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Automated Report

Technical Report for

Anderson, Mulholland & Associates

BMSMC, Building 5 Area, PR

02i

SGS Accutest Job Number: JC25024

Sampling Date: 08/01/16

Report to:

Anderson, Mulholland & Associates
2700 Westchester Avenue Suite 417
Purchase, NY 10577
ttaylor@amaiconsult.com

ATTN: Terry Taylor

Total number of pages in report: 245

Nancy Cole
Laboratory Director

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

Client Service contact: Tammy McCloskey 732-329-0200

Certifications: NJ(12129), NY(10983), CA, CT, DE, FL, IL, IN, KS, KY, LA, MA, MD, MI, MT, NC, OH VAP (CL0056), AK (UST-103), AZ (AZ0786), PA, RI, SC, TN, TX, VA, WV, DoD ELAP (L-A-B L2248)

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SGS Accutest

Sample Summary

Anderson, Mulholland & Associates

Job No: JC25024

BMSMC, Building 5 Area, PR
Project No: 02i

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
JC25024-1	08/01/16	12:11	NR	08/02/16	AQ	Ground Water	OSMW-3D
JC25024-2	08/01/16	13:10	NR	08/02/16	AQ	Ground Water	OSMW-3S

CASE NARRATIVE / CONFORMANCE SUMMARY

Client:	Anderson, Mulholland & Associates	**Job No**	JC25024
Site:	BMSMC, Building 5 Area, PR	**Report Date**	8/11/2016 12:32:34 P

On 08/02/2016, 2 Sample(s), 0 Trip Blank(s) and 0 Field Blank(s) were received at SGS Accutest at a maximum corrected temperature of 4.8 C. Samples were intact and chemically preserved, unless noted below. A SGS Accutest Job Number of JC25024 was assigned to the project. Laboratory sample ID, client sample ID and dates of sample collection are detailed in the report's Results Summary Section.

Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

Extractables by GCMS By Method SW846 8270D BY SIM

Matrix: AQ **Batch ID:** OP95988A

- All samples were extracted within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JC25011-1MS, JC25011-1MSD were used as the QC samples indicated.

SGS Accutest certifies that data reported for samples received, listed on the associated custody chain or analytical task order, were produced to specifications meeting the Quality System precision, accuracy and completeness objectives except as noted.

Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria.

SGS Accutest is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety. Data release is authorized by SGS Accutest indicated via signature on the report cover

Summary of Hits

Job Number: JC25024
Account: Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Collected: 08/01/16

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
JC25024-1	**OSMW-3D**					
No hits reported in this sample.						
JC25024-2	**OSMW-3S**					
1,4-Dioxane		5.75	1.0	0.049	ug/l	SW846 8270D BY SIM

Sample Results

Report of Analysis

SGS Accutest

Report of Analysis

Client Sample ID:	OSMW-3D		
Lab Sample ID:	JC25024-1	**Date Sampled:**	08/01/16
Matrix:	AQ - Ground Water	**Date Received:**	08/02/16
Method:	SW846 8270D BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	BMSMC, Building 5 Area, PR		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3P55435.D	1	08/03/16	JJ	08/02/16	OP95988A	E3P2535
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
91-20-3	Naphthalene	ND	0.10	0.029	ug/l	
123-91-1	1,4-Dioxane	ND	0.10	0.049	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	66%		24-125%
321-60-8	2-Fluorobiphenyl	70%		19-127%
1718-51-0	Terphenyl-d14	71%		10-119%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

SGS Accutest

Report of Analysis

Client Sample ID:	OSMW-3S		
Lab Sample ID:	JC25024-2	**Date Sampled:**	08/01/16
Matrix:	AQ - Ground Water	**Date Received:**	08/02/16
Method:	SW846 8270D BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	BMSMC, Building 5 Area, PR		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M126617.D	1	08/03/16	SB	08/02/16	OP95988A	EM5377
Run #2	3P55453.D	1	08/03/16	SG	08/02/16	OP95988A	E3P2536

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2	1000 ml	1.0 ml

CAS No.	Compound	Result	RL	MDL	Units	Q
91-20-3	Naphthalene	ND [a]	0.10	0.029	ug/l	
123-91-1	1,4-Dioxane	5.75	1.0	0.049	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	61%	64%	24-125%
321-60-8	2-Fluorobiphenyl	59%	62%	19-127%
1718-51-0	Terphenyl-d14	71%	64%	10-119%

(a) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody
- Sample Tracking Chronicle
- Internal Chain of Custody

GW

ACCUTEST LABORATORIES

NJ

CHAIN OF CUSTODY

2235 Route 130, Dayton, NJ 08810
TEL. 732-329-0200 FAX. 732-329-3499/3480
www.accutest.com

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Accutest Quote # 809862882550

Bottle Order Control #

Accutest Job # JC25024

Client / Reporting Information

Company Name: Anderson Mulholland & Associates
Street Address: 2700 Westchester Avenue, Suite 417
City: Purchase State: NY Zip: 10577
Project Contact: Terry Taylor E-mail:
Phone #: 914-251-0400 Fax #:
Sampler(s) Name(s): N. Rivera, R. Stuart, R. O'Reilly, T. Taylor Phone #:

Project Information

Project Name: BMSMC Phase 2A Release Assessment
Street:
City: Humacao State: PR
Project #: 02i
Client Purchase Order #:
Project Manager: Terry Taylor

Billing Information (if different from Report to)
Company Name:
Street Address:
City State Zip
Attention:

Requested Analysis (see TEST CODE sheet)

Matrix Codes: DW - Drinking Water; GW - Ground Water; WW - Water; SW - Surface Water; SO - Soil; SL- Sludge; SED-Sediment; OI - Oil; LIQ - Other Liquid; AIR - Air; SOL - Other Solid; WP - Wipe; FB-Field Blank; EB-Equipment Blank; RB- Rinse Blank; TB-Trip Blank

Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	1,4-Dioxane and Naphthalene via 8270D SIM	LAB USE ONLY
1	OSMW - 3D		8-1-16	1211	NR	GW	2					2				X	
2	OSMW - 3S		8-1-16	1310	NR	GW	2					2				X	E14

Turnaround Time (Business days)

- [ ] Std. 15 Business Days
- [ ] Std. 10 Business Days (by Contract only)
- [ ] 10 Day *RUSH*
- [ ] 5 Day *RUSH*
- [ ] 3 Day *EMERGENCY*
- [ ] 2 Day *EMERGENCY*
- [x] 1 Day *EMERGENCY*

Emergency & Rush T/A data available VIA Lablink

Approved By (Accutest PM): / Date:

Data Deliverable Information

- [ ] Commercial "A" (Level 1)
- [ ] Commercial "B" (Level 2)
- [x] FULLT1 (Level 3+4)
- [ ] NJ Reduced
- [ ] Commercial "C"
- [ ] NYASP Category A
- [ ] NYASP Category B
- [ ] State Forms
- [ ] EDD Format
- [ ] Other

Commercial "A" = Results Only
Commercial "B" = Results + QC Summary
NJ Reduced = Results + QC Summary + Partial Raw data

Comments / Special Instructions

INITIAL ASESSMENT B/3B
LABEL VERIFICATION B

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1	8-1-16 1700	1 Fed EX	2 FEDEX	8-2-16 940	2
Relinquished by Sampler: 3	Date Time:	Received By: 3	Relinquished By: 4	Date Time:	Received By: 4
Relinquished by: 5	Date Time:	Received By: 5	Custody Seal # 219 [✓] Intact [ ] Not intact	Preserved where applicable [ ]	On Ice [✓] Cooler Temp. 3.9°C

FP

JC25024: Chain of Custody
Page 1 of 2

SGS Accutest Sample Receipt Summary

Job Number: JC25024 **Client:** **Project:**

Date / Time Received: 8/2/2016 9:40:00 AM **Delivery Method:** **Airbill #'s:**

Cooler Temps (Raw Measured) °C: Cooler 1: (3.9);

Cooler Temps (Corrected) °C: Cooler 1: (4.8);

Cooler Security	Y	N		Y	N
1. Custody Seals Present:	☑	☐	3. COC Present:	☑	☐
2. Custody Seals Intact:	☑	☐	4. Smpl Dates/Time OK	☑	☐

Cooler Temperature	Y	N
1. Temp criteria achieved:	☑	☐
2. Cooler temp verification:	IR Gun	
3. Cooler media:	Ice (Bag)	
4. No. Coolers:	1	

Quality Control _Preservation	Y	N	N/A
1. Trip Blank present / cooler:	☐	☑	☐
2. Trip Blank listed on COC:	☐	☑	☐
3. Samples preserved properly:	☑	☐	
4. VOCs headspace free:	☐	☐	☑

Sample Integrity - Documentation	Y	N
1. Sample labels present on bottles:	☑	☐
2. Container labeling complete:	☑	☐
3. Sample container label / COC agree:	☑	☐

Sample Integrity - Condition	Y	N
1. Sample recvd within HT:	☑	☐
2. All containers accounted for:	☑	☐
3. Condition of sample:	Intact	

Sample Integrity - Instructions	Y	N	N/A
1. Analysis requested is clear:	☑	☐	
2. Bottles received for unspecified tests	☐	☑	
3. Sufficient volume recvd for analysis:	☑	☐	
4. Compositing instructions clear:	☐	☐	☑
5. Filtering instructions clear:	☐	☐	☑

Comments

5.1

5

JC25024: Chain of Custody

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Internal Sample Tracking Chronicle

Anderson, Mulholland & Associates

Job No: JC25024

BMSMC, Building 5 Area, PR
Project No: 02i

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JC25024-1 OSMW-3D	Collected: 01-AUG-16 12:11 By: NR		Received: 02-AUG-16 By: DDH			
JC25024-1	SW846 8270D BY SIM	03-AUG-16 04:16	JJ	02-AUG-16	RF	B8270SIM14DIOX,BSIM + NAP
JC25024-2 OSMW-3S	Collected: 01-AUG-16 13:10 By: NR		Received: 02-AUG-16 By: DDH			
JC25024-2	SW846 8270D BY SIM	03-AUG-16 13:47	SG	02-AUG-16	RF	BSIM + NAP
JC25024-2	SW846 8270D BY SIM	03-AUG-16 19:10	SB	02-AUG-16	RF	B8270SIM14DIOX

SGS Accutest Internal Chain of Custody

Job Number: JC25024
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Received: 08/02/16

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JC25024-1.1	Secured Storage	Christopher Hall	08/02/16 12:55	Retrieve from Storage
JC25024-1.1	Christopher Hall	Secured Staging Area	08/02/16 12:55	Return to Storage
JC25024-1.1	Secured Staging Area	Nicholas Goydish	08/02/16 14:08	Retrieve from Storage
JC25024-1.1	Nicholas Goydish	Ryan Fantasia	08/02/16 14:55	Custody Transfer
JC25024-1.1	Ryan Fantasia		08/02/16 20:25	Depleted
JC25024-1.1.1	Nicholas Goydish	Organics Prep	08/02/16 14:19	Extract from JC25024-1.1
JC25024-1.1.1	Organics Prep	Ryan Fantasia	08/02/16 20:18	Extract from JC25024-1.1
JC25024-1.1.1	Ryan Fantasia	Extract Storage	08/02/16 20:18	Return to Storage
JC25024-1.1.1	Extract Storage	Julius Johnson	08/03/16 00:06	Retrieve from Storage
JC25024-1.1.1	Julius Johnson	GCMS3P	08/03/16 00:06	Load on Instrument
JC25024-2.1	Secured Storage	Christopher Hall	08/02/16 12:55	Retrieve from Storage
JC25024-2.1	Christopher Hall	Secured Staging Area	08/02/16 12:55	Return to Storage
JC25024-2.1	Secured Staging Area	Nicholas Goydish	08/02/16 14:08	Retrieve from Storage
JC25024-2.1	Nicholas Goydish	Ryan Fantasia	08/02/16 14:55	Custody Transfer
JC25024-2.1	Ryan Fantasia		08/02/16 20:25	Depleted
JC25024-2.1.1	Nicholas Goydish	Organics Prep	08/02/16 14:19	Extract from JC25024-2.1
JC25024-2.1.1	Organics Prep	Ryan Fantasia	08/02/16 20:18	Extract from JC25024-2.1
JC25024-2.1.1	Ryan Fantasia	Extract Storage	08/02/16 20:18	Return to Storage
JC25024-2.1.1	Extract Storage	Julius Johnson	08/03/16 00:06	Retrieve from Storage
JC25024-2.1.1	Julius Johnson	GCMS3P	08/03/16 00:06	Load on Instrument

GC/MS Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Instrument Performance Checks (DFTPP)
- Internal Standard Area Summaries
- Surrogate Recovery Summaries
- Initial and Continuing Calibration Summaries

Method Blank Summary

Job Number: JC25024
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP95988A-MB1	3P55451.D	1	08/03/16	SG	08/02/16	OP95988A	E3P2536

The QC reported here applies to the following samples: **Method:** SW846 8270D BY SIM

JC25024-1, JC25024-2

CAS No.	Compound	Result	RL	MDL	Units	Q
91-20-3	Naphthalene	ND	0.10	0.029	ug/l	
123-91-1	1,4-Dioxane	ND	0.10	0.049	ug/l	

CAS No.	Surrogate Recoveries		Limits
367-12-4	2-Fluorophenol	35%	14-81%
4165-62-2	Phenol-d5	27%	11-54%
118-79-6	2,4,6-Tribromophenol	95%	35-145%
4165-60-0	Nitrobenzene-d5	70%	24-125%
321-60-8	2-Fluorobiphenyl	70%	19-127%
1718-51-0	Terphenyl-d14	79%	10-119%

Blank Spike Summary

Job Number: JC25024
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP95988A-BS12	3P55452.D	1	08/03/16	SG	08/02/16	OP95988A	E3P2536

The QC reported here applies to the following samples: **Method:** SW846 8270D BY SIM

JC25024-1, JC25024-2

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
91-20-3	Naphthalene	1	0.642	64	40-119
123-91-1	1,4-Dioxane	1	0.384	38	20-160

CAS No.	Surrogate Recoveries	BSP	Limits
367-12-4	2-Fluorophenol	40%	14-81%
4165-62-2	Phenol-d5	31%	11-54%
118-79-6	2,4,6-Tribromophenol	93%	35-145%
4165-60-0	Nitrobenzene-d5	76%	24-125%
321-60-8	2-Fluorobiphenyl	75%	19-127%
1718-51-0	Terphenyl-d14	74%	10-119%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JC25024
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP95988A-MS	3P55433.D	1	08/03/16	JJ	08/02/16	OP95988A	E3P2535
OP95988A-MSD	3P55434.D	1	08/03/16	JJ	08/02/16	OP95988A	E3P2535
JC25011-1	3P55617.D	1	08/10/16	SG	08/02/16	OP95988A	E3P2548

The QC reported here applies to the following samples: **Method:** SW846 8270D BY SIM

JC25024-1, JC25024-2

CAS No.	Compound	JC25011-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
91-20-3	Naphthalene	0.202		1	0.845	64	1	0.890	69	5	23-140/36
123-91-1	1,4-Dioxane	ND		1	0.415	42	1	0.420	42	1	20-160/30

CAS No.	Surrogate Recoveries	MS	MSD	JC25011-1	Limits
367-12-4	2-Fluorophenol	34%	37%	32%	14-81%
4165-62-2	Phenol-d5	28%	29%	24%	11-54%
118-79-6	2,4,6-Tribromophenol	94%	95%	92%	35-145%
4165-60-0	Nitrobenzene-d5	73%	75%	63%	24-125%
321-60-8	2-Fluorobiphenyl	75%	79%	72%	19-127%
1718-51-0	Terphenyl-d14	53%	59%	59%	10-119%

* = Outside of Control Limits.

Instrument Performance Check (DFTPP)

Job Number: JC25024
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: E3P2503-DFTPP
Lab File ID: 3P54953.D
Instrument ID: GCMS3P
Injection Date: 07/06/16
Injection Time: 09:12

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	57126	38.2		Pass
68	Less than 2.0% of mass 69	1062	0.71	(1.70) [a]	Pass
69	Mass 69 relative abundance	62449	41.8		Pass
70	Less than 2.0% of mass 69	387	0.26	(0.62) [a]	Pass
127	40.0 - 60.0% of mass 198	72301	48.4		Pass
197	Less than 1.0% of mass 198	1015	0.68		Pass
198	Base peak, 100% relative abundance	149501	100.0		Pass
199	5.0 - 9.0% of mass 198	10162	6.80		Pass
275	10.0 - 30.0% of mass 198	33995	22.7		Pass
365	1.0 - 100.0% of mass 198	4170	2.79		Pass
441	Present, but less than mass 443	16547	11.1	(81.6) [b]	Pass
442	40.0 - 100.0% of mass 198	109091	73.0		Pass
443	17.0 - 23.0% of mass 442	20290	13.6	(18.6) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E3P2503-ICC2503	3P54955.D	07/06/16	10:32	01:20	Initial cal 1.0
E3P2503-IC2503	3P54956.D	07/06/16	11:26	02:14	Initial cal 0.01
E3P2503-IC2503	3P54957.D	07/06/16	11:57	02:45	Initial cal 0.02
E3P2503-IC2503	3P54958.D	07/06/16	12:28	03:16	Initial cal 0.05
E3P2503-IC2503	3P54959.D	07/06/16	12:59	03:47	Initial cal 0.1
E3P2503-IC2503	3P54960.D	07/06/16	13:30	04:18	Initial cal 0.2
E3P2503-IC2503	3P54961.D	07/06/16	14:02	04:50	Initial cal 5
E3P2503-IC2503	3P54962.D	07/06/16	14:33	05:21	Initial cal 2.5
E3P2503-IC2503	3P54963.D	07/06/16	15:04	05:52	Initial cal 0.5
E3P2503-ICV2503	3P54964.D	07/06/16	17:37	08:25	Initial cal verification 1.0
E3P2503-ICV2503	3P54965.D	07/06/16	18:08	08:56	Initial cal verification 1.0

Instrument Performance Check (DFTPP)

Job Number: JC25024
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: E3P2535-DFTPP
Lab File ID: 3P55424.D
Instrument ID: GCMS3P
Injection Date: 08/02/16
Injection Time: 22:32

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	52685	37.1		Pass
68	Less than 2.0% of mass 69	1055	0.74	(1.70) [a]	Pass
69	Mass 69 relative abundance	62094	43.7		Pass
70	Less than 2.0% of mass 69	221	0.16	(0.36) [a]	Pass
127	40.0 - 60.0% of mass 198	71669	50.5		Pass
197	Less than 1.0% of mass 198	1166	0.82		Pass
198	Base peak, 100% relative abundance	142053	100.0		Pass
199	5.0 - 9.0% of mass 198	9655	6.80		Pass
275	10.0 - 30.0% of mass 198	31957	22.5		Pass
365	1.0 - 100.0% of mass 198	4235	2.98		Pass
441	Present, but less than mass 443	14807	10.4	(76.3) [b]	Pass
442	40.0 - 100.0% of mass 198	102813	72.4		Pass
443	17.0 - 23.0% of mass 442	19410	13.7	(18.9) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E3P2535-CC2503	3P55425.D	08/02/16	22:43	00:11	Continuing cal 0.5
OP95982A-MB1	3P55426.D	08/02/16	23:40	01:08	Method Blank
OP95982A-BS12	3P55427.D	08/03/16	00:10	01:38	Blank Spike
OP95982A-BSD12	3P55428.D	08/03/16	00:41	02:09	Blank Spike Duplicate
ZZZZZZ	3P55430.D	08/03/16	01:43	03:11	(unrelated sample)
ZZZZZZ	3P55431.D	08/03/16	02:13	03:41	(unrelated sample)
OP95988A-MS	3P55433.D	08/03/16	03:15	04:43	Matrix Spike
OP95988A-MSD	3P55434.D	08/03/16	03:46	05:14	Matrix Spike Duplicate
JC25024-1	3P55435.D	08/03/16	04:16	05:44	OSMW-3D
OP95978A-BS12	3P55438.D	08/03/16	05:48	07:16	Blank Spike
OP95978A-BSD12	3P55439.D	08/03/16	06:19	07:47	Blank Spike Duplicate
ZZZZZZ	3P55440.D	08/03/16	06:50	08:18	(unrelated sample)
ZZZZZZ	3P55442.D	08/03/16	07:54	09:22	(unrelated sample)
ZZZZZZ	3P55443.D	08/03/16	08:26	09:54	(unrelated sample)
ZZZZZZ	3P55444.D	08/03/16	08:59	10:27	(unrelated sample)
ZZZZZZ	3P55445.D	08/03/16	09:33	11:01	(unrelated sample)
ZZZZZZ	3P55446.D	08/03/16	10:06	11:34	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: JC25024
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: E3P2536-DFTPP
Lab File ID: 3P55449.D
Instrument ID: GCMS3P
Injection Date: 08/03/16
Injection Time: 11:59

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	67682	39.9		Pass
68	Less than 2.0% of mass 69	1010	0.60	(1.35) [a]	Pass
69	Mass 69 relative abundance	74983	44.3		Pass
70	Less than 2.0% of mass 69	289	0.17	(0.39) [a]	Pass
127	40.0 - 60.0% of mass 198	86915	51.3		Pass
197	Less than 1.0% of mass 198	1398	0.83		Pass
198	Base peak, 100% relative abundance	169429	100.0		Pass
199	5.0 - 9.0% of mass 198	11667	6.89		Pass
275	10.0 - 30.0% of mass 198	38925	23.0		Pass
365	1.0 - 100.0% of mass 198	5078	3.00		Pass
441	Present, but less than mass 443	17774	10.5	(79.1) [b]	Pass
442	40.0 - 100.0% of mass 198	117288	69.2		Pass
443	17.0 - 23.0% of mass 442	22466	13.3	(19.2) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E3P2536-CC2503	3P55450A.D	08/03/16	12:10	00:11	Continuing cal 1
OP95988A-MB1	3P55451.D	08/03/16	12:43	00:44	Method Blank
OP95988A-BS12	3P55452.D	08/03/16	13:15	01:16	Blank Spike
JC25024-2	3P55453.D	08/03/16	13:47	01:48	OSMW-3S
ZZZZZZ	3P55454.D	08/03/16	14:20	02:21	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: JC25024
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: EM5363-DFTPP
Lab File ID: M126351.D
Instrument ID: GCMSM
Injection Date: 07/26/16
Injection Time: 00:25

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	25985	37.6		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	31782	46.0		Pass
70	Less than 2.0% of mass 69	144	0.21	(0.45) [a]	Pass
127	40.0 - 60.0% of mass 198	33304	48.2		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	69085	100.0		Pass
199	5.0 - 9.0% of mass 198	4659	6.74		Pass
275	10.0 - 30.0% of mass 198	18118	26.2		Pass
365	1.0 - 100.0% of mass 198	2186	3.16		Pass
441	Present, but less than mass 443	6792	9.83	(76.1) [b]	Pass
442	40.0 - 100.0% of mass 198	46351	67.1		Pass
443	17.0 - 23.0% of mass 442	8929	12.9	(19.3) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
EM5363-IC5363	M126352.D	07/26/16	00:39	00:14	Initial cal 100
EM5363-IC5363	M126353.D	07/26/16	01:08	00:43	Initial cal 80
EM5363-ICC5363	M126354.D	07/26/16	01:36	01:11	Initial cal 50
EM5363-IC5363	M126355.D	07/26/16	02:04	01:39	Initial cal 25
EM5363-IC5363	M126356.D	07/26/16	02:33	02:08	Initial cal 10
EM5363-IC5363	M126357.D	07/26/16	03:01	02:36	Initial cal 5
EM5363-IC5363	M126358.D	07/26/16	03:30	03:05	Initial cal 2
EM5363-IC5363	M126359.D	07/26/16	03:58	03:33	Initial cal 1

Instrument Performance Check (DFTPP)

Job Number: JC25024
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: EM5364-DFTPP
Lab File ID: M126360.D
Instrument ID: GCMSM
Injection Date: 07/26/16
Injection Time: 08:39

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	38671	37.7		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	51077	49.8		Pass
70	Less than 2.0% of mass 69	402	0.39	(0.79) [a]	Pass
127	40.0 - 60.0% of mass 198	51104	49.8		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	102642	100.0		Pass
199	5.0 - 9.0% of mass 198	7462	7.27		Pass
275	10.0 - 30.0% of mass 198	27008	26.3		Pass
365	1.0 - 100.0% of mass 198	3427	3.34		Pass
441	Present, but less than mass 443	10619	10.3	(69.4) [b]	Pass
442	40.0 - 100.0% of mass 198	75490	73.5		Pass
443	17.0 - 23.0% of mass 442	15302	14.9	(20.3) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
EM5364-IC5364	M126361.D	07/26/16	09:08	00:29	Initial cal 100
EM5364-IC5364	M126362.D	07/26/16	09:36	00:57	Initial cal 80
EM5364-ICC5364	M126363.D	07/26/16	10:05	01:26	Initial cal 50
EM5364-IC5364	M126364.D	07/26/16	10:33	01:54	Initial cal 25
EM5364-IC5364	M126365.D	07/26/16	11:02	02:23	Initial cal 10
EM5364-IC5364	M126366.D	07/26/16	11:31	02:52	Initial cal 5
EM5364-IC5364	M126367.D	07/26/16	11:59	03:20	Initial cal 2
EM5364-IC5364	M126368.D	07/26/16	12:28	03:49	Initial cal 1
EM5364-ICV5363	M126369.D	07/26/16	12:56	04:17	Initial cal verification 50
EM5364-ICV5363	M126370.D	07/26/16	13:25	04:46	Initial cal verification 50
EM5364-ICV5364	M126371A.D	07/26/16	13:53	05:14	Initial cal verification 50
EM5364-ICV5363	M126371.D	07/26/16	13:53	05:14	Initial cal verification 50
EM5364-ICV5363	M126372.D	07/26/16	14:22	05:43	Initial cal verification 50
EM5364-ICV5363	M126373.D	07/26/16	14:50	06:11	Initial cal verification 50
EM5364-ICV5364	M126374.D	07/26/16	15:19	06:40	Initial cal verification 50
EM5364-ICV5363	M126375A.D	07/26/16	15:48	07:09	Initial cal verification 50
EM5364-ICV5364	M126375.D	07/26/16	15:48	07:09	Initial cal verification 50

Instrument Performance Check (DFTPP)

Job Number: JC25024
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: EM5365-DFTPP
Lab File ID: M126376.D
Instrument ID: GCMSM
Injection Date: 07/26/16
Injection Time: 18:13

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	40298	37.6		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	54492	50.9		Pass
70	Less than 2.0% of mass 69	156	0.15	(0.29) [a]	Pass
127	40.0 - 60.0% of mass 198	55149	51.5		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	107112	100.0		Pass
199	5.0 - 9.0% of mass 198	7411	6.92		Pass
275	10.0 - 30.0% of mass 198	29209	27.3		Pass
365	1.0 - 100.0% of mass 198	3468	3.24		Pass
441	Present, but less than mass 443	12730	11.9	(85.1) [b]	Pass
442	40.0 - 100.0% of mass 198	83240	77.7		Pass
443	17.0 - 23.0% of mass 442	14958	14.0	(18.0) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
EM5365-ICV5363	M126378.D	07/26/16	19:16	01:03	Initial cal verification 50

Instrument Performance Check (DFTPP)

Job Number: JC25024
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: EM5377-DFTPP
Lab File ID: M126614.D
Instrument ID: GCMSM
Injection Date: 08/03/16
Injection Time: 18:02

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	20007	35.5		Pass
68	Less than 2.0% of mass 69	145	0.26	(0.51) [a]	Pass
69	Mass 69 relative abundance	28690	50.9		Pass
70	Less than 2.0% of mass 69	267	0.47	(0.93) [a]	Pass
127	40.0 - 60.0% of mass 198	28748	51.1		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	56312	100.0		Pass
199	5.0 - 9.0% of mass 198	3540	6.29		Pass
275	10.0 - 30.0% of mass 198	14677	26.1		Pass
365	1.0 - 100.0% of mass 198	2436	4.33		Pass
441	Present, but less than mass 443	6920	12.3	(75.1) [b]	Pass
442	40.0 - 100.0% of mass 198	42482	75.4		Pass
443	17.0 - 23.0% of mass 442	9216	16.4	(21.7) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
EM5377-CC5363	M126615.D	08/03/16	18:14	00:12	Continuing cal 50
EM5377-CC5364	M126616.D	08/03/16	18:42	00:40	Continuing cal 50
JC25024-2	M126617.D	08/03/16	19:10	01:08	OSMW-3S
OP94634-MB1	M126618.D	08/03/16	19:39	01:37	Method Blank
ZZZZZZ	M126619.D	08/03/16	20:07	02:05	(unrelated sample)
ZZZZZZ	M126620.D	08/03/16	20:36	02:34	(unrelated sample)
ZZZZZZ	M126621.D	08/03/16	21:04	03:02	(unrelated sample)
ZZZZZZ	M126622.D	08/03/16	21:32	03:30	(unrelated sample)

Semivolatile Internal Standard Area Summary

Job Number: JC25024
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	E3P2535-CC2503	**Injection Date:**	08/02/16
Lab File ID:	3P55425.D	**Injection Time:**	22:43
Instrument ID:	GCMS3P	**Method:**	SW846 8270D BY SIM

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT
Check Std	85618	10.72	135845	13.70	206926	17.87	169613	22.44
Upper Limit [a]	171236	11.22	271690	14.20	413852	18.37	339226	22.94
Lower Limit [b]	42809	10.22	67923	13.20	103463	17.37	84807	21.94

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT
OP95982A-MB1	87270	10.72	128851	13.70	188883	17.87	163711	22.44
OP95982A-BS12	77506	10.72	111281	13.70	161835	17.87	128061	22.44
OP95982A-BSD12	72436	10.72	95914	13.70	132351	17.87	93484	22.44
ZZZZZZ	71805	10.72	97998	13.70	136509	17.87	107560	22.44
ZZZZZZ	72104	10.72	92154	13.70	133003	17.87	100571	22.44
OP95988A-MS	68974	10.72	92814	13.70	134247	17.87	105551	22.44
OP95988A-MSD	71193	10.72	93099	13.70	132957	17.87	105617	22.44
JC25024-1	73843	10.72	94430	13.70	136061	17.87	99611	22.44
OP95978A-BS12	76867	10.72	103622	13.70	140891	17.87	99265	22.44
OP95978A-BSD12	75150	10.72	97899	13.70	135815	17.87	92493	22.44
ZZZZZZ	75414	10.72	89462	13.70	132528	17.87	94583	22.42
ZZZZZZ	76454	10.72	108748	13.70	176150	17.87	135598	22.44
ZZZZZZ	66356	10.72	88073	13.70	135634	17.87	99442	22.44
ZZZZZZ	87446	10.72	109668	13.70	165384	17.87	120198	22.44
ZZZZZZ	122220	10.72	168711	13.70	240822	17.87	184671	22.44
ZZZZZZ	106664	10.72	153244	13.70	216510	17.87	156454	22.44

IS 1 = 1-Methylnaphthalene-d10
IS 2 = Fluorene-d10
IS 3 = Fluoranthene-d10
IS 4 = Benzo(a)pyrene-d12

(a) Upper Limit = +100% of check standard area; Retention time +0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Semivolatile Internal Standard Area Summary

Job Number: JC25024
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	E3P2536-CC2503	**Injection Date:**	08/03/16
Lab File ID:	3P55450A.D	**Injection Time:**	12:10
Instrument ID:	GCMS3P	**Method:**	SW846 8270D BY SIM

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT
Check Std	58126	10.84	81233	13.81	133356	17.98	104421	22.53
Upper Limit [a]	116252	11.34	162466	14.31	266712	18.48	208842	23.03
Lower Limit [b]	29063	10.34	40617	13.31	66678	17.48	52211	22.03

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT
OP95988A-MB1	58297	10.84	77233	13.81	119982	17.98	93609	22.53
OP95988A-BS12	45858	10.84	65293	13.81	101961	17.97	79183	22.53
JC25024-2	79157	10.84	110532	13.81	170095	17.98	138628	22.53
ZZZZZZ	69578	10.84	97637	13.81	141186	17.98	120490	22.53

IS 1 = 1-Methylnaphthalene-d10
IS 2 = Fluorene-d10
IS 3 = Fluoranthene-d10
IS 4 = Benzo(a)pyrene-d12

(a) Upper Limit = +100% of check standard area; Retention time +0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Semivolatile Internal Standard Area Summary

Job Number: JC25024
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	EM5377-CC5363	**Injection Date:**	08/03/16
Lab File ID:	M126615.D	**Injection Time:**	18:14
Instrument ID:	GCMSM	**Method:**	SW846 8270D BY SIM

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
Check Std	115895	4.82	451877	5.98	274856	8.37	461198	11.02	480125	16.20	469657	18.83
Upper Limit [a]	231790	5.32	903754	6.48	549712	8.87	922396	11.52	960250	16.70	939314	19.33
Lower Limit [b]	57948	4.32	225939	5.48	137428	7.87	230599	10.52	240063	15.70	234829	18.33

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
JC25024-2	153938	4.82	602545	5.98	364203	8.37	613938	11.01	554893	16.19	547325	18.82
OP94634-MB1	132815	4.82	491583	5.98	290247	8.36	472313	11.01	468855	16.19	429443	18.82
ZZZZZZ	108640	4.82	415667	5.98	243671	8.36	403416	11.01	392309	16.19	365249	18.81
ZZZZZZ	123041	4.82	453600	5.98	268593	8.37	439780	11.01	427852	16.19	402716	18.82
ZZZZZZ	124696	4.82	466227	5.98	275981	8.37	458590	11.01	446100	16.19	403512	18.82
ZZZZZZ	126154	4.82	472433	5.98	277236	8.37	446614	11.01	440880	16.19	413836	18.82

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-D10
IS 4 = Phenanthrene-d10
IS 5 = Chrysene-d12
IS 6 = Perylene-d12

(a) Upper Limit = +100% of check standard area; Retention time +0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Semivolatile Surrogate Recovery Summary

Job Number: JC25024
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Method: SW846 8270D BY SIM **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3
JC25024-1	3P55435.D	66	70	71
JC25024-2	M126617.D	61	59	71
JC25024-2	3P55453.D	64	62	64
OP95988A-BS12	3P55452.D	76	75	74
OP95988A-MB1	3P55451.D	70	70	79
OP95988A-MS	3P55433.D	73	75	53
OP95988A-MSD	3P55434.D	75	79	59

Surrogate Compounds	Recovery Limits
S1 = Nitrobenzene-d5	24-125%
S2 = 2-Fluorobiphenyl	19-127%
S3 = Terphenyl-d14	10-119%

Initial Calibration Summary

Job Number: JC25024
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: E3P2503-ICC2503
Lab FileID: 3P54955.D

```
                        Response Factor Report  MSGC3P

Method       : C:\MSDCHEM\1\METHODS\M3P2503SIM.M (RTE Integrator)
Title        : Semi Volatile Extractables by GC/MS
Last Update  : Wed Jul 06 17:34:10 2016
Response via : Initial Calibration

Calibration Files
2.5 =3p54962.D   1.0 =3p54955.D   0.5 =3p54963.D   0.2 =3p54960.D
0.1 =3p54959.D   0.05=3p54958.D   0.02=3p54957.D   0.01=3p54956.D
5   =3p54961.D       =                =                =

Compound
            2.5   1.0   0.5   0.2   0.1   0.05  0.02  0.01  5            Avg    %RSD
-----------------------------------------------------------------------------

1) I   1-Methylnaphthalene-d ----------------ISTD---------------------
2)  1,4-dioxane
          0.382 0.421 0.347 0.441 0.420                   0.405        0.403    8.35
3)  2-Fluorophenol
          0.512 0.597 0.571 0.766 0.707 0.723                           0.646   15.53
4)  Phenol-d5
          0.671 0.755 0.766 1.020 0.970 1.006                           0.864   17.51
5)  Phenol
          0.597 0.667 0.679 0.971 0.963 1.027 1.074                     0.854   23.21
           ---- Quadratic regression ----  Coefficient =  0.9989
             Response Ratio = 0.03088 + 0.67965 *A + -0.02976 *A^2

6)  bis(2-Chloroethyl)ether
          0.595 0.584 0.579 0.764 0.755 0.802 0.872 0.860 0.606        0.713   17.12
7)  Nitrobenzene-d5
          0.561 0.604 0.634 0.771 0.716 0.746             0.520        0.650   14.77
8)  Nitrobenzene
          0.583 0.612 0.655 0.921 0.836                                 0.722   20.62
9)  Naphthalene
          2.445 2.304 2.285 2.831 2.717 2.851 2.919 2.937 2.376        2.629   10.40
10)  Hexachlorobutadiene
          0.390 0.364 0.376 0.476 0.467 0.513 0.590       0.386        0.445   18.00
11)  2-Methylnaphthalene
          1.325 1.190 1.285 1.636 1.411 1.822             1.232        1.414   16.42
12)  1-Methylnaphthalene
          1.114 1.016 1.011 1.212 1.094 1.106 1.120 1.252 1.082        1.112    7.14
13)  Hexachlorocyclopentadiene
          0.312 0.265 0.221 0.205 0.169                   0.354        0.254   27.34
           ---- Quadratic regression ----  Coefficient =  0.9999
             Response Ratio = -0.00964 + 0.27470 *A + 0.03325 *A^2


14) I   Fluorene-d10          ----------------ISTD---------------------
15)  2-Fluorobiphenyl
          0.634 0.835 0.922 1.138 1.054 1.090 1.125 1.076              0.984   17.87
16)  Acenaphthylene
          1.420 1.327 1.446 1.509 1.319 1.483 1.399       1.385        1.411    4.83
17)  Acenaphthene
          0.817 0.847 0.879 0.964 0.894 0.943 0.936 0.995 0.767        0.893    8.29
18)  4,6-dinitro-2-methylphenol
          0.098 0.061 0.050 0.048 0.028                   0.133        0.070   55.52
           ---- Quadratic regression ----  Coefficient =  0.9996
             Response Ratio = -0.00883 + 0.06278 *A + 0.01142 *A^2
```

Initial Calibration Summary

Job Number: JC25024 **Sample:** E3P2503-ICC2503
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 3P54955.D
Project: BMSMC, Building 5 Area, PR

```
19)  Fluorene
           0.866 0.861 0.833 0.910 0.796 0.798 0.802 0.853 0.867        0.843    4.59
20)  2,4,6-Tribromophenol
           0.125 0.137 0.133 0.137                          0.094        0.125   14.44

21) I   Fluoranthene-d10      ----------------ISTD---------------------
22)  Hexachlorobenzene
           0.203 0.202 0.221 0.247 0.224 0.235 0.240 0.228 0.186        0.221    9.09
23)  Pentachlorophenol
           0.105 0.098 0.082 0.079 0.056 0.075              0.105        0.086   20.82
            ---- Quadratic regression ----  Coefficient =  0.9997
              Response Ratio = -0.00724 + 0.10562 *A + 0.00018 *A^2

24)  Phenanthrene
           0.855 0.868 0.995 1.053 0.966 1.018              0.761        0.931   11.30
25)  Anthracene
           0.735 0.782 0.826 0.903 0.843                    0.683        0.795    9.94
26)  Fluoranthene
           0.821 0.806 0.804 0.870 0.783 0.780              0.764        0.804    4.34
27)  Pyrene
           0.923 0.898 0.911 0.963 0.857 0.889              0.850        0.899    4.33
28)  Terphenyl-d14
           0.344 0.439 0.505 0.617 0.587 0.612 0.583                     0.527   19.59
29)  Benzo[a]anthracene
           0.782 0.771 0.749 0.733 0.681 0.748              0.780        0.749    4.68
30)  Chrysene
           0.784 0.822 0.890 0.938 0.897 0.956              0.704        0.856   10.55

31) I   Benzo(a)pyrene-d12    ----------------ISTD---------------------
32)  Benzo[b]fluoranthene
           1.410 1.284 1.328 1.277 1.221                    1.432        1.325    6.18
33)  Benzo[k]fluoranthene
           1.087 1.132 1.094 1.209 1.120                    1.055        1.116    4.73
34)  Benzo[a]pyrene
           0.999 0.994 0.935 1.109 1.078 1.181              1.019        1.045    7.94
35)  Indeno[1,2,3-cd]pyrene
           1.205 1.212 1.091 1.167 1.023                    1.217        1.153    6.85
36)  Dibenz[a,h]anthracene
           0.842 0.986 0.877 0.931 0.811                    0.875        0.887    7.08
37)  Benzo[g,h,i]perylene
           1.109 1.136 1.109 1.217 1.130                    1.106        1.134    3.74
-------------------------------------------------------------------------------
(#) = Out of Range  ###  Number of calibration levels exceeded format  ###

          M3P2503SIM.M        Mon Jul 11 10:10:21 2016
```

6.7.1

6

Initial Calibration Verification

Job Number: JC25024 **Sample:** E3P2503-ICV2503
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 3P54964.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\data\E3P2503\3p54964.D          Vial: 11
Acq On    :  6 Jul 2016   5:37 pm                    Operator: hankc
Sample    : icv2503-1.0                              Inst    : MSGC3P
Misc      : op95179a,e3p2503                         Multiplr: 1.00
MS Integration Params: lscint.p

Method       : C:\MSDCHEM\1\METHODS\M3P2503SIM.M (RTE Integrator)
Title        : Semi Volatile Extractables by GC/MS
Last Update  : Wed Jul 06 17:34:10 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.050  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  30%     Max. Rel. Area : 200%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1-Methylnaphthalene-d10	1.000	1.000	0.0	96	0.00	11.10
2	t	1,4-dioxane	0.403	0.317	21.3	72	-0.02	2.74
		----------	AvgRF	CCRF	% Dev	----------		
6	t	bis(2-Chloroethyl)ether	0.713	0.945	-32.5#	155	-0.01	6.76
8	t	Nitrobenzene	0.722	0.849	-17.6	133	0.00	8.24
9	t	Naphthalene	2.629	2.847	-8.3	118	0.00	9.62
10	t	Hexachlorobutadiene	0.445	0.463	-4.0	122	0.00	9.92
11	t	2-Methylnaphthalene	1.414	1.410	0.3	113	0.00	10.98
		----------	True	Calc.	% Drift	----------		
13		Hexachlorocyclopentadiene	1.000	0.902	9.8	78	0.00	11.35
		----------	AvgRF	CCRF	% Dev	----------		
14	I	Fluorene-d10	1.000	1.000	0.0	88	0.00	14.09
16	t	Acenaphthylene	1.411	1.697	-20.3	113	0.00	12.75
17	t	Acenaphthene	0.893	1.076	-20.5	112	0.00	13.11
		----------	AvgRF	CCRF	% Dev	----------		
19	t	Fluorene	0.843	1.061	-25.9	109	0.00	14.15
21	I	Fluoranthene-d10	1.000	1.000	0.0	81	0.00	18.26
22	t	Hexachlorobenzene	0.221	0.270	-22.2	109	0.00	15.26
		----------	AvgRF	CCRF	% Dev	----------		
24	t	Phenanthrene	0.931	1.167	-25.3	109	0.00	16.05
25	t	Anthracene	0.795	0.945	-18.9	98	0.00	16.15
26	t	Fluoranthene	0.804	1.037	-29.0	105	0.00	18.29
27	t	Pyrene	0.899	1.100	-22.4	100	0.00	18.67
29	t	Benzo[a]anthracene	0.749	0.986	-31.6#	104	0.00	20.74
30	t	Chrysene	0.856	0.887	-3.6	88	0.00	20.79
31	I	Benzo(a)pyrene-d12	1.000	1.000	0.0	69	0.04	22.83
32	t	Benzo[b]fluoranthene	1.325	1.552	-17.1	83	0.00	22.40
33	t	Benzo[k]fluoranthene	1.116	1.529	-37.0#	93	0.00	22.44
34	t	Benzo[a]pyrene	1.045	1.292	-23.6	89	0.00	22.85
35	t	Indeno[1,2,3-cd]pyrene	1.153	1.406	-21.9	79	0.00	24.45
36	t	Dibenz[a,h]anthracene	0.887	1.101	-24.1	77	0.00	24.49
37	t	Benzo[g,h,i]perylene	1.134	1.388	-22.4	84	0.00	24.88

Initial Calibration Verification

Job Number: JC25024
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: E3P2503-ICV2503
Lab FileID: 3P54964.D

```
(#) = Out of Range                SPCC's out = 0  CCC's out = 0
 3p54955.D  M3P2503SIM.M       Mon Jul 11 10:10:11 2016
```

Initial Calibration Verification

Job Number: JC25024 **Sample:** E3P2503-ICV2503
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 3P54965.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\data\E3P2503\3p54965.D          Vial: 12
Acq On    :  6 Jul 2016   6:08 pm                     Operator: hankc
Sample    : icv2503-1.0                               Inst    : MSGC3P
Misc      : op95179a,e3p2503                          Multiplr: 1.00
MS Integration Params: lscint.p

Method       : C:\MSDCHEM\1\METHODS\M3P2503SIM.M (RTE Integrator)
Title        : Semi Volatile Extractables by GC/MS
Last Update  : Wed Jul 06 17:34:10 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.050  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  30%     Max. Rel. Area : 200%
```

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	1-Methylnaphthalene-d10	1.000	1.000	0.0	99	0.00	11.10
	----------	True	Calc.	% Drift	----------		
5	Phenol	5.000	6.972	-39.4#	133	-0.01	6.61
	----------	AvgRF	CCRF	% Dev	----------		
14 I	Fluorene-d10	1.000	1.000	0.0	87	0.00	14.09
	----------	True	Calc.	% Drift	----------		
18 t	4,6-dinitro-2-methylpheno	5.000	3.887	22.3	72	-0.02	14.28
	----------	AvgRF	CCRF	% Dev	----------		
21 I	Fluoranthene-d10	1.000	1.000	0.0	79	0.00	18.26
	----------	True	Calc.	% Drift	----------		
23 t	Pentachlorophenol	5.000	4.412	11.8	71	0.00	15.67

(#) = Out of Range SPCC's out = 0 CCC's out = 0
3p54955.D M3P2503SIM.M Mon Jul 11 10:10:13 2016

Continuing Calibration Summary

Job Number: JC25024 **Sample:** E3P2535-CC2503
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 3P55425.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\data\E3P2535\3p55425.D          Vial: 2
Acq On    :  2 Aug 2016  10:43 pm                    Operator: juliusj
Sample    : cc2503-0.5                               Inst    : MSGC3P
Misc      : op95661a,e3p2535                         Multiplr: 1.00
MS Integration Params: lscint.p

Method       : C:\MSDCHEM\1\METHODS\M3P2503SIM.M (RTE Integrator)
Title        : Semi Volatile Extractables by GC/MS
Last Update  : Wed Jul 06 17:34:10 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.050  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 200%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1-Methylnaphthalene-d10	1.000	1.000	0.0	105	-0.05	10.72
2	t	1,4-dioxane	0.403	0.472	-17.1	143	-0.07	2.47
3	S	2-Fluorophenol	0.646	0.548	15.2	101	-0.16	4.73
4	S	Phenol-d5	0.864	0.798	7.6	110	-0.10	6.30
		----------	True	Calc.	% Drift	----------		
5		Phenol	2.500	2.605	-4.2	114	-0.10	6.33
		----------	AvgRF	CCRF	% Dev	----------		
6	t	bis(2-Chloroethyl)ether	0.713	0.663	7.0	121	-0.02	6.44
7	S	Nitrobenzene-d5	0.650	0.795	-22.3#	132	-0.10	7.86
8	t	Nitrobenzene	0.722	0.762	-5.5	123	-0.02	7.89
9	t	Naphthalene	2.629	2.645	-0.6	122	-0.08	9.25
10	t	Hexachlorobutadiene	0.445	0.414	7.0	116	-0.07	9.55
11	t	2-Methylnaphthalene	1.414	1.506	-6.5	124	-0.05	10.60
12	t	1-Methylnaphthalene	1.112	1.439	-29.4#	150	-0.04	10.79
		----------	True	Calc.	% Drift	----------		
13		Hexachlorocyclopentadiene	1.000	1.219	-21.9#	147	-0.05	10.96
		----------	AvgRF	CCRF	% Dev	----------		
14	I	Fluorene-d10	1.000	1.000	0.0	117	-0.04	13.70
15	S	2-Fluorobiphenyl	0.984	1.027	-4.4	131	-0.07	11.39
16	t	Acenaphthylene	1.411	1.720	-21.9#	140	-0.06	12.37
17	t	Acenaphthene	0.893	0.998	-11.8	133	-0.05	12.73
		----------	True	Calc.	% Drift	----------		
18	t	4,6-dinitro-2-methylpheno	2.500	3.329	-33.2#	195	-0.03	13.91
		----------	AvgRF	CCRF	% Dev	----------		
19	t	Fluorene	0.843	0.904	-7.2	127	-0.04	13.76
20	S	2,4,6-Tribromophenol	0.125	0.158	-26.4#	139	-0.02	14.25
21	I	Fluoranthene-d10	1.000	1.000	0.0	118	-0.03	17.87
22	t	Hexachlorobenzene	0.221	0.233	-5.4	124	-0.10	14.86
		----------	True	Calc.	% Drift	----------		
23	t	Pentachlorophenol	2.500	2.704	-8.2	147	-0.10	15.28
		----------	AvgRF	CCRF	% Dev	----------		
24	t	Phenanthrene	0.931	1.082	-16.2	128	-0.03	15.65

Continuing Calibration Summary

Job Number: JC25024 **Sample:** E3P2535-CC2503
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 3P55425.D
Project: BMSMC, Building 5 Area, PR

25	t	Anthracene	0.795	0.933	-17.4	133	-0.03	15.76
26	t	Fluoranthene	0.804	0.898	-11.7	132	-0.03	17.91
27	t	Pyrene	0.899	1.079	-20.0	140	-0.02	18.29
28	S	Terphenyl-d14	0.527	0.547	-3.8	128	0.00	18.66
29	t	Benzo[a]anthracene	0.749	1.060	-41.5#	167	-0.03	20.36
30	t	Chrysene	0.856	0.981	-14.6	130	-0.03	20.42
31	I	Benzo(a)pyrene-d12	1.000	1.000	0.0	134	-0.04	22.44
32	t	Benzo[b]fluoranthene	1.325	1.538	-16.1	156	-0.05	22.02
33	t	Benzo[k]fluoranthene	1.116	1.048	6.1	129	-0.03	22.06
34	t	Benzo[a]pyrene	1.045	0.925	11.5	133	-0.04	22.46
35	t	Indeno[1,2,3-cd]pyrene	1.153	1.389	-20.5#	171	-0.11	23.96
36	t	Dibenz[a,h]anthracene	0.887	1.009	-13.8	155	-0.11	24.00
37	t	Benzo[g,h,i]perylene	1.134	1.168	-3.0	142	0.00	24.34

(#) = Out of Range SPCC's out = 0 CCC's out = 0
3p54963.D M3P2503SIM.M Wed Aug 03 09:56:32 2016

6.7.4 6

Continuing Calibration Summary

Job Number: JC25024 **Sample:** E3P2536-CC2503
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 3P55450A.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\data\E3P2536\3p55450a.D         Vial: 2
Acq On    :  3 Aug 2016  12:10 pm                    Operator: shaniceg
Sample    : cc2503-1                                 Inst    : MSGC3P
Misc      : op95661a,e3p2536                         Multiplr: 1.00
MS Integration Params: lscint.p

Method       : C:\MSDCHEM\1\METHODS\M3P2503SIM.M (RTE Integrator)
Title        : Semi Volatile Extractables by GC/MS
Last Update  : Wed Jul 06 17:34:10 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.050  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 200%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1-Methylnaphthalene-d10	1.000	1.000	0.0	107	0.07	10.84
2	t	1,4-dioxane	0.403	0.363	9.9	92	0.00	2.55
3	S	2-Fluorophenol	0.646	0.534	17.3	96	-0.07	4.82
4	S	Phenol-d5	0.864	0.756	12.5	107	0.00	6.40
		----------	True	Calc.	% Drift	----------		
5		Phenol	5.000	4.966	0.7	106	0.00	6.43
		----------	AvgRF	CCRF	% Dev	----------		
6	t	bis(2-Chloroethyl)ether	0.713	0.600	15.8	110	0.07	6.53
7	S	Nitrobenzene-d5	0.650	0.686	-5.5	121	0.00	7.95
8	t	Nitrobenzene	0.722	0.699	3.2	122	0.07	7.99
9	t	Naphthalene	2.629	2.221	15.5	103	0.02	9.34
10	t	Hexachlorobutadiene	0.445	0.331	25.6#	97	0.02	9.65
11	t	2-Methylnaphthalene	1.414	1.094	22.6#	98	0.07	10.72
12	t	1-Methylnaphthalene	1.112	1.034	7.0	109	0.06	10.89
		----------	True	Calc.	% Drift	----------		
13		Hexachlorocyclopentadiene	2.000	1.976	1.2	108	0.07	11.08
		----------	AvgRF	CCRF	% Dev	----------		
14	I	Fluorene-d10	1.000	1.000	0.0	98	0.08	13.81
15	S	2-Fluorobiphenyl	0.984	0.989	-0.5	116	0.02	11.48
16	t	Acenaphthylene	1.411	1.390	1.5	103	0.05	12.49
17	t	Acenaphthene	0.893	0.962	-7.7	112	0.06	12.83
		----------	True	Calc.	% Drift	----------		
18	t	4,6-dinitro-2-methylpheno	5.000	7.732	-54.6#	199	0.08	14.02
		----------	AvgRF	CCRF	% Dev	----------		
19	t	Fluorene	0.843	0.941	-11.6	107	0.06	13.85
20	S	2,4,6-Tribromophenol	0.125	0.153	-22.4#	110	0.09	14.36
21	I	Fluoranthene-d10	1.000	1.000	0.0	103	0.08	17.98
22	t	Hexachlorobenzene	0.221	0.200	9.5	102	0.00	14.97
		----------	True	Calc.	% Drift	----------		
23	t	Pentachlorophenol	5.000	5.919	-18.4	126	0.01	15.39
		----------	AvgRF	CCRF	% Dev	----------		
24	t	Phenanthrene	0.931	0.957	-2.8	113	0.08	15.76

Continuing Calibration Summary

Job Number: JC25024 **Sample:** E3P2536-CC2503
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 3P55450A.D
Project: BMSMC, Building 5 Area, PR

25	t	Anthracene	0.795	0.891	-12.1	117	0.08	15.86
26	t	Fluoranthene	0.804	0.897	-11.6	114	0.06	18.00
27	t	Pyrene	0.899	1.040	-15.7	119	0.09	18.40
28	S	Terphenyl-d14	0.527	0.492	6.6	115	0.09	18.76
29	t	Benzo[a]anthracene	0.749	0.964	-28.7#	128	0.06	20.45
30	t	Chrysene	0.856	0.894	-4.4	112	0.06	20.52
31	I	Benzo(a)pyrene-d12	1.000	1.000	0.0	108	0.06	22.53
32	t	Benzo[b]fluoranthene	1.325	1.305	1.5	110	0.06	22.12
33	t	Benzo[k]fluoranthene	1.116	1.056	5.4	101	0.06	22.15
34	t	Benzo[a]pyrene	1.045	0.916	12.3	100	0.08	22.57
35	t	Indeno[1,2,3-cd]pyrene	1.153	1.263	-9.5	113	0.03	24.10
36	t	Dibenz[a,h]anthracene	0.887	0.977	-10.1	107	0.03	24.13
37	t	Benzo[g,h,i]perylene	1.134	1.165	-2.7	111	0.15	24.49

(#) = Out of Range SPCC's out = 0 CCC's out = 0
3p54955.D M3P2503SIM.M Wed Aug 03 14:41:07 2016

6.7.5

6

Initial Calibration Summary

Job Number: JC25024 **Sample:** EM5363-ICC5363
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** M126354.D
Project: BMSMC, Building 5 Area, PR

Response Factor Report Instrument #1

Method : C:\MSDCHEM\1\METHODS\MM5363.M (RTE Integrator)
Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
Last Update : Tue Jul 26 15:28:14 2016
Response via : Initial Calibration

Calibration Files
2 =M126358.D 5 =M126357.D 100 =M126352.D 50 =M126354.D
1 =M126359.D 10 =M126356.D 80 =M126353.D 25 =M126355.D

Compound	2	5	100	50	1	10	80	25	Avg	%RSD
1) I 1,4-Dichlorobenzene-d					ISTD					
2) 1,4-Dioxane	0.500	0.503	0.507	0.515	0.455	0.510	0.484	0.499	0.497	3.85
3) Pyridine	1.340	1.403	1.361	1.420	1.147	1.378	1.320	1.369	1.342	6.34
4) N-Nitrosodim	0.721	0.701	0.616	0.646	0.668	0.654	0.613	0.625	0.655	6.03
5) 2-Fluorophen	1.193	1.196	1.237	1.240	1.185	1.222	1.186	1.181	1.205	2.00
6) Indene	2.504	2.381	2.090	2.213	2.388	2.352	2.061	2.211	2.275	6.86
7) Cumene	3.208	3.131	2.947	3.099	3.190	3.109	2.890	3.010	3.073	3.70
8) Phenol-d5	1.534	1.567	1.511	1.556	1.650	1.541	1.477	1.452	1.536	3.93
9) Phenol	1.771	1.779	1.732	1.719	1.579	1.682	1.681	1.670	1.702	3.77
10) Aniline	2.088	2.212	1.785	1.915	2.133	2.148	1.819	1.928	2.004	8.08
11) bis(2-Chloro	1.287	1.291	1.099	1.169	1.158	1.237	1.095	1.157	1.187	6.50
12) 2-Chlorophen	1.379	1.517	1.338	1.413	1.479	1.488	1.297	1.376	1.411	5.52
13) Decane	1.554	1.347	1.154	1.262	1.301	1.381	1.149	1.278	1.303	10.03
14) 1,3-Dichloro	1.564	1.527	1.408	1.477	1.509	1.500	1.378	1.440	1.475	4.24
15) 1,4-Dichloro	1.618	1.557	1.383	1.448	1.585	1.490	1.372	1.443	1.487	6.18
16) Benzyl alcoh	0.838	0.889	0.826	0.868	0.946	0.854	0.819	0.851	0.861	4.76
17) 1,2-Dichloro	1.492	1.425	1.266	1.347	1.451	1.409	1.255	1.364	1.376	6.17
18) Acetophenone	1.846	1.806	1.575	1.696	1.792	1.834	1.574	1.746	1.734	6.30
19) 2-Methylphen	1.236	1.258	1.109	1.155	1.095	1.196	1.077	1.162	1.161	5.68
20) 2,2'-oxybis(	0.489	0.439	0.373	0.391	0.496	0.464	0.359	0.390	0.425	12.68
21) 3&4-Methylph	1.350	1.242	1.229	1.274	1.264	1.295	1.197	1.271	1.265	3.63
22) n-Nitroso-di	1.057	1.013	0.822	0.895	0.961	0.960	0.814	0.869	0.924	9.55
23) Hexachloroet	0.624	0.605	0.539	0.535	0.574	0.559	0.512	0.546	0.562	6.69
24) I Naphthalene-d8					ISTD					
25) Nitrobenzene	0.349	0.338	0.328	0.340	0.353	0.353	0.329	0.326	0.339	3.29
26) Nitrobenzene	0.385	0.369	0.330	0.341	0.353	0.365	0.332	0.346	0.353	5.42
27) Quinoline	0.761	0.745	0.710	0.733	0.709	0.753	0.705	0.702	0.727	3.26
28) Isophorone	0.623	0.650	0.592	0.617	0.608	0.635	0.604	0.608	0.617	2.99
29) 2-Nitropheno	0.170	0.196	0.211	0.211	0.162	0.197	0.208	0.196	0.194	9.44
30) 2,4-Dimethyl	0.329	0.323	0.313	0.316	0.385	0.334	0.308	0.303	0.326	7.98
31) Benzoic acid		0.150	0.248	0.239		0.182	0.235	0.211	0.211	18.11
32) bis(2-Chloro	0.424	0.392	0.355	0.370	0.414	0.394	0.353	0.355	0.382	7.29
33) 2,4-Dichloro	0.298	0.336	0.316	0.319	0.304	0.323	0.309	0.298	0.313	4.21
34) 2,6-Dichloro	0.313	0.326	0.300	0.297	0.290	0.312	0.288	0.289	0.302	4.57
35) 1,3,5-Trichl	0.358	0.381	0.350	0.355	0.344	0.384	0.346	0.357	0.359	4.20
36) 1,2,4-Trichl	0.364	0.353	0.330	0.338	0.361	0.344	0.333	0.335	0.345	3.82
37) 1,2,3-Trichl	0.383	0.346	0.325	0.329	0.317	0.346	0.318	0.323	0.336	6.64
38) Naphthalene	1.098	1.037	0.948	0.976	1.057	1.028	0.945	0.926	1.002	6.17
39) 4-Chloroanil	0.475	0.478	0.439	0.464	0.476	0.486	0.449	0.447	0.464	3.73
40) 2,3-Dichloro	0.419	0.383	0.373	0.380	0.381	0.403	0.367	0.368	0.384	4.74
41) Caprolactam	0.170	0.148	0.145	0.151	0.169	0.158	0.145	0.146	0.154	6.93
42) Hexachlorobu	0.181	0.196	0.189	0.185	0.212	0.191	0.186	0.179	0.190	5.55
43) 4-Chloro-3-m	0.275	0.301	0.287	0.295	0.248	0.302	0.279	0.283	0.284	6.17
44) 2-Methylnaph	0.665	0.698	0.629	0.653	0.654	0.670	0.634	0.645	0.656	3.35
45) 1-Methylnaph	0.759	0.772	0.694	0.697	0.750	0.723	0.681	0.683	0.720	5.06

```
46) Dimethylnaph 0.655 0.666 0.620 0.635 0.652 0.660 0.613 0.621 0.640   3.21

47) I   Acenaphthene-d10      ----------------ISTD---------------------
48) Hexachlorocy 0.359 0.386 0.389 0.389 0.292 0.380 0.380 0.380 0.369   8.90
49) 2,4,6-Trichl 0.412 0.382 0.370 0.379 0.375 0.376 0.359 0.371 0.378   4.06
50) 2,4,5-Trichl 0.434 0.427 0.400 0.396 0.354 0.410 0.387 0.384 0.399   6.40
51) 2-Fluorobiph 1.286 1.271 1.135 1.172 1.314 1.230 1.112 1.147 1.208   6.37
52) 2-Chloronaph 1.158 1.177 1.000 1.017 1.125 1.094 0.987 1.046 1.076   6.84
53) Biphenyl     1.437 1.542 1.305 1.331 1.502 1.449 1.273 1.325 1.395   7.16
54) 2-Nitroanili 0.290 0.302 0.296 0.306 0.284 0.309 0.294 0.299 0.298   2.75
55) Dimethylphth 1.355 1.292 1.204 1.259 1.272 1.274 1.189 1.213 1.257   4.32
56) Acenaphthyle 1.928 1.891 1.656 1.703 1.848 1.776 1.630 1.715 1.768   6.26
57) 2,6-Dinitrot 0.225 0.251 0.277 0.274 0.208 0.251 0.268 0.263 0.252   9.63
58) 3-Nitroanili 0.307 0.316 0.338 0.340 0.251 0.334 0.329 0.320 0.317   9.08
59) Acenaphthene 1.176 1.169 1.025 1.047 1.137 1.100 1.002 1.022 1.085   6.42
60) 2,4-Dinitrop 0.039 0.065 0.170 0.151       0.091 0.158 0.126 0.114  43.81
            ---- Quadratic regression ----  Coefficient =  0.9995
              Response Ratio = -0.01659 + 0.13364 *A + 0.00773 *A^2

61) 4-Nitropheno 0.131 0.120 0.149 0.150 0.132 0.141 0.149 0.142 0.139   7.67
62) Dibenzofuran 1.815 1.750 1.550 1.585 1.762 1.706 1.520 1.583 1.659   6.75
63) 2,4-Dinitrot 0.288 0.324 0.371 0.368 0.235 0.342 0.363 0.355 0.331  14.39
64) 2,3,4,6-Tetr 0.325 0.331 0.355 0.353 0.297 0.342 0.349 0.342 0.337   5.74
65) Diethylphtha 1.332 1.329 1.178 1.202 1.270 1.241 1.161 1.184 1.237   5.45
66) Fluorene     1.399 1.359 1.195 1.225 1.394 1.297 1.170 1.199 1.280   7.40
67) 4-Chlorophen 0.678 0.675 0.582 0.599 0.652 0.636 0.563 0.595 0.622   7.06
68) 4-Nitroanili 0.327 0.333 0.328 0.325 0.333 0.354 0.326 0.323 0.331   2.96

69) I   Phenanthrene-d10      ----------------ISTD---------------------
70) 4,6-Dinitro- 0.067 0.079 0.143 0.133       0.094 0.140 0.116 0.110  27.79
            ---- Quadratic regression ----  Coefficient =  0.9997
              Response Ratio = -0.00635 + 0.12692 *A + 0.00749 *A^2

71) n-Nitrosodip 0.558 0.543 0.488 0.497 0.520 0.518 0.497 0.497 0.515   4.86
72) 1,2-Diphenyl 0.747 0.734 0.594 0.644 0.710 0.670 0.616 0.645 0.670   8.29
73) 2,4,6-Tribro 0.129 0.137 0.127 0.127 0.108 0.126 0.128 0.120 0.125   6.63
74) 4-Bromopheny 0.231 0.229 0.225 0.226 0.264 0.227 0.221 0.221 0.231   6.13
75) Hexachlorobe 0.296 0.273 0.253 0.255 0.297 0.262 0.252 0.252 0.268   7.14
76) Pentachlorop 0.144 0.167 0.186 0.183 0.130 0.167 0.186 0.178 0.168  12.26
77) Phenanthrene 1.109 1.088 0.965 0.994 1.017 1.042 0.978 0.979 1.021   5.25
78) Anthracene   1.158 1.128 0.996 1.021 1.130 1.067 1.003 1.012 1.064   6.14
79) Carbazole    1.124 1.058 0.986 1.020 1.042 1.047 0.996 1.003 1.035   4.30
80) Di-n-butylph 1.292 1.270 1.220 1.246 1.300 1.244 1.249 1.225 1.256   2.33
81) Fluoranthene 1.255 1.243 1.188 1.223 1.203 1.213 1.187 1.188 1.212   2.16
82) Octadecane   0.446 0.431 0.375 0.399 0.429 0.416 0.383 0.401 0.410   6.03

83) I   Chrysene-d12          ----------------ISTD---------------------
84) Pyrene       1.196 1.199 1.105 1.151 1.233 1.177 1.128 1.114 1.163   3.92
85) Terphenyl-d1 0.775 0.821 0.787 0.786 0.783 0.788 0.784 0.755 0.785   2.29
86) Butylbenzylp 0.490 0.498 0.517 0.518 0.457 0.513 0.528 0.491 0.501   4.49
87) Benzo[a]anth 1.124 1.128 1.079 1.096 1.194 1.094 1.085 1.062 1.108   3.73
88) 3,3'-Dichlor 0.408 0.414 0.420 0.415 0.385 0.412 0.414 0.407 0.409   2.60
89) Chrysene     1.137 1.039 1.001 1.006 1.092 1.034 1.003 0.978 1.036   5.16
90) bis(2-Ethylh 0.611 0.696 0.703 0.705 0.642 0.698 0.707 0.677 0.680   5.16

91) I   Perylene-d12          ----------------ISTD---------------------
92) Di-n-octylph 1.120 1.199 1.174 1.250 1.043 1.196 1.221 1.203 1.176   5.58
93) Benzo[b]fluo 1.206 1.229 1.121 1.180 1.100 1.220 1.120 1.147 1.165   4.29
94) Benzo[k]fluo 1.157 1.163 0.947 1.033 1.147 1.106 1.006 1.043 1.075   7.42
95) Benzo[a]pyre 1.066 1.090 0.977 1.041 1.060 1.083 1.009 1.011 1.042   3.81
```

Initial Calibration Summary

Job Number: JC25024 **Sample:** EM5363-ICC5363
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** M126354.D
Project: BMSMC, Building 5 Area, PR

```
 96) Indeno[1,2,3 0.962 1.020 1.000 1.038 0.894 1.009 1.002 0.973 0.987   4.53
 97) Dibenz(a,h)a 0.957 0.990 0.951 1.006 0.927 0.995 0.974 0.964 0.971   2.69
 98) Dibenz[a,h]a 1.071 1.080 1.003 1.079 1.052 1.050 1.028 1.019 1.048   2.72
 99) 7,12-Dimethy 0.578 0.575 0.515 0.553 0.470 0.578 0.526 0.536 0.541   6.97
100) Benzo[g,h,i] 1.119 1.125 1.031 1.059 1.055 1.095 1.045 1.049 1.072   3.34
 ------------------------------------------------------------------------------
 (#) = Out of Range  ###  Number of calibration levels exceeded format  ###

          MM5363.M          Tue Jul 26 15:28:24 2016   MSM
```

Initial Calibration Summary

Job Number: JC25024 **Sample:** EM5364-ICC5364
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** M126363.D
Project: BMSMC, Building 5 Area, PR

```
                          Response Factor Report  Instrument #1

  Method       : C:\MSDCHEM\1\METHODS\MM5364.M (RTE Integrator)
  Title        : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
  Last Update  : Tue Jul 26 17:12:07 2016
  Response via : Initial Calibration

  Calibration Files
  2   =M126367.D  5   =M126366.D  100 =M126361.D  50  =M126363.D
  1   =M126368.D  10  =M126365.D  80  =M126362.D  25  =M126364.D

   Compound          2     5     100   50    1     10    80    25    Avg %RSD
   -------------------------------------------------------------------------------
101) I   1,4-Dichlorobenzene-d ----------------ISTD---------------------
102) Benzaldehyde 0.929 0.928       0.977 0.977 1.046 0.652 0.962 0.925  13.67

103) I   Acenaphthene-d10     ----------------ISTD---------------------
104) 1,2,4,5-Tetr 0.511 0.487 0.500 0.568 0.552 0.528 0.495 0.505 0.518   5.50
105) Atrazine     0.172 0.173 0.174 0.203 0.170 0.185 0.180 0.173 0.179   6.19

106) I   Chrysene-d12a         ----------------ISTD---------------------
107) Benzidine    0.502 0.514       0.476 0.415 0.628 0.327 0.568 0.490  20.10
108) 1-chloroocta 0.232 0.224 0.232 0.261 0.204 0.252 0.229 0.242 0.235   7.52

109) I   Phenanthrene-d10a     ----------------ISTD---------------------
110) o-terphenyl  0.509 0.529 0.521 0.579 0.505 0.569 0.527 0.537 0.535   4.97

111) I   Naphthalene-d8       ----------------ISTD---------------------
112) Hydroquinone 0.243 0.250 0.317 0.358       0.272 0.317 0.299 0.294  14.01

 ---------------------------------------------------------------------------
 (#) = Out of Range  ###  Number of calibration levels exceeded format  ###

           MM5363.M          Tue Jul 26 17:12:57 2016   MSM
```

Initial Calibration Verification

Job Number: JC25024 **Sample:** EM5364-ICV5363
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** M126369.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\EM5364\M126369.D          Vial: 10
Acq On    : 26 Jul 2016  12:56 pm                   Operator: ashleyd
Sample    : icv5363-50                              Inst    : Instrument #1
Misc      : op95476,em5364                          Multiplr: 1.00
MS Integration Params: RTEINT.P

Method       : C:\MSDCHEM\1\METHODS\MM5363.M (RTE Integrator)
Title        : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
Last Update  : Tue Jul 26 16:46:35 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.050  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  30%     Max. Rel. Area : 200%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	125	0.00	4.94
9	t	Phenol	1.702	1.591	6.5	115	0.00	4.65
12	t	2-Chlorophenol	1.411	1.317	6.7	116	0.00	4.77
19	t	2-Methylphenol	1.161	1.108	4.6	119	0.00	5.13
21	t	3&4-Methylphenol	1.265	1.164	8.0	114	0.00	5.26
24	I	Naphthalene-d8	1.000	1.000	0.0	119	0.00	6.12
29	t	2-Nitrophenol	0.194	0.180	7.2	101	0.00	5.73
30	t	2,4-Dimethylphenol	0.326	0.326	0.0	123	0.00	5.75
31	t	Benzoic acid	0.211	0.192	9.0	95	0.07	5.86
33	t	2,4-Dichlorophenol	0.313	0.294	6.1	110	0.00	5.97
34	t	2,6-Dichlorophenol	0.302	0.280	7.3	112	0.00	6.21
43	t	4-Chloro-3-methylphenol	0.284	0.275	3.2	111	0.00	6.77
47	I	Acenaphthene-d10	1.000	1.000	0.0	115	0.00	8.54
49	t	2,4,6-Trichlorophenol	0.378	0.356	5.8	108	0.00	7.37
50	t	2,4,5-Trichlorophenol	0.399	0.343	14.0	100	0.00	7.42
		----------	True	Calc.	% Drift	----------		
60	t	2,4-Dinitrophenol	50.000	37.933	24.1	72	0.00	8.65
		----------	AvgRF	CCRF	% Dev	----------		
61	t	4-Nitrophenol	0.139	0.135	2.9	104	0.00	8.78
64	t	2,3,4,6-Tetrachlorophenol	0.337	0.293	13.1	95	0.00	9.11
69	I	Phenanthrene-d10	1.000	1.000	0.0	109	0.00	11.20
		----------	True	Calc.	% Drift	----------		
70	t	4,6-Dinitro-2-methylpheno	50.000	40.617	18.8	85	0.00	9.59
		----------	AvgRF	CCRF	% Dev	----------		
76	t	Pentachlorophenol	0.168	0.160	4.8	94	0.00	10.86

```
(#) = Out of Range                SPCC's out = 0  CCC's out = 0
 M126363a.D MM5363.M          Tue Jul 26 16:52:53 2016   MSM
```

Initial Calibration Verification

Job Number: JC25024 **Sample:** EM5364-ICV5363
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** M126370.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\EM5364\M126370.D          Vial: 11
Acq On    : 26 Jul 2016   1:25 pm                   Operator: ashleyd
Sample    : icv5363-50                              Inst    : Instrument #1
Misc      : op95476,em5364                          Multiplr: 1.00
MS Integration Params: RTEINT.P

Method       : C:\MSDCHEM\1\METHODS\MM5363.M (RTE Integrator)
Title        : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
Last Update  : Tue Jul 26 16:46:35 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.050  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  30%     Max. Rel. Area : 200%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	107	0.00	4.94
3	t	Pyridine	1.342	1.404	-4.6	106	0.04	2.89
10	t	Aniline	2.004	2.181	-8.8	122	0.00	4.68
16	t	Benzyl alcohol	0.861	0.885	-2.8	109	0.00	5.05
24	I	Naphthalene-d8	1.000	1.000	0.0	113	0.00	6.13
39	t	4-Chloroaniline	0.464	0.435	6.3	106	0.00	6.20
44	t	2-Methylnaphthalene	0.656	0.590	10.1	102	0.00	6.99
47	I	Acenaphthene-d10	1.000	1.000	0.0	104	0.00	8.54
54	t	2-Nitroaniline	0.298	0.286	4.0	97	0.00	7.82
58	t	3-Nitroaniline	0.317	0.309	2.5	94	0.01	8.48
62	t	Dibenzofuran	1.659	1.608	3.1	106	0.00	8.89
68	t	4-Nitroaniline	0.331	0.304	8.2	97	0.01	9.53
69	I	Phenanthrene-d10	1.000	1.000	0.0	107	0.00	11.20
79	t	Carbazole	1.035	0.999	3.5	105	0.00	11.67

```
(#) = Out of Range              SPCC's out = 0  CCC's out = 0
 M126363a.D MM5363.M         Tue Jul 26 16:56:58 2016   MSM
```

Initial Calibration Verification

Job Number: JC25024 **Sample:** EM5364-ICV5363
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** M126371.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\EM5364\M126371.D          Vial: 12
Acq On    : 26 Jul 2016   1:53 pm                   Operator: ashleyd
Sample    : icv5363-50                              Inst    : Instrument #1
Misc      : op95476,em5364                          Multiplr: 1.00
MS Integration Params: RTEINT.P

Method       : C:\MSDCHEM\1\METHODS\MM5363.M (RTE Integrator)
Title        : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
Last Update  : Tue Jul 26 17:12:07 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.050  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  30%     Max. Rel. Area : 200%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	125	0.00	4.94
4	t	N-Nitrosodimethylamine	0.655	0.563	14.0	109	0.00	2.80
11	t	bis(2-Chloroethyl)ether	1.187	1.199	-1.0	129	0.00	4.72
14	t	1,3-Dichlorobenzene	1.475	1.425	3.4	121	0.00	4.89
15	t	1,4-Dichlorobenzene	1.487	1.383	7.0	120	0.00	4.95
17	t	1,2-Dichlorobenzene	1.376	1.337	2.8	124	0.00	5.08
20	t	2,2'-oxybis(1-Chloropropa	0.425	0.366	13.9	118	0.00	5.16
22	t	n-Nitroso-di-n-propylamin	0.924	0.789	14.6	110	0.00	5.26
23	t	Hexachloroethane	0.562	0.495	11.9	116	0.00	5.38
24	I	Naphthalene-d8	1.000	1.000	0.0	116	0.00	6.12
26	t	Nitrobenzene	0.353	0.321	9.1	109	0.00	5.42
28	t	Isophorone	0.617	0.604	2.1	114	0.00	5.64
32	t	bis(2-Chloroethoxy)methan	0.382	0.378	1.0	119	0.00	5.85
36	t	1,2,4-Trichlorobenzene	0.345	0.336	2.6	115	0.00	6.06
38	t	Naphthalene	1.002	0.950	5.2	113	0.00	6.15
42	t	Hexachlorobutadiene	0.190	0.185	2.6	116	0.00	6.29
47	I	Acenaphthene-d10	1.000	1.000	0.0	108	0.00	8.54
48	t	Hexachlorocyclopentadiene	0.369	0.306	17.1	86	0.00	7.21
52	t	2-Chloronaphthalene	1.076	1.079	-0.3	115	0.00	7.67
55	t	Dimethylphthalate	1.257	1.184	5.8	102	0.01	8.13
56	t	Acenaphthylene	1.768	1.604	9.3	102	0.00	8.31
57	t	2,6-Dinitrotoluene	0.252	0.230	8.7	91	0.01	8.21
59	t	Acenaphthene	1.085	1.018	6.2	105	0.00	8.60
63	t	2,4-Dinitrotoluene	0.331	0.276	16.6	81	0.01	8.88
65	t	Diethylphthalate	1.237	1.108	10.4	100	0.01	9.34
66	t	Fluorene	1.280	1.127	12.0	100	0.00	9.48
67	t	4-Chlorophenyl-phenylethe	0.622	0.566	9.0	103	0.00	9.51
69	I	Phenanthrene-d10	1.000	1.000	0.0	105	0.00	11.20
71	t	n-Nitrosodiphenylamine	0.515	0.462	10.3	97	0.01	9.72
72	t	1,2-Diphenylhydrazine	0.670	0.611	8.8	99	0.01	9.79
74	t	4-Bromophenyl-phenylether	0.231	0.212	8.2	98	0.00	10.40
75	t	Hexachlorobenzene	0.268	0.232	13.4	95	0.01	10.49
77	t	Phenanthrene	1.021	0.952	6.8	100	0.00	11.24
78	t	Anthracene	1.064	0.932	12.4	96	0.01	11.34
80	t	Di-n-butylphthalate	1.256	1.153	8.2	97	0.00	12.48
81	t	Fluoranthene	1.212	1.080	10.9	92	0.00	13.54
83	I	Chrysene-d12	1.000	1.000	0.0	93	0.00	16.39
84	t	Pyrene	1.163	1.140	2.0	92	0.01	13.98

Initial Calibration Verification

Job Number: JC25024 **Sample:** EM5364-ICV5363
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** M126371.D
Project: BMSMC, Building 5 Area, PR

86	t	Butylbenzylphthalate	0.501	0.517	-3.2	93	0.00	15.43
87	t	Benzo[a]anthracene	1.108	1.039	6.2	88	0.00	16.37
89	t	Chrysene	1.036	0.933	9.9	86	0.01	16.44
90	t	bis(2-Ethylhexyl)phthalat	0.680	0.692	-1.8	91	0.00	16.65
91	I	Perylene-d12	1.000	1.000	0.0	90	0.00	19.01
92	t	Di-n-octylphthalate	1.176	1.251	-6.4	90	0.00	17.88
93	t	Benzo[b]fluoranthene	1.165	1.057	9.3	81	0.01	18.37
94	t	Benzo[k]fluoranthene	1.075	1.008	6.2	88	0.02	18.42
95	t	Benzo[a]pyrene	1.042	0.981	5.9	85	0.02	18.92
96	t	Indeno[1,2,3-cd]pyrene	0.987	0.959	2.8	83	0.02	20.83
98	t	Dibenz[a,h]anthracene	1.048	0.966	7.8	81	0.02	20.88
100	t	Benzo[g,h,i]perylene	1.072	0.979	8.7	83	0.03	21.33

(#) = Out of Range SPCC's out = 0 CCC's out = 0
M126363a.D MM5363.M Tue Jul 26 17:15:18 2016 MSM

Initial Calibration Verification

Job Number: JC25024
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: EM5364-ICV5364
Lab FileID: M126371A.D

Evaluate Continuing Calibration Report

```
  Data File : C:\msdchem\1\DATA\EM5364\M126371a.D          Vial: 12
  Acq On    : 26 Jul 2016   1:53 pm                    Operator: ashleyd
  Sample    : icv5364-50                               Inst    : Instrument #1
  Misc      : op95476,em5364                           Multiplr: 1.00
  MS Integration Params: RTEINT.P

  Method       : C:\MSDCHEM\1\METHODS\MM5363.M (RTE Integrator)
  Title        : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
  Last Update  : Tue Jul 26 17:12:07 2016
  Response via : Multiple Level Calibration

  Min. RRF     :   0.050  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
  Max. RRF Dev :  30%     Max. Rel. Area : 200%
```

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
103 I	Acenaphthene-d10a	1.000	1.000	0.0	113	0.00	8.54
104 I	1,2,4,5-Tetrachlorobenzen	0.518	0.566	-9.3	113	0.00	7.22

(#) = Out of Range SPCC's out = 0 CCC's out = 0
M126363a.D MM5363.M Tue Jul 26 17:15:21 2016 MSM

Initial Calibration Verification

Job Number: JC25024 **Sample:** EM5364-ICV5363
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** M126372.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\EM5364\M126372.D          Vial: 13
Acq On    : 26 Jul 2016   2:22 pm                   Operator: ashleyd
Sample    : icv5363-50                              Inst    : Instrument #1
Misc      : op95476,em5364                          Multiplr: 1.00
MS Integration Params: RTEINT.P

Method       : C:\MSDCHEM\1\METHODS\MM5363.M (RTE Integrator)
Title        : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
Last Update  : Tue Jul 26 17:25:16 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.050  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  30%     Max. Rel. Area : 200%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	123	0.00	4.94
2	t	1,4-Dioxane	0.497	0.510	-2.6	122	0.00	2.52
6	t	Indene	2.275	2.523	-10.9	140	0.00	5.15
7	t	Cumene	3.073	3.290	-7.1	130	0.00	4.33
13	t	Decane	1.303	1.390	-6.7	135	0.00	4.81
18	t	Acetophenone	1.734	1.874	-8.1	136	0.00	5.27
24	I	Naphthalene-d8	1.000	1.000	0.0	120	0.00	6.12
27	t	Quinoline	0.727	0.631	13.2	103	0.00	6.52
40	t	2,3-Dichloroaniline	0.384	0.282	26.6	89	0.00	7.37
41	t	Caprolactam	0.154	0.143	7.1	113	0.02	6.58
45	t	1-Methylnaphthalene	0.720	0.731	-1.5	126	0.00	7.12
46	t	Dimethylnaphthalene	0.640	0.656	-2.5	124	0.00	7.88
47	I	Acenaphthene-d10	1.000	1.000	0.0	109	0.00	8.54
53	t	Biphenyl	1.395	1.539	-10.3	126	0.00	7.65
69	I	Phenanthrene-d10	1.000	1.000	0.0	102	0.00	11.19
82	t	Octadecane	0.410	0.489	-19.3	126	0.00	11.18
91	I	Perylene-d12	1.000	1.000	0.0	58	0.00	19.01
99	t	7,12-Dimethylbenz(a)anthr	0.541	0.865	-59.9#	90	0.01	18.38

```
(#) = Out of Range              SPCC's out = 0  CCC's out = 0
 M126363a.D MM5363.M         Tue Jul 26 17:35:52 2016   MSM
```

Initial Calibration Verification

Job Number: JC25024 **Sample:** EM5364-ICV5363
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** M126373.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\EM5364\M126373.D          Vial: 14
Acq On    : 26 Jul 2016   2:50 pm                   Operator: ashleyd
Sample    : icv5363-50                              Inst    : Instrument #1
Misc      : op95476,em5364                          Multiplr: 1.00
MS Integration Params: RTEINT.P

Method       : C:\MSDCHEM\1\METHODS\MM5363.M (RTE Integrator)
Title        : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
Last Update  : Tue Jul 26 17:25:16 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.050  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  30%     Max. Rel. Area : 200%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	144	0.00	4.94
5	S	2-Fluorophenol	1.205	1.184	1.7	137	0.00	3.94
8	S	Phenol-d5	1.536	1.439	6.3	133	0.00	4.64
24	I	Naphthalene-d8	1.000	1.000	0.0	139	0.00	6.12
25	S	Nitrobenzene-d5	0.339	0.338	0.3	138	0.00	5.40
47	I	Acenaphthene-d10	1.000	1.000	0.0	127	0.00	8.54
51	S	2-Fluorobiphenyl	1.208	1.260	-4.3	137	0.00	7.50
69	I	Phenanthrene-d10	1.000	1.000	0.0	122	0.00	11.19
73	S	2,4,6-Tribromophenol	0.125	0.113	9.6	109	0.00	9.91
83	I	Chrysene-d12	1.000	1.000	0.0	114	0.00	16.39
85	S	Terphenyl-d14	0.785	0.782	0.4	113	0.00	14.38

```
(#) = Out of Range              SPCC's out = 0  CCC's out = 0
 M126363a.D MM5363.M         Tue Jul 26 17:41:12 2016   MSM
```

Initial Calibration Verification

Job Number: JC25024
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: EM5364-ICV5364
Lab FileID: M126374.D

Evaluate Continuing Calibration Report

```
  Data File : C:\msdchem\1\DATA\EM5364\M126374.D          Vial: 15
  Acq On    : 26 Jul 2016   3:19 pm                   Operator: ashleyd
  Sample    : icv5364-50                              Inst    : Instrument #1
  Misc      : op95476,em5364                          Multiplr: 1.00
  MS Integration Params: RTEINT.P

  Method       : C:\MSDCHEM\1\METHODS\MM5363.M (RTE Integrator)
  Title        : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
  Last Update  : Tue Jul 26 17:25:16 2016
  Response via : Multiple Level Calibration

  Min. RRF     :   0.050  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
  Max. RRF Dev :  30%     Max. Rel. Area : 200%
```

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
111 I	Naphthalene-d8a	1.000	1.000	0.0	185	0.00	6.12
112	Hydroquinone	0.294	0.351	-19.4	181	0.02	6.58

(#) = Out of Range SPCC's out = 0 CCC's out = 0
M126363a.D MM5363.M Tue Jul 26 17:41:14 2016 MSM

Initial Calibration Verification

Job Number: JC25024
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: EM5364-ICV5364
Lab FileID: M126375.D

Evaluate Continuing Calibration Report

```
  Data File : C:\msdchem\1\DATA\EM5364\M126375.D          Vial: 16
  Acq On    : 26 Jul 2016   3:48 pm                   Operator: ashleyd
  Sample    : icv5364-50                              Inst    : Instrument #1
  Misc      : op95476,em5364                          Multiplr: 1.00
  MS Integration Params: RTEINT.P

  Method       : C:\MSDCHEM\1\METHODS\MM5363.M (RTE Integrator)
  Title        : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
  Last Update  : Tue Jul 26 17:25:16 2016
  Response via : Multiple Level Calibration

  Min. RRF     :   0.050  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
  Max. RRF Dev :  30%     Max. Rel. Area : 200%
```

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
106 I	Chrysene-d12a	1.000	1.000	0.0	120	0.00	16.39
107 t	Benzidine	0.490	0.591	-20.6	150	0.00	13.88

(#) = Out of Range SPCC's out = 0 CCC's out = 0
M126363a.D MM5363.M Tue Jul 26 17:28:13 2016 MSM

Initial Calibration Verification

Job Number: JC25024
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: EM5364-ICV5363
Lab FileID: M126375A.D

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\EM5364\M126375a.D          Vial: 16
Acq On    : 26 Jul 2016   3:48 pm                    Operator: ashleyd
Sample    : icv5363-50                               Inst    : Instrument #1
Misc      : op95476,em5364                           Multiplr: 1.00
MS Integration Params: RTEINT.P

Method       : C:\MSDCHEM\1\METHODS\MM5363.M (RTE Integrator)
Title        : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
Last Update  : Tue Jul 26 17:25:16 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.050  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  30%     Max. Rel. Area : 200%
```

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
83 I	Chrysene-d12	1.000	1.000	0.0	120	0.00	16.39
88 t	3,3'-Dichlorobenzidine	0.409	0.386	5.6	111	0.00	16.39

(#) = Out of Range SPCC's out = 0 CCC's out = 0
M126363a.D MM5363.M Tue Jul 26 17:28:15 2016 MSM

Initial Calibration Verification

Job Number: JC25024
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: EM5365-ICV5363
Lab FileID: M126378.D

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\EM5365\M126378.D          Vial: 2
Acq On    : 26 Jul 2016   7:16 pm                   Operator: seanb1
Sample    : icv5363-50                              Inst    : Instrument #1
Misc      : op95476,em5365                          Multiplr: 1.00
MS Integration Params: RTEINT.P

Method       : C:\MSDCHEM\1\METHODS\MM5363.M (RTE Integrator)
Title        : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
Last Update  : Tue Jul 26 17:12:07 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.050  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 200%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
101	I	1,4-Dichlorobenzene-d4a	1.000	1.000	0.0	126	0.00	4.93
102	t	Benzaldehyde	0.925	0.864	6.6	111	0.00	4.59
103	I	Acenaphthene-d10a	1.000	1.000	0.0	120	0.00	8.53
105	t	Atrazine	0.179	0.183	-2.2	108	0.00	10.77

(#) = Out of Range SPCC's out = 0 CCC's out = 0
M126363a.D MM5363.M Wed Jul 27 08:42:36 2016 MSM

Continuing Calibration Summary

Job Number: JC25024 **Sample:** EM5377-CC5363
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** M126615.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\EM5377\M126615.D          Vial: 2
Acq On    :  3 Aug 2016   6:14 pm                   Operator: seanb1
Sample    : cc5363-50                               Inst    : Instrument #1
Misc      : op95925,em5377                          Multiplr: 1.00
MS Integration Params: RTEINT.P

Method       : C:\MSDCHEM\1\METHODS\MM5363.M (RTE Integrator)
Title        : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
Last Update  : Wed Aug 03 17:34:37 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.050  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 200%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	75	-0.01	4.82
2	t	1,4-Dioxane	0.497	0.518	-4.2	75	-0.08	2.38
3	t	Pyridine	1.342	1.408	-4.9	74	-0.08	2.72
4	t	N-Nitrosodimethylamine	0.655	0.669	-2.1	78	-0.02	2.67
5	S	2-Fluorophenol	1.205	1.227	-1.8	74	0.00	3.86
6	t	Indene	2.275	2.337	-2.7	79	-0.01	5.03
7	t	Cumene	3.073	3.247	-5.7	78	-0.02	4.22
8	S	Phenol-d5	1.536	1.599	-4.1	77	0.00	4.57
9	t	Phenol	1.702	1.871	-9.9	82	0.00	4.58
10	t	Aniline	2.004	1.826	8.9	71	0.00	4.57
11	t	bis(2-Chloroethyl)ether	1.187	1.136	4.3	73	0.00	4.61
12	t	2-Chlorophenol	1.411	1.376	2.5	73	0.00	4.67
13	t	Decane	1.303	1.211	7.1	72	-0.01	4.69
14	t	1,3-Dichlorobenzene	1.475	1.453	1.5	74	0.00	4.78
15	t	1,4-Dichlorobenzene	1.487	1.448	2.6	75	0.00	4.84
16	t	Benzyl alcohol	0.861	0.863	-0.2	74	0.00	4.94
17	t	1,2-Dichlorobenzene	1.376	1.342	2.5	75	-0.01	4.96
18	t	Acetophenone	1.734	1.784	-2.9	79	0.00	5.15
19	t	2-Methylphenol	1.161	1.116	3.9	72	0.02	5.04
20	t	2,2'-oxybis(1-Chloropropa	0.425	0.415	2.4	80	0.00	5.03
21	t	3&4-Methylphenol	1.265	1.256	0.7	74	0.03	5.17
22	t	n-Nitroso-di-n-propylamin	0.924	0.944	-2.2	79	0.00	5.15
23	t	Hexachloroethane	0.562	0.520	7.5	73	-0.02	5.24
24	I	Naphthalene-d8	1.000	1.000	0.0	77	-0.01	5.98
25	S	Nitrobenzene-d5	0.339	0.355	-4.7	81	0.00	5.29
26	t	Nitrobenzene	0.353	0.344	2.5	78	0.00	5.30
27	t	Quinoline	0.727	0.697	4.1	74	0.00	6.39
28	t	Isophorone	0.617	0.602	2.4	76	0.00	5.51
29	t	2-Nitrophenol	0.194	0.207	-6.7	76	0.00	5.59
30	t	2,4-Dimethylphenol	0.326	0.312	4.3	76	0.01	5.65
31	t	Benzoic acid	0.211	0.254	-20.4#	82	0.11	5.78
32	t	bis(2-Chloroethoxy)methan	0.382	0.353	7.6	74	0.00	5.72
33	t	2,4-Dichlorophenol	0.313	0.301	3.8	73	0.01	5.85
34	t	2,6-Dichlorophenol	0.302	0.280	7.3	73	0.02	6.08
35	t	1,3,5-Trichlorobenzene	0.359	0.342	4.7	75	-0.01	5.61
36	t	1,2,4-Trichlorobenzene	0.345	0.316	8.4	72	0.00	5.93
37	t	1,2,3-Trichlorobenzene	0.336	0.313	6.8	74	0.00	6.17
38	t	Naphthalene	1.002	0.962	4.0	76	-0.01	6.01
39	t	4-Chloroaniline	0.464	0.419	9.7	70	0.00	6.07
40	t	2,3-Dichloroaniline	0.384	0.359	6.5	73	0.00	7.22
41	t	Caprolactam	0.154	0.147	4.5	75	0.06	6.49

Continuing Calibration Summary

Job Number: JC25024 **Sample:** EM5377-CC5363
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** M126615.D
Project: BMSMC, Building 5 Area, PR

42	t	Hexachlorobutadiene	0.190	0.180	5.3	75	-0.01	6.15
43	t	4-Chloro-3-methylphenol	0.284	0.300	-5.6	79	0.04	6.67
44	t	2-Methylnaphthalene	0.656	0.634	3.4	75	0.00	6.83
45	t	1-Methylnaphthalene	0.720	0.686	4.7	76	0.00	6.96
46	t	Dimethylnaphthalene	0.640	0.604	5.6	74	0.00	7.72
47	I	Acenaphthene-d10	1.000	1.000	0.0	74	-0.04	8.37
48	t	Hexachlorocyclopentadiene	0.369	0.327	11.4	62	-0.05	7.05
49	t	2,4,6-Trichlorophenol	0.378	0.376	0.5	73	-0.03	7.23
50	t	2,4,5-Trichlorophenol	0.399	0.396	0.8	74	-0.03	7.30
51	S	2-Fluorobiphenyl	1.208	1.143	5.4	72	-0.02	7.34
52	t	2-Chloronaphthalene	1.076	1.019	5.3	74	-0.04	7.51
53	t	Biphenyl	1.395	1.380	1.1	76	-0.04	7.49
54	t	2-Nitroaniline	0.298	0.339	-13.8	81	-0.02	7.68
55	t	Dimethylphthalate	1.257	1.239	1.4	72	-0.03	7.97
56	t	Acenaphthylene	1.768	1.740	1.6	75	-0.04	8.14
57	t	2,6-Dinitrotoluene	0.252	0.292	-15.9	79	-0.02	8.06
58	t	3-Nitroaniline	0.317	0.355	-12.0	77	0.00	8.33
59	t	Acenaphthene	1.085	1.055	2.8	74	-0.04	8.43
		----------	True	Calc.	% Drift	----------		
60	t	2,4-Dinitrophenol	100.000	118.672	-18.7	87	-0.01	8.51
		----------	AvgRF	CCRF	% Dev	----------		
61	t	4-Nitrophenol	0.139	0.183	-31.7#	90	-0.05	8.70
62	t	Dibenzofuran	1.659	1.603	3.4	74	-0.03	8.71
63	t	2,4-Dinitrotoluene	0.331	0.374	-13.0	75	-0.01	8.73
64	t	2,3,4,6-Tetrachlorophenol	0.337	0.336	0.3	70	-0.01	8.96
65	t	Diethylphthalate	1.237	1.273	-2.9	78	-0.02	9.17
66	t	Fluorene	1.280	1.219	4.8	73	-0.03	9.30
67	t	4-Chlorophenyl-phenylethe	0.622	0.584	6.1	72	-0.03	9.33
68	t	4-Nitroaniline	0.331	0.328	0.9	74	0.00	9.38
69	I	Phenanthrene-d10	1.000	1.000	0.0	72	-0.04	11.02
		----------	True	Calc.	% Drift	----------		
70	t	4,6-Dinitro-2-methylpheno	50.000	57.826	-15.7	83	-0.02	9.45
		----------	AvgRF	CCRF	% Dev	----------		
71	t	n-Nitrosodiphenylamine	0.515	0.511	0.8	74	-0.04	9.55
72	t	1,2-Diphenylhydrazine	0.670	0.710	-6.0	79	-0.05	9.61
73	S	2,4,6-Tribromophenol	0.125	0.124	0.8	70	-0.04	9.75
74	t	4-Bromophenyl-phenylether	0.231	0.223	3.5	71	-0.06	10.22
75	t	Hexachlorobenzene	0.268	0.248	7.5	70	-0.05	10.31
76	t	Pentachlorophenol	0.168	0.158	6.0	62	-0.02	10.71
77	t	Phenanthrene	1.021	1.012	0.9	73	-0.04	11.06
78	t	Anthracene	1.064	1.044	1.9	73	-0.04	11.16
79	t	Carbazole	1.035	1.041	-0.6	73	-0.02	11.51
80	t	Di-n-butylphthalate	1.256	1.350	-7.5	78	-0.03	12.29
81	t	Fluoranthene	1.212	1.209	0.2	71	-0.02	13.36
82	t	Octadecane	0.410	0.434	-5.9	78	-0.06	10.99
83	I	Chrysene-d12	1.000	1.000	0.0	69	-0.01	16.20
84	t	Pyrene	1.163	1.202	-3.4	72	-0.03	13.79
85	S	Terphenyl-d14	0.785	0.786	-0.1	69	-0.03	14.19
86	t	Butylbenzylphthalate	0.501	0.589	-17.6	78	-0.03	15.24
87	t	Benzo[a]anthracene	1.108	1.123	-1.4	71	0.00	16.18
88	t	3,3'-Dichlorobenzidine	0.409	0.421	-2.9	70	0.00	16.20
89	t	Chrysene	1.036	1.024	1.2	70	0.00	16.25
90	t	bis(2-Ethylhexyl)phthalat	0.680	0.803	-18.1	78	-0.02	16.45

Continuing Calibration Summary

Job Number: JC25024 **Sample:** EM5377-CC5363
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** M126615.D
Project: BMSMC, Building 5 Area, PR

91	I	Perylene-d12	1.000	1.000	0.0	68	-0.01	18.83
92	t	Di-n-octylphthalate	1.176	1.479	-25.8#	80	-0.03	17.68
93	t	Benzo[b]fluoranthene	1.165	1.207	-3.6	69	0.00	18.19
94	t	Benzo[k]fluoranthene	1.075	1.038	3.4	68	0.00	18.24
95	t	Benzo[a]pyrene	1.042	1.053	-1.1	68	0.00	18.73
96	t	Indeno[1,2,3-cd]pyrene	0.987	1.052	-6.6	69	-0.02	20.60
97	t	Dibenz(a,h)acridine	0.971	1.011	-4.1	68	-0.01	20.21
98	t	Dibenz[a,h]anthracene	1.048	1.081	-3.1	68	-0.03	20.64
99	t	7,12-Dimethylbenz(a)anthr	0.541	0.552	-2.0	67	0.00	18.19
100	t	Benzo[g,h,i]perylene	1.072	1.078	-0.6	69	-0.02	21.09

(#) = Out of Range SPCC's out = 0 CCC's out = 0
M126363a.D MM5363.M Wed Aug 03 20:09:02 2016 MSM

6.7.18

6

Continuing Calibration Summary

Job Number: JC25024 **Sample:** EM5377-CC5364
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** M126616.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\EM5377\M126616.D          Vial: 3
Acq On    :  3 Aug 2016   6:42 pm                   Operator: seanb1
Sample    : cc5364-50                               Inst    : Instrument #1
Misc      : op95925,em5377                          Multiplr: 1.00
MS Integration Params: RTEINT.P

Method       : C:\MSDCHEM\1\METHODS\MM5363.M (RTE Integrator)
Title        : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
Last Update  : Wed Aug 03 17:34:37 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.050  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 200%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
101	I	1,4-Dichlorobenzene-d4a	1.000	1.000	0.0	77	-0.01	4.82
102	t	Benzaldehyde	0.925	0.871	5.8	68	0.00	4.48
103	I	Acenaphthene-d10a	1.000	1.000	0.0	75	-0.04	8.37
104	I	1,2,4,5-Tetrachlorobenzen	0.518	0.564	-8.9	75	-0.05	7.06
105	t	Atrazine	0.179	0.198	-10.6	73	0.00	10.60
106	I	Chrysene-d12a	1.000	1.000	0.0	71	-0.02	16.19
107	t	Benzidine	0.490	0.576	-17.6	86	-0.04	13.69
108	s	1-chlorooctadecane	0.235	0.287	-22.1#	78	-0.06	13.33
109	I	Phenanthrene-d10a	1.000	1.000	0.0	73	-0.05	11.01
110	s	o-terphenyl	0.535	0.600	-12.1	75	-0.05	11.81
111	I	Naphthalene-d8a	1.000	1.000	0.0	77	-0.01	5.98
112		Hydroquinone	0.294	0.366	-24.5#	79	0.05	6.48
113		Chrysene-d12b	1.000	1.000	0.0	71	-0.02	16.19
114		2,3,7,8-TCDD		----------NA----------				

```
(#) = Out of Range              SPCC's out = 0  CCC's out = 0
 M126363a.D MM5363.M         Wed Aug 03 20:09:04 2016   MSM
```

GC/MS Semi-volatiles

Raw Data

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\E3P2535\
Data File : 3p55435.D
Acq On : 3 Aug 2016 4:16 am
Operator : juliusj
Sample : jc25024-1
Misc : op95988a,e3p2535,1000
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Aug 03 10:03:07 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3P2503SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue Aug 02 12:12:06 2016
Response via : Initial Calibration

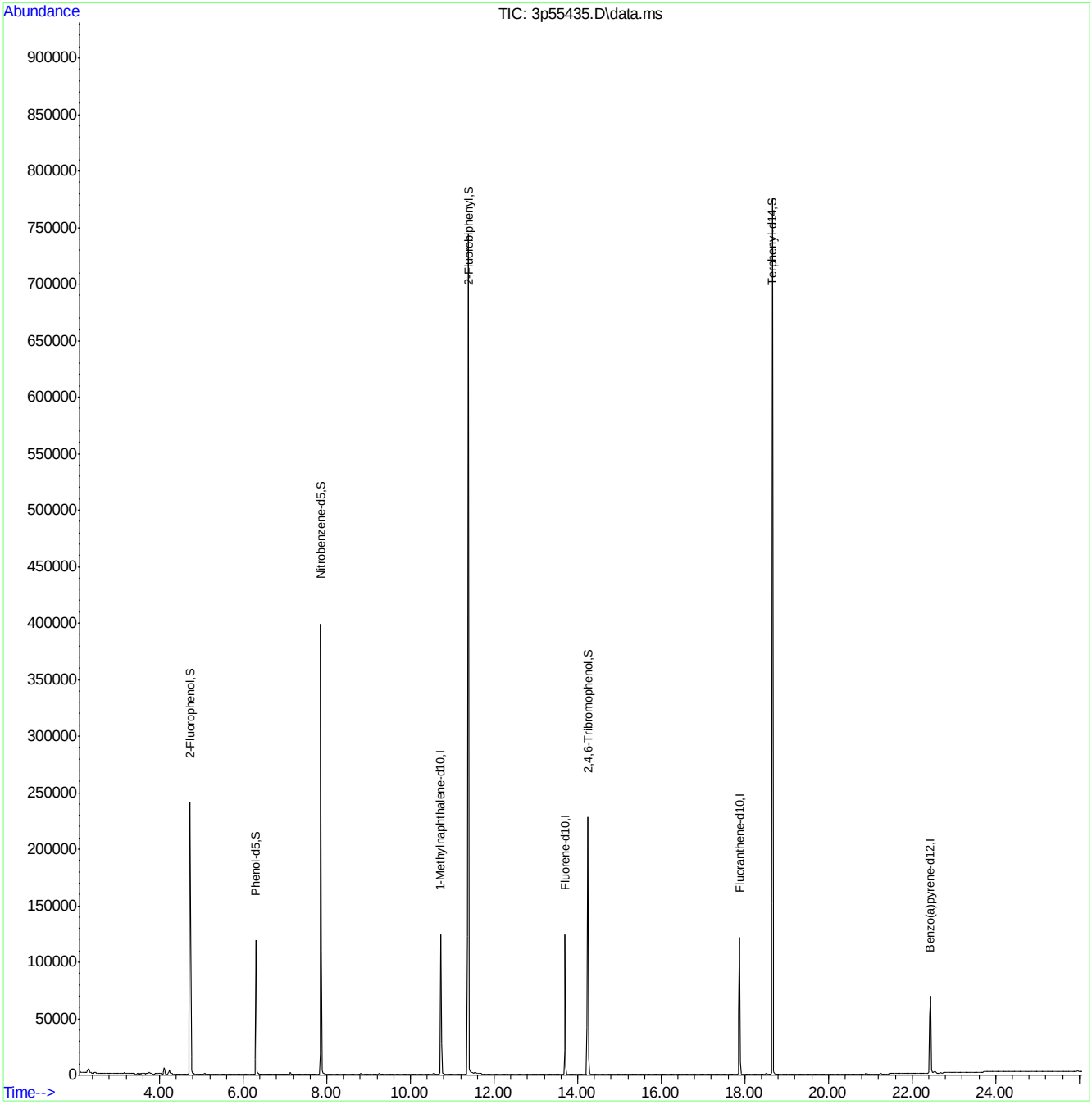
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.720	150	73843	4.00	ppm	#-0.05
14) Fluorene-d10	13.702	176	94430	4.00	ppm	-0.04
21) Fluoranthene-d10	17.875	212	136061	4.00	ppm	-0.03
31) Benzo(a)pyrene-d12	22.441	264	99611	4.00	ppm	-0.04
System Monitoring Compounds						
3) 2-Fluorophenol	4.729	112	187270	15.70	ppm	-0.16
Spiked Amount 50.000			Recovery = 31.40%			
4) Phenol-d5	6.304	99	182814	11.46	ppm	-0.10
Spiked Amount 50.000			Recovery = 22.92%			
7) Nitrobenzene-d5	7.857	82	393726	32.80	ppm	-0.10
Spiked Amount 50.000			Recovery = 65.60%			
15) 2-Fluorobiphenyl	11.388	172	811576	34.92	ppm	-0.07
Spiked Amount 50.000			Recovery = 69.84%			
20) 2,4,6-Tribromophenol	14.248	330	124291	42.05	ppm	-0.02
Spiked Amount 50.000			Recovery = 84.10%			
28) Terphenyl-d14	18.663	244	633339	35.35	ppm	0.00
Spiked Amount 50.000			Recovery = 70.70%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\E3P2535\
Data File : 3p55435.D
Acq On : 3 Aug 2016 4:16 am
Operator : juliusj
Sample : jc25024-1
Misc : op95988a,e3p2535,1000
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Aug 03 10:03:07 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3P2503SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue Aug 02 12:12:06 2016
Response via : Initial Calibration



SGS ACCUTEST JC25024

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\E3P2536\
Data File : 3p55453.D
Acq On : 3 Aug 2016 1:47 pm
Operator : shaniceg
Sample : jc25024-2
Misc : op95988a,e3p2536,1000
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 03 14:40:26 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3P2503SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Aug 03 09:47:12 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1-Methylnaphthalene-d10	10.839	150	79157	4.00 ppm	0.07
14) Fluorene-d10	13.815	176	110532	4.00 ppm	0.08
21) Fluoranthene-d10	17.983	212	170095	4.00 ppm	0.08
31) Benzo(a)pyrene-d12	22.535	264	138628	4.00 ppm	0.06
System Monitoring Compounds					
3) 2-Fluorophenol	4.838	112	192042	15.02 ppm	-0.05
Spiked Amount 50.000			Recovery = 30.04%		
4) Phenol-d5	6.401	99	196167	11.47 ppm	0.00
Spiked Amount 50.000			Recovery = 22.94%		
7) Nitrobenzene-d5	7.951	82	414727	32.23 ppm	0.00
Spiked Amount 50.000			Recovery = 64.46%		
15) 2-Fluorobiphenyl	11.484	172	844062	31.03 ppm	0.02
Spiked Amount 50.000			Recovery = 62.06%		
20) 2,4,6-Tribromophenol	14.361	330	141543	40.91 ppm	0.09
Spiked Amount 50.000			Recovery = 81.82%		
28) Terphenyl-d14	18.771	244	719859	32.14 ppm	0.11
Spiked Amount 50.000			Recovery = 64.28%		
Target Compounds					Qvalue
2) 1,4-dioxane	2.551	88	43737	5.48 ppm	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

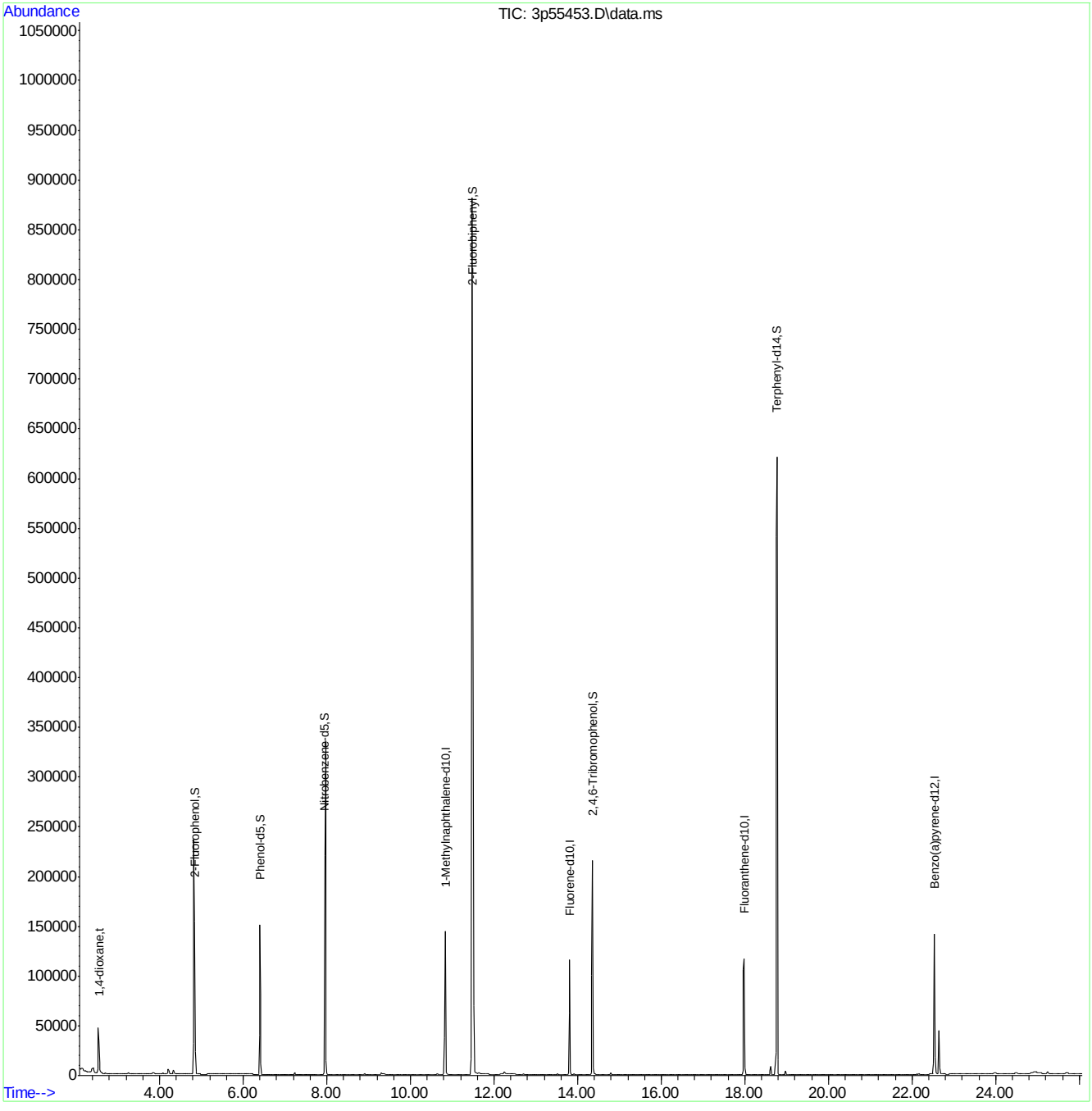
7.1.2

7

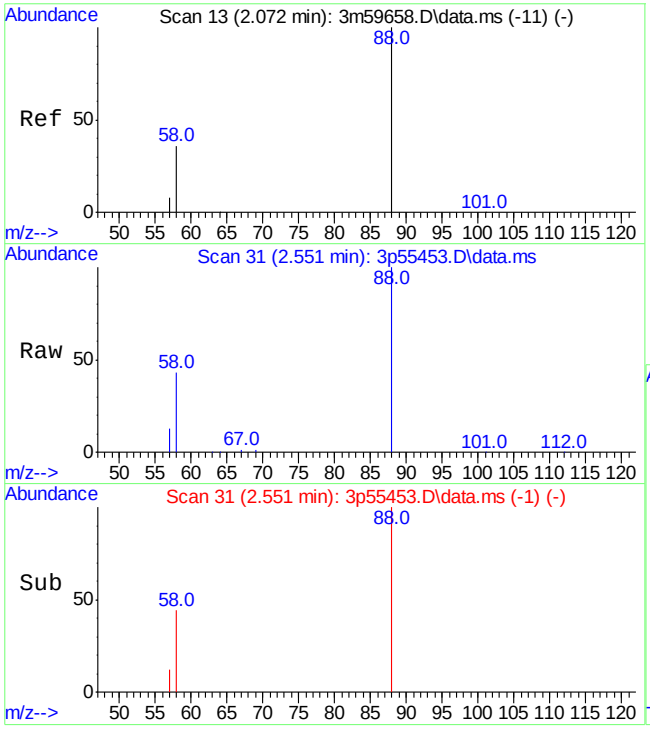
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\E3P2536\
Data File : 3p55453.D
Acq On : 3 Aug 2016 1:47 pm
Operator : shaniceg
Sample : jc25024-2
Misc : op95988a,e3p2536,1000
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 03 14:40:26 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3P2503SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Aug 03 09:47:12 2016
Response via : Initial Calibration



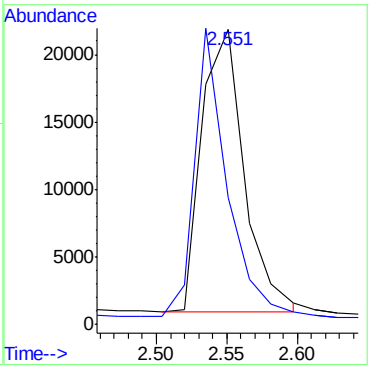
M3P2503SIM.M Wed Aug 03 14:40:33 2016 Page: 2



#2
1,4-dioxane
Concen: 5.48 ppm
RT: 2.551 min Scan# 31
Delta R.T. 0.006 min
Lab File: 3p55453.D
Acq: 3 Aug 2016 1:47 pm

Tgt Ion: 88 Resp: 43737

Ion	Ratio	Lower	Upper
88	100		
58	42.2	20.8	60.8



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5377\
Data File : M126617.D
Acq On : 3 Aug 2016 7:10 pm
Operator : seanb1
Sample : jc25024-2
Misc : op95988a,em5377,1000
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 03 20:10:05 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5363.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Aug 03 17:34:37 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.821	152	153938	40.00	ppm	-0.01
24) Naphthalene-d8	5.980	136	602545	40.00	ppm	-0.02
47) Acenaphthene-d10	8.368	164	364203	40.00	ppm	-0.04
69) Phenanthrene-d10	11.013	188	613938	40.00	ppm	-0.05
83) Chrysene-d12	16.189	240	554893	40.00	ppm	-0.02
91) Perylene-d12	18.823	264	547325	40.00	ppm	-0.02
101) 1,4-Dichlorobenzene-d4a	4.821	152	153938	40.00	ppm	-0.01
103) Acenaphthene-d10a	8.368	164	364203	40.00	ppm	-0.04
106) Chrysene-d12a	16.189	240	554893	40.00	ppm	-0.02
109) Phenanthrene-d10a	11.013	188	613938	40.00	ppm	-0.05
111) Naphthalene-d8a	5.980	136	602545	40.00	ppm	-0.02
113) Chrysene-d12b	16.189	240	554893	40.00	ppm	-0.02
System Monitoring Compounds						
5) 2-Fluorophenol	3.859	112	73907	15.94	ppm	0.01
Spiked Amount 50.000			Recovery = 31.88%			
8) Phenol-d5	4.565	99	65630	11.10	ppm	0.00
Spiked Amount 50.000			Recovery = 22.20%			
25) Nitrobenzene-d5	5.280	82	156169	30.54	ppm	0.00
Spiked Amount 50.000			Recovery = 61.08%			
51) 2-Fluorobiphenyl	7.337	172	326212	29.65	ppm	-0.02
Spiked Amount 50.000			Recovery = 59.30%			
73) 2,4,6-Tribromophenol	9.736	330	55099	28.67	ppm	-0.05
Spiked Amount 50.000			Recovery = 57.34%			
85) Terphenyl-d14	14.186	244	385861	35.44	ppm	-0.04
Spiked Amount 50.000			Recovery = 70.88%			
108) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
110) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
Target Compounds						Qvalue
2) 1,4-Dioxane	2.390	88	10998	5.75	ppm	87

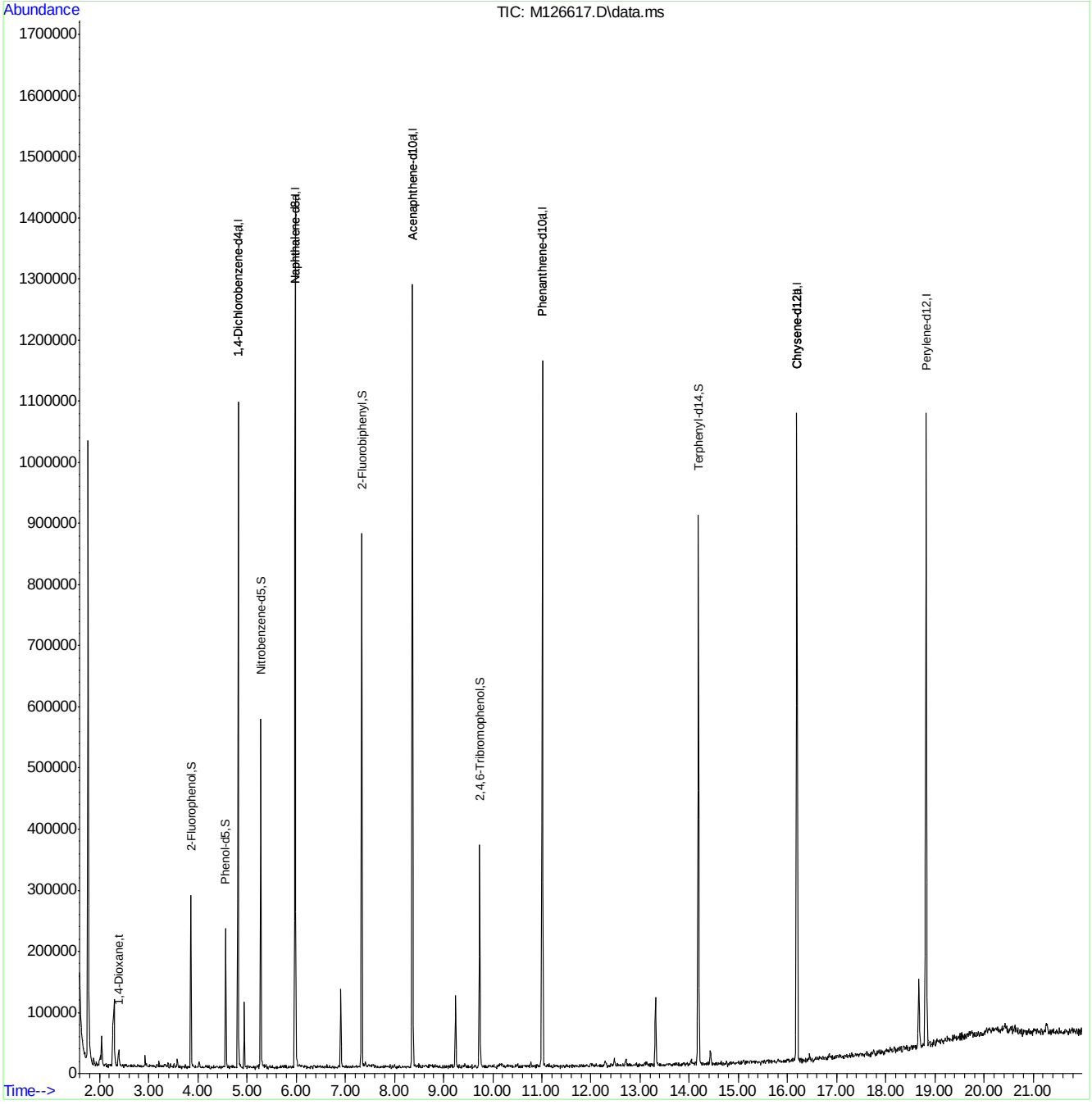
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC25024

Quantitation Report (QT Reviewed)

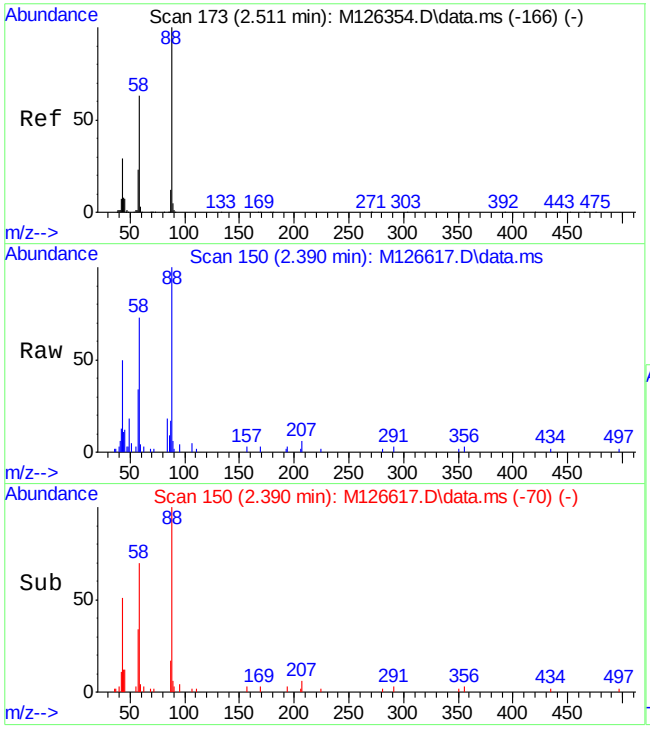
Data Path : C:\msdchem\1\DATA\EM5377\
Data File : M126617.D
Acq On : 3 Aug 2016 7:10 pm
Operator : seanb1
Sample : jc25024-2
Misc : op95988a,em5377,1000
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 03 20:10:05 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5363.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Aug 03 17:34:37 2016
Response via : Initial Calibration



MM5363.M Wed Aug 03 20:10:29 2016 MSM

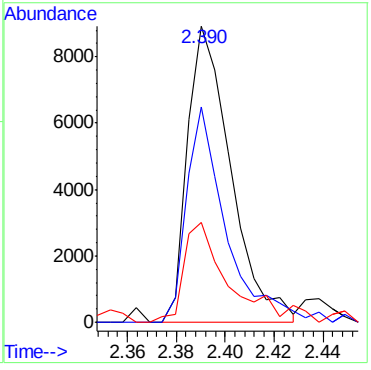
SGS ACCUTEST JC25024



#2
1,4-Dioxane
Concen: 5.75 ppm
RT: 2.390 min Scan# 150
Delta R.T. -0.073 min
Lab File: M126617.D
Acq: 3 Aug 2016 7:10 pm

Tgt Ion: 88 Resp: 10998

Ion	Ratio	Lower	Upper
88	100		
58	71.7	32.8	92.8
57	30.3	0.0	52.8



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\E3P2536\
Data File : 3p55451.D
Acq On : 3 Aug 2016 12:43 pm
Operator : shaniceg
Sample : op95988a-mb1
Misc : op95988a,e3p2536,1000
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 03 14:39:18 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3P2503SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Aug 03 09:47:12 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.839	150	58297	4.00	ppm	0.07
14) Fluorene-d10	13.815	176	77233	4.00	ppm	0.08
21) Fluoranthene-d10	17.983	212	119982	4.00	ppm	0.08
31) Benzo(a)pyrene-d12	22.535	264	93609	4.00	ppm	0.06
System Monitoring Compounds						
3) 2-Fluorophenol	4.837	112	166339	17.67	ppm	-0.05
Spiked Amount 50.000			Recovery = 35.34%			
4) Phenol-d5	6.401	99	167027	13.26	ppm	0.00
Spiked Amount 50.000			Recovery = 26.52%			
7) Nitrobenzene-d5	7.951	82	331690	35.00	ppm	0.00
Spiked Amount 50.000			Recovery = 70.00%			
15) 2-Fluorobiphenyl	11.484	172	665472	35.01	ppm	0.02
Spiked Amount 50.000			Recovery = 70.02%			
20) 2,4,6-Tribromophenol	14.361	330	115188	47.64	ppm	0.09
Spiked Amount 50.000			Recovery = 95.28%			
28) Terphenyl-d14	18.771	244	626615	39.67	ppm	0.11
Spiked Amount 50.000			Recovery = 79.34%			

Target Compounds Qvalue

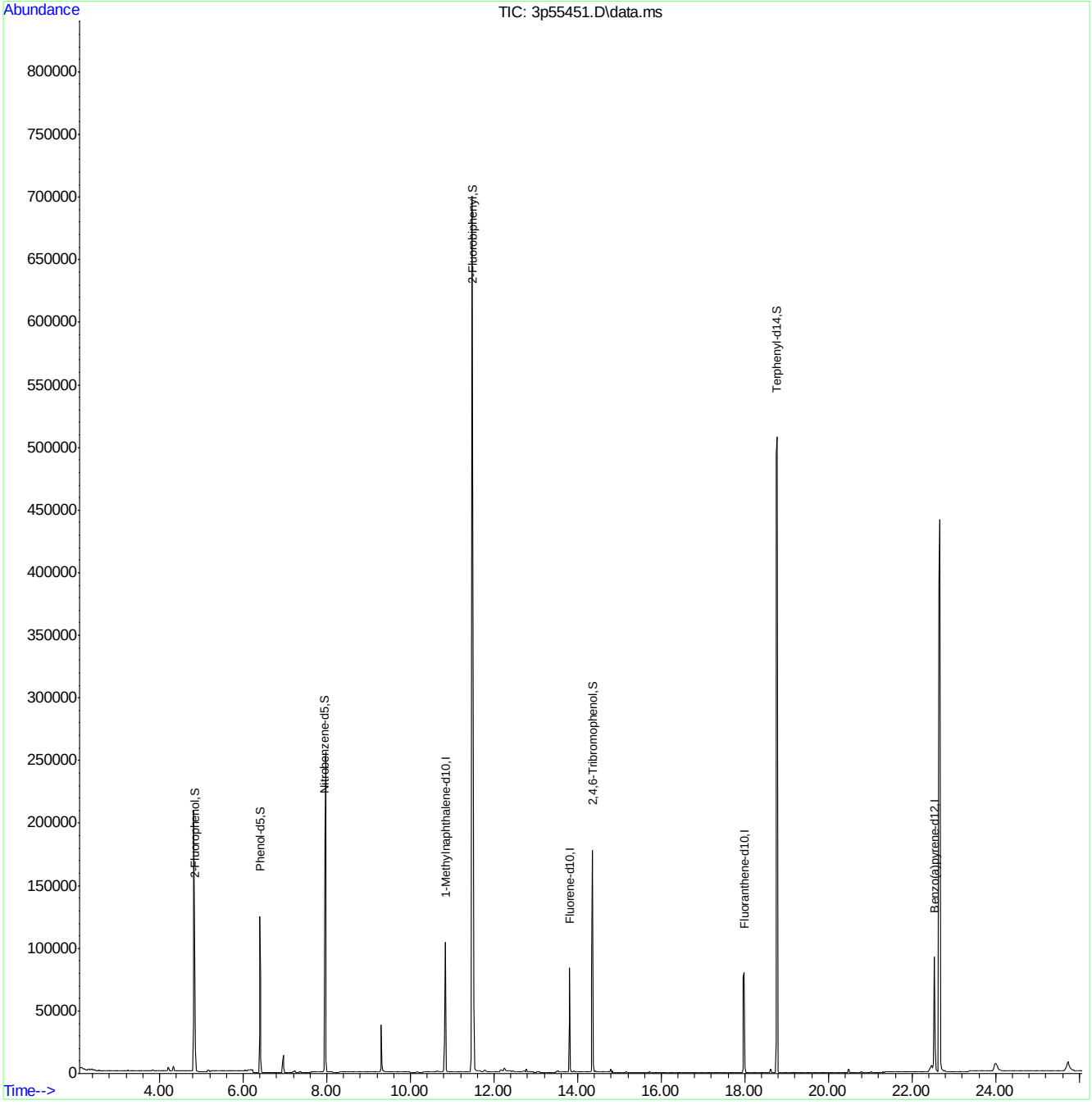
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC25024

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\E3P2536\
Data File : 3p55451.D
Acq On : 3 Aug 2016 12:43 pm
Operator : shaniceg
Sample : op95988a-mb1
Misc : op95988a,e3p2536,1000
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 03 14:39:18 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3P2503SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Aug 03 09:47:12 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\E3P2536\
Data File : 3p55452.D
Acq On : 3 Aug 2016 1:15 pm
Operator : shaniceg
Sample : op95988a-bs12
Misc : op95988a,e3p2536,1000
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 03 14:39:46 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3P2503SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Jul 06 17:34:10 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.839	150	45858	4.00	ppm	0.07
14) Fluorene-d10	13.815	176	65293	4.00	ppm	0.08
21) Fluoranthene-d10	17.967	212	101961	4.00	ppm	0.06
31) Benzo(a)pyrene-d12	22.535	264	79183	4.00	ppm	0.06
System Monitoring Compounds						
3) 2-Fluorophenol	4.822	112	149614	20.20	ppm	-0.07
Spiked Amount 50.000			Recovery = 40.40%			
4) Phenol-d5	6.401	99	155717	15.71	ppm	0.00
Spiked Amount 50.000			Recovery = 31.42%			
7) Nitrobenzene-d5	7.951	82	281577	37.77	ppm	0.00
Spiked Amount 50.000			Recovery = 75.54%			
15) 2-Fluorobiphenyl	11.484	172	601052	37.41	ppm	0.02
Spiked Amount 50.000			Recovery = 74.82%			
20) 2,4,6-Tribromophenol	14.361	330	95070	46.51	ppm	0.09
Spiked Amount 50.000			Recovery = 93.02%			
28) Terphenyl-d14	18.755	244	499528	37.21	ppm	0.09
Spiked Amount 50.000			Recovery = 74.42%			
Target Compounds						Qvalue
2) 1,4-dioxane	2.535	88	1773	0.38	ppm	# 1
5) Phenol	6.425	94	16726	2.01	ppm	# 70
6) bis(2-Chloroethyl)ether	6.534	93	5620	0.69	ppm	83
8) Nitrobenzene	7.763	77	10857	1.31	ppm	65
9) Naphthalene	9.345	128	19368	0.64	ppm	98
10) Hexachlorobutadiene	9.646	225	2575	0.50	ppm	66
11) 2-Methylnaphthalene	10.720	141	9957	0.61	ppm	74
13) Hexachlorocyclopentadiene	11.078	237	1368	0.57	ppm	91
16) Acenaphthylene	12.486	152	14635	0.64	ppm	87
17) Acenaphthene	12.833	153	12318	0.84	ppm	93
18) 4,6-dinitro-2-methylph...	14.022	198	6628	5.60	ppm	87
19) Fluorene	13.853	166	12308	0.89	ppm	78
22) Hexachlorobenzene	14.968	284	4165	0.74	ppm	76
23) Pentachlorophenol	15.386	266	11581	4.57	ppm	95
24) Phenanthrene	15.757	178	20532	0.87	ppm	98
25) Anthracene	15.865	178	16525	0.82	ppm	97
26) Fluoranthene	17.998	202	19504	0.95	ppm	95
27) Pyrene	18.384	202	21741	0.95	ppm	97
29) Benzo[a]anthracene	20.455	228	16972	0.89	ppm	98
30) Chrysene	20.517	228	16712	0.77	ppm	96
32) Benzo[b]fluoranthene	22.124	252	17654	0.67	ppm	96
33) Benzo[k]fluoranthene	22.154	252	15556	0.70	ppm	96
34) Benzo[a]pyrene	22.572	252	12893	0.62	ppm	94
35) Indeno[1,2,3-cd]pyrene	24.096	276	16348	0.72	ppm	92
36) Dibenz[a,h]anthracene	24.134	278	12372	0.70	ppm	55
37) Benzo[g,h,i]perylene	24.491	276	14158	0.63	ppm	99

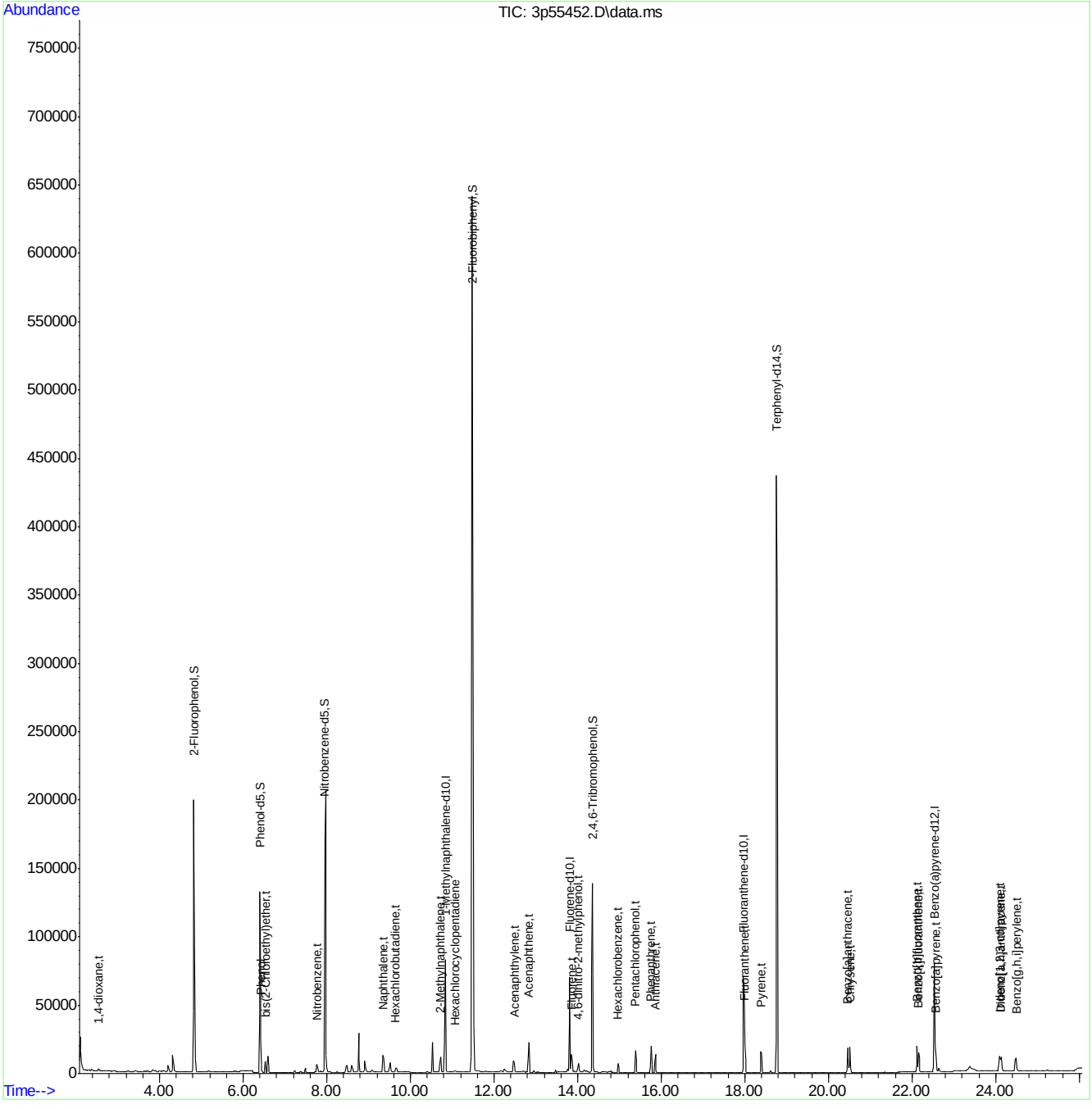
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC25024

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\E3P2536\
Data File : 3p55452.D
Acq On : 3 Aug 2016 1:15 pm
Operator : shaniceg
Sample : op95988a-bs12
Misc : op95988a,e3p2536,1000
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 03 14:39:46 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3P2503SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Jul 06 17:34:10 2016
Response via : Initial Calibration



M3P2503SIM.M Wed Aug 03 14:39:58 2016 Page: 2

SGS ACCUTEST JC25024

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\E3P2535\
Data File : 3p55433.D
Acq On : 3 Aug 2016 3:15 am
Operator : juliusj
Sample : op95988a-ms
Misc : op95988a,e3p2535,1000
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 03 10:01:54 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3P2503SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue Aug 02 12:12:06 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.720	150	68974	4.00	ppm	#-0.05
14) Fluorene-d10	13.702	176	92814	4.00	ppm	-0.04
21) Fluoranthene-d10	17.875	212	134247	4.00	ppm	-0.03
31) Benzo(a)pyrene-d12	22.441	264	105551	4.00	ppm	-0.04
System Monitoring Compounds						
3) 2-Fluorophenol	4.745	112	189749	17.03	ppm	-0.14
Spiked Amount 50.000			Recovery = 34.06%			
4) Phenol-d5	6.304	99	205226	13.77	ppm	-0.10
Spiked Amount 50.000			Recovery = 27.54%			
7) Nitrobenzene-d5	7.857	82	408280	36.41	ppm	-0.10
Spiked Amount 50.000			Recovery = 72.82%			
15) 2-Fluorobiphenyl	11.388	172	860693	37.68	ppm	-0.07
Spiked Amount 50.000			Recovery = 75.36%			
20) 2,4,6-Tribromophenol	14.248	330	137266	47.25	ppm	-0.02
Spiked Amount 50.000			Recovery = 94.50%			
28) Terphenyl-d14	18.663	244	471781	26.69	ppm	0.00
Spiked Amount 50.000			Recovery = 53.38%			
Target Compounds						Qvalue
2) 1,4-dioxane	2.458	88	2887	0.42	ppm	# 44
5) Phenol	6.328	94	21927	1.72	ppm	# 64
6) bis(2-Chloroethyl)ether	6.437	93	8127	0.66	ppm	86
8) Nitrobenzene	7.895	77	13570	1.09	ppm	84
9) Naphthalene	9.251	128	38319	0.85	ppm	95
10) Hexachlorobutadiene	9.552	225	4327	0.56	ppm	86
11) 2-Methylnaphthalene	10.601	141	19882	0.82	ppm	96
13) Hexachlorocyclopentadiene	10.959	237	2522	0.66	ppm	84
16) Acenaphthylene	12.367	152	27592	0.84	ppm	93
17) Acenaphthene	12.725	153	28578	1.38	ppm	96
18) 4,6-dinitro-2-methylph...	13.909	198	11424	6.49	ppm	# 34
19) Fluorene	13.758	166	23451	1.20	ppm	90
22) Hexachlorobenzene	14.860	284	5706	0.77	ppm	81
23) Pentachlorophenol	15.277	266	20381	6.01	ppm	95
24) Phenanthrene	15.648	178	40698	1.30	ppm	95
25) Anthracene	15.741	178	29237	1.10	ppm	94
26) Fluoranthene	17.905	202	34223	1.27	ppm	97
27) Pyrene	18.292	202	36938	1.22	ppm	93
29) Benzo[a]anthracene	20.362	228	22942	0.91	ppm	94
30) Chrysene	20.408	228	20311	0.71	ppm	87
32) Benzo[b]fluoranthene	22.015	252	20649	0.59	ppm	90
33) Benzo[k]fluoranthene	22.062	252	15014	0.51	ppm	93
34) Benzo[a]pyrene	22.459	252	13659	0.50	ppm	94
35) Indeno[1,2,3-cd]pyrene	23.964	276	17630	0.58	ppm	92
36) Dibenz[a,h]anthracene	24.002	278	12752	0.54	ppm	52
37) Benzo[g,h,i]perylene	24.340	276	15218	0.51	ppm	87

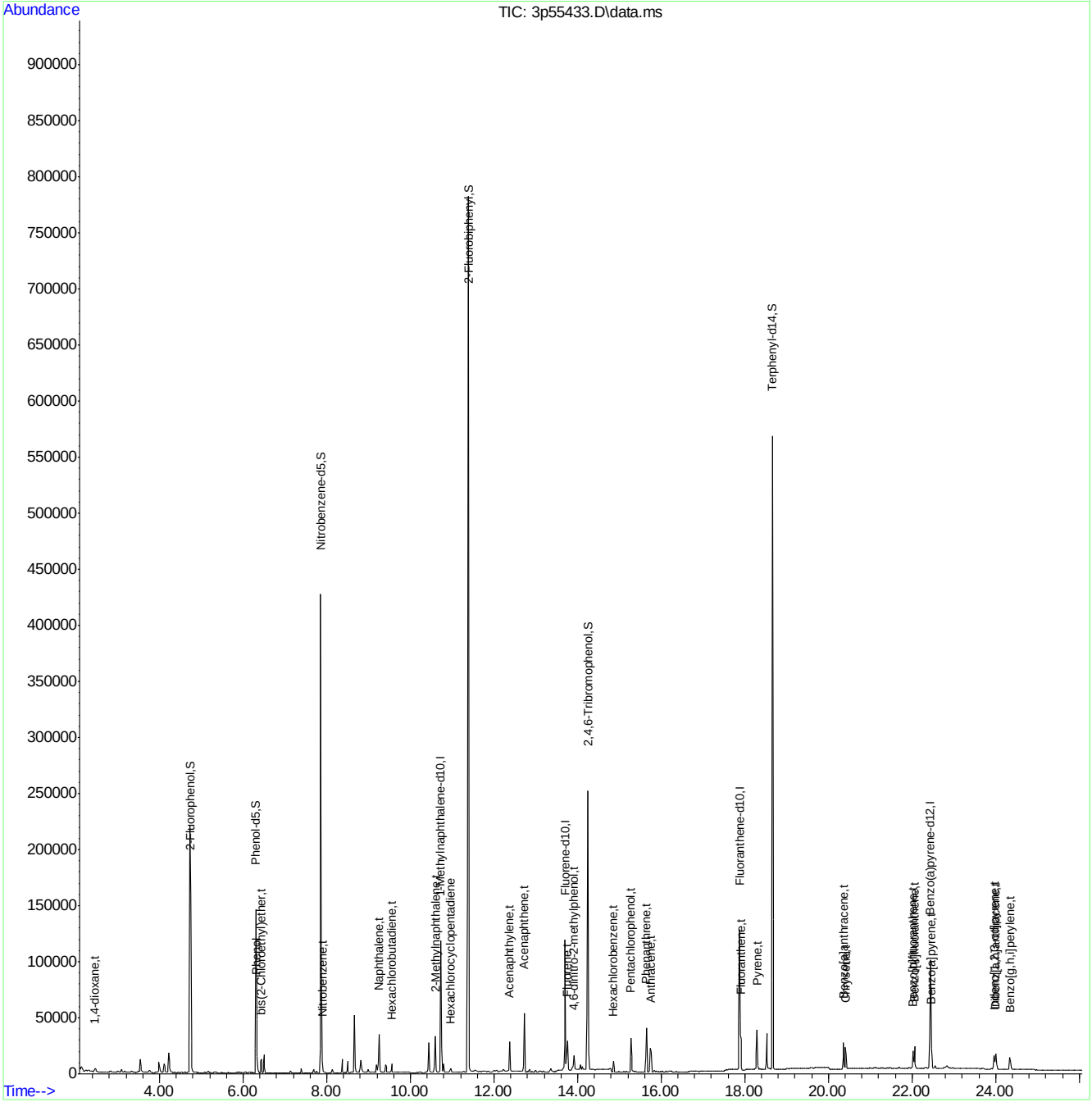
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC25024

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\E3P2535\
Data File : 3p55433.D
Acq On : 3 Aug 2016 3:15 am
Operator : juliusj
Sample : op95988a-ms
Misc : op95988a,e3p2535,1000
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 03 10:01:54 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3P2503SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue Aug 02 12:12:06 2016
Response via : Initial Calibration



SGS ACCUTEST JC25024

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\E3P2535\
Data File : 3p55434.D
Acq On : 3 Aug 2016 3:46 am
Operator : juliusj
Sample : op95988a-msd
Misc : op95988a,e3p2535,1000
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 03 10:02:22 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3P2503SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue Aug 02 12:12:06 2016
Response via : Initial Calibration

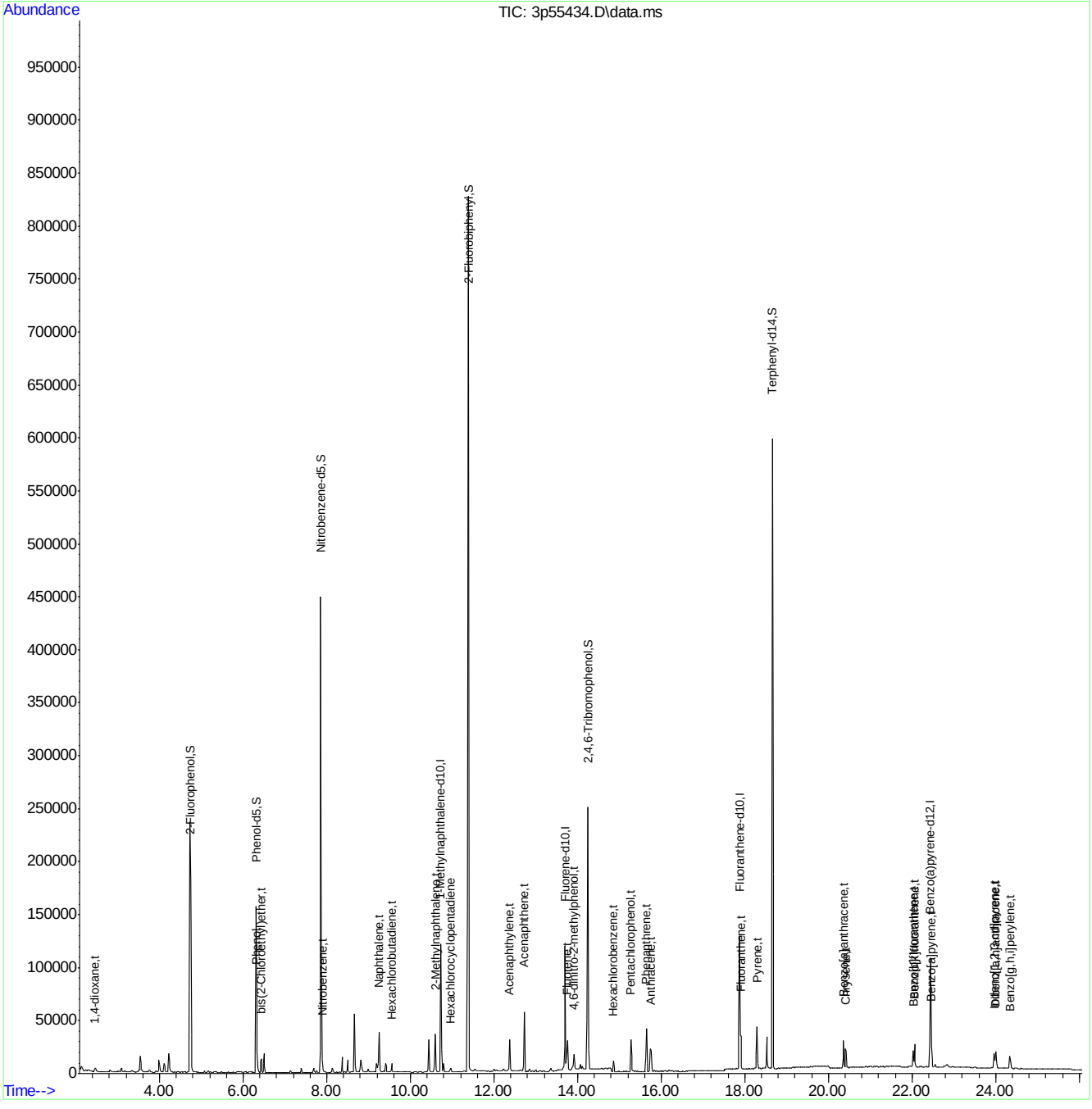
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.720	150	71193	4.00	ppm	#-0.05
14) Fluorene-d10	13.702	176	93099	4.00	ppm	-0.04
21) Fluoranthene-d10	17.875	212	132957	4.00	ppm	-0.03
31) Benzo(a)pyrene-d12	22.441	264	105617	4.00	ppm	-0.04
System Monitoring Compounds						
3) 2-Fluorophenol	4.745	112	210860	18.34	ppm	-0.14
Spiked Amount 50.000			Recovery = 36.68%			
4) Phenol-d5	6.316	99	221608	14.40	ppm	-0.09
Spiked Amount 50.000			Recovery = 28.80%			
7) Nitrobenzene-d5	7.857	82	435555	37.63	ppm	-0.10
Spiked Amount 50.000			Recovery = 75.26%			
15) 2-Fluorobiphenyl	11.388	172	901132	39.33	ppm	-0.07
Spiked Amount 50.000			Recovery = 78.66%			
20) 2,4,6-Tribromophenol	14.248	330	138833	47.64	ppm	-0.02
Spiked Amount 50.000			Recovery = 95.28%			
28) Terphenyl-d14	18.663	244	514465	29.39	ppm	0.00
Spiked Amount 50.000			Recovery = 58.78%			
Target Compounds						Qvalue
2) 1,4-dioxane	2.458	88	3015	0.42	ppm	# 42
5) Phenol	6.328	94	23216	1.77	ppm	# 71
6) bis(2-Chloroethyl)ether	6.437	93	8681	0.68	ppm	88
8) Nitrobenzene	7.895	77	14759	1.15	ppm	83
9) Naphthalene	9.251	128	41632	0.89	ppm	95
10) Hexachlorobutadiene	9.552	225	4656	0.59	ppm	85
11) 2-Methylnaphthalene	10.601	141	21825	0.87	ppm	95
13) Hexachlorocyclopentadiene	10.959	237	2962	0.73	ppm	85
16) Acenaphthylene	12.367	152	30706	0.94	ppm	94
17) Acenaphthene	12.725	153	30732	1.48	ppm	96
18) 4,6-dinitro-2-methylph...	13.909	198	11987	6.72	ppm	# 12
19) Fluorene	13.758	166	24678	1.26	ppm	91
22) Hexachlorobenzene	14.860	284	5958	0.81	ppm	81
23) Pentachlorophenol	15.277	266	20340	6.05	ppm	95
24) Phenanthrene	15.648	178	42151	1.36	ppm	95
25) Anthracene	15.741	178	30783	1.16	ppm	93
26) Fluoranthene	17.905	202	34824	1.30	ppm	97
27) Pyrene	18.292	202	39514	1.32	ppm	94
29) Benzo[a]anthracene	20.362	228	26379	1.06	ppm	95
30) Chrysene	20.409	228	23409	0.82	ppm	87
32) Benzo[b]fluoranthene	22.031	252	21670	0.62	ppm	94
33) Benzo[k]fluoranthene	22.062	252	16485	0.56	ppm	94
34) Benzo[a]pyrene	22.459	252	15304	0.55	ppm	94
35) Indeno[1,2,3-cd]pyrene	23.964	276	19461	0.64	ppm	93
36) Dibenz[a,h]anthracene	24.002	278	14382	0.61	ppm	52
37) Benzo[g,h,i]perylene	24.340	276	16633	0.56	ppm	87

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\E3P2535\
Data File : 3p55434.D
Acq On : 3 Aug 2016 3:46 am
Operator : juliusj
Sample : op95988a-msd
Misc : op95988a,e3p2535,1000
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 03 10:02:22 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3P2503SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue Aug 02 12:12:06 2016
Response via : Initial Calibration

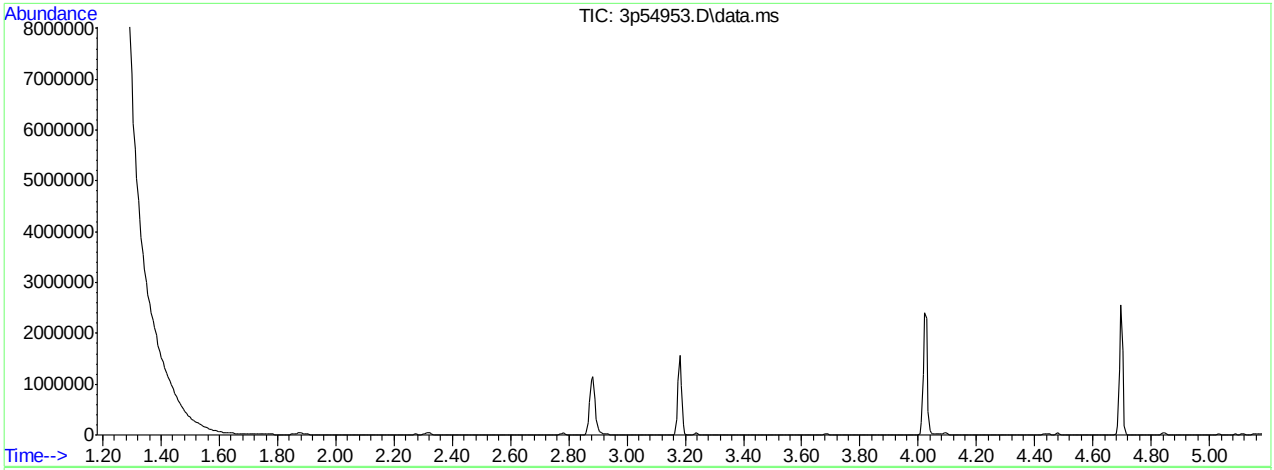


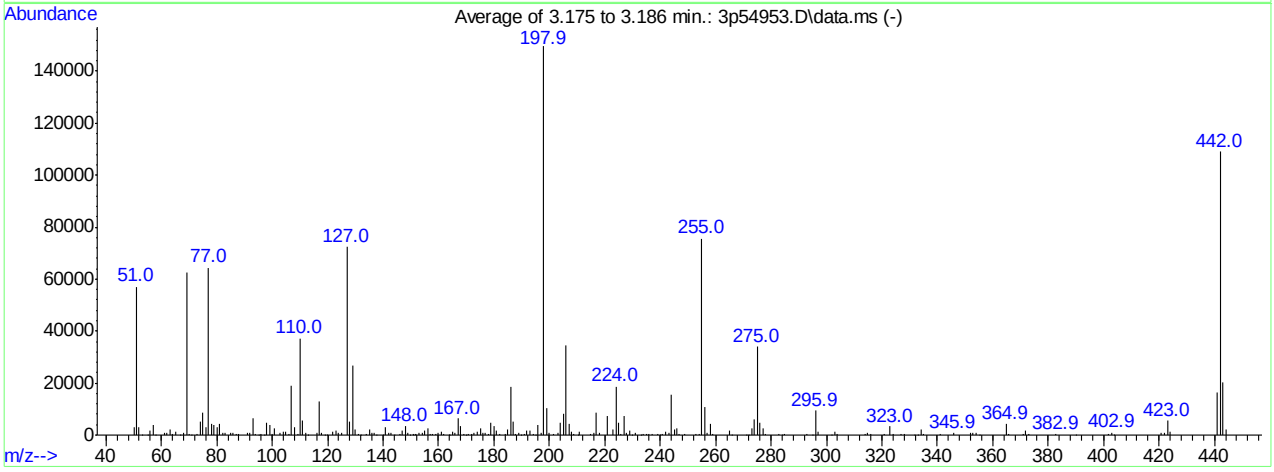
SGS ACCUTEST JC25024

DFTPP

Data File : C:\msdchem\1\data\E3P2503\3p54953.D Vial: 1
Acq On : 6 Jul 2016 9:12 am Operator: hankc
Sample : DFTPP Inst : MSGC3P
Misc : op94978,e3p2503 Multiplr: 1.00
MS Integration Params: events.e

Method : C:\MSDCHEM\1\METHODS\DFTPP3P.M (ChemStation Integrator)
Title : zebron ZB-5msi 30mx0.25mmx0.25um





AutoFind: Scans 330, 331, 332; Background Corrected with Scan 326

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	38.2	57126	PASS
68	69	0.00	2	1.7	1062	PASS
69	198	0.00	100	41.8	62449	PASS
70	69	0.00	2	0.6	387	PASS
127	198	40	60	48.4	72301	PASS
197	198	0.00	1	0.7	1015	PASS
198	198	100	100	100.0	149501	PASS
199	198	5	9	6.8	10162	PASS
275	198	10	30	22.7	33995	PASS
365	198	1	100	2.8	4170	PASS
441	443	0.01	100	81.6	16547	PASS
442	198	40	100	73.0	109091	PASS
443	442	17	23	18.6	20290	PASS

3p54953.D DFTPP3P.M Fri Jul 08 09:11:01 2016

Average of 3.175 to 3.186 min.: 3p54953.D\data.ms
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
50.00	2955	63.95	301	77.00	64389	90.95	1064
51.00	57126	65.00	1197	78.00	4401	92.00	940
52.00	3031	66.90	74	79.00	3741	93.00	6346
52.95	145	68.00	1062	80.00	2904	93.95	475
54.95	92	69.00	62449	81.00	4303	94.90	222
56.00	1681	70.00	387	82.00	1086	95.90	422
57.00	3969	70.90	73	82.95	981	97.00	225
57.95	174	73.00	326	84.95	857	98.00	4664
60.95	683	74.00	5251	85.90	913	99.00	4074
62.00	761	75.00	8784	86.95	629	99.95	407
63.00	2173	76.00	2955	87.85	294	100.95	2404

Average of 3.175 to 3.186 min.: 3p54953.D\data.ms
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
102.90	756	116.00	943	129.00	26797	141.95	1075
104.00	1459	117.00	13133	129.90	2257	142.95	764
104.95	1429	117.90	997	130.90	463	143.90	80
106.05	507	118.90	83	132.00	166	145.90	542
107.00	18956	119.95	178	133.95	652	146.95	1539
108.00	3037	121.95	1137	134.95	2002	148.00	3486
109.05	623	123.00	1852	135.90	861	148.90	761
110.00	37213	123.95	857	136.95	1076	149.90	217
111.00	5431	124.95	833	137.75	176	150.90	119
112.00	680	127.00	72301	139.90	222	151.05	269
113.00	184	128.00	5277	140.95	3070	151.60	82

Average of 3.175 to 3.186 min.: 3p54953.D\data.ms
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
151.80	232	163.80	77	174.00	1335	186.00	18693
152.95	922	164.00	80	175.00	2520	187.00	5103
154.00	697	164.95	1126	176.00	734	187.90	524
155.00	1821	166.00	1082	176.90	1042	188.90	1043
156.00	2805	167.00	6428	177.90	378	189.90	69
157.00	558	167.95	3248	178.90	4649	190.90	527
157.90	538	168.95	570	180.00	3249	191.95	1571
158.90	430	169.95	163	180.95	1558	192.95	1817
159.95	1002	170.90	256	181.90	307	194.00	342
160.95	1447	171.95	543	183.95	377	194.90	108
161.90	411	172.95	791	185.00	2330	195.95	4036

Average of 3.175 to 3.186 min.: 3p54953.D\data.ms
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
196.90	1015	208.90	341	225.95	440	239.00	281
197.90	149501	210.30	175	226.95	7494	239.90	183
198.90	10162	210.95	1352	227.95	999	240.85	402
199.95	720	214.90	343	228.90	1661	241.95	1113
201.35	657	216.00	706	229.90	183	243.00	1054
202.90	916	216.90	8848	230.95	689	244.00	15577
204.00	4963	217.90	1082	232.90	82	245.00	2075
205.00	8235	221.00	7477	233.90	525	245.95	2728
206.00	34419	222.95	2104	234.90	539	246.90	605
206.95	4313	224.00	18613	235.85	386	248.90	487
207.90	1104	225.00	4589	236.95	626	252.85	359

Average of 3.175 to 3.186 min.: 3p54953.D\data.ms
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
253.95	534	273.95	6191	296.90	1394	327.90	335
255.00	75555	275.00	33995	302.00	75	331.90	126
256.00	10922	276.00	4787	303.00	1110	332.95	230
256.90	917	276.95	2683	303.85	294	334.00	1982

DFTPP3P.M Fri Jul 08 09:10:38 2016 Page: 0

257.95	4171	277.85	452	313.90	461	334.90	539
258.90	640	282.95	373	314.90	1058	340.95	414
264.95	1632	283.90	111	315.95	528	345.90	763
265.80	87	284.95	500	320.95	344	351.95	913
270.90	89	292.95	628	323.00	3263	352.95	698
271.90	86	294.90	78	324.00	600	353.95	915
272.95	2479	295.95	9348	326.90	607	355.00	102

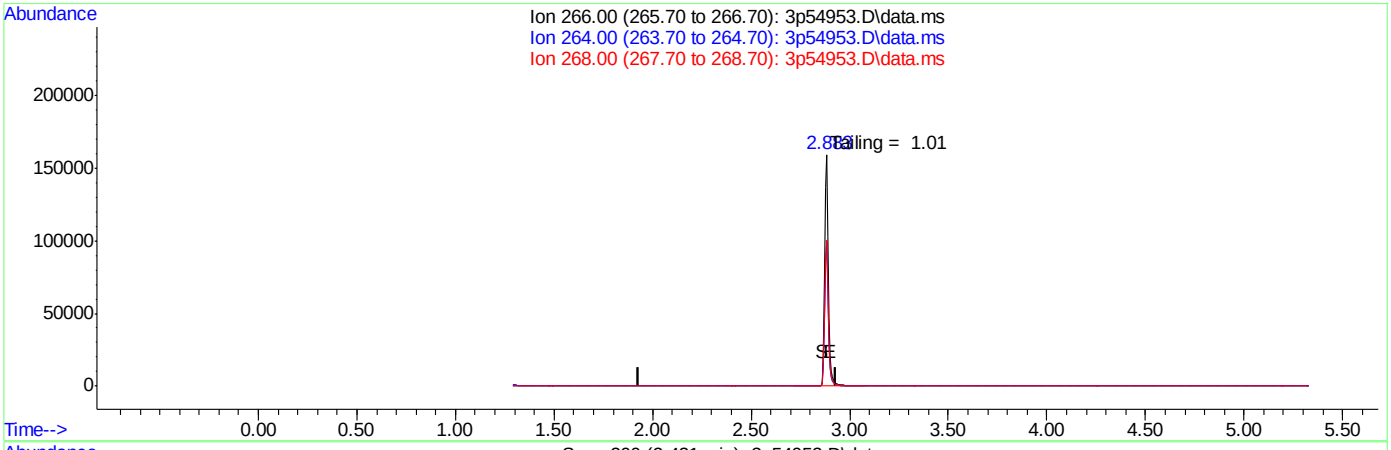
Average of 3.175 to 3.186 min.: 3p54953.D\data.ms
DFTPP
Modified:subtracted

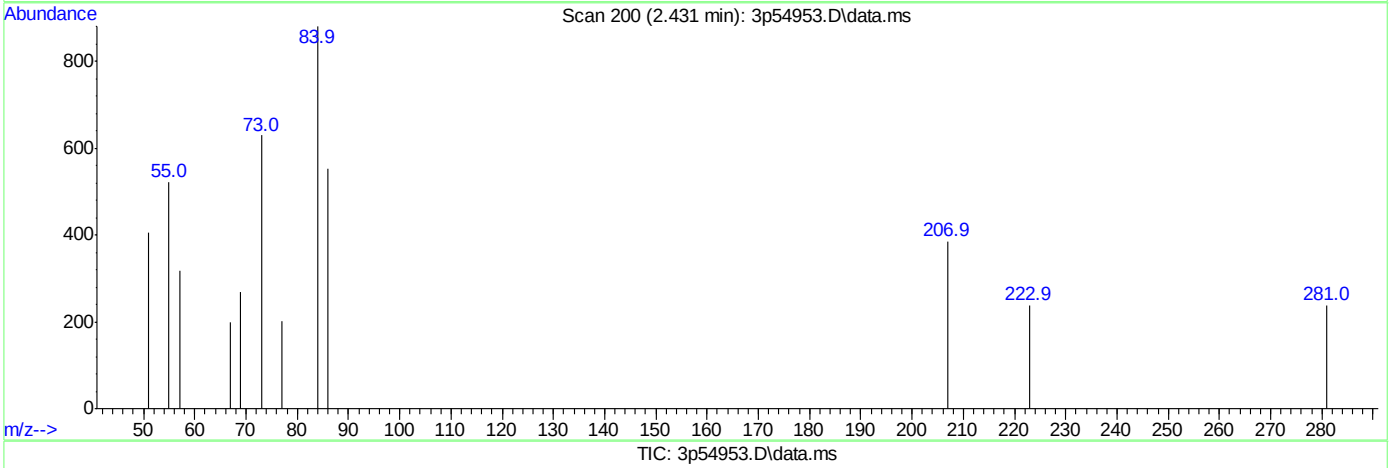
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
364.90	4170	421.95	702				
365.90	597	423.00	5541				
370.90	237	424.00	1113				
371.95	1727	441.00	16547				
372.90	423	442.00	109091				
382.90	397	443.00	20290				
389.90	210	444.00	2003				
401.85	620						
402.95	941						
403.90	227						
420.90	854						

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\E3P2503\
Data File : 3p54953.D
Acq On : 6 Jul 2016 9:12 am
Operator : hankc
Sample : DFTPP
Misc : op94978,e3p2503
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 06 09:18:24 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPP3P.M
Quant Title : zebron ZB-5msi 30mx0.25mmx0.25um
QLast Update : Wed Mar 02 08:34:25 2016
Response via : Initial Calibration





TIC: 3p54953.D\data.ms

(1) Pentachlorophenol

2.431min (-2.431) 0.00

response 0

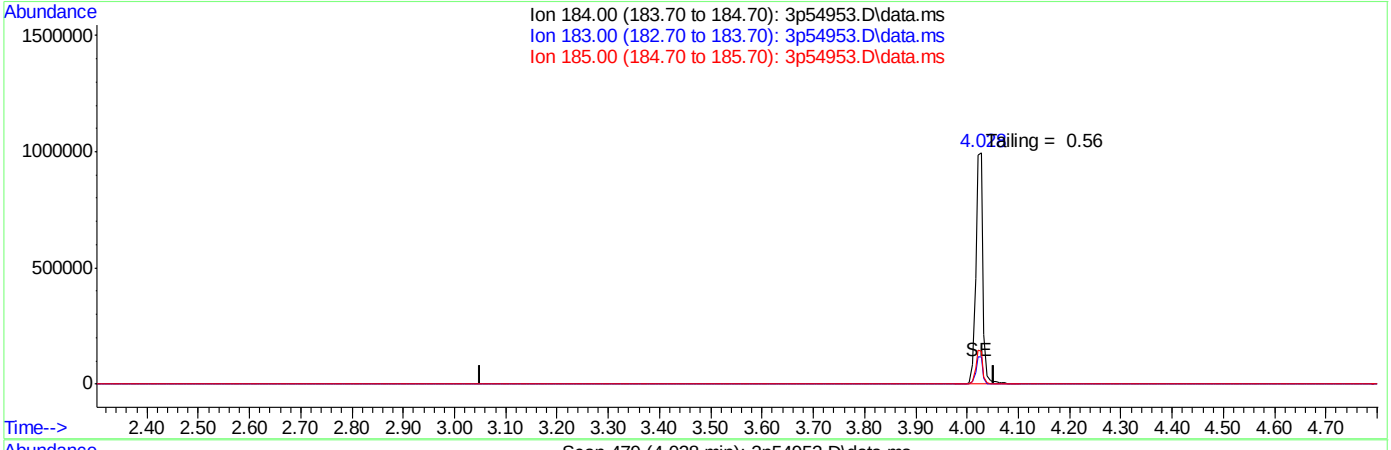
Ion	Exp%	Act%
266.00	100	0.00
264.00	0.00	0.00
268.00	0.00	0.00
0.00	0.00	0.00

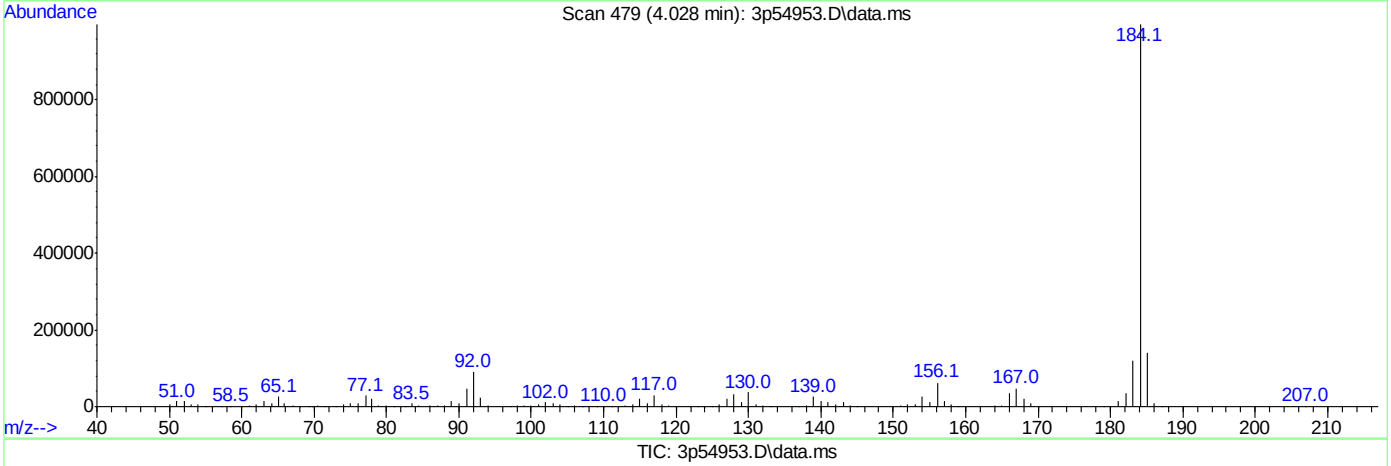
SGS ACCUTEST JC25024

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\E3P2503\
Data File : 3p54953.D
Acq On : 6 Jul 2016 9:12 am
Operator : hankc
Sample : DFTPP
Misc : op94978,e3p2503
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 06 09:18:24 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPP3P.M
Quant Title : zebron ZB-5msi 30mx0.25mmx0.25um
QLast Update : Wed Mar 02 08:34:25 2016
Response via : Initial Calibration





TIC: 3p54953.D\data.ms

(2) Benzidine

3.552min (-3.552) 0.00

response 0

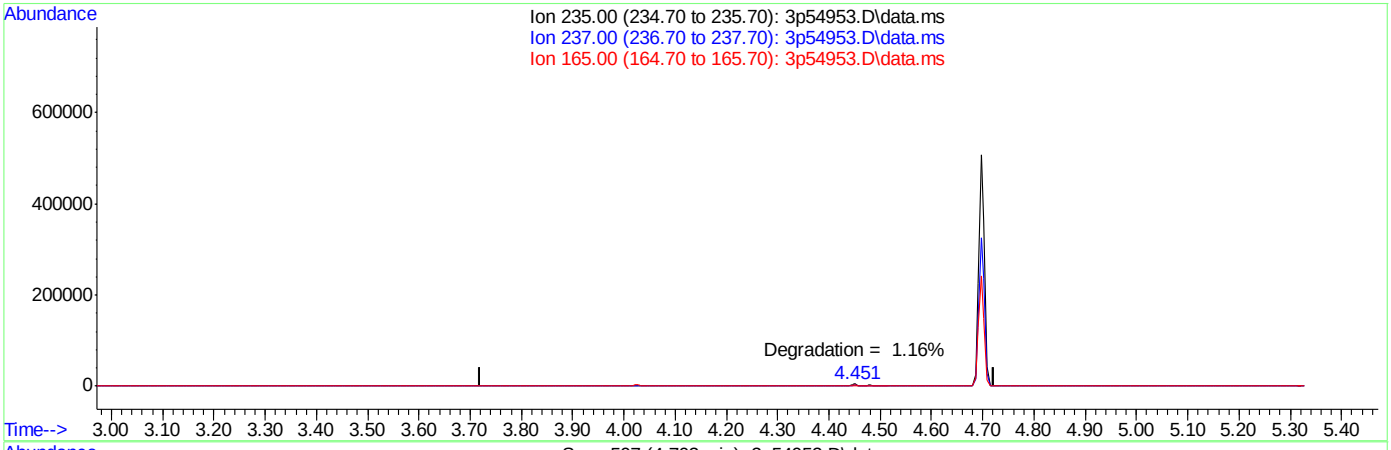
Ion	Exp%	Act%
184.00	100	0.00
183.00	0.00	0.00
185.00	0.00	0.00
0.00	0.00	0.00

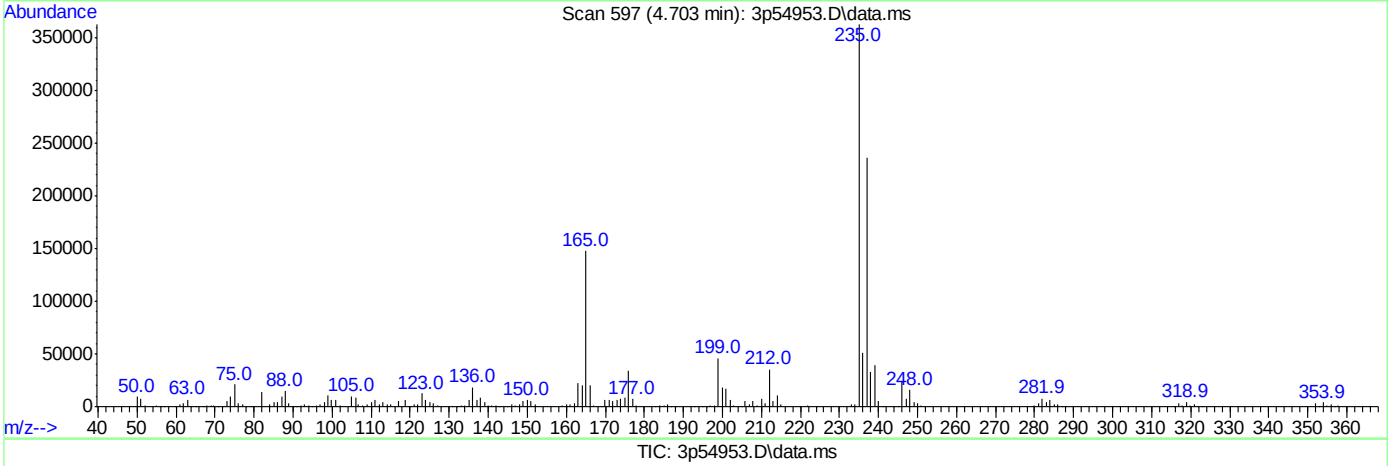
SGS ACCUTEST JC25024

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\E3P2503\
Data File : 3p54953.D
Acq On : 6 Jul 2016 9:12 am
Operator : hankc
Sample : DFTPP
Misc : op94978,e3p2503
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 06 09:18:24 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPP3P.M
Quant Title : zebron ZB-5msi 30mx0.25mmx0.25um
QLast Update : Wed Mar 02 08:34:25 2016
Response via : Initial Calibration





TIC: 3p54953.D\data.ms

(3) PP-DDT

4.222min (-4.222) 0.00

response 0

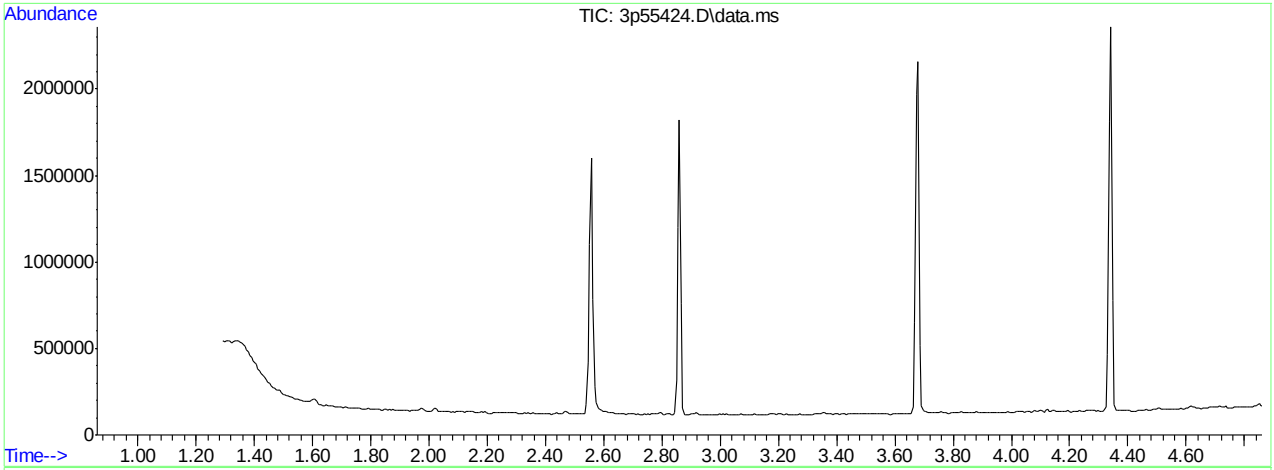
Ion	Exp%	Act%
235.00	100	0.00
237.00	0.00	0.00
165.00	0.00	0.00
0.00	0.00	0.00

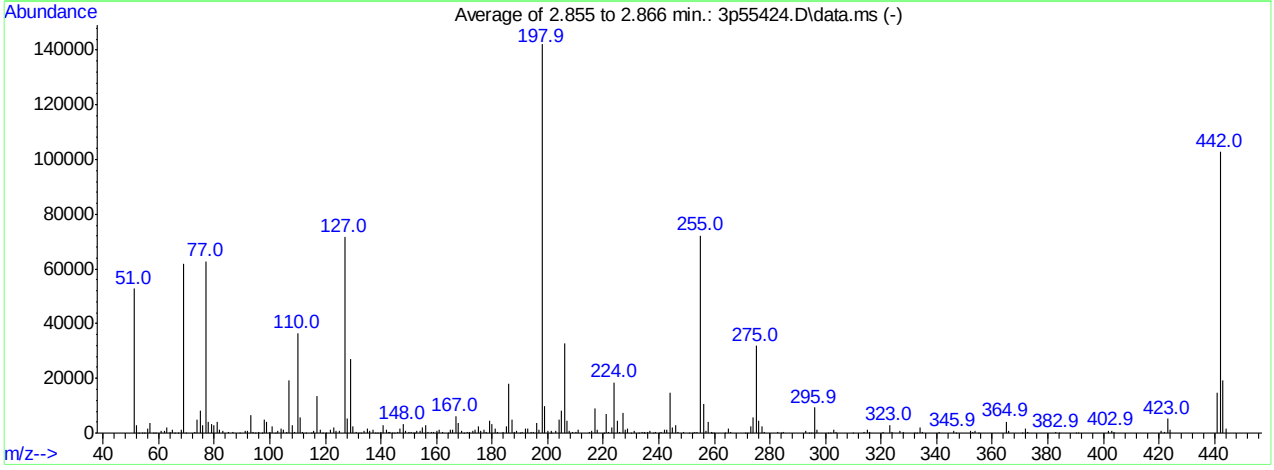
SGS ACCUTEST JC25024

DFTPP

Data File : C:\msdchem\1\data\E3P2535\3p55424.D Vial: 1
Acq On : 2 Aug 2016 10:32 pm Operator: juliusj
Sample : dftpp Inst : MSGC3P
Misc : op95661a,e3p2535 Multiplr: 1.00
MS Integration Params: events.e

Method : C:\MSDCHEM\1\METHODS\DFTPP3P.M (ChemStation Integrator)
Title : zebron ZB-5msi 30mx0.25mmx0.25um





AutoFind: Scans 274, 275, 276; Background Corrected with Scan 270

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	37.1	52685	PASS
68	69	0.00	2	1.7	1055	PASS
69	198	0.00	100	43.7	62094	PASS
70	69	0.00	2	0.4	221	PASS
127	198	40	60	50.5	71669	PASS
197	198	0.00	1	0.8	1166	PASS
198	198	100	100	100.0	142053	PASS
199	198	5	9	6.8	9655	PASS
275	198	10	30	22.5	31957	PASS
365	198	1	100	3.0	4235	PASS
441	443	0.01	100	76.3	14807	PASS
442	198	40	100	72.4	102813	PASS
443	442	17	23	18.9	19410	PASS

3p55424.D DFTPP3P.M Wed Aug 03 09:45:33 2016

Average of 2.855 to 2.866 min.: 3p55424.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
51.00	52685	63.00	2181	76.00	2804	91.00	886
51.95	2823	64.00	269	76.95	62776	92.00	1027
52.90	84	65.00	1281	77.95	4181	93.00	6379
54.00	88	65.90	90	79.00	3446	94.00	513
55.00	185	67.00	48	80.00	2979	94.90	121
56.00	1516	68.00	1055	80.95	4113	96.00	565
57.00	3763	69.00	62094	81.95	1088	97.00	93
58.00	83	69.90	221	82.95	827	98.00	4884
58.90	104	72.95	362	84.95	371	99.00	4199
61.00	753	73.95	4910	86.90	489	99.90	320
62.00	793	75.00	8374	88.95	192	100.95	2413

Average of 2.855 to 2.866 min.: 3p55424.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
101.95	164	112.95	162	127.00	71669	137.95	205
103.00	918	115.00	70	127.95	5439	138.95	153
104.00	1499	115.95	951	128.95	26880	139.90	282
104.95	1405	117.00	13575	130.00	2344	140.95	3007
106.00	622	118.00	1078	130.95	579	142.00	1167
107.00	19457	118.95	220	131.95	202	142.80	418
108.00	2886	120.00	203	132.90	42	143.00	444
109.05	573	121.95	1248	133.95	751	144.00	217
110.00	36510	122.95	1885	135.00	1821	145.00	205
111.00	5788	123.95	949	135.95	892	145.90	605
111.90	617	125.00	945	137.00	1160	146.95	1771

Average of 2.855 to 2.866 min.: 3p55424.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
148.00	3488	157.95	535	169.95	209	181.00	1677
148.95	712	159.00	575	170.95	242	181.95	287
149.95	246	159.95	990	171.90	583	183.95	269
151.05	478	160.95	1424	172.90	728	185.00	2428
151.50	140	162.00	482	173.95	1437	186.00	18225
151.95	190	164.00	179	175.00	2590	187.00	4925
153.00	1019	164.90	1195	176.00	755	187.95	586
154.00	760	165.95	1057	176.95	1068	188.90	989
154.95	1883	167.00	6295	177.95	357	189.90	74
156.00	2808	168.00	3710	178.90	4644	190.90	341
156.90	621	168.95	726	179.95	3306	191.95	1575

Average of 2.855 to 2.866 min.: 3p55424.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
193.00	1824	204.00	4886	217.95	1129	229.90	112
193.90	370	205.00	8082	220.10	82	231.00	687
194.85	224	206.00	32811	221.00	6848	232.90	75
195.95	3875	207.00	4323	221.70	501	233.85	448
196.95	1166	207.90	970	222.90	2114	234.80	138
197.90	142053	208.95	259	224.00	18592	234.95	371
198.90	9655	210.05	562	225.00	4463	235.85	253
199.90	734	211.00	1344	225.90	567	236.95	709
201.10	127	214.95	270	226.95	7484	238.00	71
201.45	672	215.95	703	227.95	1072	238.90	244
202.95	969	216.90	8826	228.90	1551	240.00	104

Average of 2.855 to 2.866 min.: 3p55424.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
240.90	384	253.90	524	270.90	77	292.85	733
241.90	1068	255.00	72157	271.90	131	293.90	82
243.00	1056	256.00	10559	272.95	2367	294.90	126
244.00	14925	256.95	847	274.00	5840	295.95	9375

M3P2503SIM.M Wed Aug 03 09:38:47 2016 Page: 0

245.00	2062	257.95	4202	275.00	31957	296.95	1390
245.95	2717	258.80	175	276.00	4541	300.90	73
246.90	506	259.00	466	276.95	2600	301.90	68
248.90	470	259.90	76	278.00	472	303.00	1062
250.90	79	263.90	101	282.95	354	303.95	248
252.00	98	264.95	1630	283.90	104	309.90	68
253.00	397	265.85	319	284.95	464	313.95	464

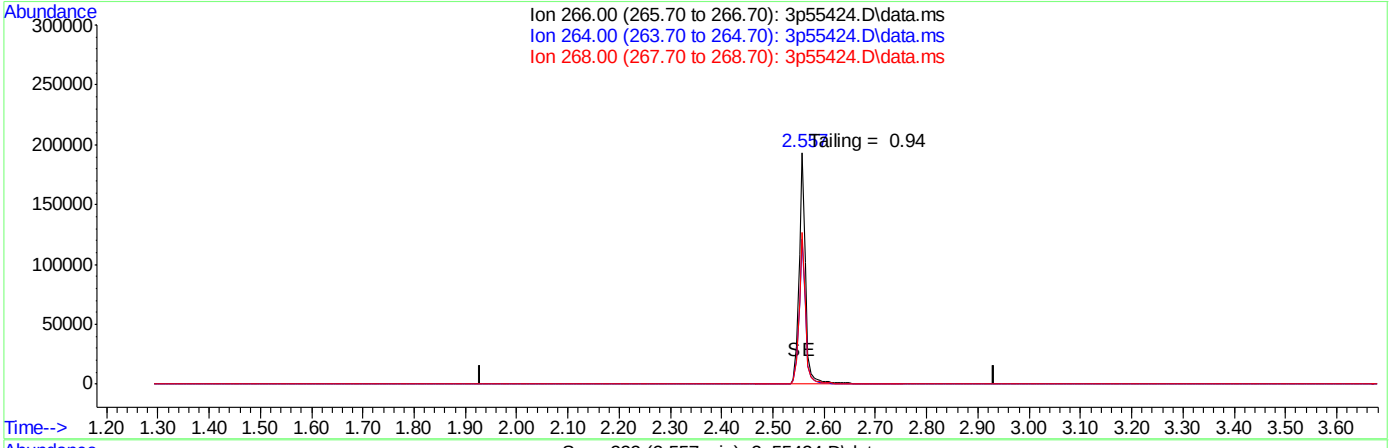
Average of 2.855 to 2.866 min.: 3p55424.D\data.ms
dftpp
Modified:subtracted

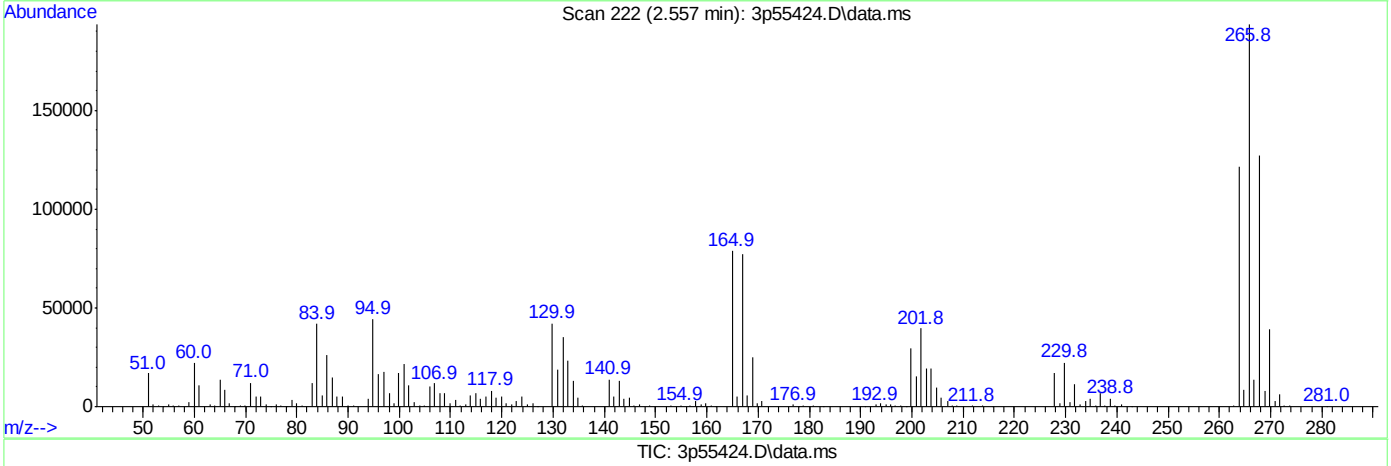
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
314.90	1059	340.95	392	372.95	339	423.95	1081
315.95	521	345.95	813	382.90	315	441.00	14807
320.90	248	346.90	76	383.90	80	442.00	102813
323.00	3055	352.00	999	389.95	178	443.00	19410
323.90	628	352.95	585	391.00	89	444.00	1780
326.90	659	354.00	924	401.95	705		
327.95	379	355.00	107	402.95	927		
331.90	184	364.95	4235	403.90	260		
332.95	190	365.85	677	420.95	783		
333.95	1914	370.90	185	421.95	626		
335.00	452	372.00	1657	423.00	5165		

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\E3P2535\
Data File : 3p55424.D
Acq On : 2 Aug 2016 10:32 pm
Operator : juliusj
Sample : dftpp
Misc : op95661a,e3p2535
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 02 22:37:44 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPP3P.M
Quant Title : zebron ZB-5msi 30mx0.25mmx0.25um
QLast Update : Wed Mar 02 08:34:25 2016
Response via : Initial Calibration





TIC: 3p55424.D\data.ms

(1) Pentachlorophenol

2.431min (-2.431) 0.00

response 0

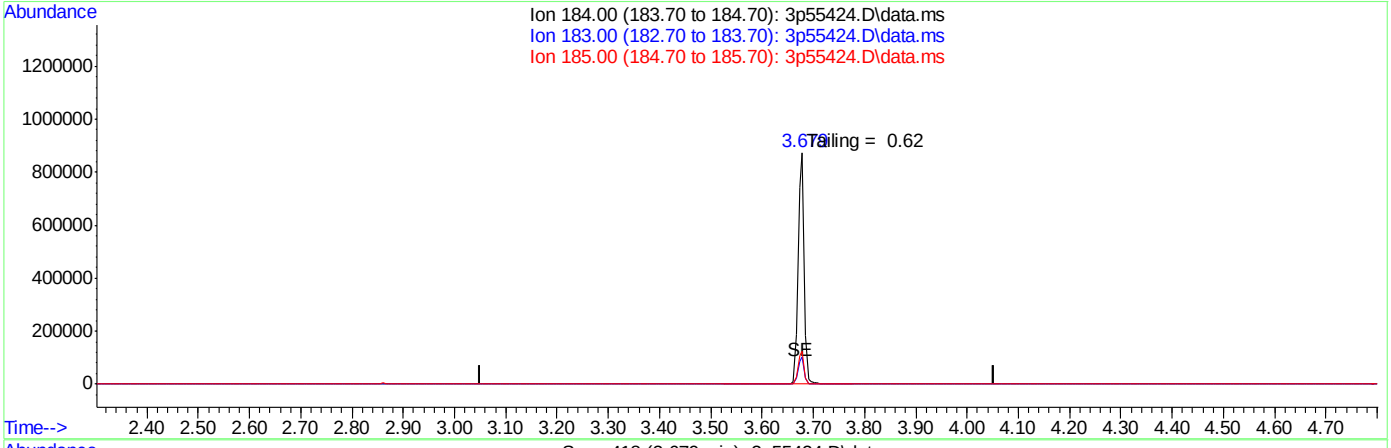
Ion	Exp%	Act%
266.00	100	0.00
264.00	0.00	0.00
268.00	0.00	0.00
0.00	0.00	0.00

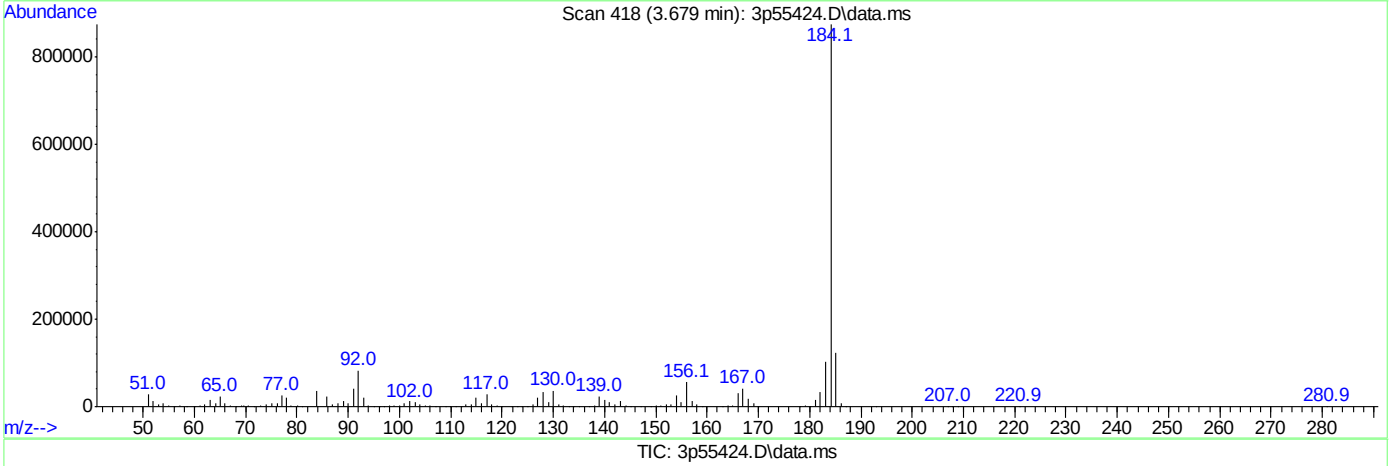
SGS ACCUTEST JC25024

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\E3P2535\
Data File : 3p55424.D
Acq On : 2 Aug 2016 10:32 pm
Operator : juliusj
Sample : dftpp
Misc : op95661a,e3p2535
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 02 22:37:44 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPP3P.M
Quant Title : zebron ZB-5msi 30mx0.25mmx0.25um
QLast Update : Wed Mar 02 08:34:25 2016
Response via : Initial Calibration





TIC: 3p55424.D\data.ms

(2) Benzidine

3.552min (-3.552) 0.00

response 0

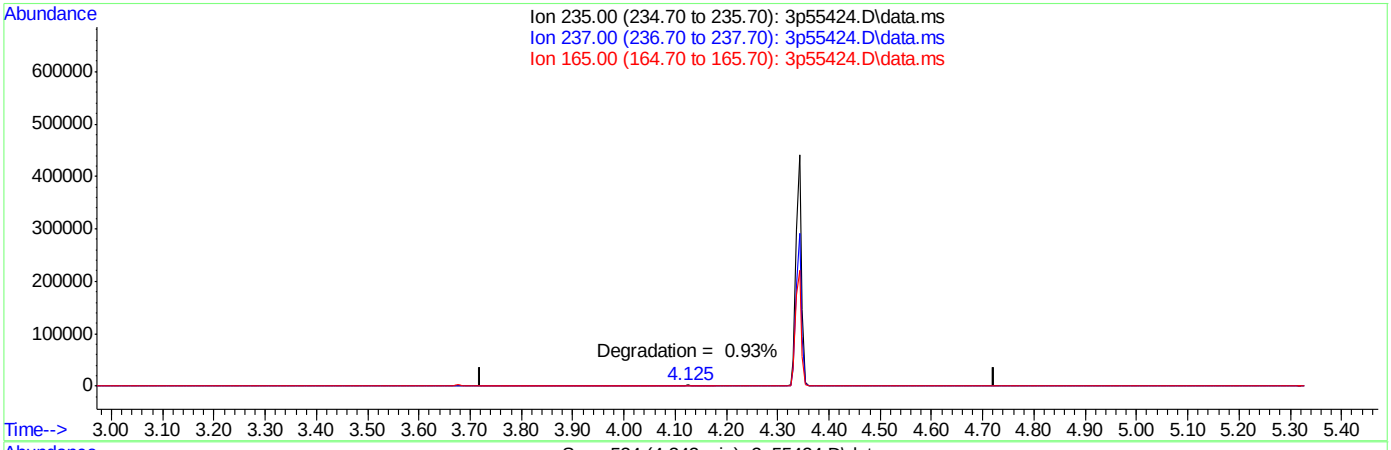
Ion	Exp%	Act%
184.00	100	0.00
183.00	0.00	0.00
185.00	0.00	0.00
0.00	0.00	0.00

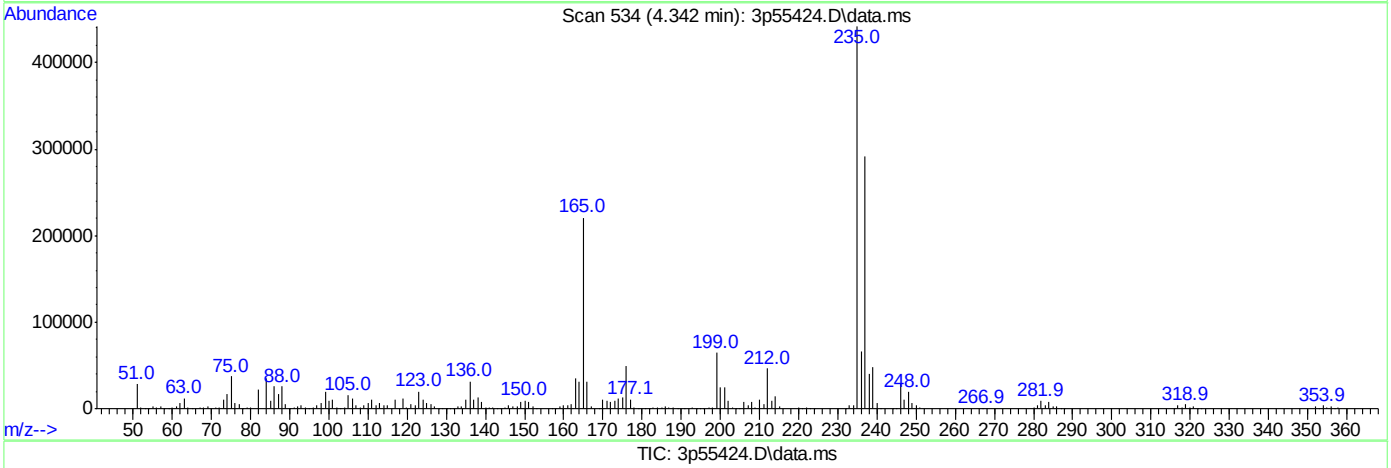
SGS ACCUTEST JC25024

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\E3P2535\
Data File : 3p55424.D
Acq On : 2 Aug 2016 10:32 pm
Operator : juliusj
Sample : dftpp
Misc : op95661a,e3p2535
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 02 22:37:44 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPP3P.M
Quant Title : zebron ZB-5msi 30mx0.25mmx0.25um
QLast Update : Wed Mar 02 08:34:25 2016
Response via : Initial Calibration





TIC: 3p55424.D\data.ms

(3) PP-DDT

4.222min (-4.222) 0.00

response 0

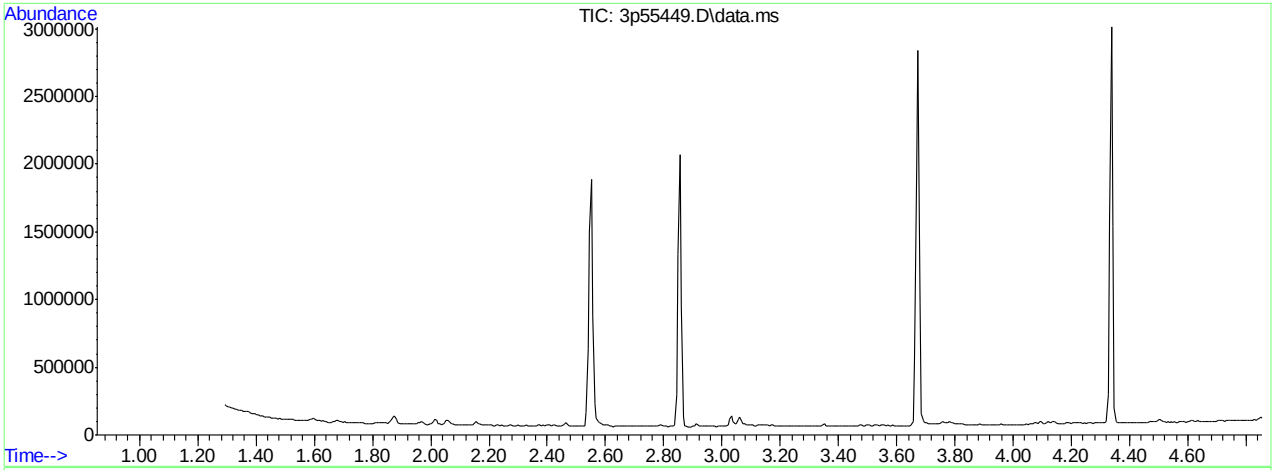
Ion	Exp%	Act%
235.00	100	0.00
237.00	0.00	0.00
165.00	0.00	0.00
0.00	0.00	0.00

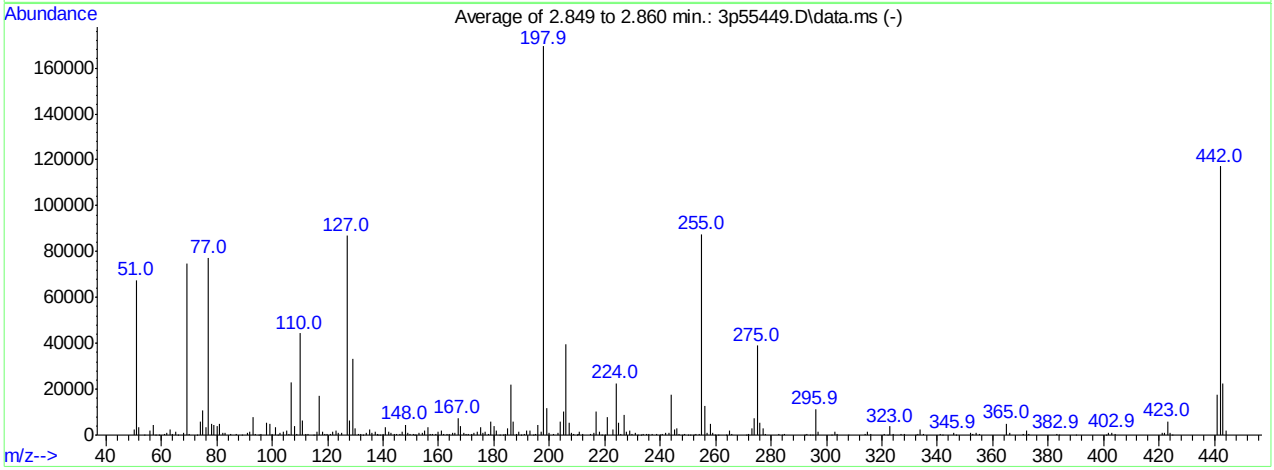
SGS ACCUTEST JC25024

DFTPP

Data File : C:\msdchem\1\data\E3P2536\3p55449.D Vial: 1
Acq On : 3 Aug 2016 11:59 am Operator: shaniceg
Sample : dftpp Inst : MSGC3P
Misc : op95661a,e3p2536 Multiplr: 1.00
MS Integration Params: events.e

Method : C:\MSDCHEM\1\METHODS\DFTPP3P.M (ChemStation Integrator)
Title : zebron ZB-5msi 30mx0.25mmx0.25um





AutoFind: Scans 273, 274, 275; Background Corrected with Scan 268

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	39.9	67682	PASS
68	69	0.00	2	1.3	1010	PASS
69	198	0.00	100	44.3	74983	PASS
70	69	0.00	2	0.4	289	PASS
127	198	40	60	51.3	86915	PASS
197	198	0.00	1	0.8	1398	PASS
198	198	100	100	100.0	169429	PASS
199	198	5	9	6.9	11667	PASS
275	198	10	30	23.0	38925	PASS
365	198	1	100	3.0	5078	PASS
441	443	0.01	100	79.1	17774	PASS
442	198	40	100	69.2	117288	PASS
443	442	17	23	19.2	22466	PASS

3p55449.D DFTPP3P.M Wed Aug 03 14:41:48 2016

Average of 2.849 to 2.860 min.: 3p55449.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
50.00	2479	63.95	455	78.00	5072	92.95	7843
51.00	67682	65.00	1344	78.95	4370	93.95	391
52.00	3357	65.95	18	80.00	3779	94.90	181
53.95	30	68.00	1010	81.00	4839	95.95	314
56.00	1767	69.00	74983	82.00	1220	98.00	5559
57.00	4616	70.00	289	83.00	1066	98.95	4789
58.00	128	73.00	178	85.00	708	99.90	469
59.00	102	74.00	6073	87.00	599	101.00	3227
60.95	663	75.00	10529	88.90	70	101.95	153
61.95	957	76.05	3509	90.95	1008	102.90	877
63.00	2658	76.95	77178	92.00	1352	104.00	1705

Average of 2.849 to 2.860 min.: 3p55449.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
105.00	1767	117.00	16897	128.95	33263	138.90	115
105.95	742	117.95	1358	129.95	2759	139.95	444
106.95	23219	118.95	361	130.95	556	141.00	3612
108.00	3777	119.95	393	131.90	312	141.95	1359
108.95	594	120.90	272	132.80	136	142.95	1039
110.00	44324	121.95	1388	133.90	852	144.05	266
110.95	6332	123.00	2081	134.95	2221	144.95	287
111.95	742	123.90	878	135.95	1077	145.95	686
112.90	355	125.00	1170	137.00	1393	146.90	1550
114.95	50	127.00	86915	137.80	122	148.00	4511
116.00	1344	127.95	6407	138.00	289	148.90	930

Average of 2.849 to 2.860 min.: 3p55449.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
149.90	386	159.95	1277	170.90	430	181.95	246
151.05	473	161.00	1986	171.95	629	183.10	97
151.50	98	161.95	664	172.90	933	183.90	466
151.85	261	162.95	276	174.00	1592	185.00	2997
152.95	1201	163.90	306	175.00	3291	186.00	22087
153.95	790	164.95	1054	176.00	930	187.00	6077
155.00	2209	166.00	1115	176.95	1460	188.05	658
156.00	3444	167.00	7577	177.90	549	188.90	1295
157.00	723	168.00	4073	178.95	5933	189.90	236
157.85	613	169.00	787	179.95	3990	191.00	722
158.90	585	169.85	272	180.90	2029	191.90	1829

Average of 2.849 to 2.860 min.: 3p55449.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
193.00	2212	205.00	10101	216.95	10454	228.95	1909
194.00	253	206.00	39371	217.95	1386	229.85	277
194.95	358	207.00	5188	219.00	83	230.95	837
196.00	4458	208.00	1059	220.00	98	232.00	72
196.95	1398	208.95	505	221.00	7674	232.90	108
197.90	169429	209.90	157	222.95	2556	233.90	548
198.90	11667	210.20	561	224.00	22519	234.90	639
199.95	901	210.95	1581	225.00	5438	235.90	473
201.50	725	211.95	270	225.95	550	236.95	708
202.90	1162	214.90	472	227.00	8918	238.85	351
204.00	5807	215.95	867	227.95	1264	239.90	130

Average of 2.849 to 2.860 min.: 3p55449.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
240.90	544	251.90	74	264.95	1980	283.95	200
242.00	1223	253.00	423	265.85	381	285.00	660
243.00	1237	254.00	730	271.00	136	291.90	91
244.00	17625	255.00	87525	272.00	296	292.90	734

DFTPP3P.M Wed Aug 03 14:41:45 2016 Page: 0

245.00	2419	256.00	12795	272.90	2840	294.00	92
245.95	3093	256.90	1025	273.95	7395	295.00	106
246.90	698	257.95	4983	275.00	38925	295.95	11318
247.90	82	258.90	843	275.95	5186	296.90	1668
248.90	677	259.90	88	277.00	3190	301.90	101
249.90	75	260.90	99	277.95	565	302.95	1263
250.90	76	263.80	155	282.95	408	303.95	340

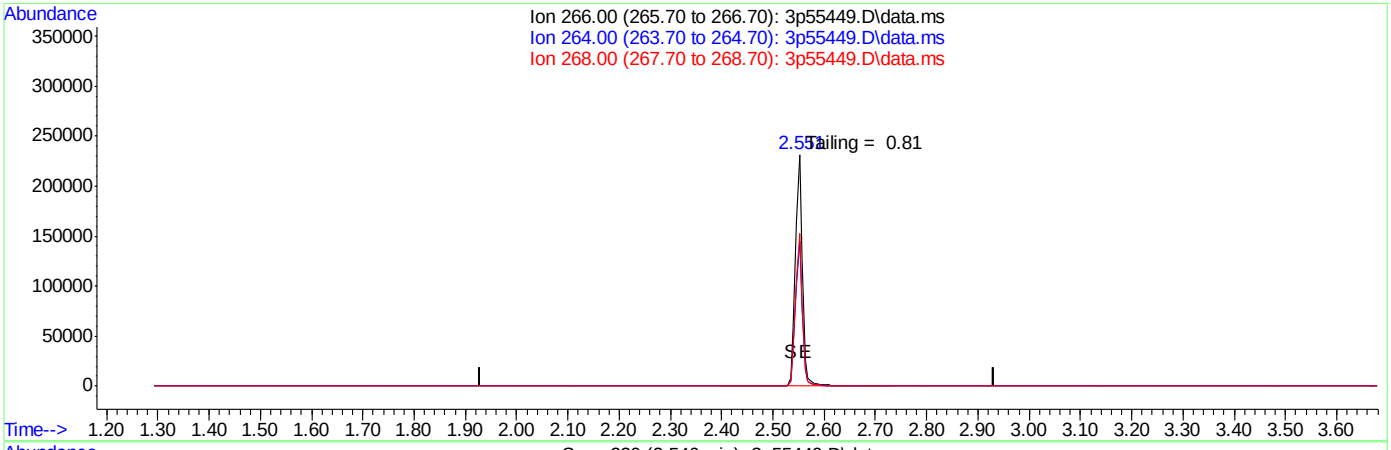
Average of 2.849 to 2.860 min.: 3p55449.D\data.ms
dftpp
Modified:subtracted

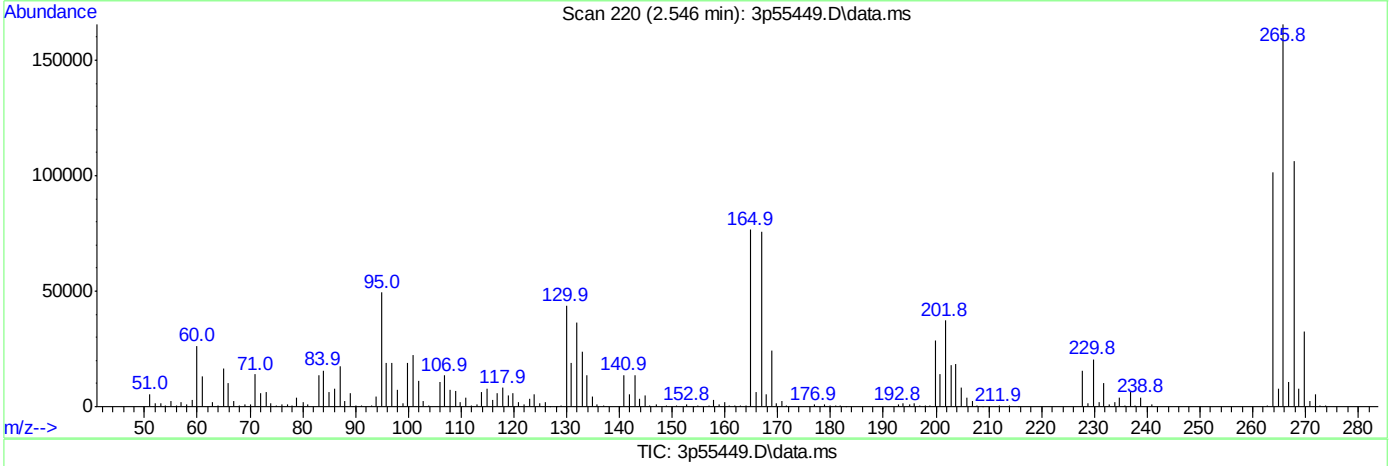
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
308.00	83	332.95	271	365.00	5078	403.95	347
314.00	528	333.95	2254	365.95	842	420.95	979
314.90	1317	334.95	673	370.95	280	421.95	759
316.00	674	340.90	461	372.00	1830	423.00	5983
320.95	276	341.90	73	372.90	458	423.95	1200
321.90	84	345.85	970	382.95	558	424.90	69
323.00	3757	346.90	101	383.90	148	441.00	17774
323.95	706	351.95	1056	389.90	232	442.00	117288
326.90	703	352.95	699	400.90	76	443.00	22466
327.95	375	354.00	1062	401.90	779	444.00	2035
332.00	225	355.05	271	402.95	1082		

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\E3P2536\
Data File : 3p55449.D
Acq On : 3 Aug 2016 11:59 am
Operator : shaniceg
Sample : dftpp
Misc : op95661a,e3p2536
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 03 12:04:52 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPP3P.M
Quant Title : zebron ZB-5msi 30mx0.25mmx0.25um
QLast Update : Wed Mar 02 08:34:25 2016
Response via : Initial Calibration





TIC: 3p55449.D\data.ms

(1) Pentachlorophenol

2.431min (-2.431) 0.00

response 0

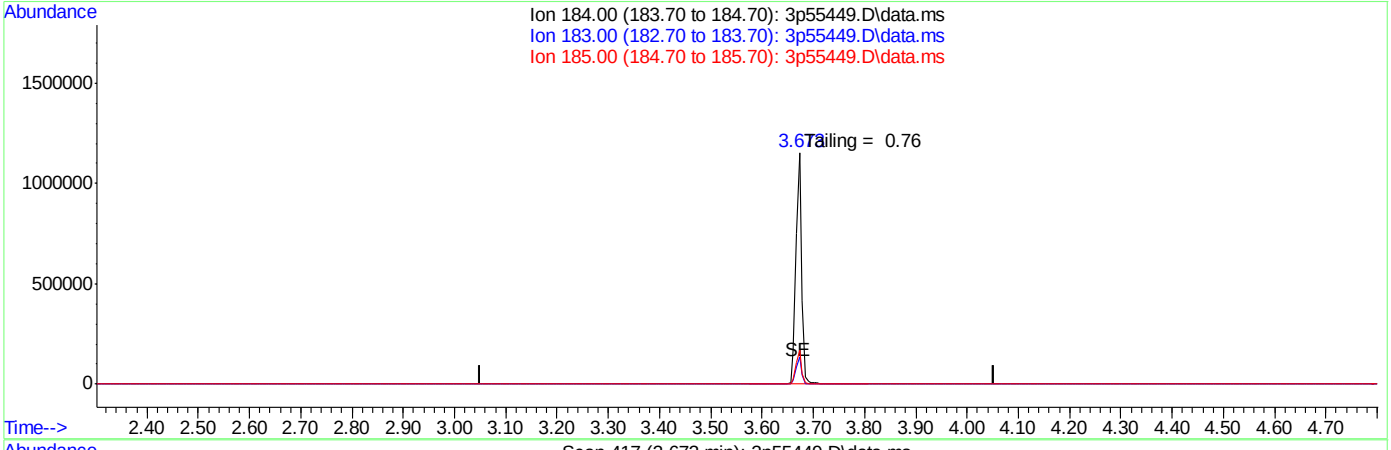
Ion	Exp%	Act%
266.00	100	0.00
264.00	0.00	0.00
268.00	0.00	0.00
0.00	0.00	0.00

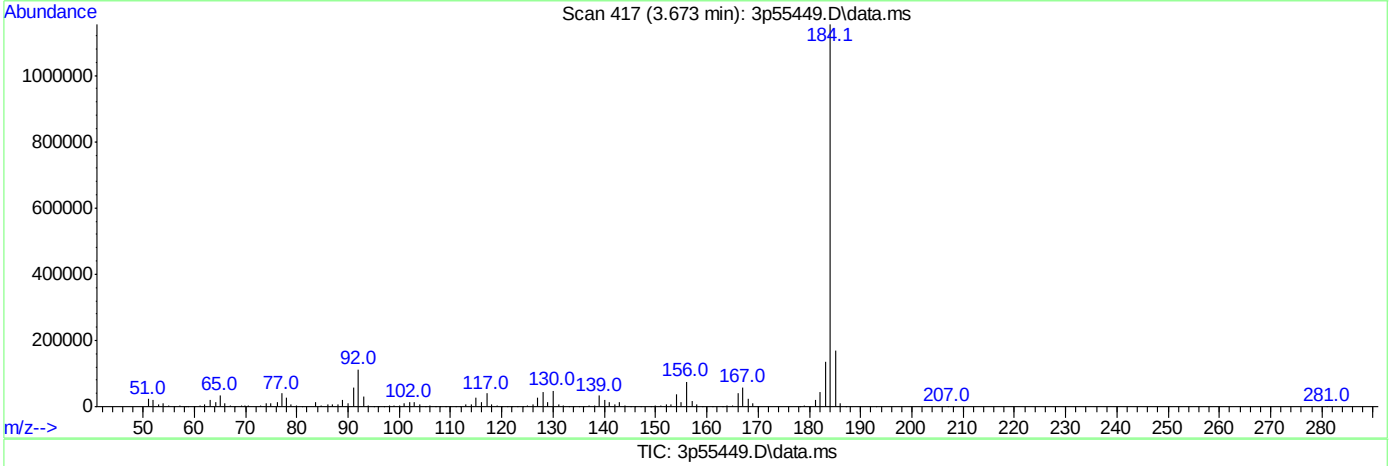
SGS ACCUTEST JC25024

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\E3P2536\
Data File : 3p55449.D
Acq On : 3 Aug 2016 11:59 am
Operator : shaniceg
Sample : dftpp
Misc : op95661a,e3p2536
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 03 12:04:52 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPP3P.M
Quant Title : zebron ZB-5msi 30mx0.25mmx0.25um
QLast Update : Wed Mar 02 08:34:25 2016
Response via : Initial Calibration





TIC: 3p55449.D\data.ms

(2) Benzidine

3.552min (-3.552) 0.00

response 0

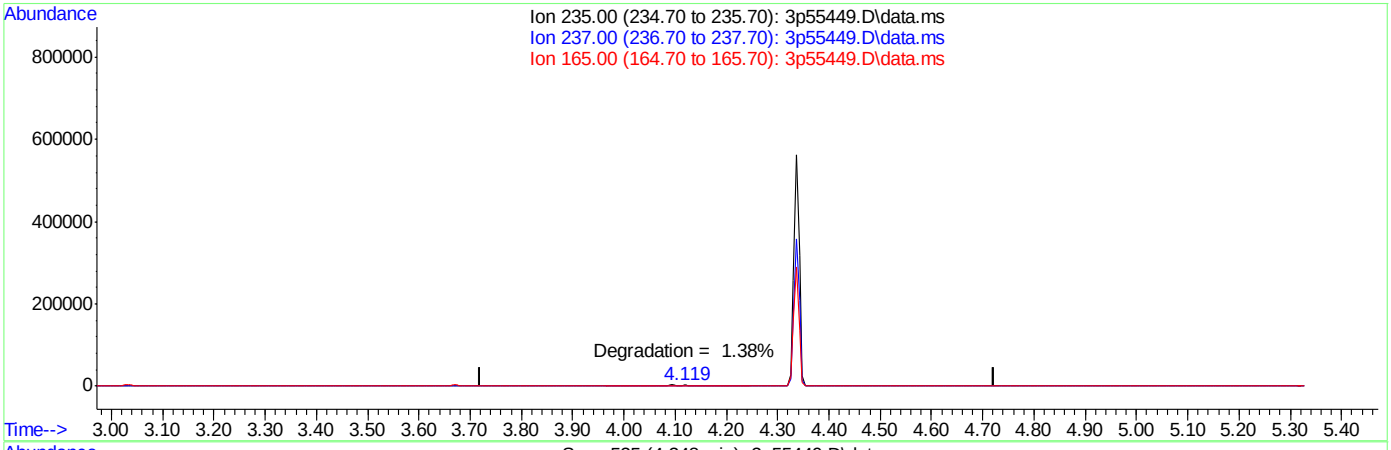
Ion	Exp%	Act%
184.00	100	0.00
183.00	0.00	0.00
185.00	0.00	0.00
0.00	0.00	0.00

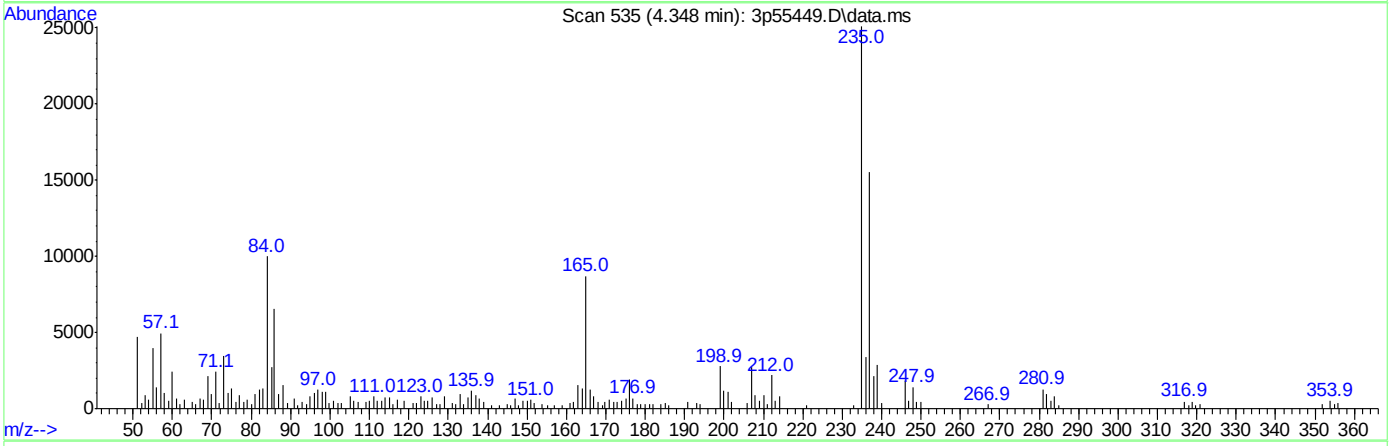
SGS ACCUTEST JC25024

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\E3P2536\
Data File : 3p55449.D
Acq On : 3 Aug 2016 11:59 am
Operator : shaniceg
Sample : dftpp
Misc : op95661a,e3p2536
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 03 12:04:52 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPP3P.M
Quant Title : zebron ZB-5msi 30mx0.25mmx0.25um
QLast Update : Wed Mar 02 08:34:25 2016
Response via : Initial Calibration





TIC: 3p55449.D\data.ms

(3) PP-DDT

4.222min (-4.222) 0.00

response 0

Ion	Exp%	Act%
235.00	100	0.00
237.00	0.00	0.00
165.00	0.00	0.00
0.00	0.00	0.00

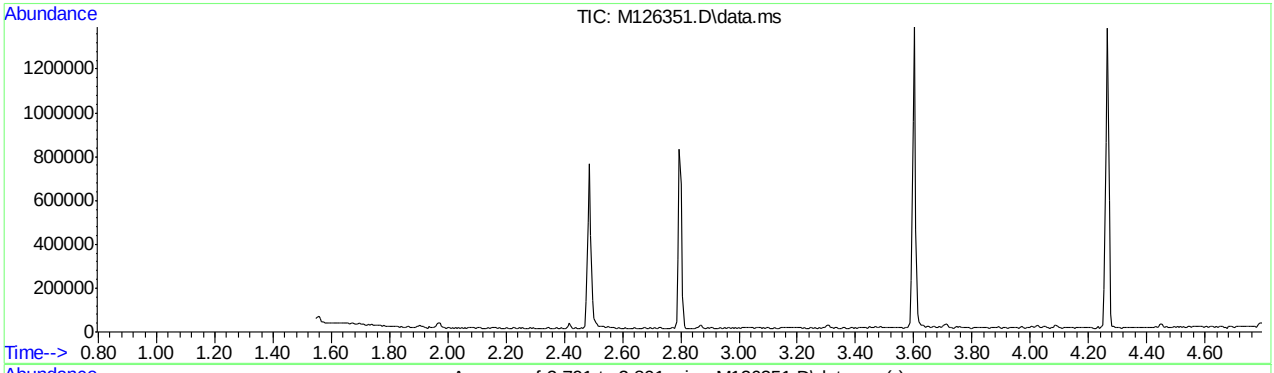
SGS ACCUTEST JC25024

DFTPPR

Data Path : C:\msdchem\1\DATA\EM5363\
Data File : M126351.D
Acq On : 26 Jul 2016 12:25 am
Operator : seanb1
Sample : dftpp
Misc : op95476,em5363
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : C:\MSDCHEM\1\METHODS\DFTPPM.M
Title : Semi Volatile Extractables by GC/MS rxi-5silms 30mTue Jul 12 17:11:27 2016
Last Update : Tue Jul 12 17:11:27 2016



AutoFind: Scans 234, 235, 236; Background Corrected with Scan 230

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	37.6	25985	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	46.0	31782	PASS
70	69	0.00	2	0.5	144	PASS
127	198	40	60	48.2	33304	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	69085	PASS
199	198	5	9	6.7	4659	PASS
275	198	10	30	26.2	18118	PASS
365	198	1	100	3.2	2186	PASS
441	443	0.10	100	76.1	6792	PASS
442	198	40	100	67.1	46351	PASS
443	442	17	23	19.3	8929	PASS

SGS ACCUTEST JC25024

Average of 2.791 to 2.801 min.: M126351.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.90	35	55.15	279	70.05	144	81.95	515
38.05	685	55.95	632	71.00	91	83.10	263
39.00	2572	57.00	1797	71.30	84	85.00	429
41.00	98	61.05	366	73.05	595	86.00	570
42.30	70	62.05	360	74.00	2714	87.00	403
43.05	276	63.00	1283	75.00	4537	87.90	137
45.20	93	64.90	420	77.10	30584	90.20	67
50.05	7572	66.10	70	78.05	2116	90.95	525
51.05	25985	66.80	75	79.00	1897	92.05	612
52.05	1376	67.20	193	80.05	2130	92.95	3624
53.20	97	69.00	31782	80.90	1781	94.00	180

Average of 2.791 to 2.801 min.: M126351.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
94.30	116	103.95	1027	115.00	116	127.00	33304
95.00	99	104.70	121	115.90	146	128.05	2867
96.00	237	104.95	872	116.95	7131	129.00	13819
96.30	84	105.80	113	118.00	609	130.00	1160
97.15	255	107.00	9324	120.30	106	130.95	227
98.00	2636	108.00	1425	121.10	139	132.00	145
98.95	1743	109.00	190	122.00	759	133.10	73
100.05	181	110.00	15581	122.95	962	133.60	76
101.05	1125	111.00	2818	123.85	428	133.95	257
101.50	111	111.90	446	124.95	711	135.05	1148
103.00	554	112.90	112	125.60	143	136.00	510

Average of 2.791 to 2.801 min.: M126351.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
136.95	414	144.50	67	152.05	227	159.40	86
137.30	99	145.30	112	152.60	68	159.90	531
138.10	212	145.85	337	152.90	509	161.00	703
138.90	79	146.20	91	153.90	341	161.80	74
139.70	134	146.95	881	154.10	107	162.05	228
140.00	129	147.90	1707	154.80	143	162.30	83
140.95	1859	148.70	87	155.00	696	162.90	73
141.95	570	148.95	370	156.05	1213	163.70	132
142.80	105	150.20	125	156.90	225	164.90	640
143.00	197	150.70	87	157.95	387	165.90	790
144.10	91	151.05	348	159.05	322	167.00	2385

Average of 2.791 to 2.801 min.: M126351.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
167.95	1609	176.00	111	183.60	141	191.90	883
168.95	467	176.40	109	183.85	309	192.95	1006
169.90	77	176.70	248	185.10	231	193.60	107
170.80	93	176.90	176	186.00	8880	193.90	206
171.00	226	177.95	247	187.00	2274	194.30	73
171.95	387	178.95	2315	187.80	291	194.60	180
172.85	266	179.95	1957	188.40	138	196.00	2567
173.35	227	180.95	936	188.90	99	196.60	543
174.05	847	182.00	187	189.05	447	197.90	69085
174.95	1226	182.90	99	190.95	365	198.90	4659
175.80	204	183.10	75	191.30	152	199.90	441

Average of 2.791 to 2.801 min.: M126351.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
200.70	67	209.80	116	217.95	643	229.90	193
201.20	420	210.55	428	219.40	116	230.95	448
201.50	84	211.10	821	220.95	4181	233.20	88
201.95	217	213.00	71	222.00	335	233.90	168

DFTPPM.M Tue Jul 26 15:33:10 2016 MSM Page: 2

203.00	636	213.80	67	223.00	1120	234.95	360
203.95	2681	214.40	83	224.00	9736	235.70	72
205.05	3946	214.90	236	224.95	2321	235.90	156
206.00	16240	215.80	126	225.90	340	236.30	70
206.90	2389	216.00	190	226.95	4365	237.00	558
207.70	95	216.90	3981	227.95	771	237.75	155
207.95	487	217.60	195	228.95	1108	238.90	127

Average of 2.791 to 2.801 min.: M126351.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
239.85	232	248.70	105	259.00	417	272.95	1493
240.95	209	248.90	338	260.00	72	274.00	3592
242.00	736	250.10	78	261.00	84	275.00	18118
242.80	91	251.50	115	262.70	81	276.00	2400
244.00	8025	252.85	365	264.95	795	276.90	1659
244.80	227	253.10	240	266.10	101	277.80	279
245.00	1156	255.00	39076	267.10	91	278.10	94
245.95	1668	255.95	5484	267.70	90	279.15	193
246.70	159	256.85	418	269.60	72	281.10	87
247.00	267	257.95	1680	271.00	253	282.20	80
248.00	101	258.60	70	271.90	204	282.95	285

Average of 2.791 to 2.801 min.: M126351.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
283.70	76	294.50	68	309.80	68	323.95	309
284.10	86	295.00	73	312.30	73	325.90	67
284.60	84	295.95	5458	314.15	283	326.95	232
284.90	103	296.95	680	314.90	454	328.10	285
285.20	186	300.70	91	315.95	356	329.30	74
287.10	71	301.05	176	316.70	68	331.80	139
288.00	76	301.80	91	318.70	78	332.70	186
289.10	99	302.80	78	320.80	138	332.90	154
291.80	105	303.00	435	321.10	225	333.95	832
292.20	82	303.60	165	321.90	98	334.90	387
293.05	394	303.90	158	322.95	1536	340.70	85

Average of 2.791 to 2.801 min.: M126351.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
341.00	139	362.15	142	372.00	889	417.80	74
341.70	69	362.90	89	372.90	84	420.30	118
342.30	94	364.95	2186	373.10	125	421.00	540
345.90	351	365.80	407	373.80	70	421.95	310
349.70	69	366.20	138	382.70	120	422.95	2870
351.85	623	367.70	68	383.00	234	424.00	442
352.80	103	368.90	103	392.10	121	424.90	117
353.00	189	370.00	67	393.50	73	425.30	90
354.05	586	370.70	105	401.90	394	426.10	105
355.00	70	371.00	154	402.95	484	431.60	93
358.90	89	371.20	94	403.90	116	432.50	72

Average of 2.791 to 2.801 min.: M126351.D\data.ms
dftpp
Modified:subtracted

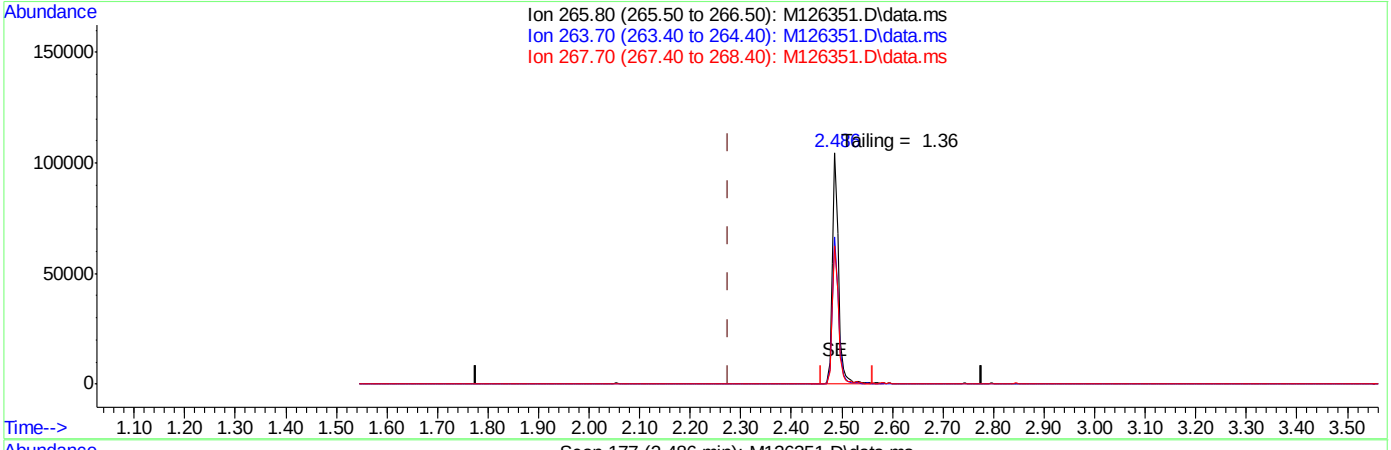
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
434.90	101	443.95	1196				
435.80	74	444.80	71				
436.10	76	452.90	100				
436.60	72	464.70	72				
437.50	142	489.10	68				
438.60	146						
439.00	69						
439.80	184						
441.00	6792						
442.00	46351						
443.00	8929						

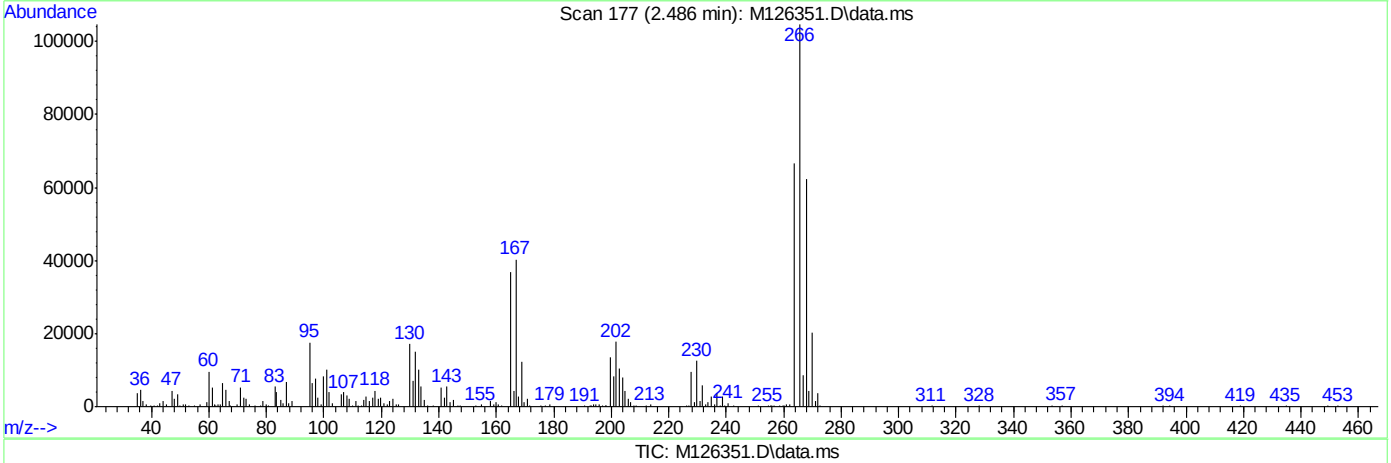
DFTPPM.M Tue Jul 26 15:33:10 2016 MSM Page: 3

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM5363\
Data File : M126351.D
Acq On : 26 Jul 2016 12:25 am
Operator : seanb1
Sample : dftpp
Misc : op95476,em5363
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 26 00:30:24 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPPM.M
Quant Title : Semi Volatile Extractables by GC/MS rxi-5silms 30mTue Jul 12 17:11:27 2016
QLast Update : Tue Jul 12 17:11:27 2016
Response via : Continuing Cal File:





(1) Pentachlorophenol (MC)

2.486min (+0.210) 0.00ppm

response 88893

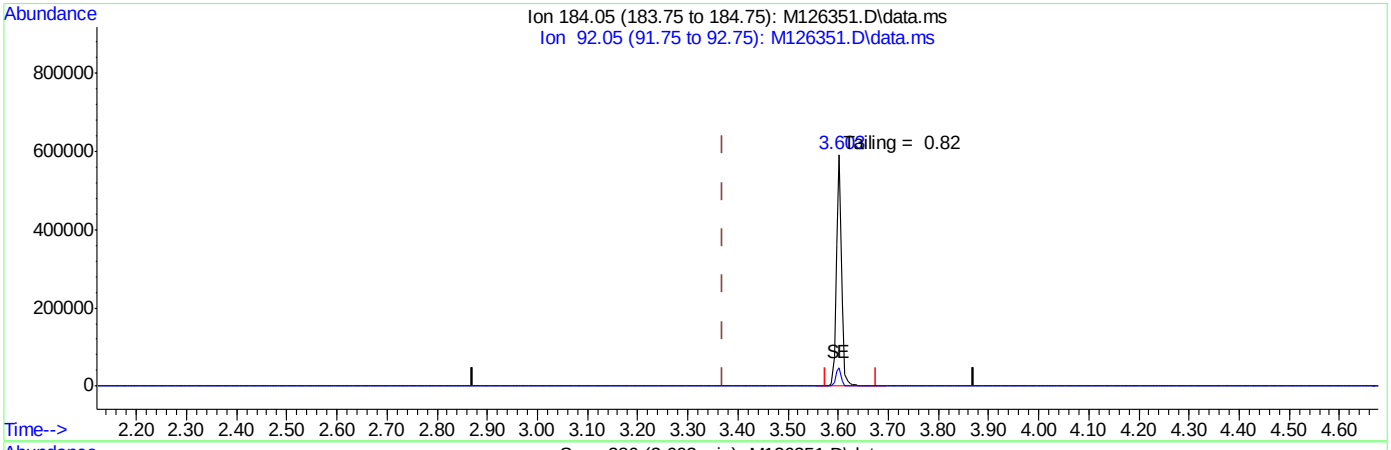
Ion	Exp%	Act%
265.80	100	100
263.70	59.00	63.46
267.70	66.70	59.56
0.00	0.00	0.00

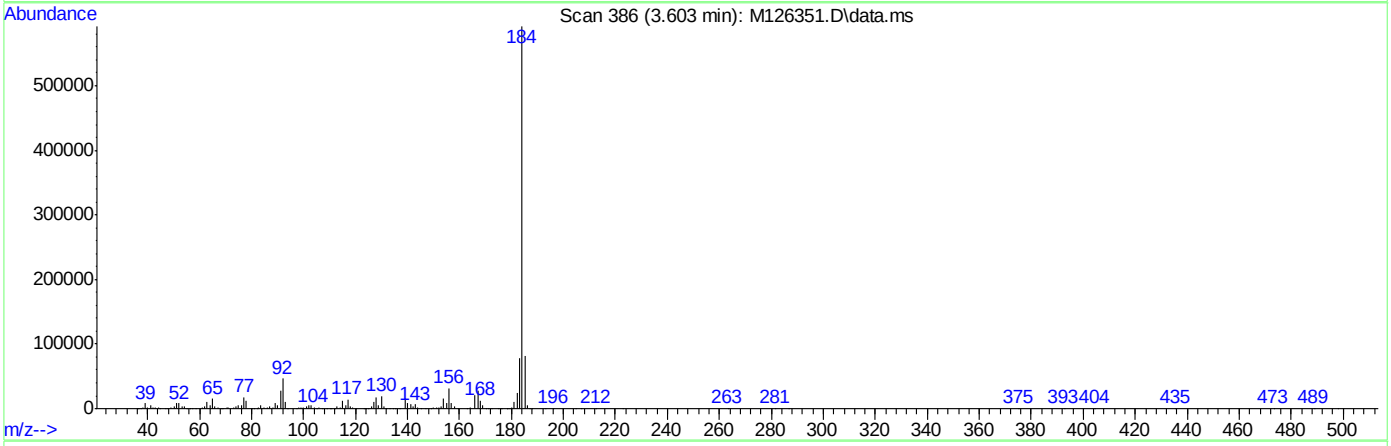
SGS ACCUTEST JC25024

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM5363\
Data File : M126351.D
Acq On : 26 Jul 2016 12:25 am
Operator : seanb1
Sample : dftpp
Misc : op95476,em5363
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 26 00:30:24 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPPM.M
Quant Title : Semi Volatile Extractables by GC/MS rxi-5silms 30mTue Jul 12 17:11:27 2016
QLast Update : Tue Jul 12 17:11:27 2016
Response via : Continuing Cal File:





TIC: M126351.D\data.ms

(2) Benzidine (M)

3.603min (+0.231) 0.00ppm

response 421257

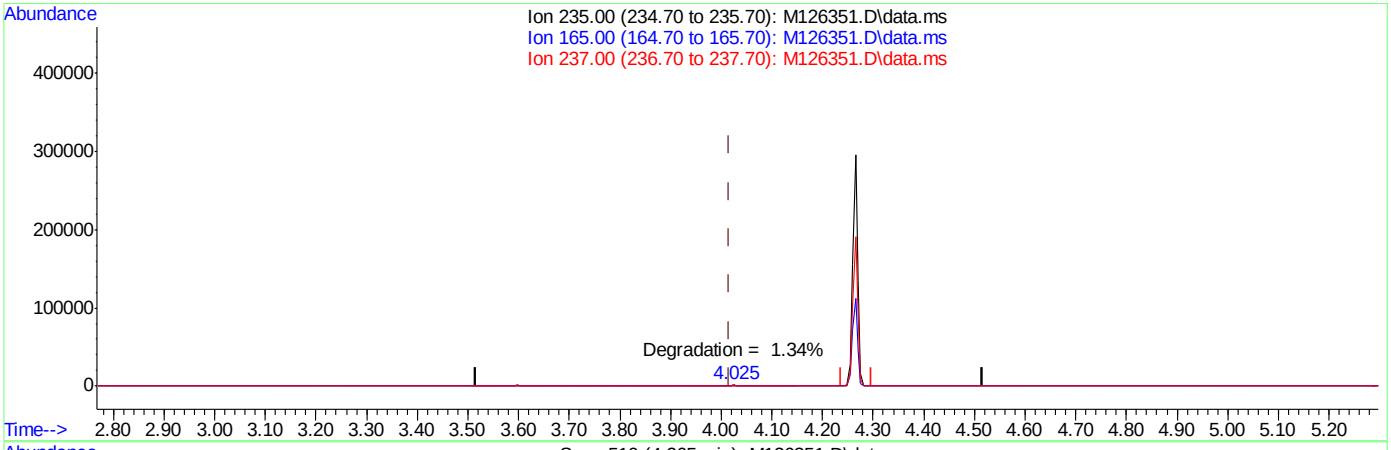
Ion	Exp%	Act%
184.05	100	100
92.05	10.20	7.77
0.00	0.00	0.00
0.00	0.00	0.00

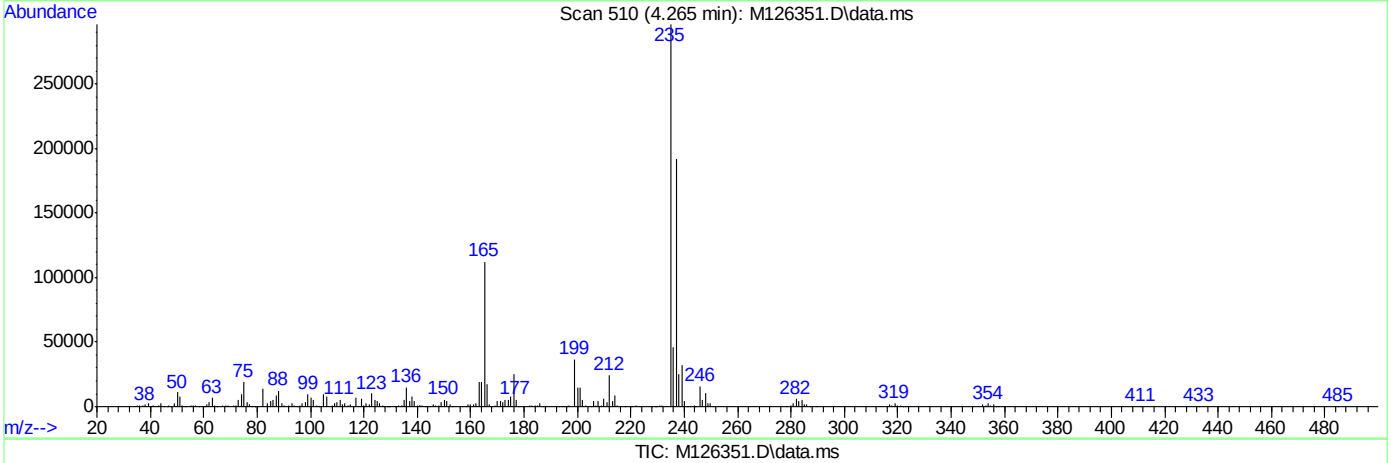
SGS ACCUTEST JC25024

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM5363\
Data File : M126351.D
Acq On : 26 Jul 2016 12:25 am
Operator : seanb1
Sample : dftpp
Misc : op95476,em5363
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 26 00:30:24 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPPM.M
Quant Title : Semi Volatile Extractables by GC/MS rxi-5silms 30mTue Jul 12 17:11:27 2016
QLast Update : Tue Jul 12 17:11:27 2016
Response via : Continuing Cal File:





TIC: M126351.D\data.ms

(3) PP-DDT (MC)

4.265min (+0.248) 0.00ppm

response 202692

Ion	Exp%	Act%
235.00	100	100
165.00	50.00	37.87
237.00	67.20	64.73
0.00	0.00	0.00

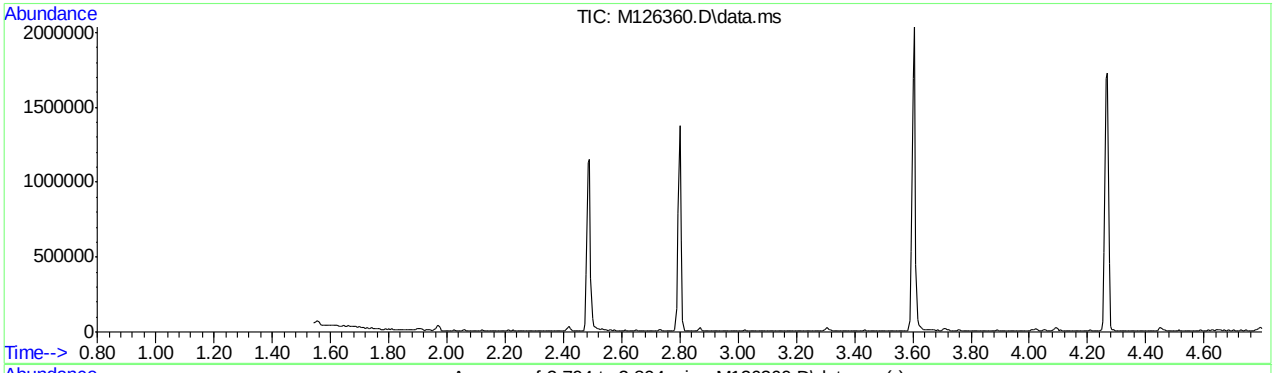
SGS ACCUTEST JC25024

DFTPPR

Data Path : C:\msdchem\1\DATA\EM5364\
Data File : M126360.D
Acq On : 26 Jul 2016 8:39 am
Operator : ashleyd
Sample : dftpp
Misc : op95476,em5364
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : C:\MSDCHEM\1\METHODS\DFTPPM.M
Title : Semi Volatile Extractables by GC/MS rxi-5silms 30mTue Jul 12 17:11:27 2016
Last Update : Tue Jul 12 17:11:27 2016



AutoFind: Scans 235, 236, 237; Background Corrected with Scan 230

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	37.7	38671	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	49.8	51077	PASS
70	69	0.00	2	0.8	402	PASS
127	198	40	60	49.8	51104	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	102642	PASS
199	198	5	9	7.3	7462	PASS
275	198	10	30	26.3	27008	PASS
365	198	1	100	3.3	3427	PASS
441	443	0.10	100	69.4	10619	PASS
442	198	40	100	73.5	75490	PASS
443	442	17	23	20.3	15302	PASS

SGS ACCUTEST JC25024

Average of 2.794 to 2.804 min.: M126360.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.95	192	51.10	38671	64.10	281	76.05	2111
38.10	870	52.05	2120	65.05	625	77.10	46488
39.10	3682	55.00	484	66.60	87	78.05	3341
40.05	281	56.00	1461	66.80	70	79.00	3329
40.85	169	57.00	2612	67.10	87	80.00	2028
41.10	98	58.05	278	69.00	51077	81.00	3182
41.60	73	59.00	74	69.90	402	81.90	399
42.00	75	59.80	145	70.75	165	82.10	549
43.10	54	61.10	549	73.00	540	83.00	699
49.05	58	62.05	701	74.10	4010	85.00	700
50.10	11407	63.05	1720	75.00	6786	86.00	966

Average of 2.794 to 2.804 min.: M126360.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
87.05	680	97.10	66	105.90	127	116.10	385
87.95	270	98.00	4156	107.00	14734	117.00	9995
89.00	106	99.05	3109	107.95	2389	118.00	737
89.20	109	99.95	463	108.80	284	119.00	116
89.80	77	101.00	1920	110.00	25515	119.80	150
91.00	1093	101.90	139	111.00	3994	122.05	976
91.95	896	102.95	467	111.70	131	122.95	1400
93.00	5144	103.20	86	112.00	496	123.85	424
94.00	451	103.95	1030	112.80	67	125.00	762
95.80	119	104.60	138	115.00	224	125.70	247
96.00	295	105.00	990	115.80	74	127.00	51104

Average of 2.794 to 2.804 min.: M126360.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
128.00	4487	136.00	483	145.70	104	151.35	378
128.95	19725	137.00	653	145.90	106	152.10	160
129.95	1538	137.70	191	146.00	133	153.00	585
131.05	214	137.90	221	146.15	230	153.90	672
132.10	215	140.95	2281	147.05	1350	155.00	1291
132.60	70	142.05	857	148.00	2822	155.95	1884
133.10	105	142.70	94	149.05	570	157.00	488
133.90	493	142.95	696	149.90	89	157.95	310
134.30	82	144.30	90	150.10	170	158.60	95
134.95	1510	144.70	83	150.65	202	158.90	216
135.70	74	145.10	228	151.00	120	159.10	96

Average of 2.794 to 2.804 min.: M126360.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
159.95	669	170.00	257	179.00	3487	188.20	124
160.95	1203	171.05	239	180.00	2427	188.95	790
161.85	672	171.70	114	180.95	1209	190.10	155
164.00	270	172.05	364	182.00	133	190.95	639
164.70	226	173.00	747	182.20	84	191.20	197
164.95	810	174.00	1139	182.80	177	191.90	504
165.30	108	174.95	1523	183.90	387	192.10	656
166.05	746	176.05	727	185.00	2034	193.05	1561
166.95	4740	176.60	149	186.00	15092	194.00	419
167.95	2213	176.95	833	186.95	3681	194.90	134
169.05	346	178.05	279	187.90	180	195.10	467

Average of 2.794 to 2.804 min.: M126360.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
195.95	3943	205.00	6297	214.90	355	224.95	4027
197.90	102642	206.00	27469	215.60	80	226.00	580
198.90	7462	207.05	4075	216.00	641	227.00	5742
199.70	138	207.90	430	216.95	6600	228.00	868

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200.05	623	208.90	361	217.95	1138	228.90	1196
201.40	877	209.90	592	219.10	105	229.75	282
201.70	97	210.20	180	219.80	152	230.00	90
202.60	104	210.60	186	220.90	6348	230.30	104
202.90	750	211.00	973	222.20	216	230.95	431
203.10	183	211.55	337	222.90	1829	233.00	102
204.00	3877	213.80	77	224.00	14704	233.70	252

Average of 2.794 to 2.804 min.: M126360.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
234.10	119	244.00	12842	252.10	155	265.95	236
234.90	476	245.00	1686	252.50	174	269.50	91
235.90	172	245.90	1765	253.05	803	269.70	97
236.90	395	246.85	541	255.00	59642	270.80	218
237.90	92	247.30	67	256.00	9101	271.10	136
238.80	130	247.90	86	257.00	718	271.90	79
239.30	161	248.35	157	258.00	2985	272.20	147
240.70	91	249.00	448	258.95	521	272.95	2208
241.00	303	250.50	75	259.85	155	273.95	5104
242.00	1158	251.10	130	264.00	96	274.95	27008
243.10	1181	251.60	67	264.95	1423	276.00	3827

Average of 2.794 to 2.804 min.: M126360.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
276.90	2194	293.60	69	307.10	89	320.40	76
277.95	264	294.30	104	308.00	76	320.70	69
278.80	81	295.95	7599	310.00	85	321.05	365
282.00	83	296.95	1119	312.00	77	322.10	76
282.80	144	299.30	90	312.90	150	322.95	2595
283.10	237	300.20	72	313.75	254	323.95	501
284.10	122	301.00	85	314.05	293	325.70	135
285.00	186	301.70	127	314.85	941	326.75	251
289.70	67	302.05	232	316.00	594	327.00	295
292.05	171	302.95	1133	316.90	142	328.00	500
292.95	566	303.85	288	318.00	82	331.70	82

Average of 2.794 to 2.804 min.: M126360.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
331.90	110	350.80	125	365.60	89	373.90	70
332.80	97	351.95	833	365.85	512	376.90	71
333.90	192	352.90	665	366.30	80	383.05	323
334.05	857	353.95	729	367.10	73	384.00	101
334.95	408	354.90	98	369.90	176	389.90	67
338.90	68	359.70	79	370.70	162	391.10	150
340.90	318	360.00	94	370.90	76	392.15	208
342.90	118	361.70	84	371.20	130	397.80	69
344.00	80	362.80	168	371.80	141	401.00	80
345.90	554	363.50	81	372.00	974	401.85	503
347.80	108	364.95	3427	372.95	307	402.95	861

Average of 2.794 to 2.804 min.: M126360.D\data.ms
dftpp
Modified:subtracted

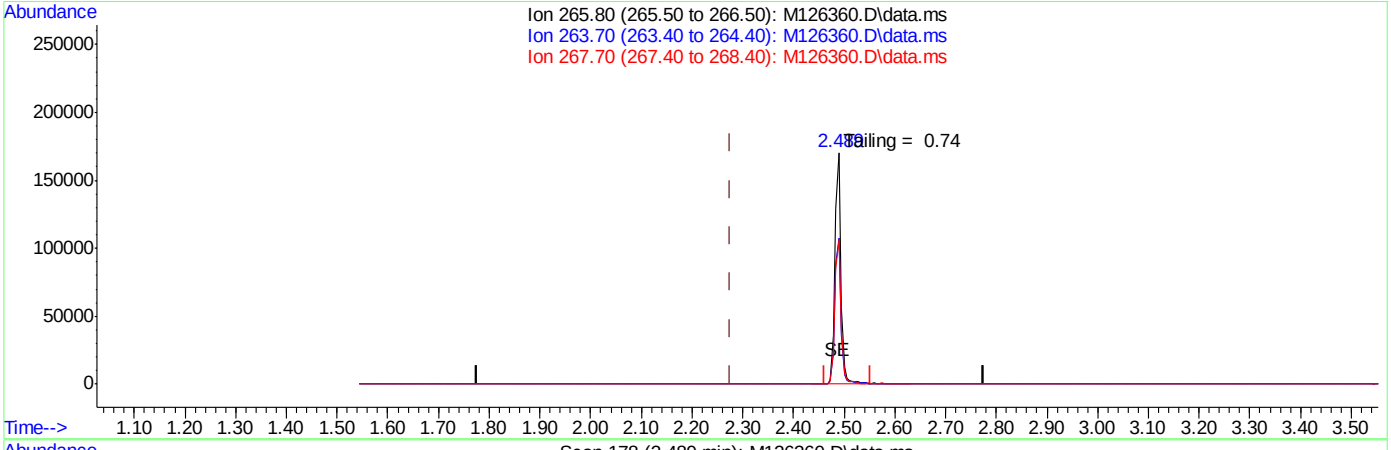
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
404.10	328	428.70	75	436.40	68	444.00	1322
416.90	69	429.80	74	436.60	99	448.00	85
417.40	111	430.20	66	437.20	87	454.20	88
419.30	84	430.80	80	437.60	111	500.00	71
420.90	611	432.35	158	438.55	373		
421.80	188	432.95	179	439.00	140		
422.05	383	433.50	84	439.40	133		
422.95	5418	435.20	124	439.70	97		
423.95	913	435.40	97	441.00	10619		
425.60	67	435.80	142	442.00	75490		
427.00	72	436.00	97	443.00	15302		

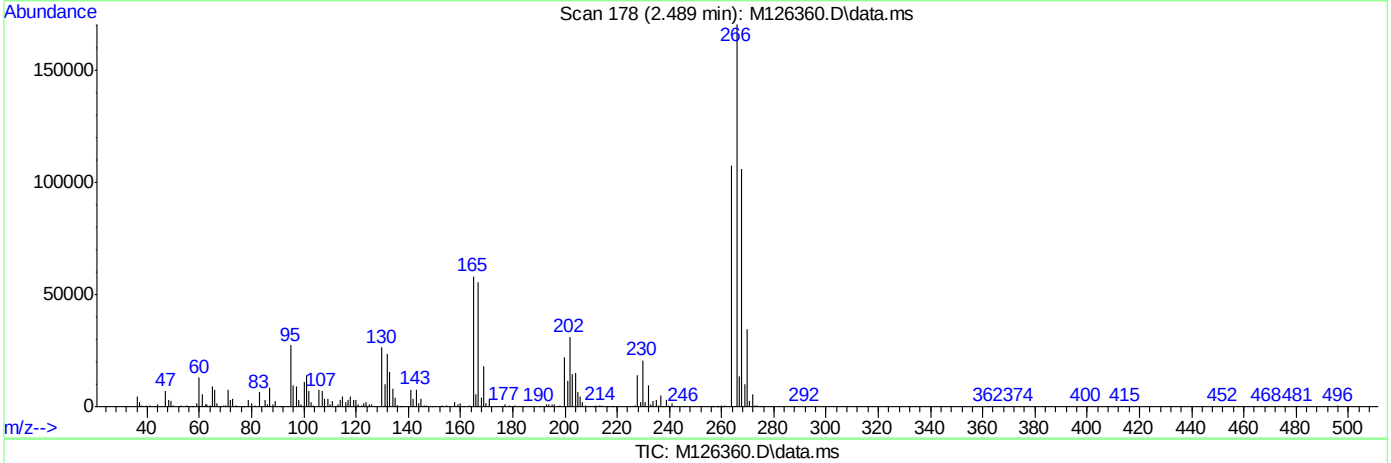
DFTPPM.M Tue Jul 26 16:29:42 2016 MSM Page: 3

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM5364\
Data File : M126360.D
Acq On : 26 Jul 2016 8:39 am
Operator : ashleyd
Sample : dftpp
Misc : op95476,em5364
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 26 08:45:17 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPPM.M
Quant Title : Semi Volatile Extractables by GC/MS rxi-5silms 30mTue Jul 12 17:11:27 2016
QLast Update : Tue Jul 12 17:11:27 2016
Response via : Continuing Cal File:





(1) Pentachlorophenol (MC)

2.489min (+0.213) 0.00ppm

response 136178

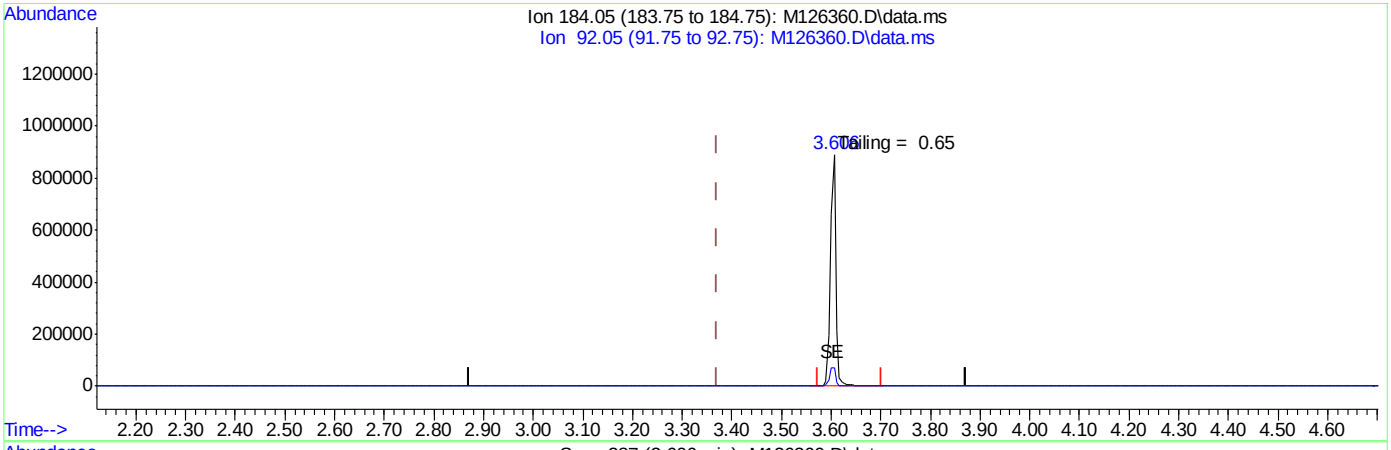
Ion	Exp%	Act%
265.80	100	100
263.70	59.00	63.04
267.70	66.70	61.96
0.00	0.00	0.00

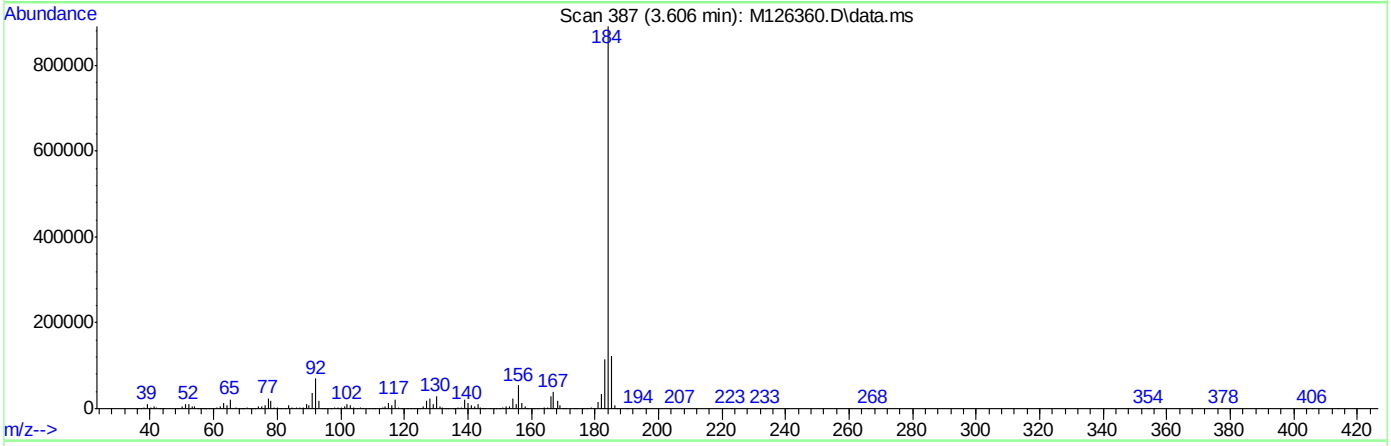
SGS ACCUTEST JC25024

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM5364\
Data File : M126360.D
Acq On : 26 Jul 2016 8:39 am
Operator : ashleyd
Sample : dftpp
Misc : op95476,em5364
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 26 08:45:17 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPPM.M
Quant Title : Semi Volatile Extractables by GC/MS rxi-5silms 30mTue Jul 12 17:11:27 2016
QLast Update : Tue Jul 12 17:11:27 2016
Response via : Continuing Cal File:





TIC: M126360.D\data.ms

(2) Benzidine (M)

3.606min (+0.234) 0.00ppm

response 665475

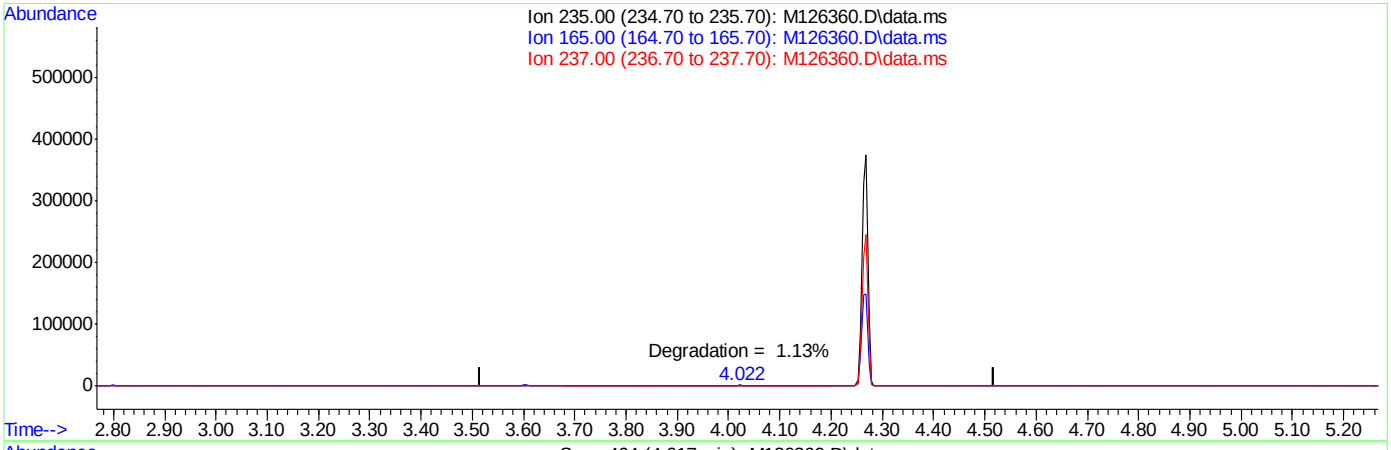
Ion	Exp%	Act%
184.05	100	100
92.05	10.20	7.86
0.00	0.00	0.00
0.00	0.00	0.00

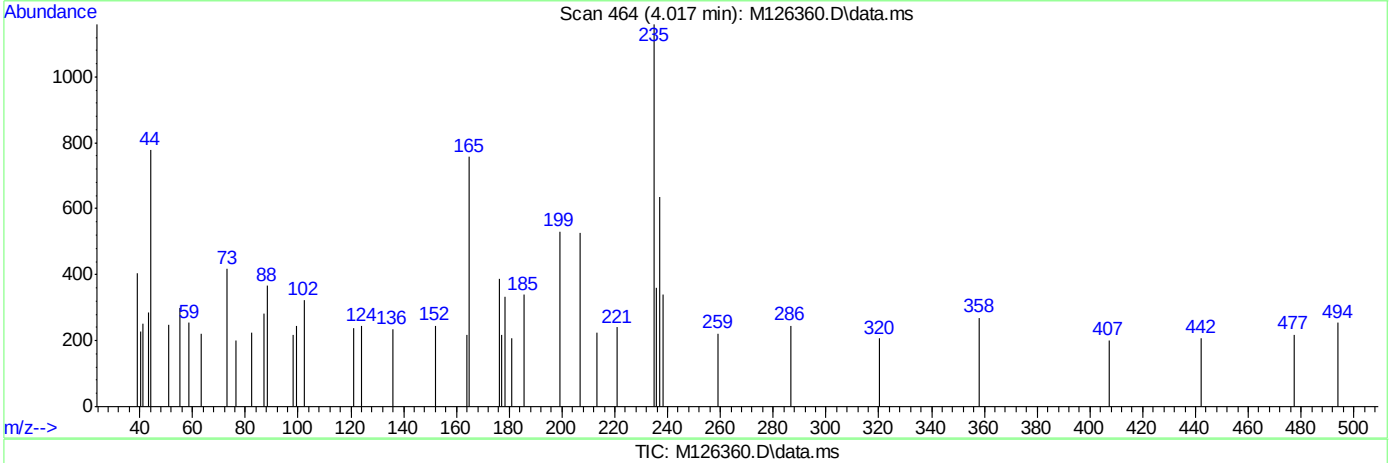
SGS ACCUTEST JC25024

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM5364\
Data File : M126360.D
Acq On : 26 Jul 2016 8:39 am
Operator : ashleyd
Sample : dftpp
Misc : op95476,em5364
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 26 08:45:17 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPPM.M
Quant Title : Semi Volatile Extractables by GC/MS rxi-5silms 30mTue Jul 12 17:11:27 2016
QLast Update : Tue Jul 12 17:11:27 2016
Response via : Continuing Cal File:





TIC: M126360.D\data.ms

(3) PP-DDT (MC)

4.018min 0.00ppm d

response 0

Ion	Exp%	Act%
235.00	100	0.00
165.00	50.00	0.00
237.00	67.20	0.00
0.00	0.00	0.00

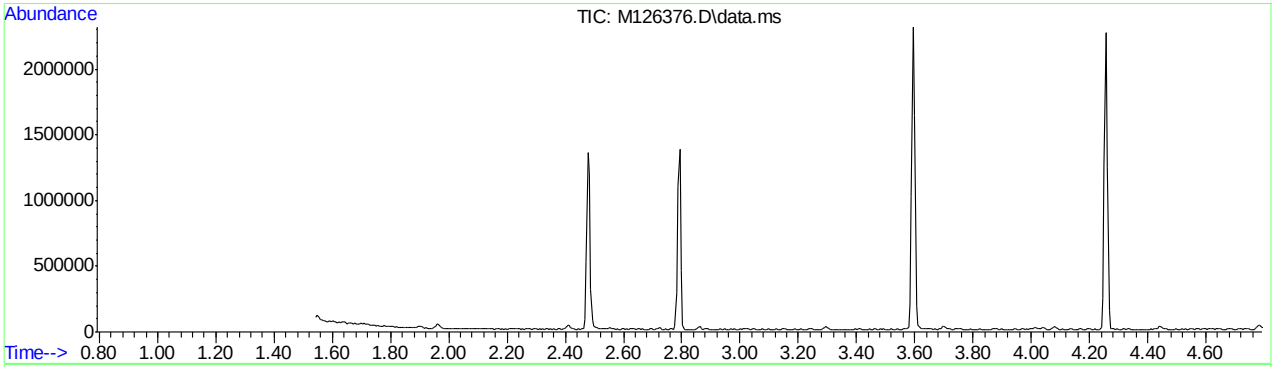
SGS ACCUTEST JC25024

DFTPPR

Data Path : C:\msdchem\1\DATA\EM5365\
Data File : M126376.D
Acq On : 26 Jul 2016 6:13 pm
Operator : seanb1
Sample : dftpp
Misc : op95476,em5365
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : C:\MSDCHEM\1\METHODS\DFTPPM.M
Title : Semi Volatile Extractables by GC/MS rxi-5silms 30mTue Jul 12 17:11:27 2016
Last Update : Tue Jul 12 17:11:27 2016



AutoFind: Scans 234, 235, 236; Background Corrected with Scan 229

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	37.6	40298	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	50.9	54492	PASS
70	69	0.00	2	0.3	156	PASS
127	198	40	60	51.5	55149	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	107112	PASS
199	198	5	9	6.9	7411	PASS
275	198	10	30	27.3	29209	PASS
365	198	1	100	3.2	3468	PASS
441	443	0.10	100	85.1	12730	PASS
442	198	40	100	77.7	83240	PASS
443	442	17	23	18.0	14958	PASS

SGS ACCUTEST JC25024

Average of 2.787 to 2.798 min.: M126376.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
37.00	219	51.05	40298	61.80	104	77.00	47962
37.20	122	52.05	1730	62.05	671	78.10	3185
38.00	505	52.80	134	63.00	1859	79.00	3625
39.05	3802	55.05	637	63.90	268	80.00	2507
40.00	413	55.90	1317	65.10	1035	81.00	3433
40.20	119	57.00	3173	69.00	54492	82.05	808
41.05	281	58.10	278	70.00	156	82.80	106
41.90	74	59.70	94	70.60	81	83.05	792
43.15	197	60.10	168	73.10	600	85.00	542
44.70	73	61.00	437	74.00	4500	85.95	750
50.05	11453	61.20	127	75.00	8578	86.95	607

Average of 2.787 to 2.798 min.: M126376.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
87.95	434	100.05	193	111.00	4265	123.95	767
88.80	74	100.95	2004	112.00	633	124.95	903
90.90	956	102.15	165	112.90	138	127.00	55149
92.00	942	102.80	170	114.30	144	128.00	5009
93.00	5679	103.10	463	114.80	77	129.00	22215
93.70	231	104.00	1383	117.00	10038	129.95	1974
93.95	253	105.00	1416	118.00	988	131.00	396
96.00	283	105.90	382	118.90	138	132.10	150
97.05	249	107.00	15273	119.95	282	133.10	72
97.90	3664	107.95	2255	122.00	1050	133.90	376
99.00	3629	110.00	25501	122.95	1479	134.30	72

Average of 2.787 to 2.798 min.: M126376.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
134.95	1593	144.30	74	152.95	735	162.00	102
135.95	672	145.20	232	153.95	790	163.85	217
136.95	523	145.90	571	154.95	1457	164.90	796
137.70	169	147.00	1707	156.00	2291	166.00	748
138.10	219	147.95	2772	157.00	300	167.00	4780
139.50	68	148.95	615	157.30	259	168.00	2519
139.90	228	150.90	205	157.90	488	168.80	216
140.90	2585	151.10	361	158.95	361	169.00	217
142.05	1035	151.40	144	160.00	919	169.90	160
142.95	646	152.20	88	161.00	1149	170.10	135
144.10	69	152.50	113	161.80	84	170.40	126

Average of 2.787 to 2.798 min.: M126376.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
171.00	141	180.00	2624	190.00	224	199.85	703
171.35	176	181.00	1688	190.95	370	200.90	104
171.95	392	181.80	92	191.30	100	201.50	885
172.40	142	182.05	252	192.00	1559	202.95	1065
173.05	514	182.90	125	193.00	1346	204.00	4407
173.95	1160	183.85	479	194.00	479	205.00	6561
175.00	1835	185.00	1952	194.65	245	206.00	28294
175.95	783	186.00	14927	195.00	367	206.95	3518
176.95	988	187.00	3892	195.95	4216	208.05	875
177.80	113	188.05	389	197.90	107112	208.90	298
178.95	3605	189.00	834	198.90	7411	209.90	171

Average of 2.787 to 2.798 min.: M126376.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
210.10	219	217.95	1252	225.80	177	235.00	607
210.80	575	218.75	182	227.00	6023	236.00	341
211.00	904	219.20	78	227.90	804	236.30	89
212.10	163	219.75	279	228.90	1069	236.90	505

DFTPPM.M Wed Jul 27 08:35:50 2016 MSM Page: 2

213.40	92	220.00	143	229.80	83	237.70	114
214.70	107	221.00	6238	230.00	141	238.85	220
215.00	118	221.60	660	231.00	356	239.85	297
215.20	100	221.95	887	231.90	72	240.90	236
215.70	366	222.95	995	232.60	79	241.90	886
215.90	356	224.00	15296	232.90	158	242.90	281
216.90	7191	225.00	3852	233.95	382	243.10	274

Average of 2.787 to 2.798 min.: M126376.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
244.00	12802	252.30	92	264.90	1375	276.00	3698
244.95	1509	252.80	605	266.00	433	276.95	2332
245.90	2559	253.00	142	266.70	100	277.90	202
246.75	396	255.00	61277	267.60	104	278.10	69
247.70	236	256.00	9706	268.10	72	278.80	101
248.00	68	257.05	703	270.00	74	282.10	80
248.95	504	257.95	3688	270.60	106	282.95	319
249.75	160	258.95	697	271.30	81	283.90	77
250.80	241	259.80	86	272.90	2494	285.05	574
251.10	119	261.00	77	274.00	5271	288.80	100
251.95	285	263.85	240	275.00	29209	291.75	203

Average of 2.787 to 2.798 min.: M126376.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
292.95	667	304.80	94	321.40	80	333.80	439
294.15	194	307.80	100	321.70	139	333.95	955
294.70	115	310.05	217	322.00	81	335.00	148
295.95	7739	312.95	202	323.00	3184	340.20	77
297.00	917	313.60	279	323.95	598	340.70	105
299.80	96	314.05	320	325.10	72	341.00	334
301.70	120	314.80	166	326.90	499	341.90	173
302.00	127	314.95	726	327.90	252	342.60	90
303.00	1425	315.70	164	328.80	105	345.95	673
303.90	97	316.00	540	331.85	298	346.90	87
304.05	264	321.15	444	332.90	297	351.00	70

Average of 2.787 to 2.798 min.: M126376.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
352.00	934	364.90	3468	382.90	386	415.10	73
353.00	576	365.80	133	383.85	179	417.10	79
353.80	243	365.95	432	384.10	68	419.10	72
354.00	846	368.70	80	387.80	100	419.80	78
354.40	131	369.70	79	389.85	286	421.00	826
354.70	136	370.80	151	391.00	190	421.95	626
354.90	143	372.00	1372	392.00	106	422.95	5003
357.90	79	372.70	213	400.70	78	423.95	1398
358.90	76	373.00	210	401.95	575	424.90	261
362.90	94	377.00	153	402.95	972	427.20	105
363.60	70	381.70	82	403.90	443	429.20	116

Average of 2.787 to 2.798 min.: M126376.D\data.ms
dftpp
Modified:subtracted

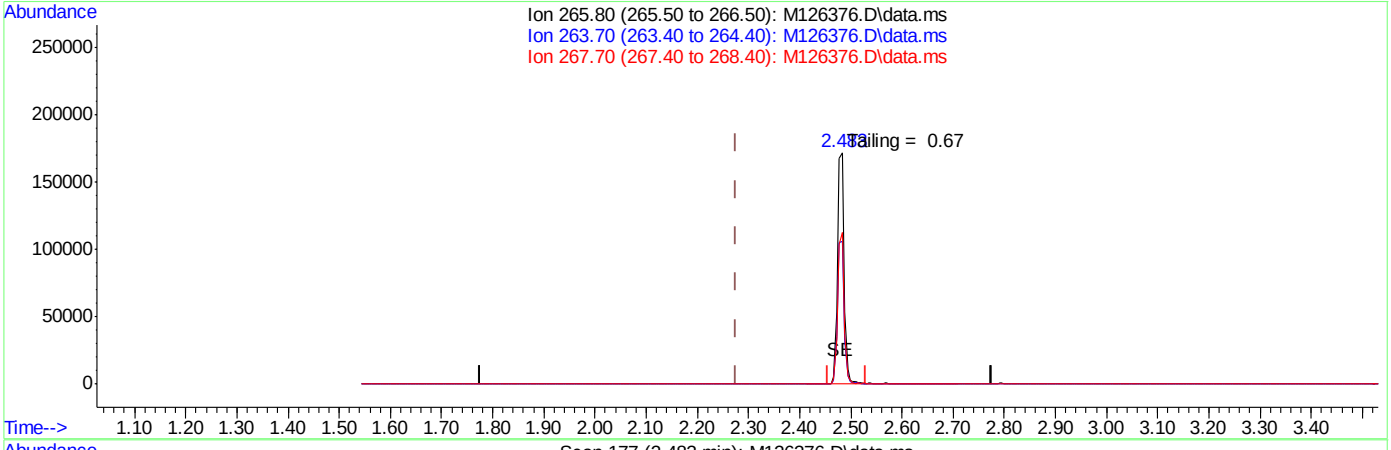
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
431.30	68	437.10	81	445.00	103		
431.90	90	437.45	138	454.90	86		
432.40	70	438.10	121	468.90	84		
433.20	124	438.30	227	473.00	69		
433.80	123	439.00	430				
434.10	90	439.70	117				
434.40	92	440.00	136				
435.20	139	440.95	12730				
435.70	264	442.00	83240				
436.50	97	443.00	14958				
436.80	200	443.95	1572				

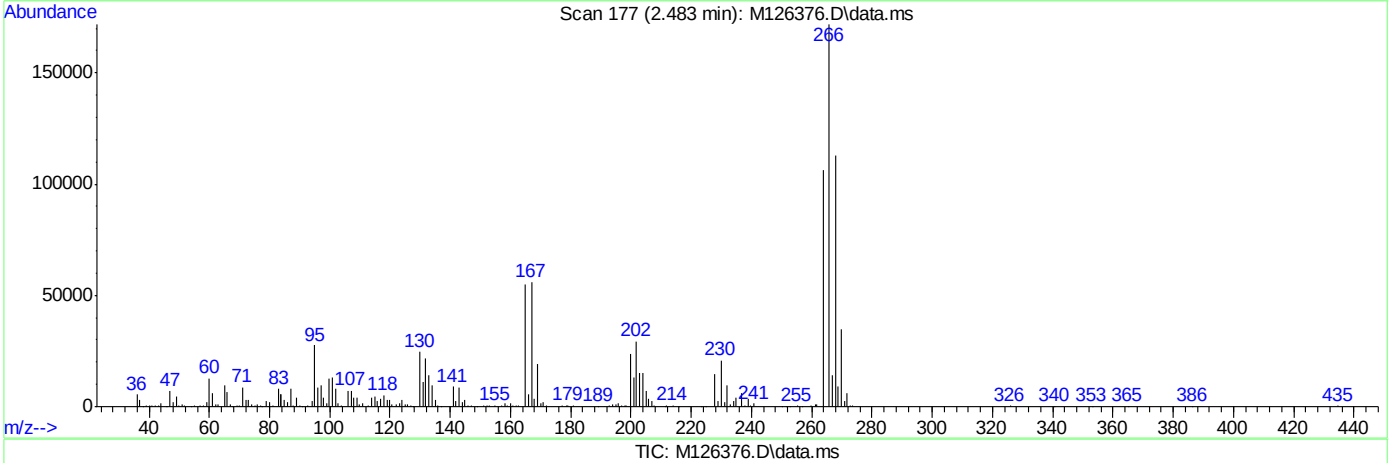
DFTPPM.M Wed Jul 27 08:35:50 2016 MSM Page: 3

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM5365\
Data File : M126376.D
Acq On : 26 Jul 2016 6:13 pm
Operator : seanb1
Sample : dftpp
Misc : op95476,em5365
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 26 18:19:14 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPPM.M
Quant Title : Semi Volatile Extractables by GC/MS rxi-5silms 30mTue Jul 12 17:11:27 2016
QLast Update : Tue Jul 12 17:11:27 2016
Response via : Continuing Cal File:





TIC: M126376.D\data.ms

(1) Pentachlorophenol (MC)

2.483min (+0.207) 0.00ppm

response 151596

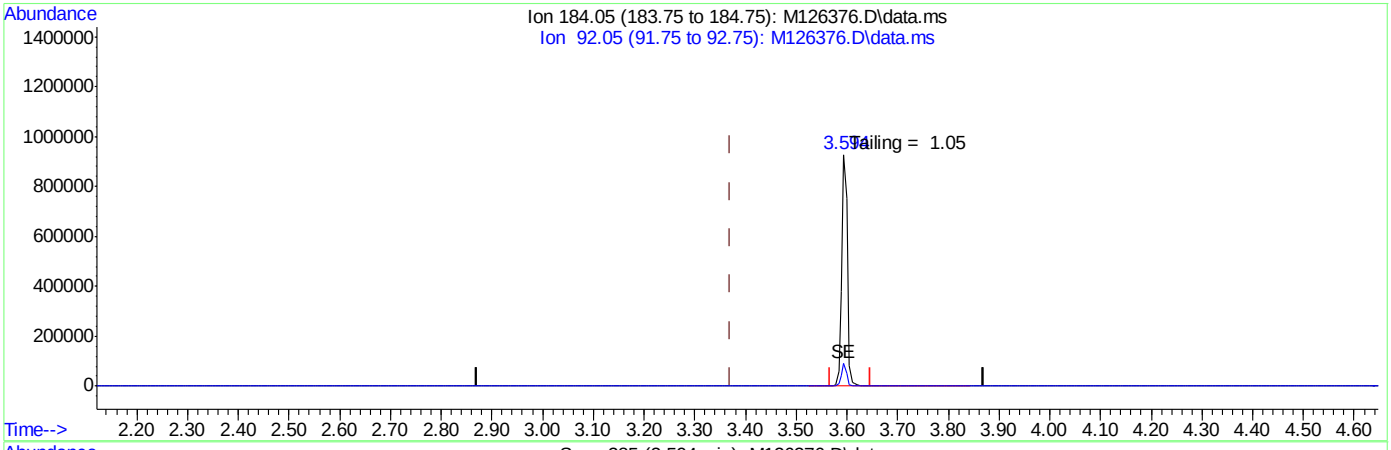
Ion	Exp%	Act%
265.80	100	100
263.70	59.00	61.68
267.70	66.70	65.61
0.00	0.00	0.00

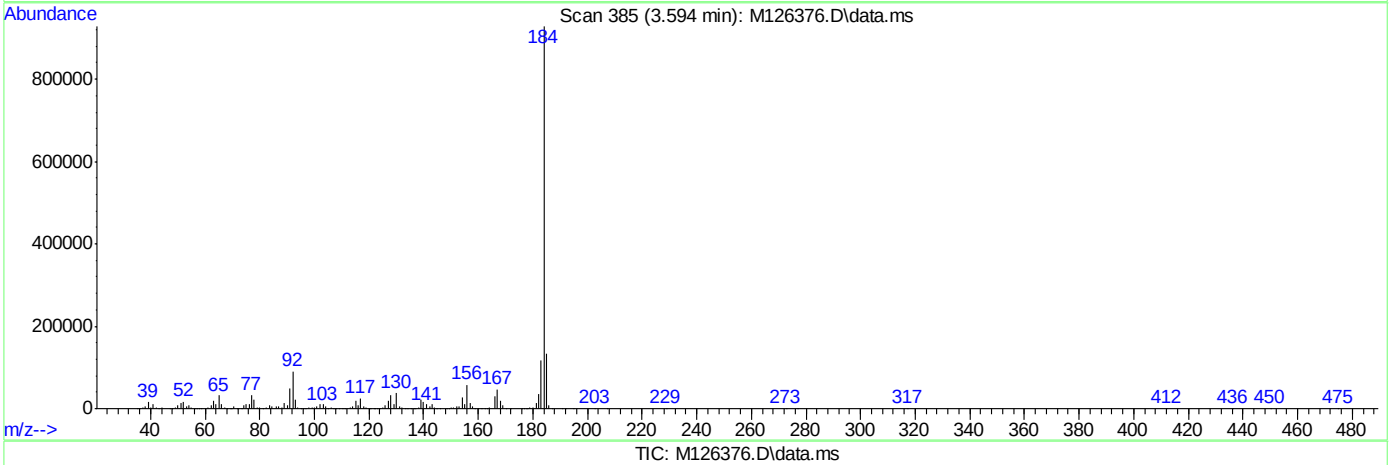
SGS ACCUTEST JC25024

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM5365\
Data File : M126376.D
Acq On : 26 Jul 2016 6:13 pm
Operator : seanb1
Sample : dftpp
Misc : op95476,em5365
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 26 18:19:14 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPPM.M
Quant Title : Semi Volatile Extractables by GC/MS rxi-5silms 30mTue Jul 12 17:11:27 2016
QLast Update : Tue Jul 12 17:11:27 2016
Response via : Continuing Cal File:





TIC: M126376.D\data.ms

(2) Benzidine (M)

3.594min (+0.223) 0.00ppm

response 721341

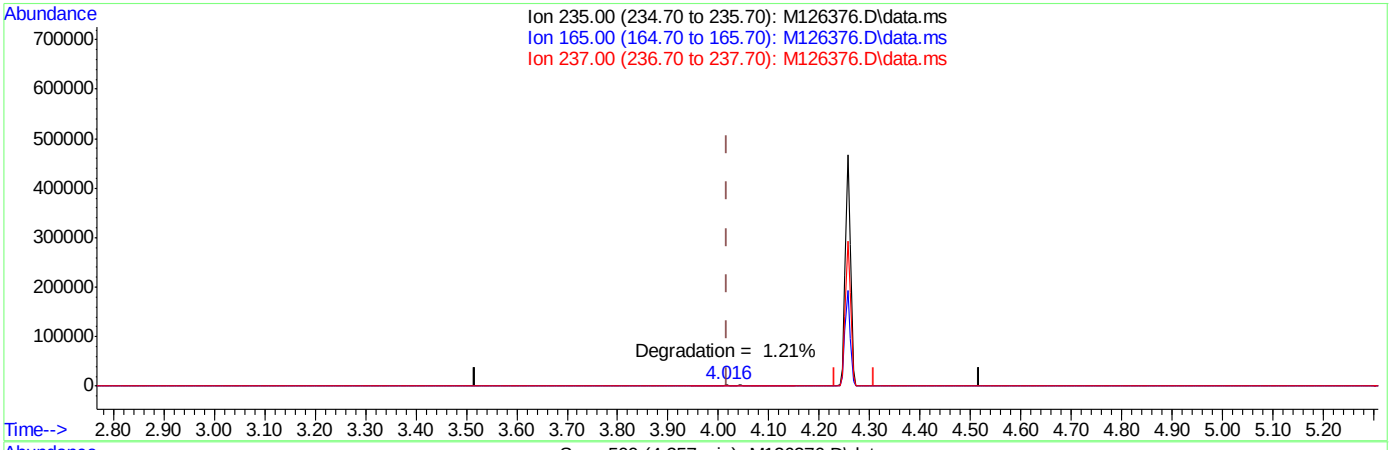
Ion	Exp%	Act%
184.05	100	100
92.05	10.20	9.81
0.00	0.00	0.00
0.00	0.00	0.00

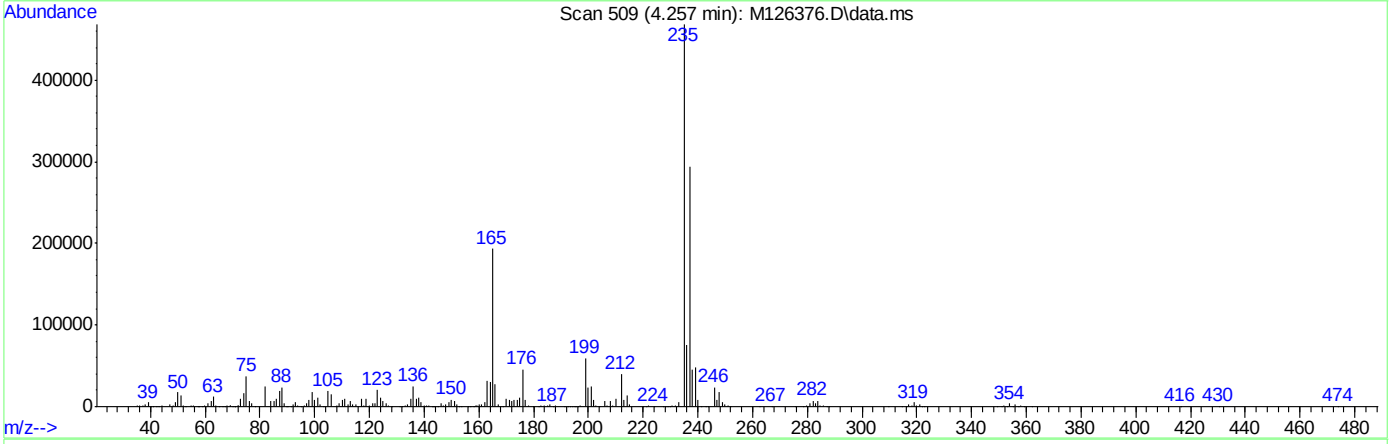
SGS ACCUTEST JC25024

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM5365\
Data File : M126376.D
Acq On : 26 Jul 2016 6:13 pm
Operator : seanb1
Sample : dftpp
Misc : op95476,em5365
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 26 18:19:14 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPPM.M
Quant Title : Semi Volatile Extractables by GC/MS rxi-5silms 30mTue Jul 12 17:11:27 2016
QLast Update : Tue Jul 12 17:11:27 2016
Response via : Continuing Cal File:





TIC: M126376.D\data.ms

(3) PP-DDT (MC)

4.257min (+0.239) 0.00ppm m

response 336411

Ion	Exp%	Act%
235.00	100	100
165.00	50.00	41.26
237.00	67.20	62.82
0.00	0.00	0.00

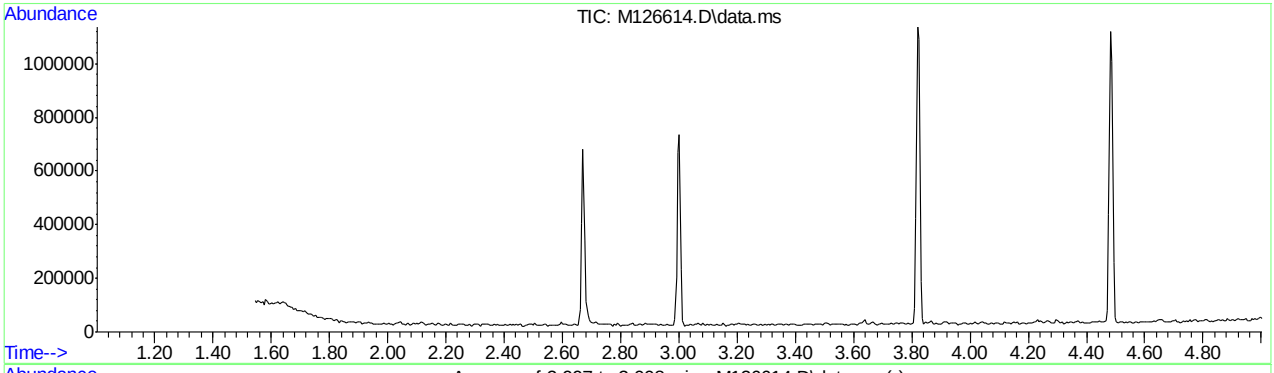
SGS ACCUTEST JC25024

DFTPPR

Data Path : C:\msdchem\1\DATA\EM5377\
Data File : M126614.D
Acq On : 3 Aug 2016 6:02 pm
Operator : seanb1
Sample : dftpp
Misc : op95925,em5377
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : C:\MSDCHEM\1\METHODS\DFTPPM.M
Title : Semi Volatile Extractables by GC/MS rxi-5silms 30mTue Jul 12 17:11:27 2016
Last Update : Tue Jul 12 17:11:27 2016



AutoFind: Scans 273, 274, 275; Background Corrected with Scan 268

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	35.5	20007	PASS
68	69	0.00	2	0.5	145	PASS
69	198	0.00	100	50.9	28690	PASS
70	69	0.00	2	0.9	267	PASS
127	198	40	60	51.1	28748	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	56312	PASS
199	198	5	9	6.3	3540	PASS
275	198	10	30	26.1	14677	PASS
365	198	1	100	4.3	2436	PASS
441	443	0.10	100	75.1	6920	PASS
442	198	40	100	75.4	42482	PASS
443	442	17	23	21.7	9216	PASS

DFTPPM.M Wed Aug 03 20:05:58 2016 MSM

Page: 1

Average of 2.997 to 3.008 min.: M126614.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
35.10	239	51.05	20007	62.20	174	73.00	187
36.60	88	52.10	1343	63.00	530	74.00	2712
37.10	200	54.10	107	63.70	150	75.00	3953
38.20	433	55.10	90	64.20	97	76.30	987
39.00	1783	56.05	498	65.15	599	77.05	22776
40.00	297	57.05	1680	66.00	89	78.00	1713
42.05	154	58.00	147	66.50	96	79.00	2028
46.00	71	59.10	76	68.10	145	80.00	1567
48.05	465	60.50	101	69.00	28690	80.50	69
49.05	1	61.00	297	69.90	163	80.95	1918
50.00	6244	61.70	110	70.15	267	81.90	383

Average of 2.997 to 3.008 min.: M126614.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
82.05	319	92.95	2864	104.05	881	115.15	266
83.10	568	94.20	253	104.95	699	116.00	338
83.30	307	94.95	17	105.70	99	117.00	6386
85.00	122	95.30	118	106.30	103	117.90	412
85.90	128	96.20	94	107.00	7828	119.00	70
87.10	298	98.00	2644	107.95	1372	119.70	80
88.00	350	98.95	1674	110.00	13961	119.95	368
90.70	90	99.90	97	111.00	2187	121.95	759
90.95	626	100.05	311	112.00	401	122.30	74
91.20	124	101.00	847	112.90	160	122.95	690
91.95	421	102.90	617	113.70	105	123.95	735

Average of 2.997 to 3.008 min.: M126614.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
125.00	525	135.85	431	143.20	90	152.90	189
127.00	28748	136.05	331	143.90	74	153.95	190
128.05	2230	136.85	388	145.85	328	154.20	105
129.00	11607	137.20	86	147.00	629	154.95	882
130.00	1388	138.00	91	147.90	620	156.00	1197
130.60	93	138.80	67	148.10	587	156.80	313
130.80	153	139.90	152	148.95	565	157.30	32
132.10	97	140.20	70	149.30	110	157.95	273
133.10	91	141.00	1011	149.80	89	159.05	302
133.95	442	141.90	585	150.10	103	159.90	636
135.00	612	142.95	462	150.70	71	160.85	730

Average of 2.997 to 3.008 min.: M126614.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
161.95	255	171.80	199	178.95	2524	189.05	640
163.10	148	172.10	72	180.00	1341	189.85	203
163.85	202	173.00	339	180.50	71	190.60	115
164.90	334	173.80	216	180.95	805	191.00	147
166.15	309	174.00	310	182.10	136	191.95	660
166.95	2780	174.90	978	183.60	111	192.60	107
168.00	1264	175.10	136	183.85	286	193.05	776
168.90	330	175.80	151	185.05	1661	193.95	227
170.20	67	176.10	120	186.00	8863	194.40	134
170.50	96	176.95	874	187.00	2343	194.70	79
170.90	131	178.00	80	187.90	180	195.00	449

Average of 2.997 to 3.008 min.: M126614.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
196.05	2253	202.70	184	210.45	432	220.00	107
197.90	56312	203.00	317	211.00	444	221.00	3238
198.95	3540	203.20	315	211.15	331	221.70	509
199.70	159	203.95	2018	211.60	102	222.80	382

DFTPPM.M Wed Aug 03 20:05:58 2016 MSM Page: 2

200.00	211	205.00	3533	212.00	185	222.95	721
200.20	178	206.00	14586	215.40	105	223.95	7700
200.60	87	207.05	2287	216.00	256	225.00	2220
200.80	115	208.00	512	216.90	3999	226.95	3814
201.30	531	208.70	143	217.80	233	227.80	124
201.90	128	208.90	247	218.00	368	228.00	406
202.30	67	209.95	402	218.60	73	228.90	350

Average of 2.997 to 3.008 min.: M126614.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
229.10	202	236.65	19	247.00	262	257.10	197
229.70	137	238.00	97	247.90	120	258.00	2301
230.10	98	238.90	215	249.05	394	258.85	371
231.00	489	240.50	82	250.30	203	263.40	82
232.00	86	241.05	234	251.00	215	264.10	68
232.70	140	241.95	411	251.70	171	264.70	432
233.00	173	242.70	185	252.90	203	265.00	195
235.00	184	243.00	592	253.20	356	266.00	138
235.60	138	244.00	6444	255.00	34340	267.20	91
235.80	89	245.05	717	255.90	4506	269.70	97
236.00	118	246.00	1404	256.80	330	271.10	80

Average of 2.997 to 3.008 min.: M126614.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
272.00	495	284.90	71	300.00	87	316.00	242
272.85	1281	285.10	199	303.00	641	319.70	132
273.95	3209	286.40	86	303.70	70	320.00	147
274.95	14677	289.00	105	303.90	128	320.80	69
276.05	1772	292.95	295	304.80	78	321.00	297
276.90	1167	293.90	99	309.05	182	321.60	98
277.90	88	294.50	75	310.10	98	322.10	76
282.10	73	295.05	370	311.90	72	323.05	1541
282.95	347	296.00	4342	312.70	91	324.00	269
283.60	77	296.95	838	313.95	275	324.20	98
284.00	67	297.80	152	314.90	653	324.80	79

Average of 2.997 to 3.008 min.: M126614.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
326.00	83	341.60	179	360.80	85	380.30	70
326.80	232	345.10	101	361.60	91	382.90	279
327.20	171	346.05	223	363.10	104	384.00	66
332.10	400	348.60	168	364.90	2436	387.80	67
333.00	71	350.40	85	365.95	520	389.90	90
334.00	547	351.30	76	370.40	92	390.60	83
334.75	223	351.95	488	370.60	100	394.80	67
335.00	90	353.00	514	371.05	199	396.70	193
337.20	70	353.95	382	371.85	840	396.90	106
338.80	83	358.70	105	373.00	207	397.50	69
341.10	160	359.60	72	378.80	103	400.70	174

Average of 2.997 to 3.008 min.: M126614.D\data.ms
dftpp
Modified:subtracted

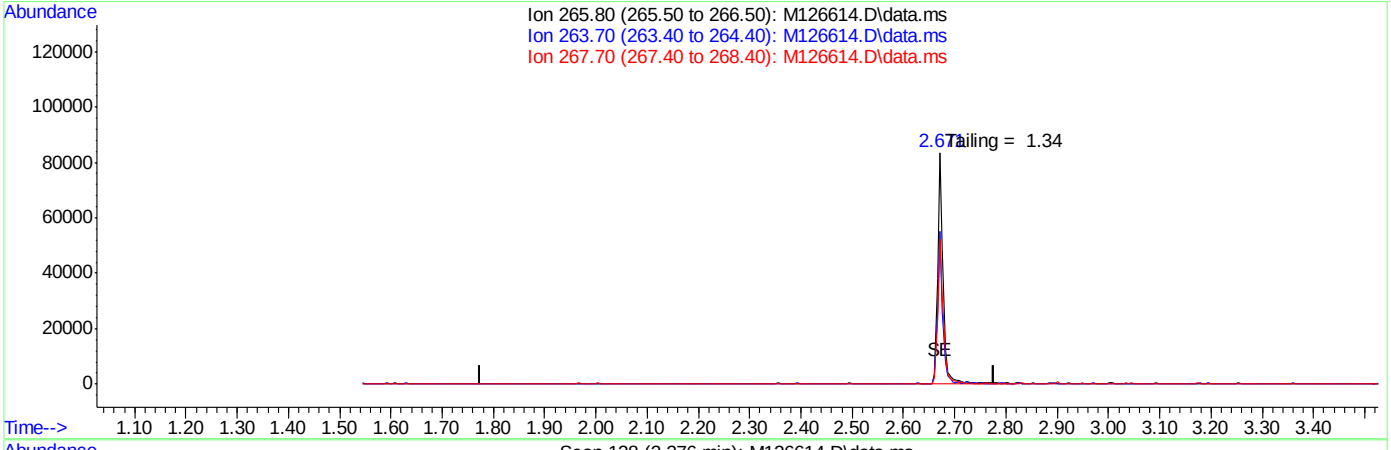
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
401.90	482	423.95	622	435.55	341	445.80	90
403.00	355	425.80	88	436.10	73	451.40	70
404.10	116	428.00	84	436.60	100	465.00	78
405.00	90	428.60	67	437.70	190	472.10	82
406.00	78	429.20	75	438.20	93	484.30	84
409.00	135	429.70	68	439.00	124	496.80	80
409.90	68	430.00	97	439.40	77		
410.40	66	431.50	67	441.00	6920		
420.95	343	432.50	78	442.00	42482		
421.85	404	433.90	162	442.95	9216		
422.95	2922	435.00	96	444.05	869		

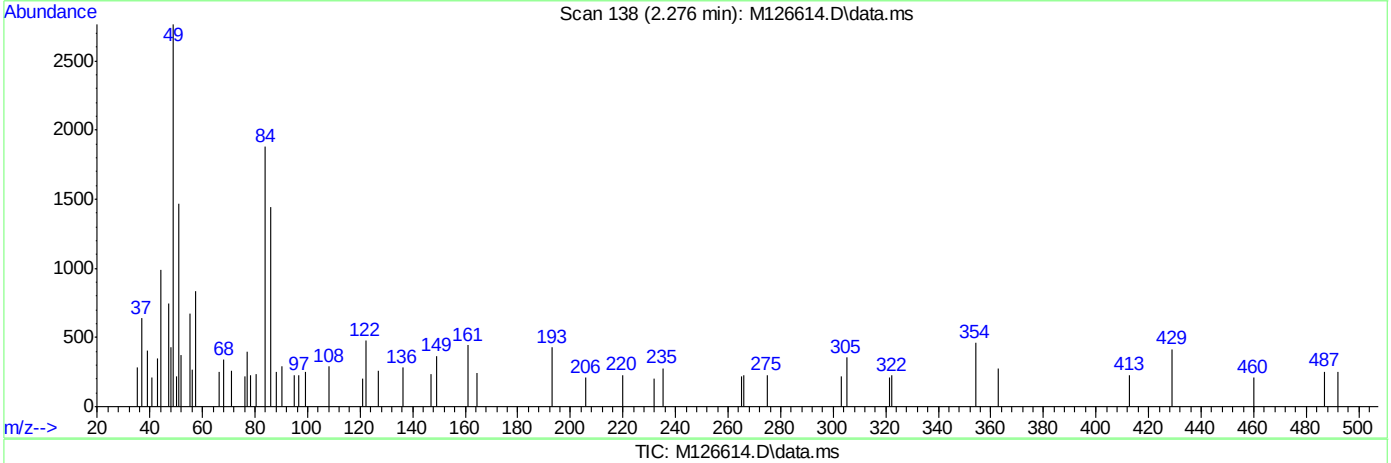
DFTPPM.M Wed Aug 03 20:05:58 2016 MSM Page: 3

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM5377\
Data File : M126614.D
Acq On : 3 Aug 2016 6:02 pm
Operator : seanb1
Sample : dftpp
Misc : op95925,em5377
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 03 18:07:50 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPPM.M
Quant Title : Semi Volatile Extractables by GC/MS rxi-5silms 30mTue Jul 12 17:11:27 2016
QLast Update : Tue Jul 12 17:11:27 2016
Response via : Continuing Cal File:





TIC: M126614.D\data.ms

(1) Pentachlorophenol (MC)

2.276min (-2.276) 0.00ppm

response 0

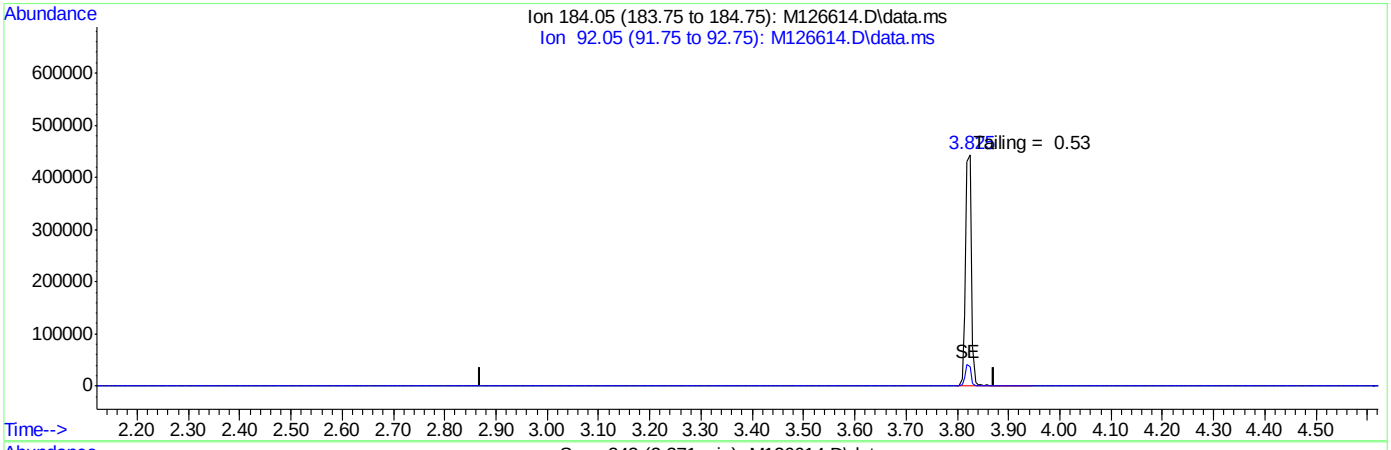
Ion	Exp%	Act%
265.80	100	0.00
263.70	59.00	0.00#
267.70	66.70	0.00#
0.00	0.00	0.00

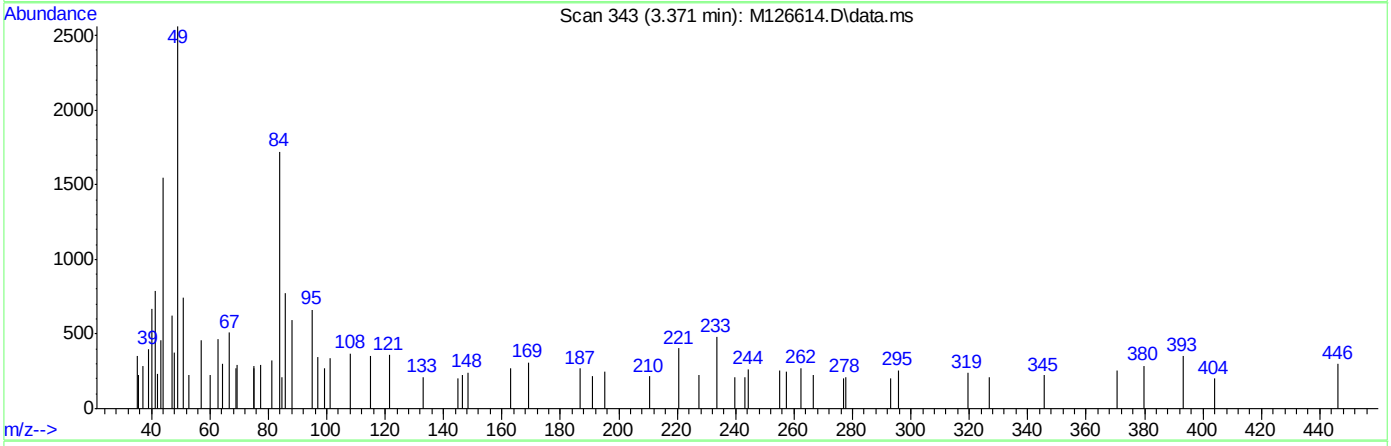
SGS ACCUTEST JC25024

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM5377\
Data File : M126614.D
Acq On : 3 Aug 2016 6:02 pm
Operator : seanb1
Sample : dftpp
Misc : op95925,em5377
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 03 18:07:50 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPPM.M
Quant Title : Semi Volatile Extractables by GC/MS rxi-5silms 30mTue Jul 12 17:11:27 2016
QLast Update : Tue Jul 12 17:11:27 2016
Response via : Continuing Cal File:





TIC: M126614.D\data.ms

(2) Benzidine (M)

3.371min (-3.371) 0.00ppm

response 0

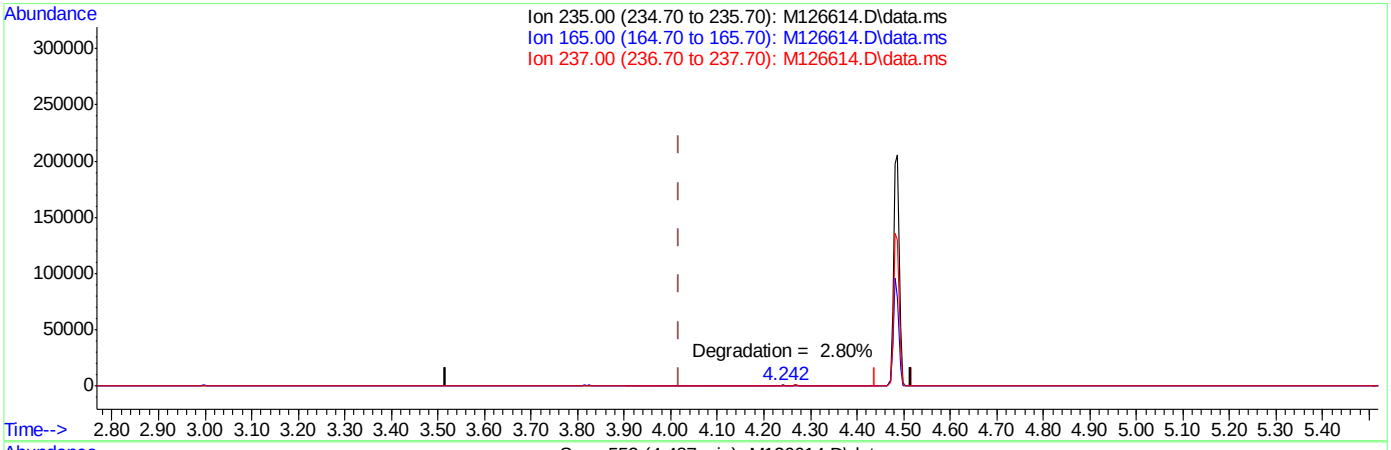
Ion	Exp%	Act%
184.05	100	0.00
92.05	10.20	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

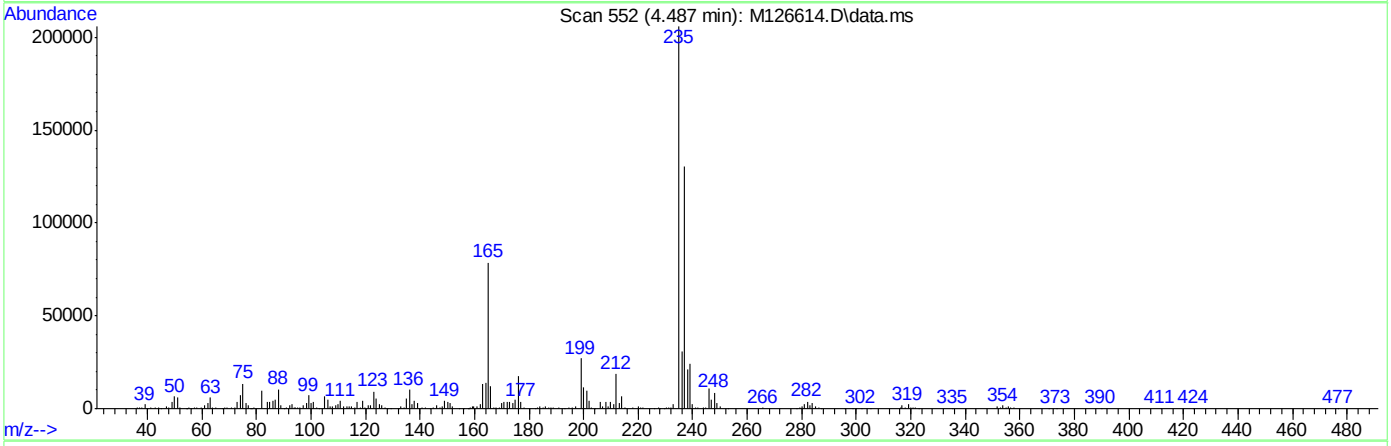
SGS ACCUTEST JC25024

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM5377\
Data File : M126614.D
Acq On : 3 Aug 2016 6:02 pm
Operator : seanb1
Sample : dftpp
Misc : op95925,em5377
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 03 18:07:50 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPPM.M
Quant Title : Semi Volatile Extractables by GC/MS rxi-5silms 30mTue Jul 12 17:11:27 2016
QLast Update : Tue Jul 12 17:11:27 2016
Response via : Continuing Cal File:





TIC: M126614.D\data.ms

(3) PP-DDT (MC)

4.487min (+0.470) 0.00ppm m

response 170410

Ion	Exp%	Act%
235.00	100	100
165.00	50.00	38.17
237.00	67.20	63.30
0.00	0.00	0.00

SGS ACCUTEST JC25024

Manual Integrations APPROVED (compounds with "m" flag)
Nina Pandya
07/11/16 10:45

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\E3P2503\
Data File : 3p54955.D
Acq On : 6 Jul 2016 10:32 am
Operator : hankc
Sample : icc2503-1.0
Misc : op95179a,e3p2503
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 06 17:25:10 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3P2503SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Jul 06 17:23:56 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	11.100	150	54447	4.00	ppm	0.00
14) Fluorene-d10	14.093	176	82620	4.00	ppm	0.00
21) Fluoranthene-d10	18.256	212	129840	4.00	ppm	0.00
31) Benzo(a)pyrene-d12	22.812	264	96457	4.00	ppm	0.00
System Monitoring Compounds						
3) 2-Fluorophenol	5.039	112	162469	20.41	ppm	0.00
Spiked Amount 50.000			Recovery = 40.82%			
4) Phenol-d5	6.603	99	205430	20.35	ppm	0.00
Spiked Amount 50.000			Recovery = 40.70%			
7) Nitrobenzene-d5	8.205	82	164537	20.35	ppm	0.00
Spiked Amount 50.000			Recovery = 40.70%			
15) 2-Fluorobiphenyl	11.756	172	344958	20.00	ppm	0.00
Spiked Amount 50.000			Recovery = 40.00%			
20) 2,4,6-Tribromophenol	14.639	330	56519	19.68	ppm	0.00
Spiked Amount 50.000			Recovery = 39.36%			
28) Terphenyl-d14	19.029	244	285010	20.00	ppm	0.00
Spiked Amount 50.000			Recovery = 40.00%			
Target Compounds						Qvalue
2) 1,4-dioxane	2.736	88	5732	0.78	ppm #	1
5) Phenol	6.627	94	45417	5.09	ppm #	68
6) bis(2-Chloroethyl)ether	6.772	93	7943	0.99	ppm	91
8) Nitrobenzene	8.243	77	8332	0.98	ppm	74
9) Naphthalene	9.617	128	31368	1.02	ppm	98
10) Hexachlorobutadiene	9.919	225	4960	1.02	ppm	79
11) 2-Methylnaphthalene	10.977	141	16196	0.98	ppm	87
12) 1-Methylnaphthalene	11.182	141	13827	0.99	ppm #	58
13) Hexachlorocyclopentadiene	11.346	237	7201	2.04	ppm	99
16) Acenaphthylene	12.751	152	27400	0.99	ppm	98
17) Acenaphthene	13.107	153	17497	1.00	ppm	78
18) 4,6-dinitro-2-methylph...	14.300	198	6340	5.00	ppm	89
19) Fluorene	14.149	166	17779	1.00	ppm	97
22) Hexachlorobenzene	15.272	284	6556	1.00	ppm	98
23) Pentachlorophenol	15.674	266	15830	5.18	ppm	91
24) Phenanthrene	16.045	178	28166	0.99	ppm	92
25) Anthracene	16.154	178	25387	1.00	ppm	94
26) Fluoranthene	18.287	202	26178	1.00	ppm	98
27) Pyrene	18.673	202	29156	1.00	ppm	96
29) Benzo[a]anthracene	20.728	228	25038	0.98	ppm	90
30) Chrysene	20.790	228	26686	0.95	ppm	99
32) Benzo[b]fluoranthene	22.398	252	30952m	0.94	ppm	
33) Benzo[k]fluoranthene	22.436	252	27300m	0.98	ppm	
34) Benzo[a]pyrene	22.850	252	23964	1.00	ppm	95
35) Indeno[1,2,3-cd]pyrene	24.448	276	29231	0.96	ppm	93
36) Dibenz[a,h]anthracene	24.486	278	23777	1.02	ppm	76
37) Benzo[g,h,i]perylene	24.881	276	27395	1.01	ppm	90

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\E3P2503\
Data File : 3p54955.D
Acq On : 6 Jul 2016 10:32 am
Operator : hankc
Sample : icc2503-1.0
Misc : op95179a,e3p2503
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 06 17:25:10 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3P2503SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Jul 06 17:23:56 2016
Response via : Initial Calibration

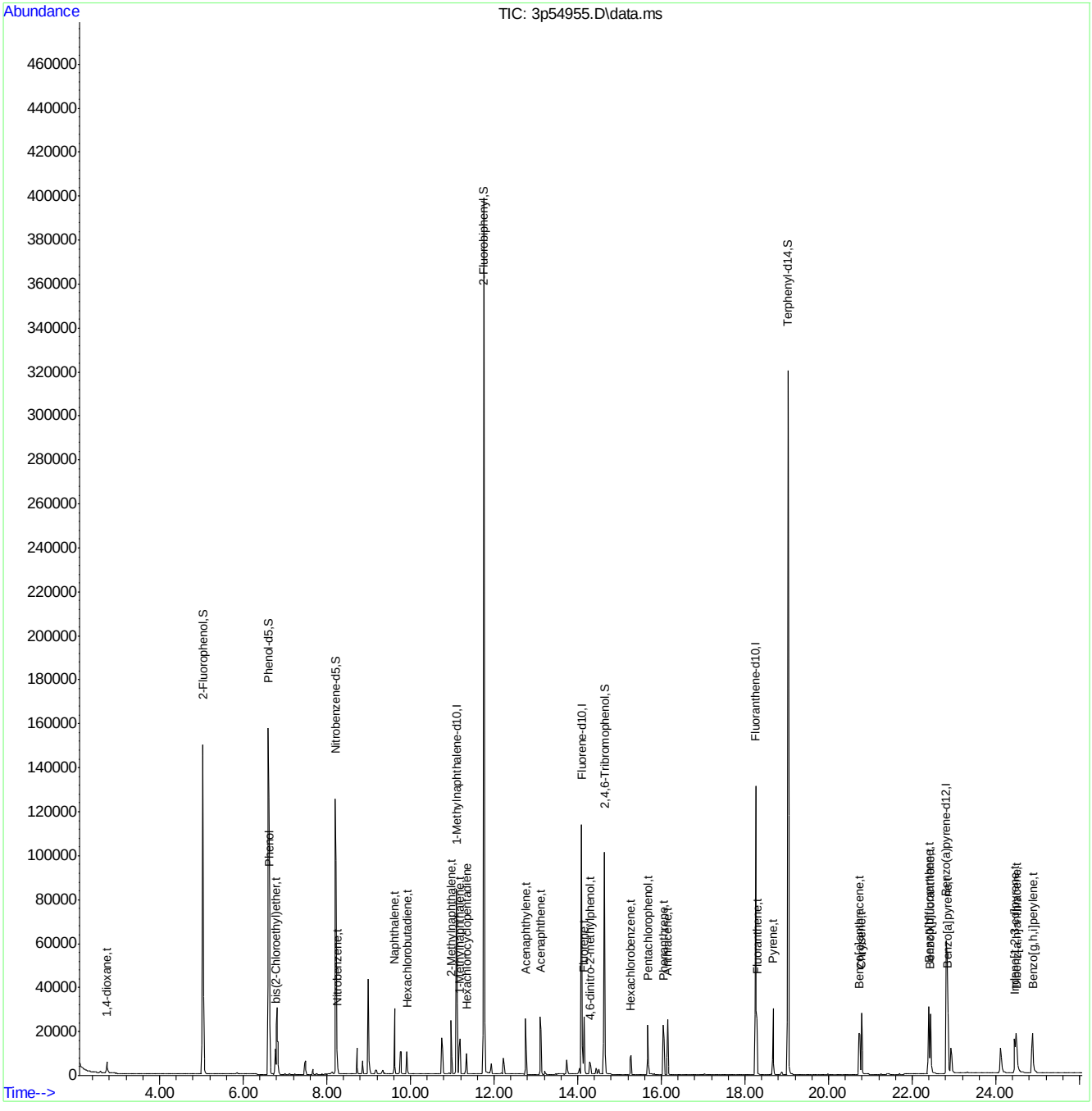
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\E3P2503\
Data File : 3p54955.D
Acq On : 6 Jul 2016 10:32 am
Operator : hankc
Sample : icc2503-1.0
Misc : op95179a,e3p2503
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 06 17:25:10 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3P2503SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Jul 06 17:23:56 2016
Response via : Initial Calibration



M3P2503SIM.M Mon Jul 11 10:07:57 2016 Page: 3

Manual Integration Approval Summary

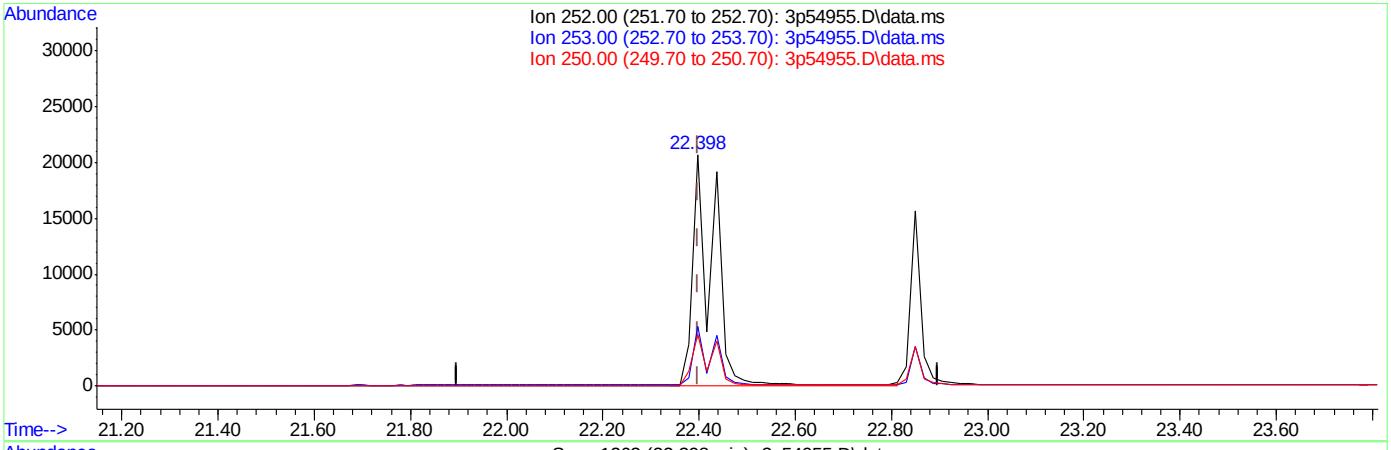
Sample Number:	E3P2503-ICC2503	**Method:**	SW846 8270D BY SIM
Lab FileID:	3P54955.D	**Analyst approved:**	07/11/16 10:13 Ashley Dye
Injection Time:	07/06/16 10:32	**Supervisor approved:**	07/11/16 10:45 Nina Pandya

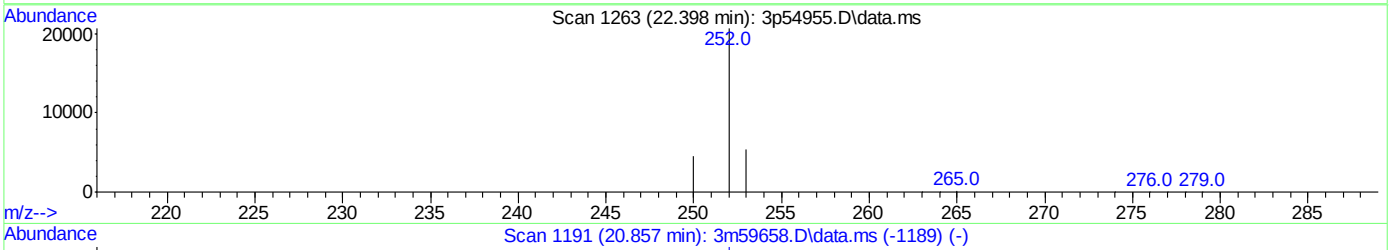
Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzo(b)fluoranthene	205-99-2		22.40	Overlapping peak
Benzo(k)fluoranthene	207-08-9		22.44	Overlapping peak

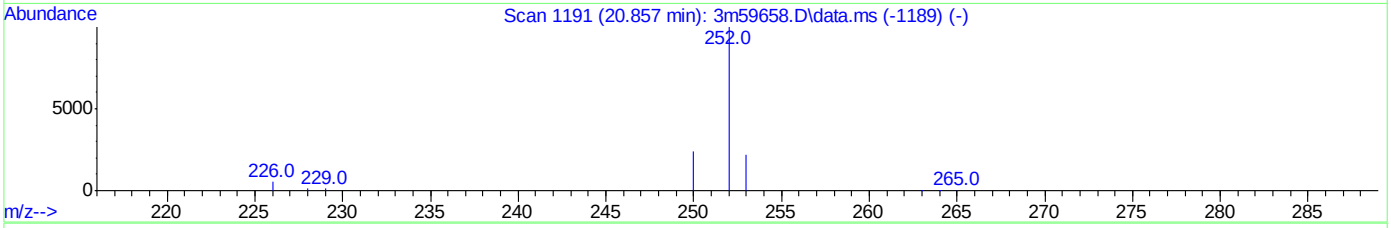
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\E3P2503\
Data File : 3p54955.D
Acq On : 6 Jul 2016 10:32 am
Operator : hankc
Sample : icc2503-1.0
Misc : op94978,e3p2503
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 06 17:24:53 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3P2503SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Jul 06 17:23:56 2016
Response via : Initial Calibration







TIC: 3p54955.D\data.ms

(32) Benzo[b]fluoranthene (t)

22.398min (0.000) 1.85ppm

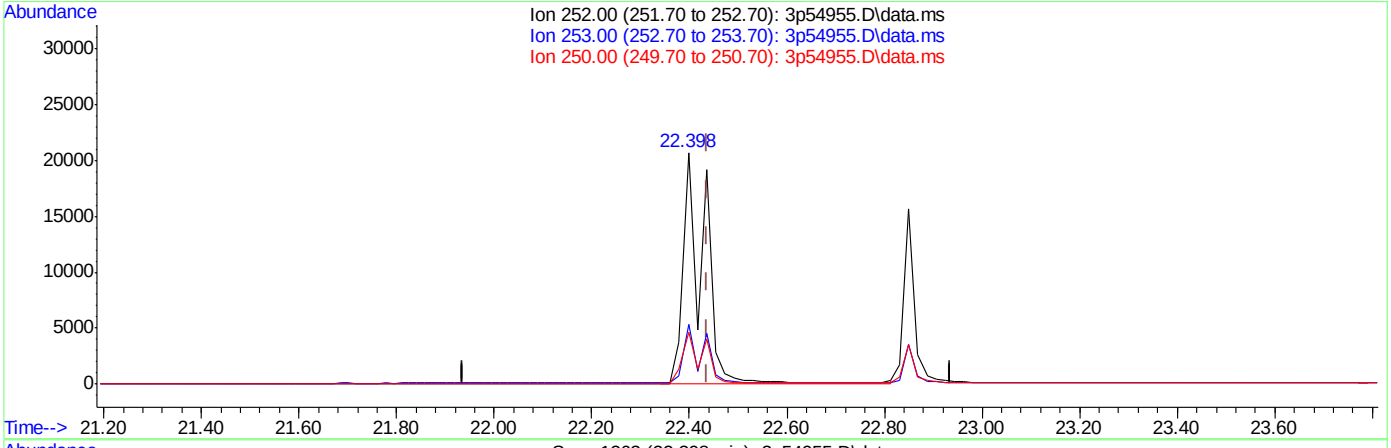
response 60924

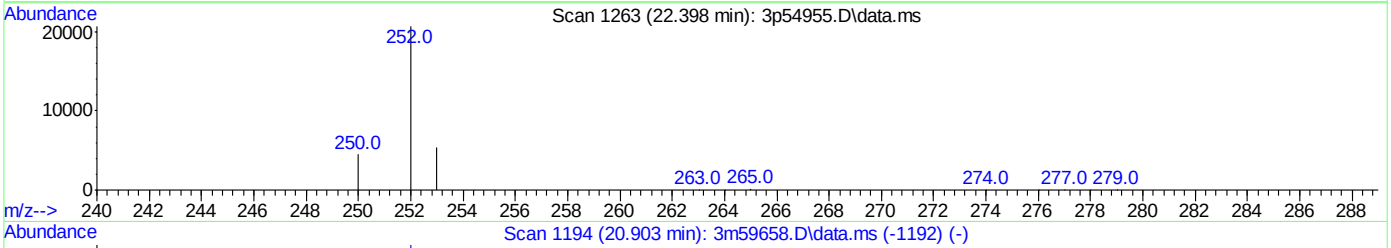
Ion	Exp%	Act%
252.00	100	100
253.00	23.60	25.36
250.00	23.10	21.99
0.00	0.00	0.00

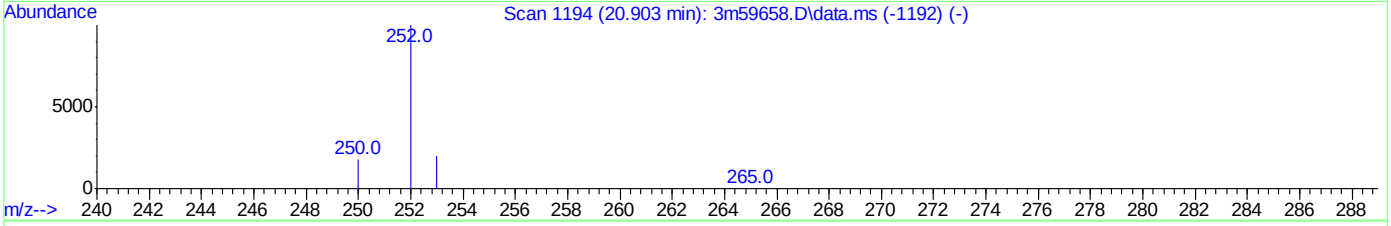
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\E3P2503\
Data File : 3p54955.D
Acq On : 6 Jul 2016 10:32 am
Operator : hankc
Sample : icc2503-1.0
Misc : op94978,e3p2503
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 06 17:24:53 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3P2503SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Jul 06 17:23:56 2016
Response via : Initial Calibration







TIC: 3p54955.D\data.ms

(33) Benzo[k]fluoranthene (t)

22.398min (-0.038) 2.19ppm

response 60924

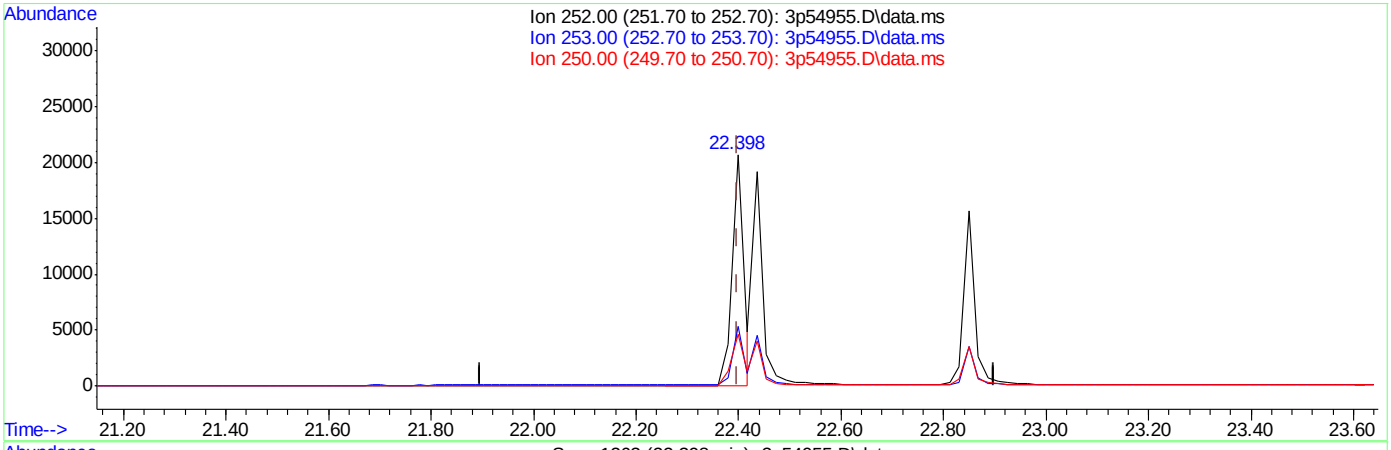
Ion	Exp%	Act%
252.00	100	100
253.00	23.60	25.36
250.00	23.10	21.99
0.00	0.00	0.00

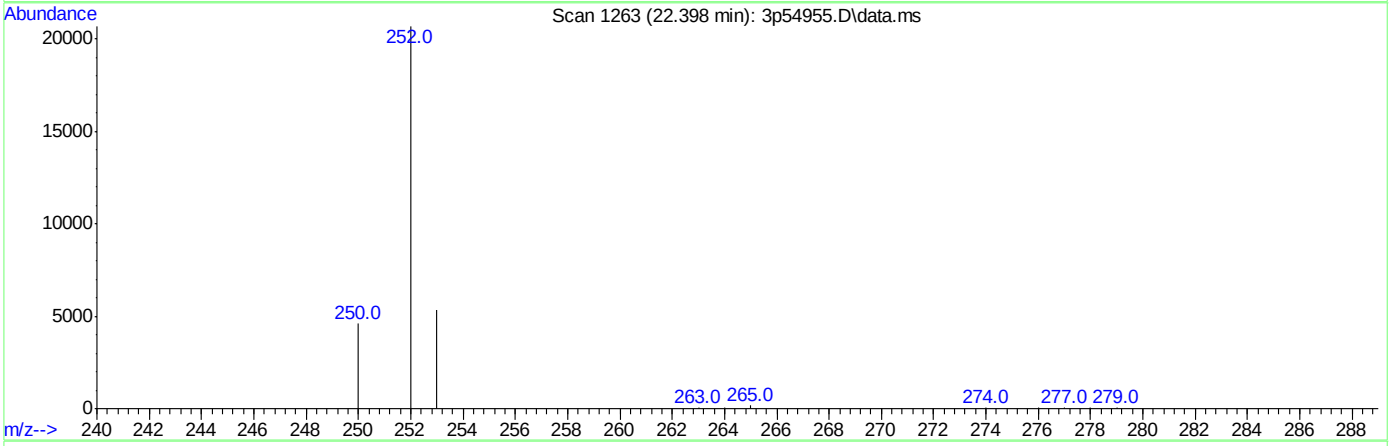
SGS ACCUTEST JC25024

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\E3P2503\
Data File : 3p54955.D
Acq On : 6 Jul 2016 10:32 am
Operator : hankc
Sample : icc2503-1.0
Misc : op95179a,e3p2503
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 06 17:25:10 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3P2503SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Jul 06 17:23:56 2016
Response via : Initial Calibration





TIC: 3p54955.D\data.ms

(32) Benzo[b]fluoranthene (t)

22.398min (0.000) 0.94ppm m

response 30952

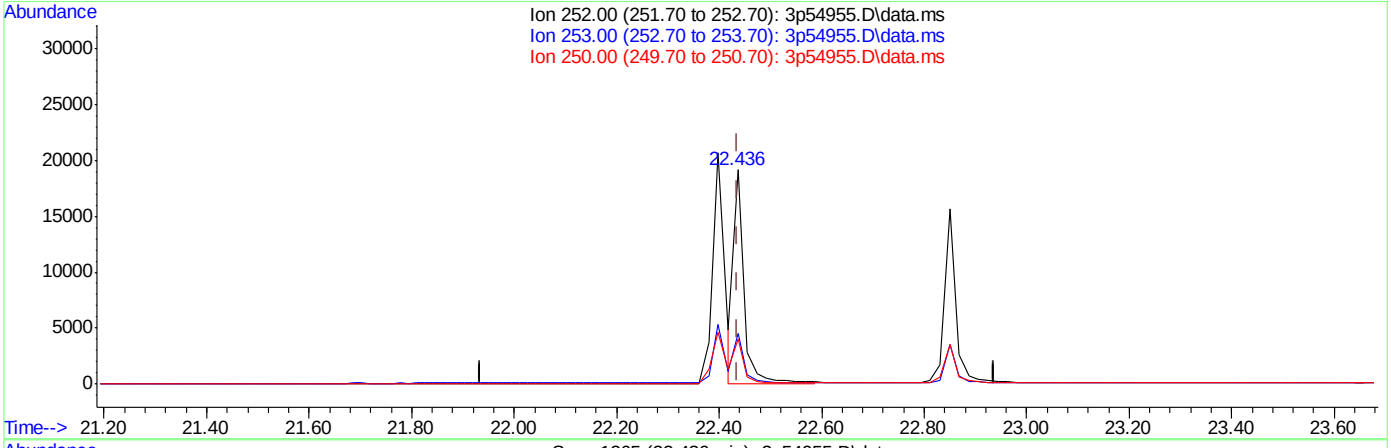
Ion	Exp%	Act%
252.00	100	100
253.00	23.60	25.77
250.00	23.10	22.24
0.00	0.00	0.00

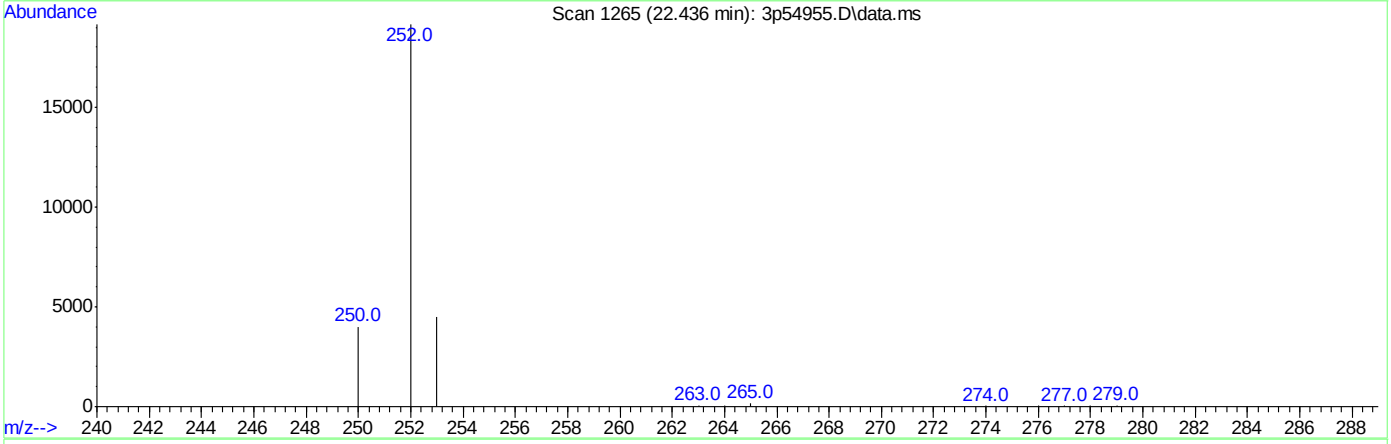
SGS ACCUTEST JC25024

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\E3P2503\
Data File : 3p54955.D
Acq On : 6 Jul 2016 10:32 am
Operator : hankc
Sample : icc2503-1.0
Misc : op95179a,e3p2503
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 06 17:25:10 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3P2503SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Jul 06 17:23:56 2016
Response via : Initial Calibration





TIC: 3p54955.D\data.ms

(33) Benzo[k]fluoranthene (t)

22.436min (0.000) 0.98ppm m

response 27300

Ion	Exp%	Act%
252.00	100	100
253.00	23.60	23.48
250.00	23.10	20.89
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\E3P2503\
Data File : 3p54956.D
Acq On : 6 Jul 2016 11:26 am
Operator : hankc
Sample : ic2503-0.01
Misc : op95179a,e3p2503
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jul 06 17:26:39 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3P2503SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Jul 06 17:25:20 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	11.100	150	79545	4.00	ppm	0.00
14) Fluorene-d10	14.093	176	120952	4.00	ppm	0.00
21) Fluoranthene-d10	18.256	212	177380	4.00	ppm	# 0.00
31) Benzo(a)pyrene-d12	22.831	264	143417	4.00	ppm	0.02
System Monitoring Compounds						
3) 2-Fluorophenol	5.038	112	2956	0.25	ppm	0.00
Spiked Amount 50.000			Recovery	=	0.50%	
4) Phenol-d5	6.602	99	4067	0.27	ppm	0.00
Spiked Amount 50.000			Recovery	=	0.54%	
7) Nitrobenzene-d5	8.205	82	3272	0.27	ppm	0.00
Spiked Amount 50.000			Recovery	=	0.54%	
15) 2-Fluorobiphenyl	11.756	172	6506	0.26	ppm	0.00
Spiked Amount 50.000			Recovery	=	0.52%	
20) 2,4,6-Tribromophenol	14.639	330	685	0.17	ppm	0.00
Spiked Amount 50.000			Recovery	=	0.34%	
28) Terphenyl-d14	19.029	244	4989	0.26	ppm	0.00
Spiked Amount 50.000			Recovery	=	0.52%	
Target Compounds						Qvalue
5) Phenol	6.627	94	1100	0.08	ppm	# 74
6) bis(2-Chloroethyl)ether	6.772	93	171	0.01	ppm	92
9) Naphthalene	9.617	128	584	0.01	ppm	98
11) 2-Methylnaphthalene	10.977	141	822	0.03	ppm	88
12) 1-Methylnaphthalene	11.182	141	249	0.01	ppm	# 66
13) Hexachlorocyclopentadiene	11.346	237	55	0.01	ppm	96
16) Acenaphthylene	12.751	152	434	0.01	ppm	99
17) Acenaphthene	13.107	153	301	0.01	ppm	79
18) 4,6-dinitro-2-methylph...	14.300	198	137	0.07	ppm	67
19) Fluorene	14.149	166	258	0.01	ppm	96
22) Hexachlorobenzene	15.272	284	101	0.01	ppm	99
23) Pentachlorophenol	15.674	266	544	0.13	ppm	98
24) Phenanthrene	16.045	178	465	0.01	ppm	93
25) Anthracene	16.154	178	405	0.01	ppm	94
26) Fluoranthene	18.287	202	485	0.01	ppm	99
27) Pyrene	18.673	202	436	0.01	ppm	97
29) Benzo[a]anthracene	20.744	228	406	0.01	ppm	92
30) Chrysene	20.790	228	418	0.01	ppm	99
32) Benzo[b]fluoranthene	22.398	252	640	0.01	ppm	99
33) Benzo[k]fluoranthene	22.436	252	580	0.01	ppm	94
35) Indeno[1,2,3-cd]pyrene	24.467	276	485	0.01	ppm	93
36) Dibenz[a,h]anthracene	24.505	278	351	0.01	ppm	54
37) Benzo[g,h,i]perylene	24.881	276	516	0.01	ppm	88

(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.6.2

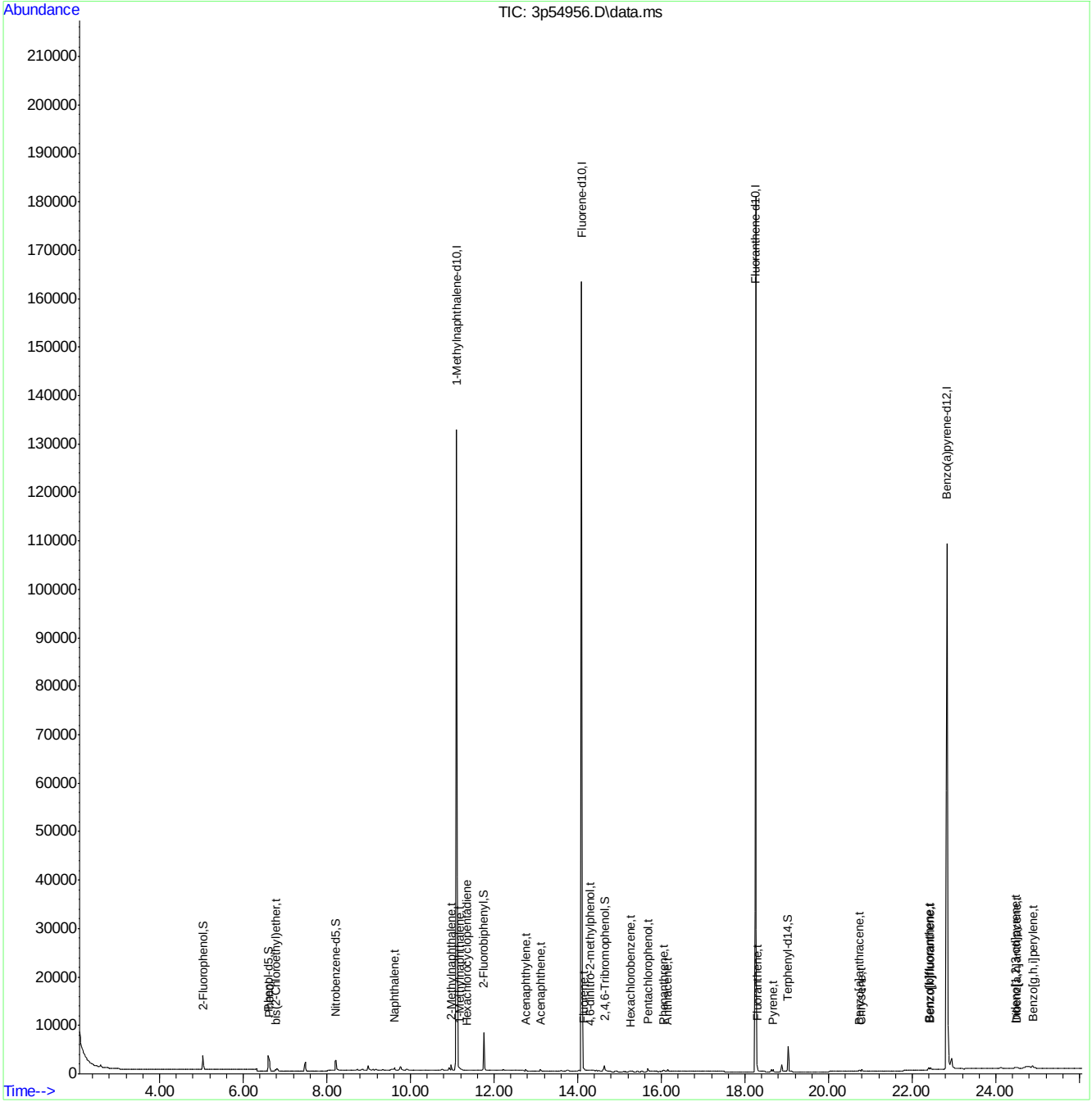
7

SGS ACCUTEST JC25024

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\E3P2503\
Data File : 3p54956.D
Acq On : 6 Jul 2016 11:26 am
Operator : hankc
Sample : ic2503-0.01
Misc : op95179a,e3p2503
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jul 06 17:26:39 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3P2503SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Jul 06 17:25:20 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\E3P2503\
Data File : 3p54957.D
Acq On : 6 Jul 2016 11:57 am
Operator : hankc
Sample : ic2503-0.02
Misc : op95179a,e3p2503
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jul 06 17:27:06 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3P2503SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Jul 06 17:26:47 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	11.100	150	105023	4.00	ppm	# 0.00
14) Fluorene-d10	14.093	176	158303	4.00	ppm	0.00
21) Fluoranthene-d10	18.256	212	232382	4.00	ppm	# 0.00
31) Benzo(a)pyrene-d12	22.831	264	188456	4.00	ppm	0.00
System Monitoring Compounds						
3) 2-Fluorophenol	5.038	112	7602	0.49	ppm	0.00
Spiked Amount 50.000			Recovery	=	0.98%	
4) Phenol-d5	6.602	99	10549	0.53	ppm	0.00
Spiked Amount 50.000			Recovery	=	1.06%	
7) Nitrobenzene-d5	8.205	82	7872	0.50	ppm	0.00
Spiked Amount 50.000			Recovery	=	1.00%	
15) 2-Fluorobiphenyl	11.756	172	17810	0.47	ppm	0.00
Spiked Amount 50.000			Recovery	=	0.94%	
20) 2,4,6-Tribromophenol	14.639	330	1705	0.31	ppm	0.00
Spiked Amount 50.000			Recovery	=	0.62%	
28) Terphenyl-d14	19.028	244	13540	0.53	ppm	0.00
Spiked Amount 50.000			Recovery	=	1.06%	
Target Compounds						Qvalue
5) Phenol	6.627	94	2821	0.16	ppm	# 71
6) bis(2-Chloroethyl)ether	6.772	93	458	0.02	ppm	92
8) Nitrobenzene	8.243	77	497	0.03	ppm	69
9) Naphthalene	9.617	128	1533	0.02	ppm	96
10) Hexachlorobutadiene	9.919	225	310	0.03	ppm	85
11) 2-Methylnaphthalene	10.977	141	1456	0.05	ppm	93
12) 1-Methylnaphthalene	11.161	141	588	0.02	ppm	93
13) Hexachlorocyclopentadiene	11.346	237	123	0.02	ppm	96
16) Acenaphthylene	12.751	152	1107	0.02	ppm	97
17) Acenaphthene	13.107	153	741	0.02	ppm	82
18) 4,6-dinitro-2-methylph...	14.300	198	215	0.09	ppm	76
19) Fluorene	14.149	166	635	0.02	ppm	96
22) Hexachlorobenzene	15.257	284	279	0.02	ppm	72
23) Pentachlorophenol	15.674	266	757	0.13	ppm	96
24) Phenanthrene	16.045	178	1192	0.02	ppm	95
25) Anthracene	16.154	178	1040	0.02	ppm	93
26) Fluoranthene	18.287	202	1096	0.02	ppm	98
27) Pyrene	18.673	202	1039	0.02	ppm	96
29) Benzo[a]anthracene	20.744	228	877	0.02	ppm	95
30) Chrysene	20.790	228	998	0.02	ppm	98
32) Benzo[b]fluoranthene	22.398	252	1188	0.02	ppm	97
33) Benzo[k]fluoranthene	22.436	252	1064	0.02	ppm	95
35) Indeno[1,2,3-cd]pyrene	24.448	276	1060	0.02	ppm	91
36) Dibenz[a,h]anthracene	24.486	278	834	0.02	ppm	81
37) Benzo[g,h,i]perylene	24.881	276	1088	0.02	ppm	89

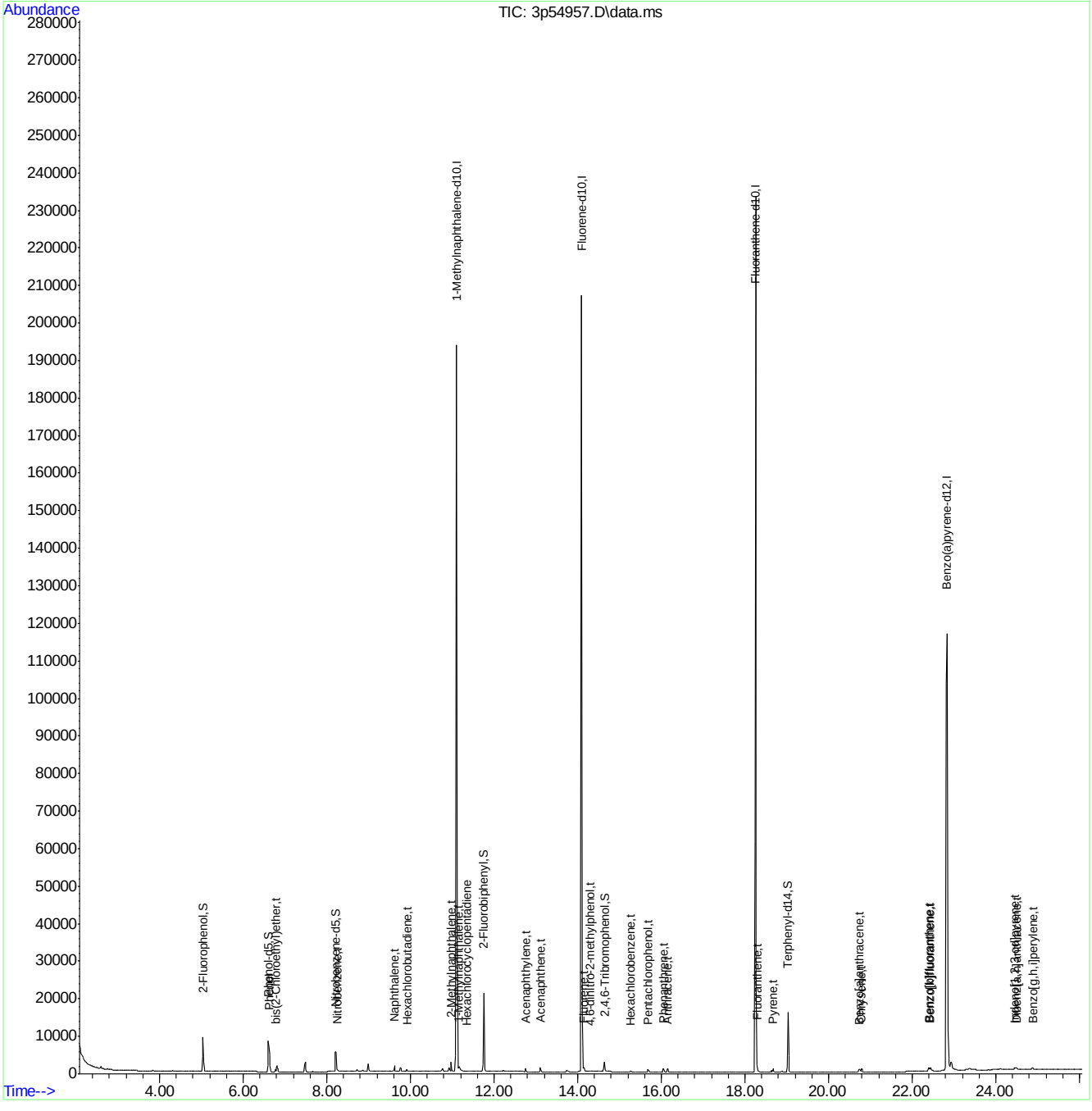
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC25024

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\E3P2503\
Data File : 3p54957.D
Acq On : 6 Jul 2016 11:57 am
Operator : hankc
Sample : ic2503-0.02
Misc : op95179a,e3p2503
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jul 06 17:27:06 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3P2503SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Jul 06 17:26:47 2016
Response via : Initial Calibration



SGS ACCUTEST JC25024

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\E3P2503\
Data File : 3p54958.D
Acq On : 6 Jul 2016 12:28 pm
Operator : hankc
Sample : ic2503-0.05
Misc : op95179a,e3p2503
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jul 06 17:33:36 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3P2503SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Jul 06 17:33:16 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1-Methylnaphthalene-d10	11.100	150	95340	4.00 ppm	# 0.00
14) Fluorene-d10	14.093	176	145255	4.00 ppm	0.00
21) Fluoranthene-d10	18.256	212	211286	4.00 ppm	# 0.00
31) Benzo(a)pyrene-d12	22.831	264	168543	4.00 ppm	0.02
System Monitoring Compounds					
3) 2-Fluorophenol	5.039	112	17235	1.12 ppm	0.00
Spiked Amount 50.000			Recovery	= 2.24%	
4) Phenol-d5	6.603	99	23981	1.16 ppm	0.00
Spiked Amount 50.000			Recovery	= 2.32%	
7) Nitrobenzene-d5	8.205	82	17781	1.15 ppm	0.00
Spiked Amount 50.000			Recovery	= 2.30%	
15) 2-Fluorobiphenyl	11.756	172	39594	1.11 ppm	0.00
Spiked Amount 50.000			Recovery	= 2.22%	
20) 2,4,6-Tribromophenol	14.639	330	4068	0.89 ppm	0.00
Spiked Amount 50.000			Recovery	= 1.78%	
28) Terphenyl-d14	19.029	244	32347	1.23 ppm	0.00
Spiked Amount 50.000			Recovery	= 2.46%	
Target Compounds					Qvalue
2) 1,4-dioxane	2.752	88	702	0.07 ppm	70
5) Phenol	6.627	94	6117	0.20 ppm #	68
6) bis(2-Chloroethyl)ether	6.772	93	956	0.06 ppm	93
8) Nitrobenzene	8.243	77	1196	0.07 ppm	74
9) Naphthalene	9.618	128	3398	0.05 ppm	96
10) Hexachlorobutadiene	9.919	225	611	0.06 ppm	87
11) 2-Methylnaphthalene	10.977	141	2171	0.06 ppm	92
12) 1-Methylnaphthalene	11.162	141	1318	0.05 ppm	95
13) Hexachlorocyclopentadiene	11.346	237	348	0.19 ppm	94
16) Acenaphthylene	12.751	152	2693	0.05 ppm	97
17) Acenaphthene	13.107	153	1712	0.05 ppm	83
18) 4,6-dinitro-2-methylph...	14.300	198	328	0.69 ppm	83
19) Fluorene	14.149	166	1449	0.05 ppm	93
22) Hexachlorobenzene	15.257	284	620	0.05 ppm	74
23) Pentachlorophenol	15.674	266	997	0.45 ppm	99
24) Phenanthrene	16.046	178	2689	0.05 ppm	95
25) Anthracene	16.154	178	2314	0.06 ppm	92
26) Fluoranthene	18.287	202	2061	0.05 ppm	98
27) Pyrene	18.673	202	2349	0.05 ppm	93
29) Benzo[a]anthracene	20.728	228	1975	0.05 ppm	91
30) Chrysene	20.790	228	2524	0.06 ppm	99
32) Benzo[b]fluoranthene	22.398	252	2577	0.05 ppm	97
33) Benzo[k]fluoranthene	22.436	252	2325	0.05 ppm	95
34) Benzo[a]pyrene	22.850	252	2489	0.06 ppm	94
35) Indeno[1,2,3-cd]pyrene	24.448	276	2281	0.05 ppm	93
36) Dibenz[a,h]anthracene	24.486	278	1819	0.05 ppm	81
37) Benzo[g,h,i]perylene	24.881	276	2387	0.05 ppm	90

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\E3P2503\
Data File : 3p54958.D
Acq On : 6 Jul 2016 12:28 pm
Operator : hankc
Sample : ic2503-0.05
Misc : op95179a,e3p2503
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jul 06 17:33:36 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3P2503SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Jul 06 17:33:16 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

(#) = qualifier out of range (m) = manual integration (+) = signals summed

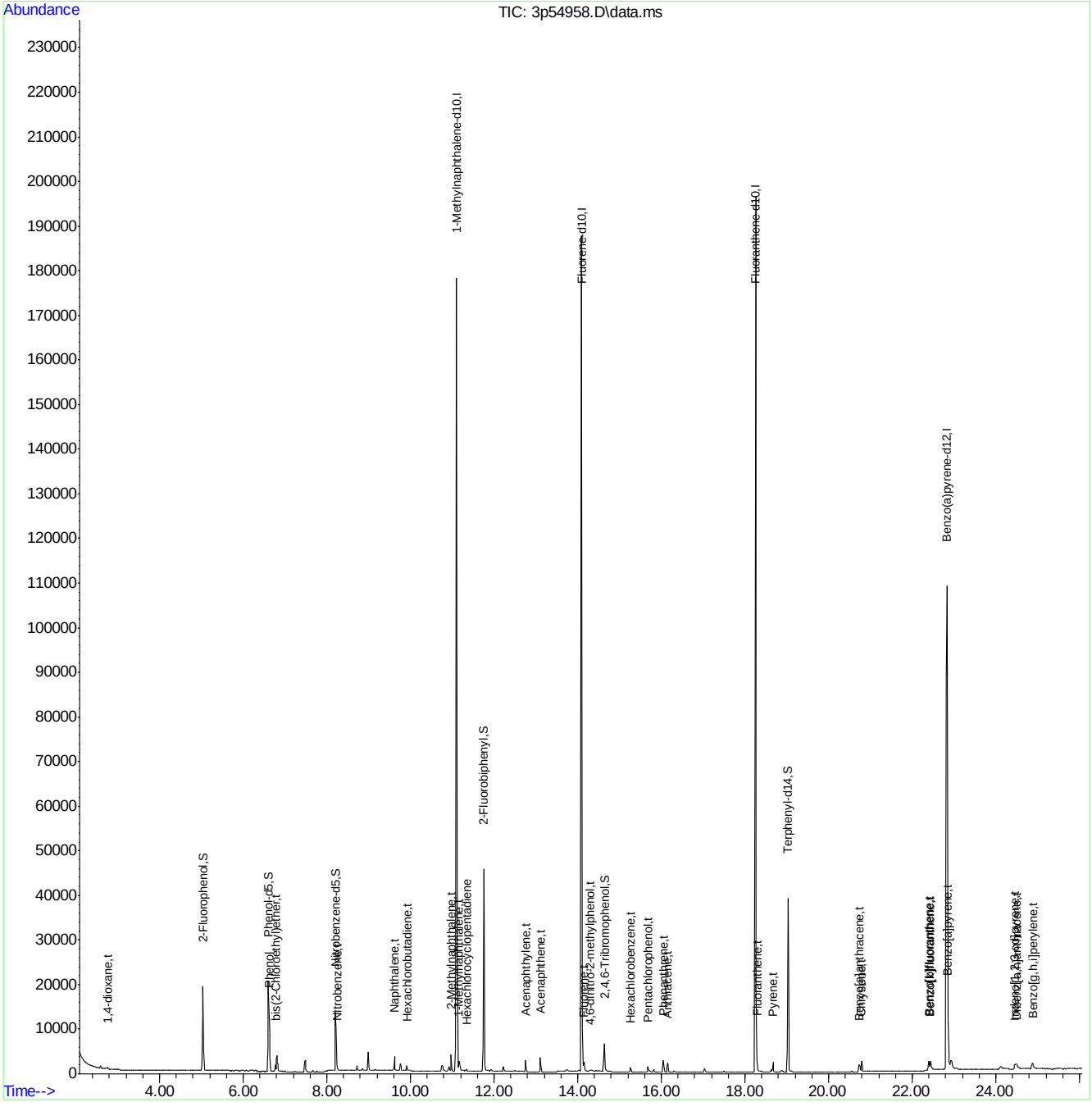
7.6.4

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\E3P2503\
Data File : 3p54958.D
Acq On : 6 Jul 2016 12:28 pm
Operator : hankc
Sample : ic2503-0.05
Misc : op95179a,e3p2503
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jul 06 17:33:36 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3P2503SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Jul 06 17:33:16 2016
Response via : Initial Calibration



SGS ACCUTEST JC25024

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\E3P2503\
Data File : 3p54959.D
Acq On : 6 Jul 2016 12:59 pm
Operator : hankc
Sample : ic2503-0.1
Misc : op95179a,e3p2503
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jul 06 17:28:10 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3P2503SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Jul 06 17:27:37 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	11.100	150	80575	4.00	ppm	# 0.00
14) Fluorene-d10	14.093	176	123488	4.00	ppm	0.00
21) Fluoranthene-d10	18.256	212	180618	4.00	ppm	# 0.00
31) Benzo(a)pyrene-d12	22.812	264	137267	4.00	ppm	-0.02
System Monitoring Compounds						
3) 2-Fluorophenol	5.038	112	28500	2.14	ppm	0.00
Spiked Amount 50.000			Recovery	=	4.28%	
4) Phenol-d5	6.602	99	39059	2.20	ppm	0.00
Spiked Amount 50.000			Recovery	=	4.40%	
7) Nitrobenzene-d5	8.205	82	28853	2.12	ppm	0.00
Spiked Amount 50.000			Recovery	=	4.24%	
15) 2-Fluorobiphenyl	11.756	172	65085	2.04	ppm	0.00
Spiked Amount 50.000			Recovery	=	4.08%	
20) 2,4,6-Tribromophenol	14.639	330	7100	1.68	ppm	0.00
Spiked Amount 50.000			Recovery	=	3.36%	
28) Terphenyl-d14	19.028	244	52972	2.67	ppm	0.00
Spiked Amount 50.000			Recovery	=	5.34%	
Target Compounds						Qvalue
2) 1,4-dioxane	2.751	88	847	0.10	ppm	67
5) Phenol	6.627	94	9704	0.52	ppm #	67
6) bis(2-Chloroethyl)ether	6.772	93	1520	0.10	ppm	92
8) Nitrobenzene	8.243	77	1684	0.10	ppm	71
9) Naphthalene	9.617	128	5473	0.10	ppm	97
10) Hexachlorobutadiene	9.919	225	941	0.10	ppm	85
11) 2-Methylnaphthalene	10.977	141	2843	0.09	ppm	92
12) 1-Methylnaphthalene	11.161	141	2204	0.10	ppm	92
13) Hexachlorocyclopentadiene	11.346	237	681	0.13	ppm	96
16) Acenaphthylene	12.751	152	4073	0.09	ppm	97
17) Acenaphthene	13.107	153	2759	0.10	ppm	81
18) 4,6-dinitro-2-methylph...	14.300	198	425	0.22	ppm	88
19) Fluorene	14.149	166	2457	0.10	ppm	94
22) Hexachlorobenzene	15.257	284	1013	0.10	ppm	73
23) Pentachlorophenol	15.674	266	1274	0.33	ppm	99
24) Phenanthrene	16.045	178	4363	0.10	ppm	95
25) Anthracene	16.154	178	3806	0.11	ppm	92
26) Fluoranthene	18.287	202	3534	0.10	ppm	97
27) Pyrene	18.673	202	3868	0.10	ppm	94
29) Benzo[a]anthracene	20.728	228	3076	0.09	ppm	90
30) Chrysene	20.790	228	4050	0.10	ppm	100
32) Benzo[b]fluoranthene	22.398	252	4191	0.10	ppm	97
33) Benzo[k]fluoranthene	22.436	252	3842	0.10	ppm	96
34) Benzo[a]pyrene	22.849	252	3699	0.10	ppm	94
35) Indeno[1,2,3-cd]pyrene	24.448	276	3512	0.08	ppm	93
36) Dibenz[a,h]anthracene	24.486	278	2784	0.08	ppm	83
37) Benzo[g,h,i]perylene	24.881	276	3878	0.10	ppm	91

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\E3P2503\
Data File : 3p54959.D
Acq On : 6 Jul 2016 12:59 pm
Operator : hankc
Sample : ic2503-0.1
Misc : op95179a,e3p2503
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jul 06 17:28:10 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3P2503SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Jul 06 17:27:37 2016
Response via : Initial Calibration

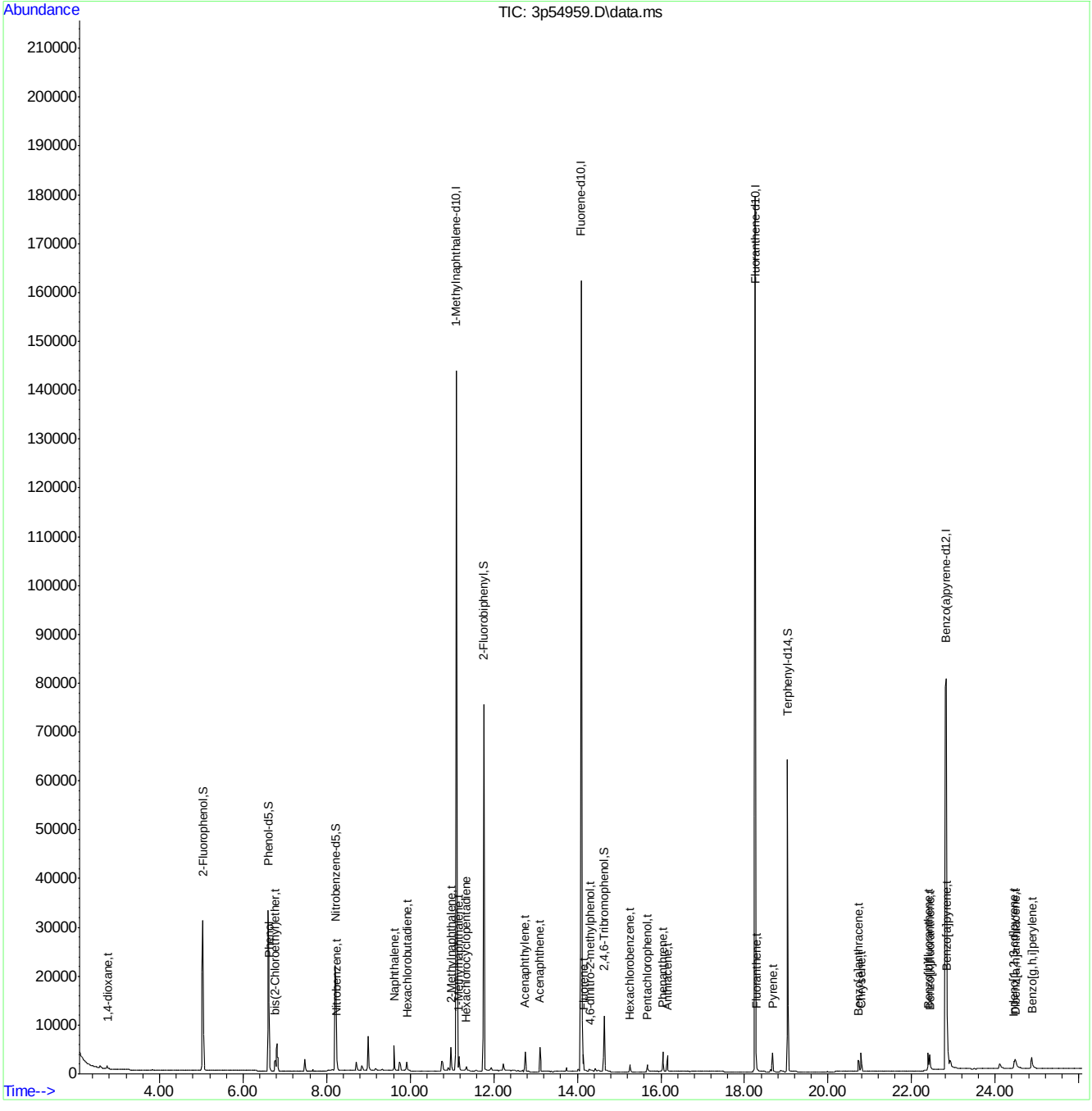
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\E3P2503\
Data File : 3p54959.D
Acq On : 6 Jul 2016 12:59 pm
Operator : hankc
Sample : ic2503-0.1
Misc : op95179a,e3p2503
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jul 06 17:28:10 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3P2503SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Jul 06 17:27:37 2016
Response via : Initial Calibration



SGS ACCUTEST JC25024

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\E3P2503\
Data File : 3p54960.D
Acq On : 6 Jul 2016 1:30 pm
Operator : hankc
Sample : ic2503-0.2
Misc : op95179a,e3p2503
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jul 06 17:28:40 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3P2503SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Jul 06 17:28:34 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	11.100	150	66048	4.00	ppm	# 0.00
14) Fluorene-d10	14.093	176	99585	4.00	ppm	0.00
21) Fluoranthene-d10	18.256	212	147162	4.00	ppm	# 0.00
31) Benzo(a)pyrene-d12	22.831	264	109620	4.00	ppm	0.02
System Monitoring Compounds						
3) 2-Fluorophenol	5.038	112	50614	4.54	ppm	0.00
Spiked Amount 50.000			Recovery	=	9.08%	
4) Phenol-d5	6.602	99	67367	4.48	ppm	0.00
Spiked Amount 50.000			Recovery	=	8.96%	
7) Nitrobenzene-d5	8.205	82	50923	4.48	ppm	0.00
Spiked Amount 50.000			Recovery	=	8.96%	
15) 2-Fluorobiphenyl	11.756	172	113318	4.39	ppm	0.00
Spiked Amount 50.000			Recovery	=	8.78%	
20) 2,4,6-Tribromophenol	14.639	330	13649	4.01	ppm	0.00
Spiked Amount 50.000			Recovery	=	8.02%	
28) Terphenyl-d14	19.029	244	90856	4.82	ppm	0.00
Spiked Amount 50.000			Recovery	=	9.64%	
Target Compounds						Qvalue
2) 1,4-dioxane	2.736	88	1458	0.21	ppm	# 1
5) Phenol	6.627	94	16041	1.04	ppm	# 65
6) bis(2-Chloroethyl)ether	6.772	93	2522	0.20	ppm	90
8) Nitrobenzene	8.243	77	3042	0.22	ppm	75
9) Naphthalene	9.617	128	9348	0.21	ppm	96
10) Hexachlorobutadiene	9.919	225	1571	0.20	ppm	86
11) 2-Methylnaphthalene	10.977	141	5404	0.22	ppm	94
12) 1-Methylnaphthalene	11.161	141	4002	0.22	ppm	95
13) Hexachlorocyclopentadiene	11.346	237	1351	0.38	ppm	96
16) Acenaphthylene	12.751	152	7514	0.22	ppm	97
17) Acenaphthene	13.107	153	4798	0.21	ppm	83
18) 4,6-dinitro-2-methylph...	14.300	198	1203	1.09	ppm	83
19) Fluorene	14.149	166	4529	0.22	ppm	93
22) Hexachlorobenzene	15.257	284	1819	0.22	ppm	73
23) Pentachlorophenol	15.674	266	2921	1.04	ppm	95
24) Phenanthrene	16.045	178	7748	0.22	ppm	95
25) Anthracene	16.154	178	6641	0.22	ppm	92
26) Fluoranthene	18.287	202	6405	0.22	ppm	96
27) Pyrene	18.673	202	7087	0.22	ppm	95
29) Benzo[a]anthracene	20.744	228	5395	0.20	ppm	93
30) Chrysene	20.790	228	6901	0.21	ppm	99
32) Benzo[b]fluoranthene	22.398	252	6998	0.20	ppm	97
33) Benzo[k]fluoranthene	22.436	252	6625	0.21	ppm	96
34) Benzo[a]pyrene	22.850	252	6076	0.20	ppm	95
35) Indeno[1,2,3-cd]pyrene	24.448	276	6396	0.21	ppm	92
36) Dibenz[a,h]anthracene	24.486	278	5103	0.21	ppm	83
37) Benzo[g,h,i]perylene	24.881	276	6671	0.21	ppm	89

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\E3P2503\
Data File : 3p54960.D
Acq On : 6 Jul 2016 1:30 pm
Operator : hankc
Sample : ic2503-0.2
Misc : op95179a,e3p2503
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jul 06 17:28:40 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3P2503SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Jul 06 17:28:34 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

(#) = qualifier out of range (m) = manual integration (+) = signals summed

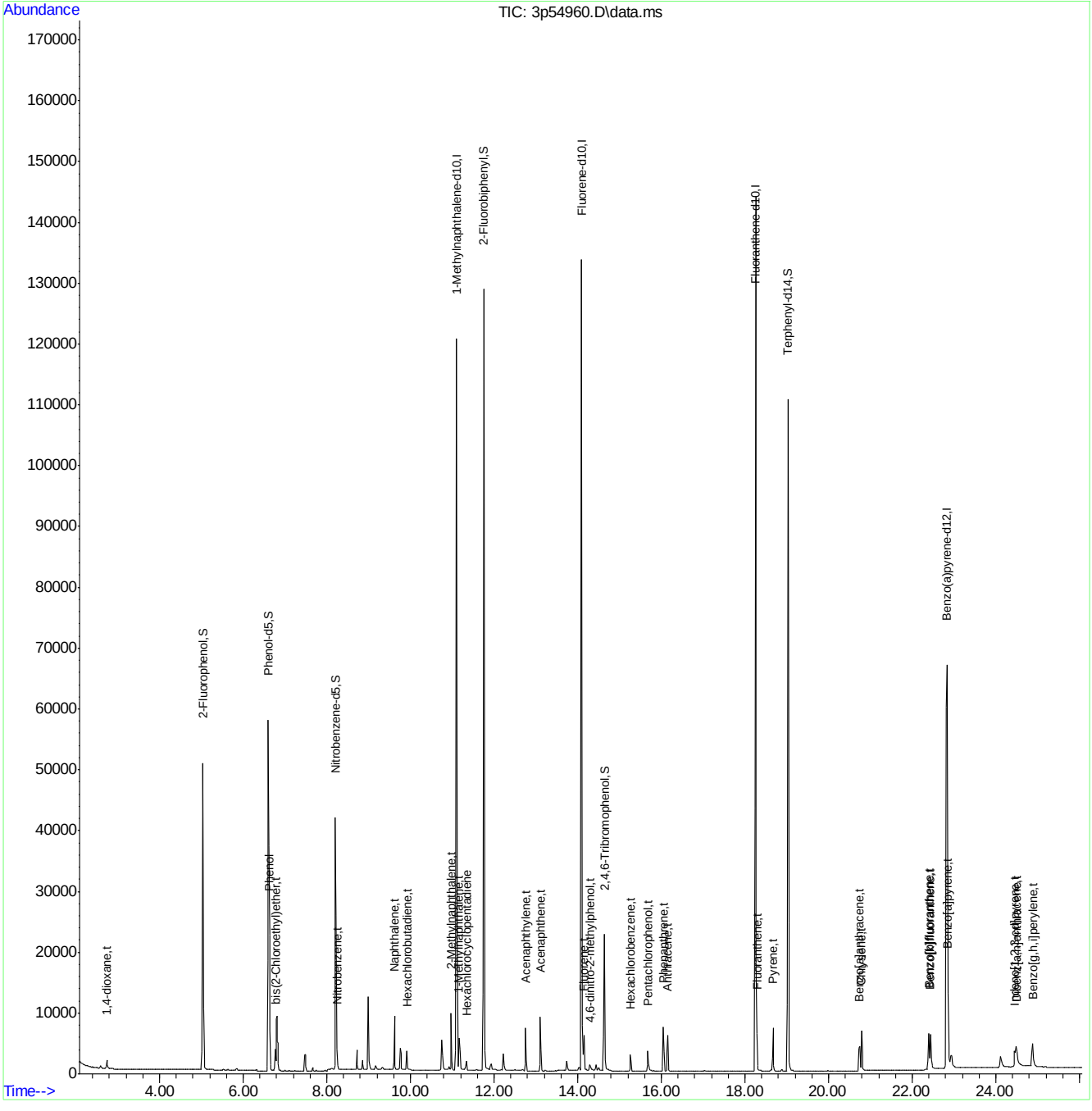
7.6.6

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\E3P2503\
Data File : 3p54960.D
Acq On : 6 Jul 2016 1:30 pm
Operator : hankc
Sample : ic2503-0.2
Misc : op95179a,e3p2503
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jul 06 17:28:40 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3P2503SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Jul 06 17:28:34 2016
Response via : Initial Calibration



M3P2503SIM.M Mon Jul 11 10:08:37 2016 Page: 3

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\E3P2503\
Data File : 3p54961.D
Acq On : 6 Jul 2016 2:02 pm
Operator : hankc
Sample : ic2503-5
Misc : op95179a,e3p2503
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jul 06 17:29:12 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3P2503SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Jul 06 17:29:04 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	11.100	150	61525	4.00	ppm	0.00
14) Fluorene-d10	14.092	176	106137	4.00	ppm	0.00
21) Fluoranthene-d10	18.256	212	179159	4.00	ppm	# 0.00
31) Benzo(a)pyrene-d12	22.831	264	120627	4.00	ppm	0.00
System Monitoring Compounds						
3) 2-Fluorophenol	5.038	112	647516	60.28	ppm	0.00
Spiked Amount 50.000			Recovery = 120.56%			
4) Phenol-d5	6.627	99	895989	62.13	ppm	0.02
Spiked Amount 50.000			Recovery = 124.26%			
7) Nitrobenzene-d5	8.224	82	800055	73.32	ppm	0.02
Spiked Amount 50.000			Recovery = 146.64%			
15) 2-Fluorobiphenyl	11.756	172	1343229	48.07	ppm	0.00
Spiked Amount 50.000			Recovery = 96.14%			
20) 2,4,6-Tribromophenol	14.639	330	249435	68.65	ppm	0.00
Spiked Amount 50.000			Recovery = 137.30%			
28) Terphenyl-d14	19.044	244	1032408	42.09	ppm	0.02
Spiked Amount 50.000			Recovery = 84.18%			
Target Compounds						Qvalue
2) 1,4-dioxane	2.736	88	31180	4.74	ppm	# 49
5) Phenol	6.639	94	210004	14.51	ppm	# 79
6) bis(2-Chloroethyl)ether	6.772	93	46583	3.92	ppm	82
8) Nitrobenzene	8.243	77	41778	3.14	ppm	# 55
9) Naphthalene	9.617	128	182708	4.30	ppm	94
10) Hexachlorobutadiene	9.919	225	29671	4.00	ppm	86
11) 2-Methylnaphthalene	10.977	141	94727	4.07	ppm	97
12) 1-Methylnaphthalene	11.161	141	83239	4.78	ppm	96
13) Hexachlorocyclopentadiene	11.346	237	54397	16.63	ppm	96
16) Acenaphthylene	12.751	152	183790	4.92	ppm	93
17) Acenaphthene	13.107	153	101699	4.12	ppm	88
18) 4,6-dinitro-2-methylph...	14.300	198	87912	72.42	ppm	84
19) Fluorene	14.149	166	114988	5.18	ppm	90
22) Hexachlorobenzene	15.257	284	41582	4.05	ppm	72
23) Pentachlorophenol	15.674	266	118085	34.14	ppm	82
24) Phenanthrene	16.045	178	170430	3.90	ppm	97
25) Anthracene	16.154	178	152857	4.05	ppm	90
26) Fluoranthene	18.287	202	171110	4.72	ppm	94
27) Pyrene	18.673	202	190448	4.71	ppm	91
29) Benzo[a]anthracene	20.743	228	174583	5.31	ppm	89
30) Chrysene	20.790	228	157584	3.90	ppm	97
32) Benzo[b]fluoranthene	22.398	252	215963	5.68	ppm	92
33) Benzo[k]fluoranthene	22.436	252	159024	4.57	ppm	97
34) Benzo[a]pyrene	22.849	252	153670	4.67	ppm	96
35) Indeno[1,2,3-cd]pyrene	24.448	276	183558	5.37	ppm	93
36) Dibenz[a,h]anthracene	24.486	278	131921	4.81	ppm	54
37) Benzo[g,h,i]perylene	24.881	276	166794	4.76	ppm	89

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\E3P2503\
Data File : 3p54961.D
Acq On : 6 Jul 2016 2:02 pm
Operator : hankc
Sample : ic2503-5
Misc : op95179a,e3p2503
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jul 06 17:29:12 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3P2503SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Jul 06 17:29:04 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

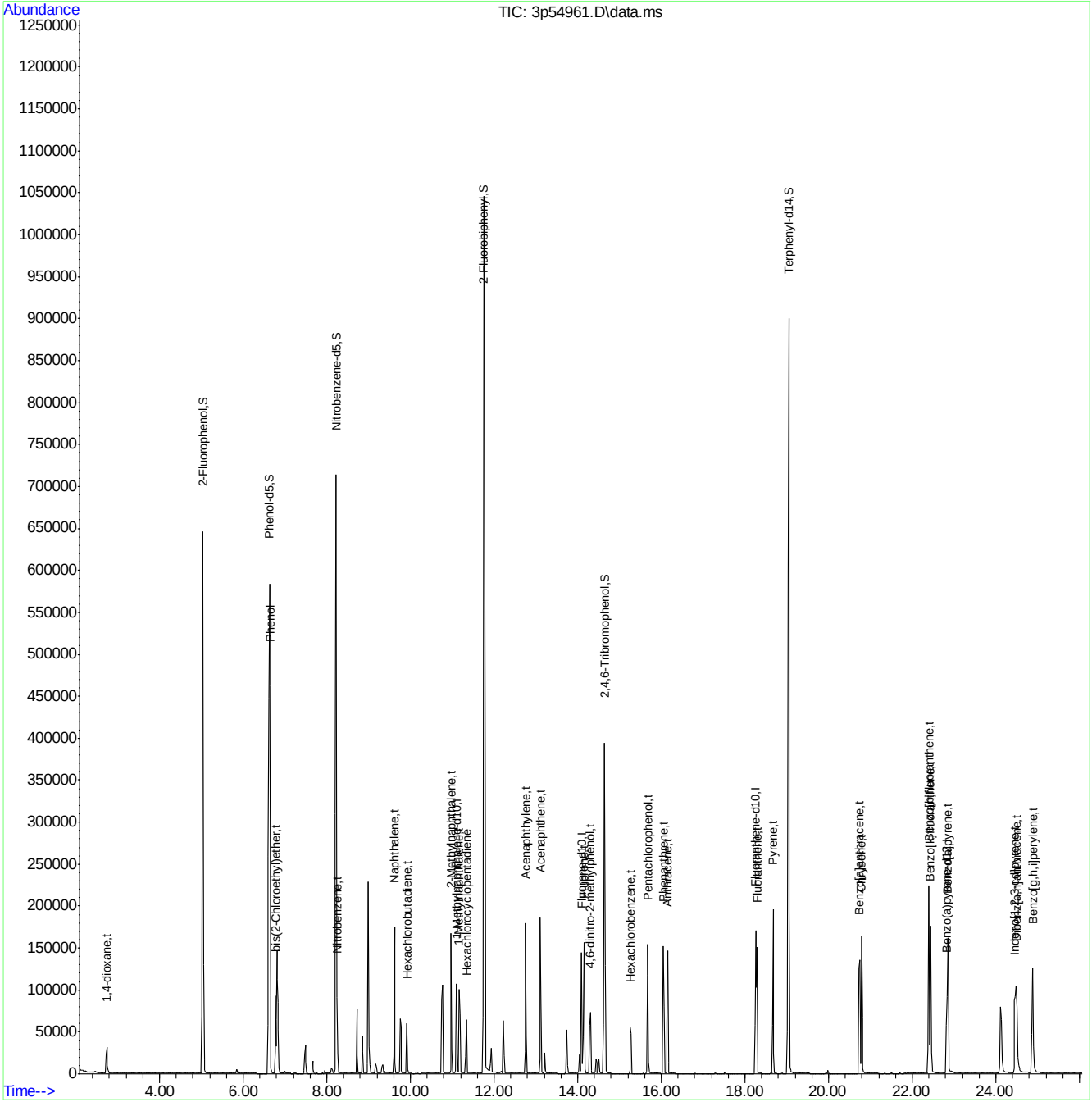
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC25024

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\E3P2503\
Data File : 3p54961.D
Acq On : 6 Jul 2016 2:02 pm
Operator : hankc
Sample : ic2503-5
Misc : op95179a,e3p2503
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jul 06 17:29:12 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3P2503SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Jul 06 17:29:04 2016
Response via : Initial Calibration



M3P2503SIM.M Mon Jul 11 10:08:45 2016 Page: 3

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\E3P2503\
Data File : 3p54962.D
Acq On : 6 Jul 2016 2:33 pm
Operator : hankc
Sample : ic2503-2.5
Misc : op95179a,e3p2503
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jul 06 17:29:34 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3P2503SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Jul 06 17:29:28 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	11.100	150	58818	4.00	ppm	# 0.00
14) Fluorene-d10	14.092	176	97541	4.00	ppm	0.00
21) Fluoranthene-d10	18.256	212	156559	4.00	ppm	# 0.00
31) Benzo(a)pyrene-d12	22.812	264	110080	4.00	ppm	-0.02
System Monitoring Compounds						
3) 2-Fluorophenol	5.038	112	376140	39.79	ppm	0.00
Spiked Amount 50.000			Recovery = 79.58%			
4) Phenol-d5	6.614	99	493254	38.71	ppm	-0.01
Spiked Amount 50.000			Recovery = 77.42%			
7) Nitrobenzene-d5	8.205	82	412360	41.76	ppm	-0.02
Spiked Amount 50.000			Recovery = 83.52%			
15) 2-Fluorobiphenyl	11.756	172	773441	30.12	ppm	0.00
Spiked Amount 50.000			Recovery = 60.24%			
20) 2,4,6-Tribromophenol	14.639	330	152849	51.12	ppm	0.00
Spiked Amount 50.000			Recovery = 102.24%			
28) Terphenyl-d14	19.028	244	672834	36.70	ppm	-0.02
Spiked Amount 50.000			Recovery = 73.40%			
Target Compounds						Qvalue
2) 1,4-dioxane	2.736	88	14051	2.26	ppm	# 49
5) Phenol	6.627	94	109670	8.52	ppm	# 76
6) bis(2-Chloroethyl)ether	6.772	93	21874	1.99	ppm	89
8) Nitrobenzene	8.243	77	21431	1.80	ppm	75
9) Naphthalene	9.617	128	89873	2.26	ppm	94
10) Hexachlorobutadiene	9.919	225	14342	2.09	ppm	87
11) 2-Methylnaphthalene	10.977	141	48722	2.27	ppm	98
12) 1-Methylnaphthalene	11.161	141	40943	2.47	ppm	98
13) Hexachlorocyclopentadiene	11.346	237	22911	6.28	ppm	95
16) Acenaphthylene	12.751	152	86595	2.53	ppm	94
17) Acenaphthene	13.107	153	49818	2.25	ppm	86
18) 4,6-dinitro-2-methylph...	14.300	198	29862	18.16	ppm	80
19) Fluorene	14.149	166	52810	2.58	ppm	91
22) Hexachlorobenzene	15.257	284	19891	2.28	ppm	74
23) Pentachlorophenol	15.659	266	51486	15.87	ppm	86
24) Phenanthrene	16.045	178	83690	2.29	ppm	98
25) Anthracene	16.154	178	71928	2.29	ppm	90
26) Fluoranthene	18.287	202	80300	2.56	ppm	95
27) Pyrene	18.673	202	90291	2.59	ppm	92
29) Benzo[a]anthracene	20.728	228	76512	2.63	ppm	91
30) Chrysene	20.790	228	76758	2.27	ppm	98
32) Benzo[b]fluoranthene	22.398	252	97027	2.70	ppm	93
33) Benzo[k]fluoranthene	22.436	252	74773	2.41	ppm	96
34) Benzo[a]pyrene	22.849	252	68723	2.29	ppm	95
35) Indeno[1,2,3-cd]pyrene	24.448	276	82881	2.61	ppm	93
36) Dibenz[a,h]anthracene	24.486	278	57958	2.34	ppm	52
37) Benzo[g,h,i]perylene	24.881	276	76272	2.42	ppm	89

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\E3P2503\
Data File : 3p54962.D
Acq On : 6 Jul 2016 2:33 pm
Operator : hankc
Sample : ic2503-2.5
Misc : op95179a,e3p2503
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jul 06 17:29:34 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3P2503SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Jul 06 17:29:28 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

(#) = qualifier out of range (m) = manual integration (+) = signals summed

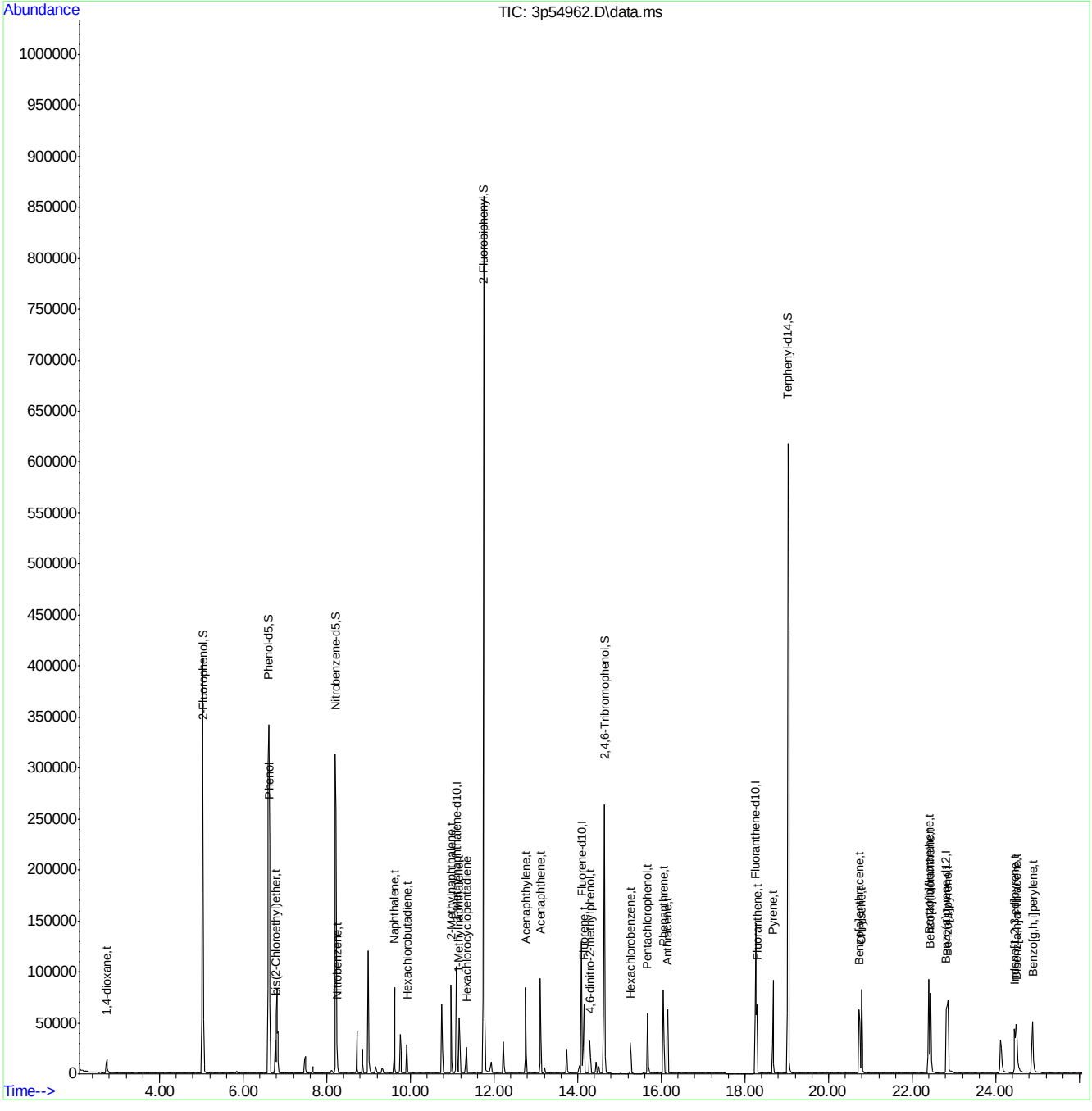
7.6.8

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\E3P2503\
Data File : 3p54962.D
Acq On : 6 Jul 2016 2:33 pm
Operator : hankc
Sample : ic2503-2.5
Misc : op95179a,e3p2503
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jul 06 17:29:34 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3P2503SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Jul 06 17:29:28 2016
Response via : Initial Calibration



M3P2503SIM.M Mon Jul 11 10:08:54 2016 Page: 3

Manual Integrations APPROVED (compounds with "m" flag)
Nina Pandya
07/11/16 10:45

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\E3P2503\
Data File : 3p54963.D
Acq On : 6 Jul 2016 3:04 pm
Operator : hankc
Sample : ic2503-0.5
Misc : op95179a,e3p2503
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jul 06 17:30:52 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3P2503SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Jul 06 17:29:51 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1-Methylnaphthalene-d10	11.100	150	81223	4.00 ppm	# 0.00
14) Fluorene-d10	14.092	176	115674	4.00 ppm	0.00
21) Fluoranthene-d10	18.256	212	175349	4.00 ppm	# 0.00
31) Benzo(a)pyrene-d12	22.812	264	126215	4.00 ppm	0.00
System Monitoring Compounds					
3) 2-Fluorophenol	5.038	112	115904	9.19 ppm	0.00
Spiked Amount 50.000			Recovery	= 18.38%	
4) Phenol-d5	6.602	99	155488	9.18 ppm	-0.01
Spiked Amount 50.000			Recovery	= 18.36%	
7) Nitrobenzene-d5	8.205	82	128683	9.70 ppm	0.00
Spiked Amount 50.000			Recovery	= 19.40%	
15) 2-Fluorobiphenyl	11.756	172	266716	9.29 ppm	0.00
Spiked Amount 50.000			Recovery	= 18.58%	
20) 2,4,6-Tribromophenol	14.639	330	38410	10.77 ppm	0.00
Spiked Amount 50.000			Recovery	= 21.54%	
28) Terphenyl-d14	19.028	244	221305	11.38 ppm	0.00
Spiked Amount 50.000			Recovery	= 22.76%	
Target Compounds					Qvalue
2) 1,4-dioxane	2.736	88	3525	0.42 ppm	# 42
5) Phenol	6.627	94	34474	2.03 ppm	# 62
6) bis(2-Chloroethyl)ether	6.772	93	5883	0.40 ppm	86
8) Nitrobenzene	8.243	77	6653	0.42 ppm	80
9) Naphthalene	9.617	128	23203	0.43 ppm	96
10) Hexachlorobutadiene	9.919	225	3815	0.41 ppm	87
11) 2-Methylnaphthalene	10.977	141	13042	0.45 ppm	96
12) 1-Methylnaphthalene	11.161	141	10262	0.45 ppm	97
13) Hexachlorocyclopentadiene	11.346	237	4486	0.85 ppm	95
16) Acenaphthylene	12.751	152	20901	0.51 ppm	96
17) Acenaphthene	13.107	153	12707	0.49 ppm	84
18) 4,6-dinitro-2-methylph...	14.281	198	3583	1.68 ppm	# 1
19) Fluorene	14.149	166	12043	0.49 ppm	92
22) Hexachlorobenzene	15.257	284	4853	0.50 ppm	75
23) Pentachlorophenol	15.674	266	9025	2.38 ppm	88
24) Phenanthrene	16.045	178	21809	0.54 ppm	96
25) Anthracene	16.154	178	18101	0.52 ppm	91
26) Fluoranthene	18.287	202	17629	0.50 ppm	96
27) Pyrene	18.673	202	19967	0.51 ppm	94
29) Benzo[a]anthracene	20.728	228	16414	0.50 ppm	91
30) Chrysene	20.790	228	19513	0.52 ppm	98
32) Benzo[b]fluoranthene	22.398	252	20946m	0.50 ppm	
33) Benzo[k]fluoranthene	22.436	252	17265m	0.49 ppm	
34) Benzo[a]pyrene	22.849	252	14751	0.44 ppm	95
35) Indeno[1,2,3-cd]pyrene	24.448	276	17213	0.47 ppm	93
36) Dibenz[a,h]anthracene	24.486	278	13842	0.49 ppm	82
37) Benzo[g,h,i]perylene	24.881	276	17492	0.49 ppm	89

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\E3P2503\
Data File : 3p54963.D
Acq On : 6 Jul 2016 3:04 pm
Operator : hankc
Sample : ic2503-0.5
Misc : op95179a,e3p2503
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jul 06 17:30:52 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3P2503SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Jul 06 17:29:51 2016
Response via : Initial Calibration

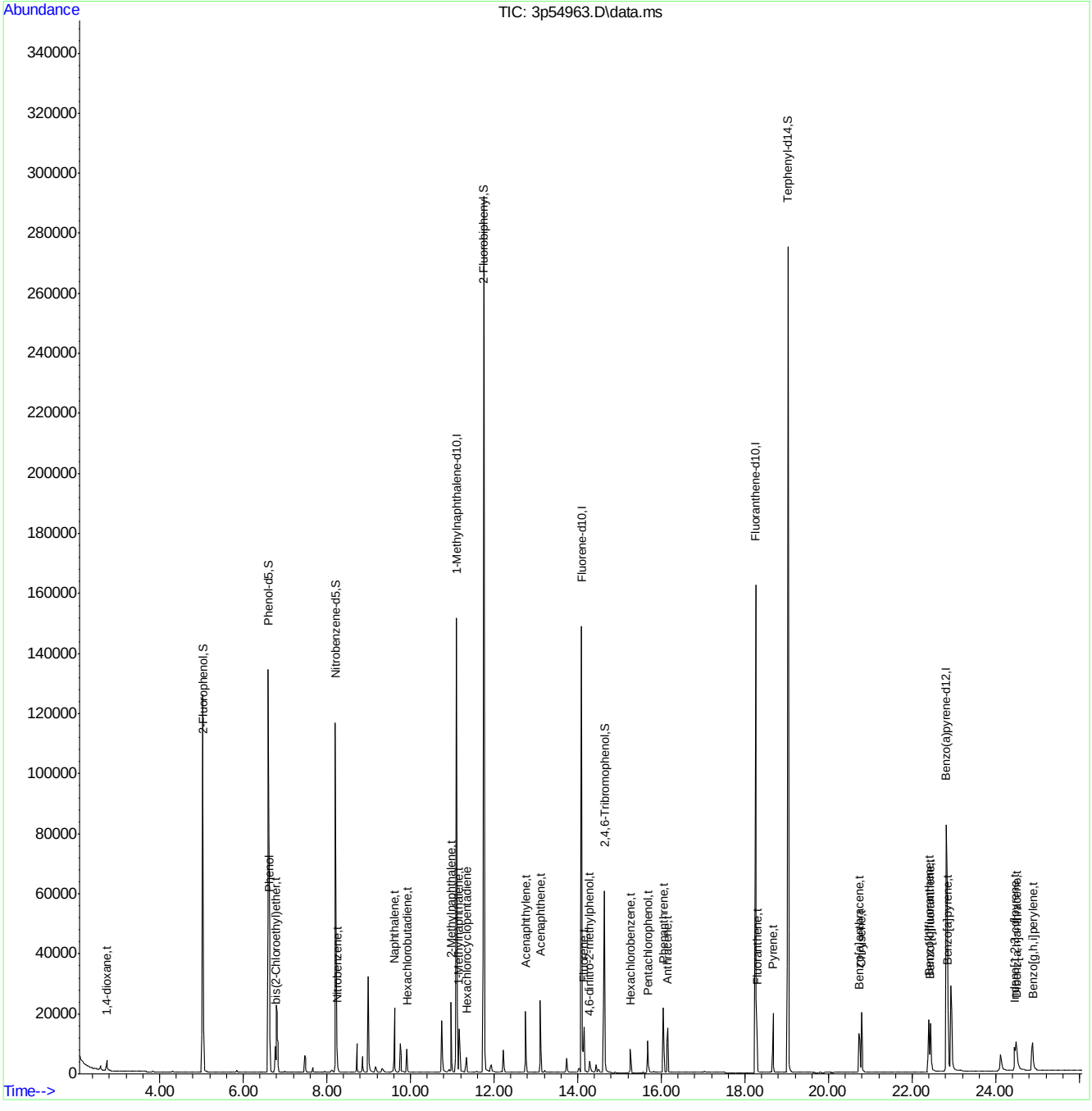
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\E3P2503\
Data File : 3p54963.D
Acq On : 6 Jul 2016 3:04 pm
Operator : hankc
Sample : ic2503-0.5
Misc : op95179a,e3p2503
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jul 06 17:30:52 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3P2503SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Jul 06 17:29:51 2016
Response via : Initial Calibration



SGS ACCUTEST JC25024

Manual Integration Approval Summary

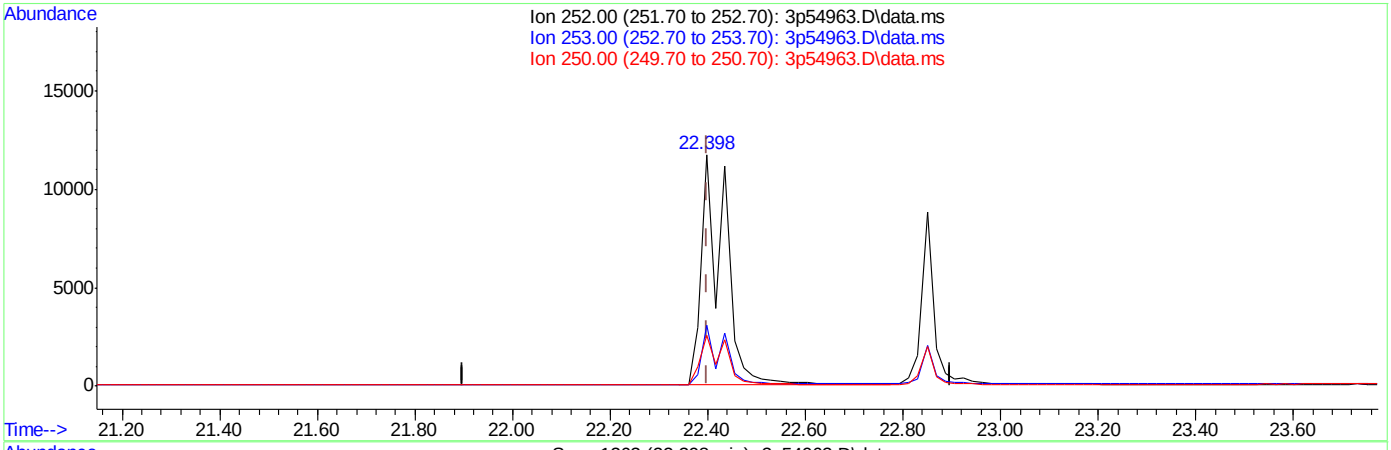
Sample Number:	E3P2503-IC2503	**Method:**	SW846 8270D BY SIM
Lab FileID:	3P54963.D	**Analyst approved:**	07/11/16 10:13 Ashley Dye
Injection Time:	07/06/16 15:04	**Supervisor approved:**	07/11/16 10:45 Nina Pandya

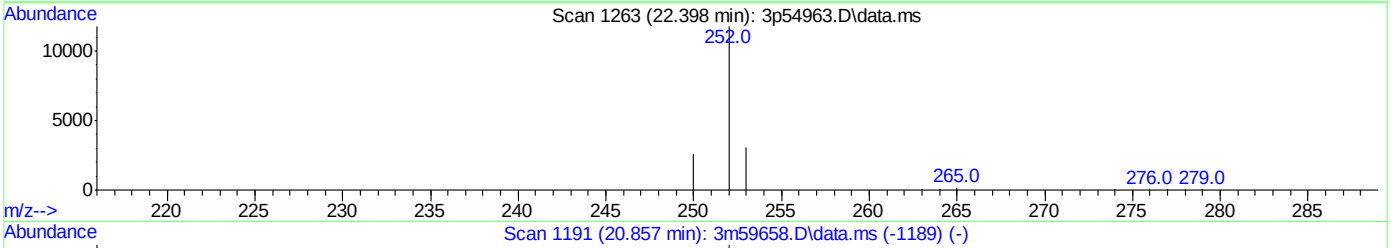
Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzo(b)fluoranthene	205-99-2		22.40	Overlapping peak
Benzo(k)fluoranthene	207-08-9		22.44	Overlapping peak

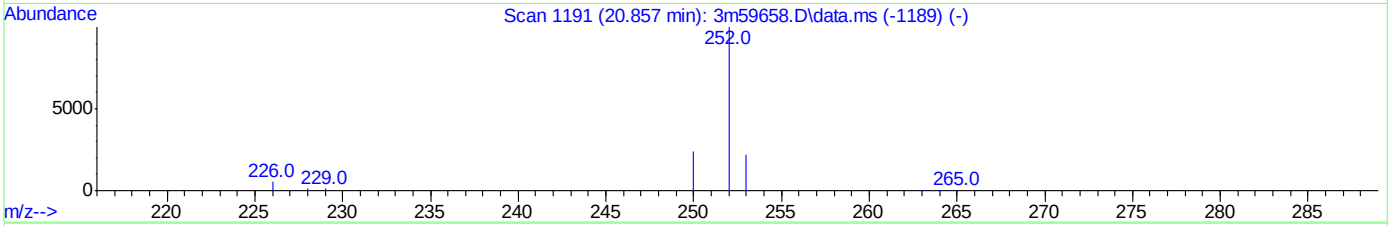
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\E3P2503\
Data File : 3p54963.D
Acq On : 6 Jul 2016 3:04 pm
Operator : hankc
Sample : ic2503-0.5
Misc : op94978,e3p2503
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jul 06 17:30:33 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3P2503SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Jul 06 17:29:51 2016
Response via : Initial Calibration







TIC: 3p54963.D\data.ms

(32) Benzo[b]fluoranthene (t)

22.398min (+0.000) 0.94ppm

response 39195

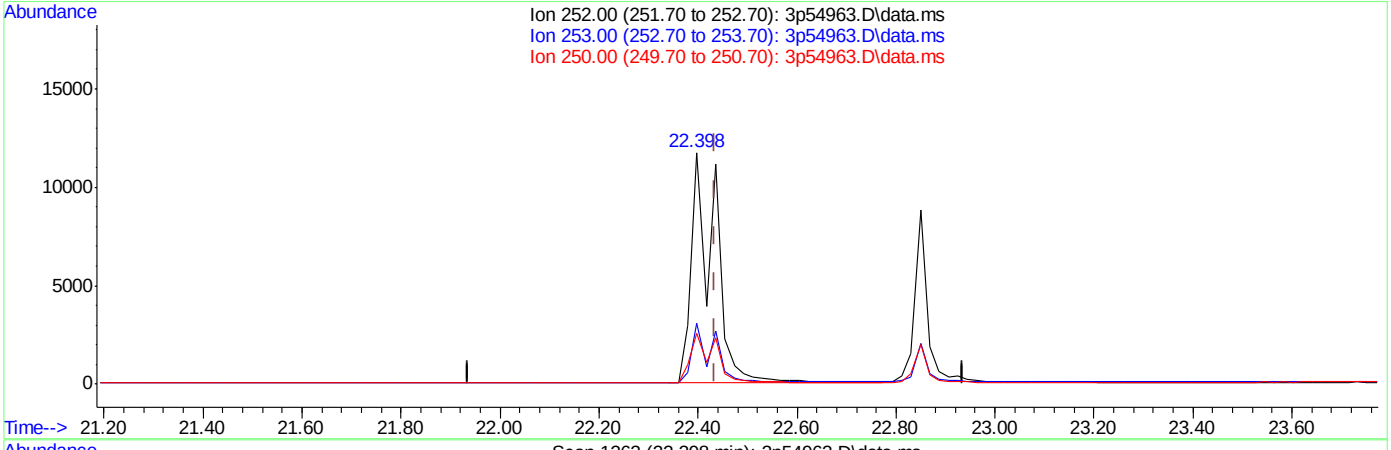
Ion	Exp%	Act%
252.00	100	100
253.00	23.60	25.51
250.00	23.10	21.50
0.00	0.00	0.00

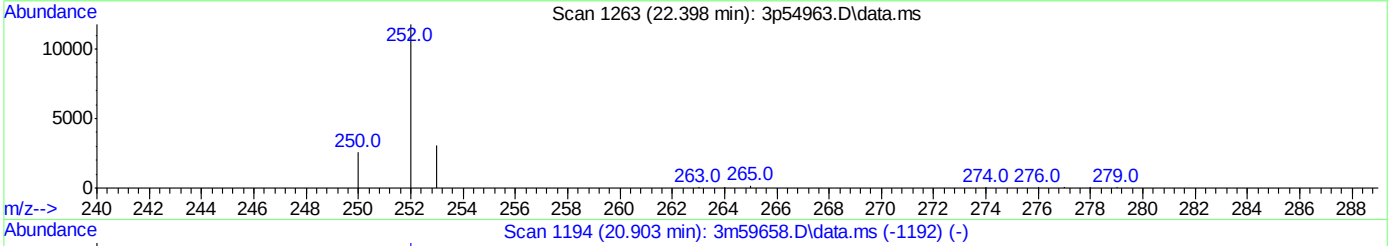
SGS ACCUTEST JC25024

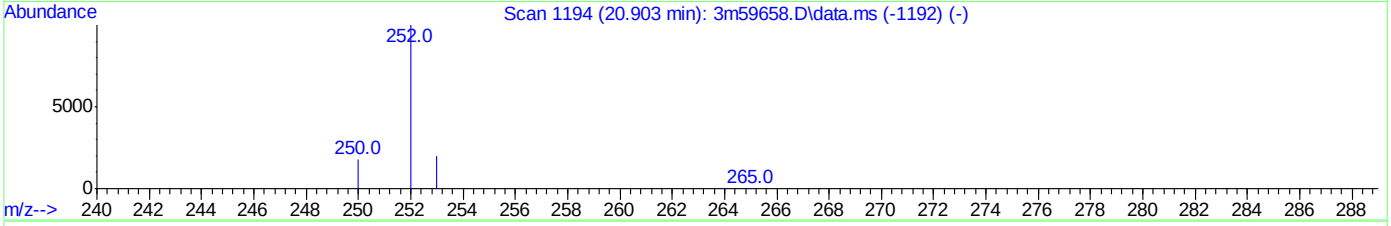
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\E3P2503\
Data File : 3p54963.D
Acq On : 6 Jul 2016 3:04 pm
Operator : hankc
Sample : ic2503-0.5
Misc : op94978,e3p2503
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jul 06 17:30:33 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3P2503SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Jul 06 17:29:51 2016
Response via : Initial Calibration







TIC: 3p54963.D\data.ms

(33) Benzo[k]fluoranthene (t)

22.398min (-0.038) 1.11ppm

response 39195

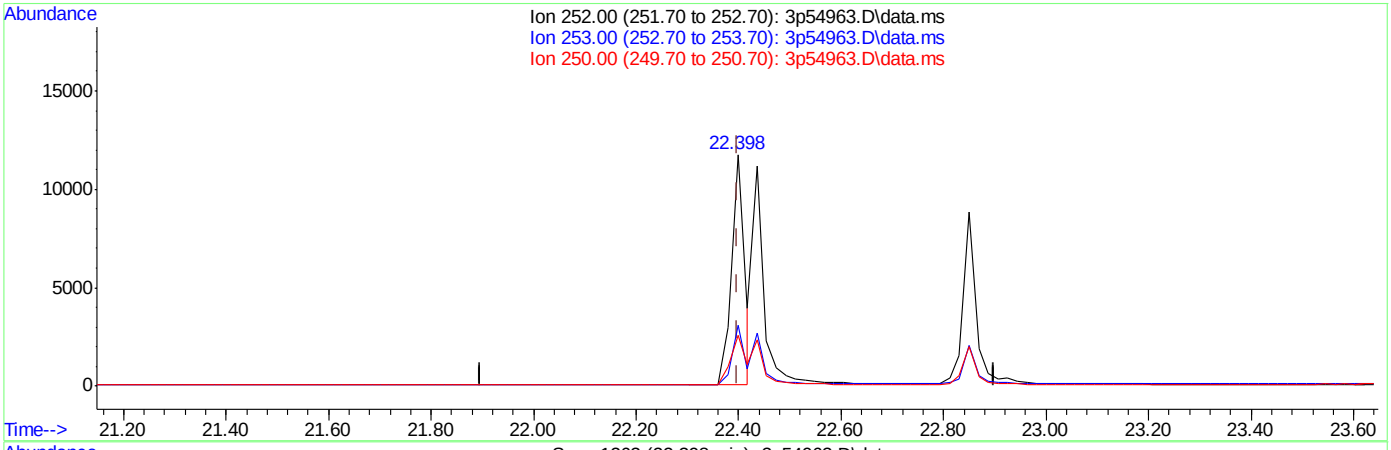
Ion	Exp%	Act%
252.00	100	100
253.00	23.60	25.51
250.00	23.10	21.50
0.00	0.00	0.00

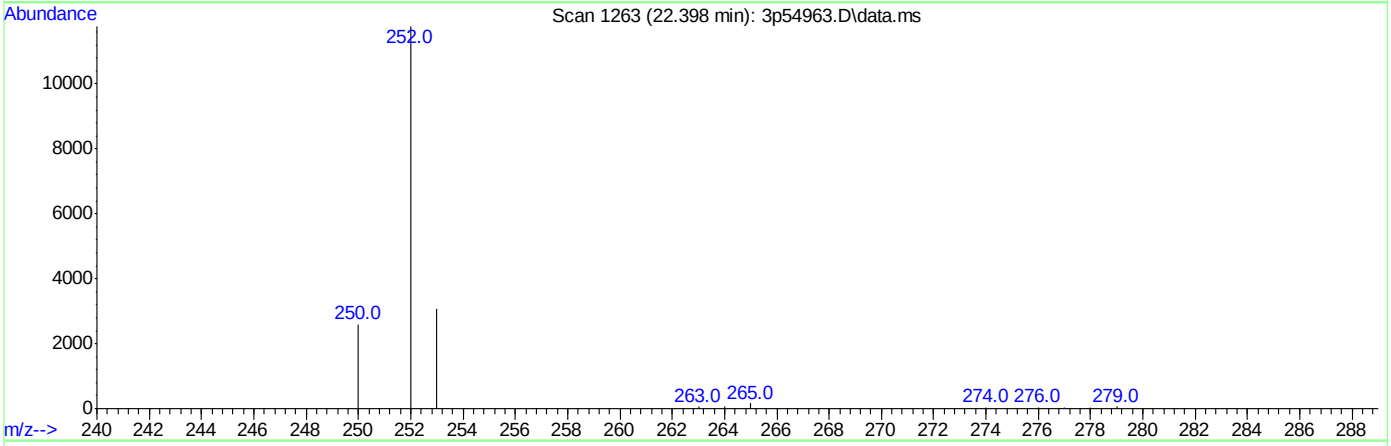
SGS ACCUTEST JC25024

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\E3P2503\
Data File : 3p54963.D
Acq On : 6 Jul 2016 3:04 pm
Operator : hankc
Sample : ic2503-0.5
Misc : op95179a,e3p2503
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jul 06 17:30:52 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3P2503SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Jul 06 17:29:51 2016
Response via : Initial Calibration





TIC: 3p54963.D\data.ms

(32) Benzo[b]fluoranthene (t)

22.398min (+0.000) 0.50ppm m

response 20946

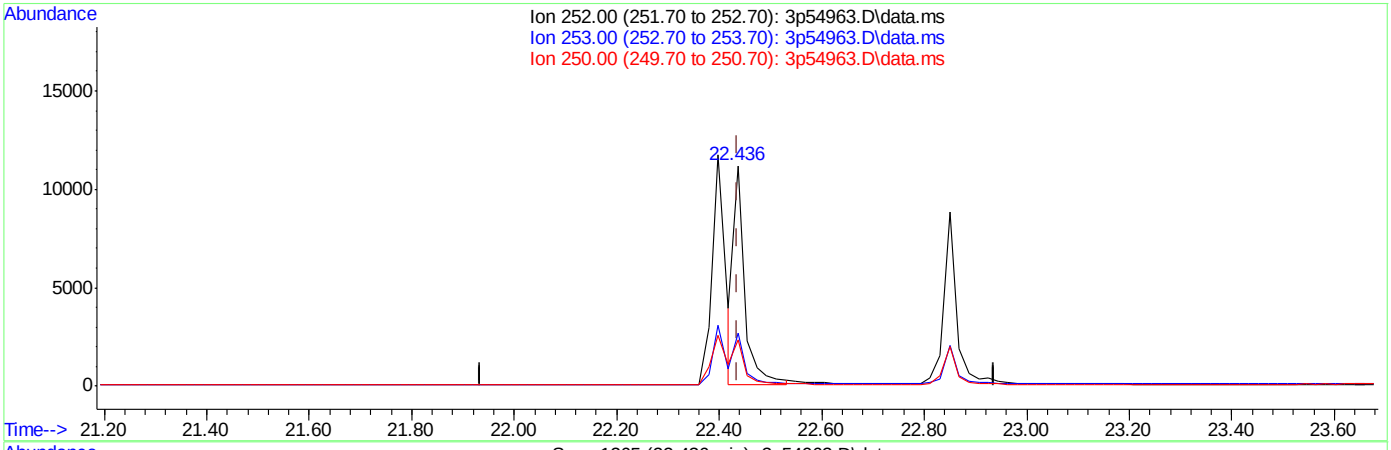
Ion	Exp%	Act%
252.00	100	100
253.00	23.60	26.15
250.00	23.10	22.06
0.00	0.00	0.00

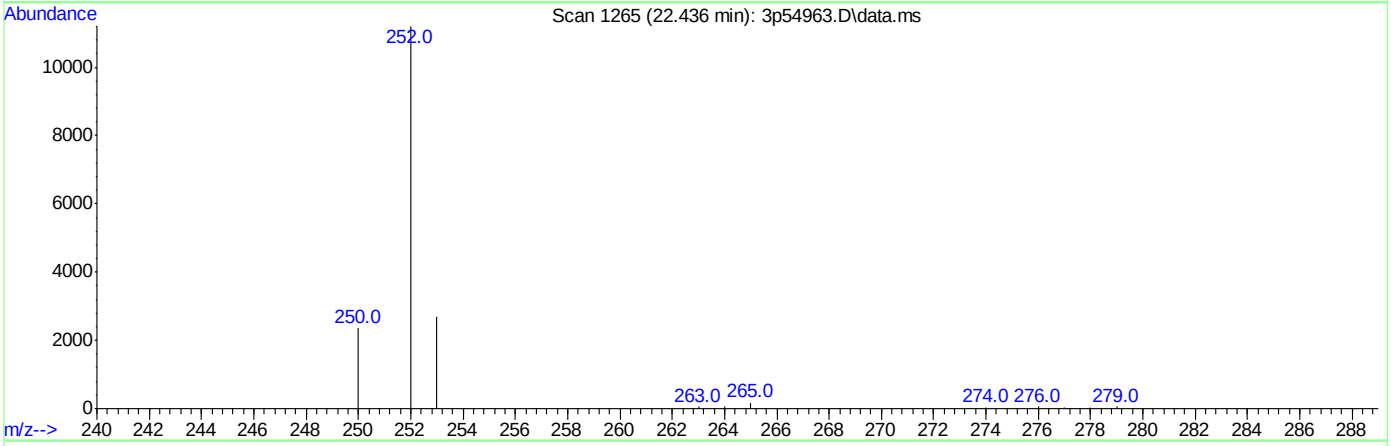
SGS ACCUTEST JC25024

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\E3P2503\
Data File : 3p54963.D
Acq On : 6 Jul 2016 3:04 pm
Operator : hankc
Sample : ic2503-0.5
Misc : op95179a,e3p2503
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jul 06 17:30:52 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3P2503SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Jul 06 17:29:51 2016
Response via : Initial Calibration





TIC: 3p54963.D\data.ms

(33) Benzo[k]fluoranthene (t)

22.436min (+0.000) 0.49ppm m

response 17265

Ion	Exp%	Act%
252.00	100	100
253.00	23.60	23.92
250.00	23.10	21.02
0.00	0.00	0.00

SGS ACCUTEST JC25024

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\E3P2503\
Data File : 3p54964.D
Acq On : 6 Jul 2016 5:37 pm
Operator : hankc
Sample : icv2503-1.0
Misc : op95179a,e3p2503
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jul 07 09:41:20 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3P2503SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Jul 06 17:34:10 2016
Response via : Initial Calibration

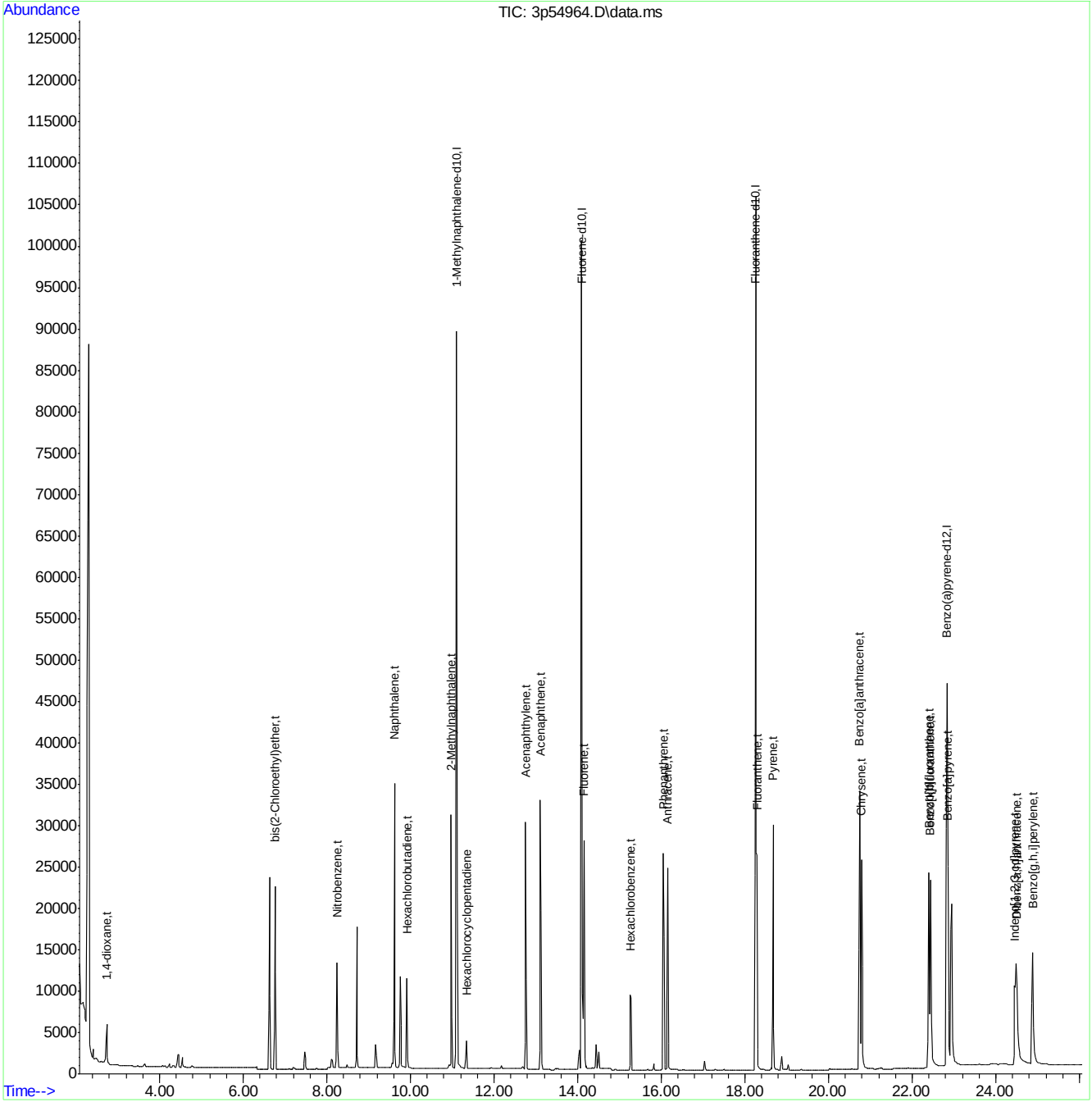
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1-Methylnaphthalene-d10	11.100	150	52064	4.00	ppm		0.00
14) Fluorene-d10	14.093	176	72894	4.00	ppm		0.00
21) Fluoranthene-d10	18.256	212	105662	4.00	ppm	#	0.00
31) Benzo(a)pyrene-d12	22.831	264	66096	4.00	ppm		0.00
System Monitoring Compounds							
3) 2-Fluorophenol	0.000	112	0	0.00	ppm		
Spiked Amount 50.000			Recovery	=	0.00%		
4) Phenol-d5	0.000	99	0d	0.00	ppm		
Spiked Amount 50.000			Recovery	=	0.00%		
7) Nitrobenzene-d5	0.000	82	0d	0.00	ppm		
Spiked Amount 50.000			Recovery	=	0.00%		
15) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm		
Spiked Amount 50.000			Recovery	=	0.00%		
20) 2,4,6-Tribromophenol	0.000	330	0d	0.00	ppm		
Spiked Amount 50.000			Recovery	=	0.00%		
28) Terphenyl-d14	0.000	244	0d	0.00	ppm		
Spiked Amount 50.000			Recovery	=	0.00%		
Target Compounds							Qvalue
2) 1,4-dioxane	2.736	88	4123	0.79	ppm		58
6) bis(2-Chloroethyl)ether	6.760	93	12301	1.33	ppm	#	61
8) Nitrobenzene	8.243	77	11052	1.18	ppm		76
9) Naphthalene	9.618	128	37061	1.08	ppm		95
10) Hexachlorobutadiene	9.919	225	6032	1.04	ppm		85
11) 2-Methylnaphthalene	10.977	141	18358	1.00	ppm		92
13) Hexachlorocyclopentadiene	11.346	237	2810	0.90	ppm		99
16) Acenaphthylene	12.751	152	30926	1.20	ppm		98
17) Acenaphthene	13.107	153	19615	1.20	ppm		78
19) Fluorene	14.149	166	19330	1.26	ppm		95
22) Hexachlorobenzene	15.257	284	7137	1.22	ppm		69
24) Phenanthrene	16.046	178	30829	1.25	ppm		94
25) Anthracene	16.154	178	24958	1.19	ppm		93
26) Fluoranthene	18.287	202	27399	1.29	ppm		97
27) Pyrene	18.673	202	29057	1.22	ppm		96
29) Benzo[a]anthracene	20.744	228	26055	1.32	ppm		93
30) Chrysene	20.790	228	23433	1.04	ppm		99
32) Benzo[b]fluoranthene	22.398	252	25649	1.17	ppm		97
33) Benzo[k]fluoranthene	22.436	252	25258	1.37	ppm		96
34) Benzo[a]pyrene	22.850	252	21343	1.24	ppm		95
35) Indeno[1,2,3-cd]pyrene	24.448	276	23238	1.22	ppm		92
36) Dibenz[a,h]anthracene	24.486	278	18197	1.24	ppm		86
37) Benzo[g,h,i]perylene	24.881	276	22938	1.22	ppm		89

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\E3P2503\
Data File : 3p54964.D
Acq On : 6 Jul 2016 5:37 pm
Operator : hankc
Sample : icv2503-1.0
Misc : op95179a,e3p2503
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jul 07 09:41:20 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3P2503SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Jul 06 17:34:10 2016
Response via : Initial Calibration



M3P2503SIM.M Mon Jul 11 10:09:14 2016 Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\E3P2503\
Data File : 3p54965.D
Acq On : 6 Jul 2016 6:08 pm
Operator : hankc
Sample : icv2503-1.0
Misc : op95179a,e3p2503
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jul 07 09:19:21 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3P2503SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Jul 06 17:34:10 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	11.100	150	53847	4.00	ppm	# 0.00
14) Fluorene-d10	14.092	176	72209	4.00	ppm	0.00
21) Fluoranthene-d10	18.256	212	102579	4.00	ppm	# 0.00
31) Benzo(a)pyrene-d12	22.812	264	71944	4.00	ppm	-0.02
System Monitoring Compounds						
3) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
4) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
7) Nitrobenzene-d5	0.000	82	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
15) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
20) 2,4,6-Tribromophenol	0.000	330	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
28) Terphenyl-d14	0.000	244	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
Target Compounds						Qvalue
5) Phenol	6.614	94	60582	6.97	ppm	# 86
18) 4,6-dinitro-2-methylph...	14.281	198	4546	3.89	ppm	# 1
23) Pentachlorophenol	15.674	266	11230	4.41	ppm	89

(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.6.11

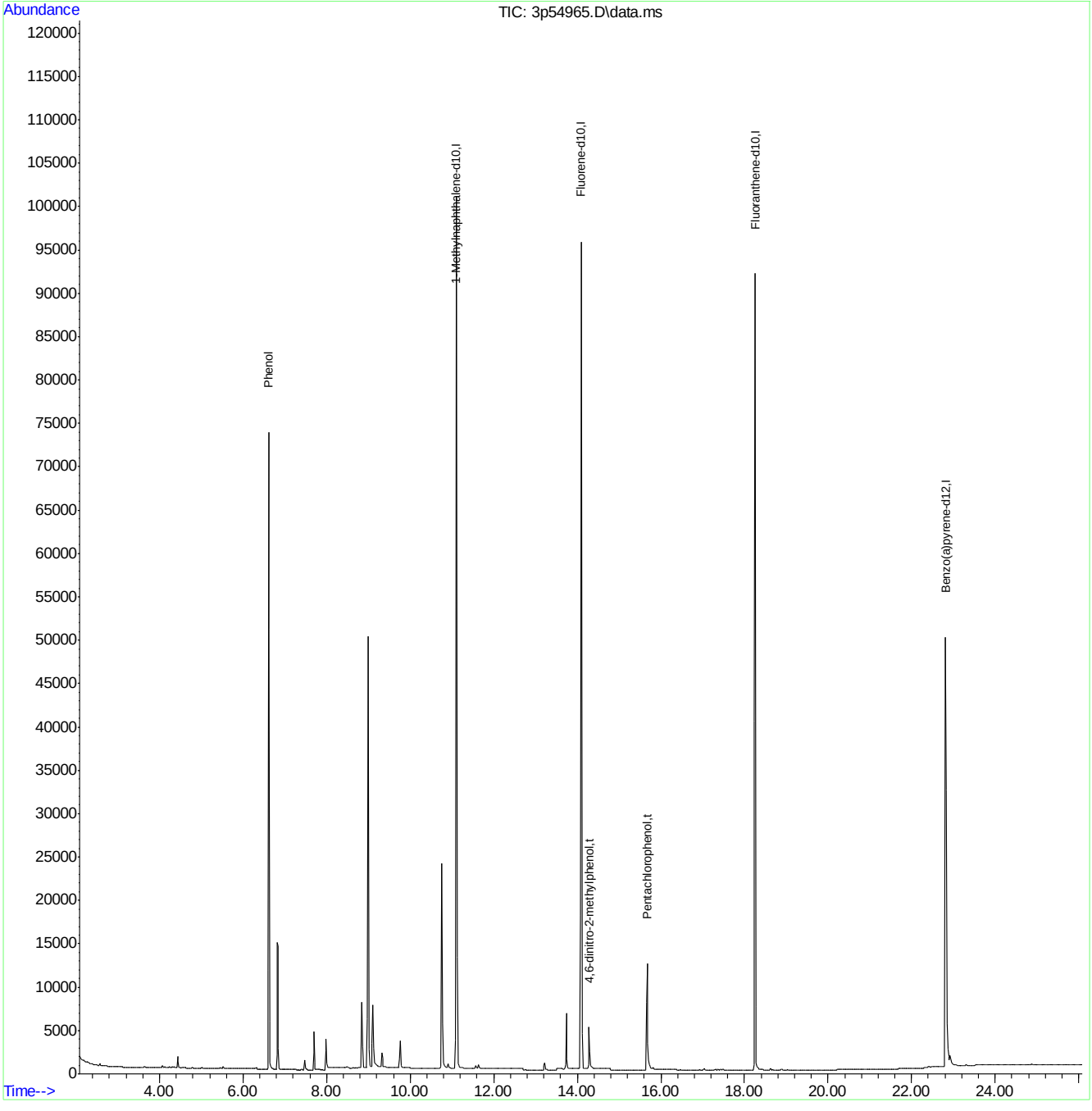
7

SGS ACCUTEST JC25024

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\E3P2503\
Data File : 3p54965.D
Acq On : 6 Jul 2016 6:08 pm
Operator : hankc
Sample : icv2503-1.0
Misc : op95179a,e3p2503
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jul 07 09:19:21 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3P2503SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Jul 06 17:34:10 2016
Response via : Initial Calibration



M3P2503SIM.M Mon Jul 11 10:09:22 2016 Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\E3P2535\
Data File : 3p55425.D
Acq On : 2 Aug 2016 10:43 pm
Operator : juliusj
Sample : cc2503-0.5
Misc : op95661a,e3p2535
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 03 09:47:13 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3P2503SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Aug 03 09:47:12 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.720	150	85618	4.00	ppm	#-0.05
14) Fluorene-d10	13.702	176	135845	4.00	ppm	-0.04
21) Fluoranthene-d10	17.875	212	206926	4.00	ppm	-0.03
31) Benzo(a)pyrene-d12	22.441	264	169613	4.00	ppm	-0.04
System Monitoring Compounds						
3) 2-Fluorophenol	4.729	112	117265	8.48	ppm	-0.16
Spiked Amount 50.000			Recovery = 16.96%			
4) Phenol-d5	6.304	99	170794	9.23	ppm	-0.10
Spiked Amount 50.000			Recovery = 18.46%			
7) Nitrobenzene-d5	7.857	82	170130	12.22	ppm	-0.10
Spiked Amount 50.000			Recovery = 24.44%			
15) 2-Fluorobiphenyl	11.388	172	348822	10.43	ppm	-0.07
Spiked Amount 50.000			Recovery = 20.86%			
20) 2,4,6-Tribromophenol	14.248	330	53555	12.59	ppm	-0.02
Spiked Amount 50.000			Recovery = 25.18%			
28) Terphenyl-d14	18.663	244	283076	10.39	ppm	0.00
Spiked Amount 50.000			Recovery = 20.78%			
Target Compounds						Qvalue
2) 1,4-dioxane	2.473	88	5053	0.59	ppm	88
5) Phenol	6.328	94	39453	2.60	ppm #	66
6) bis(2-Chloroethyl)ether	6.437	93	7096	0.47	ppm	81
8) Nitrobenzene	7.895	77	8158	0.53	ppm	64
9) Naphthalene	9.251	128	28305	0.50	ppm	96
10) Hexachlorobutadiene	9.552	225	4434	0.47	ppm	83
11) 2-Methylnaphthalene	10.601	141	16119	0.53	ppm	92
12) 1-Methylnaphthalene	10.792	141	15402	0.65	ppm	84
13) Hexachlorocyclopentadiene	10.959	237	6608	1.22	ppm	80
16) Acenaphthylene	12.367	152	29204	0.61	ppm	95
17) Acenaphthene	12.725	153	16946	0.56	ppm	93
18) 4,6-dinitro-2-methylph...	13.909	198	6973	3.33	ppm #	1
19) Fluorene	13.758	166	15353	0.54	ppm	95
22) Hexachlorobenzene	14.860	284	6034	0.53	ppm	77
23) Pentachlorophenol	15.277	266	13291	2.70	ppm	90
24) Phenanthrene	15.648	178	27976	0.58	ppm	97
25) Anthracene	15.757	178	24132	0.59	ppm	96
26) Fluoranthene	17.905	202	23220	0.56	ppm	99
27) Pyrene	18.292	202	27914	0.60	ppm	94
29) Benzo[a]anthracene	20.362	228	27406	0.71	ppm	94
30) Chrysene	20.424	228	25366	0.57	ppm	96
32) Benzo[b]fluoranthene	22.015	252	32604	0.58	ppm	90
33) Benzo[k]fluoranthene	22.062	252	22225	0.47	ppm	94
34) Benzo[a]pyrene	22.459	252	19613	0.44	ppm	95
35) Indeno[1,2,3-cd]pyrene	23.964	276	29448	0.60	ppm	93
36) Dibenz[a,h]anthracene	24.002	278	21401	0.57	ppm	52
37) Benzo[g,h,i]perylene	24.340	276	24757	0.51	ppm	96

SGS ACCUTEST JC25024

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\E3P2535\
Data File : 3p55425.D
Acq On : 2 Aug 2016 10:43 pm
Operator : juliusj
Sample : cc2503-0.5
Misc : op95661a,e3p2535
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 03 09:47:13 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3P2503SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Aug 03 09:47:12 2016
Response via : Initial Calibration

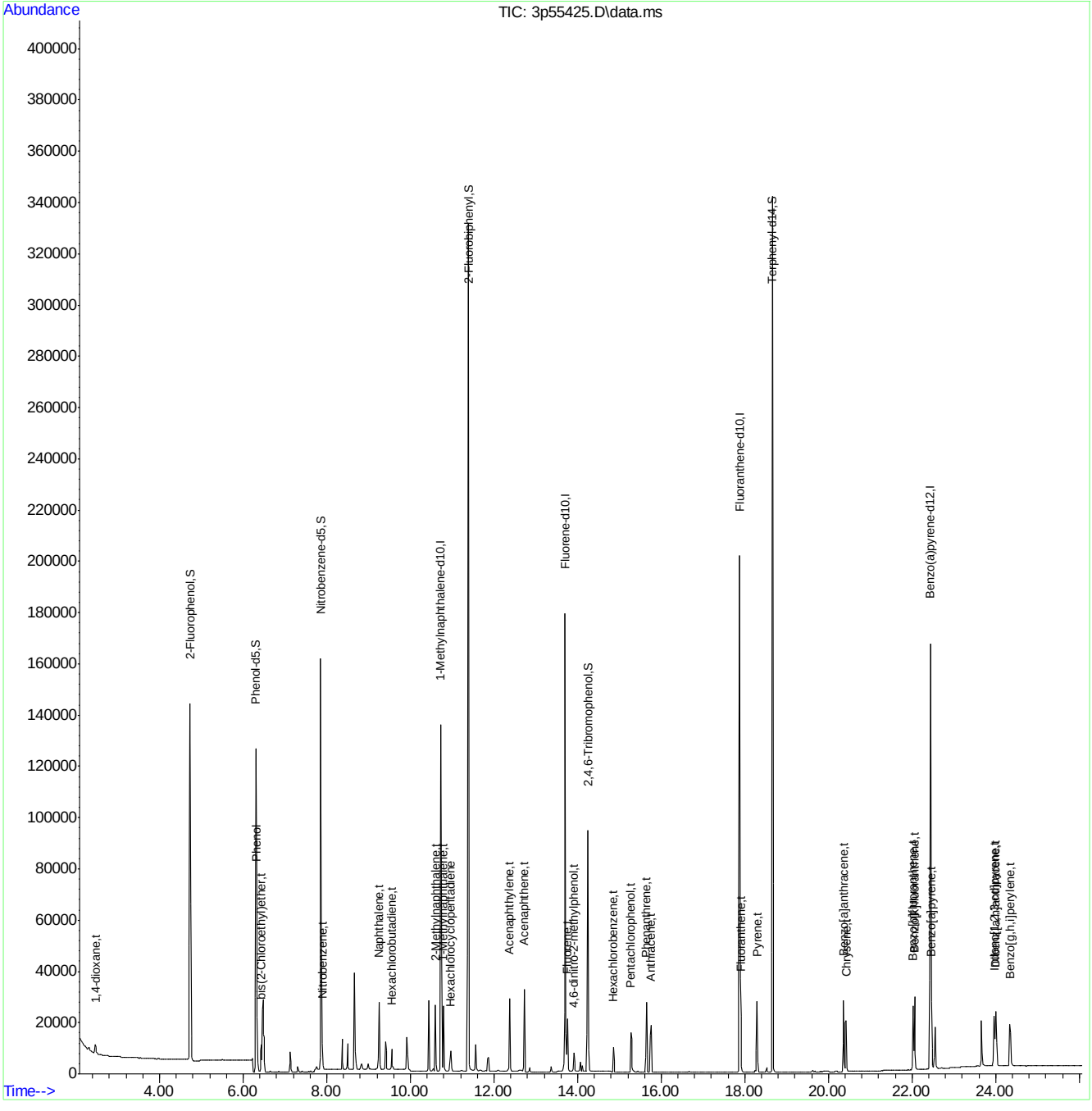
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\E3P2535\
Data File : 3p55425.D
Acq On : 2 Aug 2016 10:43 pm
Operator : juliusj
Sample : cc2503-0.5
Misc : op95661a,e3p2535
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 03 09:47:13 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3P2503SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Aug 03 09:47:12 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\E3P2536\
Data File : 3p55450a.D
Acq On : 3 Aug 2016 12:10 pm
Operator : shaniceg
Sample : cc2503-1
Misc : op95661a,e3p2536
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 03 12:38:02 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3P2503SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Jul 06 17:34:10 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.839	150	58126	4.00	ppm	0.07
14) Fluorene-d10	13.815	176	81233	4.00	ppm	0.08
21) Fluoranthene-d10	17.983	212	133356	4.00	ppm	0.08
31) Benzo(a)pyrene-d12	22.535	264	104421	4.00	ppm	0.06
System Monitoring Compounds						
3) 2-Fluorophenol	4.822	112	155290	16.54	ppm	-0.07
Spiked Amount 50.000			Recovery = 33.08%			
4) Phenol-d5	6.401	99	219830	17.50	ppm	0.00
Spiked Amount 50.000			Recovery = 35.00%			
7) Nitrobenzene-d5	7.951	82	199257	21.08	ppm	0.00
Spiked Amount 50.000			Recovery = 42.16%			
15) 2-Fluorobiphenyl	11.484	172	401623	20.09	ppm	0.02
Spiked Amount 50.000			Recovery = 40.18%			
20) 2,4,6-Tribromophenol	14.361	330	62105	24.42	ppm	0.09
Spiked Amount 50.000			Recovery = 48.84%			
28) Terphenyl-d14	18.755	244	327786	18.67	ppm	0.09
Spiked Amount 50.000			Recovery = 37.34%			
Target Compounds						Qvalue
2) 1,4-dioxane	2.550	88	5270	0.90	ppm	77
5) Phenol	6.425	94	48176	4.97	ppm #	62
6) bis(2-Chloroethyl)ether	6.534	93	8725	0.84	ppm	82
8) Nitrobenzene	7.989	77	10162	0.97	ppm	83
9) Naphthalene	9.345	128	32276	0.84	ppm	98
10) Hexachlorobutadiene	9.646	225	4811	0.74	ppm	66
11) 2-Methylnaphthalene	10.720	141	15899	0.77	ppm	74
12) 1-Methylnaphthalene	10.887	141	15024	0.93	ppm	91
13) Hexachlorocyclopentadiene	11.078	237	7797	1.98	ppm	92
16) Acenaphthylene	12.486	152	28237	0.99	ppm	87
17) Acenaphthene	12.833	153	19541	1.08	ppm	93
18) 4,6-dinitro-2-methylph...	14.022	198	12607	7.73	ppm	87
19) Fluorene	13.852	166	19101	1.12	ppm	76
22) Hexachlorobenzene	14.968	284	6666	0.91	ppm	75
23) Pentachlorophenol	15.385	266	19931	5.92	ppm	94
24) Phenanthrene	15.756	178	31892	1.03	ppm	98
25) Anthracene	15.865	178	29713	1.12	ppm	98
26) Fluoranthene	17.998	202	29892	1.11	ppm	94
27) Pyrene	18.400	202	34681	1.16	ppm	90
29) Benzo[a]anthracene	20.455	228	32151	1.29	ppm	97
30) Chrysene	20.517	228	29805	1.04	ppm	96
32) Benzo[b]fluoranthene	22.123	252	34078	0.98	ppm	98
33) Benzo[k]fluoranthene	22.154	252	27570	0.95	ppm	97
34) Benzo[a]pyrene	22.572	252	23916	0.88	ppm	94
35) Indeno[1,2,3-cd]pyrene	24.096	276	32966	1.10	ppm	93
36) Dibenz[a,h]anthracene	24.133	278	25504	1.10	ppm	55
37) Benzo[g,h,i]perylene	24.491	276	30425	1.03	ppm	98

SGS ACCUTEST JC25024

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\E3P2536\
Data File : 3p55450a.D
Acq On : 3 Aug 2016 12:10 pm
Operator : shaniceg
Sample : cc2503-1
Misc : op95661a,e3p2536
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 03 12:38:02 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3P2503SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Jul 06 17:34:10 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.6.13

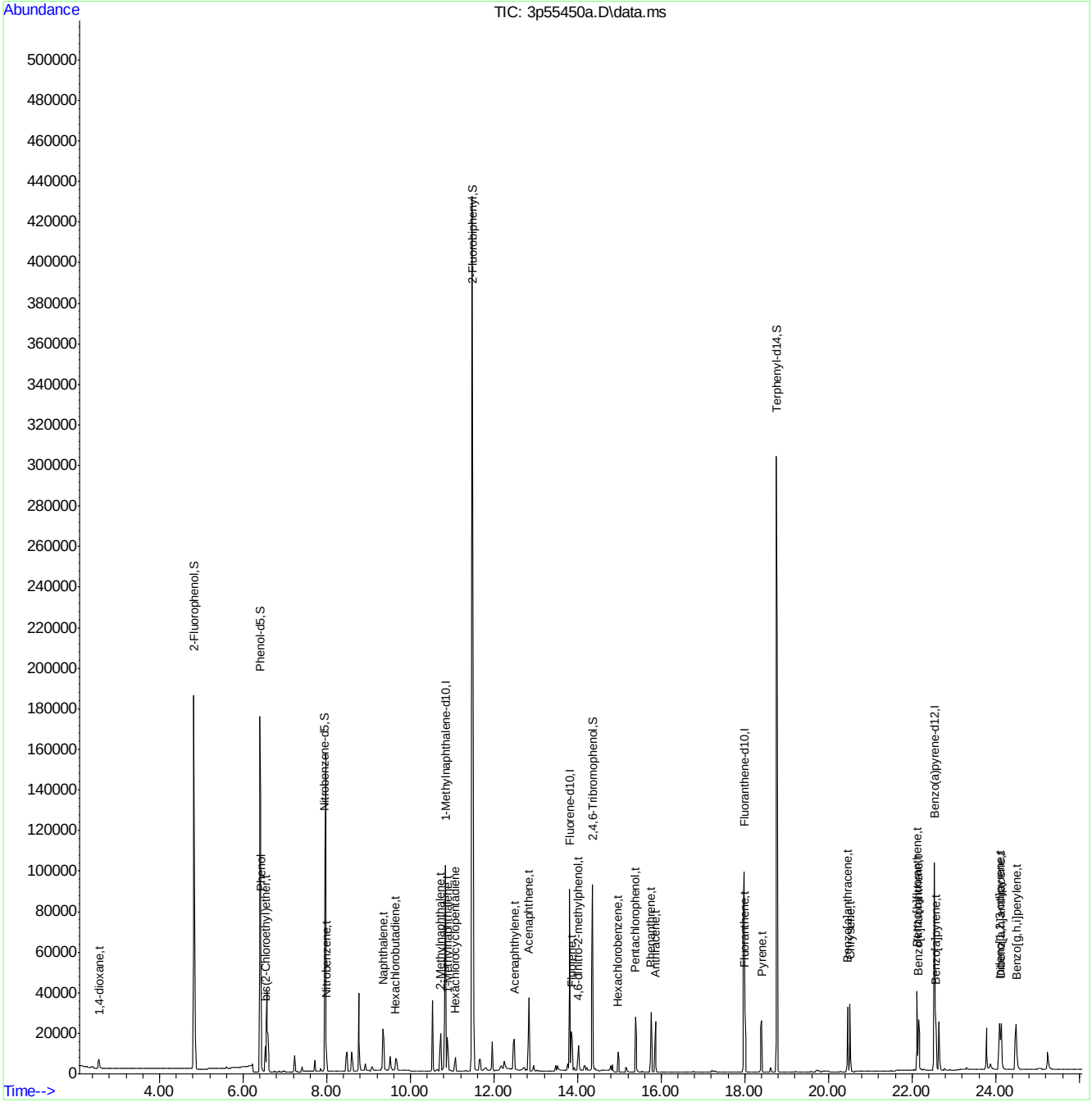
7

SGS ACCUTEST JC25024

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\E3P2536\
Data File : 3p55450a.D
Acq On : 3 Aug 2016 12:10 pm
Operator : shaniceg
Sample : cc2503-1
Misc : op95661a,e3p2536
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 03 12:38:02 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3P2503SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Jul 06 17:34:10 2016
Response via : Initial Calibration



M3P2503SIM.M Wed Aug 03 14:38:43 2016 Page: 3

SGS ACCUTEST JC25024

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5363\
Data File : M126352.D
Acq On : 26 Jul 2016 12:39 am
Operator : seanb1
Sample : ic5363-100
Misc : op95476,em5363
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 26 12:58:19 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5363.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Tue Jul 26 12:57:20 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.939	152	145170	40.00	ppm	0.00
24) Naphthalene-d8	6.131	136	535239	40.00	ppm	0.00
47) Acenaphthene-d10	8.545	164	342677	40.00	ppm	0.00
69) Phenanthrene-d10	11.206	188	601283	40.00	ppm	0.00
83) Chrysene-d12	16.404	240	654246	40.00	ppm	0.00
91) Perylene-d12	19.027	264	704120	40.00	ppm	0.00
101) 1,4-Dichlorobenzene-d4a	4.939	152	145170	40.00	ppm	0.00
103) Acenaphthene-d10a	8.545	164	342677	40.00	ppm	0.00
106) Chrysene-d12a	16.404	240	654246	40.00	ppm	0.00
109) Phenanthrene-d10a	11.206	188	601283	40.00	ppm	0.00
111) Naphthalene-d8a	6.131	136	535239	40.00	ppm	0.00
113) Chrysene-d12b	16.404	240	654246	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.935	112	448939	100.00	ppm	0.00
Spiked Amount 50.000			Recovery	=	200.00%	
8) Phenol-d5	4.646	99	548440	100.00	ppm	0.00
Spiked Amount 50.000			Recovery	=	200.00%	
25) Nitrobenzene-d5	5.415	82	438604	100.00	ppm	0.00
Spiked Amount 50.000			Recovery	=	200.00%	
51) 2-Fluorobiphenyl	7.509	172	972086	100.00	ppm	0.00
Spiked Amount 50.000			Recovery	=	200.00%	
73) 2,4,6-Tribromophenol	9.918	330	191357	100.00	ppm	0.00
Spiked Amount 50.000			Recovery	=	200.00%	
85) Terphenyl-d14	14.390	244	1286493	100.00	ppm	0.00
Spiked Amount 50.000			Recovery	=	200.00%	
108) 1-chlorooctadecane	0.000	57	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
110) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
Target Compounds						Qvalue
2) 1,4-Dioxane	2.509	88	183911	100.00	ppm	99
3) Pyridine	2.818	79	493880	100.00	ppm	99
4) N-Nitrosodimethylamine	2.786	42	223554	100.00	ppm	92
6) Indene	5.158	116	758492	100.00	ppm	97
7) Cumene	4.330	105	1069510	100.00	ppm	98
9) Phenol	4.662	94	628480	100.00	ppm	97
10) Aniline	4.678	93	647660	100.00	ppm #	55
11) bis(2-Chloroethyl)ether	4.726	93	398741	100.00	ppm	99
12) 2-Chlorophenol	4.774	128	485532	100.00	ppm	94
13) Decane	4.811	43	418635	100.00	ppm	95
14) 1,3-Dichlorobenzene	4.897	146	511000	100.00	ppm	99
15) 1,4-Dichlorobenzene	4.955	146	502086	100.00	ppm	98
16) Benzyl alcohol	5.052	108	299889	100.00	ppm	99
17) 1,2-Dichlorobenzene	5.084	146	459397	100.00	ppm	98
18) Acetophenone	5.276	105	571445	100.00	ppm	92
19) 2-Methylphenol	5.142	108	402305	100.00	ppm	97
20) 2,2'-oxybis(1-Chloropr...	5.158	121	135307	100.00	ppm #	87

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5363\
Data File : M126352.D
Acq On : 26 Jul 2016 12:39 am
Operator : seanb1
Sample : ic5363-100
Misc : op95476,em5363
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 26 12:58:19 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5363.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Tue Jul 26 12:57:20 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
21) 3&4-Methylphenol	5.271	108	446015	100.00	ppm		96
22) n-Nitroso-di-n-propyla...	5.276	70	298181	100.00	ppm		97
23) Hexachloroethane	5.377	201	195658	100.00	ppm		99
26) Nitrobenzene	5.431	77	441228	100.00	ppm		95
27) Quinoline	6.547	129	949922	100.00	ppm		99
28) Isophorone	5.655	82	792194	100.00	ppm		97
29) 2-Nitrophenol	5.730	139	281898	100.00	ppm		95
30) 2,4-Dimethylphenol	5.762	107	418585	100.00	ppm		93
31) Benzoic acid	5.896	105	331471	100.00	ppm		89
32) bis(2-Chloroethoxy)met...	5.858	93	475543	100.00	ppm		98
33) 2,4-Dichlorophenol	5.976	162	422804	100.00	ppm		98
34) 2,6-Dichlorophenol	6.221	162	401175	100.00	ppm		97
35) 1,3,5-Trichlorobenzene	5.746	180	468545	100.00	ppm		99
36) 1,2,4-Trichlorobenzene	6.067	180	441065	100.00	ppm		98
37) 1,2,3-Trichlorobenzene	6.318	180	434218	100.00	ppm		99
38) Naphthalene	6.152	128	1268653	100.00	ppm		99
39) 4-Chloroaniline	6.211	127	587538	100.00	ppm		96
40) 2,3-Dichloroaniline	7.375	161	498778	100.00	ppm		96
41) Caprolactam	6.633	55	193864	100.00	ppm		96
42) Hexachlorobutadiene	6.296	225	252572	100.00	ppm		99
43) 4-Chloro-3-methylphenol	6.793	107	384656	100.00	ppm		99
44) 2-Methylnaphthalene	6.991	141	841439	100.00	ppm		94
45) 1-Methylnaphthalene	7.124	142	928708	100.00	ppm		99
46) Dimethylnaphthalene	7.894	156	829035	100.00	ppm		98
48) Hexachlorocyclopentadiene	7.220	237	667256	200.00	ppm		99
49) 2,4,6-Trichlorophenol	7.386	196	317264	100.00	ppm		97
50) 2,4,5-Trichlorophenol	7.434	196	342679	100.00	ppm		98
52) 2-Chloronaphthalene	7.680	162	856784	100.00	ppm		97
53) Biphenyl	7.653	154	1117601	100.00	ppm		97
54) 2-Nitroaniline	7.835	65	253921	100.00	ppm		95
55) Dimethylphthalate	8.139	163	1031822	100.00	ppm		99
56) Acenaphthylene	8.316	152	1418407	100.00	ppm		99
57) 2,6-Dinitrotoluene	8.219	165	237394	100.00	ppm		99
58) 3-Nitroaniline	8.492	138	289698	100.00	ppm		98
59) Acenaphthene	8.604	153	878421	100.00	ppm		95
60) 2,4-Dinitrophenol	8.663	184	290542	200.00	ppm	#	73
61) 4-Nitrophenol	8.802	109	127586	100.00	ppm		98
62) Dibenzofuran	8.898	168	1327841	100.00	ppm		99
63) 2,4-Dinitrotoluene	8.893	165	317458	100.00	ppm		95
64) 2,3,4,6-Tetrachlorophenol	9.117	232	304391	100.00	ppm		99
65) Diethylphthalate	9.357	149	1009330	100.00	ppm		98
66) Fluorene	9.491	166	1023528	100.00	ppm		98
67) 4-Chlorophenyl-phenyle...	9.518	204	498429	100.00	ppm		95
68) 4-Nitroaniline	9.555	138	280987	100.00	ppm		94
70) 4,6-Dinitro-2-methylph...	9.608	198	214215	100.00	ppm		98
71) n-Nitrosodiphenylamine	9.737	169	733367	100.00	ppm		99
72) 1,2-Diphenylhydrazine	9.801	77	893255	100.00	ppm		97
74) 4-Bromophenyl-phenylether	10.404	248	338111	100.00	ppm		96
75) Hexachlorobenzene	10.500	284	381018	100.00	ppm		95
76) Pentachlorophenol	10.880	266	560667	200.00	ppm		100

SGS ACCUTEST JC25024

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5363\
Data File : M126352.D
Acq On : 26 Jul 2016 12:39 am
Operator : seanb1
Sample : ic5363-100
Misc : op95476,em5363
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 26 12:58:19 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5363.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Tue Jul 26 12:57:20 2016
Response via : Initial Calibration

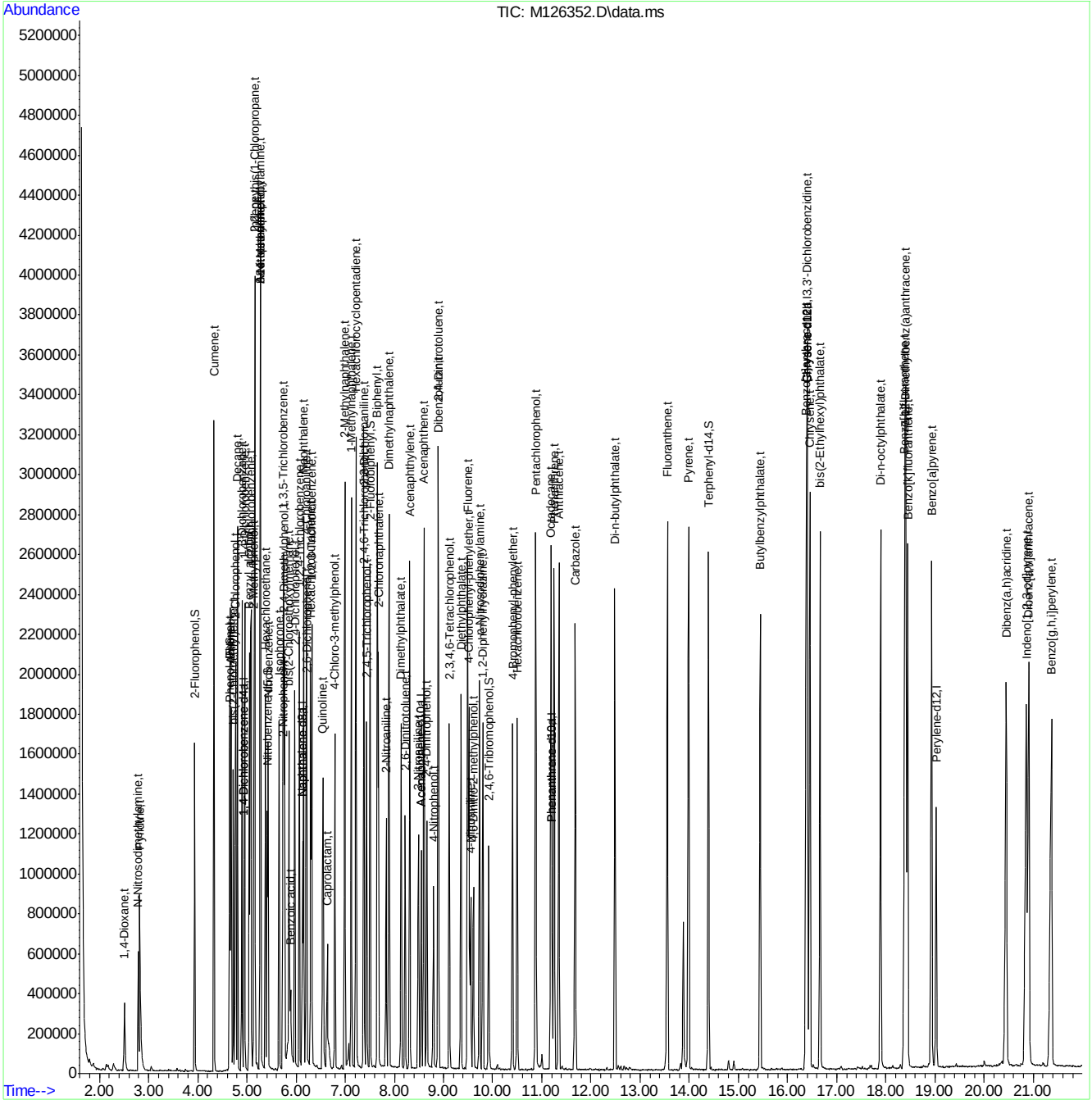
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
77)	Phenanthrene	11.254	178	1450013	100.00	ppm	99
78)	Anthracene	11.350	178	1497104	100.00	ppm	98
79)	Carbazole	11.686	167	1482687	100.00	ppm	98
80)	Di-n-butylphthalate	12.488	149	1834348	100.00	ppm	99
81)	Fluoranthene	13.556	202	1785092	100.00	ppm	99
82)	Octadecane	11.184	57	563679	100.00	ppm	95
84)	Pyrene	13.989	202	1807831	100.00	ppm	99
86)	Butylbenzylphthalate	15.442	149	844991	100.00	ppm	98
87)	Benzo[a]anthracene	16.382	228	1764561	100.00	ppm	99
88)	3,3'-Dichlorobenzidine	16.398	252	687280	100.00	ppm	98
89)	Chrysene	16.457	228	1636513	100.00	ppm	100
90)	bis(2-Ethylhexyl)phtha...	16.660	149	1149716	100.00	ppm	96
92)	Di-n-octylphthalate	17.894	149	2066279	100.00	ppm	99
93)	Benzo[b]fluoranthene	18.385	252	1973087	100.00	ppm	100
94)	Benzo[k]fluoranthene	18.450	252	1666789	100.00	ppm	99
95)	Benzo[a]pyrene	18.936	252	1720463	100.00	ppm	97
96)	Indeno[1,2,3-cd]pyrene	20.859	276	1760814	100.00	ppm	96
97)	Dibenz(a,h)acridine	20.453	279	1674460	100.00	ppm	98
98)	Dibenz[a,h]anthracene	20.912	278	1766073	100.00	ppm	98
99)	7,12-Dimethylbenz(a)an...	18.407	256	907316	100.00	ppm	98
100)	Benzo[g,h,i]perylene	21.372	276	1814484	100.00	ppm	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5363\
Data File : M126352.D
Acq On : 26 Jul 2016 12:39 am
Operator : seanb1
Sample : ic5363-100
Misc : op95476,em5363
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 26 12:58:19 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5363.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Tue Jul 26 12:57:20 2016
Response via : Initial Calibration



MM5363.M Tue Jul 26 12:58:42 2016 MSM

Page: 4

SGS ACCUTEST JC25024

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5363\
Data File : M126353.D
Acq On : 26 Jul 2016 1:08 am
Operator : seanb1
Sample : ic5363-80
Misc : op95476,em5363
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jul 26 13:00:26 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5363.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Tue Jul 26 12:59:45 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.941	152	154735	40.00	ppm	0.00
24) Naphthalene-d8	6.127	136	561078	40.00	ppm	0.00
47) Acenaphthene-d10	8.547	164	362274	40.00	ppm	0.00
69) Phenanthrene-d10	11.202	188	610226	40.00	ppm	0.00
83) Chrysene-d12	16.399	240	656701	40.00	ppm	0.00
91) Perylene-d12	19.022	264	683036	40.00	ppm	0.00
101) 1,4-Dichlorobenzene-d4a	4.941	152	154735	40.00	ppm	0.00
103) Acenaphthene-d10a	8.547	164	362274	40.00	ppm	0.00
106) Chrysene-d12a	16.399	240	656701	40.00	ppm	0.00
109) Phenanthrene-d10a	11.202	188	610226	40.00	ppm	0.00
111) Naphthalene-d8a	6.127	136	561078	40.00	ppm	0.00
113) Chrysene-d12b	16.399	240	656701	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.936	112	367070	74.93	ppm	0.00
Spiked Amount 50.000			Recovery	=	149.86%	
8) Phenol-d5	4.647	99	456976	72.93	ppm	0.00
Spiked Amount 50.000			Recovery	=	145.86%	
25) Nitrobenzene-d5	5.411	82	369423	71.25	ppm	0.00
Spiked Amount 50.000			Recovery	=	142.50%	
51) 2-Fluorobiphenyl	7.505	172	805399	63.83	ppm	0.00
Spiked Amount 50.000			Recovery	=	127.66%	
73) 2,4,6-Tribromophenol	9.919	330	156471	88.06	ppm	0.01
Spiked Amount 50.000			Recovery	=	176.12%	
85) Terphenyl-d14	14.391	244	1029791	66.56	ppm	0.00
Spiked Amount 50.000			Recovery	=	133.12%	
108) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
110) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
Target Compounds						Qvalue
2) 1,4-Dioxane	2.510	88	149916	63.85	ppm	99
3) Pyridine	2.820	79	408443	80.36	ppm	99
4) N-Nitrosodimethylamine	2.788	42	189802	73.94	ppm	96
6) Indene	5.154	116	637755	73.51	ppm	95
7) Cumene	4.332	105	894295	75.72	ppm	97
9) Phenol	4.657	94	520234	75.99	ppm	100
10) Aniline	4.679	93	562980	80.81	ppm	61
11) bis(2-Chloroethyl)ether	4.727	93	338845	70.79	ppm	95
12) 2-Chlorophenol	4.775	128	401466	73.90	ppm	96
13) Decane	4.807	43	355566	74.59	ppm	95
14) 1,3-Dichlorobenzene	4.898	146	426546	69.40	ppm	99
15) 1,4-Dichlorobenzene	4.951	146	424498	72.12	ppm	94
16) Benzyl alcohol	5.047	108	253359	77.89	ppm	98
17) 1,2-Dichlorobenzene	5.085	146	388274	68.86	ppm	99
18) Acetophenone	5.277	105	487232	75.96	ppm	85
19) 2-Methylphenol	5.138	108	333371	71.65	ppm	95
20) 2,2'-oxybis(1-Chloropr...	5.160	121	111115	67.63	ppm	92

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5363\
Data File : M126353.D
Acq On : 26 Jul 2016 1:08 am
Operator : seanb1
Sample : ic5363-80
Misc : op95476,em5363
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jul 26 13:00:26 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5363.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Tue Jul 26 12:59:45 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
21) 3&4-Methylphenol	5.266	108	370311	74.95	ppm	87
22) n-Nitroso-di-n-propyla...	5.277	70	251932	74.44	ppm	98
23) Hexachloroethane	5.379	201	158367	71.54	ppm	97
26) Nitrobenzene	5.427	77	372722	71.87	ppm	92
27) Quinoline	6.543	129	790840	71.31	ppm	99
28) Isophorone	5.651	82	677651	72.42	ppm	98
29) 2-Nitrophenol	5.731	139	233451	81.83	ppm	93
30) 2,4-Dimethylphenol	5.763	107	346182	78.23	ppm	97
32) bis(2-Chloroethoxy)met...	5.854	93	395883	71.92	ppm	98
33) 2,4-Dichlorophenol	5.972	162	347292	75.76	ppm	99
34) 2,6-Dichlorophenol	6.217	162	322751	73.91	ppm	97
35) 1,3,5-Trichlorobenzene	5.742	180	388520	71.84	ppm	97
36) 1,2,4-Trichlorobenzene	6.068	180	374228	70.27	ppm	97
37) 1,2,3-Trichlorobenzene	6.313	180	356534	70.22	ppm	100
38) Naphthalene	6.153	128	1060602	69.98	ppm	99
39) 4-Chloroaniline	6.207	127	503422	78.12	ppm	96
40) 2,3-Dichloroaniline	7.377	161	411637	71.16	ppm	99
41) Caprolactam	6.629	55	162215	79.25	ppm	97
42) Hexachlorobutadiene	6.297	225	208764	74.18	ppm	98
43) 4-Chloro-3-methylphenol	6.789	107	313453	72.35	ppm	100
44) 2-Methylnaphthalene	6.992	141	711414	76.70	ppm	94
45) 1-Methylnaphthalene	7.125	142	763701	68.77	ppm	95
46) Dimethylnaphthalene	7.889	156	688301	68.58	ppm	97
48) Hexachlorocyclopentadiene	7.216	237	550965	185.33	ppm	99
49) 2,4,6-Trichlorophenol	7.382	196	260122	76.45	ppm	97
50) 2,4,5-Trichlorophenol	7.430	196	280266	74.15	ppm	95
52) 2-Chloronaphthalene	7.676	162	714977	66.58	ppm	99
53) Biphenyl	7.654	154	922208	65.21	ppm	94
54) 2-Nitroaniline	7.831	65	212673	77.97	ppm	89
55) Dimethylphthalate	8.135	163	861837	69.40	ppm	99
56) Acenaphthylene	8.311	152	1181334	67.41	ppm	99
57) 2,6-Dinitrotoluene	8.221	165	194263	73.47	ppm	98
58) 3-Nitroaniline	8.488	138	238074	78.02	ppm	95
59) Acenaphthene	8.600	153	726257	66.47	ppm	98
60) 2,4-Dinitrophenol	8.664	184	229340	132.29	ppm	93
61) 4-Nitrophenol	8.798	109	107917	81.73	ppm	95
62) Dibenzofuran	8.894	168	1101418	71.66	ppm	99
63) 2,4-Dinitrotoluene	8.888	165	263197	75.86	ppm	97
64) 2,3,4,6-Tetrachlorophenol	9.113	232	253092	90.24	ppm	99
65) Diethylphthalate	9.353	149	841026	71.77	ppm	98
66) Fluorene	9.487	166	847435	65.25	ppm	99
67) 4-Chlorophenyl-phenyle...	9.513	204	407595	65.09	ppm	97
68) 4-Nitroaniline	9.551	138	235947	78.23	ppm	94
70) 4,6-Dinitro-2-methylph...	9.604	198	170502	69.24	ppm	99
71) n-Nitrosodiphenylamine	9.732	169	607130	69.54	ppm	100
72) 1,2-Diphenylhydrazine	9.797	77	751767	73.46	ppm	96
74) 4-Bromophenyl-phenylether	10.406	248	269682	73.91	ppm	94
75) Hexachlorobenzene	10.496	284	308130	74.85	ppm	97
76) Pentachlorophenol	10.876	266	453146	188.05	ppm	97
77) Phenanthrene	11.250	178	1193239	67.14	ppm	99

SGS ACCUTEST JC25024

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5363\
Data File : M126353.D
Acq On : 26 Jul 2016 1:08 am
Operator : seanb1
Sample : ic5363-80
Misc : op95476,em5363
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jul 26 13:00:26 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5363.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Tue Jul 26 12:59:45 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
78)	Anthracene	11.346	178	1224657	68.23	ppm	99
79)	Carbazole	11.682	167	1215963	70.63	ppm	98
80)	Di-n-butylphthalate	12.489	149	1523897	79.64	ppm	99
81)	Fluoranthene	13.552	202	1448074	70.29	ppm	99
82)	Octadecane	11.186	57	467198	77.80	ppm	96
84)	Pyrene	13.985	202	1480923	63.84	ppm	98
86)	Butylbenzylphthalate	15.443	149	693770	75.21	ppm	99
87)	Benzo[a]anthracene	16.378	228	1424865	69.22	ppm	99
88)	3,3'-Dichlorobenzidine	16.399	252	544114	76.97	ppm	99
89)	Chrysene	16.453	228	1317203	63.96	ppm	99
90)	bis(2-Ethylhexyl)phtha...	16.661	149	927974	75.47	ppm	95
92)	Di-n-octylphthalate	17.890	149	1668622	79.75	ppm	99
93)	Benzo[b]fluoranthene	18.381	252	1530363	70.12	ppm	98
94)	Benzo[k]fluoranthene	18.440	252	1373803	66.13	ppm	99
95)	Benzo[a]pyrene	18.932	252	1378942	69.90	ppm	98
96)	Indeno[1,2,3-cd]pyrene	20.849	276	1368554	71.75	ppm	98
97)	Dibenz(a,h)acridine	20.449	279	1330751	76.77	ppm	84
98)	Dibenz[a,h]anthracene	20.903	278	1404745	70.49	ppm	97
99)	7,12-Dimethylbenz(a)an...	18.397	256	718734	85.60	ppm	98
100)	Benzo[g,h,i]perylene	21.362	276	1427962	68.83	ppm	97

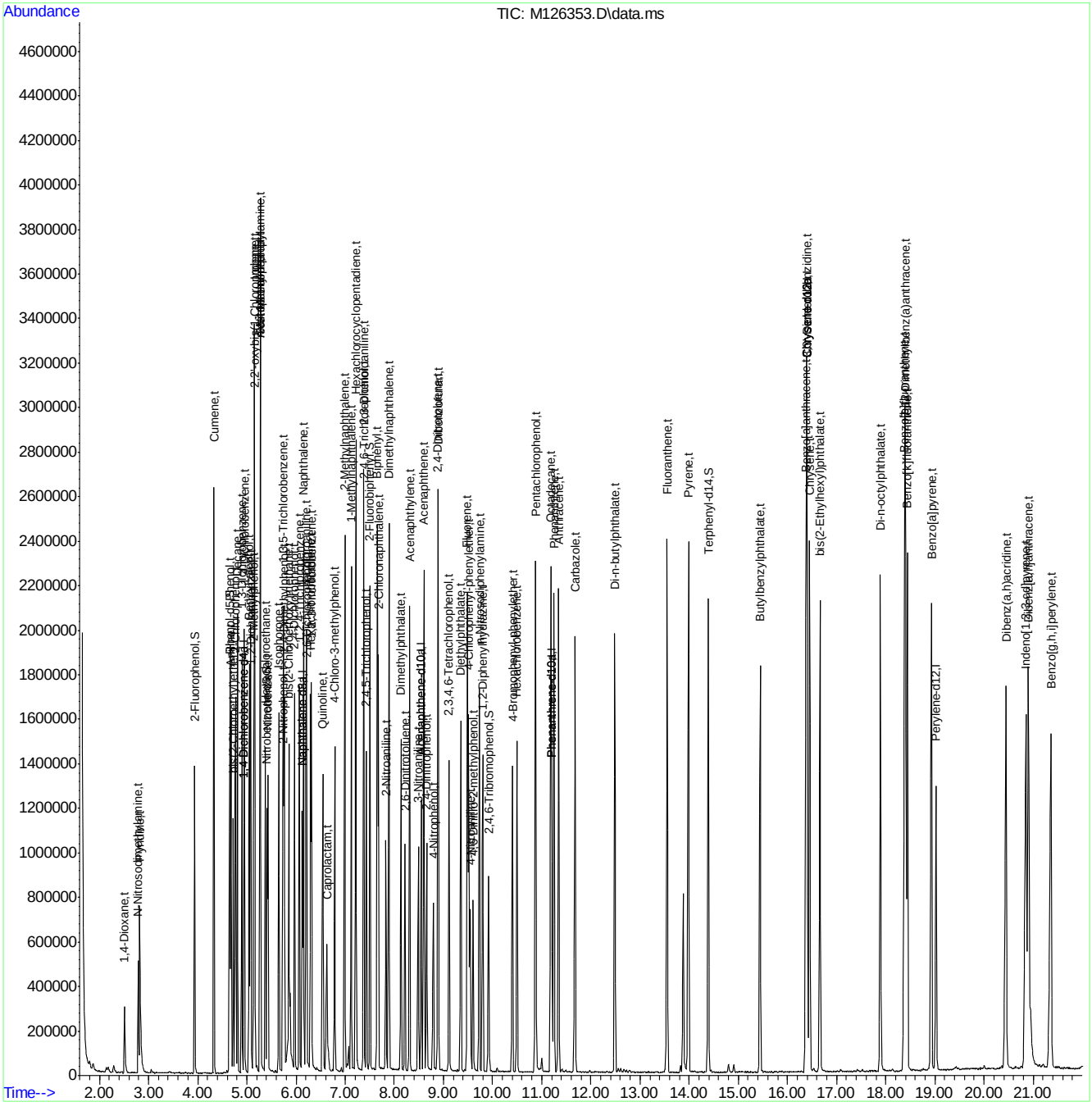
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC25024

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5363\
Data File : M126353.D
Acq On : 26 Jul 2016 1:08 am
Operator : seanb1
Sample : ic5363-80
Misc : op95476,em5363
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jul 26 13:00:26 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5363.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Tue Jul 26 12:59:45 2016
Response via : Initial Calibration



SGS ACCUTEST JC25024

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5363\
Data File : M126354.D
Acq On : 26 Jul 2016 1:36 am
Operator : seanb1
Sample : icc5363-50
Misc : op95476,em5363
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jul 26 13:03:25 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5363.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Tue Jul 26 13:02:31 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.937	152	154780	40.00	ppm	0.00
24) Naphthalene-d8	6.128	136	583952	40.00	ppm	0.00
47) Acenaphthene-d10	8.543	164	373863	40.00	ppm	0.00
69) Phenanthrene-d10	11.198	188	644031	40.00	ppm	0.00
83) Chrysene-d12	16.395	240	697339	40.00	ppm	0.00
91) Perylene-d12	19.018	264	694326	40.00	ppm	0.00
101) 1,4-Dichlorobenzene-d4a	4.937	152	154780	40.00	ppm	0.00
103) Acenaphthene-d10a	8.543	164	373863	40.00	ppm	0.00
106) Chrysene-d12a	16.395	240	697339	40.00	ppm	0.00
109) Phenanthrene-d10a	11.198	188	644031	40.00	ppm	0.00
111) Naphthalene-d8a	6.128	136	583952	40.00	ppm	0.00
113) Chrysene-d12b	16.395	240	697339	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.932	112	239917	49.22	ppm	0.00
Spiked Amount 50.000			Recovery	=	98.44%	
8) Phenol-d5	4.643	99	300998	48.30	ppm	-0.01
Spiked Amount 50.000			Recovery	=	96.60%	
25) Nitrobenzene-d5	5.407	82	248439	46.18	ppm	0.00
Spiked Amount 50.000			Recovery	=	92.36%	
51) 2-Fluorobiphenyl	7.501	172	547710	42.37	ppm	0.00
Spiked Amount 50.000			Recovery	=	84.74%	
73) 2,4,6-Tribromophenol	9.915	330	101932	54.26	ppm	0.00
Spiked Amount 50.000			Recovery	=	108.52%	
85) Terphenyl-d14	14.387	244	684892	42.44	ppm	0.00
Spiked Amount 50.000			Recovery	=	84.88%	
108) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
110) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
Target Compounds						Qvalue
2) 1,4-Dioxane	2.511	88	99612	42.89	ppm	99
3) Pyridine	2.821	79	274667	54.02	ppm	99
4) N-Nitrosodimethylamine	2.789	42	124939	48.82	ppm	94
6) Indene	5.156	116	428246	48.73	ppm	94
7) Cumene	4.328	105	599547	50.19	ppm	96
9) Phenol	4.653	94	332526	48.25	ppm	89
10) Aniline	4.675	93	370569	51.72	ppm #	55
11) bis(2-Chloroethyl)ether	4.723	93	226160	47.22	ppm	98
12) 2-Chlorophenol	4.771	128	273459	50.03	ppm	94
13) Decane	4.808	43	244251	50.58	ppm	95
14) 1,3-Dichlorobenzene	4.894	146	285857	46.51	ppm	97
15) 1,4-Dichlorobenzene	4.953	146	280228	47.45	ppm	98
16) Benzyl alcohol	5.043	108	167938	51.57	ppm	96
17) 1,2-Dichlorobenzene	5.081	146	260675	46.05	ppm	97
18) Acetophenone	5.273	105	328082	50.28	ppm	87
19) 2-Methylphenol	5.134	108	223490	48.00	ppm	94
20) 2,2'-oxybis(1-Chloropr...	5.156	121	75572	46.06	ppm #	85

SGS ACCUTEST JC25024

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5363\
Data File : M126354.D
Acq On : 26 Jul 2016 1:36 am
Operator : seanb1
Sample : icc5363-50
Misc : op95476,em5363
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jul 26 13:03:25 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5363.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Tue Jul 26 13:02:31 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
21) 3&4-Methylphenol	5.263	108	246500	49.49	ppm	84
22) n-Nitroso-di-n-propyla...	5.268	70	173191	50.70	ppm	95
23) Hexachloroethane	5.375	201	103483	46.70	ppm	93
26) Nitrobenzene	5.428	77	248988	46.08	ppm	95
27) Quinoline	6.534	129	534842	46.32	ppm	97
28) Isophorone	5.647	82	450199	46.11	ppm	98
29) 2-Nitrophenol	5.727	139	154284	51.47	ppm	96
30) 2,4-Dimethylphenol	5.759	107	230465	49.74	ppm	94
31) Benzoic acid	5.866	105	174288	50.73	ppm	94
32) bis(2-Chloroethoxy)met...	5.850	93	269918	47.02	ppm	99
33) 2,4-Dichlorophenol	5.968	162	232793	48.58	ppm	99
34) 2,6-Dichlorophenol	6.213	162	216480	47.26	ppm	98
35) 1,3,5-Trichlorobenzene	5.743	180	258859	45.39	ppm	97
36) 1,2,4-Trichlorobenzene	6.064	180	246767	44.25	ppm	97
37) 1,2,3-Trichlorobenzene	6.315	180	239887	45.04	ppm	99
38) Naphthalene	6.149	128	712628	45.02	ppm	98
39) 4-Chloroaniline	6.203	127	338342	49.51	ppm	95
40) 2,3-Dichloroaniline	7.373	161	277147	45.71	ppm	100
41) Caprolactam	6.609	55	110327	51.88	ppm	97
42) Hexachlorobutadiene	6.294	225	134910	45.53	ppm	97
43) 4-Chloro-3-methylphenol	6.780	107	215004	47.70	ppm	95
44) 2-Methylnaphthalene	6.988	141	476775	48.65	ppm	92
45) 1-Methylnaphthalene	7.122	142	508736	43.90	ppm	93
46) Dimethylnaphthalene	7.885	156	463566	44.26	ppm	95
48) Hexachlorocyclopentadiene	7.218	237	364038	115.84	ppm	99
49) 2,4,6-Trichlorophenol	7.378	196	177345	50.08	ppm	95
50) 2,4,5-Trichlorophenol	7.426	196	185012	47.56	ppm	98
52) 2-Chloronaphthalene	7.672	162	475394	42.87	ppm	99
53) Biphenyl	7.650	154	621865	42.75	ppm	97
54) 2-Nitroaniline	7.827	65	143199	50.99	ppm	88
55) Dimethylphthalate	8.131	163	588393	45.95	ppm	98
56) Acenaphthylene	8.308	152	795774	44.13	ppm	99
57) 2,6-Dinitrotoluene	8.211	165	127876	47.39	ppm	93
58) 3-Nitroaniline	8.484	138	158874	50.75	ppm	98
59) Acenaphthene	8.601	153	489402	43.57	ppm	96
60) 2,4-Dinitrophenol	8.655	184	141100	93.82	ppm	95
61) 4-Nitrophenol	8.788	109	69896	52.07	ppm	95
62) Dibenzofuran	8.890	168	740613	46.29	ppm	99
63) 2,4-Dinitrotoluene	8.884	165	172122	47.96	ppm	92
64) 2,3,4,6-Tetrachlorophenol	9.109	232	165041	56.64	ppm	95
65) Diethylphthalate	9.349	149	561962	46.41	ppm	99
66) Fluorene	9.483	166	572258	42.98	ppm	98
67) 4-Chlorophenyl-phenyle...	9.509	204	279763	43.48	ppm	96
68) 4-Nitroaniline	9.536	138	151916	49.08	ppm	97
70) 4,6-Dinitro-2-methylph...	9.595	198	106897	47.86	ppm	95
71) n-Nitrosodiphenylamine	9.729	169	399934	43.81	ppm	96
72) 1,2-Diphenylhydrazine	9.798	77	518305	48.37	ppm	97
74) 4-Bromophenyl-phenylether	10.402	248	181805	47.30	ppm	96
75) Hexachlorobenzene	10.492	284	205070	47.00	ppm	98
76) Pentachlorophenol	10.872	266	294822	108.90	ppm	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5363\
Data File : M126354.D
Acq On : 26 Jul 2016 1:36 am
Operator : seanb1
Sample : icc5363-50
Misc : op95476,em5363
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jul 26 13:03:25 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5363.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Tue Jul 26 13:02:31 2016
Response via : Initial Calibration

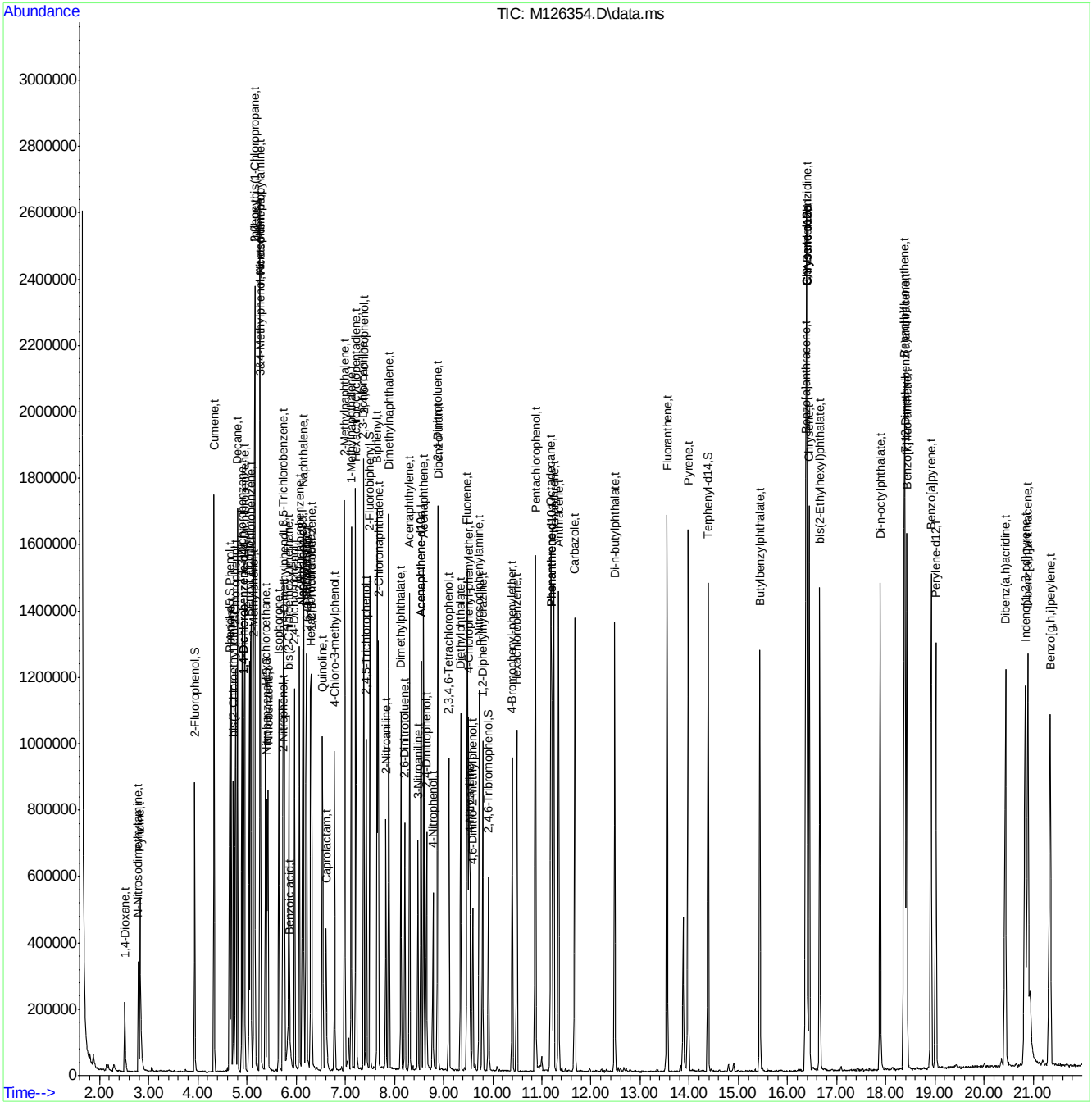
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
77) Phenanthrene	11.246	178	799966	42.98	ppm	99
78) Anthracene	11.342	178	822290	43.76	ppm	98
79) Carbazole	11.673	167	820846	45.41	ppm	98
80) Di-n-butylphthalate	12.485	149	1002892	49.52	ppm	99
81) Fluoranthene	13.548	202	984462	45.54	ppm	98
82) Octadecane	11.182	57	321328	50.65	ppm	95
84) Pyrene	13.981	202	1003064	41.56	ppm	99
86) Butylbenzylphthalate	15.439	149	451222	46.91	ppm	98
87) Benzo[a]anthracene	16.374	228	955598	44.29	ppm	98
88) 3,3'-Dichlorobenzidine	16.395	252	361347	48.67	ppm	97
89) Chrysene	16.444	228	876600	40.92	ppm	99
90) bis(2-Ethylhexyl)phtha...	16.657	149	614465	47.86	ppm	96
92) Di-n-octylphthalate	17.886	149	1085002	50.90	ppm	99
93) Benzo[b]fluoranthene	18.377	252	1024175	45.98	ppm	99
94) Benzo[k]fluoranthene	18.431	252	896853	42.64	ppm	99
95) Benzo[a]pyrene	18.922	252	903215	45.04	ppm	98
96) Indeno[1,2,3-cd]pyrene	20.840	276	900763	46.70	ppm	99
97) Dibenz(a,h)acridine	20.439	279	873402	49.40	ppm	85
98) Dibenz[a,h]anthracene	20.894	278	936326	46.53	ppm	98
99) 7,12-Dimethylbenz(a)an...	18.393	256	480369	55.48	ppm	99
100) Benzo[g,h,i]perylene	21.348	276	918824	43.89	ppm	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5363\
Data File : M126354.D
Acq On : 26 Jul 2016 1:36 am
Operator : seanb1
Sample : icc5363-50
Misc : op95476,em5363
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jul 26 13:03:25 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5363.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Tue Jul 26 13:02:31 2016
Response via : Initial Calibration



SGS ACCUTEST JC25024

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5363\
Data File : M126355.D
Acq On : 26 Jul 2016 2:04 am
Operator : seanb1
Sample : ic5363-25
Misc : op95476,em5363
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jul 26 13:05:16 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5363.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Tue Jul 26 13:04:17 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.940	152	173110	40.00	ppm	0.00
24) Naphthalene-d8	6.126	136	660587	40.00	ppm	0.00
47) Acenaphthene-d10	8.546	164	413275	40.00	ppm	0.00
69) Phenanthrene-d10	11.196	188	713151	40.00	ppm	0.00
83) Chrysene-d12	16.388	240	783317	40.00	ppm	-0.01
91) Perylene-d12	19.017	264	771997	40.00	ppm	0.00
101) 1,4-Dichlorobenzene-d4a	4.940	152	173110	40.00	ppm	0.00
103) Acenaphthene-d10a	8.546	164	413275	40.00	ppm	0.00
106) Chrysene-d12a	16.388	240	783317	40.00	ppm	-0.01
109) Phenanthrene-d10a	11.196	188	713151	40.00	ppm	0.00
111) Naphthalene-d8a	6.126	136	660587	40.00	ppm	0.00
113) Chrysene-d12b	16.388	240	783317	40.00	ppm	-0.01
System Monitoring Compounds						
5) 2-Fluorophenol	3.936	112	127760	23.44	ppm	0.00
Spiked Amount 50.000			Recovery	=	46.88%	
8) Phenol-d5	4.641	99	157126	22.54	ppm	-0.01
Spiked Amount 50.000			Recovery	=	45.08%	
25) Nitrobenzene-d5	5.405	82	134398	22.09	ppm	0.00
Spiked Amount 50.000			Recovery	=	44.18%	
51) 2-Fluorobiphenyl	7.499	172	296295	20.74	ppm	0.00
Spiked Amount 50.000			Recovery	=	41.48%	
73) 2,4,6-Tribromophenol	9.908	330	53324	25.63	ppm	0.00
Spiked Amount 50.000			Recovery	=	51.26%	
85) Terphenyl-d14	14.380	244	369805	20.40	ppm	0.00
Spiked Amount 50.000			Recovery	=	40.80%	
108) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
110) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
Target Compounds						Qvalue
2) 1,4-Dioxane	2.510	88	53990	20.79	ppm	91
3) Pyridine	2.819	79	148073	26.04	ppm	99
4) N-Nitrosodimethylamine	2.787	42	67599	23.62	ppm	97
6) Indene	5.154	116	239235	24.34	ppm	95
7) Cumene	4.331	105	325627	24.37	ppm	97
9) Phenol	4.652	94	180655	23.44	ppm	90
10) Aniline	4.673	93	208651	26.04	ppm	58
11) bis(2-Chloroethyl)ether	4.721	93	125207	23.37	ppm	96
12) 2-Chlorophenol	4.769	128	148875	24.35	ppm	94
13) Decane	4.807	43	138264	25.60	ppm	92
14) 1,3-Dichlorobenzene	4.892	146	155782	22.66	ppm	99
15) 1,4-Dichlorobenzene	4.951	146	156091	23.63	ppm	96
16) Benzyl alcohol	5.042	108	92102	25.29	ppm	96
17) 1,2-Dichlorobenzene	5.079	146	147627	23.32	ppm	98
18) Acetophenone	5.271	105	188954	25.89	ppm	83
19) 2-Methylphenol	5.133	108	125674	24.14	ppm	95
20) 2,2'-oxybis(1-Chloropr...	5.159	121	42243	23.02	ppm	91

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5363\
Data File : M126355.D
Acq On : 26 Jul 2016 2:04 am
Operator : seanb1
Sample : ic5363-25
Misc : op95476,em5363
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jul 26 13:05:16 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5363.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Tue Jul 26 13:04:17 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
21) 3&4-Methylphenol	5.261	108	137487	24.68	ppm	89
22) n-Nitroso-di-n-propyla...	5.266	70	94055	24.62	ppm	93
23) Hexachloroethane	5.373	201	59071	23.83	ppm	91
26) Nitrobenzene	5.421	77	142824	23.37	ppm	88
27) Quinoline	6.527	129	289707	22.18	ppm	99
28) Isophorone	5.640	82	250951	22.72	ppm	98
29) 2-Nitrophenol	5.726	139	81076	23.91	ppm	96
30) 2,4-Dimethylphenol	5.758	107	124895	23.83	ppm	91
31) Benzoic acid	5.843	105	87121	22.42	ppm	90
32) bis(2-Chloroethoxy)met...	5.848	93	146719	22.59	ppm	95
33) 2,4-Dichlorophenol	5.966	162	123131	22.71	ppm	97
34) 2,6-Dichlorophenol	6.212	162	119426	23.05	ppm	98
35) 1,3,5-Trichlorobenzene	5.742	180	147416	22.85	ppm	98
36) 1,2,4-Trichlorobenzene	6.062	180	138408	21.94	ppm	93
37) 1,2,3-Trichlorobenzene	6.313	180	133476	22.16	ppm	98
38) Naphthalene	6.148	128	382422	21.36	ppm	98
39) 4-Chloroaniline	6.201	127	184411	23.85	ppm	95
40) 2,3-Dichloroaniline	7.371	161	151777	22.13	ppm	97
41) Caprolactam	6.586	55	60104	24.99	ppm	91
42) Hexachlorobutadiene	6.292	225	73734	22.00	ppm	98
43) 4-Chloro-3-methylphenol	6.778	107	116893	22.93	ppm	93
44) 2-Methylnaphthalene	6.986	141	266233	24.01	ppm	88
45) 1-Methylnaphthalene	7.120	142	281966	21.51	ppm	94
46) Dimethylnaphthalene	7.884	156	256413	21.64	ppm	97
48) Hexachlorocyclopentadiene	7.216	237	196176	56.47	ppm	99
49) 2,4,6-Trichlorophenol	7.376	196	95762	24.46	ppm	94
50) 2,4,5-Trichlorophenol	7.424	196	99061	23.04	ppm	99
52) 2-Chloronaphthalene	7.670	162	270223	22.05	ppm	96
53) Biphenyl	7.643	154	342144	21.28	ppm	97
54) 2-Nitroaniline	7.820	65	77206	24.87	ppm	88
55) Dimethylphthalate	8.130	163	313254	22.13	ppm	98
56) Acenaphthylene	8.306	152	442971	22.22	ppm	98
57) 2,6-Dinitrotoluene	8.210	165	67805	22.73	ppm	97
58) 3-Nitroaniline	8.477	138	82621	23.87	ppm	92
59) Acenaphthene	8.594	153	264019	21.26	ppm	96
60) 2,4-Dinitrophenol	8.648	184	64933	44.84	ppm	92
61) 4-Nitrophenol	8.781	109	36616	24.68	ppm	99
62) Dibenzofuran	8.888	168	408939	23.12	ppm	98
63) 2,4-Dinitrotoluene	8.877	165	91670	23.11	ppm	91
64) 2,3,4,6-Tetrachlorophenol	9.107	232	88448	27.46	ppm	96
65) Diethylphthalate	9.348	149	305919	22.86	ppm	97
66) Fluorene	9.481	166	309630	21.04	ppm	97
67) 4-Chlorophenyl-phenyle...	9.508	204	153571	21.59	ppm	98
68) 4-Nitroaniline	9.524	138	83460	24.39	ppm	97
70) 4,6-Dinitro-2-methylph...	9.593	198	51599	23.58	ppm	98
71) n-Nitrosodiphenylamine	9.721	169	221321	21.89	ppm	99
72) 1,2-Diphenylhydrazine	9.791	77	287278	24.21	ppm	97
74) 4-Bromophenyl-phenylether	10.400	248	98534	23.15	ppm	95
75) Hexachlorobenzene	10.491	284	112531	23.29	ppm	92
76) Pentachlorophenol	10.865	266	158297	55.80	ppm	97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5363\
Data File : M126355.D
Acq On : 26 Jul 2016 2:04 am
Operator : seanb1
Sample : ic5363-25
Misc : op95476,em5363
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jul 26 13:05:16 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5363.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Tue Jul 26 13:04:17 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
77)	Phenanthrene	11.239	178	436470	21.18	ppm	99
78)	Anthracene	11.335	178	451169	21.68	ppm	98
79)	Carbazole	11.671	167	447070	22.33	ppm	99
80)	Di-n-butylphthalate	12.483	149	545963	24.34	ppm	99
81)	Fluoranthene	13.546	202	529373	22.12	ppm	97
82)	Octadecane	11.180	57	178598	25.42	ppm	96
84)	Pyrene	13.974	202	545290	20.11	ppm	100
86)	Butylbenzylphthalate	15.432	149	240282	22.24	ppm	97
87)	Benzo[a]anthracene	16.367	228	519828	21.45	ppm	99
88)	3,3'-Dichlorobenzidine	16.388	252	199076	23.87	ppm	96
89)	Chrysene	16.437	228	478962	19.90	ppm	99
90)	bis(2-Ethylhexyl)phtha...	16.656	149	331465	22.98	ppm	95
92)	Di-n-octylphthalate	17.884	149	580510	24.49	ppm	98
93)	Benzo[b]fluoranthene	18.370	252	553339	22.34	ppm	98
94)	Benzo[k]fluoranthene	18.418	252	503459	21.53	ppm	97
95)	Benzo[a]pyrene	18.915	252	487745	21.87	ppm	98
96)	Indeno[1,2,3-cd]pyrene	20.828	276	469349	21.88	ppm	98
97)	Dibenz(a,h)acridine	20.427	279	465207	23.67	ppm	98
98)	Dibenz[a,h]anthracene	20.881	278	491887	21.98	ppm	100
99)	7,12-Dimethylbenz(a)an...	18.381	256	258773	26.88	ppm	98
100)	Benzo[g,h,i]perylene	21.330	276	506218	21.75	ppm	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

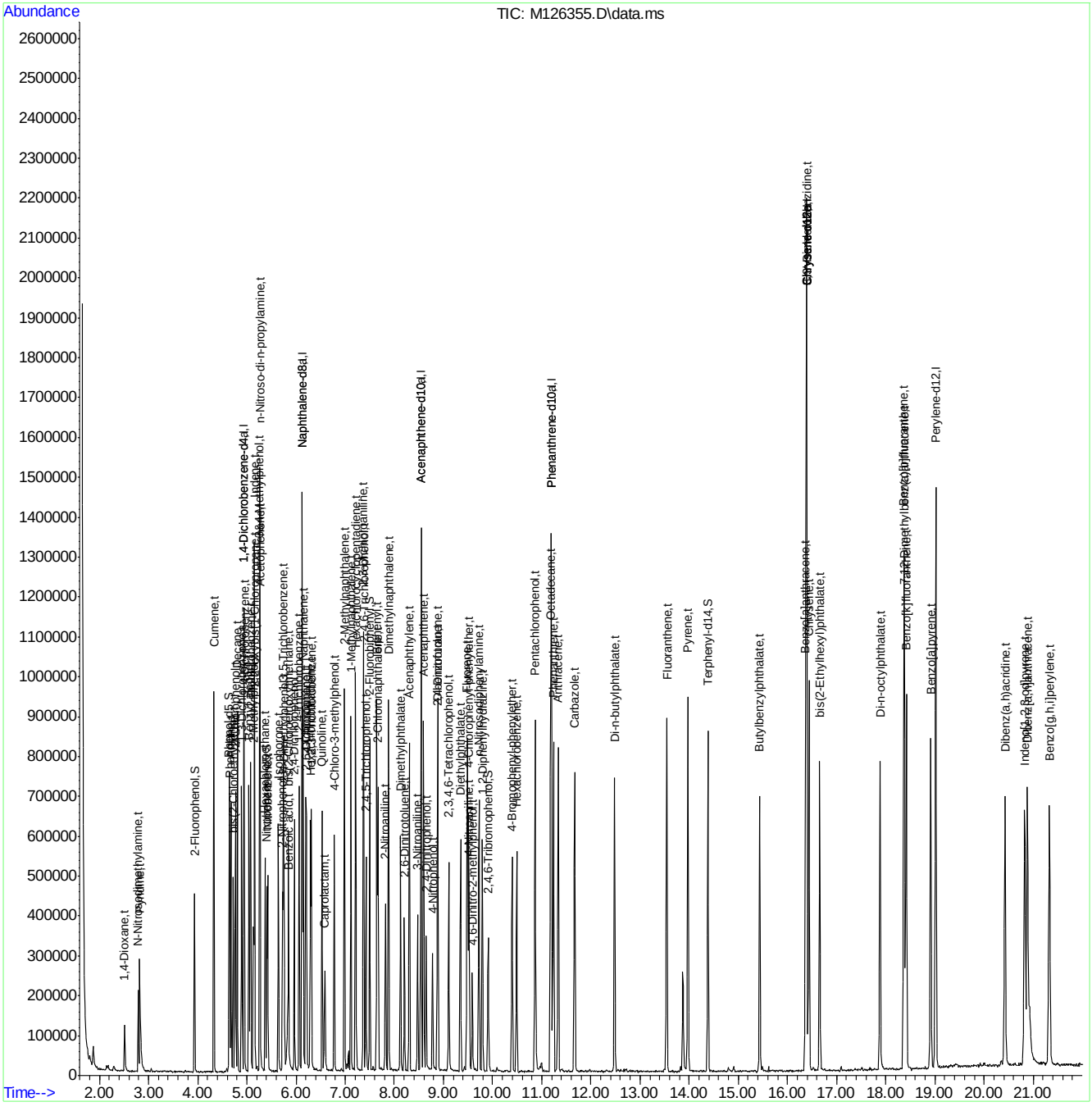
7.6.17

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5363\
Data File : M126355.D
Acq On : 26 Jul 2016 2:04 am
Operator : seanb1
Sample : ic5363-25
Misc : op95476,em5363
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jul 26 13:05:16 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5363.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Tue Jul 26 13:04:17 2016
Response via : Initial Calibration



SGS ACCUTEST JC25024

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5363\
Data File : M126356.D
Acq On : 26 Jul 2016 2:33 am
Operator : seanb1
Sample : ic5363-10
Misc : op95476,em5363
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jul 26 13:06:33 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5363.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Tue Jul 26 13:05:34 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.938	152	166514	40.00	ppm	0.00
24) Naphthalene-d8	6.124	136	618859	40.00	ppm	0.00
47) Acenaphthene-d10	8.544	164	392558	40.00	ppm	0.00
69) Phenanthrene-d10	11.199	188	682247	40.00	ppm	0.00
83) Chrysene-d12	16.386	240	744571	40.00	ppm	-0.01
91) Perylene-d12	19.014	264	726109	40.00	ppm	0.00
101) 1,4-Dichlorobenzene-d4a	4.938	152	166514	40.00	ppm	0.00
103) Acenaphthene-d10a	8.544	164	392558	40.00	ppm	0.00
106) Chrysene-d12a	16.386	240	744571	40.00	ppm	-0.01
109) Phenanthrene-d10a	11.199	188	682247	40.00	ppm	0.00
111) Naphthalene-d8a	6.124	136	618859	40.00	ppm	0.00
113) Chrysene-d12b	16.386	240	744571	40.00	ppm	-0.01
System Monitoring Compounds						
5) 2-Fluorophenol	3.933	112	50857	9.80	ppm	0.00
Spiked Amount 50.000			Recovery	=	19.60%	
8) Phenol-d5	4.639	99	64152	9.71	ppm	-0.02
Spiked Amount 50.000			Recovery	=	19.42%	
25) Nitrobenzene-d5	5.402	82	54540	9.71	ppm	0.00
Spiked Amount 50.000			Recovery	=	19.42%	
51) 2-Fluorobiphenyl	7.497	172	120728	9.10	ppm	0.00
Spiked Amount 50.000			Recovery	=	18.20%	
73) 2,4,6-Tribromophenol	9.906	330	21418	10.79	ppm	0.00
Spiked Amount 50.000			Recovery	=	21.58%	
85) Terphenyl-d14	14.377	244	146660	8.73	ppm	0.00
Spiked Amount 50.000			Recovery	=	17.46%	
108) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
110) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
Target Compounds						Qvalue
2) 1,4-Dioxane	2.518	88	21241	8.65	ppm	89
3) Pyridine	2.828	79	57369	10.52	ppm	98
4) N-Nitrosodimethylamine	2.790	42	27206	9.95	ppm	98
6) Indene	5.151	116	97926	10.40	ppm	95
7) Cumene	4.329	105	129428	10.14	ppm	97
9) Phenol	4.649	94	70034	9.56	ppm	94
10) Aniline	4.676	93	89419	11.62	ppm	57
11) bis(2-Chloroethyl)ether	4.719	93	51479	10.07	ppm	98
12) 2-Chlorophenol	4.772	128	61932	10.59	ppm	97
13) Decane	4.810	43	57505	11.05	ppm	90
14) 1,3-Dichlorobenzene	4.895	146	62444	9.56	ppm	98
15) 1,4-Dichlorobenzene	4.954	146	62044	9.84	ppm	97
16) Benzyl alcohol	5.039	108	35535	10.19	ppm	90
17) 1,2-Dichlorobenzene	5.082	146	58669	9.71	ppm	98
18) Acetophenone	5.269	105	76333	10.86	ppm	84
19) 2-Methylphenol	5.130	108	49778	10.04	ppm	98
20) 2,2'-oxybis(1-Chloropr...	5.157	121	19305	11.07	ppm #	85

SGS ACCUTEST JC25024

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5363\
Data File : M126356.D
Acq On : 26 Jul 2016 2:33 am
Operator : seanb1
Sample : ic5363-10
Misc : op95476,em5363
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jul 26 13:06:33 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5363.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Tue Jul 26 13:05:34 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
21) 3&4-Methylphenol	5.258	108	53917	10.12	ppm	80
22) n-Nitroso-di-n-propyla...	5.264	70	39945	10.93	ppm	90
23) Hexachloroethane	5.376	201	23269	9.83	ppm	96
26) Nitrobenzene	5.424	77	56510	9.97	ppm	91
27) Quinoline	6.524	129	116488	9.69	ppm	98
28) Isophorone	5.643	82	98222	9.65	ppm	97
29) 2-Nitrophenol	5.723	139	30409	9.73	ppm	94
30) 2,4-Dimethylphenol	5.755	107	51725	10.68	ppm	95
31) Benzoic acid	5.814	105	28219	8.17	ppm	84
32) bis(2-Chloroethoxy)met...	5.846	93	61032	10.18	ppm	96
33) 2,4-Dichlorophenol	5.963	162	50039	10.03	ppm	96
34) 2,6-Dichlorophenol	6.209	162	48204	10.05	ppm	98
35) 1,3,5-Trichlorobenzene	5.739	180	59356	9.91	ppm	93
36) 1,2,4-Trichlorobenzene	6.060	180	53214	9.13	ppm	98
37) 1,2,3-Trichlorobenzene	6.311	180	53575	9.60	ppm	94
38) Naphthalene	6.145	128	159026	9.66	ppm	100
39) 4-Chloroaniline	6.198	127	75198	10.46	ppm	94
40) 2,3-Dichloroaniline	7.368	161	62292	9.86	ppm	96
41) Caprolactam	6.572	55	24403	10.90	ppm	93
42) Hexachlorobutadiene	6.295	225	29481	9.52	ppm	97
43) 4-Chloro-3-methylphenol	6.775	107	46698	9.92	ppm	97
44) 2-Methylnaphthalene	6.984	141	103598	10.03	ppm	93
45) 1-Methylnaphthalene	7.117	142	111797	9.27	ppm	93
46) Dimethylnaphthalene	7.881	156	102083	9.38	ppm	92
48) Hexachlorocyclopentadiene	7.213	237	74650	22.62	ppm	97
49) 2,4,6-Trichlorophenol	7.374	196	36913	9.98	ppm	89
50) 2,4,5-Trichlorophenol	7.422	196	40193	10.00	ppm	97
52) 2-Chloronaphthalene	7.668	162	107404	9.35	ppm	98
53) Biphenyl	7.646	154	142214	9.51	ppm	97
54) 2-Nitroaniline	7.817	65	30290	10.39	ppm	90
55) Dimethylphthalate	8.127	163	125017	9.43	ppm	99
56) Acenaphthylene	8.303	152	174287	9.37	ppm	99
57) 2,6-Dinitrotoluene	8.202	165	24674	8.92	ppm	89
58) 3-Nitroaniline	8.469	138	32730	10.15	ppm	96
59) Acenaphthene	8.592	153	107933	9.34	ppm	98
60) 2,4-Dinitrophenol	8.645	184	17869	18.01	ppm	82
61) 4-Nitrophenol	8.773	109	13854	9.95	ppm	98
62) Dibenzofuran	8.886	168	167474	10.05	ppm	99
63) 2,4-Dinitrotoluene	8.875	165	33596	9.10	ppm	98
64) 2,3,4,6-Tetrachlorophenol	9.105	232	33540	10.95	ppm	99
65) Diethylphthalate	9.340	149	121778	9.72	ppm	94
66) Fluorene	9.479	166	127265	9.31	ppm	100
67) 4-Chlorophenyl-phenyle...	9.505	204	62382	9.39	ppm	96
68) 4-Nitroaniline	9.516	138	34711	10.82	ppm	96
70) 4,6-Dinitro-2-methylph...	9.585	198	16006	9.86	ppm	92
71) n-Nitrosodiphenylamine	9.719	169	88400	9.31	ppm	96
72) 1,2-Diphenylhydrazine	9.788	77	114253	10.19	ppm	98
74) 4-Bromophenyl-phenylether	10.397	248	38702	9.59	ppm	92
75) Hexachlorobenzene	10.488	284	44691	9.74	ppm	97
76) Pentachlorophenol	10.862	266	56937	23.96	ppm	90

SGS ACCUTEST JC25024

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5363\
Data File : M126356.D
Acq On : 26 Jul 2016 2:33 am
Operator : seanb1
Sample : ic5363-10
Misc : op95476,em5363
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jul 26 13:06:33 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5363.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Tue Jul 26 13:05:34 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
77) Phenanthrene	11.236	178	177657	9.20	ppm	98
78) Anthracene	11.332	178	181962	9.33	ppm	98
79) Carbazole	11.663	167	178555	9.50	ppm	98
80) Di-n-butylphthalate	12.481	149	212264	10.00	ppm	99
81) Fluoranthene	13.539	202	206906	9.20	ppm	99
82) Octadecane	11.177	57	70992	10.60	ppm	93
84) Pyrene	13.971	202	219017	8.73	ppm	100
86) Butylbenzylphthalate	15.430	149	95492	9.50	ppm	97
87) Benzo[a]anthracene	16.370	228	203633	8.99	ppm	98
88) 3,3'-Dichlorobenzidine	16.386	252	76752	9.83	ppm	99
89) Chrysene	16.434	228	192510	8.63	ppm	99
90) bis(2-Ethylhexyl)phtha...	16.653	149	130018	9.66	ppm	93
92) Di-n-octylphthalate	17.876	149	217092	9.88	ppm	99
93) Benzo[b]fluoranthene	18.363	252	221455	9.64	ppm	97
94) Benzo[k]fluoranthene	18.411	252	200679	9.29	ppm	97
95) Benzo[a]pyrene	18.907	252	196596	9.54	ppm	95
96) Indeno[1,2,3-cd]pyrene	20.815	276	183130	9.23	ppm	97
97) Dibenz(a,h)acridine	20.419	279	180636	9.88	ppm	98
98) Dibenz[a,h]anthracene	20.873	278	190553	9.25	ppm	97
99) 7,12-Dimethylbenz(a)an...	18.373	256	104898	11.67	ppm	99
100) Benzo[g,h,i]perylene	21.317	276	198848	9.25	ppm	97

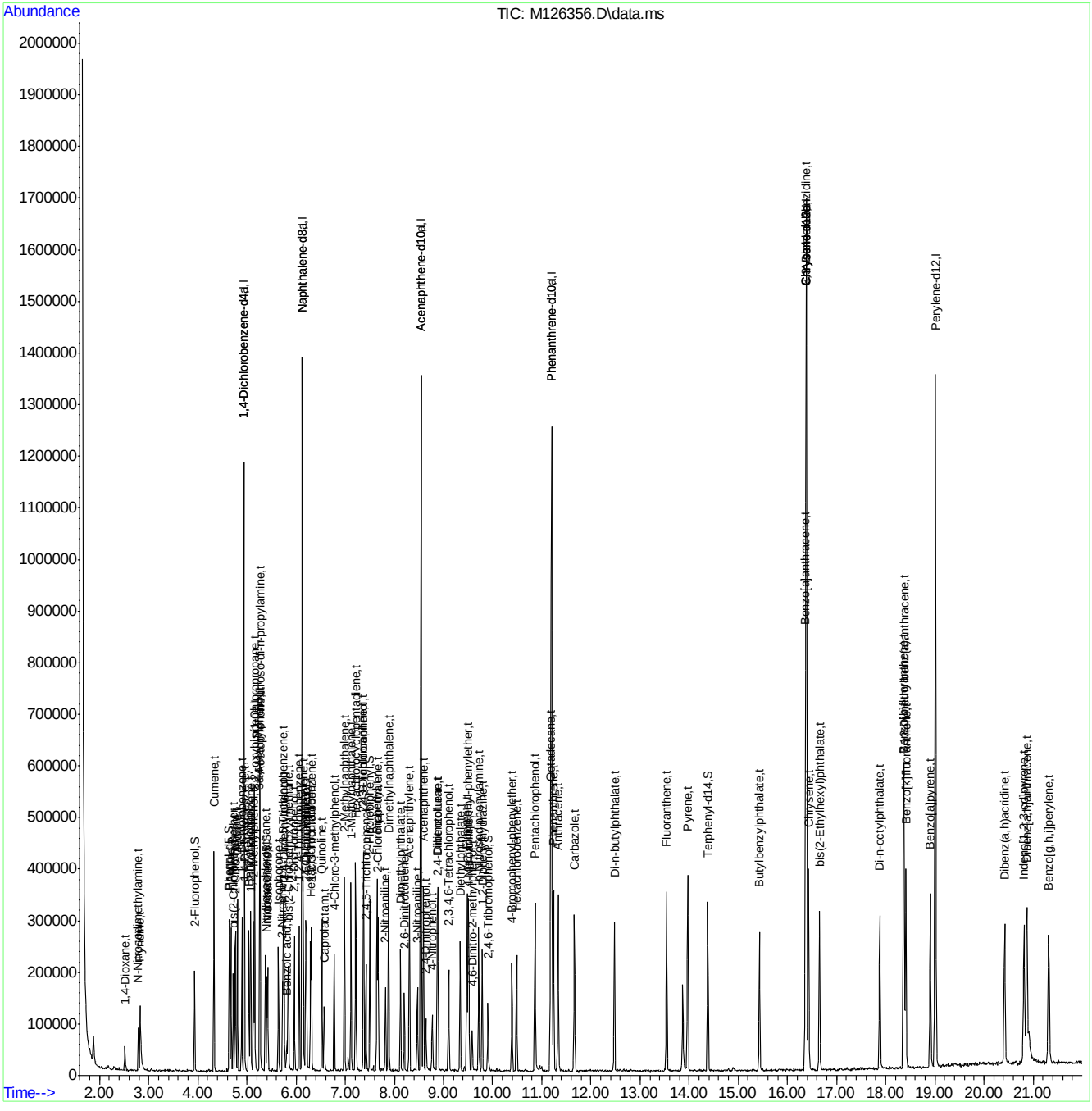
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC25024

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5363\
Data File : M126356.D
Acq On : 26 Jul 2016 2:33 am
Operator : seanb1
Sample : ic5363-10
Misc : op95476,em5363
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jul 26 13:06:33 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5363.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Tue Jul 26 13:05:34 2016
Response via : Initial Calibration



SGS ACCUTEST JC25024

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5363\
Data File : M126357.D
Acq On : 26 Jul 2016 3:01 am
Operator : seanb1
Sample : ic5363-5
Misc : op95476,em5363
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jul 26 15:11:22 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5363.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Tue Jul 26 13:08:25 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.935	152	155384	40.00	ppm	0.00
24) Naphthalene-d8	6.126	136	578067	40.00	ppm	0.00
47) Acenaphthene-d10	8.541	164	351317	40.00	ppm	0.00
69) Phenanthrene-d10	11.196	188	610995	40.00	ppm	0.00
83) Chrysene-d12	16.383	240	670758	40.00	ppm	-0.02
91) Perylene-d12	19.011	264	646532	40.00	ppm	-0.01
101) 1,4-Dichlorobenzene-d4a	4.935	152	155384	40.00	ppm	0.00
103) Acenaphthene-d10a	8.541	164	351317	40.00	ppm	0.00
106) Chrysene-d12a	16.383	240	670758	40.00	ppm	-0.02
109) Phenanthrene-d10a	11.196	188	610995	40.00	ppm	0.00
111) Naphthalene-d8a	6.126	136	578067	40.00	ppm	0.00
113) Chrysene-d12b	16.383	240	670758	40.00	ppm	-0.02
System Monitoring Compounds						
5) 2-Fluorophenol	3.931	112	23238	4.80	ppm	0.00
Spiked Amount 50.000			Recovery	=	9.60%	
8) Phenol-d5	4.636	99	30442	4.94	ppm	-0.02
Spiked Amount 50.000			Recovery	=	9.88%	
25) Nitrobenzene-d5	5.405	82	24457	4.67	ppm	0.00
Spiked Amount 50.000			Recovery	=	9.34%	
51) 2-Fluorobiphenyl	7.499	172	55803	4.75	ppm	0.00
Spiked Amount 50.000			Recovery	=	9.50%	
73) 2,4,6-Tribromophenol	9.908	330	10442	5.79	ppm	0.00
Spiked Amount 50.000			Recovery	=	11.58%	
85) Terphenyl-d14	14.374	244	68804	4.61	ppm	0.00
Spiked Amount 50.000			Recovery	=	9.22%	
108) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
110) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
Target Compounds						Qvalue
2) 1,4-Dioxane	2.515	88	9777	4.31	ppm	97
3) Pyridine	2.835	79	27252	5.31	ppm	92
4) N-Nitrosodimethylamine	2.793	42	13617	5.28	ppm	96
6) Indene	5.154	116	46255	5.23	ppm	99
7) Cumene	4.331	105	60818	5.08	ppm	94
9) Phenol	4.646	94	34559	5.07	ppm	86
10) Aniline	4.673	93	42962	5.83	ppm #	58
11) bis(2-Chloroethyl)ether	4.721	93	25071	5.22	ppm	92
12) 2-Chlorophenol	4.769	128	29471	5.33	ppm	96
13) Decane	4.807	43	26160	5.29	ppm	94
14) 1,3-Dichlorobenzene	4.892	146	29665	4.89	ppm	99
15) 1,4-Dichlorobenzene	4.951	146	30241	5.13	ppm	98
16) Benzyl alcohol	5.042	108	17258	5.25	ppm	95
17) 1,2-Dichlorobenzene	5.079	146	27678	4.93	ppm	96
18) Acetophenone	5.266	105	35072	5.28	ppm	89
19) 2-Methylphenol	5.133	108	24429	5.26	ppm	97
20) 2,2'-oxybis(1-Chloropr...	5.154	121	8536	5.18	ppm #	81

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5363\
Data File : M126357.D
Acq On : 26 Jul 2016 3:01 am
Operator : seanb1
Sample : ic5363-5
Misc : op95476,em5363
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jul 26 15:11:22 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5363.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Tue Jul 26 13:08:25 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
21) 3&4-Methylphenol	5.255	108	24132	4.83	ppm	#	77
22) n-Nitroso-di-n-propyla...	5.266	70	19670	5.71	ppm		98
23) Hexachloroethane	5.373	201	11747	5.33	ppm		94
26) Nitrobenzene	5.421	77	26632	5.02	ppm		90
27) Quinoline	6.527	129	53846	4.79	ppm		96
28) Isophorone	5.640	82	46951	4.94	ppm		98
29) 2-Nitrophenol	5.725	139	14163	4.85	ppm		96
30) 2,4-Dimethylphenol	5.752	107	23362	5.06	ppm		95
31) Benzoic acid	5.800	105	10817	3.57	ppm		75
32) bis(2-Chloroethoxy)met...	5.848	93	28316	5.04	ppm		94
33) 2,4-Dichlorophenol	5.966	162	24269	5.19	ppm		93
34) 2,6-Dichlorophenol	6.212	162	23543	5.22	ppm		98
35) 1,3,5-Trichlorobenzene	5.742	180	27530	4.92	ppm		89
36) 1,2,4-Trichlorobenzene	6.062	180	25521	4.75	ppm		91
37) 1,2,3-Trichlorobenzene	6.308	180	24976	4.80	ppm		97
38) Naphthalene	6.148	128	74917	4.89	ppm		94
39) 4-Chloroaniline	6.196	127	34518	5.08	ppm		98
40) 2,3-Dichloroaniline	7.371	161	27672	4.68	ppm		99
41) Caprolactam	6.564	55	10667	5.01	ppm		98
42) Hexachlorobutadiene	6.292	225	14156	4.90	ppm		97
43) 4-Chloro-3-methylphenol	6.773	107	21728	4.92	ppm		95
44) 2-Methylnaphthalene	6.986	141	50440	5.22	ppm		84
45) 1-Methylnaphthalene	7.114	142	55794	4.99	ppm		98
46) Dimethylnaphthalene	7.884	156	48160	4.77	ppm		93
48) Hexachlorocyclopentadiene	7.211	237	33879	11.26	ppm		95
49) 2,4,6-Trichlorophenol	7.371	196	16758	5.03	ppm		95
50) 2,4,5-Trichlorophenol	7.419	196	18745	5.18	ppm		99
52) 2-Chloronaphthalene	7.665	162	51694	5.06	ppm		98
53) Biphenyl	7.643	154	67707	5.08	ppm		99
54) 2-Nitroaniline	7.814	65	13249	5.03	ppm	#	83
55) Dimethylphthalate	8.124	163	56757	4.80	ppm		94
56) Acenaphthylene	8.306	152	83032	5.03	ppm		97
57) 2,6-Dinitrotoluene	8.204	165	11011	4.51	ppm		84
58) 3-Nitroaniline	8.471	138	13869	4.80	ppm		99
59) Acenaphthene	8.594	153	51328	5.00	ppm		91
60) 2,4-Dinitrophenol	8.648	184	5721	9.33	ppm		77
61) 4-Nitrophenol	8.776	109	5269	4.17	ppm	#	86
62) Dibenzofuran	8.883	168	76854	5.15	ppm		96
63) 2,4-Dinitrotoluene	8.872	165	14222	4.38	ppm		96
64) 2,3,4,6-Tetrachlorophenol	9.107	232	14552	5.20	ppm		91
65) Diethylphthalate	9.337	149	58364	5.20	ppm		94
66) Fluorene	9.476	166	59676	4.92	ppm		94
67) 4-Chlorophenyl-phenyle...	9.508	204	29630	5.01	ppm		89
68) 4-Nitroaniline	9.513	138	14642	5.05	ppm		93
70) 4,6-Dinitro-2-methylph...	9.582	198	6004	5.11	ppm		89
71) n-Nitrosodiphenylamine	9.716	169	41476	4.90	ppm		99
72) 1,2-Diphenylhydrazine	9.786	77	56086	5.55	ppm		89
74) 4-Bromophenyl-phenylether	10.395	248	17468	4.82	ppm		98
75) Hexachlorobenzene	10.485	284	20859	5.06	ppm		98
76) Pentachlorophenol	10.859	266	25536	13.72	ppm		96

SGS ACCUTEST JC25024

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5363\
Data File : M126357.D
Acq On : 26 Jul 2016 3:01 am
Operator : seanb1
Sample : ic5363-5
Misc : op95476,em5363
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jul 26 15:11:22 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5363.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Tue Jul 26 13:08:25 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
77) Phenanthrene	11.239	178	83069	4.85	ppm	95
78) Anthracene	11.329	178	86115	4.98	ppm	98
79) Carbazole	11.666	167	80774	4.82	ppm	99
80) Di-n-butylphthalate	12.478	149	97009	5.09	ppm	98
81) Fluoranthene	13.541	202	94899	4.76	ppm	97
82) Octadecane	11.174	57	32900	5.40	ppm	90
84) Pyrene	13.968	202	100498	4.51	ppm	99
86) Butylbenzylphthalate	15.432	149	41771	4.62	ppm	97
87) Benzo[a]anthracene	16.367	228	94604	4.66	ppm	99
88) 3,3'-Dichlorobenzidine	16.383	252	34739	4.92	ppm	89
89) Chrysene	16.431	228	87114	4.40	ppm	98
90) bis(2-Ethylhexyl)phtha...	16.655	149	58341	4.81	ppm	91
92) Di-n-octylphthalate	17.879	149	96891	4.97	ppm	98
93) Benzo[b]fluoranthene	18.360	252	99330	4.88	ppm	97
94) Benzo[k]fluoranthene	18.408	252	94005	4.95	ppm	99
95) Benzo[a]pyrene	18.905	252	88056	4.83	ppm	99
96) Indeno[1,2,3-cd]pyrene	20.812	276	82431	4.71	ppm	94
97) Dibenz(a,h)acridine	20.416	279	79991	4.91	ppm	95
98) Dibenz[a,h]anthracene	20.870	278	87252	4.81	ppm	97
99) 7,12-Dimethylbenz(a)an...	18.376	256	46462	5.61	ppm	94
100) Benzo[g,h,i]perylene	21.314	276	90936	4.79	ppm	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.6.19

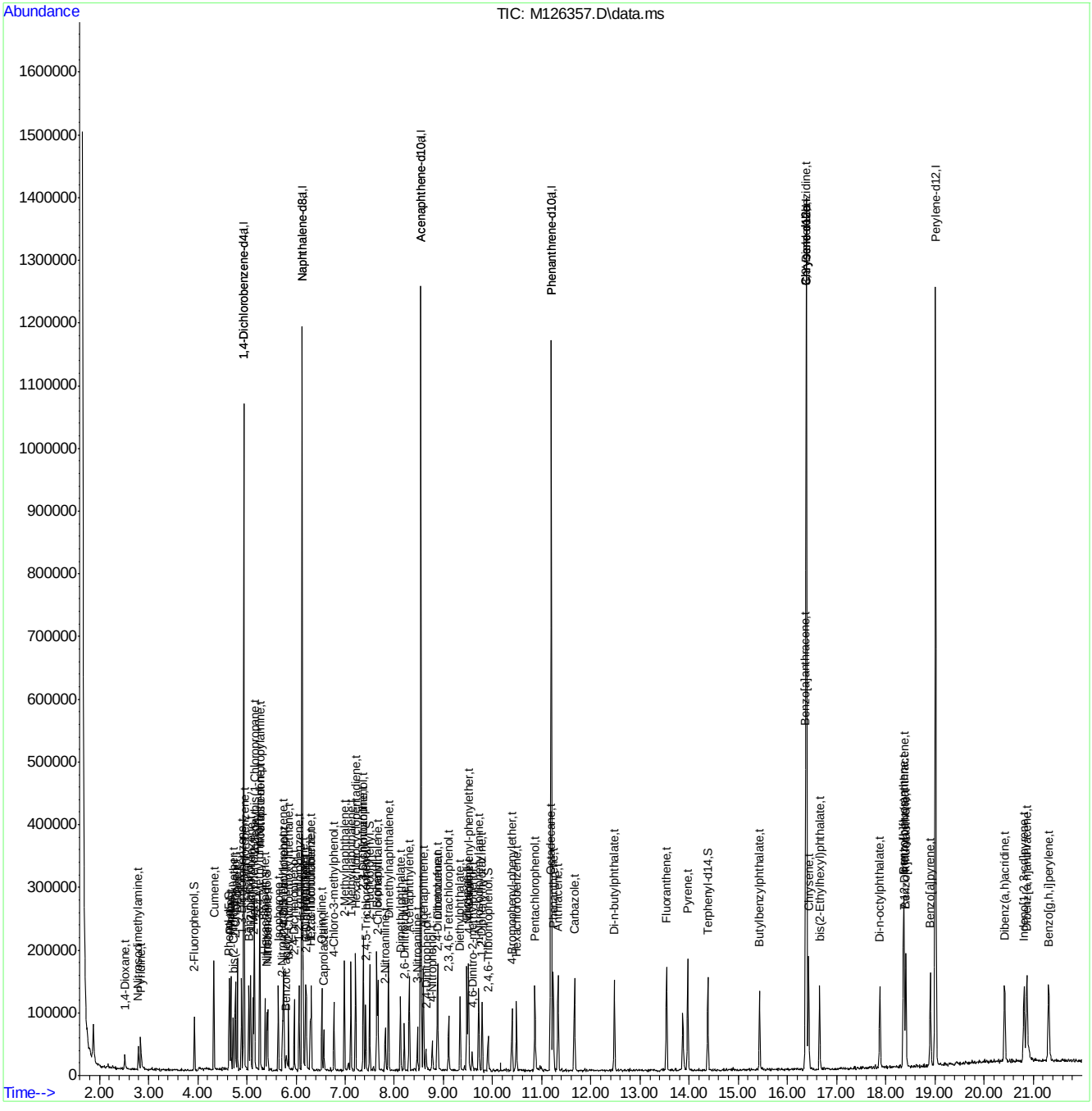
7

SGS ACCUTEST JC25024

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5363\
Data File : M126357.D
Acq On : 26 Jul 2016 3:01 am
Operator : seanb1
Sample : ic5363-5
Misc : op95476,em5363
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jul 26 15:11:22 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5363.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Tue Jul 26 13:08:25 2016
Response via : Initial Calibration



MM5363.M Tue Jul 26 15:11:30 2016 MSM Page: 4

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5363\
Data File : M126358.D
Acq On : 26 Jul 2016 3:30 am
Operator : seanb1
Sample : ic5363-2
Misc : op95476,em5363
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jul 26 15:13:28 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5363.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Tue Jul 26 15:12:42 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.934	152	151755	40.00	ppm	0.00
24) Naphthalene-d8	6.126	136	574484	40.00	ppm	0.00
47) Acenaphthene-d10	8.540	164	348275	40.00	ppm	0.00
69) Phenanthrene-d10	11.195	188	607623	40.00	ppm	0.00
83) Chrysene-d12	16.383	240	682462	40.00	ppm	-0.02
91) Perylene-d12	19.011	264	678559	40.00	ppm	-0.01
101) 1,4-Dichlorobenzene-d4a	4.934	152	151755	40.00	ppm	0.00
103) Acenaphthene-d10a	8.540	164	348275	40.00	ppm	0.00
106) Chrysene-d12a	16.383	240	682462	40.00	ppm	-0.02
109) Phenanthrene-d10a	11.195	188	607623	40.00	ppm	0.00
111) Naphthalene-d8a	6.126	136	574484	40.00	ppm	0.00
113) Chrysene-d12b	16.383	240	682462	40.00	ppm	-0.02
System Monitoring Compounds						
5) 2-Fluorophenol	3.936	112	9055	1.93	ppm	0.00
Spiked Amount 50.000			Recovery	=	3.86%	
8) Phenol-d5	4.635	99	11638	1.97	ppm	-0.02
Spiked Amount 50.000			Recovery	=	3.94%	
25) Nitrobenzene-d5	5.405	82	10015	1.97	ppm	0.00
Spiked Amount 50.000			Recovery	=	3.94%	
51) 2-Fluorobiphenyl	7.499	172	22387	1.98	ppm	0.00
Spiked Amount 50.000			Recovery	=	3.96%	
73) 2,4,6-Tribromophenol	9.908	330	3927	2.14	ppm	0.00
Spiked Amount 50.000			Recovery	=	4.28%	
85) Terphenyl-d14	14.379	244	26454	1.79	ppm	0.00
Spiked Amount 50.000			Recovery	=	3.58%	
108) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
110) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
Target Compounds						Qvalue
2) 1,4-Dioxane	2.520	88	3793	1.77	ppm	80
3) Pyridine	2.846	79	10167	2.03	ppm	84
4) N-Nitrosodimethylamine	2.798	42	5471	2.16	ppm	91
6) Indene	5.154	116	19002	2.22	ppm	87
7) Cumene	4.331	105	24339	2.11	ppm	94
9) Phenol	4.646	94	13437	2.04	ppm	84
10) Aniline	4.673	93	15844	2.18	ppm	70
11) bis(2-Chloroethyl)ether	4.721	93	9768	2.10	ppm	97
12) 2-Chlorophenol	4.769	128	10461	1.94	ppm	98
13) Decane	4.806	43	11793	2.46	ppm	81
14) 1,3-Dichlorobenzene	4.892	146	11865	2.05	ppm	98
15) 1,4-Dichlorobenzene	4.950	146	12275	2.15	ppm	98
16) Benzyl alcohol	5.041	108	6355	1.98	ppm	88
17) 1,2-Dichlorobenzene	5.079	146	11319	2.11	ppm	98
18) Acetophenone	5.266	105	14005	2.18	ppm	91
19) 2-Methylphenol	5.132	108	9381	2.09	ppm	96
20) 2,2'-oxybis(1-Chloropr...	5.154	121	3713	2.34	ppm #	78

SGS ACCUTEST JC25024

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5363\
Data File : M126358.D
Acq On : 26 Jul 2016 3:30 am
Operator : seanb1
Sample : ic5363-2
Misc : op95476,em5363
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jul 26 15:13:28 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5363.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Tue Jul 26 15:12:42 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
21) 3&4-Methylphenol	5.255	108	10243	2.13	ppm	#	85
22) n-Nitroso-di-n-propyla...	5.266	70	8019	2.38	ppm		96
23) Hexachloroethane	5.378	201	4735	2.20	ppm		86
26) Nitrobenzene	5.421	77	11045	2.12	ppm		83
27) Quinoline	6.526	129	21850	1.99	ppm		99
28) Isophorone	5.640	82	17909	1.93	ppm		96
29) 2-Nitrophenol	5.725	139	4893	1.70	ppm		85
30) 2,4-Dimethylphenol	5.752	107	9439	2.05	ppm		90
31) Benzoic acid	5.795	105	3540	1.27	ppm	#	63
32) bis(2-Chloroethoxy)met...	5.848	93	12178	2.21	ppm		92
33) 2,4-Dichlorophenol	5.966	162	8563	1.85	ppm		90
34) 2,6-Dichlorophenol	6.211	162	8984	2.02	ppm		89
35) 1,3,5-Trichlorobenzene	5.741	180	10275	1.88	ppm		92
36) 1,2,4-Trichlorobenzene	6.062	180	10461	2.01	ppm		92
37) 1,2,3-Trichlorobenzene	6.307	180	11005	2.18	ppm		96
38) Naphthalene	6.147	128	31548	2.11	ppm		98
39) 4-Chloroaniline	6.195	127	13650	2.04	ppm		93
40) 2,3-Dichloroaniline	7.370	161	12048	2.10	ppm		84
41) Caprolactam	6.558	55	4885	2.32	ppm	#	79
42) Hexachlorobutadiene	6.291	225	5193	1.84	ppm		86
43) 4-Chloro-3-methylphenol	6.772	107	7890	1.82	ppm		93
44) 2-Methylnaphthalene	6.986	141	19089	2.00	ppm		96
45) 1-Methylnaphthalene	7.114	142	21795	2.00	ppm		97
46) Dimethylnaphthalene	7.878	156	18809	1.91	ppm		79
48) Hexachlorocyclopentadiene	7.210	237	12493	4.14	ppm		93
49) 2,4,6-Trichlorophenol	7.370	196	7172	2.18	ppm		83
50) 2,4,5-Trichlorophenol	7.413	196	7555	2.12	ppm		97
52) 2-Chloronaphthalene	7.664	162	20172	2.03	ppm		93
53) Biphenyl	7.643	154	25031	1.93	ppm		83
54) 2-Nitroaniline	7.814	65	5054	1.95	ppm	#	78
55) Dimethylphthalate	8.124	163	23600	2.06	ppm		96
56) Acenaphthylene	8.305	152	33574	2.09	ppm		98
57) 2,6-Dinitrotoluene	8.204	165	3913	1.66	ppm		81
58) 3-Nitroaniline	8.471	138	5342	1.89	ppm		85
59) Acenaphthene	8.594	153	20481	2.05	ppm		91
60) 2,4-Dinitrophenol	8.647	184	1369	5.35	ppm		84
61) 4-Nitrophenol	8.770	109	2281	1.83	ppm		90
62) Dibenzofuran	8.882	168	31598	2.17	ppm		97
63) 2,4-Dinitrotoluene	8.866	165	5021	1.62	ppm		96
64) 2,3,4,6-Tetrachlorophenol	9.107	232	5657	2.01	ppm		95
65) Diethylphthalate	9.336	149	23191	2.11	ppm		92
66) Fluorene	9.475	166	24370	2.07	ppm		99
67) 4-Chlorophenyl-phenyle...	9.502	204	11815	2.06	ppm		90
68) 4-Nitroaniline	9.513	138	5701	2.00	ppm		84
70) 4,6-Dinitro-2-methylph...	9.582	198	2028	2.48	ppm		76
71) n-Nitrosodiphenylamine	9.716	169	16951	2.05	ppm		93
72) 1,2-Diphenylhydrazine	9.790	77	22687	2.26	ppm		96
74) 4-Bromophenyl-phenylether	10.399	248	7029	1.98	ppm		82
75) Hexachlorobenzene	10.485	284	8995	2.21	ppm		92
76) Pentachlorophenol	10.864	266	8770	6.43	ppm		91

SGS ACCUTEST JC25024

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5363\
Data File : M126358.D
Acq On : 26 Jul 2016 3:30 am
Operator : seanb1
Sample : ic5363-2
Misc : op95476,em5363
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jul 26 15:13:28 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5363.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Tue Jul 26 15:12:42 2016
Response via : Initial Calibration

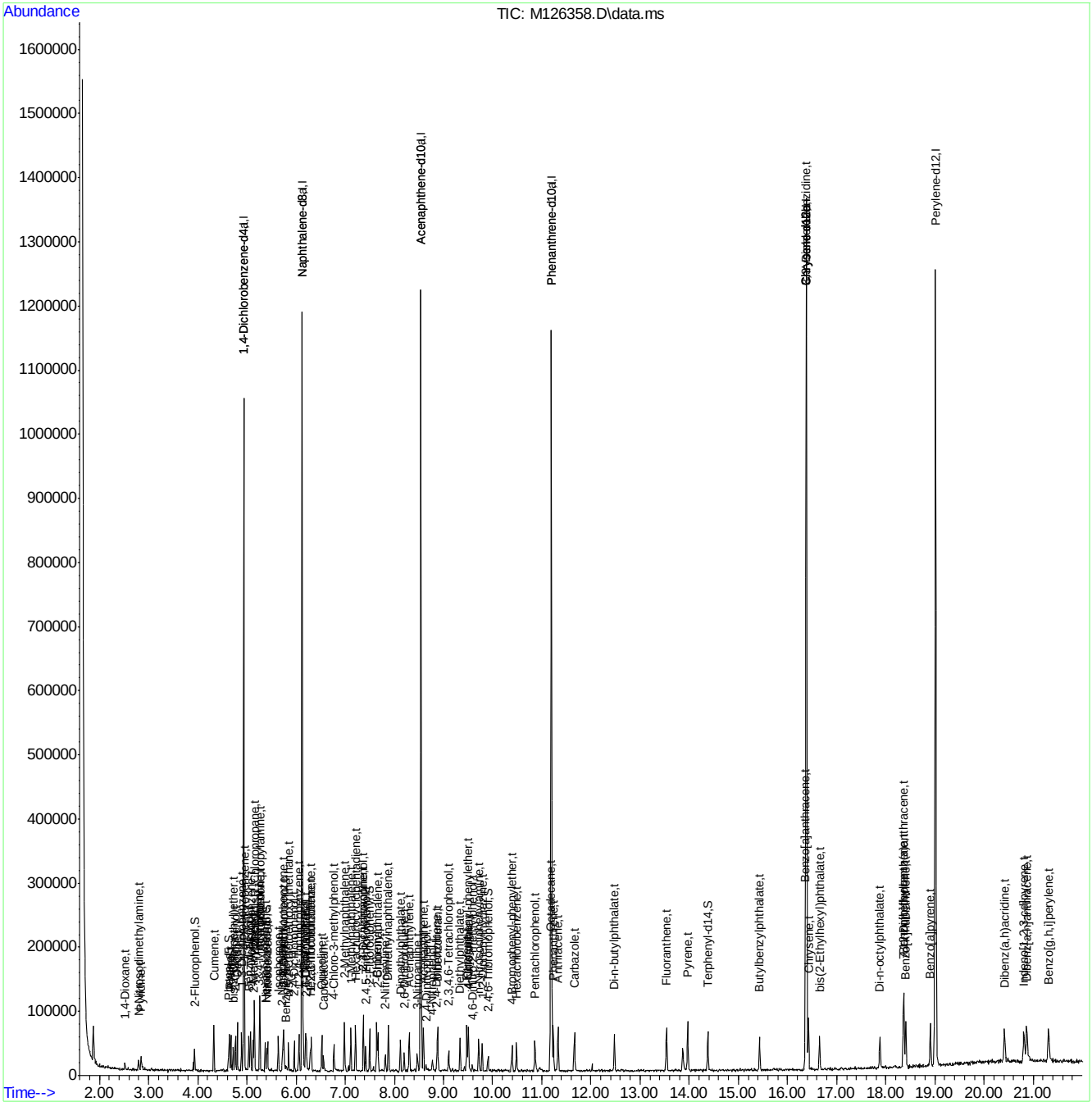
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
77)	Phenanthrene	11.233	178	33685	2.02	ppm	96
78)	Anthracene	11.329	178	35171	2.09	ppm	99
79)	Carbazole	11.666	167	34162	2.09	ppm	100
80)	Di-n-butylphthalate	12.478	149	39262	2.09	ppm	97
81)	Fluoranthene	13.541	202	38120	1.97	ppm	94
82)	Octadecane	11.174	57	13537	2.22	ppm	98
84)	Pyrene	13.968	202	40818	1.86	ppm	99
86)	Butylbenzylphthalate	15.432	149	16721	1.84	ppm	90
87)	Benzo[a]anthracene	16.361	228	38365	1.90	ppm	96
88)	3,3'-Dichlorobenzidine	16.383	252	13939	1.95	ppm	89
89)	Chrysene	16.431	228	38805	1.98	ppm	94
90)	bis(2-Ethylhexyl)phtha...	16.655	149	20856	1.71	ppm	97
92)	Di-n-octylphthalate	17.878	149	37995	1.88	ppm	95
93)	Benzo[b]fluoranthene	18.359	252	40903	1.96	ppm	93
94)	Benzo[k]fluoranthene	18.402	252	39259	2.02	ppm	93
95)	Benzo[a]pyrene	18.904	252	36166	1.94	ppm	99
96)	Indeno[1,2,3-cd]pyrene	20.806	276	32623	1.82	ppm	95
97)	Dibenz(a,h)acridine	20.421	279	32474	1.93	ppm	87
98)	Dibenz[a,h]anthracene	20.865	278	36337	1.95	ppm	96
99)	7,12-Dimethylbenz(a)an...	18.370	256	19602	2.19	ppm	84
100)	Benzo[g,h,i]perylene	21.308	276	37973	1.96	ppm	96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5363\
Data File : M126358.D
Acq On : 26 Jul 2016 3:30 am
Operator : seanb1
Sample : ic5363-2
Misc : op95476,em5363
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jul 26 15:13:28 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5363.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Tue Jul 26 15:12:42 2016
Response via : Initial Calibration



SGS ACCUTEST JC25024

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5363\
Data File : M126359.D
Acq On : 26 Jul 2016 3:58 am
Operator : seanb1
Sample : ic5363-1
Misc : op95476,em5363
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jul 26 15:21:24 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5363.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Tue Jul 26 15:20:52 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.938	152	156029	40.00	ppm	0.00
24) Naphthalene-d8	6.124	136	575277	40.00	ppm	0.00
47) Acenaphthene-d10	8.538	164	354113	40.00	ppm	0.00
69) Phenanthrene-d10	11.193	188	614663	40.00	ppm	0.00
83) Chrysene-d12	16.386	240	685270	40.00	ppm	0.00
91) Perylene-d12	19.014	264	682840	40.00	ppm	0.00
101) 1,4-Dichlorobenzene-d4a	4.938	152	156029	40.00	ppm	0.00
103) Acenaphthene-d10a	8.538	164	354113	40.00	ppm	0.00
106) Chrysene-d12a	16.386	240	685270	40.00	ppm	0.00
109) Phenanthrene-d10a	11.193	188	614663	40.00	ppm	0.00
111) Naphthalene-d8a	6.124	136	575277	40.00	ppm	0.00
113) Chrysene-d12b	16.386	240	685270	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.933	112	4624	0.99	ppm	0.00
Spiked Amount 50.000			Recovery	=	1.98%	
8) Phenol-d5	4.633	99	6436	1.08	ppm	0.00
Spiked Amount 50.000			Recovery	=	2.16%	
25) Nitrobenzene-d5	5.403	82	5076	1.04	ppm	0.00
Spiked Amount 50.000			Recovery	=	2.08%	
51) 2-Fluorobiphenyl	7.497	172	11637	1.09	ppm	0.00
Spiked Amount 50.000			Recovery	=	2.18%	
73) 2,4,6-Tribromophenol	9.901	330	1664	0.87	ppm	-0.01
Spiked Amount 50.000			Recovery	=	1.74%	
85) Terphenyl-d14	14.377	244	13420	0.98	ppm	0.00
Spiked Amount 50.000			Recovery	=	1.96%	
108) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
110) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
Target Compounds						Qvalue
2) 1,4-Dioxane	2.518	88	1775	0.91	ppm	84
3) Pyridine	2.854	79	4474	0.86	ppm	95
4) N-Nitrosodimethylamine	2.801	42	2607	1.02	ppm	99
6) Indene	5.152	116	9313	1.07	ppm	91
7) Cumene	4.329	105	12442	1.07	ppm	95
9) Phenol	4.644	94	6161	0.95	ppm	94
10) Aniline	4.671	93	8321	1.10	ppm	74
11) bis(2-Chloroethyl)ether	4.719	93	4516	0.98	ppm #	66
12) 2-Chlorophenol	4.767	128	5771	1.07	ppm	82
13) Decane	4.804	43	5074	1.02	ppm	89
14) 1,3-Dichlorobenzene	4.890	146	5885	1.04	ppm	82
15) 1,4-Dichlorobenzene	4.948	146	6184	1.08	ppm	85
16) Benzyl alcohol	5.039	108	3691	1.11	ppm	92
17) 1,2-Dichlorobenzene	5.082	146	5661	1.07	ppm	88
18) Acetophenone	5.269	105	6992	1.06	ppm	96
19) 2-Methylphenol	5.130	108	4270	0.95	ppm	94
20) 2,2'-oxybis(1-Chloropr...	5.152	121	1935	1.18	ppm #	55

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5363\
Data File : M126359.D
Acq On : 26 Jul 2016 3:58 am
Operator : seanb1
Sample : ic5363-1
Misc : op95476,em5363
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jul 26 15:21:24 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5363.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Tue Jul 26 15:20:52 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
21)	3&4-Methylphenol	5.258	108	4929	1.02	ppm		91
22)	n-Nitroso-di-n-propyla...	5.264	70	3747	1.06	ppm		97
23)	Hexachloroethane	5.376	201	2240	1.04	ppm		80
26)	Nitrobenzene	5.424	77	5083	1.01	ppm		90
27)	Quinoline	6.524	129	10192	0.98	ppm		90
28)	Isophorone	5.638	82	8750	0.99	ppm		92
29)	2-Nitrophenol	5.723	139	2337	0.85	ppm		85
30)	2,4-Dimethylphenol	5.755	107	5543	1.19	ppm		86
32)	bis(2-Chloroethoxy)met...	5.846	93	5947	1.09	ppm		95
33)	2,4-Dichlorophenol	5.963	162	4365	0.98	ppm		94
34)	2,6-Dichlorophenol	6.209	162	4167	0.98	ppm		85
35)	1,3,5-Trichlorobenzene	5.739	180	4943	0.98	ppm		90
36)	1,2,4-Trichlorobenzene	6.060	180	5196	1.06	ppm		90
37)	1,2,3-Trichlorobenzene	6.305	180	4553	0.96	ppm		88
38)	Naphthalene	6.145	128	15205	1.07	ppm		96
39)	4-Chloroaniline	6.199	127	6845	1.05	ppm		92
40)	2,3-Dichloroaniline	7.368	161	5477	1.01	ppm		93
41)	Caprolactam	6.562	55	2434	1.10	ppm	#	81
42)	Hexachlorobutadiene	6.289	225	3048	1.14	ppm		82
43)	4-Chloro-3-methylphenol	6.770	107	3563	0.88	ppm		98
44)	2-Methylnaphthalene	6.984	141	9410	1.02	ppm		93
45)	1-Methylnaphthalene	7.112	142	10792	1.05	ppm		80
46)	Dimethylnaphthalene	7.881	156	9374	1.03	ppm		93
48)	Hexachlorocyclopentadiene	7.208	237	5164	1.63	ppm		88
49)	2,4,6-Trichlorophenol	7.374	196	3320	1.01	ppm		95
50)	2,4,5-Trichlorophenol	7.422	196	3131	0.89	ppm		89
52)	2-Chloronaphthalene	7.662	162	9962	1.06	ppm		93
53)	Biphenyl	7.641	154	13294	1.09	ppm		97
54)	2-Nitroaniline	7.812	65	2517	0.95	ppm	#	78
55)	Dimethylphthalate	8.122	163	11257	1.02	ppm		97
56)	Acenaphthylene	8.303	152	16359	1.05	ppm		96
57)	2,6-Dinitrotoluene	8.202	165	1844	0.82	ppm		83
58)	3-Nitroaniline	8.464	138	2226	0.79	ppm		73
59)	Acenaphthene	8.592	153	10063	1.05	ppm		90
61)	4-Nitrophenol	8.773	109	1168	0.93	ppm	#	78
62)	Dibenzofuran	8.880	168	15603	1.08	ppm		91
63)	2,4-Dinitrotoluene	8.870	165	2077	0.72	ppm		90
64)	2,3,4,6-Tetrachlorophenol	9.105	232	2625	0.89	ppm		91
65)	Diethylphthalate	9.334	149	11243	1.04	ppm		95
66)	Fluorene	9.479	166	12338	1.09	ppm		90
67)	4-Chlorophenyl-phenyle...	9.505	204	5776	1.05	ppm		86
68)	4-Nitroaniline	9.516	138	2948	1.00	ppm		88
71)	n-Nitrosodiphenylamine	9.714	169	7985	1.00	ppm		97
72)	1,2-Diphenylhydrazine	9.783	77	10907	1.05	ppm		85
74)	4-Bromophenyl-phenylether	10.397	248	4063	1.16	ppm		84
75)	Hexachlorobenzene	10.483	284	4563	1.12	ppm		91
76)	Pentachlorophenol	10.857	266	4004	1.59	ppm		85
77)	Phenanthrene	11.236	178	15625	0.99	ppm		84
78)	Anthracene	11.327	178	17362	1.06	ppm		98
79)	Carbazole	11.664	167	16014	1.01	ppm		90

SGS ACCUTEST JC25024

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5363\
Data File : M126359.D
Acq On : 26 Jul 2016 3:58 am
Operator : seanb1
Sample : ic5363-1
Misc : op95476,em5363
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jul 26 15:21:24 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5363.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Tue Jul 26 15:20:52 2016
Response via : Initial Calibration

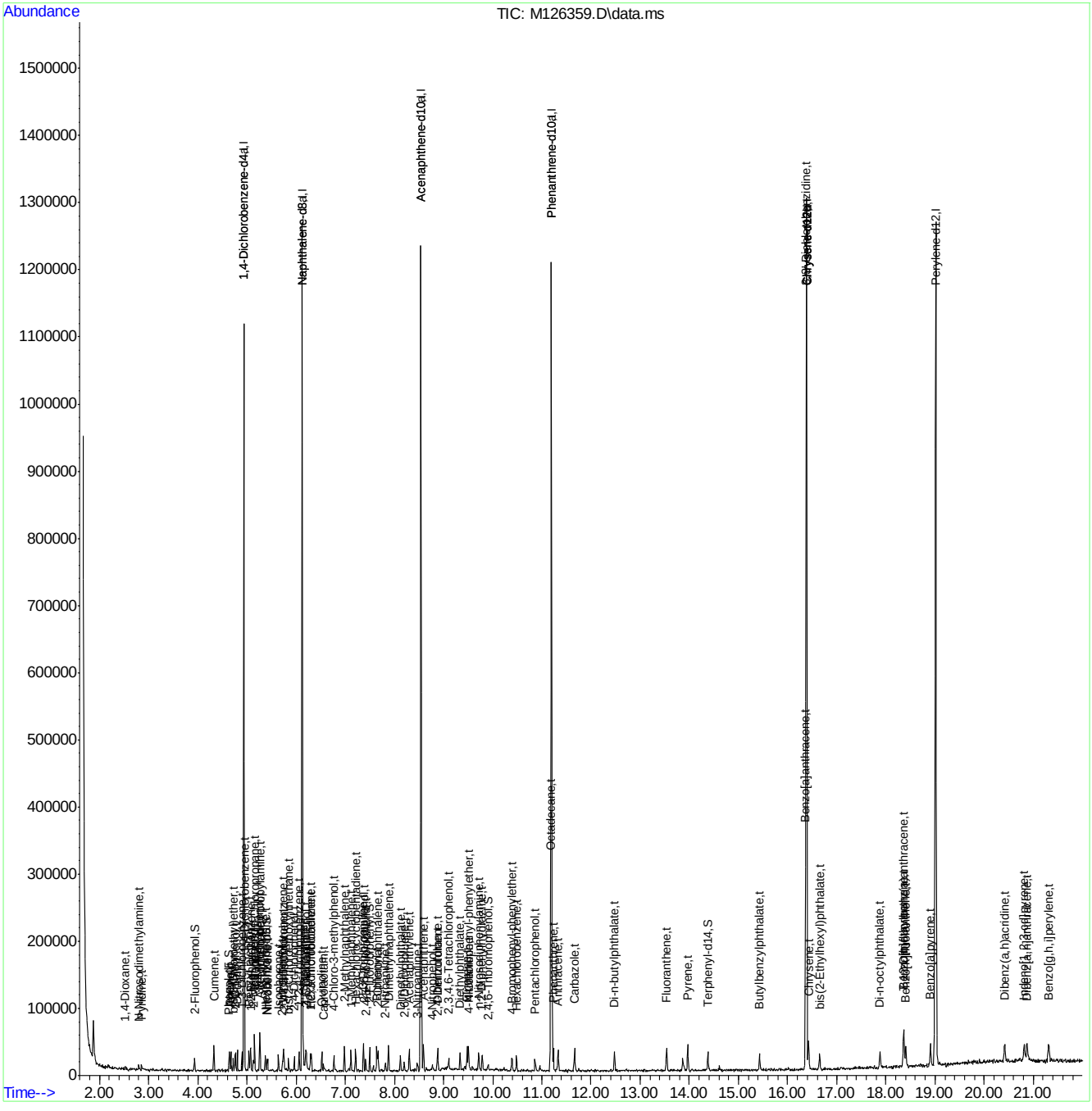
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
80) Di-n-butylphthalate	12.476	149	19977	1.05	ppm	97
81) Fluoranthene	13.539	202	18483	1.00	ppm	88
82) Octadecane	11.177	57	6597	1.05	ppm	85
84) Pyrene	13.966	202	21119	1.04	ppm	96
86) Butylbenzylphthalate	15.430	149	7835	0.89	ppm	89
87) Benzo[a]anthracene	16.365	228	20456	1.06	ppm	90
88) 3,3'-Dichlorobenzidine	16.381	252	6599	0.93	ppm	73
89) Chrysene	16.429	228	18710	1.03	ppm	93
90) bis(2-Ethylhexyl)phtha...	16.653	149	11002	0.93	ppm	88
92) Di-n-octylphthalate	17.876	149	17801	0.90	ppm	94
93) Benzo[b]fluoranthene	18.357	252	18779	0.95	ppm	93
94) Benzo[k]fluoranthene	18.405	252	19578	1.07	ppm	93
95) Benzo[a]pyrene	18.902	252	18091	1.02	ppm	85
96) Indeno[1,2,3-cd]pyrene	20.809	276	15267	0.90	ppm	95
97) Dibenz(a,h)acridine	20.414	279	15823	0.96	ppm	87
98) Dibenz[a,h]anthracene	20.868	278	17953	1.00	ppm	94
99) 7,12-Dimethylbenz(a)an...	18.368	256	8021	0.88	ppm	96
100) Benzo[g,h,i]perylene	21.306	276	18017	0.98	ppm	95

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5363\
Data File : M126359.D
Acq On : 26 Jul 2016 3:58 am
Operator : seanb1
Sample : ic5363-1
Misc : op95476,em5363
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jul 26 15:21:24 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5363.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Tue Jul 26 15:20:52 2016
Response via : Initial Calibration



MM5363.M Tue Jul 26 15:22:08 2016 MSM

SGS ACCUTEST JC25024

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5364\
Data File : M126361.D
Acq On : 26 Jul 2016 9:08 am
Operator : ashleyd
Sample : ic5364-100
Misc : op95476,em5364
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 26 16:31:12 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5363.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Tue Jul 26 16:30:46 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.939	152	204482	40.00	ppm	0.00
24) Naphthalene-d8	6.120	136	771133	40.00	ppm	0.00
47) Acenaphthene-d10	8.540	164	469203	40.00	ppm	0.00
69) Phenanthrene-d10	11.195	188	791307	40.00	ppm	0.00
83) Chrysene-d12	16.382	240	829875	40.00	ppm	0.00
91) Perylene-d12	19.016	264	829114	40.00	ppm	0.00
101) 1,4-Dichlorobenzene-d4a	4.939	152	204482	40.00	ppm	0.00
103) Acenaphthene-d10a	8.540	164	469203	40.00	ppm	0.00
106) Chrysene-d12a	16.382	240	829875	40.00	ppm	0.00
109) Phenanthrene-d10a	11.195	188	791307	40.00	ppm	0.00
111) Naphthalene-d8a	6.120	136	771133	40.00	ppm	0.00
113) Chrysene-d12b	16.382	240	829875	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
8) Phenol-d5	0.000	99	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
51) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
108) 1-chlorooctadecane	13.535	57	482128	100.00	ppm	0.07
Spiked Amount 50.000			Recovery	=	200.00%	
110) o-terphenyl	12.012	230	1031124	100.00	ppm	0.00
Spiked Amount 50.000			Recovery	=	200.00%	
Target Compounds						Qvalue
102) Benzaldehyde	4.592	105	297491	100.00	ppm #	75
104) 1,2,4,5-Tetrachloroben...	7.220	216	587082	100.00	ppm	95
105) Atrazine	10.778	215	203584	100.00	ppm	95
107) Benzidine	13.877	184	655400	100.00	ppm	100
112) Hydroquinone	6.590	110	611961	100.00	ppm	81

(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.6.22

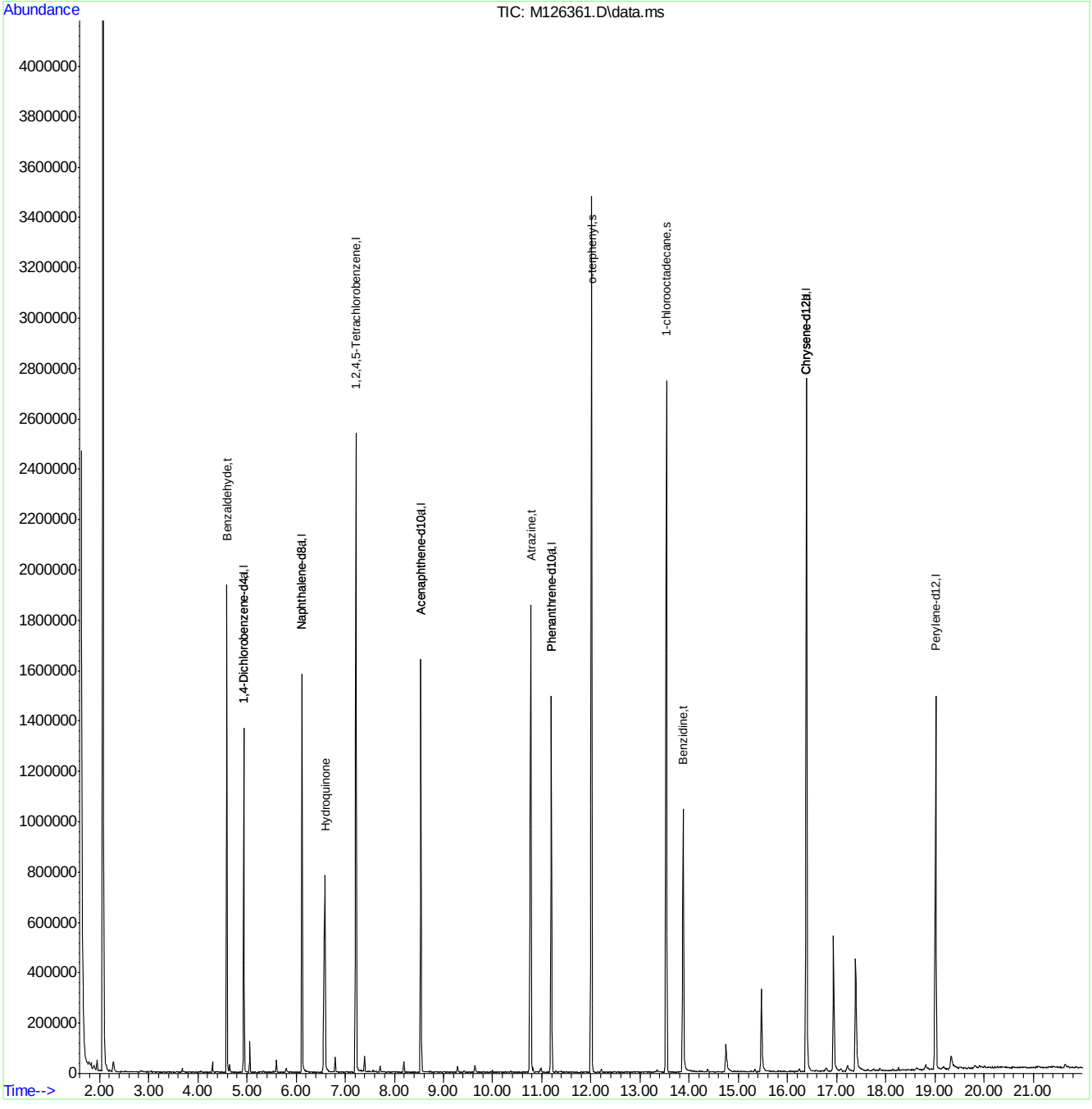
7

SGS ACCUTEST JC25024

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5364\
Data File : M126361.D
Acq On : 26 Jul 2016 9:08 am
Operator : ashleyd
Sample : ic5364-100
Misc : op95476,em5364
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 26 16:31:12 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5363.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Tue Jul 26 16:30:46 2016
Response via : Initial Calibration



MM5363.M Tue Jul 26 16:31:22 2016 MSM

Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5364\
Data File : M126362.D
Acq On : 26 Jul 2016 9:36 am
Operator : ashleyd
Sample : ic5364-80
Misc : op95476,em5364
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jul 26 16:31:45 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5363.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Tue Jul 26 16:30:46 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.933	152	183684	40.00	ppm	0.00
24) Naphthalene-d8	6.124	136	685028	40.00	ppm	0.00
47) Acenaphthene-d10	8.539	164	416768	40.00	ppm	0.00
69) Phenanthrene-d10	11.194	188	720027	40.00	ppm	0.00
83) Chrysene-d12	16.381	240	792829	40.00	ppm	0.00
91) Perylene-d12	19.010	264	784246	40.00	ppm	0.00
101) 1,4-Dichlorobenzene-d4a	4.933	152	183684	40.00	ppm	0.00
103) Acenaphthene-d10a	8.539	164	416768	40.00	ppm	0.00
106) Chrysene-d12a	16.381	240	792829	40.00	ppm	0.00
109) Phenanthrene-d10a	11.194	188	720027	40.00	ppm	0.00
111) Naphthalene-d8a	6.124	136	685028	40.00	ppm	0.00
113) Chrysene-d12b	16.381	240	792829	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
8) Phenol-d5	0.000	99	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
51) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
108) 1-chlorooctadecane	13.529	57	363557	78.93	ppm	0.07
Spiked Amount 50.000			Recovery	=	157.86%	
110) o-terphenyl	12.012	230	759346	80.93	ppm	0.00
Spiked Amount 50.000			Recovery	=	161.86%	
Target Compounds						Qvalue
102) Benzaldehyde	4.591	105	239697	89.70	ppm	# 74
104) 1,2,4,5-Tetrachloroben...	7.220	216	412964	79.19	ppm	97
105) Atrazine	10.772	215	149700	82.78	ppm	93
107) Benzidine	13.876	184	518371	82.79	ppm	100
112) Hydroquinone	6.573	110	433623	79.76	ppm	79

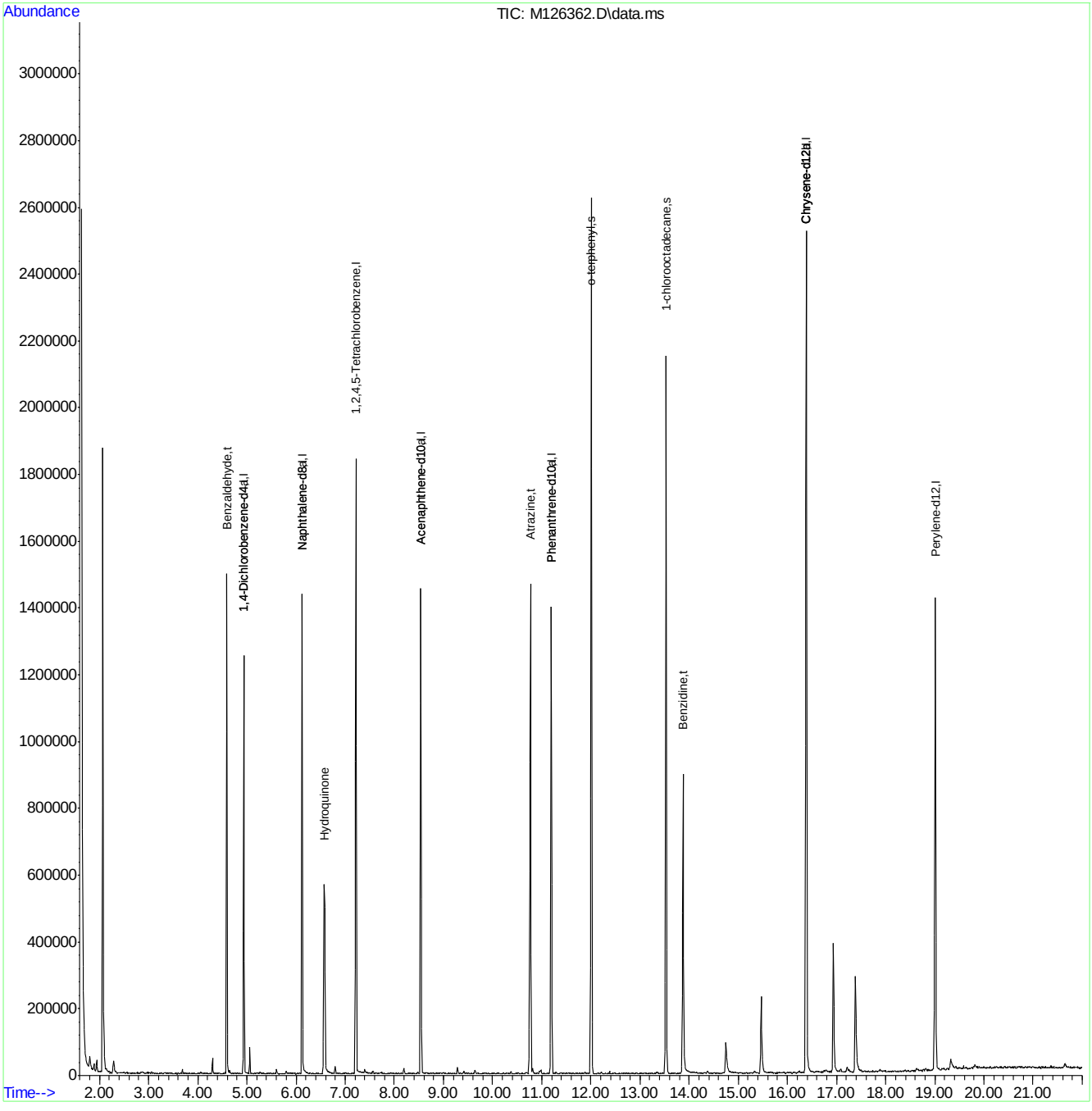
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC25024

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5364\
Data File : M126362.D
Acq On : 26 Jul 2016 9:36 am
Operator : ashleyd
Sample : ic5364-80
Misc : op95476,em5364
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jul 26 16:31:45 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5363.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Tue Jul 26 16:30:46 2016
Response via : Initial Calibration



MM5363.M Tue Jul 26 16:31:56 2016 MSM

SGS ACCUTEST JC25024

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5364\
Data File : M126363.D
Acq On : 26 Jul 2016 10:05 am
Operator : ashleyd
Sample : icc5364-50
Misc : op95476,em5364
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jul 26 16:32:18 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5363.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Tue Jul 26 16:30:46 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.938	152	158127	40.00	ppm	0.00
24) Naphthalene-d8	6.124	136	588527	40.00	ppm	0.00
47) Acenaphthene-d10	8.539	164	358748	40.00	ppm	0.00
69) Phenanthrene-d10	11.194	188	644739	40.00	ppm	0.00
83) Chrysene-d12	16.381	240	693025	40.00	ppm	0.00
91) Perylene-d12	19.014	264	677080	40.00	ppm	0.00
101) 1,4-Dichlorobenzene-d4a	4.938	152	158127	40.00	ppm	0.00
103) Acenaphthene-d10a	8.539	164	358748	40.00	ppm	0.00
106) Chrysene-d12a	16.381	240	693025	40.00	ppm	0.00
109) Phenanthrene-d10a	11.194	188	644739	40.00	ppm	0.00
111) Naphthalene-d8a	6.124	136	588527	40.00	ppm	0.00
113) Chrysene-d12b	16.381	240	693025	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
8) Phenol-d5	0.000	99	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
51) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
108) 1-chlorooctadecane	13.528	57	225963	56.12	ppm	0.07
Spiked Amount 50.000			Recovery = 112.24%			
110) o-terphenyl	12.006	230	466750	55.56	ppm	-0.02
Spiked Amount 50.000			Recovery = 111.12%			
Target Compounds						Qvalue
102) Benzaldehyde	4.591	105	193075	83.93	ppm #	73
104) 1,2,4,5-Tetrachloroben...	7.219	216	254489	56.69	ppm	98
105) Atrazine	10.766	215	91194	58.59	ppm	90
107) Benzidine	13.875	184	412370	75.34	ppm	100
112) Hydroquinone	6.567	110	263241	56.36	ppm	78

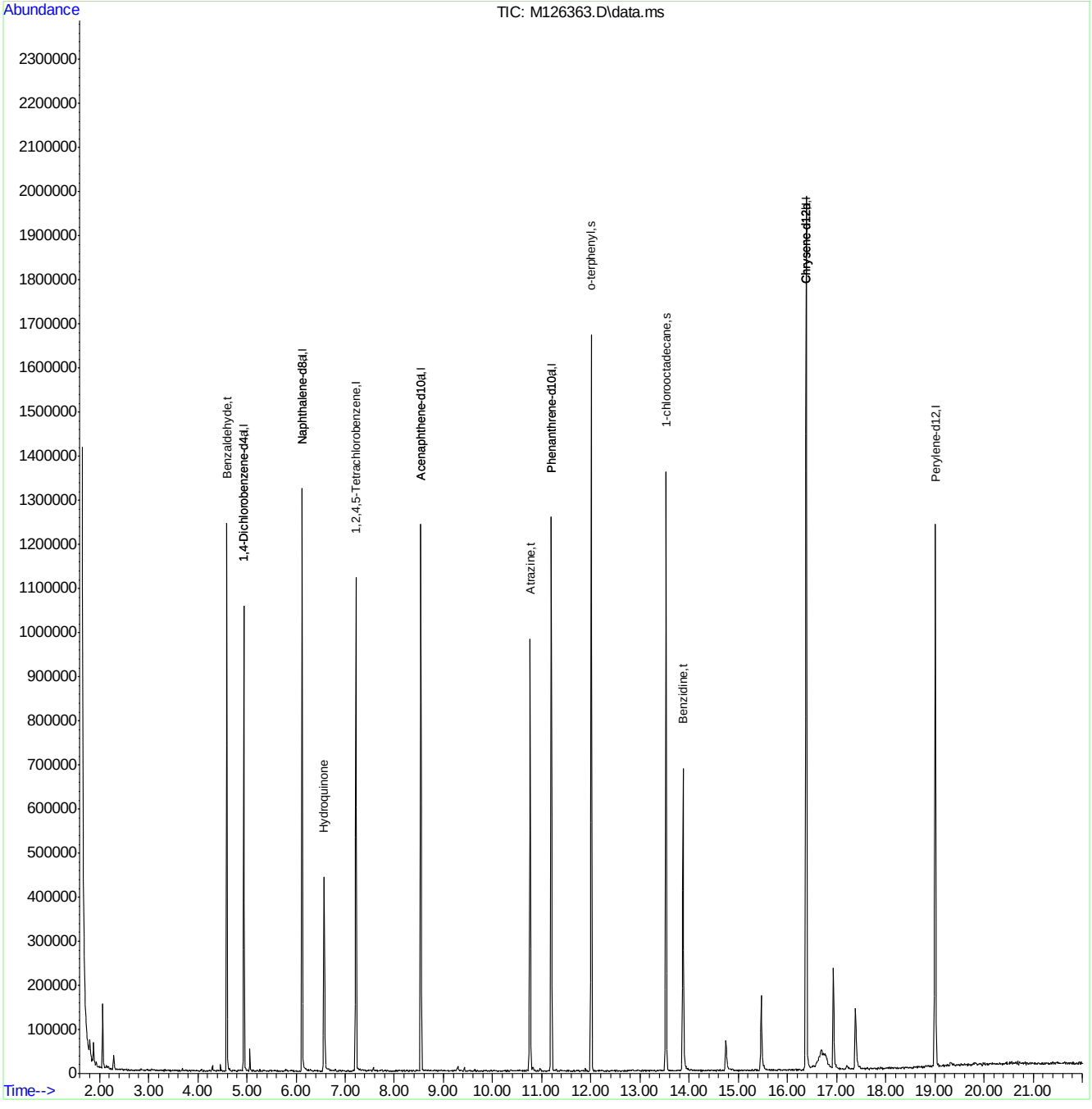
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC25024

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5364\
Data File : M126363.D
Acq On : 26 Jul 2016 10:05 am
Operator : ashleyd
Sample : icc5364-50
Misc : op95476,em5364
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jul 26 16:32:18 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5363.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Tue Jul 26 16:30:46 2016
Response via : Initial Calibration



MM5363.M Tue Jul 26 16:32:29 2016 MSM

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5364\
Data File : M126364.D
Acq On : 26 Jul 2016 10:33 am
Operator : ashleyd
Sample : ic5364-25
Misc : op95476,em5364
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jul 26 16:32:57 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5363.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Tue Jul 26 16:30:46 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.935	152	199843	40.00	ppm	0.00
24) Naphthalene-d8	6.121	136	737023	40.00	ppm	0.00
47) Acenaphthene-d10	8.541	164	450586	40.00	ppm	0.00
69) Phenanthrene-d10	11.196	188	773784	40.00	ppm	0.00
83) Chrysene-d12	16.383	240	829779	40.00	ppm	0.00
91) Perylene-d12	19.012	264	806102	40.00	ppm	0.00
101) 1,4-Dichlorobenzene-d4a	4.935	152	199843	40.00	ppm	0.00
103) Acenaphthene-d10a	8.541	164	450586	40.00	ppm	0.00
106) Chrysene-d12a	16.383	240	829779	40.00	ppm	0.00
109) Phenanthrene-d10a	11.196	188	773784	40.00	ppm	0.00
111) Naphthalene-d8a	6.121	136	737023	40.00	ppm	0.00
113) Chrysene-d12b	16.383	240	829779	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
8) Phenol-d5	0.000	99	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
51) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
108) 1-chlorooctadecane	13.525	57	125616	26.06	ppm	0.07
Spiked Amount 50.000			Recovery = 52.12%			
110) o-terphenyl	12.008	230	259753	25.76	ppm	-0.01
Spiked Amount 50.000			Recovery = 51.52%			
Target Compounds						Qvalue
102) Benzaldehyde	4.593	105	120150	41.33	ppm #	73
104) 1,2,4,5-Tetrachloroben...	7.216	216	142317	25.24	ppm	94
105) Atrazine	10.763	215	48756	24.94	ppm	98
107) Benzidine	13.873	184	294741	44.98	ppm	100
112) Hydroquinone	6.565	110	137839	23.57	ppm	79

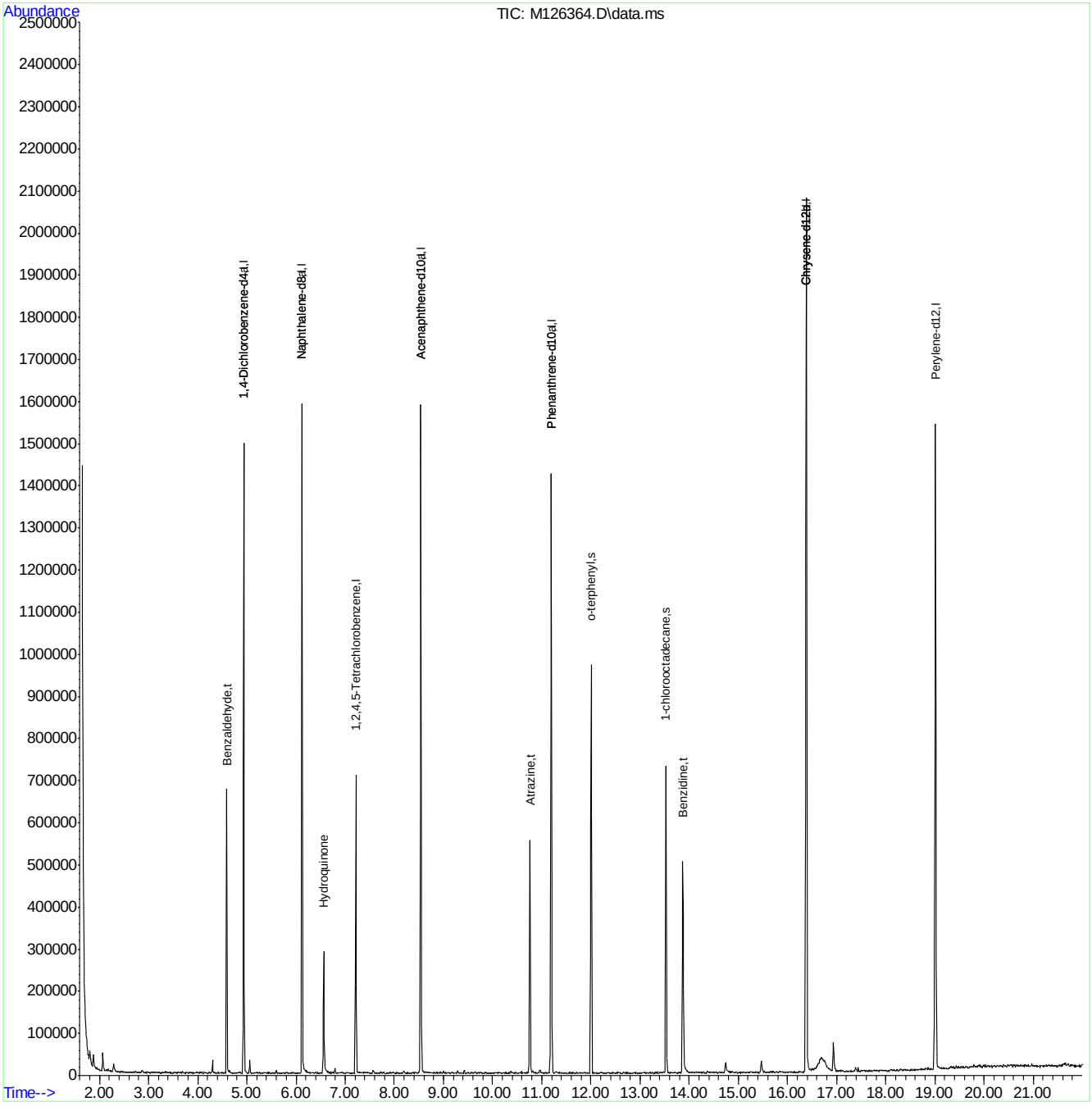
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC25024

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5364\
Data File : M126364.D
Acq On : 26 Jul 2016 10:33 am
Operator : ashleyd
Sample : ic5364-25
Misc : op95476,em5364
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jul 26 16:32:57 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5363.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Tue Jul 26 16:30:46 2016
Response via : Initial Calibration



SGS ACCUTEST JC25024

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5364\
Data File : M126365.D
Acq On : 26 Jul 2016 11:02 am
Operator : ashleyd
Sample : ic5364-10
Misc : op95476,em5364
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jul 26 16:33:27 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5363.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Tue Jul 26 16:30:46 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,4-Dichlorobenzene-d4	4.938	152	194525	40.00 ppm	0.00
24) Naphthalene-d8	6.124	136	731863	40.00 ppm	0.00
47) Acenaphthene-d10	8.538	164	452364	40.00 ppm	0.00
69) Phenanthrene-d10	11.193	188	768909	40.00 ppm	0.00
83) Chrysene-d12	16.381	240	831619	40.00 ppm	0.00
91) Perylene-d12	19.014	264	811853	40.00 ppm	0.00
101) 1,4-Dichlorobenzene-d4a	4.938	152	194525	40.00 ppm	0.00
103) Acenaphthene-d10a	8.538	164	452364	40.00 ppm	0.00
106) Chrysene-d12a	16.381	240	831619	40.00 ppm	0.00
109) Phenanthrene-d10a	11.193	188	768909	40.00 ppm	0.00
111) Naphthalene-d8a	6.124	136	731863	40.00 ppm	0.00
113) Chrysene-d12b	16.381	240	831619	40.00 ppm	0.00
System Monitoring Compounds					
5) 2-Fluorophenol	0.000	112	0	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
8) Phenol-d5	0.000	99	0	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
25) Nitrobenzene-d5	0.000	82	0	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
51) 2-Fluorobiphenyl	0.000	172	0	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
73) 2,4,6-Tribromophenol	0.000	330	0	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
85) Terphenyl-d14	0.000	244	0	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
108) 1-chlorooctadecane	13.528	57	52441	10.85 ppm	0.07
Spiked Amount 50.000			Recovery	= 21.70%	
110) o-terphenyl	12.005	230	109332	10.91 ppm	-0.02
Spiked Amount 50.000			Recovery	= 21.82%	
Target Compounds					Qvalue
102) Benzaldehyde	4.591	105	50882	17.98 ppm #	79
104) 1,2,4,5-Tetrachloroben...	7.219	216	59699	10.55 ppm	93
105) Atrazine	10.755	215	20911	10.65 ppm	90
107) Benzidine	13.870	184	130465	19.86 ppm	100
112) Hydroquinone	6.562	110	49833	8.58 ppm	79

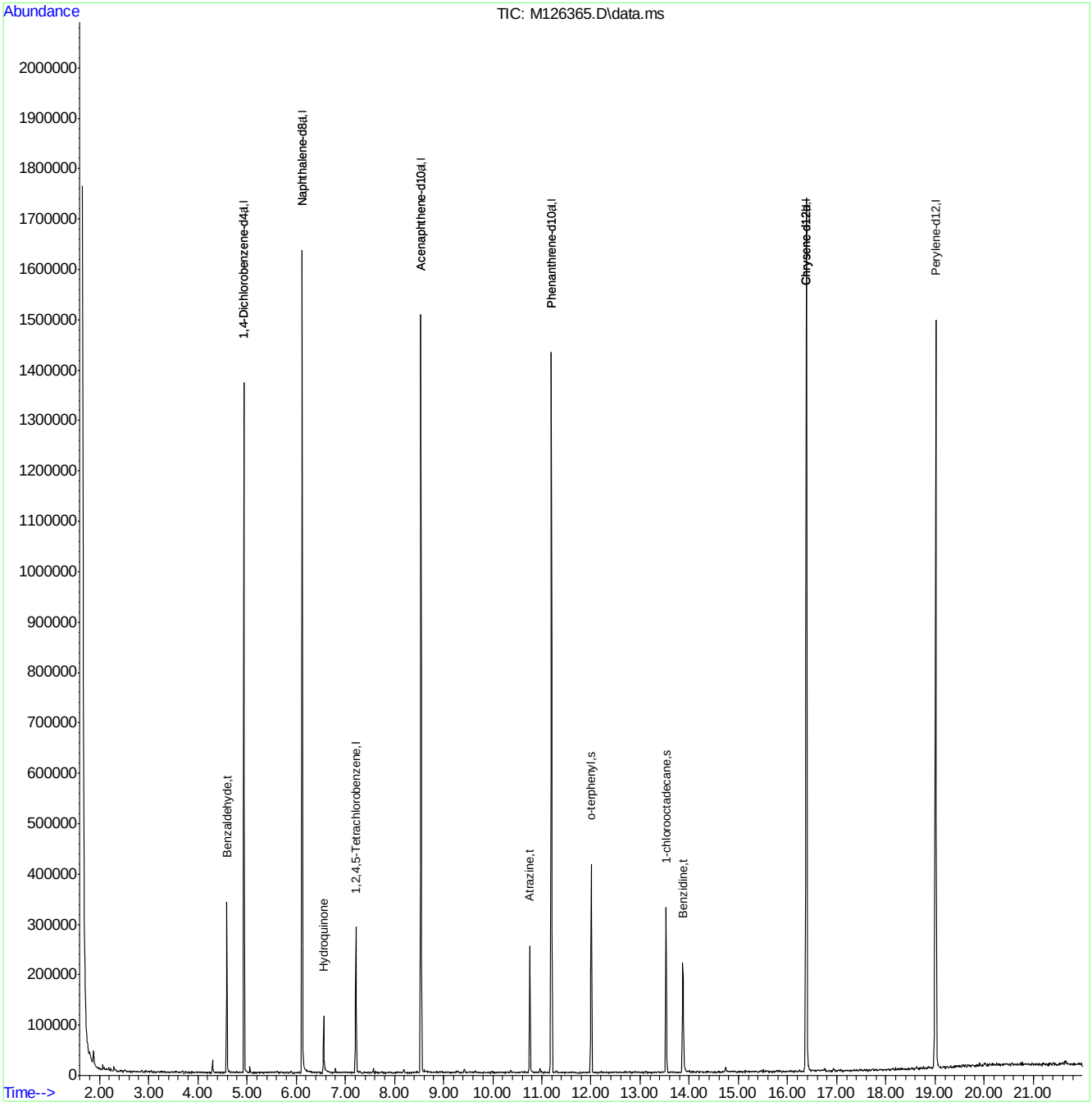
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC25024

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5364\
Data File : M126365.D
Acq On : 26 Jul 2016 11:02 am
Operator : ashleyd
Sample : ic5364-10
Misc : op95476,em5364
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jul 26 16:33:27 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5363.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Tue Jul 26 16:30:46 2016
Response via : Initial Calibration



MM5363.M Tue Jul 26 16:33:38 2016 MSM

Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5364\
Data File : M126366.D
Acq On : 26 Jul 2016 11:31 am
Operator : ashleyd
Sample : ic5364-5
Misc : op95476,em5364
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jul 26 16:33:57 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5363.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Tue Jul 26 16:30:46 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.935	152	189200	40.00	ppm	0.00
24) Naphthalene-d8	6.121	136	700623	40.00	ppm	0.00
47) Acenaphthene-d10	8.541	164	440672	40.00	ppm	0.00
69) Phenanthrene-d10	11.196	188	758476	40.00	ppm	0.00
83) Chrysene-d12	16.384	240	820722	40.00	ppm	0.00
91) Perylene-d12	19.012	264	789549	40.00	ppm	0.00
101) 1,4-Dichlorobenzene-d4a	4.935	152	189200	40.00	ppm	0.00
103) Acenaphthene-d10a	8.541	164	440672	40.00	ppm	0.00
106) Chrysene-d12a	16.384	240	820722	40.00	ppm	0.00
109) Phenanthrene-d10a	11.196	188	758476	40.00	ppm	0.00
111) Naphthalene-d8a	6.121	136	700623	40.00	ppm	0.00
113) Chrysene-d12b	16.384	240	820722	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
8) Phenol-d5	0.000	99	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
51) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
108) 1-chlorooctadecane	13.526	57	22989	4.82	ppm	0.07
Spiked Amount 50.000			Recovery	=	9.64%	
110) o-terphenyl	12.003	230	50171	5.08	ppm	-0.02
Spiked Amount 50.000			Recovery	=	10.16%	
Target Compounds						Qvalue
102) Benzaldehyde	4.593	105	21955	7.98	ppm #	79
104) 1,2,4,5-Tetrachloroben...	7.216	216	26851	4.87	ppm	97
105) Atrazine	10.753	215	9518	4.98	ppm #	80
107) Benzidine	13.867	184	52775	8.14	ppm	100
112) Hydroquinone	6.559	110	21897	3.94	ppm	75

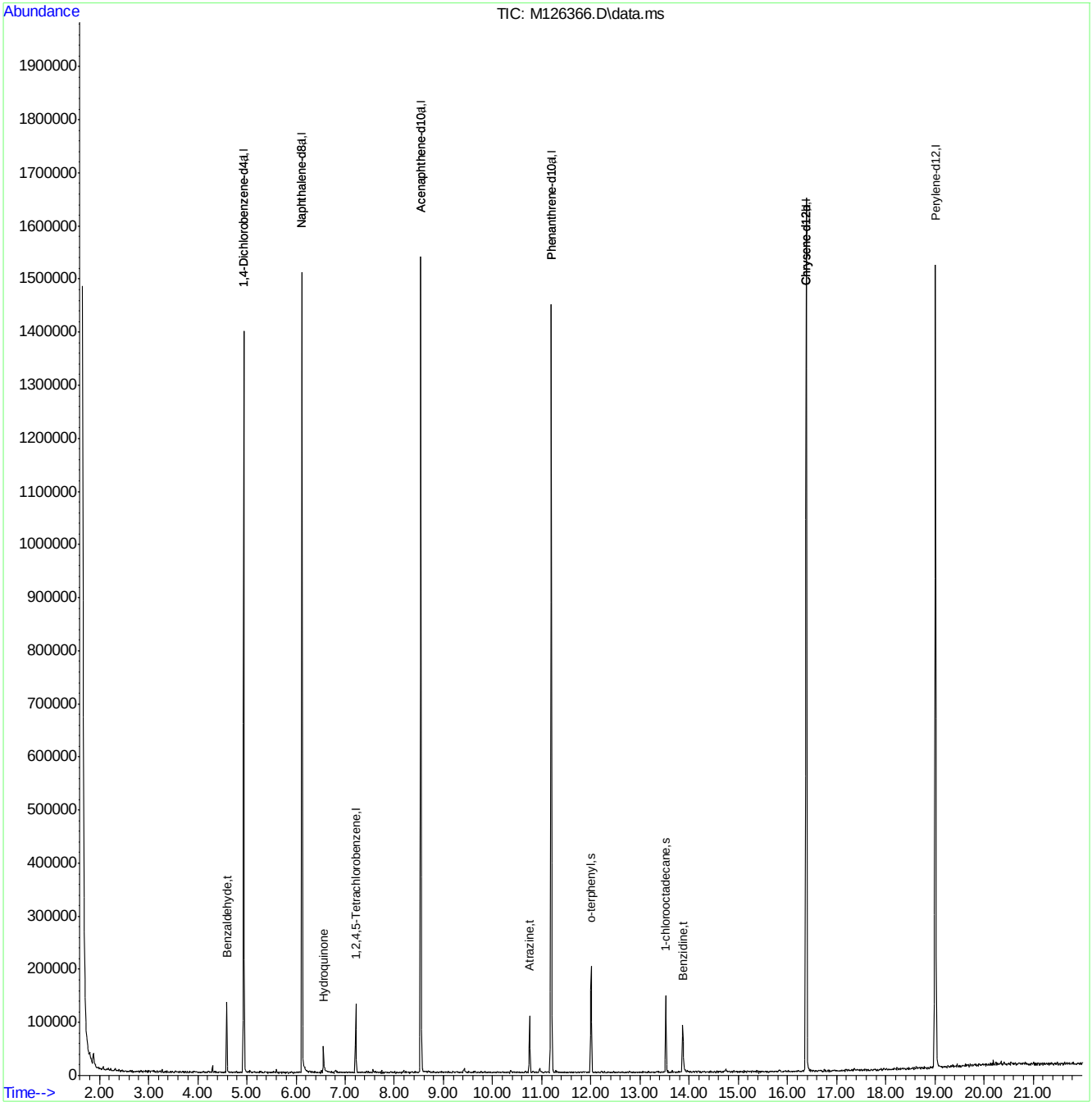
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC25024

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5364\
Data File : M126366.D
Acq On : 26 Jul 2016 11:31 am
Operator : ashleyd
Sample : ic5364-5
Misc : op95476,em5364
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jul 26 16:33:57 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5363.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Tue Jul 26 16:30:46 2016
Response via : Initial Calibration



MM5363.M Tue Jul 26 16:34:08 2016 MSM

Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5364\
Data File : M126367.D
Acq On : 26 Jul 2016 11:59 am
Operator : ashleyd
Sample : ic5364-2
Misc : op95476,em5364
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jul 26 16:34:28 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5363.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Tue Jul 26 16:30:46 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.937	152	185410	40.00	ppm	0.00
24) Naphthalene-d8	6.123	136	710169	40.00	ppm	0.00
47) Acenaphthene-d10	8.543	164	440615	40.00	ppm	0.00
69) Phenanthrene-d10	11.193	188	761691	40.00	ppm	0.00
83) Chrysene-d12	16.385	240	830149	40.00	ppm	0.00
91) Perylene-d12	19.014	264	792466	40.00	ppm	0.00
101) 1,4-Dichlorobenzene-d4a	4.937	152	185410	40.00	ppm	0.00
103) Acenaphthene-d10a	8.543	164	440615	40.00	ppm	0.00
106) Chrysene-d12a	16.385	240	830149	40.00	ppm	0.00
109) Phenanthrene-d10a	11.193	188	761691	40.00	ppm	0.00
111) Naphthalene-d8a	6.123	136	710169	40.00	ppm	0.00
113) Chrysene-d12b	16.385	240	830149	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
8) Phenol-d5	0.000	99	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
51) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
108) 1-chlorooctadecane	13.522	57	9627	2.00	ppm	0.06
Spiked Amount 50.000			Recovery	=	4.00%	
110) o-terphenyl	12.005	230	19383	1.95	ppm	-0.02
Spiked Amount 50.000			Recovery	=	3.90%	
Target Compounds						Qvalue
102) Benzaldehyde	4.590	105	8616	3.19	ppm	# 82
104) 1,2,4,5-Tetrachloroben...	7.213	216	11257	2.04	ppm	87
105) Atrazine	10.755	215	3797	1.99	ppm	# 90
107) Benzidine	13.869	184	20820	3.18	ppm	100
112) Hydroquinone	6.561	110	8627	1.53	ppm	85

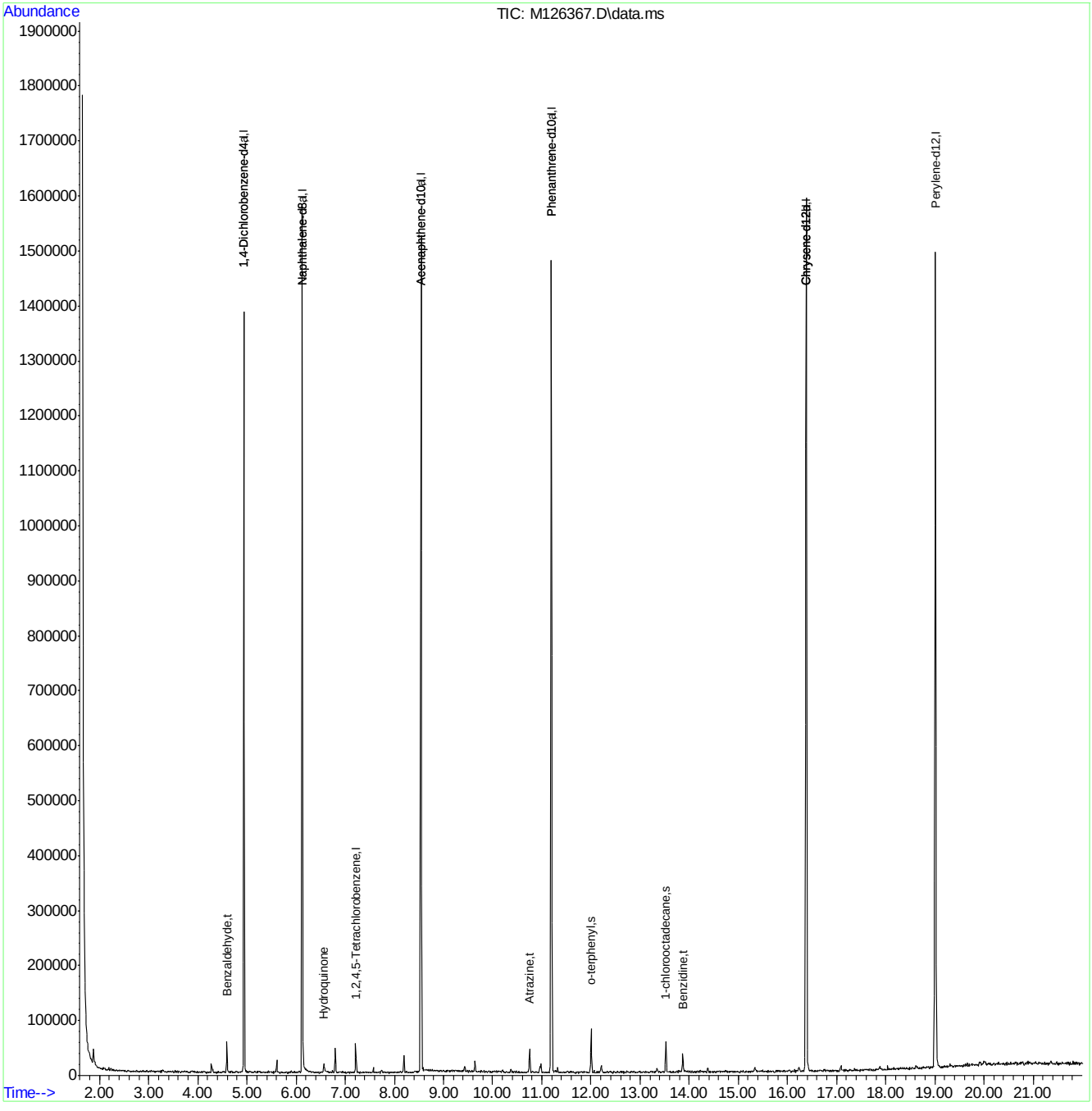
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC25024

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5364\
Data File : M126367.D
Acq On : 26 Jul 2016 11:59 am
Operator : ashleyd
Sample : ic5364-2
Misc : op95476,em5364
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jul 26 16:34:28 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5363.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Tue Jul 26 16:30:46 2016
Response via : Initial Calibration



MM5363.M Tue Jul 26 16:34:47 2016 MSM

SGS ACCUTEST JC25024

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5364\
Data File : M126368.D
Acq On : 26 Jul 2016 12:28 pm
Operator : ashleyd
Sample : ic5364-1
Misc : op95476,em5364
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jul 26 16:35:55 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5363.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Tue Jul 26 16:30:46 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.937	152	197041	40.00	ppm	0.00
24) Naphthalene-d8	6.123	136	737366	40.00	ppm	0.00
47) Acenaphthene-d10	8.543	164	454051	40.00	ppm	0.00
69) Phenanthrene-d10	11.193	188	774363	40.00	ppm	0.00
83) Chrysene-d12	16.385	240	846151	40.00	ppm	0.00
91) Perylene-d12	19.014	264	817534	40.00	ppm	0.00
101) 1,4-Dichlorobenzene-d4a	4.937	152	197041	40.00	ppm	0.00
103) Acenaphthene-d10a	8.543	164	454051	40.00	ppm	0.00
106) Chrysene-d12a	16.385	240	846151	40.00	ppm	0.00
109) Phenanthrene-d10a	11.193	188	774363	40.00	ppm	0.00
111) Naphthalene-d8a	6.123	136	737366	40.00	ppm	0.00
113) Chrysene-d12b	16.385	240	846151	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
8) Phenol-d5	0.000	99	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
51) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
108) 1-chlorooctadecane	13.527	57	4305	0.88	ppm	0.07
Spiked Amount 50.000			Recovery	=	1.76%	
110) o-terphenyl	12.010	230	9782	0.97	ppm	-0.01
Spiked Amount 50.000			Recovery	=	1.94%	
Target Compounds						Qvalue
102) Benzaldehyde	4.590	105	4815	1.68	ppm	# 71
104) 1,2,4,5-Tetrachloroben...	7.218	216	6271	1.10	ppm	87
105) Atrazine	10.755	215	1930	0.98	ppm	# 71
107) Benzidine	13.869	184	8779	1.31	ppm	100
112) Hydroquinone	6.572	110	3311	0.57	ppm	73

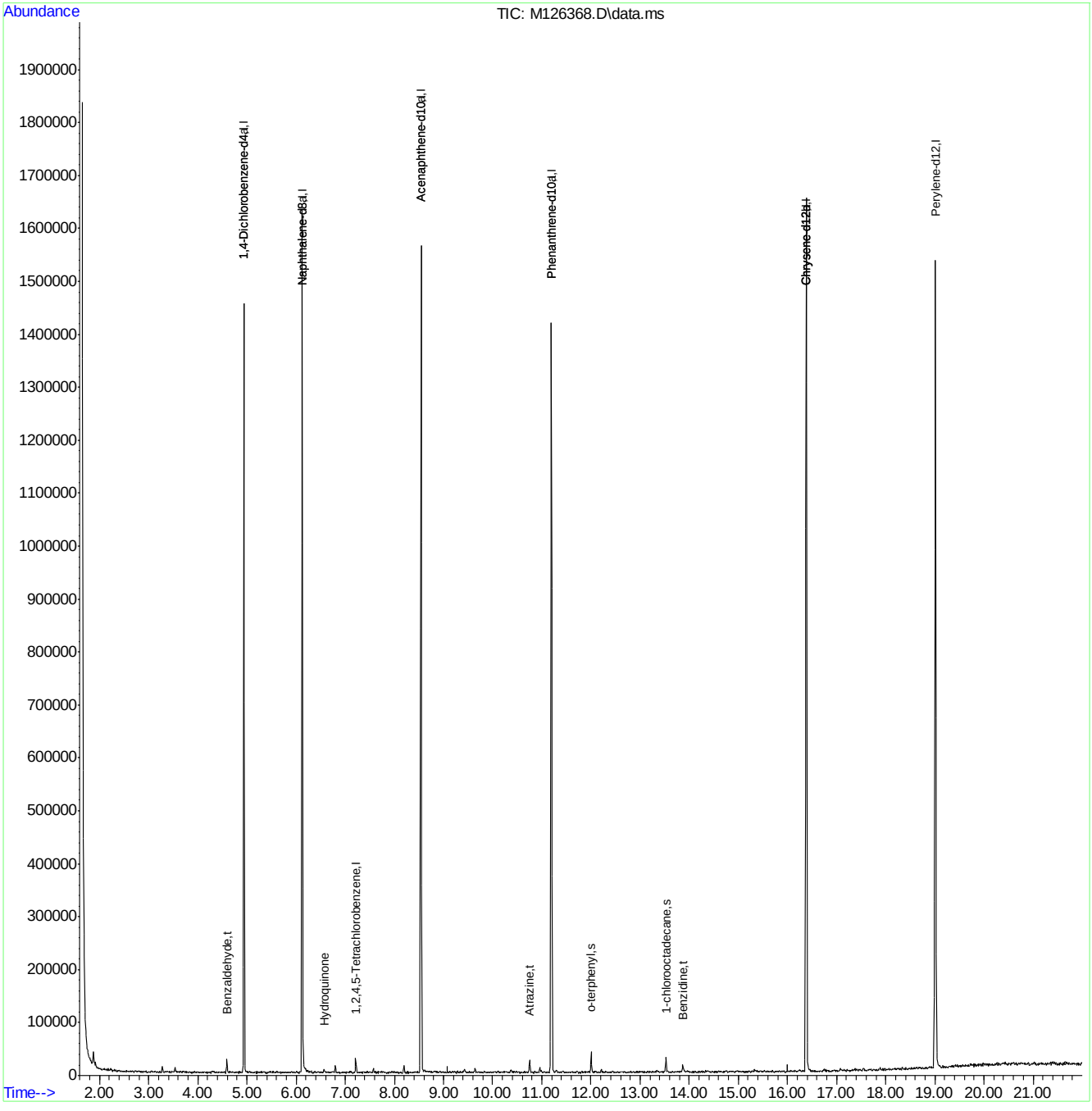
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC25024

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5364\
Data File : M126368.D
Acq On : 26 Jul 2016 12:28 pm
Operator : ashleyd
Sample : ic5364-1
Misc : op95476,em5364
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jul 26 16:35:55 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5363.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Tue Jul 26 16:30:46 2016
Response via : Initial Calibration



MM5363.M Tue Jul 26 16:36:06 2016 MSM

SGS ACCUTEST JC25024

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5364\
Data File : M126369.D
Acq On : 26 Jul 2016 12:56 pm
Operator : ashleyd
Sample : icv5363-50
Misc : op95476,em5364
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jul 26 16:52:26 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5363.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Tue Jul 26 16:46:35 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.935	152	192796	40.00	ppm	0.00
24) Naphthalene-d8	6.121	136	694244	40.00	ppm	0.00
47) Acenaphthene-d10	8.541	164	429293	40.00	ppm	0.00
69) Phenanthrene-d10	11.196	188	699467	40.00	ppm	0.00
83) Chrysene-d12	16.383	240	723173	40.00	ppm	0.00
91) Perylene-d12	19.012	264	674102	40.00	ppm	0.00
101) 1,4-Dichlorobenzene-d4a	4.935	152	192796	40.00	ppm	0.00
103) Acenaphthene-d10a	8.541	164	429293	40.00	ppm	0.00
106) Chrysene-d12a	16.383	240	723173	40.00	ppm	0.00
109) Phenanthrene-d10a	11.196	188	699467	40.00	ppm	0.00
111) Naphthalene-d8a	6.121	136	694244	40.00	ppm	0.00
113) Chrysene-d12b	16.383	240	723173	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
25) Nitrobenzene-d5	0.000	82	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
108) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
110) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
Target Compounds						Qvalue
9) Phenol	4.652	94	383334	46.74	ppm	90
12) 2-Chlorophenol	4.770	128	317500	46.69	ppm	99
19) 2-Methylphenol	5.133	108	267005	47.72	ppm	100
21) 3&4-Methylphenol	5.261	108	280503	46.00	ppm	92
29) 2-Nitrophenol	5.726	139	156387	46.45	ppm	99
30) 2,4-Dimethylphenol	5.753	107	282554	49.88	ppm	96
31) Benzoic acid	5.859	105	166393	45.47	ppm	99
33) 2,4-Dichlorophenol	5.966	162	255356	47.01	ppm	99
34) 2,6-Dichlorophenol	6.212	162	242638	46.35	ppm	100
43) 4-Chloro-3-methylphenol	6.773	107	238903	48.52	ppm	97
49) 2,4,6-Trichlorophenol	7.371	196	191254	47.14	ppm	100
50) 2,4,5-Trichlorophenol	7.419	196	184256	43.05	ppm	99
60) 2,4-Dinitrophenol	8.648	184	50268	37.93	ppm	95
61) 4-Nitrophenol	8.776	109	72560	48.58	ppm	93
64) 2,3,4,6-Tetrachlorophenol	9.107	232	157468	43.56	ppm	96
70) 4,6-Dinitro-2-methylph...	9.588	198	91109	40.62	ppm	97
76) Pentachlorophenol	10.860	266	139414	47.54	ppm	96

SGS ACCUTEST JC25024

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5364\
Data File : M126369.D
Acq On : 26 Jul 2016 12:56 pm
Operator : ashleyd
Sample : icv5363-50
Misc : op95476,em5364
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jul 26 16:52:26 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5363.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Tue Jul 26 16:46:35 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.6.30

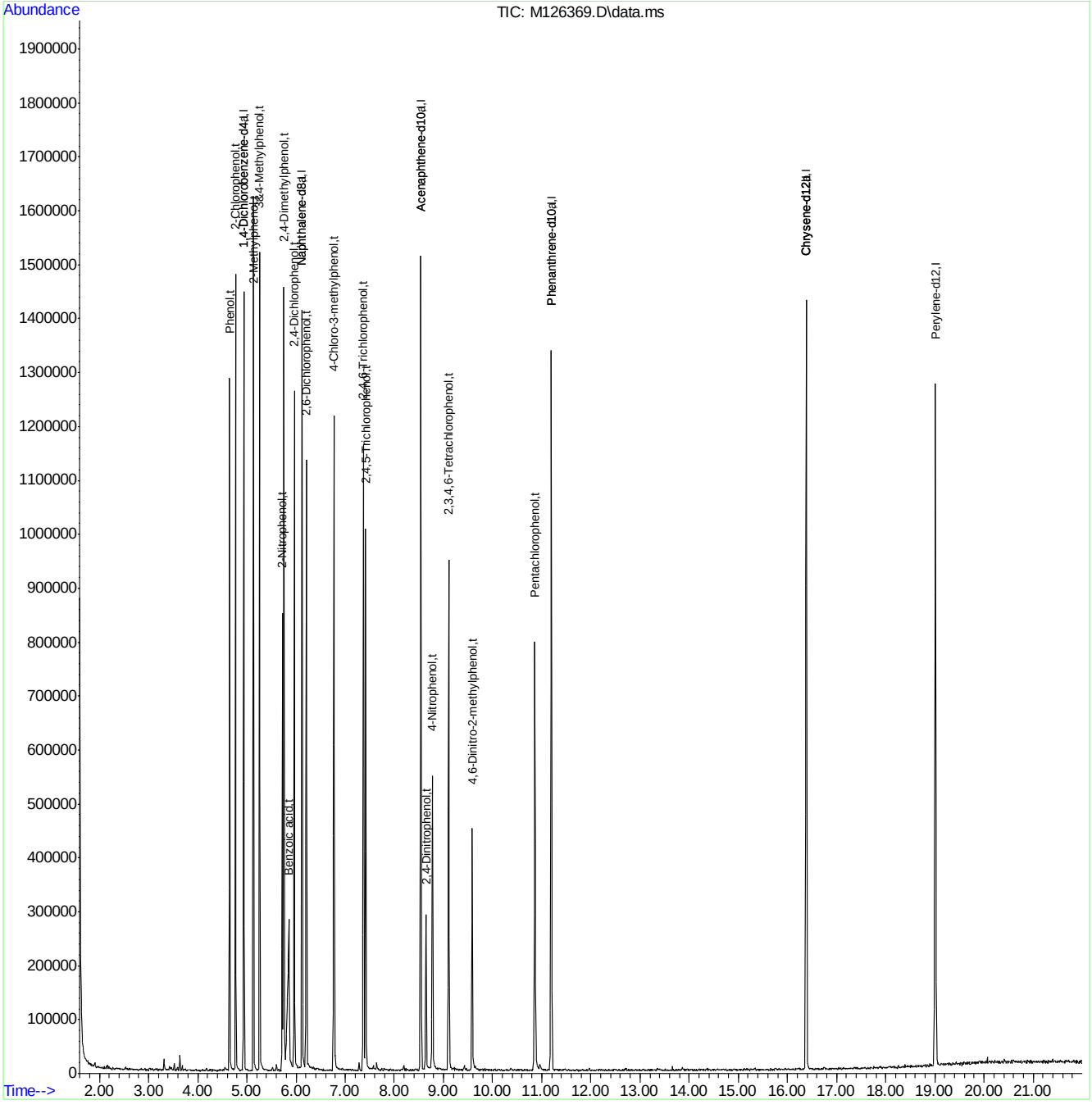
7

SGS ACCUTEST JC25024

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5364\
Data File : M126369.D
Acq On : 26 Jul 2016 12:56 pm
Operator : ashleyd
Sample : icv5363-50
Misc : op95476,em5364
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jul 26 16:52:26 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5363.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Tue Jul 26 16:46:35 2016
Response via : Initial Calibration



MM5363.M Tue Jul 26 16:52:37 2016 MSM

SGS ACCUTEST JC25024

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5364\
Data File : M126370.D
Acq On : 26 Jul 2016 1:25 pm
Operator : ashleyd
Sample : icv5363-50
Misc : op95476,em5364
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jul 26 16:56:40 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5363.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Tue Jul 26 16:46:35 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.941	152	165840	40.00	ppm	0.00
24) Naphthalene-d8	6.127	136	659373	40.00	ppm	0.00
47) Acenaphthene-d10	8.541	164	389132	40.00	ppm	0.00
69) Phenanthrene-d10	11.196	188	687778	40.00	ppm	0.00
83) Chrysene-d12	16.384	240	708003	40.00	ppm	0.00
91) Perylene-d12	19.012	264	497762	40.00	ppm	0.00
101) 1,4-Dichlorobenzene-d4a	4.941	152	165840	40.00	ppm	0.00
103) Acenaphthene-d10a	8.541	164	389132	40.00	ppm	0.00
106) Chrysene-d12a	16.384	240	708003	40.00	ppm	0.00
109) Phenanthrene-d10a	11.196	188	687778	40.00	ppm	0.00
111) Naphthalene-d8a	6.127	136	659373	40.00	ppm	0.00
113) Chrysene-d12b	16.384	240	708003	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
8) Phenol-d5	0.000	99	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
51) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
108) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
110) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
Target Compounds						Qvalue
3) Pyridine	2.895	79	291090	52.31	ppm	99
10) Aniline	4.679	93	452051	54.42	ppm	63
16) Benzyl alcohol	5.048	108	183528	51.40	ppm	98
39) 4-Chloroaniline	6.201	127	358454	46.85	ppm	97
44) 2-Methylnaphthalene	6.987	141	486538	45.00	ppm	98
54) 2-Nitroaniline	7.820	65	139336	48.14	ppm	95
58) 3-Nitroaniline	8.477	138	150133	48.72	ppm	98
62) Dibenzofuran	8.889	168	781927	48.45	ppm	99
68) 4-Nitroaniline	9.530	138	147943	45.92	ppm	97
79) Carbazole	11.672	167	859228	48.30	ppm	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.6.31

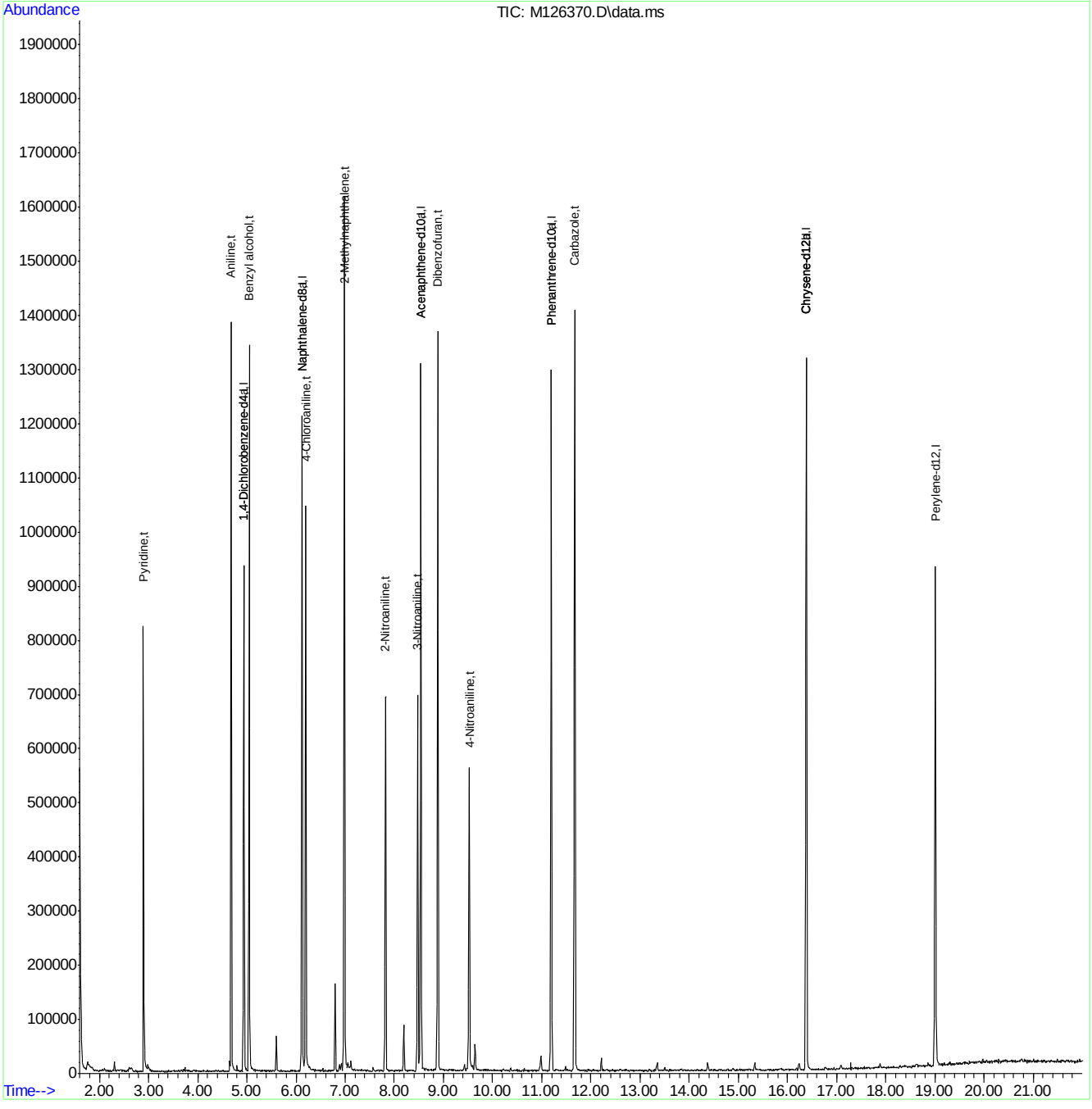
7

SGS ACCUTEST JC25024

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5364\
Data File : M126370.D
Acq On : 26 Jul 2016 1:25 pm
Operator : ashleyd
Sample : icv5363-50
Misc : op95476,em5364
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jul 26 16:56:40 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5363.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Tue Jul 26 16:46:35 2016
Response via : Initial Calibration



MM5363.M Tue Jul 26 16:56:49 2016 MSM

Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5364\
Data File : M126371.D
Acq On : 26 Jul 2016 1:53 pm
Operator : ashleyd
Sample : icv5363-50
Misc : op95476,em5364
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jul 27 11:50:00 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5363.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Tue Jul 26 16:46:35 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.937	152	194032	40.00	ppm	0.00
24) Naphthalene-d8	6.123	136	677879	40.00	ppm	0.00
47) Acenaphthene-d10	8.543	164	405552	40.00	ppm	0.00
69) Phenanthrene-d10	11.198	188	674424	40.00	ppm	0.00
83) Chrysene-d12	16.391	240	647270	40.00	ppm	0.00
91) Perylene-d12	19.014	264	625497	40.00	ppm	0.00
101) 1,4-Dichlorobenzene-d4a	4.937	152	194032	40.00	ppm	0.00
103) Acenaphthene-d10a	8.543	164	405552	40.00	ppm	0.00
106) Chrysene-d12a	16.391	240	647270	40.00	ppm	0.01
109) Phenanthrene-d10a	11.198	188	674424	40.00	ppm	0.00
111) Naphthalene-d8a	6.123	136	677879	40.00	ppm	0.00
113) Chrysene-d12b	16.391	240	647270	40.00	ppm	0.01
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
8) Phenol-d5	0.000	99	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
25) Nitrobenzene-d5	0.000	82	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
108) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
110) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
Target Compounds						Qvalue
4) N-Nitrosodimethylamine	2.795	42	136569	42.95	ppm	99
11) bis(2-Chloroethyl)ether	4.718	93	290815	50.53	ppm	99
14) 1,3-Dichlorobenzene	4.895	146	345733	48.31	ppm	98
15) 1,4-Dichlorobenzene	4.953	146	335381	46.49	ppm	99
17) 1,2-Dichlorobenzene	5.082	146	324235	48.57	ppm	97
20) 2,2'-oxybis(1-Chloropr...	5.156	121	88826	43.07	ppm	89
22) n-Nitroso-di-n-propyla...	5.263	70	191352	42.70	ppm	98
23) Hexachloroethane	5.375	201	119956	44.02	ppm	97
26) Nitrobenzene	5.423	77	271612	45.46	ppm	97
28) Isophorone	5.637	82	511673	48.92	ppm	97
32) bis(2-Chloroethoxy)met...	5.851	93	320538	49.50	ppm	99
36) 1,2,4-Trichlorobenzene	6.064	180	284461	48.67	ppm	99
38) Naphthalene	6.150	128	804811	47.40	ppm	99
42) Hexachlorobutadiene	6.294	225	156608	48.72	ppm	97
48) Hexachlorocyclopentadiene	7.213	237	155493	41.52	ppm	96
52) 2-Chloronaphthalene	7.667	162	547101	50.16	ppm	98
55) Dimethylphthalate	8.132	163	600168	47.08	ppm	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5364\
Data File : M126371.D
Acq On : 26 Jul 2016 1:53 pm
Operator : ashleyd
Sample : icv5363-50
Misc : op95476,em5364
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jul 27 11:50:00 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5363.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Tue Jul 26 16:46:35 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
56)	Acenaphthylene	8.308	152	813362	45.37	ppm	99
57)	2,6-Dinitrotoluene	8.212	165	116386	45.54	ppm	99
59)	Acenaphthene	8.597	153	516103	46.92	ppm	96
63)	2,4-Dinitrotoluene	8.880	165	140076	41.77	ppm	84
65)	Diethylphthalate	9.345	149	561801	44.79	ppm	99
66)	Fluorene	9.483	166	571389	44.04	ppm	97
67)	4-Chlorophenyl-phenyle...	9.510	204	286977	45.48	ppm	98
71)	n-Nitrosodiphenylamine	9.724	169	389207	44.85	ppm	99
72)	1,2-Diphenylhydrazine	9.793	77	515070	45.60	ppm	99
74)	4-Bromophenyl-phenylether	10.397	248	178636	45.96	ppm	97
75)	Hexachlorobenzene	10.493	284	195434	43.31	ppm	97
77)	Phenanthrene	11.241	178	802534	46.61	ppm	99
78)	Anthracene	11.337	178	785341	43.76	ppm	99
80)	Di-n-butylphthalate	12.480	149	972089	45.91	ppm	100
81)	Fluoranthene	13.543	202	910326	44.54	ppm	97
84)	Pyrene	13.976	202	922338	49.02	ppm	99
86)	Butylbenzylphthalate	15.435	149	418178	51.53	ppm	98
87)	Benzo[a]anthracene	16.369	228	840563	46.89	ppm	99
89)	Chrysene	16.439	228	755204	45.04	ppm	99
90)	bis(2-Ethylhexyl)phtha...	16.653	149	560149	50.91	ppm	99
92)	Di-n-octylphthalate	17.881	149	978448	53.22	ppm	100
93)	Benzo[b]fluoranthene	18.367	252	826056	45.33	ppm	99
94)	Benzo[k]fluoranthene	18.421	252	788508	46.90	ppm	100
95)	Benzo[a]pyrene	18.918	252	766679	47.05	ppm	99
96)	Indeno[1,2,3-cd]pyrene	20.830	276	749999	48.59	ppm	99
98)	Dibenz[a,h]anthracene	20.884	278	755221	46.10	ppm	99
100)	Benzo[g,h,i]perylene	21.332	276	765080	45.62	ppm	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.6.32

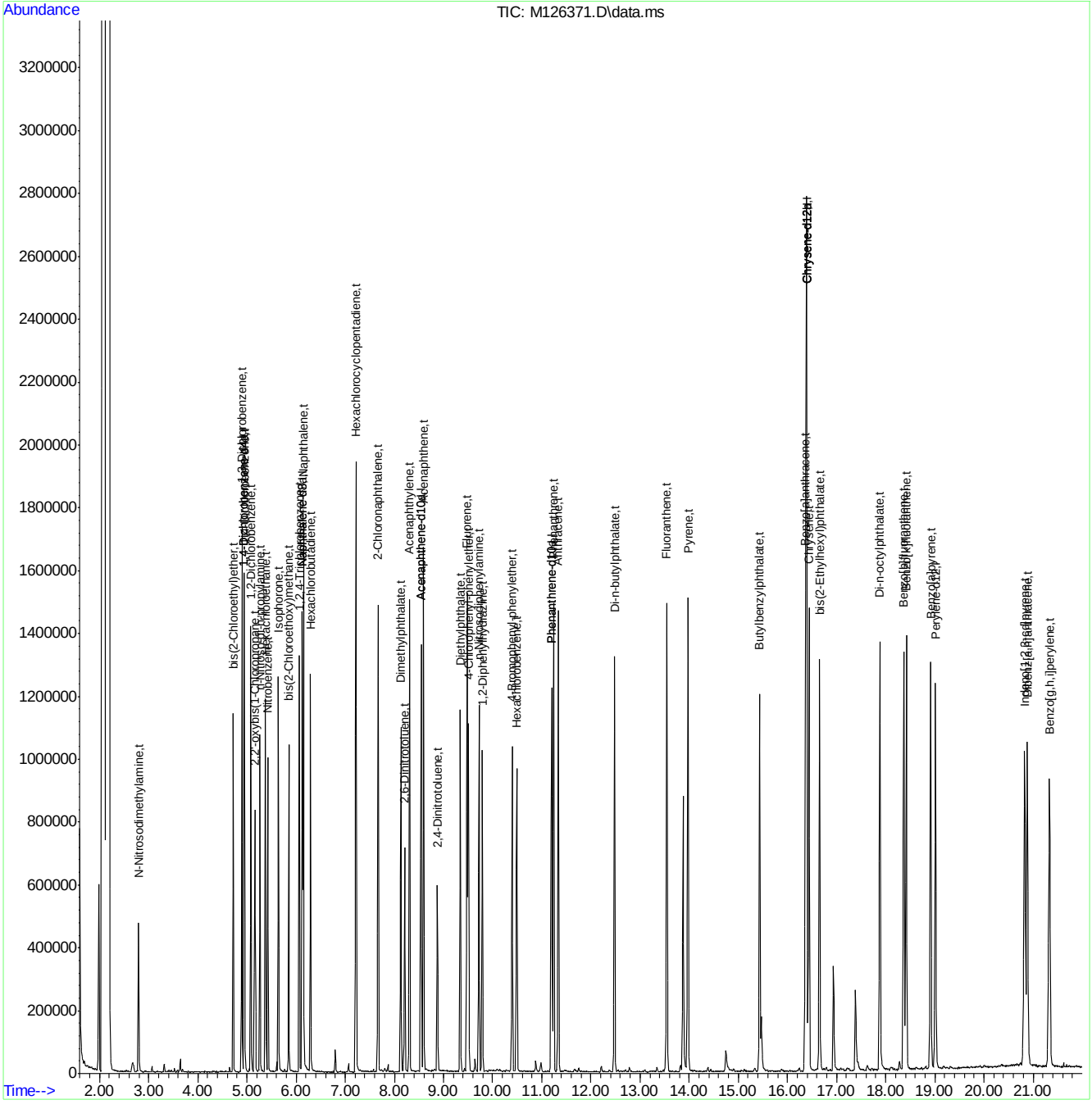
7

SGS ACCUTEST JC25024

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5364\
Data File : M126371.D
Acq On : 26 Jul 2016 1:53 pm
Operator : ashleyd
Sample : icv5363-50
Misc : op95476,em5364
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jul 27 11:50:00 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5363.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Tue Jul 26 16:46:35 2016
Response via : Initial Calibration



MM5363.M Wed Jul 27 11:50:06 2016 MSM

SGS ACCUTEST JC25024

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5364\
Data File : M126371a.D
Acq On : 26 Jul 2016 1:53 pm
Operator : ashleyd
Sample : icv5364-50
Misc : op95476,em5364
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jul 26 17:28:36 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5363.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Tue Jul 26 17:05:07 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.937	152	194032	40.00	ppm	0.00
24) Naphthalene-d8	6.123	136	677879	40.00	ppm	0.00
47) Acenaphthene-d10	8.543	164	405552	40.00	ppm	0.00
69) Phenanthrene-d10	11.198	188	674424	40.00	ppm	0.00
83) Chrysene-d12	16.391	240	647270	40.00	ppm	0.00
91) Perylene-d12	19.014	264	625497	40.00	ppm	0.00
101) 1,4-Dichlorobenzene-d4a	4.937	152	194032	40.00	ppm	0.00
103) Acenaphthene-d10a	8.543	164	405552	40.00	ppm	0.00
106) Chrysene-d12a	16.391	240	647270	40.00	ppm	0.01
109) Phenanthrene-d10a	11.198	188	674424	40.00	ppm	0.00
111) Naphthalene-d8a	6.123	136	677879	40.00	ppm	0.00
113) Chrysene-d12b	16.391	240	647270	40.00	ppm	0.01
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
8) Phenol-d5	0.000	99	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
25) Nitrobenzene-d5	0.000	82	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
108) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
110) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
Target Compounds						Qvalue
104) 1,2,4,5-Tetrachloroben...	7.218	216	286733	54.55	ppm	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.6.33

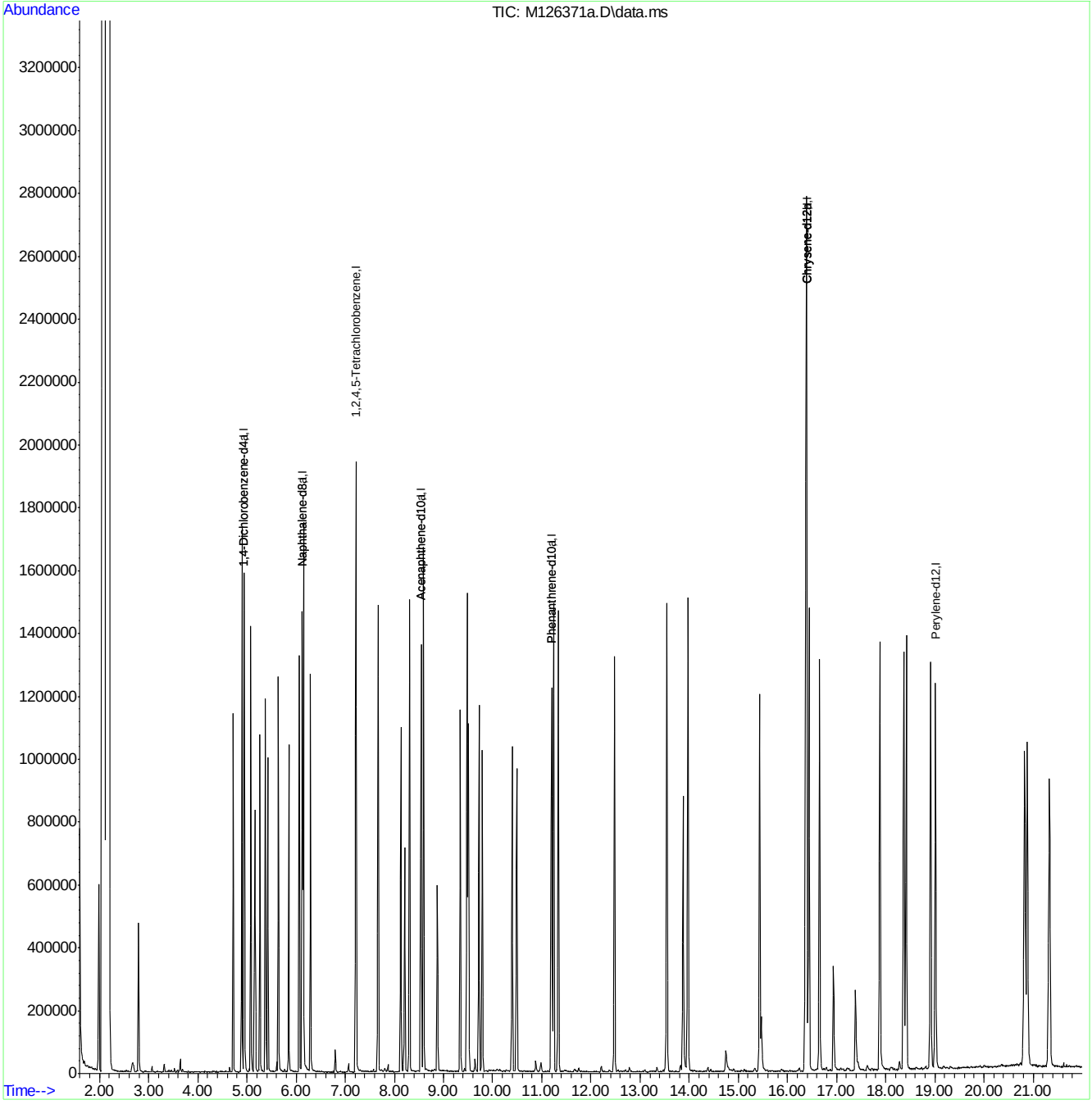
7

SGS ACCUTEST JC25024

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5364\
Data File : M126371a.D
Acq On : 26 Jul 2016 1:53 pm
Operator : ashleyd
Sample : icv5364-50
Misc : op95476,em5364
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jul 26 17:28:36 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5363.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Tue Jul 26 17:05:07 2016
Response via : Initial Calibration



MM5363.M Tue Jul 26 17:28:43 2016 MSM

SGS ACCUTEST JC25024

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5364\
Data File : M126372.D
Acq On : 26 Jul 2016 2:22 pm
Operator : ashleyd
Sample : icv5363-50
Misc : op95476,em5364
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jul 26 17:34:54 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5363.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Tue Jul 26 17:25:16 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.938	152	190086	40.00	ppm	0.00
24) Naphthalene-d8	6.124	136	701108	40.00	ppm	0.00
47) Acenaphthene-d10	8.538	164	406661	40.00	ppm	0.00
69) Phenanthrene-d10	11.193	188	659837	40.00	ppm	0.00
83) Chrysene-d12	16.381	240	703672	40.00	ppm	0.00
91) Perylene-d12	19.009	264	399623	40.00	ppm	0.00
101) 1,4-Dichlorobenzene-d4a	4.938	152	190086	40.00	ppm	0.00
103) Acenaphthene-d10a	8.538	164	406661	40.00	ppm	0.00
106) Chrysene-d12a	16.381	240	703672	40.00	ppm	0.00
109) Phenanthrene-d10a	11.193	188	659837	40.00	ppm	0.00
111) Naphthalene-d8a	6.124	136	701108	40.00	ppm	0.00
113) Chrysene-d12b	16.381	240	703672	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
108) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
110) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
Target Compounds						Qvalue
2) 1,4-Dioxane	2.518	88	121077	51.30	ppm	97
6) Indene	5.152	116	599596	55.46	ppm	99
7) Cumene	4.329	105	781829	53.54	ppm	99
13) Decane	4.810	43	330348	53.34	ppm	99
18) Acetophenone	5.269	105	445210	54.04	ppm	93
27) Quinoline	6.524	129	553193	43.41	ppm	97
40) 2,3-Dichloroaniline	7.374	161	247446	36.76	ppm	98
41) Caprolactam	6.578	55	125179	46.42	ppm	99
45) 1-Methylnaphthalene	7.117	142	641002	50.81	ppm	97
46) Dimethylnaphthalene	7.881	156	575288	51.26	ppm	98
53) Biphenyl	7.646	154	782102	55.13	ppm	99
82) Octadecane	11.177	57	403510	59.67	ppm	96
99) 7,12-Dimethylbenz(a)an...	18.379	256	432261	79.91	ppm	96

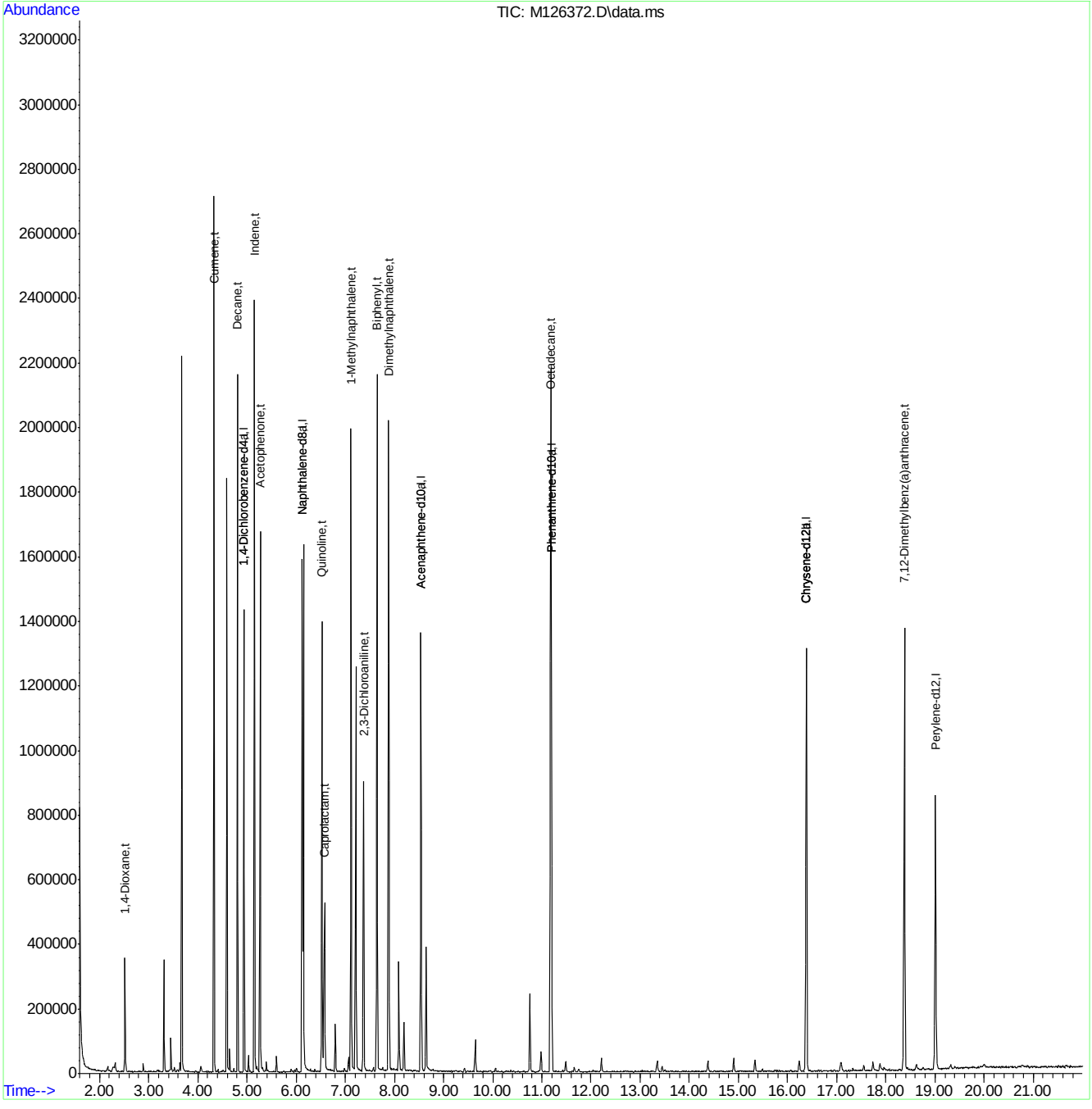
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC25024

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5364\
Data File : M126372.D
Acq On : 26 Jul 2016 2:22 pm
Operator : ashleyd
Sample : icv5363-50
Misc : op95476,em5364
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jul 26 17:34:54 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5363.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Tue Jul 26 17:25:16 2016
Response via : Initial Calibration



MM5363.M Tue Jul 26 17:34:58 2016 MSM

Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5364\
Data File : M126373.D
Acq On : 26 Jul 2016 2:50 pm
Operator : ashleyd
Sample : icv5363-50
Misc : op95476,em5364
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jul 26 17:40:14 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5363.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Tue Jul 26 17:25:16 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.938	152	222549	40.00	ppm	0.00
24) Naphthalene-d8	6.124	136	811718	40.00	ppm	0.00
47) Acenaphthene-d10	8.538	164	475621	40.00	ppm	0.00
69) Phenanthrene-d10	11.193	188	787341	40.00	ppm	0.00
83) Chrysene-d12	16.386	240	794850	40.00	ppm	0.00
91) Perylene-d12	19.014	264	736424	40.00	ppm	0.00
101) 1,4-Dichlorobenzene-d4a	4.938	152	222549	40.00	ppm	0.00
103) Acenaphthene-d10a	8.538	164	475621	40.00	ppm	0.00
106) Chrysene-d12a	16.386	240	794850	40.00	ppm	0.00
109) Phenanthrene-d10a	11.193	188	787341	40.00	ppm	0.00
111) Naphthalene-d8a	6.124	136	811718	40.00	ppm	0.00
113) Chrysene-d12b	16.386	240	794850	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.939	112	329326	49.12	ppm	0.00
Spiked Amount 50.000			Recovery = 98.24%			
8) Phenol-d5	4.639	99	400322	46.84	ppm	0.00
Spiked Amount 50.000			Recovery = 93.68%			
25) Nitrobenzene-d5	5.403	82	343259	49.83	ppm	0.00
Spiked Amount 50.000			Recovery = 99.66%			
51) 2-Fluorobiphenyl	7.502	172	749055	52.14	ppm	0.00
Spiked Amount 50.000			Recovery = 104.28%			
73) 2,4,6-Tribromophenol	9.906	330	111043	45.06	ppm	0.00
Spiked Amount 50.000			Recovery = 90.12%			
85) Terphenyl-d14	14.383	244	776697	49.80	ppm	0.00
Spiked Amount 50.000			Recovery = 99.60%			
108) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
110) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
Target Compounds						Qvalue

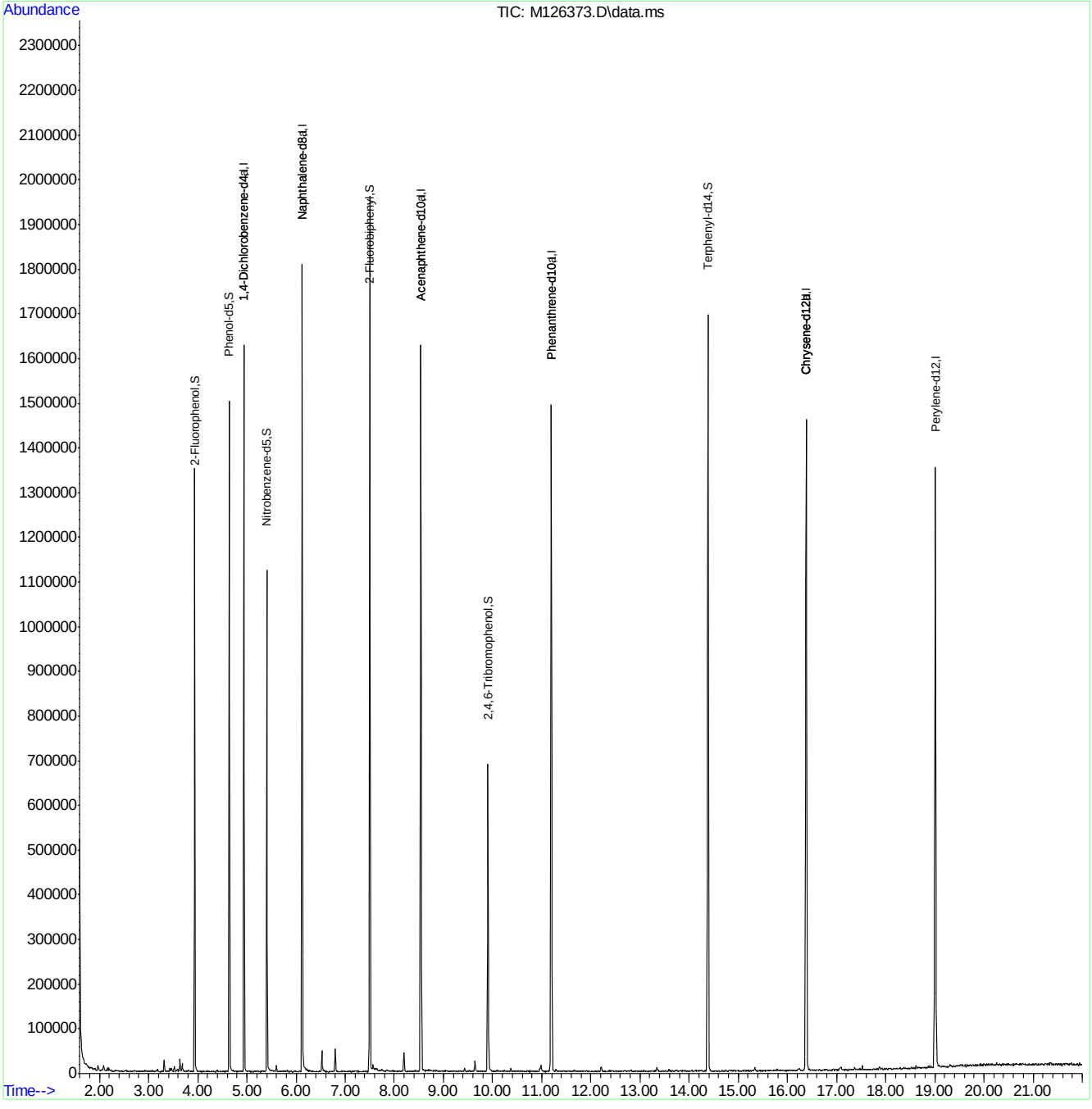
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC25024

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5364\
Data File : M126373.D
Acq On : 26 Jul 2016 2:50 pm
Operator : ashleyd
Sample : icv5363-50
Misc : op95476,em5364
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jul 26 17:40:14 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5363.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Tue Jul 26 17:25:16 2016
Response via : Initial Calibration



MM5363.M Tue Jul 26 17:40:27 2016 MSM

SGS ACCUTEST JC25024

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5364\
Data File : M126374.D
Acq On : 26 Jul 2016 3:19 pm
Operator : ashleyd
Sample : icv5364-50
Misc : op95476,em5364
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jul 26 17:40:45 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5363.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Tue Jul 26 17:25:16 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.937	152	297412	40.00	ppm	0.00
24) Naphthalene-d8	6.123	136	1086718	40.00	ppm	0.00
47) Acenaphthene-d10	8.543	164	646585	40.00	ppm	0.00
69) Phenanthrene-d10	11.198	188	1110586	40.00	ppm	0.00
83) Chrysene-d12	16.390	240	1223839	40.00	ppm	0.00
91) Perylene-d12	19.019	264	1199965	40.00	ppm	0.00
101) 1,4-Dichlorobenzene-d4a	4.937	152	297412	40.00	ppm	0.00
103) Acenaphthene-d10a	8.543	164	646585	40.00	ppm	0.00
106) Chrysene-d12a	16.390	240	1223839	40.00	ppm	0.00
109) Phenanthrene-d10a	11.198	188	1110586	40.00	ppm	0.00
111) Naphthalene-d8a	6.123	136	1086718	40.00	ppm	0.00
113) Chrysene-d12b	16.390	240	1223839	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
8) Phenol-d5	0.000	99	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
108) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
110) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
Target Compounds						Qvalue
112) Hydroquinone	6.582	110	476934	59.76	ppm	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.6.36

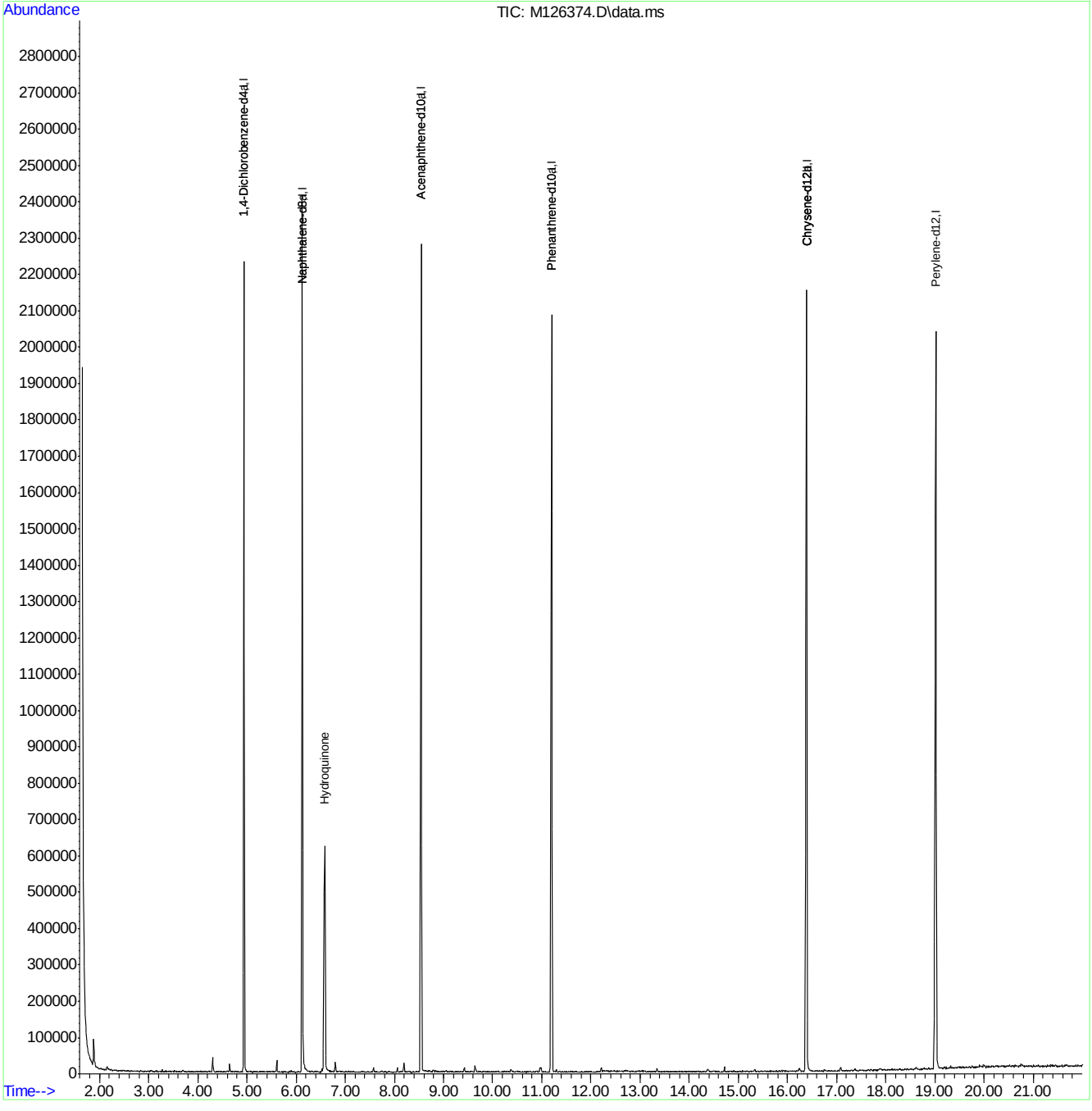
7

SGS ACCUTEST JC25024

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5364\
Data File : M126374.D
Acq On : 26 Jul 2016 3:19 pm
Operator : ashleyd
Sample : icv5364-50
Misc : op95476,em5364
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jul 26 17:40:45 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5363.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Tue Jul 26 17:25:16 2016
Response via : Initial Calibration



MM5363.M Tue Jul 26 17:40:56 2016 MSM

Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5364\
Data File : M126375.D
Acq On : 26 Jul 2016 3:48 pm
Operator : ashleyd
Sample : icv5364-50
Misc : op95476,em5364
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Jul 26 17:27:20 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5363.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Tue Jul 26 17:25:16 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.938	152	195316	40.00	ppm	0.00
24) Naphthalene-d8	6.124	136	713974	40.00	ppm	0.00
47) Acenaphthene-d10	8.544	164	428569	40.00	ppm	0.00
69) Phenanthrene-d10	11.193	188	748399	40.00	ppm	0.00
83) Chrysene-d12	16.386	240	834826	40.00	ppm	0.00
91) Perylene-d12	19.014	264	821662	40.00	ppm	0.00
101) 1,4-Dichlorobenzene-d4a	4.938	152	195316	40.00	ppm	0.00
103) Acenaphthene-d10a	8.544	164	428569	40.00	ppm	0.00
106) Chrysene-d12a	16.386	240	834826	40.00	ppm	0.00
109) Phenanthrene-d10a	11.193	188	748399	40.00	ppm	0.00
111) Naphthalene-d8a	6.124	136	713974	40.00	ppm	0.00
113) Chrysene-d12b	16.386	240	834826	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
8) Phenol-d5	0.000	99	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
51) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
108) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
110) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
Target Compounds						Qvalue
107) Benzidine	13.875	184	616889	60.33	ppm	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.6.37

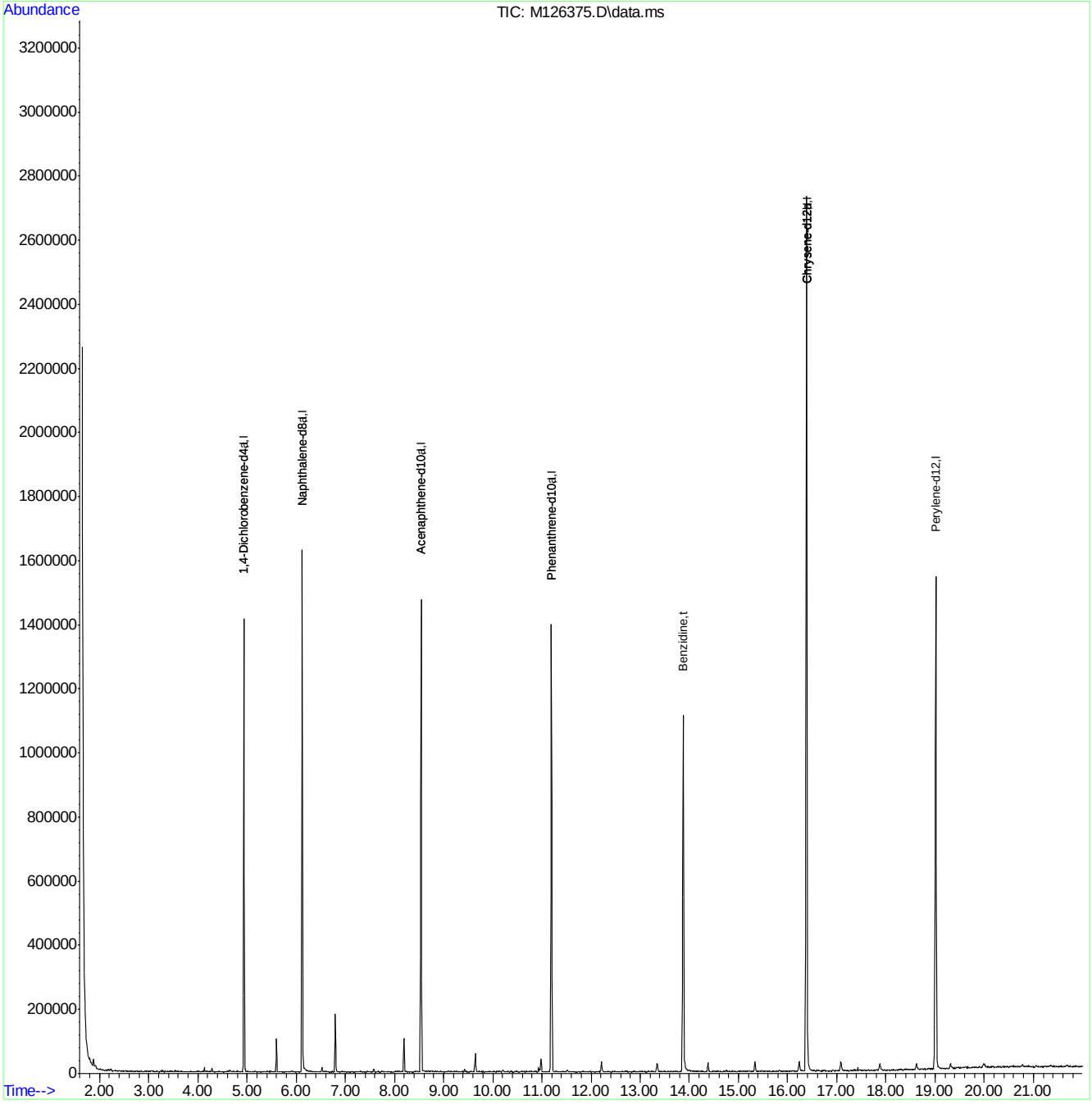
7

SGS ACCUTEST JC25024

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5364\
Data File : M126375.D
Acq On : 26 Jul 2016 3:48 pm
Operator : ashleyd
Sample : icv5364-50
Misc : op95476,em5364
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Jul 26 17:27:20 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5363.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Tue Jul 26 17:25:16 2016
Response via : Initial Calibration



MM5363.M Tue Jul 26 17:27:27 2016 MSM

SGS ACCUTEST JC25024

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5364\
Data File : M126375a.D
Acq On : 26 Jul 2016 3:48 pm
Operator : ashleyd
Sample : icv5363-50
Misc : op95476,em5364
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Jul 26 17:27:52 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5363.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Tue Jul 26 17:25:16 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.938	152	195316	40.00	ppm	0.00
24) Naphthalene-d8	6.124	136	713974	40.00	ppm	0.00
47) Acenaphthene-d10	8.544	164	428569	40.00	ppm	0.00
69) Phenanthrene-d10	11.193	188	748399	40.00	ppm	0.00
83) Chrysene-d12	16.386	240	834826	40.00	ppm	0.00
91) Perylene-d12	19.014	264	821662	40.00	ppm	0.00
101) 1,4-Dichlorobenzene-d4a	4.938	152	195316	40.00	ppm	0.00
103) Acenaphthene-d10a	8.544	164	428569	40.00	ppm	0.00
106) Chrysene-d12a	16.386	240	834826	40.00	ppm	0.00
109) Phenanthrene-d10a	11.193	188	748399	40.00	ppm	0.00
111) Naphthalene-d8a	6.124	136	713974	40.00	ppm	0.00
113) Chrysene-d12b	16.386	240	834826	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
8) Phenol-d5	0.000	99	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
51) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
108) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
110) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
Target Compounds						Qvalue
88) 3,3'-Dichlorobenzidine	16.386	252	402854	47.14	ppm	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.6.38

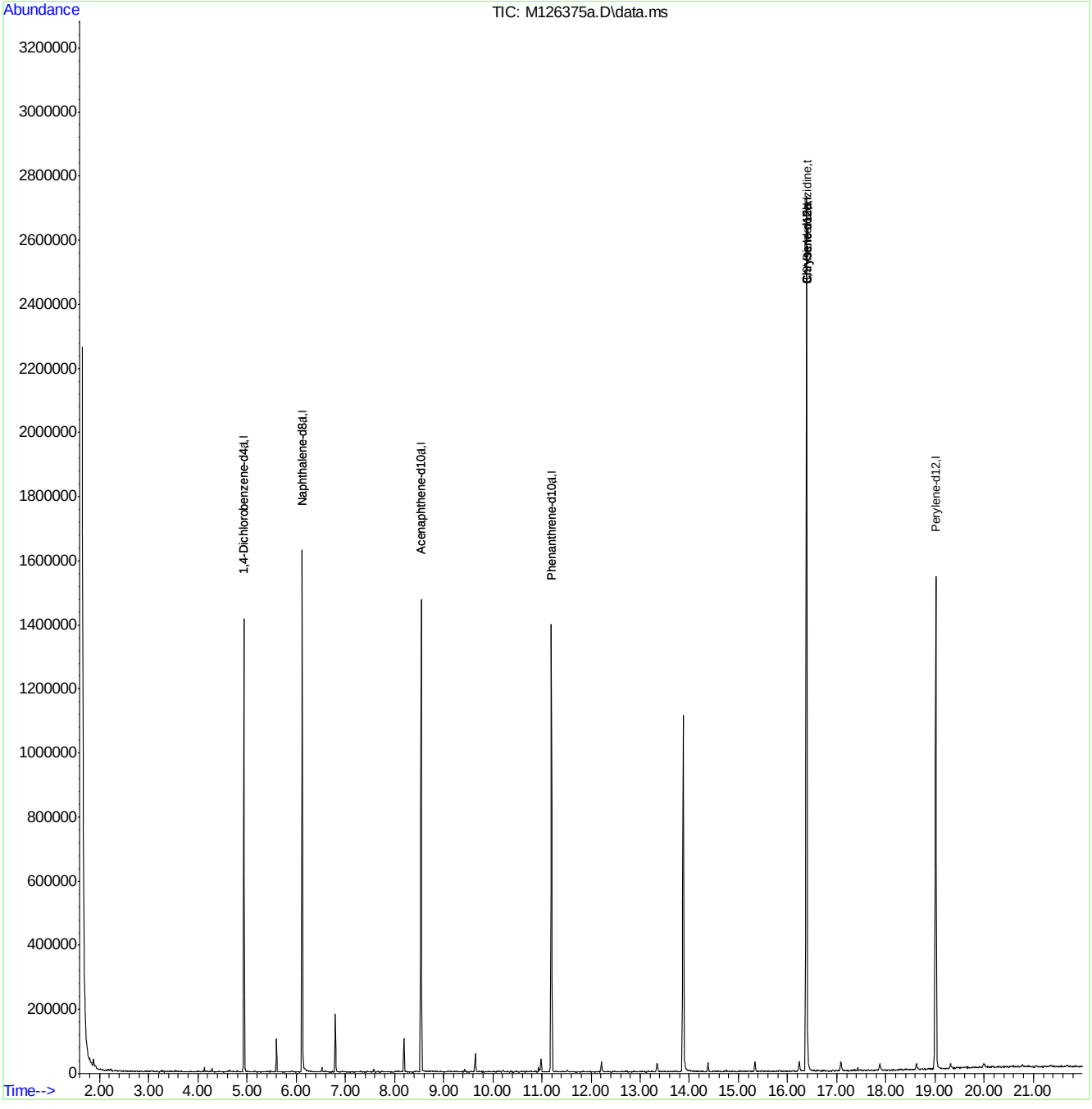
7

SGS ACCUTEST JC25024

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5364\
Data File : M126375a.D
Acq On : 26 Jul 2016 3:48 pm
Operator : ashleyd
Sample : icv5363-50
Misc : op95476,em5364
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Jul 26 17:27:52 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5363.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Tue Jul 26 17:25:16 2016
Response via : Initial Calibration



MM5363.M Tue Jul 26 17:28:01 2016 MSM

Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5365\
Data File : M126378.D
Acq On : 26 Jul 2016 7:16 pm
Operator : seanb1
Sample : icv5363-50
Misc : op95476,em5365
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 27 08:42:10 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5363.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Tue Jul 26 17:12:07 2016
Response via : Initial Calibration

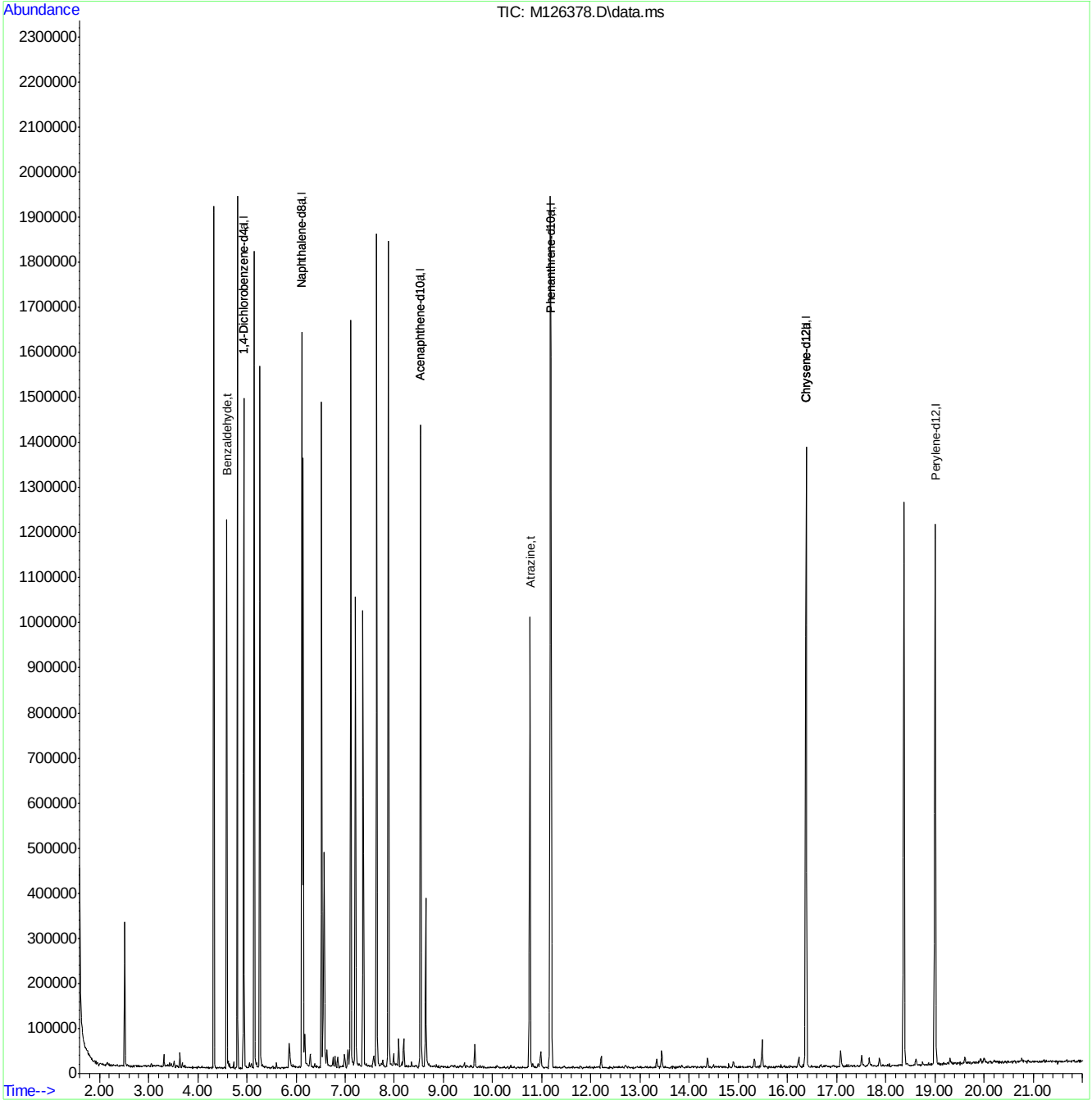
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.933	152	199100	40.00	ppm	0.00
24) Naphthalene-d8	6.119	136	743999	40.00	ppm	0.00
47) Acenaphthene-d10	8.533	164	430516	40.00	ppm	0.00
69) Phenanthrene-d10	11.188	188	696635	40.00	ppm	0.00
83) Chrysene-d12	16.381	240	737382	40.00	ppm	0.00
91) Perylene-d12	19.009	264	664643	40.00	ppm	0.00
101) 1,4-Dichlorobenzene-d4a	4.933	152	199100	40.00	ppm	0.00
103) Acenaphthene-d10a	8.533	164	430516	40.00	ppm	0.00
106) Chrysene-d12a	16.381	240	737382	40.00	ppm	0.00
109) Phenanthrene-d10a	11.188	188	696635	40.00	ppm	0.00
111) Naphthalene-d8a	6.119	136	743999	40.00	ppm	0.00
113) Chrysene-d12b	16.381	240	737382	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
25) Nitrobenzene-d5	0.000	82	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
51) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
108) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
110) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
Target Compounds						Qvalue
102) Benzaldehyde	4.591	105	214974	46.71	ppm	96
105) Atrazine	10.766	215	98689	51.31	ppm	91

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5365\
Data File : M126378.D
Acq On : 26 Jul 2016 7:16 pm
Operator : seanb1
Sample : icv5363-50
Misc : op95476,em5365
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 27 08:42:10 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5363.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Tue Jul 26 17:12:07 2016
Response via : Initial Calibration



MM5363.M Wed Jul 27 08:42:17 2016 MSM

Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5377\
Data File : M126615.D
Acq On : 3 Aug 2016 6:14 pm
Operator : seanb1
Sample : cc5363-50
Misc : op95925,em5377
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 03 20:07:45 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5363.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Aug 03 17:34:37 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.820	152	115895	40.00	ppm	-0.01
24) Naphthalene-d8	5.985	136	451877	40.00	ppm	-0.01
47) Acenaphthene-d10	8.373	164	274856	40.00	ppm	-0.04
69) Phenanthrene-d10	11.017	188	461198	40.00	ppm	-0.04
83) Chrysene-d12	16.199	240	480125	40.00	ppm	-0.01
91) Perylene-d12	18.827	264	469657	40.00	ppm	-0.01
101) 1,4-Dichlorobenzene-d4a	4.820	152	115895	40.00	ppm	-0.01
103) Acenaphthene-d10a	8.373	164	274856	40.00	ppm	-0.04
106) Chrysene-d12a	16.199	240	480125	40.00	ppm	-0.01
109) Phenanthrene-d10a	11.017	188	461198	40.00	ppm	-0.04
111) Naphthalene-d8a	5.985	136	451877	40.00	ppm	-0.01
113) Chrysene-d12b	16.199	240	480125	40.00	ppm	-0.01
System Monitoring Compounds						
5) 2-Fluorophenol	3.859	112	177718	50.90	ppm	0.00
Spiked Amount 50.000			Recovery	=	101.80%	
8) Phenol-d5	4.569	99	231598	52.04	ppm	0.00
Spiked Amount 50.000			Recovery	=	104.08%	
25) Nitrobenzene-d5	5.285	82	200571	52.31	ppm	0.00
Spiked Amount 50.000			Recovery	=	104.62%	
51) 2-Fluorobiphenyl	7.342	172	392805	47.31	ppm	-0.02
Spiked Amount 50.000			Recovery	=	94.62%	
73) 2,4,6-Tribromophenol	9.746	330	71335	49.42	ppm	-0.04
Spiked Amount 50.000			Recovery	=	98.84%	
85) Terphenyl-d14	14.190	244	471831	50.08	ppm	-0.03
Spiked Amount 50.000			Recovery	=	100.16%	
108) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
110) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
Target Compounds						Qvalue
2) 1,4-Dioxane	2.384	88	75005	52.12	ppm	92
3) Pyridine	2.715	79	203934	52.44	ppm	99
4) N-Nitrosodimethylamine	2.673	42	96876	51.01	ppm #	65
6) Indene	5.029	116	338616	51.37	ppm	94
7) Cumene	4.217	105	470401	52.83	ppm	99
9) Phenol	4.580	94	271010	54.97	ppm #	53
10) Aniline	4.569	93	264501	45.56	ppm	48
11) bis(2-Chloroethyl)ether	4.612	93	164594	47.88	ppm	99
12) 2-Chlorophenol	4.671	128	199317	48.76	ppm	97
13) Decane	4.687	43	175403	46.45	ppm	99
14) 1,3-Dichlorobenzene	4.777	146	210466	49.23	ppm	98
15) 1,4-Dichlorobenzene	4.836	146	209741	48.68	ppm	98
16) Benzyl alcohol	4.938	108	125008	50.09	ppm	94
17) 1,2-Dichlorobenzene	4.959	146	194396	48.75	ppm	96
18) Acetophenone	5.151	105	258470	51.46	ppm	94
19) 2-Methylphenol	5.045	108	161639	48.06	ppm	99
20) 2,2'-oxybis(1-Chloropr...	5.034	121	60112	48.79	ppm #	77

SGS ACCUTEST JC25024

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5377\
Data File : M126615.D
Acq On : 3 Aug 2016 6:14 pm
Operator : seanb1
Sample : cc5363-50
Misc : op95925,em5377
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 03 20:07:45 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5363.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Aug 03 17:34:37 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
21)	3&4-Methylphenol	5.173	108	181935	49.63	ppm	#	86
22)	n-Nitroso-di-n-propyla...	5.151	70	136754	51.10	ppm		97
23)	Hexachloroethane	5.242	201	75283	46.26	ppm		95
26)	Nitrobenzene	5.301	77	194545	48.84	ppm		97
27)	Quinoline	6.391	129	393609	47.92	ppm		98
28)	Isophorone	5.515	82	340297	48.81	ppm		97
29)	2-Nitrophenol	5.595	139	117049	53.41	ppm		91
30)	2,4-Dimethylphenol	5.648	107	176031	47.74	ppm		97
31)	Benzoic acid	5.782	105	143514	60.26	ppm		93
32)	bis(2-Chloroethoxy)met...	5.718	93	199269	46.16	ppm		97
33)	2,4-Dichlorophenol	5.851	162	170142	48.13	ppm		96
34)	2,6-Dichlorophenol	6.081	162	158407	46.49	ppm	#	34
35)	1,3,5-Trichlorobenzene	5.606	180	193374	47.65	ppm		97
36)	1,2,4-Trichlorobenzene	5.926	180	178751	45.88	ppm		99
37)	1,2,3-Trichlorobenzene	6.166	180	176697	46.59	ppm		96
38)	Naphthalene	6.006	128	543196	47.99	ppm		99
39)	4-Chloroaniline	6.070	127	236766	45.16	ppm		98
40)	2,3-Dichloroaniline	7.219	161	202814	46.74	ppm		99
41)	Caprolactam	6.487	55	83035	47.77	ppm		94
42)	Hexachlorobutadiene	6.145	225	101828	47.52	ppm		92
43)	4-Chloro-3-methylphenol	6.669	107	169658	52.94	ppm		99
44)	2-Methylnaphthalene	6.834	141	358002	48.31	ppm		98
45)	1-Methylnaphthalene	6.962	142	387645	47.67	ppm		95
46)	Dimethylnaphthalene	7.721	156	341362	47.20	ppm		96
48)	Hexachlorocyclopentadiene	7.048	237	224499	88.44	ppm		98
49)	2,4,6-Trichlorophenol	7.235	196	129199	49.74	ppm		94
50)	2,4,5-Trichlorophenol	7.299	196	136082	49.66	ppm		98
52)	2-Chloronaphthalene	7.507	162	350145	47.37	ppm		95
53)	Biphenyl	7.486	154	474158	49.45	ppm		99
54)	2-Nitroaniline	7.678	65	116409	56.94	ppm		98
55)	Dimethylphthalate	7.967	163	425756	49.28	ppm		98
56)	Acenaphthylene	8.138	152	597945	49.21	ppm		99
57)	2,6-Dinitrotoluene	8.058	165	100462	58.00	ppm		94
58)	3-Nitroaniline	8.330	138	121922	56.01	ppm		98
59)	Acenaphthene	8.426	153	362297	48.60	ppm		100
60)	2,4-Dinitrophenol	8.506	184	123116	118.67	ppm		89
61)	4-Nitrophenol	8.704	109	62843	65.72	ppm	#	2
62)	Dibenzofuran	8.715	168	550886	48.33	ppm		86
63)	2,4-Dinitrotoluene	8.725	165	128435	56.51	ppm		95
64)	2,3,4,6-Tetrachlorophenol	8.955	232	115559	49.93	ppm		98
65)	Diethylphthalate	9.174	149	437413	51.45	ppm		98
66)	Fluorene	9.302	166	418759	47.63	ppm		99
67)	4-Chlorophenyl-phenyle...	9.329	204	200643	46.92	ppm		89
68)	4-Nitroaniline	9.382	138	112829	49.58	ppm		93
70)	4,6-Dinitro-2-methylph...	9.447	198	88913	57.83	ppm		95
71)	n-Nitrosodiphenylamine	9.553	169	294397	49.61	ppm		93
72)	1,2-Diphenylhydrazine	9.612	77	409186	52.98	ppm		95
74)	4-Bromophenyl-phenylether	10.216	248	128606	48.39	ppm		96
75)	Hexachlorobenzene	10.312	284	143061	46.36	ppm		98
76)	Pentachlorophenol	10.707	266	182226	94.25	ppm		97

SGS ACCUTEST JC25024

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5377\
Data File : M126615.D
Acq On : 3 Aug 2016 6:14 pm
Operator : seanb1
Sample : cc5363-50
Misc : op95925,em5377
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 03 20:07:45 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5363.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Aug 03 17:34:37 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
77) Phenanthrene	11.060	178	583565	49.56 ppm	100
78) Anthracene	11.156	178	601813	49.04 ppm	97
79) Carbazole	11.509	167	600166	50.31 ppm	97
80) Di-n-butylphthalate	12.294	149	778048	53.73 ppm	99
81) Fluoranthene	13.362	202	696873	49.86 ppm	98
82) Octadecane	10.985	57	250249	52.95 ppm	95
84) Pyrene	13.790	202	721539	51.70 ppm	98
86) Butylbenzylphthalate	15.237	149	353760	58.77 ppm	95
87) Benzo[a]anthracene	16.183	228	673748	50.67 ppm	98
88) 3,3'-Dichlorobenzidine	16.204	252	252728	51.42 ppm	96
89) Chrysene	16.252	228	614747	49.42 ppm	99
90) bis(2-Ethylhexyl)phtha...	16.450	149	482032	59.07 ppm	99
92) Di-n-octylphthalate	17.679	149	868365	62.90 ppm	99
93) Benzo[b]fluoranthene	18.186	252	708858	51.81 ppm	93
94) Benzo[k]fluoranthene	18.240	252	609665	48.29 ppm	98
95) Benzo[a]pyrene	18.731	252	618436	50.54 ppm	97
96) Indeno[1,2,3-cd]pyrene	20.601	276	617799	53.30 ppm	99
97) Dibenz(a,h)acridine	20.211	279	593317	52.06 ppm	85
98) Dibenz[a,h]anthracene	20.644	278	634827	51.60 ppm	98
99) 7,12-Dimethylbenz(a)an...	18.192	256	324202	50.99 ppm	95
100) Benzo[g,h,i]perylene	21.087	276	632657	50.24 ppm	99

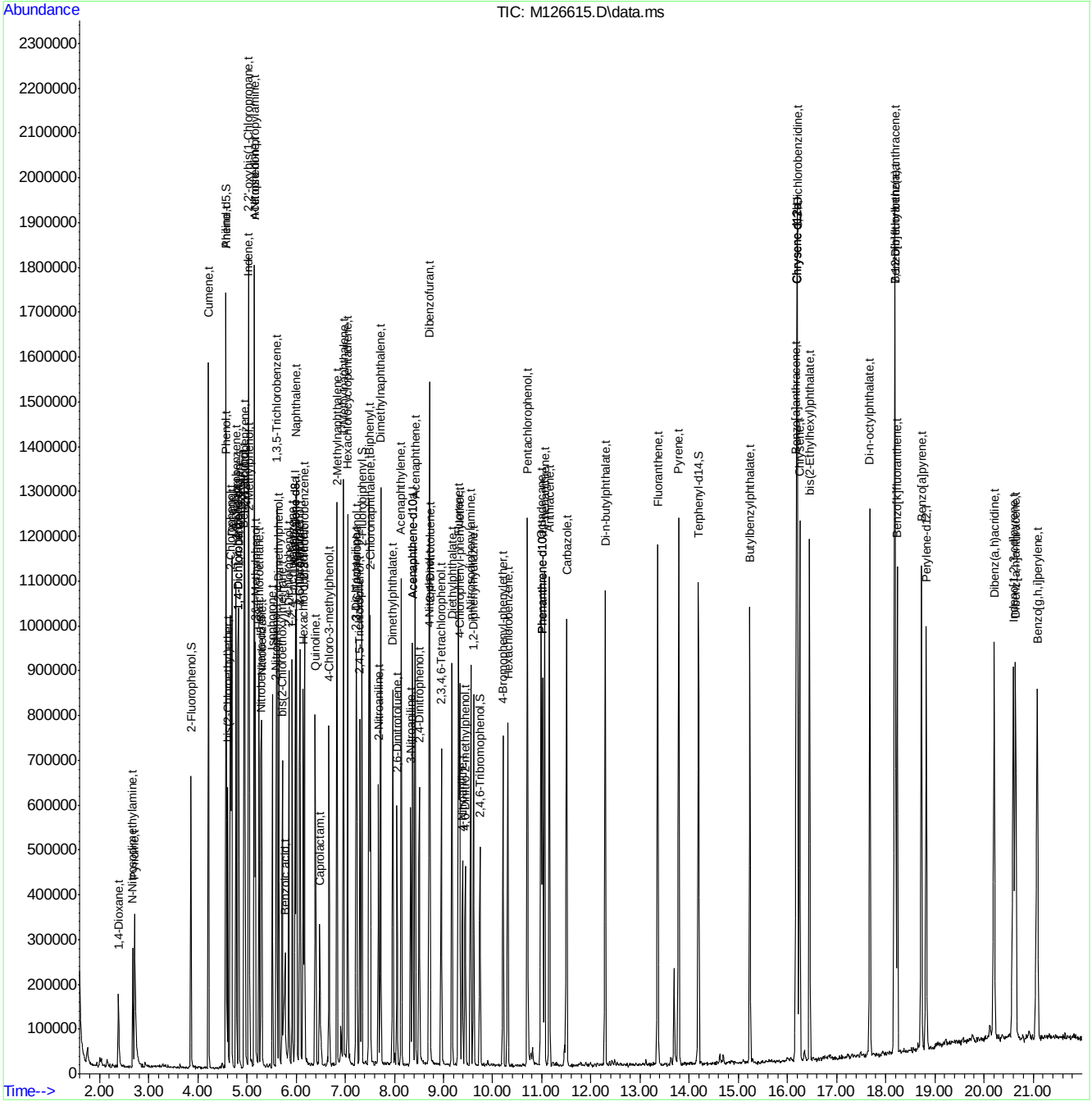
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC25024

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5377\
Data File : M126615.D
Acq On : 3 Aug 2016 6:14 pm
Operator : seanb1
Sample : cc5363-50
Misc : op95925,em5377
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 03 20:07:45 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5363.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Aug 03 17:34:37 2016
Response via : Initial Calibration



MM5363.M Wed Aug 03 20:07:51 2016 MSM

SGS ACCUTEST JC25024

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5377\
Data File : M126616.D
Acq On : 3 Aug 2016 6:42 pm
Operator : seanb1
Sample : cc5364-50
Misc : op95925,em5377
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 03 20:08:34 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5363.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Aug 03 17:34:37 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,4-Dichlorobenzene-d4	4.819	152	121056	40.00 ppm	-0.01
24) Naphthalene-d8	5.984	136	453174	40.00 ppm	-0.01
47) Acenaphthene-d10	8.366	164	268846	40.00 ppm	-0.04
69) Phenanthrene-d10	11.011	188	469620	40.00 ppm	-0.05
83) Chrysene-d12	16.193	240	491927	40.00 ppm	-0.02
91) Perylene-d12	18.821	264	477697	40.00 ppm	-0.02
101) 1,4-Dichlorobenzene-d4a	4.819	152	121056	40.00 ppm	-0.01
103) Acenaphthene-d10a	8.366	164	268846	40.00 ppm	-0.04
106) Chrysene-d12a	16.193	240	491927	40.00 ppm	-0.02
109) Phenanthrene-d10a	11.011	188	469620	40.00 ppm	-0.05
111) Naphthalene-d8a	5.984	136	453174	40.00 ppm	-0.01
113) Chrysene-d12b	16.193	240	491927	40.00 ppm	-0.02
System Monitoring Compounds					
5) 2-Fluorophenol	0.000	112	0	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
8) Phenol-d5	0.000	99	0	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
25) Nitrobenzene-d5	0.000	82	0	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
51) 2-Fluorobiphenyl	0.000	172	0	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
73) 2,4,6-Tribromophenol	0.000	330	0	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
85) Terphenyl-d14	0.000	244	0	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
108) 1-chlorooctadecane	13.329	57	176694	61.25 ppm	-0.06
Spiked Amount 50.000			Recovery	= 122.50%	
110) o-terphenyl	11.812	230	352219	56.12 ppm	-0.05
Spiked Amount 50.000			Recovery	= 112.24%	
Target Compounds					Qvalue
102) Benzaldehyde	4.483	105	131769	47.09 ppm	97
104) 1,2,4,5-Tetrachloroben...	7.058	216	189595	54.41 ppm	97
105) Atrazine	10.599	215	66691	55.52 ppm	92
107) Benzidine	13.693	184	353891	58.73 ppm	99
112) Hydroquinone	6.481	110	207248	62.27 ppm	93

(#) = qualifier out of range (m) = manual integration (+) = signals summed

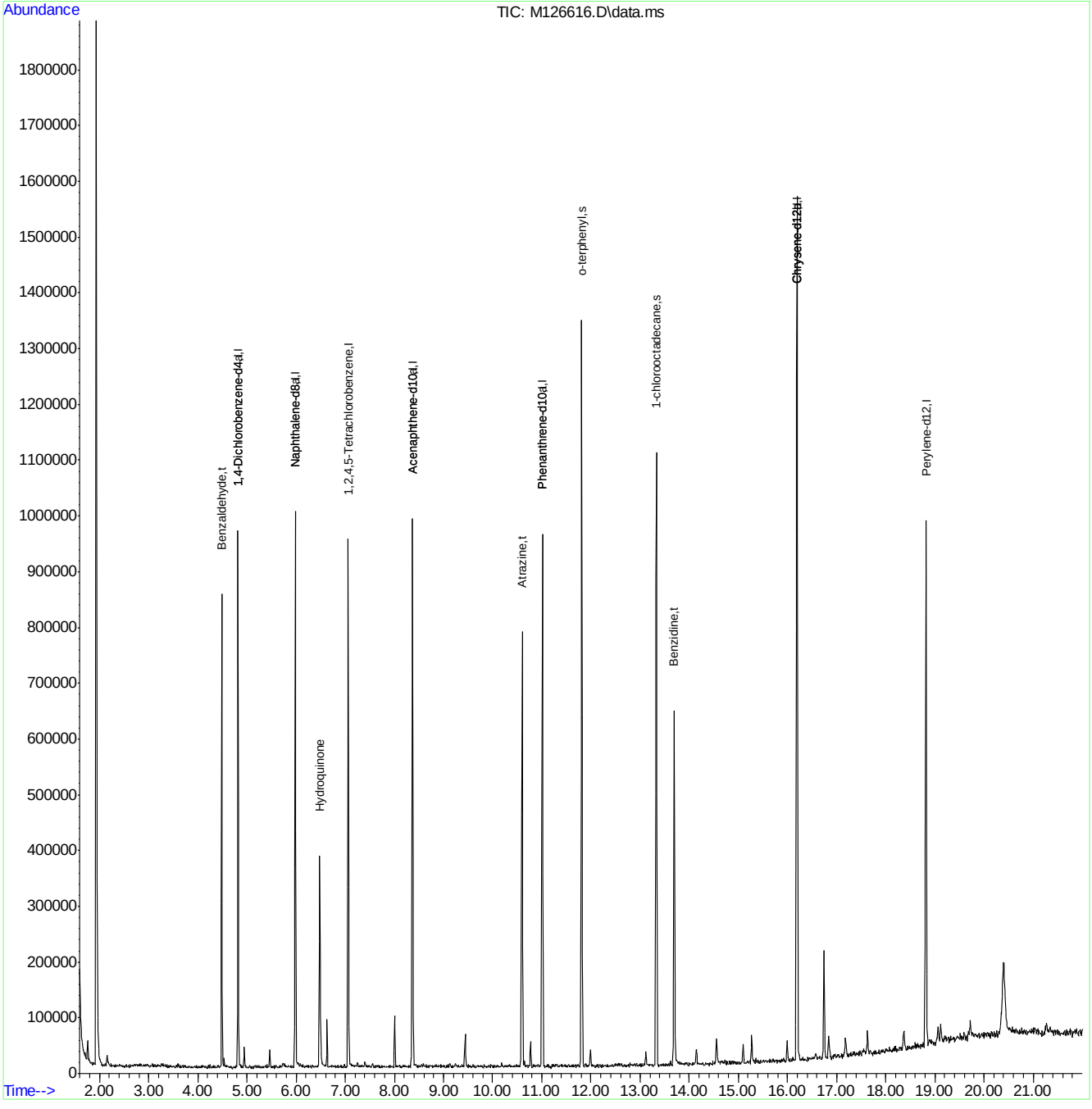
7.6.41

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5377\
Data File : M126616.D
Acq On : 3 Aug 2016 6:42 pm
Operator : seanb1
Sample : cc5364-50
Misc : op95925,em5377
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 03 20:08:34 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5363.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Aug 03 17:34:37 2016
Response via : Initial Calibration



SGS ACCUTEST JC25024

SEMI-VOLATILE by GCMS ANALYSIS LOG

SGS ACCUTEST

Batch ID E3P 2503

Print Analyst Name: Hank Chao

Analyst Signature: HC

Date: 7/6/16

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SV515791	DFTPP	50ppm
SV16A3594	SIM internal	400ppm
163B9	DCMFshed	—

Columns: Rtx-5Sil ms 30m x .25mm x .25

Method 8270D/625

Initial Cal. Method M3P2503SIM

Injection Volume: 1.0µL

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to compl with the criteria of Accutest SOP EQA044.

Supervisor Signature: AMC

Date: 7/8/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution.	L+	IS	SU	Status (Data)	Comments
	3P54953	DFTPP				1					OK	9:12 am
	54954	ICC2503-1.0		BLASIM	W	2					not using	fix grouping rerun as A file not
	54955	ICC2503-1.0		BLASIM	W	2					OK	SV16A935-90A
	54956	IC2503-001				3					OK	SV16-1935-60G
	54957	-0.02				4					OK	-60F
	54958	-0.05				5					OK	-60E
	54959	-0.1				6					OK	-60D
	54960	-0.2				7					OK	-60C
	54961	-5				8					OK	-60A
	54962	-2.5				9					OK	-60B
	54963	-0.5				10					OK	-90B
	54964	ICV2503-1.0		BSIM2nd	W	11					OK	OP16A7912 pan ST Rerun.
	54965	-1.0		Acid2nd	W	12					OK	SV16A93596 phenol T

AMC

MTX = Matrix. Designate W for water, S for soil, O for oil. L+ = Library Search. IS = Internal Standard Area. SU = Surrogate.

All strikeouts must be initialed, dated, and reason applied if not transcription error

Sample volume/weight used and final volumes refer to extraction log.

11

Form: OR015-07
Rev. Date: 1/19/16

SEMI-VOLATILE by GCMS ANALYSIS LOG

SGS ACCUTEST

Batch ID E3P2535

Print Analyst Name: Julius M. Johnson

Analyst Signature: JMJ

Date: 8/2/16

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SH162589	DFTPP	50 ppb
-100	SIM Std	0.5 ppm
-115	SIM internal	100 ppm
163582	DCM (Fisher)	—

Columns: Rxi5Sil MS 30m x .25mm x .25µm

Method 8270D/625

Initial Cal. Method M3P2503SIM

Injection Volume: 1 µl

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: AMO Date: 8-3-16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	L+	IS	SU	Status (Data)	Comments
	3P55424	DFTPP				1					OK	10:32pm
	55425	CC2503-0.5				2					OK	
	55426	OP95982a-MB1	95982	A8270		3			✓	✓	OK	
	55427	-BS12				4			✓	✓	OK	
	55428	-BSD12				5			✓	✓	OK	
	55429	JC24992-1		ASIMPCP		6			4 ↓	✓	OK	RR for cfi
	55430	-2F				7			✓	✓	OK	
	55431	-3				8			✓	✓	OK	
	55432	OP95988-BS	95988	B8270		9			4 ↓		IZR	
	55433	-MS				10			✓	✓	OK	
	55434	-MSD				11			✓	✓	OK	
	55435	JC25024-1		BSIM 14DIOX BSIM-NAP		12			✓	✓	OK	
	55436	-2				13			2,3,4 ↓		RR	
	55437	OP95978-MB1	95978	AB8270		14			3,4 ↓		IZR	
	55438	-BS12				15			✓	✓	OK	
	55439	-BSD12				16			✓	✓	OK	
	55440	JC24569-1		ABSIMNJ 14DIOX		17			✓	✓	OK	

MTX = Matrix. Designate W for water, S for soil, O for oil. L+ = Library Search. IS = Internal Standard Area. SU = Surrogate.

All strikeouts must be initialed, dated, and reason applied if not transcription error

Sample volume/weight used and final volumes refer to extraction log.

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Form: OR015-07
Rev. Date: 1/19/16

SEMI-VOLATILE by GCMS ANALYSIS LOG

SGS ACCUTEST

Batch ID E3P2535

Print Analyst Name: Julius M. Johnson

Analyst Signature: JMJ

Date: 8/3/16

Columns: Rxi 5Sil ms 30 m x .25 mm x .25 µm

Method 8270D / 625

Initial Cal. Method M3P2503 SIM

Injection Volume: 1 µl

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
	See Page 99	

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: AMO Date: 8-3-16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution.	L+	IS	SU	Status (Data)	Comments
	3P55441	JC24569-2	95978	ABSIMNJ14		18			3A		RR	
	55442	-3				19			✓	✓	OK	
	55443	-4				20			✓	✓	OK	
	55444	-5				21			✓	✓	OK	
	55445	JC24606-1	95821-1	ABSIMNJ+ 14DIOX	N	22			✓	✓	OK	
	55446	-2				23			✓	✓	OK	1006AM

AMO

MTX = Matrix . Designate W for water, S for soil, O for oil. L+ =Library Search. IS = Internal Standard Area. SU = Surrogate.

All strikeouts must be initialed, dated, and reason applied if not transcription error.

Sample volume/weight used and final volumes refer to extraction log.

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Form: OR015-07
Rev. Date: 1/19/16

7.7.2

7

SEMI-VOLATILE by GCMS ANALYSIS LOG

SGS ACCUTEST

Batch ID E3P2536

Print Analyst Name: Ashley Mdye

Analyst Signature: AMO

Date: 8/3/2016

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SV 1613589	dftpp	50 ppm
SV 1613510004	sim std.	1 ppm
SV 1613511 5	sim internal	400 ppb
163582	DCM (Fisher)	—

Columns: Rxi5silms 30m, .25mm x .25µm

Method 8270D/625

Initial Cal. Method M3P2503sim

Injection Volume: mL

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: AMO

Date: 8-5-16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution.	L+	IS	SU	Status (Data)	Comments
	3P55447	DFTPP				1					not using	abundance ↓ reinst.
	55448	dftpp				1					↓	spectrum many/reinj
	55449	dftpp				1					OK	1159AM.
	55450	cc2503-1		BNAsim	W	2					OK	hcbutadiene ↓
	55451	op95988.mb1	95988-1	B8270	W	3			✓	✓	OK	
	55452	-bs12				4			✓	✓	OK	
	55453	JC25024-2		napt PAHUX		5			✓	✓	OK	unbuffered.
	55454	JC24992-1	95982-1	ABSIMPQP	W	6			✓	✓	OK	220PM.
												AMO

MTX = Matrix . Designate W for water, S for soil, O for oil. L+ =Library Search. IS = Internal Standard Area. SU = Surrogate.

All strikeouts must be initialed, dated, and reason applied if not transcription error

Sample volume/weight used and final volumes refer to extraction log.

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Form: OR015-07
Rev. Date: 1/19/16

7.7.3

7

SEMI-VOLATILE by GCMS ANALYSIS LOG

SGS ACCUTEST

Batch ID EM5363

Print Analyst Name: Sean Black

Analyst Signature: [signature]

Date: 7/28/16

Columns: 2x15m x 0.25mm x 0.25µm

Method 8270D/625

Initial Cal. Method MM5363

Injection Volume: 1µL

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SU 161935-89	DFTPP	50ppm
CM-5732	Internal Std	40ppm
162038	DCM (Fisher)	II

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: [signature] Date: 7-26-16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution.	L+	IS	SU	Status (Data)	Comments
	M126351	DFTPP				1					OK	12:25am 7/26/16
	M126352	105363-100		BNA		2					OK	SU161935-102A
	126353	-80				3					OK	-102B
	126354	105363-50				4					OK	-102C
	126355	105363-25				5					OK	-102D
	126356	-10				6					OK	-102E
	126357	-5				7					OK	-102G
	126358	-2				8					OK	-102H
	126359	-1				9					OK	-102II 3:58AM
												[signature]

MTX = Matrix. Designate W for water, S for soil, O for oil. L+ = Library Search. IS = Internal Standard Area. SU = Surrogate.

All strikeouts must be initialed, dated, and reason applied if not transcription error

Sample volume/weight used and final volumes refer to extraction log.

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Form: OR015-07
Rev. Date: 1/19/16

7.7.4

7

SEMI-VOLATILE by GCMS ANALYSIS LOG

SGS ACCUTEST

Batch ID: EM5364

Print Analyst Name: Ashley MDyer

Date: 7/26/2016

Analyst Signature: AMD

Columns: Rx15silms30mx.25mmx.25

Method: 8270D/625

Initial Cal. Method: MM5363

Injection Volume: µL

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SV169358	DFTPP	50ppm
CM5732	Internal Std.	40000ppm
463038	DCM (Fisher)	—

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: AM Date: 7/26/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution.	L+	IS	SU	Status (Data)	Comments
	M126360	DFTPP				1					OK	839AM.
	126361	IC5364-100		TCL42	W	2					OK	SV16193537A
	126362	-80				3					OK	B
	126363	ICC5364-50				4					OK	SV16193532C
	126364	IC5364-25				5					OK	SV16193530
	126365	-10				6					OK	E
	126366	-5				7					OK	G
	126367	-2				8					OK	H
	126368	-1				9					OK	I
	126369	ICV5363-50	AMD 7/26/16	Acid		10					OK	SV16193559 #60 MW 8.00
	126370	ICV5363-50		Aniline		11					OK	SV16193515
	126371	ICV5363-50		BN1		12					OK	SV16193575 ¥NO 33DCB
	126372	ICV5363-50		BN2		13					OK/RR	SV16193574 RR ATRZ. dilp 10
	126373	ICV5363-50		ABN		14					OK	CP16172107
	126374	ICV5364-50		HQ		15					OK	SV16187798C
	126375	ICV5364-50		BZD 3rd.		16					OK	AMD 7/26/16 SV16187738B 3:48
												AM

MTX = Matrix. Designate W for water, S for soil, O for oil. L+ = Library Search. IS = Internal Standard Area. SU = Surrogate.

All strikeouts must be initialed, dated, and reason applied if not transcription error

Sample volume/weight used and final volumes refer to extraction log.

Form: OR015-07
Rev. Date: 1/19/16

SGS ACCUTEST JC25024

SEMI-VOLATILE by GCMS ANALYSIS LOG

SGS ACCUTEST

Batch ID EM5365

Print Analyst Name: Sean Black

Analyst Signature: Sean Black

Date: 7-26-16

Columns: Rtx-5Sil ms 30m x .25mm x .25µm

Method 8270D-625

Initial Cal. Method MM5363

Injection Volume: 1µL

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SU 161935-89	DFTPP	50ppm
IM-5332	Internal Std	4000ppm
162489	DCM (Rinse)	5ml

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: [signature] Date: 7-27-16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution.	L+	IS	SU	Status (Data)	Comments
	M126376	DFTPP		~~BNA~~		1					[illegible]	6:13pm
	126377	ICV5363-50		BN2		2					NOT using wrong method; PR	
	126378	ICV5363-50		BN2		2					[illegible]	SU161935-105

MTX = Matrix . Designate W for water, S for soil, O for oil. L+ =Library Search. IS = Internal Standard Area. SU = Surrogate.

All strikeouts must be initialed, dated, and reason applied if not transcription error

Sample volume/weight used and final volumes refer to extraction log.

Form: OR015-07
Rev. Date: 1/19/16

SEMI-VOLATILE by GCMS ANALYSIS LOG

SGS ACCUTEST

Batch ID EM5377

Print Analyst Name: Sean Black

Analyst Signature: [signature]

Date: 8/3/16

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SV 161935-89	DFTPP	50ppm
SV 161935-102C	BNA	50ppm
SV 161935-32C	TCL42	50ppm
CM-5732	Internal Std	4000ppm
163582	DCM (Fisher)	-

Columns: Rtx-5Sil ms 30m x 25mm

Method 8270D 625

Initial Cal. Method MM5363

Injection Volume: 1µL

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to compl with the criteria of Accutest SOP EQA044.

Supervisor Signature: [signature] Date: 8/11/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	L+	IS	SU	Status (Data)	Comments
	M126614	DFTPP				1					OK	6:02pm
	126615	cc5363-50		BNA		2					OK	21,61,9DT
	126616	cc5364-50		TCL42		3					OK	
	126617	JC25024-2	959880	BSDM 1,4D50+ +Nap	W	4			✓	✓	OK	
	126618	OP94624-mb1	SB 959634	LOD/LOQ	S	5			✓	✓	OK	
	126619	JC119468-4B				6			✓	✓	OK	B55
	126620	-4B				7			✓	✓	OK	B56
	126621	-4A				8			✓	✓	OK	B57
	126622	-4A				9			✓	✓	OK	B58

MTX = Matrix. Designate W for water, S for soil, O for oil. L+ =Library Search. IS = Internal Standard Area. SU = Surrogate.

All strikeouts must be initialed, dated, and reason applied if not transcription error

Sample volume/weight used and final volumes refer to extraction log.

Form: OR015-07
Rev. Date: 1/19/16

LOGBOOK ID: 6-1744

ABN Aqueous Extraction Logbook

Date Started: 8/2/16 Time Started: 3:30pm
Date Finished: 8/2/16 Time Finished: 4:00pm

Extract Method (CHECK OFF "√" /DO NOT CIRCLE):
Separatory Funnel: SW846 3510C/CLP/other____ 3510C SIM ✓
Continuous Liquid Liquid: SW846 3520C/CLP/other____

BATCH # MS 95988	RACK# D18
Extracted by:	YB/GM
Concentrated by:	RA, ADC
Vialed by:	RF
Relinquished by:	ADC
Accepted by:	
Supervisor Review:	8/2/16

Special Client Spike Instructions

QC ID# for Special Spike	Amt to Spike	Spike ID	Lot #	Conc.	Amt. Spiked

WITNESS SIGN: SPIKE SIGN:
Manager/Supervisor/Team Lead Approval:

	Sample #		Analysis Type	Sample Bottle #	Sample Description	Sample Volume (mL)	pH Adjust(mL) Δ H2SO4	pH Adjust(mL) >11 NaOH	Final Extract Color	Final Extract Vol(mL)	Misc. GPC Cleanup	Misc. Comments
		MB1	ABN		DI H2O	1000	1	4	clear	1		
required		BS1			DI H2O	1000	1	4	yellow	1		
	JC25011-1	MS		2	yellow	1000	1	4	yellow	1		
	↓	MSD		3	yellow	1000	1	4	yellow	1		
required		BS	12 SIM		DI H2O	1000	1	4	l. yellow	1		
required	JC25011-1	MS		6	yellow	1000	1	4	yellow	1		
	↓	MSD		1	yellow	1000	1	4	yellow	1		
1	JC25006-2		ABN	4	clear	980	1	4	clear	1		
2	JC25009-1			1	clear	950	1	4	yellow	1		
3	JC13380-82			1	clear	100	1	4	clear	1		
4	JC25011-1			4	yellow	1000	1	4	yellow	1		
5	-2			1	yellow	1000	1	4	l. yellow	1		
6	-3			1	brown	975	1	4	yellow	1		
7	-4			2	brown	980	1	4	yellow	1		
8	-5			2	clear	1000	1	4	clear	1		
9	JC25024-1			1	clear	1000	1	4	clear	1		
10	-2			1	yellow	1000	1	4	clear	1		
11												
12												
13												
14												
15												
16												
17												
18												
19												
20												

use 100ml

1d TAT

SPECIAL PROCESSING INSTRUCTIONS

Rx Reason:

Spiking:

Weights/Volumes:

Required MS/MSD: JC25011-1 } MS/MSD, SIM MS/MSD

Final Volume:

Other:

Comments:

Equipment/ Range	ID	Observed Temp (°C)	Correction Factor (°C)	Corrected Temp (°C)	Pressure/ Flowrate
Buchi (65-71°C)					
Buchi Chiller					
Waterbath (70-80°C)	37	73.9/73.6	-0.8/0.1	77/74	NA
Waterbath Chiller (GPM)	F2	4	—	—	2
NEVAP (32-38°C; LPM)	2	35.8	+0.9	36	10

SURROGATE	LOT #	CONC (ppm)	AMT (mL)
ABN	SP 16 177050	50	1

WITNESS SIGN: Kim SPIKE SIGN: GM

MATRIX SPIKE	LOT #	CONC (ppm)	AMT (mL)
Acid	SV 16 1935-121	50	Acid: 1
Acid (for SIM)			A(SIM): 0.1
Base #1	SV 16 1935 129	50	1
Base #2	SV 16 1935 127	50	1
Anilines	SV 16 1935 116	50	1
BSIM	SP 16 177041	1	1

WITNESS SIGN: Kim SPIKE SIGN: GM

SOLVENT	LOT #	BRAND	AMT (mL)
METH CHLOR	163582	Fisher	600

REAGENT	LOT #	BRAND
NaOH	157991	Fisher
H2SO4	2603838	Alcor
Sodium Sulfate	148420	Fisher
Glass Wool	05026	Rem
Filter Paper		
pH strips		

SGS ACCUTEST INC.
Form: OP022A-08
Rev Date: 1/13/16

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