Organic Analysis:
Semi-Volatile Organic Compounds by GC/MS

Validation Package

Raw Data

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Battelle Memorial Institute	**Service Request:**	K2502554
Project:	Novato Ballfields/G486063	**Date Collected:**	04/07/2005
Sample Matrix:	Soil	**Date Received:**	04/08/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name:	TO63-IDW-01	**Units:**	ug/Kg
Lab Code:	K2502554-001	**Basis:**	Dry
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2,4,5-Tetrachlorobenzene	ND	U	7.3	7.1	1	04/11/05	04/15/05	KWG0505755	
Phenol	**4.2**	J	22	2.8	1	04/11/05	04/15/05	KWG0505755	
Bis(2-chloroethyl) Ether	ND	U	7.3	3.5	1	04/11/05	04/15/05	KWG0505755	
2-Chlorophenol	ND	U	7.3	2.5	1	04/11/05	04/15/05	KWG0505755	
2-Methylphenol	ND	U	7.3	5.0	1	04/11/05	04/15/05	KWG0505755	
Bis(2-chloroisopropyl) Ether	ND	U	7.3	1.8	1	04/11/05	04/15/05	KWG0505755	
Acetophenone	ND	U	37	18	1	04/11/05	04/15/05	KWG0505755	
4-Methylphenol†	ND	U	7.3	4.2	1	04/11/05	04/15/05	KWG0505755	
N-Nitrosodi-n-propylamine	ND	U	7.3	4.7	1	04/11/05	04/15/05	KWG0505755	
Hexachloroethane	ND	U	7.3	3.2	1	04/11/05	04/15/05	KWG0505755	
Nitrobenzene	ND	U	7.3	2.9	1	04/11/05	04/15/05	KWG0505755	
Isophorone	ND	U	7.3	2.4	1	04/11/05	04/15/05	KWG0505755	
2-Nitrophenol	ND	U	7.3	3.8	1	04/11/05	04/15/05	KWG0505755	
2,4-Dimethylphenol	ND	U	37	8.0	1	04/11/05	04/15/05	KWG0505755	
Bis(2-chloroethoxy)methane	ND	U	7.3	1.9	1	04/11/05	04/15/05	KWG0505755	
2,4-Dichlorophenol	ND	U	7.3	2.7	1	04/11/05	04/15/05	KWG0505755	
Naphthalene	ND	U	7.3	1.9	1	04/11/05	04/15/05	KWG0505755	
4-Chloroaniline	ND	U	7.3	3.1	1	04/11/05	04/15/05	KWG0505755	
Hexachlorobutadiene	ND	U	7.3	2.1	1	04/11/05	04/15/05	KWG0505755	
Caprolactam	ND	U	18	18	1	04/11/05	04/15/05	KWG0505755	
Benzaldehyde	ND	U	15	13	1	04/11/05	04/15/05	KWG0505755	
4-Chloro-3-methylphenol	ND	U	7.3	3.1	1	04/11/05	04/15/05	KWG0505755	
2-Methylnaphthalene	ND	U	7.3	1.8	1	04/11/05	04/15/05	KWG0505755	
Hexachlorocyclopentadiene	ND	U	37	22	1	04/11/05	04/15/05	KWG0505755	
2,4,6-Trichlorophenol	ND	U	7.3	2.7	1	04/11/05	04/15/05	KWG0505755	
2,4,5-Trichlorophenol	ND	U	7.3	4.4	1	04/11/05	04/15/05	KWG0505755	
Biphenyl	ND	U	15	7.0	1	04/11/05	04/15/05	KWG0505755	
2-Chloronaphthalene	ND	U	7.3	5.3	1	04/11/05	04/15/05	KWG0505755	
2-Nitroaniline	ND	U	15	4.0	1	04/11/05	04/15/05	KWG0505755	
Dimethyl Phthalate	ND	U	7.3	2.7	1	04/11/05	04/15/05	KWG0505755	
2,6-Dinitrotoluene	ND	U	7.3	4.1	1	04/11/05	04/15/05	KWG0505755	
Acenaphthylene	ND	U	7.3	2.1	1	04/11/05	04/15/05	KWG0505755	
3-Nitroaniline	ND	U	15	3.8	1	04/11/05	04/15/05	KWG0505755	

Comments:

Client: Battelle Memorial Institute
Project: Novato Ballfields/G486063
Sample Matrix: Soil

Service Request: K2502554
Date Collected: 04/07/2005
Date Received: 04/08/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name: TO63-IDW-01
Lab Code: K2502554-001

Units: ug/Kg
Basis: Dry

Extraction Method: EPA 3541
Analysis Method: 8270C

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Acenaphthene	ND	U	7.3	1.5	1	04/11/05	04/15/05	KWG0505755	
2,4-Dinitrophenol	ND	U	150	53	1	04/11/05	04/15/05	KWG0505755	
4-Nitrophenol	ND	U	73	44	1	04/11/05	04/15/05	KWG0505755	
Dibenzofuran	ND	U	7.3	1.9	1	04/11/05	04/15/05	KWG0505755	
2,4-Dinitrotoluene	ND	U	7.3	4.1	1	04/11/05	04/15/05	KWG0505755	
Diethyl Phthalate	ND	U	7.3	5.1	1	04/11/05	04/15/05	KWG0505755	
Fluorene	ND	U	7.3	2.5	1	04/11/05	04/15/05	KWG0505755	
4-Chlorophenyl Phenyl Ether	ND	U	7.3	2.9	1	04/11/05	04/15/05	KWG0505755	
4-Nitroaniline	ND	U	15	5.0	1	04/11/05	04/15/05	KWG0505755	
2-Methyl-4,6-dinitrophenol	ND	U	73	2.5	1	04/11/05	04/15/05	KWG0505755	
N-Nitrosodiphenylamine	ND	U	7.3	3.2	1	04/11/05	04/15/05	KWG0505755	
4-Bromophenyl Phenyl Ether	ND	U	7.3	2.1	1	04/11/05	04/15/05	KWG0505755	
Hexachlorobenzene	ND	U	7.3	3.1	1	04/11/05	04/15/05	KWG0505755	
Atrazine	ND	U	7.3	3.2	1	04/11/05	04/15/05	KWG0505755	
Pentachlorophenol	ND	U	73	13	1	04/11/05	04/15/05	KWG0505755	
Phenanthrene	ND	U	7.3	1.9	1	04/11/05	04/15/05	KWG0505755	
Anthracene	ND	U	7.3	2.1	1	04/11/05	04/15/05	KWG0505755	
Carbazole	ND	U	7.3	1.9	1	04/11/05	04/15/05	KWG0505755	
Di-n-butyl Phthalate	**17**	B	7.3	3.8	1	04/11/05	04/15/05	KWG0505755	
Fluoranthene	ND	U	7.3	3.2	1	04/11/05	04/15/05	KWG0505755	
Pyrene	**2.1**	J	7.3	1.9	1	04/11/05	04/15/05	KWG0505755	
Butyl Benzyl Phthalate	ND	U	7.3	2.2	1	04/11/05	04/15/05	KWG0505755	
3,3'-Dichlorobenzidine	ND	U	73	5.4	1	04/11/05	04/15/05	KWG0505755	
Benz(a)anthracene	**2.8**	J	7.3	2.1	1	04/11/05	04/15/05	KWG0505755	
Chrysene	**3.7**	J	7.3	2.1	1	04/11/05	04/15/05	KWG0505755	
Bis(2-ethylhexyl) Phthalate	**45**	J	150	2.5	1	04/11/05	04/15/05	KWG0505755	
Di-n-octyl Phthalate	ND	U	7.3	1.8	1	04/11/05	04/15/05	KWG0505755	
Benzo(b)fluoranthene	**6.5**	J	7.3	3.7	1	04/11/05	04/15/05	KWG0505755	
Benzo(k)fluoranthene	ND	U	7.3	3.7	1	04/11/05	04/15/05	KWG0505755	
Benzo(a)pyrene	ND	U	7.3	2.4	1	04/11/05	04/15/05	KWG0505755	
Indeno(1,2,3-cd)pyrene	ND	U	7.3	2.8	1	04/11/05	04/15/05	KWG0505755	
Dibenz(a,h)anthracene	ND	U	7.3	3.2	1	04/11/05	04/15/05	KWG0505755	
Benzo(g,h,i)perylene	**5.2**	J	7.3	3.4	1	04/11/05	04/15/05	KWG0505755	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Battelle Memorial Institute	**Service Request:**	K2502554
Project:	Novato Ballfields/G486063	**Date Collected:**	04/07/2005
Sample Matrix:	Soil	**Date Received:**	04/08/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name:	TO63-IDW-01	**Units:**	ug/Kg
Lab Code:	K2502554-001	**Basis:**	Dry

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	62	11-87	04/15/05	Acceptable
Phenol-d6	76	20-99	04/15/05	Acceptable
Nitrobenzene-d5	70	10-99	04/15/05	Acceptable
2-Fluorobiphenyl	72	10-104	04/15/05	Acceptable
2,4,6-Tribromophenol	89	23-113	04/15/05	Acceptable
Terphenyl-d14	112	39-124	04/15/05	Acceptable

† Analyte Comments

4-Methylphenol	This analyte cannot be separated from 3-Methylphenol.

Comments:

Exception Report

Data File: J:\MS10\DATA\041505\0415F006.D
Lab ID: K2502554-001
RunType: SMPL
Matrix: SOIL

Date Acquired: 04/15/2005 13:40
Date Quantitated: 04/18/2005 10:52
Batch ID: KWG0506208
Analysis Method: 8270C
ListJoinID: LJ5440

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Tune Window	NA	NA	NA	x	
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Pass/Fail	NA	NA	NA	x	
ICAL Average RSD	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Initial Calibration Minimum RF	NA	NA	NA	x	
Initial Calibration SPCC/CCC	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Minimum RF	NA	NA	NA	x	
Continuing Calibration SPCC/CCC	NA	NA	NA	x	
Method Blank	NA	NA	NA		x
MB Surrogate Recovery	NA	NA	NA		x
Lab Control Spike	NA	NA	NA	x	
Duplicate Lab Control Spike	NA	NA	NA	x	
Internal Standards	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Relative Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Method Blank	Di-n-butyl Phthalate	8.20	NA	10	B flag
MB Surrogate Recovery	Terphenyl-d14	125	39	124	SURMBHIGH

Primary Review: A 4/18/05

Secondary Review: CO 4/19/05

Quantitation Report

Bottle ID:		**Tier:**	V	**Matrix:**	SOIL
Prod Code:	8270-LL	**Collect Date:**	04/07/2005	**Receive Date:**	04/08/2005

Analysis Lot:	KWG0506208	**Prep Lot:**	KWG0505755	**Report Group:**	K2502554
Analysis Method:	8270C	**Prep Method:**	EPA 3541		
Prep Ref:	373958	**Prep Date:**	04/11/2005		

Quant Method:	J:\MS10\METHODS\BNA\0412BNLL.M	**Calibration ID:**	CAL4375
Title:	Semi-Volatile Organic Compounds by GC/MS	**Report List ID:**	LJ5440
Tune Ref:	J:\MS10\DATA\041505\0415T001.D	**Method ID:**	MJ142
MB Ref:	J:\MS10\DATA\041505\0415F003.D	**Quant based on Report List**	

Data File:	J:\MS10\DATA\041505\0415F006.D			**Instrument:**	MS10
Acqu Date:	04/15/2005 13:40	**Quant Date:**	04/18/2005 10:52	**Vial:**	6
Run Type:	SMPL			**Dilution:**	1.0
Lab ID:	K2502554-001			**Soln Conc. Units:**	ng/ml

Internal Standard Compounds

IS Ref	Parameter Name	RT	RT Dev	Quant Mass	Response	Solution Conc	Area Criteria
1	1,4-Dichlorobenzene-d4	8.61	-0.01	152	68493	1,000.00	OK
2	Naphthalene-d8	10.54	-0.01	136	222203	1,000.00	OK
3	Acenaphthene-d10	13.37	0.00	164	108397	1,000.00	OK
4	Phenanthrene-d10	15.78	-0.01	188	175926	1,000.00	OK
5	Chrysene-d12	20.23	-0.01	240	125528	1,000.00	OK
6	Perylene-d12	24.15	-0.02	264	100858	1,000.00	OK

Surrogate Compounds

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	%Rec	%Rec Limits	Rpt?
1	2-Fluorophenol	6.84	0.00	0.00	112	175015	2,325	62	11-87 OK	
1	Phenol-d6	8.14	-0.02	0.00	99	258053	2,834	76	20-99 OK	
1	Nitrobenzene-d5	9.44	-0.02	0.00	82	161150	1,758	70	10-99 OK	
3	2-Fluorobiphenyl	12.30	-0.01	0.00	172	253387	1,800	72	10-104 OK	
4	2,4,6-Tribromophenol	14.67	-0.01	0.00	330	71760	3,356	89	23-113 OK	
5	Terphenyl-d14	18.43	-0.01	0.00	244	322923	2,790	112	39-124 OK	

Target Compounds

Final Conc. Units: ug/Kg Dry Weight

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	QuantMass	Response	Solution Conc	Final Conc	Q	Rpt?
1	Benzaldehyde	7.99		0.00	106	5374	86.23	13	U	
1	Bis(2-chloroethyl) Ether				93	0d		3.5	U	
1	Phenol	8.16	-0.03	0.00	94	5414	58.58	4.2	J	
1	2-Chlorophenol				128	0		2.5	U	
1	Bis(2-chloroisopropyl) Ether				45	0d		1.8	U	
1	2-Methylphenol				107	0		5.0	U	
1	Acetophenone	9.24	0.01	0.00	105	14931	133.23	18	U	
1	Hexachloroethane				117	0		3.2	U	
1	N-Nitrosodi-n-propylamine				70	0d		4.7	U	
1	4-Methylphenol				107	0		4.2	U	

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File:	J:\MS10\DATA\041505\0415F006.D			**Instrument:**	MS10
Acqu Date:	04/15/2005 13:40	**Quant Date:**	04/18/2005 10:52	**Vial:**	6
Run Type:	SMPL			**Dilution:**	1.0
Lab ID:	K2502554-001			**Soln Conc. Units:**	ng/ml

Target Compounds **Final Conc. Units:** ug/Kg Dry Weight

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	QuantMass	Response	Solution Conc	Final Conc	Q	Rpt?
1	Nitrobenzene				77	0d		2.9	U	
2	Isophorone				82	0d		2.4	U	
2	2-Nitrophenol				139	0		3.8	U	
2	2,4-Dimethylphenol				122	0		8.0	U	
2	Bis(2-chloroethoxy)methane				93	0		1.9	U	
2	2,4-Dichlorophenol				162	0		2.7	U	
2	Naphthalene	10.58	-0.01	0.00	128	2712	12.48	1.9	U	
2	4-Chloroaniline				127	0d		3.1	U	
2	Hexachlorobutadiene				225	0		2.1	U	
2	Caprolactam				55	0d		18	U	
2	4-Chloro-3-methylphenol				107	0d		3.1	U	
2	2-Methylnaphthalene	11.69	-0.02	0.00	141	835	6.55	1.8	U	
3	1,2,4,5-Tetrachlorobenzene				216	0		7.1	U	
3	Hexachlorocyclopentadiene				237	0		22	U	
3	2,4,6-Trichlorophenol				196	0d		2.7	U	
3	2,4,5-Trichlorophenol	12.24	-0.02	0.00	196	1023	21.74	4.4	U	
3	Biphenyl	12.46		0.00	154	1204	7.59	7.0	U	
3	2-Chloronaphthalene				127	0		5.3	U	
3	2-Nitroaniline				65	0d		4.0	U	
3	Acenaphthylene				152	0d		2.1	U	
3	Dimethyl Phthalate				163	0d		2.7	U	
3	2,6-Dinitrotoluene				165	0d		4.1	U	
3	Acenaphthene	13.42	-0.02	0.00	154	533	4.73	1.5	U	
3	3-Nitroaniline				138	0		3.8	U	
3	2,4-Dinitrophenol				184	0		53	U	
3	Dibenzofuran				168	0d		1.9	U	
3	4-Nitrophenol				109	0d		44	U	
3	2,4-Dinitrotoluene				165	0		4.1	U	
3	Fluorene	14.26	-0.03	0.00	166	955	7.14	2.5	U	
3	4-Chlorophenyl Phenyl Ether				204	0		2.9	U	
3	Diethyl Phthalate	14.15	-0.01	0.00	149	3355	23.02	5.1	U	
3	4-Nitroaniline				138	0		5.0	U	
3	2-Methyl-4,6-dinitrophenol				198	0		2.5	U	
3	N-Nitrosodiphenylamine				169	0		3.2	U	
4	4-Bromophenyl Phenyl Ether				248	0		2.1	U	
4	Hexachlorobenzene				284	0		3.1	U	
4	Atrazine				200	0		3.2	U	
4	Pentachlorophenol				266	0		13	U	
4	Phenanthrene	15.82	-0.02	0.00	178	4343	21.21	1.9	U	
4	Anthracene	15.91	-0.01	0.00	178	1596	7.77	2.1	U	
4	Carbazole				167	0d		1.9	U	
4	Di-n-butyl Phthalate	16.83		0.00	149	57274	233.54	17	B	

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E: Analyte concentration above high point of ICAL
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D: Result from dilution
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d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File:	J:\MS10\DATA\041505\0415F006.D			**Instrument:**	MS10
Acqu Date:	04/15/2005 13:40	**Quant Date:**	04/18/2005 10:52	**Vial:**	6
Run Type:	SMPL			**Dilution:**	1.0
Lab ID:	K2502554-001			**Soln Conc. Units:**	ng/ml

Target Compounds **Final Conc. Units:** ug/Kg Dry Weight

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	QuantMass	Response	Solution Conc	Final Conc	Q	Rpt?
4	Fluoranthene	17.77		0.00	202	6162	28.78	3.2	U	
5	Pyrene	18.13	-0.01	0.00	202	5697	29.24	2.1	J	
5	Butyl Benzyl Phthalate				149	0d		2.2	U	
5	3,3'-Dichlorobenzidine				252	0		5.4	U	
5	Benz(a)anthracene	20.21	-0.03	0.00	228	6277	38.40	2.8	J	
5	Chrysene	20.28	-0.04	0.00	228	7460	51.14	3.7	J	
5	Bis(2-ethylhexyl) Phthalate	20.42	-0.01	0.00	149	74823	618.60	45	J	
6	Di-n-octyl Phthalate				149	0d		1.8	U	
6	Benzo(b)fluoranthene	22.99	-0.05	0.00	252	12876	90.23	6.5	J	
6	Benzo(k)fluoranthene	23.08	-0.05	0.00	252	4524	31.74	3.7	U	
6	Benzo(a)pyrene	23.97	-0.05	0.00	252	3891	28.10	2.4	U	
6	Indeno(1,2,3-cd)pyrene	26.79	-0.06	0.00	276	4514	38.39	2.8	U	
6	Dibenz(a,h)anthracene				278	0d		3.2	U	
6	Benzo(g,h,i)perylene	27.33	-0.05	0.00	276	8575	71.89	5.2	J	

Prep Amount:	40.09 g	**Dilution:**	1.0
Prep Final Vol:	2 ml	**Unit Factor:**	1
Solids:	69.1 %		

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / (Prep Amount x Solids)) x Unit Factor

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Quantitation Report (QT Reviewed)

Data File : J:\MS10\DATA\041505\0415F006.D Vial: 6
Acq On : 15 Apr 2005 1:40 pm Operator: JGISH
Sample : K2502554-001 Inst : MS10
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 18 10:25:50 2005 Quant Results File: 0412BNLL.RES

Quant Method : J:\MS10\METHODS\BNA\0412BNLL.M (RTE Integrator)
Title : 8270LL ICAL
Last Update : Mon Apr 18 10:24:44 2005
Response via : Initial Calibration
DataAcq Meth : BNALL

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	8.61	152	68493	1000.00	ng/ml	0.00
23) Naphthalene-d8	10.54	136	222203	1000.00	ng/ml	-0.02
37) Acenaphthene-d10	13.37	164	108397	1000.00	ng/ml	0.00
63) Phenanthrene-d10	15.78	188	175926	1000.00	ng/ml	-0.02
74) Chrysene-d12	20.23	240	125528	1000.00	ng/ml	-0.03
83) Perylene-d12	24.15	264	100858	1000.00	ng/ml	-0.02

System Monitoring Compounds						
4) 2-Fluorophenol	6.84	112	175015	2324.57	ng/ml	0.00
Spiked Amount 3750.000	Range 38 - 110		Recovery = 61.99%			
7) Phenol-d6	8.14	99	258053	2833.57	ng/ml	-0.02
Spiked Amount 3750.000	Range 43 - 128		Recovery = 75.56%			
21) Nitrobenzene-d5	9.44	82	161150	1757.95	ng/ml	-0.02
Spiked Amount 2500.000	Range 30 - 139		Recovery = 70.32%			
42) 2-Fluorobiphenyl	12.30	172	253387	1800.25	ng/ml	0.00
Spiked Amount 2500.000	Range 37 - 126		Recovery = 72.01%			
64) 2,4,6-Tribromophenol	14.67	330	71760	3355.69	ng/ml	-0.02
Spiked Amount 3750.000	Range 38 - 157		Recovery = 89.49%			
77) Terphenyl-d14	18.43	244	322923	2789.93	ng/ml	0.00
Spiked Amount 2500.000	Range 54 - 158		Recovery = 111.60%			

Target Compounds						Qvalue
5) Benzaldehyde	7.99	106	5374	86.23	ng/ml	90
8) Phenol	8.16	94	5414	58.58	ng/ml#	1
17) Acetophenone	9.24	105	14931	133.23	ng/ml	94
29) Benzoic Acid	10.25	122	3891	147.59	ng/ml	91
31) Naphthalene	10.58	128	2712	12.48	ng/ml	95
36) 2-Methylnaphthalene	11.69	141	835	6.55	ng/ml	84
41) 2,4,5-Trichlorophenol	12.24	196	1023	21.74	ng/ml	99
43) Biphenyl	12.46	154	1204	7.59	ng/ml	93
49) Acenaphthene	13.42	154	533	4.73	ng/ml	91
56) Fluorene	14.26	166	955	7.14	ng/ml	93
58) Diethyl Phthalate	14.15	149	3355	23.02	ng/ml	96
69) Phenanthrene	15.82	178	4343	21.21	ng/ml	97
70) Anthracene	15.91	178	1596	7.77	ng/ml	97
72) Di-n-butyl Phthalate	16.83	149	57274	233.54	ng/ml	100
73) Fluoranthene	17.77	202	6162	28.78	ng/ml	93
76) Pyrene	18.13	202	5697	29.24	ng/ml	92
80) Benz(a)anthracene	20.21	228	6277	38.40	ng/ml	94
81) Chrysene	20.28	228	7460	51.14	ng/ml	98
82) Bis(2-ethylhexyl) Phthalat	20.42	149	74823	618.60	ng/ml	99
85) Benzo(b)fluoranthene	22.99	252	12876	90.23	ng/ml	98

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : J:\MS10\DATA\041505\0415F006.D Vial: 6
Acq On : 15 Apr 2005 1:40 pm Operator: JGISH
Sample : K2502554-001 Inst : MS10
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 18 10:25:50 2005 Quant Results File: 0412BNLL.RES

Quant Method : J:\MS10\METHODS\BNA\0412BNLL.M (RTE Integrator)
Title : 8270LL ICAL
Last Update : Mon Apr 18 10:24:44 2005
Response via : Initial Calibration
DataAcq Meth : BNALL

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
86)	Benzo(k)fluoranthene	23.08	252	4524	31.74	ng/ml	89
87)	Benzo(a)pyrene	23.97	252	3891	28.10	ng/ml	90
88)	Indeno(1,2,3-cd)pyrene	26.79	276	4514	38.39	ng/ml	95
90)	Benzo(g,h,i)perylene	27.33	276	8575	71.89	ng/ml	96

(#) = qualifier out of range (m) = manual integration

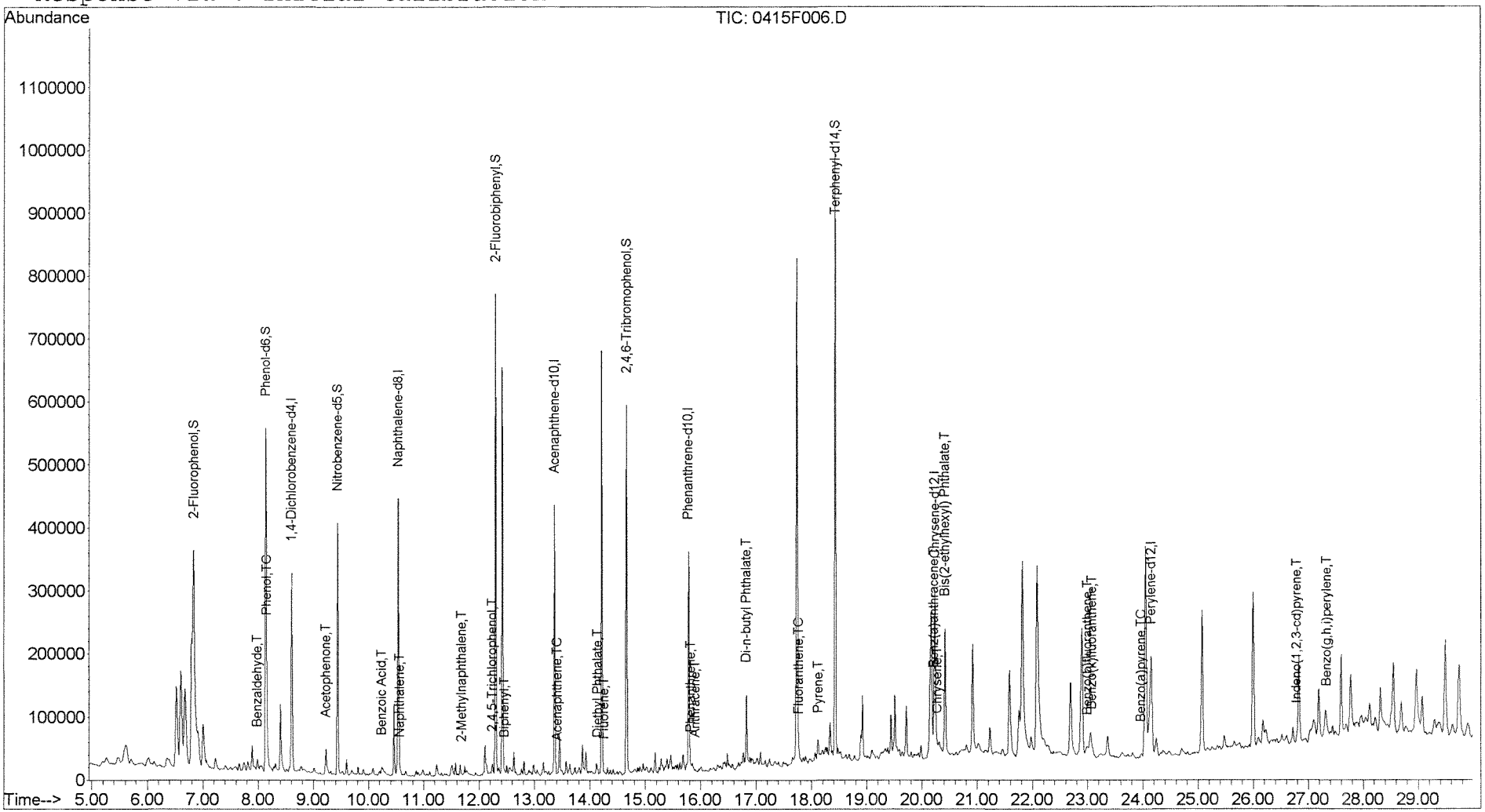
Quantitation Report (QT Reviewed)

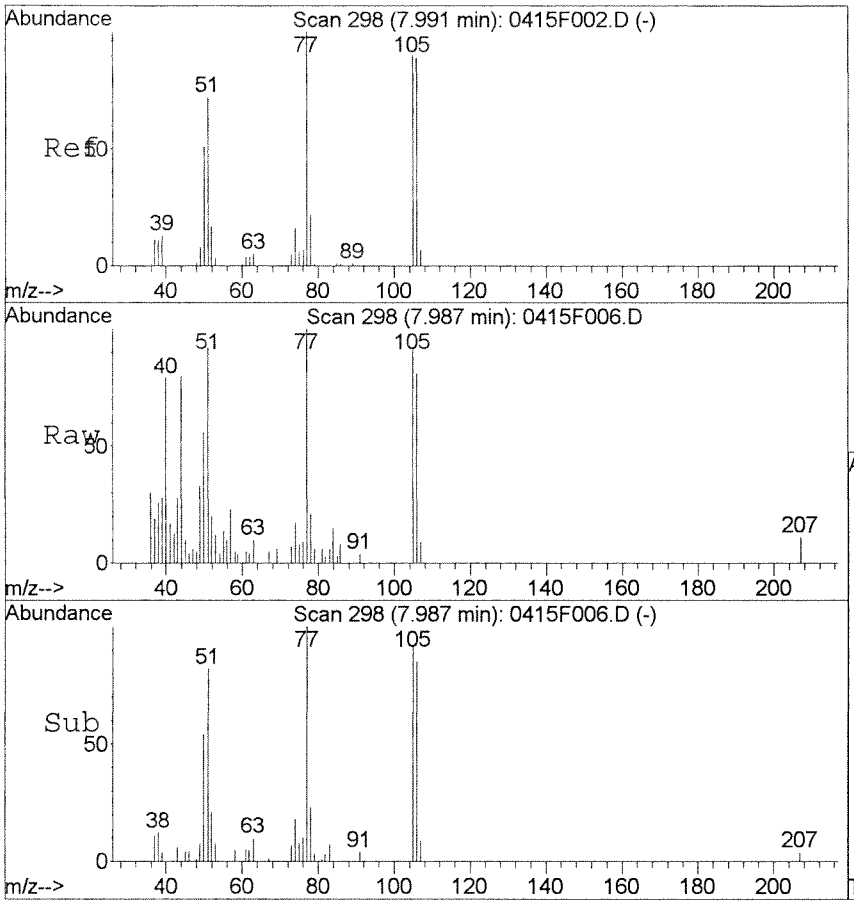
Data File : J:\MS10\DATA\041505\0415F006.D
Acq On : 15 Apr 2005 1:40 pm
Sample : K2502554-001
Misc :
MS Integration Params: RTEINT.P
Quant Time: Apr 18 10:52 2005

Vial: 6
Operator: JGISH
Inst : MS10
Multiplr: 1.00

Quant Results File: 0412BNLL.RES

Method : J:\MS10\METHODS\BNA\0412BNLL.M (RTE Integrator)
Title : 8270LL ICAL
Last Update : Mon Apr 18 10:24:44 2005
Response via : Initial Calibration

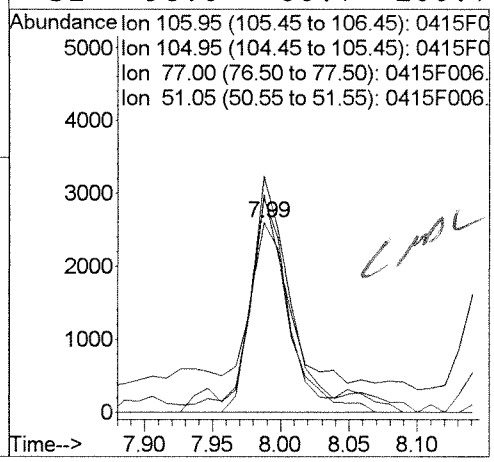


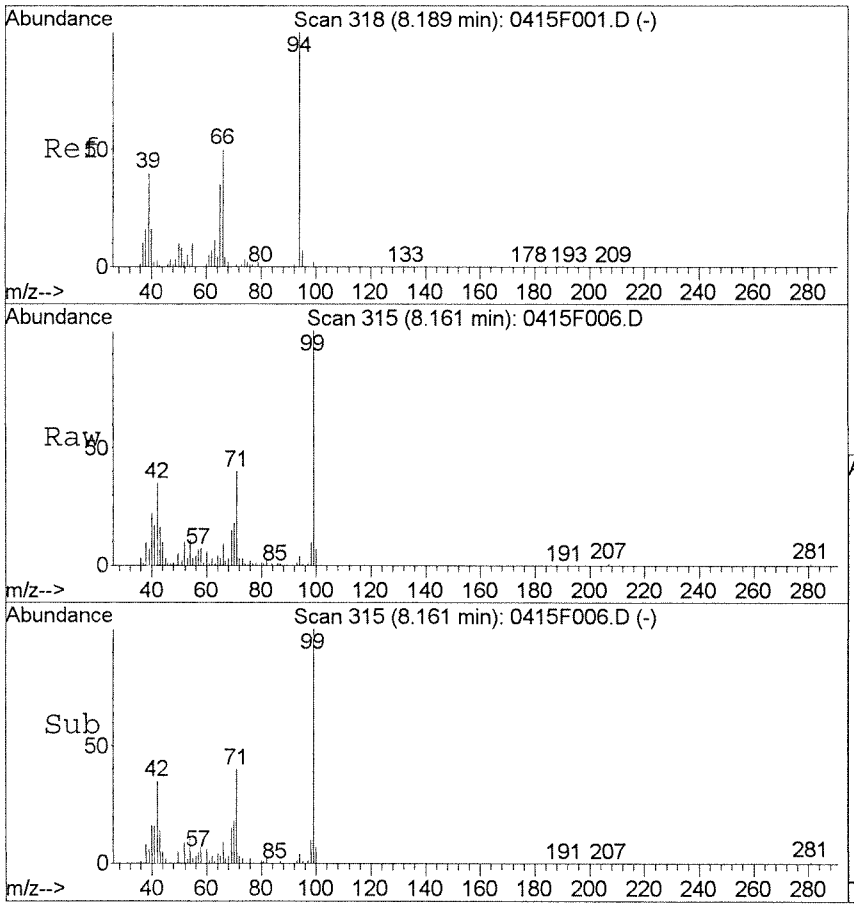


#5
Benzaldehyde
Concen: 86.23 ng/ml
RT: 7.99 min Scan# 298
Delta R.T. -0.00 min
Lab File: 0415F006.D
Acq: 15 Apr 2005 1:40 pm

Tgt Ion:106 Resp: 5374

Ion	Ratio	Lower	Upper
106	100		
105	108.1	81.1	121.1
77	118.6	92.4	132.4
51	98.0	60.7	100.7

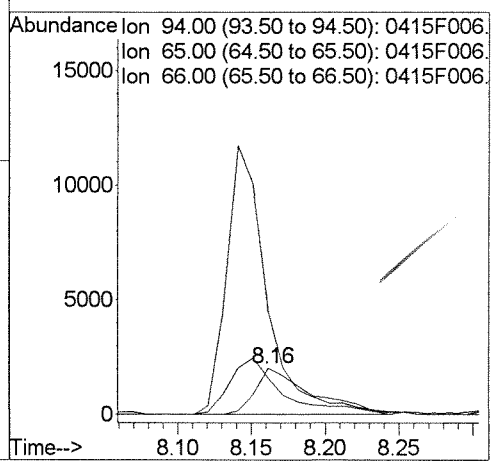


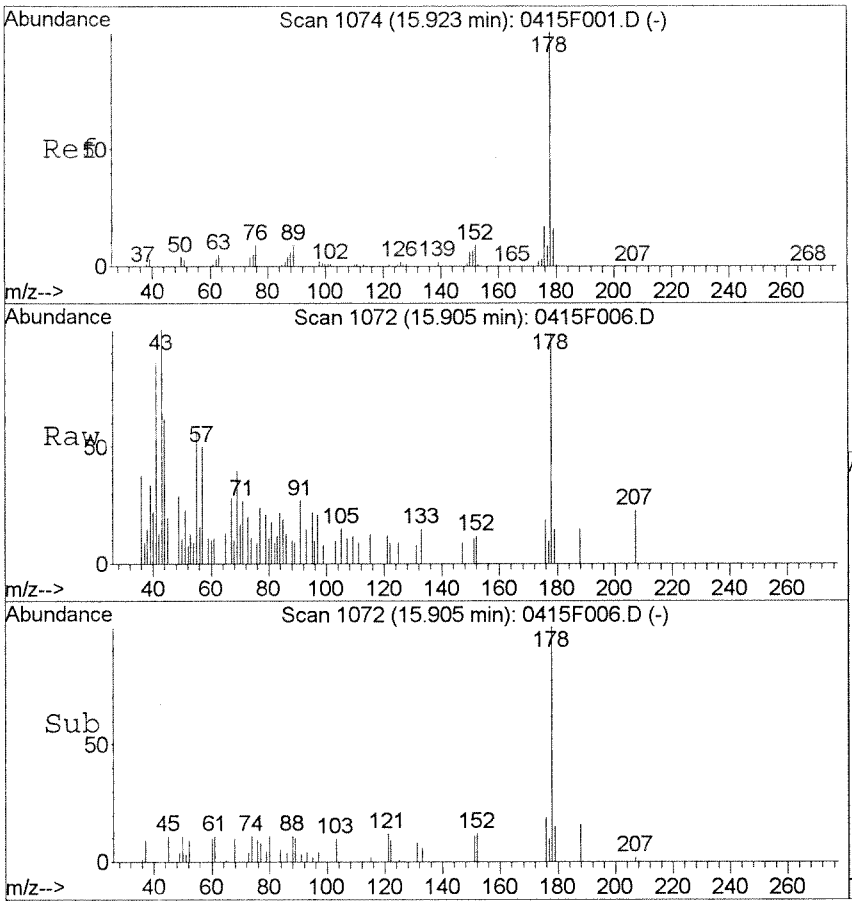


#8
Phenol
Concen: 58.58 ng/ml
RT: 8.16 min Scan# 315
Delta R.T. -0.03 min
Lab File: 0415F006.D
Acq: 15 Apr 2005 1:40 pm

Tgt Ion: 94 Resp: 5414

Ion	Ratio	Lower	Upper
94	100		
65	73.1	4.6	64.6#
66	215.7	20.3	80.3#

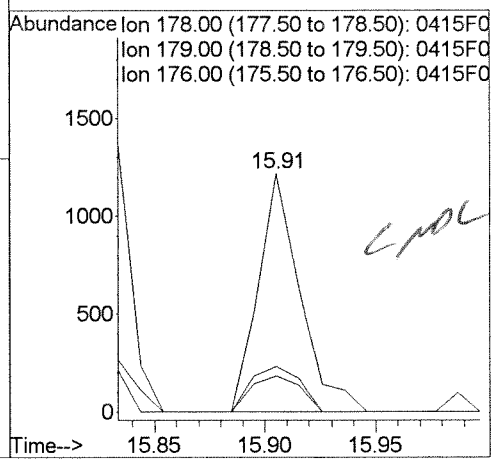


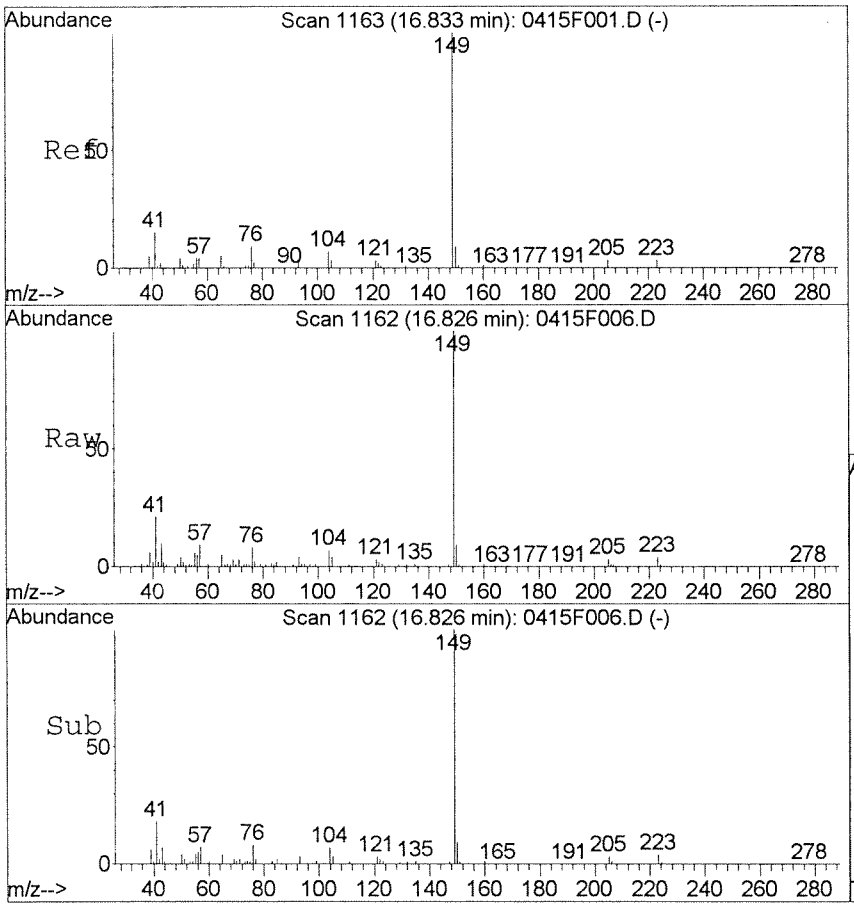


#70
Anthracene
Concen: 7.77 ng/ml
RT: 15.91 min Scan# 1072
Delta R.T. -0.02 min
Lab File: 0415F006.D
Acq: 15 Apr 2005 1:40 pm

Tgt Ion:178 Resp: 1596

Ion	Ratio	Lower	Upper
178	100		
179	15.2	0.0	45.6
176	19.1	0.0	47.4

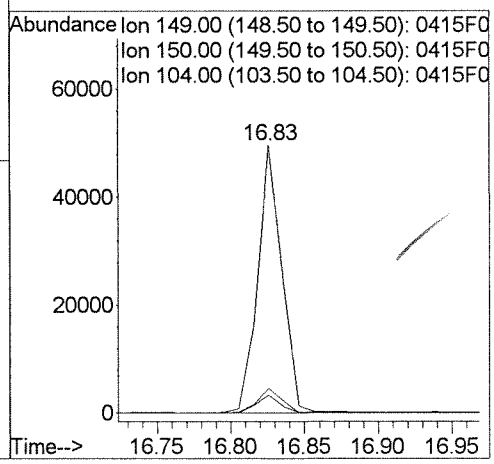


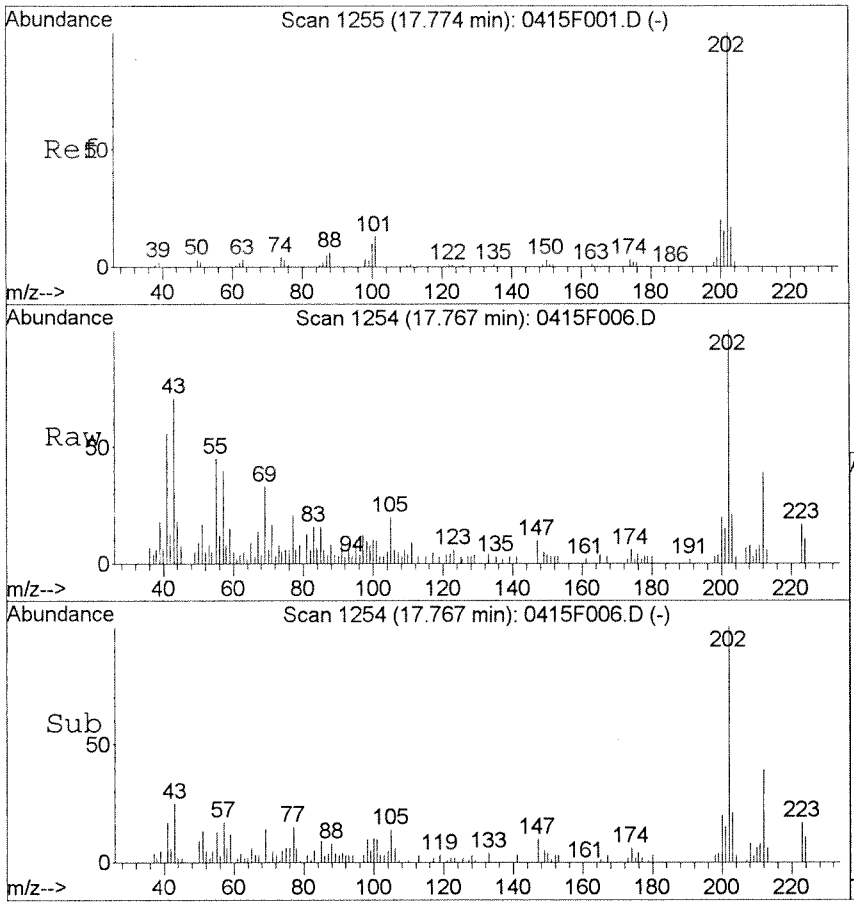


#72
Di-n-butyl Phthalate
Concen: 233.54 ng/ml
RT: 16.83 min Scan# 1162
Delta R.T. -0.01 min
Lab File: 0415F006.D
Acq: 15 Apr 2005 1:40 pm

Tgt Ion:149 Resp: 57274

Ion	Ratio	Lower	Upper
149	100		
150	9.3	0.0	39.4
104	6.8	0.0	37.0

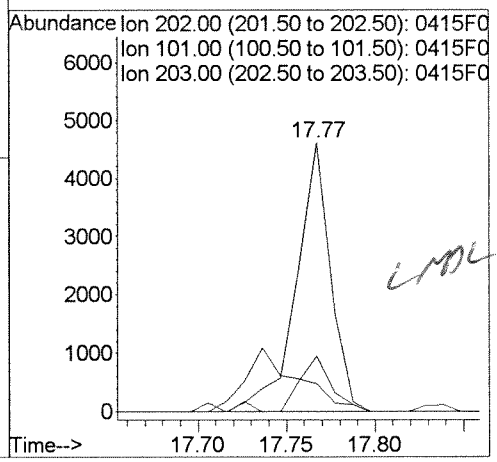


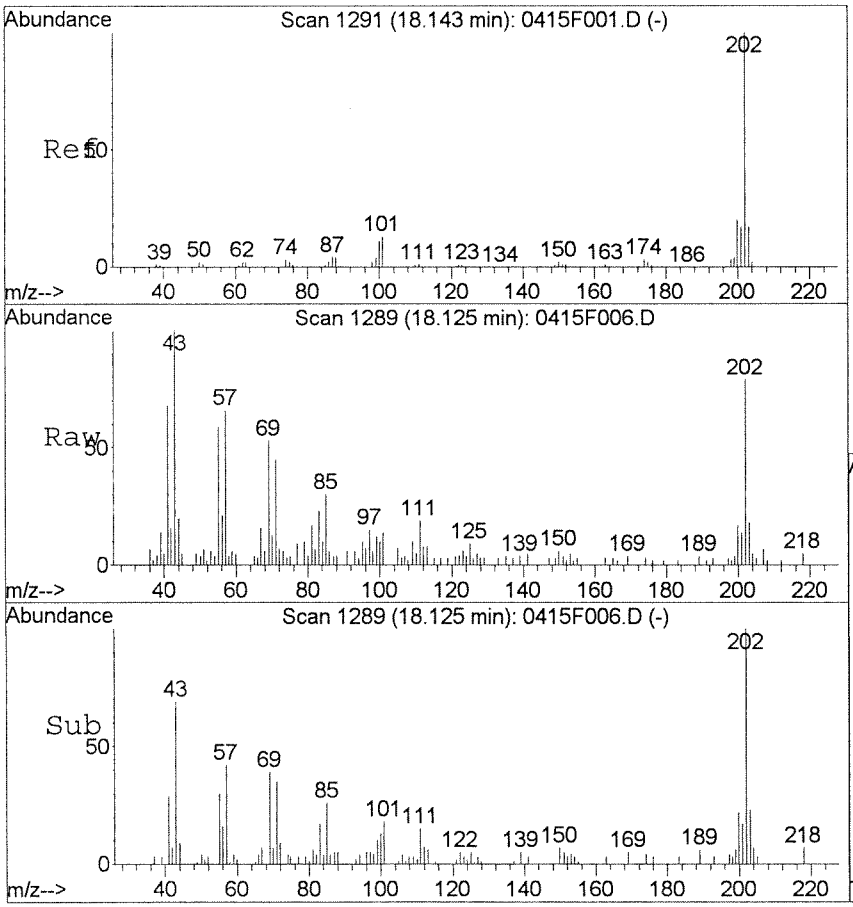


#73
Fluoranthene
Concen: 28.78 ng/ml
RT: 17.77 min Scan# 1254
Delta R.T. -0.01 min
Lab File: 0415F006.D
Acq: 15 Apr 2005 1:40 pm

Tgt Ion:202 Resp: 6162

Ion	Ratio	Lower	Upper
202	100		
101	10.4	0.0	42.6
203	20.7	0.0	47.4

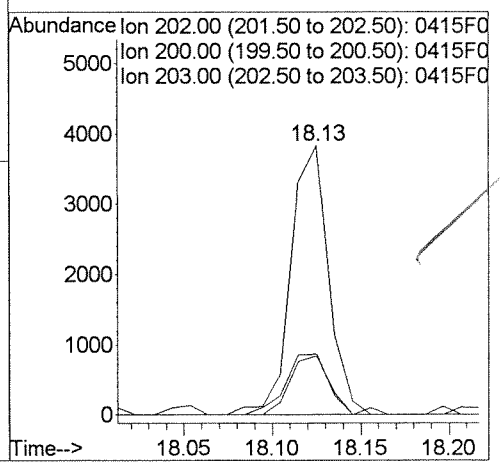


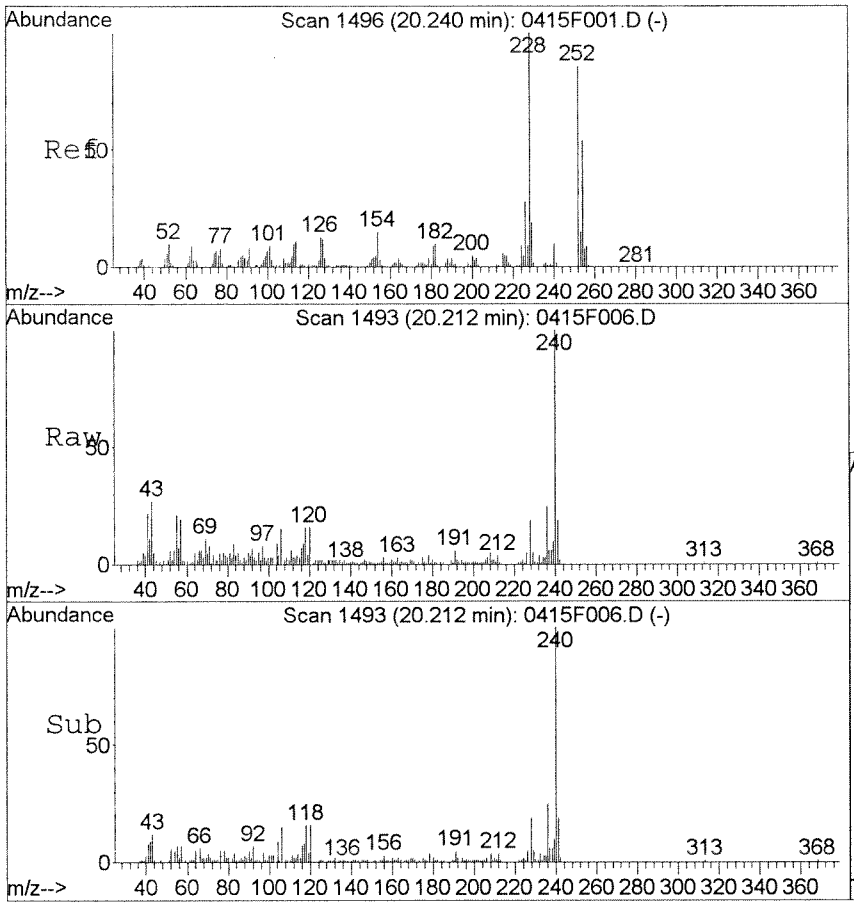


#76
Pyrene
Concen: 29.24 ng/ml
RT: 18.13 min Scan# 1289
Delta R.T. -0.02 min
Lab File: 0415F006.D
Acq: 15 Apr 2005 1:40 pm

Tgt Ion:202 Resp: 5697

Ion	Ratio	Lower	Upper
202	100		
200	21.9	0.0	50.4
203	22.7	0.0	47.1

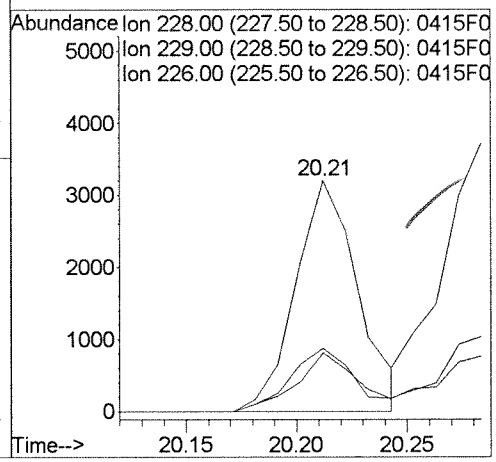


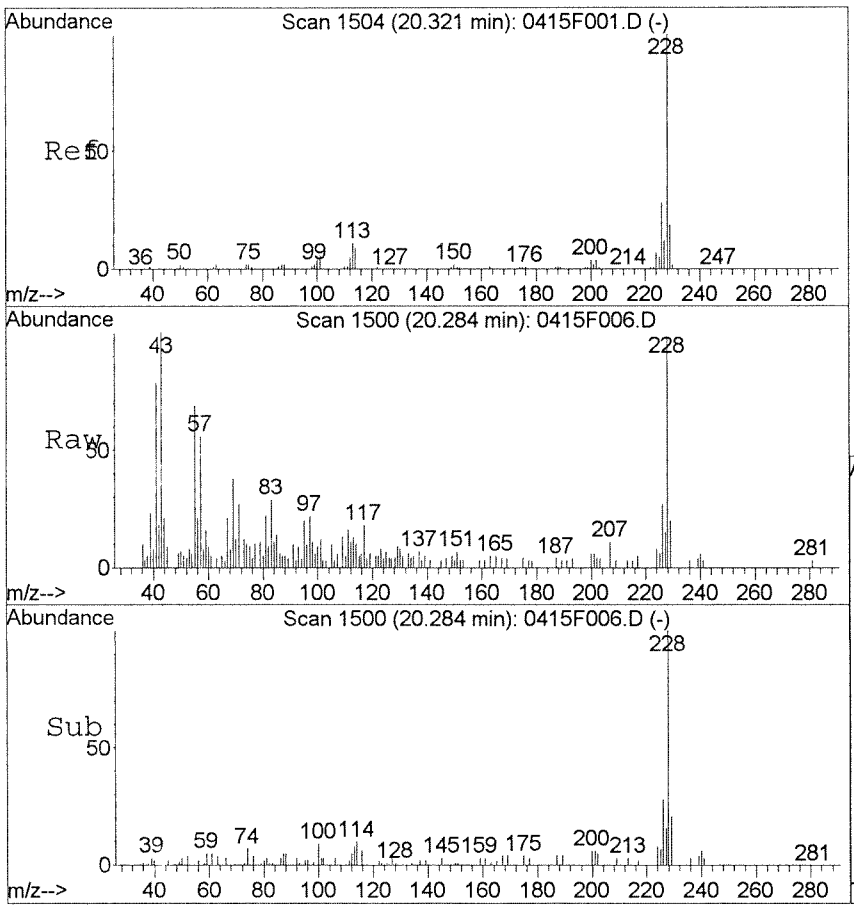


#80
Benz(a)anthracene
Concen: 38.40 ng/ml
RT: 20.21 min Scan# 1493
Delta R.T. -0.03 min
Lab File: 0415F006.D
Acq: 15 Apr 2005 1:40 pm

Tgt Ion:228 Resp: 6277

Ion	Ratio	Lower	Upper
228	100		
229	25.5	0.0	49.4
226	27.3	0.0	57.8

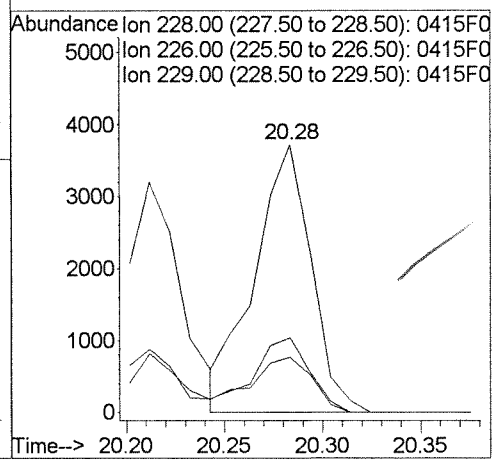


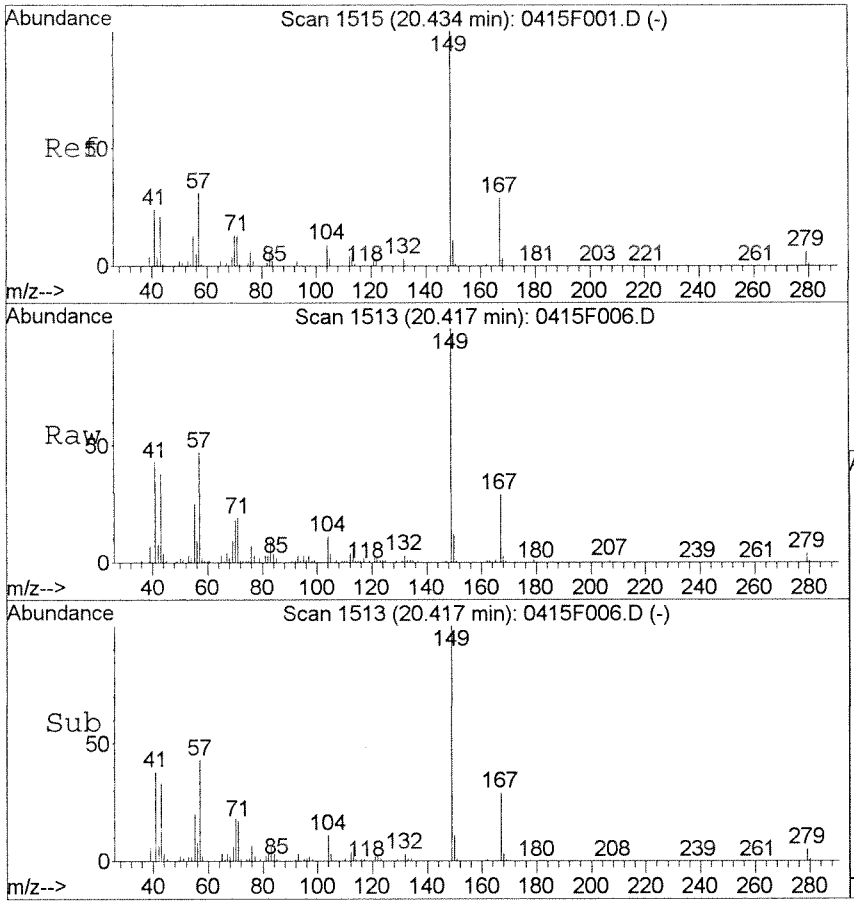


#81
Chrysene
Concen: 51.14 ng/ml
RT: 20.28 min Scan# 1500
Delta R.T. -0.04 min
Lab File: 0415F006.D
Acq: 15 Apr 2005 1:40 pm

Tgt Ion:228 Resp: 7460

Ion	Ratio	Lower	Upper
228	100		
226	27.9	0.0	58.2
229	20.6	0.0	49.1

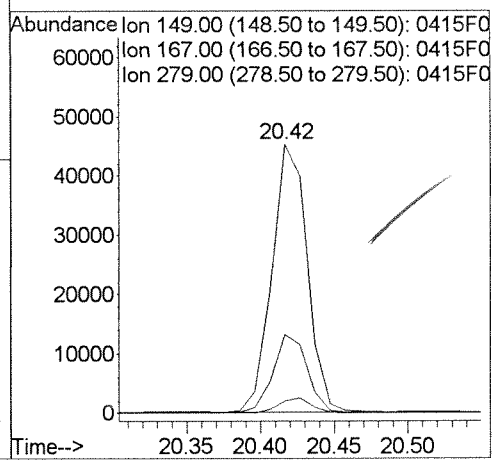


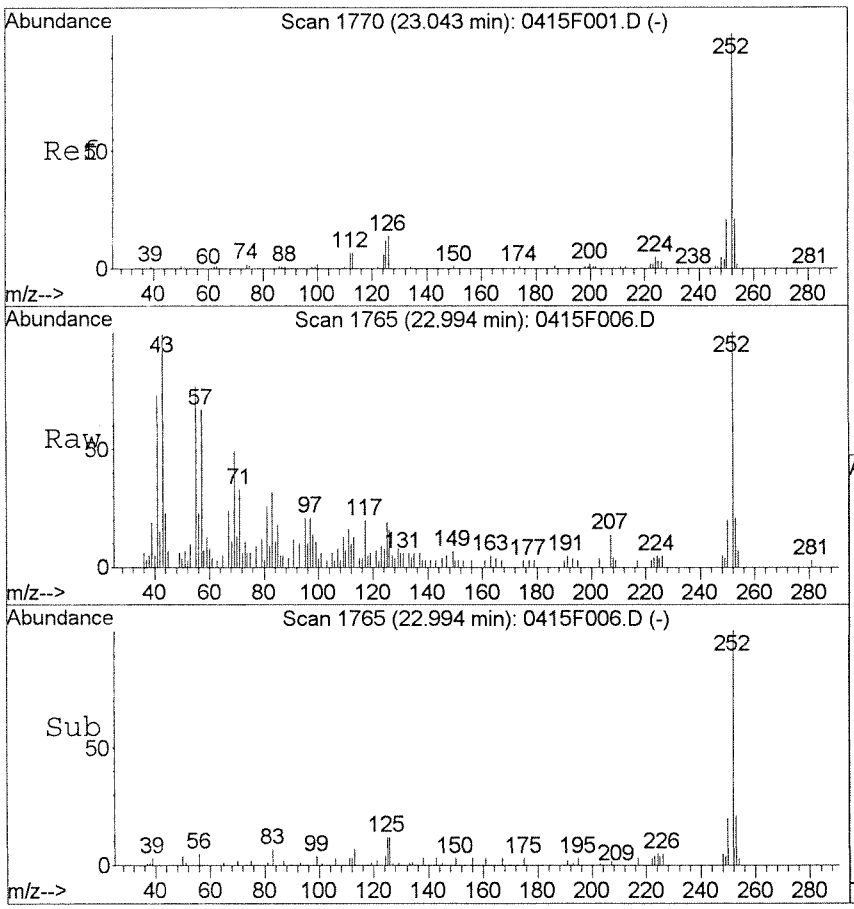


#82
Bis(2-ethylhexyl) Phthalate
Concen: 618.60 ng/ml
RT: 20.42 min Scan# 1513
Delta R.T. -0.02 min
Lab File: 0415F006.D
Acq: 15 Apr 2005 1:40 pm

Tgt Ion:149 Resp: 74823

Ion	Ratio	Lower	Upper
149	100		
167	29.1	0.0	59.5
279	4.5	0.0	36.1

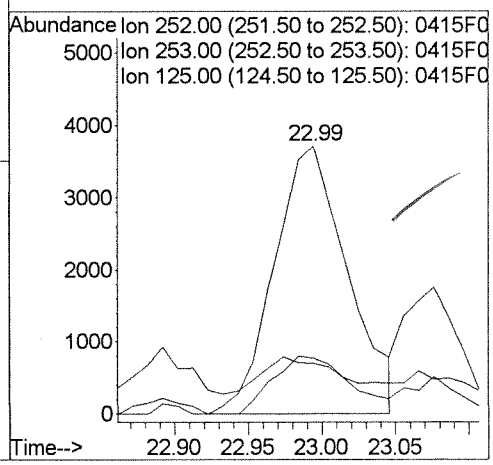


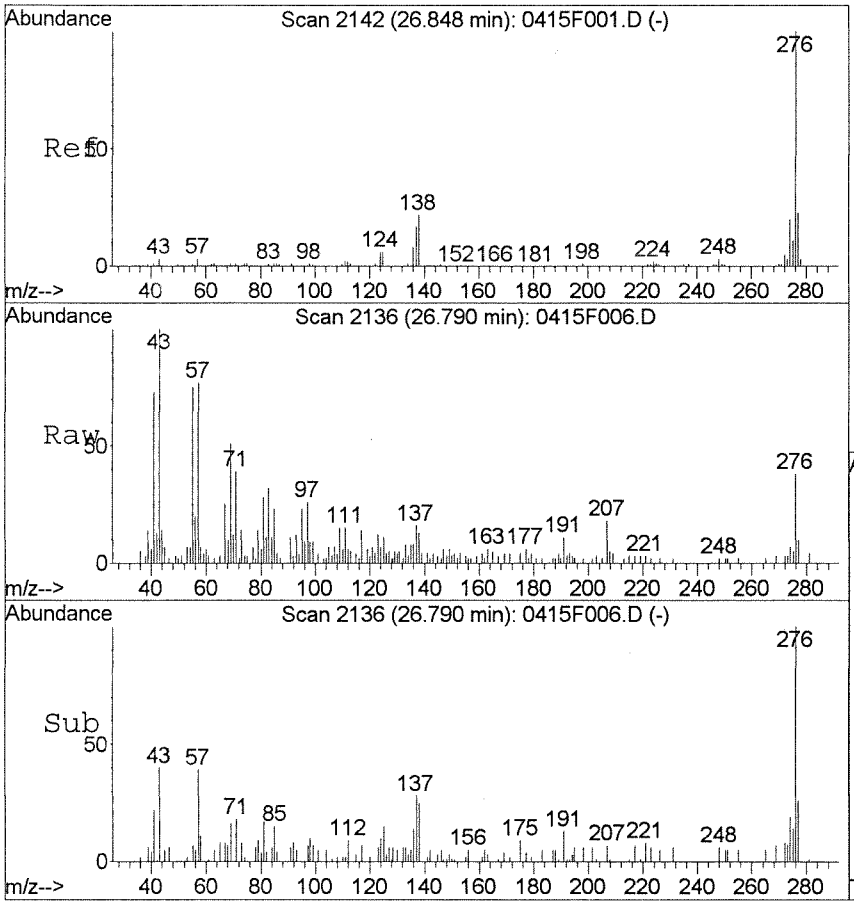


#85
Benzo(b)fluoranthene
Concen: 90.23 ng/ml
RT: 22.99 min Scan# 1765
Delta R.T. -0.05 min
Lab File: 0415F006.D
Acq: 15 Apr 2005 1:40 pm

Tgt Ion:252 Resp: 12876

Ion	Ratio	Lower	Upper
252	100		
253	20.8	0.0	51.3
125	9.8	0.0	41.7

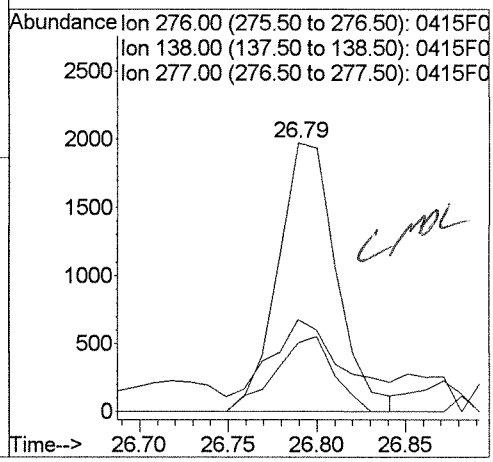


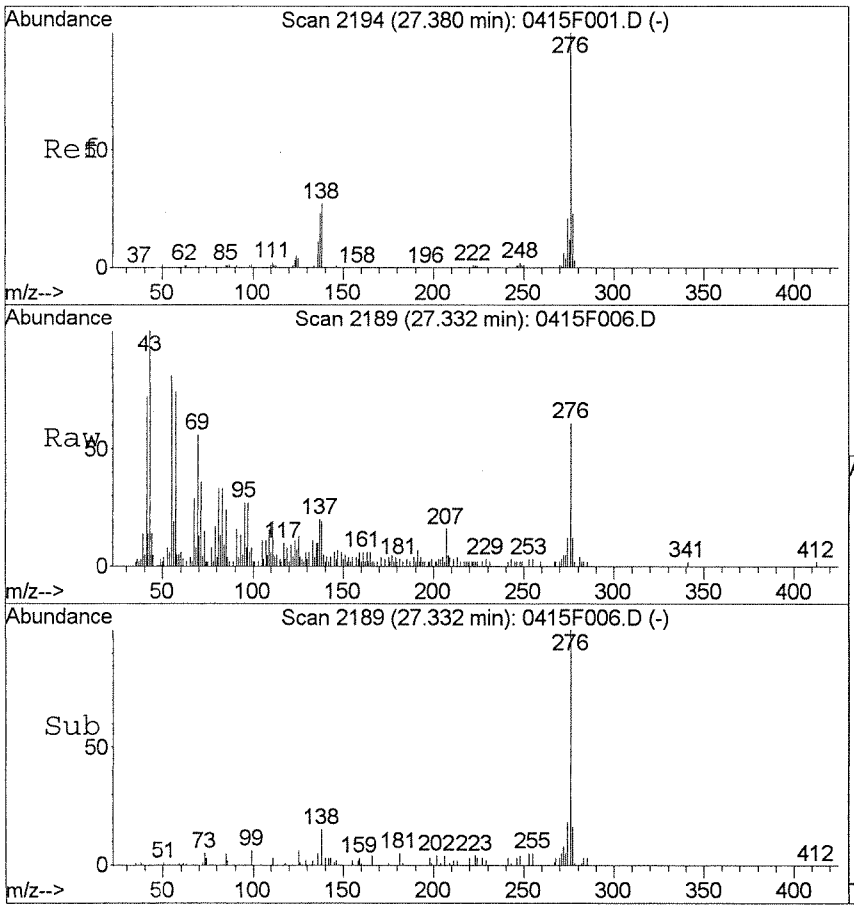


#88
Indeno(1,2,3-cd)pyrene
Concen: 38.39 ng/ml
RT: 26.79 min Scan# 2136
Delta R.T. -0.06 min
Lab File: 0415F006.D
Acq: 15 Apr 2005 1:40 pm

Tgt Ion:276 Resp: 4514

Ion	Ratio	Lower	Upper
276	100		
138	24.5	0.0	52.0
277	25.5	0.0	53.3

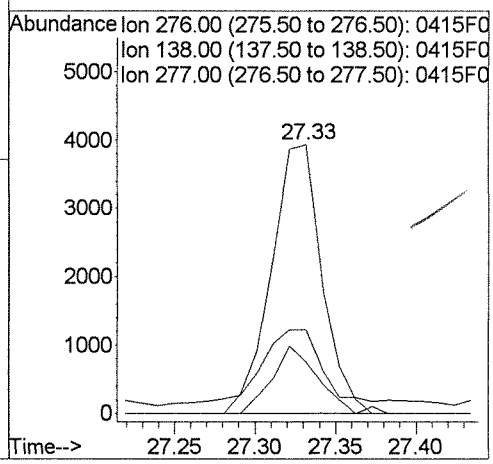




#90
Benzo(g,h,i)perylene
Concen: 71.89 ng/ml
RT: 27.33 min Scan# 2189
Delta R.T. -0.05 min
Lab File: 0415F006.D
Acq: 15 Apr 2005 1:40 pm

Tgt Ion:276 Resp: 8575

Ion	Ratio	Lower	Upper
276	100		
138	26.4	0.0	56.6
277	19.1	0.0	53.5



COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Battelle Memorial Institute	**Service Request:**	K2502554
Project:	Novato Ballfields/G486063	**Date Collected:**	NA
Sample Matrix:	Soil	**Date Received:**	NA

Semi-Volatile Organic Compounds by GC/MS

Sample Name:	Method Blank	**Units:**	ug/Kg
Lab Code:	KWG0505755-7	**Basis:**	Dry
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2,4,5-Tetrachlorobenzene	ND	U	5.0	4.9	1	04/11/05	04/15/05	KWG0505755	
Phenol	ND	U	15	1.9	1	04/11/05	04/15/05	KWG0505755	
Bis(2-chloroethyl) Ether	ND	U	5.0	2.4	1	04/11/05	04/15/05	KWG0505755	
2-Chlorophenol	ND	U	5.0	1.7	1	04/11/05	04/15/05	KWG0505755	
2-Methylphenol	ND	U	5.0	3.4	1	04/11/05	04/15/05	KWG0505755	
Bis(2-chloroisopropyl) Ether	ND	U	5.0	1.2	1	04/11/05	04/15/05	KWG0505755	
Acetophenone	ND	U	25	12	1	04/11/05	04/15/05	KWG0505755	
4-Methylphenol†	ND	U	5.0	2.9	1	04/11/05	04/15/05	KWG0505755	
N-Nitrosodi-n-propylamine	ND	U	5.0	3.2	1	04/11/05	04/15/05	KWG0505755	
Hexachloroethane	ND	U	5.0	2.2	1	04/11/05	04/15/05	KWG0505755	
Nitrobenzene	ND	U	5.0	2.0	1	04/11/05	04/15/05	KWG0505755	
Isophorone	ND	U	5.0	1.6	1	04/11/05	04/15/05	KWG0505755	
2-Nitrophenol	ND	U	5.0	2.6	1	04/11/05	04/15/05	KWG0505755	
2,4-Dimethylphenol	ND	U	25	5.5	1	04/11/05	04/15/05	KWG0505755	
Bis(2-chloroethoxy)methane	ND	U	5.0	1.3	1	04/11/05	04/15/05	KWG0505755	
2,4-Dichlorophenol	ND	U	5.0	1.8	1	04/11/05	04/15/05	KWG0505755	
Naphthalene	ND	U	5.0	1.3	1	04/11/05	04/15/05	KWG0505755	
4-Chloroaniline	ND	U	5.0	2.1	1	04/11/05	04/15/05	KWG0505755	
Hexachlorobutadiene	ND	U	5.0	1.4	1	04/11/05	04/15/05	KWG0505755	
Caprolactam	ND	U	12	12	1	04/11/05	04/15/05	KWG0505755	
Benzaldehyde	ND	U	10	8.8	1	04/11/05	04/15/05	KWG0505755	
4-Chloro-3-methylphenol	ND	U	5.0	2.1	1	04/11/05	04/15/05	KWG0505755	
2-Methylnaphthalene	ND	U	5.0	1.2	1	04/11/05	04/15/05	KWG0505755	
Hexachlorocyclopentadiene	ND	U	25	15	1	04/11/05	04/15/05	KWG0505755	
2,4,6-Trichlorophenol	ND	U	5.0	1.8	1	04/11/05	04/15/05	KWG0505755	
2,4,5-Trichlorophenol	ND	U	5.0	3.0	1	04/11/05	04/15/05	KWG0505755	
Biphenyl	ND	U	10	4.8	1	04/11/05	04/15/05	KWG0505755	
2-Chloronaphthalene	ND	U	5.0	3.6	1	04/11/05	04/15/05	KWG0505755	
2-Nitroaniline	ND	U	10	2.7	1	04/11/05	04/15/05	KWG0505755	
Dimethyl Phthalate	ND	U	5.0	1.8	1	04/11/05	04/15/05	KWG0505755	
2,6-Dinitrotoluene	ND	U	5.0	2.8	1	04/11/05	04/15/05	KWG0505755	
Acenaphthylene	ND	U	5.0	1.4	1	04/11/05	04/15/05	KWG0505755	
3-Nitroaniline	ND	U	10	2.6	1	04/11/05	04/15/05	KWG0505755	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Battelle Memorial Institute	**Service Request:**	K2502554
Project:	Novato Ballfields/G486063	**Date Collected:**	NA
Sample Matrix:	Soil	**Date Received:**	NA

Semi-Volatile Organic Compounds by GC/MS

Sample Name:	Method Blank	**Units:**	ug/Kg
Lab Code:	KWG0505755-7	**Basis:**	Dry
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Acenaphthene	ND	U	5.0	1.0	1	04/11/05	04/15/05	KWG0505755	
2,4-Dinitrophenol	ND	U	100	36	1	04/11/05	04/15/05	KWG0505755	
4-Nitrophenol	ND	U	50	30	1	04/11/05	04/15/05	KWG0505755	
Dibenzofuran	ND	U	5.0	1.3	1	04/11/05	04/15/05	KWG0505755	
2,4-Dinitrotoluene	ND	U	5.0	2.8	1	04/11/05	04/15/05	KWG0505755	
Diethyl Phthalate	ND	U	5.0	3.5	1	04/11/05	04/15/05	KWG0505755	
Fluorene	ND	U	5.0	1.7	1	04/11/05	04/15/05	KWG0505755	
4-Chlorophenyl Phenyl Ether	ND	U	5.0	2.0	1	04/11/05	04/15/05	KWG0505755	
4-Nitroaniline	ND	U	10	3.4	1	04/11/05	04/15/05	KWG0505755	
2-Methyl-4,6-dinitrophenol	ND	U	50	1.7	1	04/11/05	04/15/05	KWG0505755	
N-Nitrosodiphenylamine	ND	U	5.0	2.2	1	04/11/05	04/15/05	KWG0505755	
4-Bromophenyl Phenyl Ether	ND	U	5.0	1.4	1	04/11/05	04/15/05	KWG0505755	
Hexachlorobenzene	ND	U	5.0	2.1	1	04/11/05	04/15/05	KWG0505755	
Atrazine	ND	U	5.0	2.2	1	04/11/05	04/15/05	KWG0505755	
Pentachlorophenol	ND	U	50	8.5	1	04/11/05	04/15/05	KWG0505755	
Phenanthrene	ND	U	5.0	1.3	1	04/11/05	04/15/05	KWG0505755	
Anthracene	ND	U	5.0	1.4	1	04/11/05	04/15/05	KWG0505755	
Carbazole	ND	U	5.0	1.3	1	04/11/05	04/15/05	KWG0505755	
Di-n-butyl Phthalate	**8.2**		5.0	2.6	1	04/11/05	04/15/05	KWG0505755	
Fluoranthene	ND	U	5.0	2.2	1	04/11/05	04/15/05	KWG0505755	
Pyrene	ND	U	5.0	1.3	1	04/11/05	04/15/05	KWG0505755	
Butyl Benzyl Phthalate	ND	U	5.0	1.5	1	04/11/05	04/15/05	KWG0505755	
3,3'-Dichlorobenzidine	ND	U	50	3.7	1	04/11/05	04/15/05	KWG0505755	
Benz(a)anthracene	ND	U	5.0	1.4	1	04/11/05	04/15/05	KWG0505755	
Chrysene	ND	U	5.0	1.4	1	04/11/05	04/15/05	KWG0505755	
Bis(2-ethylhexyl) Phthalate	**7.7**	J	100	1.7	1	04/11/05	04/15/05	KWG0505755	
Di-n-octyl Phthalate	ND	U	5.0	1.2	1	04/11/05	04/15/05	KWG0505755	
Benzo(b)fluoranthene	ND	U	5.0	2.5	1	04/11/05	04/15/05	KWG0505755	
Benzo(k)fluoranthene	ND	U	5.0	2.5	1	04/11/05	04/15/05	KWG0505755	
Benzo(a)pyrene	ND	U	5.0	1.6	1	04/11/05	04/15/05	KWG0505755	
Indeno(1,2,3-cd)pyrene	ND	U	5.0	1.9	1	04/11/05	04/15/05	KWG0505755	
Dibenz(a,h)anthracene	ND	U	5.0	2.2	1	04/11/05	04/15/05	KWG0505755	
Benzo(g,h,i)perylene	ND	U	5.0	2.3	1	04/11/05	04/15/05	KWG0505755	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Battelle Memorial Institute	**Service Request:**	K2502554
Project:	Novato Ballfields/G486063	**Date Collected:**	NA
Sample Matrix:	Soil	**Date Received:**	NA

Semi-Volatile Organic Compounds by GC/MS

Sample Name:	Method Blank	**Units:**	ug/Kg
Lab Code:	KWG0505755-7	**Basis:**	Dry

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	68	11-87	04/15/05	Acceptable
Phenol-d6	79	20-99	04/15/05	Acceptable
Nitrobenzene-d5	81	10-99	04/15/05	Acceptable
2-Fluorobiphenyl	97	10-104	04/15/05	Acceptable
2,4,6-Tribromophenol	85	23-113	04/15/05	Acceptable
Terphenyl-d14	125	39-124	04/15/05	Outside Control Limits

† Analyte Comments

4-Methylphenol	This analyte cannot be separated from 3-Methylphenol.

Comments:

Exception Report

Data File: J:\MS10\DATA\041505\0415F003.D
Lab ID: KWG0505755-7
RunType: MB
Matrix: SOIL

Date Acquired: 04/15/2005 11:41
Date Quantitated: 04/18/2005 10:32
Batch ID: KWG0506208
Analysis Method: 8270C
MethodJoinID: MJ142

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Tune Window	NA	NA	NA	x	
Analytical Holding Time	NA	NA	NA	x	
ICAL Pass/Fail	NA	NA	NA	x	
ICAL Average RSD	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Initial Calibration Minimum RF	NA	NA	NA	x	
Initial Calibration SPCC/CCC	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Minimum RF	NA	NA	NA	x	
Continuing Calibration SPCC/CCC	NA	NA	NA	x	
Internal Standards	NA	NA	NA	x	
Surrogates	NA	NA	NA		x
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Relative Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

1K2502499
1K2502554

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Surrogates	Terphenyl-d14	125	39	124	SUR MBH 1GH

Primary Review: 4/18/05

Secondary Review: 4/19/05

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	SOIL
Prod Code:	8270-LL	**Collect Date:**		**Receive Date:**	04/12/2005

Analysis Lot:	KWG0506208	**Prep Lot:**	KWG0505755	**Report Group:**	
Analysis Method:	8270C	**Prep Method:**	EPA 3541		
Prep Ref:	373965	**Prep Date:**	04/11/2005		

Quant Method:	J:\MS10\METHODS\BNA\0412BNLL.M	**Calibration ID:**	CAL4375
Title:			
Tune Ref:	J:\MS10\DATA\041505\0415T001.D	**Method ID:**	MJ142
MB Ref:		**Quant based on Method**	

Data File:	J:\MS10\DATA\041505\0415F003.D			**Instrument:**	MS10
Acqu Date:	04/15/2005 11:41	**Quant Date:**	04/18/2005 10:32	**Vial:**	3
Run Type:	MB			**Dilution:**	1.0
Lab ID:	KWG0505755-7			**Soln Conc. Units:**	ng/ml

Internal Standard Compounds

IS Ref	Parameter Name	RT	RT Dev	Quant Mass	Response	Solution Conc	Area Criteria
1	1,4-Dichlorobenzene-d4	8.61	-0.01	152	66962	1,000.00	OK
2	Naphthalene-d8	10.54	-0.01	136	205309	1,000.00	OK
3	Acenaphthene-d10	13.37	0.00	164	99715	1,000.00	OK
4	Phenanthrene-d10	15.79	0.00	188	157563	1,000.00	OK
5	Chrysene-d12	20.23	-0.01	240	120134	1,000.00	OK
6	Perylene-d12	24.15	-0.02	264	84870	1,000.00	OK

Surrogate Compounds

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	%Rec	%Rec Limits	Rpt?
1	2-Fluorophenol	6.84	0.00	0.00	112	187412	2,546	68	11-87	OK
1	Phenol-d6	8.15	-0.01	0.00	99	263931	2,964	79	20-99	OK
1	Nitrobenzene-d5	9.45	-0.01	0.00	82	181128	2,021	81	10-99	OK
3	2-Fluorobiphenyl	12.30	-0.01	0.00	172	314282	2,427	97	10-104	OK
4	2,4,6-Tribromophenol	14.67	-0.01	0.00	330	61083	3,189	85	23-113	OK
5	Terphenyl-d14	18.43	-0.01	0.00	244	346637	3,129	125	39-124	*

Target Compounds

Final Conc. Units: ug/Kg Wet Weight

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	QuantMass	Response	Solution Conc	Final Conc	Q	Rpt?
1	N-Nitrosodimethylamine				42	0d		6.1	U	
1	Pyridine				79	0d		3.0	U	
1	Benzaldehyde	8.00	0.01	0.00	106	6076	99.73	8.8	U	
1	Bis(2-chloroethyl) Ether				93	0		2.4	U	
1	Phenol				94	0d		1.9	U	
1	Aniline				93	0		1.5	U	
1	2-Chlorophenol				128	0		1.7	U	
1	1,3-Dichlorobenzene				146	0		1.6	U	
1	1,4-Dichlorobenzene				146	0		1.9	U	
1	1,2-Dichlorobenzene				146	0		1.3	U	

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File:	J:\MS10\DATA\041505\0415F003.D			**Instrument:**	MS10
Acqu Date:	04/15/2005 11:41	**Quant Date:**	04/18/2005 10:32	**Vial:**	3
Run Type:	MB			**Dilution:**	1.0
Lab ID:	KWG0505755-7			**Soln Conc. Units:**	ng/ml

Target Compounds **Final Conc. Units:** ug/Kg Wet Weight

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	QuantMass	Response	Solution Conc	Final Conc	Q	Rpt?
1	Benzyl Alcohol				108	0		3.7	U	
1	Bis(2-chloroisopropyl) Ether				45	0d		1.2	U	
1	2-Methylphenol				107	0		3.4	U	
1	Acetophenone	9.23		0.00	105	11089	101.21	12	U	
1	Hexachloroethane				117	0		2.2	U	
1	N-Nitrosodi-n-propylamine				70	0d		3.2	U	
1	4-Methylphenol				107	0d		2.9	U	
1	Nitrobenzene				77	0d		2.0	U	
2	Isophorone				82	0d		1.6	U	
2	2-Nitrophenol				139	0		2.6	U	
2	2,4-Dimethylphenol				122	0		5.5	U	
2	Bis(2-chloroethoxy)methane				93	0		1.3	U	
2	2,4-Dichlorophenol				162	0		1.8	U	
2	Benzoic Acid	10.25	-0.18	-0.02	122	2307	94.71	96	U	
2	1,2,4-Trichlorobenzene				180	0		1.5	U	
2	Naphthalene				128	0d		1.3	U	
2	4-Chloroaniline				127	0		2.1	U	
2	Hexachlorobutadiene				225	0		1.4	U	
2	Caprolactam				55	0d		12	U	
2	4-Chloro-3-methylphenol				107	0d		2.1	U	
2	2-Methylnaphthalene				141	0		1.2	U	
3	1,2,4,5-Tetrachlorobenzene				216	0		4.9	U	
3	Hexachlorocyclopentadiene				237	0		15	U	
3	2,4,6-Trichlorophenol				196	0		1.8	U	
3	2,4,5-Trichlorophenol				196	0		3.0	U	
3	Biphenyl				154	0d		4.8	U	
3	2-Chloronaphthalene				127	0		3.6	U	
3	2-Nitroaniline				65	0d		2.7	U	
3	Acenaphthylene				152	0		1.4	U	
3	Dimethyl Phthalate				163	0d		1.8	U	
3	2,6-Dinitrotoluene				165	0		2.8	U	
3	Acenaphthene				154	0		1.0	U	
3	3-Nitroaniline				138	0		2.6	U	
3	2,4-Dinitrophenol				184	0		36	U	
3	Dibenzofuran				168	0		1.3	U	
3	4-Nitrophenol				109	0		30	U	
3	2,4-Dinitrotoluene				165	0		2.8	U	
3	2,3,4,6-Tetrachlorophenol				232	0		10	U	
3	Fluorene				166	0d		1.7	U	
3	4-Chlorophenyl Phenyl Ether				204	0		2.0	U	
3	Diethyl Phthalate	14.14	-0.02	0.00	149	2255	16.82	3.5	U	
3	4-Nitroaniline				138	0		3.4	U	

U: Undetected at or above MDL
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E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File:	J:\MS10\DATA\041505\0415F003.D			**Instrument:**	MS10
Acqu Date:	04/15/2005 11:41	**Quant Date:**	04/18/2005 10:32	**Vial:**	3
Run Type:	MB			**Dilution:**	1.0
Lab ID:	KWG0505755-7			**Soln Conc. Units:**	ng/ml

Target Compounds **Final Conc. Units:** ug/Kg Wet Weight

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	QuantMass	Response	Solution Conc	Final Conc	Q	Rpt?
3	2-Methyl-4,6-dinitrophenol				198	0		1.7	U	
3	N-Nitrosodiphenylamine				169	0		2.2	U	
3	Azobenzene				77	0d		2.4	U	
4	4-Bromophenyl Phenyl Ether				248	0		1.4	U	
4	Hexachlorobenzene				284	0		2.1	U	
4	Atrazine				200	0		2.2	U	
4	Pentachlorophenol				266	0		8.5	U	
4	Phenanthrene	15.82	-0.02	0.00	178	1537	8.38	1.3	U	
4	Anthracene	15.90	-0.02	0.00	178	886	4.82	1.4	U	
4	Carbazole				167	0d		1.3	U	
4	Di-n-butyl Phthalate	16.82	-0.01	0.00	149	35929	163.58	8.16		
4	Fluoranthene	17.76	-0.01	0.00	202	2162	11.28	2.2	U	
5	Benzidine				184	0		200	U	
5	Pyrene	18.12	-0.02	0.00	202	1891	10.14	1.3	U	
5	Butyl Benzyl Phthalate				149	0d		1.5	U	
5	3,3'-Dichlorobenzidine				252	0		3.7	U	
5	Benz(a)anthracene				228	0d		1.4	U	
5	Chrysene				228	0d		1.4	U	
5	Bis(2-ethylhexyl) Phthalate	20.41	-0.02	0.00	149	17913	154.74	7.72	J	
6	Di-n-octyl Phthalate				149	0d		1.2	U	
6	Benzo(b)fluoranthene				252	0d		2.5	U	
6	Benzo(k)fluoranthene				252	0		2.5	U	
6	Benzo(a)pyrene				252	0		1.6	U	
6	Indeno(1,2,3-cd)pyrene				276	0		1.9	U	
6	Dibenz(a,h)anthracene				278	0		2.2	U	
6	Benzo(g,h,i)perylene				276	0d		2.3	U	

Prep Amount:	40.09 g	**Dilution:**	1.0
Prep Final Vol:	2 ml	**Unit Factor:**	1
Solids:	%		

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / (Prep Amount x Solids)) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (QT Reviewed)

Data File : J:\MS10\DATA\041505\0415F003.D
Acq On : 15 Apr 2005 11:41 am
Sample : KWG0505755-MB
Misc :
MS Integration Params: RTEINT.P
Quant Time: Apr 18 10:25:47 2005

Vial: 3
Operator: JGISH
Inst : MS10
Multiplr: 1.00
Quant Results File: 0412BNLL.RES

Quant Method : J:\MS10\METHODS\BNA\0412BNLL.M (RTE Integrator)
Title : 8270LL ICAL
Last Update : Mon Apr 18 10:24:44 2005
Response via : Initial Calibration
DataAcq Meth : BNALL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	8.61	152	66962	1000.00 ng/ml	0.00
23) Naphthalene-d8	10.54	136	205309	1000.00 ng/ml	-0.02
37) Acenaphthene-d10	13.37	164	99715	1000.00 ng/ml	0.00
63) Phenanthrene-d10	15.79	188	157563	1000.00 ng/ml	0.00
74) Chrysene-d12	20.23	240	120134	1000.00 ng/ml	-0.03
83) Perylene-d12	24.15	264	84870	1000.00 ng/ml	-0.02

System Monitoring Compounds					
4) 2-Fluorophenol	6.84	112	187412	2546.14 ng/ml	0.00
Spiked Amount 3750.000	Range 38 - 110		Recovery = 67.90%		
7) Phenol-d6	8.15	99	263931	2964.38 ng/ml	0.00
Spiked Amount 3750.000	Range 43 - 128		Recovery = 79.05%		
21) Nitrobenzene-d5	9.45	82	181128	2021.06 ng/ml	0.00
Spiked Amount 2500.000	Range 30 - 139		Recovery = 80.84%		
42) 2-Fluorobiphenyl	12.30	172	314282	2427.31 ng/ml	0.00
Spiked Amount 2500.000	Range 37 - 126		Recovery = 97.09%		
64) 2,4,6-Tribromophenol	14.67	330	61083	3189.30 ng/ml	-0.02
Spiked Amount 3750.000	Range 38 - 157		Recovery = 85.05%		
77) Terphenyl-d14	18.43	244	346637	3129.28 ng/ml	0.00
Spiked Amount 2500.000	Range 54 - 158		Recovery = 125.17%		

Target Compounds					Qvalue
5) Benzaldehyde	8.00	106	6076	99.73 ng/ml	96
17) Acetophenone	9.23	105	11089	101.21 ng/ml	92
29) Benzoic Acid	10.25	122	2307	94.71 ng/ml#	80
58) Diethyl Phthalate	14.14	149	2255	16.82 ng/ml	94
69) Phenanthrene	15.82	178	1537	8.38 ng/ml	88
70) Anthracene	15.90	178	886	4.82 ng/ml	79
72) Di-n-butyl Phthalate	16.82	149	35929	163.58 ng/ml	99
73) Fluoranthene	17.76	202	2162	11.28 ng/ml	91
76) Pyrene	18.12	202	1891	10.14 ng/ml	91
82) Bis(2-ethylhexyl) Phthalat	20.41	149	17913	154.74 ng/ml	99

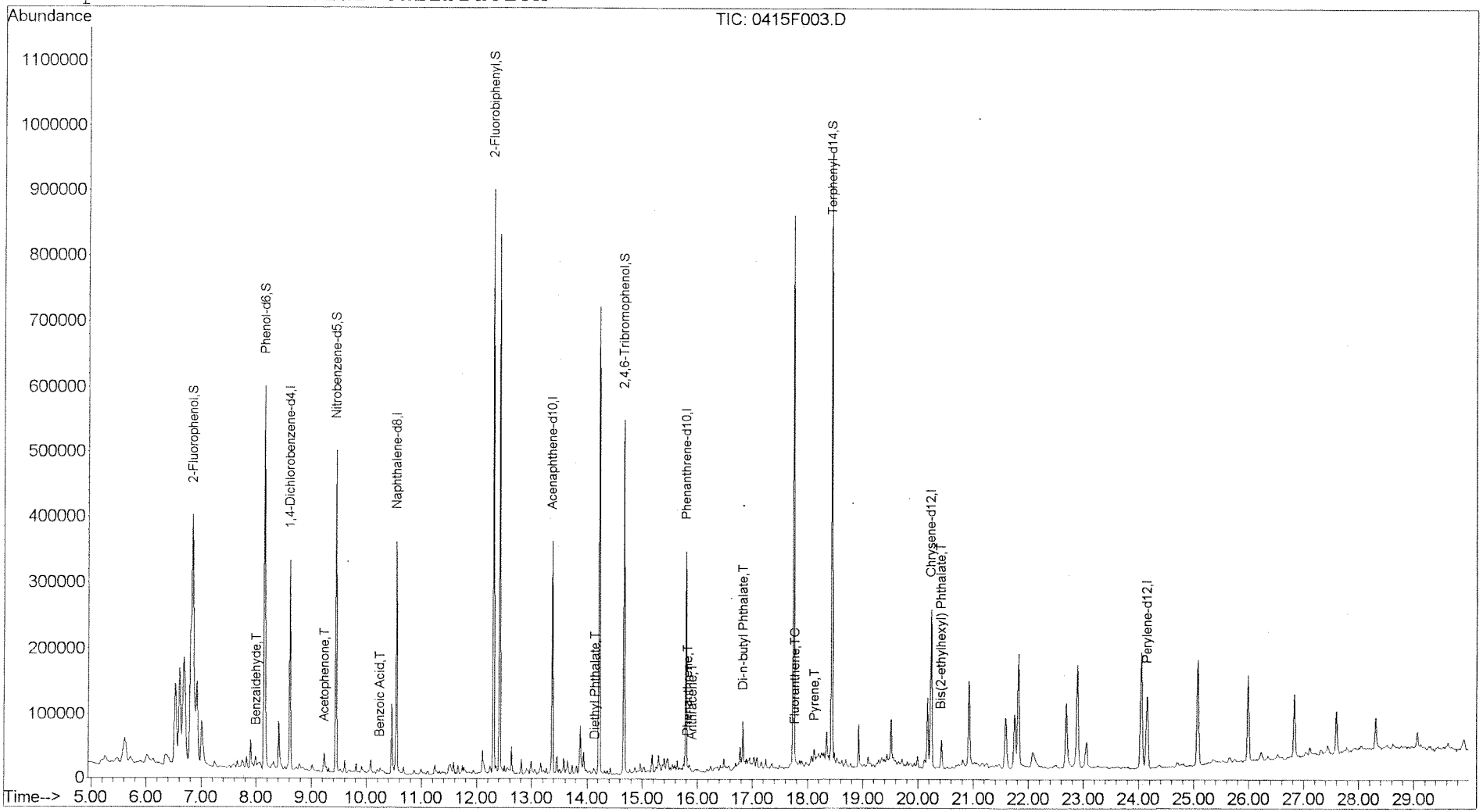
(#) = qualifier out of range (m) = manual integration

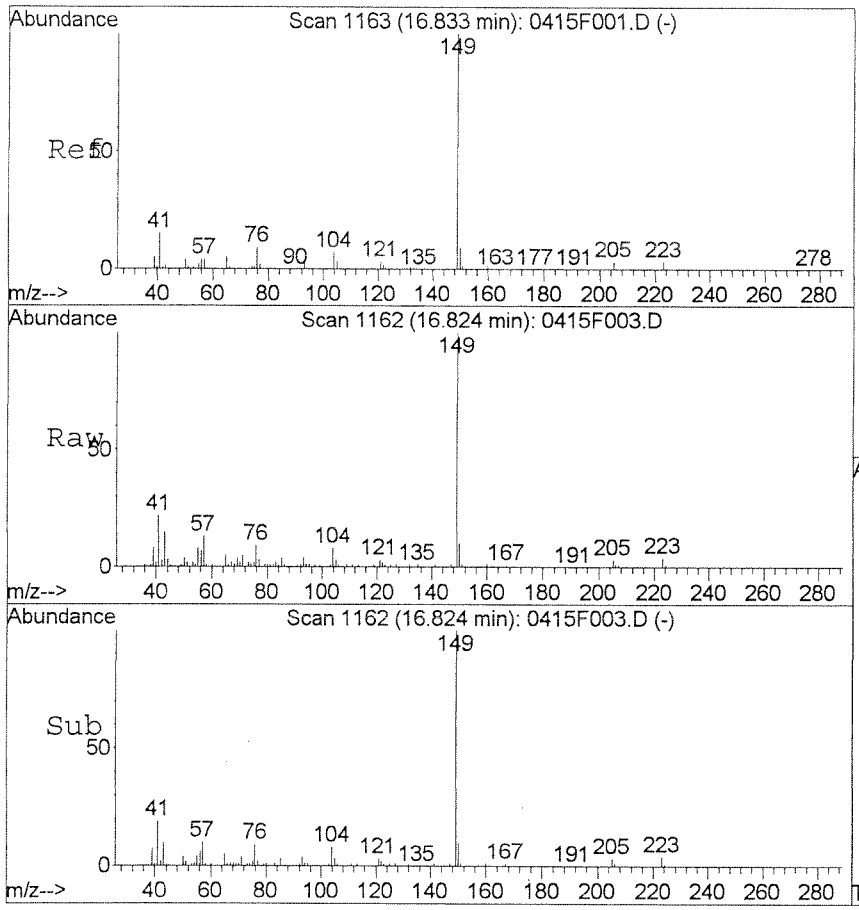
Quantitation Report (QT Reviewed)

Data File : J:\MS10\DATA\041505\0415F003.D
Acq On : 15 Apr 2005 11:41 am
Sample : KWG0505755-MB
Misc :
MS Integration Params: RTEINT.P
Quant Time: Apr 18 10:32 2005

Vial: 3
Operator: JGISH
Inst : MS10
Multiplr: 1.00
Quant Results File: 0412BNLL.RES

Method : J:\MS10\METHODS\BNA\0412BNLL.M (RTE Integrator)
Title : 8270LL ICAL
Last Update : Mon Apr 18 10:24:44 2005
Response via : Initial Calibration

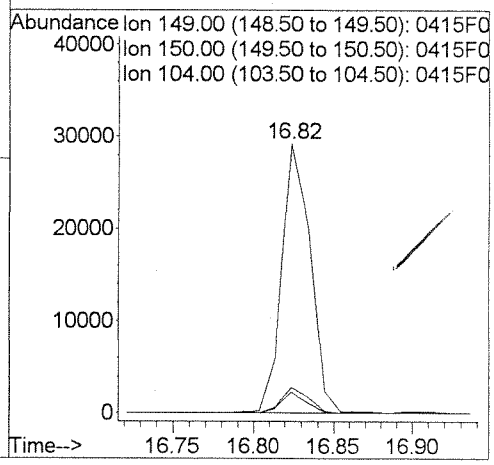


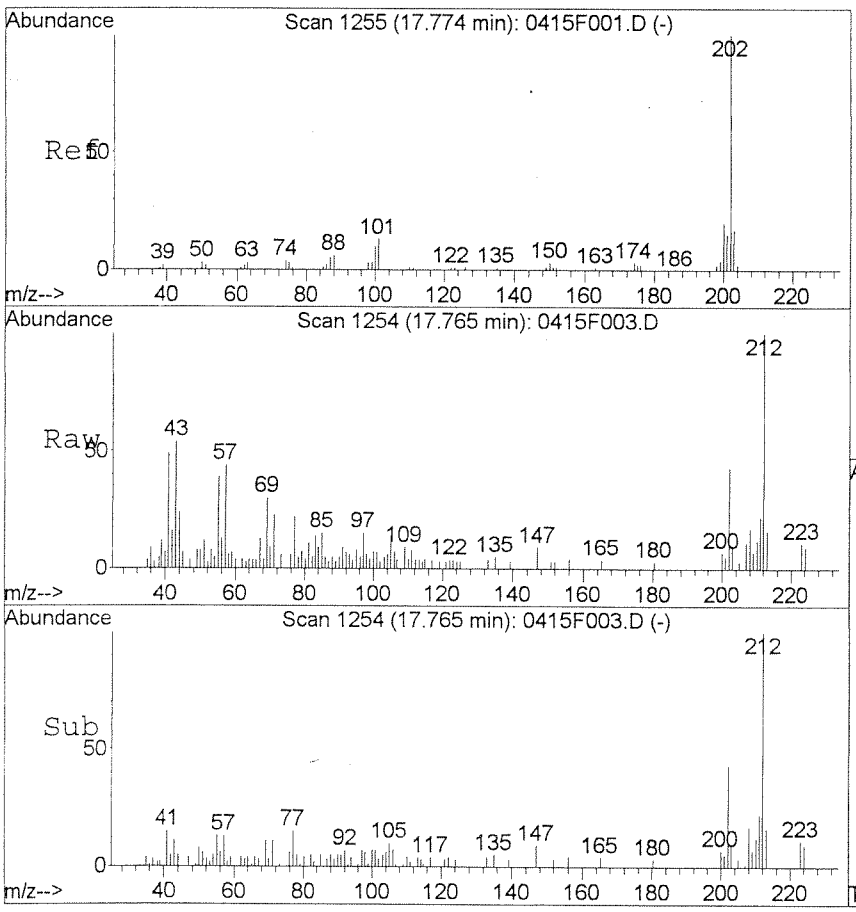


#72
Di-n-butyl Phthalate
Concen: 163.58 ng/ml
RT: 16.82 min Scan# 1162
Delta R.T. -0.01 min
Lab File: 0415F003.D
Acq: 15 Apr 2005 11:41 am

Tgt Ion:149 Resp: 35929

Ion	Ratio	Lower	Upper
149	100		
150	9.5	0.0	39.4
104	7.8	0.0	37.0

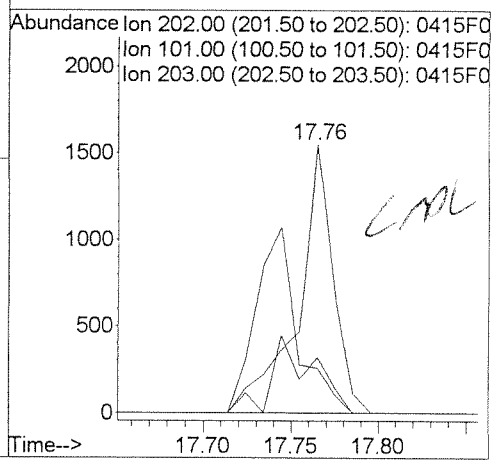


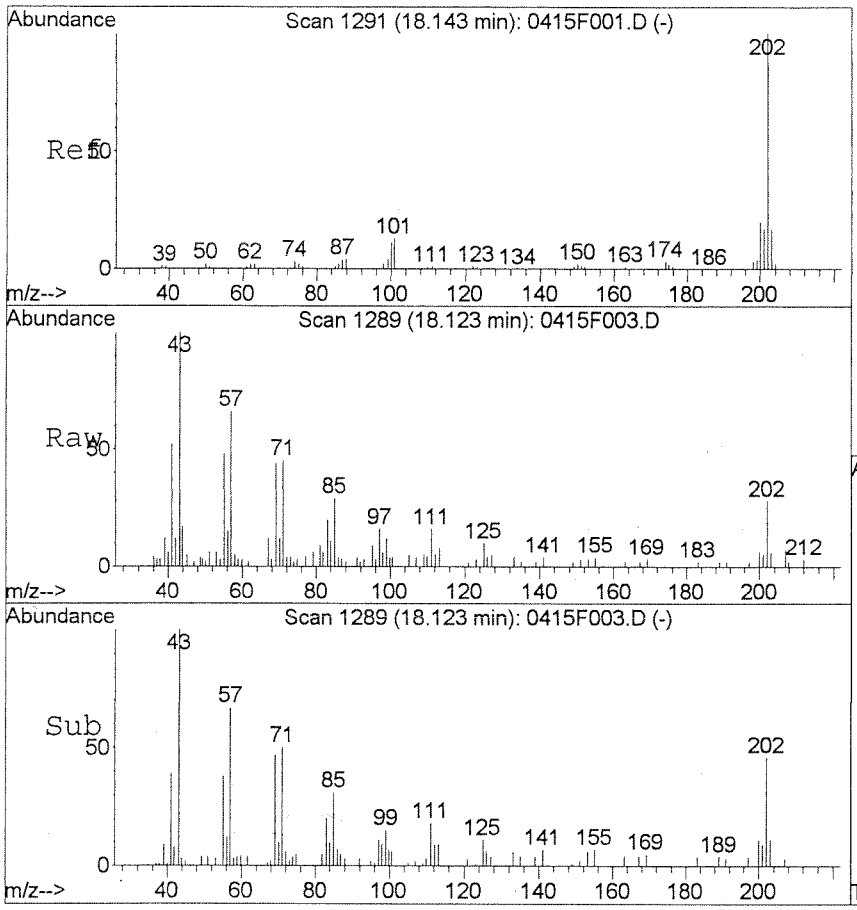


#73
Fluoranthene
Concen: 11.28 ng/ml
RT: 17.76 min Scan# 1254
Delta R.T. -0.01 min
Lab File: 0415F003.D
Acq: 15 Apr 2005 11:41 am

Tgt Ion:202 Resp: 2162

Ion	Ratio	Lower	Upper
202	100		
101	16.7	0.0	42.6
203	20.6	0.0	47.4

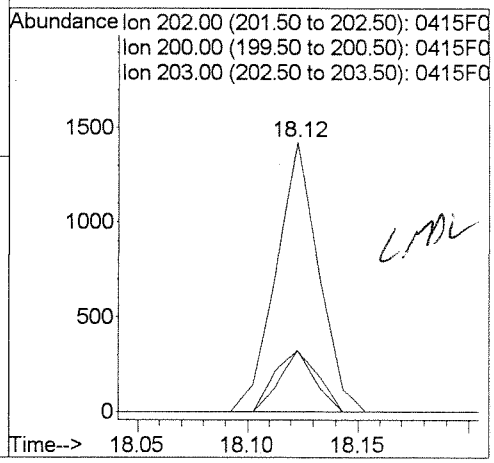


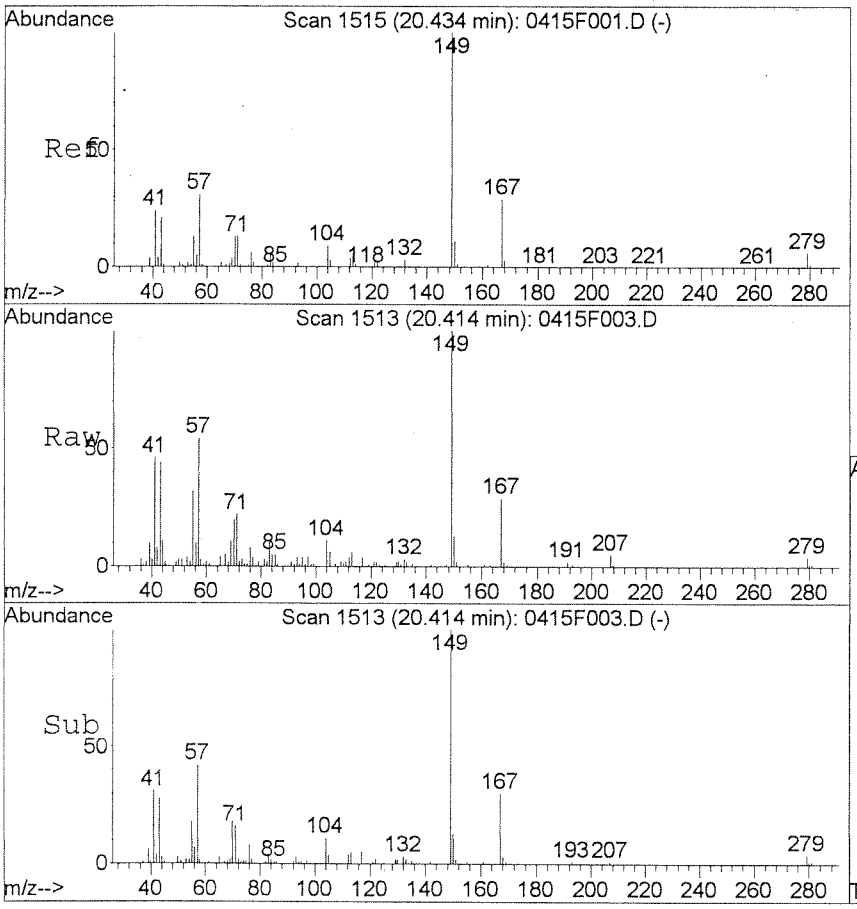


#76
Pyrene
Concen: 10.14 ng/ml
RT: 18.12 min Scan# 1289
Delta R.T. -0.02 min
Lab File: 0415F003.D
Acq: 15 Apr 2005 11:41 am

Tgt Ion:202 Resp: 1891

Ion	Ratio	Lower	Upper
202	100		
200	22.7	0.0	50.4
203	22.8	0.0	47.1

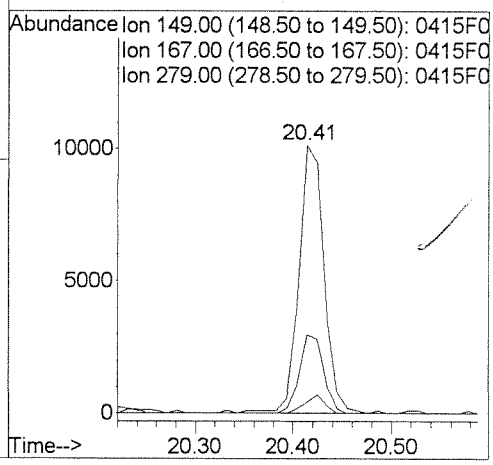




#82
Bis(2-ethylhexyl) Phthalate
Concen: 154.74 ng/ml
RT: 20.41 min Scan# 1513
Delta R.T. -0.02 min
Lab File: 0415F003.D
Acq: 15 Apr 2005 11:41 am

Tgt Ion:149 Resp: 17913

Ion	Ratio	Lower	Upper
149	100		
167	29.3	0.0	59.5
279	4.2	0.0	36.1



COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Battelle Memorial Institute	**Service Request:**	K2502554
Project:	Novato Ballfields/G486063	**Date Collected:**	NA
Sample Matrix:	Soil	**Date Received:**	NA

Semi-Volatile Organic Compounds by GC/MS

Sample Name:	Batch QC	**Units:**	ug/Kg
Lab Code:	K2502499-011	**Basis:**	Dry
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2,4,5-Tetrachlorobenzene	ND	U	5.9	5.8	1	04/11/05	04/15/05	KWG0505755	
Phenol	**7.2**	J	18	2.3	1	04/11/05	04/15/05	KWG0505755	
Bis(2-chloroethyl) Ether	ND	U	5.9	2.8	1	04/11/05	04/15/05	KWG0505755	
2-Chlorophenol	ND	U	5.9	2.0	1	04/11/05	04/15/05	KWG0505755	
2-Methylphenol	ND	U	5.9	4.0	1	04/11/05	04/15/05	KWG0505755	
Bis(2-chloroisopropyl) Ether	ND	U	5.9	1.4	1	04/11/05	04/15/05	KWG0505755	
Acetophenone	**22**	J	30	14	1	04/11/05	04/15/05	KWG0505755	
4-Methylphenol†	ND	U	5.9	3.4	1	04/11/05	04/15/05	KWG0505755	
N-Nitrosodi-n-propylamine	ND	U	5.9	3.8	1	04/11/05	04/15/05	KWG0505755	
Hexachloroethane	ND	U	5.9	2.6	1	04/11/05	04/15/05	KWG0505755	
Nitrobenzene	ND	U	5.9	2.4	1	04/11/05	04/15/05	KWG0505755	
Isophorone	ND	U	5.9	1.9	1	04/11/05	04/15/05	KWG0505755	
2-Nitrophenol	ND	U	5.9	3.1	1	04/11/05	04/15/05	KWG0505755	
2,4-Dimethylphenol	ND	U	30	6.5	1	04/11/05	04/15/05	KWG0505755	
Bis(2-chloroethoxy)methane	ND	U	5.9	1.6	1	04/11/05	04/15/05	KWG0505755	
2,4-Dichlorophenol	ND	U	5.9	2.1	1	04/11/05	04/15/05	KWG0505755	
Naphthalene	ND	U	5.9	1.6	1	04/11/05	04/15/05	KWG0505755	
4-Chloroaniline	ND	U	5.9	2.5	1	04/11/05	04/15/05	KWG0505755	
Hexachlorobutadiene	ND	U	5.9	1.7	1	04/11/05	04/15/05	KWG0505755	
Caprolactam	ND	U	14	14	1	04/11/05	04/15/05	KWG0505755	
Benzaldehyde	ND	U	12	11	1	04/11/05	04/15/05	KWG0505755	
4-Chloro-3-methylphenol	ND	U	5.9	2.5	1	04/11/05	04/15/05	KWG0505755	
2-Methylnaphthalene	ND	U	5.9	1.4	1	04/11/05	04/15/05	KWG0505755	
Hexachlorocyclopentadiene	ND	U	30	18	1	04/11/05	04/15/05	KWG0505755	
2,4,6-Trichlorophenol	ND	U	5.9	2.1	1	04/11/05	04/15/05	KWG0505755	
2,4,5-Trichlorophenol	ND	U	5.9	3.5	1	04/11/05	04/15/05	KWG0505755	
Biphenyl	ND	U	12	5.6	1	04/11/05	04/15/05	KWG0505755	
2-Chloronaphthalene	ND	U	5.9	4.2	1	04/11/05	04/15/05	KWG0505755	
2-Nitroaniline	**5.3**	J	12	3.2	1	04/11/05	04/15/05	KWG0505755	
Dimethyl Phthalate	ND	U	5.9	2.1	1	04/11/05	04/15/05	KWG0505755	
2,6-Dinitrotoluene	ND	U	5.9	3.3	1	04/11/05	04/15/05	KWG0505755	
Acenaphthylene	ND	U	5.9	1.7	1	04/11/05	04/15/05	KWG0505755	
3-Nitroaniline	ND	U	12	3.1	1	04/11/05	04/15/05	KWG0505755	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Battelle Memorial Institute	**Service Request:**	K2502554
Project:	Novato Ballfields/G486063	**Date Collected:**	NA
Sample Matrix:	Soil	**Date Received:**	NA

Semi-Volatile Organic Compounds by GC/MS

Sample Name:	Batch QC	**Units:**	ug/Kg
Lab Code:	K2502499-011	**Basis:**	Dry
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Acenaphthene	ND	U	5.9	1.2	1	04/11/05	04/15/05	KWG0505755	
2,4-Dinitrophenol	ND	U	120	42	1	04/11/05	04/15/05	KWG0505755	
4-Nitrophenol	ND	U	59	35	1	04/11/05	04/15/05	KWG0505755	
Dibenzofuran	ND	U	5.9	1.6	1	04/11/05	04/15/05	KWG0505755	
2,4-Dinitrotoluene	ND	U	5.9	3.3	1	04/11/05	04/15/05	KWG0505755	
Diethyl Phthalate	ND	U	5.9	4.1	1	04/11/05	04/15/05	KWG0505755	
Fluorene	ND	U	5.9	2.0	1	04/11/05	04/15/05	KWG0505755	
4-Chlorophenyl Phenyl Ether	ND	U	5.9	2.4	1	04/11/05	04/15/05	KWG0505755	
4-Nitroaniline	ND	U	12	4.0	1	04/11/05	04/15/05	KWG0505755	
2-Methyl-4,6-dinitrophenol	ND	U	59	2.0	1	04/11/05	04/15/05	KWG0505755	
N-Nitrosodiphenylamine	ND	U	5.9	2.6	1	04/11/05	04/15/05	KWG0505755	
4-Bromophenyl Phenyl Ether	ND	U	5.9	1.7	1	04/11/05	04/15/05	KWG0505755	
Hexachlorobenzene	ND	U	5.9	2.5	1	04/11/05	04/15/05	KWG0505755	
Atrazine	ND	U	5.9	2.6	1	04/11/05	04/15/05	KWG0505755	
Pentachlorophenol	ND	U	59	10	1	04/11/05	04/15/05	KWG0505755	
Phenanthrene	**4.7**	J	5.9	1.6	1	04/11/05	04/15/05	KWG0505755	
Anthracene	ND	U	5.9	1.7	1	04/11/05	04/15/05	KWG0505755	
Carbazole	ND	U	5.9	1.6	1	04/11/05	04/15/05	KWG0505755	
Di-n-butyl Phthalate	**17**	B	5.9	3.1	1	04/11/05	04/15/05	KWG0505755	
Fluoranthene	**7.0**		5.9	2.6	1	04/11/05	04/15/05	KWG0505755	
Pyrene	**7.0**		5.9	1.6	1	04/11/05	04/15/05	KWG0505755	
Butyl Benzyl Phthalate	ND	U	5.9	1.8	1	04/11/05	04/15/05	KWG0505755	
3,3'-Dichlorobenzidine	ND	U	59	4.4	1	04/11/05	04/15/05	KWG0505755	
Benz(a)anthracene	**3.6**	J	5.9	1.7	1	04/11/05	04/15/05	KWG0505755	
Chrysene	**6.7**		5.9	1.7	1	04/11/05	04/15/05	KWG0505755	
Bis(2-ethylhexyl) Phthalate	**43**	J	120	2.0	1	04/11/05	04/15/05	KWG0505755	
Di-n-octyl Phthalate	ND	U	5.9	1.4	1	04/11/05	04/15/05	KWG0505755	
Benzo(b)fluoranthene	**7.9**		5.9	3.0	1	04/11/05	04/15/05	KWG0505755	
Benzo(k)fluoranthene	ND	U	5.9	3.0	1	04/11/05	04/15/05	KWG0505755	
Benzo(a)pyrene	**4.7**	J	5.9	1.9	1	04/11/05	04/15/05	KWG0505755	
Indeno(1,2,3-cd)pyrene	**4.3**	J	5.9	2.3	1	04/11/05	04/15/05	KWG0505755	
Dibenz(a,h)anthracene	ND	U	5.9	2.6	1	04/11/05	04/15/05	KWG0505755	
Benzo(g,h,i)perylene	**5.1**	J	5.9	2.7	1	04/11/05	04/15/05	KWG0505755	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Battelle Memorial Institute	**Service Request:**	K2502554
Project:	Novato Ballfields/G486063	**Date Collected:**	NA
Sample Matrix:	Soil	**Date Received:**	NA

Semi-Volatile Organic Compounds by GC/MS

Sample Name:	Batch QC	**Units:**	ug/Kg
Lab Code:	K2502499-011	**Basis:**	Dry

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	54	11-87	04/15/05	Acceptable
Phenol-d6	71	20-99	04/15/05	Acceptable
Nitrobenzene-d5	65	10-99	04/15/05	Acceptable
2-Fluorobiphenyl	74	10-104	04/15/05	Acceptable
2,4,6-Tribromophenol	81	23-113	04/15/05	Acceptable
Terphenyl-d14	97	39-124	04/15/05	Acceptable

† Analyte Comments

4-Methylphenol	This analyte cannot be separated from 3-Methylphenol.

Comments:

Exception Report

Data File: J:\MS10\DATA\041505\0415F010.D
Lab ID: K2502499-011
RunType: SMPL
Matrix: SOIL

Date Acquired: 04/15/2005 16:22
Date Quantitated: 04/18/2005 11:56
Batch ID: KWG0506208
Analysis Method: 8270C
ListJoinID: LJ5440

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Tune Window	NA	NA	NA	x	
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Pass/Fail	NA	NA	NA	x	
ICAL Average RSD	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Initial Calibration Minimum RF	NA	NA	NA	x	
Initial Calibration SPCC/CCC	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Minimum RF	NA	NA	NA	x	
Continuing Calibration SPCC/CCC	NA	NA	NA	x	
Method Blank	NA	NA	NA		x
MB Surrogate Recovery	NA	NA	NA		x
Lab Control Spike	NA	NA	NA	x	
Duplicate Lab Control Spike	NA	NA	NA	x	
Internal Standards	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Relative Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Method Blank	Di-n-butyl Phthalate	8.20	NA	10	B Flag
MB Surrogate Recovery	Terphenyl-d14	125	39	124	SUR MB HIGH

Primary Review: K 4/18/05

Secondary Review: 4/19/05

Quantitation Report

Bottle ID:		**Tier:**	V	**Matrix:**	SOIL
Prod Code:	8270-LL	**Collect Date:**	04/06/2005	**Receive Date:**	04/07/2005

Analysis Lot:	KWG0506208	**Prep Lot:**	KWG0505755	**Report Group:**	K2502499
Analysis Method:	8270C	**Prep Method:**	EPA 3541		
Prep Ref:	373956	**Prep Date:**	04/11/2005		

Quant Method:	J:\MS10\METHODS\BNA\0412BNLL.M	**Calibration ID:**	CAL4375
Title:	Semi-Volatile Organic Compounds by GC/MS	**Report List ID:**	LJ5440
Tune Ref:	J:\MS10\DATA\041505\0415T001.D	**Method ID:**	MJ142
MB Ref:	J:\MS10\DATA\041505\0415F003.D	**Quant based on Report List**	

Data File:	J:\MS10\DATA\041505\0415F010.D			**Instrument:**	MS10
Acqu Date:	04/15/2005 16:22	**Quant Date:**	04/18/2005 11:56	**Vial:**	10
Run Type:	SMPL			**Dilution:**	1.0
Lab ID:	K2502499-011			**Soln Conc. Units:**	ng/ml

Internal Standard Compounds

IS Ref	Parameter Name	RT	RT Dev	Quant Mass	Response	Solution Conc	Area Criteria
1	1,4-Dichlorobenzene-d4	8.62	0.00	152	67029	1,000.00	OK
2	Naphthalene-d8	10.56	0.01	136	215343	1,000.00	OK
3	Acenaphthene-d10	13.39	0.02	164	103378	1,000.00	OK
4	Phenanthrene-d10	15.80	0.01	188	167820	1,000.00	OK
5	Chrysene-d12	20.27	0.03	240	123855	1,000.00	OK
6	Perylene-d12	24.23	0.06	264	99372	1,000.00	OK

Surrogate Compounds

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	%Rec	%Rec Limits	Rpt?
1	2-Fluorophenol	6.87	0.03	0.00	112	150094	2,037	54	11-87 OK	
1	Phenol-d6	8.18	0.02	0.00	99	236071	2,649	71	20-99 OK	
1	Nitrobenzene-d5	9.46	0.00	0.00	82	145526	1,622	65	10-99 OK	
3	2-Fluorobiphenyl	12.31	0.00	0.00	172	247221	1,842	74	10-104 OK	
4	2,4,6-Tribromophenol	14.69	0.01	0.00	330	61600	3,020	81	23-113 OK	
5	Terphenyl-d14	18.45	0.01	0.00	244	276949	2,425	97	39-124 OK	

Target Compounds

Final Conc. Units: ug/Kg Dry Weight

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	QuantMass	Response	Solution Conc	Final Conc	Q	Rpt?
1	Benzaldehyde	8.01	0.02	0.00	106	7049	115.58	11	U	
1	Bis(2-chloroethyl) Ether				93	0d		2.8	U	
1	Phenol	8.20	0.01	0.00	94	11224	124.10	7.2	J	
1	2-Chlorophenol				128	0		2.0	U	
1	Bis(2-chloroisopropyl) Ether				45	0d		1.4	U	
1	2-Methylphenol				107	0		4.0	U	
1	Acetophenone	9.24	0.01	0.00	105	42197	384.76	22	J	
1	Hexachloroethane				117	0		2.6	U	
1	N-Nitrosodi-n-propylamine				70	0d		3.8	U	
1	4-Methylphenol				107	0d		3.4	U	

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File:	J:\MS10\DATA\041505\0415F010.D			**Instrument:**	MS10
Acqu Date:	04/15/2005 16:22	**Quant Date:**	04/18/2005 11:56	**Vial:**	10
Run Type:	SMPL			**Dilution:**	1.0
Lab ID:	K2502499-011			**Soln Conc. Units:**	ng/ml

Target Compounds **Final Conc. Units:** ug/Kg Dry Weight

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	QuantMass	Response	Solution Conc	Final Conc	Q	Rpt?
1	Nitrobenzene				77	0d		2.4	U	
2	Isophorone				82	0d		1.9	U	
2	2-Nitrophenol				139	0		3.1	U	
2	2,4-Dimethylphenol				122	0		6.5	U	
2	Bis(2-chloroethoxy)methane				93	0d		1.6	U	
2	2,4-Dichlorophenol				162	0		2.1	U	
2	Naphthalene				128	0d		1.6	U	
2	4-Chloroaniline				127	0		2.5	U	
2	Hexachlorobutadiene				225	0		1.7	U	
2	Caprolactam				55	0d		14	U	
2	4-Chloro-3-methylphenol				107	0d		2.5	U	
2	2-Methylnaphthalene	11.70	-0.01	0.00	141	1769	14.33	1.4	U	
3	1,2,4,5-Tetrachlorobenzene				216	0		5.8	U	
3	Hexachlorocyclopentadiene				237	0		18	U	
3	2,4,6-Trichlorophenol				196	0d		2.1	U	
3	2,4,5-Trichlorophenol	12.27	0.01	0.00	196	550	12.26	3.5	U	
3	Biphenyl	12.47	0.01	0.00	154	1712	11.32	5.6	U	
3	2-Chloronaphthalene				127	0		4.2	U	
3	2-Nitroaniline	12.65	-0.04	0.00	65	4625m	91.37	5.3	J	
3	Acenaphthylene	13.15		0.00	152	1806	9.89	1.7	U	
3	Dimethyl Phthalate				163	0d		2.1	U	
3	2,6-Dinitrotoluene				165	0d		3.3	U	
3	Acenaphthene	13.44		0.00	154	1186	11.03	1.2	U	
3	3-Nitroaniline				138	0d		3.1	U	
3	2,4-Dinitrophenol				184	0		42	U	
3	Dibenzofuran	13.72		0.00	168	1000	5.58	1.6	U	
3	4-Nitrophenol				109	0d		35	U	
3	2,4-Dinitrotoluene				165	0d		3.3	U	
3	Fluorene				166	0d		2.0	U	
3	4-Chlorophenyl Phenyl Ether				204	0		2.4	U	
3	Diethyl Phthalate	14.16		0.00	149	2757	19.84	4.1	U	
3	4-Nitroaniline				138	0d		4.0	U	
3	2-Methyl-4,6-dinitrophenol				198	0		2.0	U	
3	N-Nitrosodiphenylamine				169	0d		2.6	U	
4	4-Bromophenyl Phenyl Ether				248	0		1.7	U	
4	Hexachlorobenzene				284	0		2.5	U	
4	Atrazine				200	0		2.6	U	
4	Pentachlorophenol				266	0		10	U	
4	Phenanthrene	15.84		0.00	178	15663	80.17	4.7	J	
4	Anthracene	15.93	0.01	0.00	178	3321	16.95	1.7	U	
4	Carbazole				167	0d		1.6	U	
4	Di-n-butyl Phthalate	16.85	0.02	0.00	149	66446	284.02	17	B	

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

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?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File:	J:\MS10\DATA\041505\0415F010.D			**Instrument:**	MS10
Acqu Date:	04/15/2005 16:22	**Quant Date:**	04/18/2005 11:56	**Vial:**	10
Run Type:	SMPL			**Dilution:**	1.0
Lab ID:	K2502499-011			**Soln Conc. Units:**	ng/ml

Target Compounds **Final Conc. Units:** ug/Kg Dry Weight

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	QuantMass	Response	Solution Conc	Final Conc	Q	Rpt?
4	Fluoranthene	17.79	0.02	0.00	202	24417	119.57	7.0		
5	Pyrene	18.14		0.00	202	23046	119.87	7.0		
5	Butyl Benzyl Phthalate				149	0d		1.8	U	
5	3,3'-Dichlorobenzidine				252	0d		4.4	U	
5	Benz(a)anthracene	20.25	0.01	0.00	228	10085	62.53	3.6	J	
5	Chrysene	20.32		0.00	228	16507	114.68	6.7		
5	Bis(2-ethylhexyl) Phthalate	20.46	0.03	0.00	149	88061	737.87	43	J	
6	Di-n-octyl Phthalate				149	0d		1.4	U	
6	Benzo(b)fluoranthene	23.07	0.03	0.00	252	19032	135.36	7.9		
6	Benzo(k)fluoranthene	23.16	0.03	0.00	252	5799	41.30	3.0	U	
6	Benzo(a)pyrene	24.06	0.04	0.00	252	10987	80.54	4.7	J	
6	Indeno(1,2,3-cd)pyrene	26.91	0.06	0.00	276	8565	73.92	4.3	J	
6	Dibenz(a,h)anthracene	26.98	0.06	0.00	278	1769	15.61	2.6	U	
6	Benzo(g,h,i)perylene	27.47	0.09	0.00	276	10403	88.52	5.1	J	

Prep Amount:	40.07 g	**Dilution:**	1.0
Prep Final Vol:	2 ml	**Unit Factor:**	1
Solids:	85.8 %		

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / (Prep Amount x Solids)) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (QT Reviewed)

Data File : J:\MS10\DATA\041505\0415F010.D
Acq On : 15 Apr 2005 4:22 pm
Sample : K2502499-011
Misc :
MS Integration Params: RTEINT.P
Quant Time: Apr 18 10:25:54 2005

Vial: 10
Operator: JGISH
Inst : MS10
Multiplr: 1.00
Quant Results File: 0412BNLL.RES

Quant Method : J:\MS10\METHODS\BNA\0412BNLL.M (RTE Integrator)
Title : 8270LL ICAL
Last Update : Mon Apr 18 10:24:44 2005
Response via : Initial Calibration
DataAcq Meth : BNALL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	8.62	152	67029	1000.00 ng/ml	0.00
23) Naphthalene-d8	10.56	136	215343	1000.00 ng/ml	0.00
37) Acenaphthene-d10	13.39	164	103378	1000.00 ng/ml	0.01
63) Phenanthrene-d10	15.80	188	167820	1000.00 ng/ml	0.00
74) Chrysene-d12	20.27	240	123855	1000.00 ng/ml	0.01
83) Perylene-d12	24.23	264	99372	1000.00 ng/ml	0.06
System Monitoring Compounds					
4) 2-Fluorophenol	6.87	112	150094	2037.10 ng/ml	0.03
Spiked Amount 3750.000	Range 38 - 110		Recovery =	54.32%	
7) Phenol-d6	8.18	99	236071	2648.82 ng/ml	0.02
Spiked Amount 3750.000	Range 43 - 128		Recovery =	70.64%	
21) Nitrobenzene-d5	9.46	82	145526	1622.18 ng/ml	0.00
Spiked Amount 2500.000	Range 30 - 139		Recovery =	64.89%	
42) 2-Fluorobiphenyl	12.31	172	247221	1841.72 ng/ml	0.00
Spiked Amount 2500.000	Range 37 - 126		Recovery =	73.67%	
64) 2,4,6-Tribromophenol	14.69	330	61600	3019.71 ng/ml	0.00
Spiked Amount 3750.000	Range 38 - 157		Recovery =	80.53%	
77) Terphenyl-d14	18.45	244	276949	2425.06 ng/ml	0.01
Spiked Amount 2500.000	Range 54 - 158		Recovery =	97.00%	

Target Compounds					Qvalue
5) Benzaldehyde	8.01	106	7049	115.58 ng/ml	95
8) Phenol	8.20	94	11224	124.10 ng/ml#	58
14) Benzyl Alcohol	8.86	108	1680	32.85 ng/ml	90
17) Acetophenone	9.24	105	42197	384.76 ng/ml	94
29) Benzoic Acid	10.34	122	17489	684.51 ng/ml	99
36) 2-Methylnaphthalene	11.70	141	1769	14.33 ng/ml	96
41) 2,4,5-Trichlorophenol	12.27	196	550	12.26 ng/ml#	72
43) Biphenyl	12.47	154	1712	11.32 ng/ml	83
45) 2-Nitroaniline	12.65	65	4625m	91.37 ng/ml	
46) Acenaphthylene	13.15	152	1806	9.89 ng/ml	82
49) Acenaphthene	13.44	154	1186	11.03 ng/ml	88
52) Dibenzofuran	13.72	168	1000	5.58 ng/ml	89
58) Diethyl Phthalate	14.16	149	2757	19.84 ng/ml	92
69) Phenanthrene	15.84	178	15663	80.17 ng/ml	98
70) Anthracene	15.93	178	3321	16.95 ng/ml	89
72) Di-n-butyl Phthalate	16.85	149	66446	284.02 ng/ml	99
73) Fluoranthene	17.79	202	24417	119.57 ng/ml	97
76) Pyrene	18.14	202	23046	119.87 ng/ml	94
80) Benz(a)anthracene	20.25	228	10085	62.53 ng/ml	98
81) Chrysene	20.32	228	16507	114.68 ng/ml	93

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : J:\MS10\DATA\041505\0415F010.D Vial: 10
Acq On : 15 Apr 2005 4:22 pm Operator: JGISH
Sample : K2502499-011 Inst : MS10
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 18 10:25:54 2005 Quant Results File: 0412BNLL.RES

Quant Method : J:\MS10\METHODS\BNA\0412BNLL.M (RTE Integrator)
Title : 8270LL ICAL
Last Update : Mon Apr 18 10:24:44 2005
Response via : Initial Calibration
DataAcq Meth : BNALL

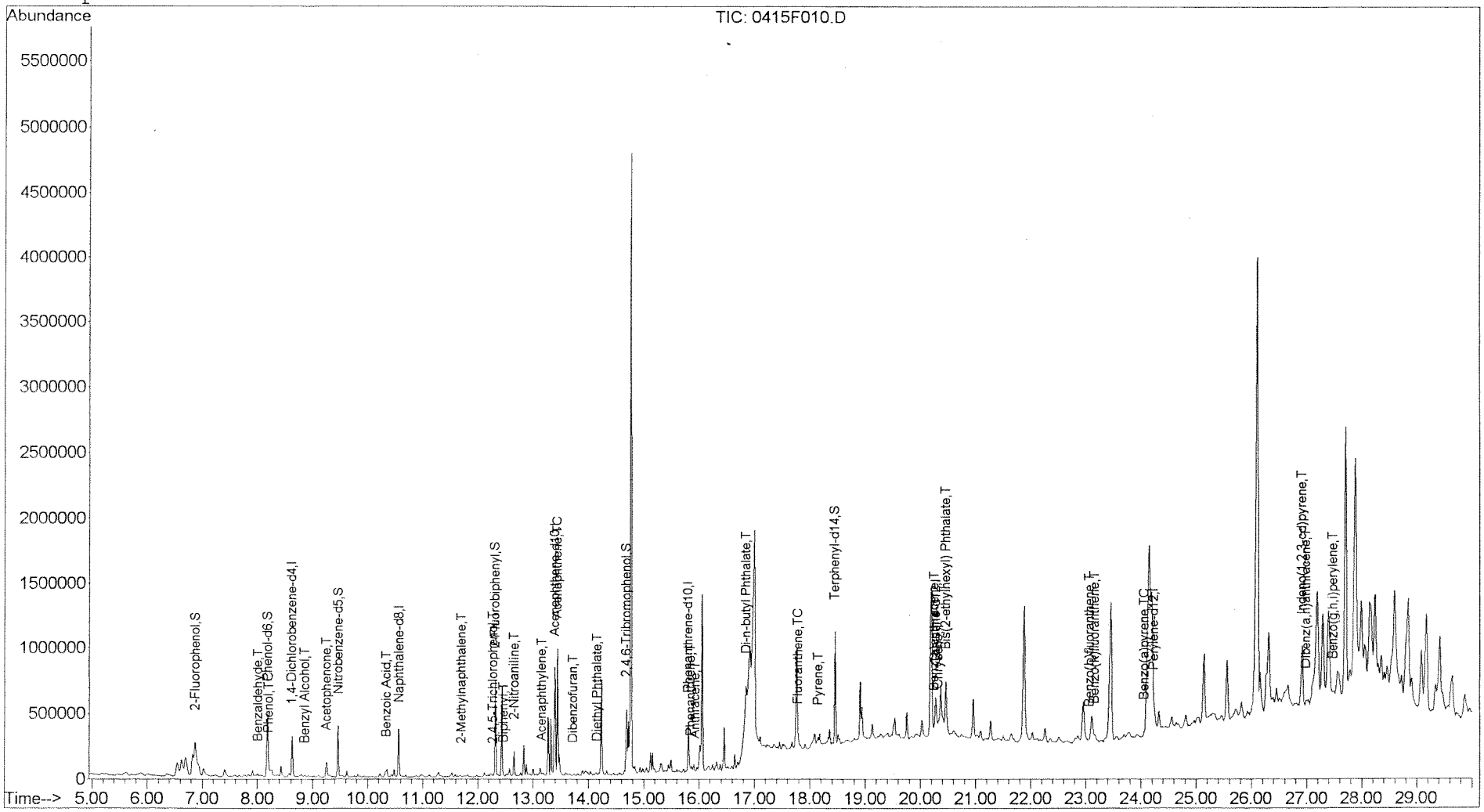
	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
82)	Bis(2-ethylhexyl) Phthalat	20.46	149	88061	737.87 ng/ml	98
85)	Benzo(b)fluoranthene	23.07	252	19032	135.36 ng/ml	97
86)	Benzo(k)fluoranthene	23.16	252	5799	41.30 ng/ml	96
87)	Benzo(a)pyrene	24.06	252	10987	80.54 ng/ml	89
88)	Indeno(1,2,3-cd)pyrene	26.91	276	8565	73.92 ng/ml	91
89)	Dibenz(a,h)anthracene	26.98	278	1769	15.61 ng/ml	63
90)	Benzo(g,h,i)perylene	27.47	276	10403	88.52 ng/ml	88

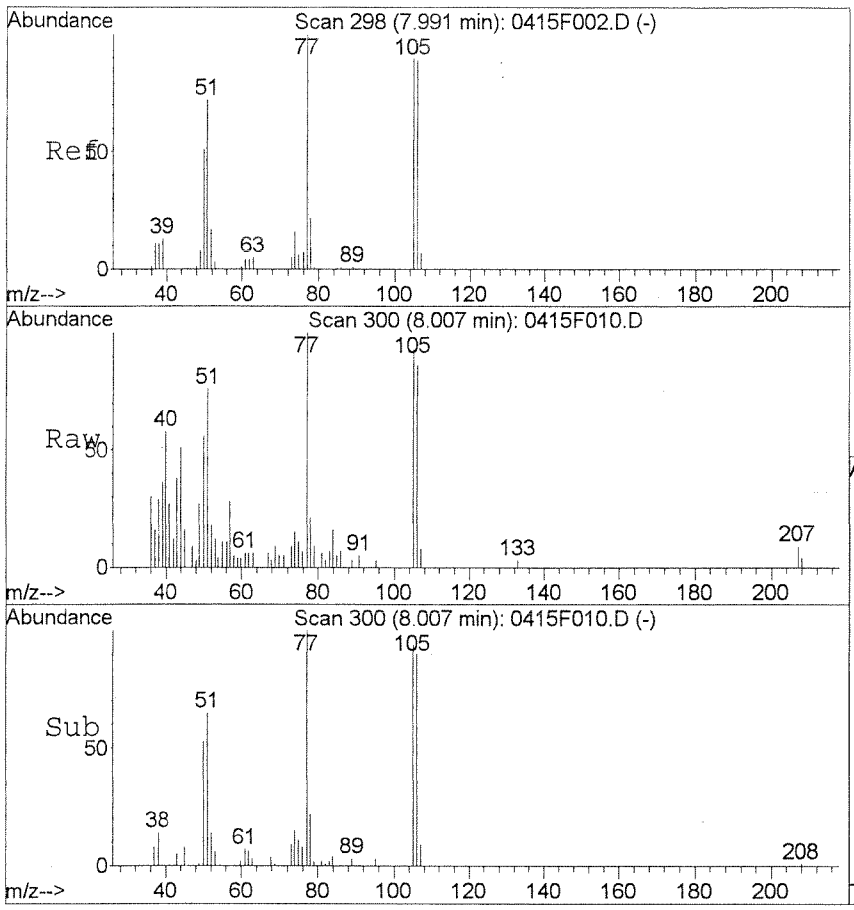
(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : J:\MS10\DATA\041505\0415F010.D Vial: 10
Acq On : 15 Apr 2005 4:22 pm Operator: JGISH
Sample : K2502499-011 Inst : MS10
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 18 11:56 2005 Quant Results File: 0412BNLL.RES

Method : J:\MS10\METHODS\BNA\0412BNLL.M (RTE Integrator)
Title : 8270LL ICAL
Last Update : Mon Apr 18 10:24:44 2005
Response via : Initial Calibration

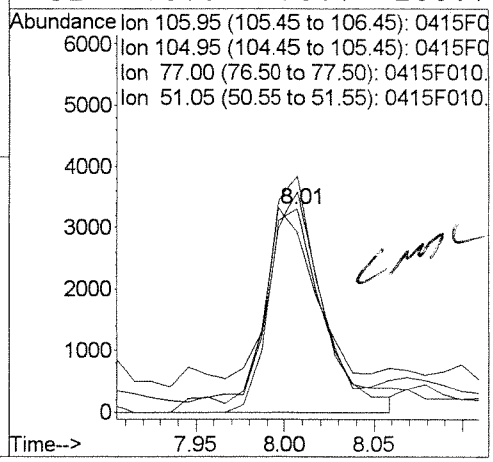


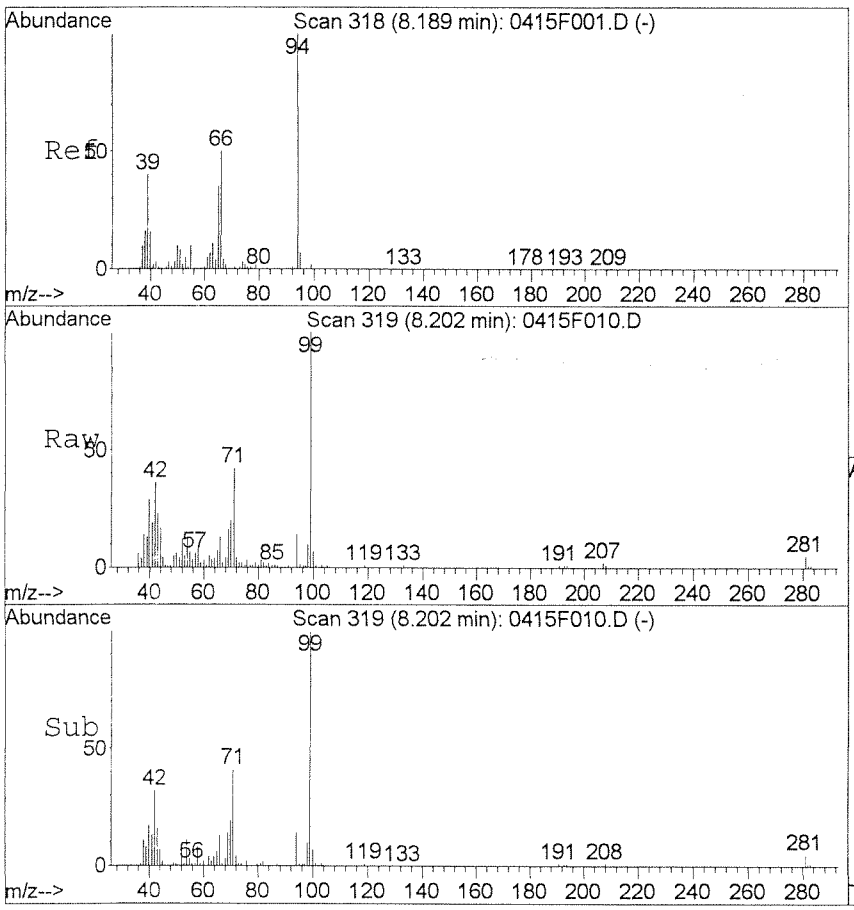


#5
Benzaldehyde
Concen: 115.58 ng/ml
RT: 8.01 min Scan# 300
Delta R.T. 0.02 min
Lab File: 0415F010.D
Acq: 15 Apr 2005 4:22 pm

Tgt Ion:106 Resp: 7049

Ion	Ratio	Lower	Upper
106	100		
105	101.3	81.1	121.1
77	108.6	92.4	132.4
51	70.0	60.7	100.7

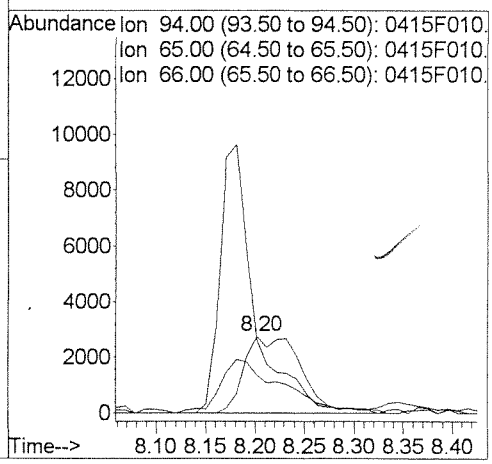


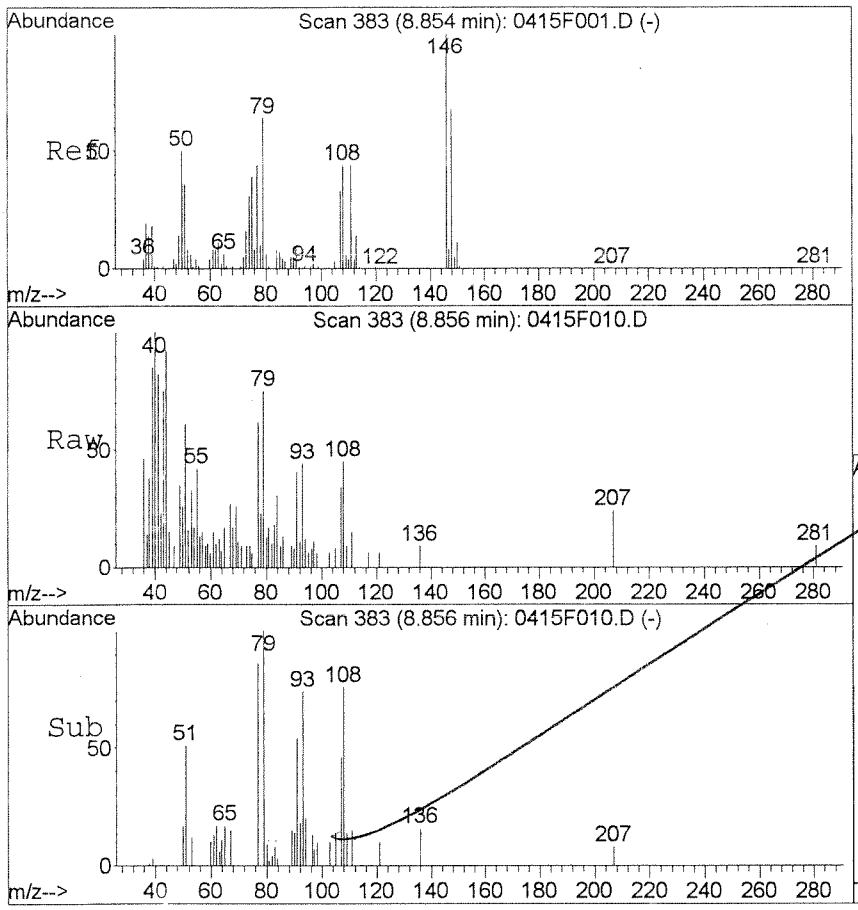


#8
Phenol
Concen: 124.10 ng/ml
RT: 8.20 min Scan# 319
Delta R.T. 0.01 min
Lab File: 0415F010.D
Acq: 15 Apr 2005 4:22 pm

Tgt Ion: 94 Resp: 11224

Ion	Ratio	Lower	Upper
94	100		
65	43.8	4.6	64.6
66	91.6	20.3	80.3#

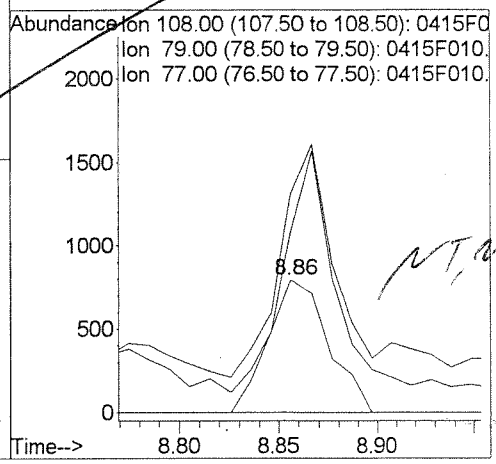


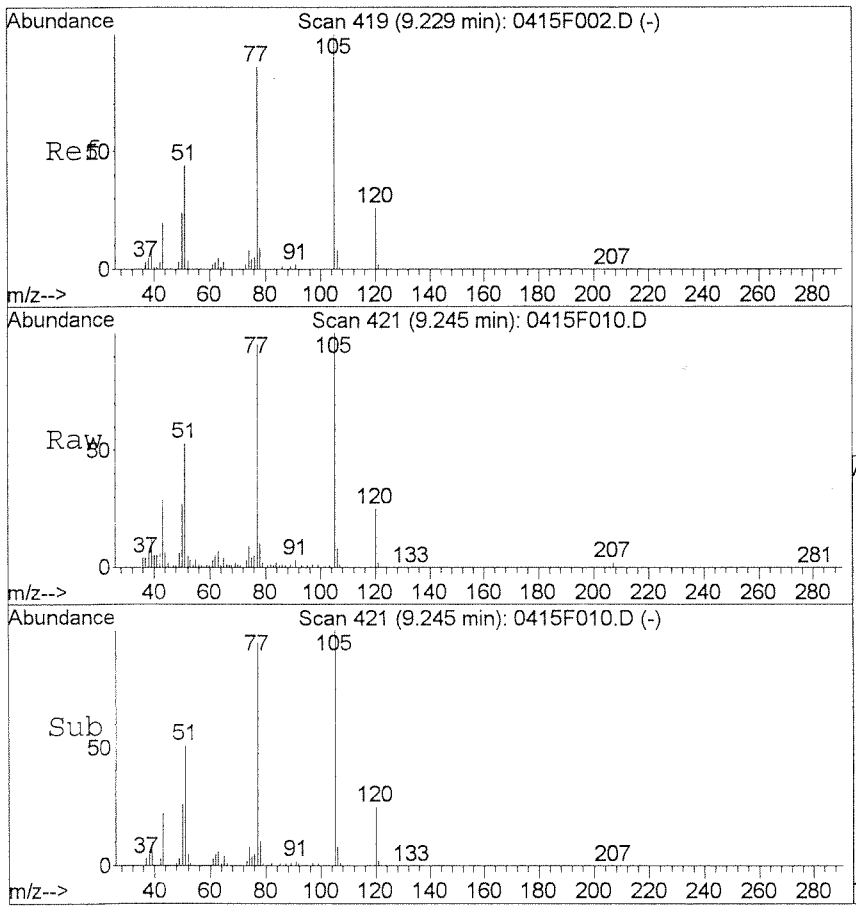


#14
Benzyl Alcohol
Concen: 32.85 ng/ml
RT: 8.86 min Scan# 383
Delta R.T. 0.00 min
Lab File: 0415F010.D
Acq: 15 Apr 2005 4:22 pm

Tgt Ion:108 Resp: 1680

Ion	Ratio	Lower	Upper
108	100		
79	133.8	117.7	177.7
77	110.2	71.1	131.1

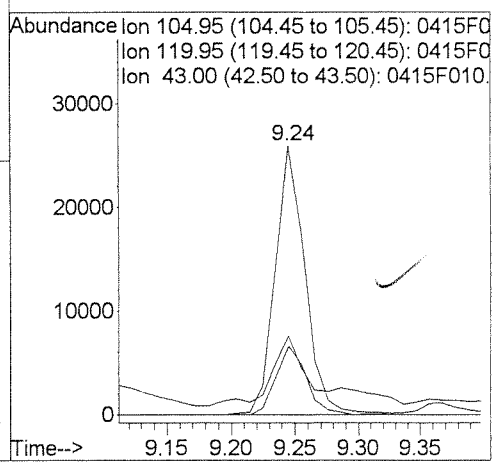


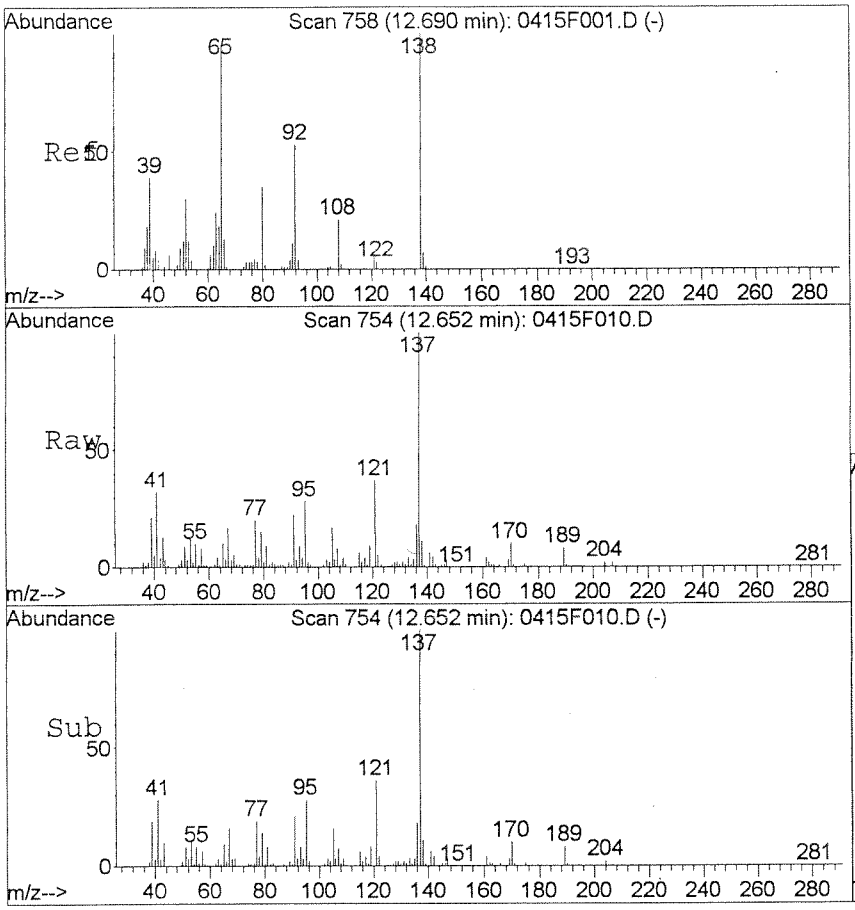


#17
Acetophenone
Concen: 384.76 ng/ml
RT: 9.24 min Scan# 421
Delta R.T. 0.02 min
Lab File: 0415F010.D
Acq: 15 Apr 2005 4:22 pm

Tgt Ion:105 Resp: 42197

Ion	Ratio	Lower	Upper
105	100		
120	25.3	5.8	45.8
43	25.6	0.0	39.6

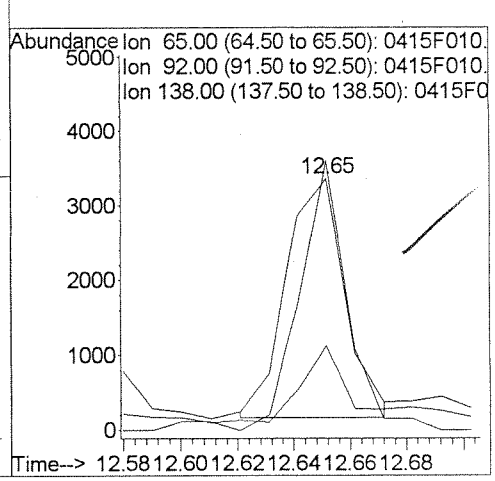


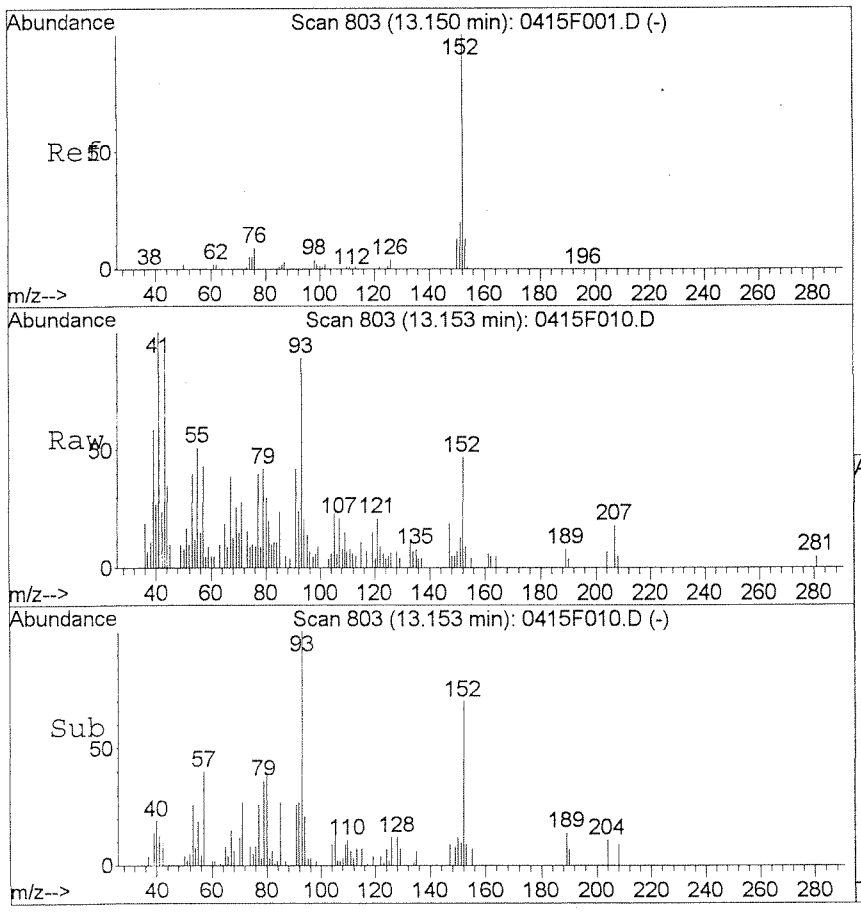


#45
2-Nitroaniline
Concen: 91.37 ng/ml m
RT: 12.65 min Scan# 754
Delta R.T. -0.04 min
Lab File: 0415F010.D
Acq: 15 Apr 2005 4:22 pm

Tgt Ion: 65 Resp: 4625

Ion	Ratio	Lower	Upper
65	100		
92	33.4	26.0	86.0
138	107.1	75.7	135.7

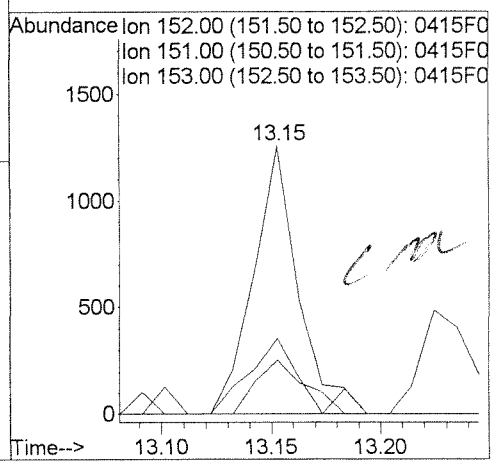


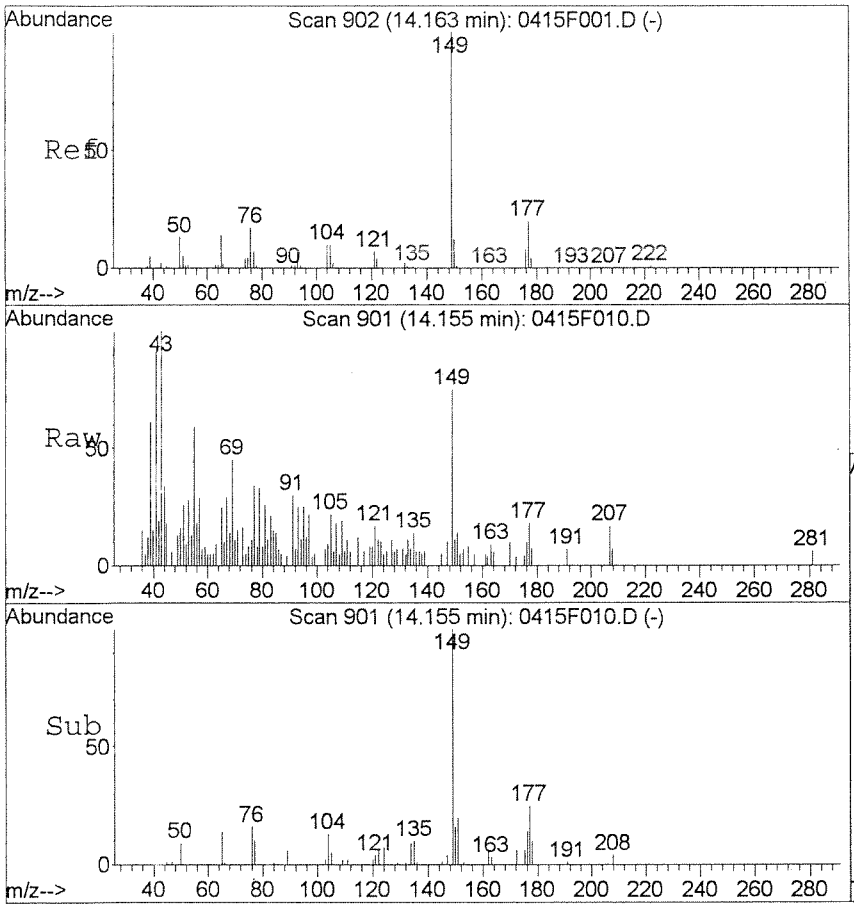


#46
Acenaphthylene
Concen: 9.89 ng/ml
RT: 13.15 min Scan# 803
Delta R.T. 0.00 min
Lab File: 0415F010.D
Acq: 15 Apr 2005 4:22 pm

Tgt Ion:152 Resp: 1806

Ion	Ratio	Lower	Upper
152	100		
151	28.2	0.0	49.5
153	20.1	0.0	43.2

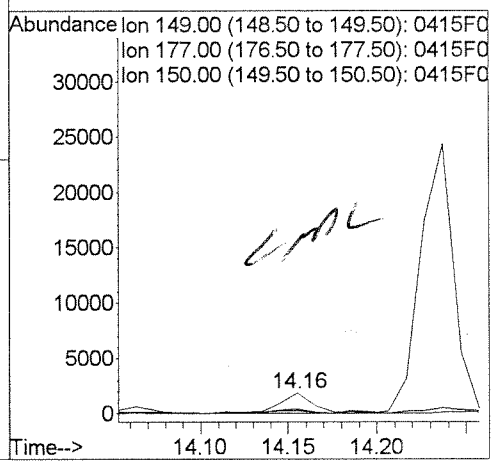


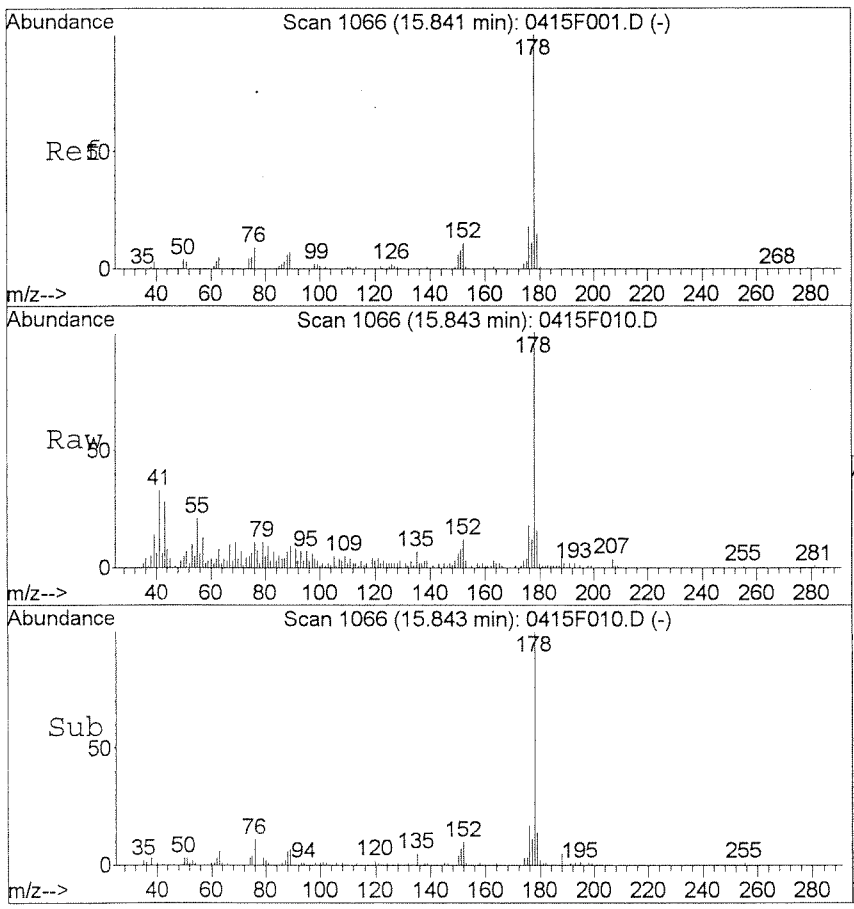


#58
Diethyl Phthalate
Concen: 19.84 ng/ml
RT: 14.16 min Scan# 901
Delta R.T. -0.01 min
Lab File: 0415F010.D
Acq: 15 Apr 2005 4:22 pm

Tgt Ion:149 Resp: 2757

Ion	Ratio	Lower	Upper
149	100		
177	23.6	0.0	50.0
150	15.3	0.0	42.1

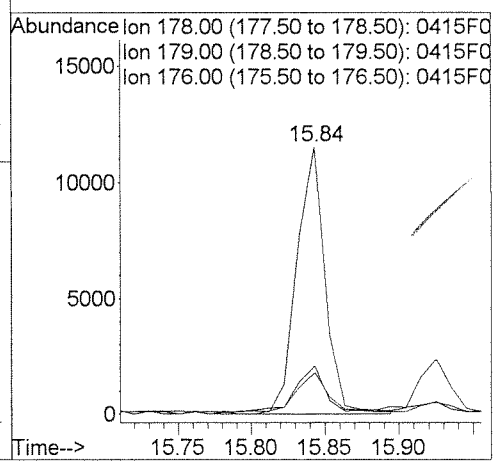


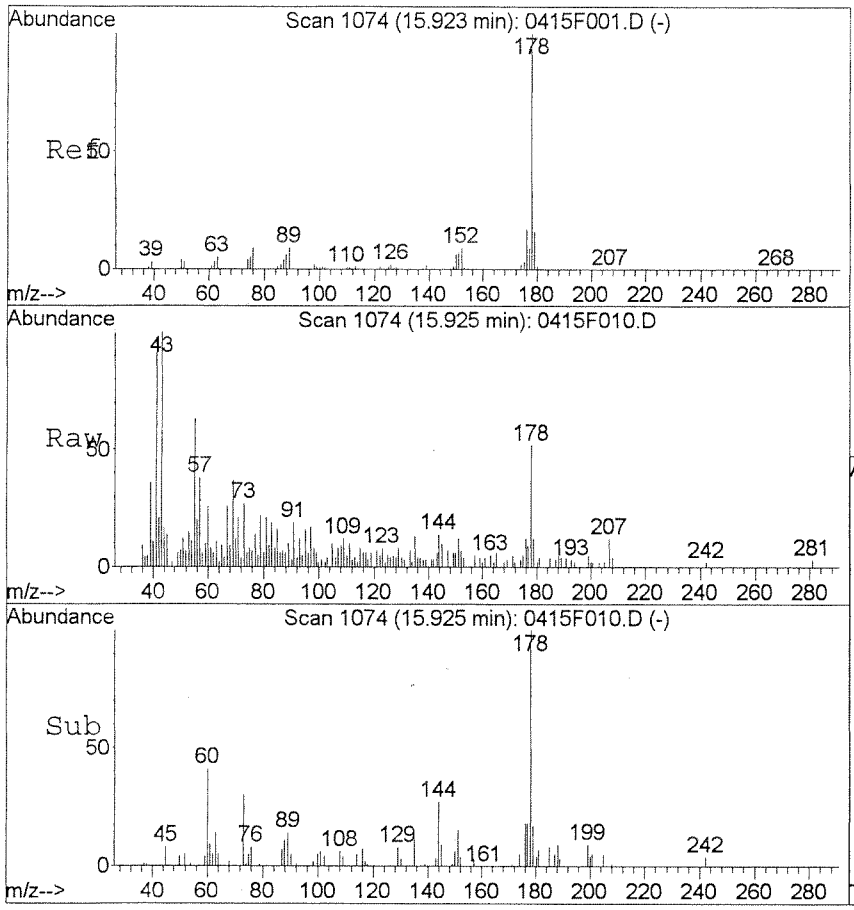


#69
Phenanthrene
Concen: 80.17 ng/ml
RT: 15.84 min Scan# 1066
Delta R.T. 0.00 min
Lab File: 0415F010.D
Acq: 15 Apr 2005 4:22 pm

Tgt Ion:178 Resp: 15663

Ion	Ratio	Lower	Upper
178	100		
179	15.7	0.0	45.4
176	17.1	0.0	48.1

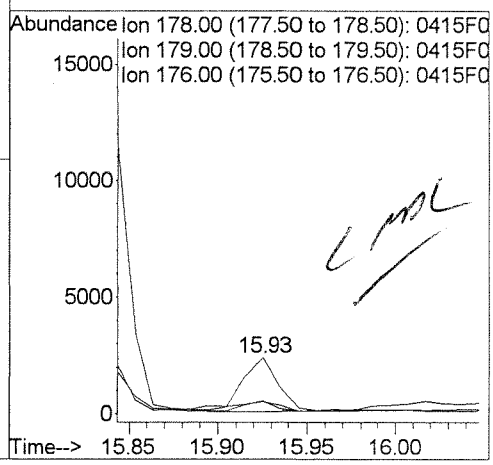


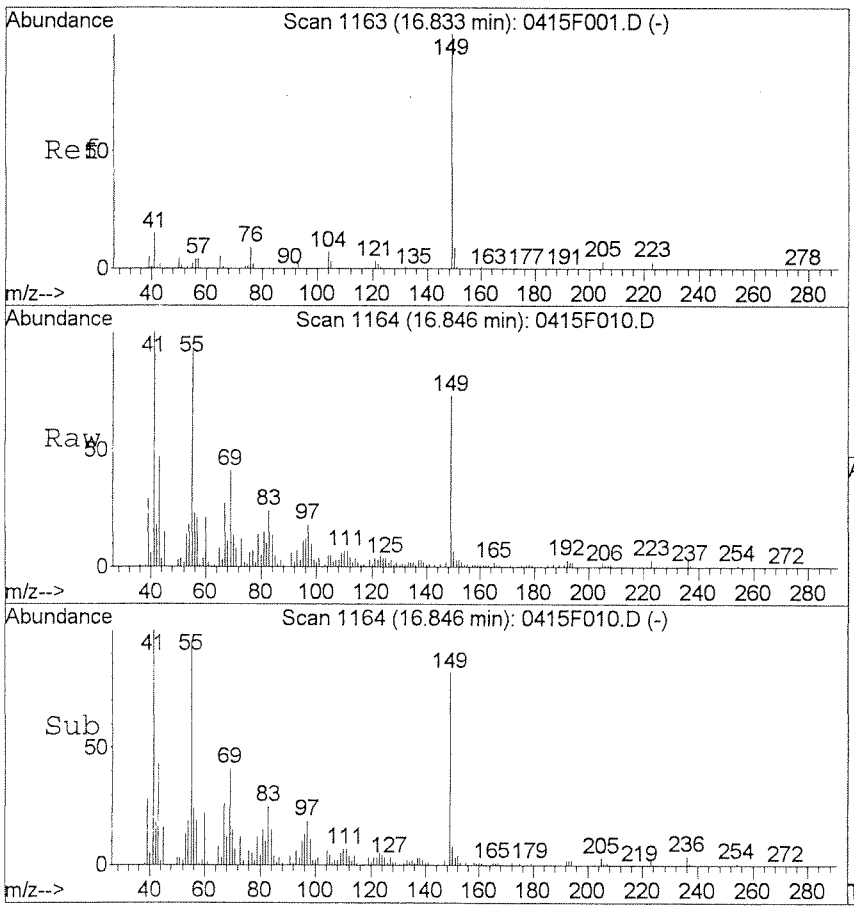


#70
Anthracene
Concen: 16.95 ng/ml
RT: 15.93 min Scan# 1074
Delta R.T. 0.00 min
Lab File: 0415F010.D
Acq: 15 Apr 2005 4:22 pm

Tgt Ion:178 Resp: 3321

Ion	Ratio	Lower	Upper
178	100		
179	7.8	0.0	45.6
176	19.2	0.0	47.4

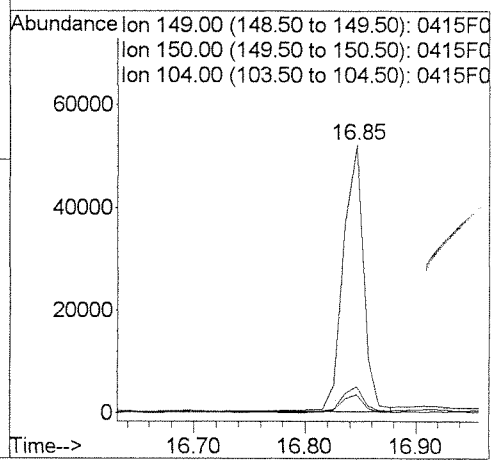


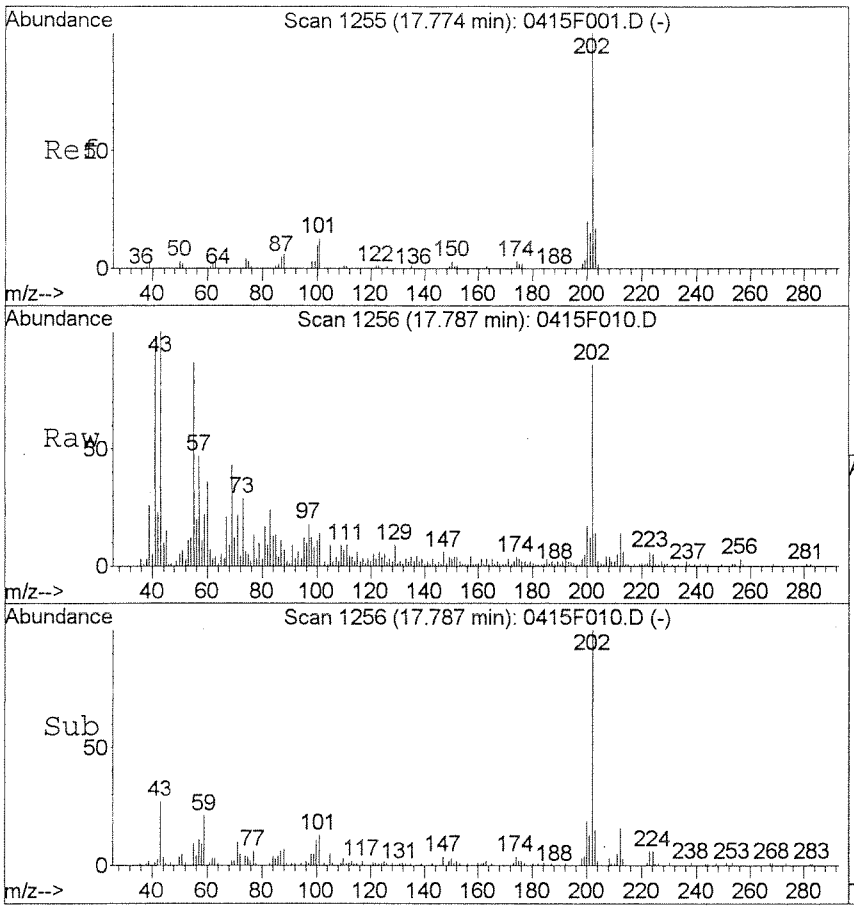


#72
Di-n-butyl Phthalate
Concen: 284.02 ng/ml
RT: 16.85 min Scan# 1164
Delta R.T. 0.01 min
Lab File: 0415F010.D
Acq: 15 Apr 2005 4:22 pm

Tgt Ion:149 Resp: 66446

Ion	Ratio	Lower	Upper
149	100		
150	9.5	0.0	39.4
104	6.7	0.0	37.0

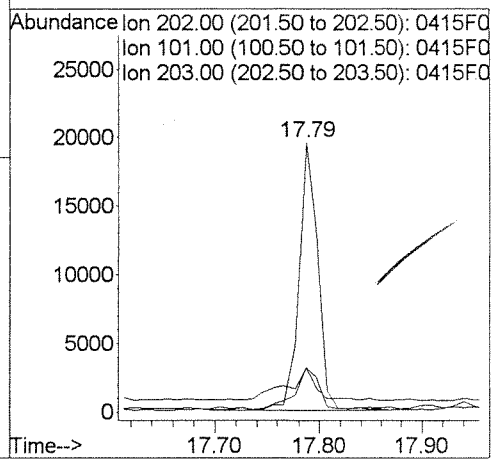


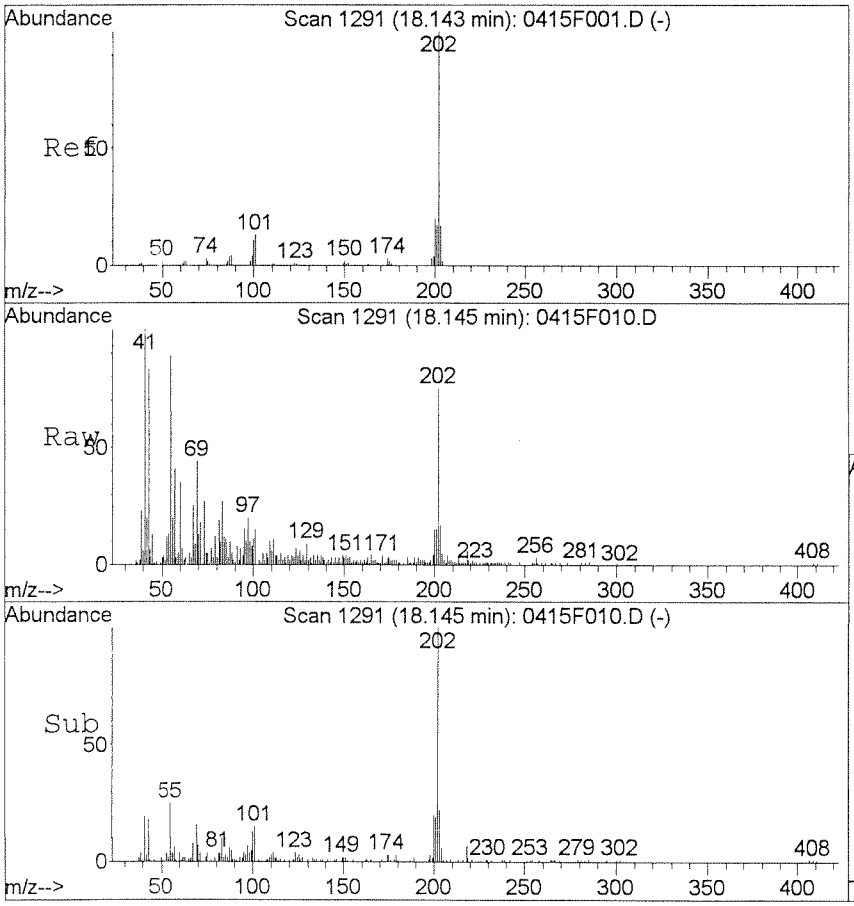


#73
Fluoranthene
Concen: 119.57 ng/ml
RT: 17.79 min Scan# 1256
Delta R.T. 0.01 min
Lab File: 0415F010.D
Acq: 15 Apr 2005 4:22 pm

Tgt Ion:202 Resp: 24417

Ion	Ratio	Lower	Upper
202	100		
101	12.2	0.0	42.6
203	15.4	0.0	47.4

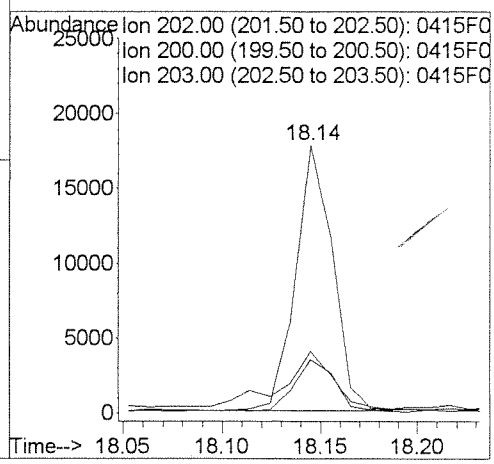


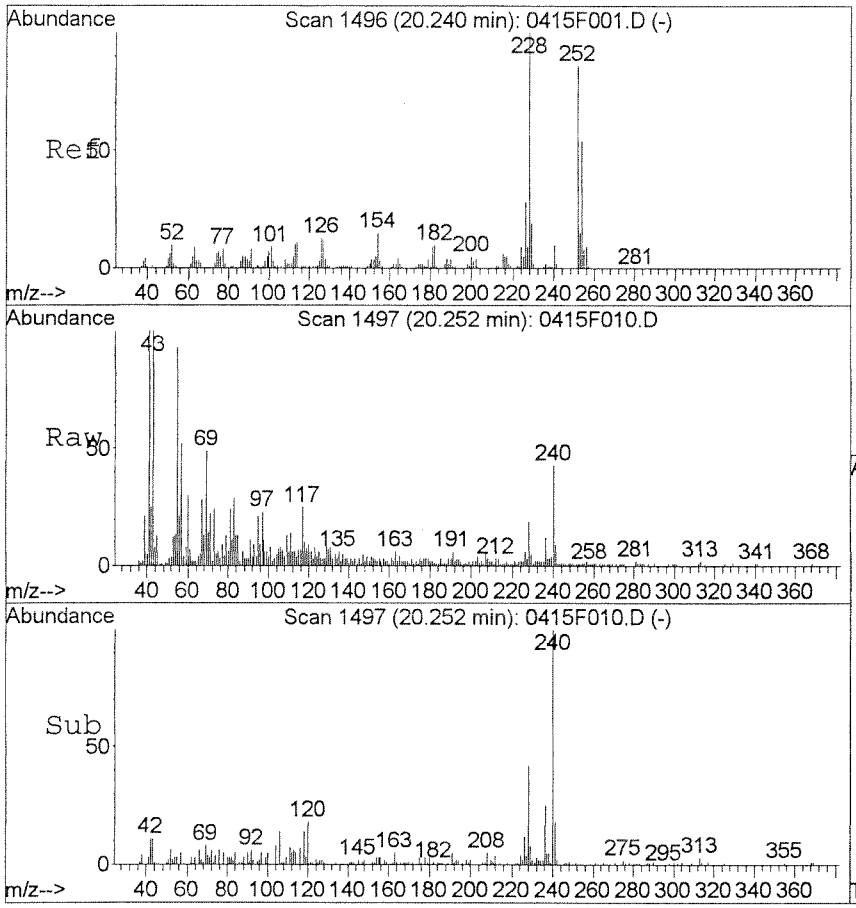


#76
Pyrene
Concen: 119.87 ng/ml
RT: 18.14 min Scan# 1291
Delta R.T. 0.00 min
Lab File: 0415F010.D
Acq: 15 Apr 2005 4:22 pm

Tgt Ion:202 Resp: 23046

Ion	Ratio	Lower	Upper
202	100		
200	19.4	0.0	50.4
203	21.5	0.0	47.1

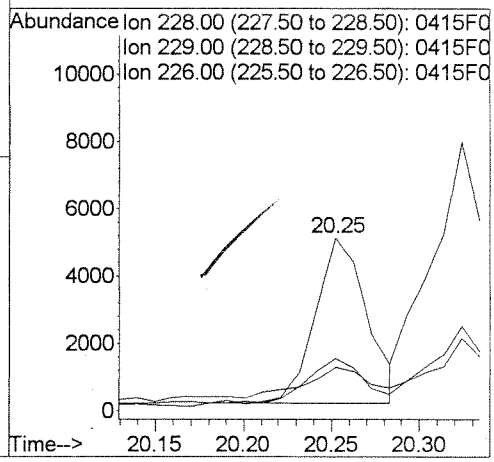


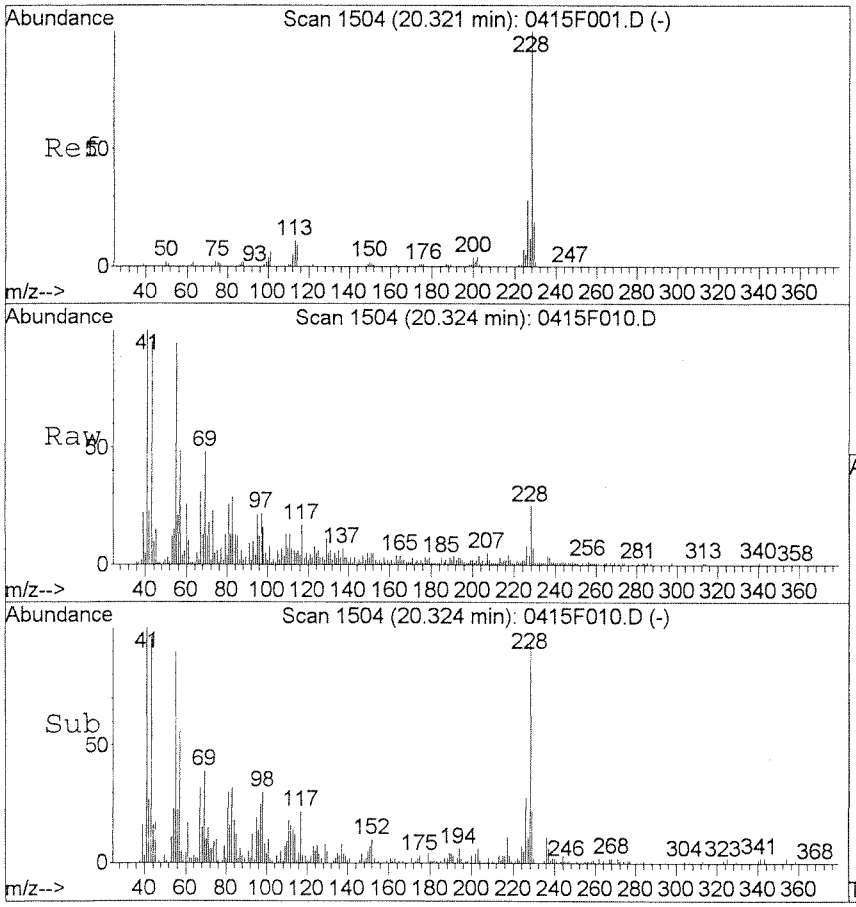


#80
Benz(a)anthracene
Concen: 62.53 ng/ml
RT: 20.25 min Scan# 1497
Delta R.T. 0.01 min
Lab File: 0415F010.D
Acq: 15 Apr 2005 4:22 pm

Tgt Ion:228 Resp: 10085

Ion	Ratio	Lower	Upper
228	100		
229	17.9	0.0	49.4
226	27.2	0.0	57.8

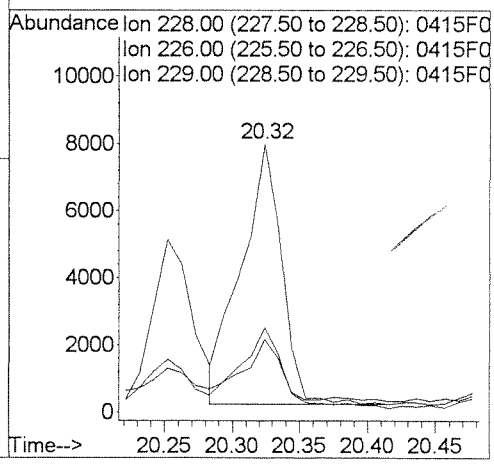


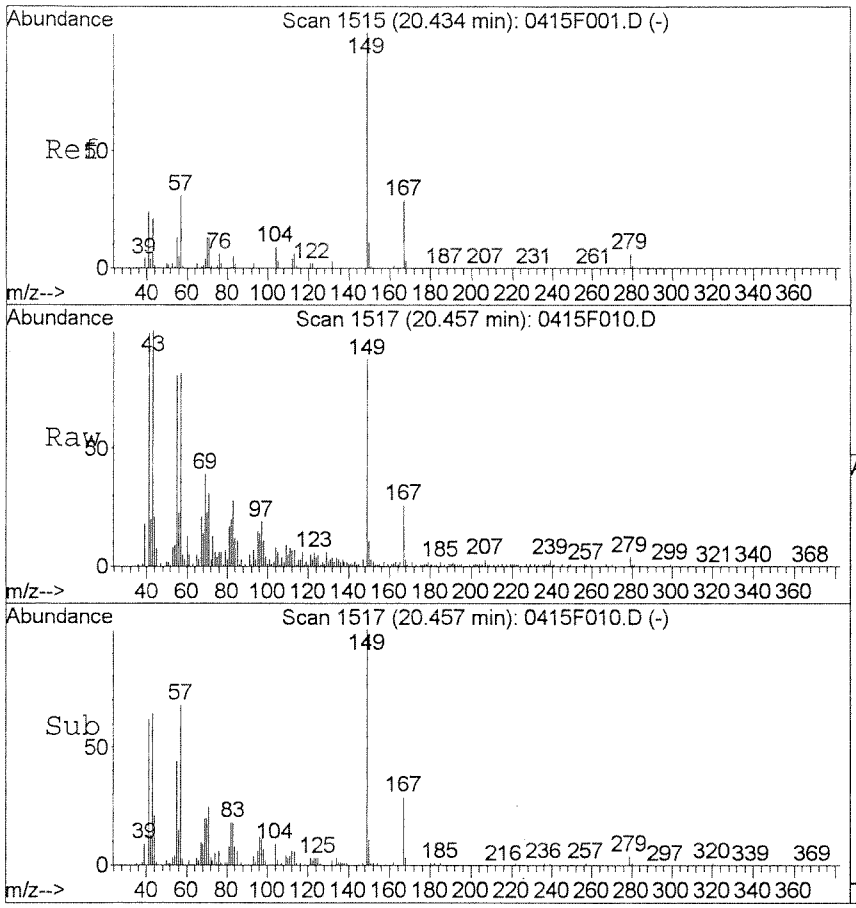


#81
Chrysene
Concen: 114.68 ng/ml
RT: 20.32 min Scan# 1504
Delta R.T. 0.00 min
Lab File: 0415F010.D
Acq: 15 Apr 2005 4:22 pm

Tgt Ion:228 Resp: 16507

Ion	Ratio	Lower	Upper
228	100		
226	30.9	0.0	58.2
229	23.8	0.0	49.1

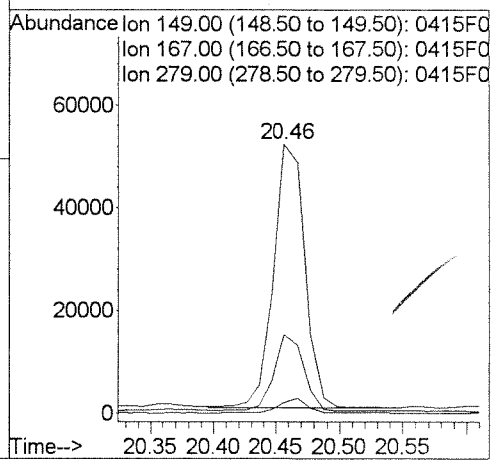


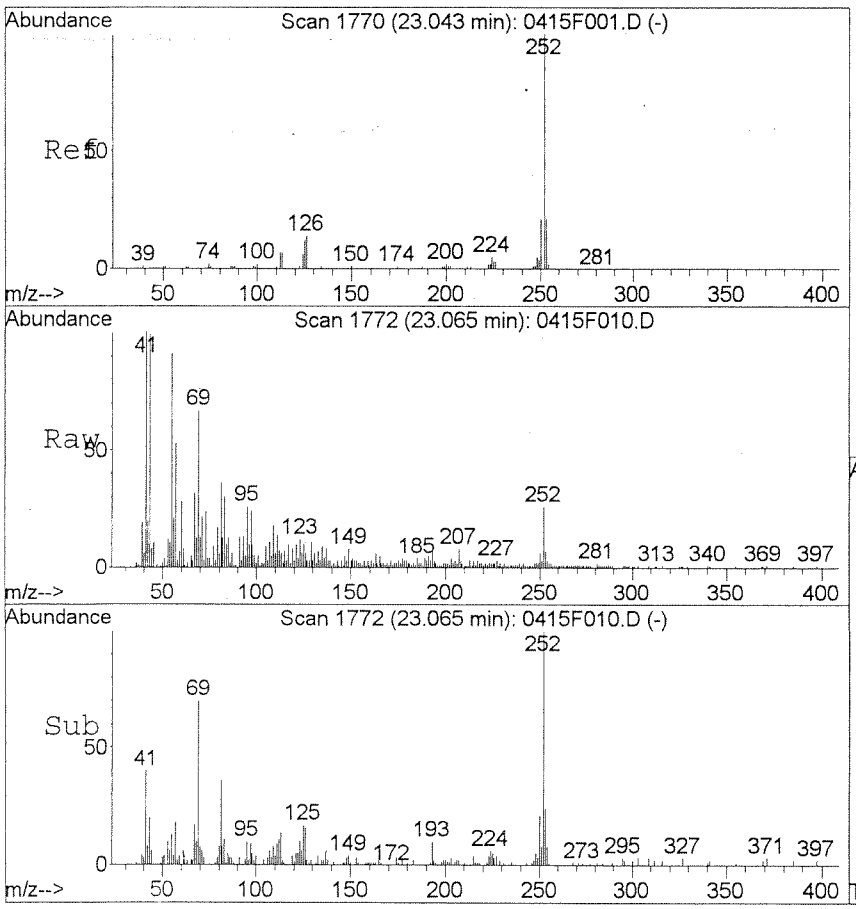


#82
Bis(2-ethylhexyl) Phthalate
Concen: 737.87 ng/ml
RT: 20.46 min Scan# 1517
Delta R.T. 0.02 min
Lab File: 0415F010.D
Acq: 15 Apr 2005 4:22 pm

Tgt Ion:149 Resp: 88061

Ion	Ratio	Lower	Upper
149	100		
167	28.9	0.0	59.5
279	4.2	0.0	36.1

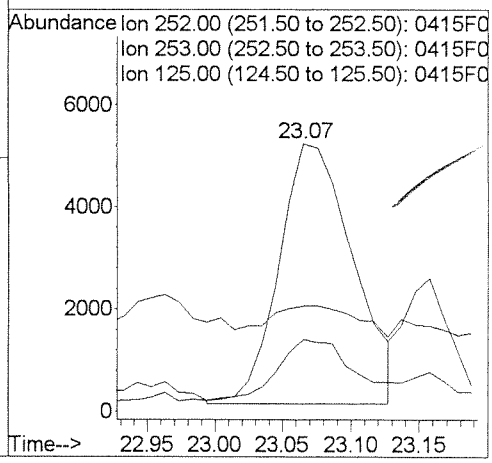


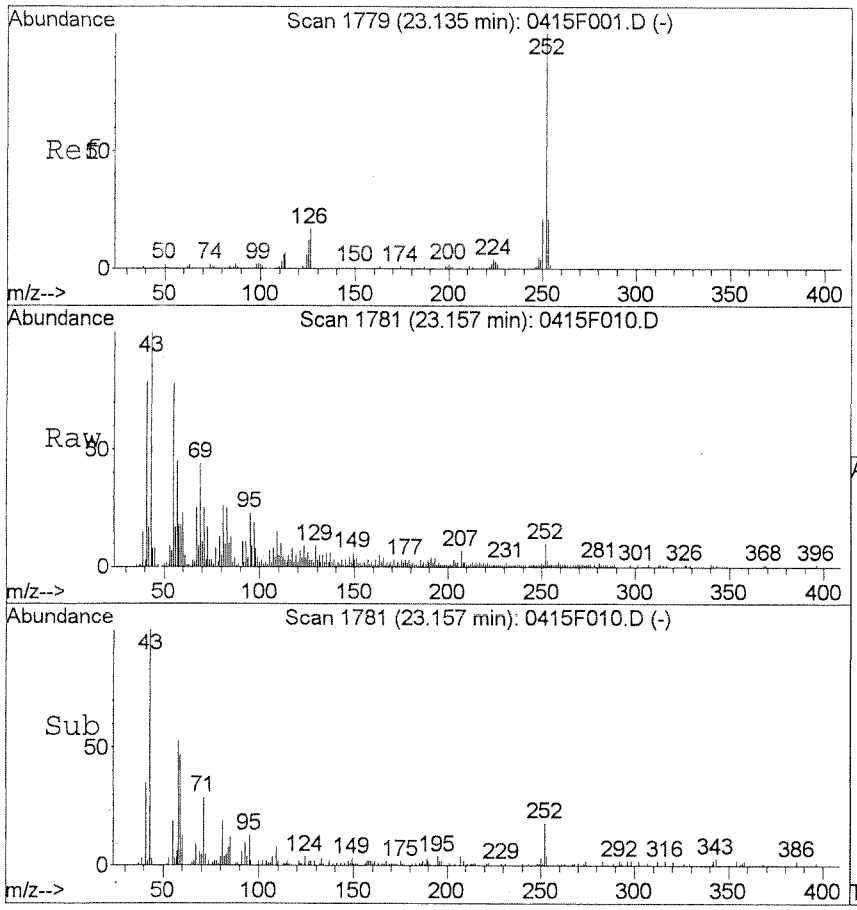


#85
Benzo(b)fluoranthene
Concen: 135.36 ng/ml
RT: 23.07 min Scan# 1772
Delta R.T. 0.02 min
Lab File: 0415F010.D
Acq: 15 Apr 2005 4:22 pm

Tgt Ion:252 Resp: 19032

Ion	Ratio	Lower	Upper
252	100		
253	23.6	0.0	51.3
125	11.9	0.0	41.7

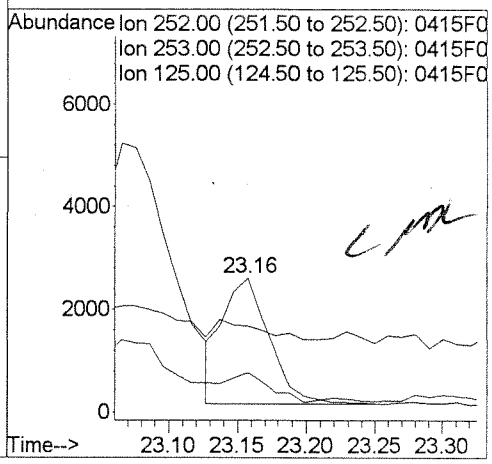


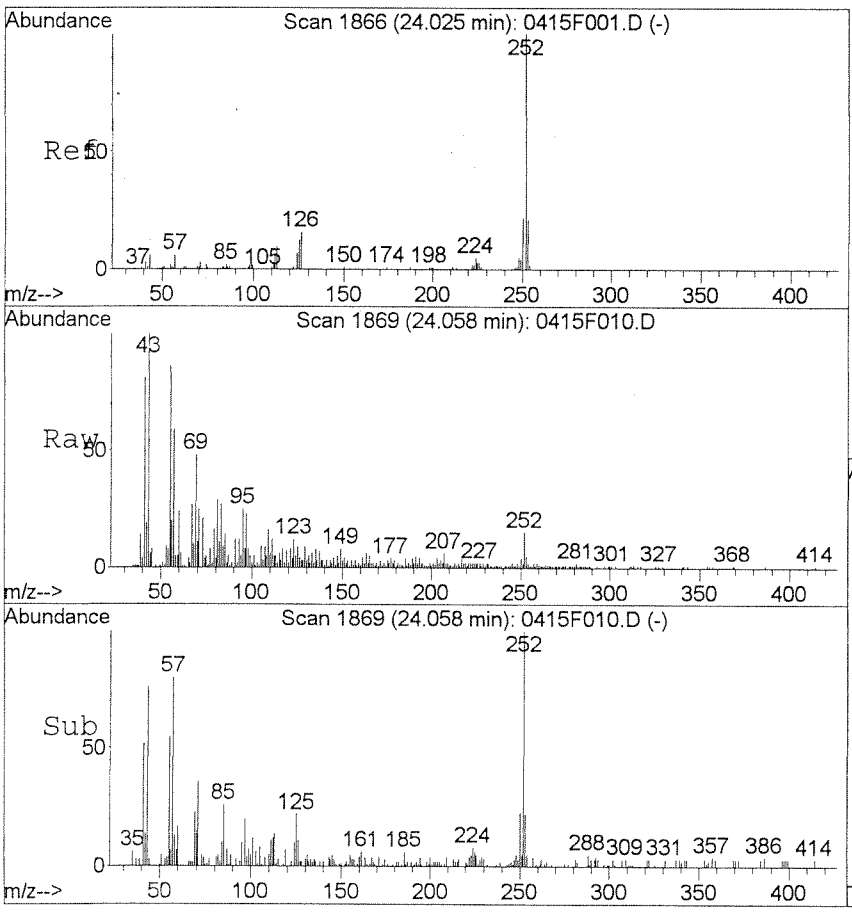


#86
Benzo(k)fluoranthene
Concen: 41.30 ng/ml
RT: 23.16 min Scan# 1781
Delta R.T. 0.02 min
Lab File: 0415F010.D
Acq: 15 Apr 2005 4:22 pm

Tgt Ion:252 Resp: 5799

Ion	Ratio	Lower	Upper
252	100		
253	22.3	0.0	51.2
125	8.9	0.0	41.8

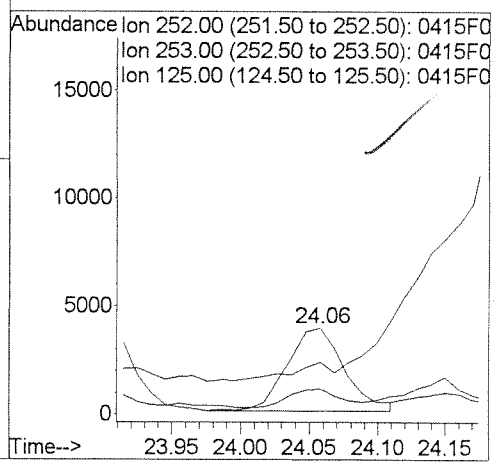


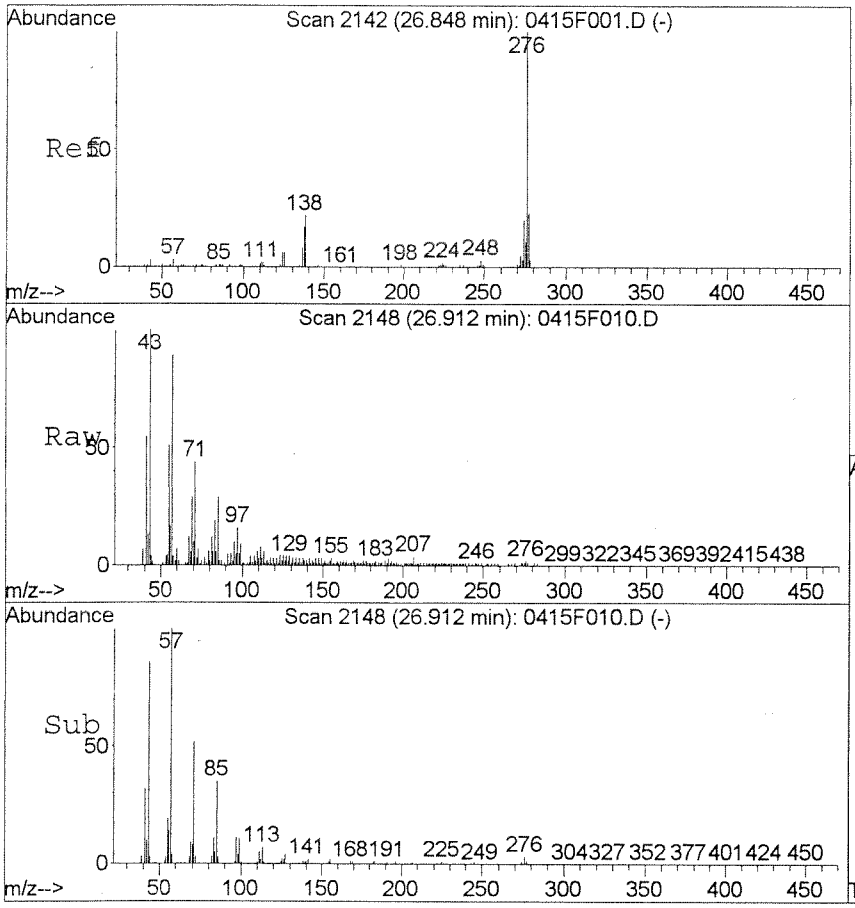


#87
Benzo(a)pyrene
Concen: 80.54 ng/ml
RT: 24.06 min Scan# 1869
Delta R.T. 0.03 min
Lab File: 0415F010.D
Acq: 15 Apr 2005 4:22 pm

Tgt Ion:252 Resp: 10987

Ion	Ratio	Lower	Upper
252	100		
253	21.0	0.0	51.0
125	24.1	0.0	42.7

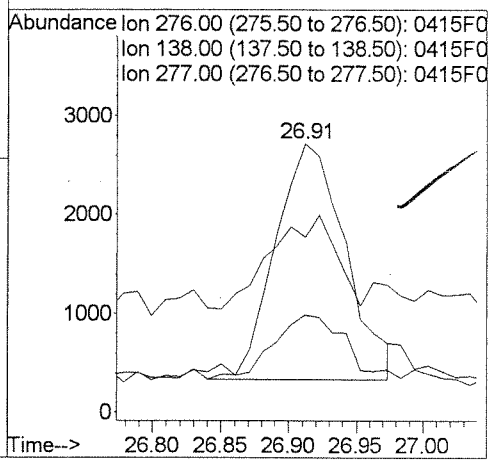


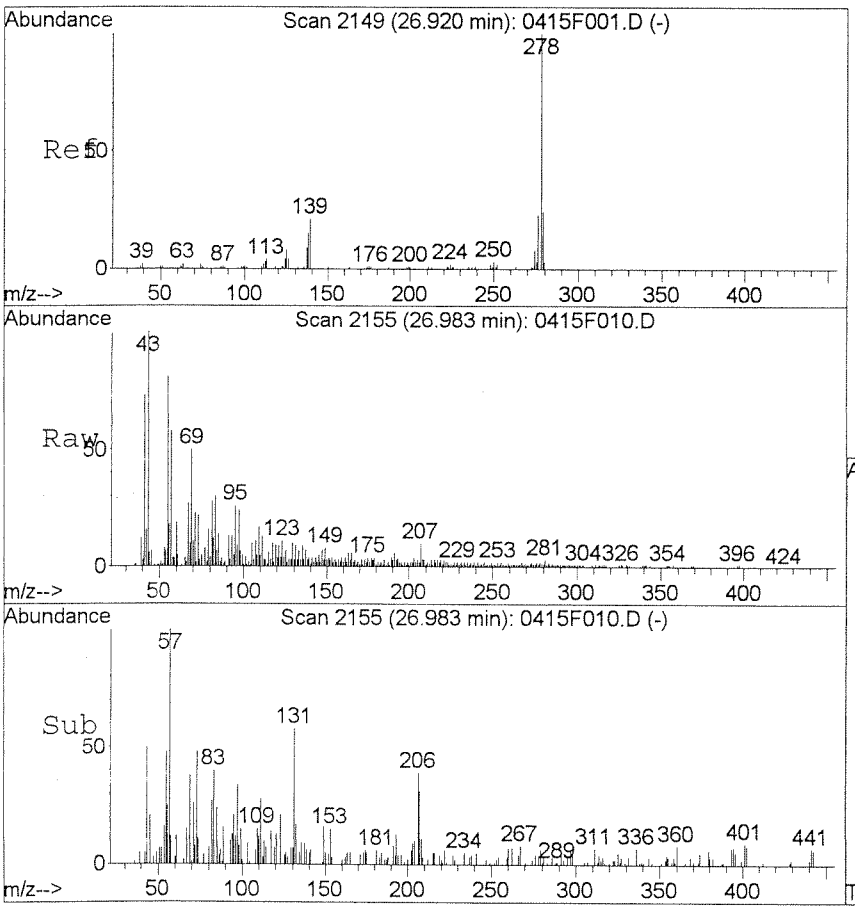


#88
Indeno(1,2,3-cd)pyrene
Concen: 73.92 ng/ml
RT: 26.91 min Scan# 2148
Delta R.T. 0.06 min
Lab File: 0415F010.D
Acq: 15 Apr 2005 4:22 pm

Tgt Ion:276 Resp: 8565

Ion	Ratio	Lower	Upper
276	100		
138	30.2	0.0	52.0
277	24.3	0.0	53.3

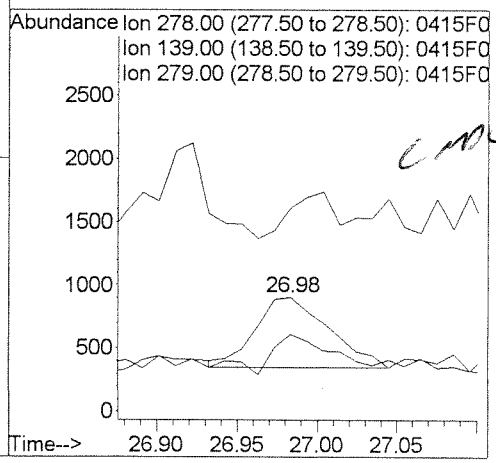


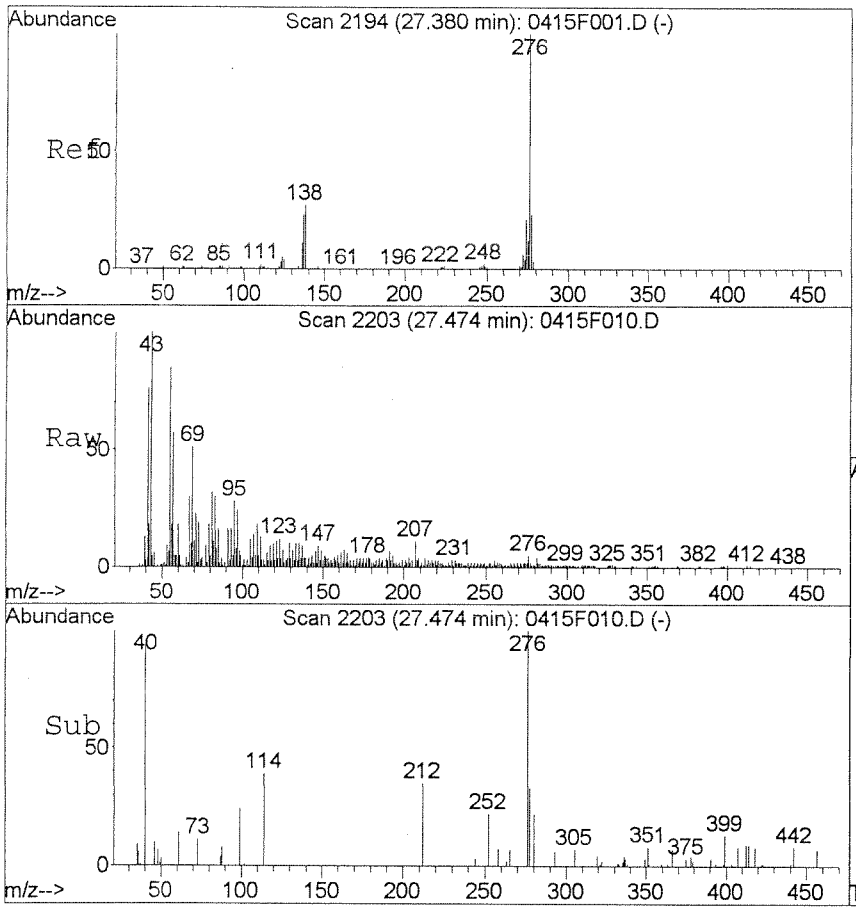


#89
Dibenz(a,h)anthracene
Concen: 15.61 ng/ml
RT: 26.98 min Scan# 2155
Delta R.T. 0.06 min
Lab File: 0415F010.D
Acq: 15 Apr 2005 4:22 pm

Tgt Ion:278 Resp: 1769

Ion	Ratio	Lower	Upper
278	100		
139	8.6	0.0	50.7
279	47.0	0.0	54.0

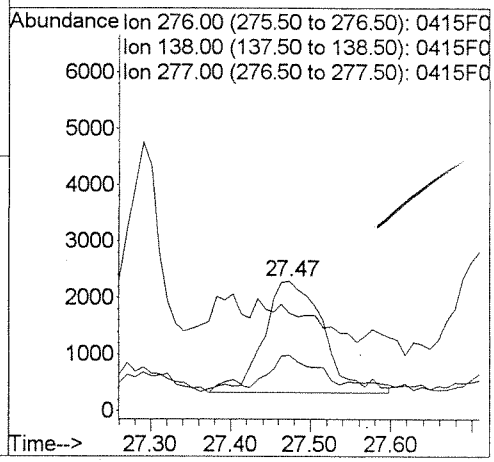




#90
Benzo(g,h,i)perylene
Concen: 88.52 ng/ml
RT: 27.47 min Scan# 2203
Delta R.T. 0.09 min
Lab File: 0415F010.D
Acq: 15 Apr 2005 4:22 pm

Tgt Ion:276 Resp: 10403

Ion	Ratio	Lower	Upper
276	100		
138	21.3	0.0	56.6
277	30.0	0.0	53.5

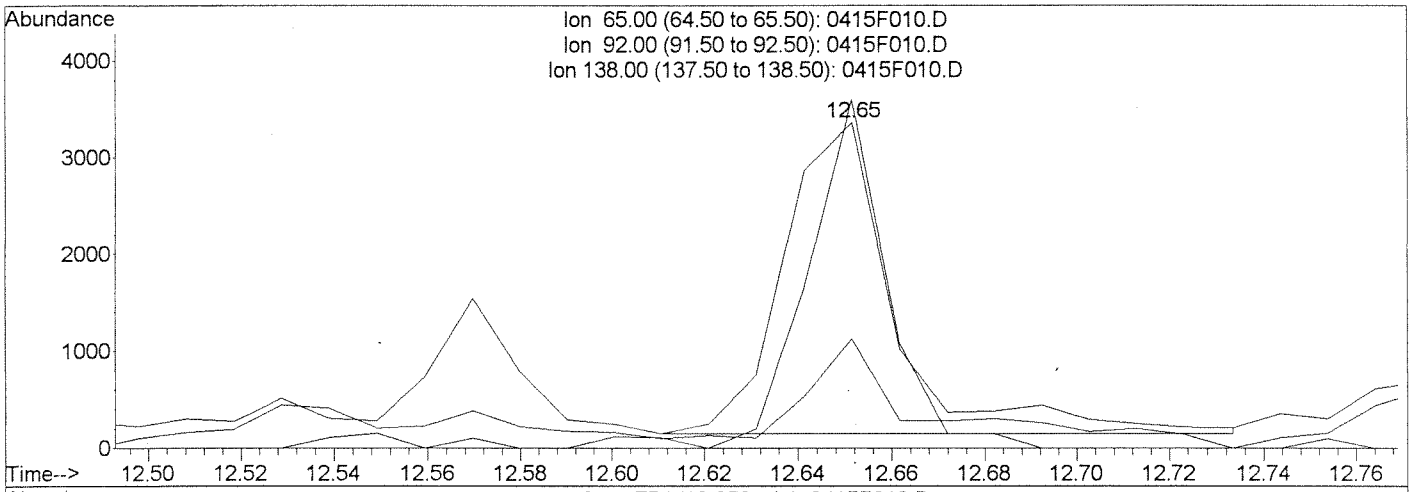


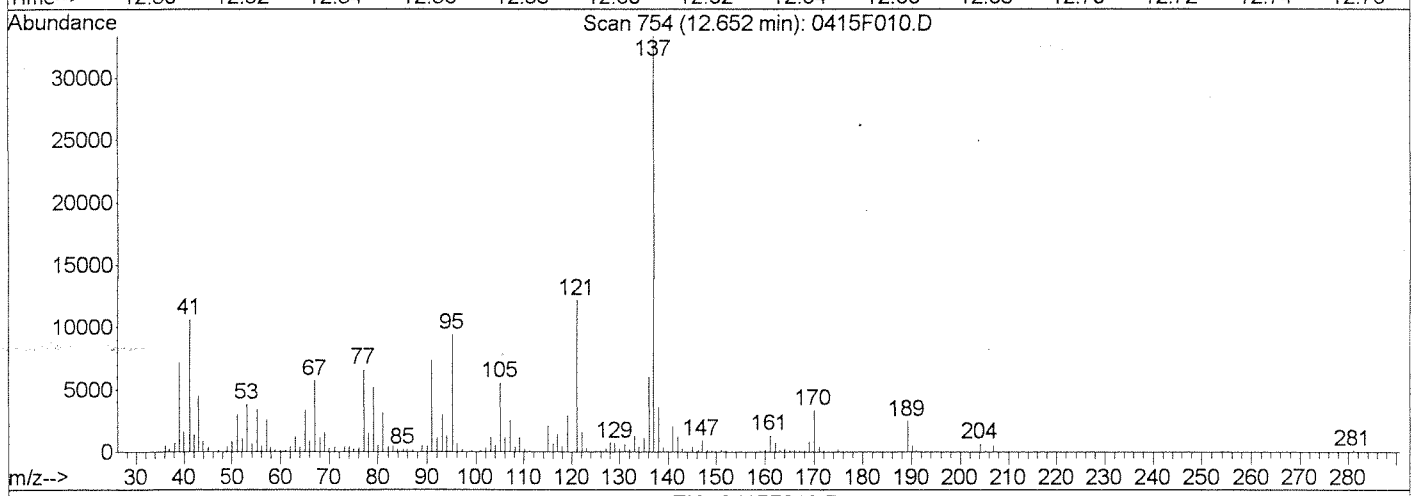
Quantitation Report (Qedit)

Data File : J:\MS10\DATA\041505\0415F010.D
Acq On : 15 Apr 2005 4:22 pm
Sample : K2502499-011
Misc :
MS Integration Params: RTEINT.P
Quant Time: Apr 18 11:51 2005

Vial: 10
Operator: JGISH
Inst : MS10
Multiplr: 1.00
Quant Results File: temp.res

Method : J:\MS10\METHODS\BNA\0412BNLL.M (RTE Integrator)
Title : 8270LL ICAL
Last Update : Mon Apr 18 10:24:44 2005
Response via : Multiple Level Calibration





TIC: 0415F010.D

(45) 2-Nitroaniline (T)

12.65min 104.37ng/ml

response 5283

Ion	Exp%	Act%
65.00	100	100
92.00	56.00	34.97
138.00	105.70	112.18
0.00	0.00	0.00

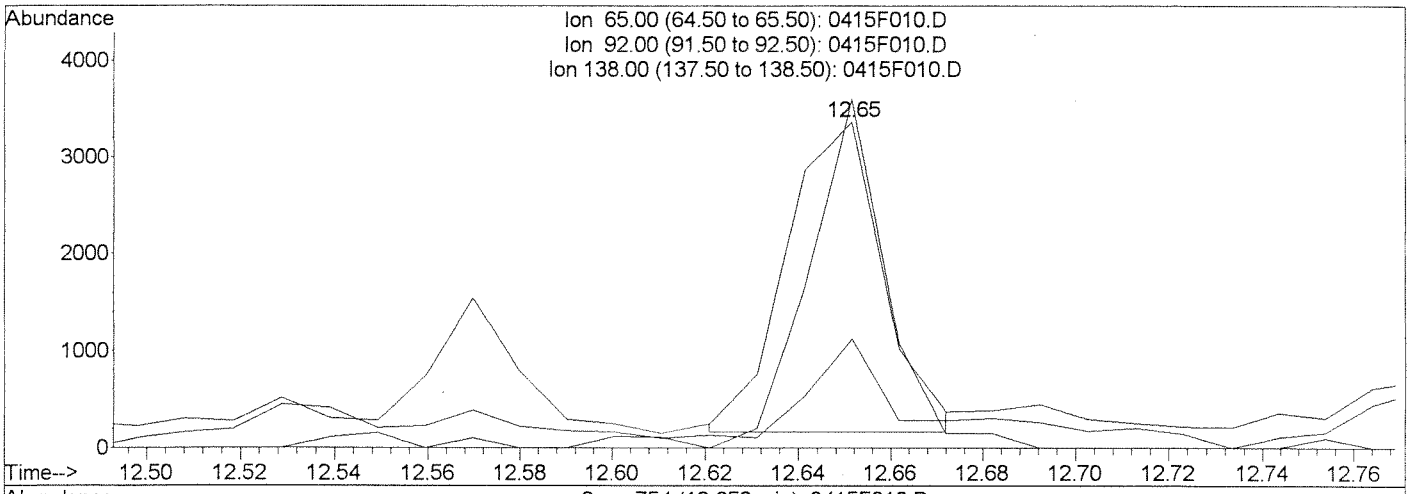
0415F010.D 0412BNLL.M Mon Apr 18 11:52:16 2005

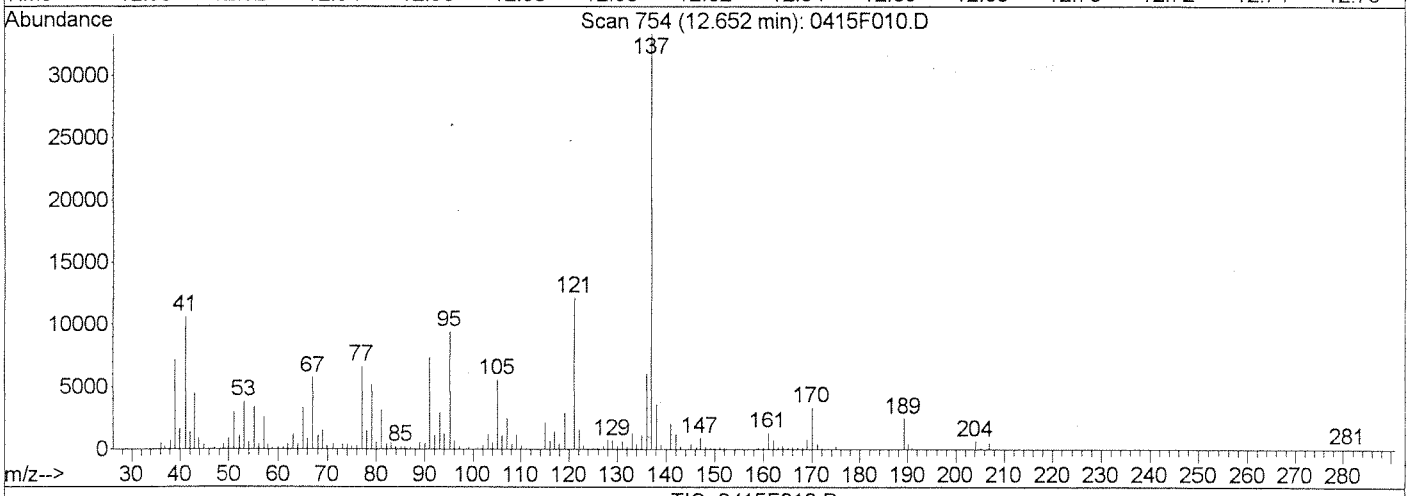
Quantitation Report (Qedit)

Data File : J:\MS10\DATA\041505\0415F010.D
Acq On : 15 Apr 2005 4:22 pm
Sample : K2502499-011
Misc :
MS Integration Params: RTEINT.P
Quant Time: Apr 18 11:52 2005

Vial: 10
Operator: JGISH
Inst : MS10
Multiplr: 1.00
Quant Results File: temp.res

Method : J:\MS10\METHODS\BNA\0412BNLL.M (RTE Integrator)
Title : 8270LL ICAL
Last Update : Mon Apr 18 10:24:44 2005
Response via : Multiple Level Calibration





TIC: 0415F010.D

(45) 2-Nitroaniline (T)

12.65min 91.37ng/ml m

response 4625

Ion	Exp%	Act%
65.00	100	100
92.00	56.00	33.40
138.00	105.70	107.14
0.00	0.00	0.00

poor Integration
4/18/05
4/19/05

0415F010.D 0412BNLL.M Mon Apr 18 11:52:26 2005

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Battelle Memorial Institute	**Service Request:**	K2502554
Project:	Novato Ballfields/G486063	**Date Collected:**	NA
Sample Matrix:	Soil	**Date Received:**	NA

Semi-Volatile Organic Compounds by GC/MS

Sample Name:	Batch QCMS	**Units:**	ug/Kg
Lab Code:	KWG0505755-1	**Basis:**	Dry
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2,4,5-Tetrachlorobenzene	**94.8**		5.9	5.8	1	04/11/05	04/15/05	KWG0505755	
Phenol	**103**		18	2.3	1	04/11/05	04/15/05	KWG0505755	
Bis(2-chloroethyl) Ether	**93.6**		5.9	2.8	1	04/11/05	04/15/05	KWG0505755	
2-Chlorophenol	**95.5**		5.9	2.0	1	04/11/05	04/15/05	KWG0505755	
2-Methylphenol	**72.2**		5.9	4.0	1	04/11/05	04/15/05	KWG0505755	
Bis(2-chloroisopropyl) Ether	**82.9**		5.9	1.4	1	04/11/05	04/15/05	KWG0505755	
Acetophenone	**107**		30	14	1	04/11/05	04/15/05	KWG0505755	
4-Methylphenol†	**69.4**		5.9	3.4	1	04/11/05	04/15/05	KWG0505755	
N-Nitrosodi-n-propylamine	**94.5**		5.9	3.8	1	04/11/05	04/15/05	KWG0505755	
Hexachloroethane	**66.2**		5.9	2.6	1	04/11/05	04/15/05	KWG0505755	
Nitrobenzene	**87.3**		5.9	2.4	1	04/11/05	04/15/05	KWG0505755	
Isophorone	**106**		5.9	1.9	1	04/11/05	04/15/05	KWG0505755	
2-Nitrophenol	**105**		5.9	3.1	1	04/11/05	04/15/05	KWG0505755	
2,4-Dimethylphenol	**18.7**	J	30	6.5	1	04/11/05	04/15/05	KWG0505755	
Bis(2-chloroethoxy)methane	**90.9**		5.9	1.6	1	04/11/05	04/15/05	KWG0505755	
2,4-Dichlorophenol	**106**		5.9	2.1	1	04/11/05	04/15/05	KWG0505755	
Naphthalene	**89.5**		5.9	1.6	1	04/11/05	04/15/05	KWG0505755	
4-Chloroaniline	ND	U	5.9	2.5	1	04/11/05	04/15/05	KWG0505755	
Hexachlorobutadiene	**74.4**		5.9	1.7	1	04/11/05	04/15/05	KWG0505755	
Caprolactam	**132**		14	14	1	04/11/05	04/15/05	KWG0505755	
Benzaldehyde	**78.7**		12	11	1	04/11/05	04/15/05	KWG0505755	
4-Chloro-3-methylphenol	**104**		5.9	2.5	1	04/11/05	04/15/05	KWG0505755	
2-Methylnaphthalene	**86.5**		5.9	1.4	1	04/11/05	04/15/05	KWG0505755	
Hexachlorocyclopentadiene	**19.4**	J	30	18	1	04/11/05	04/15/05	KWG0505755	
2,4,6-Trichlorophenol	**121**		5.9	2.1	1	04/11/05	04/15/05	KWG0505755	
2,4,5-Trichlorophenol	**127**		5.9	3.5	1	04/11/05	04/15/05	KWG0505755	
Biphenyl	**110**		12	5.6	1	04/11/05	04/15/05	KWG0505755	
2-Chloronaphthalene	**98.8**		5.9	4.2	1	04/11/05	04/15/05	KWG0505755	
2-Nitroaniline	**118**		12	3.2	1	04/11/05	04/15/05	KWG0505755	
Dimethyl Phthalate	**119**		5.9	2.1	1	04/11/05	04/15/05	KWG0505755	
2,6-Dinitrotoluene	**114**		5.9	3.3	1	04/11/05	04/15/05	KWG0505755	
Acenaphthylene	**116**		5.9	1.7	1	04/11/05	04/15/05	KWG0505755	
3-Nitroaniline	ND	U	12	3.1	1	04/11/05	04/15/05	KWG0505755	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Battelle Memorial Institute	**Service Request:**	K2502554
Project:	Novato Ballfields/G486063	**Date Collected:**	NA
Sample Matrix:	Soil	**Date Received:**	NA

Semi-Volatile Organic Compounds by GC/MS

Sample Name:	Batch QCMS	**Units:**	ug/Kg
Lab Code:	KWG0505755-1	**Basis:**	Dry
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Acenaphthene	**113**		5.9	1.2	1	04/11/05	04/15/05	KWG0505755	
2,4-Dinitrophenol	**127**		120	42	1	04/11/05	04/15/05	KWG0505755	
4-Nitrophenol	**126**		59	35	1	04/11/05	04/15/05	KWG0505755	
Dibenzofuran	**110**		5.9	1.6	1	04/11/05	04/15/05	KWG0505755	
2,4-Dinitrotoluene	**122**		5.9	3.3	1	04/11/05	04/15/05	KWG0505755	
Diethyl Phthalate	**124**		5.9	4.1	1	04/11/05	04/15/05	KWG0505755	
Fluorene	**122**		5.9	2.0	1	04/11/05	04/15/05	KWG0505755	
4-Chlorophenyl Phenyl Ether	**119**		5.9	2.4	1	04/11/05	04/15/05	KWG0505755	
4-Nitroaniline	**16.2**		12	4.0	1	04/11/05	04/15/05	KWG0505755	
2-Methyl-4,6-dinitrophenol	**104**		59	2.0	1	04/11/05	04/15/05	KWG0505755	
N-Nitrosodiphenylamine	**119**		5.9	2.6	1	04/11/05	04/15/05	KWG0505755	
4-Bromophenyl Phenyl Ether	**115**		5.9	1.7	1	04/11/05	04/15/05	KWG0505755	
Hexachlorobenzene	**116**		5.9	2.5	1	04/11/05	04/15/05	KWG0505755	
Atrazine	**109**		5.9	2.6	1	04/11/05	04/15/05	KWG0505755	
Pentachlorophenol	**94.1**		59	10	1	04/11/05	04/15/05	KWG0505755	
Phenanthrene	**122**		5.9	1.6	1	04/11/05	04/15/05	KWG0505755	
Anthracene	**117**		5.9	1.7	1	04/11/05	04/15/05	KWG0505755	
Carbazole	**119**		5.9	1.6	1	04/11/05	04/15/05	KWG0505755	
Di-n-butyl Phthalate	**129**	B	5.9	3.1	1	04/11/05	04/15/05	KWG0505755	
Fluoranthene	**127**		5.9	2.6	1	04/11/05	04/15/05	KWG0505755	
Pyrene	**121**		5.9	1.6	1	04/11/05	04/15/05	KWG0505755	
Butyl Benzyl Phthalate	**128**		5.9	1.8	1	04/11/05	04/15/05	KWG0505755	
3,3'-Dichlorobenzidine	ND	U	59	4.4	1	04/11/05	04/15/05	KWG0505755	
Benz(a)anthracene	**120**		5.9	1.7	1	04/11/05	04/15/05	KWG0505755	
Chrysene	**128**		5.9	1.7	1	04/11/05	04/15/05	KWG0505755	
Bis(2-ethylhexyl) Phthalate	**162**		120	2.0	1	04/11/05	04/15/05	KWG0505755	
Di-n-octyl Phthalate	**123**		5.9	1.4	1	04/11/05	04/15/05	KWG0505755	
Benzo(b)fluoranthene	**123**		5.9	3.0	1	04/11/05	04/15/05	KWG0505755	
Benzo(k)fluoranthene	**118**		5.9	3.0	1	04/11/05	04/15/05	KWG0505755	
Benzo(a)pyrene	**123**		5.9	1.9	1	04/11/05	04/15/05	KWG0505755	
Indeno(1,2,3-cd)pyrene	**96.1**		5.9	2.3	1	04/11/05	04/15/05	KWG0505755	
Dibenz(a,h)anthracene	**119**		5.9	2.6	1	04/11/05	04/15/05	KWG0505755	
Benzo(g,h,i)perylene	**114**		5.9	2.7	1	04/11/05	04/15/05	KWG0505755	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Battelle Memorial Institute	**Service Request:**	K2502554
Project:	Novato Ballfields/G486063	**Date Collected:**	NA
Sample Matrix:	Soil	**Date Received:**	NA

Semi-Volatile Organic Compounds by GC/MS

Sample Name:	Batch QCMS	**Units:**	ug/Kg
Lab Code:	KWG0505755-1	**Basis:**	Dry

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	55	11-87	04/15/05	Acceptable
Phenol-d6	69	20-99	04/15/05	Acceptable
Nitrobenzene-d5	62	10-99	04/15/05	Acceptable
2-Fluorobiphenyl	76	10-104	04/15/05	Acceptable
2,4,6-Tribromophenol	88	23-113	04/15/05	Acceptable
Terphenyl-d14	99	39-124	04/15/05	Acceptable

† Analyte Comments

4-Methylphenol	This analyte cannot be separated from 3-Methylphenol.

Comments:

Exception Report

Data File: J:\MS10\DATA\041505\0415F011.D
Lab ID: KWG0505755-1 -- K2502499-011MS
RunType: MS
Matrix: SOIL

Date Acquired: 04/15/2005 17:01
Date Quantitated: 04/18/2005 12:20
Batch ID: KWG0506208
Analysis Method: 8270C
MethodJoinID: MJ142

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Tune Window	NA	NA	NA	x	
Analytical Holding Time	NA	NA	NA	x	
ICAL Pass/Fail	NA	NA	NA	x	
ICAL Average RSD	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Initial Calibration Minimum RF	NA	NA	NA	x	
Initial Calibration SPCC/CCC	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Minimum RF	NA	NA	NA	x	
Continuing Calibration SPCC/CCC	NA	NA	NA	x	
Internal Standards	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Relative Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

K2502499
K2502554

Primary Review: 4/18/05

Secondary Review: 4/18/05

Printed: 04/18/2005 15:32:36
u:\Stealth\Crystal.rpt\except2.rpt

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	SOIL
Prod Code:	8270-LL	**Collect Date:**		**Receive Date:**	04/12/2005

Analysis Lot:	KWG0506208	**Prep Lot:**	KWG0505755	**Report Group:**	
Analysis Method:	8270C	**Prep Method:**	EPA 3541		
Prep Ref:	373959	**Prep Date:**	04/11/2005		

Quant Method:	J:\MS10\METHODS\BNA\0412BNLL.M	**Calibration ID:**	CAL4375
Title:			
Tune Ref:	J:\MS10\DATA\041505\0415T001.D	**Method ID:**	MJ142
MB Ref:	J:\MS10\DATA\041505\0415F003.D	**Quant based on Method**	

Data File:	J:\MS10\DATA\041505\0415F011.D			**Instrument:**	MS10
Acqu Date:	04/15/2005 17:01	**Quant Date:**	04/18/2005 12:20	**Vial:**	11
Run Type:	MS			**Dilution:**	1.0
Lab ID:	KWG0505755-1 -- K2502499-011MS			**Soln Conc. Units:**	ng/ml

Internal Standard Compounds

IS Ref	Parameter Name	RT	RT Dev	Quant Mass	Response	Solution Conc	Area Criteria
1	1,4-Dichlorobenzene-d4	8.63	0.01	152	69522	1,000.00	OK
2	Naphthalene-d8	10.56	0.01	136	216074	1,000.00	OK
3	Acenaphthene-d10	13.40	0.03	164	109049	1,000.00	OK
4	Phenanthrene-d10	15.82	0.03	188	176835	1,000.00	OK
5	Chrysene-d12	20.31	0.07	240	135187	1,000.00	OK
6	Perylene-d12	24.30	0.13	264	102944	1,000.00	OK

Surrogate Compounds

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	%Rec	%Rec Limits		Rpt?
1	2-Fluorophenol	6.88	0.04	0.00	112	156910	2,053	55	11-87	OK	
1	Phenol-d6	8.19	0.03	0.00	99	239713	2,593	69	20-99	OK	
1	Nitrobenzene-d5	9.47	0.01	0.00	82	143420	1,541	62	10-99	OK	
3	2-Fluorobiphenyl	12.32	0.01	0.00	172	269591	1,904	76	10-104	OK	
4	2,4,6-Tribromophenol	14.70	0.02	0.00	330	70877	3,297	88	23-113	OK	
5	Terphenyl-d14	18.46	0.02	0.00	244	306956	2,463	99	39-124	OK	

Target Compounds

Final Conc. Units: ug/Kg Dry Weight

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	QuantMass	Response	Solution Conc	Final Conc	Q	Rpt?
1	N-Nitrosodimethylamine	5.21	0.04	0.00	42	93632	1,285	74.8		
1	Pyridine	5.35	0.12	0.01	79	79197m	970.79	56.5		
1	Benzaldehyde	8.01	0.02	0.00	106	85525	1,352	78.7		
1	Bis(2-chloroethyl) Ether	8.26		0.00	93	124910	1,608	93.6		
1	Phenol	8.21	0.02	0.00	94	165578	1,765	103		
1	Aniline				93	0d		1.8	U	
1	2-Chlorophenol	8.34	0.01	0.00	128	126475	1,641	95.5		
1	1,3-Dichlorobenzene	8.54	0.01	0.00	146	109580	1,163	67.7		
1	1,4-Dichlorobenzene	8.65	0.01	0.00	146	114104	1,162	67.6		
1	1,2-Dichlorobenzene	8.86	0.01	0.00	146	114018	1,267	73.7		

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File:	J:\MS10\DATA\041505\0415F011.D			**Instrument:**	MS10
Acqu Date:	04/15/2005 17:01	**Quant Date:**	04/18/2005 12:20	**Vial:**	11
Run Type:	MS			**Dilution:**	1.0
Lab ID:	KWG0505755-1 -- K2502499-011MS			**Soln Conc. Units:**	ng/ml

Target Compounds **Final Conc. Units:** ug/Kg Dry Weight

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	QuantMass	Response	Solution Conc	Final Conc	Q	Rpt?
1	Benzyl Alcohol	8.87	0.02	0.00	108	79708	1,503	87.4		
1	Bis(2-chloroisopropyl) Ether	9.06	0.02	0.00	45	207282	1,425	82.9		
1	2-Methylphenol	9.08	0.03	0.00	107	72843	1,240	72.2		
1	Acetophenone	9.24	0.01	0.00	105	209973m	1,846	107		
1	Hexachloroethane	9.37	0.01	0.00	117	49944	1,138	66.2		
1	N-Nitrosodi-n-propylamine	9.26		0.00	70	102237	1,624	94.5		
1	4-Methylphenol	9.31	0.02	0.00	107	101739	1,193	69.4		
1	Nitrobenzene	9.50	0.01	0.00	77	146932	1,501	87.3		
2	Isophorone	9.88	-0.01	0.00	82	243247	1,824	106		
2	2-Nitrophenol	9.98		0.00	139	76846	1,803	105		
2	2,4-Dimethylphenol	10.11	0.01	0.00	122	18446	320.58	18.7	J	
2	Bis(2-chloroethoxy)methane	10.22		0.00	93	138804	1,563	90.9		
2	2,4-Dichlorophenol	10.39	0.01	0.00	162	117111	1,818	106		
2	Benzoic Acid	10.50	0.07	0.01	122	224727	8,766	510		
2	1,2,4-Trichlorobenzene	10.49	0.01	0.00	180	116229	1,435	83.5		
2	Naphthalene	10.60	0.01	0.00	128	325189	1,539	89.5		
2	4-Chloroaniline				127	0d		2.5	U	
2	Hexachlorobutadiene	10.80	0.01	0.00	225	67764	1,279	74.4		
2	Caprolactam	11.39	0.12	0.01	55	91725	2,274	132		
2	4-Chloro-3-methylphenol	11.58	0.04	0.00	107	110324	1,784	104		
2	2-Methylnaphthalene	11.71		0.00	141	184145	1,487	86.5		
3	1,2,4,5-Tetrachlorobenzene	11.98	0.01	0.00	216	130591	1,630	94.8		
3	Hexachlorocyclopentadiene	11.95	0.01	0.00	237	12148	334.13	19.4	J	
3	2,4,6-Trichlorophenol	12.21	0.02	0.00	196	91189	2,082	121		
3	2,4,5-Trichlorophenol	12.29	0.03	0.00	196	102996	2,176	127		
3	Biphenyl	12.48	0.02	0.00	154	301610	1,890	110		
3	2-Chloronaphthalene	12.50	0.01	0.00	127	97214	1,698	98.8		
3	2-Nitroaniline	12.70	0.01	0.00	65	107955	2,022	118		
3	Acenaphthylene	13.16	0.01	0.00	152	385291	1,999	116		
3	Dimethyl Phthalate	13.02	0.01	0.00	163	318506	2,047	119		
3	2,6-Dinitrotoluene	13.11	0.01	0.00	165	74126	1,963	114		
3	Acenaphthene	13.45	0.01	0.00	154	220364	1,942	113		
3	3-Nitroaniline				138	0d		3.1	U	
3	2,4-Dinitrophenol	13.57	0.01	0.00	184	28315	2,184	127		
3	Dibenzofuran	13.73	0.01	0.00	168	356992	1,890	110		
3	4-Nitrophenol	13.77	0.04	0.00	109	46676	2,165	126		
3	2,4-Dinitrotoluene	13.77	0.01	0.00	165	98737	2,095	122		
3	2,3,4,6-Tetrachlorophenol				232	0		12	U	
3	Fluorene	14.30	0.01	0.00	166	281609	2,092	122		
3	4-Chlorophenyl Phenyl Ether	14.32	0.01	0.00	204	144801	2,048	119		
3	Diethyl Phthalate	14.17	0.01	0.00	149	313102	2,136	124		
3	4-Nitroaniline	14.37	-0.01	0.00	138	10122	278.98	16.2		

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Data File:	J:\MS10\DATA\041505\0415F011.D			**Instrument:**	MS10
Acqu Date:	04/15/2005 17:01	**Quant Date:**	04/18/2005 12:20	**Vial:**	11
Run Type:	MS			**Dilution:**	1.0
Lab ID:	KWG0505755-1 -- K2502499-011MS			**Soln Conc. Units:**	ng/ml

Target Compounds **Final Conc. Units:** ug/Kg Dry Weight

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	QuantMass	Response	Solution Conc	Final Conc	Q	Rpt?
3	2-Methyl-4,6-dinitrophenol	14.44		0.00	198	46999	1,781	104		
3	N-Nitrosodiphenylamine	14.52	0.01	0.00	169	187203	2,042	119		
3	Azobenzene	14.57	0.01	0.00	77	331203	1,982	115		
4	4-Bromophenyl Phenyl Ether	15.11	0.02	0.00	248	81063	1,971	115		
4	Hexachlorobenzene	15.20	0.03	0.00	284	91379	1,987	116		
4	Atrazine	15.47	0.04	0.00	200	79800	1,867	109		
4	Pentachlorophenol	15.54	0.02	0.00	266	30596	1,618	94.1		
4	Phenanthrene	15.85	0.01	0.00	178	431994	2,098	122		
4	Anthracene	15.94	0.02	0.00	178	414362	2,007	117		
4	Carbazole	16.24	0.02	0.00	167	384018	2,045	119		
4	Di-n-butyl Phthalate	16.85	0.02	0.00	149	546869	2,218	129		
4	Fluoranthene	17.81	0.04	0.00	202	470908	2,188	127		
5	Benzidine				184	0		240	U	
5	Pyrene	18.16	0.02	0.00	202	435134	2,074	121		
5	Butyl Benzyl Phthalate	19.32	0.04	0.00	149	221279	2,198	128		
5	3,3'-Dichlorobenzidine				252	0**d**		4.4	U	
5	Benz(a)anthracene	20.29	0.05	0.00	228	363247	2,063	120		
5	Chrysene	20.36	0.04	0.00	228	345020	2,196	128		
5	Bis(2-ethylhexyl) Phthalate	20.49	0.06	0.00	149	362080	2,780	162		
6	Di-n-octyl Phthalate	22.23	0.08	0.00	149	444006	2,120	123		
6	Benzo(b)fluoranthene	23.16	0.12	0.00	252	306988	2,108	123		
6	Benzo(k)fluoranthene	23.24	0.11	0.00	252	294884	2,027	118		
6	Benzo(a)pyrene	24.14	0.12	0.00	252	298132	2,110	123		
6	Indeno(1,2,3-cd)pyrene	26.99	0.14	0.00	276	198259**m**	1,652	96.1		
6	Dibenz(a,h)anthracene	27.05	0.13	0.00	278	239020	2,037	119		
6	Benzo(g,h,i)perylene	27.57	0.19	0.00	276	237776	1,953	114		

Prep Amount:	40.06 g	**Dilution:**	1.0
Prep Final Vol:	2 ml	**Unit Factor:**	1
Solids:	85.8 %		

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / (Prep Amount x Solids)) x Unit Factor

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Quantitation Report (QT Reviewed)

Data File : J:\MS10\DATA\041505\0415F011.D Vial: 11
Acq On : 15 Apr 2005 5:01 pm Operator: JGISH
Sample : K2502499-011MS Inst : MS10
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 18 10:25:55 2005 Quant Results File: 0412BNLL.RES

Quant Method : J:\MS10\METHODS\BNA\0412BNLL.M (RTE Integrator)
Title : 8270LL ICAL
Last Update : Mon Apr 18 10:24:44 2005
Response via : Initial Calibration
DataAcq Meth : BNALL

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	8.63	152	69522	1000.00	ng/ml	0.01
23) Naphthalene-d8	10.56	136	216074	1000.00	ng/ml	0.00
37) Acenaphthene-d10	13.40	164	109049	1000.00	ng/ml	0.02
63) Phenanthrene-d10	15.82	188	176835	1000.00	ng/ml	0.02
74) Chrysene-d12	20.31	240	135187	1000.00	ng/ml	0.05
83) Perylene-d12	24.30	264	102944	1000.00	ng/ml	0.13
System Monitoring Compounds						
4) 2-Fluorophenol	6.88	112	156910	2053.25	ng/ml	0.04
Spiked Amount 3750.000	Range 38 - 110		Recovery = 54.75%			
7) Phenol-d6	8.19	99	239713	2593.23	ng/ml	0.03
Spiked Amount 3750.000	Range 43 - 128		Recovery = 69.15%			
21) Nitrobenzene-d5	9.47	82	143420	1541.38	ng/ml	0.01
Spiked Amount 2500.000	Range 30 - 139		Recovery = 61.66%			
42) 2-Fluorobiphenyl	12.32	172	269591	1903.93	ng/ml	0.01
Spiked Amount 2500.000	Range 37 - 126		Recovery = 76.16%			
64) 2,4,6-Tribromophenol	14.70	330	70877	3297.36	ng/ml	0.01
Spiked Amount 3750.000	Range 38 - 157		Recovery = 87.93%			
77) Terphenyl-d14	18.46	244	306956	2462.50	ng/ml	0.02
Spiked Amount 2500.000	Range 54 - 158		Recovery = 98.50%			

Target Compounds						Qvalue
2) N-Nitrosodimethylamine	5.21	42	93632	1285.25	ng/ml	95
3) Pyridine	5.35	79	79197m	970.79	ng/ml	
5) Benzaldehyde	8.01	106	85525	1352.04	ng/ml	97
6) Bis(2-chloroethyl) Ether	8.26	93	124910	1608.42	ng/ml	93
8) Phenol	8.21	94	165578	1765.08	ng/ml	91
10) 2-Chlorophenol	8.34	128	126475	1640.94	ng/ml	95
11) 1,3-Dichlorobenzene	8.54	146	109580	1162.77	ng/ml	98
12) 1,4-Dichlorobenzene	8.65	146	114104	1161.83	ng/ml	99
13) 1,2-Dichlorobenzene	8.86	146	114018	1266.66	ng/ml	98
14) Benzyl Alcohol	8.87	108	79708	1502.68	ng/ml	99
15) Bis(2-chloroisopropyl) Eth	9.06	45	207282	1424.69	ng/ml#	46
16) 2-Methylphenol	9.08	107	72843	1240.14	ng/ml	95
17) Acetophenone	9.24	105	209973m	1845.92	ng/ml	
18) Hexachloroethane	9.37	117	49944	1137.53	ng/ml	99
19) N-Nitrosodi-n-propylamine	9.26	70	102237	1623.81	ng/ml	95
20) 4-Methylphenol	9.31	107	101739	1192.98	ng/ml	97
22) Nitrobenzene	9.50	77	146932	1500.78	ng/ml	96
24) Isophorone	9.88	82	243247	1824.27	ng/ml	99
25) 2-Nitrophenol	9.98	139	76846	1803.19	ng/ml	95
26) 2,4-Dimethylphenol	10.11	122	18446	320.58	ng/ml	94

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : J:\MS10\DATA\041505\0415F011.D Vial: 11
Acq On : 15 Apr 2005 5:01 pm Operator: JGISH
Sample : K2502499-011MS Inst : MS10
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 18 10:25:55 2005 Quant Results File: 0412BNLL.RES

Quant Method : J:\MS10\METHODS\BNA\0412BNLL.M (RTE Integrator)
Title : 8270LL ICAL
Last Update : Mon Apr 18 10:24:44 2005
Response via : Initial Calibration
DataAcq Meth : BNALL

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
27) Bis(2-chloroethoxy)methane	10.22	93	138804	1562.83 ng/ml	99
28) 2,4-Dichlorophenol	10.39	162	117111	1817.63 ng/ml	98
29) Benzoic Acid	10.50	122	224727	8765.88 ng/ml	100
30) 1,2,4-Trichlorobenzene	10.49	180	116229	1435.12 ng/ml	98
31) Naphthalene	10.60	128	325189	1538.72 ng/ml	100
33) Hexachlorobutadiene	10.80	225	67764	1278.69 ng/ml	100
34) Caprolactam	11.39	55	91725	2274.34 ng/ml	98
35) 4-Chloro-3-methylphenol	11.58	107	110324	1784.25 ng/ml	96
36) 2-Methylnaphthalene	11.71	141	184145	1486.55 ng/ml	96
38) 1,2,4,5-Tetrachlorobenzene	11.98	216	130591	1629.90 ng/ml	99
39) Hexachlorocyclopentadiene	11.95	237	12148	334.13 ng/ml	98
40) 2,4,6-Trichlorophenol	12.21	196	91189	2082.23 ng/ml	99
41) 2,4,5-Trichlorophenol	12.29	196	102996	2175.87 ng/ml	98
43) Biphenyl	12.48	154	301610	1890.20 ng/ml	99
44) 2-Chloronaphthalene	12.50	127	97214	1698.19 ng/ml	98
45) 2-Nitroaniline	12.70	65	107955	2021.88 ng/ml	92
46) Acenaphthylene	13.16	152	385291	1999.46 ng/ml	99
47) Dimethyl Phthalate	13.02	163	318506	2046.79 ng/ml	100
48) 2,6-Dinitrotoluene	13.11	165	74126	1962.51 ng/ml	96
49) Acenaphthene	13.45	154	220364	1942.26 ng/ml	99
51) 2,4-Dinitrophenol	13.57	184	28315	2184.42 ng/ml	99
52) Dibenzofuran	13.73	168	356992	1889.98 ng/ml	83
53) 4-Nitrophenol	13.77	109	46676	2165.21 ng/ml#	72
54) 2,4-Dinitrotoluene	13.77	165	98737	2094.53 ng/ml	89
56) Fluorene	14.30	166	281609	2092.32 ng/ml	98
57) 4-Chlorophenyl Phenyl Ethe	14.32	204	144801	2047.58 ng/ml	100
58) Diethyl Phthalate	14.17	149	313102	2135.56 ng/ml	98
59) 4-Nitroaniline	14.37	138	10122	278.98 ng/ml	96
60) 2-Methyl-4,6-dinitrophenol	14.44	198	46999	1781.32 ng/ml	97
61) N-Nitrosodiphenylamine	14.52	169	187203	2042.27 ng/ml	100
62) Azobenzene	14.57	77	331203	1982.04 ng/ml	98
65) 4-Bromophenyl Phenyl Ether	15.11	248	81063	1971.36 ng/ml	98
66) Hexachlorobenzene	15.20	284	91379	1986.53 ng/ml	86
67) Atrazine	15.47	200	79800	1867.27 ng/ml	99
68) Pentachlorophenol	15.54	266	30596	1618.01 ng/ml	99
69) Phenanthrene	15.85	178	431994	2098.48 ng/ml	100
70) Anthracene	15.94	178	414362	2007.09 ng/ml	99
71) Carbazole	16.24	167	384018	2044.92 ng/ml	99
72) Di-n-butyl Phthalate	16.85	149	546869	2218.41 ng/ml	100
73) Fluoranthene	17.81	202	470908	2188.44 ng/ml	100
76) Pyrene	18.16	202	435134	2073.50 ng/ml	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : J:\MS10\DATA\041505\0415F011.D
Acq On : 15 Apr 2005 5:01 pm
Sample : K2502499-011MS
Misc :
MS Integration Params: RTEINT.P
Quant Time: Apr 18 10:25:55 2005

Vial: 11
Operator: JGISH
Inst : MS10
Multiplr: 1.00
Quant Results File: 0412BNLL.RES

Quant Method : J:\MS10\METHODS\BNA\0412BNLL.M (RTE Integrator)
Title : 8270LL ICAL
Last Update : Mon Apr 18 10:24:44 2005
Response via : Initial Calibration
DataAcq Meth : BNALL

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
78)	Butyl Benzyl Phthalate	19.32	149	221279	2197.68	ng/ml	99
80)	Benz(a)anthracene	20.29	228	363247	2063.49	ng/ml	98
81)	Chrysene	20.36	228	345020	2196.07	ng/ml	98
82)	Bis(2-ethylhexyl) Phthalat	20.49	149	362080	2779.60	ng/ml	98
84)	Di-n-octyl Phthalate	22.23	149	444006	2119.54	ng/ml	97
85)	Benzo(b)fluoranthene	23.16	252	306988	2107.64	ng/ml	99
86)	Benzo(k)fluoranthene	23.24	252	294884	2027.20	ng/ml	100
87)	Benzo(a)pyrene	24.14	252	298132	2109.55	ng/ml	98
88)	Indeno(1,2,3-cd)pyrene	26.99	276	198259m	1651.80	ng/ml	
89)	Dibenz(a,h)anthracene	27.05	278	239020	2036.59	ng/ml	98
90)	Benzo(g,h,i)perylene	27.57	276	237776	1953.04	ng/ml	97

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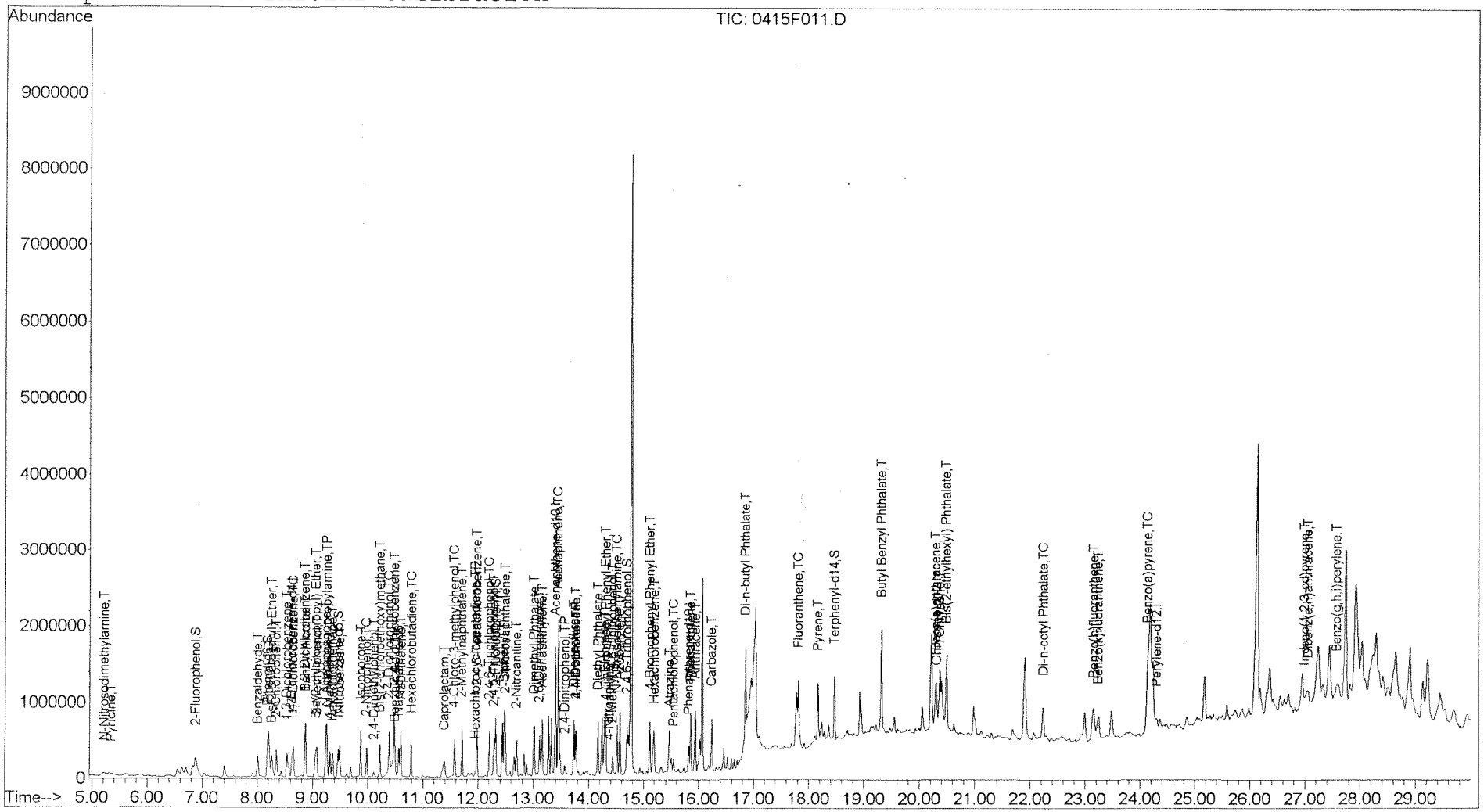
Quantitation Report (QT Reviewed)

Data File : J:\MS10\DATA\041505\0415F011.D
Acq On : 15 Apr 2005 5:01 pm
Sample : K2502499-011MS
Misc :
MS Integration Params: RTEINT.P
Quant Time: Apr 18 12:20 2005

Vial: 11
Operator: JGISH
Inst : MS10
Multiplr: 1.00

Quant Results File: 0412BNLL.RES

Method : J:\MS10\METHODS\BNA\0412BNLL.M (RTE Integrator)
Title : 8270LL ICAL
Last Update : Mon Apr 18 10:24:44 2005
Response via : Initial Calibration

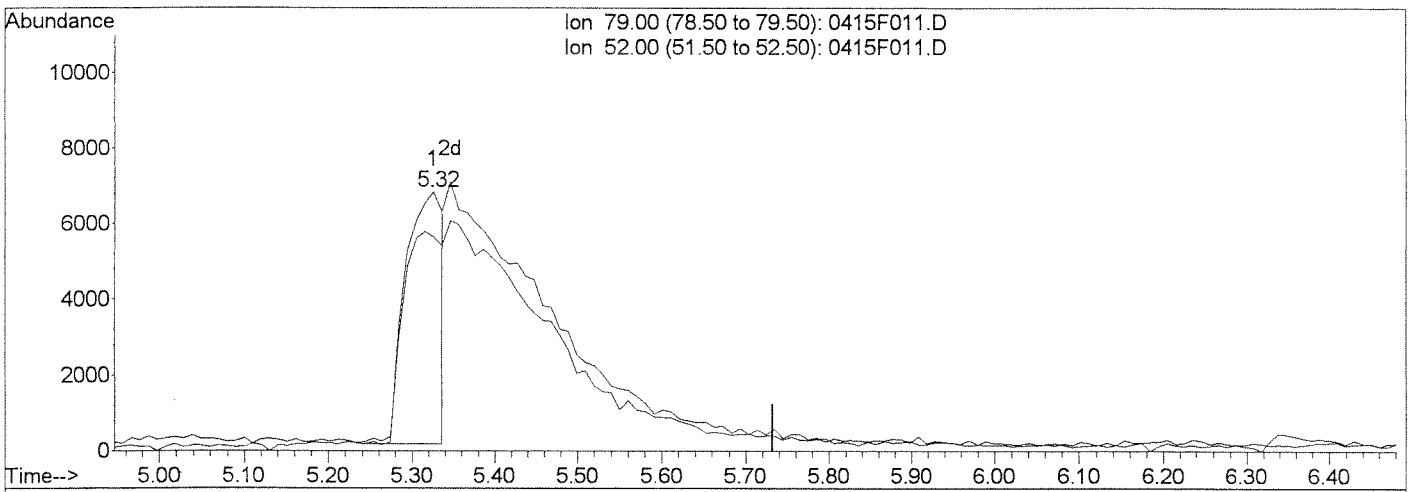


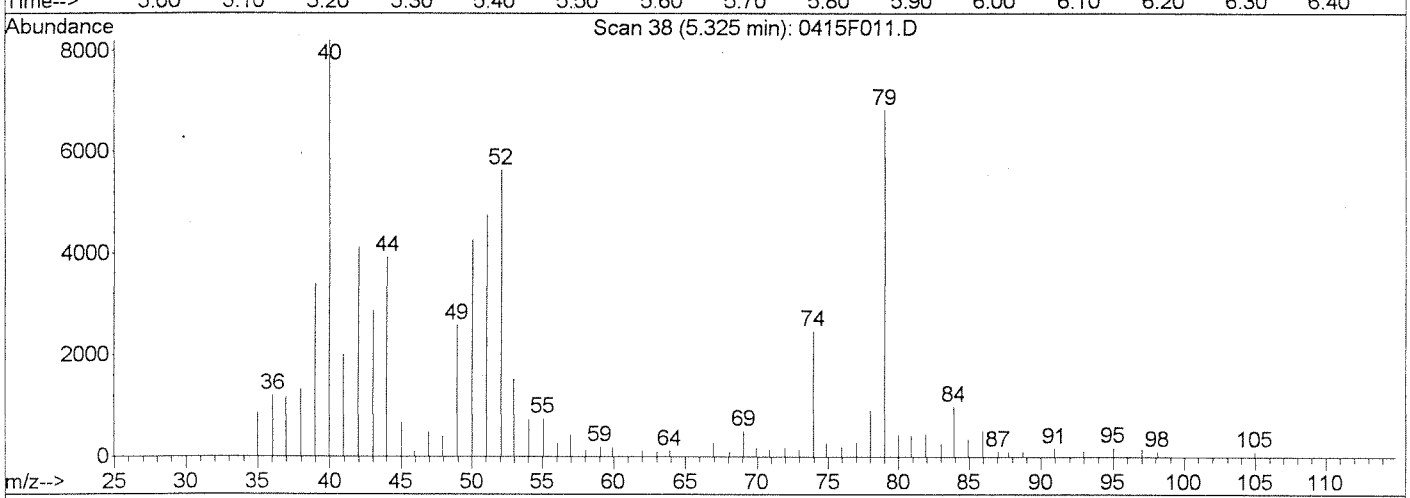
Quantitation Report (Qedit)

Data File : J:\MS10\DATA\041505\0415F011.D
Acq On : 15 Apr 2005 5:01 pm
Sample : K2502499-011MS
Misc :
MS Integration Params: RTEINT.P
Quant Time: Apr 18 10:25 2005

Vial: 11
Operator: JGISH
Inst : MS10
Multiplr: 1.00
Quant Results File: temp.res

Method : J:\MS10\METHODS\BNA\0412BNLL.M (RTE Integrator)
Title : 8270LL ICAL
Last Update : Mon Apr 18 10:24:44 2005
Response via : Multiple Level Calibration





TIC: 0415F011.D

(3) Pyridine (T)

5.32min 251.66ng/ml

response 20530

Ion	Exp%	Act%
79.00	100	100
52.00	88.10	81.27
0.00	0.00	0.00
0.00	0.00	0.00

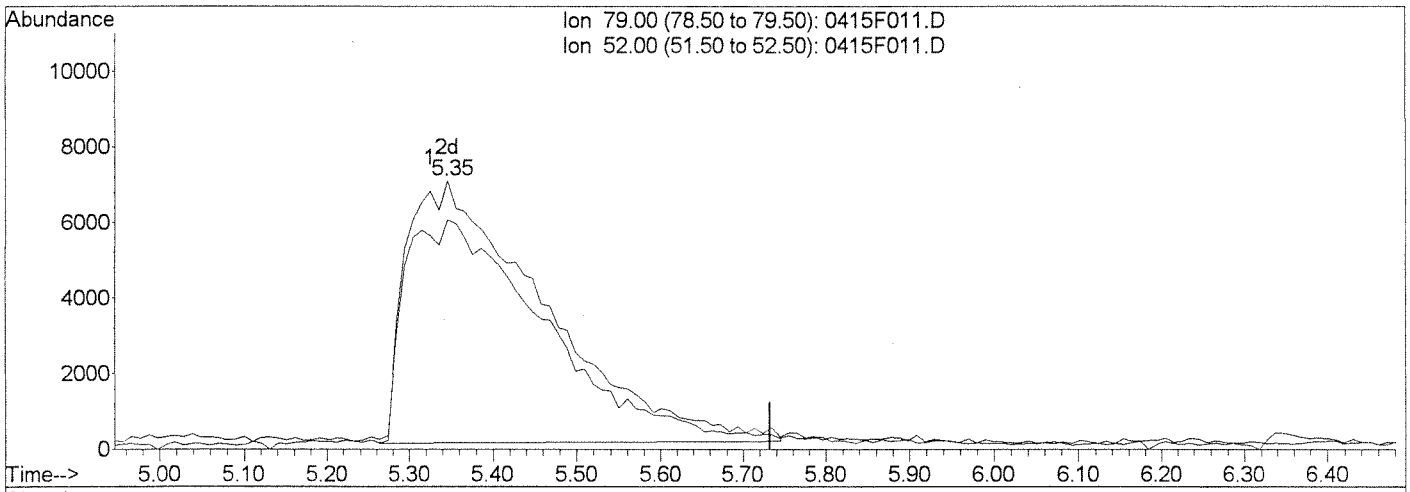
0415F011.D 0412BNLL.M Mon Apr 18 11:56:40 2005

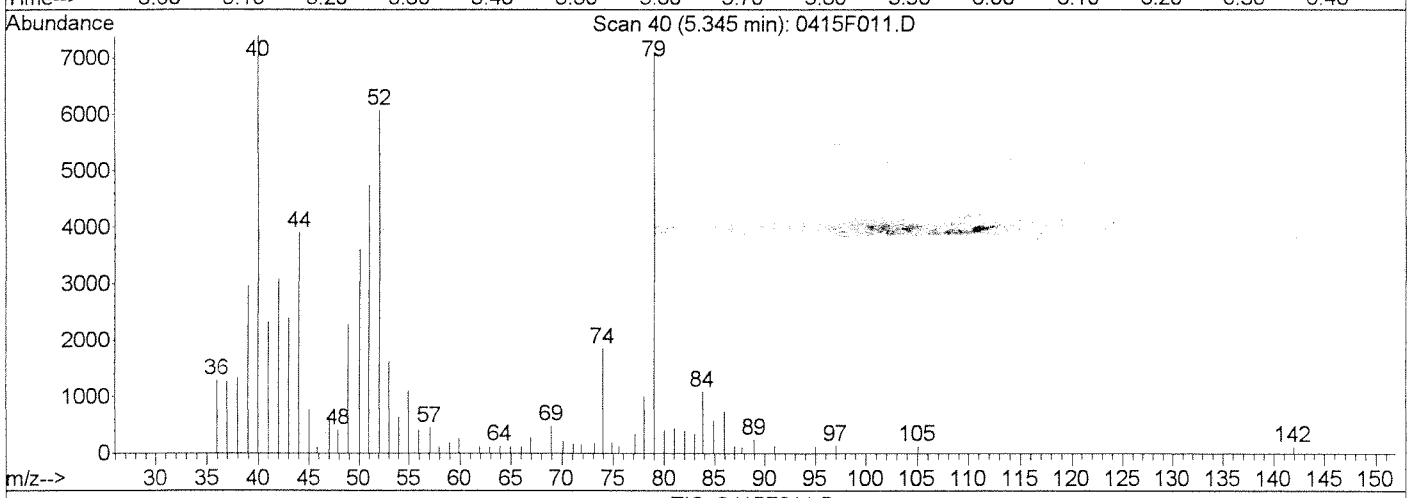
Quantitation Report (Qedit)

Data File : J:\MS10\DATA\041505\0415F011.D
Acq On : 15 Apr 2005 5:01 pm
Sample : K2502499-011MS
Misc :
MS Integration Params: RTEINT.P
Quant Time: Apr 18 11:56 2005

Vial: 11
Operator: JGISH
Inst : MS10
Multiplr: 1.00
Quant Results File: temp.res

Method : J:\MS10\METHODS\BNA\0412BNLL.M (RTE Integrator)
Title : 8270LL ICAL
Last Update : Mon Apr 18 10:24:44 2005
Response via : Multiple Level Calibration





TIC: 0415F011.D

(3) Pyridine (T)

5.35min 970.79ng/ml m

response 79197

Ion	Exp%	Act%
79.00	100	100
52.00	88.10	85.44
0.00	0.00	0.00
0.00	0.00	0.00

poor Integration

4/18/05

4/18/05

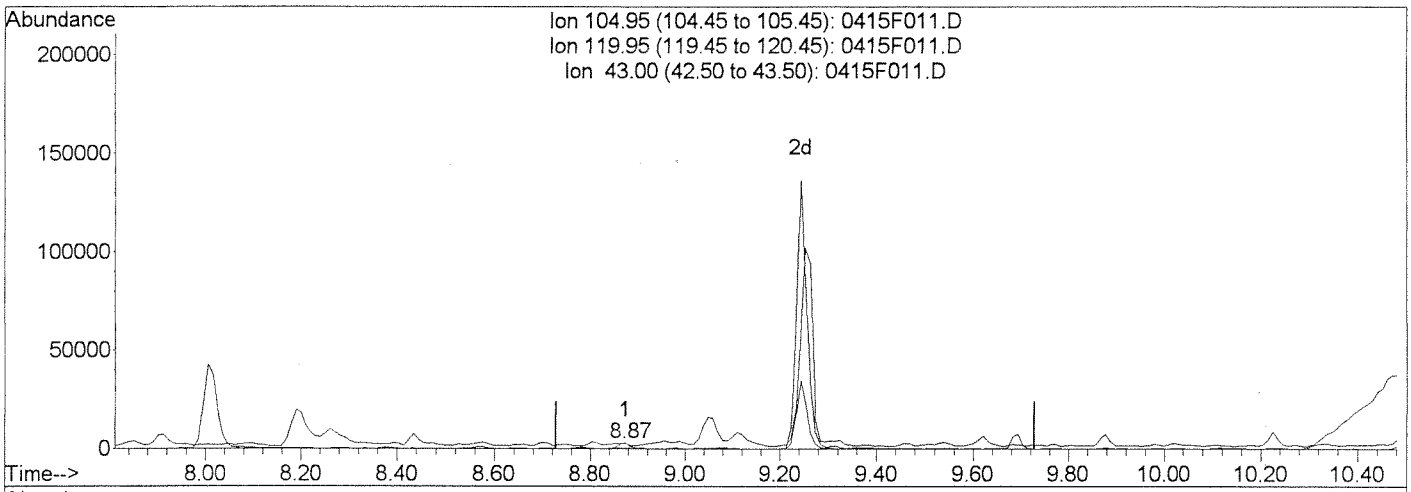
0415F011.D 0412BNLL.M Mon Apr 18 11:56:47 2005

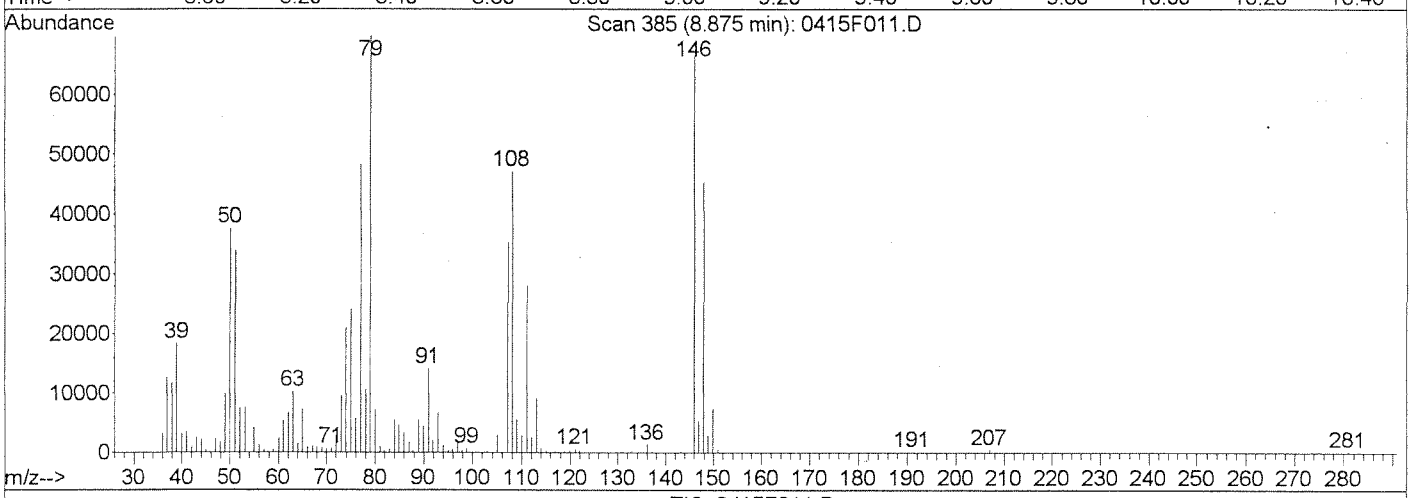
Quantitation Report (Qedit)

Data File : J:\MS10\DATA\041505\0415F011.D
Acq On : 15 Apr 2005 5:01 pm
Sample : K2502499-011MS
Misc :
MS Integration Params: RTEINT.P
Quant Time: Apr 18 11:57 2005

Vial: 11
Operator: JGISH
Inst : MS10
Multiplr: 1.00
Quant Results File: temp.res

Method : J:\MS10\METHODS\BNA\0412BNLL.M (RTE Integrator)
Title : 8270LL ICAL
Last Update : Mon Apr 18 10:24:44 2005
Response via : Multiple Level Calibration





TIC: 0415F011.D

(17) Acetophenone (T)

8.87min 48.30ng/ml

response 5494

Ion	Exp%	Act%
104.95	100	100
119.95	25.80	13.34
43.00	19.60	0.00
0.00	0.00	0.00

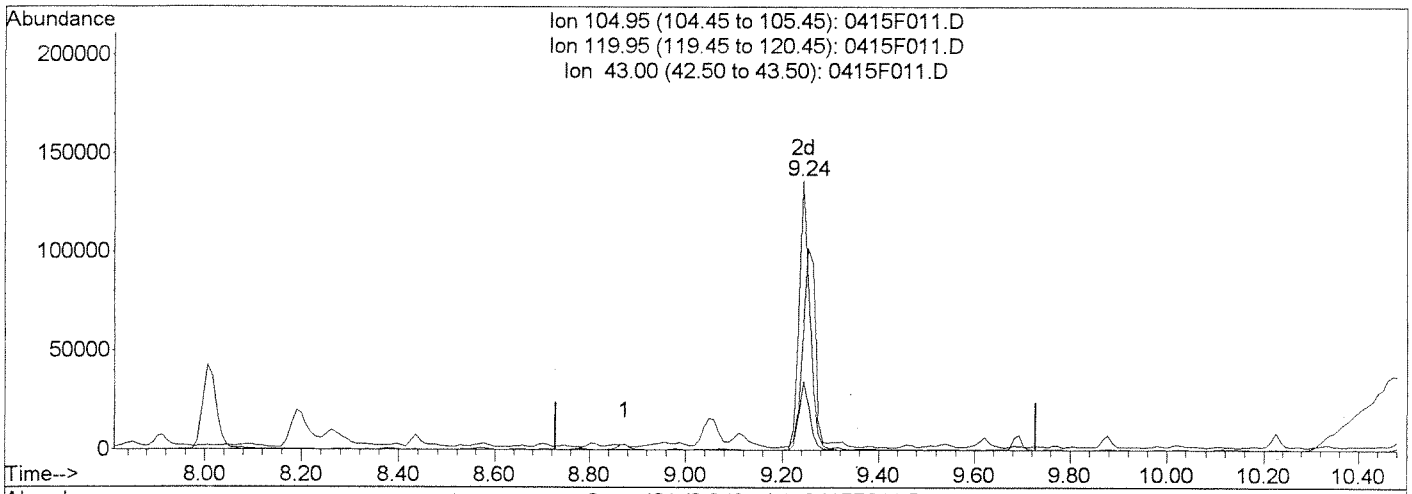
0415F011.D 0412BNLL.M Mon Apr 18 11:57:15 2005

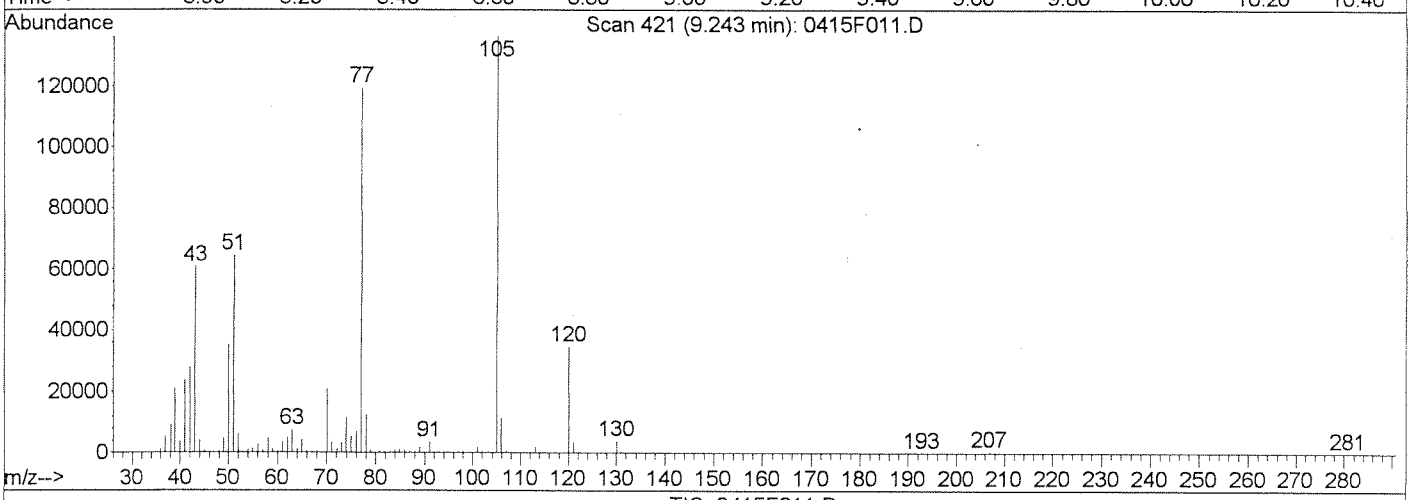
Quantitation Report (Qedit)

Data File : J:\MS10\DATA\041505\0415F011.D
Acq On : 15 Apr 2005 5:01 pm
Sample : K2502499-011MS
Misc :
MS Integration Params: RTEINT.P
Quant Time: Apr 18 11:57 2005

Vial: 11
Operator: JGISH
Inst : MS10
Multiplr: 1.00
Quant Results File: temp.res

Method : J:\MS10\METHODS\BNA\0412BNLL.M (RTE Integrator)
Title : 8270LL ICAL
Last Update : Mon Apr 18 10:24:44 2005
Response via : Multiple Level Calibration





TIC: 0415F011.D

(17) Acetophenone (T)

9.24min 1845.92ng/ml m

response 209973

Ion	Exp%	Act%
104.95	100	100
119.95	25.80	25.48
43.00	19.60	44.54#
0.00	0.00	0.00

wrong peak selected

4/19/05

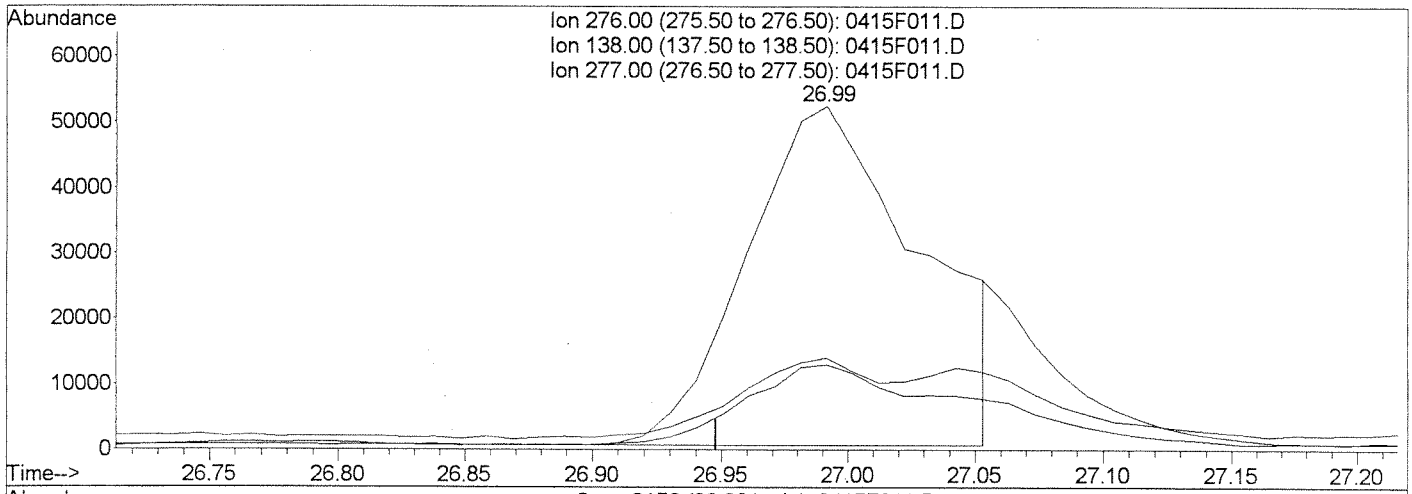
0415F011.D 0412BNLL.M Mon Apr 18 11:57:20 2005

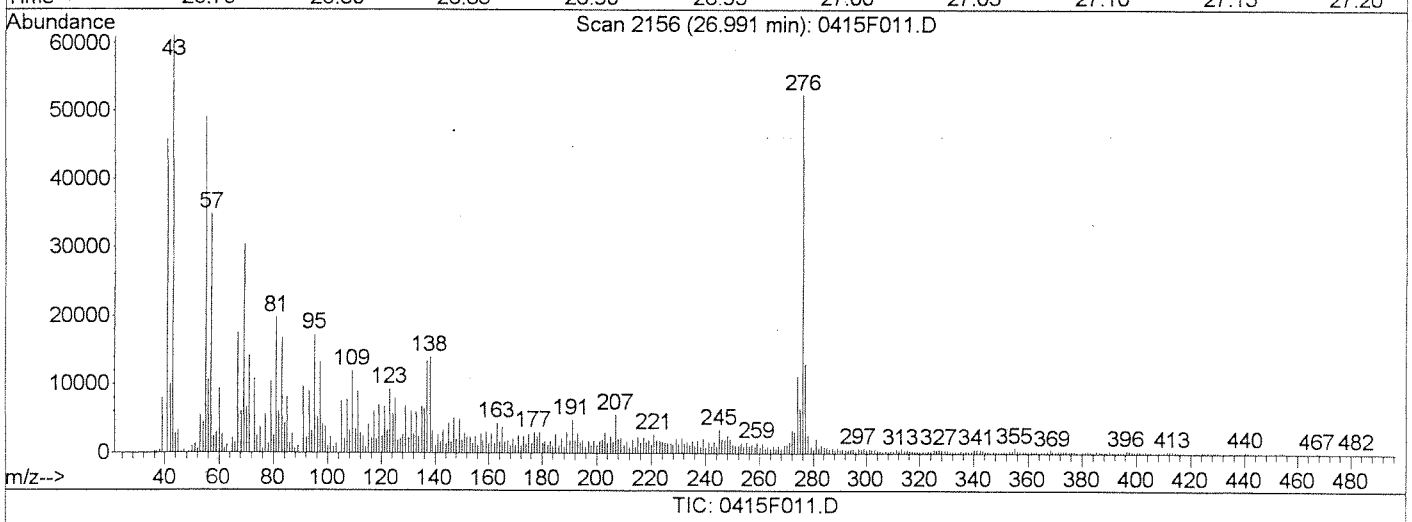
Quantitation Report (Qedit)

Data File : J:\MS10\DATA\041505\0415F011.D
Acq On : 15 Apr 2005 5:01 pm
Sample : K2502499-011MS
Misc :
MS Integration Params: RTEINT.P
Quant Time: Apr 18 12:20 2005

Vial: 11
Operator: JGISH
Inst : MS10
Multiplr: 1.00
Quant Results File: temp.res

Method : J:\MS10\METHODS\BNA\0412BNLL.M (RTE Integrator)
Title : 8270LL ICAL
Last Update : Mon Apr 18 10:24:44 2005
Response via : Multiple Level Calibration





(88) Indeno(1,2,3-cd)pyrene (T)

26.99min 2060.91ng/ml

response 247363

Ion	Exp%	Act%
276.00	100	100
138.00	22.00	23.14
277.00	23.30	23.63
0.00	0.00	0.00

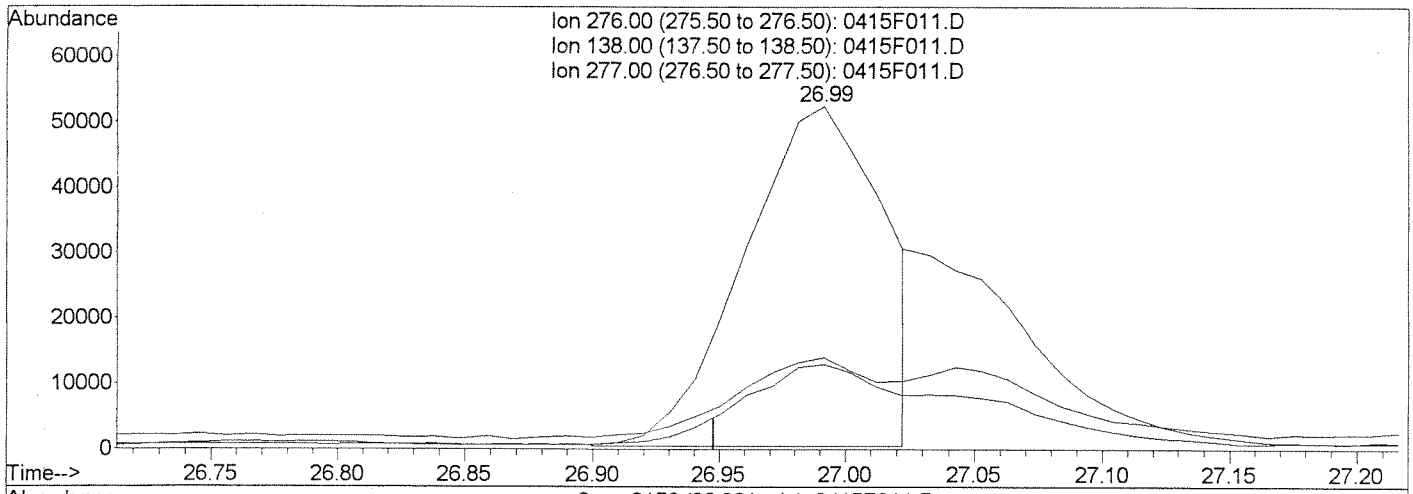
0415F011.D 0412BNLL.M Mon Apr 18 12:20:50 2005

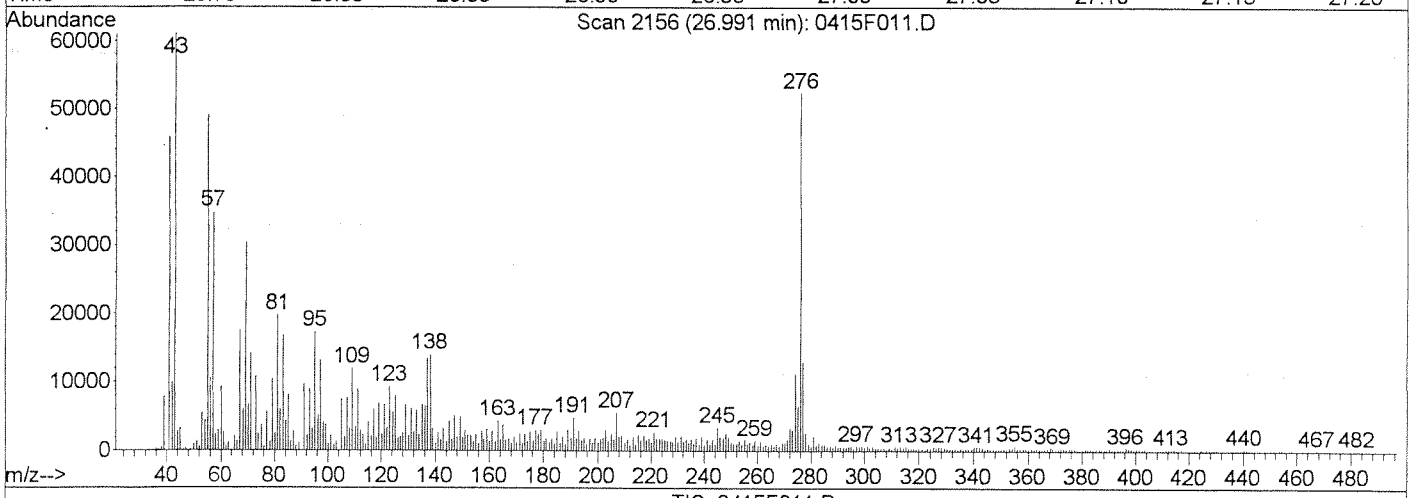
Quantitation Report (Qedit)

Data File : J:\MS10\DATA\041505\0415F011.D
Acq On : 15 Apr 2005 5:01 pm
Sample : K2502499-011MS
Misc :
MS Integration Params: RTEINT.P
Quant Time: Apr 18 12:20 2005

Vial: 11
Operator: JGISH
Inst : MS10
Multiplr: 1.00
Quant Results File: temp.res

Method : J:\MS10\METHODS\BNA\0412BNLL.M (RTE Integrator)
Title : 8270LL ICAL
Last Update : Mon Apr 18 10:24:44 2005
Response via : Multiple Level Calibration





TIC: 0415F011.D

(88) Indeno(1,2,3-cd)pyrene (T)

26.99min 1651.80ng/ml m

response 198259

Ion	Exp%	Act%
276.00	100	100
138.00	22.00	26.72
277.00	23.30	24.72
0.00	0.00	0.00

Good Integration
4/18/05

4/18/05

0415F011.D 0412BNLL.M Mon Apr 18 12:20:58 2005

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Battelle Memorial Institute	**Service Request:**	K2502554
Project:	Novato Ballfields/G486063	**Date Collected:**	NA
Sample Matrix:	Soil	**Date Received:**	NA

Semi-Volatile Organic Compounds by GC/MS

Sample Name:	Batch QCDMS	**Units:**	ug/Kg
Lab Code:	KWG0505755-2	**Basis:**	Dry
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2,4,5-Tetrachlorobenzene	**100**		5.9	5.8	1	04/11/05	04/15/05	KWG0505755	
Phenol	**121**		18	2.3	1	04/11/05	04/15/05	KWG0505755	
Bis(2-chloroethyl) Ether	**125**		5.9	2.8	1	04/11/05	04/15/05	KWG0505755	
2-Chlorophenol	**108**		5.9	2.0	1	04/11/05	04/15/05	KWG0505755	
2-Methylphenol	**90.1**		5.9	4.0	1	04/11/05	04/15/05	KWG0505755	
Bis(2-chloroisopropyl) Ether	**92.4**		5.9	1.4	1	04/11/05	04/15/05	KWG0505755	
Acetophenone	**121**		30	14	1	04/11/05	04/15/05	KWG0505755	
4-Methylphenol†	**86.9**		5.9	3.4	1	04/11/05	04/15/05	KWG0505755	
N-Nitrosodi-n-propylamine	**105**		5.9	3.8	1	04/11/05	04/15/05	KWG0505755	
Hexachloroethane	**76.0**		5.9	2.6	1	04/11/05	04/15/05	KWG0505755	
Nitrobenzene	**95.9**		5.9	2.4	1	04/11/05	04/15/05	KWG0505755	
Isophorone	**114**		5.9	1.9	1	04/11/05	04/15/05	KWG0505755	
2-Nitrophenol	**108**		5.9	3.1	1	04/11/05	04/15/05	KWG0505755	
2,4-Dimethylphenol	**33.3**		30	6.5	1	04/11/05	04/15/05	KWG0505755	
Bis(2-chloroethoxy)methane	**97.6**		5.9	1.6	1	04/11/05	04/15/05	KWG0505755	
2,4-Dichlorophenol	**113**		5.9	2.1	1	04/11/05	04/15/05	KWG0505755	
Naphthalene	**92.9**		5.9	1.6	1	04/11/05	04/15/05	KWG0505755	
4-Chloroaniline	**3.97**	J	5.9	2.5	1	04/11/05	04/15/05	KWG0505755	
Hexachlorobutadiene	**81.0**		5.9	1.7	1	04/11/05	04/15/05	KWG0505755	
Caprolactam	**133**		14	14	1	04/11/05	04/15/05	KWG0505755	
Benzaldehyde	**85.3**		12	11	1	04/11/05	04/15/05	KWG0505755	
4-Chloro-3-methylphenol	**116**		5.9	2.5	1	04/11/05	04/15/05	KWG0505755	
2-Methylnaphthalene	**87.2**		5.9	1.4	1	04/11/05	04/15/05	KWG0505755	
Hexachlorocyclopentadiene	**13.4**	J	30	18	1	04/11/05	04/15/05	KWG0505755	
2,4,6-Trichlorophenol	**133**		5.9	2.1	1	04/11/05	04/15/05	KWG0505755	
2,4,5-Trichlorophenol	**135**		5.9	3.5	1	04/11/05	04/15/05	KWG0505755	
Biphenyl	**112**		12	5.6	1	04/11/05	04/15/05	KWG0505755	
2-Chloronaphthalene	**106**		5.9	4.2	1	04/11/05	04/15/05	KWG0505755	
2-Nitroaniline	**120**		12	3.2	1	04/11/05	04/15/05	KWG0505755	
Dimethyl Phthalate	**122**		5.9	2.1	1	04/11/05	04/15/05	KWG0505755	
2,6-Dinitrotoluene	**123**		5.9	3.3	1	04/11/05	04/15/05	KWG0505755	
Acenaphthylene	**119**		5.9	1.7	1	04/11/05	04/15/05	KWG0505755	
3-Nitroaniline	ND	U	12	3.1	1	04/11/05	04/15/05	KWG0505755	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Battelle Memorial Institute	**Service Request:**	K2502554
Project:	Novato Ballfields/G486063	**Date Collected:**	NA
Sample Matrix:	Soil	**Date Received:**	NA

Semi-Volatile Organic Compounds by GC/MS

Sample Name:	Batch QCDMS	**Units:**	ug/Kg
Lab Code:	KWG0505755-2	**Basis:**	Dry
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Acenaphthene	**115**		5.9	1.2	1	04/11/05	04/15/05	KWG0505755	
2,4-Dinitrophenol	**120**		120	42	1	04/11/05	04/15/05	KWG0505755	
4-Nitrophenol	**105**		59	35	1	04/11/05	04/15/05	KWG0505755	
Dibenzofuran	**117**		5.9	1.6	1	04/11/05	04/15/05	KWG0505755	
2,4-Dinitrotoluene	**134**		5.9	3.3	1	04/11/05	04/15/05	KWG0505755	
Diethyl Phthalate	**134**		5.9	4.1	1	04/11/05	04/15/05	KWG0505755	
Fluorene	**128**		5.9	2.0	1	04/11/05	04/15/05	KWG0505755	
4-Chlorophenyl Phenyl Ether	**127**		5.9	2.4	1	04/11/05	04/15/05	KWG0505755	
4-Nitroaniline	**14.5**		12	4.0	1	04/11/05	04/15/05	KWG0505755	
2-Methyl-4,6-dinitrophenol	**106**		59	2.0	1	04/11/05	04/15/05	KWG0505755	
N-Nitrosodiphenylamine	**131**		5.9	2.6	1	04/11/05	04/15/05	KWG0505755	
4-Bromophenyl Phenyl Ether	**122**		5.9	1.7	1	04/11/05	04/15/05	KWG0505755	
Hexachlorobenzene	**121**		5.9	2.5	1	04/11/05	04/15/05	KWG0505755	
Atrazine	**123**		5.9	2.6	1	04/11/05	04/15/05	KWG0505755	
Pentachlorophenol	**90.4**		59	10	1	04/11/05	04/15/05	KWG0505755	
Phenanthrene	**130**		5.9	1.6	1	04/11/05	04/15/05	KWG0505755	
Anthracene	**124**		5.9	1.7	1	04/11/05	04/15/05	KWG0505755	
Carbazole	**126**		5.9	1.6	1	04/11/05	04/15/05	KWG0505755	
Di-n-butyl Phthalate	**136**	B	5.9	3.1	1	04/11/05	04/15/05	KWG0505755	
Fluoranthene	**131**		5.9	2.6	1	04/11/05	04/15/05	KWG0505755	
Pyrene	**125**		5.9	1.6	1	04/11/05	04/15/05	KWG0505755	
Butyl Benzyl Phthalate	**133**		5.9	1.8	1	04/11/05	04/15/05	KWG0505755	
3,3'-Dichlorobenzidine	ND	U	59	4.4	1	04/11/05	04/15/05	KWG0505755	
Benz(a)anthracene	**126**		5.9	1.7	1	04/11/05	04/15/05	KWG0505755	
Chrysene	**138**		5.9	1.7	1	04/11/05	04/15/05	KWG0505755	
Bis(2-ethylhexyl) Phthalate	**183**		120	2.0	1	04/11/05	04/15/05	KWG0505755	
Di-n-octyl Phthalate	**132**		5.9	1.4	1	04/11/05	04/15/05	KWG0505755	
Benzo(b)fluoranthene	**135**		5.9	3.0	1	04/11/05	04/15/05	KWG0505755	
Benzo(k)fluoranthene	**118**		5.9	3.0	1	04/11/05	04/15/05	KWG0505755	
Benzo(a)pyrene	**131**		5.9	1.9	1	04/11/05	04/15/05	KWG0505755	
Indeno(1,2,3-cd)pyrene	**98.0**		5.9	2.3	1	04/11/05	04/15/05	KWG0505755	
Dibenz(a,h)anthracene	**123**		5.9	2.6	1	04/11/05	04/15/05	KWG0505755	
Benzo(g,h,i)perylene	**116**		5.9	2.7	1	04/11/05	04/15/05	KWG0505755	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Battelle Memorial Institute	**Service Request:**	K2502554
Project:	Novato Ballfields/G486063	**Date Collected:**	NA
Sample Matrix:	Soil	**Date Received:**	NA

Semi-Volatile Organic Compounds by GC/MS

Sample Name:	Batch QCDMS	**Units:**	ug/Kg
Lab Code:	KWG0505755-2	**Basis:**	Dry

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	63	11-87	04/15/05	Acceptable
Phenol-d6	79	20-99	04/15/05	Acceptable
Nitrobenzene-d5	69	10-99	04/15/05	Acceptable
2-Fluorobiphenyl	78	10-104	04/15/05	Acceptable
2,4,6-Tribromophenol	93	23-113	04/15/05	Acceptable
Terphenyl-d14	107	39-124	04/15/05	Acceptable

† Analyte Comments

4-Methylphenol	This analyte cannot be separated from 3-Methylphenol.

Comments:

Exception Report

Data File: J:\MS10\DATA\041505\0415F012.D
Lab ID: KWG0505755-2 -- K2502499-011DMS
RunType: DMS
Matrix: SOIL

Date Acquired: 04/15/2005 17:41
Date Quantitated: 04/18/2005 12:23
Batch ID: KWG0506208
Analysis Method: 8270C
MethodJoinID: MJ142

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Tune Window	NA	NA	NA	x	
Analytical Holding Time	NA	NA	NA	x	
ICAL Pass/Fail	NA	NA	NA	x	
ICAL Average RSD	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Initial Calibration Minimum RF	NA	NA	NA	x	
Initial Calibration SPCC/CCC	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Minimum RF	NA	NA	NA	x	
Continuing Calibration SPCC/CCC	NA	NA	NA	x	
Internal Standards	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Relative Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

K2502499
K2502554

Primary Review: A 4/18/05

Secondary Review: CO 4/19/05

Printed: 04/18/2005 15:32:39
u:\Stealth\Crystal.rpt\except2.rpt

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	SOIL
Prod Code:	8270-LL	**Collect Date:**		**Receive Date:**	04/12/2005

Analysis Lot:	KWG0506208	**Prep Lot:**	KWG0505755	**Report Group:**	
Analysis Method:	8270C	**Prep Method:**	EPA 3541		
Prep Ref:	373960	**Prep Date:**	04/11/2005		

Quant Method:	J:\MS10\METHODS\BNA\0412BNLL.M	**Calibration ID:**	CAL4375
Title:			
Tune Ref:	J:\MS10\DATA\041505\0415T001.D	**Method ID:**	MJ142
MB Ref:	J:\MS10\DATA\041505\0415F003.D	**Quant based on Method**	

Data File:	J:\MS10\DATA\041505\0415F012.D			**Instrument:**	MS10
Acqu Date:	04/15/2005 17:41	**Quant Date:**	04/18/2005 12:23	**Vial:**	12
Run Type:	DMS			**Dilution:**	1.0
Lab ID:	KWG0505755-2 -- K2502499-011DMS			**Soln Conc. Units:**	ng/ml

Internal Standard Compounds

IS Ref	Parameter Name	RT	RT Dev	Quant Mass	Response	Solution Conc	Area Criteria
1	1,4-Dichlorobenzene-d4	8.63	0.01	152	67141	1,000.00	OK
2	Naphthalene-d8	10.57	0.02	136	221018	1,000.00	OK
3	Acenaphthene-d10	13.41	0.04	164	108420	1,000.00	OK
4	Phenanthrene-d10	15.83	0.04	188	177660	1,000.00	OK
5	Chrysene-d12	20.32	0.08	240	134507	1,000.00	OK
6	Perylene-d12	24.32	0.15	264	104154	1,000.00	OK

Surrogate Compounds

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	%Rec	%Rec Limits	Rpt?
1	2-Fluorophenol	6.89	0.05	0.00	112	174601	2,366	63	11-87 OK	
1	Phenol-d6	8.21	0.05	0.00	99	265796	2,977	79	20-99 OK	
1	Nitrobenzene-d5	9.48	0.02	0.00	82	155054	1,726	69	10-99 OK	
3	2-Fluorobiphenyl	12.33	0.02	0.00	172	273456	1,942	78	10-104 OK	
4	2,4,6-Tribromophenol	14.72	0.04	0.00	330	75590	3,500	93	23-113 OK	
5	Terphenyl-d14	18.48	0.04	0.00	244	331329	2,671	107	39-124 OK	

Target Compounds

Final Conc. Units: ug/Kg Dry Weight

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	QuantMass	Response	Solution Conc	Final Conc	Q	Rpt?
1	N-Nitrosodimethylamine	5.22	0.05	0.01	42	101899	1,448	84.3		
1	Pyridine	5.31	0.08	0.01	79	74615	947.06	55.1		
1	Benzaldehyde	8.01	0.02	0.00	106	89538	1,466	85.3		
1	Bis(2-chloroethyl) Ether	8.27	0.01	0.00	93	160739	2,143	125		
1	Phenol	8.23	0.04	0.00	94	188597	2,082	121		
1	Aniline				93	0d		1.8	U	
1	2-Chlorophenol	8.35	0.02	0.00	128	138509	1,861	108		
1	1,3-Dichlorobenzene	8.55	0.02	0.00	146	120113	1,320	76.8		
1	1,4-Dichlorobenzene	8.66	0.02	0.00	146	122664	1,293	75.3		
1	1,2-Dichlorobenzene	8.87	0.02	0.00	146	126078	1,450	84.4		

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File:	J:\MS10\DATA\041505\0415F012.D			**Instrument:**	MS10
Acqu Date:	04/15/2005 17:41	**Quant Date:**	04/18/2005 12:23	**Vial:**	12
Run Type:	DMS			**Dilution:**	1.0
Lab ID:	KWG0505755-2 -- K2502499-011DMS			**Soln Conc. Units:**	ng/ml

Target Compounds

Final Conc. Units: ug/Kg Dry Weight

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	QuantMass	Response	Solution Conc	Final Conc	Q	Rpt?
1	Benzyl Alcohol	8.88	0.03	0.00	108	89731	1,752	102		
1	Bis(2-chloroisopropyl) Ether	9.06	0.02	0.00	45	222973**m**	1,587	92.4		
1	2-Methylphenol	9.09	0.04	0.00	107	87825	1,548	90.1		
1	Acetophenone	9.25	0.02	0.00	105	229221**m**	2,087	121		
1	Hexachloroethane	9.37	0.01	0.00	117	55327	1,305	76.0		
1	N-Nitrosodi-n-propylamine	9.26		0.00	70	109361	1,799	105		
1	4-Methylphenol	9.32	0.03	0.00	107	122919	1,492	86.9		
1	Nitrobenzene	9.50	0.01	0.00	77	155771	1,647	95.9		
2	Isophorone	9.89		0.00	82	266229	1,952	114		
2	2-Nitrophenol	9.99	0.01	0.00	139	80787	1,853	108		
2	2,4-Dimethylphenol	10.12	0.02	0.00	122	33666	572.01	33.3		
2	Bis(2-chloroethoxy)methane	10.23	0.01	0.00	93	152366	1,677	97.6		
2	2,4-Dichlorophenol	10.41	0.03	0.00	162	128263	1,946	113		
2	Benzoic Acid	10.51	0.08	0.01	122	205490	7,836	456		
2	1,2,4-Trichlorobenzene	10.49	0.01	0.00	180	126314	1,525	88.8		
2	Naphthalene	10.60	0.01	0.00	128	345023	1,596	92.9		
2	4-Chloroaniline	10.73		0.00	127	6884**m**	68.15	3.97	J	
2	Hexachlorobutadiene	10.80	0.01	0.00	225	75427	1,391	81.0		
2	Caprolactam	11.40	0.13	0.01	55	94121	2,282	133		
2	4-Chloro-3-methylphenol	11.60	0.06	0.00	107	126243	1,996	116		
2	2-Methylnaphthalene	11.72	0.01	0.00	141	189779	1,498	87.2		
3	1,2,4,5-Tetrachlorobenzene	11.99	0.02	0.00	216	137256	1,723	100		
3	Hexachlorocyclopentadiene	11.96	0.02	0.00	237	8305	229.75	13.4	J	
3	2,4,6-Trichlorophenol	12.22	0.03	0.00	196	99562	2,287	133		
3	2,4,5-Trichlorophenol	12.31	0.05	0.00	196	109046	2,317	135		
3	Biphenyl	12.49	0.03	0.00	154	304914	1,922	112		
3	2-Chloronaphthalene	12.51	0.02	0.00	127	103890	1,825	106		
3	2-Nitroaniline	12.71	0.02	0.00	65	109649	2,066	120		
3	Acenaphthylene	13.17	0.02	0.00	152	392620	2,049	119		
3	Dimethyl Phthalate	13.02	0.01	0.00	163	324582	2,098	122		
3	2,6-Dinitrotoluene	13.12	0.02	0.00	165	79239	2,110	123		
3	Acenaphthene	13.46	0.02	0.00	154	223340	1,980	115		
3	3-Nitroaniline				138	0**d**		3.1	U	
3	2,4-Dinitrophenol	13.58	0.02	0.00	184	25814	2,064	120		
3	Dibenzofuran	13.74	0.02	0.00	168	375931	2,002	117		
3	4-Nitrophenol	13.79	0.06	0.00	109	38524**m**	1,797	105		
3	2,4-Dinitrotoluene	13.78	0.02	0.00	165	107595	2,296	134		
3	2,3,4,6-Tetrachlorophenol				232	0		12	U	
3	Fluorene	14.31	0.02	0.00	166	294737	2,203	128		
3	4-Chlorophenyl Phenyl Ether	14.32	0.01	0.00	204	153339	2,181	127		
3	Diethyl Phthalate	14.18	0.02	0.00	149	336770	2,310	134		
3	4-Nitroaniline	14.38		0.00	138	8979**m**	248.91	14.5		

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File:	J:\MS10\DATA\041505\0415F012.D			**Instrument:**	MS10
Acqu Date:	04/15/2005 17:41	**Quant Date:**	04/18/2005 12:23	**Vial:**	12
Run Type:	DMS			**Dilution:**	1.0
Lab ID:	KWG0505755-2 -- K2502499-011DMS			**Soln Conc. Units:**	ng/ml

Target Compounds **Final Conc. Units:** ug/Kg Dry Weight

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	QuantMass	Response	Solution Conc	Final Conc	Q	Rpt?
3	2-Methyl-4,6-dinitrophenol	14.45	0.01	0.00	198	47835	1,824	106		
3	N-Nitrosodiphenylamine	14.53	0.02	0.00	169	205479	2,255	131		
3	Azobenzene	14.58	0.02	0.00	77	340462	2,049	119		
4	4-Bromophenyl Phenyl Ether	15.12	0.03	0.00	248	86867	2,103	122		
4	Hexachlorobenzene	15.21	0.04	0.00	284	96306	2,084	121		
4	Atrazine	15.48	0.05	0.00	200	90692	2,112	123		
4	Pentachlorophenol	15.56	0.04	0.00	266	29497	1,553	90.4		
4	Phenanthrene	15.87	0.03	0.00	178	463247	2,240	130		
4	Anthracene	15.95	0.03	0.00	178	443111	2,136	124		
4	Carbazole	16.26	0.04	0.00	167	408125	2,163	126		
4	Di-n-butyl Phthalate	16.86	0.03	0.00	149	579409	2,339	136		
4	Fluoranthene	17.83	0.06	0.00	202	484911	2,243	131		
5	Benzidine				184	0d		240	U	
5	Pyrene	18.18	0.04	0.00	202	447041	2,141	125		
5	Butyl Benzyl Phthalate	19.32	0.04	0.00	149	229727	2,293	133		
5	3,3'-Dichlorobenzidine				252	0d		4.4	U	
5	Benz(a)anthracene	20.30	0.06	0.00	228	378472	2,161	126		
5	Chrysene	20.38	0.06	0.00	228	370393	2,369	138		
5	Bis(2-ethylhexyl) Phthalate	20.50	0.07	0.00	149	406880	3,139	183		
6	Di-n-octyl Phthalate	22.23	0.08	0.00	149	481833	2,273	132		
6	Benzo(b)fluoranthene	23.18	0.14	0.00	252	341573	2,318	135		
6	Benzo(k)fluoranthene	23.26	0.13	0.00	252	297315	2,020	118		
6	Benzo(a)pyrene	24.16	0.14	0.00	252	321844	2,251	131		
6	Indeno(1,2,3-cd)pyrene	27.02	0.17	0.00	276	204390	1,683	98.0		
6	Dibenz(a,h)anthracene	27.08	0.16	0.00	278	250424	2,109	123		
6	Benzo(g,h,i)perylene	27.63	0.25	0.00	276	244938	1,989	116		

Prep Amount:	40.04 g	**Dilution:**	1.0
Prep Final Vol:	2 ml	**Unit Factor:**	1
Solids:	85.8 %		

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / (Prep Amount x Solids)) x Unit Factor

U: Undetected at or above MDL
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D: Result from dilution
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d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (QT Reviewed)

Data File : J:\MS10\DATA\041505\0415F012.D
Acq On : 15 Apr 2005 5:41 pm
Sample : K2502499-011MSD
Misc :
MS Integration Params: RTEINT.P
Quant Time: Apr 18 10:25:56 2005

Vial: 12
Operator: JGISH
Inst : MS10
Multiplr: 1.00
Quant Results File: 0412BNLL.RES

Quant Method : J:\MS10\METHODS\BNA\0412BNLL.M (RTE Integrator)
Title : 8270LL ICAL
Last Update : Mon Apr 18 10:24:44 2005
Response via : Initial Calibration
DataAcq Meth : BNALL

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	8.63	152	67141	1000.00	ng/ml	0.00
23) Naphthalene-d8	10.57	136	221018	1000.00	ng/ml	0.00
37) Acenaphthene-d10	13.41	164	108420	1000.00	ng/ml	0.03
63) Phenanthrene-d10	15.83	188	177660	1000.00	ng/ml	0.03
74) Chrysene-d12	20.32	240	134507	1000.00	ng/ml	0.06
83) Perylene-d12	24.32	264	104154	1000.00	ng/ml	0.15

System Monitoring Compounds						
4) 2-Fluorophenol	6.89	112	174601	2365.77	ng/ml	0.05
Spiked Amount 3750.000	Range 38 - 110		Recovery = 63.09%			
7) Phenol-d6	8.21	99	265796	2977.37	ng/ml	0.05
Spiked Amount 3750.000	Range 43 - 128		Recovery = 79.40%			
21) Nitrobenzene-d5	9.48	82	155054	1725.51	ng/ml	0.02
Spiked Amount 2500.000	Range 30 - 139		Recovery = 69.02%			
42) 2-Fluorobiphenyl	12.33	172	273456	1942.43	ng/ml	0.02
Spiked Amount 2500.000	Range 37 - 126		Recovery = 77.70%			
64) 2,4,6-Tribromophenol	14.72	330	75590	3500.29	ng/ml	0.03
Spiked Amount 3750.000	Range 38 - 157		Recovery = 93.34%			
77) Terphenyl-d14	18.48	244	331329	2671.47	ng/ml	0.04
Spiked Amount 2500.000	Range 54 - 158		Recovery = 106.86%			

Target Compounds						Qvalue
2) N-Nitrosodimethylamine	5.22	42	101899	1448.33	ng/ml	96
3) Pyridine	5.31	79	74615	947.06	ng/ml	98
5) Benzaldehyde	8.01	106	89538	1465.67	ng/ml	99
6) Bis(2-chloroethyl) Ether	8.27	93	160739	2143.17	ng/ml	85
8) Phenol	8.23	94	188597	2081.76	ng/ml	94
10) 2-Chlorophenol	8.35	128	138509	1860.80	ng/ml	93
11) 1,3-Dichlorobenzene	8.55	146	120113	1319.74	ng/ml	100
12) 1,4-Dichlorobenzene	8.66	146	122664	1293.29	ng/ml	99
13) 1,2-Dichlorobenzene	8.87	146	126078	1450.31	ng/ml	99
14) Benzyl Alcohol	8.88	108	89731	1751.63	ng/ml	97
15) Bis(2-chloroisopropyl) Eth	9.06	45	222973m	1586.88	ng/ml	
16) 2-Methylphenol	9.09	107	87825	1548.23	ng/ml	95
17) Acetophenone	9.25	105	229221m	2086.60	ng/ml	
18) Hexachloroethane	9.37	117	55327	1304.82	ng/ml	90
19) N-Nitrosodi-n-propylamine	9.26	70	109361	1798.56	ng/ml	94
20) 4-Methylphenol	9.32	107	122919	1492.45	ng/ml	98
22) Nitrobenzene	9.50	77	155771	1647.48	ng/ml	98
24) Isophorone	9.89	82	266229	1951.96	ng/ml	99
25) 2-Nitrophenol	9.99	139	80787	1853.26	ng/ml	97
26) 2,4-Dimethylphenol	10.12	122	33666	572.01	ng/ml	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : J:\MS10\DATA\041505\0415F012.D Vial: 12
Acq On : 15 Apr 2005 5:41 pm Operator: JGISH
Sample : K2502499-011MSD Inst : MS10
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 18 10:25:56 2005 Quant Results File: 0412BNLL.RES

Quant Method : J:\MS10\METHODS\BNA\0412BNLL.M (RTE Integrator)
Title : 8270LL ICAL
Last Update : Mon Apr 18 10:24:44 2005
Response via : Initial Calibration
DataAcq Meth : BNALL

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
27) Bis(2-chloroethoxy)methane	10.23	93	152366	1677.16 ng/ml	99
28) 2,4-Dichlorophenol	10.41	162	128263	1946.18 ng/ml	97
29) Benzoic Acid	10.51	122	205490	7836.20 ng/ml	97
30) 1,2,4-Trichlorobenzene	10.49	180	126314	1524.75 ng/ml	98
31) Naphthalene	10.60	128	345023	1596.06 ng/ml	99
32) 4-Chloroaniline	10.73	127	6884m	68.15 ng/ml	
33) Hexachlorobutadiene	10.80	225	75427	1391.45 ng/ml	98
34) Caprolactam	11.40	55	94121	2281.55 ng/ml	99
35) 4-Chloro-3-methylphenol	11.60	107	126243	1996.04 ng/ml	100
36) 2-Methylnaphthalene	11.72	141	189779	1497.76 ng/ml	96
38) 1,2,4,5-Tetrachlorobenzene	11.99	216	137256	1723.03 ng/ml	99
39) Hexachlorocyclopentadiene	11.96	237	8305	229.75 ng/ml	99
40) 2,4,6-Trichlorophenol	12.22	196	99562	2286.61 ng/ml	99
41) 2,4,5-Trichlorophenol	12.31	196	109046	2317.05 ng/ml	98
43) Biphenyl	12.49	154	304914	1921.99 ng/ml	99
44) 2-Chloronaphthalene	12.51	127	103890	1825.34 ng/ml	99
45) 2-Nitroaniline	12.71	65	109649	2065.52 ng/ml	95
46) Acenaphthylene	13.17	152	392620	2049.31 ng/ml	99
47) Dimethyl Phthalate	13.02	163	324582	2097.93 ng/ml	99
48) 2,6-Dinitrotoluene	13.12	165	79239	2110.05 ng/ml	98
49) Acenaphthene	13.46	154	223340	1979.91 ng/ml	99
51) 2,4-Dinitrophenol	13.58	184	25814	2064.32 ng/ml	93
52) Dibenzofuran	13.74	168	375931	2001.79 ng/ml	85
53) 4-Nitrophenol	13.79	109	38524m	1797.42 ng/ml	
54) 2,4-Dinitrotoluene	13.78	165	107595	2295.67 ng/ml	97
56) Fluorene	14.31	166	294737	2202.56 ng/ml	99
57) 4-Chlorophenyl Phenyl Ethe	14.32	204	153339	2180.89 ng/ml	89
58) Diethyl Phthalate	14.18	149	336770	2310.32 ng/ml	98
59) 4-Nitroaniline	14.38	138	8979m	248.91 ng/ml	
60) 2-Methyl-4,6-dinitrophenol	14.45	198	47835	1823.53 ng/ml	84
61) N-Nitrosodiphenylamine	14.53	169	205479	2254.66 ng/ml	99
62) Azobenzene	14.58	77	340462	2049.26 ng/ml	98
65) 4-Bromophenyl Phenyl Ether	15.12	248	86867	2102.70 ng/ml	99
66) Hexachlorobenzene	15.21	284	96306	2083.92 ng/ml	99
67) Atrazine	15.48	200	90692	2112.28 ng/ml	97
68) Pentachlorophenol	15.56	266	29497	1552.65 ng/ml	98
69) Phenanthrene	15.87	178	463247	2239.85 ng/ml	99
70) Anthracene	15.95	178	443111	2136.38 ng/ml	99
71) Carbazole	16.26	167	408125	2163.20 ng/ml	100
72) Di-n-butyl Phthalate	16.86	149	579409	2339.49 ng/ml	99
73) Fluoranthene	17.83	202	484911	2243.05 ng/ml	96

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : J:\MS10\DATA\041505\0415F012.D Vial: 12
Acq On : 15 Apr 2005 5:41 pm Operator: JGISH
Sample : K2502499-011MSD Inst : MS10
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 18 10:25:56 2005 Quant Results File: 0412BNLL.RES

Quant Method : J:\MS10\METHODS\BNA\0412BNLL.M (RTE Integrator)
Title : 8270LL ICAL
Last Update : Mon Apr 18 10:24:44 2005
Response via : Initial Calibration
DataAcq Meth : BNALL

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
76)	Pyrene	18.18	202	447041	2141.01 ng/ml	100
78)	Butyl Benzyl Phthalate	19.32	149	229727	2293.12 ng/ml	95
80)	Benz(a)anthracene	20.30	228	378472	2160.85 ng/ml	99
81)	Chrysene	20.38	228	370393	2369.49 ng/ml	99
82)	Bis(2-ethylhexyl) Phthalat	20.50	149	406880	3139.30 ng/ml	99
84)	Di-n-octyl Phthalate	22.23	149	481833	2273.39 ng/ml	95
85)	Benzo(b)fluoranthene	23.18	252	341573	2317.84 ng/ml	99
86)	Benzo(k)fluoranthene	23.26	252	297315	2020.17 ng/ml	99
87)	Benzo(a)pyrene	24.16	252	321844	2250.87 ng/ml	98
88)	Indeno(1,2,3-cd)pyrene	27.02	276	204390	1683.09 ng/ml	99
89)	Dibenz(a,h)anthracene	27.08	278	250424	2108.97 ng/ml	97
90)	Benzo(g,h,i)perylene	27.63	276	244938	1988.50 ng/ml	93

(#) = qualifier out of range (m) = manual integration

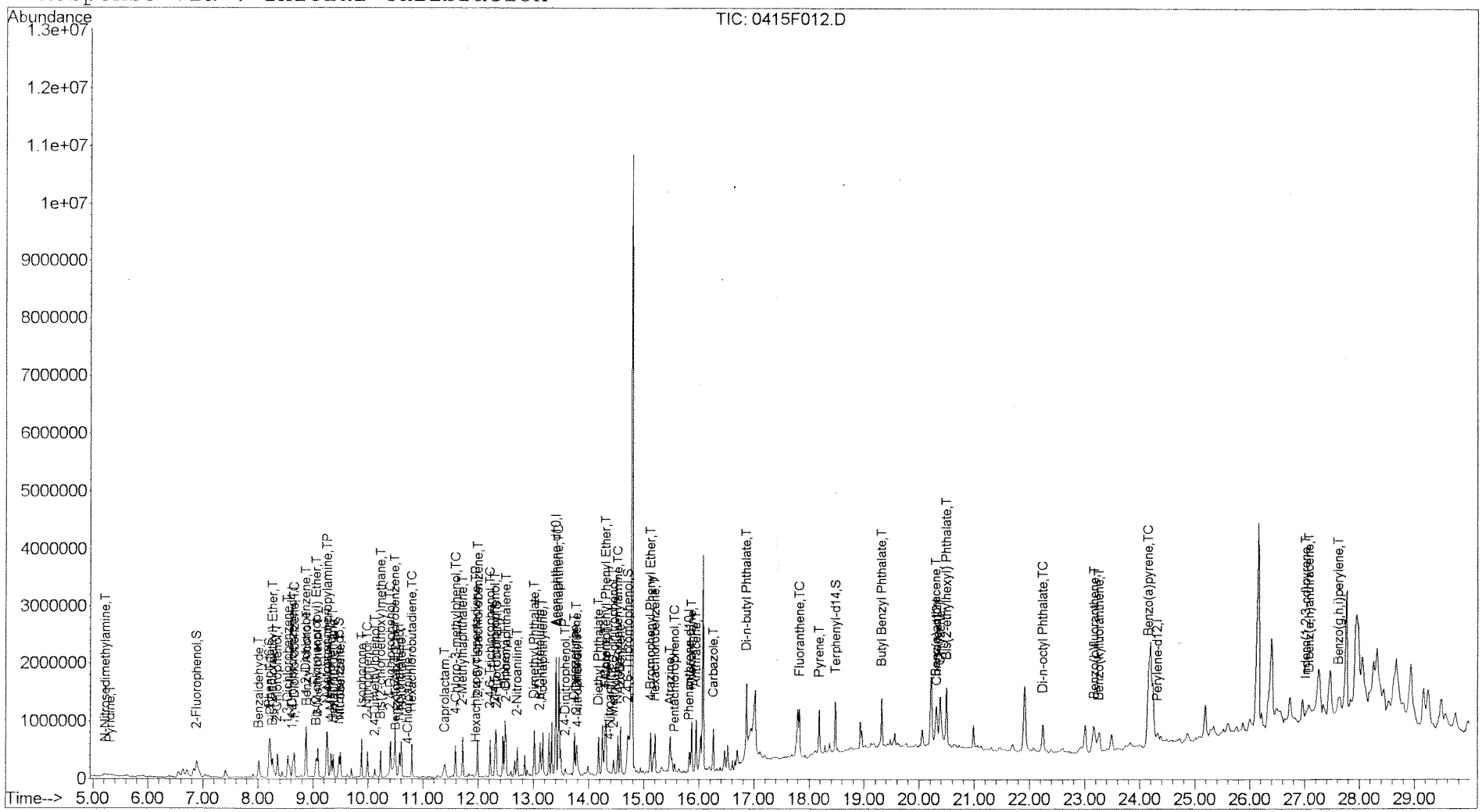
Quantitation Report (QT Reviewed)

Data File : J:\MS10\DATA\041505\0415F012.D
Acq On : 15 Apr 2005 5:41 pm
Sample : K2502499-011MSD
Misc :
MS Integration Params: RTEINT.P
Quant Time: Apr 18 12:23 2005

Vial: 12
Operator: JGISH
Inst : MS10
Multiplr: 1.00

Quant Results File: 0412BNLL.RES

Method : J:\MS10\METHODS\BNA\0412BNLL.M (RTE Integrator)
Title : 8270LL ICAL
Last Update : Mon Apr 18 10:24:44 2005
Response via : Initial Calibration

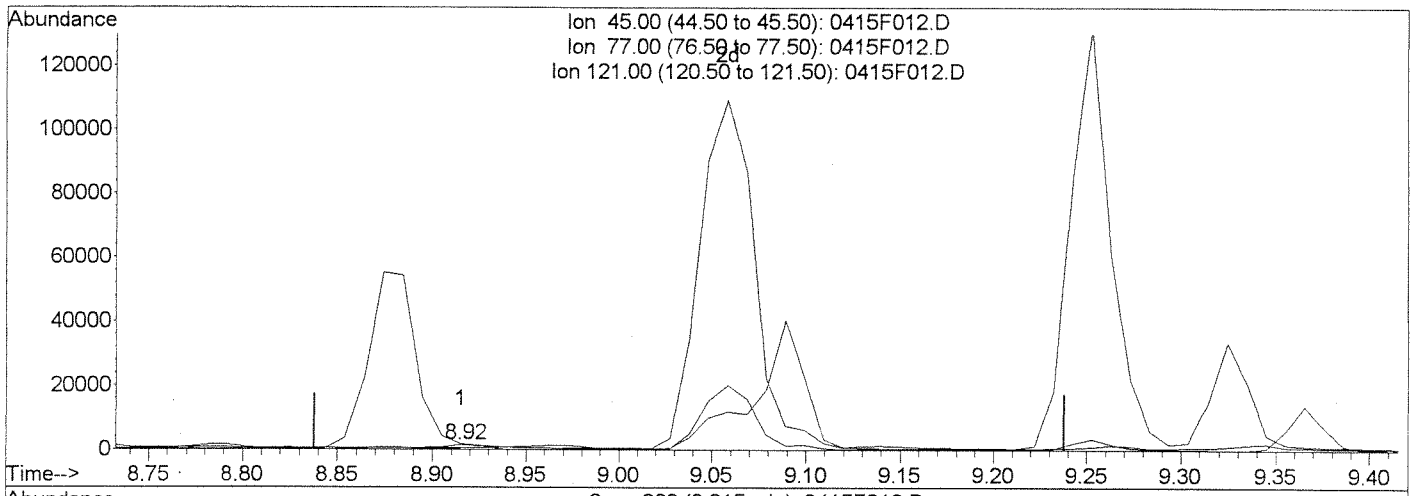


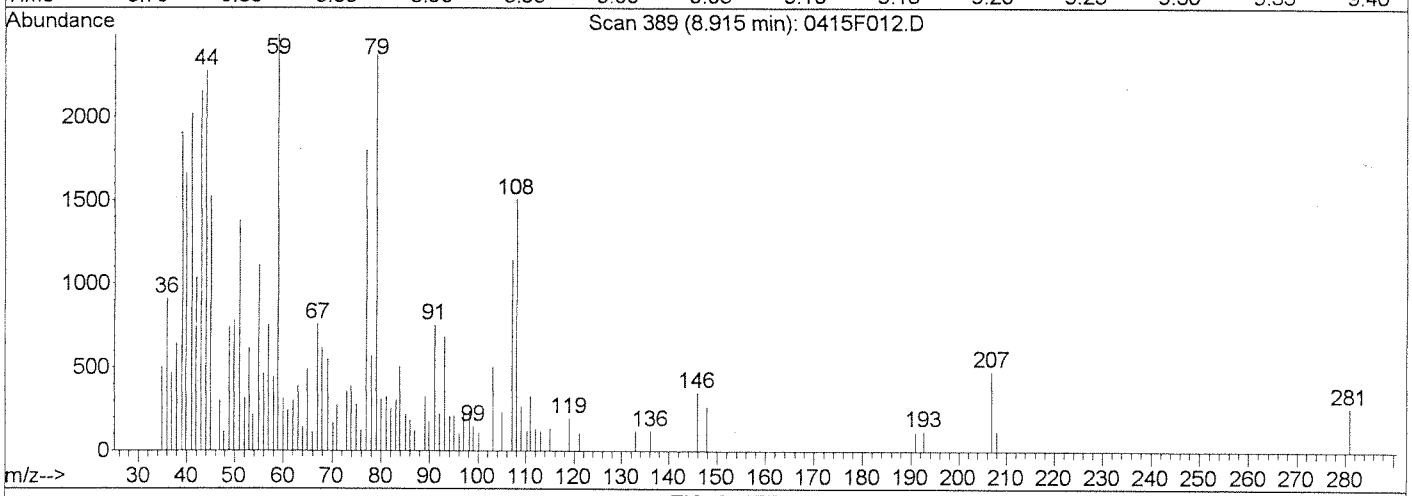
Quantitation Report (Qedit)

Data File : J:\MS10\DATA\041505\0415F012.D
Acq On : 15 Apr 2005 5:41 pm
Sample : K2502499-011MSD
Misc :
MS Integration Params: RTEINT.P
Quant Time: Apr 18 12:21 2005

Vial: 12
Operator: JGISH
Inst : MS10
Multiplr: 1.00
Quant Results File: temp.res

Method : J:\MS10\METHODS\BNA\0412BNLL.M (RTE Integrator)
Title : 8270LL ICAL
Last Update : Mon Apr 18 10:24:44 2005
Response via : Multiple Level Calibration





TIC: 0415F012.D

(15) Bis(2-chloroisopropyl) Ether (T)

8.92min 11.22ng/ml

response 1576

Ion	Exp%	Act%
45.00	100	100
77.00	72.50	88.77
121.00	20.40	0.00
0.00	0.00	0.00

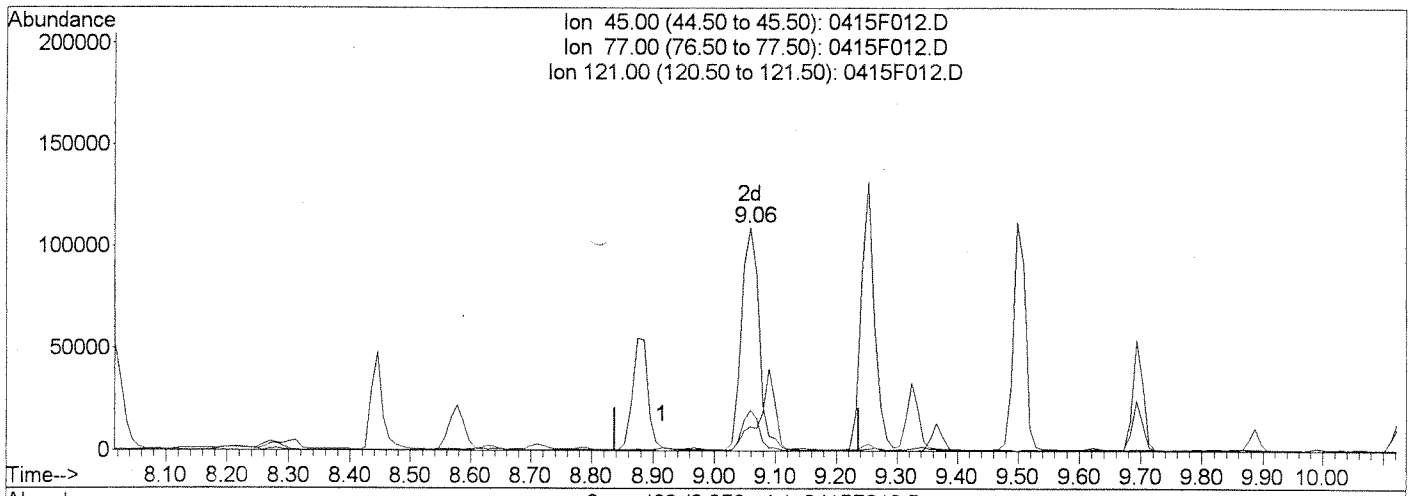
0415F012.D 0412BNLL.M Mon Apr 18 12:21:22 2005

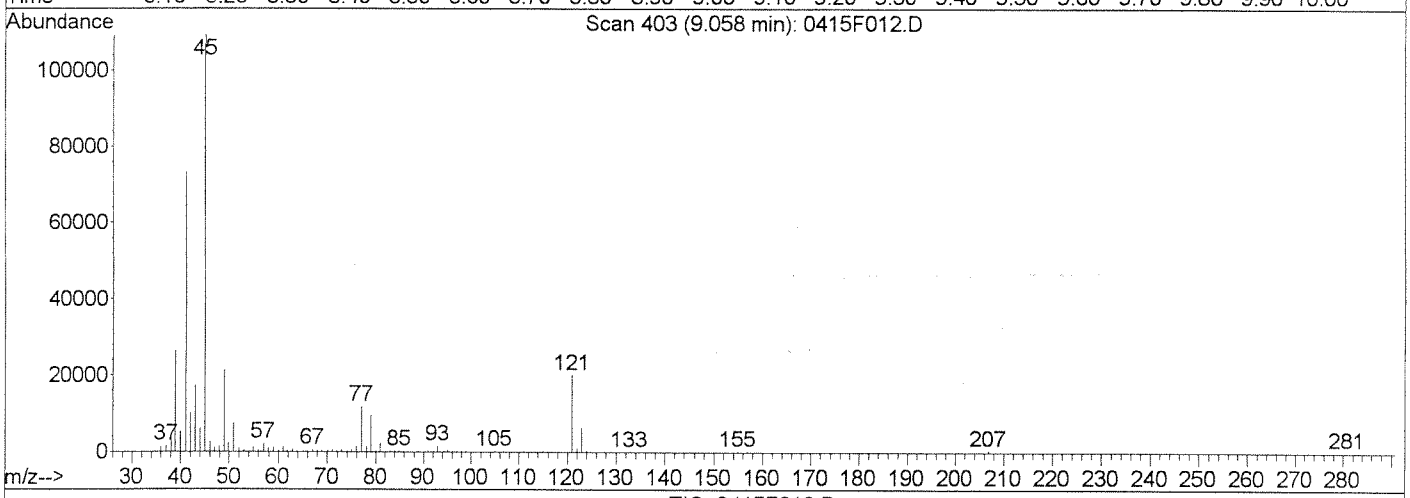
Quantitation Report (Qedit)

Data File : J:\MS10\DATA\041505\0415F012.D
Acq On : 15 Apr 2005 5:41 pm
Sample : K2502499-011MSD
Misc :
MS Integration Params: RTEINT.P
Quant Time: Apr 18 12:23 2005

Vial: 12
Operator: JGISH
Inst : MS10
Multiplr: 1.00
Quant Results File: temp.res

Method : J:\MS10\METHODS\BNA\0412BNLL.M (RTE Integrator)
Title : 8270LL ICAL
Last Update : Mon Apr 18 10:24:44 2005
Response via : Multiple Level Calibration





TIC: 0415F012.D

(15) Bis(2-chloroisopropyl) Ether (T)

9.06min 1586.88ng/ml m

response 222973

Ion	Exp%	Act%
45.00	100	100
77.00	72.50	10.83#
121.00	20.40	18.40
0.00	0.00	0.00

wrong peak selected

* 4/18/05

4/18/05

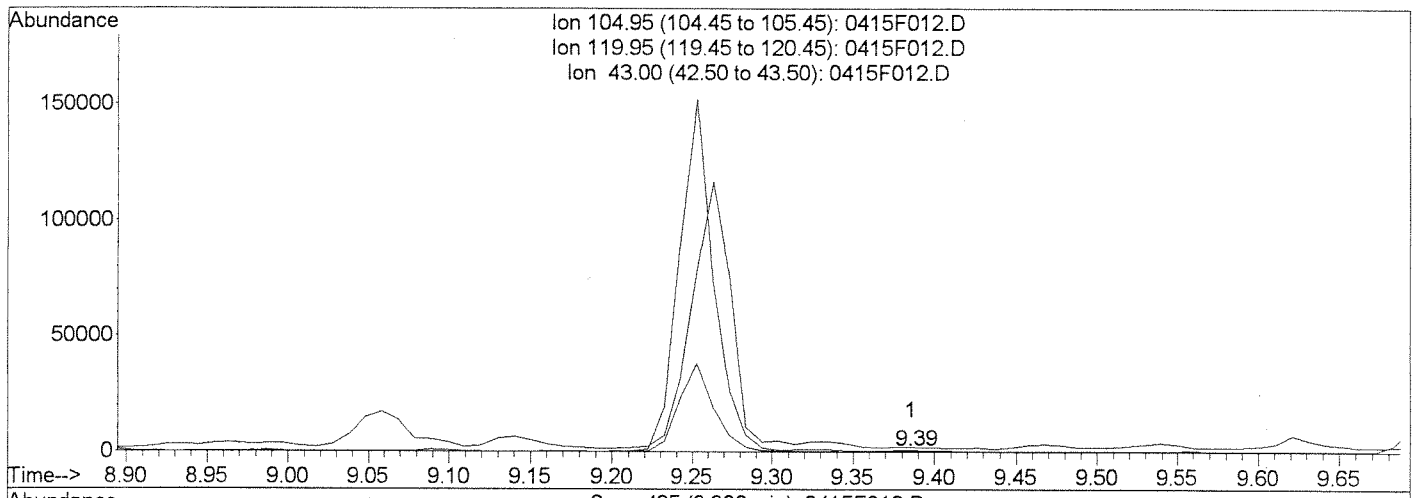
0415F012.D 0412BNLL.M Mon Apr 18 16:14:48 2005

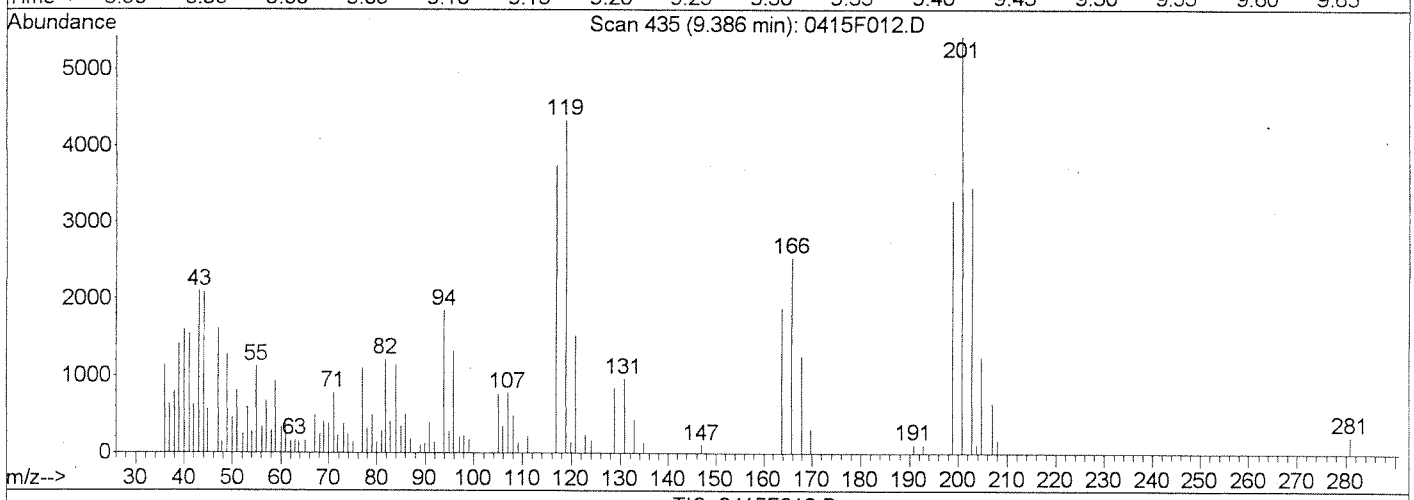
Quantitation Report (Qedit)

Data File : J:\MS10\DATA\041505\0415F012.D
Acq On : 15 Apr 2005 5:41 pm
Sample : K2502499-011MSD
Misc :
MS Integration Params: RTEINT.P
Quant Time: Apr 18 12:21 2005

Vial: 12
Operator: JGISH
Inst : MS10
Multiplr: 1.00
Quant Results File: temp.res

Method : J:\MS10\METHODS\BNA\0412BNLL.M (RTE Integrator)
Title : 8270LL ICAL
Last Update : Mon Apr 18 10:24:44 2005
Response via : Multiple Level Calibration





TIC: 0415F012.D

(17) Acetophenone (T)

9.39min 17.02ng/ml

response 1870

Ion	Exp%	Act%
104.95	100	100
119.95	25.80	25.36
43.00	19.60	19.38
0.00	0.00	0.00

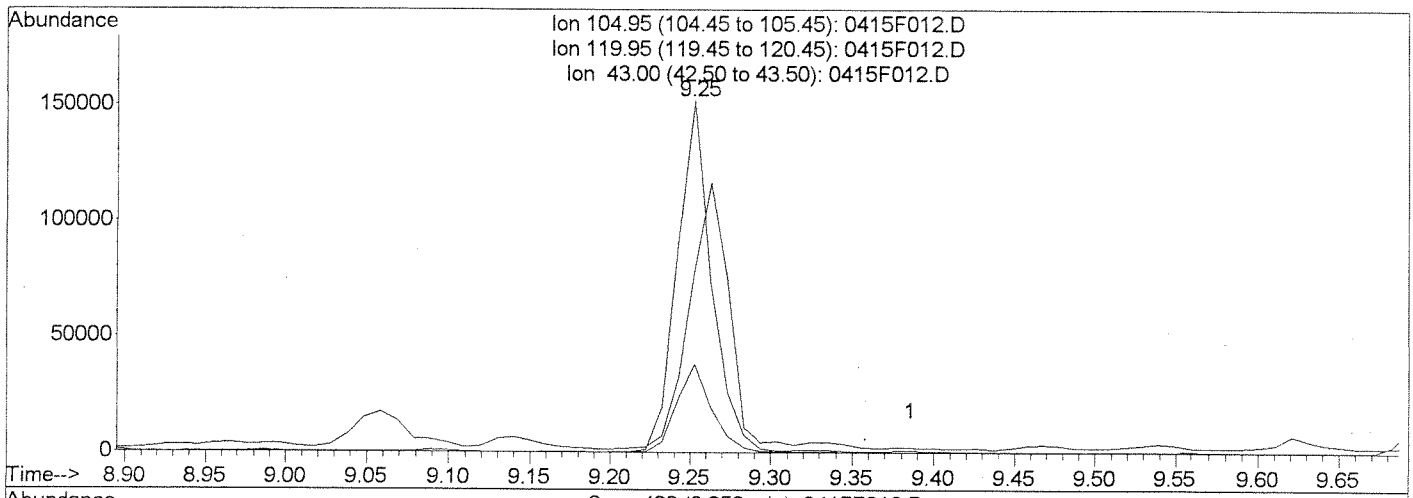
0415F012.D 0412BNLL.M Mon Apr 18 12:21:43 2005

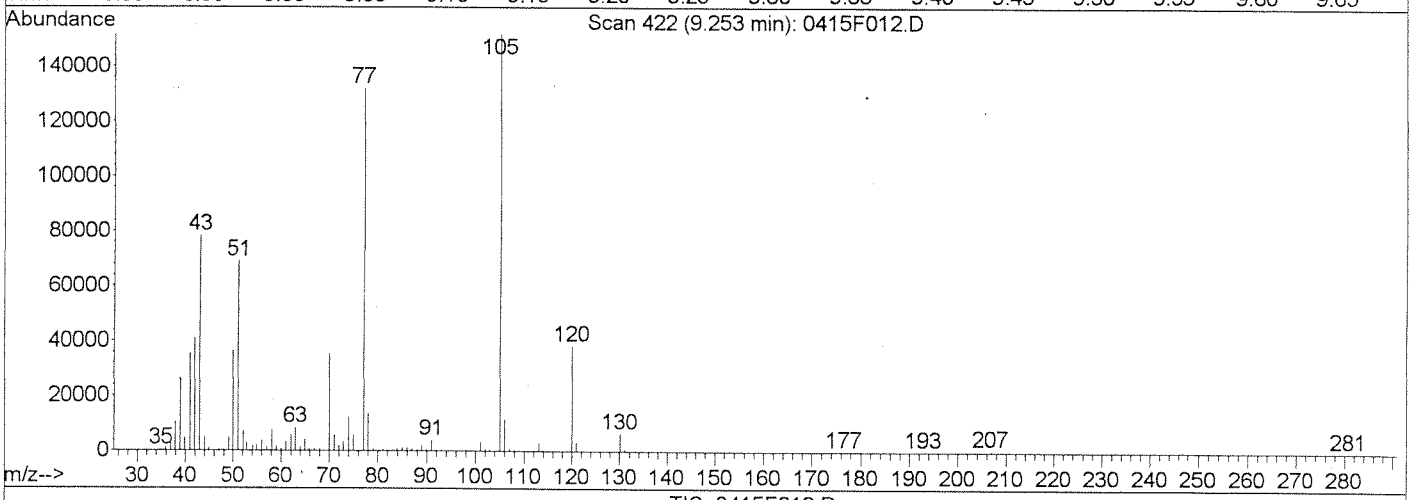
Quantitation Report (Qedit)

Data File : J:\MS10\DATA\041505\0415F012.D
Acq On : 15 Apr 2005 5:41 pm
Sample : K2502499-011MSD
Misc :
MS Integration Params: RTEINT.P
Quant Time: Apr 18 12:21 2005

Vial: 12
Operator: JGISH
Inst : MS10
Multiplr: 1.00
Quant Results File: temp.res

Method : J:\MS10\METHODS\BNA\0412BNLL.M (RTE Integrator)
Title : 8270LL ICAL
Last Update : Mon Apr 18 10:24:44 2005
Response via : Multiple Level Calibration





TIC: 0415F012.D

(17) Acetophenone (T)

9.25min 2086.60ng/ml m

response 229221

Ion	Exp%	Act%
104.95	100	100
119.95	25.80	25.12
43.00	19.60	51.53#
0.00	0.00	0.00

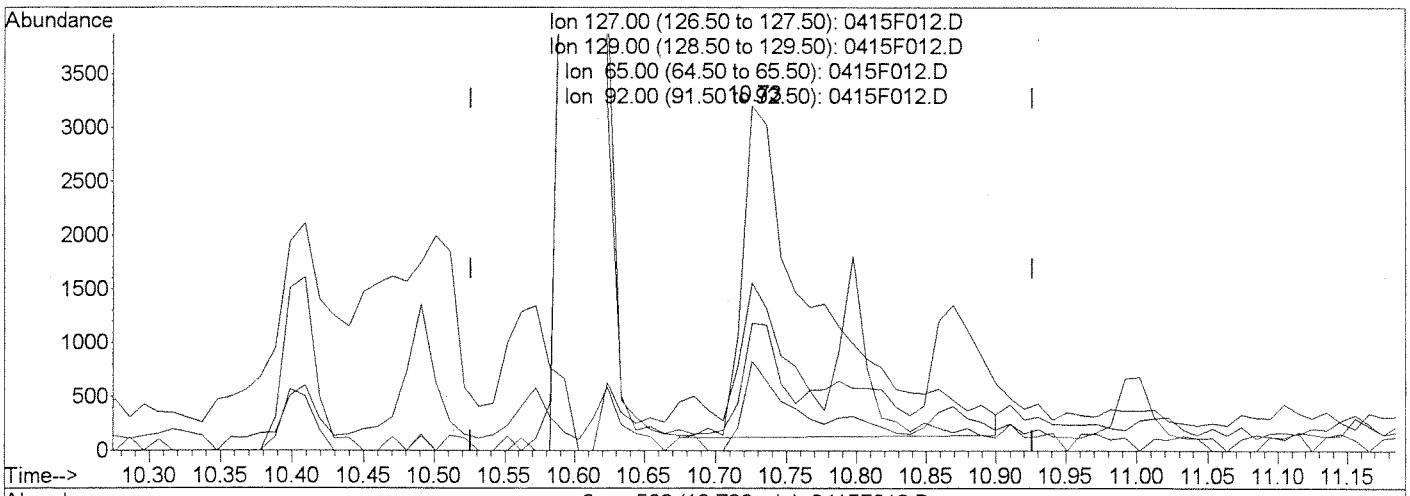
Peak not found

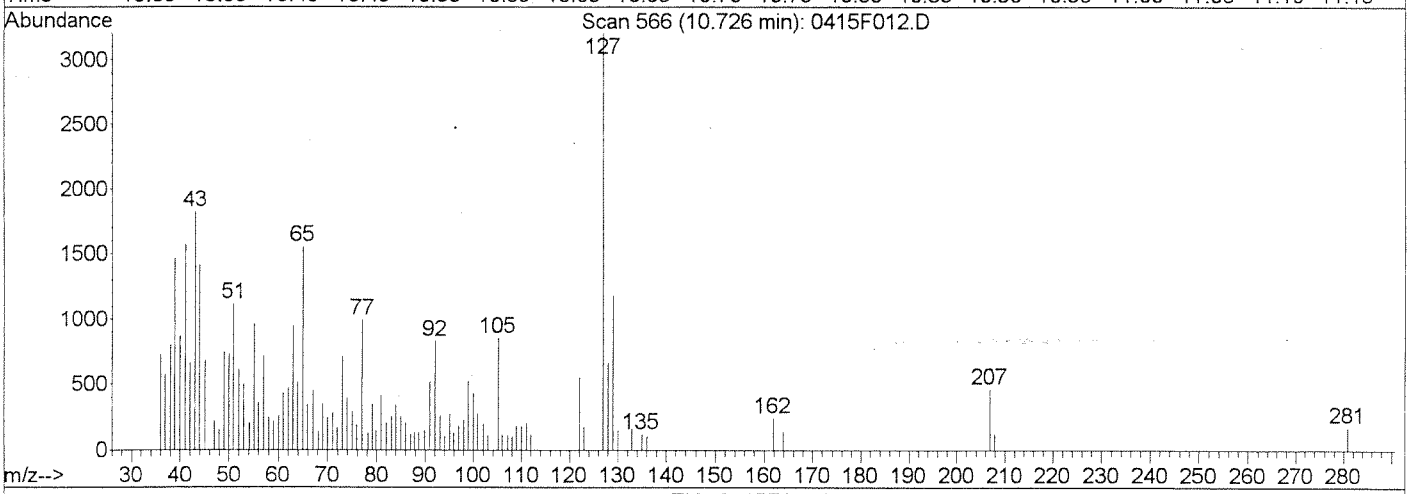
0415F012.D 0412BNLL.M Mon Apr 18 12:21:48 2005

Quantitation Report (Qedit)

Data File : J:\MS10\DATA\041505\0415F012.D Vial: 12
Acq On : 15 Apr 2005 5:41 pm Operator: JGISH
Sample : K2502499-011MSD Inst : MS10
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 18 12:21 2005 Quant Results File: temp.res

Method : J:\MS10\METHODS\BNA\0412BNLL.M (RTE Integrator)
Title : 8270LL ICAL
Last Update : Mon Apr 18 10:24:44 2005
Response via : Multiple Level Calibration





TIC: 0415F012.D

(32) 4-Chloroaniline (T)

10.73min 111.70ng/ml

response 11283

Ion	Exp%	Act%
127.00	100	100
129.00	32.40	34.64
65.00	32.40	36.15
92.00	17.40	23.32

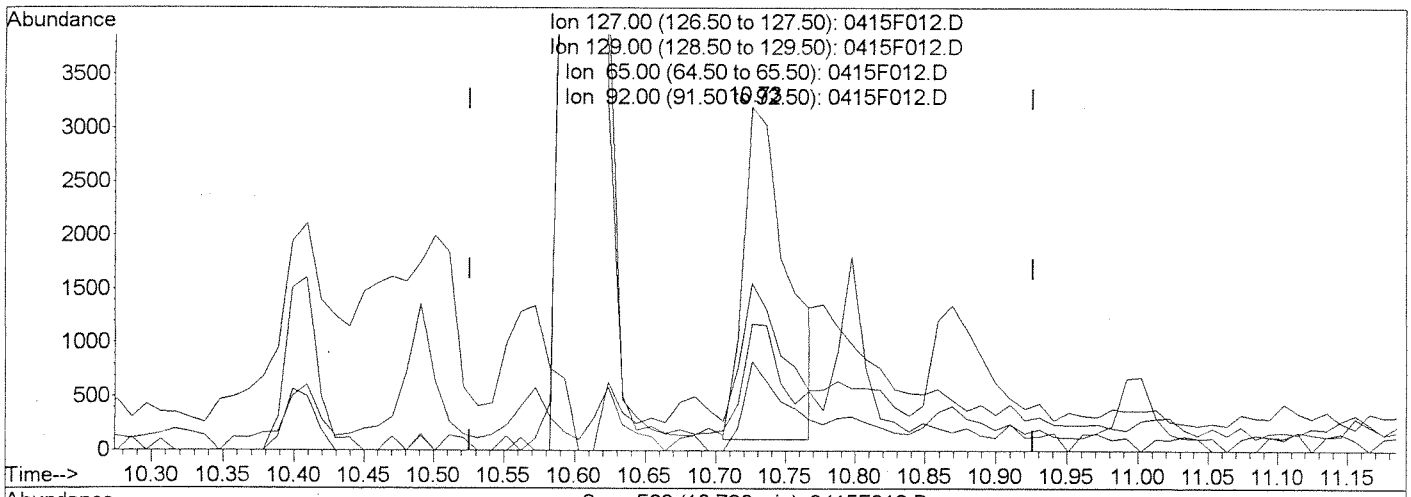
0415F012.D 0412BNLL.M Mon Apr 18 12:22:07 2005

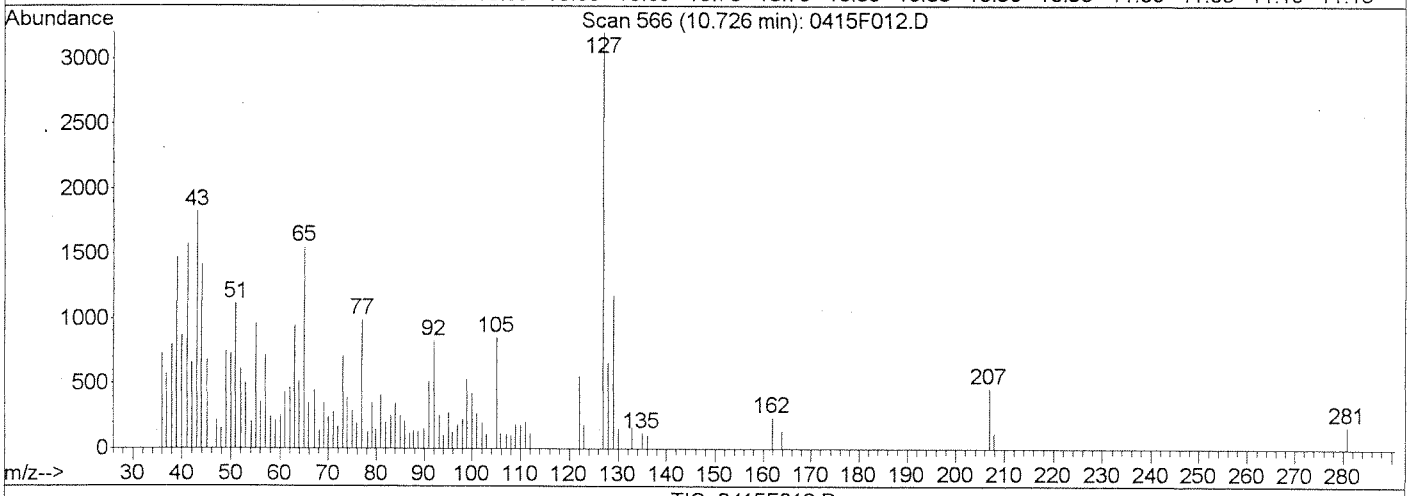
Quantitation Report (Qedit)

Data File : J:\MS10\DATA\041505\0415F012.D
Acq On : 15 Apr 2005 5:41 pm
Sample : K2502499-011MSD
Misc :
MS Integration Params: RTEINT.P
Quant Time: Apr 18 12:22 2005

Vial: 12
Operator: JGISH
Inst : MS10
Multiplr: 1.00
Quant Results File: temp.res

Method : J:\MS10\METHODS\BNA\0412BNLL.M (RTE Integrator)
Title : 8270LL ICAL
Last Update : Mon Apr 18 10:24:44 2005
Response via : Multiple Level Calibration





TIC: 0415F012.D

(32) 4-Chloroaniline (T)

10.73min 68.15ng/ml m

response 6884

Ion	Exp%	Act%
127.00	100	100
129.00	32.40	36.83
65.00	32.40	48.55
92.00	17.40	25.90

poor Integration

4/19/05

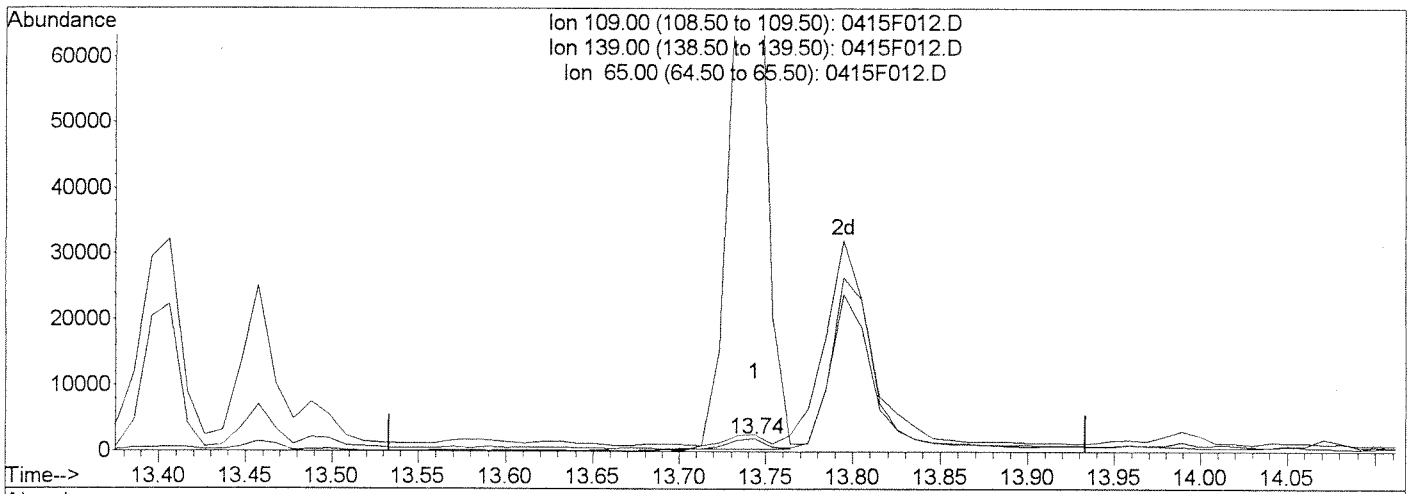
0415F012.D 0412BNLL.M Mon Apr 18 12:22:14 2005

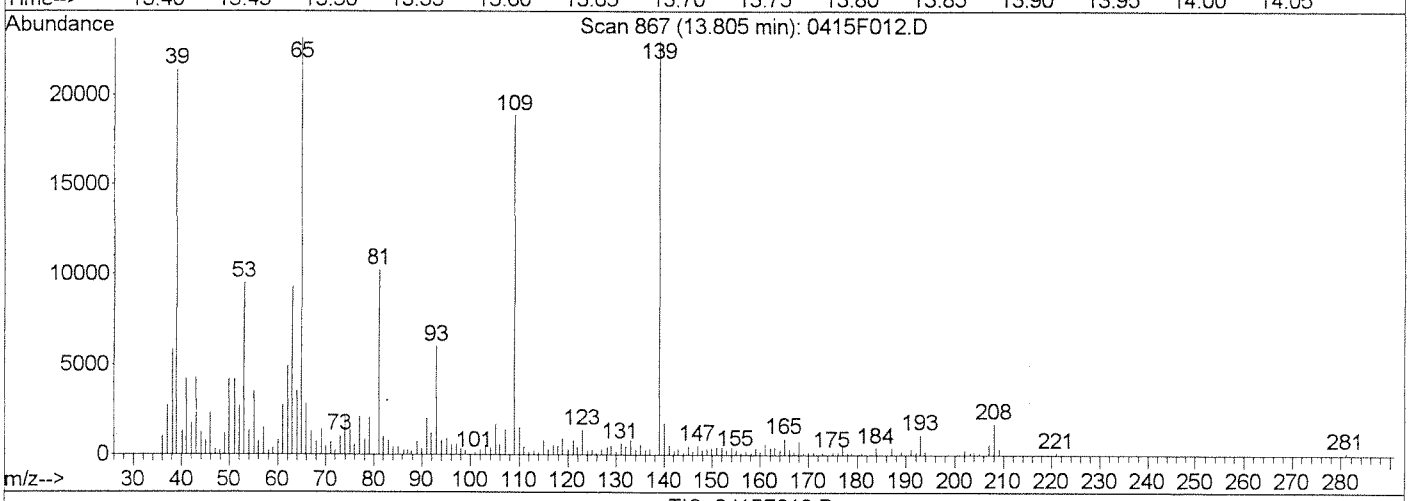
Quantitation Report (Qedit)

Data File : J:\MS10\DATA\041505\0415F012.D
Acq On : 15 Apr 2005 5:41 pm
Sample : K2502499-011MSD
Misc :
MS Integration Params: RTEINT.P
Quant Time: Apr 18 12:22 2005

Vial: 12
Operator: JGISH
Inst : MS10
Multiplr: 1.00
Quant Results File: temp.res

Method : J:\MS10\METHODS\BNA\0412BNLL.M (RTE Integrator)
Title : 8270LL ICAL
Last Update : Mon Apr 18 10:24:44 2005
Response via : Multiple Level Calibration





TIC: 0415F012.D

(53) 4-Nitrophenol (TP)

13.74min 108.94ng/ml

response 2335

Ion	Exp%	Act%
109.00	100	100
139.00	174.20	6586.87#
65.00	130.20	95.23#
0.00	0.00	0.00

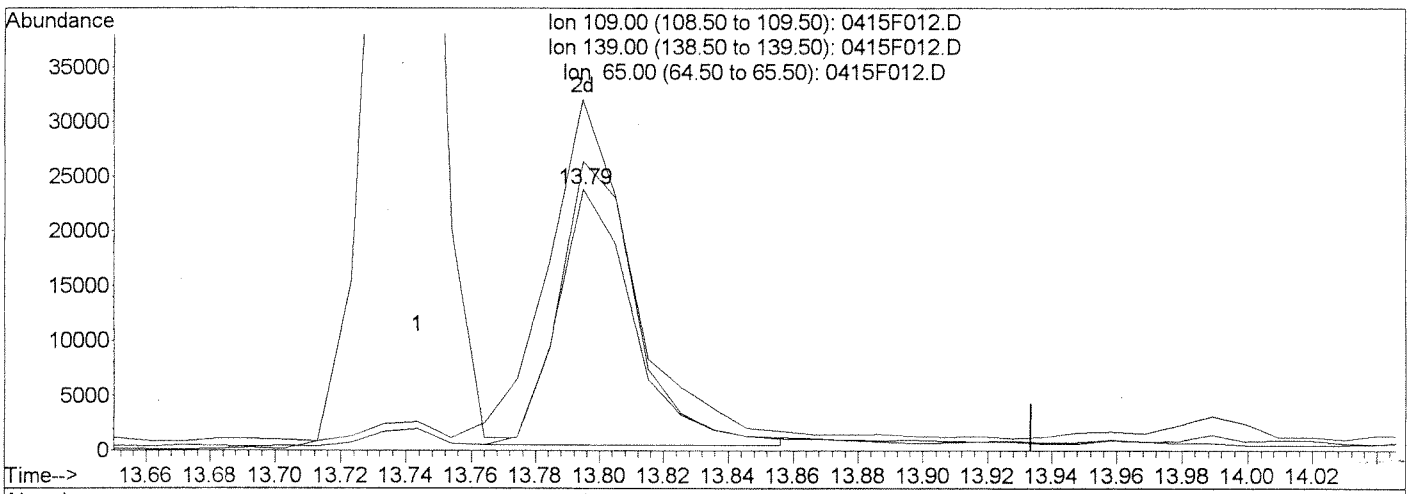
0415F012.D 0412BNLL.M Mon Apr 18 12:22:45 2005

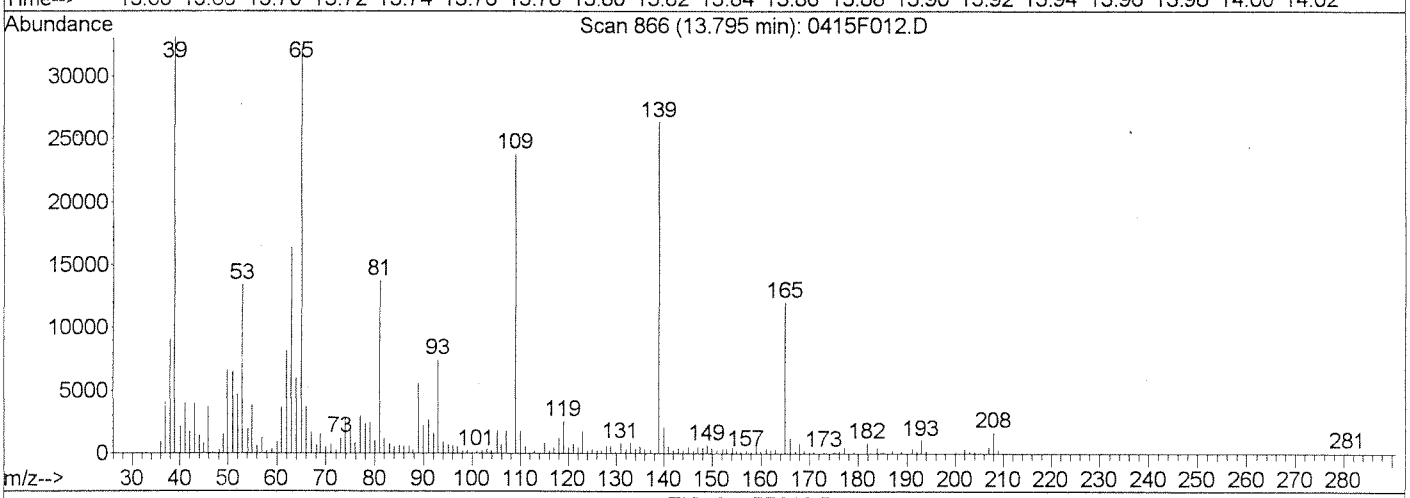
Quantitation Report (Qedit)

Data File : J:\MS10\DATA\041505\0415F012.D
Acq On : 15 Apr 2005 5:41 pm
Sample : K2502499-011MSD
Misc :
MS Integration Params: RTEINT.P
Quant Time: Apr 18 12:22 2005

Vial: 12
Operator: JGISH
Inst : MS10
Multiplr: 1.00
Quant Results File: temp.res

Method : J:\MS10\METHODS\BNA\0412BNLL.M (RTE Integrator)
Title : 8270LL ICAL
Last Update : Mon Apr 18 10:24:44 2005
Response via : Multiple Level Calibration





TIC: 0415F012.D

(53) 4-Nitrophenol (TP)

13.79min 1797.42ng/ml m

response 38524

Ion	Exp%	Act%
109.00	100	100
139.00	174.20	110.74#
65.00	130.20	134.68
0.00	0.00	0.00

wrong peak selected

4/19/05

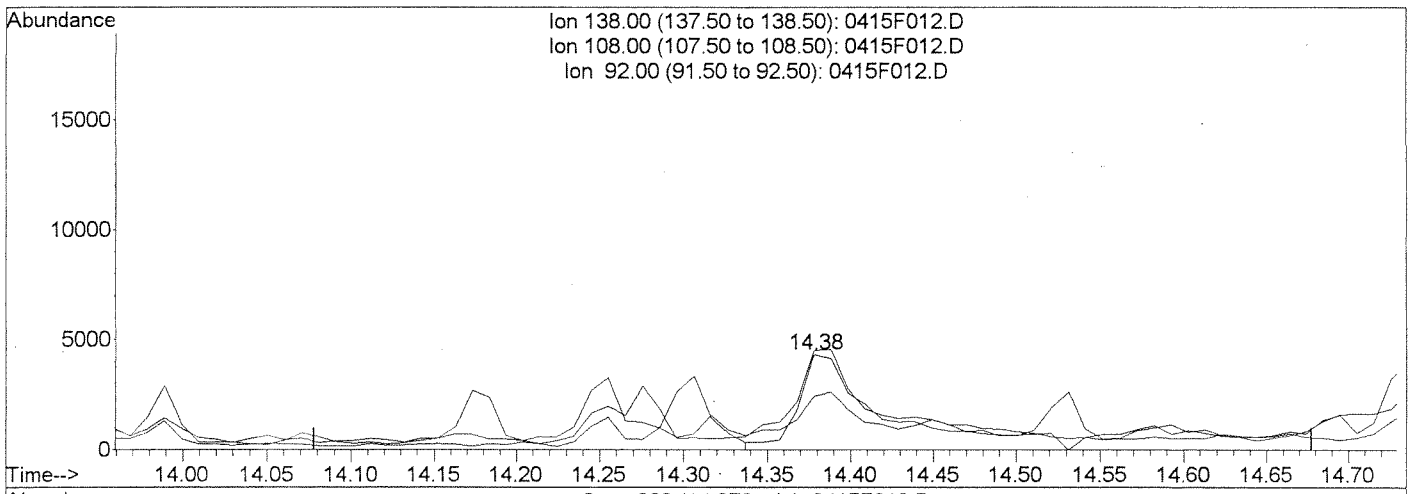
0415F012.D 0412BNLL.M Mon Apr 18 12:22:59 2005

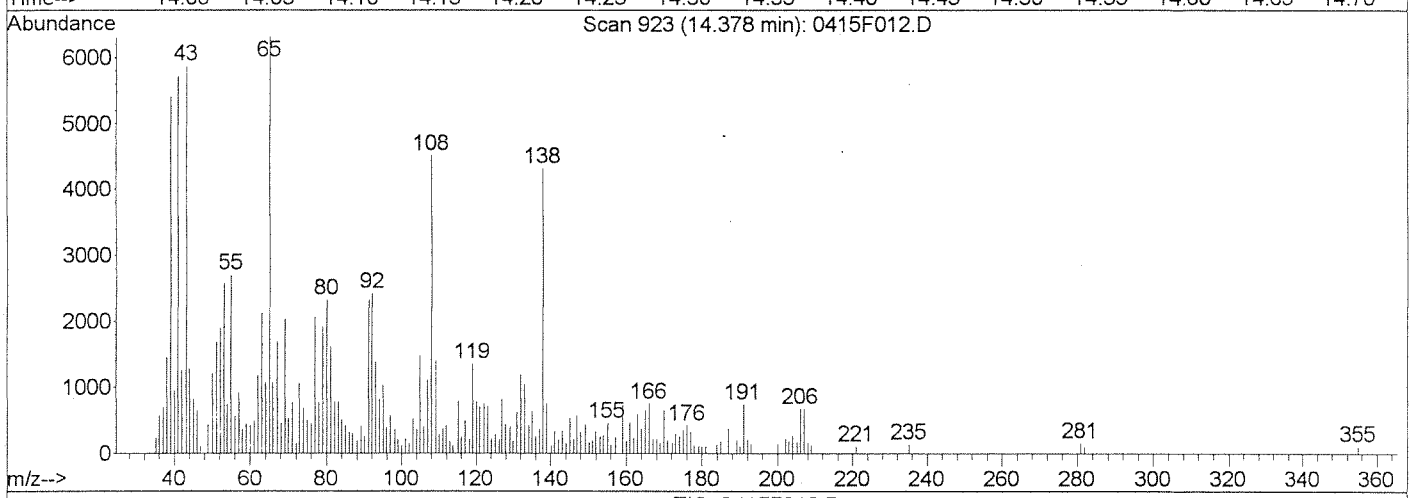
Quantitation Report (Qedit)

Data File : J:\MS10\DATA\041505\0415F012.D
Acq On : 15 Apr 2005 5:41 pm
Sample : K2502499-011MSD
Misc :
MS Integration Params: RTEINT.P
Quant Time: Apr 18 12:22 2005

Vial: 12
Operator: JGISH
Inst : MS10
Multiplr: 1.00
Quant Results File: temp.res

Method : J:\MS10\METHODS\BNA\0412BNLL.M (RTE Integrator)
Title : 8270LL ICAL
Last Update : Mon Apr 18 10:24:44 2005
Response via : Multiple Level Calibration





(59) 4-Nitroaniline (T)

14.38min 440.41ng/ml

response 15887

Ion	Exp%	Act%
138.00	100	100
108.00	95.60	92.66
92.00	46.60	41.19
0.00	0.00	0.00

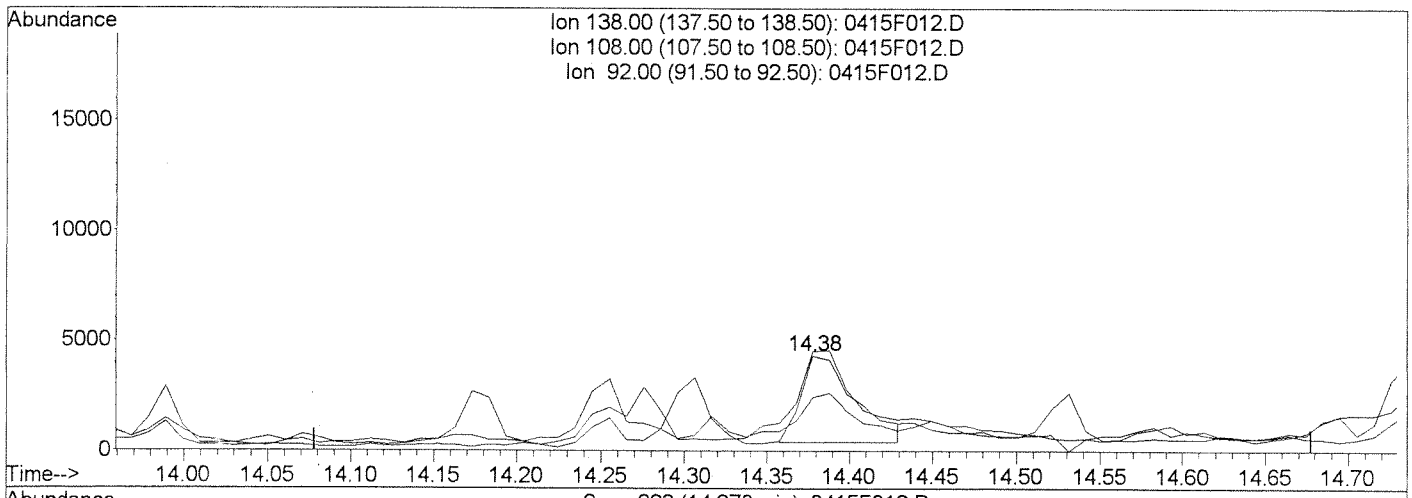
0415F012.D 0412BNLL.M Mon Apr 18 12:23:12 2005

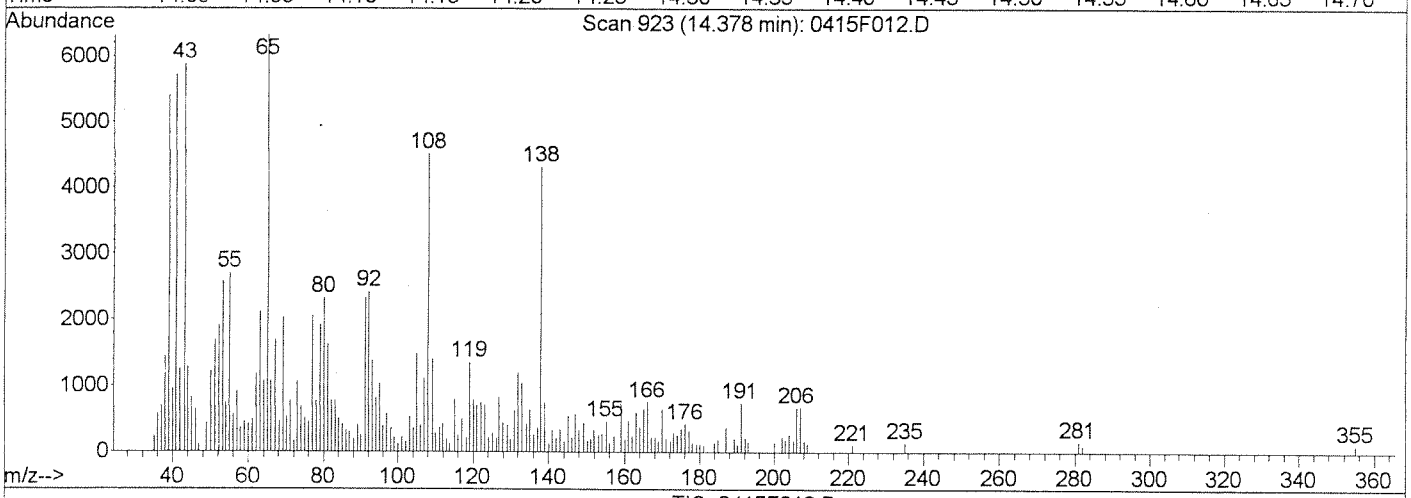
Quantitation Report (Qedit)

Data File : J:\MS10\DATA\041505\0415F012.D
Acq On : 15 Apr 2005 5:41 pm
Sample : K2502499-011MSD
Misc :
MS Integration Params: RTEINT.P
Quant Time: Apr 18 12:23 2005

Vial: 12
Operator: JGISH
Inst : MS10
Multiplr: 1.00
Quant Results File: temp.res

Method : J:\MS10\METHODS\BNA\0412BNLL.M (RTE Integrator)
Title : 8270LL ICAL
Last Update : Mon Apr 18 10:24:44 2005
Response via : Multiple Level Calibration





TIC: 0415F012.D

(59) 4-Nitroaniline (T)

14.38min 248.91ng/ml m

response 8979

Ion	Exp%	Act%
138.00	100	100
108.00	95.60	104.68
92.00	46.60	56.20
0.00	0.00	0.00

good Integration
4/18/05

4/19/05

0415F012.D 0412BNLL.M Mon Apr 18 12:23:19 2005

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Battelle Memorial Institute	**Service Request:**	K2502554
Project:	Novato Ballfields/G486063	**Date Collected:**	NA
Sample Matrix:	Soil	**Date Received:**	NA

Semi-Volatile Organic Compounds by GC/MS

Sample Name:	Lab Control Sample	**Units:**	ug/Kg
Lab Code:	KWG0505755-5	**Basis:**	Dry
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2,4,5-Tetrachlorobenzene	179		10	4.9	1	04/11/05	04/15/05	KWG0505755	
Phenol	201		30	1.9	1	04/11/05	04/15/05	KWG0505755	
Bis(2-chloroethyl) Ether	185		10	2.4	1	04/11/05	04/15/05	KWG0505755	
2-Chlorophenol	191		10	1.7	1	04/11/05	04/15/05	KWG0505755	
2-Methylphenol	179		10	3.4	1	04/11/05	04/15/05	KWG0505755	
Bis(2-chloroisopropyl) Ether	181		10	1.2	1	04/11/05	04/15/05	KWG0505755	
Acetophenone	205		50	12	1	04/11/05	04/15/05	KWG0505755	
4-Methylphenol†	179		10	2.9	1	04/11/05	04/15/05	KWG0505755	
N-Nitrosodi-n-propylamine	193		10	3.2	1	04/11/05	04/15/05	KWG0505755	
Hexachloroethane	176		10	2.2	1	04/11/05	04/15/05	KWG0505755	
Nitrobenzene	181		10	2.0	1	04/11/05	04/15/05	KWG0505755	
Isophorone	203		10	1.6	1	04/11/05	04/15/05	KWG0505755	
2-Nitrophenol	195		10	2.6	1	04/11/05	04/15/05	KWG0505755	
2,4-Dimethylphenol	93.1		50	5.5	1	04/11/05	04/15/05	KWG0505755	
Bis(2-chloroethoxy)methane	179		10	1.3	1	04/11/05	04/15/05	KWG0505755	
2,4-Dichlorophenol	188		10	1.8	1	04/11/05	04/15/05	KWG0505755	
Naphthalene	176		10	1.3	1	04/11/05	04/15/05	KWG0505755	
4-Chloroaniline	124		10	2.1	1	04/11/05	04/15/05	KWG0505755	
Hexachlorobutadiene	162		10	1.4	1	04/11/05	04/15/05	KWG0505755	
Caprolactam	172		20	12	1	04/11/05	04/15/05	KWG0505755	
Benzaldehyde	161		20	8.8	1	04/11/05	04/15/05	KWG0505755	
4-Chloro-3-methylphenol	184		10	2.1	1	04/11/05	04/15/05	KWG0505755	
2-Methylnaphthalene	154		10	1.2	1	04/11/05	04/15/05	KWG0505755	
Hexachlorocyclopentadiene	87.3		50	15	1	04/11/05	04/15/05	KWG0505755	
2,4,6-Trichlorophenol	199		10	1.8	1	04/11/05	04/15/05	KWG0505755	
2,4,5-Trichlorophenol	207		10	3.0	1	04/11/05	04/15/05	KWG0505755	
Biphenyl	198		20	4.8	1	04/11/05	04/15/05	KWG0505755	
2-Chloronaphthalene	178		10	3.6	1	04/11/05	04/15/05	KWG0505755	
2-Nitroaniline	188		20	2.7	1	04/11/05	04/15/05	KWG0505755	
Dimethyl Phthalate	199		10	1.8	1	04/11/05	04/15/05	KWG0505755	
2,6-Dinitrotoluene	195		10	2.8	1	04/11/05	04/15/05	KWG0505755	
Acenaphthylene	199		10	1.4	1	04/11/05	04/15/05	KWG0505755	
3-Nitroaniline	187		20	2.6	1	04/11/05	04/15/05	KWG0505755	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Battelle Memorial Institute	**Service Request:**	K2502554
Project:	Novato Ballfields/G486063	**Date Collected:**	NA
Sample Matrix:	Soil	**Date Received:**	NA

Semi-Volatile Organic Compounds by GC/MS

Sample Name:	Lab Control Sample	**Units:**	ug/Kg
Lab Code:	KWG0505755-5	**Basis:**	Dry
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Acenaphthene	**184**		10	1.0	1	04/11/05	04/15/05	KWG0505755	
2,4-Dinitrophenol	**192**	J	200	36	1	04/11/05	04/15/05	KWG0505755	
4-Nitrophenol	**211**		100	30	1	04/11/05	04/15/05	KWG0505755	
Dibenzofuran	**183**		10	1.3	1	04/11/05	04/15/05	KWG0505755	
2,4-Dinitrotoluene	**220**		10	2.8	1	04/11/05	04/15/05	KWG0505755	
Diethyl Phthalate	**214**		10	3.5	1	04/11/05	04/15/05	KWG0505755	
Fluorene	**193**		10	1.7	1	04/11/05	04/15/05	KWG0505755	
4-Chlorophenyl Phenyl Ether	**187**		10	2.0	1	04/11/05	04/15/05	KWG0505755	
4-Nitroaniline	**200**		20	3.4	1	04/11/05	04/15/05	KWG0505755	
2-Methyl-4,6-dinitrophenol	**207**		100	1.7	1	04/11/05	04/15/05	KWG0505755	
N-Nitrosodiphenylamine	**219**		10	2.2	1	04/11/05	04/15/05	KWG0505755	
4-Bromophenyl Phenyl Ether	**194**		10	1.4	1	04/11/05	04/15/05	KWG0505755	
Hexachlorobenzene	**203**		10	2.1	1	04/11/05	04/15/05	KWG0505755	
Atrazine	**229**		10	2.2	1	04/11/05	04/15/05	KWG0505755	
Pentachlorophenol	**149**		100	8.5	1	04/11/05	04/15/05	KWG0505755	
Phenanthrene	**201**		10	1.3	1	04/11/05	04/15/05	KWG0505755	
Anthracene	**213**		10	1.4	1	04/11/05	04/15/05	KWG0505755	
Carbazole	**219**		10	1.3	1	04/11/05	04/15/05	KWG0505755	
Di-n-butyl Phthalate	**248**		10	2.6	1	04/11/05	04/15/05	KWG0505755	
Fluoranthene	**223**		10	2.2	1	04/11/05	04/15/05	KWG0505755	
Pyrene	**226**		10	1.3	1	04/11/05	04/15/05	KWG0505755	
Butyl Benzyl Phthalate	**232**		10	1.5	1	04/11/05	04/15/05	KWG0505755	
3,3'-Dichlorobenzidine	**123**		100	3.7	1	04/11/05	04/15/05	KWG0505755	
Benz(a)anthracene	**218**		10	1.4	1	04/11/05	04/15/05	KWG0505755	
Chrysene	**238**		10	1.4	1	04/11/05	04/15/05	KWG0505755	
Bis(2-ethylhexyl) Phthalate	**239**		200	1.7	1	04/11/05	04/15/05	KWG0505755	
Di-n-octyl Phthalate	**224**		10	1.2	1	04/11/05	04/15/05	KWG0505755	
Benzo(b)fluoranthene	**225**		10	2.5	1	04/11/05	04/15/05	KWG0505755	
Benzo(k)fluoranthene	**224**		10	2.5	1	04/11/05	04/15/05	KWG0505755	
Benzo(a)pyrene	**223**		10	1.6	1	04/11/05	04/15/05	KWG0505755	
Indeno(1,2,3-cd)pyrene	**218**		10	1.9	1	04/11/05	04/15/05	KWG0505755	
Dibenz(a,h)anthracene	**225**		10	2.2	1	04/11/05	04/15/05	KWG0505755	
Benzo(g,h,i)perylene	**219**		10	2.3	1	04/11/05	04/15/05	KWG0505755	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Battelle Memorial Institute	**Service Request:**	K2502554
Project:	Novato Ballfields/G486063	**Date Collected:**	NA
Sample Matrix:	Soil	**Date Received:**	NA

Semi-Volatile Organic Compounds by GC/MS

Sample Name:	Lab Control Sample	**Units:**	ug/Kg
Lab Code:	KWG0505755-5	**Basis:**	Dry

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	69	11-87	04/15/05	Acceptable
Phenol-d6	82	20-99	04/15/05	Acceptable
Nitrobenzene-d5	82	10-99	04/15/05	Acceptable
2-Fluorobiphenyl	82	10-104	04/15/05	Acceptable
2,4,6-Tribromophenol	91	23-113	04/15/05	Acceptable
Terphenyl-d14	115	39-124	04/15/05	Acceptable

† Analyte Comments

4-Methylphenol	This analyte cannot be separated from 3-Methylphenol.

Comments:

Exception Report

Data File: J:\MS10\DATA\041505\0415F004.D
Lab ID: KWG0505755-5
RunType: LCS
Matrix: SOIL

Date Acquired: 04/15/2005 12:22
Date Quantitated: 04/18/2005 10:33
Batch ID: KWG0506208
Analysis Method: 8270C
MethodJoinID: MJ142

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Tune Window	NA	NA	NA	x	
Analytical Holding Time	NA	NA	NA	x	
ICAL Pass/Fail	NA	NA	NA	x	
ICAL Average RSD	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Initial Calibration Minimum RF	NA	NA	NA	x	
Initial Calibration SPCC/CCC	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Minimum RF	NA	NA	NA	x	
Continuing Calibration SPCC/CCC	NA	NA	NA	x	
Internal Standards	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Relative Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

K2502499
K2502554

Primary Review: 4/19/05

Secondary Review: 4/19/05

Printed: 04/18/2005 15:32:15
u:\Stealth\Crystal.rpt\except2.rpt

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	SOIL
Prod Code:	8270-LL	**Collect Date:**		**Receive Date:**	04/12/2005

Analysis Lot:	KWG0506208	**Prep Lot:**	KWG0505755	**Report Group:**	
Analysis Method:	8270C	**Prep Method:**	EPA 3541		
Prep Ref:	373963	**Prep Date:**	04/11/2005		

Quant Method:	J:\MS10\METHODS\BNA\0412BNLL.M	**Calibration ID:**	CAL4375
Title:			
Tune Ref:	J:\MS10\DATA\041505\0415T001.D	**Method ID:**	MJ142
MB Ref:	J:\MS10\DATA\041505\0415F003.D	**Quant based on Method**	

Data File:	J:\MS10\DATA\041505\0415F004.D			**Instrument:**	MS10
Acqu Date:	04/15/2005 12:22	**Quant Date:**	04/18/2005 10:33	**Vial:**	4
Run Type:	LCS			**Dilution:**	1.0
Lab ID:	KWG0505755-5			**Soln Conc. Units:**	ng/ml

Internal Standard Compounds

IS Ref	Parameter Name	RT	RT Dev	Quant Mass	Response	Solution Conc	Area Criteria
1	1,4-Dichlorobenzene-d4	8.61	-0.01	152	65827	1,000.00	OK
2	Naphthalene-d8	10.55	0.00	136	222793	1,000.00	OK
3	Acenaphthene-d10	13.38	0.01	164	107039	1,000.00	OK
4	Phenanthrene-d10	15.79	0.00	188	169169	1,000.00	OK
5	Chrysene-d12	20.25	0.01	240	125989	1,000.00	OK
6	Perylene-d12	24.16	-0.01	264	96643	1,000.00	OK

Surrogate Compounds

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	%Rec	%Rec Limits	Rpt?
1	2-Fluorophenol	6.84	0.00	0.00	112	188151	2,600	69	11-87 OK	
1	Phenol-d6	8.15	-0.01	0.00	99	268951	3,073	82	20-99 OK	
1	Nitrobenzene-d5	9.45	-0.01	0.00	82	180187	2,045	82	10-99 OK	
3	2-Fluorobiphenyl	12.31	0.00	0.00	172	286575	2,062	82	10-104 OK	
4	2,4,6-Tribromophenol	14.67	-0.01	0.00	330	70113	3,410	91	23-113 OK	
5	Terphenyl-d14	18.44	0.00	0.00	244	334630	2,881	115	39-124 OK	

Target Compounds

Final Conc. Units: ug/Kg Wet Weight

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	QuantMass	Response	Solution Conc	Final Conc	Q	Rpt?
1	N-Nitrosodimethylamine	5.18	0.01	0.00	42	102793**m**	1,490	149		
1	Pyridine	5.26	0.03	0.00	79	59002**m**	763.84	76.4		
1	Benzaldehyde	7.98	-0.01	0.00	106	96698	1,614	161		
1	Bis(2-chloroethyl) Ether	8.25	-0.01	0.00	93	135975	1,849	185		
1	Phenol	8.17	-0.02	0.00	94	178592	2,011	201		
1	Aniline	8.15		0.00	93	94913	813.81	81.4		
1	2-Chlorophenol	8.32	-0.01	0.00	128	139218	1,908	191		
1	1,3-Dichlorobenzene	8.53		0.00	146	156084	1,749	175		
1	1,4-Dichlorobenzene	8.64		0.00	146	162568	1,748	175		
1	1,2-Dichlorobenzene	8.85		0.00	146	155826	1,828	183		

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File:	J:\MS10\DATA\041505\0415F004.D			**Instrument:**	MS10
Acqu Date:	04/15/2005 12:22	**Quant Date:**	04/18/2005 10:33	**Vial:**	4
Run Type:	LCS			**Dilution:**	1.0
Lab ID:	KWG0505755-5			**Soln Conc. Units:**	ng/ml

Target Compounds **Final Conc. Units:** ug/Kg Wet Weight

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	QuantMass	Response	Solution Conc	Final Conc	Q	Rpt?
1	Benzyl Alcohol	8.84	-0.01	0.00	108	85908	1,710	171		
1	Bis(2-chloroisopropyl) Ether	9.04		0.00	45	249607	1,812	181		
1	2-Methylphenol	9.04	-0.01	0.00	107	99300	1,785	179		
1	Acetophenone	9.23		0.00	105	221277m	2,054	205		
1	Hexachloroethane	9.34	-0.02	0.00	117	73318	1,764	176		
1	N-Nitrosodi-n-propylamine	9.24	-0.02	0.00	70	115103	1,931	193		
1	4-Methylphenol	9.27	-0.02	0.00	107	144802	1,793	179		
1	Nitrobenzene	9.48	-0.01	0.00	77	167895	1,811	181		
2	Isophorone	9.86	-0.03	0.00	82	279135	2,030	203		
2	2-Nitrophenol	9.97	-0.01	0.00	139	85634	1,949	195		
2	2,4-Dimethylphenol	10.08	-0.02	0.00	122	55214	930.66	93.1		
2	Bis(2-chloroethoxy)methane	10.21	-0.01	0.00	93	163497	1,785	179		
2	2,4-Dichlorophenol	10.37	-0.01	0.00	162	125174	1,884	188		
2	Benzoic Acid	10.39	-0.04	0.00	122	120086	4,543	454		
2	1,2,4-Trichlorobenzene	10.47	-0.01	0.00	180	144096	1,726	173		
2	Naphthalene	10.58	-0.01	0.00	128	384321	1,764	176		
2	4-Chloroaniline	10.71	-0.02	0.00	127	125984	1,237	124		
2	Hexachlorobutadiene	10.79		0.00	225	88606	1,622	162		
2	Caprolactam	11.33	0.06	0.01	55	71686	1,724	172		
2	4-Chloro-3-methylphenol	11.54		0.00	107	117603	1,845	184		
2	2-Methylnaphthalene	11.70	-0.01	0.00	141	196127	1,536	154		
3	1,2,4,5-Tetrachlorobenzene	11.96	-0.01	0.00	216	140581	1,788	179		
3	Hexachlorocyclopentadiene	11.94		0.00	237	31165	873.29	87.3		
3	2,4,6-Trichlorophenol	12.18	-0.01	0.00	196	85697	1,994	199		
3	2,4,5-Trichlorophenol	12.25	-0.01	0.00	196	95957	2,065	207		
3	Biphenyl	12.46		0.00	154	309876	1,978	198		
3	2-Chloronaphthalene	12.49		0.00	127	99739	1,775	178		
3	2-Nitroaniline	12.68	-0.01	0.00	65	98447	1,878	188		
3	Acenaphthylene	13.14	-0.01	0.00	152	375665	1,986	199		
3	Dimethyl Phthalate	13.00	-0.01	0.00	163	304497	1,994	199		
3	2,6-Dinitrotoluene	13.09	-0.01	0.00	165	72134	1,946	195		
3	Acenaphthene	13.43	-0.01	0.00	154	204462	1,836	184		
3	3-Nitroaniline	13.35	-0.02	0.00	138	68340	1,872	187		
3	2,4-Dinitrophenol	13.55	-0.01	0.00	184	22776	1,922	192	J	
3	Dibenzofuran	13.71	-0.01	0.00	168	339960	1,834	183		
3	4-Nitrophenol	13.72	-0.01	0.00	109	44728	2,114	211		
3	2,4-Dinitrotoluene	13.75	-0.01	0.00	165	101726	2,198	220		
3	2,3,4,6-Tetrachlorophenol				232	0		10	U	
3	Fluorene	14.28	-0.01	0.00	166	254508	1,926	193		
3	4-Chlorophenyl Phenyl Ether	14.30	-0.01	0.00	204	129835	1,870	187		
3	Diethyl Phthalate	14.16		0.00	149	307644	2,138	214		
3	4-Nitroaniline	14.36	-0.02	0.00	138	71348	2,003	200		

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N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File:	J:\MS10\DATA\041505\0415F004.D			**Instrument:**	MS10
Acqu Date:	04/15/2005 12:22	**Quant Date:**	04/18/2005 10:33	**Vial:**	4
Run Type:	LCS			**Dilution:**	1.0
Lab ID:	KWG0505755-5			**Soln Conc. Units:**	ng/ml

Target Compounds **Final Conc. Units:** ug/Kg Wet Weight

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	QuantMass	Response	Solution Conc	Final Conc	Q	Rpt?
3	2-Methyl-4,6-dinitrophenol	14.42	-0.02	0.00	198	53629	2,071	207		
3	N-Nitrosodiphenylamine	14.50	-0.01	0.00	169	197069	2,190	219		
3	Azobenzene	14.55	-0.01	0.00	77	302039	1,841	184		
4	4-Bromophenyl Phenyl Ether	15.09		0.00	248	76263	1,939	194		
4	Hexachlorobenzene	15.17		0.00	284	89422	2,032	203		
4	Atrazine	15.43		0.00	200	93469	2,286	229		
4	Pentachlorophenol	15.51	-0.01	0.00	266	27023	1,494	149		
4	Phenanthrene	15.83	-0.01	0.00	178	395720	2,009	201		
4	Anthracene	15.92		0.00	178	419891	2,126	213		
4	Carbazole	16.21	-0.01	0.00	167	393841	2,192	219		
4	Di-n-butyl Phthalate	16.83		0.00	149	585871	2,484	248		
4	Fluoranthene	17.77		0.00	202	458840	2,229	223		
5	Benzidine				184	0		200	U	
5	Pyrene	18.13	-0.01	0.00	202	442311	2,262	226		
5	Butyl Benzyl Phthalate	19.27	-0.01	0.00	149	218078	2,324	232		
5	3,3'-Dichlorobenzidine	20.22	-0.02	0.00	252	73706	1,234	123		
5	Benz(a)anthracene	20.23	-0.01	0.00	228	357318	2,178	218		
5	Chrysene	20.30	-0.02	0.00	228	348364	2,379	238		
5	Bis(2-ethylhexyl) Phthalate	20.42	-0.01	0.00	149	290602	2,394	239		
6	Di-n-octyl Phthalate	22.14	-0.01	0.00	149	441261	2,244	224		
6	Benzo(b)fluoranthene	23.01	-0.03	0.00	252	308194	2,254	225		
6	Benzo(k)fluoranthene	23.11	-0.02	0.00	252	306398	2,244	224		
6	Benzo(a)pyrene	24.00	-0.02	0.00	252	296519	2,235	223		
6	Indeno(1,2,3-cd)pyrene	26.83	-0.02	0.00	276	245697	2,180	218		
6	Dibenz(a,h)anthracene	26.90	-0.02	0.00	278	247489	2,246	225		
6	Benzo(g,h,i)perylene	27.36	-0.02	0.00	276	249749	2,185	219		

Prep Amount:	20.00 g	**Dilution:**	1.0
Prep Final Vol:	2 ml	**Unit Factor:**	1
Solids:	%		

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / (Prep Amount x Solids)) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (QT Reviewed)

Data File : J:\MS10\DATA\041505\0415F004.D Vial: 4
Acq On : 15 Apr 2005 12:22 pm Operator: JGISH
Sample : KWG0505755-LCS Inst : MS10
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 18 10:25:48 2005 Quant Results File: 0412BNLL.RES

Quant Method : J:\MS10\METHODS\BNA\0412BNLL.M (RTE Integrator)
Title : 8270LL ICAL
Last Update : Mon Apr 18 10:24:44 2005
Response via : Initial Calibration
DataAcq Meth : BNALL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	8.61	152	65827	1000.00 ng/ml	-0.01
23) Naphthalene-d8	10.55	136	222793	1000.00 ng/ml	-0.01
37) Acenaphthene-d10	13.38	164	107039	1000.00 ng/ml	0.00
63) Phenanthrene-d10	15.79	188	169169	1000.00 ng/ml	-0.01
74) Chrysene-d12	20.25	240	125989	1000.00 ng/ml	-0.01
83) Perylene-d12	24.16	264	96643	1000.00 ng/ml	-0.01

System Monitoring Compounds					
4) 2-Fluorophenol	6.84	112	188151	2600.25 ng/ml	0.00
Spiked Amount 3750.000	Range 38 - 110		Recovery = 69.34%		
7) Phenol-d6	8.15	99	268951	3072.85 ng/ml	-0.01
Spiked Amount 3750.000	Range 43 - 128		Recovery = 81.94%		
21) Nitrobenzene-d5	9.45	82	180187	2045.23 ng/ml	-0.01
Spiked Amount 2500.000	Range 30 - 139		Recovery = 81.81%		
42) 2-Fluorobiphenyl	12.31	172	286575	2061.88 ng/ml	0.00
Spiked Amount 2500.000	Range 37 - 126		Recovery = 82.48%		
64) 2,4,6-Tribromophenol	14.67	330	70113	3409.63 ng/ml	-0.01
Spiked Amount 3750.000	Range 38 - 157		Recovery = 90.92%		
77) Terphenyl-d14	18.44	244	334630	2880.50 ng/ml	0.00
Spiked Amount 2500.000	Range 54 - 158		Recovery = 115.22%		

Target Compounds					Qvalue
2) N-Nitrosodimethylamine	5.18	42	102793m	1490.20 ng/ml	
3) Pyridine	5.26	79	59002m	763.84 ng/ml	
5) Benzaldehyde	7.98	106	96698	1614.48 ng/ml	96
6) Bis(2-chloroethyl) Ether	8.25	93	135975	1849.18 ng/ml	100
8) Phenol	8.17	94	178592	2010.67 ng/ml	90
9) Aniline	8.15	93	94913	813.81 ng/ml#	60
10) 2-Chlorophenol	8.32	128	139218	1907.66 ng/ml	97
11) 1,3-Dichlorobenzene	8.53	146	156084	1749.20 ng/ml	98
12) 1,4-Dichlorobenzene	8.64	146	162568	1748.22 ng/ml	99
13) 1,2-Dichlorobenzene	8.85	146	155826	1828.29 ng/ml	98
14) Benzyl Alcohol	8.84	108	85908	1710.48 ng/ml	98
15) Bis(2-chloroisopropyl) Eth	9.04	45	249607	1811.90 ng/ml#	70
16) 2-Methylphenol	9.04	107	99300	1785.46 ng/ml	93
17) Acetophenone	9.23	105	221277m	2054.49 ng/ml	
18) Hexachloroethane	9.34	117	73318	1763.63 ng/ml	84
19) N-Nitrosodi-n-propylamine	9.24	70	115103	1930.78 ng/ml	96
20) 4-Methylphenol	9.27	107	144802	1793.24 ng/ml	99
22) Nitrobenzene	9.48	77	167895	1811.16 ng/ml	99
24) Isophorone	9.86	82	279135	2030.28 ng/ml	99
25) 2-Nitrophenol	9.97	139	85634	1948.80 ng/ml	95

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : J:\MS10\DATA\041505\0415F004.D
Acq On : 15 Apr 2005 12:22 pm
Sample : KWG0505755-LCS
Misc :
MS Integration Params: RTEINT.P
Quant Time: Apr 18 10:25:48 2005

Vial: 4
Operator: JGISH
Inst : MS10
Multiplr: 1.00
Quant Results File: 0412BNLL.RES

Quant Method : J:\MS10\METHODS\BNA\0412BNLL.M (RTE Integrator)
Title : 8270LL ICAL
Last Update : Mon Apr 18 10:24:44 2005
Response via : Initial Calibration
DataAcq Meth : BNALL

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
26)	2,4-Dimethylphenol	10.08	122	55214	930.66	ng/ml	98
27)	Bis(2-chloroethoxy)methane	10.21	93	163497	1785.34	ng/ml	99
28)	2,4-Dichlorophenol	10.37	162	125174	1884.18	ng/ml	97
29)	Benzoic Acid	10.39	122	120086	4542.90	ng/ml	97
30)	1,2,4-Trichlorobenzene	10.47	180	144096	1725.54	ng/ml	100
31)	Naphthalene	10.58	128	384321	1763.68	ng/ml	100
32)	4-Chloroaniline	10.71	127	125984	1237.24	ng/ml	99
33)	Hexachlorobutadiene	10.79	225	88606	1621.55	ng/ml	97
34)	Caprolactam	11.33	55	71686	1723.87	ng/ml	99
35)	4-Chloro-3-methylphenol	11.54	107	117603	1844.62	ng/ml	98
36)	2-Methylnaphthalene	11.70	141	196127	1535.53	ng/ml	98
38)	1,2,4,5-Tetrachlorobenzene	11.96	216	140581	1787.54	ng/ml	98
39)	Hexachlorocyclopentadiene	11.94	237	31165	873.29	ng/ml	99
40)	2,4,6-Trichlorophenol	12.18	196	85697	1993.57	ng/ml	98
41)	2,4,5-Trichlorophenol	12.25	196	95957	2065.24	ng/ml	96
43)	Biphenyl	12.46	154	309876	1978.47	ng/ml	100
44)	2-Chloronaphthalene	12.49	127	99739	1775.02	ng/ml	98
45)	2-Nitroaniline	12.68	65	98447	1878.43	ng/ml	96
46)	Acenaphthylene	13.14	152	375665	1986.11	ng/ml	99
47)	Dimethyl Phthalate	13.00	163	304497	1993.51	ng/ml	100
48)	2,6-Dinitrotoluene	13.09	165	72134	1945.64	ng/ml	93
49)	Acenaphthene	13.43	154	204462	1835.94	ng/ml	99
50)	3-Nitroaniline	13.35	138	68340	1872.20	ng/ml	100
51)	2,4-Dinitrophenol	13.55	184	22776	1922.47	ng/ml	94
52)	Dibenzofuran	13.71	168	339960	1833.60	ng/ml	94
53)	4-Nitrophenol	13.72	109	44728	2113.81	ng/ml#	71
54)	2,4-Dinitrotoluene	13.75	165	101726	2198.45	ng/ml	94
56)	Fluorene	14.28	166	254508	1926.47	ng/ml	100
57)	4-Chlorophenyl Phenyl Ethe	14.30	204	129835	1870.42	ng/ml	96
58)	Diethyl Phthalate	14.16	149	307644	2137.74	ng/ml	98
59)	4-Nitroaniline	14.36	138	71348	2003.39	ng/ml	98
60)	2-Methyl-4,6-dinitrophenol	14.42	198	53629	2070.78	ng/ml	92
61)	N-Nitrosodiphenylamine	14.50	169	197069	2190.28	ng/ml	99
62)	Azobenzene	14.55	77	302039	1841.45	ng/ml	98
65)	4-Bromophenyl Phenyl Ether	15.09	248	76263	1938.67	ng/ml	86
66)	Hexachlorobenzene	15.17	284	89422	2032.08	ng/ml	88
67)	Atrazine	15.43	200	93469	2286.22	ng/ml	91
68)	Pentachlorophenol	15.51	266	27023	1493.82	ng/ml	98
69)	Phenanthrene	15.83	178	395720	2009.38	ng/ml	100
70)	Anthracene	15.92	178	419891	2126.04	ng/ml	99
71)	Carbazole	16.21	167	393841	2192.26	ng/ml	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : J:\MS10\DATA\041505\0415F004.D Vial: 4
Acq On : 15 Apr 2005 12:22 pm Operator: JGISH
Sample : KWG0505755-LCS Inst : MS10
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 18 10:25:48 2005 Quant Results File: 0412BNLL.RES

Quant Method : J:\MS10\METHODS\BNA\0412BNLL.M (RTE Integrator)
Title : 8270LL ICAL
Last Update : Mon Apr 18 10:24:44 2005
Response via : Initial Calibration
DataAcq Meth : BNALL

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
72)	Di-n-butyl Phthalate	16.83	149	585871	2484.32 ng/ml	99
73)	Fluoranthene	17.77	202	458840	2228.98 ng/ml	99
76)	Pyrene	18.13	202	442311	2261.58 ng/ml	99
78)	Butyl Benzyl Phthalate	19.27	149	218078	2324.01 ng/ml	92
79)	3,3'-Dichlorobenzidine	20.22	252	73706	1233.67 ng/ml	97
80)	Benz(a)anthracene	20.23	228	357318	2178.00 ng/ml	98
81)	Chrysene	20.30	228	348364	2379.23 ng/ml	100
82)	Bis(2-ethylhexyl) Phthalat	20.42	149	290602	2393.75 ng/ml	98
84)	Di-n-octyl Phthalate	22.14	149	441261	2243.78 ng/ml	97
85)	Benzo(b)fluoranthene	23.01	252	308194	2253.88 ng/ml	99
86)	Benzo(k)fluoranthene	23.11	252	306398	2243.69 ng/ml	99
87)	Benzo(a)pyrene	24.00	252	296519	2234.93 ng/ml	99
88)	Indeno(1,2,3-cd)pyrene	26.83	276	245697	2180.49 ng/ml	97
89)	Dibenz(a,h)anthracene	26.90	278	247489	2246.24 ng/ml	98
90)	Benzo(g,h,i)perylene	27.36	276	249749	2185.14 ng/ml	98

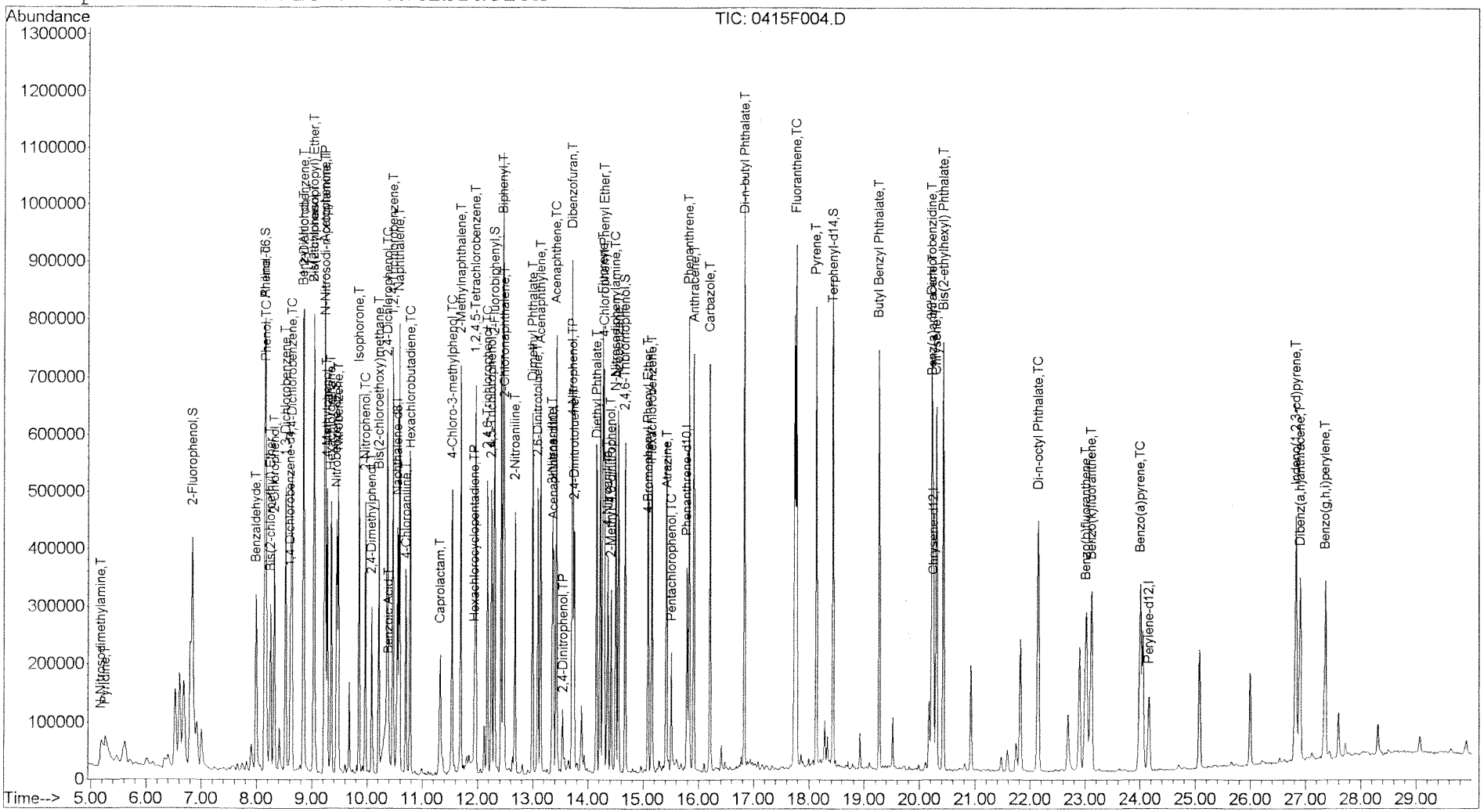
(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : J:\MS10\DATA\041505\0415F004.D
Acq On : 15 Apr 2005 12:22 pm
Sample : KWG0505755-LCS
Misc :
MS Integration Params: RTEINT.P
Quant Time: Apr 18 10:33 2005

Vial: 4
Operator: JGISH
Inst : MS10
Multiplr: 1.00
Quant Results File: 0412BNLL.RES

Method : J:\MS10\METHODS\BNA\0412BNLL.M (RTE Integrator)
Title : 8270LL ICAL
Last Update : Mon Apr 18 10:24:44 2005
Response via : Initial Calibration

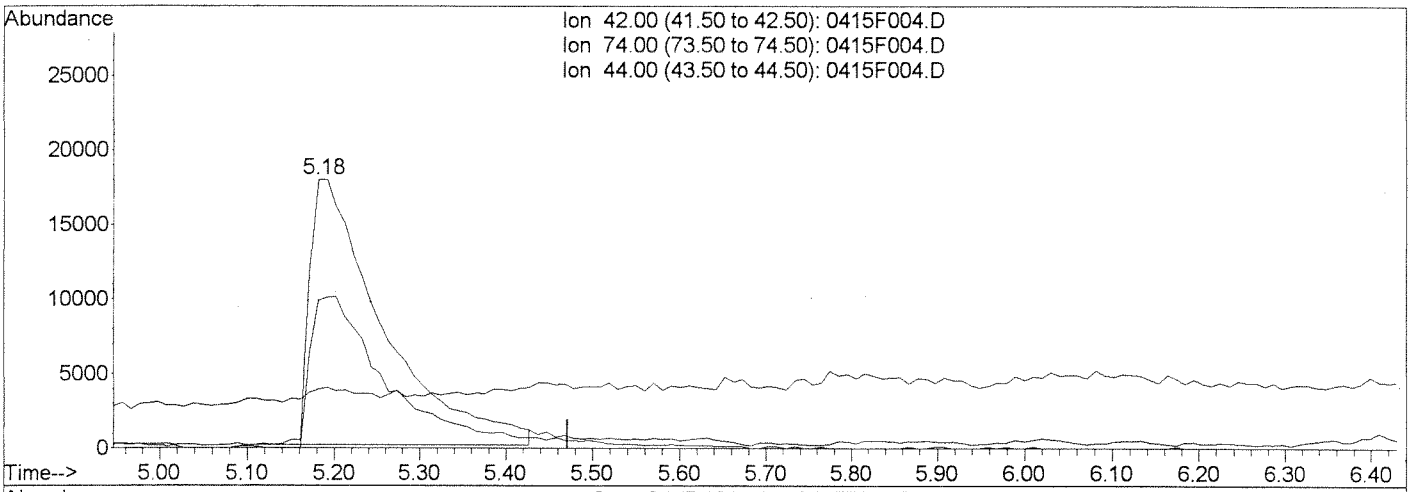


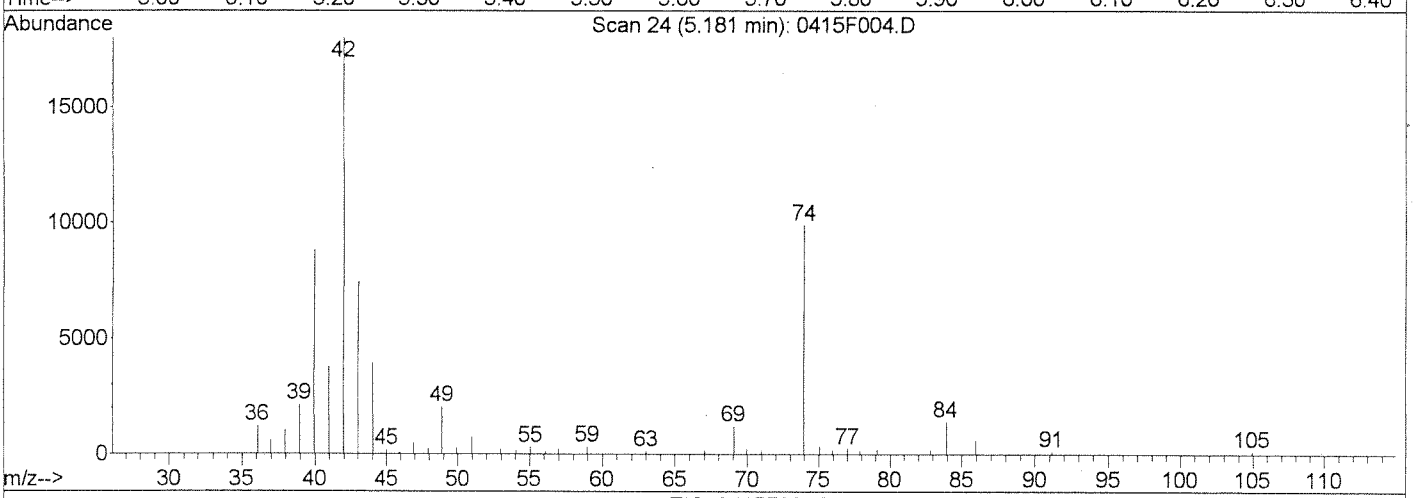
Quantitation Report (Qedit)

Data File : J:\MS10\DATA\041505\0415F004.D
Acq On : 15 Apr 2005 12:22 pm
Sample : KWG0505755-LCS
Misc :
MS Integration Params: RTEINT.P
Quant Time: Apr 18 10:25 2005

Vial: 4
Operator: JGISH
Inst : MS10
Multiplr: 1.00
Quant Results File: temp.res

Method : J:\MS10\METHODS\BNA\0412BNLL.M (RTE Integrator)
Title : 8270LL ICAL
Last Update : Mon Apr 18 10:24:44 2005
Response via : Multiple Level Calibration





TIC: 0415F004.D

(2) N-Nitrosodimethylamine (T)

5.18min 1528.20ng/ml

response 105414

Ion	Exp%	Act%
42.00	100	100
74.00	62.60	54.81
44.00	8.10	3.60
0.00	0.00	0.00

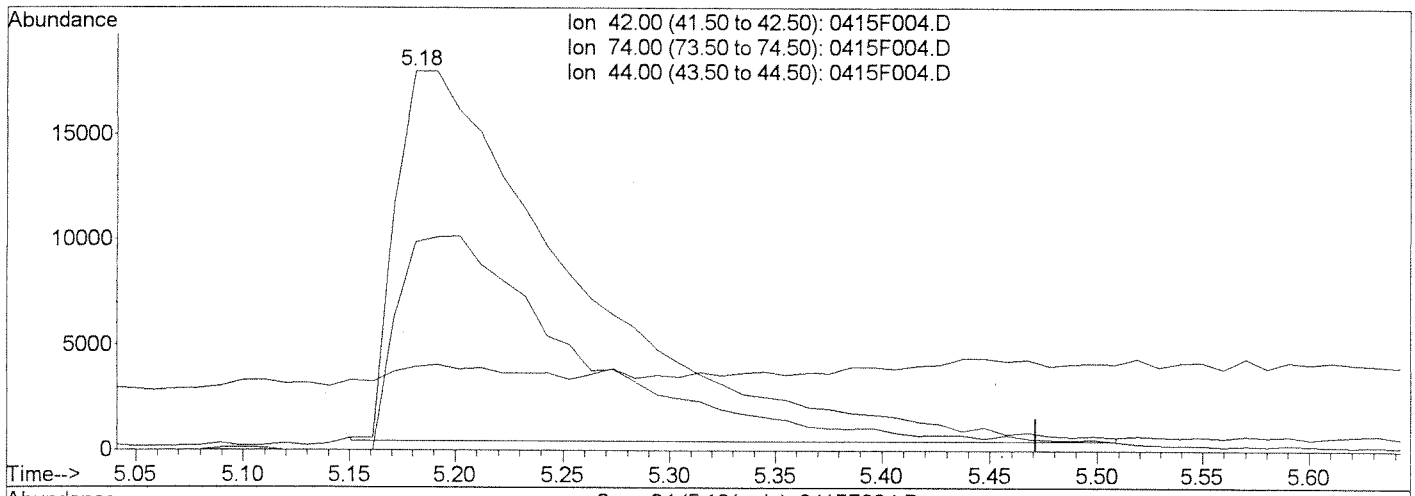
0415F004.D 0412BNLL.M Mon Apr 18 10:32:23 2005

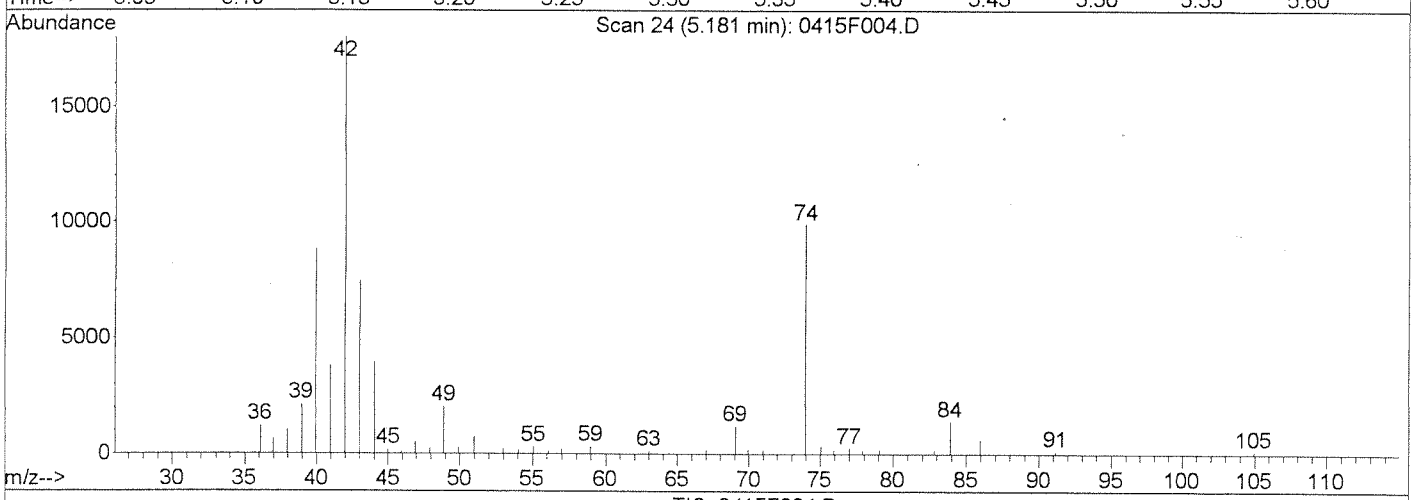
Quantitation Report (Qedit)

Data File : J:\MS10\DATA\041505\0415F004.D
Acq On : 15 Apr 2005 12:22 pm
Sample : KWG0505755-LCS
Misc :
MS Integration Params: RTEINT.P
Quant Time: Apr 18 10:32 2005

Vial: 4
Operator: JGISH
Inst : MS10
Multiplr: 1.00
Quant Results File: temp.res

Method : J:\MS10\METHODS\BNA\0412BNLL.M (RTE Integrator)
Title : 8270LL ICAL
Last Update : Mon Apr 18 10:24:44 2005
Response via : Multiple Level Calibration





TIC: 0415F004.D

(2) N-Nitrosodimethylamine (T)

5.18min 1490.20ng/ml m

response 102793

Ion	Exp%	Act%
42.00	100	100
74.00	62.60	54.90
44.00	8.10	21.89
0.00	0.00	0.00

poor Integration

4/18/05

4/18/05

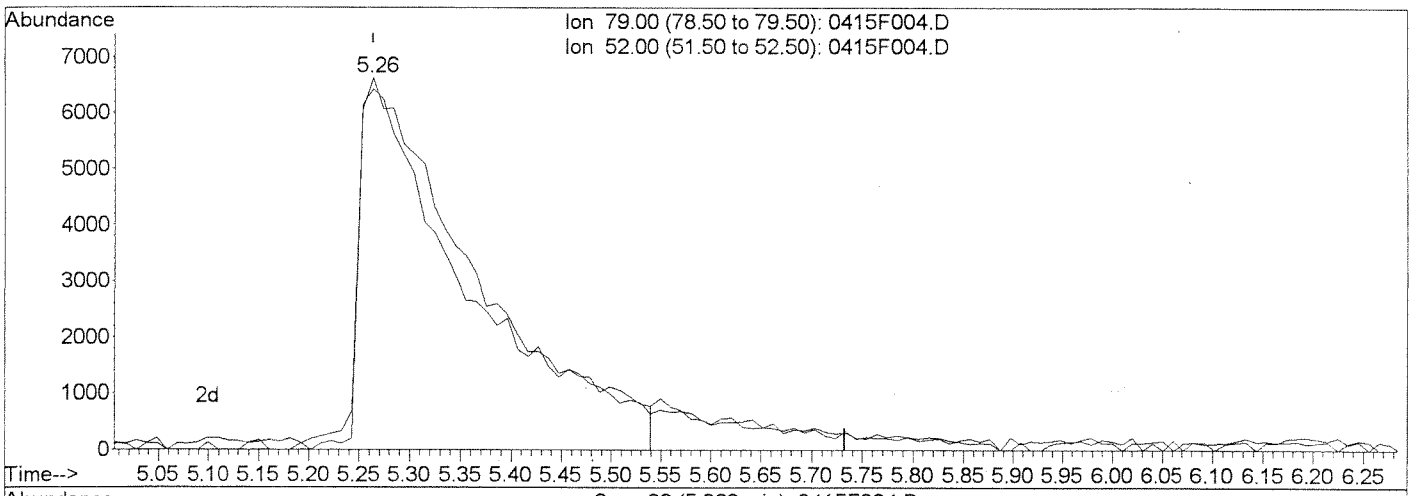
0415F004.D 0412BNLL.M Mon Apr 18 10:32:38 2005

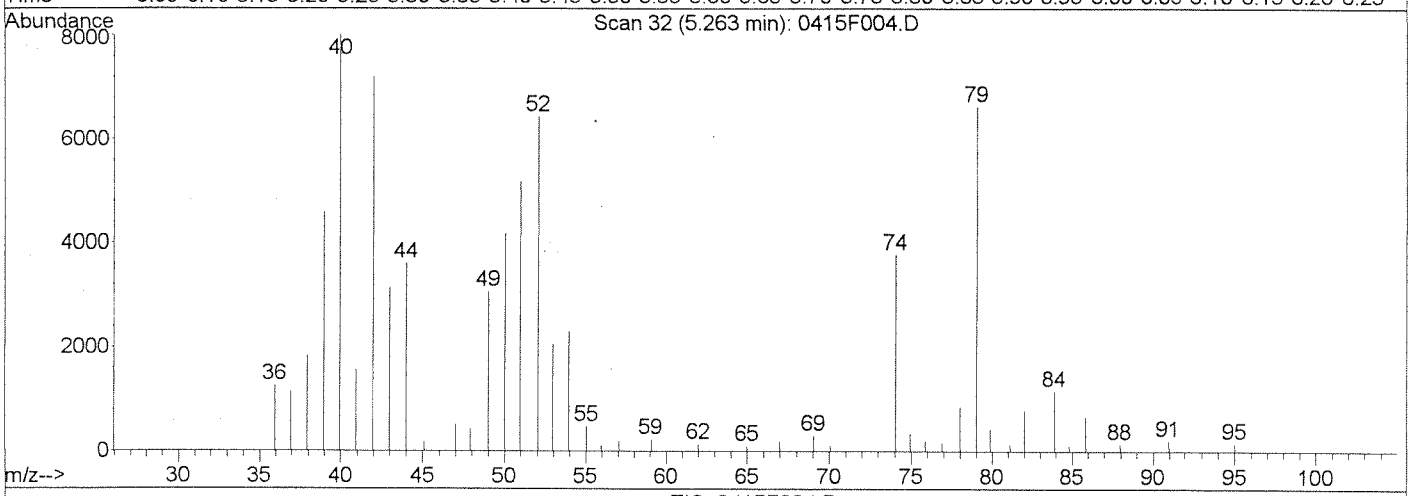
Quantitation Report (Qedit)

Data File : J:\MS10\DATA\041505\0415F004.D
Acq On : 15 Apr 2005 12:22 pm
Sample : KWG0505755-LCS
Misc :
MS Integration Params: RTEINT.P
Quant Time: Apr 18 10:32 2005

Vial: 4
Operator: JGISH
Inst : MS10
Multiplr: 1.00
Quant Results File: temp.res

Method : J:\MS10\METHODS\BNA\0412BNLL.M (RTE Integrator)
Title : 8270LL ICAL
Last Update : Mon Apr 18 10:24:44 2005
Response via : Multiple Level Calibration





TIC: 0415F004.D

(3) Pyridine (T)

5.26min 678.50ng/ml

response 52410

Ion	Exp%	Act%
79.00	100	100
52.00	88.10	94.15
0.00	0.00	0.00
0.00	0.00	0.00

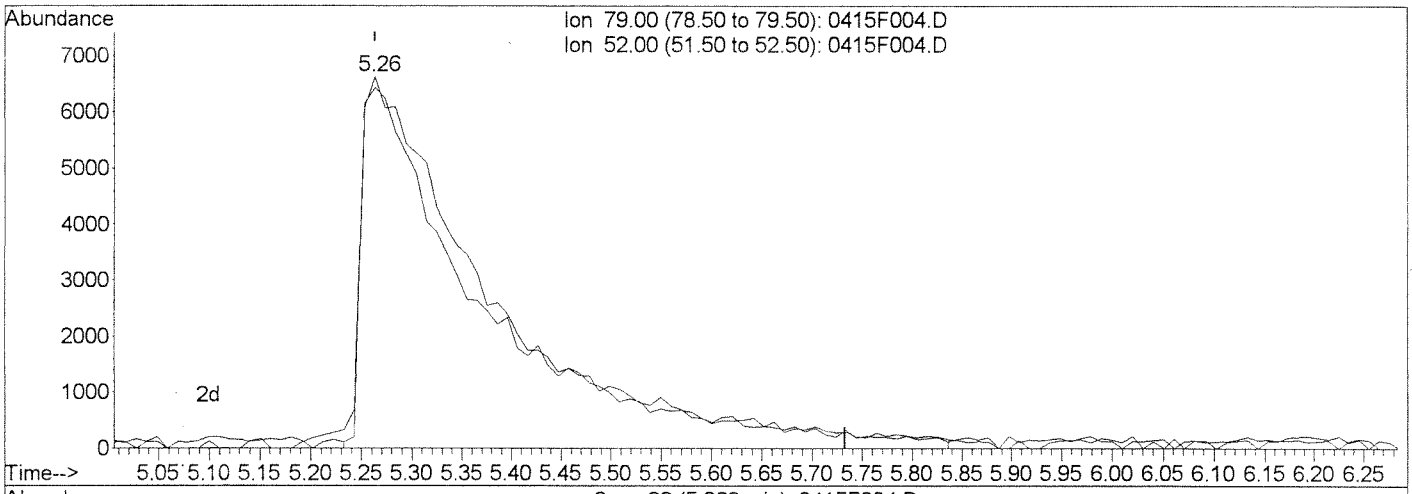
0415F004.D 0412BNLL.M Mon Apr 18 10:32:44 2005

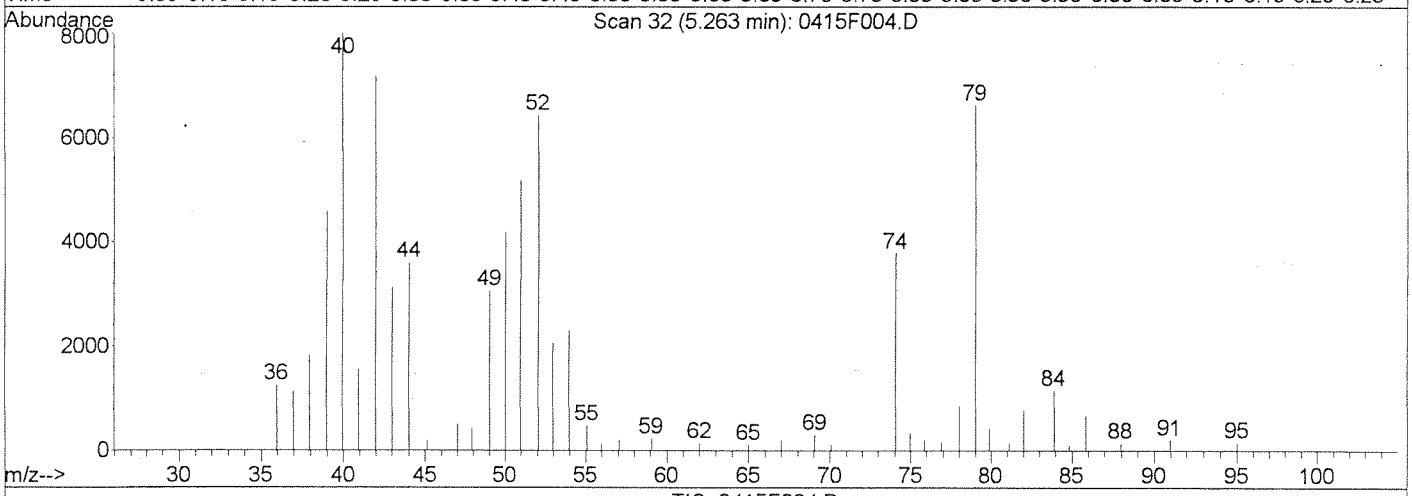
Quantitation Report (Qedit)

Data File : J:\MS10\DATA\041505\0415F004.D
Acq On : 15 Apr 2005 12:22 pm
Sample : KWG0505755-LCS
Misc :
MS Integration Params: RTEINT.P
Quant Time: Apr 18 10:32 2005

Vial: 4
Operator: JGISH
Inst : MS10
Multiplr: 1.00
Quant Results File: temp.res

Method : J:\MS10\METHODS\BNA\0412BNLL.M (RTE Integrator)
Title : 8270LL ICAL
Last Update : Mon Apr 18 10:24:44 2005
Response via : Multiple Level Calibration





TIC: 0415F004.D

(3) Pyridine (T)

5.26min 763.84ng/ml m

response 59002

Ion	Exp%	Act%
79.00	100	100
52.00	88.10	96.98
0.00	0.00	0.00
0.00	0.00	0.00

4/19/05

poor Integration

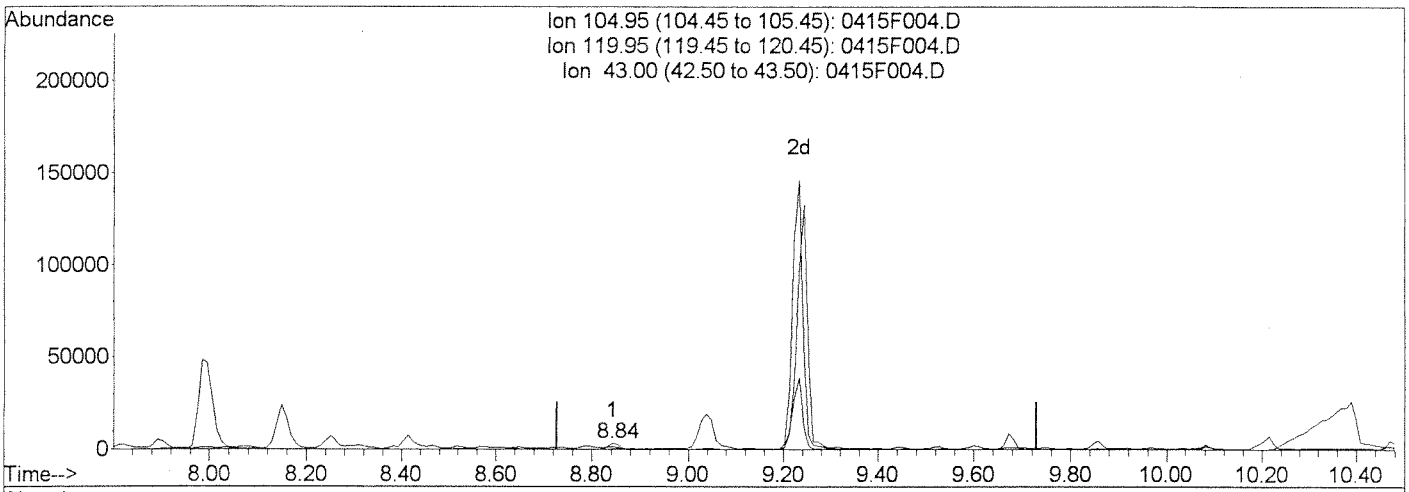
0415F004.D 0412BNLL.M Mon Apr 18 10:32:52 2005

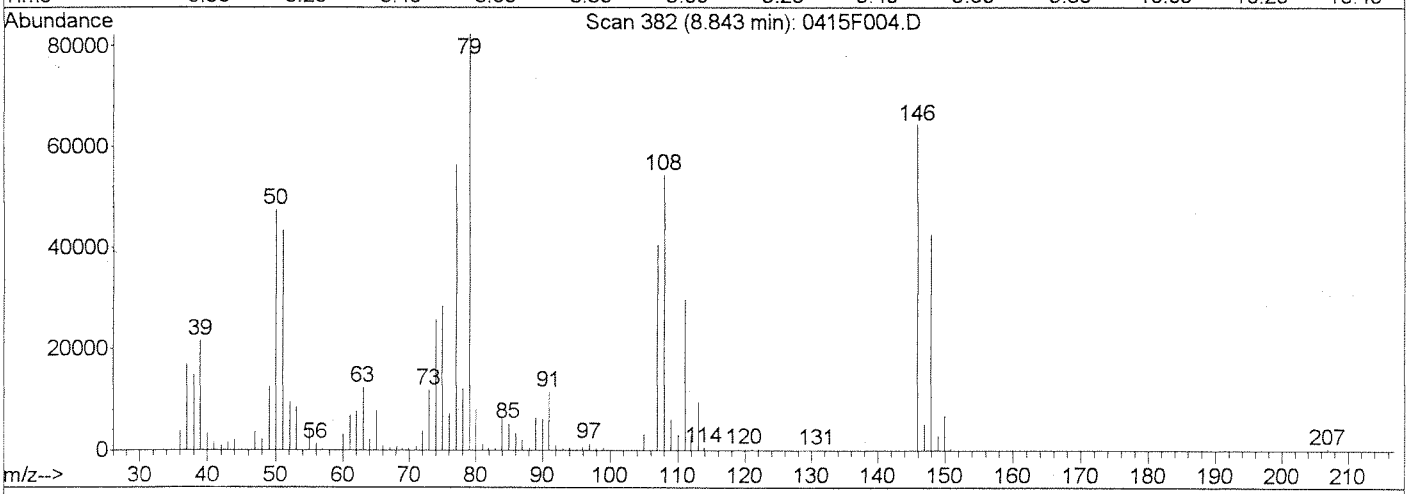
Quantitation Report (Qedit)

Data File : J:\MS10\DATA\041505\0415F004.D
Acq On : 15 Apr 2005 12:22 pm
Sample : KWG0505755-LCS
Misc :
MS Integration Params: RTEINT.P
Quant Time: Apr 18 10:32 2005

Vial: 4
Operator: JGISH
Inst : MS10
Multiplr: 1.00
Quant Results File: temp.res

Method : J:\MS10\METHODS\BNA\0412BNLL.M (RTE Integrator)
Title : 8270LL ICAL
Last Update : Mon Apr 18 10:24:44 2005
Response via : Multiple Level Calibration





TIC: 0415F004.D

(17) Acetophenone (T)

8.84min 57.68ng/ml

response 6212

Ion	Exp%	Act%
104.95	100	100
119.95	25.80	10.71
43.00	19.60	25.58
0.00	0.00	0.00

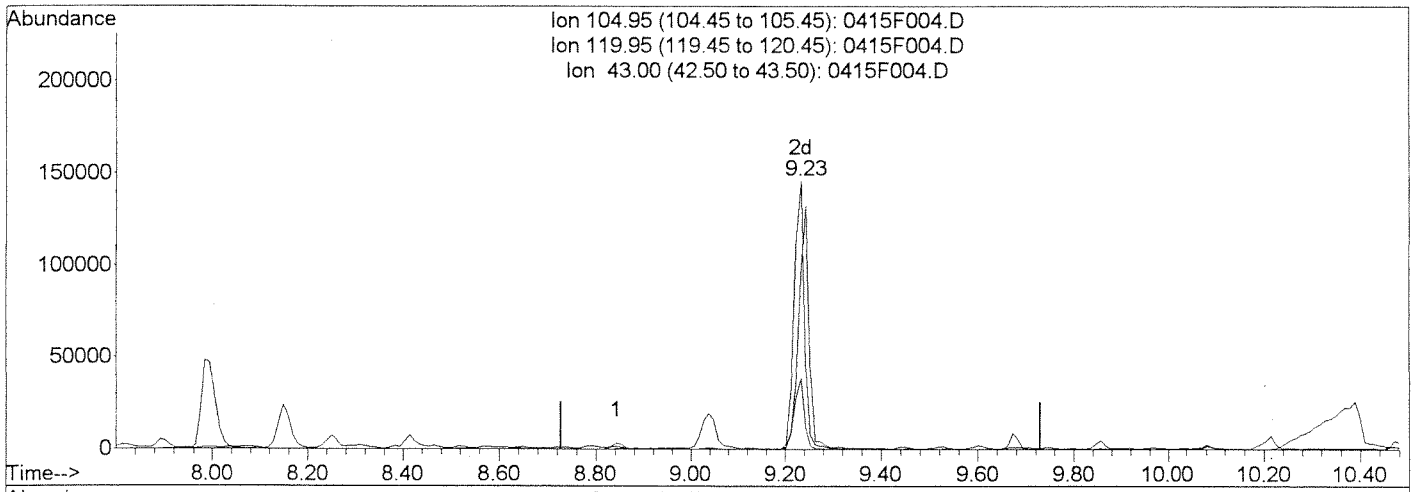
0415F004.D 0412BNLL.M Mon Apr 18 10:33:13 2005

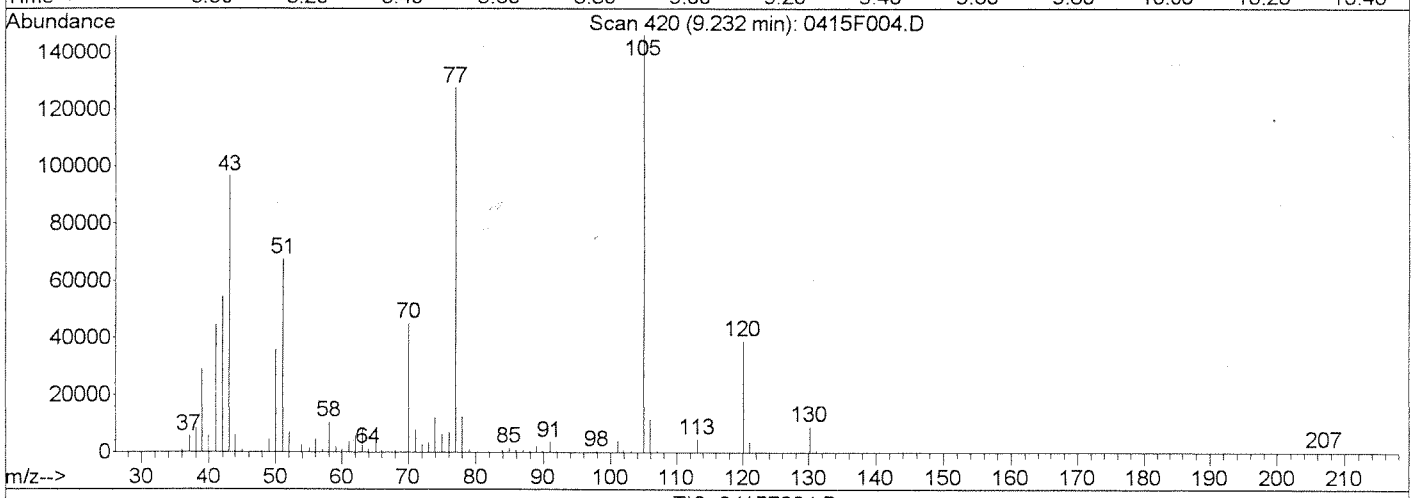
Quantitation Report (Qedit)

Data File : J:\MS10\DATA\041505\0415F004.D
Acq On : 15 Apr 2005 12:22 pm
Sample : KWG0505755-LCS
Misc :
MS Integration Params: RTEINT.P
Quant Time: Apr 18 10:33 2005

Vial: 4
Operator: JGISH
Inst : MS10
Multiplr: 1.00
Quant Results File: temp.res

Method : J:\MS10\METHODS\BNA\0412BNLL.M (RTE Integrator)
Title : 8270LL ICAL
Last Update : Mon Apr 18 10:24:44 2005
Response via : Multiple Level Calibration





TIC: 0415F004.D

(17) Acetophenone (T)

9.23min 2054.49ng/ml m

response 221277

Ion	Exp%	Act%
104.95	100	100
119.95	25.80	26.62
43.00	19.60	65.98#
0.00	0.00	0.00

4/19/05
9
wrong peak selected
4/19/05

0415F004.D 0412BNLL.M Mon Apr 18 10:33:17 2005

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Battelle Memorial Institute	**Service Request:**	K2502554
Project:	Novato Ballfields/G486063	**Date Collected:**	NA
Sample Matrix:	Soil	**Date Received:**	NA

Semi-Volatile Organic Compounds by GC/MS

Sample Name:	Duplicate Lab Control Sample	**Units:**	ug/Kg
Lab Code:	KWG0505755-6	**Basis:**	Dry
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2,4,5-Tetrachlorobenzene	179		10	4.9	1	04/11/05	04/15/05	KWG0505755	
Phenol	187		30	1.9	1	04/11/05	04/15/05	KWG0505755	
Bis(2-chloroethyl) Ether	170		10	2.4	1	04/11/05	04/15/05	KWG0505755	
2-Chlorophenol	182		10	1.7	1	04/11/05	04/15/05	KWG0505755	
2-Methylphenol	164		10	3.4	1	04/11/05	04/15/05	KWG0505755	
Bis(2-chloroisopropyl) Ether	165		10	1.2	1	04/11/05	04/15/05	KWG0505755	
Acetophenone	192		50	12	1	04/11/05	04/15/05	KWG0505755	
4-Methylphenol†	172		10	2.9	1	04/11/05	04/15/05	KWG0505755	
N-Nitrosodi-n-propylamine	179		10	3.2	1	04/11/05	04/15/05	KWG0505755	
Hexachloroethane	169		10	2.2	1	04/11/05	04/15/05	KWG0505755	
Nitrobenzene	169		10	2.0	1	04/11/05	04/15/05	KWG0505755	
Isophorone	196		10	1.6	1	04/11/05	04/15/05	KWG0505755	
2-Nitrophenol	192		10	2.6	1	04/11/05	04/15/05	KWG0505755	
2,4-Dimethylphenol	96.1		50	5.5	1	04/11/05	04/15/05	KWG0505755	
Bis(2-chloroethoxy)methane	177		10	1.3	1	04/11/05	04/15/05	KWG0505755	
2,4-Dichlorophenol	184		10	1.8	1	04/11/05	04/15/05	KWG0505755	
Naphthalene	171		10	1.3	1	04/11/05	04/15/05	KWG0505755	
4-Chloroaniline	126		10	2.1	1	04/11/05	04/15/05	KWG0505755	
Hexachlorobutadiene	156		10	1.4	1	04/11/05	04/15/05	KWG0505755	
Caprolactam	182		20	12	1	04/11/05	04/15/05	KWG0505755	
Benzaldehyde	157		20	8.8	1	04/11/05	04/15/05	KWG0505755	
4-Chloro-3-methylphenol	181		10	2.1	1	04/11/05	04/15/05	KWG0505755	
2-Methylnaphthalene	156		10	1.2	1	04/11/05	04/15/05	KWG0505755	
Hexachlorocyclopentadiene	90.8		50	15	1	04/11/05	04/15/05	KWG0505755	
2,4,6-Trichlorophenol	190		10	1.8	1	04/11/05	04/15/05	KWG0505755	
2,4,5-Trichlorophenol	198		10	3.0	1	04/11/05	04/15/05	KWG0505755	
Biphenyl	198		20	4.8	1	04/11/05	04/15/05	KWG0505755	
2-Chloronaphthalene	177		10	3.6	1	04/11/05	04/15/05	KWG0505755	
2-Nitroaniline	182		20	2.7	1	04/11/05	04/15/05	KWG0505755	
Dimethyl Phthalate	190		10	1.8	1	04/11/05	04/15/05	KWG0505755	
2,6-Dinitrotoluene	192		10	2.8	1	04/11/05	04/15/05	KWG0505755	
Acenaphthylene	201		10	1.4	1	04/11/05	04/15/05	KWG0505755	
3-Nitroaniline	182		20	2.6	1	04/11/05	04/15/05	KWG0505755	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Battelle Memorial Institute	**Service Request:**	K2502554
Project:	Novato Ballfields/G486063	**Date Collected:**	NA
Sample Matrix:	Soil	**Date Received:**	NA

Semi-Volatile Organic Compounds by GC/MS

Sample Name:	Duplicate Lab Control Sample	**Units:**	ug/Kg
Lab Code:	KWG0505755-6	**Basis:**	Dry
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Acenaphthene	**185**		10	1.0	1	04/11/05	04/15/05	KWG0505755	
2,4-Dinitrophenol	**181**	J	200	36	1	04/11/05	04/15/05	KWG0505755	
4-Nitrophenol	**207**		100	30	1	04/11/05	04/15/05	KWG0505755	
Dibenzofuran	**182**		10	1.3	1	04/11/05	04/15/05	KWG0505755	
2,4-Dinitrotoluene	**215**		10	2.8	1	04/11/05	04/15/05	KWG0505755	
Diethyl Phthalate	**200**		10	3.5	1	04/11/05	04/15/05	KWG0505755	
Fluorene	**190**		10	1.7	1	04/11/05	04/15/05	KWG0505755	
4-Chlorophenyl Phenyl Ether	**190**		10	2.0	1	04/11/05	04/15/05	KWG0505755	
4-Nitroaniline	**195**		20	3.4	1	04/11/05	04/15/05	KWG0505755	
2-Methyl-4,6-dinitrophenol	**211**		100	1.7	1	04/11/05	04/15/05	KWG0505755	
N-Nitrosodiphenylamine	**220**		10	2.2	1	04/11/05	04/15/05	KWG0505755	
4-Bromophenyl Phenyl Ether	**181**		10	1.4	1	04/11/05	04/15/05	KWG0505755	
Hexachlorobenzene	**189**		10	2.1	1	04/11/05	04/15/05	KWG0505755	
Atrazine	**215**		10	2.2	1	04/11/05	04/15/05	KWG0505755	
Pentachlorophenol	**144**		100	8.5	1	04/11/05	04/15/05	KWG0505755	
Phenanthrene	**188**		10	1.3	1	04/11/05	04/15/05	KWG0505755	
Anthracene	**189**		10	1.4	1	04/11/05	04/15/05	KWG0505755	
Carbazole	**207**		10	1.3	1	04/11/05	04/15/05	KWG0505755	
Di-n-butyl Phthalate	**235**		10	2.6	1	04/11/05	04/15/05	KWG0505755	
Fluoranthene	**214**		10	2.2	1	04/11/05	04/15/05	KWG0505755	
Pyrene	**213**		10	1.3	1	04/11/05	04/15/05	KWG0505755	
Butyl Benzyl Phthalate	**216**		10	1.5	1	04/11/05	04/15/05	KWG0505755	
3,3'-Dichlorobenzidine	**138**		100	3.7	1	04/11/05	04/15/05	KWG0505755	
Benz(a)anthracene	**212**		10	1.4	1	04/11/05	04/15/05	KWG0505755	
Chrysene	**216**		10	1.4	1	04/11/05	04/15/05	KWG0505755	
Bis(2-ethylhexyl) Phthalate	**224**		200	1.7	1	04/11/05	04/15/05	KWG0505755	
Di-n-octyl Phthalate	**216**		10	1.2	1	04/11/05	04/15/05	KWG0505755	
Benzo(b)fluoranthene	**218**		10	2.5	1	04/11/05	04/15/05	KWG0505755	
Benzo(k)fluoranthene	**212**		10	2.5	1	04/11/05	04/15/05	KWG0505755	
Benzo(a)pyrene	**215**		10	1.6	1	04/11/05	04/15/05	KWG0505755	
Indeno(1,2,3-cd)pyrene	**209**		10	1.9	1	04/11/05	04/15/05	KWG0505755	
Dibenz(a,h)anthracene	**206**		10	2.2	1	04/11/05	04/15/05	KWG0505755	
Benzo(g,h,i)perylene	**202**		10	2.3	1	04/11/05	04/15/05	KWG0505755	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Battelle Memorial Institute	**Service Request:**	K2502554
Project:	Novato Ballfields/G486063	**Date Collected:**	NA
Sample Matrix:	Soil	**Date Received:**	NA

Semi-Volatile Organic Compounds by GC/MS

Sample Name:	Duplicate Lab Control Sample	**Units:**	ug/Kg
Lab Code:	KWG0505755-6	**Basis:**	Dry

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	66	11-87	04/15/05	Acceptable
Phenol-d6	75	20-99	04/15/05	Acceptable
Nitrobenzene-d5	76	10-99	04/15/05	Acceptable
2-Fluorobiphenyl	79	10-104	04/15/05	Acceptable
2,4,6-Tribromophenol	86	23-113	04/15/05	Acceptable
Terphenyl-d14	110	39-124	04/15/05	Acceptable

† Analyte Comments

4-Methylphenol	This analyte cannot be separated from 3-Methylphenol.

Comments:

Exception Report

Data File: J:\MS10\DATA\041505\0415F005.D
Lab ID: KWG0505755-6
RunType: DLCS
Matrix: SOIL

Date Acquired: 04/15/2005 13:01
Date Quantitated: 04/18/2005 10:34
Batch ID: KWG0506208
Analysis Method: 8270C
MethodJoinID: MJ142

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Tune Window	NA	NA	NA	x	
Analytical Holding Time	NA	NA	NA	x	
ICAL Pass/Fail	NA	NA	NA	x	
ICAL Average RSD	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Initial Calibration Minimum RF	NA	NA	NA	x	
Initial Calibration SPCC/CCC	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Minimum RF	NA	NA	NA	x	
Continuing Calibration SPCC/CCC	NA	NA	NA	x	
Internal Standards	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Relative Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

1R2502498
1C2502554

Primary Review: 4/19/05

Secondary Review: 4/19/05

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	SOIL
Prod Code:	8270-LL	**Collect Date:**		**Receive Date:**	04/12/2005

Analysis Lot:	KWG0506208	**Prep Lot:**	KWG0505755	**Report Group:**	
Analysis Method:	8270C	**Prep Method:**	EPA 3541		
Prep Ref:	373964	**Prep Date:**	04/11/2005		

Quant Method:	J:\MS10\METHODS\BNA\0412BNLL.M	**Calibration ID:**	CAL4375
Title:			
Tune Ref:	J:\MS10\DATA\041505\0415T001.D	**Method ID:**	MJ142
MB Ref:	J:\MS10\DATA\041505\0415F003.D	**Quant based on Method**	

Data File:	J:\MS10\DATA\041505\0415F005.D			**Instrument:**	MS10
Acqu Date:	04/15/2005 13:01	**Quant Date:**	04/18/2005 10:34	**Vial:**	5
Run Type:	DLCS			**Dilution:**	1.0
Lab ID:	KWG0505755-6			**Soln Conc. Units:**	ng/ml

Internal Standard Compounds

IS Ref	Parameter Name	RT	RT Dev	Quant Mass	Response	Solution Conc	Area Criteria
1	1,4-Dichlorobenzene-d4	8.61	-0.01	152	69994	1,000.00	OK
2	Naphthalene-d8	10.55	0.00	136	227426	1,000.00	OK
3	Acenaphthene-d10	13.37	0.00	164	109591	1,000.00	OK
4	Phenanthrene-d10	15.79	0.00	188	183616	1,000.00	OK
5	Chrysene-d12	20.24	0.00	240	137373	1,000.00	OK
6	Perylene-d12	24.16	-0.01	264	104573	1,000.00	OK

Surrogate Compounds

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	%Rec	%Rec Limits		Rpt?
1	2-Fluorophenol	6.84	0.00	0.00	112	190980	2,482	66	11-87	OK	
1	Phenol-d6	8.15	-0.01	0.00	99	262695	2,823	75	20-99	OK	
1	Nitrobenzene-d5	9.45	-0.01	0.00	82	179097	1,912	76	10-99	OK	
3	2-Fluorobiphenyl	12.30	-0.01	0.00	172	280176	1,969	79	10-104	OK	
4	2,4,6-Tribromophenol	14.68	0.00	0.00	330	72271	3,238	86	23-113	OK	
5	Terphenyl-d14	18.43	-0.01	0.00	244	349015	2,755	110	39-124	OK	

Target Compounds

Final Conc. Units: ug/Kg Wet Weight

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	QuantMass	Response	Solution Conc	Final Conc	Q	Rpt?
1	N-Nitrosodimethylamine	5.18	0.01	0.00	42	117118m	1,597	160		
1	Pyridine	5.26	0.03	0.00	79	71422	869.58	87.0		
1	Benzaldehyde	7.99		0.00	106	100066	1,571	157		
1	Bis(2-chloroethyl) Ether	8.25	-0.01	0.00	93	132979	1,701	170		
1	Phenol	8.17	-0.02	0.00	94	176268	1,866	187		
1	Aniline	8.14	-0.01	0.00	93	105853	853.57	85.4		
1	2-Chlorophenol	8.31	-0.02	0.00	128	141109	1,818	182		
1	1,3-Dichlorobenzene	8.52	-0.01	0.00	146	155652	1,641	164		
1	1,4-Dichlorobenzene	8.63	-0.01	0.00	146	156105	1,579	158		
1	1,2-Dichlorobenzene	8.86	0.01	0.00	146	155264	1,713	171		

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File:	J:\MS10\DATA\041505\0415F005.D			**Instrument:**	MS10
Acqu Date:	04/15/2005 13:01	**Quant Date:**	04/18/2005 10:34	**Vial:**	5
Run Type:	DLCS			**Dilution:**	1.0
Lab ID:	KWG0505755-6			**Soln Conc. Units:**	ng/ml

Target Compounds **Final Conc. Units:** ug/Kg Wet Weight

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	QuantMass	Response	Solution Conc	Final Conc	Q	Rpt?
1	Benzyl Alcohol	8.85		0.00	108	83833	1,570	157		
1	Bis(2-chloroisopropyl) Ether	9.04		0.00	45	241425	1,648	165		
1	2-Methylphenol	9.04	-0.01	0.00	107	97195	1,644	164		
1	Acetophenone	9.23		0.00	105	220388	1,924	192		
1	Hexachloroethane	9.35	-0.01	0.00	117	74569	1,687	169		
1	N-Nitrosodi-n-propylamine	9.25	-0.01	0.00	70	113705	1,794	179		
1	4-Methylphenol	9.28	-0.01	0.00	107	147774	1,721	172		
1	Nitrobenzene	9.48	-0.01	0.00	77	166956	1,694	169		
2	Isophorone	9.86	-0.03	0.00	82	275470	1,963	196		
2	2-Nitrophenol	9.97	-0.01	0.00	139	86023	1,918	192		
2	2,4-Dimethylphenol	10.08	-0.02	0.00	122	58170	960.51	96.1		
2	Bis(2-chloroethoxy)methane	10.22		0.00	93	165501	1,770	177		
2	2,4-Dichlorophenol	10.36	-0.02	0.00	162	125051	1,844	184		
2	Benzoic Acid	10.37	-0.06	0.00	122	106931	3,963	396		
2	1,2,4-Trichlorobenzene	10.47	-0.01	0.00	180	142050	1,666	167		
2	Naphthalene	10.59		0.00	128	381346	1,714	171		
2	4-Chloroaniline	10.70	-0.03	0.00	127	130559	1,256	126		
2	Hexachlorobutadiene	10.78	-0.01	0.00	225	87082	1,561	156		
2	Caprolactam	11.32	0.05	0.00	55	77241	1,820	182		
2	4-Chloro-3-methylphenol	11.54		0.00	107	118046	1,814	181		
2	2-Methylnaphthalene	11.69	-0.02	0.00	141	203677	1,562	156		
3	1,2,4,5-Tetrachlorobenzene	11.97		0.00	216	144137	1,790	179		
3	Hexachlorocyclopentadiene	11.95	0.01	0.00	237	33192	908.43	90.8		
3	2,4,6-Trichlorophenol	12.18	-0.01	0.00	196	83718	1,902	190		
3	2,4,5-Trichlorophenol	12.25	-0.01	0.00	196	94366	1,984	198		
3	Biphenyl	12.47	0.01	0.00	154	317075	1,977	198		
3	2-Chloronaphthalene	12.48	-0.01	0.00	127	101877	1,771	177		
3	2-Nitroaniline	12.67	-0.02	0.00	65	97466	1,816	182		
3	Acenaphthylene	13.14	-0.01	0.00	152	388730	2,007	201		
3	Dimethyl Phthalate	13.00	-0.01	0.00	163	296440	1,896	190		
3	2,6-Dinitrotoluene	13.09	-0.01	0.00	165	72818	1,918	192		
3	Acenaphthene	13.43	-0.01	0.00	154	211245	1,853	185		
3	3-Nitroaniline	13.36	-0.01	0.00	138	67846	1,815	182		
3	2,4-Dinitrophenol	13.54	-0.02	0.00	184	21214	1,814	181	J	
3	Dibenzofuran	13.72		0.00	168	345781	1,822	182		
3	4-Nitrophenol	13.72	-0.01	0.00	109	44773	2,067	207		
3	2,4-Dinitrotoluene	13.75	-0.01	0.00	165	101679	2,146	215		
3	2,3,4,6-Tetrachlorophenol				232	0		10	U	
3	Fluorene	14.27	-0.02	0.00	166	256697	1,898	190		
3	4-Chlorophenyl Phenyl Ether	14.30	-0.01	0.00	204	134976	1,899	190		
3	Diethyl Phthalate	14.16		0.00	149	294466	1,999	200		
3	4-Nitroaniline	14.36	-0.02	0.00	138	71029	1,948	195		

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
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E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File:	J:\MS10\DATA\041505\0415F005.D			**Instrument:**	MS10
Acqu Date:	04/15/2005 13:01	**Quant Date:**	04/18/2005 10:34	**Vial:**	5
Run Type:	DLCS			**Dilution:**	1.0
Lab ID:	KWG0505755-6			**Soln Conc. Units:**	ng/ml

Target Compounds **Final Conc. Units:** ug/Kg Wet Weight

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	QuantMass	Response	Solution Conc	Final Conc	Q	Rpt?
3	2-Methyl-4,6-dinitrophenol	14.42	-0.02	0.00	198	55894	2,108	211		
3	N-Nitrosodiphenylamine	14.50	-0.01	0.00	169	202332	2,196	220		
3	Azobenzene	14.55	-0.01	0.00	77	309241	1,841	184		
4	4-Bromophenyl Phenyl Ether	15.09		0.00	248	77494	1,815	181		
4	Hexachlorobenzene	15.16	-0.01	0.00	284	90504	1,895	189		
4	Atrazine	15.42	-0.01	0.00	200	95278	2,147	215		
4	Pentachlorophenol	15.52		0.00	266	28236	1,438	144		
4	Phenanthrene	15.83	-0.01	0.00	178	402399	1,883	188		
4	Anthracene	15.92		0.00	178	404689	1,888	189		
4	Carbazole	16.21	-0.01	0.00	167	403376	2,069	207		
4	Di-n-butyl Phthalate	16.84	0.01	0.00	149	602089	2,352	235		
4	Fluoranthene	17.78	0.01	0.00	202	477595	2,138	214		
5	Benzidine				184	0		200	U	
5	Pyrene	18.14		0.00	202	454140	2,130	213		
5	Butyl Benzyl Phthalate	19.27	-0.01	0.00	149	220557	2,156	216		
5	3,3'-Dichlorobenzidine	20.21	-0.03	0.00	252	90049	1,382	138		
5	Benz(a)anthracene	20.22	-0.02	0.00	228	378804	2,118	212		
5	Chrysene	20.30	-0.02	0.00	228	345394	2,163	216		
5	Bis(2-ethylhexyl) Phthalate	20.43		0.00	149	296718	2,242	224		
6	Di-n-octyl Phthalate	22.13	-0.02	0.00	149	460348	2,163	216		
6	Benzo(b)fluoranthene	23.01	-0.03	0.00	252	322710	2,181	218		
6	Benzo(k)fluoranthene	23.11	-0.02	0.00	252	313806	2,124	212		
6	Benzo(a)pyrene	24.01	-0.01	0.00	252	307954	2,145	215		
6	Indeno(1,2,3-cd)pyrene	26.83	-0.02	0.00	276	255247	2,093	209		
6	Dibenz(a,h)anthracene	26.90	-0.02	0.00	278	245974	2,063	206		
6	Benzo(g,h,i)perylene	27.36	-0.02	0.00	276	249505	2,017	202		

Prep Amount:	20.00 g	**Dilution:**	1.0
Prep Final Vol:	2 ml	**Unit Factor:**	1
Solids:	%		

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / (Prep Amount x Solids)) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (QT Reviewed)

Data File : J:\MS10\DATA\041505\0415F005.D Vial: 5
Acq On : 15 Apr 2005 1:01 pm Operator: JGISH
Sample : KWG0505755-DLCS Inst : MS10
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 18 10:25:49 2005 Quant Results File: 0412BNLL.RES

Quant Method : J:\MS10\METHODS\BNA\0412BNLL.M (RTE Integrator)
Title : 8270LL ICAL
Last Update : Mon Apr 18 10:24:44 2005
Response via : Initial Calibration
DataAcq Meth : BNALL

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	8.61	152	69994	1000.00 ng/ml	0.00
23) Naphthalene-d8	10.55	136	227426	1000.00 ng/ml	0.00
37) Acenaphthene-d10	13.37	164	109591	1000.00 ng/ml	0.00
63) Phenanthrene-d10	15.79	188	183616	1000.00 ng/ml	0.00
74) Chrysene-d12	20.24	240	137373	1000.00 ng/ml	-0.02
83) Perylene-d12	24.16	264	104573	1000.00 ng/ml	0.00

System Monitoring Compounds					
4) 2-Fluorophenol	6.84	112	190980	2482.22 ng/ml	0.00
Spiked Amount 3750.000	Range 38 - 110		Recovery = 66.19%		
7) Phenol-d6	8.15	99	262695	2822.69 ng/ml	0.00
Spiked Amount 3750.000	Range 43 - 128		Recovery = 75.27%		
21) Nitrobenzene-d5	9.45	82	179097	1911.83 ng/ml	0.00
Spiked Amount 2500.000	Range 30 - 139		Recovery = 76.47%		
42) 2-Fluorobiphenyl	12.30	172	280176	1968.90 ng/ml	0.00
Spiked Amount 2500.000	Range 37 - 126		Recovery = 78.76%		
64) 2,4,6-Tribromophenol	14.68	330	72271	3238.04 ng/ml	0.00
Spiked Amount 3750.000	Range 38 - 157		Recovery = 86.35%		
77) Terphenyl-d14	18.43	244	349015	2755.36 ng/ml	0.00
Spiked Amount 2500.000	Range 54 - 158		Recovery = 110.21%		

Target Compounds					Qvalue
2) N-Nitrosodimethylamine	5.18	42	117118m	1596.79 ng/ml	
3) Pyridine	5.26	79	71422	869.58 ng/ml	97
5) Benzaldehyde	7.99	106	100066	1571.24 ng/ml	99
6) Bis(2-chloroethyl) Ether	8.25	93	132979	1700.77 ng/ml	100
8) Phenol	8.17	94	176268	1866.36 ng/ml	93
9) Aniline	8.14	93	105853	853.57 ng/ml#	84
10) 2-Chlorophenol	8.31	128	141109	1818.46 ng/ml	93
11) 1,3-Dichlorobenzene	8.52	146	155652	1640.51 ng/ml	99
12) 1,4-Dichlorobenzene	8.63	146	156105	1578.78 ng/ml	99
13) 1,2-Dichlorobenzene	8.86	146	155264	1713.25 ng/ml	99
14) Benzyl Alcohol	8.85	108	83833	1569.79 ng/ml	100
15) Bis(2-chloroisopropyl) Eth	9.04	45	241425	1648.17 ng/ml	73
16) 2-Methylphenol	9.04	107	97195	1643.57 ng/ml	95
17) Acetophenone	9.23	105	220388	1924.42 ng/ml	83
18) Hexachloroethane	9.35	117	74569	1686.94 ng/ml	88
19) N-Nitrosodi-n-propylamine	9.25	70	113705	1793.78 ng/ml	99
20) 4-Methylphenol	9.28	107	147774	1721.09 ng/ml	99
22) Nitrobenzene	9.48	77	166956	1693.80 ng/ml	99
24) Isophorone	9.86	82	275470	1962.81 ng/ml	97
25) 2-Nitrophenol	9.97	139	86023	1917.77 ng/ml	91

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : J:\MS10\DATA\041505\0415F005.D Vial: 5
Acq On : 15 Apr 2005 1:01 pm Operator: JGISH
Sample : KWG0505755-DLCS Inst : MS10
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 18 10:25:49 2005 Quant Results File: 0412BNLL.RES

Quant Method : J:\MS10\METHODS\BNA\0412BNLL.M (RTE Integrator)
Title : 8270LL ICAL
Last Update : Mon Apr 18 10:24:44 2005
Response via : Initial Calibration
DataAcq Meth : BNALL

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
26)	2,4-Dimethylphenol	10.08	122	58170	960.51	ng/ml	98
27)	Bis(2-chloroethoxy)methane	10.22	93	165501	1770.41	ng/ml	100
28)	2,4-Dichlorophenol	10.36	162	125051	1843.98	ng/ml	98
29)	Benzoic Acid	10.37	122	106931	3962.84	ng/ml	94
30)	1,2,4-Trichlorobenzene	10.47	180	142050	1666.39	ng/ml	98
31)	Naphthalene	10.59	128	381346	1714.38	ng/ml	100
32)	4-Chloroaniline	10.70	127	130559	1256.05	ng/ml	93
33)	Hexachlorobutadiene	10.78	225	87082	1561.20	ng/ml	99
34)	Caprolactam	11.32	55	77241	1819.61	ng/ml	98
35)	4-Chloro-3-methylphenol	11.54	107	118046	1813.84	ng/ml	94
36)	2-Methylnaphthalene	11.69	141	203677	1562.16	ng/ml	97
38)	1,2,4,5-Tetrachlorobenzene	11.97	216	144137	1790.07	ng/ml	99
39)	Hexachlorocyclopentadiene	11.95	237	33192	908.43	ng/ml	98
40)	2,4,6-Trichlorophenol	12.18	196	83718	1902.18	ng/ml	98
41)	2,4,5-Trichlorophenol	12.25	196	94366	1983.70	ng/ml	96
43)	Biphenyl	12.47	154	317075	1977.29	ng/ml	99
44)	2-Chloronaphthalene	12.48	127	101877	1770.85	ng/ml	97
45)	2-Nitroaniline	12.67	65	97466	1816.40	ng/ml	85
46)	Acenaphthylene	13.14	152	388730	2007.33	ng/ml	100
47)	Dimethyl Phthalate	13.00	163	296440	1895.57	ng/ml	99
48)	2,6-Dinitrotoluene	13.09	165	72818	1918.35	ng/ml	95
49)	Acenaphthene	13.43	154	211245	1852.68	ng/ml	99
50)	3-Nitroaniline	13.36	138	67846	1815.38	ng/ml	90
51)	2,4-Dinitrophenol	13.54	184	21214	1814.16	ng/ml	91
52)	Dibenzofuran	13.72	168	345781	1821.57	ng/ml	100
53)	4-Nitrophenol	13.72	109	44773	2066.66	ng/ml#	1
54)	2,4-Dinitrotoluene	13.75	165	101679	2146.27	ng/ml	92
56)	Fluorene	14.27	166	256697	1897.79	ng/ml	99
57)	4-Chlorophenyl Phenyl Ethe	14.30	204	134976	1899.20	ng/ml	100
58)	Diethyl Phthalate	14.16	149	294466	1998.52	ng/ml	99
59)	4-Nitroaniline	14.36	138	71029	1947.99	ng/ml	98
60)	2-Methyl-4,6-dinitrophenol	14.42	198	55894	2107.98	ng/ml	91
61)	N-Nitrosodiphenylamine	14.50	169	202332	2196.41	ng/ml	99
62)	Azobenzene	14.55	77	309241	1841.45	ng/ml	100
65)	4-Bromophenyl Phenyl Ether	15.09	248	77494	1814.97	ng/ml	98
66)	Hexachlorobenzene	15.16	284	90504	1894.85	ng/ml	99
67)	Atrazine	15.42	200	95278	2147.11	ng/ml	95
68)	Pentachlorophenol	15.52	266	28236	1438.06	ng/ml	99
69)	Phenanthrene	15.83	178	402399	1882.53	ng/ml	100
70)	Anthracene	15.92	178	404689	1887.85	ng/ml	99
71)	Carbazole	16.21	167	403376	2068.67	ng/ml	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : J:\MS10\DATA\041505\0415F005.D Vial: 5
Acq On : 15 Apr 2005 1:01 pm Operator: JGISH
Sample : KWG0505755-DLCS Inst : MS10
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 18 10:25:49 2005 Quant Results File: 0412BNLL.RES

Quant Method : J:\MS10\METHODS\BNA\0412BNLL.M (RTE Integrator)
Title : 8270LL ICAL
Last Update : Mon Apr 18 10:24:44 2005
Response via : Initial Calibration
DataAcq Meth : BNALL

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
72)	Di-n-butyl Phthalate	16.84	149	602089	2352.21	ng/ml	98
73)	Fluoranthene	17.78	202	477595	2137.55	ng/ml	97
76)	Pyrene	18.14	202	454140	2129.63	ng/ml	99
78)	Butyl Benzyl Phthalate	19.27	149	220557	2155.65	ng/ml	96
79)	3,3'-Dichlorobenzidine	20.21	252	90049	1382.31	ng/ml	98
80)	Benz(a)anthracene	20.22	228	378804	2117.62	ng/ml	98
81)	Chrysene	20.30	228	345394	2163.46	ng/ml	98
82)	Bis(2-ethylhexyl) Phthalat	20.43	149	296718	2241.58	ng/ml	99
84)	Di-n-octyl Phthalate	22.13	149	460348	2163.32	ng/ml	94
85)	Benzo(b)fluoranthene	23.01	252	322710	2181.07	ng/ml	100
86)	Benzo(k)fluoranthene	23.11	252	313806	2123.68	ng/ml	98
87)	Benzo(a)pyrene	24.01	252	307954	2145.10	ng/ml	98
88)	Indeno(1,2,3-cd)pyrene	26.83	276	255247	2093.47	ng/ml	100
89)	Dibenz(a,h)anthracene	26.90	278	245974	2063.19	ng/ml	98
90)	Benzo(g,h,i)perylene	27.36	276	249505	2017.46	ng/ml	98

(#) = qualifier out of range (m) = manual integration

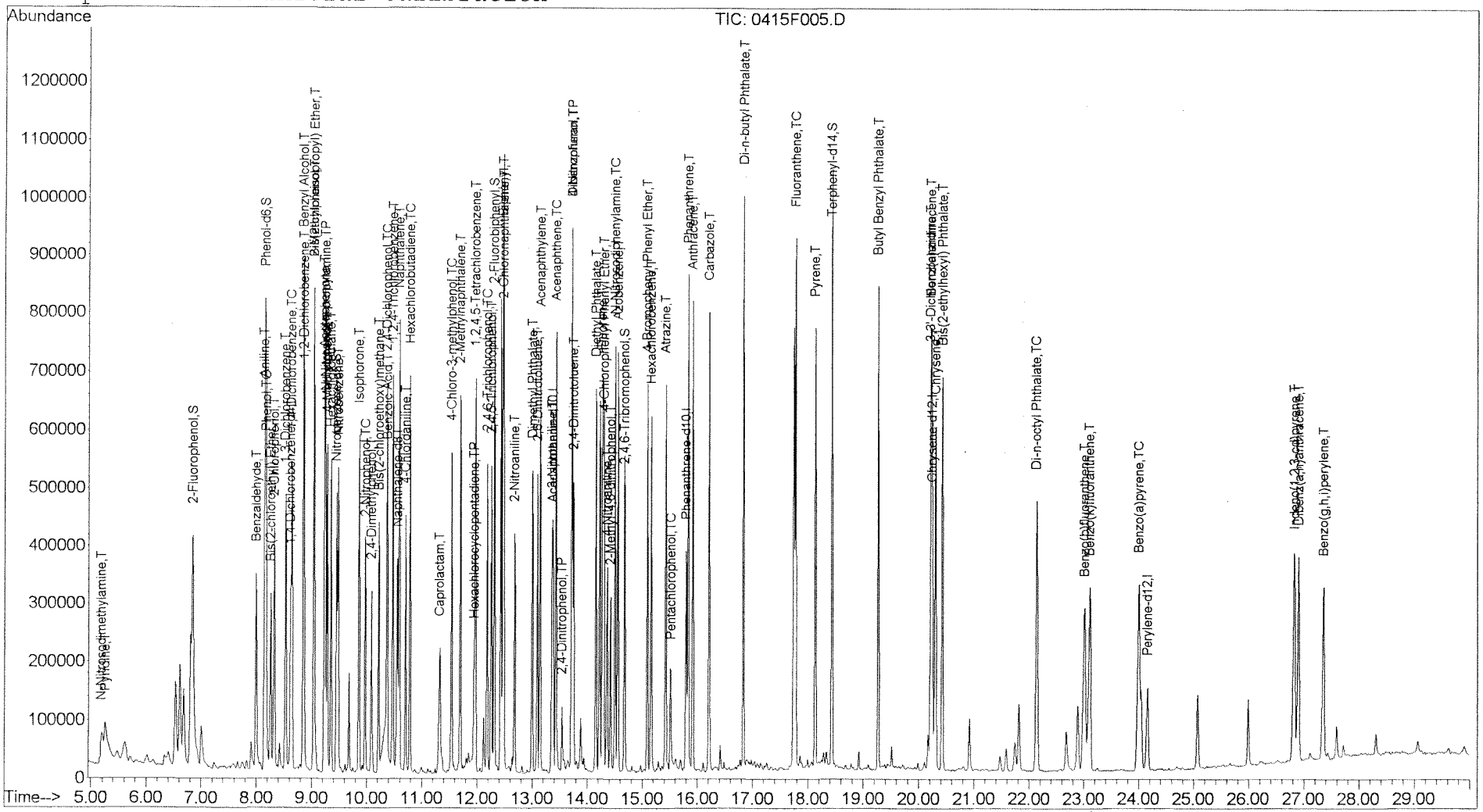
Quantitation Report (QT Reviewed)

Data File : J:\MS10\DATA\041505\0415F005.D
Acq On : 15 Apr 2005 1:01 pm
Sample : KWG0505755-DLCS
Misc :
MS Integration Params: RTEINT.P
Quant Time: Apr 18 10:34 2005

Vial: 5
Operator: JGISH
Inst : MS10
Multiplr: 1.00

Quant Results File: 0412BNLL.RES

Method : J:\MS10\METHODS\BNA\0412BNLL.M (RTE Integrator)
Title : 8270LL ICAL
Last Update : Mon Apr 18 10:24:44 2005
Response via : Initial Calibration

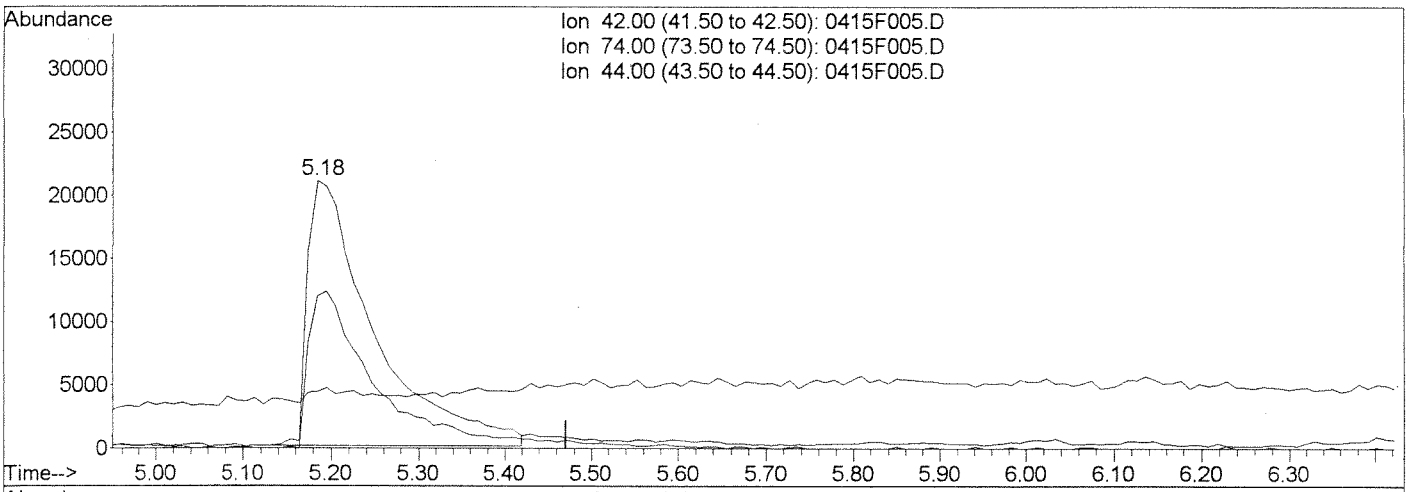


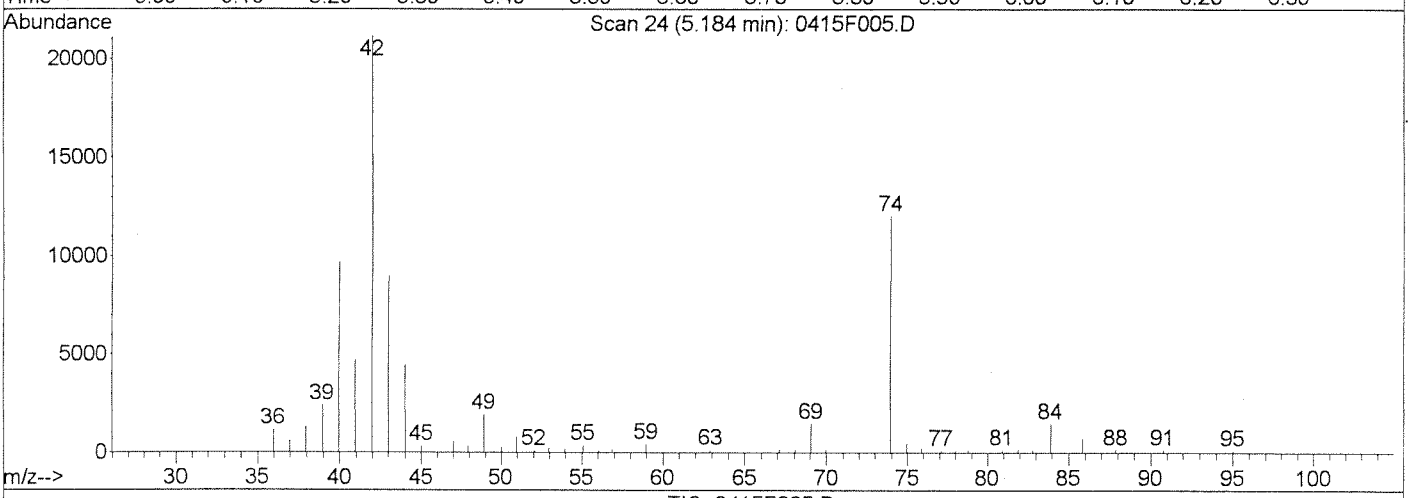
Quantitation Report (Qedit)

Data File : J:\MS10\DATA\041505\0415F005.D
Acq On : 15 Apr 2005 1:01 pm
Sample : KWG0505755-DLCS
Misc :
MS Integration Params: RTEINT.P
Quant Time: Apr 18 10:25 2005

Vial: 5
Operator: JGISH
Inst : MS10
Multiplr: 1.00
Quant Results File: temp.res

Method : J:\MS10\METHODS\BNA\0412BNLL.M (RTE Integrator)
Title : 8270LL ICAL
Last Update : Mon Apr 18 10:24:44 2005
Response via : Multiple Level Calibration





TIC: 0415F005.D

(2) N-Nitrosodimethylamine (T)

5.18min 1501.03ng/ml

response 110094

Ion	Exp%	Act%
42.00	100	100
74.00	62.60	57.34
44.00	8.10	4.88
0.00	0.00	0.00

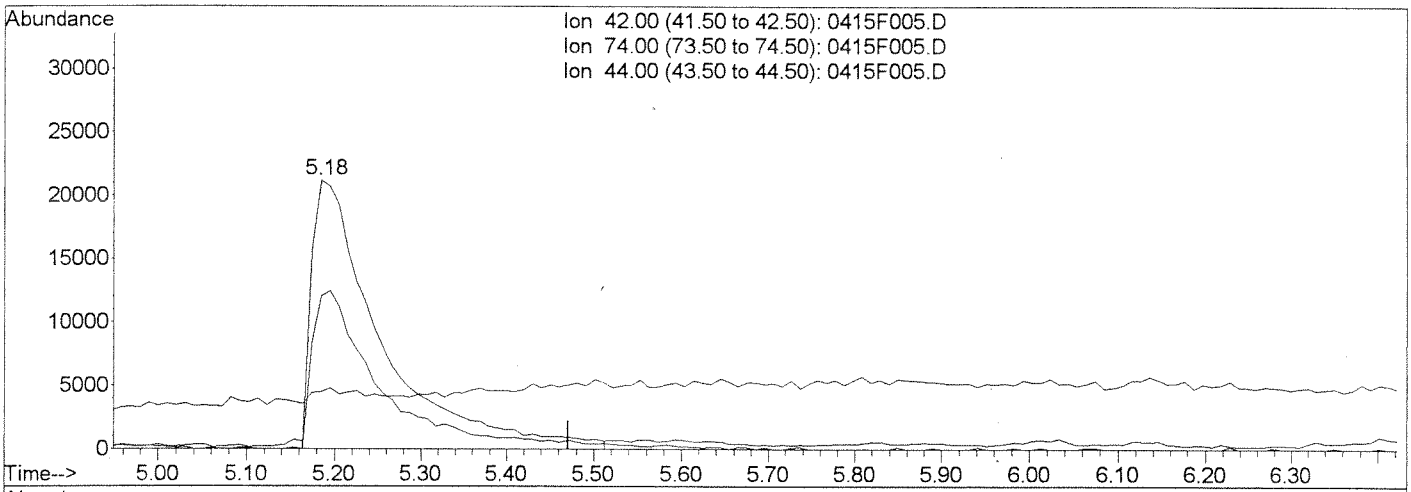
0415F005.D 0412BNLL.M Mon Apr 18 10:34:18 2005

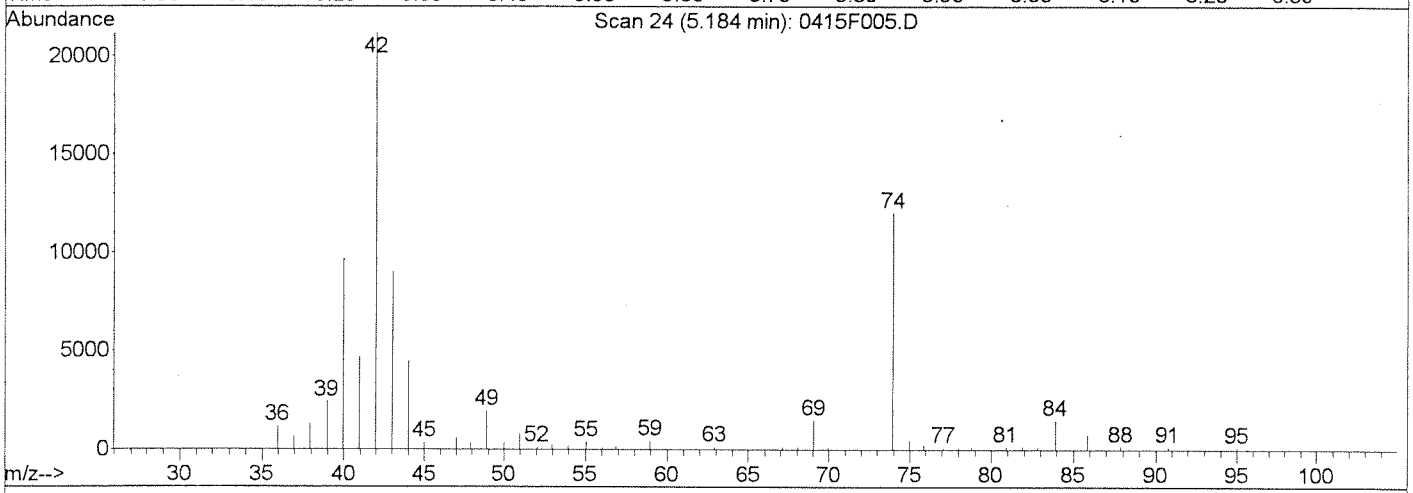
Quantitation Report (Qedit)

Data File : J:\MS10\DATA\041505\0415F005.D
Acq On : 15 Apr 2005 1:01 pm
Sample : KWG0505755-DLCS
Misc :
MS Integration Params: RTEINT.P
Quant Time: Apr 18 10:34 2005

Vial: 5
Operator: JGISH
Inst : MS10
Multiplr: 1.00
Quant Results File: temp.res

Method : J:\MS10\METHODS\BNA\0412BNLL.M (RTE Integrator)
Title : 8270LL ICAL
Last Update : Mon Apr 18 10:24:44 2005
Response via : Multiple Level Calibration





TIC: 0415F005.D

(2) N-Nitrosodimethylamine (T)

5.18min 1596.79ng/ml m

response 117118

Ion	Exp%	Act%
42.00	100	100
74.00	62.60	56.83
44.00	8.10	21.09
0.00	0.00	0.00

poor Integration

4/19/05

0415F005.D 0412BNLL.M Mon Apr 18 10:34:24 2005