	24.7718	24.77
108 4,5,6-Trichloroguaiacol	213	13.976	13.980	(1.142)	236957	24.1742	24.17
184 3,4-Dichloroguaiacol	192	11.407	11.416	(1.556)	256408	24.9167	24.92
107 4,5-Dichloroguaiacol	192	12.208	12.217	(0.998)	629849	48.8745	48.87
182 4,6-Dichloroguaiacol	192	12.208	12.217	(1.665)	627546	49.4501	49.45
185 4-Chloroguaiacol	115	10.339	10.348	(1.410)	136464	12.3499	12.35
186 Carbaryl	144	15.418	15.427	(1.057)	771380	24.9649	24.96
178 2-Benzyl-4-Chlorophenol	218	15.381	15.395	(1.055)	383050	25.4520	25.45
106 Guaiacol	124	8.331	8.339	(1.136)	602303	26.0099	26.01
100 3-beta-Coprostanol	215	21.822	21.831	(1.039)	260380	65.1645	65.16
101 Cholesterol	107	21.998	22.007	(1.048)	166565	61.7322	61.73

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt6.i
Lab File ID: 01281108.D
Lab Smp Id: ICV0128
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem2/nt6.i/20110128.b/SW846012811.m
Misc Info: 10-

Calibration Date: 28-JAN-2011
Calibration Time: 09:50
Client Smp ID: ICV0128
Level:
Sample Type:

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	458851	229426	917702	447403	-2.49
27 Naphthalene-d8	1522936	761468	3045872	1519745	-0.21
42 Acenaphthene-d10	864539	432270	1729078	866200	0.19
59 Phenanthrene-d10	1378528	689264	2757056	1402226	1.72
69 Chrysene-d12	1421586	710793	2843172	1425631	0.28
134 Di-n-octylphthala	1679951	839976	3359902	1635357	-2.65
77 Perylene-d12	1361193	680596	2722386	1357012	-0.31

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	7.33	6.83	7.83	7.33	-0.04
27 Naphthalene-d8	9.39	8.89	9.89	9.39	0.03
42 Acenaphthene-d10	12.23	11.73	12.73	12.23	0.02
59 Phenanthrene-d10	14.58	14.08	15.08	14.58	0.02
69 Chrysene-d12	18.86	18.36	19.36	18.86	0.01
134 Di-n-octylphthala	20.09	19.59	20.59	20.09	0.01
77 Perylene-d12	21.00	20.50	21.50	21.00	0.01

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Analytical Resources, Inc.

RECOVERY REPORT

Client Name:
Sample Matrix: NONE
Lab Smp Id: ICV0128
Level:
Data Type: MS DATA
SpikeList File: ICV.spk
Sublist File: ICAL.sub
Method File: /chem2/nt6.i/20110128.b/SW846012811.m
Misc Info: 10-

Client SDG: 20110128
Fraction: SV
Client Smp ID: ICV0128
Operator: JZ
SampleType: LCS
Quant Type: ISTD

SPIKE COMPOUND	AMOUNT ADDED ug/mL	AMOUNT RECOVERED ug/mL	% RECOVERED	LIMITS
3 Phenol	25.00	26.67	106.69	
4 Bis(2-Chloroethyl)	25.00	28.05	112.22	
6 2-Chlorophenol	25.00	26.26	105.03	
7 1,3-Dichlorobenzen	25.00	26.71	106.85	
9 1,4-Dichlorobenzen	25.00	26.72	106.90	
11 Benzyl alcohol	25.00	21.87	87.46	
12 1,2-Dichlorobenzen	25.00	27.09	108.37	
13 2-Methylphenol	25.00	23.95	95.81	
14 2,2'-oxybis(1-Chlo	25.00	29.07	116.30	
15 4-Methylphenol	25.00	23.78	95.14	
16 N-Nitroso-di-n-pro	25.00	28.93	115.74	
17 Hexachloroethane	25.00	27.53	110.13	
19 Nitrobenzene	25.00	27.06	108.24	
20 Isophorone	25.00	29.71	118.84	
21 2-Nitrophenol	25.00	25.94	103.75	
22 2,4-Dimethylphenol	25.00	25.61	102.43	
23 Bis(2-Chloroethoxy	25.00	26.35	105.40	
24 Benzoic acid	50.00	52.10	104.19	
25 2,4-Dichlorophenol	25.00	25.14	100.55	
26 1,2,4-Trichloroben	25.00	26.73	106.92	
28 Naphthalene	25.00	28.98	115.92	
29 4-Chloroaniline	25.00	21.39	85.55	
30 Hexachlorobutadien	25.00	27.41	109.64	
31 4-Chloro-3-methylp	25.00	25.95	103.80	
32 2-Methylnaphthalen	25.00	21.48	85.93	
33 Hexachlorocyclopen	25.00	25.74	102.98	
34 2,4,6-Trichlorophe	25.00	25.44	101.78	
35 2,4,5-Trichlorophe	25.00	24.08	96.31	
37 2-Chloronaphthalen	25.00	27.15	108.59	
38 2-Nitroaniline	25.00	21.90	87.59	
39 Dimethylphthalate	25.00	27.59	110.37	
40 Acenaphthylene	25.00	28.31	113.23	
41 2,6-Dinitrotoluene	25.00	27.56	110.24	

SPIKE	COMPOUND	AMOUNT ADDED ug/mL	AMOUNT RECOVERED ug/mL	% RECOVERED	LIMITS
43	3-Nitroaniline	25.00	22.56	90.23	
44	Acenaphthene	25.00	28.88	115.53	
45	2,4-Dinitrophenol	50.00	66.50	133.00*	
46	Dibenzofuran	25.00	21.59	86.38	
47	4-Nitrophenol	25.00	26.97	107.89	
48	2,4-Dinitrotoluene	25.00	28.27	113.09	
49	Fluorene	25.00	29.09	116.34	
50	Diethylphthalate	25.00	28.38	113.51	
51	4-Chlorophenyl-phe	25.00	27.10	108.40	
52	4-Nitroaniline	25.00	20.94	83.75	
53	4,6-Dinitro-2-meth	50.00	57.55	115.10	
54	N-Nitrosodiphenyla	25.00	26.11	104.42	
56	4-Bromophenyl-phen	25.00	27.05	108.22	
57	Hexachlorobenzene	25.00	27.37	109.48	
58	Pentachlorophenol	25.00	25.05	100.18	
60	Phenanthrene	25.00	28.71	114.84	
61	Anthracene	25.00	28.38	113.50	
62	Carbazole	25.00	25.41	101.63	
63	Di-n-butylphthalat	25.00	27.62	110.48	
64	Fluoranthene	25.00	30.01	120.05	
65	Pyrene	25.00	29.28	117.13	
67	Butylbenzylphthala	25.00	27.58	110.32	
68	Benzo(a)anthracene	25.00	28.71	114.83	
70	3,3'-Dichlorobenzi	25.00	21.21	84.84	
71	Chrysene	25.00	28.24	112.96	
72	bis(2-Ethylhexyl)p	25.00	28.52	114.10	
73	Di-n-octylphthalat	25.00	27.31	109.24	
74	Benzo(b)fluoranthe	25.00	30.63	122.53	
75	Benzo(k)fluoranthe	25.00	29.21	116.86	
187	Total Benzofluoran	50.00	59.59	119.18	
76	Benzo(a)pyrene	25.00	26.41	105.64	
78	Indeno(1,2,3-cd)py	25.00	30.39	121.57	
79	Dibenzo(a,h)anthra	25.00	30.31	121.22	
80	Benzo(g,h,i)peryle	25.00	30.01	120.05	
90	N-Nitrosodimethyla	25.00	28.27	113.07	
103	Pyridine	25.00	30.65	122.60	
91	Aniline	25.00	23.33	93.32	
105	1-methylnaphthalen	25.00	25.75	103.02	
93	Benzidine	25.00	23.97	95.88	
111	Azobenzene (1,2-DP	25.00	26.54	106.16	
143	1,4-Dioxane	25.00	21.91	87.63	
144	alpha-Terpineol	25.00	25.53	102.12	
177	p-Benzoquinone	25.00	27.88	111.50	
98	Retene	25.00	25.24	100.95	
133	Butylatedhydroxyto	25.00	24.64	98.56	
115	Tributyl Phosphate	25.00	25.48	101.94	
116	Dibutyl Phenyl Pho	25.00	25.30	101.19	

SPIKE COMPOUND	AMOUNT ADDED ug/mL	AMOUNT RECOVERED ug/mL	% RECOVERED	LIMITS
117 Butyl Diphenyl Pho	25.00	25.56	102.25	
118 Triphenyl Phosphat	25.00	25.69	102.74	
123 Acetophenone	25.00	27.95	111.81	
179 n-Decane	25.00	22.85	91.42	
180 n-Octadecane	25.00	23.21	92.85	
168 Pentachlorobenzene	25.00	27.59	110.36	
113 Diphenyl Oxide	25.00	20.85	83.38	
112 Biphenyl	25.00	22.19	88.74	
135 2,3,5,6-Tetrachlor	25.00	23.59	94.35	
120 2,3,4,6-Tetrachlor	25.00	19.03	76.14	
151 1,2,4,5-Tetrachlor	25.00	25.28	101.12	
110 Tetrachloroguaiaco	50.00	48.78	97.55	
109 3,4,5-Trichlorogua	25.00	23.74	94.97	
181 3,4,6-Trichlorogua	25.00	24.77	99.09	
108 4,5,6-Trichlorogua	25.00	24.17	96.70	
184 3,4-Dichloroguaiac	25.00	24.92	99.67	
107 4,5-Dichloroguaiac	50.00	48.87	97.75	
182 4,6-Dichloroguaiac	50.00	49.45	98.90	
185 4-Chloroguaiacol	12.50	12.35	98.80	
106 Guaiacol	25.00	26.01	104.04	
186 Carbaryl	25.00	24.96	99.86	
178 2-Benzyl-4-Chlorop	25.00	25.45	101.81	
99 Perylene	25.00	25.11	100.43	
100 3-beta-Coprostanol	62.50	65.16	104.26	
101 Cholesterol	62.50	61.73	98.77	

SURROGATE COMPOUND	AMOUNT ADDED ug/mL	AMOUNT RECOVERED ug/mL	% RECOVERED	LIMITS
$ 1 2-Fluorophenol	25.00	25.36	101.43	
$ 2 Phenol-d5	25.00	25.34	101.36	
$ 5 2-Chlorophenol-d4	25.00	24.68	98.72	
$ 10 1,2-Dichlorobenzen	25.00	24.69	98.77	
$ 18 Nitrobenzene-d5	25.00	24.70	98.81	
$ 36 2-Fluorobiphenyl	25.00	24.55	98.18	
$ 55 2,4,6-Tribromophen	25.00	26.20	104.82	
$ 66 Terphenyl-d14	25.00	24.53	98.13	
$ 137 d8-1,4-Dioxane	25.00	22.92	91.66	

Data File: /chem2/nt6.i/20110128.b/01281108.D

Date : 28-JAN-2011 13:40

Client ID: ICV0128

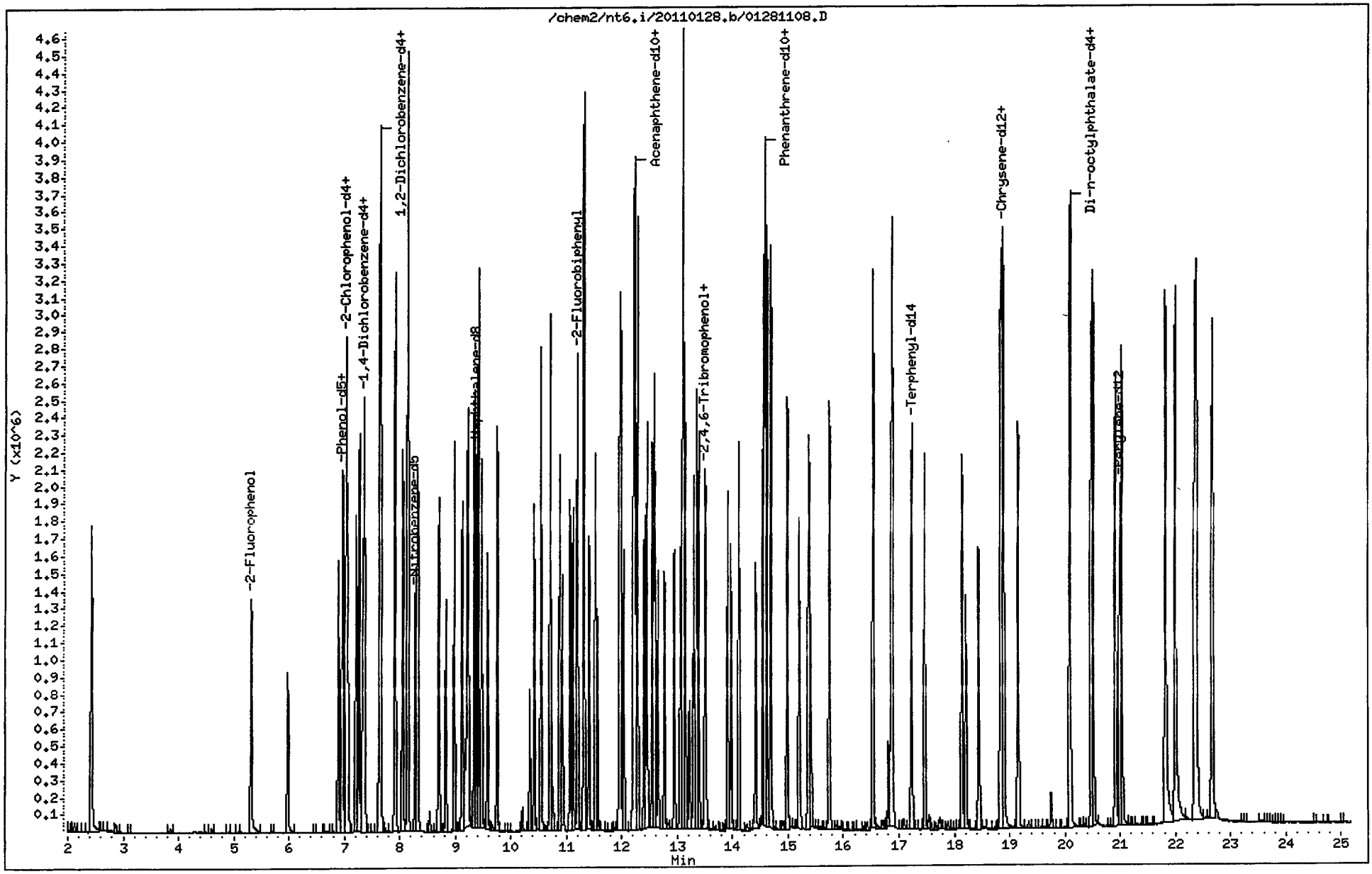
Sample Info: ICV0128

Column phase: ZB-5msi

Instrument: nt6.i

Operator: JZ

Column diameter: 0.32



SH20 00162

CO-ELUTION SUMMARY FOR FILE - 01281108.D

Lab ID: ICV0128, Method: SW846012811.m, Instrument: nt6.i, Date: 28-JAN-2011

RT	CO-ELUTION COMPOUNDS
12.235	Acenaphthene-d10 and 3-Nitroaniline

checked ok

AB 01/28/11

Semivolatile PAH Raw Data
Run Logs, Continuing Calibrations, and Raw Data

ARI Job ID: SH20

Analytical Resources, Incorporated
Analytical Chemists and Consultants

GC/MS SVOA Analyst Notes / Corrective Action Log

ARI Project ID: SH70 Client ID: Windward

ARI SOP: **801S**(SIM-PNA) **802S**(Butyl Tins) **804S**(SVOA-8270D) **805S**(op-Pest)

Parameter(s): 8270

Instrument: NT-2 NT-4 NT-6 NT-8 NT11

Curve Date: 1/28/11 Analysis Start Date: 2/7/11

DFTPP Tune Meets Criteria?	YES / NO	Internal Standard Meets Criteria?	YES / NO
DDT Breakdown <20%?	YES / NO / NA	Method Blank In Control?	YES / NO
Peak Tailing Factor ≤2?	YES / NO / NA	LCS / LCSD Recovery In Control?	YES / NO
ICal acceptable?	YES / NO	CCal acceptable?	YES / NO
Q flag applied?	YES / NO	Q flag applied?	YES / NO
Surrogate Recovery in Control?	YES / NO	Special Analysis Criteria Met?	YES / NO / NA
Manual Integrations for ICal?	YES / NO	Manual Integrations for Samples?	Yes / NO

Detail problems, corrective actions and/or other pertinent information below (use reverse side when necessary):

Sample A + MB/LCS/LCSD
Forms included

Additional Details on Reverse: Yes / No

Analyst: [signature] **Date:** 02/07/11

Reviewer: [signature] **Date:** 2/8/11

Analytical Resources Inc.: Organics Instrument Log

NT-6 Serial No.:GC=US00036167, MS=US81221575

Date: 2/7/11 Analysis: 8270 Analyst: [illegible]

GC Program: ABN 1ml Column No: 181979 Column Type: ZB-5MSi

Instrument Tune (.U or .CT.): 100928 EM Voltage: 1629

Calibration File: 02031101 Curve Date: 1/28/11

IS/SS	Ical/Ccal	LCS/ICV
1712-1	1810-1, 1811-1	
	1701-1, 1812-1	
	1803, 1808	
	1813-1	

INTERNAL STANDARD SUMMARY FOR DATABATCH - /chem2/nt6.i/20110207.b

	Time	Filename	LabID	ClientId	DF																	
1	1238	02071101.D	CC0207	CC0207	1	6.72	363971	8.78	1237715	11.61	717006	13.93	1226170	18.17	1320527	20.28	1184370	19.47	1604720			
2	1311	02071102.D	SG70MBW1	SG70MBW1	1	6.72	440514	8.78	1488172	11.61	889924	13.93	1483822	18.16	1525364	19.46	1893806	20.28	1395407			
3	1343	02071103.D	SG70LCSW1	SG70LCSW1	1	6.72	445136	8.78	1509828	11.61	893670	13.93	1487355	18.17	1476368	19.46	1801000	20.28	1314916			
4	1416	02071104.D	SG70A	MW-24-012711	1	6.72	420764	8.78	1412967	11.61	830797	13.93	1374053	18.17	1378950	19.46	1732376	20.28	1324498			
5	1449	02071105.D	SH20MBS1	SH20MBS1	1	8.78	1513746	11.61	915745	13.93	1525595	18.16	1568644	20.28	1426065							
6	1521	02071106.D	SH20LCSS1	SH20LCSS1	1	8.78	1700361	11.61	1010568	13.93	1695547	18.17	1742960	20.28	1578866							
7	1554	02071107.D	SH20LCSDS1	SH20LCSDS1	1	8.78	1665027	11.61	995377	13.93	1655040	18.16	1686812	20.28	1530936							
8	1626	02071108.D	SH20QLS	SH20QLS	1	8.78	1681634	11.60	1017126	13.93	1723830	18.16	1759034	20.28	1556385							
9	1659	02071109.D	SH20A	EW10-10-COMP	1	8.78	1559277	11.61	915578	13.93	1554074	18.18	2112159	20.31	2120479							

[illegible] 02/07/11

Maintenance / Comments

Maintenance Verification (Identify ICal or CCal that demonstrates the instrument is in control):

Every line must contain information or be lined out. Make all entries legible. Start a new page for each QC period.

MANUAL INTEGRATION SUMMARY FOR DATABATCH - /chem2/nt6.i/20110207.b

ARI Job No.: CC02 Method: SW846012811.m Instrument: nt6.i Date: 07-FEB-2011

02/07/11

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1238	02071101.D	CC0207	CC0207	1	NO MANUAL INTEGRATION
1449	02071105.D	SH20MBS1	SH20MBS1	1	NO MANUAL INTEGRATION
1521	02071106.D	SH20LCSS1	SH20LCSS1	1	NO MANUAL INTEGRATION
1554	02071107.D	SH20LCSDS1	SH20LCSDS1	1	NO MANUAL INTEGRATION
1659	02071109.D	SH20A	EW10-10-CO	1	NO MANUAL INTEGRATION

SH20:001167

Q-FLAG SUMMARY FOR DATABATCH - /chem2/nt6.i/20110207.b

Instrument: nt6.i Date: 07-FEB-2011 Method: SW846012811.m

INITIAL CAL: 28-JAN-2011

Compound	%RSD or R^2
NO Q-FLAGS	

CONTINUING CAL: 07-FEB-2011

B 02/07/11

Compound	%D
Benzoic acid	21.7
3-Nitroaniline	26.3
2,4-Dinitrophenol	50.5
4-Nitrophenol	23.8
4-Nitroaniline	24.5

NTC

Analytical Resources, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: nt6.i
Lab File ID: 02071101.D
Analysis Type:
Lab Sample ID: CC0207
Method: /chem2/nt6.i/20110207.b/SW846012811.m

Injection Date: 07-FEB-2011 12:38
Init. Cal. Date(s): 28-JAN-2011 28-JAN-2011
Init. Cal. Times: 09:50 13:08
Quant Type: ISTD

02/07/11

COMPOUND	RRF / AMOUNT	RF25	CCAL RRF25	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
$ 1 2-Fluorophenol	1.19648	1.25802	1.25802	0.010	5.14403	20.00000	Averaged
$ 2 Phenol-d5	1.49002	1.59206	1.59206	0.010	6.84816	20.00000	Averaged
3 Phenol	1.48591	1.65479	1.65479	0.010	11.36538	20 00000	Averaged
$ 5 2-Chlorophenol-d4	1.26290	1.31065	1.31065	0.010	3.78122	20.00000	Averaged
4 Bis(2-Chloroethyl)ether	1.24210	1.29955	1.29955	0.010	4.62514	20.00000	Averaged
6 2-Chlorophenol	1.26984	1.30670	1.30670	0.010	2.90235	20.00000	Averaged
7 1,3-Dichlorobenzene	1.60619	1.63388	1.63388	0.010	1.72399	20.00000	Averaged
9 1,4-Dichlorobenzene	1.61788	1.68146	1.68146	0.010	3.93013	20.00000	Averaged
$ 10 1,2-Dichlorobenzene-d4	0.89002	0.91706	0.91706	0.010	3.03837	20.00000	Averaged
12 1,2-Dichlorobenzene	1.49903	1.55915	1.55915	0.010	4.01063	20.00000	Averaged
11 Benzyl alcohol	0.91815	1.00782	1.00782	0.010	9.76673	20.00000	Averaged
14 2,2'-oxybis(1-Chloropropane	1.49555	1.61536	1.61536	0.010	8.01108	20.00000	Averaged
13 2-Methylphenol	1.26045	1.35516	1.35516	0.010	7.51400	20.00000	Averaged
17 Hexachloroethane	0.57021	0.62019	0.62019	0.010	8.76563	20.00000	Averaged
16 N-Nitroso-di-n-propylamine	0.83701	0.91346	0.91346	0.005	9.13301	20.00000	Averaged
15 4-Methylphenol	1.29671	1.44606	1.44606	0.010	11.51758	20.00000	Averaged
$ 18 Nitrobenzene-d5	0.37757	0.39943	0.39943	0.010	5.78872	20 00000	Averaged
19 Nitrobenzene	0.40778	0.42364	0.42364	0.010	3.89027	20.00000	Averaged
20 Isophorone	0.62444	0.65614	0.65614	0.010	5.07653	20.00000	Averaged
21 2-Nitrophenol	0.20359	0.21636	0.21636	0.010	6.27129	20.00000	Averaged
22 2,4-Dimethylphenol	0.34186	0.35335	0.35335	0.010	3.36207	20.00000	Averaged
23 Bis(2-Chloroethoxy)methane	0.44030	0.45996	0.45996	0.010	4.46672	20.00000	Averaged
24 Benzoic acid	0.26311	0.32028	0.32028	0.010	21.72796	20.00000	Averaged <-
25 2,4-Dichlorophenol	0.31526	0.33664	0.33664	0.010	6.78067	20 00000	Averaged
26 1,2,4-Trichlorobenzene	0.39221	0.39681	0.39681	0.010	1.17199	20.00000	Averaged
28 Naphthalene	1.02709	1.07649	1.07649	0.010	4.80968	20.00000	Averaged
29 4-Chloroaniline	0.44136	0.46919	0.46919	0.010	6.30665	20.00000	Averaged
30 Hexachlorobutadiene	0.22106	0.21650	0.21650	0.010	-2.06202	20.00000	Averaged
31 4-Chloro-3-methylphenol	0.27470	0.30523	0.30523	0.010	11.11301	20.00000	Averaged
32 2-Methylnaphthalene	0.62802	0.66722	0.66722	0.010	6.24223	20.00000	Averaged
33 Hexachlorocyclopentadiene	0.36691	0.36829	0.36829	0.010	0.37748	20.00000	Averaged
34 2,4,6-Trichlorophenol	0.41361	0.45077	0.45077	0.010	8.98444	20.00000	Averaged
35 2,4,5-Trichlorophenol	0.45745	0.50650	0.50650	0.010	10.72230	20.00000	Averaged
$ 36 2-Fluorobiphenyl	1.34172	1.38457	1.38457	0.010	3.19410	20.00000	Averaged
37 2-Chloronaphthalene	1.20627	1.27430	1.27430	0.010	5.63956	20.00000	Averaged

Analytical Resources, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: nt6.i
Lab File ID: 02071101.D
Analysis Type:
Lab Sample ID: CC0207
Method: /chem2/nt6.i/20110207.b/SW846012811.m

Injection Date: 07-FEB-2011 12:38
Init. Cal. Date(s): 28-JAN-2011 28-JAN-2011
Init. Cal. Times: 09:50 13:08
Quant Type: ISTD

COMPOUND	RRF / AMOUNT	RF25	CCAL RRF25	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
38 2-Nitroaniline	0.34089	0.40636	0.40636	0.010	19.20674	20.00000	Averaged	
39 Dimethylphthalate	1.27696	1.36446	1.36446	0.010	6.85235	20.00000	Averaged	
40 Acenaphthylene	1.76996	1.91746	1.91746	0.010	8.33367	20.00000	Averaged	
41 2,6-Dinitrotoluene	0.31243	0.34473	0.34473	0.010	10.33699	20.00000	Averaged	
43 3-Nitroaniline	0.29028	0.36653	0.36653	0.010	26.26769	20.00000	Averaged	<-
44 Acenaphthene	1.12976	1.19537	1.19537	0.010	5.80815	20.00000	Averaged	
45 2,4-Dinitrophenol	75.25224	50.00000	0.23757	0.010	50.50448	20.00000	Quadratic	<-
46 Dibenzofuran	1.72220	1.89835	1.89835	0.010	10.22823	20.00000	Averaged	
47 4-Nitrophenol	0.14596	0.18069	0.18069	0.010	23.79096	20 00000	Averaged	<-
48 2,4-Dinitrotoluene	0.38381	0.43829	0.43829	0.010	14.19479	20.00000	Averaged	
50 Diethylphthalate	1.16894	1.32878	1.32878	0.010	13.67373	20 00000	Averaged	
49 Fluorene	1.27247	1.36376	1.36376	0.010	7.17446	20 00000	Averaged	
51 4-Chlorophenyl-phenylether	0.67469	0.69938	0.69938	0.010	3.65930	20.00000	Averaged	
52 4-Nitroaniline	0.28010	0.34860	0.34860	0.010	24.45451	20.00000	Averaged	<-
53 4,6-Dinitro-2-methylphenol	0.13960	0.14955	0.14955	0.010	7.12562	20.00000	Averaged	
54 N-Nitrosodiphenylamine	0.59412	0.60452	0.60452	0.010	1.74975	20.00000	Averaged	
$ 55 2,4,6-Tribromophenol	0.19133	0.21128	0.21128	0.010	10.42810	20.00000	Averaged	
56 4-Bromophenyl-phenylether	0.25675	0.25072	0.25072	0.010	-2.34680	20.00000	Averaged	
57 Hexachlorobenzene	0.28117	0.27274	0.27274	0.010	-2.99928	20.00000	Averaged	
58 Pentachlorophenol	0.17236	0.18410	0.18410	0.010	6.81592	20.00000	Averaged	
60 Phenanthrene	1.11947	1.18640	1.18640	0.010	5.97804	20.00000	Averaged	
61 Anthracene	1.13854	1.20147	1.20147	0.010	5.52705	20.00000	Averaged	
62 Carbazole	0.95697	1.08374	1.08374	0.010	13.24653	20.00000	Averaged	
63 Di-n-butylphthalate	1.20591	1.33708	1.33708	0.010	10.87706	20.00000	Averaged	
64 Fluoranthene	1.11829	1.23912	1.23912	0.010	10.80562	20.00000	Averaged	
65 Pyrene	1.16402	1.21191	1.21191	0.010	4.11378	20.00000	Averaged	
$ 66 Terphenyl-d14	0.71588	0.72373	0.72373	0.010	1.09662	20.00000	Averaged	
67 Butylbenzylphthalate	0.50482	0.54829	0.54829	0.010	8.61136	20.00000	Averaged	
68 Benzo(a)anthracene	1.02404	1.06974	1.06974	0.010	4.46315	20.00000	Averaged	
70 3,3'-Dichlorobenzidine	0.40996	0.43799	0.43799	0.010	6.83537	20.00000	Averaged	
71 Chrysene	0.99336	1.04803	1.04803	0.010	5.50333	20.00000	Averaged	
72 bis(2-Ethylhexyl)phthalate	0.57701	0.59857	0.59857	0.010	3.73531	20.00000	Averaged	
73 Di-n-octylphthalate	1.00549	1.04316	1.04316	0.010	3.74654	20.00000	Averaged	
74 Benzo(b)fluoranthene	1.16741	1.18515	1.18515	0.010	1.51894	20.00000	Averaged	
75 Benzo(k)fluoranthene	1.18210	1.36486	1.36486	0.010	15.46114	20.00000	Averaged	

Analytical Resources, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: nt6.i
Lab File ID: 02071101.D
Analysis Type:
Lab Sample ID: CC0207
Method: /chem2/nt6.i/20110207.b/SW846012811.m

Injection Date: 07-FEB-2011 12:38
Init. Cal. Date(s): 28-JAN-2011 28-JAN-2011
Init. Cal. Times: 09:50 13:08
Quant Type: ISTD

COMPOUND	RRF / AMOUNT	RF25	CCAL RRF25	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
187 Total Benzofluoranthenes	1.11214	1.19751	1.19751	0.010	7.67629	20.00000	Averaged
76 Benzo(a)pyrene	1.09818	1.15537	1.15537	0.010	5.20808	20.00000	Averaged
78 Indeno(1,2,3-cd)pyrene	1.34446	1.31230	1.31230	0.010	-2.39191	20.00000	Averaged
79 Dibenzo(a,h)anthracene	1.10086	1.09181	1.09181	0.010	-0.82222	20.00000	Averaged
80 Benzo(g,h,i)perylene	1.21133	1.16406	1.16406	0.010	-3.90272	20.00000	Averaged
90 N-Nitrosodimethylamine	0.78643	0.80100	0.80100	0.010	1.85246	20.00000	Averaged
103 Pyridine	1.35903	1.40248	1.40248	0.010	3.19747	20.00000	Averaged
91 Aniline	1.88894	1.71140	1.71140	0.010	-9.39894	20.00000	Averaged
105 1-methylnaphthalene	0.60483	0.62331	0.62331	0.010	3.05498	20.00000	Averaged
111 Azobenzene (1,2-DP-Hydrazin	1.28872	1.52352	1.52352	0.010	18.21922	20.00000	Averaged
144 alpha-Terpineol	0.28154	0.29572	0.29572	0.010	5.03714	20.00000	Averaged
99 Perylene	1.05520	1.10360	1.10360	0.010	4.58627	20.00000	Averaged

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem2/nt6.i/20110207.b/02071101.D
Lab Smp Id: CC0207 Client Smp ID: CC0207
Inj Date : 07-FEB-2011 12:38
Operator : JZ Inst ID: nt6.i
Smp Info : CC0207
Misc Info : 11-
Comment : 1ul Injection
Method : /chem2/nt6.i/20110207.b/SW846012811.m
Meth Date : 07-Feb-2011 16:58 jianqing Quant Type: ISTD
Cal Date : 28-JAN-2011 10:23 Cal File: 01281102.D
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICALS.sub
Target Version: 3.50

02/07/11

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
$ 1 2-Fluorophenol	112	4.596	4.596	(0.684)	572356	25.0000	26.29
$ 2 Phenol-d5	99	6.380	6.380	(0.950)	724331	25.0000	26.71
3 Phenol	94	6.401	6.401	(0.953)	752870	25.0000	27.84
$ 5 2-Chlorophenol-d4	132	6.412	6.412	(0.955)	596299	25.0000	25.95
4 Bis(2-Chloroethyl)ether	93	6.433	6.433	(0.958)	591249	25.0000	26.16
6 2-Chlorophenol	128	6.438	6.438	(0.959)	594500	25.0000	25.73
7 1,3-Dichlorobenzene	146	6.641	6.641	(0.989)	743357	25.0000	25.43
* 8 1,4-Dichlorobenzene-d4	152	6.716	6.716	(1.000)	363971	20.0000	
9 1,4-Dichlorobenzene	146	6.743	6.743	(1.004)	765005	25.0000	25.98
$ 10 1,2-Dichlorobenzene-d4	152	7.021	7.021	(1.045)	417231	25.0000	25 76
12 1,2-Dichlorobenzene	146	7.042	7.042	(1.048)	709356	25.0000	26.00
11 Benzyl alcohol	108	7.063	7.063	(1.052)	458521	25.0000	27.44
14 2,2'-oxybis(1-Chloropropane)	45	7.336	7.336	(1.092)	734932	25.0000	27.00
13 2-Methylphenol	108	7.352	7.352	(1.095)	616549	25.0000	26.88
17 Hexachloroethane	117	7.533	7.533	(1.122)	282163	25.0000	27.19
16 N-Nitroso-di-n-propylamine	70	7.555	7.555	(1.125)	415591	25.0000	27.28
15 4-Methylphenol	108	7.597	7.597	(1.131)	657907	25.0000	27 88
$ 18 Nitrobenzene-d5	82	7.683	7.683	(0.875)	617974	25.0000	26.45
19 Nitrobenzene	77	7.710	7.710	(0.878)	655434	25.0000	25.97
20 Isophorone	82	8.116	8.116	(0.924)	1015140	25.0000	26.27
21 2-Nitrophenol	139	8.233	8.233	(0.937)	334742	25.0000	26 57
22 2,4-Dimethylphenol	107	8.425	8.425	(0.959)	546681	25.0000	25.84
23 Bis(2-Chloroethoxy)methane	93	8.559	8.559	(0.974)	711629	25.0000	26 12
24 Benzoic acid	105	8.730	8.730	(0.994)	991034	50.0000	60.86
25 2,4-Dichlorophenol	162	8.634	8.634	(0.983)	520826	25.0000	26.70
26 1,2,4-Trichlorobenzene	180	8.740	8.740	(0.995)	613921	25.0000	25.29
* 27 Naphthalene-d8	136	8.783	8.783	(1.000)	1237715	20.0000	

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
28 Naphthalene	128	8.815	8.815	(1.004)	1665483	25.0000	26.20
29 4-Chloroaniline	127	9.002	9.002	(1.025)	725911	25.0000	26.58
30 Hexachlorobutadiene	225	9.168	9.168	(1.044)	334960	25.0000	24.48
31 4-Chloro-3-methylphenol	107	9.862	9.862	(1.123)	472238	25.0000	27.78
32 2-Methylnaphthalene	141	9.937	9.937	(1.131)	1032286	25.0000	26.56
33 Hexachlorocyclopentadiene	237	10.327	10.327	(0.890)	330086	25.0000	25.09
34 2,4,6-Trichlorophenol	196	10.471	10.471	(0.902)	404003	25.0000	27.25
35 2,4,5-Trichlorophenol	196	10.524	10.524	(0.907)	453952	25.0000	27.68
$ 36 2-Fluorobiphenyl	172	10.604	10.604	(0.914)	1240934	25.0000	25.80
37 2-Chloronaphthalene	162	10.695	10.695	(0.921)	1142100	25.0000	26.41
38 2-Nitroaniline	65	10.962	10.962	(0.944)	364206	25.0000	29.80
39 Dimethylphthalate	163	11.374	11.374	(0.980)	1222910	25.0000	26.71
40 Acenaphthylene	152	11.352	11.352	(0.978)	1718542	25.0000	27.08
41 2,6-Dinitrotoluene	165	11.443	11.443	(0.986)	308965	25.0000	27.58
* 42 Acenaphthene-d10	164	11.609	11.609	(1.000)	717006	20.0000	
43 3-Nitroaniline	138	11.635	11.635	(1.002)	328503	25.0000	31.57
44 Acenaphthene	153	11.662	11.662	(1.005)	1071362	25.0000	26.45
45 2,4-Dinitrophenol	184	11.801	11.801	(1.017)	425851	50.0000	75.25
46 Dibenzofuran	168	11.924	11.924	(1.027)	1701407	25.0000	27.56
47 4-Nitrophenol	109	11.998	11.998	(1.034)	161942	25.0000	30 95
48 2,4-Dinitrotoluene	165	12.052	12.052	(1.038)	392825	25.0000	28 55
50 Diethylphthalate	149	12.522	12.522	(1.079)	1190928	25.0000	28.42
49 Fluorene	166	12.469	12.469	(1.074)	1222281	25.0000	26.79
51 4-Chlorophenyl-phenylether	204	12.533	12.533	(1.080)	626828	25.0000	25.91
52 4-Nitroaniline	138	12.613	12.613	(1.086)	312435	25.0000	31.11
53 4,6-Dinitro-2-methylphenol	198	12.688	12.688	(0.911)	458436	50.0000	53.56
54 N-Nitrosodiphenylamine	169	12.741	12.741	(0.914)	926556	25.0000	25.44
$ 55 2,4,6-Tribromophenol	330	12.885	12.885	(1.110)	189360	25.0000	27.61
56 4-Bromophenyl-phenylether	248	13.291	13.291	(0.954)	384286	25.0000	24.41
57 Hexachlorobenzene	284	13.473	13.473	(0.967)	418029	25.0000	24.25
58 Pentachlorophenol	266	13.788	13.788	(0.990)	282179	25.0000	26.70
* 59 Phenanthrene-d10	188	13.932	13.932	(1.000)	1226170	20.0000	
60 Phenanthrene	178	13.969	13.969	(1.003)	1818404	25.0000	26.49
61 Anthracene	178	14.039	14.039	(1.008)	1841508	25.0000	26.38
62 Carbazole	167	14.349	14.349	(1.030)	1661058	25.0000	28.31
63 Di-n-butylphthalate	149	15.144	15.144	(1.087)	2049364	25.0000	27.72
64 Fluoranthene	202	15.865	15.865	(1.139)	1899221	25.0000	27 70
65 Pyrene	202	16.202	16.202	(0.892)	2000449	25.0000	26.03
$ 66 Terphenyl-d14	244	16.586	16.586	(0.913)	1194625	25.0000	25.27
67 Butylbenzylphthalate	149	17.510	17.510	(0.964)	905038	25.0000	27.15
68 Benzo(a)anthracene	228	18.146	18.146	(0.999)	1765783	25.0000	26.12
* 69 Chrysene-d12	240	18.167	18.167	(1.000)	1320527	20.0000	
70 3,3'-Dichlorobenzidine	252	18.210	18.210	(1.002)	722964	25.0000	26 71
71 Chrysene	228	18.205	18.205	(1.002)	1729945	25.0000	26.38
72 bis(2-Ethylhexyl)phthalate	149	18.541	18.541	(0.953)	1200668	25.0000	25.93
* 134 Di-n-octylphthalate-d4	153	19.465	19.465	(1.000)	1604720	20.0000	
73 Di-n-octylphthalate	149	19.476	19.476	(1.001)	2092484	25.0000	25.94

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
74 Benzo(b)fluoranthene	252	19.775	19.775	(0.975)	1754566	25.0000	25.38
75 Benzo(k)fluoranthene	252	19.802	19.802	(0.976)	2020626	25.0000	28.87
187 Total Benzofluoranthenes	252	19.802	19.802	(0.976)	3545754	50.0000	53.84
76 Benzo(a)pyrene	252	20.202	20.202	(0.996)	1710489	25.0000	26.30
* 77 Perylene-d12	264	20.282	20.282	(1.000)	1184370	20.0000	
78 Indeno(1,2,3-cd)pyrene	276	21.623	21.623	(1.066)	1942818	25.0000	24.40
79 Dibenzo(a,h)anthracene	278	21.660	21.660	(1.068)	1616387	25.0000	24.79
80 Benzo(g,h,i)perylene	276	21.906	21.906	(1.080)	1723343	25.0000	24.02
90 N-Nitrosodimethylamine	74	1.813	1.813	(0.270)	364425	25.0000	25.46
103 Pyridine	79	1.797	1.797	(0.268)	638079	25.0000	25.80
91 Aniline	93	6.273	6.273	(0.934)	778626	25.0000	22.65
105 1-methylnaphthalene	141	10.102	10.102	(1.150)	964343	25.0000	25.76
111 Azobenzene (1,2-DP-Hydrazine)	77	12.773	12.773	(1.100)	1365464	25.0000	29 55
144 alpha-Terpineol	59	8.895	8 895	(1.013)	457526	25.0000	26 26
99 Perylene	252	20.315	20.315	(1.002)	1633833	25.0000	26 15

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt6.i
Lab File ID: 02071101.D
Lab Smp Id: CC0207
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem2/nt6.i/20110207.b/SW846012811.m
Misc Info: 11-

Calibration Date: 07-FEB-2011
Calibration Time: 11:57
Client Smp ID: CC0207
Level:
Sample Type:

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	458851	229426	917702	363971	-20.68
27 Naphthalene-d8	1522936	761468	3045872	1237715	-18.73
42 Acenaphthene-d10	864539	432270	1729078	717006	-17.06
59 Phenanthrene-d10	1378528	689264	2757056	1226170	-11.05
69 Chrysene-d12	1421586	710793	2843172	1320527	-7.11
134 Di-n-octylphthala	1679951	839976	3359902	1604720	-4.48
77 Perylene-d12	1361193	680596	2722386	1184370	-12.99

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	6.72	6.22	7.22	6.72	0.00
27 Naphthalene-d8	8.78	8.28	9.28	8.78	0.00
42 Acenaphthene-d10	11.61	11.11	12.11	11.61	0.00
59 Phenanthrene-d10	13.93	13.43	14.43	13.93	0.00
69 Chrysene-d12	18.17	17.67	18.67	18.17	0.00
134 Di-n-octylphthala	19.47	18.97	19.97	19.47	0.00
77 Perylene-d12	20.28	19.78	20.78	20.28	0.00

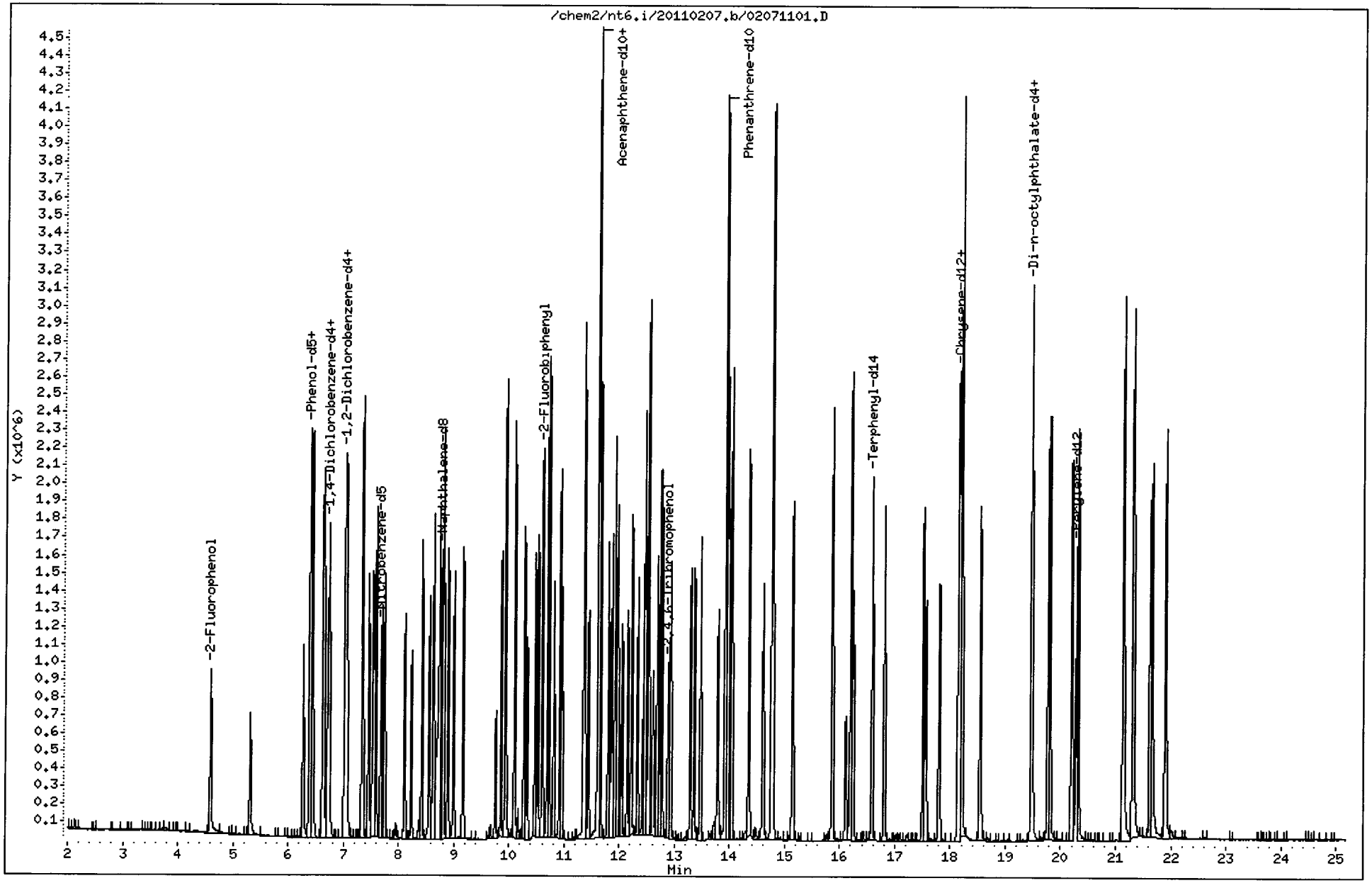
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem2/nt6.i/20110207.b/02071101.D
Date : 07-FEB-2011 12:38
Client ID: CC0207
Sample Info: CC0207

Column phase: ZB-5msi

Instrument: nt6.i

Operator: JZ
Column diameter: 0.32



SH20:001176

CO-ELUTION SUMMARY FOR FILE - 02071101.D

Lab ID: CC0207, Method: SW846012811.m, Instrument: nt6.i, Date: 07-FEB-2011

RT	CO-ELUTION COMPOUNDS
	NO CO-ELUTIONS

Data File: /chem2/nt6.i/20110207.b/tune.b/02071101.D

Date : 07-FEB-2011 12:38

Client ID: DFTPP0207

Instrument: nt6.i

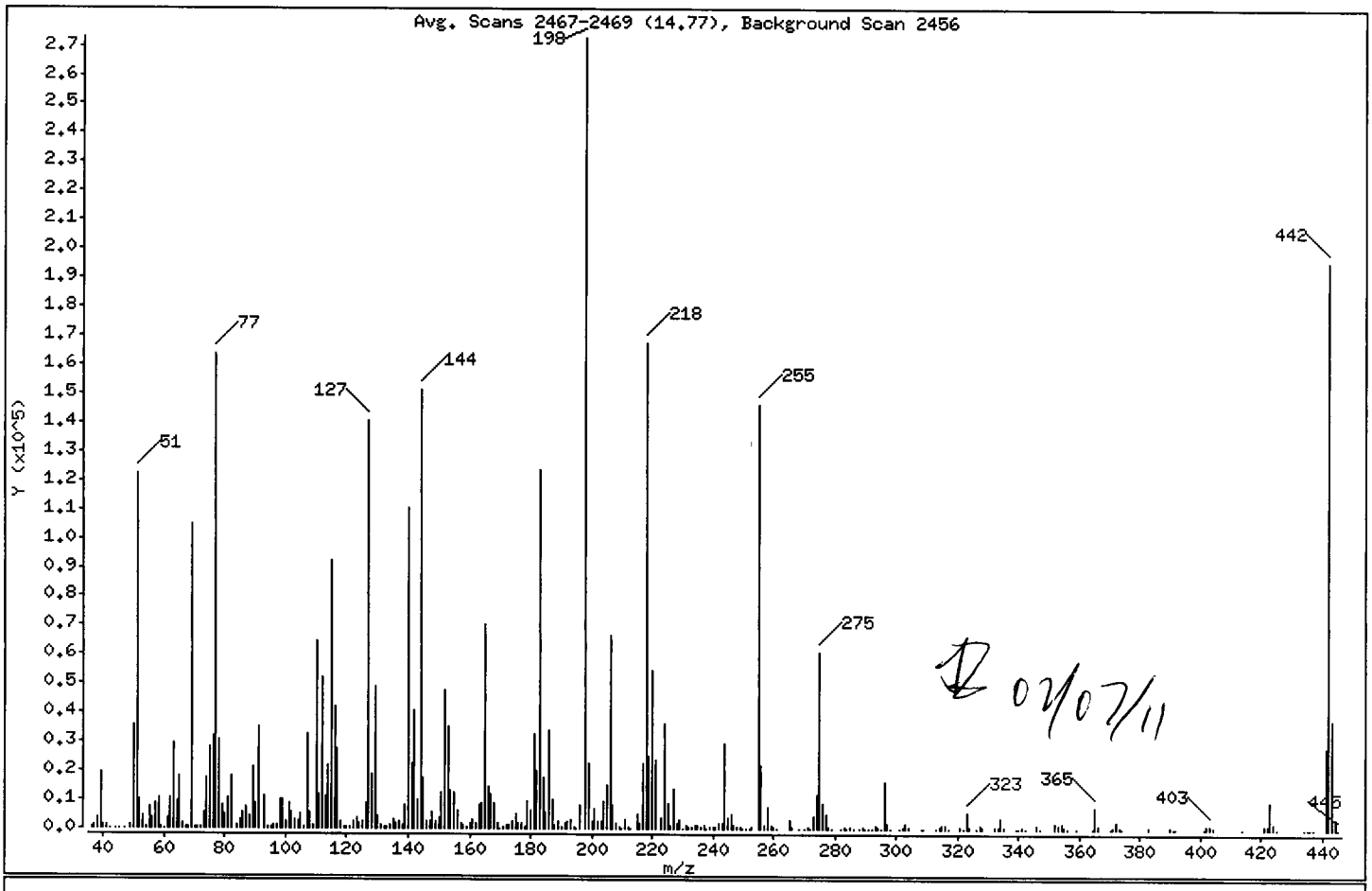
Sample Info: DFTPP0207

Operator: JZ

Column phase: ZB-5msi

Column diameter: 0.25

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	10.00 - 80.00% of mass 198	44.80
68	Less than 2.00% of mass 69	0.23 (0.59)
69	Mass 69 relative abundance	38.44
70	Less than 2.00% of mass 69	0.21 (0.55)
127	10.00 - 80.00% of mass 198	51.41
197	Less than 2.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	8.34
275	10.00 - 60.00% of mass 198	22.32
365	Greater than 1.00% of mass 198	2.84
441	0.01 - 24.00% of mass 442	10.38 (14.49)
442	50.00 - 200.00% of mass 198	71.65
443	15.00 - 24.00% of mass 442	13.73 (19.16)

Data File: /chem2/nt6.i/20110207.b/tune.b/02071101.D

Date : 07-FEB-2011 12:38

Client ID: DFTPP0207

Instrument: nt6.i

Sample Info: DFTPP0207

Operator: JZ

Column phase: ZB-5msi

Column diameter: 0.25

Data File: 02071101.D

Spectrum: Avg. Scans 2467-2469 (14.77), Background Scan 2456

Location of Maximum: 198.00

Number of points: 319

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	492	121.00	472	202.00	2213	291.00	123
37.00	1366	122.00	2470	203.00	2560	292.00	50
38.00	3895	123.00	3708	204.00	9152	293.00	1204
39.00	19320	124.00	1867	205.00	14812	294.00	406
40.00	1283	125.00	2745	206.00	66624	295.00	202
41.00	1445	126.00	8968	207.00	7911	296.00	16294
42.00	301	127.00	140288	208.00	1958	297.00	2094
44.00	261	128.00	18640	209.00	536	298.00	157
45.00	272	129.00	49000	210.00	312	301.00	223
47.00	276	130.00	4078	211.00	2904	302.00	586
49.00	1315	131.00	1127	212.00	330	303.00	1998
50.00	35496	132.00	528	213.00	246	304.00	675
51.00	122248	133.00	330	215.00	4954	308.00	151
52.00	10079	134.00	1367	216.00	2036	309.00	199
53.00	4678	135.00	3205	217.00	22632	310.00	313
54.00	391	136.00	1698	218.00	167360	313.00	167
55.00	7555	137.00	2662	219.00	25376	314.00	892
56.00	3980	138.00	1081	220.00	54880	315.00	1534
57.00	8518	139.00	7934	221.00	23992	316.00	1221
58.00	10629	140.00	110472	223.00	3773	317.00	287
59.00	402	141.00	22296	224.00	36152	321.00	637
60.00	311	142.00	40592	225.00	8963	322.00	66
61.00	3452	143.00	10060	226.00	1058	323.00	5821
62.00	10401	144.00	150976	227.00	13646	324.00	891
63.00	29584	145.00	17688	228.00	1864	326.00	67
64.00	9126	146.00	2388	229.00	2966	327.00	959
65.00	18504	147.00	2692	230.00	307	328.00	366
66.00	2090	148.00	5731	231.00	1454	329.00	57
67.00	598	149.00	2520	232.00	341	330.00	54
68.00	624	150.00	3927	233.00	346	332.00	381
69.00	104888	151.00	12749	234.00	944	333.00	618
70.00	576	152.00	47776	235.00	1113	334.00	3767
71.00	331	153.00	34848	236.00	828	335.00	821
72.00	723	154.00	12958	237.00	1318	339.00	79
73.00	5503	155.00	12368	238.00	137	340.00	73

Data File: /chem2/nt6.i/20110207.b/tune.b/02071101.D

Date : 07-FEB-2011 12:38

Client ID: DFTPP0207

Instrument: nt6.i

Sample Info: DFTPP0207

Operator: JZ

Column phase: ZB-5msi

Column diameter: 0.25

Data File: 02071101.D
Spectrum: Avg. Scans 2467-2469 (14.77), Background Scan 2456
Location of Maximum: 198.00
Number of points: 319

m/z	Y	m/z	Y	m/z	Y	m/z	Y
74.00	17736	156.00	6009	239.00	449	341.00	735
75.00	28336	157.00	1837	240.00	440	342.00	152
76.00	31856	158.00	967	241.00	664	346.00	1215
77.00	163840	159.00	705	242.00	1904	347.00	259
78.00	30456	160.00	1657	243.00	1818	352.00	1629
79.00	8149	161.00	3042	244.00	29240	353.00	1348
80.00	4861	162.00	2137	245.00	4007	354.00	1610
81.00	10369	163.00	8106	246.00	4974	355.00	401
82.00	18128	164.00	8582	247.00	1056	356.00	131
84.00	1193	165.00	70296	248.00	316	359.00	135
85.00	2964	166.00	14194	249.00	889	364.00	74
86.00	5815	167.00	12069	250.00	278	365.00	7760
87.00	7462	168.00	8997	251.00	282	366.00	1150
88.00	4455	169.00	1711	252.00	280	370.00	201
89.00	21344	170.00	302	253.00	593	371.00	374
90.00	8547	171.00	546	255.00	146048	372.00	2736
91.00	35208	172.00	1020	256.00	21696	373.00	722
93.00	11356	173.00	1511	257.00	1532	374.00	65
94.00	666	174.00	2306	258.00	7260	383.00	877
95.00	463	175.00	4708	259.00	1336	384.00	182
96.00	1017	176.00	1879	260.00	334	390.00	498
97.00	1034	177.00	2046	261.00	305	391.00	232
98.00	9855	178.00	695	263.00	201	392.00	195
99.00	10191	179.00	9167	264.00	191	400.00	54
100.00	2654	180.00	6564	265.00	3139	401.00	181
101.00	8864	181.00	32416	266.00	705	402.00	1143
102.00	5772	182.00	19976	268.00	75	403.00	1463
103.00	3090	183.00	123664	270.00	116	404.00	542
104.00	2734	184.00	17656	271.00	336	414.00	56
105.00	4834	185.00	5887	272.00	125	415.00	65
106.00	877	186.00	34080	273.00	4135	421.00	1187
107.00	32464	187.00	9776	274.00	11639	422.00	1082
108.00	5653	188.00	1349	275.00	60920	423.00	9659
109.00	1118	189.00	2588	276.00	8507	424.00	1811
110.00	64592	190.00	516	277.00	4738	425.00	303

Data File: /chem2/nt6.i/20110207.b/tune.b/02071101.D

Date : 07-FEB-2011 12:38

Client ID: DFTPP0207

Instrument: nt6.i

Sample Info: DFTPP0207

Operator: JZ

Column phase: ZB-5msi

Column diameter: 0.25

Data File: 02071101.D

Spectrum: Avg. Scans 2467-2469 (14.77), Background Scan 2456

Location of Maximum: 198.00

Number of points: 319

m/z	Y	m/z	Y	m/z	Y	m/z	Y
111.00	12010	191.00	1570	278.00	827	434.00	76
112.00	51792	192.00	2752	279.00	68	435.00	65
113.00	11321	193.00	3422	282.00	61	436.00	58
114.00	22168	194.00	792	283.00	561	437.00	67
115.00	92296	195.00	275	284.00	307	441.00	28328
116.00	42312	196.00	8125	285.00	810	442.00	195520
117.00	27360	198.00	272896	286.00	262	443.00	37456
118.00	2216	199.00	22760	288.00	67	444.00	3282
119.00	386	200.00	2256	289.00	361	445.00	88
120.00	481	201.00	7083	290.00	205		

Data File: /chem2/nt6.i/20110207.b/tune.b/02071101.D

Date : 07-FEB-2011 12:38

Client ID: DFTPP0207

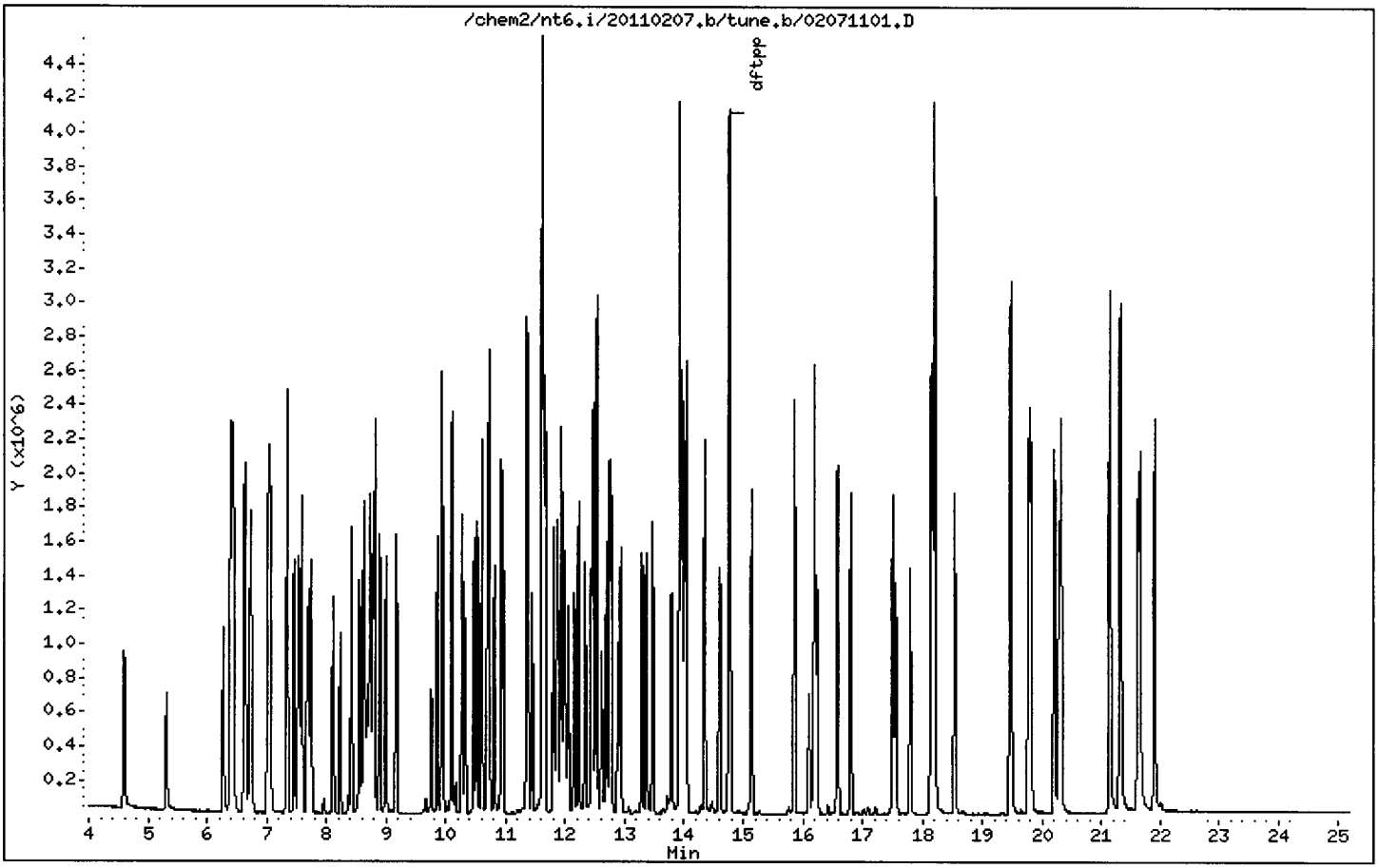
Instrument: nt6.i

Sample Info: DFTPP0207

Operator: JZ

Column phase: ZB-5msi

Column diameter: 0.25



Analytical Resources Inc.
ABN by sw846 8270C
DDT Breakdown Report

Data file: /chem2/nt6.i/20110207.b/ddt.b/02071101.D
Method: /chem2/nt6.i/20110207.b/ddt.b/sw846ddt.m
Analysis Date: 07-FEB-2011 12:38

ARI ID: CC0207
Misc: 11-
Instrument: nt6.i

COMPOUND	RT	AREA
Pentachlorophenol	13.788	281694
Benzidine	16.170	149536
4,4'-DDE	----	----
4,4'-DDD	17.099	15789
4,4'-DDT	17.564	534846

$$\text{DDT Percent Breakdown} = \frac{(\text{DDE Area} + \text{DDD Area}) * 100}{(\text{DDE Area} + \text{DDD Area} + \text{DDT Area})}$$

$$\text{DDT Percent Breakdown} = \frac{(0 + 15789) * 100}{(0 + 15789 + 534846)}$$

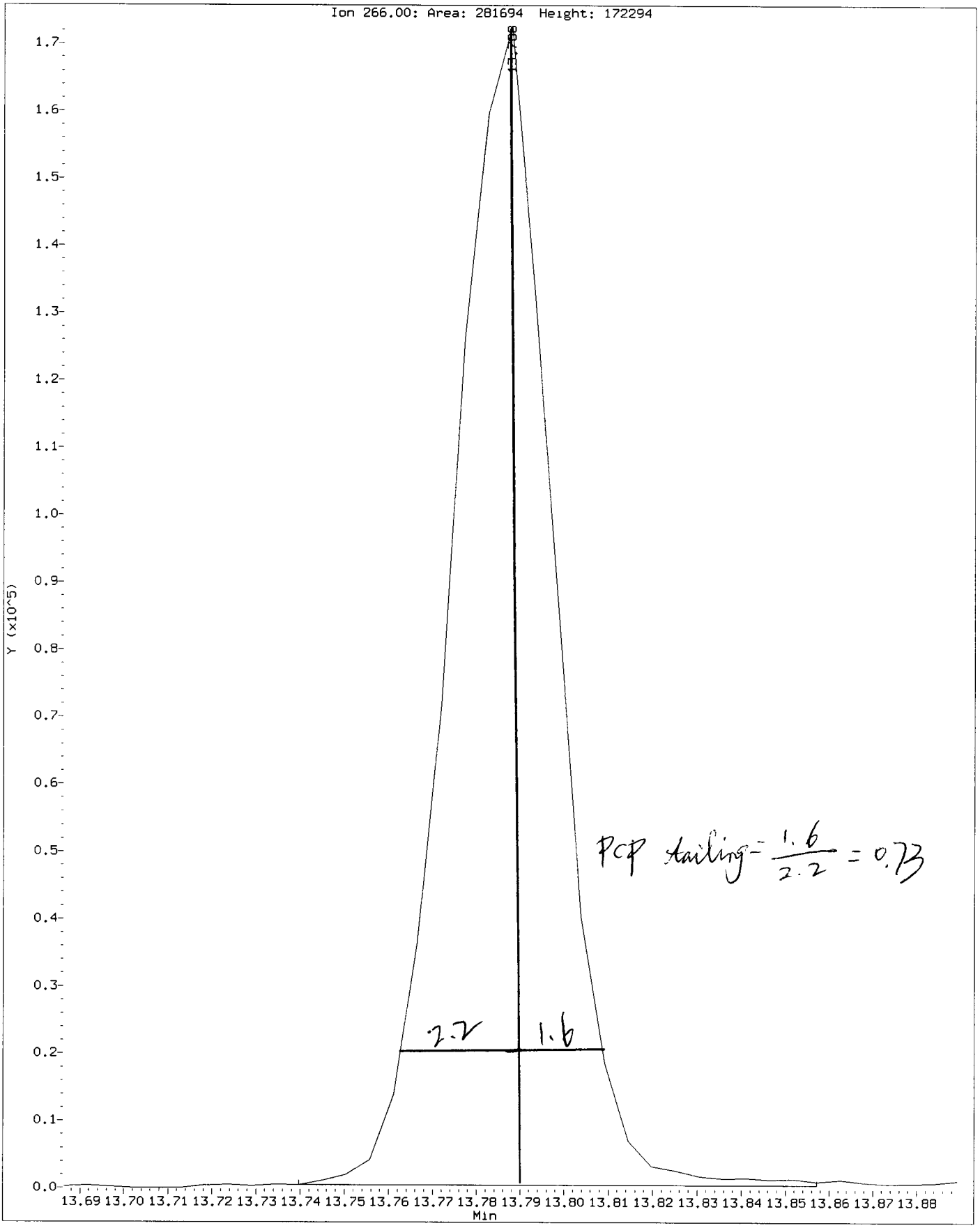
DDT Percent Breakdown = 2.9 %

VQ B 02/07/11

SH20:00183

Data File: /chem2/nt6.i/20110207.b/ddt.b/02071101.D
Injection Date: 07-FEB-2011 12:38
Instrument: nt6.i
Client Sample ID: CC0207

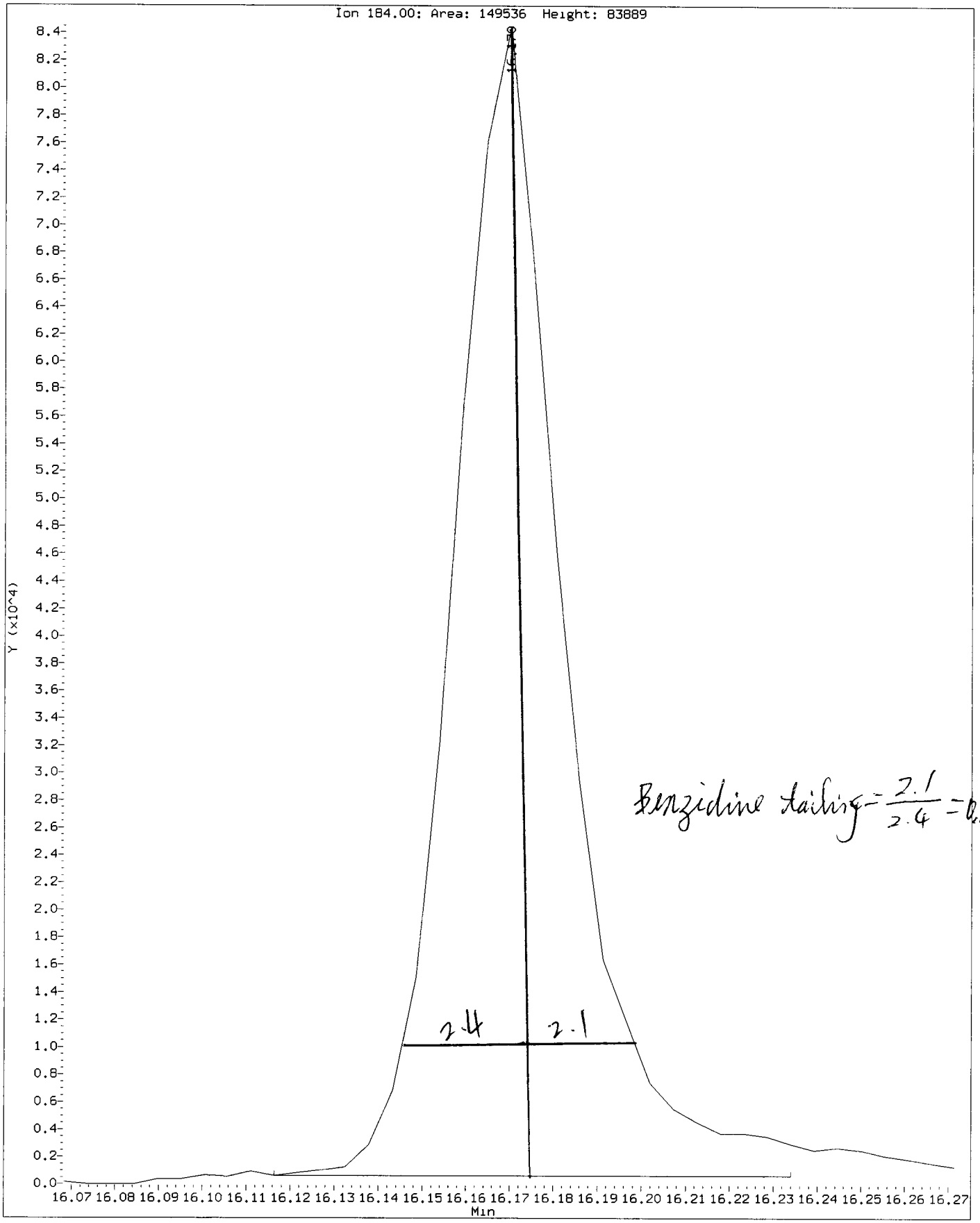
Compound: Pentachlorophenol
CAS Number: 87-86-5



SH20 : 00184

Data File: /chem2/nt6.i/20110207.b/ddt.b/02071101.D
Injection Date: 07-FEB-2011 12:38
Instrument: nt6.i
Client Sample ID: CC0207

Compound: Benzidine
CAS Number:



SH20 : 00185

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem2/nt6.i/20110207.b/02071105.D
Lab Smp Id: SH20MBS1 Client Smp ID: SH20MBS1
Inj Date : 07-FEB-2011 14:49
Operator : JZ Inst ID: nt6.i
Smp Info : SH20MBS1,
Misc Info : 11-2133
Comment : 1ul Injection
Method : /chem2/nt6.i/20110207.b/SW846012811.m
Meth Date : 07-Feb-2011 17:56 jianqing Quant Type: ISTD
Cal Date : 28-JAN-2011 10:23 Cal File: 01281102.D
Als bottle: 5 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pna.sub
Target Version: 3.50

02/07/11

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

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	500.00000	Volume of final extract (uL)
Ws	25.00000	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 (ug/mL)	FINAL (ug/kg)
* 27 Naphthalene-d8	136	8.777	8.783	(1.000)	1513746	20.0000	
28 Naphthalene	128	Compound Not Detected.					
32 2-Methylnaphthalene	141	Compound Not Detected.					
105 1-methylnaphthalene	141	Compound Not Detected.					
$ 36 2-Fluorobiphenyl	172	10.598	10.604	(0.913)	734776	11.9605	239.2
40 Acenaphthylene	152	Compound Not Detected.					
* 42 Acenaphthene-d10	164	11.608	11.609	(1.000)	915745	20.0000	
44 Acenaphthene	153	Compound Not Detected.					
46 Dibenzofuran	168	Compound Not Detected.					
49 Fluorene	166	Compound Not Detected.					
* 59 Phenanthrene-d10	188	13.926	13.932	(1.000)	1525595	20.0000	
60 Phenanthrene	178	Compound Not Detected.					
61 Anthracene	178	Compound Not Detected.					
64 Fluoranthene	202	Compound Not Detected.					
65 Pyrene	202	Compound Not Detected.					

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/kg)
$ 66 Terphenyl-d14	244	16.580	16.586	(0.913)	1046231	18.6336	372.7
68 Benzo(a)anthracene	228	Compound Not Detected.					
* 69 Chrysene-d12	240	18.161	18.167	(1.000)	1568644	20.0000	
71 Chrysene	228	Compound Not Detected.					
74 Benzo(b)fluoranthene	252	Compound Not Detected.					
75 Benzo(k)fluoranthene	252	Compound Not Detected.					
76 Benzo(a)pyrene	252	Compound Not Detected.					
* 77 Perylene-d12	264	20.276	20.282	(1.000)	1426065	20.0000	
78 Indeno(1,2,3-cd)pyrene	276	Compound Not Detected.					
79 Dibenzo(a,h)anthracene	278	Compound Not Detected.					
80 Benzo(g,h,i)perylene	276	Compound Not Detected.					
62 Carbazole	167	Compound Not Detected.					
99 Perylene	252	Compound Not Detected.					
187 Total Benzofluoranthenes	252	Compound Not Detected.					

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt6.i
Lab File ID: 02071105.D
Lab Smp Id: SH20MBS1
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem2/nt6.i/20110207.b/SW846012811.m
Misc Info: 11-2133

Calibration Date: 07-FEB-2011
Calibration Time: 12:38
Client Smp ID: SH20MBS1
Level: LOW
Sample Type: Solid

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
27 Naphthalene-d8	1522936	761468	3045872	1513746	-0.60
42 Acenaphthene-d10	864539	432270	1729078	915745	5.92
59 Phenanthrene-d10	1378528	689264	2757056	1525595	10.67
69 Chrysene-d12	1421586	710793	2843172	1568644	10.34
77 Perylene-d12	1361193	680596	2722386	1426065	4.77

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
27 Naphthalene-d8	8.78	8.28	9.28	8.78	-0.07
42 Acenaphthene-d10	11.61	11.11	12.11	11.61	-0.01
59 Phenanthrene-d10	13.93	13.43	14.43	13.93	-0.04
69 Chrysene-d12	18.17	17.67	18.67	18.16	-0.03
77 Perylene-d12	20.28	19.78	20.78	20.28	-0.03

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Analytical Resources, Inc.

RECOVERY REPORT

Client Name: WINDWARD
Sample Matrix: SOLID
Lab Smp Id: SH20MBS1
Level: LOW
Data Type: MS DATA
SpikeList File: pnalcss.spk
Sublist File: pna.sub
Method File: /chem2/nt6.i/20110207.b/SW846012811.m
Misc Info: 11-2133

Client SDG: SH20
Fraction: SV
Client Smp ID: SH20MBS1
Operator: JZ
SampleType: BLANK
Quant Type: ISTD

SPIKE COMPOUND	CONC ADDED ug/kg	CONC RECOVERED ug/kg	% RECOVERED	LIMITS
28 Naphthalene	500.0	0.000	*	37-100
32 2-Methylnaphthale	500.0	0.000	*	43-101
105 1-methylnaphthale	500.0	0.000	*	39-100
40 Acenaphthylene	500.0	0.000	*	44-100
44 Acenaphthene	500.0	0.000	*	41-100
46 Dibenzofuran	500.0	0.000	*	44-100
49 Fluorene	500.0	0.000	*	49-100
60 Phenanthrene	500.0	0.000	*	48-100
61 Anthracene	500.0	0.000	*	50-100
64 Fluoranthene	500.0	0.000	*	54-100
65 Pyrene	500.0	0.000	*	41-105
68 Benzo(a)anthracene	500.0	0.000	*	49-100
71 Chrysene	500.0	0.000	*	50-100
74 Benzo(b)fluoranth	500.0	0.000	*	53-100
75 Benzo(k)fluoranth	500.0	0.000	*	54-100
76 Benzo(a)pyrene	500.0	0.000	*	50-100
78 Indeno(1,2,3-cd)p	500.0	0.000	*	33-101
79 Dibenzo(a,h)anthr	500.0	0.000	*	37-104
80 Benzo(g,h,i)peryl	500.0	0.000	*	33-107
62 Carbazole	500.0	0.000	*	30-160
99 Perylene	500.0	0.000	*	30-160
187 Total Benzofluora	1000	0.000	*	30-160

SURROGATE COMPOUND	CONC ADDED ug/kg	CONC RECOVERED ug/kg	% RECOVERED	LIMITS
$ 36 2-Fluorobiphenyl	500.0	239.2	47.84	34-100
$ 66 Terphenyl-d14	500.0	372.7	74.53	35-112

Data File: /chem2/nt6.i/20110207.b/02071105.D

Date : 07-FEB-2011 14:49

Client ID: SH20MBS1

Sample Info: SH20MBS1,

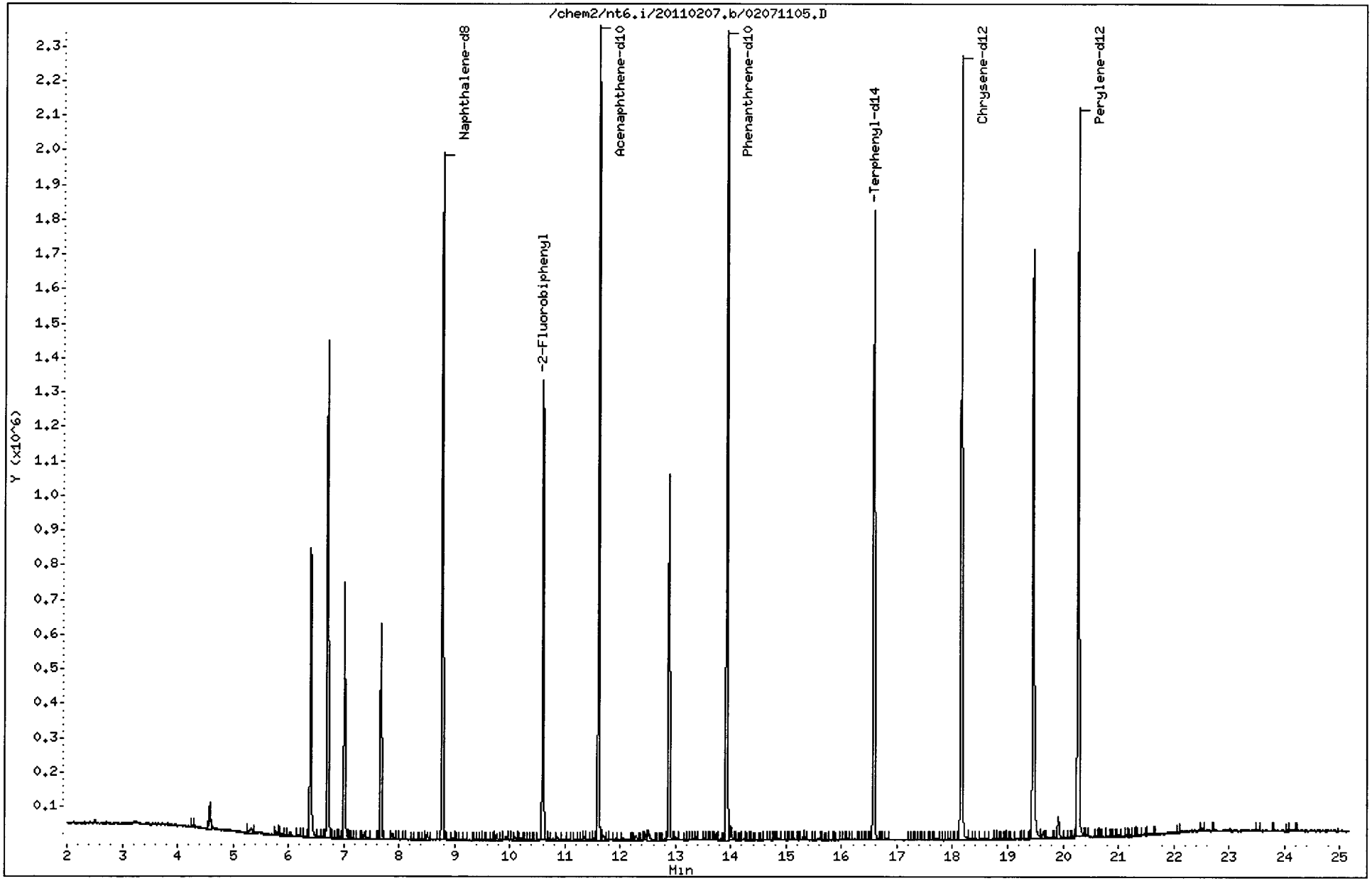
Volume Injected (uL): 1.0

Column phase: ZB-5msi

Instrument: nt6.i

Operator: JZ

Column diameter: 0.32



SH20 : 02HS

CO-ELUTION SUMMARY FOR FILE - 02071105.D

Lab ID: SH20MBS1, Method: SW846012811.m, Instrument: nt6.i, Date: 07-FEB-2011

RT	CO-ELUTION COMPOUNDS
	NO CO-ELUTIONS

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem2/nt6.i/20110207.b/02071106.D
Lab Smp Id: SH20LCSS1 Client Smp ID: SH20LCSS1
Inj Date : 07-FEB-2011 15:21
Operator : JZ Inst ID: nt6.i
Smp Info : SH20LCSS1,
Misc Info : 11-2133
Comment : 1ul Injection
Method : /chem2/nt6.i/20110207.b/SW846012811.m
Meth Date : 07-Feb-2011 17:46 jianqing Quant Type: ISTD
Cal Date : 28-JAN-2011 10:23 Cal File: 01281102.D
Als bottle: 6 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pna.sub
Target Version: 3.50

02/07/11

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

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	500.00000	Volume of final extract (uL)
Ws	25.00000	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 (ug/mL)	FINAL (ug/kg)
* 27 Naphthalene-d8	136	8.780	8.783	(1.000)	1700361	20.0000	
28 Naphthalene	128	8.806	8.815	(1.003)	1081023	12.3799	247.6
32 2-Methylnaphthalene	141	9.933	9.937	(1.131)	600496	11.2467	224.9
105 1-methylnaphthalene	141	10.094	10.102	(1.150)	622057	12.0973	241.9
$ 36 2-Fluorobiphenyl	172	10.601	10.604	(0.913)	840789	12.4020	248.0
40 Acenaphthylene	152	11.349	11.352	(0.978)	1247842	13.9528	279.1
* 42 Acenaphthene-d10	164	11.605	11.609	(1.000)	1010568	20.0000	
44 Acenaphthene	153	11.653	11.662	(1.004)	752273	13.1782	263.6
46 Dibenzofuran	168	11.915	11.924	(1.027)	1211709	13.9245	278.5
49 Fluorene	166	12.460	12.469	(1.074)	955177	14.8560	297.1
* 59 Phenanthrene-d10	188	13.928	13.932	(1.000)	1695547	20.0000	
60 Phenanthrene	178	13.960	13.969	(1.002)	1584255	16.6929	333.9
61 Anthracene	178	14.030	14.039	(1.007)	1629381	16.8808	337.6
64 Fluoranthene	202	15.862	15.865	(1.139)	1757080	18.5336	370.7
65 Pyrene	202	16.198	16.202	(0.892)	1793195	17.6770	353.5

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/kg)
$ 66 Terphenyl-d14	244	16.578	16.586	(0.912)	1037943	16.6371	332.7
68 Benzo(a)anthracene	228	18.143	18.146	(0.999)	1582977	17.7378	354.8
* 69 Chrysene-d12	240	18.169	18.167	(1.000)	1742960	20.0000	
71 Chrysene	228	18.207	18.205	(1.002)	1514187	17.4909	349.8
74 Benzo(b)fluoranthene	252	19.772	19.775	(0.975)	1563960	16.9701	339.4
75 Benzo(k)fluoranthene	252	19.804	19.802	(0.977)	1792919	19.2129	384.3
76 Benzo(a)pyrene	252	20.199	20.202	(0.996)	1390564	16.0399	320.8
* 77 Perylene-d12	264	20.279	20.282	(1.000)	1578866	20.0000	
78 Indeno(1,2,3-cd)pyrene	276	21.614	21.623	(1.066)	1655844	15.6011	312.0
79 Dibenzo(a,h)anthracene	278	21.652	21.660	(1.068)	1370661	15.7718	315.4
80 Benzo(g,h,i)perylene	276	21.897	21.906	(1.080)	1444230	15.1028	302.1
62 Carbazole	167	Compound Not Detected.					
99 Perylene	252	Compound Not Detected.					
187 Total Benzofluoranthenes	252	19.804	19.802	(0.977)	3158551	35.9759	719.5

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt6.i
Lab File ID: 02071106.D
Lab Smp Id: SH20LCSS1
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem2/nt6.i/20110207.b/SW846012811.m
Misc Info: 11-2133

Calibration Date: 07-FEB-2011
Calibration Time: 12:38
Client Smp ID: SH20LCSS1
Level: LOW
Sample Type: Solid

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
27 Naphthalene-d8	1522936	761468	3045872	1700361	11.65
42 Acenaphthene-d10	864539	432270	1729078	1010568	16.89
59 Phenanthrene-d10	1378528	689264	2757056	1695547	23.00
69 Chrysene-d12	1421586	710793	2843172	1742960	22.61
77 Perylene-d12	1361193	680596	2722386	1578866	15.99

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
27 Naphthalene-d8	8.78	8.28	9.28	8.78	-0.04
42 Acenaphthene-d10	11.61	11.11	12.11	11.61	-0.03
59 Phenanthrene-d10	13.93	13.43	14.43	13.93	-0.03
69 Chrysene-d12	18.17	17.67	18.67	18.17	0.01
77 Perylene-d12	20.28	19.78	20.78	20.28	-0.02

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Analytical Resources, Inc.

RECOVERY REPORT

Client Name: WINDWARD
Sample Matrix: SOLID
Lab Smp Id: SH20LCSS1
Level: LOW
Data Type: MS DATA
SpikeList File: pnalcss.spk
Sublist File: pna.sub
Method File: /chem2/nt6.i/20110207.b/SW846012811.m
Misc Info: 11-2133

Client SDG: SH20
Fraction: SV
Client Smp ID: SH20LCSS1
Operator: JZ
SampleType: LCS
Quant Type: ISTD

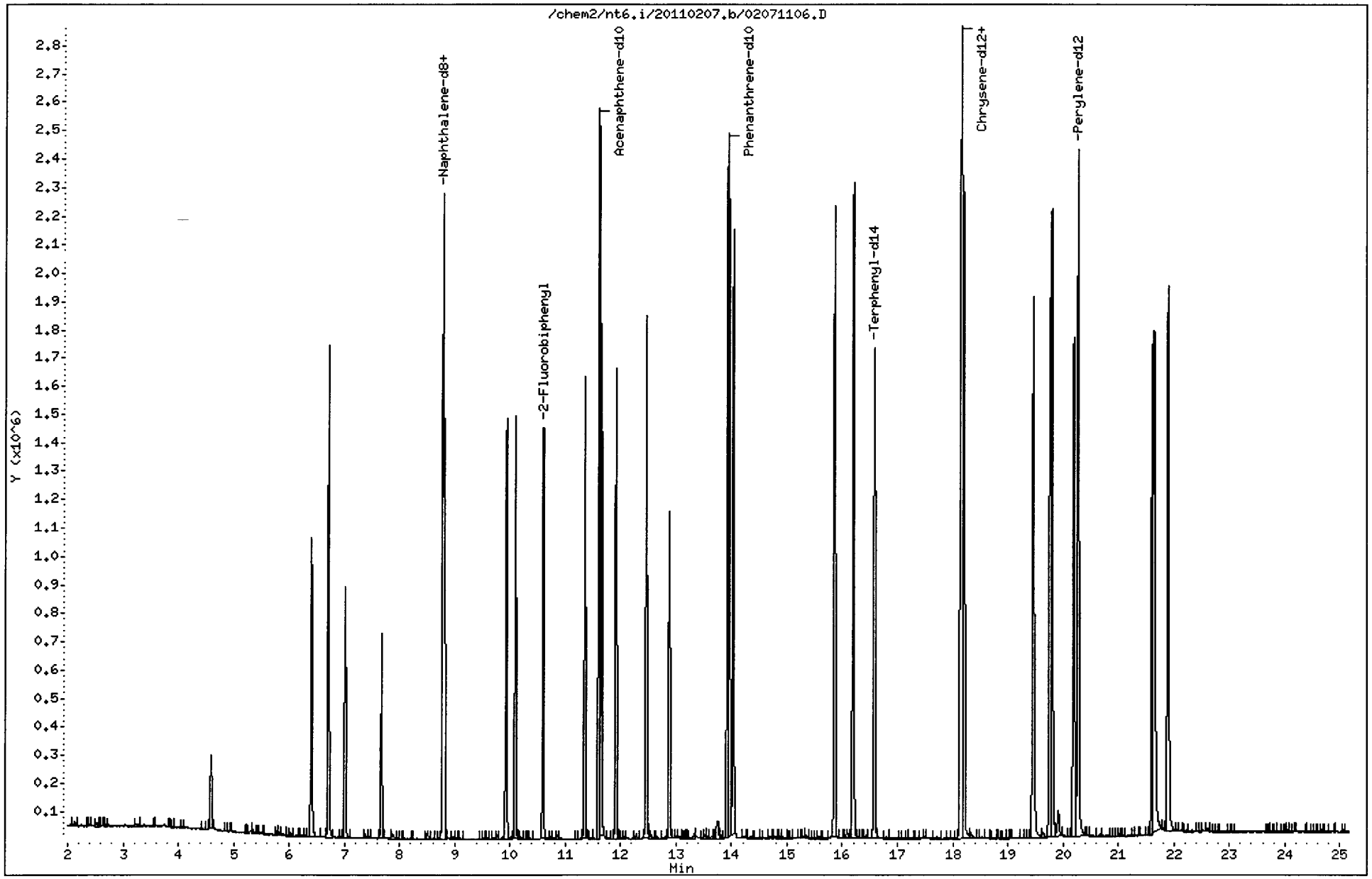
SPIKE COMPOUND	CONC ADDED ug/kg	CONC RECOVERED ug/kg	% RECOVERED	LIMITS
28 Naphthalene	500.0	247.6	49.52	37-100
32 2-Methylnaphthalen	500.0	224.9	44.99	43-101
105 1-methylnaphthalen	500.0	241.9	48.39	39-100
40 Acenaphthylene	500.0	279.1	55.81	44-100
44 Acenaphthene	500.0	263.6	52.71	41-100
46 Dibenzofuran	500.0	278.5	55.70	44-100
49 Fluorene	500.0	297.1	59.42	49-100
60 Phenanthrene	500.0	333.9	66.77	48-100
61 Anthracene	500.0	337.6	67.52	50-100
64 Fluoranthene	500.0	370.7	74.13	54-100
65 Pyrene	500.0	353.5	70.71	41-105
68 Benzo(a)anthracene	500.0	354.8	70.95	49-100
71 Chrysene	500.0	349.8	69.96	50-100
74 Benzo(b)fluoranthe	500.0	339.4	67.88	53-100
75 Benzo(k)fluoranthe	500.0	384.3	76.85	54-100
76 Benzo(a)pyrene	500.0	320.8	64.16	50-100
78 Indeno(1,2,3-cd)py	500.0	312.0	62.40	33-101
79 Dibenzo(a,h)anthra	500.0	315.4	63.09	37-104
80 Benzo(g,h,i)peryle	500.0	302.1	60.41	33-107
62 Carbazole	500.0	0.000	176 *	30-160
99 Perylene	500.0	0.000	176 *	30-160
187 Total Benzofluoran	1000	719.5	71.95	30-160

SURROGATE COMPOUND	CONC ADDED ug/kg	CONC RECOVERED ug/kg	% RECOVERED	LIMITS
$ 36 2-Fluorobiphenyl	500.0	248.0	49.61	34-100
$ 66 Terphenyl-d14	500.0	332.7	66.55	35-112

02/07/11

Data File: /chem2/nt6.i/20110207.b/02071106.D
Date : 07-FEB-2011 15:21
Client ID: SH20LCSS1
Sample Info: SH20LCSS1,
Volume Injected (uL): 1.0
Column phase: ZB-5ms1

Instrument: nt6.i
Operator: JZ
Column diameter: 0.32



SH20:00196

CO-ELUTION SUMMARY FOR FILE - 02071106.D

Lab ID: SH20LCSS1, Method: SW846012811.m, Instrument: nt6.i, Date: 07-FEB-201

RT	CO-ELUTION COMPOUNDS
	NO CO-ELUTIONS

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem2/nt6.i/20110207.b/02071107.D
Lab Smp Id: SH20LCSDS1 Client Smp ID: SH20LCSDS1
Inj Date : 07-FEB-2011 15:54
Operator : JZ Inst ID: nt6.i
Smp Info : SH20LCSDS1,
Misc Info : 11-2133
Comment : 1ul Injection
Method : /chem2/nt6.i/20110207.b/SW846012811.m
Meth Date : 07-Feb-2011 17:46 jianqing Quant Type: ISTD
Cal Date : 28-JAN-2011 10:23 Cal File: 01281102.D
Als bottle: 7 QC Sample: LCSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pna.sub
Target Version: 3.50

JZ 02/07/11

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

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	500.00000	Volume of final extract (uL)
Ws	25.00000	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 (ug/mL)	FINAL (ug/kg)
* 27 Naphthalene-d8	136	8.780	8.783	(1.000)	1665027	20.0000	
28 Naphthalene	128	8.807	8.815	(1.003)	1013963	11.8583	237.2
32 2-Methylnaphthalene	141	9.934	9.937	(1.131)	577283	11.0414	220.8
105 1-methylnaphthalene	141	10.094	10.102	(1.150)	587900	11.6756	233.5
$ 36 2-Fluorobiphenyl	172	10.596	10.604	(0.913)	790912	11.8443	236.9
40 Acenaphthylene	152	11.349	11.352	(0.978)	1216945	13.8150	276.3
* 42 Acenaphthene-d10	164	11.605	11.609	(1.000)	995377	20.0000	
44 Acenaphthene	153	11.653	11.662	(1.004)	734179	13.0575	261.1
46 Dibenzofuran	168	11.915	11.924	(1.027)	1193605	13.9258	278.5
49 Fluorene	166	12.460	12.469	(1.074)	942865	14.8883	297.8
* 59 Phenanthrene-d10	188	13.929	13.932	(1.000)	1655040	20.0000	
60 Phenanthrene	178	13.961	13.969	(1.002)	1579632	17.0515	341.0
61 Anthracene	178	14.035	14.039	(1.008)	1649454	17.5070	350.1
64 Fluoranthene	202	15.862	15.865	(1.139)	1805141	19.5065	390.1
65 Pyrene	202	16.199	16.202	(0.892)	1844987	18.7929	375.9

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/kg)
$ 66 Terphenyl-d14	244	16.578	16.586	(0.913)	1073299	17.7765	355.5
68 Benzo(a)anthracene	228	18.143	18.146	(0.999)	1625831	18.8244	376.5
* 69 Chrysene-d12	240	18.164	18.167	(1.000)	1686812	20.0000	
71 Chrysene	228	18.202	18.205	(1.002)	1563567	18.6626	373.3
74 Benzo(b)fluoranthene	252	19.766	19.775	(0.975)	1632415	18.2675	365.3
75 Benzo(k)fluoranthene	252	19.804	19.802	(0.977)	1820857	20.1232	402 5
76 Benzo(a)pyrene	252	20.194	20.202	(0.996)	1460007	17.3682	347.4
* 77 Perylene-d12	264	20.279	20.282	(1.000)	1530936	20.0000	
78 Indeno(1,2,3-cd)pyrene	276	21.614	21.623	(1.066)	1754280	17.0460	340.9
79 Dibenzo(a,h)anthracene	278	21.652	21.660	(1.068)	1413074	16.7689	335.4
80 Benzo(g,h,i)perylene	276	21.898	21.906	(1.080)	1520898	16.4025	328.1
62 Carbazole	167	Compound Not Detected.					
99 Perylene	252	Compound Not Detected.					
187 Total Benzofluoranthenes	252	19.804	19.802	(0.977)	3260267	38.2970	765.9

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt6.i
Lab File ID: 02071107.D
Lab Smp Id: SH20LCSDS1
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem2/nt6.i/20110207.b/SW846012811.m
Misc Info: 11-2133

Calibration Date: 07-FEB-2011
Calibration Time: 12:38
Client Smp ID: SH20LCSDS1
Level: LOW
Sample Type: Solid

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
27 Naphthalene-d8	1522936	761468	3045872	1665027	9.33
42 Acenaphthene-d10	864539	432270	1729078	995377	15.13
59 Phenanthrene-d10	1378528	689264	2757056	1655040	20.06
69 Chrysene-d12	1421586	710793	2843172	1686812	18.66
77 Perylene-d12	1361193	680596	2722386	1530936	12.47

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
27 Naphthalene-d8	8.78	8.28	9.28	8.78	-0.04
42 Acenaphthene-d10	11.61	11.11	12.11	11.61	-0.03
59 Phenanthrene-d10	13.93	13.43	14.43	13.93	-0.02
69 Chrysene-d12	18.17	17.67	18.67	18.16	-0.02
77 Perylene-d12	20.28	19.78	20.78	20.28	-0.02

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Analytical Resources, Inc.

RECOVERY REPORT

Client Name: WINDWARD
Sample Matrix: SOLID
Lab Smp Id: SH20LCSDS1
Level: LOW
Data Type: MS DATA
SpikeList File: pnalcss.spk
Sublist File: pna.sub
Method File: /chem2/nt6.i/20110207.b/SW846012811.m
Misc Info: 11-2133

Client SDG: SH20
Fraction: SV
Client Smp ID: SH20LCSDS1
Operator: JZ
SampleType: LCSD
Quant Type: ISTD

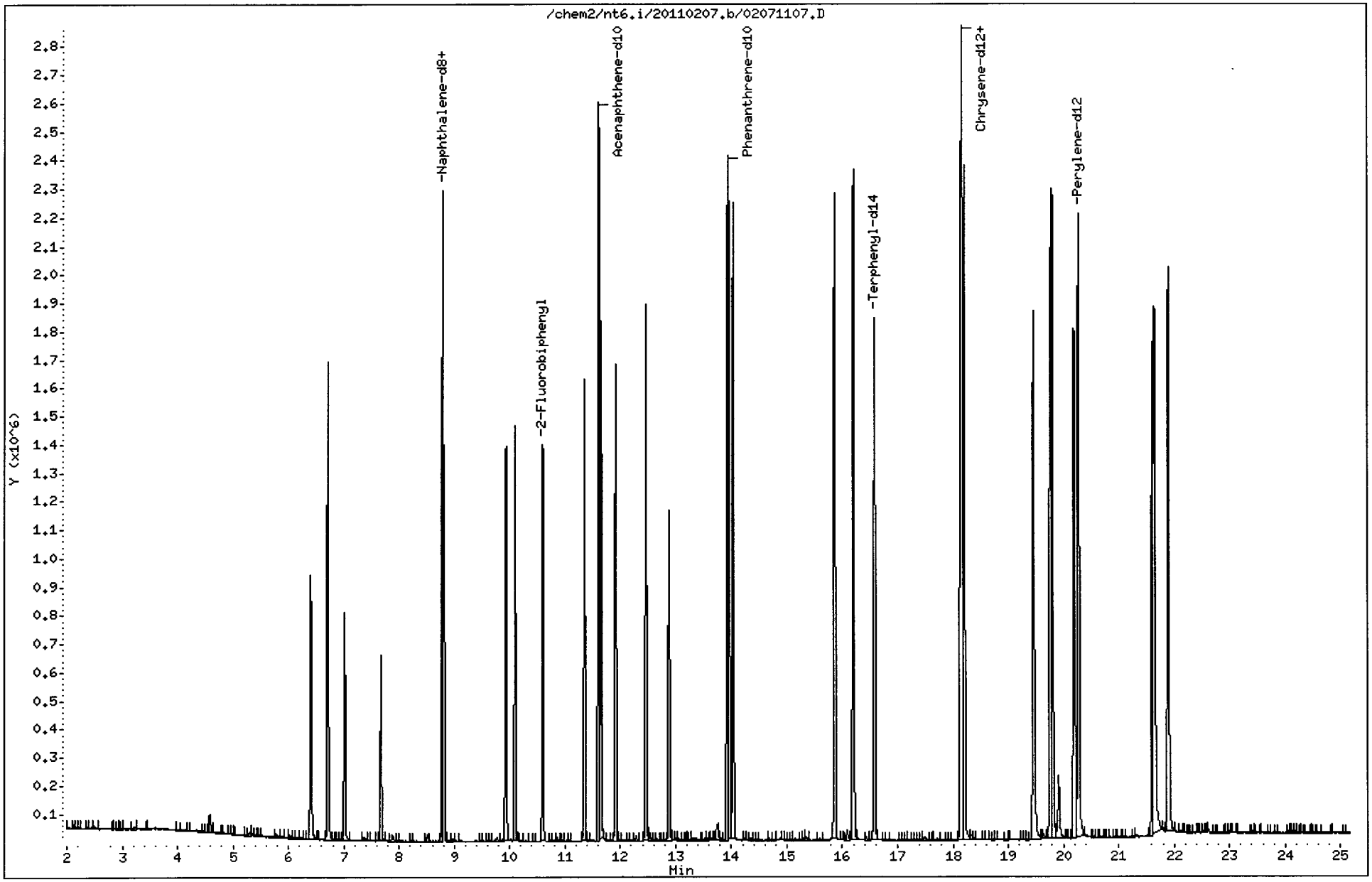
SPIKE COMPOUND	CONC ADDED ug/kg	CONC RECOVERED ug/kg	% RECOVERED	LIMITS
28 Naphthalene	500.0	237.2	47.43	37-100
32 2-Methylnaphthalen	500.0	220.8	44.17	43-101
105 1-methylnaphthalen	500.0	233.5	46.70	39-100
40 Acenaphthylene	500.0	276.3	55.26	44-100
44 Acenaphthene	500.0	261.1	52.23	41-100
46 Dibenzofuran	500.0	278.5	55.70	44-100
49 Fluorene	500.0	297.8	59.55	49-100
60 Phenanthrene	500.0	341.0	68.21	48-100
61 Anthracene	500.0	350.1	70.03	50-100
64 Fluoranthene	500.0	390.1	78.03	54-100
65 Pyrene	500.0	375.9	75.17	41-105
68 Benzo(a)anthracene	500.0	376.5	75.30	49-100
71 Chrysene	500.0	373.3	74.65	50-100
74 Benzo(b)fluoranthe	500.0	365.3	73.07	53-100
75 Benzo(k)fluoranthe	500.0	402.5	80.49	54-100
76 Benzo(a)pyrene	500.0	347.4	69.47	50-100
78 Indeno(1,2,3-cd)py	500.0	340.9	68.18	33-101
79 Dibenzo(a,h)anthra	500.0	335.4	67.08	37-104
80 Benzo(g,h,i)peryle	500.0	328.1	65.61	33-107
62 Carbazole	500.0	0.000	NC *	30-160
99 Perylene	500.0	0.000	NC *	30-160
187 Total Benzofluoran	1000	765.9	76.59	30-160

SURROGATE COMPOUND	CONC ADDED ug/kg	CONC RECOVERED ug/kg	% RECOVERED	LIMITS
$ 36 2-Fluorobiphenyl	500.0	236.9	47.38	34-100
$ 66 Terphenyl-d14	500.0	355.5	71.11	35-112

02/07/11

Data File: /chem2/nt6.i/20110207.b/02071107.D
Date : 07-FEB-2011 15:54
Client ID: SH20LCSDS1
Sample Info: SH20LCSDS1,
Volume Injected (uL): 1.0
Column phase: ZB-5msi

Instrument: nt6.i
Operator: JZ
Column diameter: 0.32



SH20 : 00202

CO-ELUTION SUMMARY FOR FILE - 02071107.D

Lab ID: SH20LCSDS1, Method: SW846012811.m, Instrument: nt6.i, Date: 07-FEB-20

RT	CO-ELUTION COMPOUNDS
	NO CO-ELUTIONS

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem2/nt6.i/20110207.b/02071109.D
Lab Smp Id: SH20A Client Smp ID: EW10-10-COMP
Inj Date : 07-FEB-2011 16:59
Operator : JZ Inst ID: nt6.i
Smp Info : SH20A
Misc Info : 11-2133
Comment : 1ul Injection
Method : /chem2/nt6.i/20110207.b/SW846012811.m
Meth Date : 07-Feb-2011 17:54 jianqing Quant Type: ISTD
Cal Date : 28-JAN-2011 10:23 Cal File: 01281102.D
Als bottle: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pna.sub
Target Version: 3.50

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

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	500.00000	Volume of final extract (uL)
Ws	33.30000	Weight of sample extracted (g)
M	22.20000	% Moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/kg)
* 27 Naphthalene-d8	136	8.778	8.783	(1.000)	1559277	20.0000	
28 Naphthalene	128	8.810	8.815	(1.004)	81321	1.01555	19.60
32 2-Methylnaphthalene	141	9.932	9.937	(1.131)	39837	0.81362	15.70
105 1-methylnaphthalene	141	10.097	10.102	(1.150)	24937	0.52883	10.21
$ 36 2-Fluorobiphenyl	172	10.599	10.604	(0.913)	576574	9.38704	181.2
40 Acenaphthylene	152	Compound Not Detected.					
* 42 Acenaphthene-d10	164	11.609	11.609	(1.000)	915578	20.0000	
44 Acenaphthene	153	11.657	11.662	(1.004)	44067	0.85205	16.44
46 Dibenzofuran	168	11.913	11.924	(1.026)	56810	0.72057	13.91
49 Fluorene	166	12.463	12.469	(1.074)	56146	0.96384	18.60
* 59 Phenanthrene-d10	188	13.932	13.932	(1.000)	1554074	20.0000	
60 Phenanthrene	178	13.964	13.969	(1.002)	363500	4.17877	80.65
61 Anthracene	178	14.034	14.039	(1.007)	305043	3.44802	66.55
64 Fluoranthene	202	15.876	15.865	(1.140)	1320395	15.1953	293.3
65 Pyrene	202	16.213	16.202	(0.892)	1372821	11.1675	215 5

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/kg)
$ 66 Terphenyl-d14	244	16.592	16.586	(0.913)	707090	9.35278	180.5
68 Benzo(a)anthracene	228	18.157	18.146	(0.999)	540621	4.99896	96.48
* 69 Chrysene-d12	240	18.178	18.167	(1.000)	2112159	20.0000	
71 Chrysene	228	18.216	18.205	(1.002)	909386	8.66848	167.3
74 Benzo(b)fluoranthene	252	19.791	19.775	(0.974)	1085993	8.77401	169.3
75 Benzo(k)fluoranthene	252	19.791	19.802	(0.974)	1096387	8.74797	168.8
76 Benzo(a)pyrene	252	20.224	20.202	(0.996)	429049	3.68493	71.12
* 77 Perylene-d12	264	20.309	20.282	(1.000)	2120479	20.0000	
78 Indeno(1,2,3-cd)pyrene	276	21.650	21.623	(1.066)	259169	1.81815	35.09
79 Dibenzo(a,h)anthracene	278	Compound Not Detected.					
80 Benzo(g,h,i)perylene	276	21.933	21.906	(1.080)	283376	2.20646	42.58
62 Carbazole	167	Compound Not Detected.					
99 Perylene	252	20.341	20.315	(1.002)	203069	1.81512	35.03
187 Total Benzofluoranthenes	252	19.791	19.802	(0.974)	1092642	9.26644	178.8

02/07/11

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt6.i
Lab File ID: 02071109.D
Lab Smp Id: SH20A
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem2/nt6.i/20110207.b/SW846012811.m
Misc Info: 11-2133

Calibration Date: 07-FEB-2011
Calibration Time: 12:38
Client Smp ID: EW10-10-COMP
Level: LOW
Sample Type: Sediment

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
27 Naphthalene-d8	1522936	761468	3045872	1559277	2.39
42 Acenaphthene-d10	864539	432270	1729078	915578	5.90
59 Phenanthrene-d10	1378528	689264	2757056	1554074	12.73
69 Chrysene-d12	1421586	710793	2843172	2112159	48.58
77 Perylene-d12	1361193	680596	2722386	2120479	55.78

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
27 Naphthalene-d8	8.78	8.28	9.28	8.78	-0.06
42 Acenaphthene-d10	11.61	11.11	12.11	11.61	0.00
59 Phenanthrene-d10	13.93	13.43	14.43	13.93	0.00
69 Chrysene-d12	18.17	17.67	18.67	18.18	0.06
77 Perylene-d12	20.28	19.78	20.78	20.31	0.13

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Analytical Resources, Inc.

RECOVERY REPORT

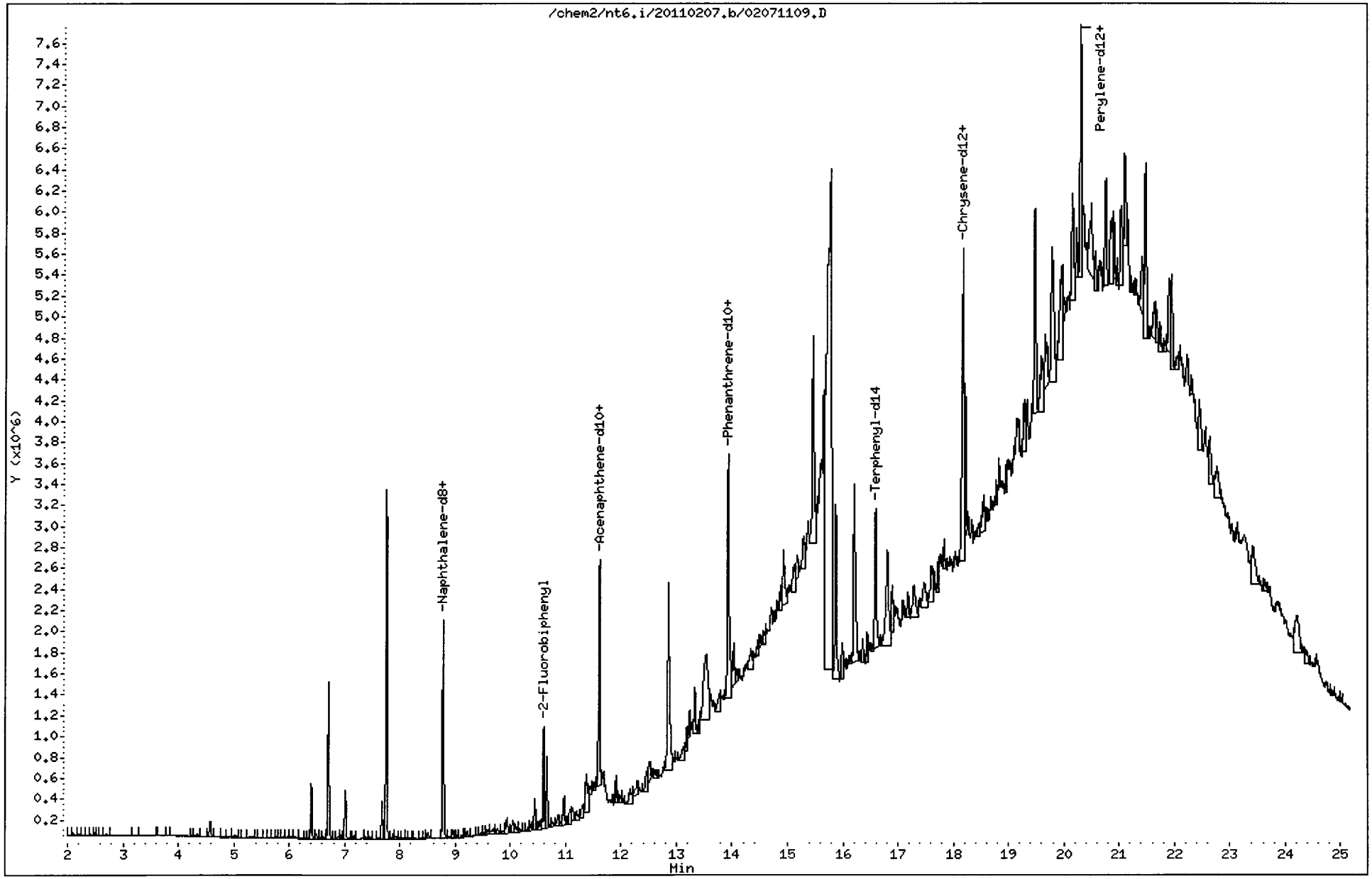
Client Name: WINDWARD
Sample Matrix: SOLID
Lab Smp Id: SH20A
Level: LOW
Data Type: MS DATA
SpikeList File: pnalcss.spk
Sublist File: pna.sub
Method File: /chem2/nt6.i/20110207.b/SW846012811.m
Misc Info: 11-2133

Client SDG: SH20
Fraction: SV
Client Smp ID: EW10-10-COMP
Operator: JZ
SampleType: SAMPLE
Quant Type: ISTD

SURROGATE COMPOUND	CONC ADDED ug/kg	CONC RECOVERED ug/kg	% RECOVERED	LIMITS
$ 36 2-Fluorobiphenyl	482.5	181.2	37.55	34-100
$ 66 Terphenyl-d14	482.5	180.5	37.41	35-112

Data File: /chem2/nt6.i/20110207.b/02071109.D
Date : 07-FEB-2011 16:59
Client ID: EW10-10-COMP
Sample Info: SH20A
Volume Injected (uL): 1.0
Column phase: ZB-5msi

Instrument: nt6.i
Operator: JZ
Column diameter: 0.32



SH20:002208

Data File: /chem2/nt6.i/20110207.b/02071109.D

Date : 07-FEB-2011 16:59

Client ID: EW10-10-COMP

Instrument: nt6.i

Sample Info: SH20A

Volume Injected (uL): 1.0

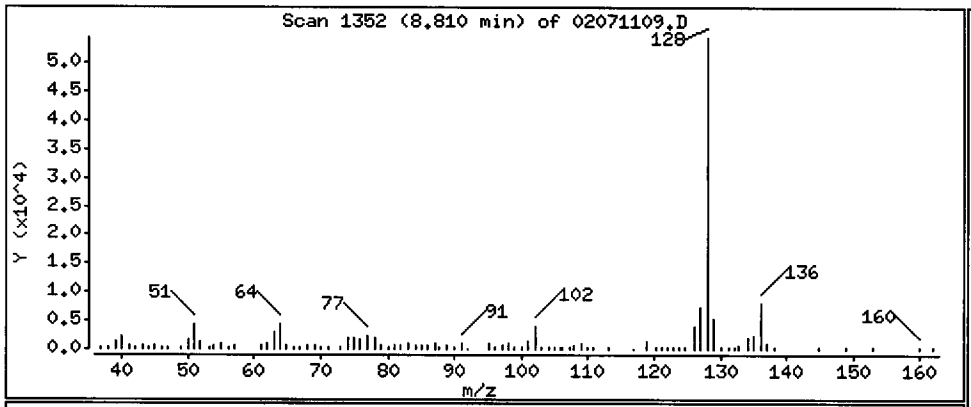
Operator: JZ

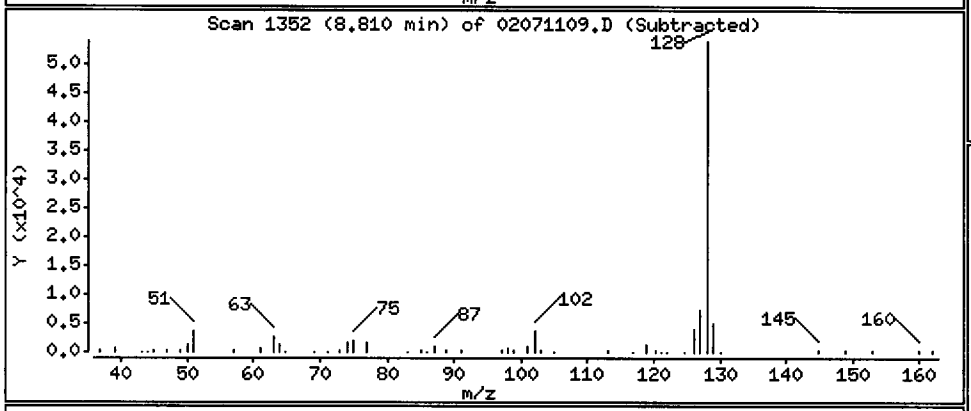
Column phase: ZB-5msi

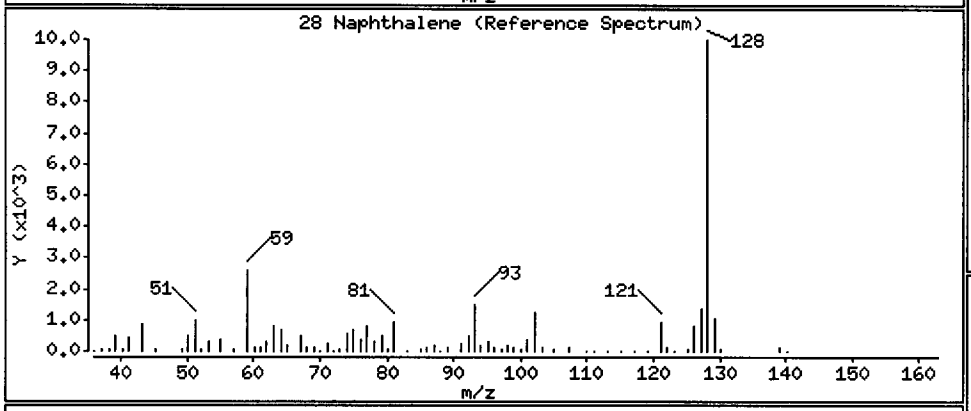
Column diameter: 0.32

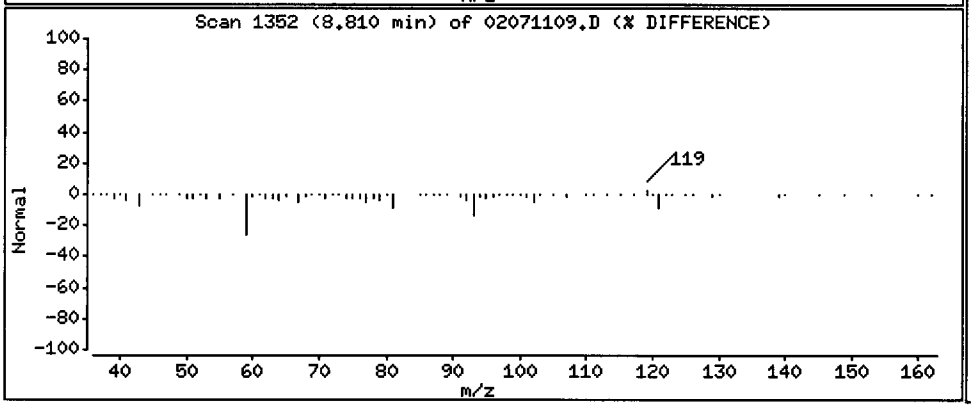
28 Naphthalene

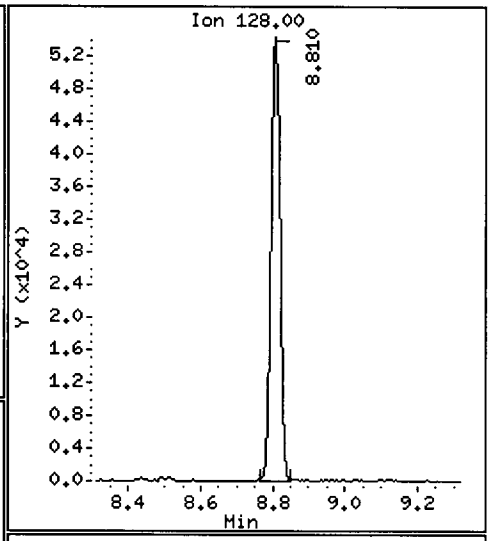
Concentration: 19.60 ug/kg

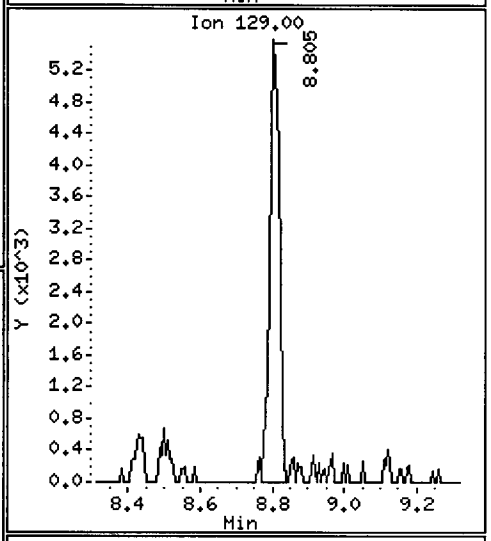


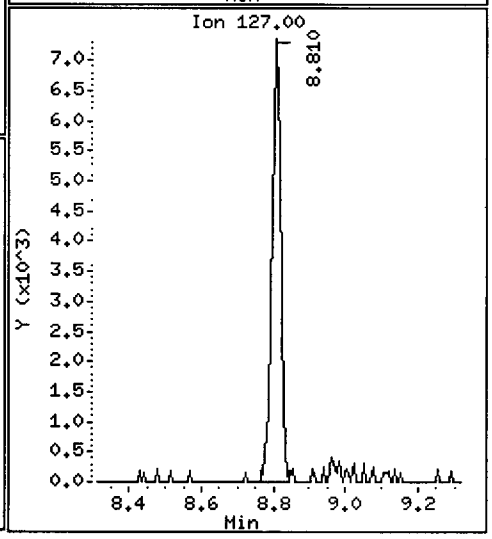












Data File: /chem2/nt6.i/20110207.b/02071109.D

Date : 07-FEB-2011 16:59

Client ID: EW10-10-COMP

Instrument: nt6.i

Sample Info: SH20A

Volume Injected (uL): 1.0

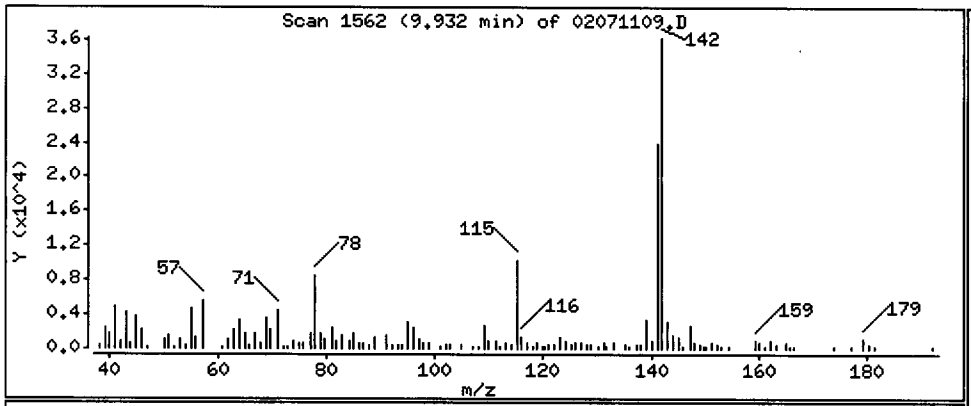
Operator: JZ

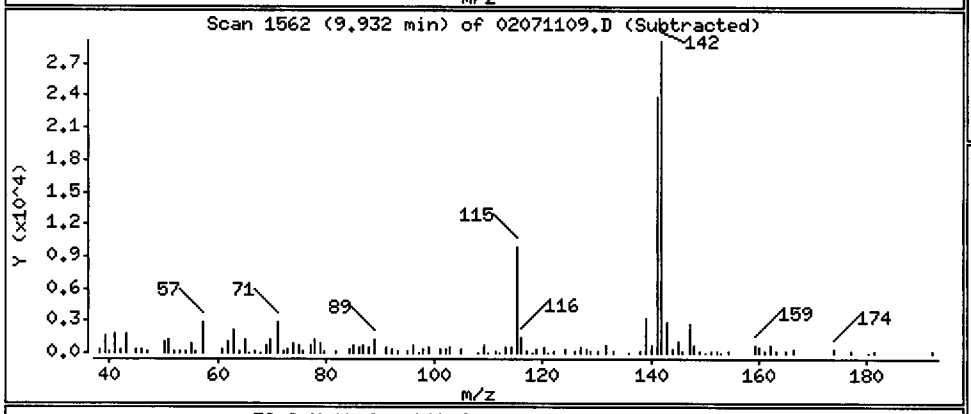
Column phase: ZB-5msi

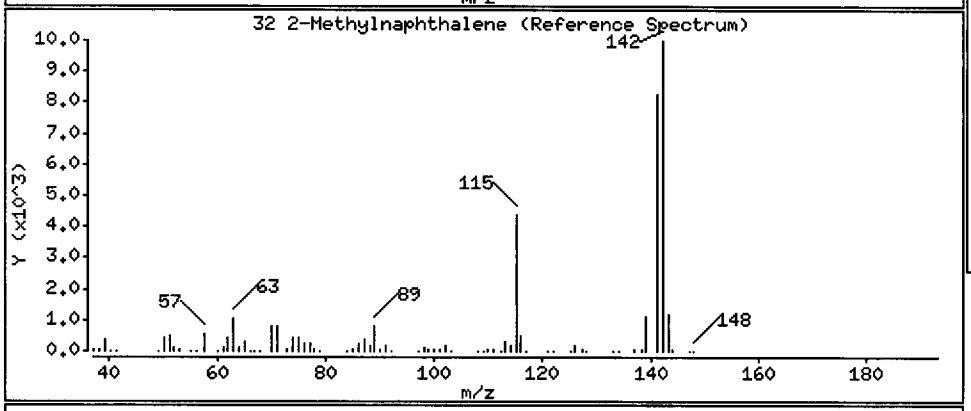
Column diameter: 0.32

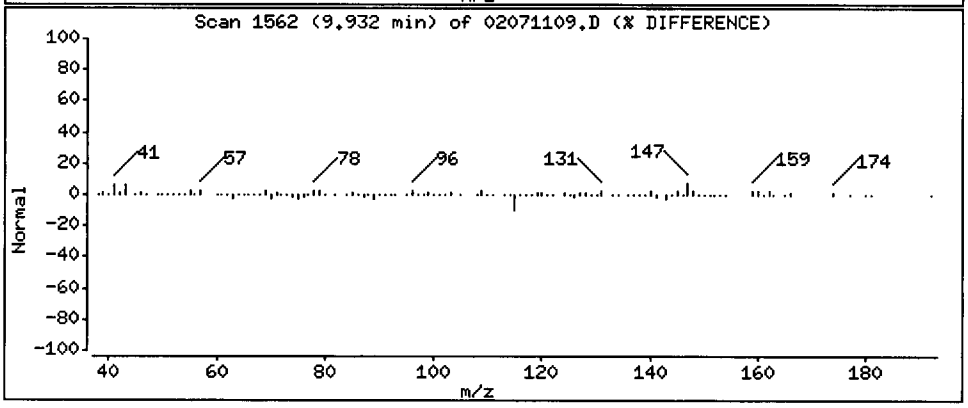
32 2-Methylnaphthalene

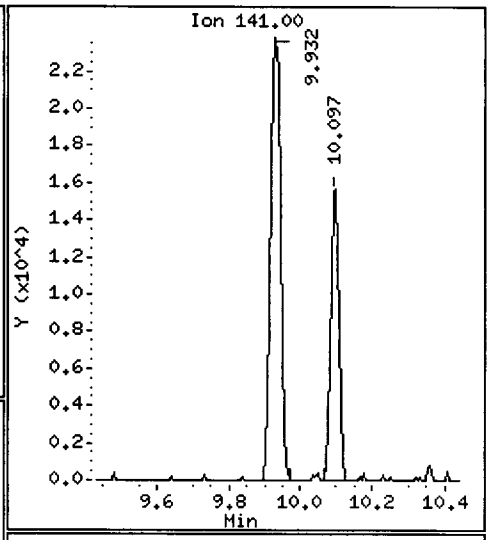
Concentration: 15.70 ug/kg

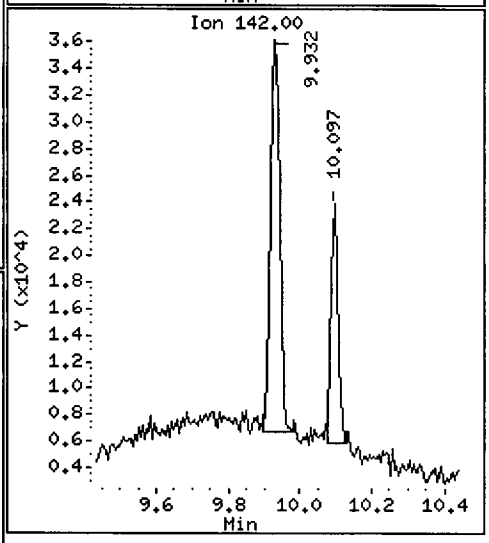












Data File: /chem2/nt6.i/20110207.b/02071109.D

Date : 07-FEB-2011 16:59

Client ID: EW10-10-COMP

Instrument: nt6.i

Sample Info: SH20A

Volume Injected (uL): 1.0

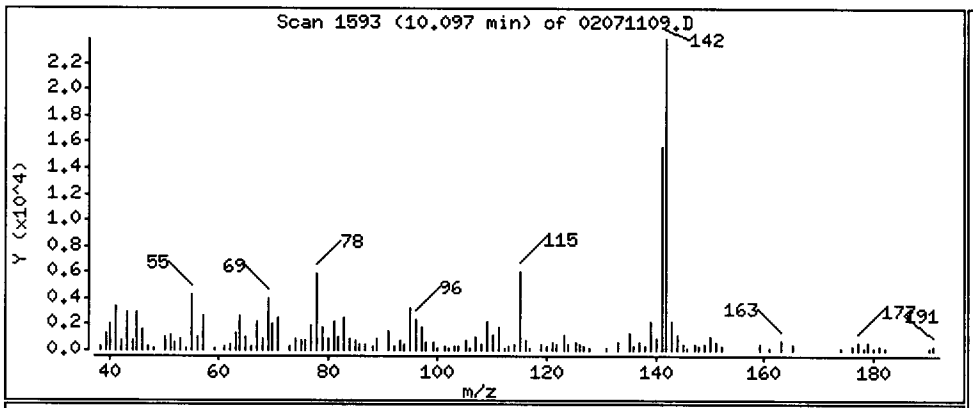
Operator: JZ

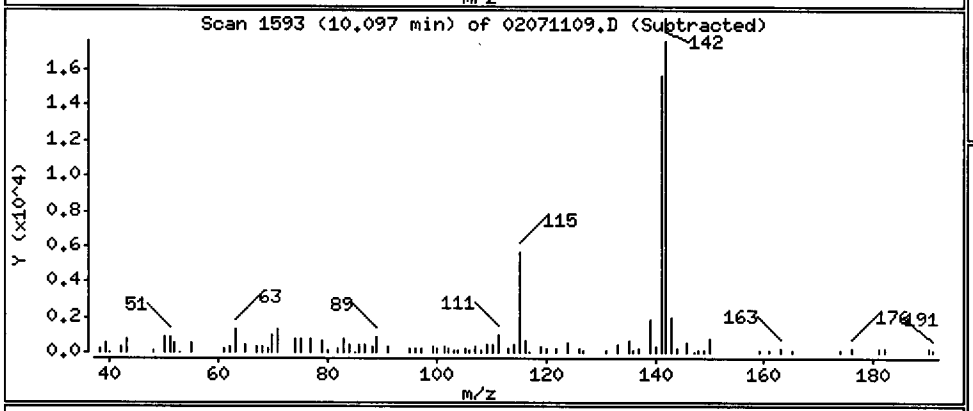
Column phase: ZB-5msi

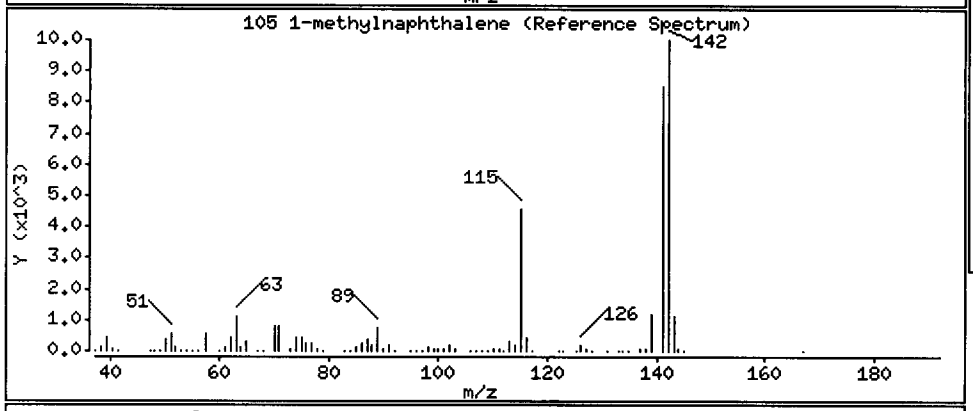
Column diameter: 0.32

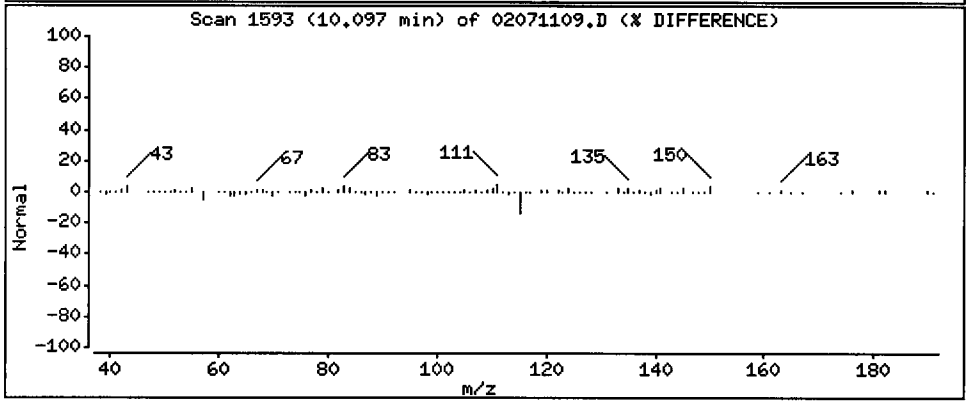
105 1-methylnaphthalene

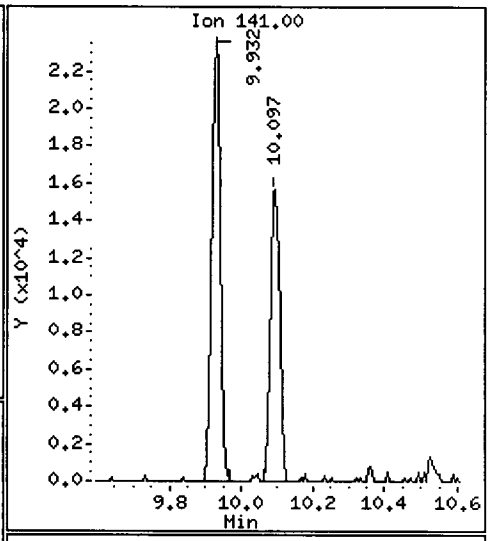
Concentration: 10.21 ug/kg

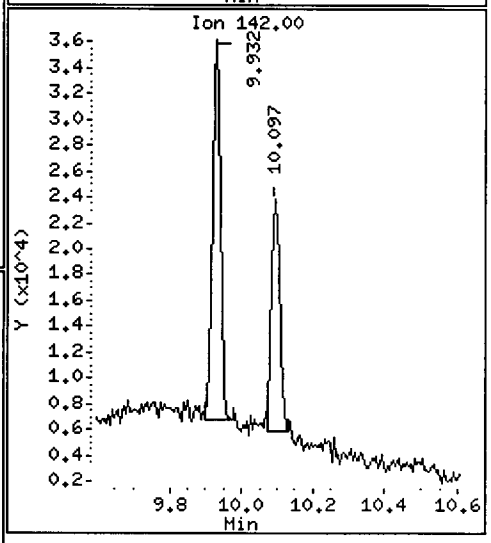












Data File: /chem2/nt6.i/20110207.b/02071109.D

Date : 07-FEB-2011 16:59

Client ID: EW10-10-COMP

Instrument: nt6.i

Sample Info: SH20A

Volume Injected (uL): 1.0

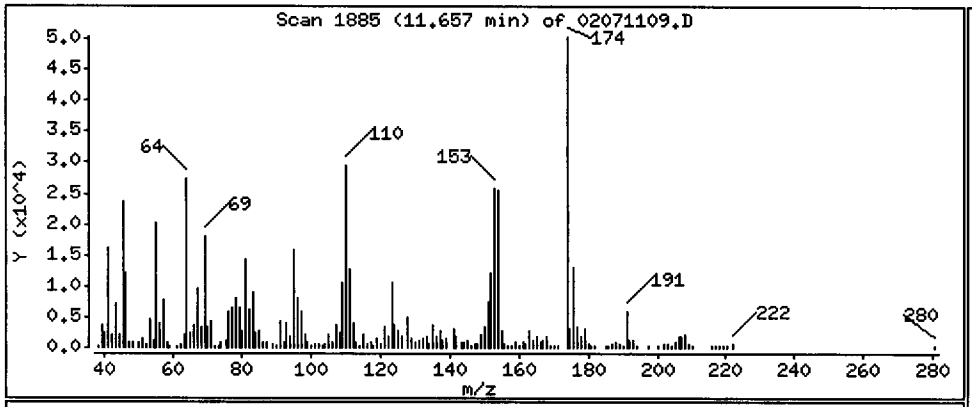
Operator: JZ

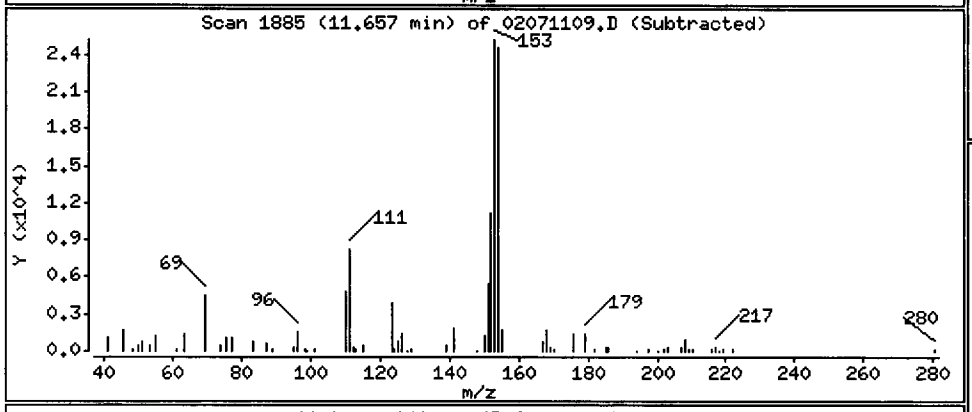
Column phase: ZB-5ms1

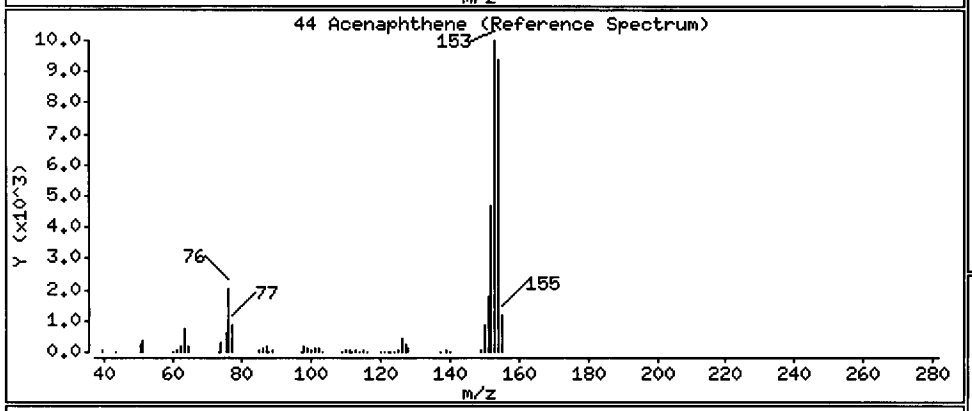
Column diameter: 0.32

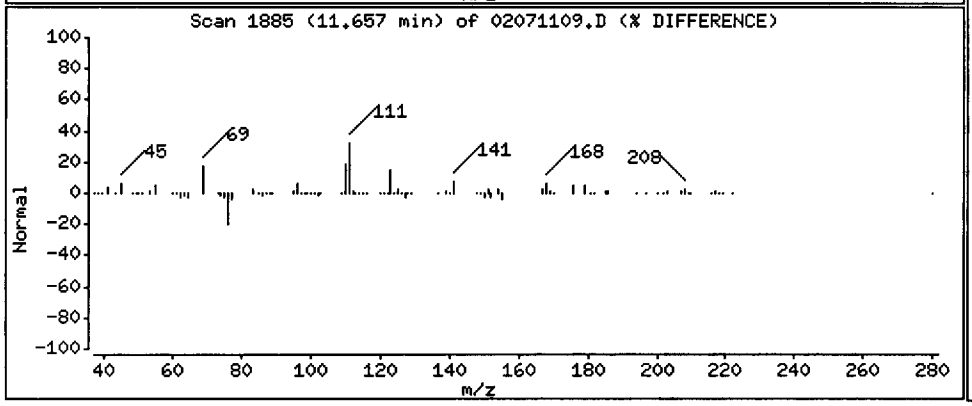
44 Acenaphthene

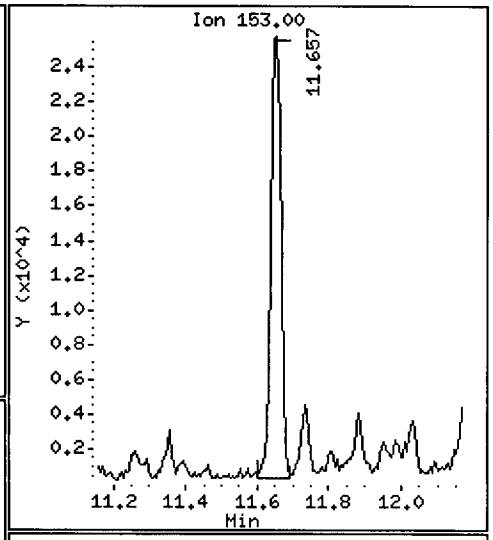
Concentration: 16.44 ug/kg

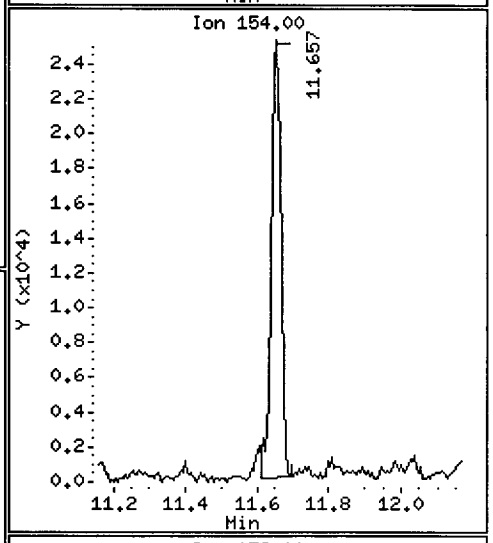


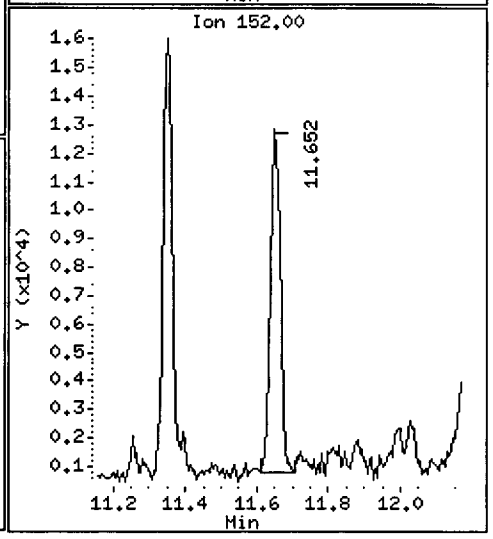












Data File: /chem2/nt6.i/20110207.b/02071109.D

Date : 07-FEB-2011 16:59

Client ID: EW10-10-COMP

Instrument: nt6.i

Sample Info: SH20A

Volume Injected (uL): 1.0

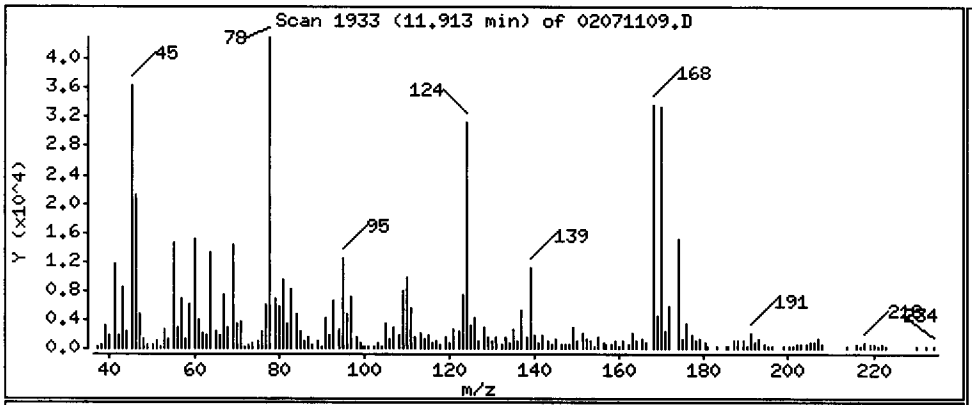
Operator: JZ

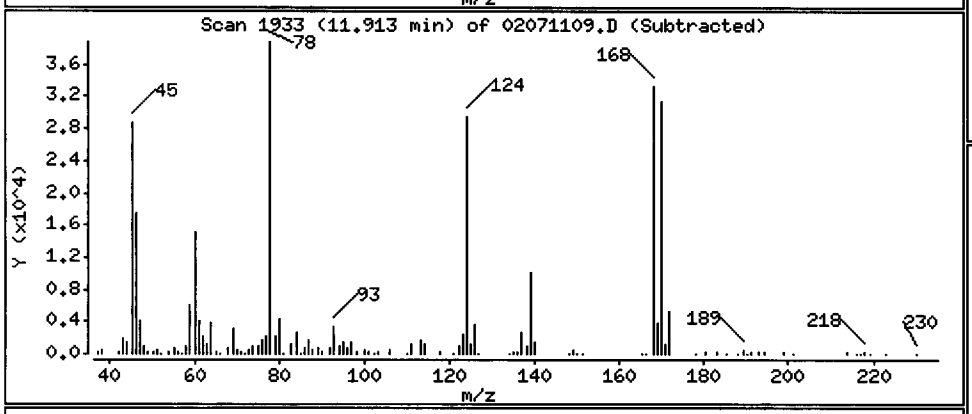
Column phase: ZB-5msi

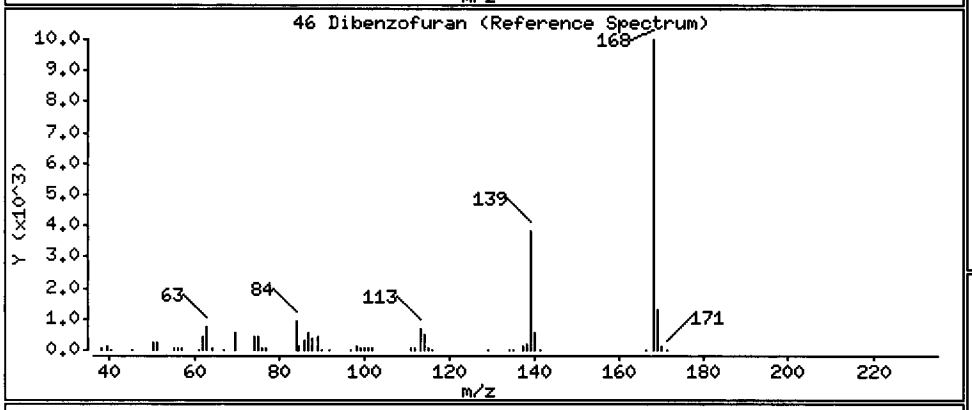
Column diameter: 0.32

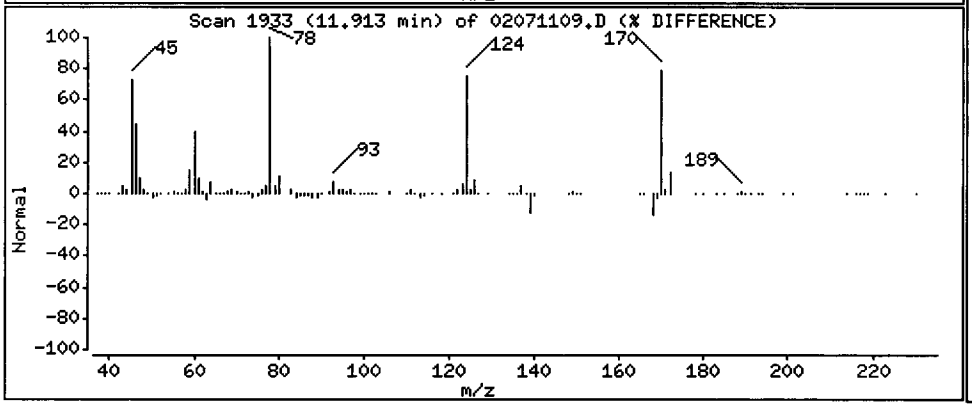
46 Dibenzofuran

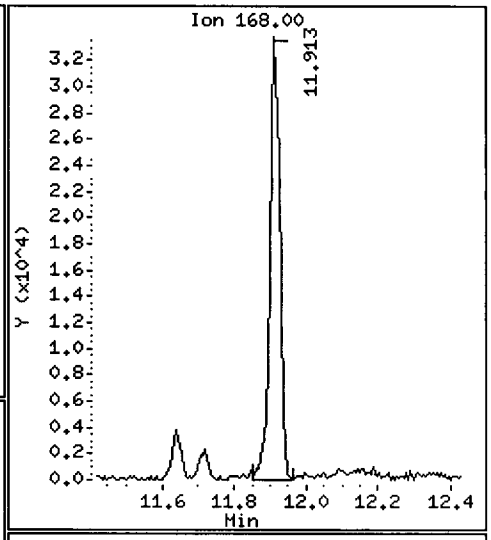
Concentration: 13.91 ug/kg

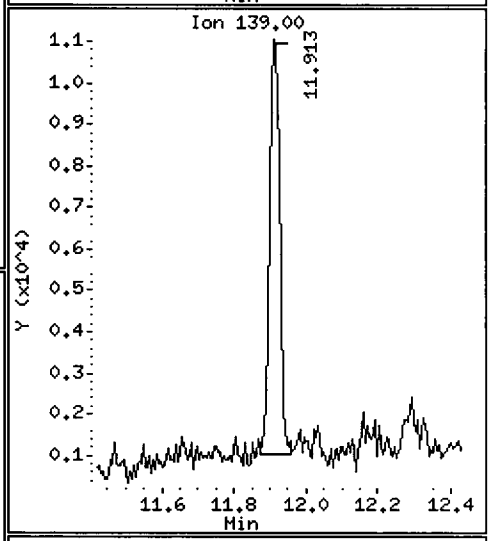


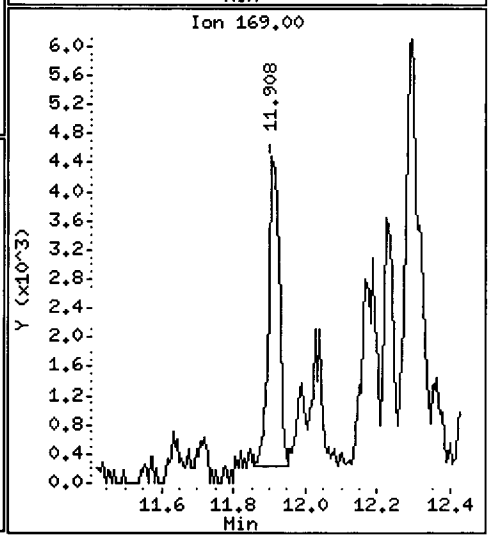












Data File: /chem2/nt6.i/20110207.b/02071109.D

Date : 07-FEB-2011 16:59

Client ID: EW10-10-COMP

Instrument: nt6.i

Sample Info: SH20A

Volume Injected (uL): 1.0

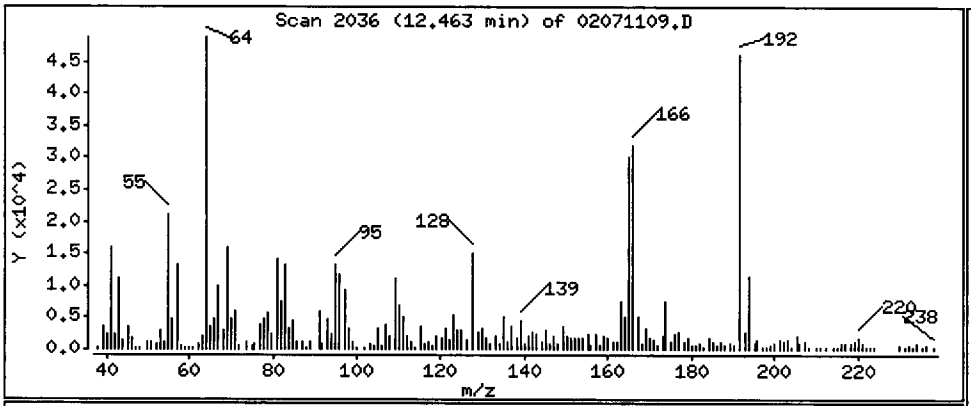
Operator: JZ

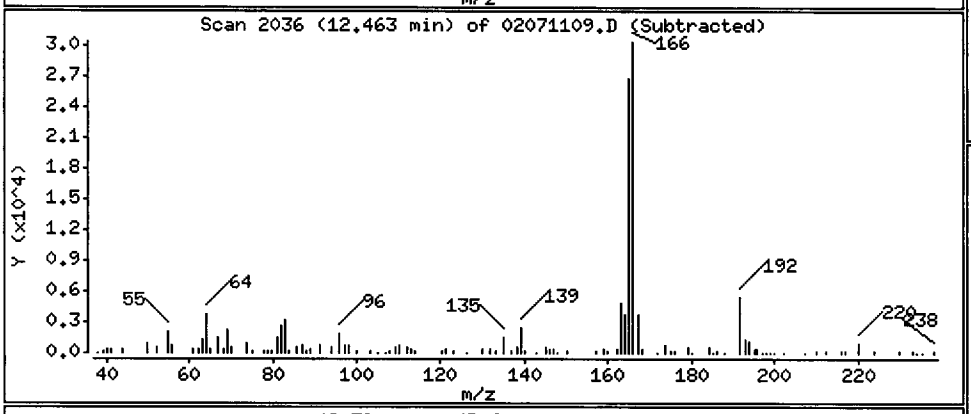
Column phase: ZB-5msi

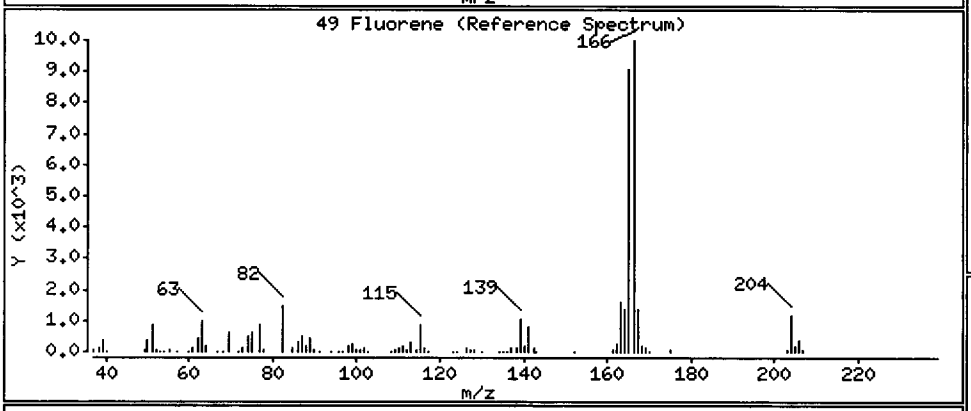
Column diameter: 0.32

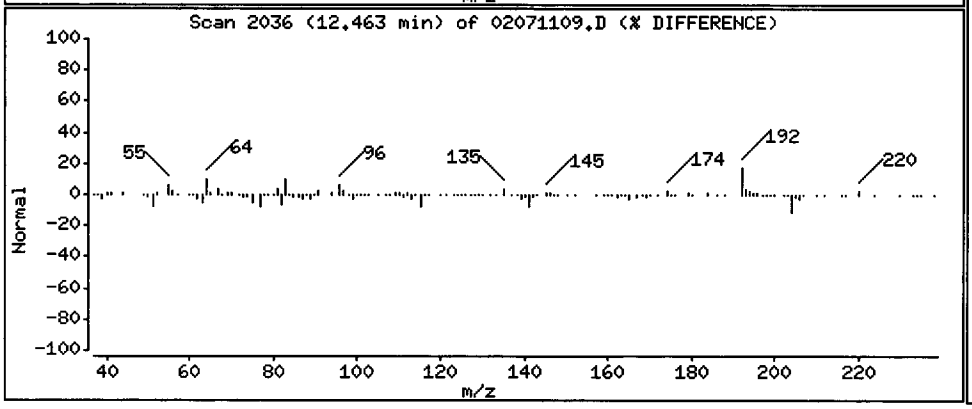
49 Fluorene

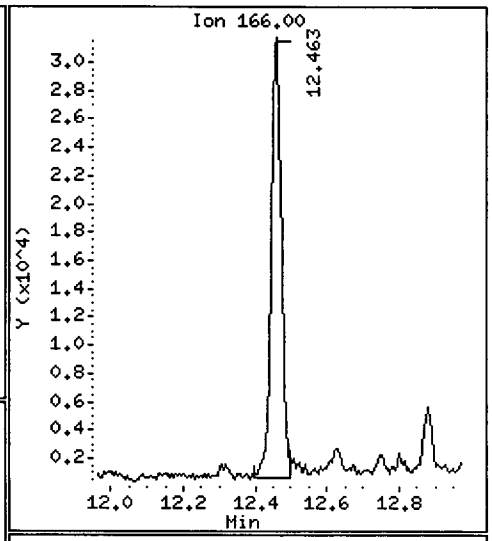
Concentration: 18.60 ug/kg

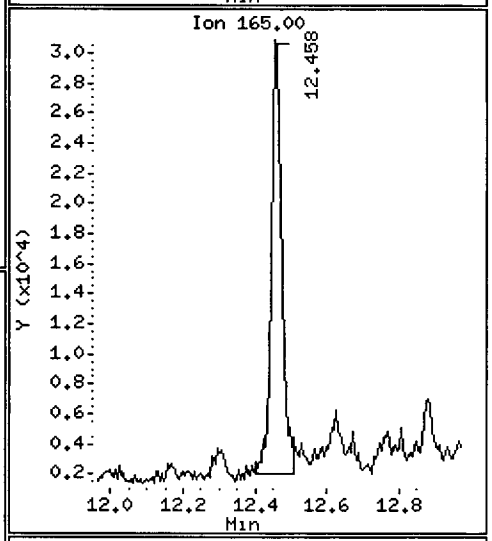


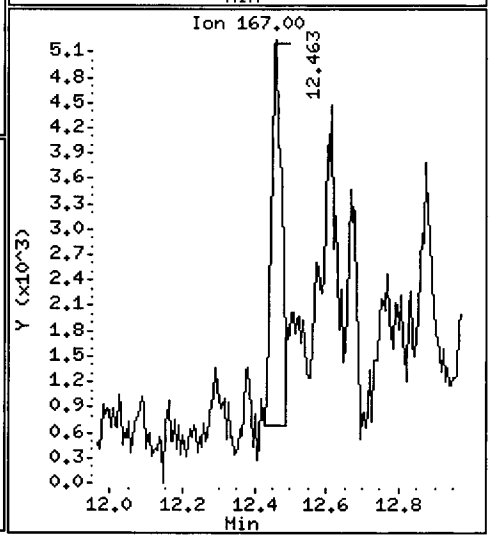












Data File: /chem2/nt6.i/20110207.b/02071109.D

Date : 07-FEB-2011 16:59

Client ID: EW10-10-COMP

Instrument: nt6.i

Sample Info: SH20A

Volume Injected (uL): 1.0

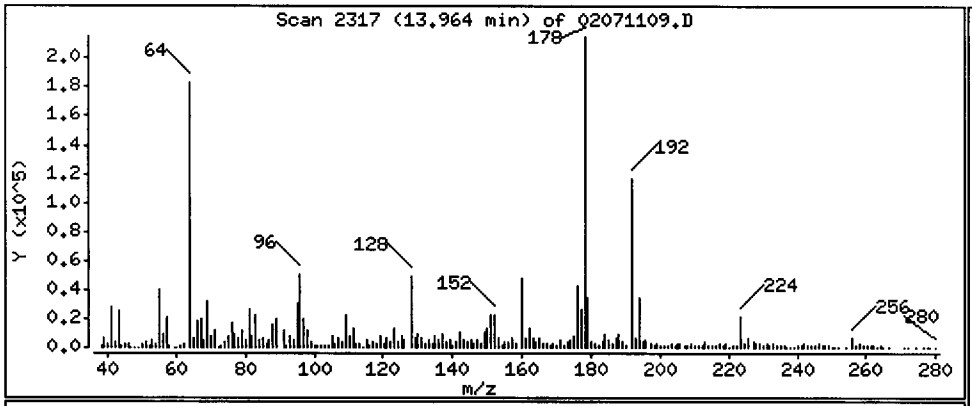
Operator: JZ

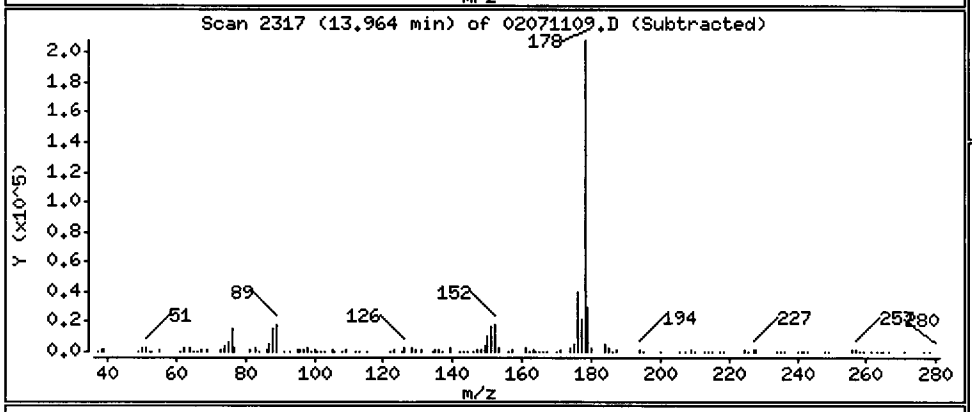
Column phase: ZB-5msi

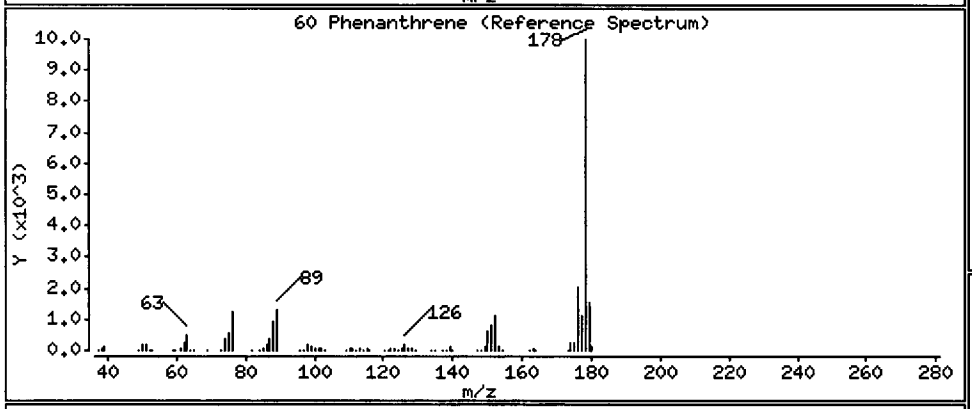
Column diameter: 0.32

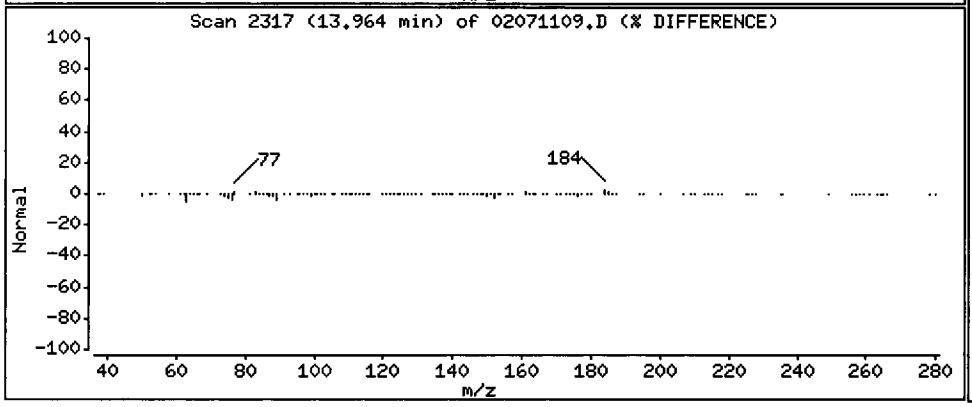
60 Phenanthrene

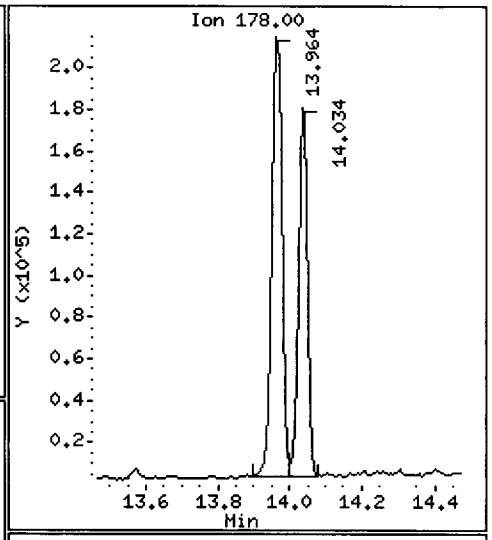
Concentration: 80.65 ug/kg

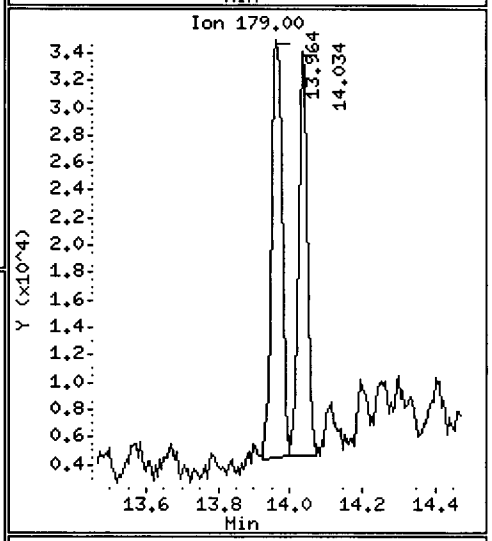


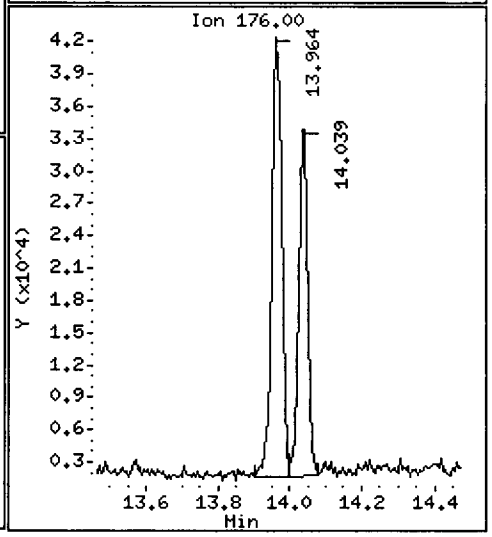












Data File: /chem2/nt6.i/20110207.b/02071109.D

Date : 07-FEB-2011 16:59

Client ID: EW10-10-COMP

Instrument: nt6.i

Sample Info: SH20A

Volume Injected (uL): 1.0

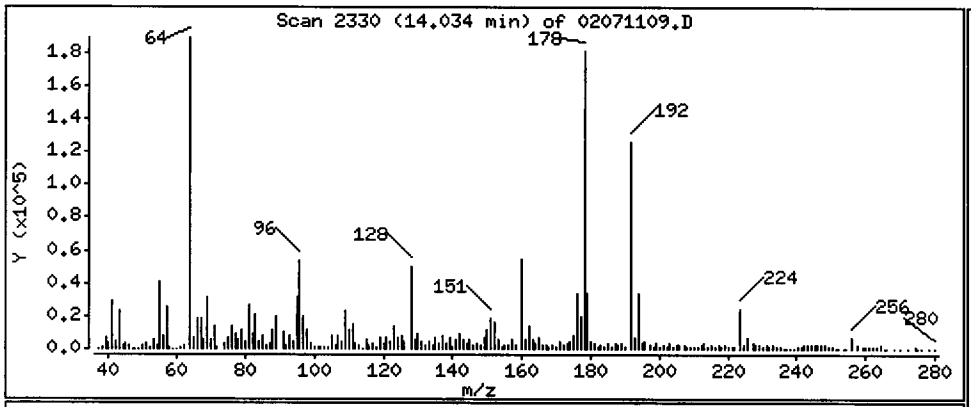
Operator: JZ

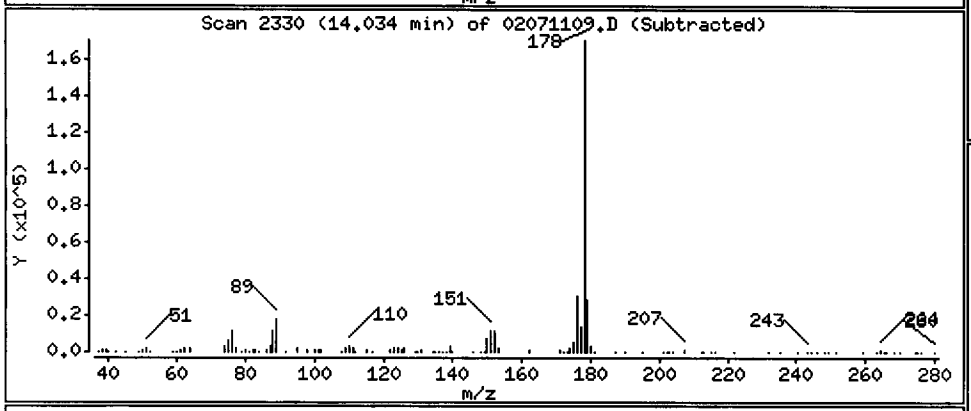
Column phase: ZB-5msi

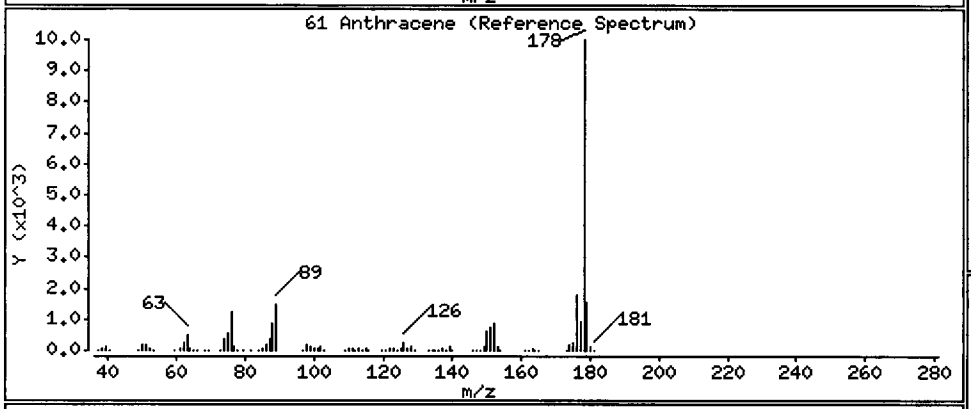
Column diameter: 0.32

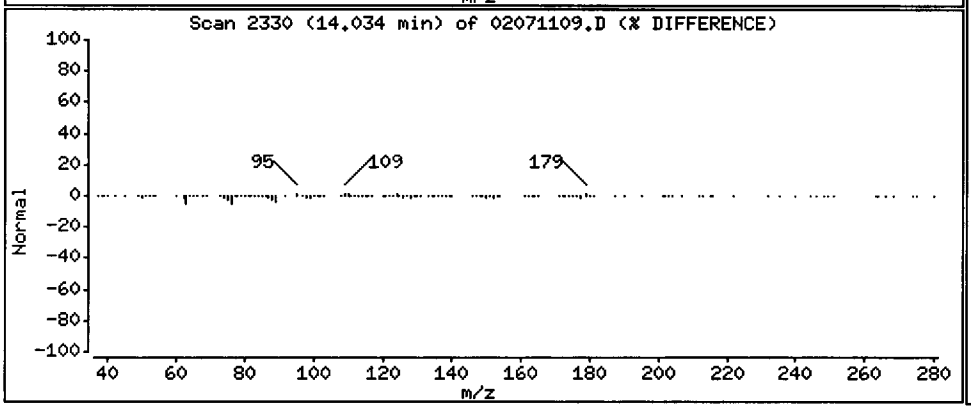
61 Anthracene

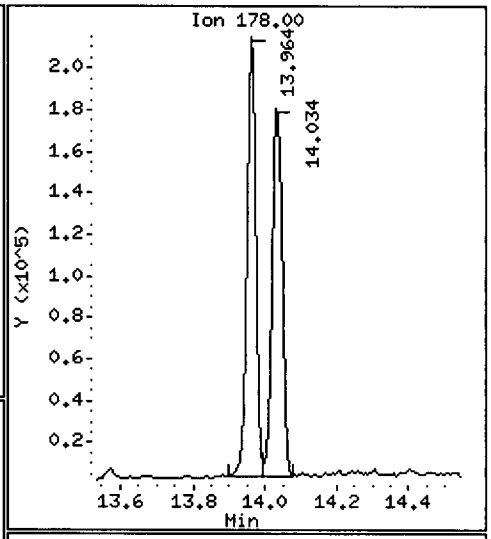
Concentration: 66.55 ug/kg

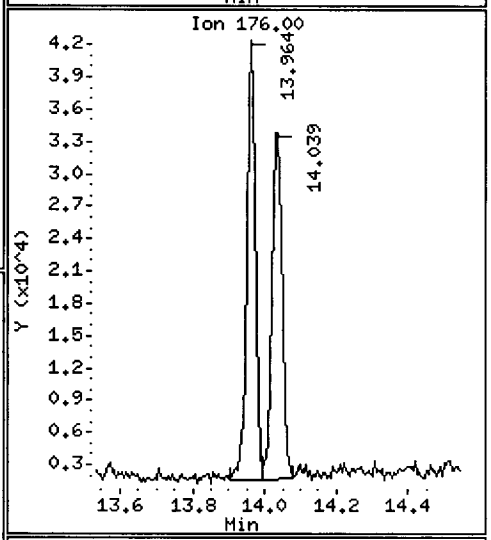


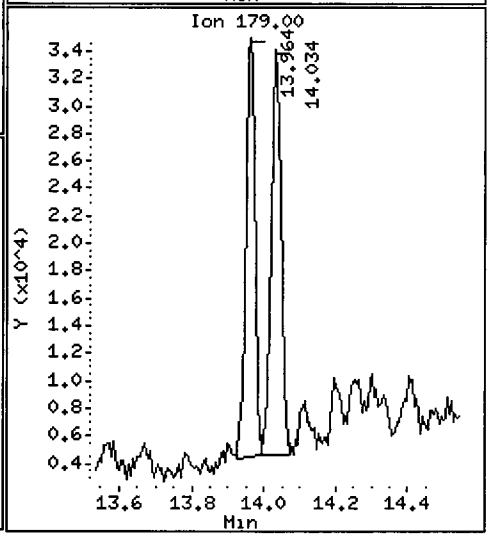












Data File: /chem2/nt6.i/20110207.b/02071109.D

Date : 07-FEB-2011 16:59

Client ID: EW10-10-COMP

Instrument: nt6.i

Sample Info: SH20A

Volume Injected (uL): 1.0

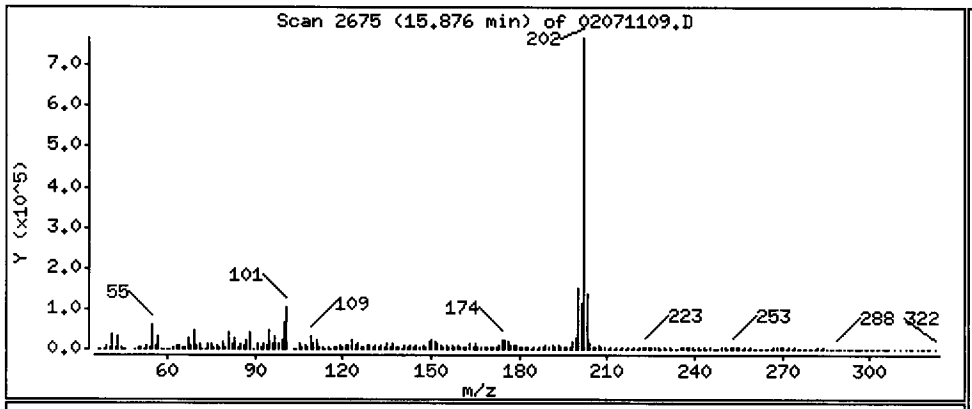
Operator: JZ

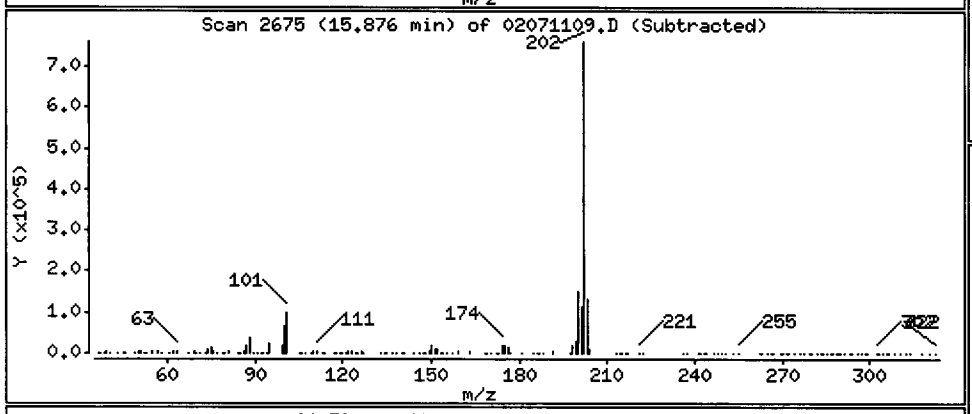
Column phase: ZB-5msi

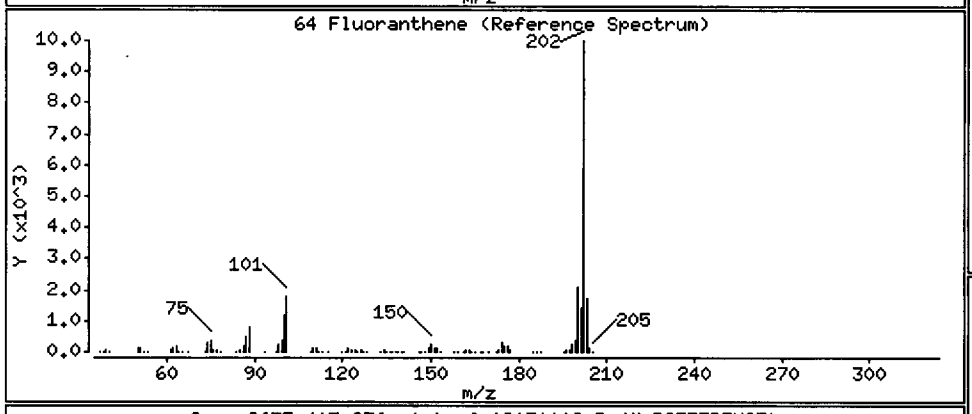
Column diameter: 0.32

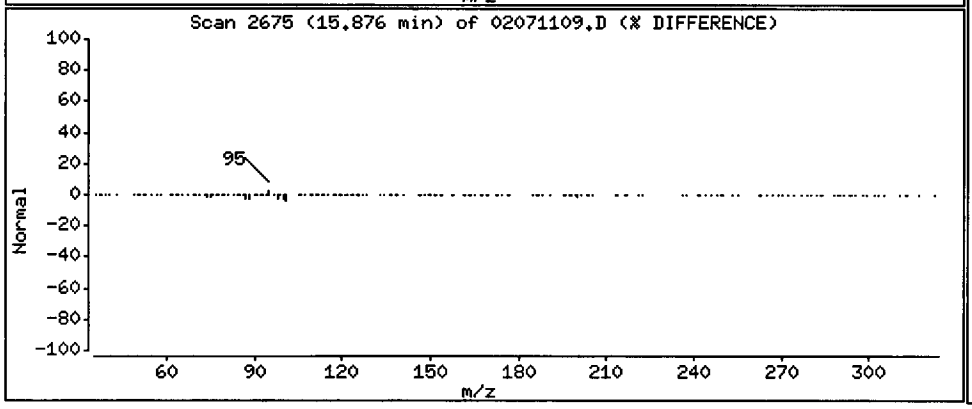
64 Fluoranthene

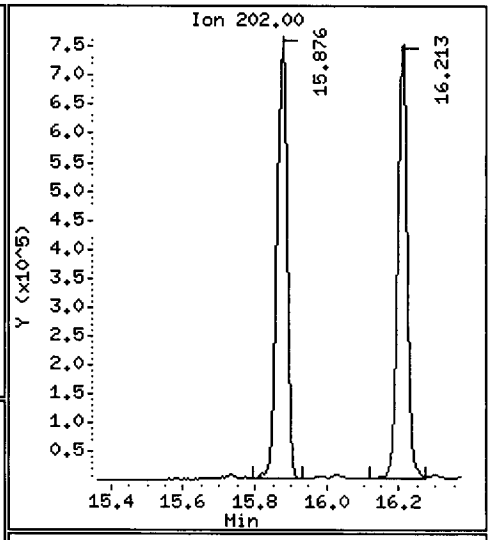
Concentration: 293.3 ug/kg

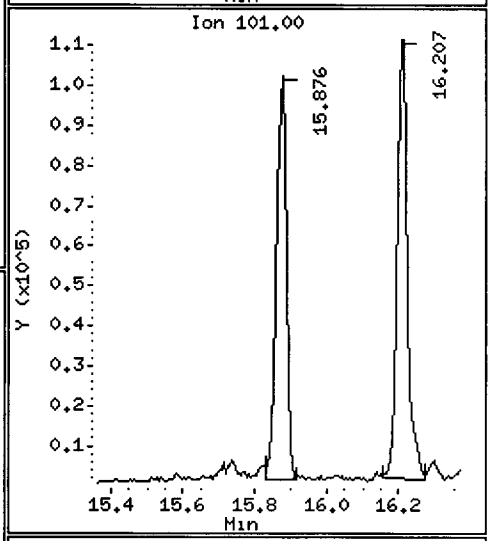


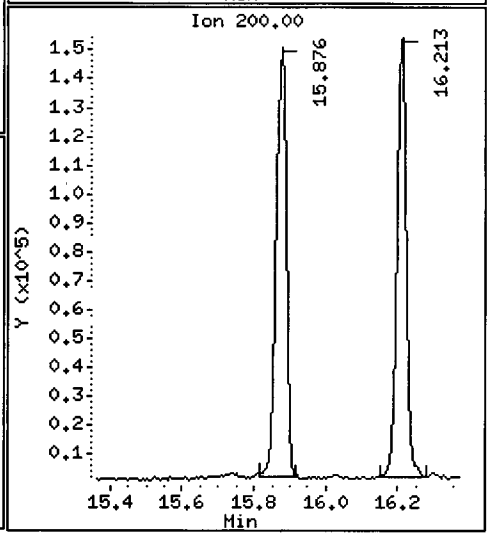












Data File: /chem2/nt6.i/20110207.b/02071109.D

Date : 07-FEB-2011 16:59

Client ID: EW10-10-COMP

Instrument: nt6.i

Sample Info: SH20A

Volume Injected (uL): 1.0

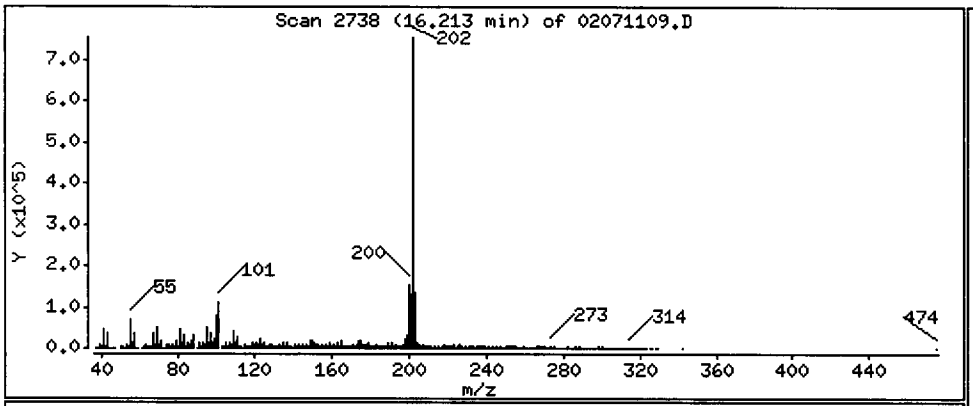
Operator: JZ

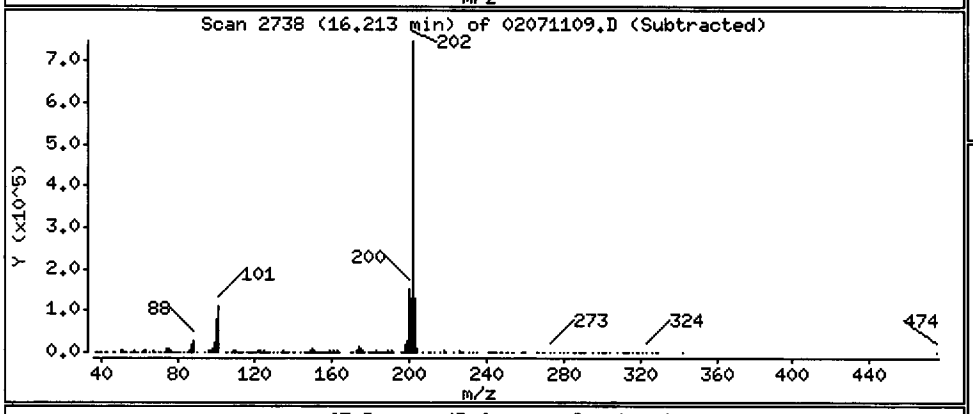
Column phase: ZB-5msi

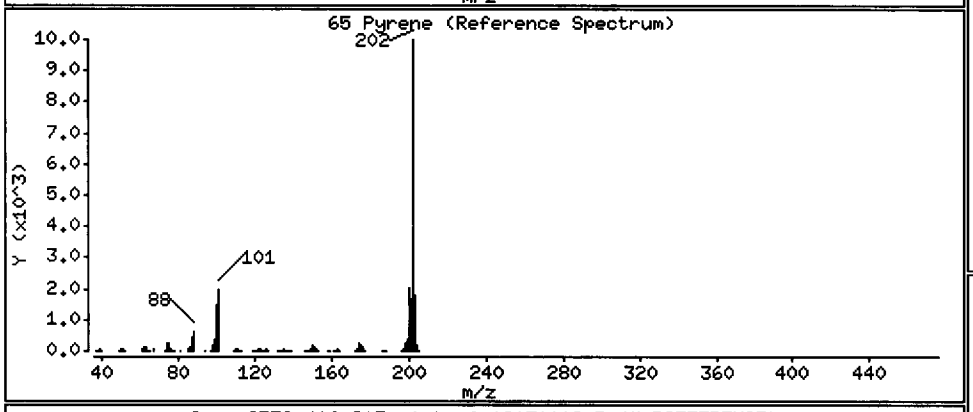
Column diameter: 0.32

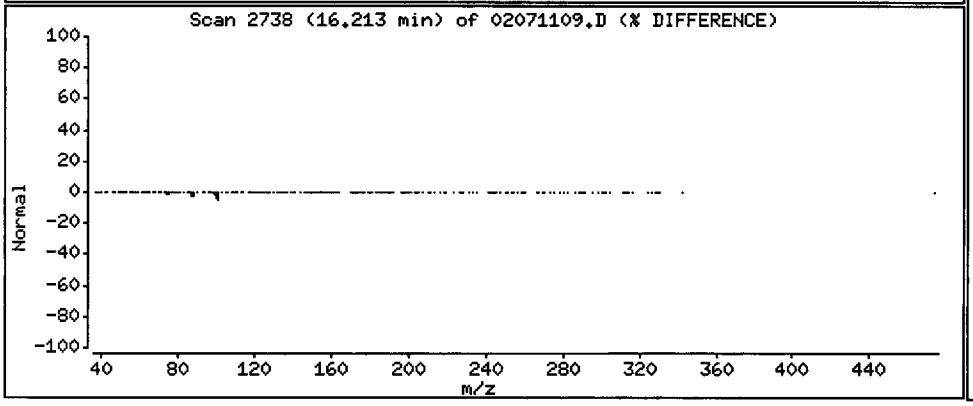
65 Pyrene

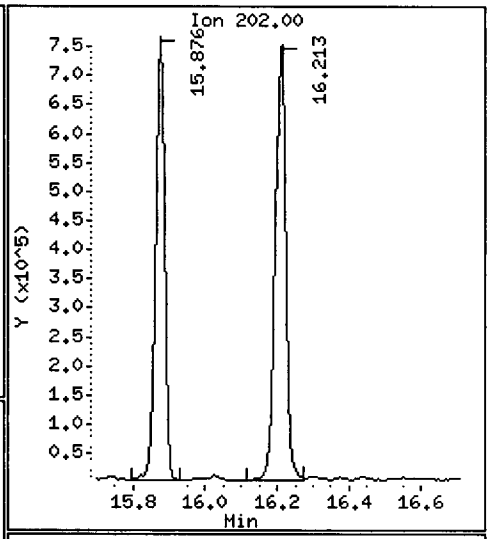
Concentration: 215.5 ug/kg

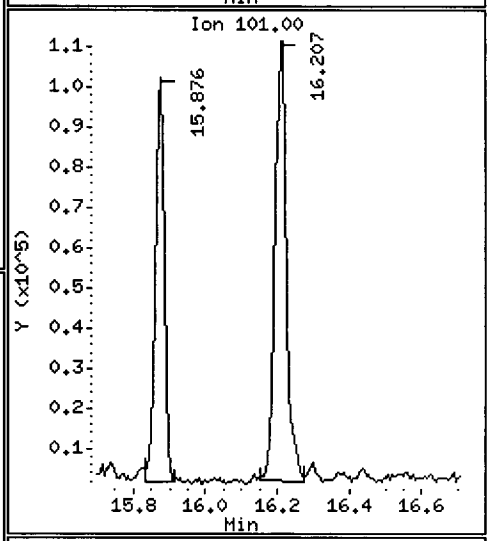


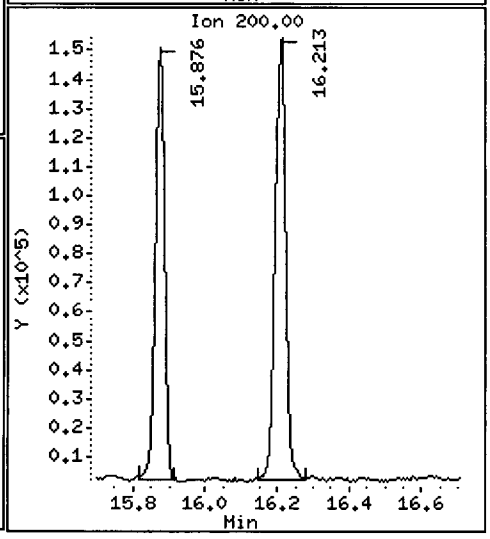












Data File: /chem2/nt6.i/20110207.b/02071109.D

Date : 07-FEB-2011 16:59

Client ID: EW10-10-COMP

Instrument: nt6.i

Sample Info: SH20A

Volume Injected (uL): 1.0

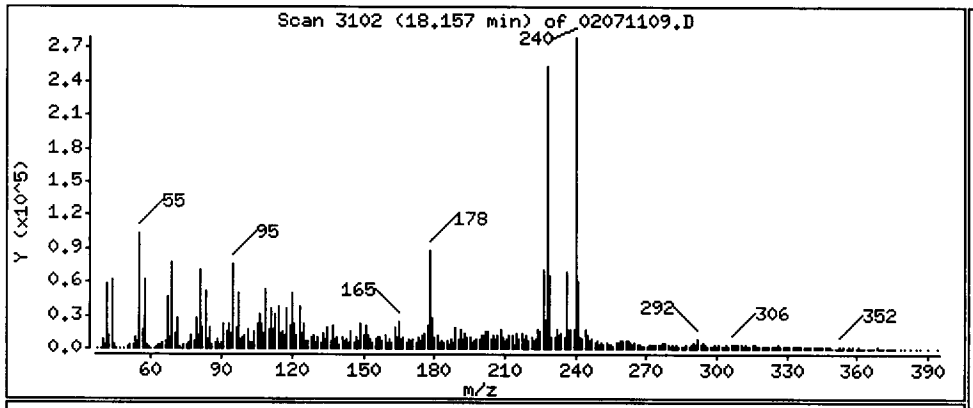
Operator: JZ

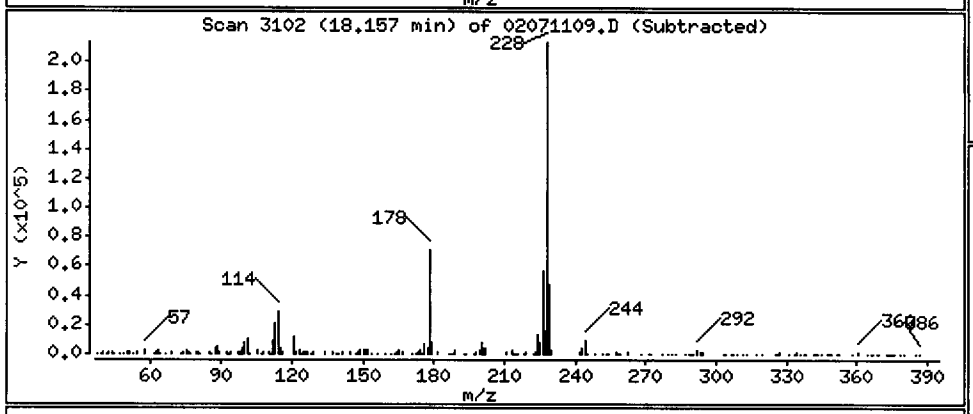
Column phase: ZB-5msi

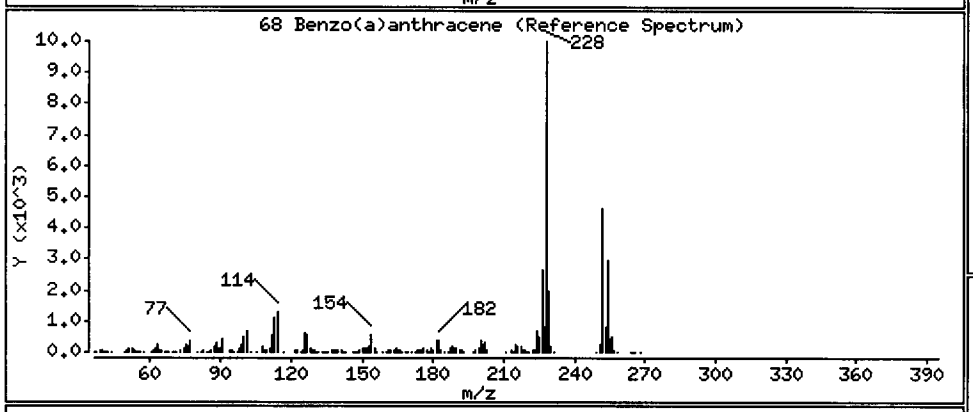
Column diameter: 0.32

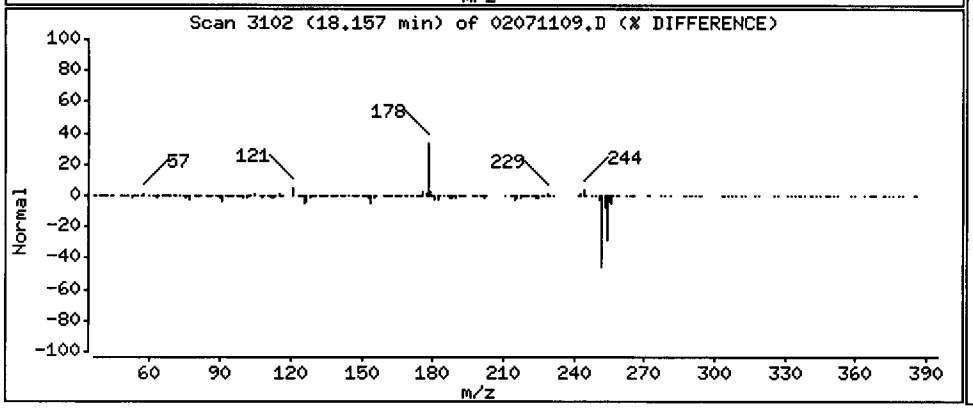
68 Benzo(a)anthracene

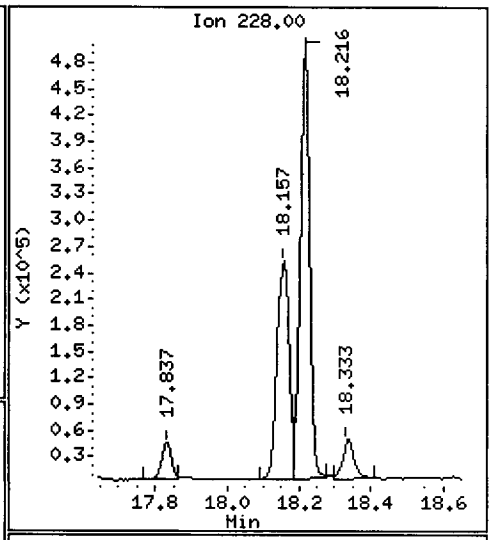
Concentration: 96.48 ug/kg

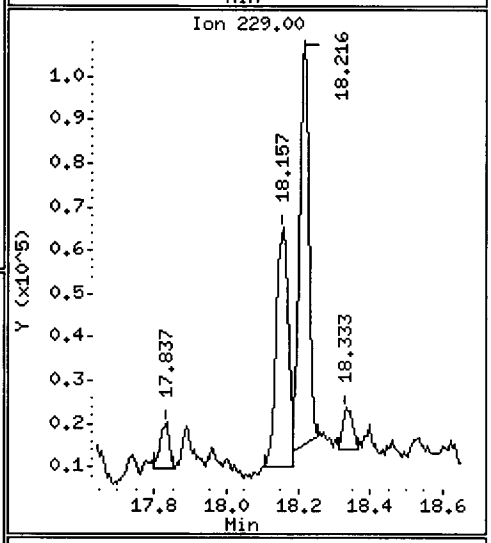


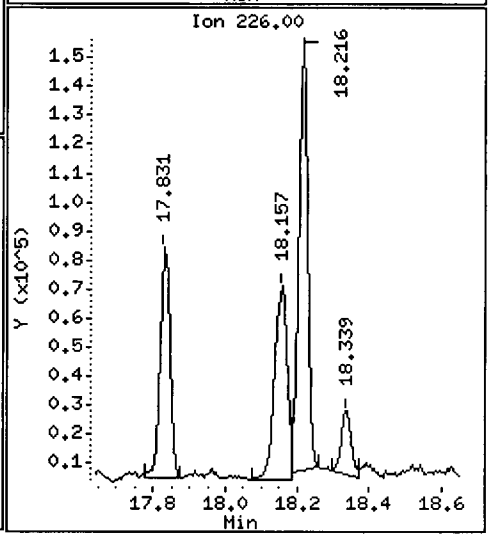












Data File: /chem2/nt6.i/20110207.b/02071109.D

Date : 07-FEB-2011 16:59

Client ID: EW10-10-COMP

Instrument: nt6.i

Sample Info: SH20A

Volume Injected (uL): 1.0

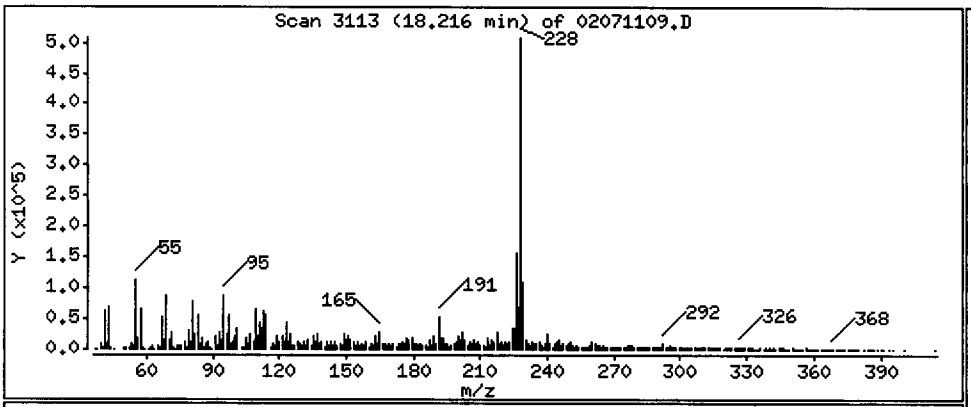
Operator: JZ

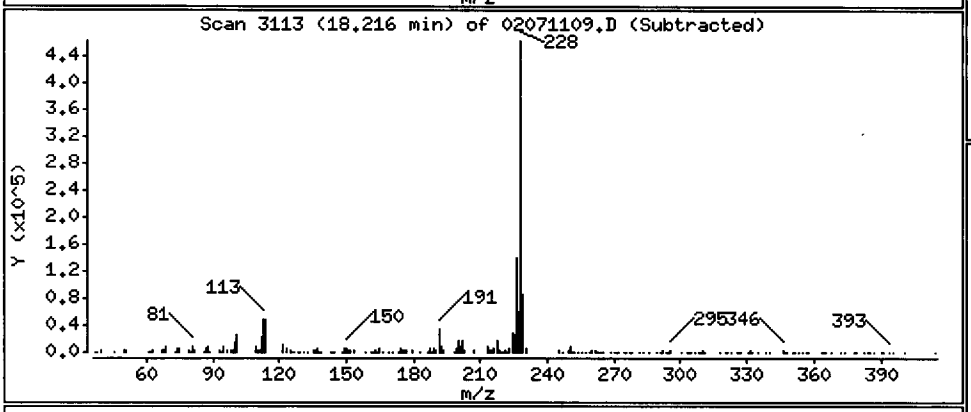
Column phase: ZB-5msi

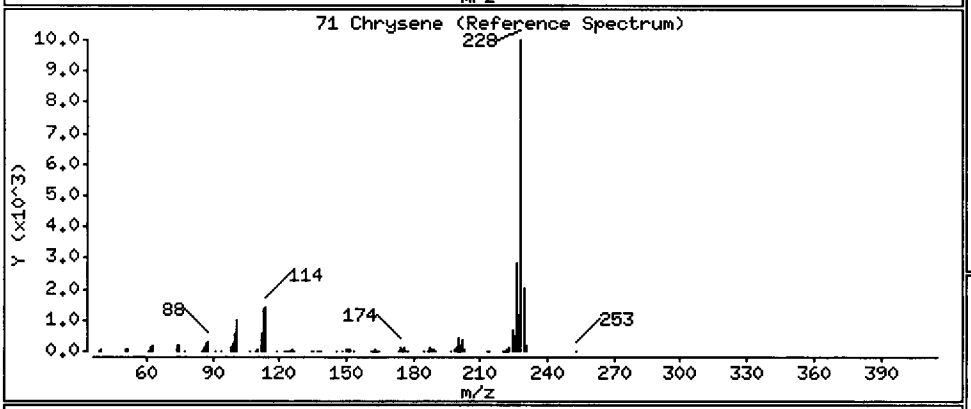
Column diameter: 0.32

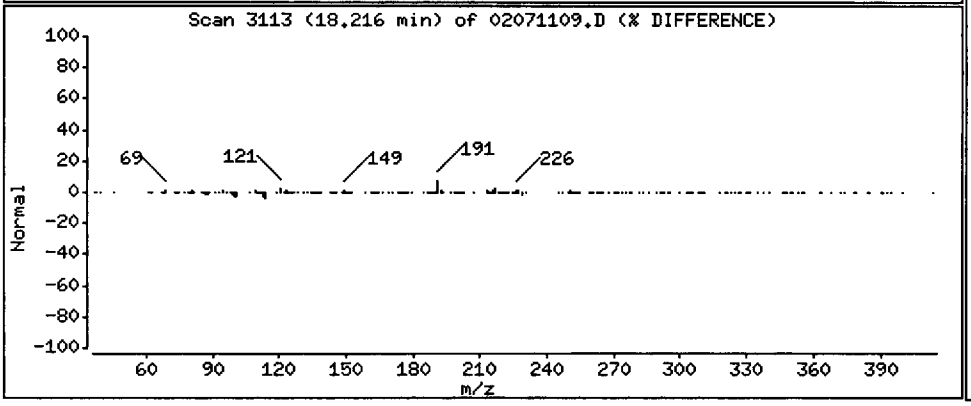
71 Chrysene

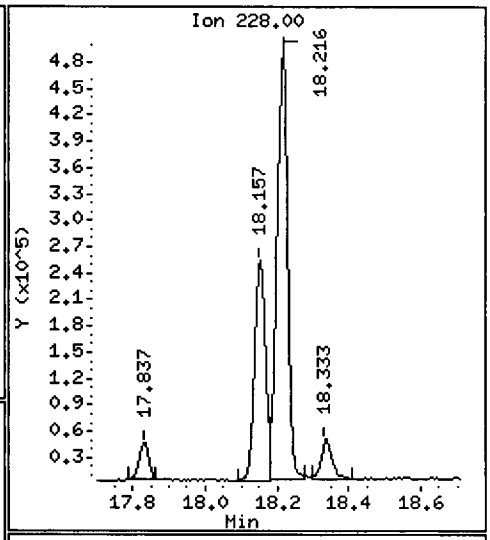
Concentration: 167.3 ug/kg

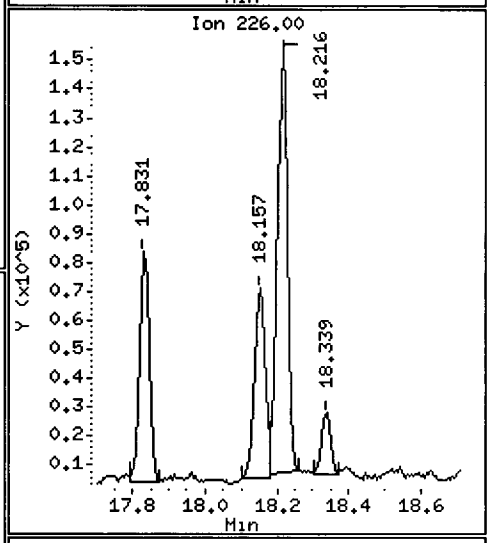


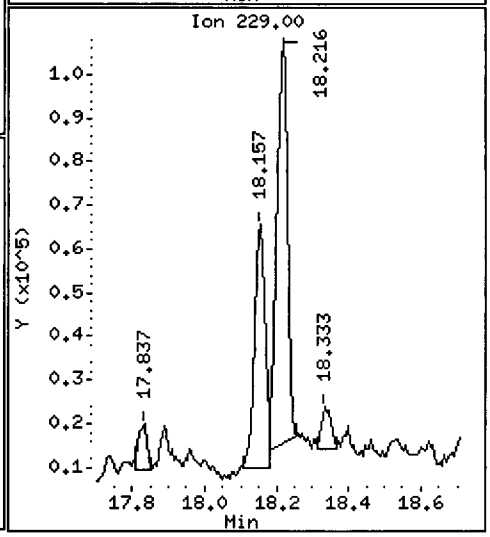












Data File: /chem2/nt6.i/20110207.b/02071109.D

Date : 07-FEB-2011 16:59

Client ID: EW10-10-COMP

Instrument: nt6.i

Sample Info: SH20A

Volume Injected (uL): 1.0

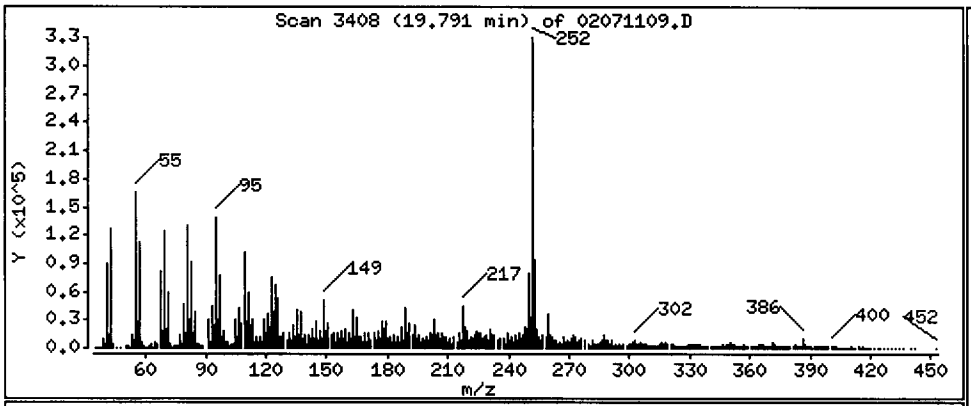
Operator: JZ

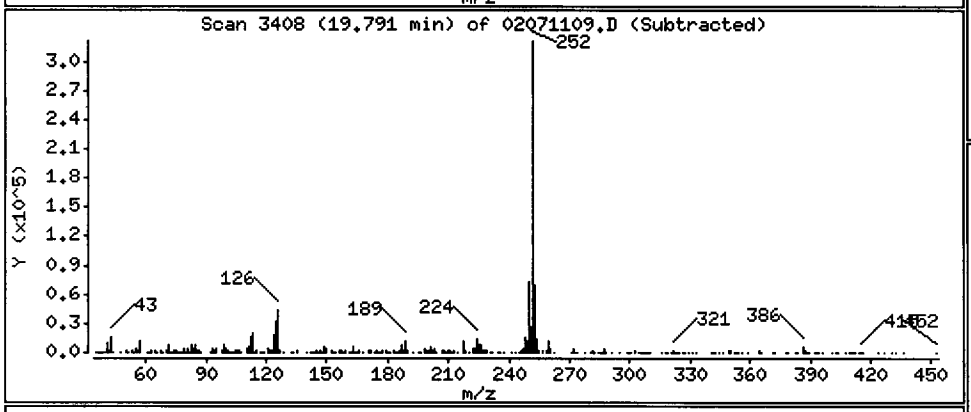
Column phase: ZB-5msi

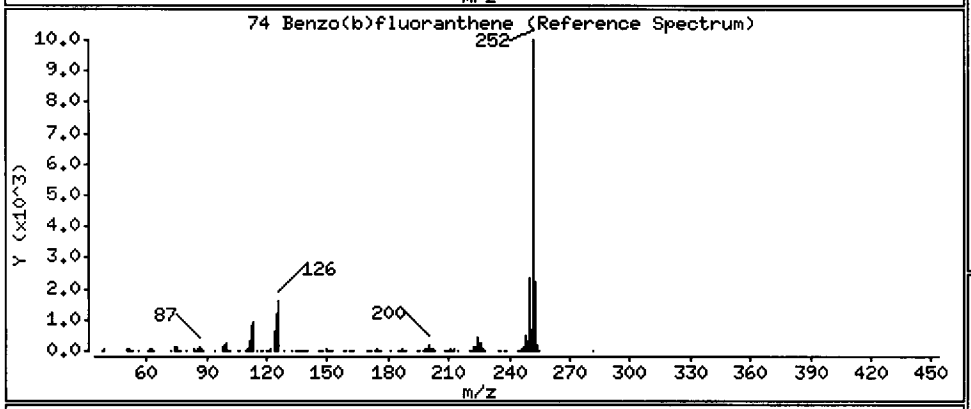
Column diameter: 0.32

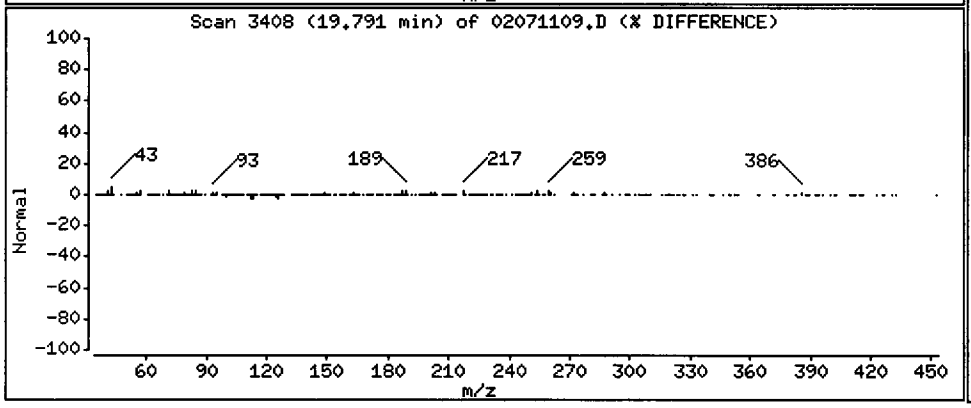
74 Benzo(b)fluoranthene

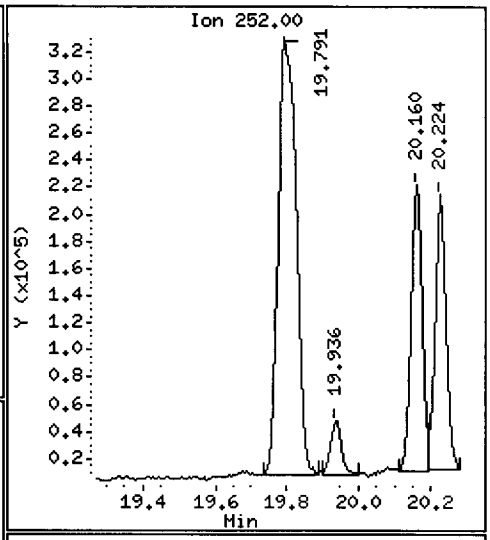
Concentration: 169.3 ug/kg

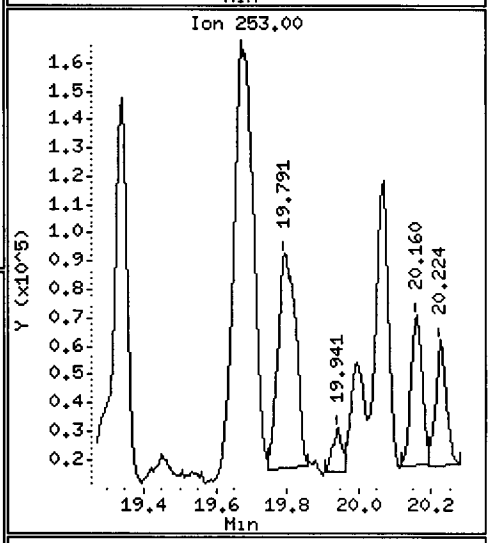


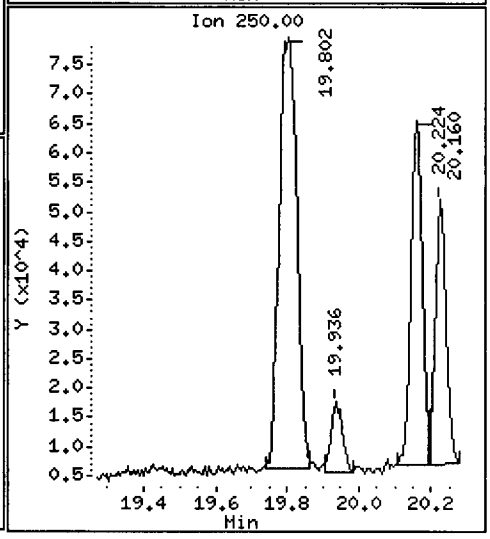












Data File: /chem2/nt6.i/20110207.b/02071109.D

Date : 07-FEB-2011 16:59

Client ID: EW10-10-COMP

Instrument: nt6.i

Sample Info: SH20A

Volume Injected (uL): 1.0

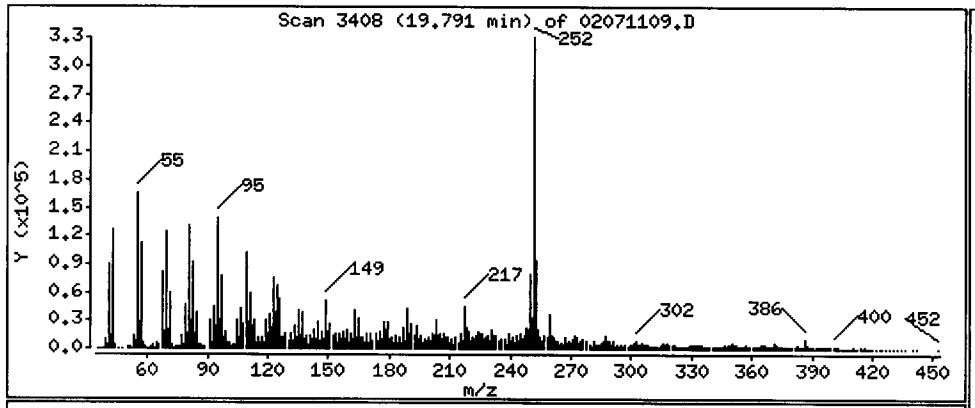
Operator: JZ

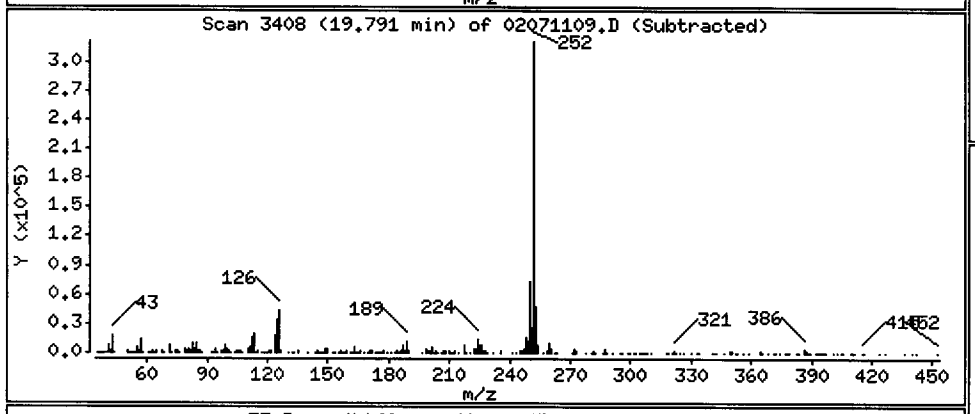
Column phase: ZB-5msi

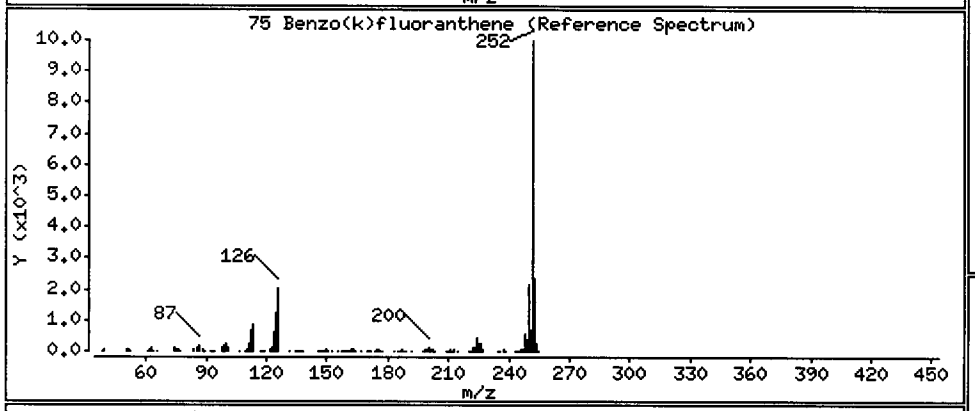
Column diameter: 0.32

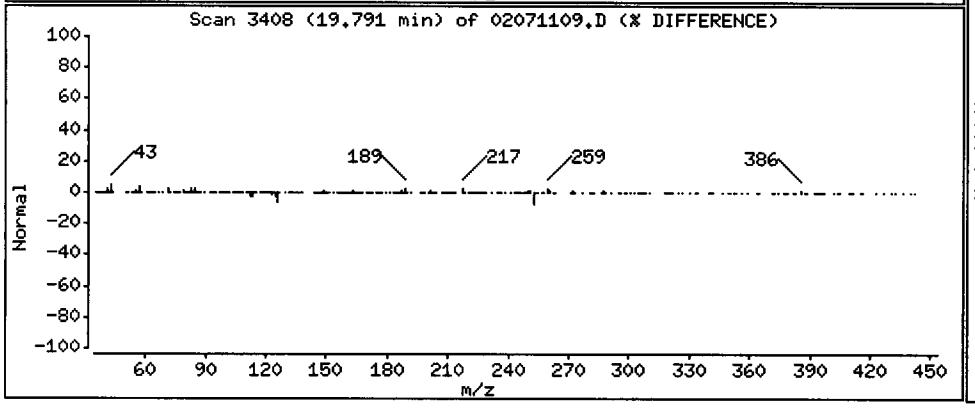
75 Benzo(k)fluoranthene

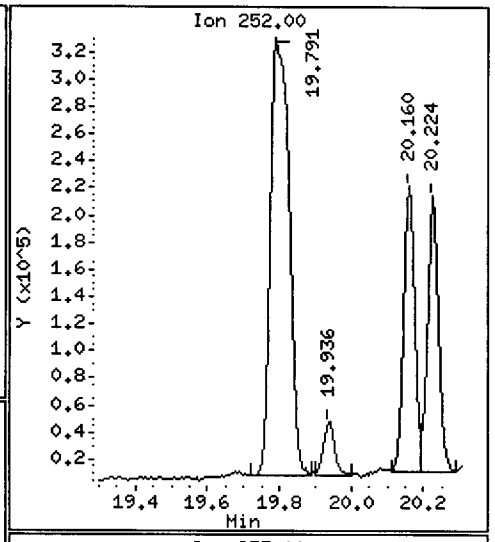
Concentration: 168.8 ug/kg

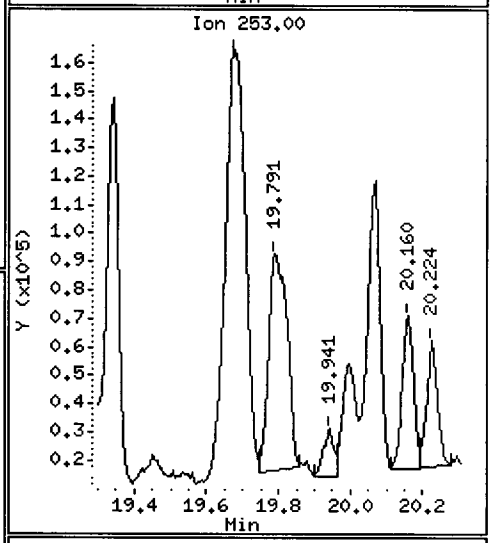


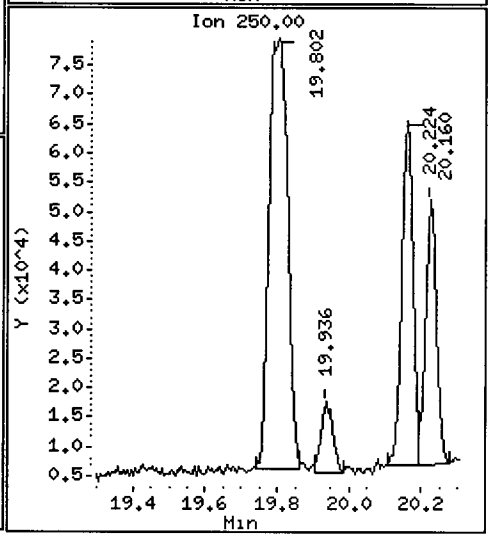












Data File: /chem2/nt6.i/20110207.b/02071109.D

Date : 07-FEB-2011 16:59

Client ID: EW10-10-COMP

Instrument: nt6.i

Sample Info: SH20A

Volume Injected (uL): 1.0

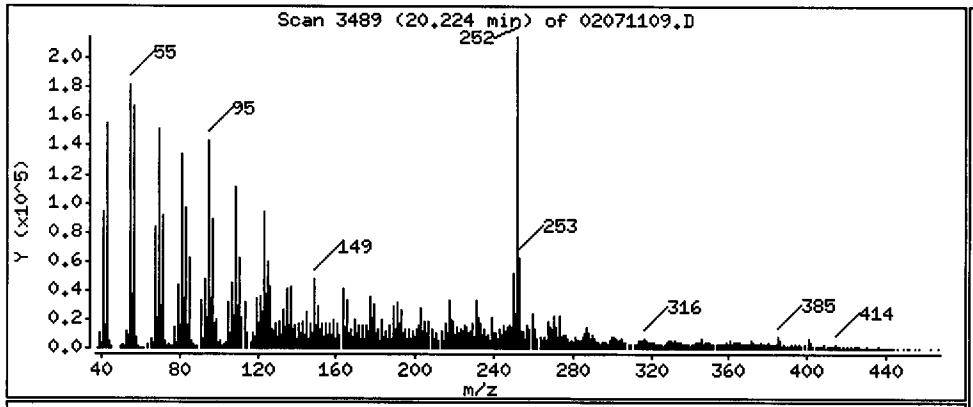
Operator: JZ

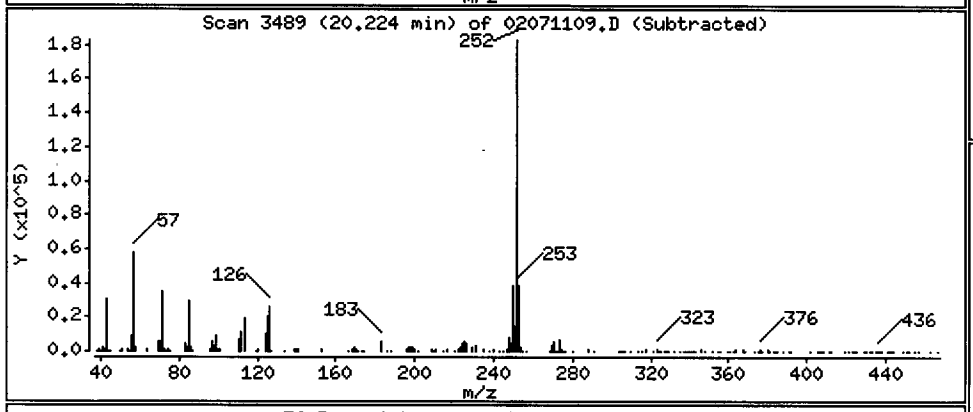
Column phase: ZB-5msi

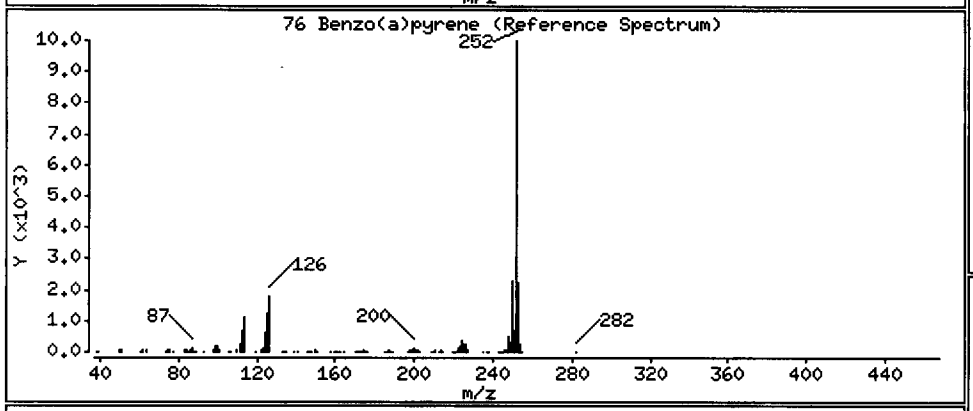
Column diameter: 0.32

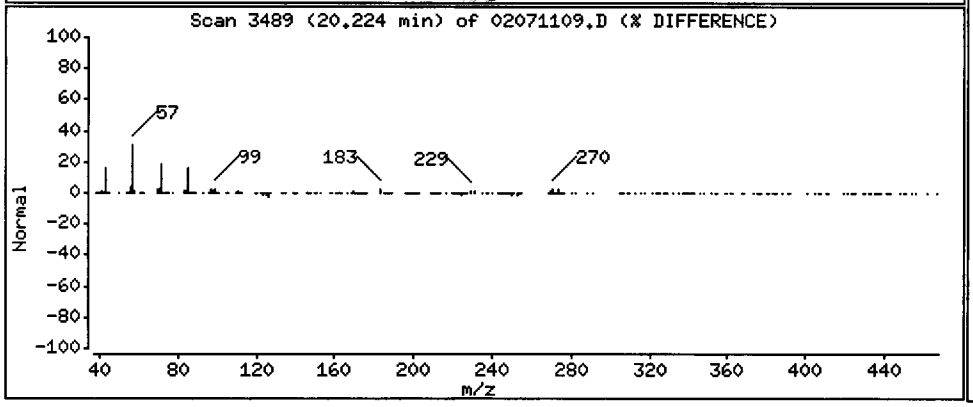
76 Benzo(a)pyrene

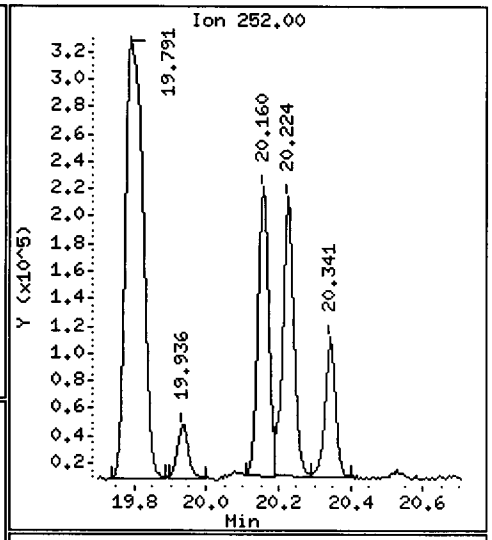
Concentration: 71.12 ug/kg

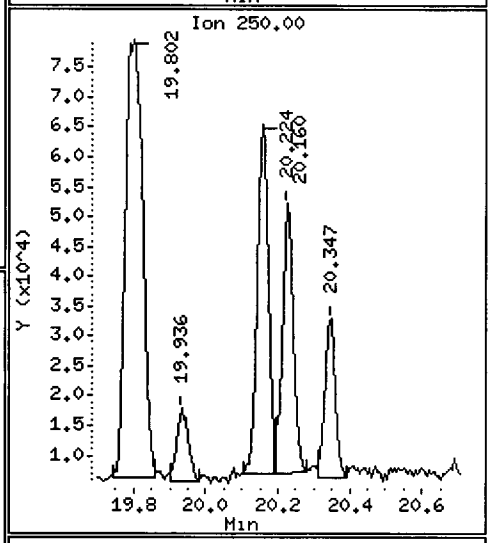


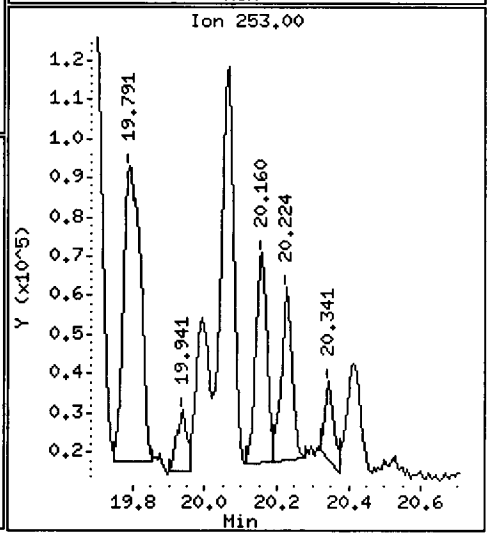












Data File: /chem2/nt6.i/20110207.b/02071109.D

Date : 07-FEB-2011 16:59

Client ID: EW10-10-COMP

Instrument: nt6.i

Sample Info: SH20A

Volume Injected (uL): 1.0

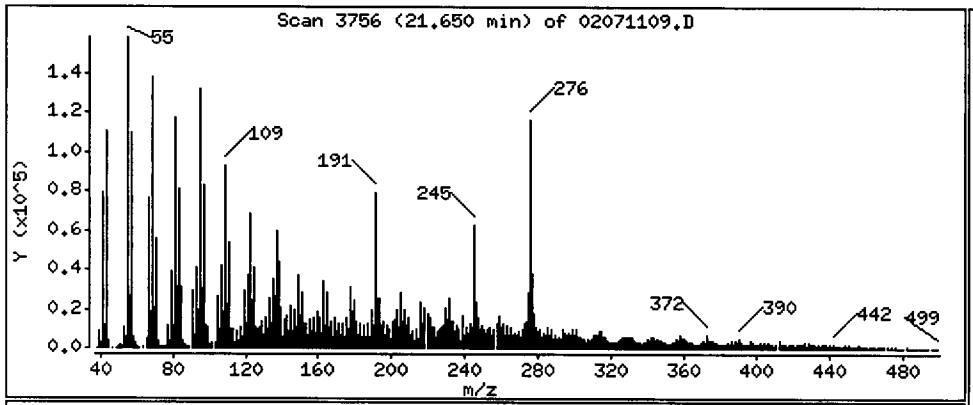
Operator: JZ

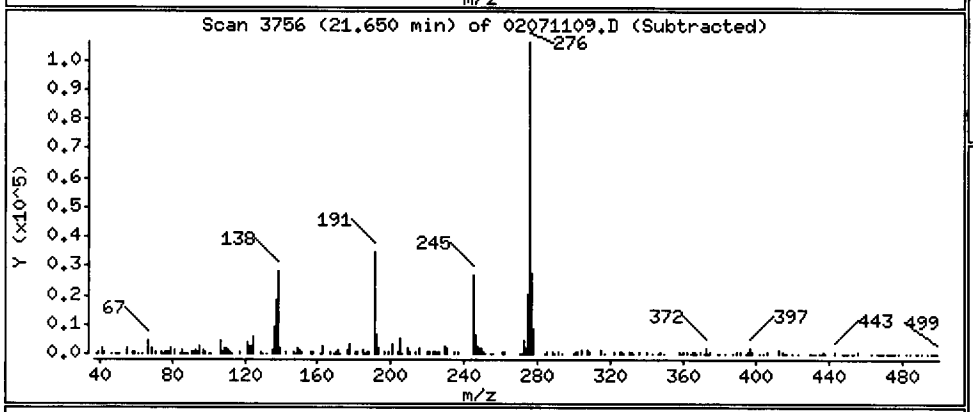
Column phase: ZB-5msi

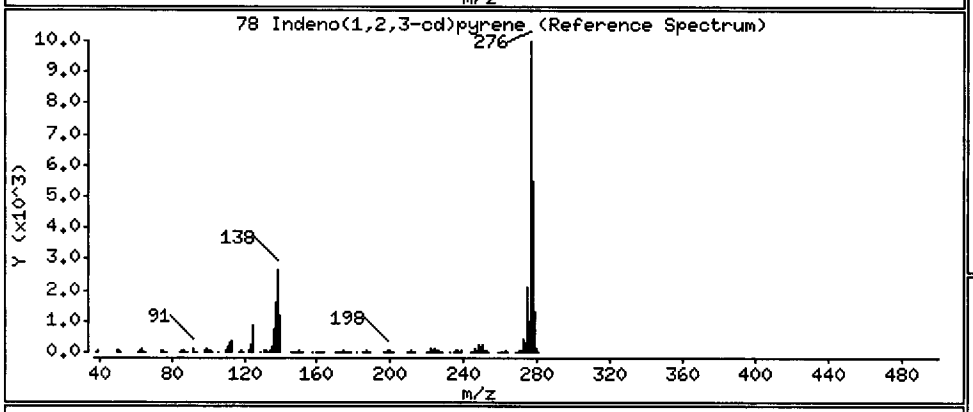
Column diameter: 0.32

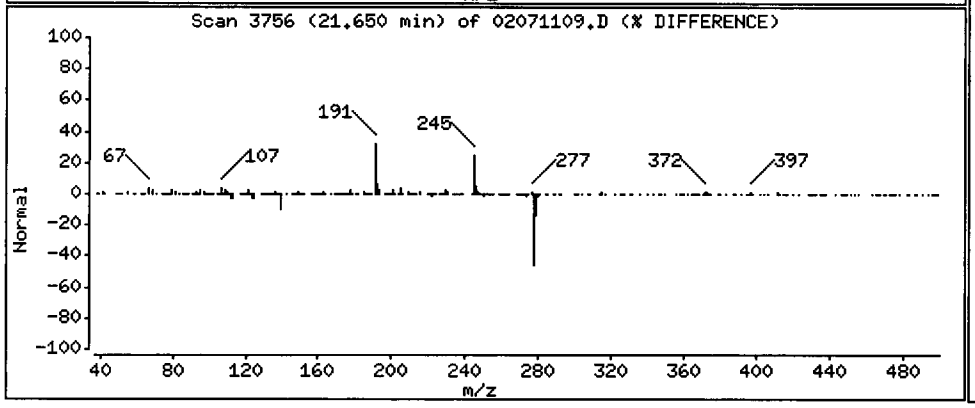
78 Indeno(1,2,3-cd)pyrene

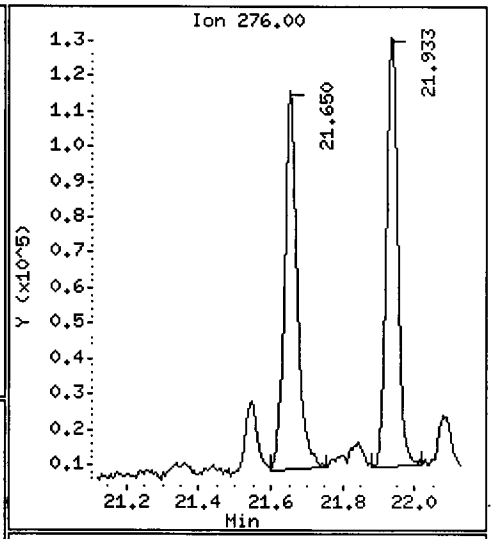
Concentration: 35.09 ug/kg

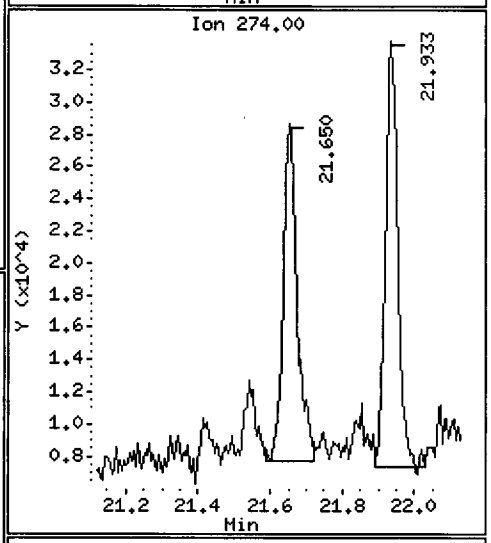


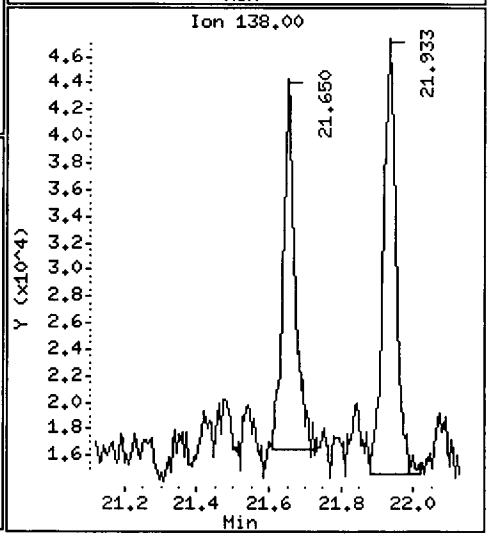












Data File: /chem2/nt6.i/20110207.b/02071109.D

Date : 07-FEB-2011 16:59

Client ID: EW10-10-COMP

Instrument: nt6.i

Sample Info: SH20A

Volume Injected (uL): 1.0

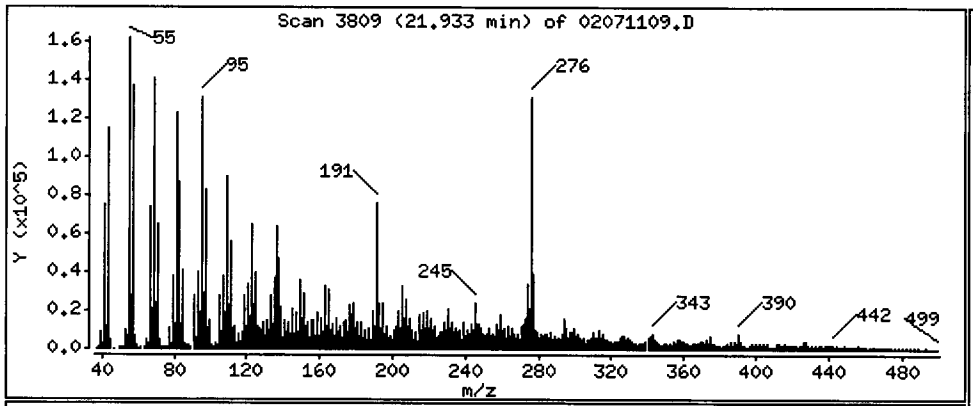
Operator: JZ

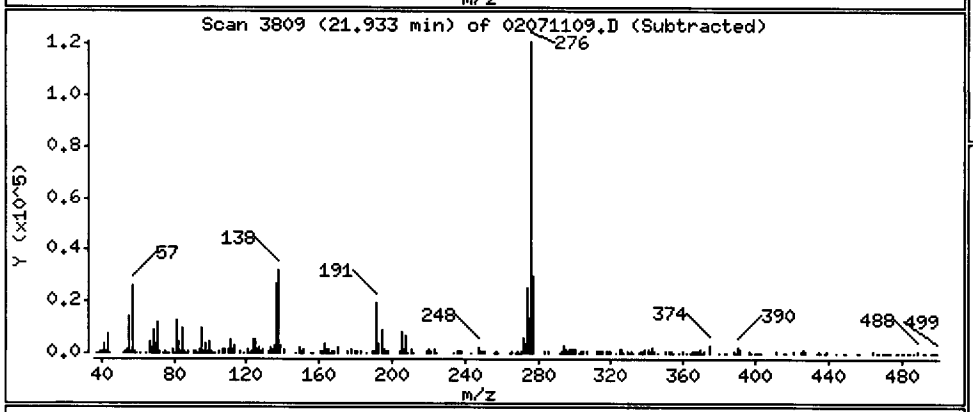
Column phase: ZB-5msi

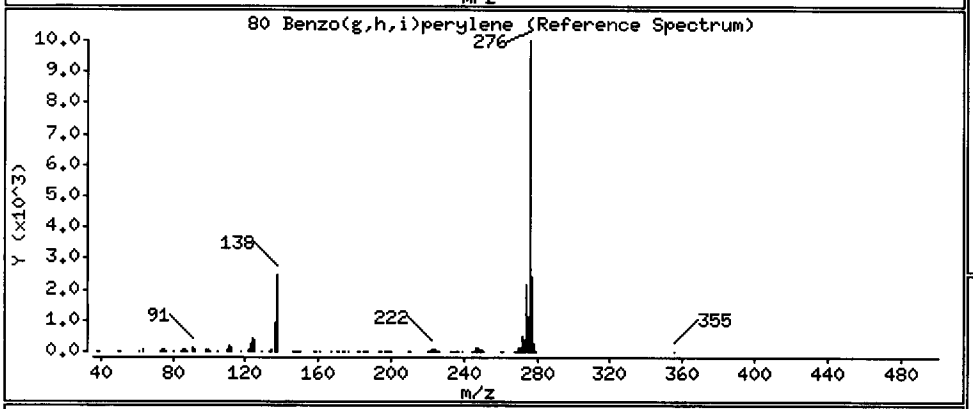
Column diameter: 0.32

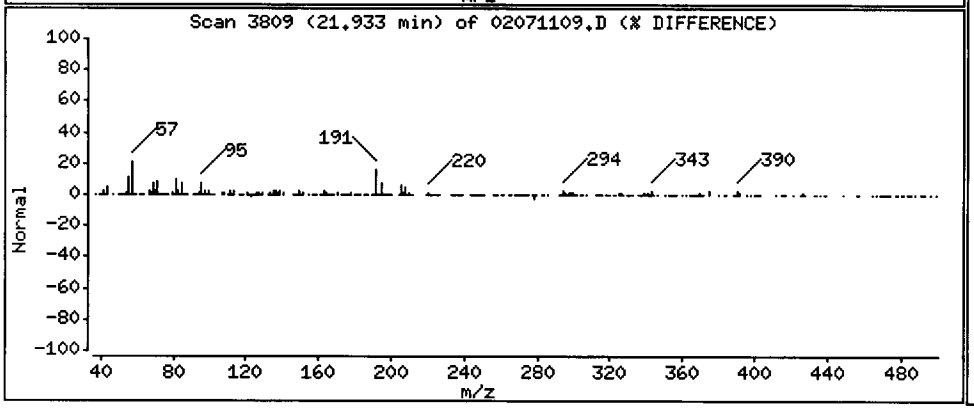
80 Benzo(g,h,i)perylene

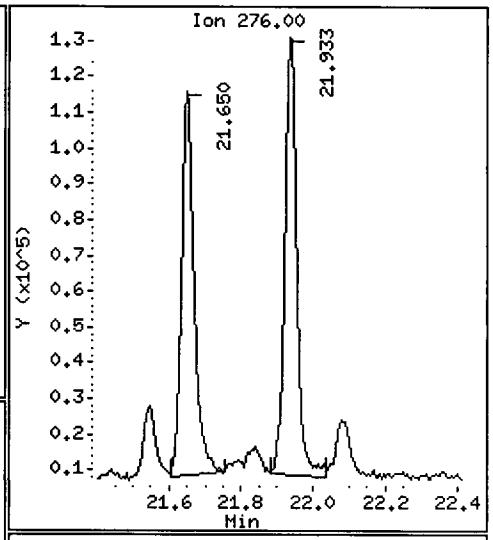
Concentration: 42.58 ug/kg

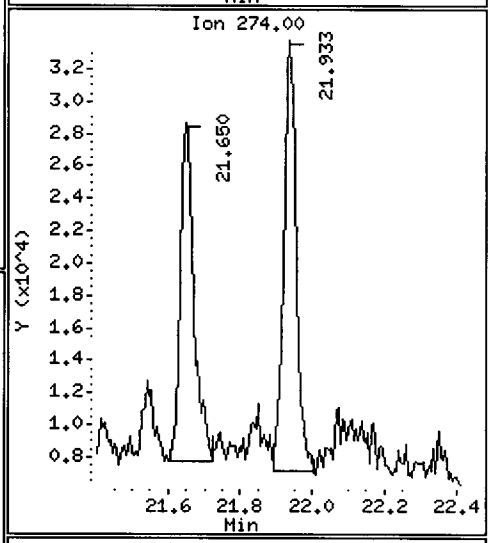


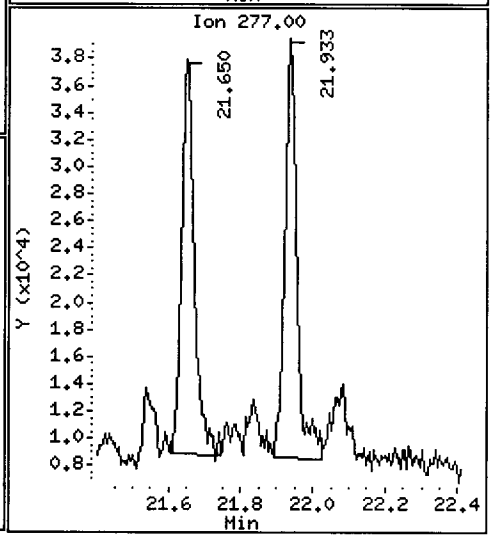












Data File: /chem2/nt6.i/20110207.b/02071109.D

Date : 07-FEB-2011 16:59

Client ID: EW10-10-COMP

Instrument: nt6.i

Sample Info: SH20A

Volume Injected (uL): 1.0

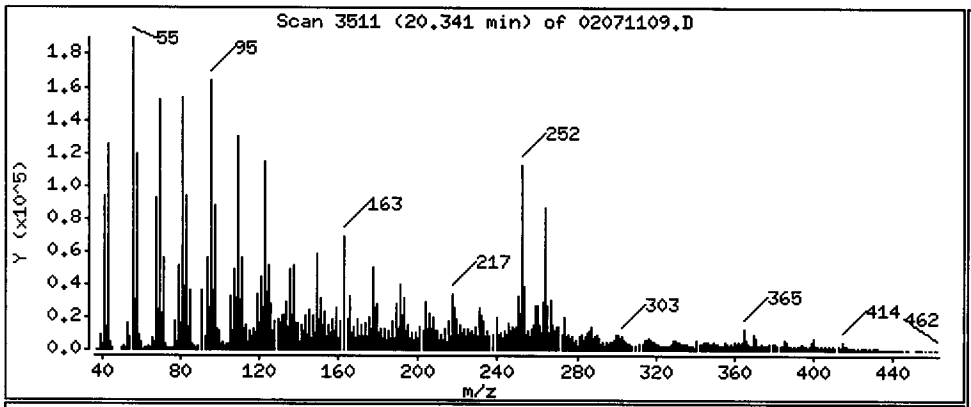
Operator: JZ

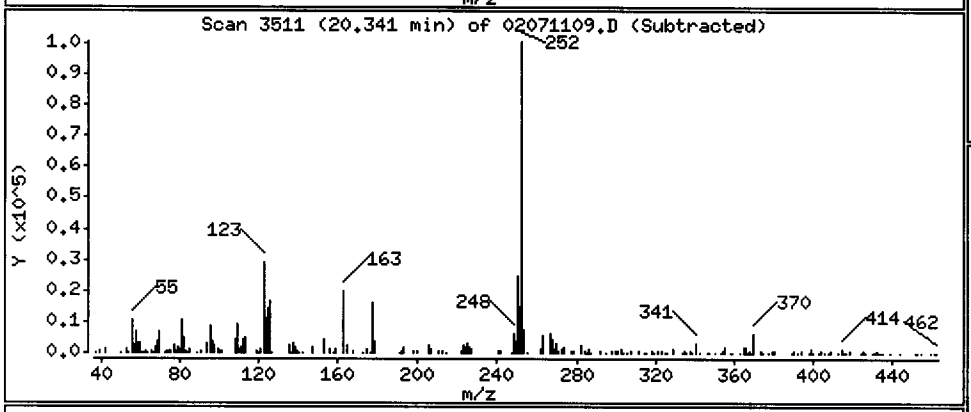
Column phase: ZB-5msi

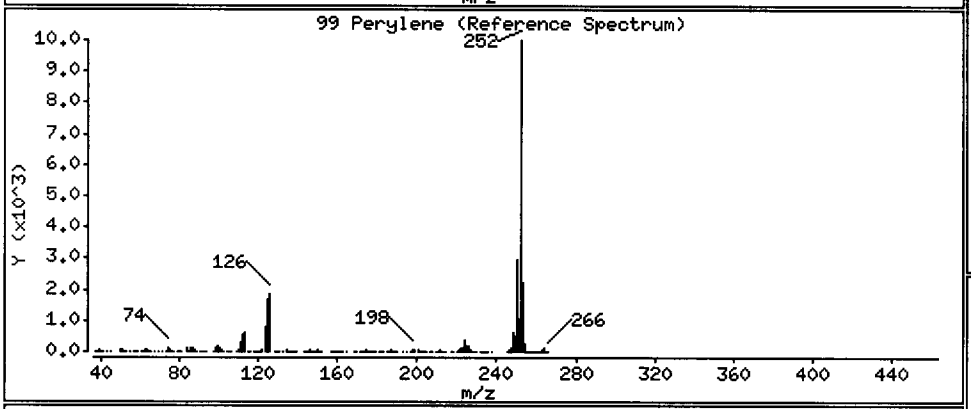
Column diameter: 0.32

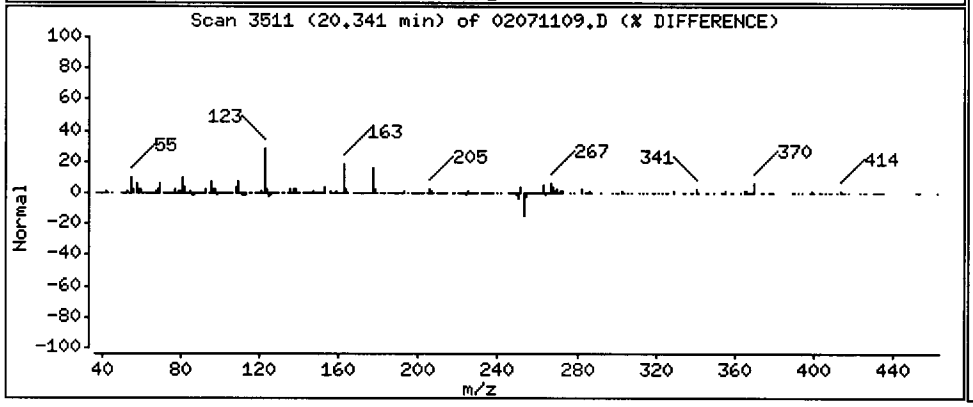
99 Perylene

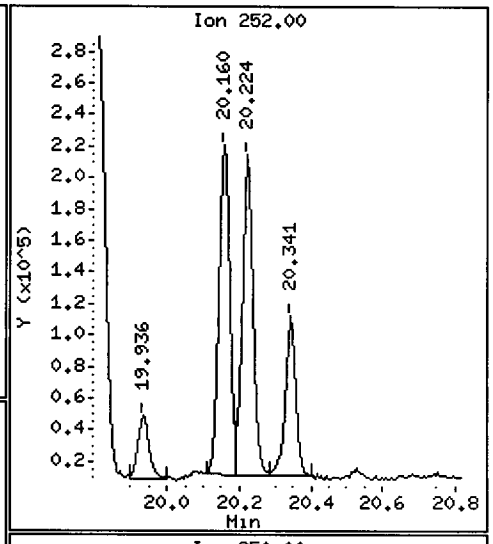
Concentration: 35.03 ug/kg

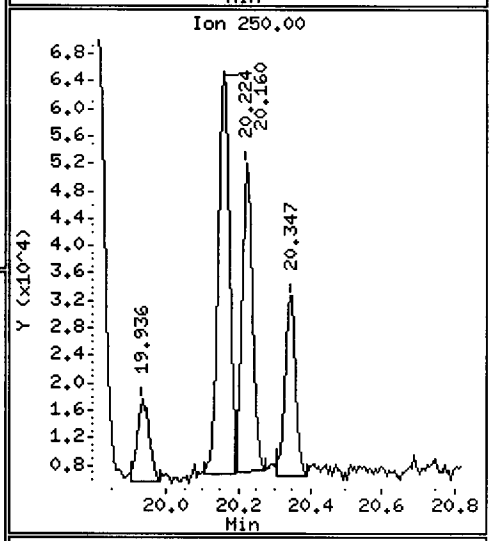


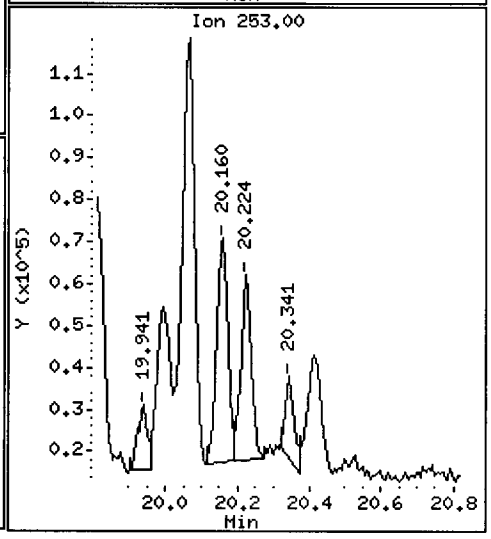












Data File: /chem2/nt6.i/20110207.b/02071109.D

Date : 07-FEB-2011 16:59

Client ID: EW10-10-COMP

Instrument: nt6.i

Sample Info: SH20A

Volume Injected (uL): 1.0

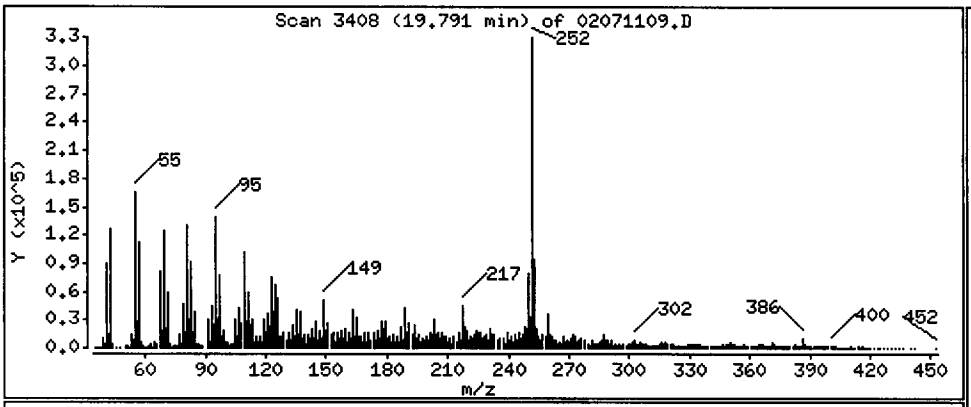
Operator: JZ

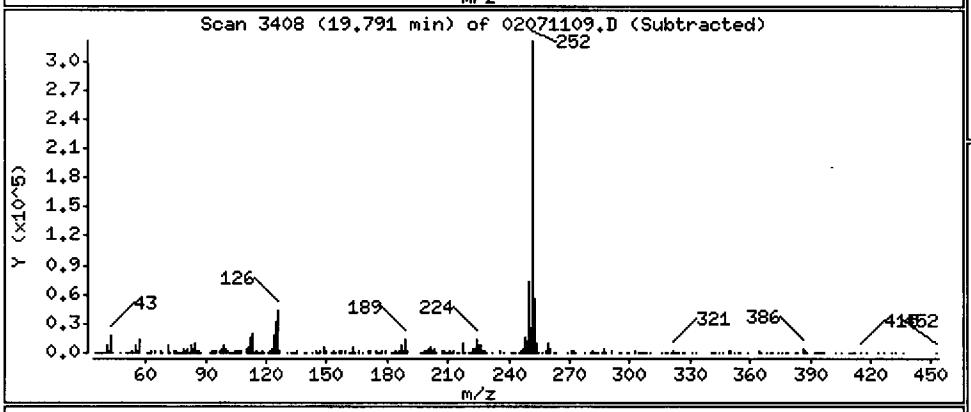
Column phase: ZB-5msi

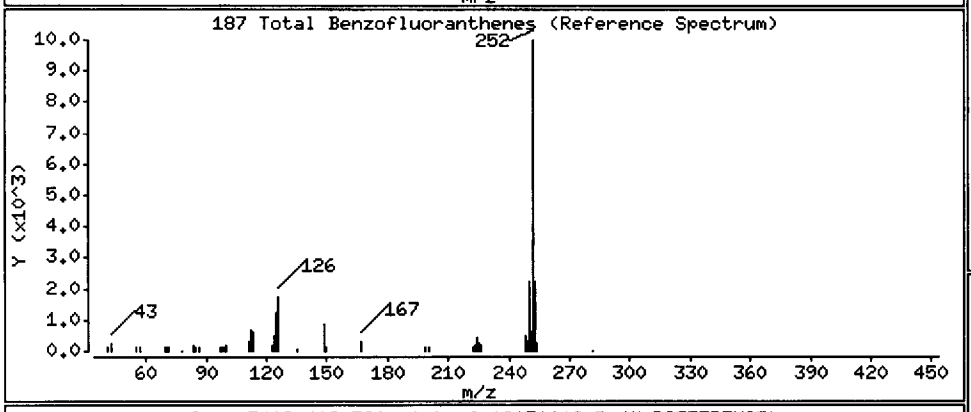
Column diameter: 0.32

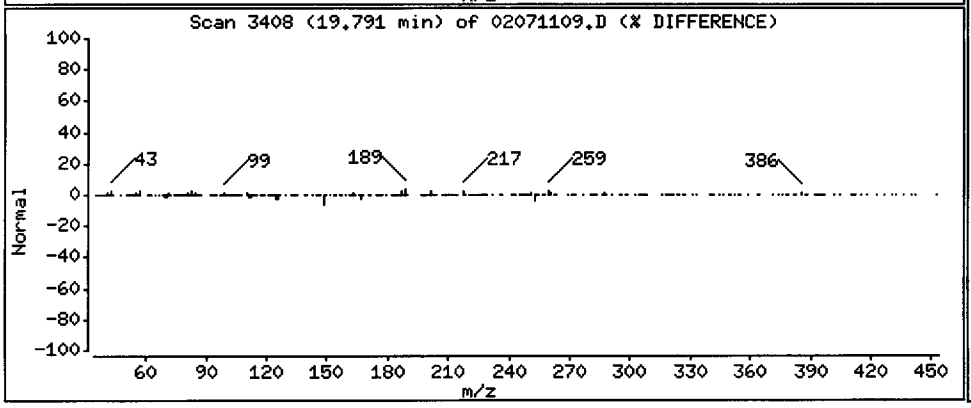
187 Total Benzofluoranthenes

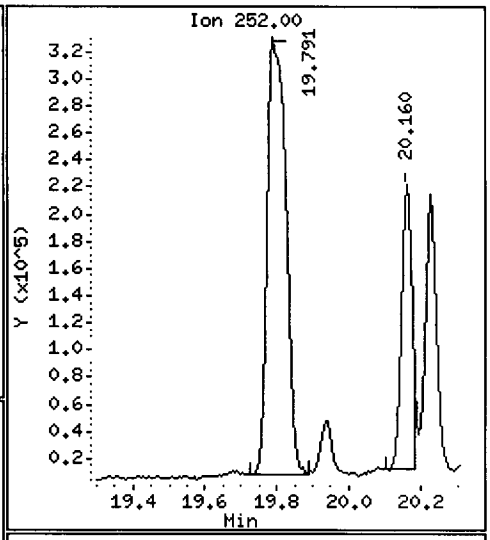
Concentration: 178.8 ug/kg

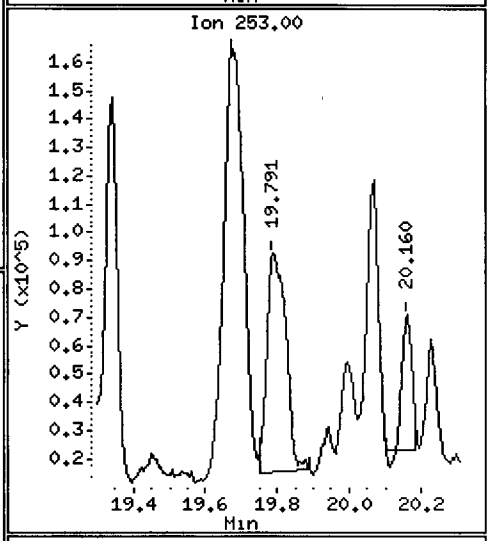


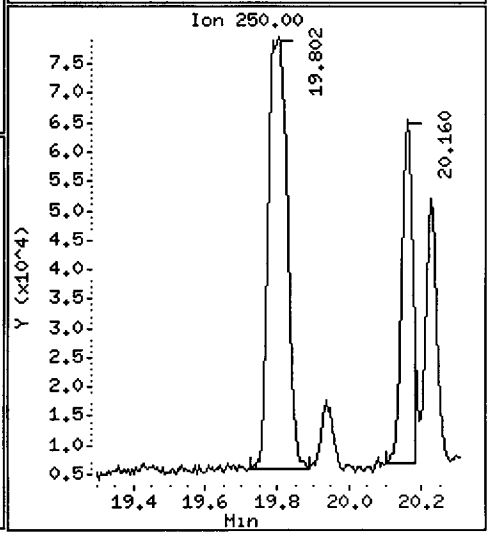












CO-ELUTION SUMMARY FOR FILE - 02071109.D

Lab ID: SH20A, Method: SW846012811.m, Instrument: nt6.i, Date: 07-FEB-2011

RT	CO-ELUTION COMPOUNDS
	NO CO-ELUTIONS

EcoChem, INC.
Environmental Data Quality

DATA VALIDATION REPORT

East Waterway Intertidal MIS Sediment Sampling

Prepared for:

Windward Environmental, LLC
200 West Mercer Street, Suite 401
Seattle, Washington 98119

Prepared by:

EcoChem, Inc.
710 Second Avenue, Suite 660
Seattle, Washington 98104

EcoChem Project: C22018-10

November 3, 2010

Approved for Release:

Chris Ransom
Project Manager
EcoChem, Inc.

PROJECT NARRATIVE

Basis for the Data Validation

This report summarizes the results of summary validation performed on sediment samples and quality control sample data for the East Waterway Intertidal MIS Sediment sampling. A complete list of samples is provided in the **Sample Index**.

Samples were analyzed by Analytical Resources, Inc. (ARI), Tukwila, Washington. The analytical methods and EcoChem project chemists are listed below.

Analysis	Method	Primary Review	Secondary Review
Semivolatile Organic Compounds	EPA 8270D	Ben Frans	Eric Strout

The data were reviewed using guidance and quality control criteria documented in the analytical methods; the quality assurance project plan (QAPP) from the *Intertidal MIS Sediment Sampling* (July, 2009); and *National Functional Guidelines for Organic Data Review* (USEPA 1999).

EcoChem's goal in assigning data assessment qualifiers is to assist in proper data interpretation. If values are estimated (J or UJ), data may be used for site evaluation and risk assessment purposes but reasons for data qualification should be taken into consideration when interpreting sample concentrations. If values are assigned an R, the data are to be rejected and should not be used for any site evaluation purposes. If values have no data qualifier assigned, then the data meet the data quality objectives as stated in the documents and methods referenced above.

Data qualifier definitions, reason codes, and validation criteria are included as **APPENDIX A**. A Qualified Data Summary Table is included in **APPENDIX B**. Data Validation Worksheets will be kept on file at EcoChem, Inc. A qualified laboratory electronic data deliverable (EDD) is also submitted with this report.

Sample Index
East Waterway Intertidal MIS Sediment Sampling
Analytical Resources Inc.

SDG	Sample ID	Lab ID	SVOC
RN92	EW10-01A-COMP	10-23817-RN92A	✓
RN92	EW10-01B-COMP	10-23818-RN92B	✓
RN92	EW10-01C-COMP	10-23819-RN92C	✓
RN92	EW10-02-COMP	10-23820-RN92D	✓
RN92	EW10-03A-COMP	10-23821-RN92E	✓
RN92	EW10-03B-COMP	10-23822-RN92F	✓
RN92	EW10-03C-COMP	10-23823-RN92G	✓
RN92	EW10-04-COMP	10-23824-RN92H	✓
RN92	EW10-05-COMP	10-23825-RN92I	✓
RN92	EW10-06-COMP	10-23826-RN92J	✓
RN92	EW10-07-COMP	10-23827-RN92K	✓
RN92	EW10-08-COMP	10-23828-RN92L	✓
RN92	EW10-09-COMP	10-23829-RN92M	✓
RN92	EW10-11-COMP	10-23830-RN92N	✓
RN92	EW10-SB01-24.5-26.5	10-23910-RN92O	✓

DATA VALIDATION REPORT
East Waterway – MIS Intertidal Sediments
Semivolatile Compounds by EPA Method 8270D

This report documents the review of analytical data from the analysis of nine composite sediment samples, one discrete sediment sample, and the associated laboratory quality control (QC) samples. Samples were analyzed by Analytical Resources, Inc. (ARI), Tukwila, Washington. Refer to the **Sample Index** for a list of samples reviewed.

SDG	Number of Samples	Validation Level
RN92	14 Composite Sediment, 1 Sediment	Stage 2B

I. DATA PACKAGE COMPLETENESS

The laboratory submitted all required deliverables. The laboratory followed adequate corrective action processes and all anomalies were discussed in the case narrative.

II. EDD TO HARDCOPY VERIFICATION

A complete (100%) verification of the electronic data deliverable (EDD) results was performed by comparison to the hardcopy laboratory data package. Laboratory QC results were also verified (10%).

III. TECHNICAL DATA VALIDATION

The quality control (QC) requirements that were reviewed are listed in the following table:

2	Sample Preservation and Holding Time	1	Reference Material
	GC/MS Instrument Performance	1	Matrix Spike/Matrix Spike Duplicate (MS/MSD)
	Initial Calibration (ICAL)		Internal Standards
	Continuing Calibration (CCAL)	1	Field Duplicates
	Laboratory Blanks		Target Analyte List
1	Field Blanks		Reporting Limits
	Surrogate Compounds	2	Reported Results
	Laboratory Control Samples (LCS/LCSD)		Compound Identification

[1] ***Quality control results are discussed below, but no data were qualified.***
[2] ***Quality control outliers that impact the reported data were noted. Data qualifiers were issued as discussed below.***

Sample Preservation and Holding Times

Samples were archived at -20°C. All of the composite samples were extracted 408 to 410 days after collection, beyond the extended holding time of one year for frozen sediments. Due to the potential low bias, all results for the composite samples were estimated (UJ/J-1).

Field Blanks

No samples identified as field blanks were submitted.

Reference Material

The Sequim Bay reference material SQ-1 was analyzed with the samples. The recoveries for several analytes were outside of the reference range. As the SQ-1 values are reference values only and are not certified, no action was taken based on the recovery value outliers.

Matrix Spike/Matrix Spike Duplicate

Sample EW10-01A-COMP was used for the matrix spike/matrix spike duplicate (MS/MSD) analyses. All percent recovery (%R) values in the matrix spike were acceptable. In the matrix spike duplicate, the recovery values for phenanthrene (at 102%), fluoranthene (114%), and pyrene (108%) were slightly greater than the upper control limits. Since the matrix spike recoveries were acceptable, no data were qualified based on the single %R outliers.

Field Duplicates

No samples identified as field duplicates were submitted.

Reported Results

For a number of samples, the concentrations of one or more target analytes were greater than the calibrated linear range of the instrument. The results were flagged "E" by the laboratory. The samples were reanalyzed at dilutions, and the concentrations were within the linear range. Both sets of data were reported by the laboratory. To indicate which results should be reported from each analysis, the results that exceeded the linear range in the original analysis were rejected (R-20). The results for all other compounds in the dilution were rejected (R-11).

The concentrations of the following compounds were greater than the calibrated linear range:

Sample EW10-03A-COMP: fluoranthene, pyrene, and chrysene

Sample EW10-05-COMP: phenanthrene, fluoranthene, pyrene, chrysene, benzo(a)pyrene, and total benzofluoranthenes

Sample EW10-06-COMP: fluorene, phenanthrene, anthracene, fluoranthene, benzo(a)anthracene, pyrene, chrysene, benzo(a)pyrene, and total benzofluoranthenes

Sample EW10-07-COMP was also reanalyzed at a 5x dilution factor, even though all concentrations were with in the calibrated linear range of the instrument and no QC outliers were evident. The results from the re-analysis are rejected (R-11); the original results should be used.

IV. OVERALL ASSESSMENT

As was determined by this evaluation, the laboratory followed the specified analytical method. Accuracy was acceptable, as demonstrated by the surrogate, laboratory control samples (LCS), and MS/MSD recoveries, with the exceptions previously noted, precision was also acceptable as demonstrated by the RPD values for the MS/MSD analyses.

Data were estimated based on sample extractions that occurred past the holding time limit. Data were rejected to indicate which result should not be used when multiple results were reported for a sample.

Data that have been rejected should not be used for any purpose.

All other data, as qualified, are acceptable for use.

EcoChem, INC.
Environmental Data Quality

APPENDIX A

DATA QUALIFIER DEFINITIONS, REASON CODES, AND CRITERIA TABLES

DATA VALIDATION QUALIFIER CODES
Based on National Functional Guidelines

The following definitions provide brief explanations of the qualifiers assigned to results in the data review process.

U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
J	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
NJ	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents the approximate concentration.
UJ	The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
R	The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

The following is an EcoChem qualifier that may also be assigned during the data review process:

DNR	Do not report; a more appropriate result is reported from another analysis or dilution.

DATA QUALIFIER REASON CODES

1	Holding Time/Sample Preservation
2	Chromatographic pattern in sample does not match pattern of calibration standard.
3	Compound Confirmation
4	Tentatively Identified Compound (TIC) (associated with NJ only)
5A	Calibration (initial)
5B	Calibration (continuing)
6	Field Blank Contamination
7	Lab Blank Contamination (e.g., method blank, instrument, etc.)
8	Matrix Spike(MS & MSD) Recoveries
9	Precision (all replicates)
10	Laboratory Control Sample Recoveries
11	A more appropriate result is reported (associated with “R” and “DNR” only)
12	Reference Material
13	Surrogate Spike Recoveries (a.k.a., labeled compounds & recovery standards)
14	Other (define in validation report)
15	GFAA Post Digestion Spike Recoveries
16	ICP Serial Dilution % Difference
17	ICP Interference Check Standard Recovery
18	Trip Blank Contamination
19	Internal Standard Performance (e.g., area, retention time, recovery)
20	Linear Range Exceeded
21	Potential False Positives
22	Elevated Detection Limit Due to Interference (i.e., laboratory, chemical and/or matrix)

EcoChem Validation Guidelines for Semivolatile Analysis by GC/MS
(Based on Organic NFG 1999)

VALIDATION QC ELEMENT	ACCEPTANCE CRITERIA	ACTION	REASON CODE
Cooler Temperature	4°C ±2°	J(+)/UJ(-) if greater than 6 deg. C (EcoChem PJ)	1
Holding Time	Water: 7 days from collection Soil: 14 days from collection Analysis: 40 days from extraction	Water: J(+)/UJ(-) if ext. > 7 and < 21 days J(+)/R(-) if ext > 21 days (EcoChem PJ) Solids/Wastes: J(+)/UJ(-) if ext. > 14 and < 42 days J(+)/R(-) if ext. > 42 days (EcoChem PJ) J(+)/UJ(-) if analysis >40 days	1
Tuning	DFTPP Beginning of each 12 hour period Method acceptance criteria	R(+/-) all analytes in all samples associated with the tune	5A
Initial Calibration (Minimum 5 stds.)	RRF > 0.05	(EcoChem PJ, see TM-06) If MDL= reporting limit: J(+)/R(-) if RRF < 0.05 If reporting limit > MDL: note in worksheet if RRF <0.05	5A
	%RSD < 30%	(EcoChem PJ, see TM-06) J(+) if %RSD > 30%	5A
Continuing Calibration (Prior to each 12 hr. shift)	RRF > 0.05	(EcoChem PJ, see TM-06) If MDL= reporting limit: J(+)/R(-) if RRF < 0.05 If reporting limit > MDL: note in worksheet if RRF <0.05	5B
	%D <25%	(EcoChem PJ, see TM-06) If > +/-90%: J+/R- If -90% to -26%: J+ (high bias) If 26% to 90%: J+/UJ- (low bias)	5B
Method Blank	One per matrix per batch No results > CRQL	U(+) if sample (+) result is less than CRQL and less than appropriate 5X or 10X rule (raise sample value to CRQL)	7
		U(+) if sample (+) result is greater than or equal to CRQL and less than appropriate 5X and 10X rule (at reported sample value)	7
	No TICs present	R(+) TICs using 10X rule	7
Field Blanks (Not Required)	No results > CRQL	Apply 5X/10X rule; U(+) < action level	6

Copyright 2005 EcoChem, Inc.

EcoChem Validation Guidelines for Semivolatile Analysis by GC/MS
(Based on Organic NFG 1999)

VALIDATION QC ELEMENT	ACCEPTANCE CRITERIA	ACTION	REASON CODE
MS/MSD (recovery)	One per matrix per batch Use method acceptance criteria	Qualify parent only unless other QC indicates systematic problems: J(+) if both %R > UCL J(+)/UJ(-) if both %R < LCL J(+)/R(-) if both %R < 10% PJ if only one %R outlier	8
MS/MSD (RPD)	One per matrix per batch Use method acceptance criteria	J(+) in parent sample if RPD > CL	9
LCS low conc. H2O SVOA	One per lab batch Within method control limits	J(+) assoc. cmpd if > UCL J(+)/R(-) assoc. cmpd if < LCL J(+)/R(-) all cmpds if half are < LCL	10
LCS regular SVOA (H2O & solid)	One per lab batch Lab or method control limits	J(+) if %R > UCL J(+)/UJ(-) if %R <LCL J(+)/R(-) if %R < 10% (EcoChem PJ)	10
LCS/LCSD *(if required)*	One set per matrix and batch of 20 samples RPD < 35%	J(+)/UJ(-) assoc. cmpd. in all samples	9
Surrogates	Minimum of 3 acid and 3 base/neutral compounds Use method acceptance criteria	Do not qualify if only 1 acid and/or 1 B/N surrogate is out unless <10% J(+) if %R > UCL J(+)/UJ(-) if %R < LCL J(+)/R(-) if %R < 10%	13
Internal Standards	Added to all samples Acceptable Range: IS area 50% to 200% of CCAL area RT within 30 seconds of CC RT	J(+) if > 200% J(+)/UJ(-) if < 50% J(+)/R(-) if < 25% RT>30 seconds, narrate and Notify PM	19
Field Duplicates	Use QAPP limits. If no QAPP: Solids: RPD <50% OR absolute diff. < 2X RL (for results < 5X RL) Aqueous: RPD <35% OR absolute diff. < 1X RL (for results < 5X RL)	Narrate and qualify if required by project (EcoChem PJ)	9
TICs	Major ions (>10%) in reference must be present in sample; intensities agree within 20%; check identification	NJ the TIC unless: R(+) common laboratory contaminants See Technical Director for ID issues	4
Quantitation/ Identification	RRT within 0.06 of standard RRT Ion relative intensity within 20% of standard All ions in std. at > 10% intensity must be present in sample	See Technical Director if outliers	14 21 (false +)

Copyright 2005 EcoChem, Inc.

EcoChem, INC.
Environmental Data Quality

APPENDIX B
QUALIFIED DATA SUMMARY TABLE

Qualified Data Summary Table
East Waterway MIS Intertidal Sediment Sampling

SDG	Sample ID	Lab ID	Method	Analyte	Result	Units	Lab Quals	Val Quals	Val Reason
RN92	EW10-01A-COMP	10-23817-RN92A	EPA 8270D	1-Methylnaphthalene		ug/kg	U	UJ	1
RN92	EW10-01A-COMP	10-23817-RN92A	EPA 8270D	2-Methylnaphthalene		ug/kg	U	UJ	1
RN92	EW10-01A-COMP	10-23817-RN92A	EPA 8270D	Acenaphthene		ug/kg	U	UJ	1
RN92	EW10-01A-COMP	10-23817-RN92A	EPA 8270D	Acenaphthylene		ug/kg	U	UJ	1
RN92	EW10-01A-COMP	10-23817-RN92A	EPA 8270D	Anthracene		ug/kg	U	UJ	1
RN92	EW10-01A-COMP	10-23817-RN92A	EPA 8270D	Benzo(a)anthracene		ug/kg	U	UJ	1
RN92	EW10-01A-COMP	10-23817-RN92A	EPA 8270D	Benzo(a)pyrene		ug/kg	U	UJ	1
RN92	EW10-01A-COMP	10-23817-RN92A	EPA 8270D	Benzo(g,h,i)perylene		ug/kg	U	UJ	1
RN92	EW10-01A-COMP	10-23817-RN92A	EPA 8270D	Chrysene	13	ug/kg	J	J	1
RN92	EW10-01A-COMP	10-23817-RN92A	EPA 8270D	Dibenz(a,h)anthracene		ug/kg	U	UJ	1
RN92	EW10-01A-COMP	10-23817-RN92A	EPA 8270D	Dibenzofuran		ug/kg	U	UJ	1
RN92	EW10-01A-COMP	10-23817-RN92A	EPA 8270D	Fluoranthene	18	ug/kg	J	J	1
RN92	EW10-01A-COMP	10-23817-RN92A	EPA 8270D	Fluorene		ug/kg	U	UJ	1
RN92	EW10-01A-COMP	10-23817-RN92A	EPA 8270D	Indeno(1,2,3-cd)pyrene		ug/kg	U	UJ	1
RN92	EW10-01A-COMP	10-23817-RN92A	EPA 8270D	Naphthalene		ug/kg	U	UJ	1
RN92	EW10-01A-COMP	10-23817-RN92A	EPA 8270D	Phenanthrene		ug/kg	U	UJ	1
RN92	EW10-01A-COMP	10-23817-RN92A	EPA 8270D	Pyrene	20	ug/kg		J	1
RN92	EW10-01A-COMP	10-23817-RN92A	EPA 8270D	Total Benzofluoranthenes	22	ug/kg		J	1
RN92	EW10-01B-COMP	10-23818-RN92B	EPA 8270D	1-Methylnaphthalene		ug/kg	U	UJ	1
RN92	EW10-01B-COMP	10-23818-RN92B	EPA 8270D	2-Methylnaphthalene		ug/kg	U	UJ	1
RN92	EW10-01B-COMP	10-23818-RN92B	EPA 8270D	Acenaphthene		ug/kg	U	UJ	1
RN92	EW10-01B-COMP	10-23818-RN92B	EPA 8270D	Acenaphthylene		ug/kg	U	UJ	1
RN92	EW10-01B-COMP	10-23818-RN92B	EPA 8270D	Anthracene		ug/kg	U	UJ	1
RN92	EW10-01B-COMP	10-23818-RN92B	EPA 8270D	Benzo(a)anthracene		ug/kg	U	UJ	1
RN92	EW10-01B-COMP	10-23818-RN92B	EPA 8270D	Benzo(a)pyrene	11	ug/kg	J	J	1
RN92	EW10-01B-COMP	10-23818-RN92B	EPA 8270D	Benzo(g,h,i)perylene		ug/kg	U	UJ	1
RN92	EW10-01B-COMP	10-23818-RN92B	EPA 8270D	Chrysene	17	ug/kg	J	J	1
RN92	EW10-01B-COMP	10-23818-RN92B	EPA 8270D	Dibenz(a,h)anthracene		ug/kg	U	UJ	1
RN92	EW10-01B-COMP	10-23818-RN92B	EPA 8270D	Dibenzofuran		ug/kg	U	UJ	1
RN92	EW10-01B-COMP	10-23818-RN92B	EPA 8270D	Fluoranthene	20	ug/kg	J	J	1
RN92	EW10-01B-COMP	10-23818-RN92B	EPA 8270D	Fluorene		ug/kg	U	UJ	1
RN92	EW10-01B-COMP	10-23818-RN92B	EPA 8270D	Indeno(1,2,3-cd)pyrene		ug/kg	U	UJ	1
RN92	EW10-01B-COMP	10-23818-RN92B	EPA 8270D	Naphthalene		ug/kg	U	UJ	1
RN92	EW10-01B-COMP	10-23818-RN92B	EPA 8270D	Phenanthrene		ug/kg	U	UJ	1
RN92	EW10-01B-COMP	10-23818-RN92B	EPA 8270D	Pyrene	51	ug/kg		J	1
RN92	EW10-01B-COMP	10-23818-RN92B	EPA 8270D	Total Benzofluoranthenes	30	ug/kg		J	1
RN92	EW10-01C-COMP	10-23819-RN92C	EPA 8270D	1-Methylnaphthalene		ug/kg	U	UJ	1
RN92	EW10-01C-COMP	10-23819-RN92C	EPA 8270D	2-Methylnaphthalene		ug/kg	U	UJ	1
RN92	EW10-01C-COMP	10-23819-RN92C	EPA 8270D	Acenaphthene		ug/kg	U	UJ	1
RN92	EW10-01C-COMP	10-23819-RN92C	EPA 8270D	Acenaphthylene		ug/kg	U	UJ	1
RN92	EW10-01C-COMP	10-23819-RN92C	EPA 8270D	Anthracene		ug/kg	U	UJ	1
RN92	EW10-01C-COMP	10-23819-RN92C	EPA 8270D	Benzo(a)anthracene		ug/kg	U	UJ	1
RN92	EW10-01C-COMP	10-23819-RN92C	EPA 8270D	Benzo(a)pyrene		ug/kg	U	UJ	1
RN92	EW10-01C-COMP	10-23819-RN92C	EPA 8270D	Benzo(g,h,i)perylene		ug/kg	U	UJ	1
RN92	EW10-01C-COMP	10-23819-RN92C	EPA 8270D	Chrysene	13	ug/kg	J	J	1
RN92	EW10-01C-COMP	10-23819-RN92C	EPA 8270D	Dibenz(a,h)anthracene		ug/kg	U	UJ	1
RN92	EW10-01C-COMP	10-23819-RN92C	EPA 8270D	Dibenzofuran		ug/kg	U	UJ	1
RN92	EW10-01C-COMP	10-23819-RN92C	EPA 8270D	Fluoranthene	15	ug/kg	J	J	1
RN92	EW10-01C-COMP	10-23819-RN92C	EPA 8270D	Fluorene		ug/kg	U	UJ	1
RN92	EW10-01C-COMP	10-23819-RN92C	EPA 8270D	Indeno(1,2,3-cd)pyrene		ug/kg	U	UJ	1
RN92	EW10-01C-COMP	10-23819-RN92C	EPA 8270D	Naphthalene		ug/kg	U	UJ	1

Qualified Data Summary Table
East Waterway MIS Intertidal Sediment Sampling

SDG	Sample ID	Lab ID	Method	Analyte	Result	Units	Lab Quals	Val Quals	Val Reason
RN92	EW10-01C-COMP	10-23819-RN92C	EPA 8270D	Phenanthrene		ug/kg	U	UJ	1
RN92	EW10-01C-COMP	10-23819-RN92C	EPA 8270D	Pyrene	16	ug/kg	J	J	1
RN92	EW10-01C-COMP	10-23819-RN92C	EPA 8270D	Total Benzofluoranthenes	23	ug/kg		J	1
RN92	EW10-02-COMP	10-23820-RN92D	EPA 8270D	1-Methylnaphthalene		ug/kg	U	UJ	1
RN92	EW10-02-COMP	10-23820-RN92D	EPA 8270D	2-Methylnaphthalene		ug/kg	U	UJ	1
RN92	EW10-02-COMP	10-23820-RN92D	EPA 8270D	Acenaphthene		ug/kg	U	UJ	1
RN92	EW10-02-COMP	10-23820-RN92D	EPA 8270D	Acenaphthylene		ug/kg	U	UJ	1
RN92	EW10-02-COMP	10-23820-RN92D	EPA 8270D	Anthracene	44	ug/kg		J	1
RN92	EW10-02-COMP	10-23820-RN92D	EPA 8270D	Benzo(a)anthracene	98	ug/kg		J	1
RN92	EW10-02-COMP	10-23820-RN92D	EPA 8270D	Benzo(a)pyrene	160	ug/kg		J	1
RN92	EW10-02-COMP	10-23820-RN92D	EPA 8270D	Benzo(g,h,i)perylene	80	ug/kg		J	1
RN92	EW10-02-COMP	10-23820-RN92D	EPA 8270D	Chrysene	200	ug/kg		J	1
RN92	EW10-02-COMP	10-23820-RN92D	EPA 8270D	Dibenz(a,h)anthracene	36	ug/kg		J	1
RN92	EW10-02-COMP	10-23820-RN92D	EPA 8270D	Dibenzofuran		ug/kg	U	UJ	1
RN92	EW10-02-COMP	10-23820-RN92D	EPA 8270D	Fluoranthene	200	ug/kg		J	1
RN92	EW10-02-COMP	10-23820-RN92D	EPA 8270D	Fluorene		ug/kg	U	UJ	1
RN92	EW10-02-COMP	10-23820-RN92D	EPA 8270D	Indeno(1,2,3-cd)pyrene	74	ug/kg		J	1
RN92	EW10-02-COMP	10-23820-RN92D	EPA 8270D	Naphthalene		ug/kg	U	UJ	1
RN92	EW10-02-COMP	10-23820-RN92D	EPA 8270D	Phenanthrene	86	ug/kg		J	1
RN92	EW10-02-COMP	10-23820-RN92D	EPA 8270D	Pyrene	340	ug/kg		J	1
RN92	EW10-02-COMP	10-23820-RN92D	EPA 8270D	Total Benzofluoranthenes	360	ug/kg		J	1
RN92	EW10-03A-COMP	10-23821-RN92E	EPA 8270D	1-Methylnaphthalene	14	ug/kg	J	J	1
RN92	EW10-03A-COMP	10-23821-RN92E	EPA 8270D	2-Methylnaphthalene	16	ug/kg	J	J	1
RN92	EW10-03A-COMP	10-23821-RN92E	EPA 8270D	Acenaphthene	50	ug/kg		J	1
RN92	EW10-03A-COMP	10-23821-RN92E	EPA 8270D	Acenaphthylene	37	ug/kg		J	1
RN92	EW10-03A-COMP	10-23821-RN92E	EPA 8270D	Anthracene	390	ug/kg		J	1
RN92	EW10-03A-COMP	10-23821-RN92E	EPA 8270D	Benzo(a)anthracene	1800	ug/kg		J	1
RN92	EW10-03A-COMP	10-23821-RN92E	EPA 8270D	Benzo(a)pyrene	1800	ug/kg		J	1
RN92	EW10-03A-COMP	10-23821-RN92E	EPA 8270D	Benzo(g,h,i)perylene	440	ug/kg		J	1
RN92	EW10-03A-COMP	10-23821-RN92E	EPA 8270D	Chrysene	2700	ug/kg	E	R	20
RN92	EW10-03A-COMP	10-23821-RN92E	EPA 8270D	Dibenz(a,h)anthracene	240	ug/kg		J	1
RN92	EW10-03A-COMP	10-23821-RN92E	EPA 8270D	Dibenzofuran	20	ug/kg	J	J	1
RN92	EW10-03A-COMP	10-23821-RN92E	EPA 8270D	Fluoranthene	4400	ug/kg	ES	R	20
RN92	EW10-03A-COMP	10-23821-RN92E	EPA 8270D	Fluorene	44	ug/kg		J	1
RN92	EW10-03A-COMP	10-23821-RN92E	EPA 8270D	Indeno(1,2,3-cd)pyrene	460	ug/kg		J	1
RN92	EW10-03A-COMP	10-23821-RN92E	EPA 8270D	Naphthalene	24	ug/kg	J	J	1
RN92	EW10-03A-COMP	10-23821-RN92E	EPA 8270D	Phenanthrene	340	ug/kg		J	1
RN92	EW10-03A-COMP	10-23821-RN92E	EPA 8270D	Pyrene	4000	ug/kg	ES	R	20
RN92	EW10-03A-COMP	10-23821-RN92E	EPA 8270D	Total Benzofluoranthenes	3400	ug/kg		J	1
RN92	EW10-03A-COMP	10-23821-RN92EDL	EPA 8270D	1-Methylnaphthalene		ug/kg	U	R	11
RN92	EW10-03A-COMP	10-23821-RN92EDL	EPA 8270D	2-Methylnaphthalene		ug/kg	U	R	11
RN92	EW10-03A-COMP	10-23821-RN92EDL	EPA 8270D	Acenaphthene		ug/kg	U	R	11
RN92	EW10-03A-COMP	10-23821-RN92EDL	EPA 8270D	Acenaphthylene		ug/kg	U	R	11
RN92	EW10-03A-COMP	10-23821-RN92EDL	EPA 8270D	Anthracene	350	ug/kg		R	11
RN92	EW10-03A-COMP	10-23821-RN92EDL	EPA 8270D	Benzo(a)anthracene	2000	ug/kg		R	11
RN92	EW10-03A-COMP	10-23821-RN92EDL	EPA 8270D	Benzo(a)pyrene	1800	ug/kg		R	11
RN92	EW10-03A-COMP	10-23821-RN92EDL	EPA 8270D	Benzo(g,h,i)perylene	670	ug/kg		R	11
RN92	EW10-03A-COMP	10-23821-RN92EDL	EPA 8270D	Chrysene	2800	ug/kg		J	1
RN92	EW10-03A-COMP	10-23821-RN92EDL	EPA 8270D	Dibenz(a,h)anthracene	320	ug/kg		R	11
RN92	EW10-03A-COMP	10-23821-RN92EDL	EPA 8270D	Dibenzofuran		ug/kg	U	R	11
RN92	EW10-03A-COMP	10-23821-RN92EDL	EPA 8270D	Fluoranthene	5200	ug/kg		J	1

Qualified Data Summary Table
East Waterway MIS Intertidal Sediment Sampling

SDG	Sample ID	Lab ID	Method	Analyte	Result	Units	Lab Quals	Val Quals	Val Reason
RN92	EW10-03A-COMP	10-23821-RN92EDL	EPA 8270D	Fluorene		ug/kg	U	R	11
RN92	EW10-03A-COMP	10-23821-RN92EDL	EPA 8270D	Indeno(1,2,3-cd)pyrene	610	ug/kg		R	11
RN92	EW10-03A-COMP	10-23821-RN92EDL	EPA 8270D	Naphthalene		ug/kg	U	R	11
RN92	EW10-03A-COMP	10-23821-RN92EDL	EPA 8270D	Phenanthrene	340	ug/kg		R	11
RN92	EW10-03A-COMP	10-23821-RN92EDL	EPA 8270D	Pyrene	5100	ug/kg		J	1
RN92	EW10-03A-COMP	10-23821-RN92EDL	EPA 8270D	Total Benzofluoranthenes	3400	ug/kg		R	11
RN92	EW10-03B-COMP	10-23822-RN92F	EPA 8270D	1-Methylnaphthalene		ug/kg	U	UJ	1
RN92	EW10-03B-COMP	10-23822-RN92F	EPA 8270D	2-Methylnaphthalene		ug/kg	U	UJ	1
RN92	EW10-03B-COMP	10-23822-RN92F	EPA 8270D	Acenaphthene		ug/kg	U	UJ	1
RN92	EW10-03B-COMP	10-23822-RN92F	EPA 8270D	Acenaphthylene		ug/kg	U	UJ	1
RN92	EW10-03B-COMP	10-23822-RN92F	EPA 8270D	Anthracene	32	ug/kg		J	1
RN92	EW10-03B-COMP	10-23822-RN92F	EPA 8270D	Benzo(a)anthracene	82	ug/kg		J	1
RN92	EW10-03B-COMP	10-23822-RN92F	EPA 8270D	Benzo(a)pyrene	110	ug/kg		J	1
RN92	EW10-03B-COMP	10-23822-RN92F	EPA 8270D	Benzo(g,h,i)perylene	39	ug/kg		J	1
RN92	EW10-03B-COMP	10-23822-RN92F	EPA 8270D	Chrysene	230	ug/kg		J	1
RN92	EW10-03B-COMP	10-23822-RN92F	EPA 8270D	Dibenz(a,h)anthracene	23	ug/kg		J	1
RN92	EW10-03B-COMP	10-23822-RN92F	EPA 8270D	Dibenzofuran		ug/kg	U	UJ	1
RN92	EW10-03B-COMP	10-23822-RN92F	EPA 8270D	Fluoranthene	150	ug/kg		J	1
RN92	EW10-03B-COMP	10-23822-RN92F	EPA 8270D	Fluorene		ug/kg	U	UJ	1
RN92	EW10-03B-COMP	10-23822-RN92F	EPA 8270D	Indeno(1,2,3-cd)pyrene	40	ug/kg		J	1
RN92	EW10-03B-COMP	10-23822-RN92F	EPA 8270D	Naphthalene		ug/kg	U	UJ	1
RN92	EW10-03B-COMP	10-23822-RN92F	EPA 8270D	Phenanthrene	62	ug/kg		J	1
RN92	EW10-03B-COMP	10-23822-RN92F	EPA 8270D	Pyrene	180	ug/kg		J	1
RN92	EW10-03B-COMP	10-23822-RN92F	EPA 8270D	Total Benzofluoranthenes	260	ug/kg		J	1
RN92	EW10-03C-COMP	10-23823-RN92G	EPA 8270D	1-Methylnaphthalene		ug/kg	U	UJ	1
RN92	EW10-03C-COMP	10-23823-RN92G	EPA 8270D	2-Methylnaphthalene	15	ug/kg	J	J	1
RN92	EW10-03C-COMP	10-23823-RN92G	EPA 8270D	Acenaphthene	27	ug/kg		J	1
RN92	EW10-03C-COMP	10-23823-RN92G	EPA 8270D	Acenaphthylene	22	ug/kg		J	1
RN92	EW10-03C-COMP	10-23823-RN92G	EPA 8270D	Anthracene	160	ug/kg		J	1
RN92	EW10-03C-COMP	10-23823-RN92G	EPA 8270D	Benzo(a)anthracene	360	ug/kg		J	1
RN92	EW10-03C-COMP	10-23823-RN92G	EPA 8270D	Benzo(a)pyrene	450	ug/kg		J	1
RN92	EW10-03C-COMP	10-23823-RN92G	EPA 8270D	Benzo(g,h,i)perylene	130	ug/kg		J	1
RN92	EW10-03C-COMP	10-23823-RN92G	EPA 8270D	Chrysene	850	ug/kg		J	1
RN92	EW10-03C-COMP	10-23823-RN92G	EPA 8270D	Dibenz(a,h)anthracene	68	ug/kg		J	1
RN92	EW10-03C-COMP	10-23823-RN92G	EPA 8270D	Dibenzofuran	29	ug/kg		J	1
RN92	EW10-03C-COMP	10-23823-RN92G	EPA 8270D	Fluoranthene	1000	ug/kg		J	1
RN92	EW10-03C-COMP	10-23823-RN92G	EPA 8270D	Fluorene	64	ug/kg		J	1
RN92	EW10-03C-COMP	10-23823-RN92G	EPA 8270D	Indeno(1,2,3-cd)pyrene	140	ug/kg		J	1
RN92	EW10-03C-COMP	10-23823-RN92G	EPA 8270D	Naphthalene	12	ug/kg	J	J	1
RN92	EW10-03C-COMP	10-23823-RN92G	EPA 8270D	Phenanthrene	380	ug/kg		J	1
RN92	EW10-03C-COMP	10-23823-RN92G	EPA 8270D	Pyrene	1000	ug/kg		J	1
RN92	EW10-03C-COMP	10-23823-RN92G	EPA 8270D	Total Benzofluoranthenes	1200	ug/kg		J	1
RN92	EW10-04-COMP	10-23824-RN92H	EPA 8270D	1-Methylnaphthalene	86	ug/kg		J	1
RN92	EW10-04-COMP	10-23824-RN92H	EPA 8270D	2-Methylnaphthalene	91	ug/kg		J	1
RN92	EW10-04-COMP	10-23824-RN92H	EPA 8270D	Acenaphthene	170	ug/kg		J	1
RN92	EW10-04-COMP	10-23824-RN92H	EPA 8270D	Acenaphthylene	130	ug/kg		J	1
RN92	EW10-04-COMP	10-23824-RN92H	EPA 8270D	Anthracene	390	ug/kg		J	1
RN92	EW10-04-COMP	10-23824-RN92H	EPA 8270D	Benzo(a)anthracene	980	ug/kg		J	1
RN92	EW10-04-COMP	10-23824-RN92H	EPA 8270D	Benzo(a)pyrene	1400	ug/kg		J	1
RN92	EW10-04-COMP	10-23824-RN92H	EPA 8270D	Benzo(g,h,i)perylene	640	ug/kg		J	1
RN92	EW10-04-COMP	10-23824-RN92H	EPA 8270D	Chrysene	1600	ug/kg		J	1

Qualified Data Summary Table
East Waterway MIS Intertidal Sediment Sampling

SDG	Sample ID	Lab ID	Method	Analyte	Result	Units	Lab Quals	Val Quals	Val Reason
RN92	EW10-04-COMP	10-23824-RN92H	EPA 8270D	Dibenz(a,h)anthracene	190	ug/kg		J	1
RN92	EW10-04-COMP	10-23824-RN92H	EPA 8270D	Dibenzofuran	93	ug/kg		J	1
RN92	EW10-04-COMP	10-23824-RN92H	EPA 8270D	Fluoranthene	3500	ug/kg		J	1
RN92	EW10-04-COMP	10-23824-RN92H	EPA 8270D	Fluorene	210	ug/kg		J	1
RN92	EW10-04-COMP	10-23824-RN92H	EPA 8270D	Indeno(1,2,3-cd)pyrene	540	ug/kg		J	1
RN92	EW10-04-COMP	10-23824-RN92H	EPA 8270D	Naphthalene	240	ug/kg		J	1
RN92	EW10-04-COMP	10-23824-RN92H	EPA 8270D	Phenanthrene	2600	ug/kg		J	1
RN92	EW10-04-COMP	10-23824-RN92H	EPA 8270D	Pyrene	3800	ug/kg		J	1
RN92	EW10-04-COMP	10-23824-RN92H	EPA 8270D	Total Benzofluoranthenes	2400	ug/kg		J	1
RN92	EW10-05-COMP	10-23825-RN92I	EPA 8270D	1-Methylnaphthalene	290	ug/kg		J	1
RN92	EW10-05-COMP	10-23825-RN92I	EPA 8270D	2-Methylnaphthalene	430	ug/kg		J	1
RN92	EW10-05-COMP	10-23825-RN92I	EPA 8270D	Acenaphthene	890	ug/kg		J	1
RN92	EW10-05-COMP	10-23825-RN92I	EPA 8270D	Acenaphthylene	130	ug/kg		J	1
RN92	EW10-05-COMP	10-23825-RN92I	EPA 8270D	Anthracene	2300	ug/kg		J	1
RN92	EW10-05-COMP	10-23825-RN92I	EPA 8270D	Benzo(a)anthracene	2300	ug/kg		J	1
RN92	EW10-05-COMP	10-23825-RN92I	EPA 8270D	Benzo(a)pyrene	3400	ug/kg	E	R	20
RN92	EW10-05-COMP	10-23825-RN92I	EPA 8270D	Benzo(g,h,i)perylene	940	ug/kg		J	1
RN92	EW10-05-COMP	10-23825-RN92I	EPA 8270D	Chrysene	4500	ug/kg	ES	R	20
RN92	EW10-05-COMP	10-23825-RN92I	EPA 8270D	Dibenz(a,h)anthracene	460	ug/kg		J	1
RN92	EW10-05-COMP	10-23825-RN92I	EPA 8270D	Dibenzofuran	640	ug/kg		J	1
RN92	EW10-05-COMP	10-23825-RN92I	EPA 8270D	Fluoranthene	9300	ug/kg	ES	R	20
RN92	EW10-05-COMP	10-23825-RN92I	EPA 8270D	Fluorene	1100	ug/kg		J	1
RN92	EW10-05-COMP	10-23825-RN92I	EPA 8270D	Indeno(1,2,3-cd)pyrene	1000	ug/kg		J	1
RN92	EW10-05-COMP	10-23825-RN92I	EPA 8270D	Naphthalene	980	ug/kg		J	1
RN92	EW10-05-COMP	10-23825-RN92I	EPA 8270D	Phenanthrene	7000	ug/kg	ES	R	20
RN92	EW10-05-COMP	10-23825-RN92I	EPA 8270D	Pyrene	7600	ug/kg	ES	R	20
RN92	EW10-05-COMP	10-23825-RN92I	EPA 8270D	Total Benzofluoranthenes	6800	ug/kg	ES	R	20
RN92	EW10-05-COMP	10-23825-RN92IDL	EPA 8270D	1-Methylnaphthalene	280	ug/kg		R	11
RN92	EW10-05-COMP	10-23825-RN92IDL	EPA 8270D	2-Methylnaphthalene	400	ug/kg		R	11
RN92	EW10-05-COMP	10-23825-RN92IDL	EPA 8270D	Acenaphthene	840	ug/kg		R	11
RN92	EW10-05-COMP	10-23825-RN92IDL	EPA 8270D	Acenaphthylene	100	ug/kg	J	R	11
RN92	EW10-05-COMP	10-23825-RN92IDL	EPA 8270D	Anthracene	2100	ug/kg		R	11
RN92	EW10-05-COMP	10-23825-RN92IDL	EPA 8270D	Benzo(a)anthracene	3100	ug/kg		R	11
RN92	EW10-05-COMP	10-23825-RN92IDL	EPA 8270D	Benzo(a)pyrene	3200	ug/kg		J	1
RN92	EW10-05-COMP	10-23825-RN92IDL	EPA 8270D	Benzo(g,h,i)perylene	1900	ug/kg		R	11
RN92	EW10-05-COMP	10-23825-RN92IDL	EPA 8270D	Chrysene	4400	ug/kg		J	1
RN92	EW10-05-COMP	10-23825-RN92IDL	EPA 8270D	Dibenz(a,h)anthracene	720	ug/kg		R	11
RN92	EW10-05-COMP	10-23825-RN92IDL	EPA 8270D	Dibenzofuran	610	ug/kg		R	11
RN92	EW10-05-COMP	10-23825-RN92IDL	EPA 8270D	Fluoranthene	11000	ug/kg		J	1
RN92	EW10-05-COMP	10-23825-RN92IDL	EPA 8270D	Fluorene	990	ug/kg		R	11
RN92	EW10-05-COMP	10-23825-RN92IDL	EPA 8270D	Indeno(1,2,3-cd)pyrene	1600	ug/kg		R	11
RN92	EW10-05-COMP	10-23825-RN92IDL	EPA 8270D	Naphthalene	940	ug/kg		R	11
RN92	EW10-05-COMP	10-23825-RN92IDL	EPA 8270D	Phenanthrene	7900	ug/kg		J	1
RN92	EW10-05-COMP	10-23825-RN92IDL	EPA 8270D	Pyrene	9100	ug/kg		J	1
RN92	EW10-05-COMP	10-23825-RN92IDL	EPA 8270D	Total Benzofluoranthenes	6300	ug/kg		J	1
RN92	EW10-06-COMP	10-23826-RN92J	EPA 8270D	1-Methylnaphthalene	4400	ug/kg		J	1
RN92	EW10-06-COMP	10-23826-RN92J	EPA 8270D	2-Methylnaphthalene	5200	ug/kg		J	1
RN92	EW10-06-COMP	10-23826-RN92J	EPA 8270D	Acenaphthene	5600	ug/kg		J	1
RN92	EW10-06-COMP	10-23826-RN92J	EPA 8270D	Acenaphthylene		ug/kg	U	UJ	1
RN92	EW10-06-COMP	10-23826-RN92J	EPA 8270D	Anthracene	8300	ug/kg	ES	R	20
RN92	EW10-06-COMP	10-23826-RN92J	EPA 8270D	Benzo(a)anthracene	13000	ug/kg	ES	R	20

Qualified Data Summary Table
East Waterway MIS Intertidal Sediment Sampling

SDG	Sample ID	Lab ID	Method	Analyte	Result	Units	Lab Quals	Val Quals	Val Reason
RN92	EW10-06-COMP	10-23826-RN92J	EPA 8270D	Benzo(a)pyrene	11000	ug/kg	ES	R	20
RN92	EW10-06-COMP	10-23826-RN92J	EPA 8270D	Benzo(g,h,i)perylene	2200	ug/kg		J	1
RN92	EW10-06-COMP	10-23826-RN92J	EPA 8270D	Chrysene	12000	ug/kg	ES	R	20
RN92	EW10-06-COMP	10-23826-RN92J	EPA 8270D	Dibenz(a,h)anthracene	1300	ug/kg		J	1
RN92	EW10-06-COMP	10-23826-RN92J	EPA 8270D	Dibenzofuran	2100	ug/kg		J	1
RN92	EW10-06-COMP	10-23826-RN92J	EPA 8270D	Fluoranthene	27000	ug/kg	ES	R	20
RN92	EW10-06-COMP	10-23826-RN92J	EPA 8270D	Fluorene	7100	ug/kg	E	R	20
RN92	EW10-06-COMP	10-23826-RN92J	EPA 8270D	Indeno(1,2,3-cd)pyrene	2500	ug/kg		J	1
RN92	EW10-06-COMP	10-23826-RN92J	EPA 8270D	Naphthalene	5600	ug/kg		J	1
RN92	EW10-06-COMP	10-23826-RN92J	EPA 8270D	Phenanthrene	34000	ug/kg	ES	R	20
RN92	EW10-06-COMP	10-23826-RN92J	EPA 8270D	Pyrene	26000	ug/kg	ES	R	20
RN92	EW10-06-COMP	10-23826-RN92J	EPA 8270D	Total Benzofluoranthenes	19000	ug/kg	ES	R	20
RN92	EW10-06-COMP	10-23826-RN92JDL	EPA 8270D	1-Methylnaphthalene	5300	ug/kg		R	11
RN92	EW10-06-COMP	10-23826-RN92JDL	EPA 8270D	2-Methylnaphthalene	5900	ug/kg		R	11
RN92	EW10-06-COMP	10-23826-RN92JDL	EPA 8270D	Acenaphthene	6600	ug/kg		R	11
RN92	EW10-06-COMP	10-23826-RN92JDL	EPA 8270D	Acenaphthylene		ug/kg	U	R	11
RN92	EW10-06-COMP	10-23826-RN92JDL	EPA 8270D	Anthracene	11000	ug/kg		J	1
RN92	EW10-06-COMP	10-23826-RN92JDL	EPA 8270D	Benzo(a)anthracene	16000	ug/kg		J	1
RN92	EW10-06-COMP	10-23826-RN92JDL	EPA 8270D	Benzo(a)pyrene	12000	ug/kg		J	1
RN92	EW10-06-COMP	10-23826-RN92JDL	EPA 8270D	Benzo(g,h,i)perylene	5700	ug/kg		R	11
RN92	EW10-06-COMP	10-23826-RN92JDL	EPA 8270D	Chrysene	17000	ug/kg		J	1
RN92	EW10-06-COMP	10-23826-RN92JDL	EPA 8270D	Dibenz(a,h)anthracene	2600	ug/kg		R	11
RN92	EW10-06-COMP	10-23826-RN92JDL	EPA 8270D	Dibenzofuran	2700	ug/kg		R	11
RN92	EW10-06-COMP	10-23826-RN92JDL	EPA 8270D	Fluoranthene	44000	ug/kg		J	1
RN92	EW10-06-COMP	10-23826-RN92JDL	EPA 8270D	Fluorene	8300	ug/kg		J	1
RN92	EW10-06-COMP	10-23826-RN92JDL	EPA 8270D	Indeno(1,2,3-cd)pyrene	5100	ug/kg		R	11
RN92	EW10-06-COMP	10-23826-RN92JDL	EPA 8270D	Naphthalene	6700	ug/kg		R	11
RN92	EW10-06-COMP	10-23826-RN92JDL	EPA 8270D	Phenanthrene	62000	ug/kg		J	1
RN92	EW10-06-COMP	10-23826-RN92JDL	EPA 8270D	Pyrene	52000	ug/kg		J	1
RN92	EW10-06-COMP	10-23826-RN92JDL	EPA 8270D	Total Benzofluoranthenes	20000	ug/kg		J	1
RN92	EW10-07-COMP	10-23827-RN92K	EPA 8270D	1-Methylnaphthalene	38	ug/kg		J	1
RN92	EW10-07-COMP	10-23827-RN92K	EPA 8270D	2-Methylnaphthalene	50	ug/kg		J	1
RN92	EW10-07-COMP	10-23827-RN92K	EPA 8270D	Acenaphthene	230	ug/kg		J	1
RN92	EW10-07-COMP	10-23827-RN92K	EPA 8270D	Acenaphthylene	43	ug/kg		J	1
RN92	EW10-07-COMP	10-23827-RN92K	EPA 8270D	Anthracene	340	ug/kg		J	1
RN92	EW10-07-COMP	10-23827-RN92K	EPA 8270D	Benzo(a)anthracene	680	ug/kg		J	1
RN92	EW10-07-COMP	10-23827-RN92K	EPA 8270D	Benzo(a)pyrene	790	ug/kg		J	1
RN92	EW10-07-COMP	10-23827-RN92K	EPA 8270D	Benzo(g,h,i)perylene	170	ug/kg		J	1
RN92	EW10-07-COMP	10-23827-RN92K	EPA 8270D	Chrysene	1400	ug/kg		J	1
RN92	EW10-07-COMP	10-23827-RN92K	EPA 8270D	Dibenz(a,h)anthracene	79	ug/kg		J	1
RN92	EW10-07-COMP	10-23827-RN92K	EPA 8270D	Dibenzofuran	61	ug/kg		J	1
RN92	EW10-07-COMP	10-23827-RN92K	EPA 8270D	Fluoranthene	3000	ug/kg		J	1
RN92	EW10-07-COMP	10-23827-RN92K	EPA 8270D	Fluorene	90	ug/kg		J	1
RN92	EW10-07-COMP	10-23827-RN92K	EPA 8270D	Indeno(1,2,3-cd)pyrene	180	ug/kg		J	1
RN92	EW10-07-COMP	10-23827-RN92K	EPA 8270D	Naphthalene	97	ug/kg		J	1
RN92	EW10-07-COMP	10-23827-RN92K	EPA 8270D	Phenanthrene	460	ug/kg		J	1
RN92	EW10-07-COMP	10-23827-RN92K	EPA 8270D	Pyrene	2900	ug/kg		J	1
RN92	EW10-07-COMP	10-23827-RN92K	EPA 8270D	Total Benzofluoranthenes	2000	ug/kg		J	1
RN92	EW10-07-COMP	10-23827-RN92KDL	EPA 8270D	1-Methylnaphthalene		ug/kg	U	R	11
RN92	EW10-07-COMP	10-23827-RN92KDL	EPA 8270D	2-Methylnaphthalene		ug/kg	U	R	11
RN92	EW10-07-COMP	10-23827-RN92KDL	EPA 8270D	Acenaphthene	220	ug/kg		R	11

Qualified Data Summary Table
East Waterway MIS Intertidal Sediment Sampling

SDG	Sample ID	Lab ID	Method	Analyte	Result	Units	Lab Quals	Val Quals	Val Reason
RN92	EW10-07-COMP	10-23827-RN92KDL	EPA 8270D	Acenaphthylene		ug/kg	U	R	11
RN92	EW10-07-COMP	10-23827-RN92KDL	EPA 8270D	Anthracene	280	ug/kg		R	11
RN92	EW10-07-COMP	10-23827-RN92KDL	EPA 8270D	Benzo(a)anthracene	790	ug/kg		R	11
RN92	EW10-07-COMP	10-23827-RN92KDL	EPA 8270D	Benzo(a)pyrene	590	ug/kg		R	11
RN92	EW10-07-COMP	10-23827-RN92KDL	EPA 8270D	Benzo(g,h,i)perylene	290	ug/kg		R	11
RN92	EW10-07-COMP	10-23827-RN92KDL	EPA 8270D	Chrysene	1000	ug/kg		R	11
RN92	EW10-07-COMP	10-23827-RN92KDL	EPA 8270D	Dibenz(a,h)anthracene	130	ug/kg	J	R	11
RN92	EW10-07-COMP	10-23827-RN92KDL	EPA 8270D	Dibenzofuran		ug/kg	U	R	11
RN92	EW10-07-COMP	10-23827-RN92KDL	EPA 8270D	Fluoranthene	3000	ug/kg		R	11
RN92	EW10-07-COMP	10-23827-RN92KDL	EPA 8270D	Fluorene		ug/kg	U	R	11
RN92	EW10-07-COMP	10-23827-RN92KDL	EPA 8270D	Indeno(1,2,3-cd)pyrene	260	ug/kg		R	11
RN92	EW10-07-COMP	10-23827-RN92KDL	EPA 8270D	Naphthalene		ug/kg	U	R	11
RN92	EW10-07-COMP	10-23827-RN92KDL	EPA 8270D	Phenanthrene	450	ug/kg		R	11
RN92	EW10-07-COMP	10-23827-RN92KDL	EPA 8270D	Pyrene	2800	ug/kg		R	11
RN92	EW10-07-COMP	10-23827-RN92KDL	EPA 8270D	Total Benzofluoranthenes	1500	ug/kg		R	11
RN92	EW10-08-COMP	10-23828-RN92L	EPA 8270D	1-Methylnaphthalene	27	ug/kg		J	1
RN92	EW10-08-COMP	10-23828-RN92L	EPA 8270D	2-Methylnaphthalene	23	ug/kg		J	1
RN92	EW10-08-COMP	10-23828-RN92L	EPA 8270D	Acenaphthene	61	ug/kg		J	1
RN92	EW10-08-COMP	10-23828-RN92L	EPA 8270D	Acenaphthylene	20	ug/kg		J	1
RN92	EW10-08-COMP	10-23828-RN92L	EPA 8270D	Anthracene	80	ug/kg		J	1
RN92	EW10-08-COMP	10-23828-RN92L	EPA 8270D	Benzo(a)anthracene	150	ug/kg		J	1
RN92	EW10-08-COMP	10-23828-RN92L	EPA 8270D	Benzo(a)pyrene	150	ug/kg		J	1
RN92	EW10-08-COMP	10-23828-RN92L	EPA 8270D	Benzo(g,h,i)perylene	45	ug/kg		J	1
RN92	EW10-08-COMP	10-23828-RN92L	EPA 8270D	Chrysene	200	ug/kg		J	1
RN92	EW10-08-COMP	10-23828-RN92L	EPA 8270D	Dibenz(a,h)anthracene	26	ug/kg		J	1
RN92	EW10-08-COMP	10-23828-RN92L	EPA 8270D	Dibenzofuran	36	ug/kg		J	1
RN92	EW10-08-COMP	10-23828-RN92L	EPA 8270D	Fluoranthene	410	ug/kg		J	1
RN92	EW10-08-COMP	10-23828-RN92L	EPA 8270D	Fluorene	37	ug/kg		J	1
RN92	EW10-08-COMP	10-23828-RN92L	EPA 8270D	Indeno(1,2,3-cd)pyrene	52	ug/kg		J	1
RN92	EW10-08-COMP	10-23828-RN92L	EPA 8270D	Naphthalene	49	ug/kg		J	1
RN92	EW10-08-COMP	10-23828-RN92L	EPA 8270D	Phenanthrene	150	ug/kg		J	1
RN92	EW10-08-COMP	10-23828-RN92L	EPA 8270D	Pyrene	370	ug/kg		J	1
RN92	EW10-08-COMP	10-23828-RN92L	EPA 8270D	Total Benzofluoranthenes	320	ug/kg		J	1
RN92	EW10-09-COMP	10-23829-RN92M	EPA 8270D	1-Methylnaphthalene	14	ug/kg	J	J	1
RN92	EW10-09-COMP	10-23829-RN92M	EPA 8270D	2-Methylnaphthalene	16	ug/kg	J	J	1
RN92	EW10-09-COMP	10-23829-RN92M	EPA 8270D	Acenaphthene	18	ug/kg	J	J	1
RN92	EW10-09-COMP	10-23829-RN92M	EPA 8270D	Acenaphthylene	20	ug/kg		J	1
RN92	EW10-09-COMP	10-23829-RN92M	EPA 8270D	Anthracene	72	ug/kg		J	1
RN92	EW10-09-COMP	10-23829-RN92M	EPA 8270D	Benzo(a)anthracene	170	ug/kg		J	1
RN92	EW10-09-COMP	10-23829-RN92M	EPA 8270D	Benzo(a)pyrene	220	ug/kg		J	1
RN92	EW10-09-COMP	10-23829-RN92M	EPA 8270D	Benzo(g,h,i)perylene	62	ug/kg		J	1
RN92	EW10-09-COMP	10-23829-RN92M	EPA 8270D	Chrysene	240	ug/kg		J	1
RN92	EW10-09-COMP	10-23829-RN92M	EPA 8270D	Dibenz(a,h)anthracene	34	ug/kg		J	1
RN92	EW10-09-COMP	10-23829-RN92M	EPA 8270D	Dibenzofuran	16	ug/kg	J	J	1
RN92	EW10-09-COMP	10-23829-RN92M	EPA 8270D	Fluoranthene	380	ug/kg		J	1
RN92	EW10-09-COMP	10-23829-RN92M	EPA 8270D	Fluorene	21	ug/kg		J	1
RN92	EW10-09-COMP	10-23829-RN92M	EPA 8270D	Indeno(1,2,3-cd)pyrene	69	ug/kg		J	1
RN92	EW10-09-COMP	10-23829-RN92M	EPA 8270D	Naphthalene	19	ug/kg	J	J	1
RN92	EW10-09-COMP	10-23829-RN92M	EPA 8270D	Phenanthrene	200	ug/kg		J	1
RN92	EW10-09-COMP	10-23829-RN92M	EPA 8270D	Pyrene	480	ug/kg		J	1
RN92	EW10-09-COMP	10-23829-RN92M	EPA 8270D	Total Benzofluoranthenes	460	ug/kg		J	1

Qualified Data Summary Table
East Waterway MIS Intertidal Sediment Sampling

SDG	Sample ID	Lab ID	Method	Analyte	Result	Units	Lab Quals	Val Quals	Val Reason
RN92	EW10-11-COMP	10-23830-RN92N	EPA 8270D	1-Methylnaphthalene		ug/kg	U	UJ	1
RN92	EW10-11-COMP	10-23830-RN92N	EPA 8270D	2-Methylnaphthalene		ug/kg	U	UJ	1
RN92	EW10-11-COMP	10-23830-RN92N	EPA 8270D	Acenaphthene	42	ug/kg		J	1
RN92	EW10-11-COMP	10-23830-RN92N	EPA 8270D	Acenaphthylene		ug/kg	U	UJ	1
RN92	EW10-11-COMP	10-23830-RN92N	EPA 8270D	Anthracene	41	ug/kg		J	1
RN92	EW10-11-COMP	10-23830-RN92N	EPA 8270D	Benzo(a)anthracene	120	ug/kg		J	1
RN92	EW10-11-COMP	10-23830-RN92N	EPA 8270D	Benzo(a)pyrene	120	ug/kg		J	1
RN92	EW10-11-COMP	10-23830-RN92N	EPA 8270D	Benzo(g,h,i)perylene	27	ug/kg		J	1
RN92	EW10-11-COMP	10-23830-RN92N	EPA 8270D	Chrysene	180	ug/kg		J	1
RN92	EW10-11-COMP	10-23830-RN92N	EPA 8270D	Dibenz(a,h)anthracene	16	ug/kg	J	J	1
RN92	EW10-11-COMP	10-23830-RN92N	EPA 8270D	Dibenzofuran		ug/kg	U	UJ	1
RN92	EW10-11-COMP	10-23830-RN92N	EPA 8270D	Fluoranthene	240	ug/kg		J	1
RN92	EW10-11-COMP	10-23830-RN92N	EPA 8270D	Fluorene	11	ug/kg	J	J	1
RN92	EW10-11-COMP	10-23830-RN92N	EPA 8270D	Indeno(1,2,3-cd)pyrene	30	ug/kg		J	1
RN92	EW10-11-COMP	10-23830-RN92N	EPA 8270D	Naphthalene	16	ug/kg	J	J	1
RN92	EW10-11-COMP	10-23830-RN92N	EPA 8270D	Phenanthrene	71	ug/kg		J	1
RN92	EW10-11-COMP	10-23830-RN92N	EPA 8270D	Pyrene	390	ug/kg		J	1
RN92	EW10-11-COMP	10-23830-RN92N	EPA 8270D	Total Benzofluoranthenes	280	ug/kg		J	1