EPA Region 5 Records Ctr.
325066

REFERENCE: 10

Heritage Environmental Services, LLC Report Package #55722, Package (Volume) 3 of 3. 510 pages.

HERITAGE ENVIRONMENTAL SERVICES, LLC

7901 West Morris Street
Indianapolis, IN 46231

STEVE SOMMER
IDEM-OFFICE OF LAND QUALITY
LQ4570-4579, 4581-4595, 4598-4610, 4597
REPORT PACKAGE #55722
VOLUME 3 OF 3

LANE ST.

INN000[illegible]229

Reference: 10

001A

R524408 Heritage Environmental Services, LLC A781255

GC/MS VOA

Method EPA 524.2 REV. 4.1
Sample Description LQ4588
Submitter IDEM - OLQ
Instrument 345 Channel 1

Test Code O516.9.0
Analyst 1062 R. SHAMP
File 2790D.D Date/Time 05Sep07 15:36:00
Dilution Factor 1

CAS	PRM	Parameter	Concentration	RQL	Limit	Units	RT
NA	1807	REGULATED CONTAMINANTS					
71-43-2	151	BENZENE		BDL	0.50	UG/L	
56-23-5	217	CARBON TETRACHLORIDE		BDL	0.50	UG/L	
106-46-7	29	1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)		BDL	0.50	UG/L	
107-06-2	21	1,2-DICHLOROETHANE		BDL	0.50	UG/L	
75-35-4	8	1,1-DICHLOROETHENE		BDL	0.50	UG/L	
71-55-6	2	1,1,1-TRICHLOROETHANE		BDL	0.50	UG/L	
79-01-6	750	TRICHLOROETHENE		BDL	0.50	UG/L	
75-01-4	768	VINYL CHLORIDE		BDL	0.20	UG/L	
108-90-7	231	CHLOROBENZENE		BDL	0.50	UG/L	
95-50-1	20	1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)		BDL	0.50	UG/L	
156-60-5	746	TRANS-1,2-DICHLOROETHENE		BDL	0.50	UG/L	
156-59-2	246	CIS-1,2-DICHLOROETHENE		BDL	0.50	UG/L	
75-09-2	302	DICHLOROMETHANE (METHYLENE CHLORIDE)		BDL	0.50	UG/L	
78-87-5	23	1,2-DICHLOROPROPANE		BDL	0.50	UG/L	
100-41-4	349	ETHYL BENZENE		BDL	0.50	UG/L	
100-42-5	680	STYRENE		BDL	0.50	UG/L	
79-00-5	4	1,1,2-TRICHLOROETHANE		BDL	0.50	UG/L	
127-18-4	703	TETRACHLOROETHENE		BDL	0.50	UG/L	
108-88-3	724	TOLUENE		BDL	0.50	UG/L	
95-47-6	549	O-XYLENE		BDL	0.50	UG/L	
MPXYLENE	492	M/P-XYLENE		BDL	0.50	UG/L	
120-82-1	16	1,2,4-TRICHLOROBENZENE		BDL	0.50	UG/L	
NA	1809	UNREGULATED - MONITORING REQUIRED					
108-86-1	193	BROMOBENZENE		BDL	0.50	UG/L	
75-27-4	195	BROMODICHLOROMETHANE		BDL	0.50	UG/L	
75-25-2	197	BROMOFORM		BDL	0.50	UG/L	
74-83-9	198	BROMOMETHANE		BDL	0.50	UG/L	
124-48-1	233	CHLORODIBROMOMETHANE		BDL	0.50	UG/L	
75-00-3	234	CHLOROETHANE		BDL	0.50	UG/L	
67-66-3	235	CHLOROFORM		BDL	0.50	UG/L	
74-87-3	236	CHLOROMETHANE		BDL	0.50	UG/L	
95-49-8	807	2-CHLOROTOLUENE (O-CHLOROTOLUENE)		BDL	0.50	UG/L	
106-43-4	808	4-CHLOROTOLUENE (P-CHLOROTOLUENE)		BDL	0.50	UG/L	
74-95-3	296	DIBROMOMETHANE		BDL	0.50	UG/L	
541-73-1	26	1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)		BDL	0.50	UG/L	
75-34-3	7	1,1-DICHLOROETHANE		BDL	0.50	UG/L	
563-58-6	10	1,1-DICHLOROPROPENE		BDL	0.50	UG/L	
142-28-9	27	1,3-DICHLOROPROPANE		BDL	0.50	UG/L	
10061-02-6	747	TRANS-1,3-DICHLOROPROPENE		BDL	0.50	UG/L	
10061-01-5	247	CIS-1,3-DICHLOROPROPENE		BDL	0.50	UG/L	
594-20-7	33	2,2-DICHLOROPROPANE		BDL	0.50	UG/L	
630-20-6	1	1,1,1,2-TETRACHLOROETHANE		BDL	0.50	UG/L	
79-34-5	3	1,1,2,2-TETRACHLOROETHANE		BDL	0.50	UG/L	
96-18-4	14	1,2,3-TRICHLOROPROPANE		BDL	0.50	UG/L	

JS 9-7-07

JS 9-7-07

R524408 Heritage Environmental Services, LLC A781255

GC/MS VOA

CAS	PRM	Parameter	Concentration	RQL	Limit	Units	RT
NA	1806	MONITORED AT STATE'S DISCRETION					
74-97-5	194	BROMOCHLOROMETHANE		BDL	0.50	UG/L	
104-51-8	519	N-BUTYLBENZENE		BDL	0.50	UG/L	
75-71-8	300	DICHLORODIFLUOROMETHANE		BDL	0.50	UG/L	
75-69-4	372	TRICHLOROFLUOROMETHANE		BDL	0.50	UG/L	
87-68-3	398	HEXACHLOROBUTADIENE		BDL	0.50	UG/L	
98-82-8	432	ISOPROPYLBENZENE (CUMENE)		BDL	0.50	UG/L	
99-87-6	628	4-ISOPROPYLTOLUENE (P-ISOPROPYLTOLUENE)		BDL	0.50	UG/L	
91-20-3	493	NAPHTHALENE		BDL	0.50	UG/L	
103-65-1	532	N-PROPYLBENZENE		BDL	0.50	UG/L	
135-98-8	644	SEC-BUTYLBENZENE		BDL	0.50	UG/L	
98-06-6	702	TERT-BUTYLBENZENE		BDL	0.50	UG/L	
87-61-6	13	1,2,3-TRICHLOROBENZENE		BDL	0.50	UG/L	
95-63-6	17	1,2,4-TRIMETHYLBENZENE		BDL	0.50	UG/L	
108-67-8	25	1,3,5-TRIMETHYLBENZENE		BDL	0.50	UG/L	
106-93-4	18	1,2-DIBROMOETHANE (EDB)		BDL	0.50	UG/L	
96-12-8	19	1,2-DIBROMO-3-CHLOROPROPANE (DBCP)		BDL	0.50	UG/L	
1634-04-4	859	METHYL-T-BUTYL ETHER (MTBE)		BDL	0.50	UG/L	
	972	————————					
591-78-6	60	2-HEXANONE		BDL	2.0	UG/L	
79-46-9	67	2-NITROPROPANE		*			
67-64-1	99	ACETONE (2-PROPANONE)		BDL	4.0	UG/L	
78-93-3	52	2-BUTANONE		BDL	2.0	UG/L	
75-15-0	216	CARBON DISULFIDE		*			
	1804	...					
	971	SURROGATE RECOVERY					
	972	————————					
17060-07-0	301	DICHLOROETHANE-D4	110			% RECOVERY	
2037-26-5	726	TOLUENE-D8	96			% RECOVERY	
460-00-4	196	4-BROMOFLUOROBENZENE	86			% RECOVERY	
	1131	TENTATIVELY IDENTIFIED COMPOUNDS					
	3320	NONE DETECTED					

Comment NA

Qualifiers

BDL Below Detection Limit

* See Note for Parameter

Comments to Laboratory (do not record)

4-HCL VIALS

Need verbals ASAP, in 7 days or sooner.

Note the additional IDEM analytes for drinking water:

CS2, MEK, Acetone, 2-Nitropropane, 2-Hexanone

Quantitation Report (Not Reviewed)

R52440B

Data File : C:\MSDCHEM\DATA\D090507\2790D.D
Acq On : 5 Sep 2007 15:36
Sample : A781255 LQ4588
Misc : 9/5/07
MS Integration Params: rteint2.p
Quant Time: Sep 05 15:52:26 2007

Vial: 18
Operator: REGI
Inst : GCMS #4
Multiplr: 1.00
Quant Results File: DWD.RES

Quant Method : C:\MSDCHEM\1\METHODS\DWD.M (RTE Integrator)
Title : *8260 VOLATILES*
Last Update : Tue Sep 04 10:38:20 2007
Response via : Initial Calibration
DataAcq Meth : DWD

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) FLUOROBENZENE	5.68	96	347710	10.00	UG/L	0.00
38) 2-Bromo-1-chloropropane	7.97	77	154002	10.00	UG/L	0.00
System Monitoring Compounds						
21) Dibromofluoromethane	4.95	113	87525	10.06	UG/L	0.00
Spiked Amount 10.000			Recovery	=	100.60%	
23) 1,2-Dichloroethane-d4	5.30	65	117970	11.02	UG/L	0.00
Spiked Amount 10.000			Recovery	=	110.20%	
33) Toluene-d8	7.51	98	346744	9.63	UG/L	0.00
Spiked Amount 10.000			Recovery	=	96.30%	
51) 4-Bromofluorobenzene	10.66	174	116976	8.58	UG/L	0.00
Spiked Amount 10.000			Recovery	=	85.80%	
Target Compounds						Qvalue
3) ~~Chloromethane~~	1.53	50	2334	0.20	UG/L	100
~~8) Acetone~~ confirmed contaminant	2.77	43	28043	7.04	UG/L	96
~~10) Methylene Chloride~~	3.19	84	6388	Below Cal		83
14) ~~2-Butanone~~	4.47	72	389	0.29	UG/L #	1
17) ~~Tetrahydrofuran~~	4.75	42	7349	1.77	UG/L	91
35) ~~trans-1,3~~-Dichloropropene	7.97	75	2892	0.23	UG/L	100
55) ~~n-Propylbenzene~~	10.66	92	4014	0.69	UG/L #	1

No TIC)

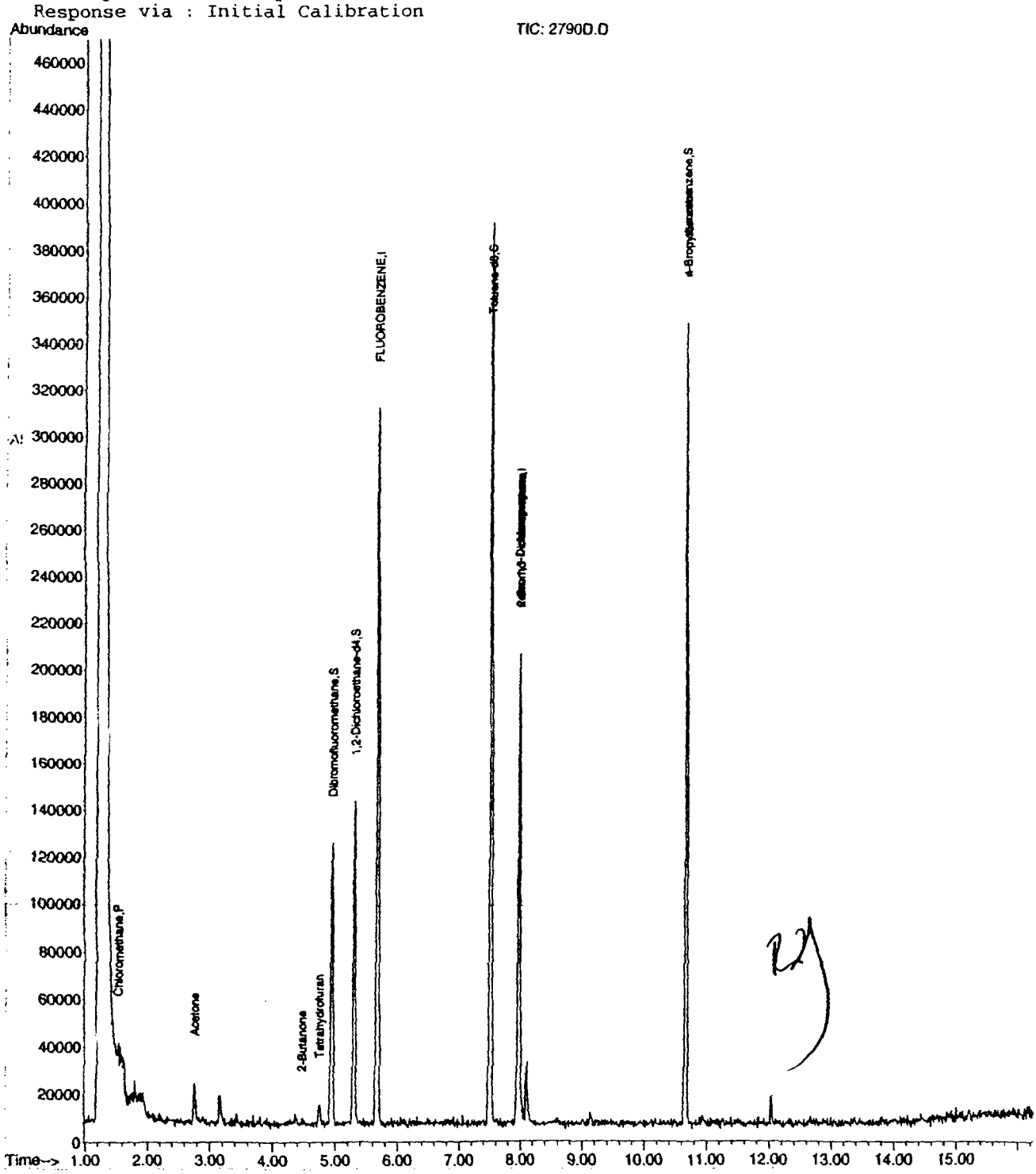
(#) = qualifier out of range (m) = manual integration
2790D.D DWD.M Wed Sep 05 15:52:27 2007

Quantitation Report (Not Reviewed)

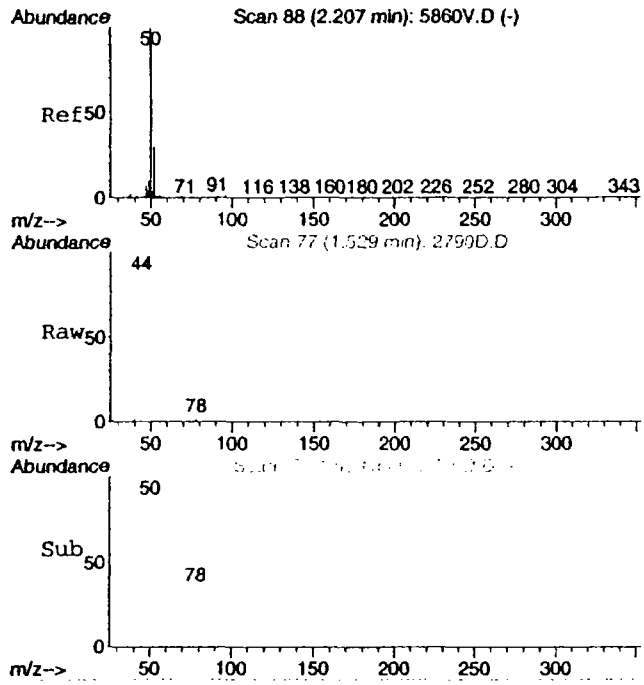
Data File : C:\MSDCHEM\DATA\D090507\2790D.D
Acq On : 5 Sep 2007 15:36
Sample : A781255 LQ4588
Misc : 9/5/07
MS Integration Params: rteint2.p
Quant Time: Sep 5 15:52 2007

Vial: 18
Operator: REGI
Inst : GCMS #4
Multiplr: 1.00
Quant Results File: DWD.RES

Method : C:\MSDCHEM\1\METHODS\DWD.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Tue Sep 04 10:38:20 2007
Response via : Initial Calibration

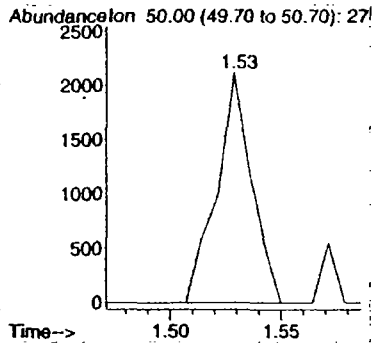


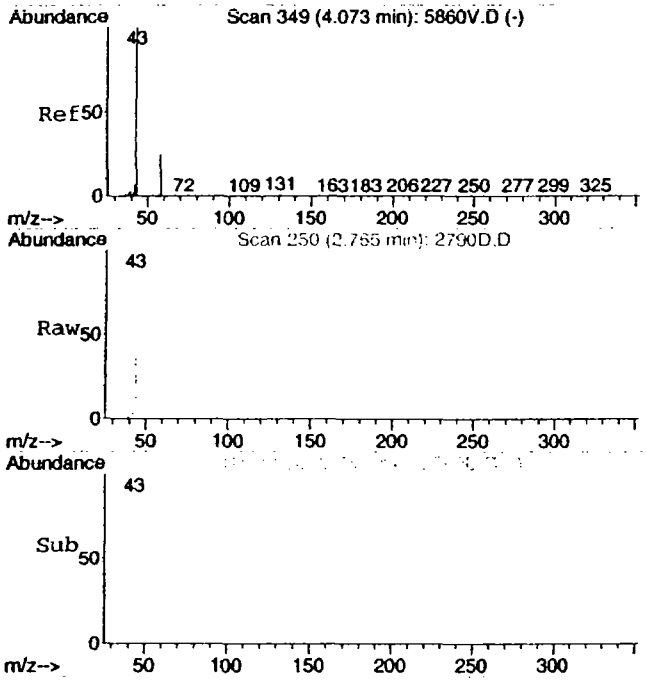
005



#3
Chloromethane
Concen: 0.20 UG/L
RT: 1.53 min Scan# 77
Delta R.T. 0.01 min
Lab File: 2790D.D
Acq: 5 Sep 2007 15:36

Tgt Ion: 50 Resp: 2334

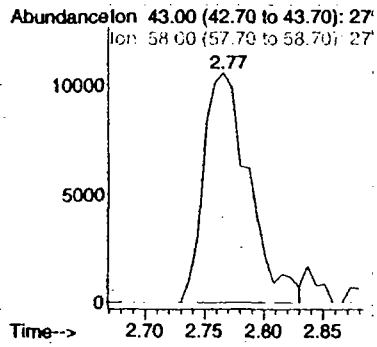




#8
Acetone
Concen: 7.04 UG/L
RT: 2.77 min Scan# 250
Delta R.T. -0.01 min
Lab File: 2790D.D
Acq: 5 Sep 2007 15:36

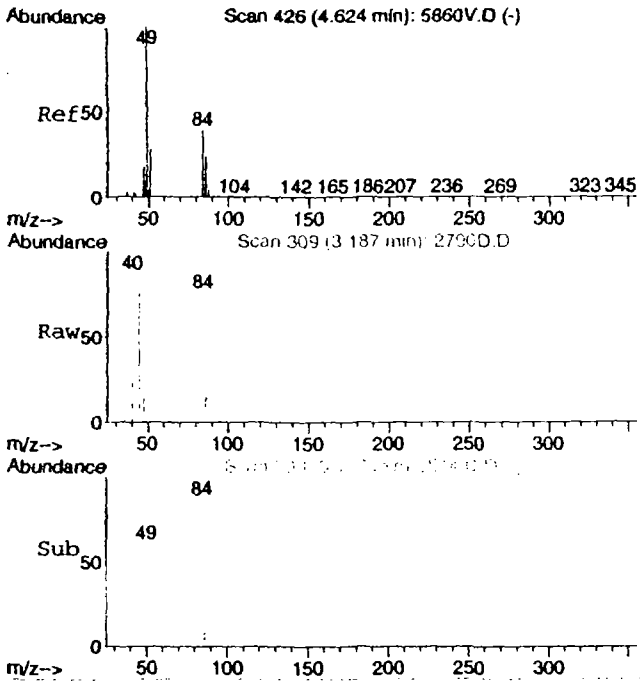
Tgt Ion: 43 Resp: 28043

Ion	Ratio	Lower	Upper
43	100		
58	27.0	23.1	34.7



Confirmed contaminant

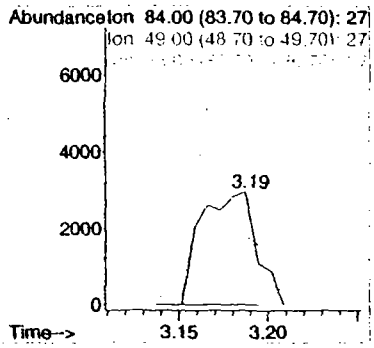
006

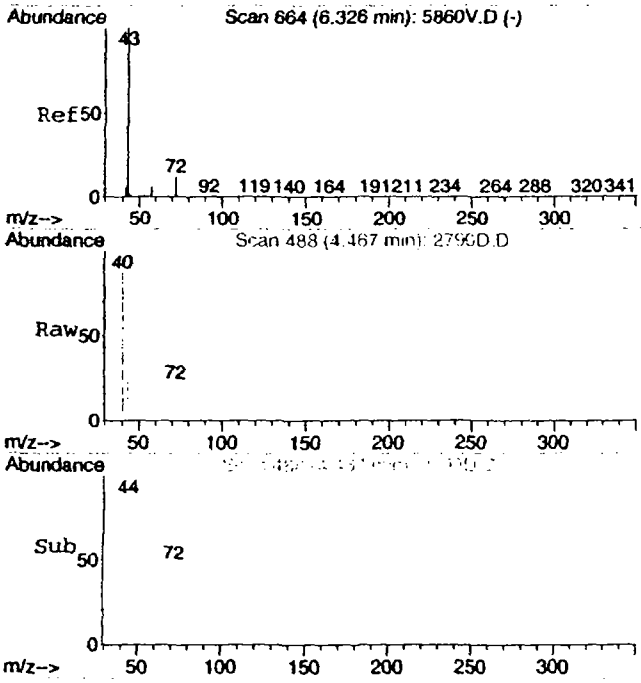


#10
Methylene Chloride
Concen: Below Cal
RT: 3.19 min Scan# 309
Delta R.T. 0.01 min
Lab File: 2790D.D
Acq: 5 Sep 2007 15:36

Tgt Ion: 84 Resp: 6388

Ion	Ratio	Lower	Upper
84	100		
49	144.0	140.2	210.2
86	65.7	51.1	76.7

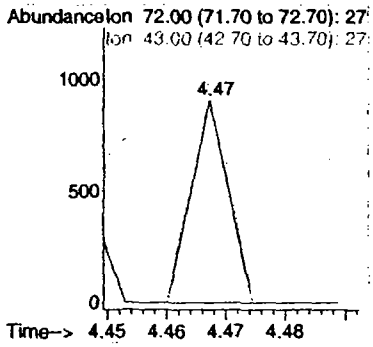


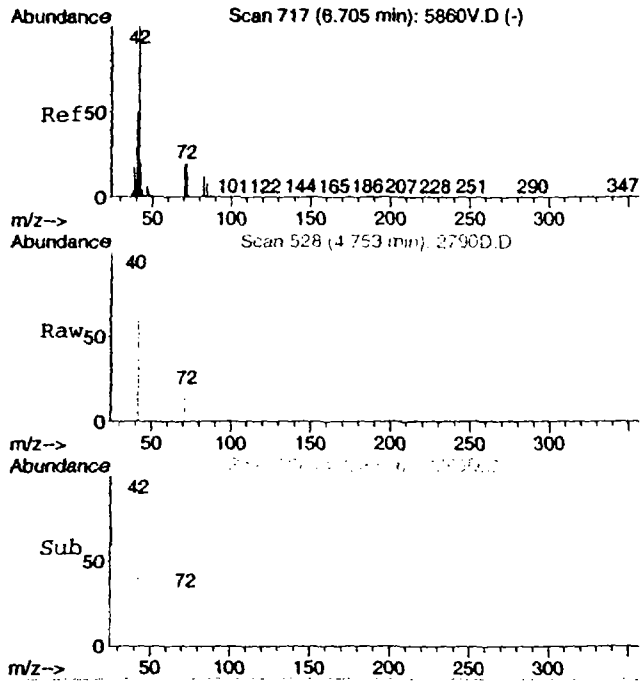


#14
2-Butanone
Concen: 0.29 UG/L
RT: 4.47 min Scan# 488
Delta R.T. -0.01 min
Lab File: 2790D.D
Acq: 5 Sep 2007 15:36

Tgt Ion: 72 Resp: 389

Ion	Ratio	Lower	Upper
72	100		
43	113.1	449.0	673.4#

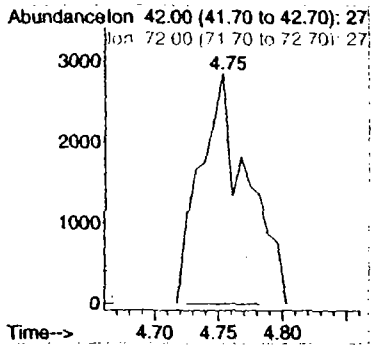


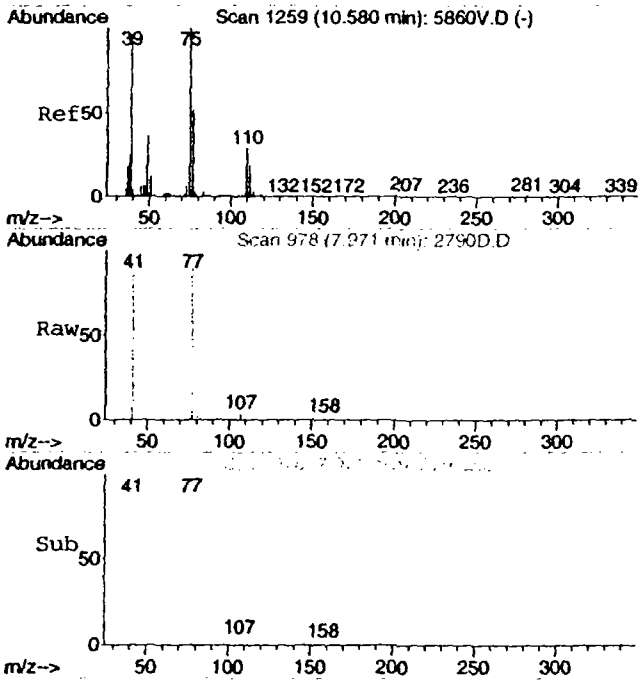


#17
Tetrahydrofuran
Concen: 1.77 UG/L
RT: 4.75 min Scan# 528
Delta R.T. 0.01 min
Lab File: 2790D.D
Acq: 5 Sep 2007 15:36

Tgt Ion: 42 Resp: 7349

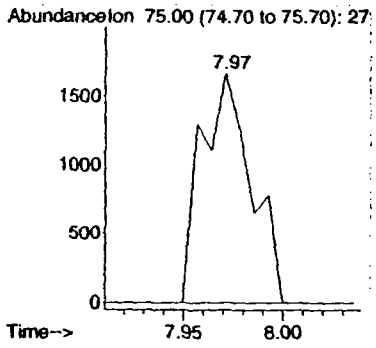
Ion	Ratio	Lower	Upper
42	100		
72	35.7	24.5	36.7

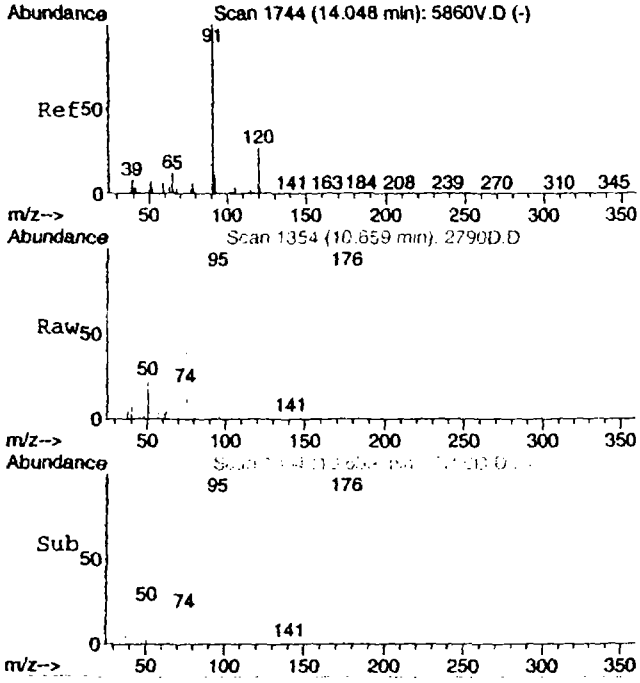




#35
trans-1,3-Dichloropropene
Concen: 0.23 UG/L
RT: 7.97 min Scan# 978
Delta R.T. 0.11 min
Lab File: 2790D.D
Acq: 5 Sep 2007 15:36

Tgt Ion: 75 Resp: 2892

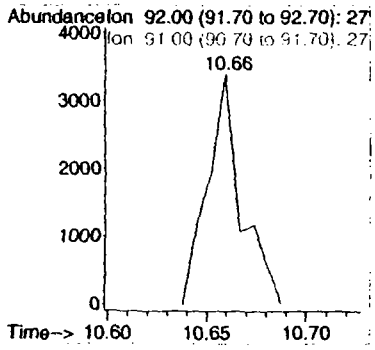




#55
n-Propylbenzene
Concen: 0.69 UG/L
RT: 10.66 min Scan# 1354
Delta R.T. -0.27 min
Lab File: 2790D.D
Acq: 5 Sep 2007 15:36

Tgt Ion: 92 Resp: 4014

Ion	Ratio	Lower	Upper
92	100		
91	0.0	715.8	1073.6#



Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\DATA\D090607\2820D.D Vial: 16
Acq On : 6 Sep 2007 14:43 Operator: REGI
Sample : A781255 LQ4588 Inst : GCMS #4
Misc : 9/8/07 Multiplr: 1.00
MS Integration Params: rteint2.p
Quant Time: Sep 06 14:59:39 2007 Quant Results File: DWD.RES

Quant Method : C:\MSDCHEM\1\METHODS\DWD.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Tue Sep 04 10:38:20 2007
Response via : Initial Calibration
DataAcq Meth : DWD

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) FLUOROBENZENE	5.67	96	344835	10.00 UG/L	0.00
38) 2-Bromo-1-chloropropane	7.97	77	141176	10.00 UG/L	0.00
System Monitoring Compounds					
21) Dibromofluoromethane	4.95	113	87406	10.13 UG/L	0.00
Spiked Amount 10.000			Recovery	= 101.30%	
23) 1,2-Dichloroethane-d4	5.30	65	114075	10.74 UG/L	0.00
Spiked Amount 10.000			Recovery	= 107.40%	
33) Toluene-d8	7.51	98	334720	9.37 UG/L	0.00
Spiked Amount 10.000			Recovery	= 93.70%	
51) 4-Bromofluorobenzene	10.67	174	114420	9.16 UG/L	0.00
Spiked Amount 10.000			Recovery	= 91.60%	
Target Compounds					Qvalue
8) Acetone	2.77	43	2480	1.27 UG/L #	69
10) Methylene Chloride	3.17	84	2183	Below Cal #	61
17) Tetrahydrofuran	4.74	42	7794	1.90 UG/L	94

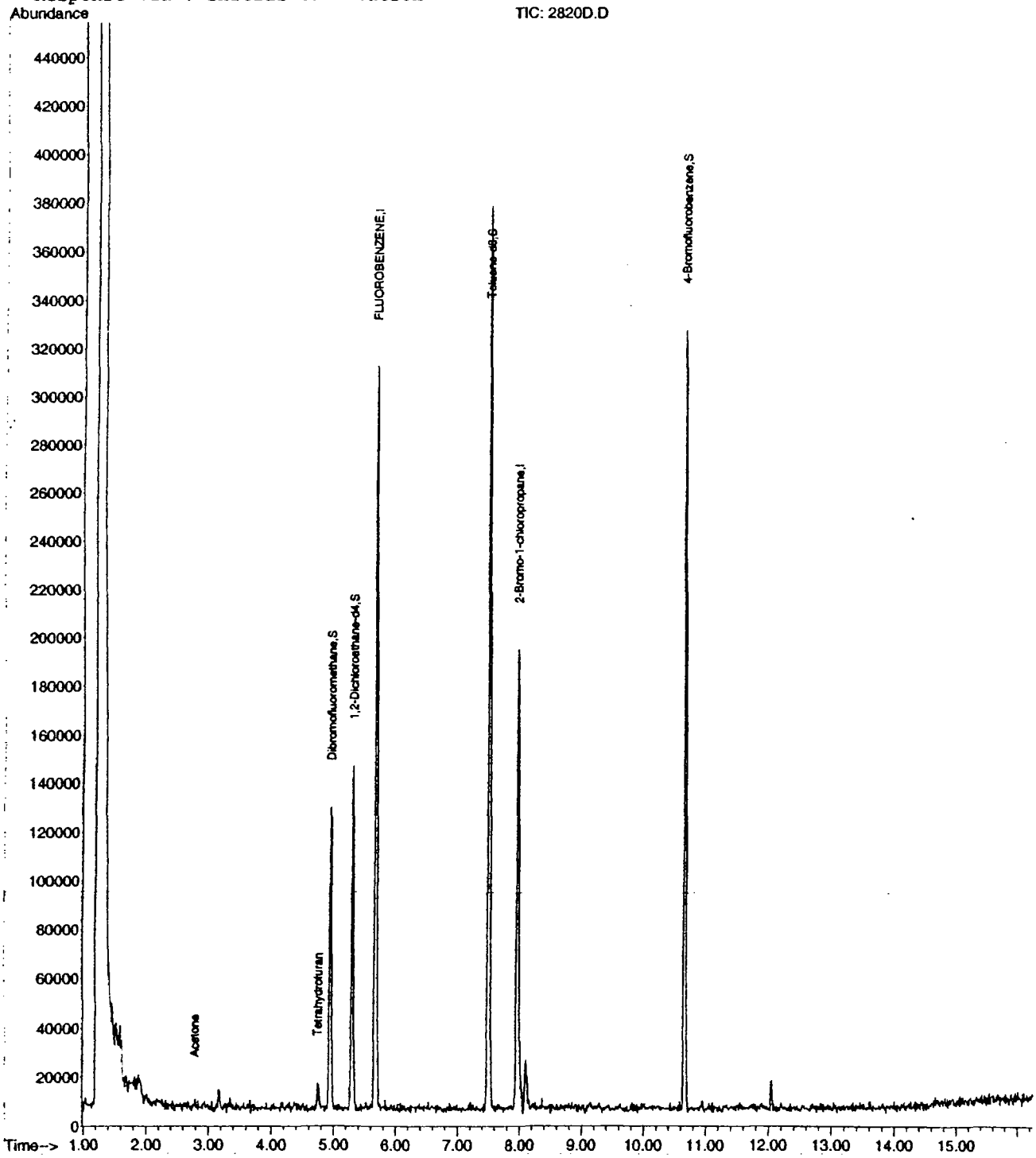
(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\DATA\D090607\2820D.D
Acq On : 6 Sep 2007 14:43
Sample : A781255 LQ4588
Misc : 9/8/07
MS Integration Params: rteint2.p
Quant Time: Sep 6 14:59 2007

Vial: 16
Operator: REGI
Inst : GCMS #4
Multiplr: 1.00
Quant Results File: DWD.RES

Method : C:\MSDCHEM\1\METHODS\DWD.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Tue Sep 04 10:38:20 2007
Response via : Initial Calibration



011

QC Check STD

QC Std# 239
Method# 296

Heritage Environmental Services, Indianapolis
LCS01 Volatile QC Report-EPA Method 524
Drinking Water

LCS Data File : 2791D.
LCS Date/Time : 5 Sep 2007 16:03
Spike Conc : 10 uG/L
Dilution Factor: 1

Compound	Spike Conc	Spike % Rec	Min Recovery	Max Recovery *
Benzene	8.99	89.9	85.0	116.4
Carbon Tetrachloride	9.32	93.2	81.0	114.2
1,4-Dichlorobenzene	8.62	86.2	88.5	113.9
1,2-Dichloroethane	9.12	91.2	83.3	117.7
1,1-DICHLOROETHENE	9.25	92.5	84.0	120.4
1,1,1-Trichloroethane	8.91	89.1	88.6	117.2
Trichloroethene	9.33	93.3	87.4	115.8
VINYL CHLORIDE	9.31	93.1	84.8	113.0
Bromobenzene	8.97	89.7	84.5	113.5
Bromodichloromethane	9.38	93.8	84.3	116.3
Bromoform	8.4	84.0	83.9	117.9
Bromomethane	8.97	89.7	60.5	165.7
Chlorobenzene	9.07	90.7	85.4	113.6
Dibromochloromethane	9.52	95.2	86.6	117.2
Chloroethane	8.63	86.3	88.3	120.5
CHLOROFORM	9.32	93.2	89.7	118.7
Chloromethane	9.36	93.6	78.6	121.8
2-Chlorotoluene	8.96	89.6	88.3	113.9
4-Chlorotoluene	8.8	88.0	83.6	115.8
Dibromomethane	9.39	93.9	88.1	121.7
1,3-Dichlorobenzene	8.86	88.6	88.9	114.5
1,2-Dichlorobenzene	8.76	87.6	90.9	120.5
trans-1,2-Dichloroethene	9.09	90.9	91.6	117.8
cis-1,2-Dichloroethene	9.31	93.1	90.5	121.3
Methylene Chloride	9.77	97.7	75.4	115.2
1,1-Dichloroethane	9.28	92.8	89.4	120.2
1,1-Dichloropropene	8.97	89.7	86.2	114.8
1,2-DICHLOROPROPANE	9.08	90.8	84.6	118.6
1,3-Dichloropropane	10	100.0	85.0	117.0
cis-1,3-Dichloropropene	8.53	85.3	85.2	115.4
trans-1,3-Dichloropropene	7.91	79.1 *	81.0	110.8
2,2-Dichloropropane	8.1	81.0	86.0	117.0
ETHYL BENZENE	8.85	88.5	85.8	112.8
Styrene	9.17	91.7	86.6	114.0
1,1,2-Trichloroethane	9.52	95.2	88.1	119.5
1,1,1,2-Tetrachloroethane	9.47	94.7	86.3	115.7
1,1,2,2-Tetrachloroethane	9.88	98.8	81.3	117.1
Tetrachloroethene	9.33	93.3	83.4	113.0
1,2,3-Trichloropropane	9.77	97.7	79.5	108.3

012

QC Std# 239
Method# 296

Heritage Environmental Services, Indianapolis
LCS01 Volatile QC Report-EPA Method 524
Drinking Water

LCS Data File : 2791D.
LCS Date/Time : 5 Sep 2007 16:03
Spike Conc : 10 uG/L
Dilution Factor: 1

Compound	Spike Conc	Spike % Rec	Min Recovery *	Max Recovery *
TOLUENE	8.67	86.7	83.9	114.1
o-Xylene	9.36	93.6	87.7	113.7
m,p-Xylene	18.3	91.5	83.4	110.6
Bromochloromethane	9.74	97.4	95.9	123.5
n-Butylbenzene	8.39	83.9	82.1	114.9
Dichlorodifluoromethane	11.1	111.0	67.4	115.4
Trichlorofluoromethane	7.85	78.5 *	82.2	113.6
Hexachlorobutadiene	9.76	97.6	78.5	130.7
Isopropylbenzene	7.57	75.7 *	82.6	112.2
p-Isopropyltoluene	8.52	85.2	85.5	114.5
Naphthalene	8.78	87.8	86.3	152.5
n-Propylbenzene	8.77	87.7	82.6	109.6
sec-Butylbenzene	9.49	94.9	85.2	112.0
t-Butylbenzene	9.05	90.5	85.9	115.5
1,2,3-Trichlorobenzene	9.19	91.9	97.8	146.0
1,2,4-Trichlorobenzene	9.1	91.0	93.1	136.3
1,2,4-Trimethylbenzene	9.3	93.0	86.9	114.1
1,3,5-Trimethylbenzene	9.18	91.8	87.2	111.8

* Advisory Limits Updated 9/05 , 80 - 120% minimum range.

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\DATA\D090507\2791D.D Vial: 19
Acq On : 5 Sep 2007 16:03 Operator: REGI
Sample : QC CHECK STD Inst : GCMS #4
Misc : 9/5/07 Multiplr: 1.00
MS Integration Params: rteint2.p
Quant Time: Sep 05 16:19:38 2007 Quant Results File: DWD.RES

Quant Method : C:\MSDCHEM\1\METHODS\DWD.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Tue Sep 04 10:38:20 2007
Response via : Initial Calibration
DataAcq Meth : DWD

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) FLUOROBENZENE	5.67	96	384925	10.00 UG/L	0.00
38) 2-Bromo-1-chloropropane	7.97	77	155041	10.00 UG/L	0.00
System Monitoring Compounds					
21) Dibromofluoromethane	4.94	113	93300	9.68 UG/L	0.00
Spiked Amount 10.000			Recovery	= 96.80%	
23) 1,2-Dichloroethane-d4	5.30	65	118902	10.03 UG/L	0.00
Spiked Amount 10.000			Recovery	= 100.30%	
33) Toluene-d8	7.51	98	380459	9.54 UG/L	0.00
Spiked Amount 10.000			Recovery	= 95.40%	
51) 4-Bromofluorobenzene	10.66	174	132937	9.69 UG/L	0.00
Spiked Amount 10.000			Recovery	= 96.90%	
Target Compounds					Qvalue
2) Dichlorodifluoromethane	1.39	85	64736	11.13 UG/L	100
3) Chloromethane	1.52	50	119277	9.36 UG/L	100
4) VINYL CHLORIDE	1.62	62	125096	9.31 UG/L	95
5) Bromomethane	1.92	94	65902	8.97 UG/L	97
6) Chloroethane	2.02	64	72176	8.63 UG/L	90
7) Trichlorofluoromethane	2.24	101	130306	7.85 UG/L #	76
8) Acetone	2.76	43	206856	43.98 UG/L	97
9) 1,1-DICHLOROETHENE	2.72	96	96785	9.25 UG/L	100
10) Methylene Chloride	3.17	84	116365	9.77 UG/L	85
11) MTBE	3.45	73	297514	9.00 UG/L	100
12) trans-1,2-Dichloroethene	3.44	96	110604	9.09 UG/L	99
13) 1,1-Dichloroethane	3.86	63	204611	9.28 UG/L	100
14) 2-Butanone	4.45	72	70956	47.58 UG/L	70
15) cis-1,2-Dichloroethene	4.45	96	117205	9.31 UG/L	98
16) CHLOROFORM	4.78	83	191971	9.32 UG/L	96
17) Tetrahydrofuran	4.74	42	511742	111.54 UG/L	89
18) Bromochloromethane	4.70	128	59072	9.74 UG/L	92
19) 2,2-Dichloropropane	4.45	77	93856	8.10 UG/L #	87
20) 1,1,1-Trichloroethane	4.97	97	147796	8.91 UG/L	98
22) 1,1-Dichloropropene	5.15	110	45337	8.97 UG/L	100
24) Carbon Tetrachloride	5.15	117	134652	9.32 UG/L	91
25) 1,2-Dichloroethane	5.38	62	154122	9.12 UG/L	93
26) Benzene	5.37	78	434293	8.99 UG/L	100
27) Trichloroethene	6.08	130	112940	9.33 UG/L	93
28) 1,2-DICHLOROPROPANE	6.33	63	104483	9.08 UG/L	100
29) Bromodichloromethane	6.66	83	137538	9.38 UG/L	99
30) Dibromomethane	6.46	93	65510	9.39 UG/L	87
31) 4-Methyl-2-Pentanone	7.37	43	696451	46.83 UG/L	95
32) cis-1,3-Dichloropropene	7.18	75	138717	8.53 UG/L	100
34) TOLUENE	7.58	91	430045	8.67 UG/L	100
35) trans-1,3-Dichloropropene	7.86	75	111874	7.91 UG/L	100
36) 1,1,2-Trichloroethane	8.09	97	95947	9.52 UG/L	100
37) 1,2-Dibromoethane	8.71	107	84620	8.69 UG/L	95
39) 2-Hexanone	8.41	43	489951	49.32 UG/L	97
40) 1,3-Dichloropropane	8.29	76	159608	10.03 UG/L	100
41) Tetrachloroethene	8.27	166	106408	9.33 UG/L	96
42) Dibromochloromethane	8.58	129	95526	9.52 UG/L	100
43) Chlorobenzene	9.35	112	261066	9.07 UG/L	99
44) 1,1,1,2-Tetrachloroethane	9.46	131	95456	9.47 UG/L	100
45) ETHYL BENZENE	9.50	106	134092	8.85 UG/L	76
46) m,p-Xylene	9.64	106	335019	18.25 UG/L #	61

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

014

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\DATA\D090507\2791D.D Vial: 19
Acq On : 5 Sep 2007 16:03 Operator: REGI
Sample : QC CHECK STD Inst : GCMS #4
Misc : 9/5/07 Multiplr: 1.00
MS Integration Params: rteint2.p
Quant Time: Sep 05 16:19:38 2007 Quant Results File: DWD.RES

Quant Method : C:\MSDCHEM\1\METHODS\DWD.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Tue Sep 04 10:38:20 2007
Response via : Initial Calibration
DataAcq Meth : DWD

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
47)	o-Xylene	10.09	106	166218	9.36 UG/L		81
48)	Styrene	10.11	104	281920	9.17 UG/L		92
49)	Bromoform	10.30	173	64863	8.40 UG/L		100
50)	1,1,2,2-Tetrachloroethane	10.82	83	127437	9.88 UG/L		100
52)	Isopropylbenzene	10.51	105	350862	7.57 UG/L		100
53)	Bromobenzene	10.81	77	168497	8.97 UG/L		100
54)	1,2,3-Trichloropropane	10.85	110	40828	9.77 UG/L		100
55)	n-Propylbenzene	10.94	92	51440	8.77 UG/L		76
56)	1,3,5-Trimethylbenzene	11.12	105	335258	9.18 UG/L		100
57)	2-Chlorotoluene	11.01	126	101600	8.96 UG/L		100
58)	4-Chlorotoluene	11.12	126	104907	8.80 UG/L		100
59)	t-Butylbenzene	11.44	91	183926	9.05 UG/L	#	72
60)	1,2,4-Trimethylbenzene	11.48	105	342964	9.30 UG/L		100
61)	sec-Butylbenzene	11.65	105	405039	9.49 UG/L		100
62)	p-Isopropyltoluene	11.79	119	327269	8.52 UG/L		100
63)	1,3-Dichlorobenzene	11.75	146	204298	8.86 UG/L		100
64)	1,4-Dichlorobenzene	11.83	146	206834	8.62 UG/L		100
65)	n-Butylbenzene	12.17	92	146911	8.39 UG/L		89
66)	1,2-Dichlorobenzene	12.18	146	189084	8.76 UG/L		100
67)	1,2-Dibromo-3-chloropropan	12.88	157	24815	8.93 UG/L		100
68)	1,2,4-Trichlorobenzene	13.58	180	107205	9.10 UG/L		100
69)	Naphthalene	13.78	128	276974	8.78 UG/L		100
70)	Hexachlorobutadiene	13.73	225	43276	9.76 UG/L		100
71)	1,2,3-Trichlorobenzene	13.98	180	92332	9.19 UG/L		100

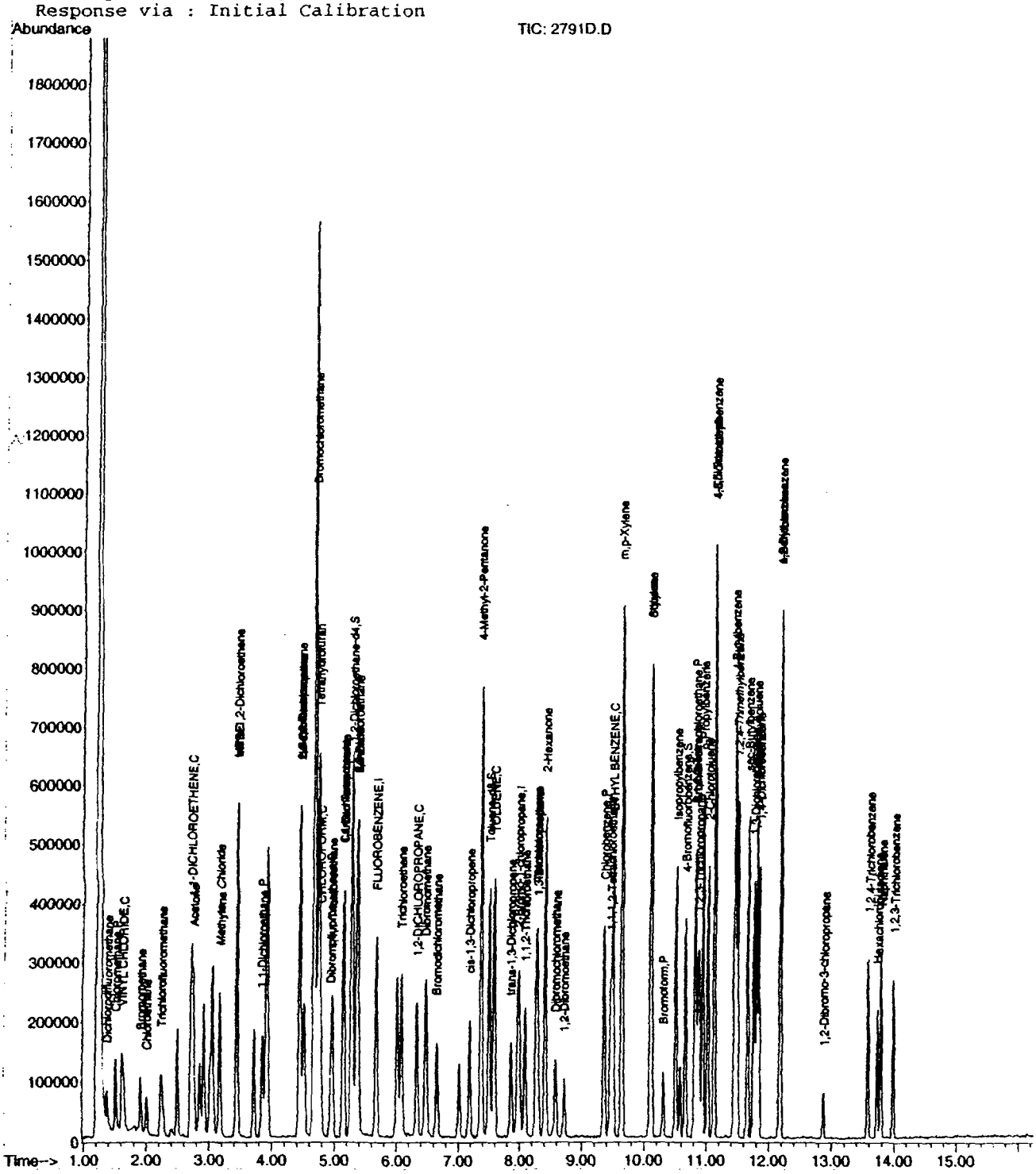
(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\DATA\D090507\2791D.D
Acq On : 5 Sep 2007 16:03
Sample : QC CHECK STD
Misc : 9/5/07
MS Integration Params: rteint2.p
Quant Time: Sep 5 16:19 2007

Vial: 19
Operator: REGI
Inst : GCMS #4
Multiplr: 1.00
Quant Results File: DWD.RES

Method : C:\MSDCHEM\1\METHODS\DWD.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Tue Sep 04 10:38:20 2007
Response via : Initial Calibration



016

QC Std# 239 Heritage Environmental Services, Indianapolis
Method# 296 MS/MSD Volatile QC Report-EPA Method 524

Drinking Water

Laboratory Sample # : A781234 LQ4570 Q199362 Q199363

Data File :2773D. MS Data File : 2792D. MSD Data File : 2793D.

Date/Time : 5 Sep 2007 7:51 MS Date/Time : 5 Sep 2007 16:30 MSD Date/Time : 5 Sep 2007 16:57

Spike Conc : 10 uG/L

Dilution Factor: 1

Compound	Sample Conc	Spike Conc	Spike % Rec	Spike Dup Conc	Spike Dup % Rec	RPD	Min Recovery *	Max
Benzene	0	9.52	95.2	9.01	90.1	5.5	70.0	130.0
Carbon Tetrachloride	0	9.66	96.6	9.35	93.5	3.3	70.0	130.0
1,4-Dichlorobenzene	0	10.3	103.0	9.75	97.5	5.5	70.0	130.0
1,2-Dichloroethane	0	9.73	97.3	9.46	94.6	2.8	70.0	130.0
1,1-DICHLOROETHENE	0	9.44	94.4	8.97	89.7	5.1	70.0	130.0
1,1,1-Trichloroethane	0	9.76	97.6	9.38	93.8	4.0	70.0	130.0
Trichloroethene	0	9.18	91.8	9.4	94.0	2.4	70.0	130.0
VINYL CHLORIDE	0	9.17	91.7	8.41	84.1	8.6	70.0	130.0
Bromobenzene	0	9.9	99.0	10.4	104.0	4.9	70.0	130.0
Bromodichloromethane	0	9.67	96.7	9.55	95.5	1.2	70.0	130.0
Bromoform	0	9.7	97.0	9.46	94.6	2.5	70.0	130.0
Bromomethane	0	8.58	85.8	8.06	80.6	6.3	70.0	130.0
Chlorobenzene	0	10.1	101.0	10	100.0	1.0	70.0	130.0
Dibromochloromethane	0	10.5	105.0	9.92	99.2	5.7	70.0	130.0
Chloroethane	0	9	90.0	8.71	87.1	3.3	70.0	130.0
CHLOROFORM	0	9.47	94.7	9.06	90.6	4.4	70.0	130.0
Chloromethane	0	8.69	86.9	8.45	84.5	2.8	70.0	130.0
2-Chlorotoluene	0	10	100.0	10.3	103.0	3.0	70.0	130.0
4-Chlorotoluene	0	10.6	106.0	10	100.0	5.8	70.0	130.0
Dibromomethane	0	9.97	99.7	9.62	96.2	3.6	70.0	130.0
1,3-Dichlorobenzene	0	10.2	102.0	10.3	103.0	1.0	70.0	130.0
1,2-Dichlorobenzene	0	10.4	104.0	10.6	106.0	1.9	70.0	130.0
trans-1,2-Dichloroethene	0	9.66	96.6	8.89	88.9	8.3	70.0	130.0
cis-1,2-Dichloroethene	0	9.44	94.4	8.64	86.4	8.8	70.0	130.0
Methylene Chloride	0	10	100.0	9.51	95.1	5.0	70.0	130.0
1,1-Dichloroethane	0	9.46	94.6	9.18	91.8	3.0	70.0	130.0
1,1-Dichloropropene	0	9.48	94.8	9.53	95.3	0.5	70.0	130.0
1,2-DICHLOROPROPANE	0	9.94	99.4	9.65	96.5	3.0	70.0	130.0
1,3-Dichloropropane	0	10.3	103.0	10.6	106.0	2.9	70.0	130.0
cis-1,3-Dichloropropene	0	8.62	86.2	8.48	84.8	1.6	70.0	130.0
trans-1,3-Dichloropropene	0	8.92	89.2	8.99	89.9	0.8	70.0	130.0
2,2-Dichloropropane	0	7.99	79.9	7.63	76.3	4.6	70.0	130.0
ETHYL BENZENE	0	9.67	96.7	10.1	101.0	4.4	70.0	130.0
Styrene	0	8.89	88.9	9.12	91.2	2.6	70.0	130.0
1,1,2-Trichloroethane	0	9.74	97.4	9.28	92.8	4.8	70.0	130.0
1,1,1,2-Tetrachloroethane	0	9.8	98.0	10	100.0	2.0	70.0	130.0
1,1,2,2-Tetrachloroethane	0	11	110.0	11.1	111.0	0.9	70.0	130.0
Tetrachloroethene	0	10	100.0	10.1	101.0	1.0	70.0	130.0
1,2,3-Trichloropropane	0	9.89	98.9	9.81	98.1	0.8	70.0	130.0

QC Std# 239 Heritage Environmental Services, Indianapolis
Method# 296 MS/MSD Volatile QC Report-EPA Method 524
Drinking Water

Laboratory Sample # : A781234 LQ4570
Data File :2773D. MS Data File : 2792D. MSD Data File : 2793D.
Date/Time : 5 Sep 2007 7:51 MS Date/Time : 5 Sep 2007 16:30 MSD Date/Time : 5 Sep 2007 16:57
Spike Conc : 10 uG/L
Dilution Factor: 1

Compound	Sample Conc	Spike Conc	Spike % Rec	Spike Dup Conc	Spike Dup % Rec	RPD	Min Recovery *	Max Recovery *
TOLUENE	0	9.58	95.8	9.19	91.9	4.2	70.0	130.0
o-Xylene	0	10.6	106.0	10.3	103.0	2.9	70.0	130.0
m,p-Xylene	0	21.1	105.5	21	105.0	0.5	70.0	130.0
Bromochloromethane	0	9.54	95.4	9.73	97.3	2.0	70.0	130.0
n-Butylbenzene	0	10.2	102.0	9.8	98.0	4.0	70.0	130.0
Dichlorodifluoromethane	0	6.52	65.2 *	6.03	60.3 *	7.8	70.0	130.0
Trichlorofluoromethane	0	9.16	91.6	8.71	87.1	5.0	70.0	130.0
Hexachlorobutadiene	0	11.1	111.0	11.4	114.0	2.7	70.0	130.0
Isopropylbenzene	0	10.1	101.0	9.93	99.3	1.7	70.0	130.0
p-Isopropyltoluene	0	10.2	102.0	10	100.0	2.0	70.0	130.0
Naphthalene	0	9.72	97.2	10.1	101.0	3.8	70.0	130.0
n-Propylbenzene	0	11	110.0	10.2	102.0	7.5	70.0	130.0
sec-Butylbenzene	0	9.93	99.3	10.3	103.0	3.7	70.0	130.0
t-Butylbenzene	0	9.71	97.1	10.1	101.0	3.9	70.0	130.0
1,2,3-Trichlorobenzene	0	10.7	107.0	10.6	106.0	0.9	70.0	130.0
1,2,4-Trichlorobenzene	0	9.68	96.8	10.4	104.0	7.2	70.0	130.0
1,2,4-Trimethylbenzene	0	10.2	102.0	10.2	102.0	0.0	70.0	130.0
1,3,5-Trimethylbenzene	0	10.1	101.0	9.99	99.9	1.1	70.0	130.0

* Advisory Limits Updated 9/05 , 80 - 120% minimum range.

R524408 Heritage Environmental Services, LLC Q1993652

QC Report

QCType SPI01 Duplicate SampleID A781234 DataFile 2792D.D
Date Entered 06Sep07 Duplicate QCSampleID Analyst 1062 R. SHAMP
Analysis Date/Time 05Sep07 16:30:00 Method 296 Matrix 1 Units ug/L

PRM	Parameter	TruVal	SpikeVal	ObsVal	RQL	Rec	Difference
151	BENZENE	0	10	9.52		95.2	
217	CARBON TETRACHLORIDE	0	10	9.66		96.6	
29	1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	0	10	10.3		103	
21	1,2-DICHLOROETHANE	0	10	9.73		97.3	
8	1,1-DICHLOROETHENE	0	10	9.44		94.4	
2	1,1,1-TRICHLOROETHANE	0	10	9.76		97.6	
750	TRICHLOROETHENE	0	10	9.18		91.8	
768	VINYL CHLORIDE	0	10	9.17		91.7	
193	BROMOBENZENE	0	10	9.9		99	
195	BROMODICHLOROMETHANE	0	10	9.67		96.7	
197	BROMOFORM	0	10	9.7		97	
198	BROMOMETHANE	0	10	8.58		85.8	
231	CHLOROBENZENE	0	10	10.1		101	
295	DIBROMOCHLOROMETHANE	0	10	10.5		105	
234	CHLOROETHANE	0	10	9		90	
235	CHLOROFORM	0	10	9.47		94.7	
236	CHLOROMETHANE	0	10	8.69		86.9	
807	2-CHLOROTOLUENE (O-CHLOROTOLUENE)	0	10	10		100	
808	4-CHLOROTOLUENE (P-CHLOROTOLUENE)	0	10	10.6		106	
296	DIBROMOMETHANE	0	10	9.97		99.7	
26	1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)	0	10	10.2		102	
20	1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	0	10	10.4		104	
746	TRANS-1,2-DICHLOROETHENE	0	10	9.66		96.6	
246	CIS-1,2-DICHLOROETHENE	0	10	9.44		94.4	
302	DICHLOROMETHANE (METHYLENE CHLORIDE)	0	10	10		100	
7	1,1-DICHLOROETHANE	0	10	9.46		94.6	
10	1,1-DICHLOROPROPENE	0	10	9.48		94.8	
23	1,2-DICHLOROPROPANE	0	10	9.94		99.4	
27	1,3-DICHLOROPROPANE	0	10	10.3		103	
247	CIS-1,3-DICHLOROPROPENE	0	10	8.62		86.2	
747	TRANS-1,3-DICHLOROPROPENE	0	10	8.92		89.2	
349	ETHYL BENZENE	0	10	9.67		96.7	
680	STYRENE	0	10	8.89		88.9	
4	1,1,2-TRICHLOROETHANE	0	10	9.74		97.4	
1	1,1,1,2-TETRACHLOROETHANE	0	10	9.8		98	
3	1,1,2,2-TETRACHLOROETHANE	0	10	11		110	
703	TETRACHLOROETHENE	0	10	10		100	
14	1,2,3-TRICHLOROPROPANE	0	10	9.89		98.9	
724	TOLUENE	0	10	9.58		95.8	
549	O-XYLENE	0	10	10.6		106	
492	M/P-XYLENE	0	10	21.1		211	
194	BROMOCHLOROMETHANE	0	10	9.54		95.4	
519	N-BUTYLBENZENE	0	10	10.2		102	
300	DICHLORODIFLUOROMETHANE	0	10	6.52	!	65.2	

HW 9/6/07

QC Report

PRM	Parameter	TruVal	SpikeVal	ObsVal	RQL	Rec	Difference
372	TRICHLOROFLUOROMETHANE	0	10	9.16		91.6	
398	HEXACHLOROBUTADIENE	0	10	11.1		111	
432	ISOPROPYLBENZENE (CUMENE)	0	10	10.1		101	
628	4-ISOPROPYLTOLUENE (P-ISOPROPYLTOLUENE)	0	10	10.2		102	
493	NAPHTHALENE	0	10	9.72		97.2	
532	N-PROPYLBENZENE	0	10	11		110	
644	SEC-BUTYLBENZENE	0	10	9.93		99.3	
702	TERT-BUTYLBENZENE	0	10	9.71		97.1	
13	1,2,3-TRICHLOROBENZENE	0	10	10.7		107	
16	1,2,4-TRICHLOROBENZENE	0	10	9.68		96.8	
17	1,2,4-TRIMETHYLBENZENE	0	10	10.2		102	
25	1,3,5-TRIMETHYLBENZENE	0	10	10.1		101	

Qualifiers

! Outside Lab Generated Control Limits

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\DATA\D090507\2792D.D Vial: 20
Acq On : 5 Sep 2007 16:30 Operator: REGI
Sample : A781234 MS LQ4570 Inst : GCMS #4
Misc : 9/5/07 Multiplr: 1.00
MS Integration Params: rteint2.p
Quant Time: Sep 05 16:46:55 2007 Quant Results File: DWD.RES

Quant Method : C:\MSDCHEM\1\METHODS\DWD.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Tue Sep 04 10:38:20 2007
Response via : Initial Calibration
DataAcq Meth : DWD

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) FLUOROBENZENE	5.68	96	367623	10.00	UG/L	0.00
38) 2-Bromo-1-chloropropane	7.96	77	145281	10.00	UG/L	0.00
System Monitoring Compounds						
21) Dibromofluoromethane	4.95	113	91299	9.92	UG/L	0.00
Spiked Amount 10.000			Recovery = 99.20%			
23) 1,2-Dichloroethane-d4	5.30	65	119643	10.57	UG/L	0.00
Spiked Amount 10.000			Recovery = 105.70%			
33) Toluene-d8	7.51	98	369046	9.69	UG/L	0.00
Spiked Amount 10.000			Recovery = 96.90%			
51) 4-Bromofluorobenzene	10.66	174	126450	9.83	UG/L	0.00
Spiked Amount 10.000			Recovery = 98.30%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.39	85	36236	6.52	UG/L	100
3) Chloromethane	1.52	50	105760	8.69	UG/L	100
4) VINYL CHLORIDE	1.62	62	117658	9.17	UG/L	98
5) Bromomethane	1.92	94	60189	8.58	UG/L	100
6) Chloroethane	2.02	64	71896	9.00	UG/L	90
7) Trichlorofluoromethane	2.24	101	145218	9.16	UG/L #	79
8) Acetone	2.77	43	94845	21.16	UG/L	94
9) 1,1-DICHLOROETHENE	2.72	96	94383	9.44	UG/L	100
10) Methylene Chloride	3.17	84	113543	10.00	UG/L	86
11) MTBE	3.44	73	586952	18.59	UG/L	100
12) trans-1,2-Dichloroethene	3.44	96	112297	9.66	UG/L	95
13) 1,1-Dichloroethane	3.85	63	199146	9.46	UG/L	100
14) 2-Butanone	4.46	72	31800	22.33	UG/L	63
15) cis-1,2-Dichloroethene	4.45	96	113548	9.44	UG/L	94
16) CHLOROFORM	4.78	83	186244	9.47	UG/L	99
17) Tetrahydrofuran	4.75	42	108353	24.73	UG/L	92
18) Bromochloromethane	4.69	128	55275	9.54	UG/L	88
19) 2,2-Dichloropropane	4.44	77	88384	7.99	UG/L	94
20) 1,1,1-Trichloroethane	4.97	97	154584	9.76	UG/L	98
22) 1,1-Dichloropropene	5.15	110	45809	9.48	UG/L	100
24) Carbon Tetrachloride	5.15	117	133355	9.66	UG/L	94
25) 1,2-Dichloroethane	5.39	62	157047	9.73	UG/L	97
26) Benzene	5.37	78	439143	9.52	UG/L	100
27) Trichloroethene	6.08	130	106154	9.18	UG/L	96
28) 1,2-DICHLOROPROPANE	6.33	63	109308	9.94	UG/L	100
29) Bromodichloromethane	6.66	83	135441	9.67	UG/L	97
30) Dibromomethane	6.46	93	66419	9.97	UG/L	90
31) 4-Methyl-2-Pentanone	7.37	43	272584	19.19	UG/L	97
32) cis-1,3-Dichloropropene	7.18	75	133802	8.62	UG/L	100
34) TOLUENE	7.58	91	453783	9.58	UG/L	100
35) trans-1,3-Dichloropropene	7.86	75	120535	8.92	UG/L	100
36) 1,1,2-Trichloroethane	8.08	97	93748	9.74	UG/L	100
37) 1,2-Dibromoethane	8.71	107	88595	9.53	UG/L	96
39) 2-Hexanone	8.41	43	189675	20.37	UG/L #	95
40) 1,3-Dichloropropane	8.30	76	153257	10.28	UG/L	100
41) Tetrachloroethene	8.27	166	107187	10.02	UG/L	98
42) Dibromochloromethane	8.59	129	98598	10.48	UG/L	100
43) Chlorobenzene	9.35	112	272184	10.10	UG/L	100
44) 1,1,1,2-Tetrachloroethane	9.46	131	92519	9.80	UG/L	100
45) ETHYL BENZENE	9.49	106	137259	9.67	UG/L	75
46) m,p-Xylene	9.64	106	362921	21.09	UG/L #	64

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

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\DATA\D090507\2792D.D Vial: 20
Acq On : 5 Sep 2007 16:30 Operator: REGI
Sample : A781234 MS LQ4570 Inst : GCMS #4
Misc : 9/5/07 Multiplr: 1.00
MS Integration Params: rteint2.p
Quant Time: Sep 05 16:46:55 2007 Quant Results File: DWD.RES

Quant Method : C:\MSDCHEM\1\METHODS\DWD.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Tue Sep 04 10:38:20 2007
Response via : Initial Calibration
DataAcq Meth : DWD

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
47)	o-Xylene	10.09	106	176137	10.59 UG/L		86
48)	Styrene	10.11	104	256228	8.89 UG/L	#	86
49)	Bromoform	10.31	173	70231	9.70 UG/L		100
50)	1,1,2,2-Tetrachloroethane	10.82	83	133388	11.04 UG/L		96
52)	Isopropylbenzene	10.50	105	436260	10.05 UG/L		100
53)	Bromobenzene	10.81	77	174299	9.90 UG/L		100
54)	1,2,3-Trichloropropane	10.86	110	38740	9.89 UG/L		100
55)	n-Propylbenzene	10.94	92	60600	11.03 UG/L		92
56)	1,3,5-Trimethylbenzene	11.12	105	345971	10.11 UG/L		100
57)	2-Chlorotoluene	11.02	126	106524	10.03 UG/L		100
58)	4-Chlorotoluene	11.12	126	117857	10.55 UG/L		100
59)	t-Butylbenzene	11.44	91	184890	9.71 UG/L	#	62
60)	1,2,4-Trimethylbenzene	11.49	105	351057	10.16 UG/L		100
61)	sec-Butylbenzene	11.65	105	397134	9.93 UG/L		100
62)	p-Isopropyltoluene	11.80	119	365858	10.17 UG/L		100
63)	1,3-Dichlorobenzene	11.75	146	219899	10.18 UG/L		100
64)	1,4-Dichlorobenzene	11.83	146	230406	10.25 UG/L		100
65)	n-Butylbenzene	12.18	92	166836	10.17 UG/L		99
66)	1,2-Dichlorobenzene	12.18	146	210371	10.40 UG/L		100
67)	1,2-Dibromo-3-chloropropan	12.87	157	29538	11.34 UG/L		100
68)	1,2,4-Trichlorobenzene	13.58	180	106864	9.68 UG/L		100
69)	Naphthalene	13.78	128	287237	9.72 UG/L		100
70)	Hexachlorobutadiene	13.73	225	45976	11.10 UG/L		100
71)	1,2,3-Trichlorobenzene	13.99	180	100537	10.68 UG/L		100

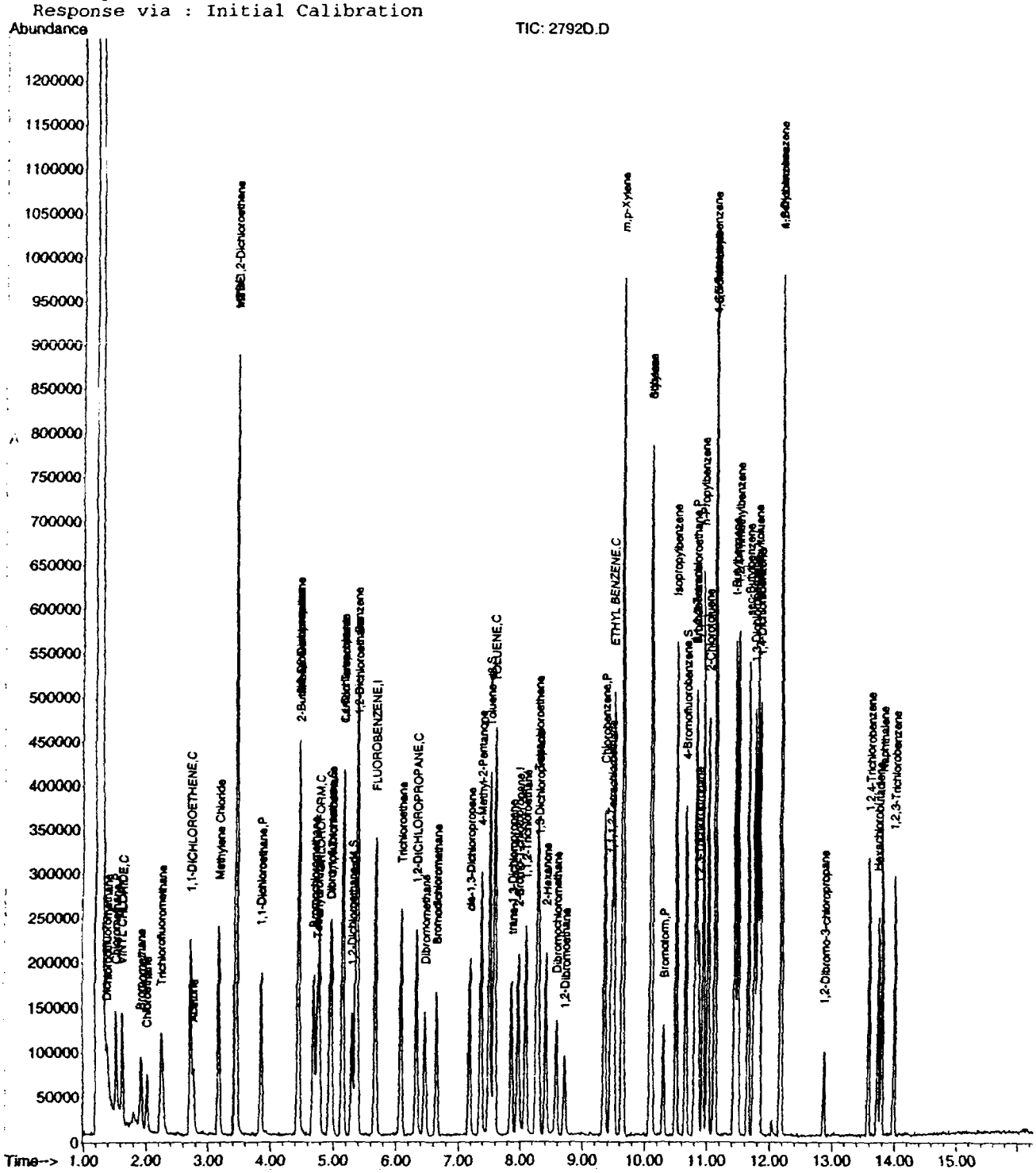
(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\DATA\D090507\2792D.D
Acq On : 5 Sep 2007 16:30
Sample : A781234 MS LQ4570
Misc : 9/5/07
MS Integration Params: rteint2.p
Quant Time: Sep 5 16:46 2007

Vial: 20
Operator: REGI
Inst : GCMS #4
Multiplr: 1.00
Quant Results File: DWD.RES

Method : C:\MSDCHEM\1\METHODS\DWD.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Tue Sep 04 10:38:20 2007
Response via : Initial Calibration



R524408 Heritage Environmental Services, LLC Q1993653

QC Report

QCType DPS01 Duplicate SampleID A781234 DataFile 2793D.D
Date Entered 06Sep07 Duplicate QCSampleID Q1993652 Analyst 1062 R. SHAMP
Analysis Date/Time 05Sep07 16:57:00 Method 296 Matrix 1 Units ug/L

PRM	Parameter	TruVal	SpikeVal	ObsVal	RQL	Rec	Difference
151	BENZENE	0	10	9.01		90.1	5.5
217	CARBON TETRACHLORIDE	0	10	9.35		93.5	3.3
29	1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	0	10	9.75		97.5	5
21	1,2-DICHLOROETHANE	0	10	9.46		94.6	2.8
8	1,1-DICHLOROETHENE	0	10	8.97		89.7	5.1
2	1,1,1-TRICHLOROETHANE	0	10	9.38		93.8	4
750	TRICHLOROETHENE	0	10	9.4		94	2.4
768	VINYL CHLORIDE	0	10	8.41		84.1	8.6
193	BROMOBENZENE	0	10	10.4		104.1	5
195	BROMODICHLOROMETHANE	0	10	9.55		95.5	1.2
197	BROMOFORM	0	10	9.46		94.6	2.5
198	BROMOMETHANE	0	10	8.06		80.6	6.3
231	CHLOROBENZENE	0	10	10		100.3	.7
295	DIBROMOCHLOROMETHANE	0	10	9.92		99.2	5.5
234	CHLOROETHANE	0	10	8.71		87.1	3.3
235	CHLOROFORM	0	10	9.06		90.6	4.4
236	CHLOROMETHANE	0	10	8.45		84.5	2.8
807	2-CHLOROTOLUENE (O-CHLOROTOLUENE)	0	10	10.3		103	2.7
808	4-CHLOROTOLUENE (P-CHLOROTOLUENE)	0	10	10		100	5.4
296	DIBROMOMETHANE	0	10	9.62		96.2	3.6
26	1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)	0	10	10.3		102.5	.7
20	1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	0	10	10.6		106.2	2.1
746	TRANS-1,2-DICHLOROETHENE	0	10	8.89		88.9	8.3
246	CIS-1,2-DICHLOROETHENE	0	10	8.64		86.4	8.8
302	DICHLOROMETHANE (METHYLENE CHLORIDE)	0	10	9.51		95.1	5
7	1,1-DICHLOROETHANE	0	10	9.18		91.8	3
10	1,1-DICHLOROPROPENE	0	10	9.53		95.3	.5
23	1,2-DICHLOROPROPANE	0	10	9.65		96.5	3
27	1,3-DICHLOROPROPANE	0	10	10.6		105.5	2.6
247	CIS-1,3-DICHLOROPROPENE	0	10	8.48		84.8	1.6
747	TRANS-1,3-DICHLOROPROPENE	0	10	8.99		89.9	.8
349	ETHYL BENZENE	0	10	10.1		100.6	4
680	STYRENE	0	10	9.12		91.2	2.6
4	1,1,2-TRICHLOROETHANE	0	10	9.28		92.8	4.8
1	1,1,1,2-TETRACHLOROETHANE	0	10	10		100.2	2.2
3	1,1,2,2-TETRACHLOROETHANE	0	10	11.1		111.3	.8
703	TETRACHLOROETHENE	0	10	10.1		101.4	1.2
14	1,2,3-TRICHLOROPROPANE	0	10	9.81		98.1	.8
724	TOLUENE	0	10	9.19		91.9	4.2
549	O-XYLENE	0	10	10.3		102.8	3
492	M/P-XYLENE	0	10	21		210.1	.4
194	BROMOCHLOROMETHANE	0	10	9.73		97.3	2
519	N-BUTYLBENZENE	0	10	9.8		98	3.7
300	DICHLORODIFLUOROMETHANE	0	10	6.03	!	60.3	7.8

QC Report

PRM	Parameter	TruVal	SpikeVal	ObsVal	RQL	Rec	Difference
372	TRICHLOROFLUOROMETHANE	0	10	8.71		87.1	5
398	HEXACHLOROBUTADIENE	0	10	11.4		114.1	2.8
432	ISOPROPYLBENZENE (CUMENE)	0	10	9.93		99.3	1.2
628	4-ISOPROPYLTOLUENE (P-ISOPROPYLTOLUENE)	0	10	10		100.4	1.3
493	NAPHTHALENE	0	10	10.1		100.6	3.4
532	N-PROPYLBENZENE	0	10	10.2		102	7.5
644	SEC-BUTYLBENZENE	0	10	10.3		102.6	3.3
702	TERT-BUTYLBENZENE	0	10	10.1		100.6	3.5
13	1,2,3-TRICHLOROBENZENE	0	10	10.6		105.9	.8
16	1,2,4-TRICHLOROBENZENE	0	10	10.4		104.3	7.5
17	1,2,4-TRIMETHYLBENZENE	0	10	10.2		102.2	.6
25	1,3,5-TRIMETHYLBENZENE	0	10	9.99		99.9	1.2

Qualifiers

! Outside Lab Generated Control Limits

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\DATA\D090507\2793D.D Vial: 21
Acq On : 5 Sep 2007 16:57 Operator: REGI
Sample : A781234 MSD LQ4570 Inst : GCMS #4
Misc : 9/5/07 Multiplr: 1.00
MS Integration Params: rteint2.p
Quant Time: Sep 05 17:14:11 2007 Quant Results File: DWD.RES

Quant Method : C:\MSDCHEM\1\METHODS\DWD.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Tue Sep 04 10:38:20 2007
Response via : Initial Calibration
DataAcq Meth : DWD

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) FLUOROBENZENE	5.68	96	385332	10.00	UG/L	0.00
38) 2-Bromo-1-chloropropane	7.97	77	149626	10.00	UG/L	0.00
System Monitoring Compounds						
21) Dibromofluoromethane	4.95	113	92507	9.59	UG/L	0.00
Spiked Amount 10.000			Recovery	=	95.90%	
23) 1,2-Dichloroethane-d4	5.30	65	112450	9.48	UG/L	0.00
Spiked Amount 10.000			Recovery	=	94.80%	
33) Toluene-d8	7.51	98	377318	9.45	UG/L	0.00
Spiked Amount 10.000			Recovery	=	94.50%	
51) 4-Bromofluorobenzene	10.66	174	129304	9.76	UG/L	0.00
Spiked Amount 10.000			Recovery	=	97.60%	
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.39	85	35099	6.03	UG/L	100
3) Chloromethane	1.52	50	107808	8.45	UG/L	100
4) VINYL CHLORIDE	1.62	62	113182	8.41	UG/L	99
5) Bromomethane	1.92	94	59251	8.06	UG/L	99
6) Chloroethane	2.01	64	72880	8.71	UG/L	92
7) Trichlorofluoromethane	2.24	101	144675	8.71	UG/L #	74
8) Acetone	2.77	43	97458	20.75	UG/L	96
9) 1,1-DICHLOROETHENE	2.72	96	93940	8.97	UG/L	100
10) Methylene Chloride	3.17	84	113630	9.51	UG/L	87
11) MTBE	3.44	73	596957	18.04	UG/L	100
12) trans-1,2-Dichloroethene	3.44	96	108295	8.89	UG/L	96
13) 1,1-Dichloroethane	3.86	63	202570	9.18	UG/L	100
14) 2-Butanone	4.45	72	28026	18.77	UG/L	83
15) cis-1,2-Dichloroethene	4.45	96	108942	8.64	UG/L	99
16) CHLOROFORM	4.78	83	186836	9.06	UG/L	99
17) Tetrahydrofuran	4.75	42	100822	21.95	UG/L #	87
18) Bromochloromethane	4.69	128	59065	9.73	UG/L	81
19) 2,2-Dichloropropane	4.45	77	88467	7.63	UG/L	96
20) 1,1,1-Trichloroethane	4.97	97	155720	9.38	UG/L	99
22) 1,1-Dichloropropene	5.15	110	48261	9.53	UG/L	100
24) Carbon Tetrachloride	5.15	117	135295	9.35	UG/L	96
25) 1,2-Dichloroethane	5.38	62	160020	9.46	UG/L	98
26) Benzene	5.37	78	435667	9.01	UG/L	100
27) Trichloroethene	6.08	130	113915	9.40	UG/L	93
28) 1,2-DICHLOROPROPANE	6.33	63	111162	9.65	UG/L	100
29) Bromodichloromethane	6.65	83	140160	9.55	UG/L	98
30) Dibromomethane	6.47	93	67197	9.62	UG/L	95
31) 4-Methyl-2-Pentanone	7.37	43	278192	18.69	UG/L	94
32) cis-1,3-Dichloropropene	7.18	75	137914	8.48	UG/L	100
34) TOLUENE	7.58	91	456342	9.19	UG/L	100
35) trans-1,3-Dichloropropene	7.86	75	127350	8.99	UG/L	100
36) 1,1,2-Trichloroethane	8.09	97	93589	9.28	UG/L	100
37) 1,2-Dibromoethane	8.71	107	92537	9.49	UG/L	100
39) 2-Hexanone	8.41	43	208685	21.77	UG/L	99
40) 1,3-Dichloropropane	8.29	76	162003	10.55	UG/L	100
41) Tetrachloroethene	8.27	166	111687	10.14	UG/L	100
42) Dibromochloromethane	8.58	129	96114	9.92	UG/L	100
43) Chlorobenzene	9.35	112	278464	10.03	UG/L	97
44) 1,1,1,2-Tetrachloroethane	9.46	131	97438	10.02	UG/L	100
45) ETHYL BENZENE	9.49	106	147017	10.06	UG/L	78
46) m,p-Xylene	9.64	106	372254	21.01	UG/L #	61

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

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\DATA\D090507\2793D.D
Acq On : 5 Sep 2007 16:57
Sample : A781234 MSD LQ4570
Misc : 9/5/07
MS Integration Params: rteint2.p
Quant Time: Sep 05 17:14:11 2007

Vial: 21
Operator: REGI
Inst : GCMS #4
Multiplr: 1.00
Quant Results File: DWD.RES

Quant Method : C:\MSDCHEM\1\METHODS\DWD.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Tue Sep 04 10:38:20 2007
Response via : Initial Calibration
DataAcq Meth : DWD

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
47)	o-Xylene	10.09	106	176215	10.28	UG/L		81
48)	Styrene	10.11	104	270687	9.12	UG/L		87
49)	Bromoform	10.30	173	70524	9.46	UG/L		100
50)	1,1,2,2-Tetrachloroethane	10.82	83	138512	11.13	UG/L		98
52)	Isopropylbenzene	10.51	105	444015	9.93	UG/L		100
53)	Bromobenzene	10.81	77	188627	10.41	UG/L		100
54)	1,2,3-Trichloropropane	10.86	110	39552	9.81	UG/L		100
55)	n-Propylbenzene	10.94	92	57657	10.19	UG/L		91
56)	1,3,5-Trimethylbenzene	11.12	105	352216	9.99	UG/L		100
57)	2-Chlorotoluene	11.02	126	112673	10.30	UG/L		100
58)	4-Chlorotoluene	11.12	126	115022	10.00	UG/L		100
59)	t-Butylbenzene	11.44	91	197409	10.06	UG/L	#	61
60)	1,2,4-Trimethylbenzene	11.49	105	363695	10.22	UG/L		100
61)	sec-Butylbenzene	11.65	105	422794	10.26	UG/L		100
62)	p-Isopropyltoluene	11.80	119	372145	10.04	UG/L		100
63)	1,3-Dichlorobenzene	11.75	146	228185	10.25	UG/L		100
64)	1,4-Dichlorobenzene	11.83	146	225718	9.75	UG/L		100
65)	n-Butylbenzene	12.18	92	165690	9.80	UG/L		97
66)	1,2-Dichlorobenzene	12.18	146	221278	10.62	UG/L		100
67)	1,2-Dibromo-3-chloropropan	12.88	157	27569	10.28	UG/L		100
68)	1,2,4-Trichlorobenzene	13.58	180	118630	10.43	UG/L		100
69)	Naphthalene	13.78	128	306172	10.06	UG/L		100
70)	Hexachlorobutadiene	13.73	225	48637	11.41	UG/L		100
71)	1,2,3-Trichlorobenzene	13.98	180	102698	10.59	UG/L		100

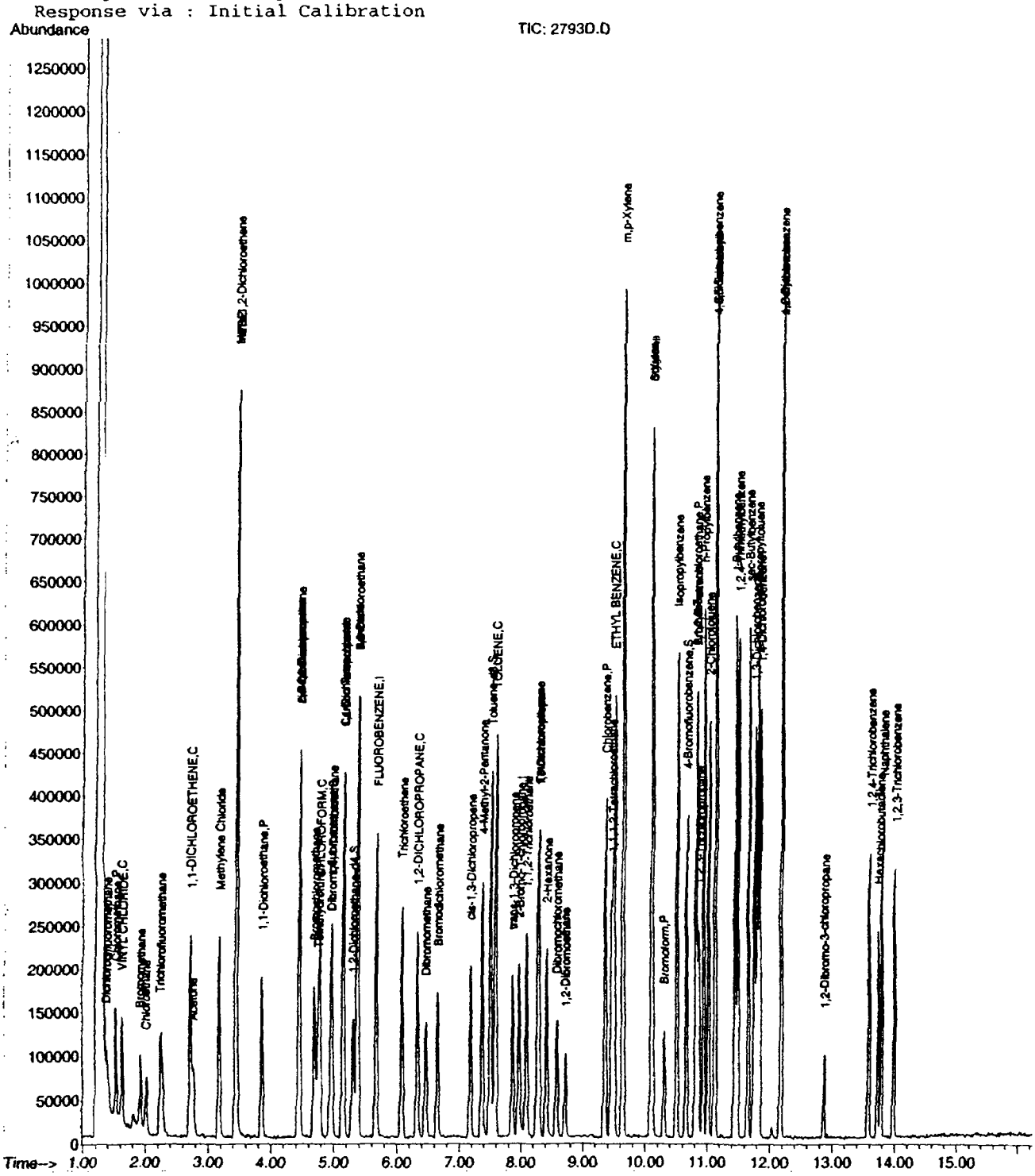
(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\DATA\D090507\2793D.D
Acq On : 5 Sep 2007 16:57
Sample : A781234 MSD LQ4570
Misc : 9/5/07
MS Integration Params: rteint2.p
Quant Time: Sep 5 17:14 2007

Vial: 21
Operator: REGI
Inst : GCMS #4
Multiplr: 1.00
Quant Results File: DWD.RES

Method : C:\MSDCHEM\1\METHODS\DWD.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Tue Sep 04 10:38:20 2007
Response via : Initial Calibration



2793D.D DWD.M Wed Sep 05 17:14:13 2007 Page 3

MSD out of 12hrs

QC Std# 239 Heritage Environmental Services, Indianapolis
Method# 296 MS/MSD Volatile QC Report-EPA Method 524
Drinking Water

Laboratory Sample # : A781238 LQ4574 Q1993654 Q1993655
Data File :2777D. MS Data File : 2794D. MSD Data File : 2795D.
Date/Time : 5 Sep 2007 9:40 MS Date/Time : 5 Sep 2007 17:25 MSD Date/Time : 5 Sep 2007 17:52
Spike Conc : 10 uG/L
Dilution Factor: 1

Compound	Sample Conc	Spike Conc	Spike % Rec	Spike Dup Conc	Spike Dup % Rec	RPD	Min Recovery *	Max
Benzene	0	9.21	92.1	9.15	91.5	0.7	70.0	130.0
Carbon Tetrachloride	0	9.64	96.4	9.55	95.5	0.9	70.0	130.0
1,4-Dichlorobenzene	0	10	100.0	10.1	101.0	1.0	70.0	130.0
1,2-Dichloroethane	0	9.48	94.8	9.12	91.2	3.9	70.0	130.0
1,1-DICHLOROETHENE	0	9.58	95.8	9.67	96.7	0.9	70.0	130.0
1,1,1-Trichloroethane	0	9.63	96.3	9.19	91.9	4.7	70.0	130.0
Trichloroethene	0	9.08	90.8	9.27	92.7	2.1	70.0	130.0
VINYL CHLORIDE	0	8.47	84.7	8.41	84.1	0.7	70.0	130.0
Bromobenzene	0	9.82	98.2	10.1	101.0	2.8	70.0	130.0
Bromodichloromethane	0	9.19	91.9	9.4	94.0	2.3	70.0	130.0
Bromoform	0	8.9	89.0	9.75	97.5	9.1	70.0	130.0
Bromomethane	0	8.23	82.3	7.82	78.2	5.1	70.0	130.0
Chlorobenzene	0	9.63	96.3	10	100.0	3.8	70.0	130.0
Dibromochloromethane	0	10.2	102.0	10.2	102.0	0.0	70.0	130.0
Chloroethane	0	9.15	91.5	8.92	89.2	2.5	70.0	130.0
CHLOROFORM	0	9.29	92.9	9.2	92.0	1.0	70.0	130.0
Chloromethane	0	8.21	82.1	8.4	84.0	2.3	70.0	130.0
2-Chlorotoluene	0	9.97	99.7	10.6	106.0	6.1	70.0	130.0
4-Chlorotoluene	0	10.2	102.0	10.4	104.0	1.9	70.0	130.0
Dibromomethane	0	9.6	96.0	9.4	94.0	2.1	70.0	130.0
1,3-Dichlorobenzene	0	10.3	103.0	10.3	103.0	0.0	70.0	130.0
1,2-Dichlorobenzene	0	10.3	103.0	10.7	107.0	3.8	70.0	130.0
trans-1,2-Dichloroethene	0	9.35	93.5	9.41	94.1	0.6	70.0	130.0
cis-1,2-Dichloroethene	0	9.26	92.6	9.55	95.5	3.1	70.0	130.0
Methylene Chloride	0	9.58	95.8	9.48	94.8	1.0	70.0	130.0
1,1-Dichloroethane	0	9.31	93.1	9.47	94.7	1.7	70.0	130.0
1,1-Dichloropropene	0	9.31	93.1	9.58	95.8	2.9	70.0	130.0
1,2-DICHLOROPROPANE	0	9.38	93.8	9.51	95.1	1.4	70.0	130.0
1,3-Dichloropropane	0	10.3	103.0	10.8	108.0	4.7	70.0	130.0
cis-1,3-Dichloropropene	0	8.87	88.7	8.71	87.1	1.8	70.0	130.0
trans-1,3-Dichloropropene	0	9.12	91.2	8.86	88.6	2.9	70.0	130.0
2,2-Dichloropropane	0	8.06	80.6	7.77	77.7	3.7	70.0	130.0
ETHYL BENZENE	0	9.56	95.6	10.2	102.0	6.5	70.0	130.0
Styrene	0	9.88	98.8	9.89	98.9	0.1	70.0	130.0
1,1,2-Trichloroethane	0	9.54	95.4	9.27	92.7	2.9	70.0	130.0
1,1,1,2-Tetrachloroethane	0	9.9	99.0	9.47	94.7	4.4	70.0	130.0
1,1,2,2-Tetrachloroethane	0	11.2	112.0	11.3	113.0	0.9	70.0	130.0
Tetrachloroethene	0	10.1	101.0	10.3	103.0	2.0	70.0	130.0
1,2,3-Trichloropropane	0	10.2	102.0	10.9	109.0	6.6	70.0	130.0

QC Std# 239 Heritage Environmental Services, Indianapolis
Method# 296 MS/MSD Volatile QC Report-EPA Method 524
Drinking Water

Laboratory Sample # : A781238 LQ4574
Data File :2777D. MS Data File : 2794D. MSD Data File : 2795D.
Date/Time : 5 Sep 2007 9:40 MS Date/Time : 5 Sep 2007 17:25 MSD Date/Time : 5 Sep 2007 17:52
Spike Conc : 10 uG/L
Dilution Factor: 1

Compound	Sample Conc	Spike Conc	Spike % Rec	Spike Dup Conc	Spike Dup % Rec	RPD	Min Recovery *	Max
TOLUENE	0	9.36	93.6	9.19	91.9	1.8	70.0	130.0
o-Xylene	0	10.1	101.0	10.5	105.0	3.9	70.0	130.0
m,p-Xylene	0	20.6	103.0	21	105.0	1.9	70.0	130.0
Bromochloromethane	0	9.78	97.8	9.56	95.6	2.3	70.0	130.0
n-Butylbenzene	0	9.9	99.0	9.83	98.3	0.7	70.0	130.0
Dichlorodifluoromethane	0	6.67	66.7 *	6.11	61.1 *	8.8	70.0	130.0
Trichlorofluoromethane	0	8.7	87.0	8.61	86.1	1.0	70.0	130.0
Hexachlorobutadiene	0	11.7	117.0	12	120.0	2.5	70.0	130.0
Isopropylbenzene	0	9.84	98.4	9.96	99.6	1.2	70.0	130.0
p-Isopropyltoluene	0	9.88	98.8	10.2	102.0	3.2	70.0	130.0
Naphthalene	0	10.9	109.0	10.4	104.0	4.7	70.0	130.0
n-Propylbenzene	0	10.3	103.0	9.87	98.7	4.3	70.0	130.0
sec-Butylbenzene	0	10.2	102.0	10.2	102.0	0.0	70.0	130.0
t-Butylbenzene	0	9.73	97.3	9.94	99.4	2.1	70.0	130.0
1,2,3-Trichlorobenzene	0	12	120.0	11	110.0	8.7	70.0	130.0
1,2,4-Trichlorobenzene	0	11.1	111.0	10.1	101.0	9.4	70.0	130.0
1,2,4-Trimethylbenzene	0	10.1	101.0	10.5	105.0	3.9	70.0	130.0
1,3,5-Trimethylbenzene	0	9.85	98.5	10.1	101.0	2.5	70.0	130.0

* Advisory Limits Updated 9/05 , 80 - 120% minimum range.

R524408 Heritage Environmental Services, LLC Q1993654

QC Report

QCType SPI01 Duplicate SampleID A781238 DataFile 2794D.D
Date Entered 06Sep07 Duplicate QCSampleID Analyst 1062 R. SHAMP
Analysis Date/Time 05Sep07 17:25:00 Method 296 Matrix 1 Units ug/L

PRM	Parameter	TruVal	SpikeVal	ObsVal	RQL	Rec	Difference
151	BENZENE	0	10	9.21		92.1	
217	CARBON TETRACHLORIDE	0	10	9.64		96.4	
29	1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	0	10	10		100	
21	1,2-DICHLOROETHANE	0	10	9.48		94.8	
8	1,1-DICHLOROETHENE	0	10	9.58		95.8	
2	1,1,1-TRICHLOROETHANE	0	10	9.63		96.3	
750	TRICHLOROETHENE	0	10	9.08		90.8	
768	VINYL CHLORIDE	0	10	8.47		84.7	
193	BROMOBENZENE	0	10	9.82		98.2	
195	BROMODICHLOROMETHANE	0	10	9.19		91.9	
197	BROMOFORM	0	10	8.9		89	
198	BROMOMETHANE	0	10	8.23		82.3	
231	CHLOROBENZENE	0	10	9.63		96.3	
295	DIBROMOCHLOROMETHANE	0	10	10.2		102	
234	CHLOROETHANE	0	10	9.15		91.5	
235	CHLOROFORM	0	10	9.29		92.9	
236	CHLOROMETHANE	0	10	8.21		82.1	
807	2-CHLOROTOLUENE (O-CHLOROTOLUENE)	0	10	9.97		99.7	
808	4-CHLOROTOLUENE (P-CHLOROTOLUENE)	0	10	10.2		102	
296	DIBROMOMETHANE	0	10	9.6		96	
26	1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)	0	10	10.3		103	
20	1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	0	10	10.3		103	
746	TRANS-1,2-DICHLOROETHENE	0	10	9.35		93.5	
246	CIS-1,2-DICHLOROETHENE	0	10	9.26		92.6	
302	DICHLOROMETHANE (METHYLENE CHLORIDE)	0	10	9.58		95.8	
7	1,1-DICHLOROETHANE	0	10	9.31		93.1	
10	1,1-DICHLOROPROPENE	0	10	9.31		93.1	
23	1,2-DICHLOROPROPANE	0	10	9.38		93.8	
27	1,3-DICHLOROPROPANE	0	10	10.3		103	
247	CIS-1,3-DICHLOROPROPENE	0	10	8.87		88.7	
747	TRANS-1,3-DICHLOROPROPENE	0	10	9.12		91.2	
349	ETHYL BENZENE	0	10	9.56		95.6	
680	STYRENE	0	10	9.88		98.8	
4	1,1,2-TRICHLOROETHANE	0	10	9.54		95.4	
1	1,1,1,2-TETRACHLOROETHANE	0	10	9.9		99	
3	1,1,2,2-TETRACHLOROETHANE	0	10	11.2		112	
703	TETRACHLOROETHENE	0	10	10.1		101	
14	1,2,3-TRICHLOROPROPANE	0	10	10.2		102	
724	TOLUENE	0	10	9.36		93.6	
549	O-XYLENE	0	10	10.1		101	
492	M/P-XYLENE	0	10	20.6		206	
194	BROMOCHLOROMETHANE	0	10	9.78		97.8	
519	N-BUTYLBENZENE	0	10	9.9		99	
300	DICHLORODIFLUOROMETHANE	0	10	6.67	!	66.7	

HP 9/6/07

QC Report

PRM	Parameter	TruVal	SpikeVal	ObsVal	RQL	Rec	Difference
372	TRICHLOROFLUOROMETHANE	0	10	8.7		87	
398	HEXACHLOROBUTADIENE	0	10	11.7		117	
432	ISOPROPYLBENZENE (CUMENE)	0	10	9.84		98.4	
628	4-ISOPROPYLTOLUENE (P-ISOPROPYLTOLUENE)	0	10	9.88		98.8	
493	NAPHTHALENE	0	10	10.9		109	
532	N-PROPYLBENZENE	0	10	10.3		103	
644	SEC-BUTYLBENZENE	0	10	10.2		102	
702	TERT-BUTYLBENZENE	0	10	9.73		97.3	
13	1,2,3-TRICHLOROBENZENE	0	10	12		120	
16	1,2,4-TRICHLOROBENZENE	0	10	11.1		111	
17	1,2,4-TRIMETHYLBENZENE	0	10	10.1		101	
25	1,3,5-TRIMETHYLBENZENE	0	10	9.85		98.5	

Comment MSD out of the 12hrs.

Qualifiers

! Outside Lab Generated Control Limits

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\DATA\D090507\2794D.D Vial: 22
Acq On : 5 Sep 2007 17:25 Operator: REGI
Sample : A781238 MS LQ4574 Inst : GCMS #4
Misc : 9/5/07 Multiplr: 1.00
MS Integration Params: rteint2.p
Quant Time: Sep 05 17:41:18 2007 Quant Results File: DWD.RES

Quant Method : C:\MSDCHEM\1\METHODS\DWD.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Tue Sep 04 10:38:20 2007
Response via : Initial Calibration
DataAcq Meth : DWD

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) FLUOROBENZENE	5.67	96	382287	10.00	UG/L	0.00
38) 2-Bromo-1-chloropropane	7.97	77	152581	10.00	UG/L	0.00
System Monitoring Compounds						
21) Dibromofluoromethane	4.95	113	90157	9.42	UG/L	0.00
Spiked Amount 10.000			Recovery	=	94.20%	
23) 1,2-Dichloroethane-d4	5.30	65	115362	9.80	UG/L	0.00
Spiked Amount 10.000			Recovery	=	98.00%	
33) Toluene-d8	7.51	98	373465	9.43	UG/L	0.00
Spiked Amount 10.000			Recovery	=	94.30%	
51) 4-Bromofluorobenzene	10.66	174	128259	9.50	UG/L	0.00
Spiked Amount 10.000			Recovery	=	95.00%	
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.39	85	38556	6.67	UG/L	100
3) Chloromethane	1.52	50	103912	8.21	UG/L	100
4) VINYL CHLORIDE	1.62	62	113123	8.47	UG/L	94
5) Bromomethane	1.92	94	60059	8.23	UG/L	96
6) Chloroethane	2.01	64	76001	9.15	UG/L	95
7) Trichlorofluoromethane	2.25	101	143470	8.70	UG/L #	74
8) Acetone	2.77	43	90937	19.54	UG/L	93
9) 1,1-DICHLOROETHENE	2.72	96	99588	9.58	UG/L	100
10) Methylene Chloride	3.17	84	113437	9.58	UG/L	86
11) MTBE	3.44	73	605074	18.43	UG/L	100
12) trans-1,2-Dichloroethene	3.44	96	112962	9.35	UG/L	98
13) 1,1-Dichloroethane	3.86	63	203880	9.31	UG/L	100
14) 2-Butanone	4.46	72	34103	23.02	UG/L #	52
15) cis-1,2-Dichloroethene	4.45	96	115766	9.26	UG/L	96
16) CHLOROFORM	4.78	83	190057	9.29	UG/L	99
17) Tetrahydrofuran	4.74	42	103384	22.69	UG/L #	87
18) Bromochloromethane	4.69	128	58893	9.78	UG/L	78
19) 2,2-Dichloropropane	4.45	77	92802	8.06	UG/L #	89
20) 1,1,1-Trichloroethane	4.97	97	158642	9.63	UG/L	96
22) 1,1-Dichloropropene	5.15	110	46779	9.31	UG/L	100
24) Carbon Tetrachloride	5.15	117	138309	9.64	UG/L	87
25) 1,2-Dichloroethane	5.38	62	159045	9.48	UG/L	98
26) Benzene	5.37	78	441968	9.21	UG/L	100
27) Trichloroethene	6.08	130	109147	9.08	UG/L	94
28) 1,2-DICHLOROPROPANE	6.33	63	107258	9.38	UG/L	100
29) Bromodichloromethane	6.66	83	133839	9.19	UG/L	96
30) Dibromomethane	6.46	93	66526	9.60	UG/L	94
31) 4-Methyl-2-Pentanone	7.37	43	275575	18.66	UG/L	94
32) cis-1,3-Dichloropropene	7.18	75	143115	8.87	UG/L	100
34) TOLUENE	7.58	91	460962	9.36	UG/L	100
35) trans-1,3-Dichloropropene	7.86	75	128152	9.12	UG/L	100
36) 1,1,2-Trichloroethane	8.09	97	95474	9.54	UG/L	100
37) 1,2-Dibromoethane	8.71	107	93793	9.70	UG/L	98
39) 2-Hexanone	8.41	43	194658	19.91	UG/L	96
40) 1,3-Dichloropropane	8.29	76	161923	10.34	UG/L	100
41) Tetrachloroethene	8.26	166	113252	10.08	UG/L	98
42) Dibromochloromethane	8.58	129	100412	10.17	UG/L	100
43) Chlorobenzene	9.35	112	272541	9.63	UG/L	96
44) 1,1,1,2-Tetrachloroethane	9.47	131	98195	9.90	UG/L	100
45) ETHYL BENZENE	9.50	106	142474	9.56	UG/L	75
46) m,p-Xylene	9.64	106	372070	20.59	UG/L #	61

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

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\DATA\D090507\2794D.D Vial: 22
Acq On : 5 Sep 2007 17:25 Operator: REGI
Sample : A781238 MS LQ4574 Inst : GCMS #4
Misc : 9/5/07 Multiplr: 1.00
MS Integration Params: rteint2.p
Quant Time: Sep 05 17:41:18 2007 Quant Results File: DWD.RES

Quant Method : C:\MSDCHEM\1\METHODS\DWD.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Tue Sep 04 10:38:20 2007
Response via : Initial Calibration
DataAcq Meth : DWD

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
47)	o-Xylene	10.10	106	176477	10.10 UG/L		79
48)	Styrene	10.11	104	299135	9.88 UG/L		91
49)	Bromoform	10.30	173	67679	8.90 UG/L		100
50)	1,1,2,2-Tetrachloroethane	10.82	83	142065	11.19 UG/L		96
52)	Isopropylbenzene	10.50	105	448664	9.84 UG/L		100
53)	Bromobenzene	10.81	77	181585	9.82 UG/L		100
54)	1,2,3-Trichloropropane	10.86	110	42076	10.23 UG/L		100
55)	n-Propylbenzene	10.93	92	59427	10.30 UG/L		93
56)	1,3,5-Trimethylbenzene	11.12	105	354028	9.85 UG/L		100
57)	2-Chlorotoluene	11.01	126	111238	9.97 UG/L		100
58)	4-Chlorotoluene	11.12	126	119474	10.19 UG/L		100
59)	t-Butylbenzene	11.44	91	194640	9.73 UG/L	#	66
60)	1,2,4-Trimethylbenzene	11.49	105	365541	10.07 UG/L		100
61)	sec-Butylbenzene	11.65	105	427525	10.18 UG/L		100
62)	p-Isopropyltoluene	11.80	119	373385	9.88 UG/L		100
63)	1,3-Dichlorobenzene	11.75	146	233631	10.30 UG/L		100
64)	1,4-Dichlorobenzene	11.83	146	236590	10.02 UG/L		100
65)	n-Butylbenzene	12.18	92	170646	9.90 UG/L		97
66)	1,2-Dichlorobenzene	12.18	146	218063	10.26 UG/L		100
67)	1,2-Dibromo-3-chloropropan	12.87	157	30742	11.24 UG/L		100
68)	1,2,4-Trichlorobenzene	13.58	180	128730	11.10 UG/L		100
69)	Naphthalene	13.78	128	337303	10.86 UG/L		100
70)	Hexachlorobutadiene	13.73	225	50707	11.67 UG/L		100
71)	1,2,3-Trichlorobenzene	13.98	180	118657	12.00 UG/L		100

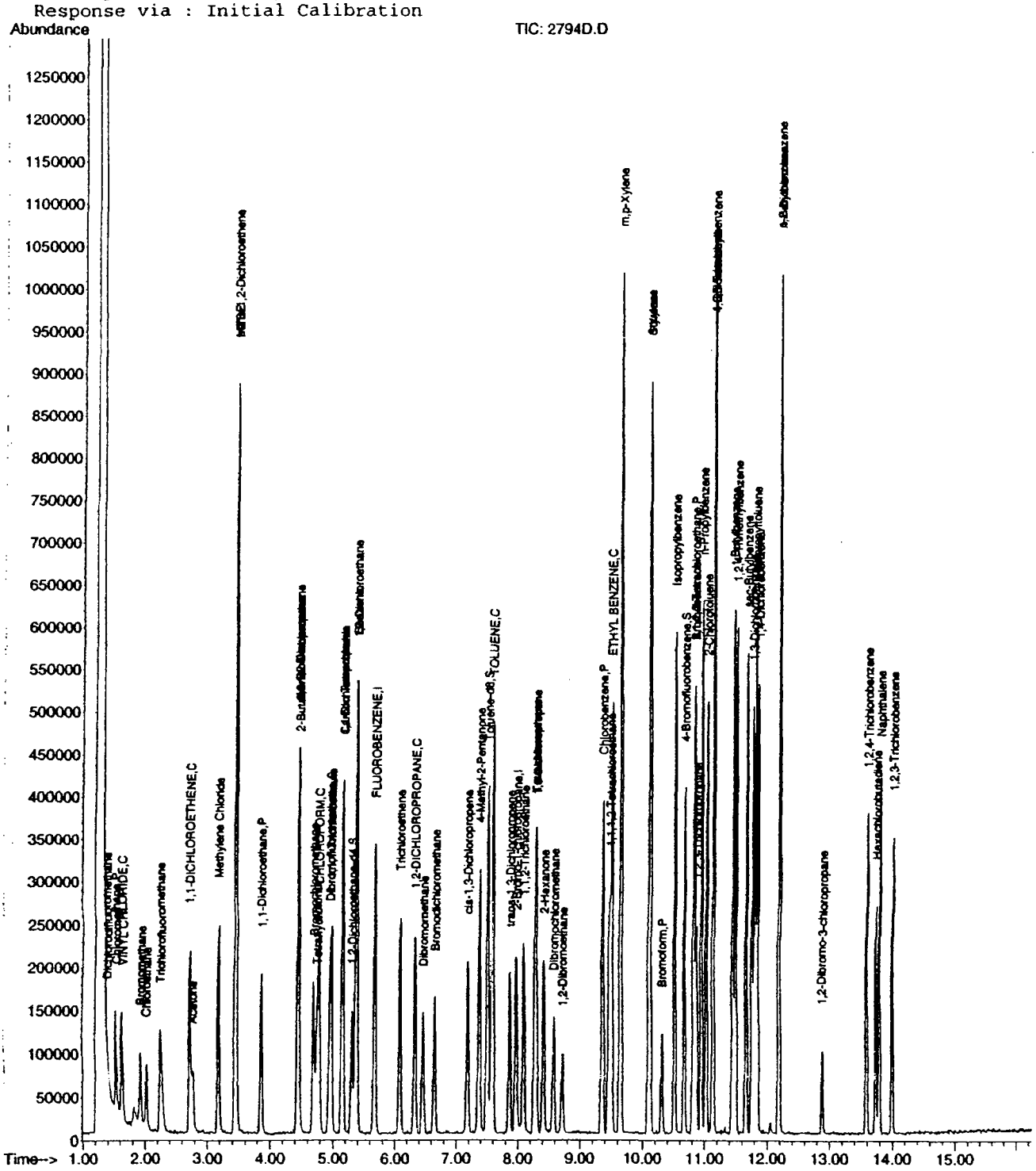
(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\DATA\D090507\2794D.D
Acq On : 5 Sep 2007 17:25
Sample : A781238 MS LQ4574
Misc : 9/5/07
MS Integration Params: rteint2.p
Quant Time: Sep 5 17:41 2007

Vial: 22
Operator: REGI
Inst : GCMS #4
Multiplr: 1.00
Quant Results File: DWD.RES

Method : C:\MSDCHEM\1\METHODS\DWD.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Tue Sep 04 10:38:20 2007
Response via : Initial Calibration



R524408 Heritage Environmental Services, LLC Q1993655

QC Report

QCType DPS01 Duplicate SampleID A781238 DataFile 2795D.D
Date Entered 06Sep07 Duplicate QCSampleID Q1993654 Analyst 1062 R. SHAMP
Analysis Date/Time 05Sep07 17:52:00 Method 296 Matrix 1 Units ug/L

PRM	Parameter	TruVal	SpikeVal	ObsVal	RQL	Rec	Difference
151	BENZENE	0	10	9.15		91.5	.7
217	CARBON TETRACHLORIDE	0	10	9.55		95.5	.9
29	1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	0	10	10.1		100.5	.3
21	1,2-DICHLOROETHANE	0	10	9.12		91.2	3.9
8	1,1-DICHLOROETHENE	0	10	9.67		96.7	.9
2	1,1,1-TRICHLOROETHANE	0	10	9.19		91.9	4.7
750	TRICHLOROETHENE	0	10	9.27		92.7	2.1
768	VINYL CHLORIDE	0	10	8.41		84.1	.7
193	BROMOBENZENE	0	10	10.1		100.9	2.7
195	BROMODICHLOROMETHANE	0	10	9.4		94	2.3
197	BROMOFORM	0	10	9.75		97.5	9.1
198	BROMOMETHANE	0	10	7.82		78.2	5.1
231	CHLOROBENZENE	0	10	10		100.4	4.2
295	DIBROMOCHLOROMETHANE	0	10	10.2		101.6	.1
234	CHLOROETHANE	0	10	8.92		89.2	2.5
235	CHLOROFORM	0	10	9.2		92	1
236	CHLOROMETHANE	0	10	8.4		84	2.3
807	2-CHLOROTOLUENE (O-CHLOROTOLUENE)	0	10	10.6		106.2	6.3
808	4-CHLOROTOLUENE (P-CHLOROTOLUENE)	0	10	10.4		103.6	1.7
296	DIBROMOMETHANE	0	10	9.4		94	2.1
26	1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)	0	10	10.3		102.5	.5
20	1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	0	10	10.7		107.1	4.3
746	TRANS-1,2-DICHLOROETHENE	0	10	9.41		94.1	.6
246	CIS-1,2-DICHLOROETHENE	0	10	9.55		95.5	3.1
302	DICHLOROMETHANE (METHYLENE CHLORIDE)	0	10	9.48		94.8	1
7	1,1-DICHLOROETHANE	0	10	9.47		94.7	1.7
10	1,1-DICHLOROPROPENE	0	10	9.58		95.8	2.9
23	1,2-DICHLOROPROPANE	0	10	9.51		95.1	1.4
27	1,3-DICHLOROPROPANE	0	10	10.8		108.1	4.4
247	CIS-1,3-DICHLOROPROPENE	0	10	8.71		87.1	1.8
747	TRANS-1,3-DICHLOROPROPENE	0	10	8.86		88.6	2.9
349	ETHYL BENZENE	0	10	10.2		101.6	6.1
680	STYRENE	0	10	9.89		98.9	.1
4	1,1,2-TRICHLOROETHANE	0	10	9.27		92.7	2.9
1	1,1,1,2-TETRACHLOROETHANE	0	10	9.47		94.7	4.4
3	1,1,2,2-TETRACHLOROETHANE	0	10	11.3		113.3	1.2
703	TETRACHLOROETHENE	0	10	10.3		103.4	2.5
14	1,2,3-TRICHLOROPROPANE	0	10	10.9		109.1	6.4
724	TOLUENE	0	10	9.19		91.9	1.8
549	O-XYLENE	0	10	10.5		105.3	4.2
492	M/P-XYLENE	0	10	21		209.6	1.8
194	BROMOCHLOROMETHANE	0	10	9.56		95.6	2.3
519	N-BUTYLBENZENE	0	10	9.83		98.3	.7
300	DICHLORODIFLUOROMETHANE	0	10	6.11	!	61.1	8.8

QC Report

PRM	Parameter	TruVal	SpikeVal	ObsVal	RQL	Rec	Difference
372	TRICHLOROFLUOROMETHANE	0	10	8.61		86.1	1
398	HEXACHLOROBUTADIENE	0	10	12		120	2.8
432	ISOPROPYLBENZENE (CUMENE)	0	10	9.96		99.6	1.2
628	4-ISOPROPYLTOLUENE (P-ISOPROPYLTOLUENE)	0	10	10.2		101.5	2.7
493	NAPHTHALENE	0	10	10.4		104.2	4.1
532	N-PROPYLBENZENE	0	10	9.87		98.7	4.3
644	SEC-BUTYLBENZENE	0	10	10.2		102	.2
702	TERT-BUTYLBENZENE	0	10	9.94		99.4	2.1
13	1,2,3-TRICHLOROBENZENE	0	10	11		110.3	8.4
16	1,2,4-TRICHLOROBENZENE	0	10	10.1		101.3	9.1
17	1,2,4-TRIMETHYLBENZENE	0	10	10.5		104.8	4
25	1,3,5-TRIMETHYLBENZENE	0	10	10.1		101.1	2.6

Comment MSD out of 12hrs.

Qualifiers

! Outside Lab Generated Control Limits

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\DATA\D090507\2795D.D Vial: 23
Acq On : 5 Sep 2007 17:52 Operator: REGI
Sample : A781238 MSD LQ4574 Inst : GCMS #4
Misc : 9/5/07 Multiplr: 1.00
MS Integration Params: rteint2.p
Quant Time: Sep 05 18:08:31 2007 Quant Results File: DWD.RES

Quant Method : C:\MSDCHEM\1\METHODS\DWD.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Tue Sep 04 10:38:20 2007
Response via : Initial Calibration
DataAcq Meth : DWD

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) FLUOROBENZENE	5.67	96	389110	10.00	UG/L	0.00
38) 2-Bromo-1-chloropropane	7.96	77	152116	10.00	UG/L	0.00
System Monitoring Compounds						
21) Dibromofluoromethane	4.94	113	96463	9.90	UG/L	0.00
Spiked Amount 10.000			Recovery	=	99.00%	
23) 1,2-Dichloroethane-d4	5.30	65	116194	9.70	UG/L	0.00
Spiked Amount 10.000			Recovery	=	97.00%	
33) Toluene-d8	7.51	98	375663	9.32	UG/L	0.00
Spiked Amount 10.000			Recovery	=	93.20%	
51) 4-Bromofluorobenzene	10.67	174	130837	9.72	UG/L	0.00
Spiked Amount 10.000			Recovery	=	97.20%	
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.39	85	35941	6.11	UG/L	100
3) Chloromethane	1.52	50	108255	8.40	UG/L	100
4) VINYL CHLORIDE	1.63	62	114332	8.41	UG/L	97
5) Bromomethane	1.92	94	58064	7.82	UG/L	98
6) Chloroethane	2.02	64	75429	8.92	UG/L	95
7) Trichlorofluoromethane	2.24	101	144547	8.61	UG/L #	79
8) Acetone	2.77	43	93915	19.82	UG/L	92
9) 1,1-DICHLOROETHENE	2.72	96	102356	9.67	UG/L	100
10) Methylene Chloride	3.17	84	114351	9.48	UG/L	85
11) MTBE	3.44	73	625349	18.71	UG/L	100
12) trans-1,2-Dichloroethene	3.44	96	115703	9.41	UG/L	97
13) 1,1-Dichloroethane	3.85	63	211068	9.47	UG/L	100
14) 2-Butanone	4.45	72	31166	20.67	UG/L	81
15) cis-1,2-Dichloroethene	4.45	96	121616	9.55	UG/L	94
16) CHLOROFORM	4.77	83	191527	9.20	UG/L	99
17) Tetrahydrofuran	4.74	42	107710	23.22	UG/L #	83
18) Bromochloromethane	4.69	128	58640	9.56	UG/L	90
19) 2,2-Dichloropropane	4.45	77	91074	7.77	UG/L	89
20) 1,1,1-Trichloroethane	4.97	97	154072	9.19	UG/L	99
22) 1,1-Dichloropropene	5.15	110	48970	9.58	UG/L	100
24) Carbon Tetrachloride	5.15	117	139458	9.55	UG/L	91
25) 1,2-Dichloroethane	5.38	62	155781	9.12	UG/L	94
26) Benzene	5.37	78	446683	9.15	UG/L	100
27) Trichloroethene	6.08	130	113507	9.27	UG/L	94
28) 1,2-DICHLOROPROPANE	6.33	63	110616	9.51	UG/L	100
29) Bromodichloromethane	6.65	83	139370	9.40	UG/L	99
30) Dibromomethane	6.46	93	66290	9.40	UG/L	92
31) 4-Methyl-2-Pentanone	7.37	43	290047	19.29	UG/L	97
32) cis-1,3-Dichloropropene	7.18	75	143095	8.71	UG/L	100
34) TOLUENE	7.58	91	460644	9.19	UG/L	100
35) trans-1,3-Dichloropropene	7.86	75	126692	8.86	UG/L	100
36) 1,1,2-Trichloroethane	8.08	97	94386	9.27	UG/L	100
37) 1,2-Dibromoethane	8.71	107	96035	9.76	UG/L	98
39) 2-Hexanone	8.41	43	210067	21.55	UG/L	95
40) 1,3-Dichloropropane	8.29	76	168735	10.81	UG/L	100
41) Tetrachloroethene	8.27	166	115814	10.34	UG/L	97
42) Dibromochloromethane	8.58	129	100070	10.16	UG/L	100
43) Chlorobenzene	9.35	112	283528	10.04	UG/L	98
44) 1,1,1,2-Tetrachloroethane	9.46	131	93652	9.47	UG/L	100
45) ETHYL BENZENE	9.50	106	150919	10.16	UG/L	79
46) m,p-Xylene	9.64	106	377594	20.96	UG/L #	62

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

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\DATA\D090507\2795D.D Vial: 23
Acq On : 5 Sep 2007 17:52 Operator: REGI
Sample : A781238 MSD LQ4574 Inst : GCMS #4
Misc : 9/5/07 Multiplr: 1.00
MS Integration Params: rteint2.p
Quant Time: Sep 05 18:08:31 2007 Quant Results File: DWD.RES

Quant Method : C:\MSDCHEM\1\METHODS\DWD.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Tue Sep 04 10:38:20 2007
Response via : Initial Calibration
DataAcq Meth : DWD

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
47)	o-Xylene	10.09	106	183479	10.53	UG/L		83
48)	Styrene	10.11	104	298410	9.89	UG/L		88
49)	Bromoform	10.30	173	73865	9.75	UG/L		100
50)	1,1,2,2-Tetrachloroethane	10.82	83	143332	11.33	UG/L		96
52)	Isopropylbenzene	10.51	105	452568	9.96	UG/L		100
53)	Bromobenzene	10.81	77	185881	10.09	UG/L		100
54)	1,2,3-Trichloropropane	10.86	110	44712	10.91	UG/L		100
55)	n-Propylbenzene	10.94	92	56791	9.87	UG/L		77
56)	1,3,5-Trimethylbenzene	11.12	105	362399	10.11	UG/L		100
57)	2-Chlorotoluene	11.02	126	118190	10.62	UG/L		100
58)	4-Chlorotoluene	11.12	126	121148	10.36	UG/L		100
59)	t-Butylbenzene	11.44	91	198210	9.94	UG/L	#	65
60)	1,2,4-Trimethylbenzene	11.49	105	379363	10.48	UG/L		100
61)	sec-Butylbenzene	11.65	105	427291	10.20	UG/L		100
62)	p-Isopropyltoluene	11.80	119	382301	10.15	UG/L		100
63)	1,3-Dichlorobenzene	11.75	146	231844	10.25	UG/L		100
64)	1,4-Dichlorobenzene	11.83	146	236676	10.05	UG/L		100
65)	n-Butylbenzene	12.18	92	168952	9.83	UG/L		93
66)	1,2-Dichlorobenzene	12.18	146	226971	10.71	UG/L		100
67)	1,2-Dibromo-3-chloropropan	12.87	157	28061	10.29	UG/L		100
68)	1,2,4-Trichlorobenzene	13.58	180	117179	10.13	UG/L		100
69)	Naphthalene	13.78	128	322581	10.42	UG/L		100
70)	Hexachlorobutadiene	13.73	225	51968	12.00	UG/L		100
71)	1,2,3-Trichlorobenzene	13.98	180	108806	11.03	UG/L		100

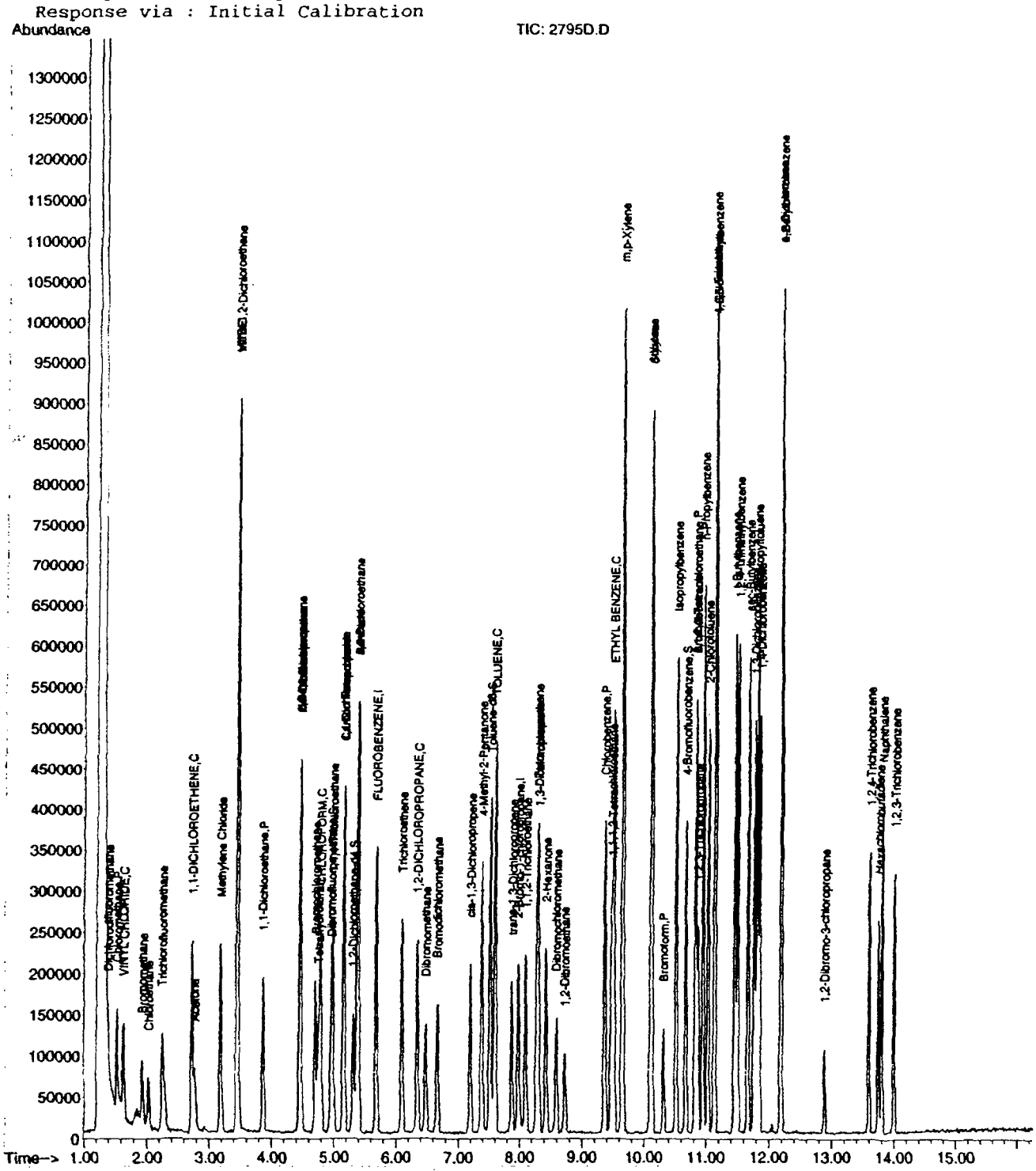
(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\DATA\D090507\2795D.D
Acq On : 5 Sep 2007 17:52
Sample : A781238 MSD LQ4574
Misc : 9/5/07
MS Integration Params: rteint2.p
Quant Time: Sep 5 18:08 2007

Vial: 23
Operator: REGI
Inst : GCMS #4
Multiplr: 1.00
Quant Results File: DWD.RES

Method : C:\MSDCHEM\1\METHODS\DWD.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Tue Sep 04 10:38:20 2007
Response via : Initial Calibration



2795D.D DWD.M Wed Sep 05 18:08:33 2007 Page 3

040

5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

EPA Method 524.2 BROMOFLUOROBENZENE (BFB)

Lab Name: _____ Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Lab File ID: 2801D.D BFB Injection Date: 09/06/07

Instrument ID: GCMS#4 BFB Injection Time: 05:46

GC Column: CAP ID: 0.18 (mm) Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	23.6
75	30.0 - 80.0% of mass 95	49.4
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.1
173	Less than 2.0% of mass 174	0.7 (0.8)1
174	50.0 - 100.0% of mass 95	88.1
175	5.0 - 9.0% of mass 174	7.4 (8.4)1
176	95.0 - 101.0% of mass 174	84.1 (95.4)1
177	5.0 - 9.0% of mass 176	6.2 (7.4)2

1-Value is % mass 174 2-Value is % mass 176

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD010	DW STD010	2802D.D	09/06/07	06:19
02	VSTD02	DW STD02	2803D.D	09/06/07	06:50
03	DW BLANK01	DW BLANK	2804D.D	09/06/07	07:22
04	A781256	A781256 LQ4589	2805D.D	09/06/07	07:53
05	A781257	A781257 LQ4590	2806D.D	09/06/07	08:21
06	A781258	A781258 LQ4591	2807D.D	09/06/07	08:48
07	A781259	A781259 LQ4592	2808D.D	09/06/07	09:15
08	A781260	A781260 LQ4593	2809D.D	09/06/07	09:42
09	A781261	A781261 LQ4594	2810D.D	09/06/07	10:10
10	A781262	A781262 LQ4595	2811D.D	09/06/07	10:37
11	A781263	A781263 LQ4598	2812D.D	09/06/07	11:04
12	A781264	A781264 LQ4599	2813D.D	09/06/07	11:32
13	A781265	A781265 LQ4600	2814D.D	09/06/07	11:59
14	A781266	A781266 LQ4601	2815D.D	09/06/07	12:27
15	A781267	A781267 LQ4602	2816D.D	09/06/07	12:54
16	A781268	A781268 LQ4603	2817D.D	09/06/07	13:21
17	A781269	A781269 LQ4604	2818D.D	09/06/07	13:48
18	A781270	A781270 LQ4605	2819D.D	09/06/07	14:16
19	A781255	A781255 LQ4588	2820D.D	09/06/07	14:43
20	A781244	A781244 LQ4578	2821D.D	09/06/07	15:10
21	A781240	A781240 LQ4575	2822D.D	09/06/07	15:37
22	A781253	A781253 LQ4586	2823D.D	09/06/07	16:04

JM 9-10-07

J41

5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

EPA Method 524.2 BROMOFLUOROBENZENE (BFB)

Lab Name: _____ Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Lab File ID: 2801D.D BFB Injection Date: 09/06/07

Instrument ID: GCMS#4 BFB Injection Time: 05:46

GC Column: CAP ID: 0.18 (mm) Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	23.6
75	30.0 - 80.0% of mass 95	49.4
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.1
173	Less than 2.0% of mass 174	0.7 (0.8)1
174	50.0 - 100.0% of mass 95	88.1
175	5.0 - 9.0% of mass 174	7.4 (8.4)1
176	95.0 - 101.0% of mass 174	84.1 (95.4)1
177	5.0 - 9.0% of mass 176	6.2 (7.4)2

1-Value is % mass 174 2-Value is % mass 176

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
23	A781243	A781243 LQ4577	2824D.D	09/06/07	16:32
24	A781260 MS	A781260 MS LQ4593	2825D.D	09/06/07	17:18
25	A781260 MSD	A781260 MSD LQ4593	2826D.D	09/06/07	17:45

UK 9-10-07

U42

8A

EPA Method 524.2 VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: _____ Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Lab File ID (Standard): 2803D.D Date Analyzed: 09/06/07

Instrument ID: GCMS#4 Time Analyzed: 06:50

GC Column: CAP ID: 0.18 (mm) Heated Purge: (Y/N) N

		IS1 AREA #	RT #	IS2 AREA #	RT #	AREA #	RT #
	12 HOUR STD	391057	5.68	154347	7.96		
	UPPER LIMIT	586586	6.18	231521	8.46		
	LOWER LIMIT	273740	5.18	108043	7.46		
	EPA SAMPLE NO.						
01	DW BLANK01	369484	5.68	148964	7.96		
02	A781256	372823	5.68	152230	7.97		
03	A781257	378720	5.68	157534	7.97		
04	A781258	386374	5.67	154887	7.96		
05	A781259	378244	5.68	148139	7.96		
06	A781260	371298	5.68	159024	7.97		
07	A781261	367504	5.67	153410	7.96		
08	A781262	356384	5.68	147641	7.97		
09	A781263	364138	5.68	152541	7.96		
10	A781264	353820	5.67	141192	7.96		
11	A781265	364638	5.67	151368	7.97		
12	A781266	313130	5.67	127803	7.97		
13	A781267	344025	5.68	145726	7.97		
14	A781268	356643	5.68	145854	7.96		
15	A781269	339103	5.68	134508	7.96		
16	A781270	341951	5.68	144171	7.97		
17	A781255	344835	5.67	141176	7.97		
18	A781244	349156	5.68	142440	7.97		
19	A781240	345233	5.68	141546	7.97		
20	A781253	333857	5.68	138223	7.97		
21	A781243	343628	5.67	145169	7.96		

IS1 = FLUOROBENZENE

IS2 = 2-BROMO-1-CHLOROPROPANE

AREA UPPER LIMIT = +50% of internal standard area

AREA LOWER LIMIT = - 30% of internal standard area

RT UPPER LIMIT = +0.50 minutes of internal standard RT

RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column to be used to flag values outside QC limit with an asterisk.

* Values outside of contract required QC limits

/ JKS 9-10-07

043

8A

EPA Method 524.2 VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: _____ Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Lab File ID (Standard): 2803D.D Date Analyzed: 09/06/07

Instrument ID: GCMS#4 Time Analyzed: 06:50

GC Column: CAP ID: 0.18 (mm) Heated Purge: (Y/N) N

		IS1 AREA #	RT #	IS2 AREA #	RT #	AREA #	RT #
	12 HOUR STD	391057	5.68	154347	7.96		
	UPPER LIMIT	586586	6.18	231521	8.46		
	LOWER LIMIT	273740	5.18	108043	7.46		
	EPA SAMPLE NO.						
22	A781260 MS	320976	5.68	130308	7.97		
23	A781260 MSD	~~320976~~ 359324	~~5.68~~ 5.67	~~130308~~ 145939	~~7.97~~ 7.96		

IS1 = FLUOROBENZENE

IS2 = 2-BROMO-1-CHLOROPROPANE

AREA UPPER LIMIT = +50% of internal standard area

AREA LOWER LIMIT = - 30% of internal standard area

RT UPPER LIMIT = +0.50 minutes of internal standard RT

RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column to be used to flag values outside QC limit with an asterisk.

* Values outside of contract required QC limits

/ UB 9-10-07

2A
WATER VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: _____ Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Date Injected: 06-Sep-07 Instrument: GCMS#4

	EPA SAMPLE NO.	SMC1 #	SMC2 #	SMC3 #	TOT OUT
01	DW BLANK01	100	93	92	0
02	A781256	101	91	91	0
03	A781257	100	90	88	0
04	A781258	104	93	91	0
05	A781259	98	92	97	0
06	A781260	101	92	88	0
07	A781261	104	94	85	0
08	A781262	103	92	90	0
09	A781263	104	93	88	0
10	A781264	101	94	93	0
11	A781265	103	96	87	0
12	A781266	102	90	93	0
13	A781267	104	94	87	0
14	A781268	105	91	84	0
15	A781269	103	94	93	0
16	A781270	103	94	90	0
17	A781255	107	94	92	0
18	A781244	105	92	90	0
19	A781240	104	93	87	0
20	A781253	109	91	87	0
21	A781243	104	92	84	0
22	A781260 MS	95	97	94	0
23	A781260 MSD	105	97	97	0

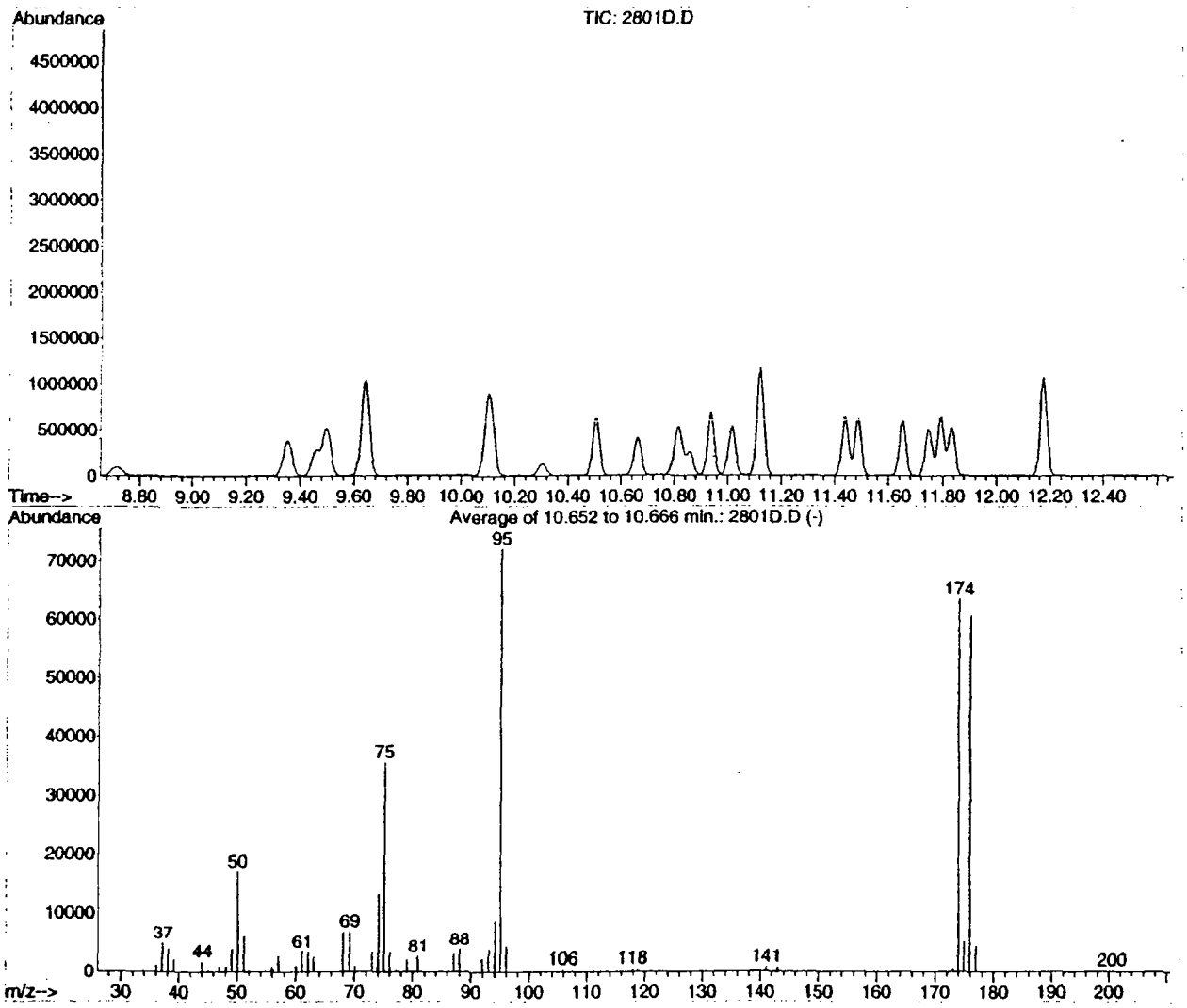
			QC LIMITS
SMC1	=	1,2-Dichloroethane-d4	(80-120)
SMC2	=	Toluene-d8	(80-120)
SMC3	=	4-Bromofluorobenzene	(80-120)

/KS 9/10/07

Column to be used to flag recovery values
* Values outside of contract required QC limits
D System Monitoring Compound diluted out

BFB

Data File : C:\MSDCHEM\DATA\D090607\2801D.D Vial: 23
Acq On : 6 Sep 2007 5:46 Operator: REGI
Sample : DW STD010 Inst : GCMS #4
Misc : CALIBRATION CHECK 9/8/07 Multiplr: 1.00
MS Integration Params: rteint2.p
Method : C:\MSDCHEM\1\METHODS\DWD.M (RTE Integrator)
Title : 8260 VOLATILES



Spectrum Information: Average of 10.652 to 10.666 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	23.6	17036	PASS
75	95	30	60	49.4	35610	PASS
95	95	100	100	100.0	72141	PASS
96	95	5	9	6.1	4374	PASS
173	174	0.00	2	0.8	535	PASS
174	95	50	100	88.1	63568	PASS
175	174	5	9	8.4	5312	PASS
176	174	95	101	95.4	60650	PASS
177	176	5	9	7.4	4501	PASS

✓ JB 9-10-07

2801D.D DWD.M Thu Sep 06 06:04:23 2007

Average of 10.652 to 10.666 min.: 2801D.D
DW STD010
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.10	1084	51.10	6165	70.05	924	91.95	2154
37.10	4954	52.00	211	73.00	3075	93.05	3758
38.10	3868	55.95	898	74.05	13331	94.05	8644
39.15	1981	56.20	434	75.05	35610	95.00	72141
44.00	1634	57.05	2591	76.05	3139	96.00	4374
44.90	222	60.05	1075	77.10	271	102.80	173
45.20	220	61.00	3293	78.95	2014	103.70	273
47.00	786	62.05	3113	79.90	252	104.00	178
48.10	831	63.00	2469	80.85	2471	105.90	414
49.05	3838	68.00	6779	87.00	2844	116.10	192
50.05	17036	69.10	6926	88.00	3741	116.70	176

Average of 10.652 to 10.666 min.: 2801D.D
DW STD010
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
117.90	484						
118.80	341						
141.05	760						
143.00	661						
173.00	535						
173.95	63568						
174.95	5312						
175.90	60650						
176.95	4501						
178.20	169						
200.60	174						

R524561 Heritage Environmental Services, LLC Q1994745

QC Report

QCType CCVD Duplicate SampleID DataFile 2802D.D
Date Entered 10Sep07 Duplicate QCSampleID Analyst 1062 R. SHAMP
Analysis Date/Time 06Sep0706:19:00 Method Matrix 1 Units

PRM	Parameter	TruVal	SpikeVal	ObsVal	RQL	Rec	Difference
300	DICHLORODIFLUOROMETHANE	0.1511		0.1547			2.4
236	CHLOROMETHANE	0.3312		0.3350			1.1
768	VINYL CHLORIDE	0.3492		0.3215			7.9
198	BROMOMETHANE	0.1909		0.1654			13.4
234	CHLOROETHANE	0.2173		0.2090			3.8
372	TRICHLOROFLUOROMETHANE	0.4313		0.4116			4.6
8	1,1-DICHLOROETHENE	0.2719		0.2542			6.5
302	DICHLOROMETHANE (METHYLENE CHLORIDE)	10		9.65	QDR		3.5
746	TRANS-1,2-DICHLOROETHENE	0.3161		0.3045			3.7
7	1,1-DICHLOROETHANE	0.5728		0.5236			8.6
246	CIS-1,2-DICHLOROETHENE	0.3271		0.2873			12.2
235	CHLOROFORM	0.5349		0.4893			8.5
194	BROMOCHLOROMETHANE	0.1576		0.1440			8.6
2	1,1,1-TRICHLOROETHANE	0.4307		0.3941			8.5
10	1,1-DICHLOROPROPENE	0.1314		0.1161			11.6
217	CARBON TETRACHLORIDE	0.3754		0.3465			7.7
21	1,2-DICHLOROETHANE	0.4390		0.3876			11.7
151	BENZENE	1.2552		1.1094			11.6
750	TRICHLOROETHENE	0.3146		0.2803			10.9
23	1,2-DICHLOROPROPANE	0.2990		0.2757			7.8
299	DICHLOROBROMOMETHANE	0.3809		0.3468			9
296	DIBROMOMETHANE	0.1813		0.1657			8.6
247	CIS-1,3-DICHLOROPROPENE	0.4223		0.3776			10.6
724	TOLUENE	1.2883		1.1041			14.3
747	TRANS-1,3-DICHLOROPROPENE	0.3675		0.3350			8.8
4	1,1,2-TRICHLOROETHANE	0.2617		0.2299			12.2
27	1,3-DICHLOROPROPANE	1.0264		0.9998			2.6
703	TETRACHLOROETHENE	0.7360		0.7013			4.7
295	DIBROMOCHLOROMETHANE	0.6474		0.6389			1.3
18	1,2-DIBROMOETHANE (EDB)	0.2530		0.2253			10.9
231	CHLOROBENZENE	1.8557		1.7235			7.1
349	ETHYL BENZENE	0.9769		0.8708			10.9
1	1,1,1,2-TETRACHLOROETHANE	0.6499		0.5667			12.8
492	M/P-XYLENE	1.1843		1.1451			3.3
549	O-XYLENE	1.1452		1.1365			.8
680	STYRENE	1.9837		1.8131			8.6
432	ISOPROPYLBENZENE (CUMENE)	2.9880		2.8268			5.4
197	BROMOFORM	0.4981		0.4564			8.4
3	1,1,2,2-TETRACHLOROETHANE	0.8318		0.7894			5.1
532	N-PROPYLBENZENE	0.3782		0.3610			4.5
193	BROMOBENZENE	1.2113		1.1239			7.2
25	1,3,5-TRIMETHYLBENZENE	2.3563		2.2579			4.2
807	2-CHLOROTOLUENE (O-CHLOROTOLUENE)	0.7313		0.7024			4
808	4-CHLOROTOLUENE (P-CHLOROTOLUENE)	0.7687		0.7563			1.6

/ LKS 9-10-07

LKS 9-10-07

QC Report

PRM	Parameter	TruVal	SpikeVal	ObsVal	RQL	Rec	Difference
702	TERT-BUTYLBENZENE	1.3112		1.1990			8.6
17	1,2,4-TRIMETHYLBENZENE	2.3787		2.2526			5.3
644	SEC-BUTYLBENZENE	2.7532		2.5873			6
628	4-ISOPROPYLTOLUENE (P-ISOPROPYLTOLUENE)	2.4762		2.3030			7
26	1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)	1.4872		1.3870			6.7
29	1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	1.5475		1.4526			6.1
519	N-BUTYLBENZENE	1.1297		1.0598			6.2
20	1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	1.3929		1.2999			6.7
19	1,2-DIBROMO-3-CHLOROPROPANE (DBCP)	0.1793		0.1604			10.5
16	1,2,4-TRICHLOROBENZENE	0.7601		0.7252			4.6
398	HEXACHLOROBUTADIENE	10		11.30	QDR		13
493	NAPHTHALENE	2.0349		1.8935			6.9
13	1,2,3-TRICHLOROBENZENE	0.6483		0.6100			5.9
14	1,2,3-TRICHLOROPROPANE	0.2695		0.2643			1.9
99	ACETONE (2-PROPANONE)	20		21.86	QDR		9.3
52	2-BUTANONE	0.0388		0.0456			17.5
91	4-METHYL-2-PENTANONE	0.3864		0.4148			7.3
709	TETRAHYDROFURAN	0.1192		0.1417			18.9
60	2-HEXANONE	0.6408		0.7114			11
859	METHYL-T-BUTYL ETHER (MTBE)	0.8588		0.9312			8.4
301	DICHLOROETHANE-D4	0.3079		0.3086			.2
726	TOLUENE-D8	1.0360		0.9874			4.7
196	4-BROMOFLUOROBENZENE	0.8852		0.8167			7.7

Comment Value reported for analytes calibrated by linear (LIN) or quadratic (QDR) equations is concentration ( ).

Qualifiers

QDR Quadratic Equation Used

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\DATA\D090607\2802D.D Vial: 23
Acq On : 6 Sep 2007 6:19 Operator: REGI
Sample : DW STD010 Inst : GCMS #4
Misc : CALIBRATION CHECK 9/8/07 Multiplr: 1.00
MS Integration Params: rteint2.p
Quant Time: Sep 06 06:34:53 2007 Quant Results File: DWD.RES

Quant Method : C:\MSDCHEM\1\METHODS\DWD.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Tue Sep 04 10:38:20 2007
Response via : Initial Calibration
DataAcq Meth : DWD

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) FLUOROBENZENE	5.67	96	395352	10.00 UG/L	0.00
38) 2-Bromo-1-chloropropane	7.96	77	160521	10.00 UG/L	0.00
System Monitoring Compounds					
21) Dibromofluoromethane	4.95	113	93990	9.50 UG/L	0.00
Spiked Amount 10.000			Recovery	= 95.00%	
23) 1,2-Dichloroethane-d4	5.30	65	121999	10.02 UG/L	0.00
Spiked Amount 10.000			Recovery	= 100.20%	
33) Toluene-d8	7.51	98	390389	9.53 UG/L	0.00
Spiked Amount 10.000			Recovery	= 95.30%	
51) 4-Bromofluorobenzene	10.66	174	131091	9.23 UG/L	0.00
Spiked Amount 10.000			Recovery	= 92.30%	

Target Compounds					Qvalue
2) Dichlorodifluoromethane	1.39	85	61160	10.24 UG/L	100
3) Chloromethane	1.52	50	132446	10.12 UG/L	100
4) VINYL CHLORIDE	1.63	62	127125	9.21 UG/L	97
5) Bromomethane	1.93	94	65373	8.66 UG/L	95
6) Chloroethane	2.01	64	82637	9.62 UG/L	100
7) Trichlorofluoromethane	2.24	101	162723	9.54 UG/L #	85
8) Acetone	2.76	43	105446	21.86 UG/L	98
9) 1,1-DICHLOROETHENE	2.72	96	100501	9.35 UG/L	100
10) Methylene Chloride	3.17	84	118120	9.65 UG/L	87
11) MTBE	3.44	73	736300	21.69 UG/L	100
12) trans-1,2-Dichloroethene	3.44	96	120383	9.63 UG/L	97
13) 1,1-Dichloroethane	3.85	63	207008	9.14 UG/L	100
14) 2-Butanone	4.46	72	36085	23.56 UG/L	69
15) cis-1,2-Dichloroethene	4.45	96	113589	8.78 UG/L	97
16) CHLOROFORM	4.77	83	193428	9.15 UG/L	97
17) Tetrahydrofuran	4.75	42	112051	23.78 UG/L #	88
18) Bromochloromethane	4.70	128	56937	9.14 UG/L	90
19) 2,2-Dichloropropane	4.45	77	113194	9.51 UG/L #	89
20) 1,1,1-Trichloroethane	4.97	97	155793	9.15 UG/L	97
22) 1,1-Dichloropropene	5.15	110	45903	8.84 UG/L	100
24) Carbon Tetrachloride	5.15	117	136988	9.23 UG/L	95
25) 1,2-Dichloroethane	5.38	62	153253	8.83 UG/L	96
26) Benzene	5.37	78	438620	8.84 UG/L	100
27) Trichloroethene	6.08	130	110813	8.91 UG/L	98
28) 1,2-DICHLOROPROPANE	6.33	63	109000	9.22 UG/L	100
29) Bromodichloromethane	6.66	83	137102	9.11 UG/L	100
30) Dibromomethane	6.47	93	65510	9.14 UG/L	94
31) 4-Methyl-2-Pentanone	7.37	43	327945	21.47 UG/L #	96
32) cis-1,3-Dichloropropene	7.18	75	149289	8.94 UG/L	100
34) TOLUENE	7.59	91	436514	8.57 UG/L	100
35) trans-1,3-Dichloropropene	7.86	75	132453	9.12 UG/L	100
36) 1,1,2-Trichloroethane	8.09	97	90906	8.78 UG/L	100
37) 1,2-Dibromoethane	8.71	107	89075	8.91 UG/L	97
39) 2-Hexanone	8.41	43	228379	22.20 UG/L	94
40) 1,3-Dichloropropane	8.29	76	160489	9.74 UG/L	100
41) Tetrachloroethene	8.26	166	112571	9.53 UG/L	95
42) Dibromochloromethane	8.58	129	102563	9.87 UG/L	100
43) Chlorobenzene	9.35	112	276654	9.29 UG/L	99
44) 1,1,1,2-Tetrachloroethane	9.45	131	90972	8.72 UG/L	100
45) ETHYL BENZENE	9.49	106	139785	8.91 UG/L #	69
46) m,p-Xylene	9.64	106	367625	19.34 UG/L #	64

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

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\DATA\D090607\2802D.D Vial: 23
Acq On : 6 Sep 2007 6:19 Operator: REGI
Sample : DW STD010 Inst : GCMS #4
Misc : CALIBRATION CHECK 9/8/07 Multiplr: 1.00
MS Integration Params: rteint2.p
Quant Time: Sep 06 06:34:53 2007 Quant Results File: DWD.RES

Quant Method : C:\MSDCHEM\1\METHODS\DWD.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Tue Sep 04 10:38:20 2007
Response via : Initial Calibration
DataAcq Meth : DWD

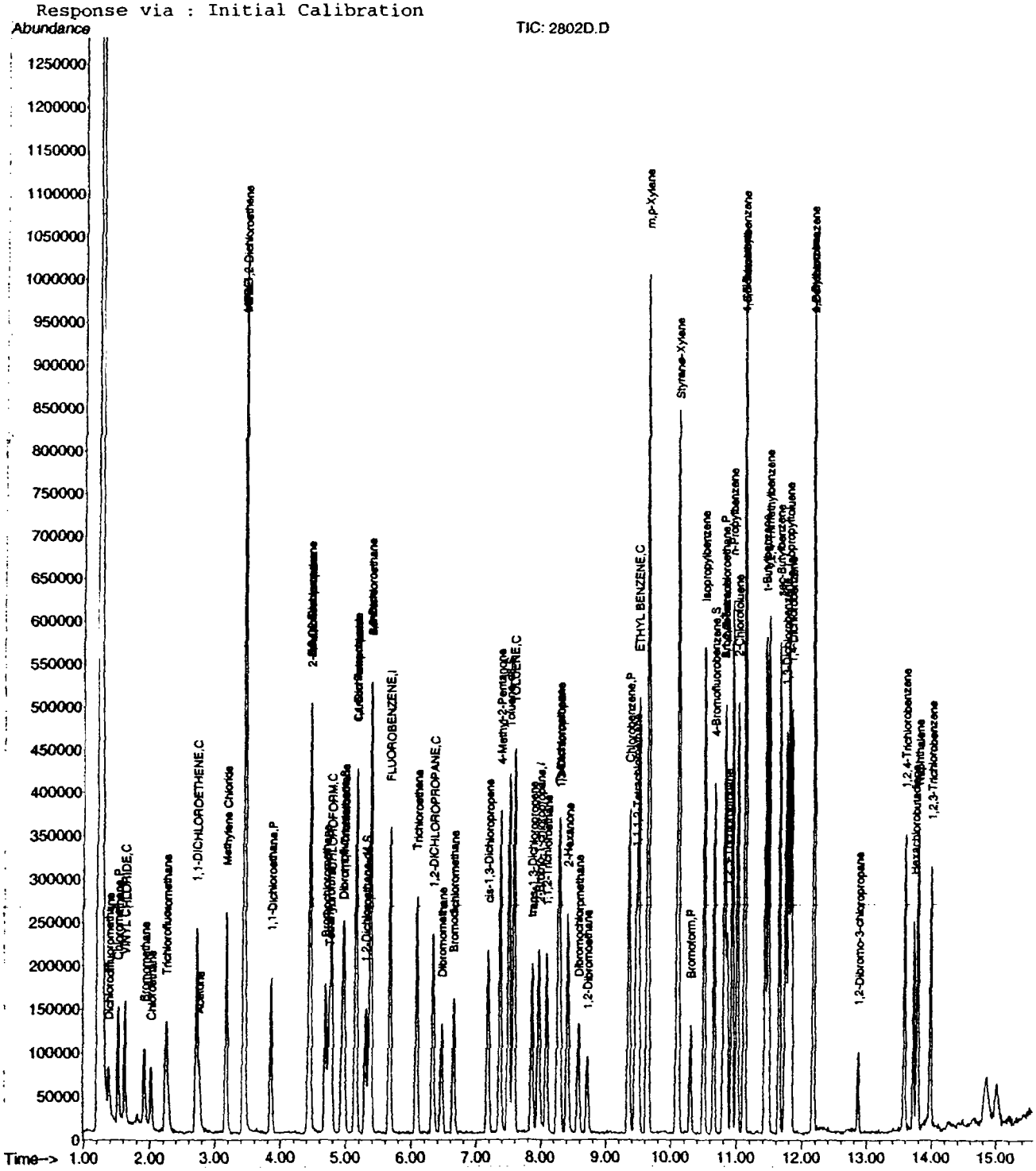
	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
47)	o-Xylene	10.09	106	182430	9.92 UG/L	87
48)	Styrene	10.12	104	291037	9.14 UG/L	88
49)	Bromoform	10.30	173	73266	9.16 UG/L	100
50)	1,1,2,2-Tetrachloroethane	10.82	83	126712	9.49 UG/L	98
52)	Isopropylbenzene	10.51	105	453755	9.46 UG/L	100
53)	Bromobenzene	10.81	77	180413	9.28 UG/L	100
54)	1,2,3-Trichloropropane	10.86	110	42425	9.81 UG/L	100
55)	n-Propylbenzene	10.94	92	57952	9.54 UG/L	89
56)	1,3,5-Trimethylbenzene	11.12	105	362441	9.58 UG/L	100
57)	2-Chlorotoluene	11.02	126	112755	9.61 UG/L	100
58)	4-Chlorotoluene	11.13	126	121402	9.84 UG/L	100
59)	t-Butylbenzene	11.44	91	192461	9.14 UG/L #	63
60)	1,2,4-Trimethylbenzene	11.49	105	361583	9.47 UG/L	100
61)	sec-Butylbenzene	11.65	105	415322	9.40 UG/L	100
62)	p-Isopropyltoluene	11.80	119	369682	9.30 UG/L	100
63)	1,3-Dichlorobenzene	11.75	146	222641	9.33 UG/L	100
64)	1,4-Dichlorobenzene	11.83	146	233169	9.39 UG/L	100
65)	n-Butylbenzene	12.18	92	170119	9.38 UG/L	92
66)	1,2-Dichlorobenzene	12.18	146	208667	9.33 UG/L	100
67)	1,2-Dibromo-3-chloropropan	12.88	157	25746	8.95 UG/L	100
68)	1,2,4-Trichlorobenzene	13.58	180	116416	9.54 UG/L	100
69)	Naphthalene	13.78	128	303950	9.31 UG/L	100
70)	Hexachlorobutadiene	13.73	225	51704	11.30 UG/L	100
71)	1,2,3-Trichlorobenzene	13.99	180	97915	9.41 UG/L	100

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

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\DATA\D090607\2802D.D Vial: 23
Acq On : 6 Sep 2007 6:19 Operator: REGI
Sample : DW STD010 Inst : GCMS #4
Misc : CALIBRATION CHECK 9/8/07 Multiplr: 1.00
MS Integration Params: rteint2.p
Quant Time: Sep 6 6:34 2007 Quant Results File: DWD.RES

Method : C:\MSDCHEM\1\METHODS\DWD.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Tue Sep 04 10:38:20 2007
Response via : Initial Calibration



2802D.D DWD.M Thu Sep 06 06:35:14 2007 Page 3

U52

R524561 Heritage Environmental Services, LLC Q1994746

QC Report

QCType CCVD | Duplicate SampleID | DataFile 2803D.D
Date Entered 10Sep07 | Duplicate QCSampleID | Analyst 1062 R. SHAMP
Analysis Date/Time 06Sep0706:50:00 | Method | Matrix 1 | Units

PRM	Parameter	TruVal	SpikeVal	ObsVal	RQL	Rec	Difference
300	DICHLORODIFLUOROMETHANE	0.1511		0.1345			11
236	CHLOROMETHANE	0.3312		0.3200			3.4
768	VINYL CHLORIDE	0.3492		0.3060			12.4
198	BROMOMETHANE	0.1909		0.1861			2.5
234	CHLOROETHANE	0.2173		0.2026			6.8
372	TRICHLOROFLUOROMETHANE	0.4313		0.3642			15.6
8	1,1-DICHLOROETHENE	0.2719		0.2342			13.9
302	DICHLOROMETHANE (METHYLENE CHLORIDE)	2.0		1.89	QDR		5.5
746	TRANS-1,2-DICHLOROETHENE	0.3161		0.3045			3.7
7	1,1-DICHLOROETHANE	0.5728		0.4893			14.6
246	CIS-1,2-DICHLOROETHENE	0.3271		0.3051			6.7
235	CHLOROFORM	0.5349		0.4952			7.4
194	BROMOCHLOROMETHANE	0.1576		0.1349			14.4
2	1,1,1-TRICHLOROETHANE	0.4307		0.3831			11.1
10	1,1-DICHLOROPROPENE	0.1314		0.1219			7.2
217	CARBON TETRACHLORIDE	0.3754		0.3188			15.1
21	1,2-DICHLOROETHANE	0.4390		0.3650			16.9
151	BENZENE	1.2552		1.1126			11.4
750	TRICHLOROETHENE	0.3146		0.2794			11.2
23	1,2-DICHLOROPROPANE	0.2990		0.2685			10.2
299	DICHLOROBROMOMETHANE	0.3809		0.3466			9
296	DIBROMOMETHANE	0.1813		0.1658			8.5
247	CIS-1,3-DICHLOROPROPENE	0.4223		0.3295			22
724	TOLUENE	1.2883		1.0613			17.6
747	TRANS-1,3-DICHLOROPROPENE	0.3675		0.3121			15.1
4	1,1,2-TRICHLOROETHANE	0.2617		0.1993			23.8
27	1,3-DICHLOROPROPANE	1.0264		0.9850			4
703	TETRACHLOROETHENE	0.7360		0.7009			4.8
295	DIBROMOCHLOROMETHANE	0.6474		0.5554			14.2
18	1,2-DIBROMOETHANE (EDB)	0.2530		0.2295			9.3
231	CHLOROBENZENE	1.8557		1.6841			9.2
349	ETHYL BENZENE	0.9769		0.8514			12.8
1	1,1,1,2-TETRACHLOROETHANE	0.6499		0.5641			13.2
492	M/P-XYLENE	1.1843		1.0847			8.4
549	O-XYLENE	1.1452		0.9593			16.2
680	STYRENE	1.9837		1.6218			18.2
432	ISOPROPYLBENZENE (CUMENE)	2.9880		2.6943			9.8
197	BROMOFORM	0.4981		0.4240			14.9
3	1,1,2,2-TETRACHLOROETHANE	0.8318		0.7965			4.2
532	N-PROPYLBENZENE	0.3782		0.3181			15.9
193	BROMOBENZENE	1.2113		1.1458			5.4
25	1,3,5-TRIMETHYLBENZENE	2.3563		2.1641			8.2
807	2-CHLOROTOLUENE (O-CHLOROTOLUENE)	0.7313		0.6712			8.2
808	4-CHLOROTOLUENE (P-CHLOROTOLUENE)	0.7687		0.6413			16.6

CS 9-10-07

CS 9-10-07

QC Report

PRM	Parameter	TruVal	SpikeVal	ObsVal	RQL	Rec	Difference
702	TERT-BUTYLBENZENE	1.3112		1.1980			8.6
17	1,2,4-TRIMETHYLBENZENE	2.3787		2.1625			9.1
644	SEC-BUTYLBENZENE	2.7532		2.5125			8.7
628	4-ISOPROPYLTOLUENE (P-ISOPROPYLTOLUENE)	2.4762		2.3278			6
26	1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)	1.4872		1.4630			1.6
29	1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	1.5475		1.4420			6.8
519	N-BUTYLBENZENE	1.1297		1.0013			11.4
20	1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	1.3929		1.2648			9.2
19	1,2-DIBROMO-3-CHLOROPROPANE (DBCP)	0.1793		0.1559			13.1
16	1,2,4-TRICHLOROBENZENE	0.7601		0.7914			4.1
398	HEXACHLOROBUTADIENE	2.0		2.34	QDR		17
493	NAPHTHALENE	2.0349		2.0422			.4
13	1,2,3-TRICHLOROBENZENE	0.6483		0.7927			22.3
14	1,2,3-TRICHLOROPROPANE	0.2695		0.3175			17.8
99	ACETONE (2-PROPANONE)	4.0		4.41	QDR		10.3
52	2-BUTANONE	0.0388		0.0190			51
91	4-METHYL-2-PENTANONE	0.3864		0.3034			21.5
709	TETRAHYDROFURAN	0.1192		0.1073			10
60	2-HEXANONE	0.6408		0.5617			12.3
859	METHYL-T-BUTYL ETHER (MTBE)	0.8588		0.7822			8.9
301	DICHLOROETHANE-D4	0.3079		0.3084			.2
726	TOLUENE-D8	1.0360		0.9674			6.6
196	4-BROMOFLUOROBENZENE	0.8852		0.8506			3.9

Comment Value reported for analytes calibrated by linear (LIN) or quadratic (QDR) equations is concentration ( ).

Qualifiers

QDR Quadratic Equation Used

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\DATA\D090607\2803D.D Vial: 23
Acq On : 6 Sep 2007 6:50 Operator: REGI
Sample : DW STD02 Inst : GCMS #4
Misc : CALIBRATION CHECK 9/8/07 Multiplr: 1.00
MS Integration Params: rteint2.p
Quant Time: Sep 06 07:06:41 2007 Quant Results File: DWD.RES

Quant Method : C:\MSDCHEM\1\METHODS\DWD.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Tue Sep 04 10:38:20 2007
Response via : Initial Calibration
DataAcq Meth : DWD

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) FLUOROBENZENE	5.68	96	391057	10.00	UG/L	0.00
38) 2-Bromo-1-chloropropane	7.96	77	154347	10.00	UG/L	0.00
System Monitoring Compounds						
21) Dibromofluoromethane	4.95	113	95784	9.78	UG/L	0.00
Spiked Amount 10.000			Recovery	=	97.80%	
23) 1,2-Dichloroethane-d4	5.31	65	120584	10.02	UG/L	0.00
Spiked Amount 10.000			Recovery	=	100.20%	
33) Toluene-d8	7.51	98	378305	9.34	UG/L	0.00
Spiked Amount 10.000			Recovery	=	93.40%	
51) 4-Bromofluorobenzene	10.66	174	131285	9.61	UG/L	0.00
Spiked Amount 10.000			Recovery	=	96.10%	

Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.39	85	10523	1.78	UG/L	100
3) Chloromethane	1.52	50	25026	1.93	UG/L	100
4) VINYL CHLORIDE	1.63	62	23932	1.75	UG/L	94
5) Bromomethane	1.93	94	14559	1.95	UG/L	95
6) Chloroethane	2.02	64	15848	1.87	UG/L #	86
7) Trichlorofluoromethane	2.24	101	28482	1.69	UG/L #	70
8) Acetone	2.77	43	18453	4.41	UG/L	97
9) 1,1-DICHLOROETHENE	2.72	96	18320	1.72	UG/L	100
10) Methylene Chloride	3.17	84	30308	1.89	UG/L	82
11) MTBE	3.44	73	122353	3.64	UG/L	100
12) trans-1,2-Dichloroethene	3.44	96	23814	1.93	UG/L	97
13) 1,1-Dichloroethane	3.86	63	38268	1.71	UG/L	100
14) 2-Butanone	4.45	72	2977	1.96	UG/L #	1
15) cis-1,2-Dichloroethene	4.44	96	23861	1.87	UG/L	93
16) CHLOROFORM	4.78	83	38732	1.85	UG/L	99
17) Tetrahydrofuran	4.75	42	16783	3.60	UG/L #	69
18) Bromochloromethane	4.70	128	10549	1.71	UG/L	88
19) 2,2-Dichloropropane	4.45	77	21223	1.80	UG/L	99
20) 1,1,1-Trichloroethane	4.98	97	29959	1.78	UG/L	96
22) 1,1-Dichloropropene	5.15	110	9534	1.86	UG/L	100
24) Carbon Tetrachloride	5.15	117	24930	1.70	UG/L	99
25) 1,2-Dichloroethane	5.38	62	28548	1.66	UG/L	96
26) Benzene	5.37	78	87015	1.77	UG/L	100
27) Trichloroethene	6.08	130	21853	1.78	UG/L	89
28) 1,2-DICHLOROPROPANE	6.33	63	20997	1.80	UG/L	100
29) Bromodichloromethane	6.65	83	27108	1.82	UG/L	90
30) Dibromomethane	6.46	93	12968	1.83	UG/L	97
31) 4-Methyl-2-Pentanone	7.37	43	47453	3.14	UG/L #	94
32) cis-1,3-Dichloropropene	7.18	75	25774	1.56	UG/L	100
34) TOLUENE	7.58	91	83005	1.65	UG/L	100
35) trans-1,3-Dichloropropene	7.86	75	24411	1.70	UG/L	100
36) 1,1,2-Trichloroethane	8.09	97	15591	1.52	UG/L	100
37) 1,2-Dibromoethane	8.71	107	17950	1.81	UG/L	97
39) 2-Hexanone	8.41	43	34676	3.51	UG/L #	90
40) 1,3-Dichloropropane	8.29	76	30405	1.92	UG/L	100
41) Tetrachloroethene	8.26	166	21637	1.90	UG/L	98
42) Dibromochloromethane	8.57	129	17145	1.72	UG/L	100
43) Chlorobenzene	9.35	112	51987	1.82	UG/L	97
44) 1,1,1,2-Tetrachloroethane	9.47	131	17413	1.74	UG/L	100
45) ETHYL BENZENE	9.49	106	26283	1.74	UG/L	75
46) m,p-Xylene	9.64	106	66966	3.66	UG/L #	70

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

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\DATA\D090607\2803D.D Vial: 23
Acq On : 6 Sep 2007 6:50 Operator: REGI
Sample : DW STD02 Inst : GCMS #4
Misc : CALIBRATION CHECK 9/8/07 Multiplr: 1.00
MS Integration Params: rteint2.p
Quant Time: Sep 06 07:06:41 2007 Quant Results File: DWD.RES

Quant Method : C:\MSDCHEM\1\METHODS\DWD.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Tue Sep 04 10:38:20 2007
Response via : Initial Calibration
DataAcq Meth : DWD

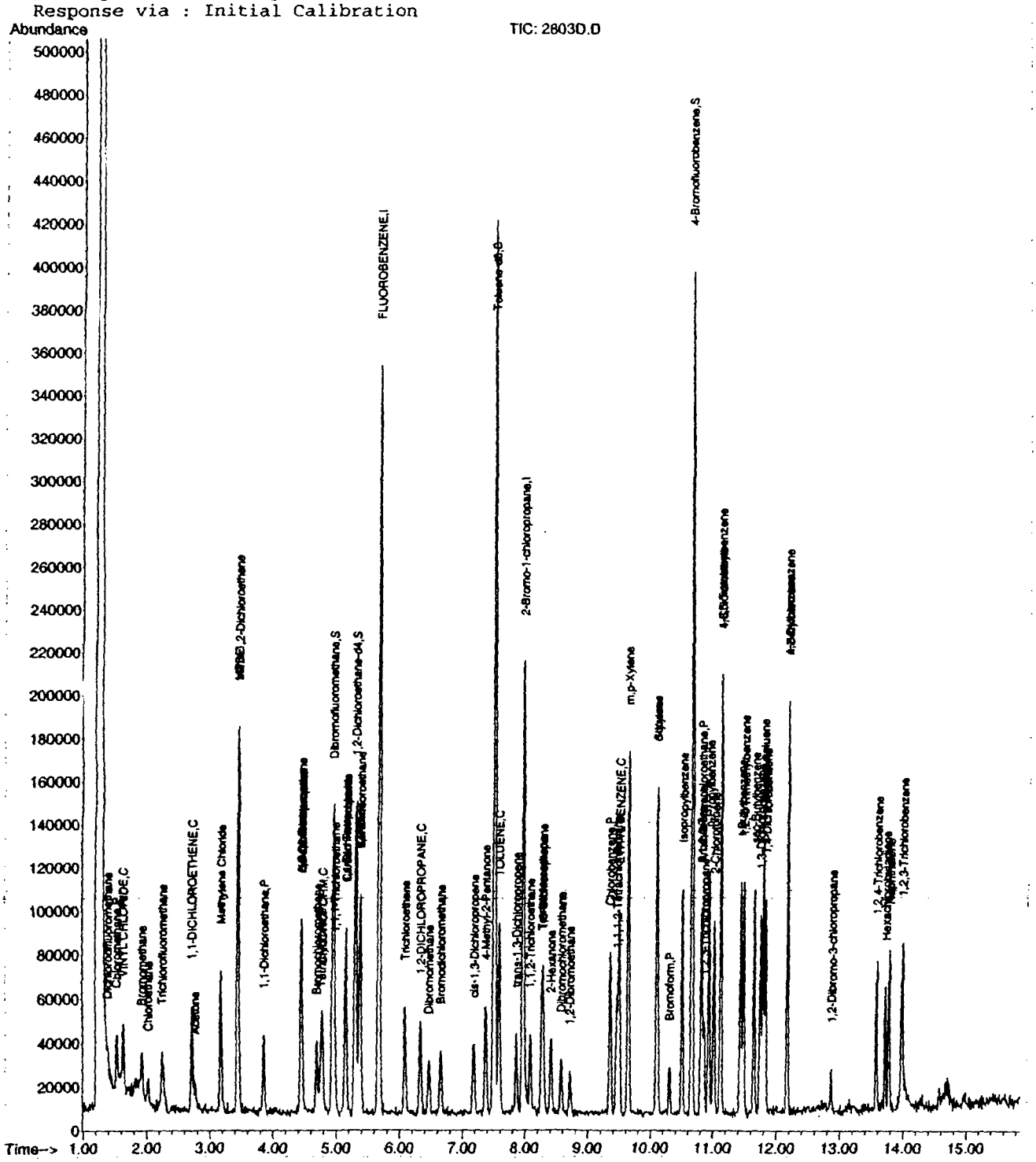
	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
47)	o-Xylene	10.09	106	29612	1.68 UG/L		74
48)	Styrene	10.11	104	50064	1.64 UG/L	#	86
49)	Bromoform	10.31	173	13090	1.70 UG/L		100
50)	1,1,2,2-Tetrachloroethane	10.82	83	24588	1.92 UG/L		95
52)	Isopropylbenzene	10.51	105	83172	1.80 UG/L		100
53)	Bromobenzene	10.81	77	35371	1.89 UG/L		100
54)	1,2,3-Trichloropropane	10.85	110	9802	2.36 UG/L		100
55)	n-Propylbenzene	10.93	92	9820	1.68 UG/L		70
56)	1,3,5-Trimethylbenzene	11.12	105	66805	1.84 UG/L		100
57)	2-Chlorotoluene	11.02	126	20719	1.84 UG/L		100
58)	4-Chlorotoluene	11.12	126	19797	1.67 UG/L		100
59)	t-Butylbenzene	11.44	91	36983	1.83 UG/L	#	60
60)	1,2,4-Trimethylbenzene	11.48	105	66756	1.82 UG/L		100
61)	sec-Butylbenzene	11.65	105	77558	1.83 UG/L		100
62)	p-Isopropyltoluene	11.80	119	71859	1.88 UG/L		100
63)	1,3-Dichlorobenzene	11.75	146	45163	1.97 UG/L		100
64)	1,4-Dichlorobenzene	11.83	146	44515	1.86 UG/L		100
65)	n-Butylbenzene	12.18	92	30910	1.77 UG/L		92
66)	1,2-Dichlorobenzene	12.18	146	39045	1.82 UG/L		100
67)	1,2-Dibromo-3-chloropropan	12.88	157	4814	1.74 UG/L		100
68)	1,2,4-Trichlorobenzene	13.58	180	24429	2.08 UG/L		100
69)	Naphthalene	13.78	128	63040	2.01 UG/L		100
70)	Hexachlorobutadiene	13.73	225	11833	2.34 UG/L		100
71)	1,2,3-Trichlorobenzene	13.98	180	24469	2.45 UG/L		100

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

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\DATA\D090607\2803D.D Vial: 23
Acq On : 6 Sep 2007 6:50 Operator: REGI
Sample : DW STD02 Inst : GCMS #4
Misc : CALIBRATION CHECK 9/8/07 Multiplr: 1.00
MS Integration Params: rteint2.p
Quant Time: Sep 6 7:06 2007 Quant Results File: DWD.RES

Method : C:\MSDCHEM\1\METHODS\DWD.M (RTE Integrator)
Title : *8260 VOLATILES*
Last Update : Tue Sep 04 10:38:20 2007
Response via : Initial Calibration



2803D.D DWD.M Thu Sep 06 07:07:17 2007 Page 3

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R524561 Heritage Environmental Services, LLC Q1994747

QC Report

QCType BLA01 Duplicate SampleID DataFile 2804D.D
Date Entered 10Sep07 Duplicate QCSampleID Analyst 1062 R. SHAMP
Analysis Date/Time 06Sep0707:22:00 Method 296 Matrix 1 Units ug/L

PRM	Parameter	TruVal	SpikeVal	ObsVal	RQL	Rec	Difference
300	DICHLORODIFLUOROMETHANE			0.50	BDL		
236	CHLOROMETHANE			0.50	BDL		
768	VINYL CHLORIDE			0.20	BDL		
198	BROMOMETHANE			0.50	BDL		
234	CHLOROETHANE			0.50	BDL		
372	TRICHLOROFLUOROMETHANE			0.50	BDL		
8	1,1-DICHLOROETHENE			0.50	BDL		
302	DICHLOROMETHANE (METHYLENE CHLORIDE)			0.50	BDL		
746	TRANS-1,2-DICHLOROETHENE			0.50	BDL		
7	1,1-DICHLOROETHANE			0.50	BDL		
246	CIS-1,2-DICHLOROETHENE			0.50	BDL		
235	CHLOROFORM			0.50	BDL		
194	BROMOCHLOROMETHANE			0.50	BDL		
2	1,1,1-TRICHLOROETHANE			0.50	BDL		
10	1,1-DICHLOROPROPENE			0.50	BDL		
217	CARBON TETRACHLORIDE			0.50	BDL		
21	1,2-DICHLOROETHANE			0.50	BDL		
151	BENZENE			0.50	BDL		
750	TRICHLOROETHENE			0.20	BDL		
23	1,2-DICHLOROPROPANE			0.50	BDL		
299	DICHLOROBROMOMETHANE			0.50	BDL		
296	DIBROMOMETHANE			0.50	BDL		
247	CIS-1,3-DICHLOROPROPENE			0.50	BDL		
724	TOLUENE			0.50	BDL		
747	TRANS-1,3-DICHLOROPROPENE			0.50	BDL		
4	1,1,2-TRICHLOROETHANE			0.50	BDL		
27	1,3-DICHLOROPROPANE			0.50	BDL		
703	TETRACHLOROETHENE			0.50	BDL		
295	DIBROMOCHLOROMETHANE			0.50	BDL		
18	1,2-DIBROMOETHANE (EDB)			0.50	BDL		
231	CHLOROBENZENE			0.50	BDL		
349	ETHYL BENZENE			0.50	BDL		
1	1,1,1,2-TETRACHLOROETHANE			0.50	BDL		
492	M/P-XYLENE			0.50	BDL		
549	O-XYLENE			0.50	BDL		
680	STYRENE			0.50	BDL		
432	ISOPROPYLBENZENE (CUMENE)			0.50	BDL		
197	BROMOFORM			0.50	BDL		
3	1,1,2,2-TETRACHLOROETHANE			0.50	BDL		
532	N-PROPYLBENZENE			0.50	BDL		
193	BROMOBENZENE			0.50	BDL		
25	1,3,5-TRIMETHYLBENZENE			0.50	BDL		
807	2-CHLOROTOLUENE (O-CHLOROTOLUENE)			0.50	BDL		
808	4-CHLOROTOLUENE (P-CHLOROTOLUENE)			0.50	BDL		

/ KS 9-10-07
KS 9-10-07

QC Report

PRM	Parameter	TruVal	SpikeVal	ObsVal	RQL	Rec	Difference
702	TERT-BUTYLBENZENE			0.50	BDL		
17	1,2,4-TRIMETHYLBENZENE			0.50	BDL		
644	SEC-BUTYLBENZENE			0.50	BDL		
628	4-ISOPROPYLTOLUENE (P-ISOPROPYLTOLUENE)			0.50	BDL		
26	1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)			0.50	BDL		
29	1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)			0.20	BDL		
519	N-BUTYLBENZENE			0.50	BDL		
20	1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)			0.50	BDL		
19	1,2-DIBROMO-3-CHLOROPROPANE (DBCP)			0.50	BDL		
16	1,2,4-TRICHLOROBENZENE			0.50	BDL		
398	HEXACHLOROBUTADIENE			0.50	BDL		
493	NAPHTHALENE			0.50	BDL		
13	1,2,3-TRICHLOROBENZENE			0.50	BDL		
14	1,2,3-TRICHLOROPROPANE			0.50	BDL		
99	ACETONE (2-PROPANONE)			4.0	BDL		
52	2-BUTANONE			2.0	BDL		
91	4-METHYL-2-PENTANONE			2.0	BDL		
709	TETRAHYDROFURAN			5.0	BDL		
60	2-HEXANONE			2.0	BDL		
859	METHYL-T-BUTYL ETHER (MTBE)			0.50	BDL		
301	DICHLOROETHANE-D4					100	
726	TOLUENE-D8					93	
196	4-BROMOFLUOROBENZENE					92	

Qualifiers

BDL Below Detection Limit

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\DATA\D090607\2804D.D Vial: 23
Acq On : 6 Sep 2007 7:22 Operator: REGI
Sample : DW BLANK Inst : GCMS #4
Misc : 9/8/07 Multiplr: 1.00
MS Integration Params: rteint2.p
Quant Time: Sep 06 07:37:55 2007 Quant Results File: DWD.RES

Quant Method : C:\MSDCHEM\1\METHODS\DWD.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Tue Sep 04 10:38:20 2007
Response via : Initial Calibration
DataAcq Meth : DWD

Q194747

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) FLUOROBENZENE	5.68	96	369484	10.00 UG/L	0.00
38) 2-Bromo-1-chloropropane	7.96	77	148964	10.00 UG/L	0.00
System Monitoring Compounds					
21) Dibromofluoromethane	4.94	113	96167	10.40 UG/L	0.00
Spiked Amount 10.000			Recovery	= 104.00%	
23) 1,2-Dichloroethane-d4	5.31	65	113284	9.96 UG/L	0.00
Spiked Amount 10.000			Recovery	= 99.60%	
33) Toluene-d8	7.51	98	357489	9.34 UG/L	0.00
Spiked Amount 10.000			Recovery	= 93.40%	
51) 4-Bromofluorobenzene	10.66	174	121021	9.18 UG/L	0.00
Spiked Amount 10.000			Recovery	= 91.80%	
Target Compounds					Qvalue
8) Acetone	2.78	43	810	0.88 UG/L #	88
10) Methylene Chloride	3.17	84	5352	Below Cal	96
70) Hexachlorobutadiene	13.72	225	225	Below Cal	100

(#) = qualifier out of range (m) = manual integration
2804D.D DWD.M Thu Sep 06 07:37:57 2007

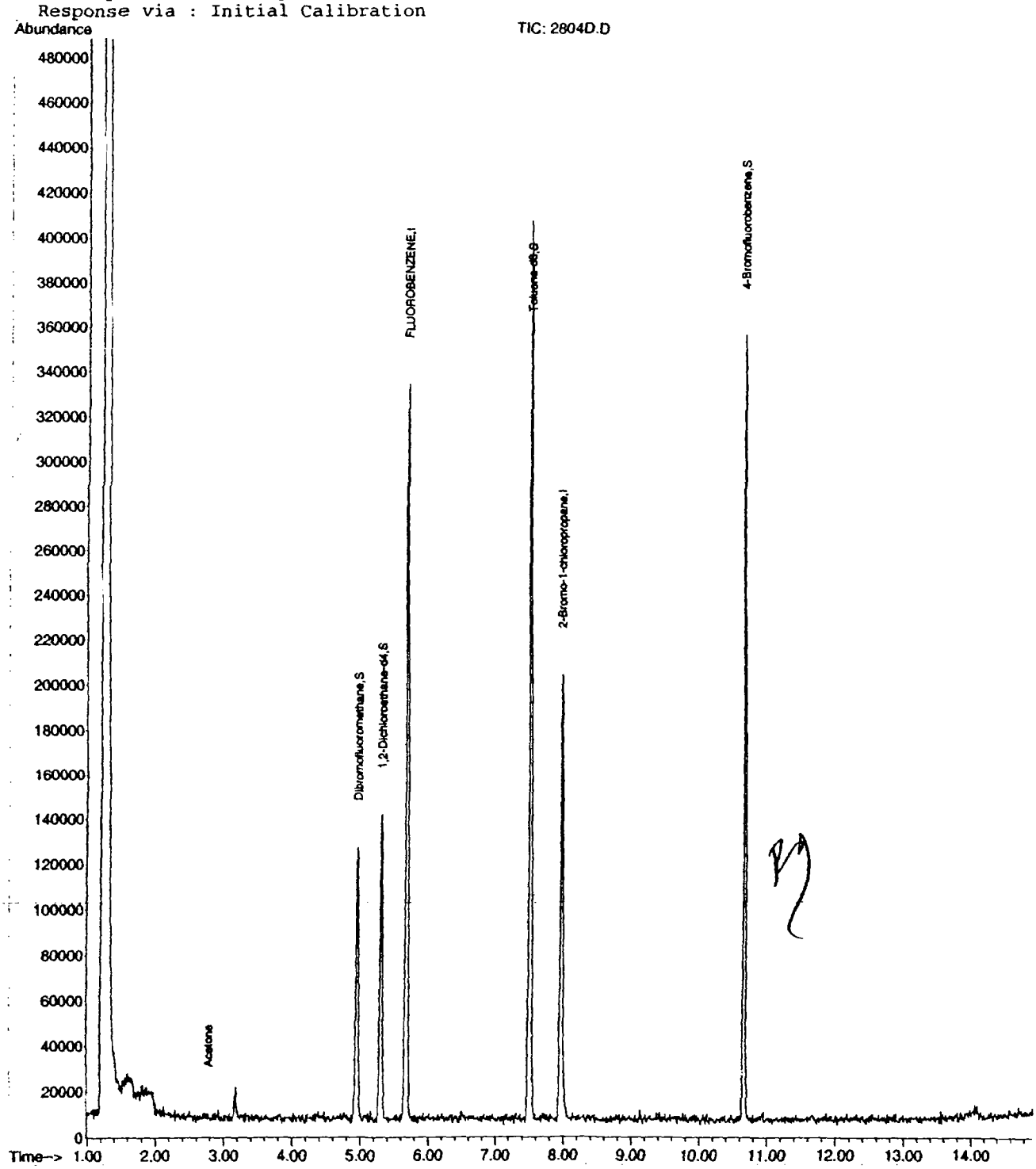
060

Quantitation Report (Not Reviewed)

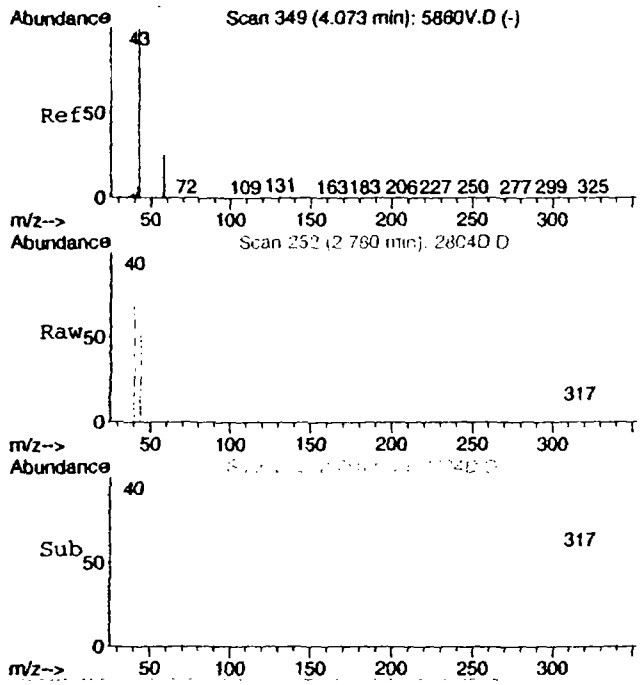
Data File : C:\MSDCHEM\DATA\D090607\2804D.D
Acq On : 6 Sep 2007 7:22
Sample : DW BLANK
Misc : 9/8/07
MS Integration Params: rteint2.p
Quant Time: Sep 6 7:37 2007

Vial: 23
Operator: REGI
Inst : GCMS #4
Multiplr: 1.00
Quant Results File: DWD.RES

Method : C:\MSDCHEM\1\METHODS\DWD.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Tue Sep 04 10:38:20 2007
Response via : Initial Calibration



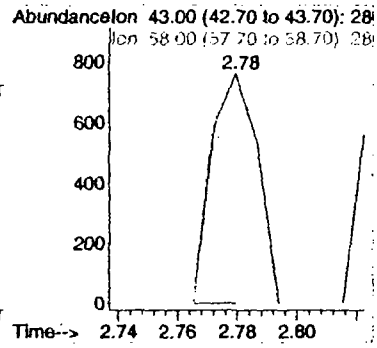
2804D.D DWD.M Thu Sep 06 07:37:57 2007

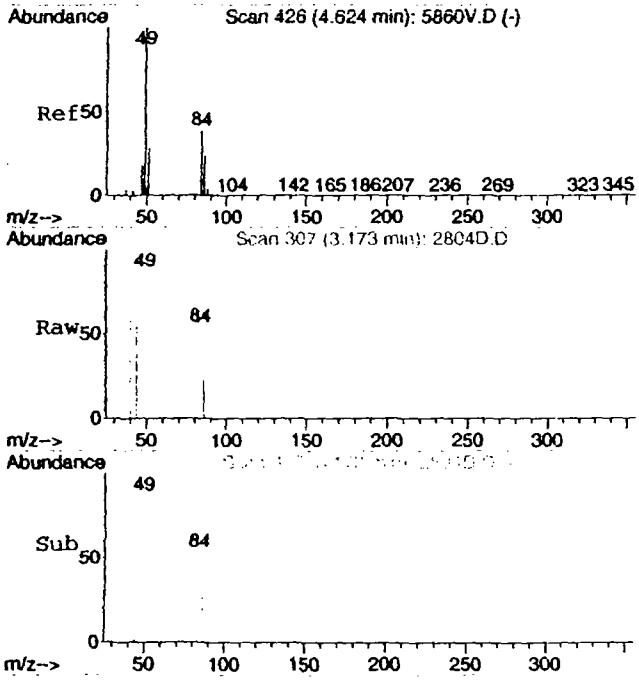


#8
Acetone
Concen: 0.88 UG/L
RT: 2.78 min Scan# 252
Delta R.T. 0.01 min
Lab File: 2804D.D
Acq: 6 Sep 2007 7:22

Tgt Ion: 43 Resp: 810

Ion	Ratio	Lower	Upper
43	100		
58	35.2	23.1	34.7#

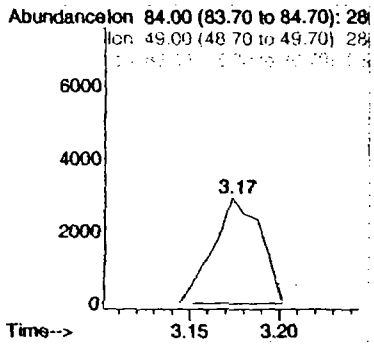


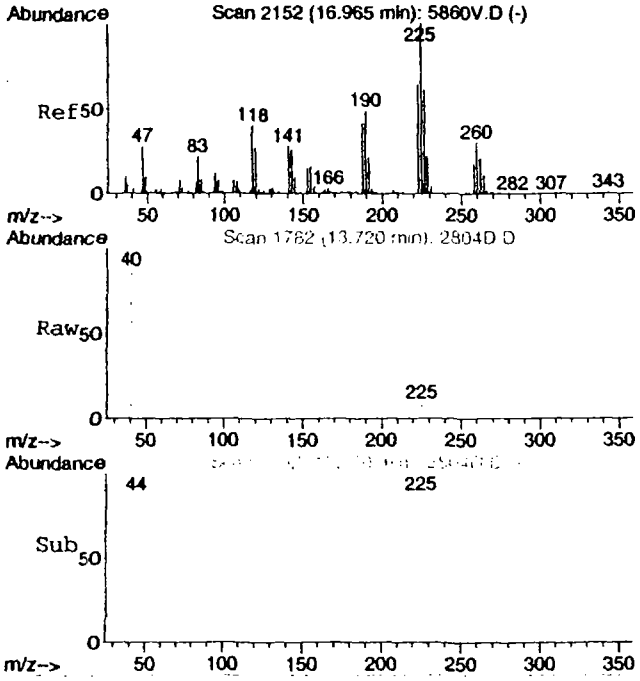


#10
Methylene Chloride
Concen: Below Cal
RT: 3.17 min Scan# 307
Delta R.T. -0.00 min
Lab File: 2804D.D
Acq: 6 Sep 2007 7:22

Tgt Ion: 84 Resp: 5352

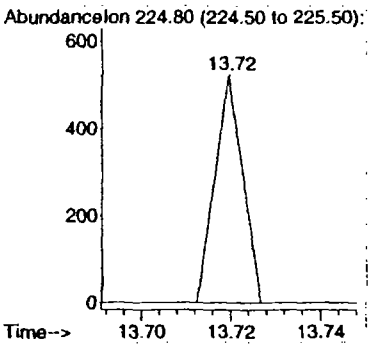
Ion	Ratio	Lower	Upper
84	100		
49	169.0	140.2	210.2
86	61.0	51.1	76.7





#70
Hexachlorobutadiene
Concen: Below Cal
RT: 13.72 min Scan# 1782
Delta R.T. -0.01 min
Lab File: 2804D.D
Acq: 6 Sep 2007 7:22

Tgt Ion:225 Resp: 225



R524561 Heritage Environmental Services, LLC A781256

GC/MS VOA

Method EPA 524.2 REV. 4.1 **Test Code** O516.9.0
Sample Description LQ4589 Analyst 1062 R. SHAMP
Submitter IDEM - OLQ File 2805D.D Date/Time 06Sep07 07:53:00
Instrument 345 Channel 1 Dilution Factor 1

CAS	PRM	Parameter	Concentration	RQL	Limit	Units	RT
NA	1807	REGULATED CONTAMINANTS					
71-43-2	151	BENZENE		BDL	0.50	UG/L	
56-23-5	217	CARBON TETRACHLORIDE		BDL	0.50	UG/L	
106-46-7	29	1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)		BDL	0.50	UG/L	
107-06-2	21	1,2-DICHLOROETHANE		BDL	0.50	UG/L	
75-35-4	8	1,1-DICHLOROETHENE		BDL	0.50	UG/L	
71-55-6	2	1,1,1-TRICHLOROETHANE		BDL	0.50	UG/L	
79-01-6	750	TRICHLOROETHENE		BDL	0.50	UG/L	
75-01-4	768	VINYL CHLORIDE		BDL	0.20	UG/L	
108-90-7	231	CHLOROBENZENE		BDL	0.50	UG/L	
95-50-1	20	1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)		BDL	0.50	UG/L	
156-60-5	746	TRANS-1,2-DICHLOROETHENE		BDL	0.50	UG/L	
156-59-2	246	CIS-1,2-DICHLOROETHENE		BDL	0.50	UG/L	
75-09-2	302	DICHLOROMETHANE (METHYLENE CHLORIDE)		BDL	0.50	UG/L	
78-87-5	23	1,2-DICHLOROPROPANE		BDL	0.50	UG/L	
100-41-4	349	ETHYL BENZENE		BDL	0.50	UG/L	
100-42-5	680	STYRENE		BDL	0.50	UG/L	
79-00-5	4	1,1,2-TRICHLOROETHANE		BDL	0.50	UG/L	
127-18-4	703	TETRACHLOROETHENE		BDL	0.50	UG/L	
108-88-3	724	TOLUENE		BDL	0.50	UG/L	
95-47-6	549	O-XYLENE		BDL	0.50	UG/L	
MPXYLENE	492	M/P-XYLENE		BDL	0.50	UG/L	
120-82-1	16	1,2,4-TRICHLOROBENZENE		BDL	0.50	UG/L	
NA	1809	UNREGULATED - MONITORING REQUIRED					
108-86-1	193	BROMOBENZENE		BDL	0.50	UG/L	
75-27-4	195	BROMODICHLOROMETHANE		BDL	0.50	UG/L	
75-25-2	197	BROMOFORM		BDL	0.50	UG/L	
74-83-9	198	BROMOMETHANE		BDL	0.50	UG/L	
124-48-1	233	CHLORODIBROMOMETHANE		BDL	0.50	UG/L	
75-00-3	234	CHLOROETHANE		BDL	0.50	UG/L	
67-66-3	235	CHLOROFORM		BDL	0.50	UG/L	
74-87-3	236	CHLOROMETHANE		BDL	0.50	UG/L	
95-49-8	807	2-CHLOROTOLUENE (O-CHLOROTOLUENE)		BDL	0.50	UG/L	
106-43-4	808	4-CHLOROTOLUENE (P-CHLOROTOLUENE)		BDL	0.50	UG/L	
74-95-3	296	DIBROMOMETHANE		BDL	0.50	UG/L	
541-73-1	26	1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)		BDL	0.50	UG/L	
75-34-3	7	1,1-DICHLOROETHANE		BDL	0.50	UG/L	
563-58-6	10	1,1-DICHLOROPROPENE		BDL	0.50	UG/L	
142-28-9	27	1,3-DICHLOROPROPANE		BDL	0.50	UG/L	
10061-02-6	747	TRANS-1,3-DICHLOROPROPENE		BDL	0.50	UG/L	
10061-01-5	247	CIS-1,3-DICHLOROPROPENE		BDL	0.50	UG/L	
594-20-7	33	2,2-DICHLOROPROPANE		BDL	0.50	UG/L	
630-20-6	1	1,1,1,2-TETRACHLOROETHANE		BDL	0.50	UG/L	
79-34-5	3	1,1,2,2-TETRACHLOROETHANE		BDL	0.50	UG/L	
96-18-4	14	1,2,3-TRICHLOROPROPANE		BDL	0.50	UG/L	

LKS 9.10.07

LKS 9.10.07

NA	1806	MONITORED AT STATE'S DISCRETION			
74-97-5	194	BROMOCHLOROMETHANE	BDL	0.50	UG/L
104-51-8	519	N-BUTYLBENZENE	BDL	0.50	UG/L
75-71-8	300	DICHLORODIFLUOROMETHANE	BDL	0.50	UG/L
75-69-4	372	TRICHLOROFLUOROMETHANE	BDL	0.50	UG/L
87-68-3	398	HEXACHLOROBUTADIENE	BDL	0.50	UG/L
98-82-8	432	ISOPROPYLBENZENE (CUMENE)	BDL	0.50	UG/L
99-87-6	628	4-ISOPROPYLTOLUENE (P-ISOPROPYLTOLUENE)	BDL	0.50	UG/L
91-20-3	493	NAPHTHALENE	BDL	0.50	UG/L
103-65-1	532	N-PROPYLBENZENE	BDL	0.50	UG/L
135-98-8	644	SEC-BUTYLBENZENE	BDL	0.50	UG/L
98-06-6	702	TERT-BUTYLBENZENE	BDL	0.50	UG/L
87-61-6	13	1,2,3-TRICHLOROBENZENE	BDL	0.50	UG/L
95-63-6	17	1,2,4-TRIMETHYLBENZENE	BDL	0.50	UG/L
108-67-8	25	1,3,5-TRIMETHYLBENZENE	BDL	0.50	UG/L
106-93-4	18	1,2-DIBROMOETHANE (EDB)	BDL	0.50	UG/L
96-12-8	19	1,2-DIBROMO-3-CHLOROPROPANE (DBCP)	BDL	0.50	UG/L
1634-04-4	859	METHYL-T-BUTYL ETHER (MTBE)	BDL	0.50	UG/L
	972	————————			
591-78-6	60	2-HEXANONE	BDL	2.0	UG/L
79-46-9	67	2-NITROPROPANE	*		
67-64-1	99	ACETONE (2-PROPANONE)	BDL	4.0	UG/L
78-93-3	52	2-BUTANONE	BDL	2.0	UG/L
75-15-0	216	CARBON DISULFIDE	*		
	1804	...			
	971	SURROGATE RECOVERY			
	972	————————			
17060-07-0	301	DICHLOROETHANE-D4	101		% RECOVERY
2037-26-5	726	TOLUENE-D8	91		% RECOVERY
460-00-4	196	4-BROMOFLUOROBENZENE	91		% RECOVERY
	1131	TENTATIVELY IDENTIFIED COMPOUNDS			
	3320	NONE DETECTED			

Comment Note: * Compound searched for but not detected. Standard was unavailable to determine retention time and detection limit.

Qualifiers

* See Note for Parameter

BDL Below Detection Limit

Comments to Laboratory (do not record)

4-HCL VIALS

Need verbals ASAP, in 7 days or sooner.

Note the additional IDEM analytes for drinking water:

CS2, MEK, Acetone, 2-Nitropropane, 2-Hexanone

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\DATA\D090607\2805D.D Vial: 1
Acq On : 6 Sep 2007 7:53 Operator: REGI
Sample : A781256 LQ4589 Inst : GCMS #4
Misc : 9/8/07 Multiplr: 1.00
MS Integration Params: rteint2.p
Quant Time: Sep 06 08:10:04 2007 Quant Results File: DWD.RES

Quant Method : C:\MSDCHEM\1\METHODS\DWD.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Tue Sep 04 10:38:20 2007
Response via : Initial Calibration
DataAcq Meth : DWD

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) FLUOROBENZENE	5.68	96	372823	10.00	UG/L	0.00
38) 2-Bromo-1-chloropropane	7.97	77	152230	10.00	UG/L	0.00
System Monitoring Compounds						
21) Dibromofluoromethane	4.95	113	94876	10.17	UG/L	0.00
Spiked Amount 10.000			Recovery	=	101.70%	
23) 1,2-Dichloroethane-d4	5.30	65	116419	10.14	UG/L	0.00
Spiked Amount 10.000			Recovery	=	101.40%	
33) Toluene-d8	7.51	98	350816	9.08	UG/L	0.00
Spiked Amount 10.000			Recovery	=	90.80%	
51) 4-Bromofluorobenzene	10.66	174	123075	9.13	UG/L	0.00
Spiked Amount 10.000			Recovery	=	91.30%	
Target Compounds						Qvalue
3) Chloromethane	1.52	50	4378	0.35	UG/L	100
8) Acetone	2.78	43	5881	1.95	UG/L #	88
10) Methylene Chloride	3.18	84	3260	Below Cal	#	84
17) Tetrahydrofuran	4.75	42	7389	1.66	UG/L #	85
55) n-Propylbenzene	10.67	92	4046	0.70	UG/L #	1

no TICs

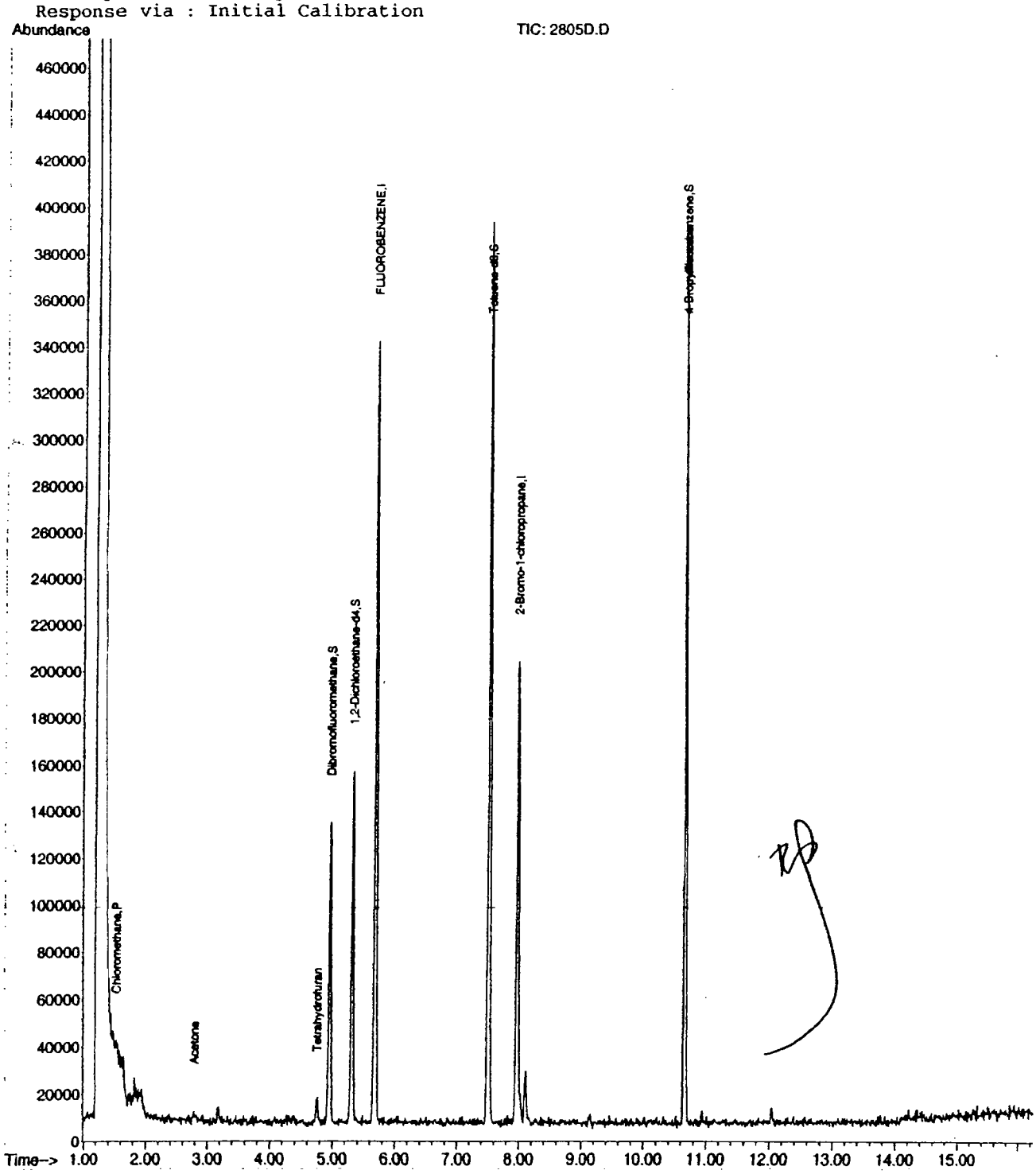
(#) = qualifier out of range (m) = manual integration
2805D.D DWD.M Thu Sep 06 08:10:06 2007

Quantitation Report (Not Reviewed)

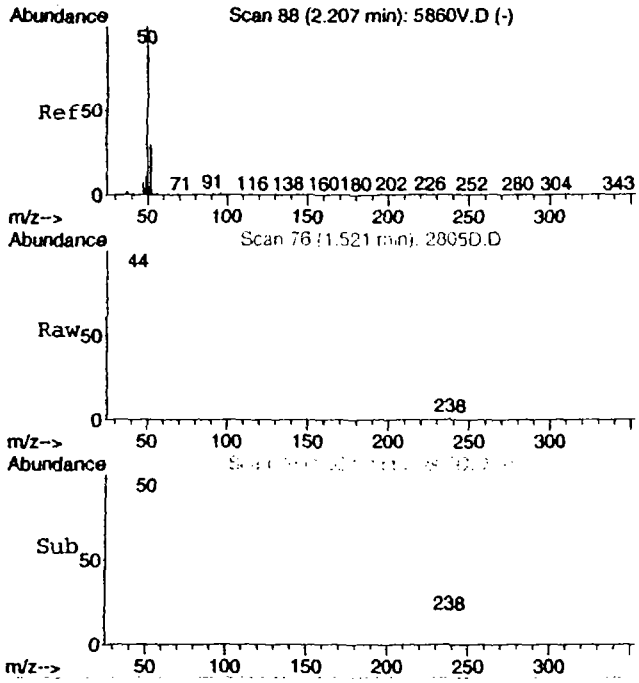
Data File : C:\MSDCHEM\DATA\D090607\2805D.D
Acq On : 6 Sep 2007 7:53
Sample : A781256 LQ4589
Misc : 9/8/07
MS Integration Params: rteint2.p
Quant Time: Sep 6 8:10 2007

Vial: 1
Operator: REGI
Inst : GCMS #4
Multiplr: 1.00
Quant Results File: DWD.RES

Method : C:\MSDCHEM\1\METHODS\DWD.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Tue Sep 04 10:38:20 2007
Response via : Initial Calibration

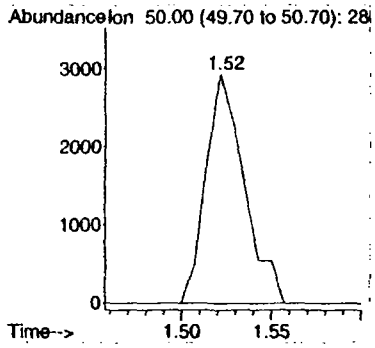


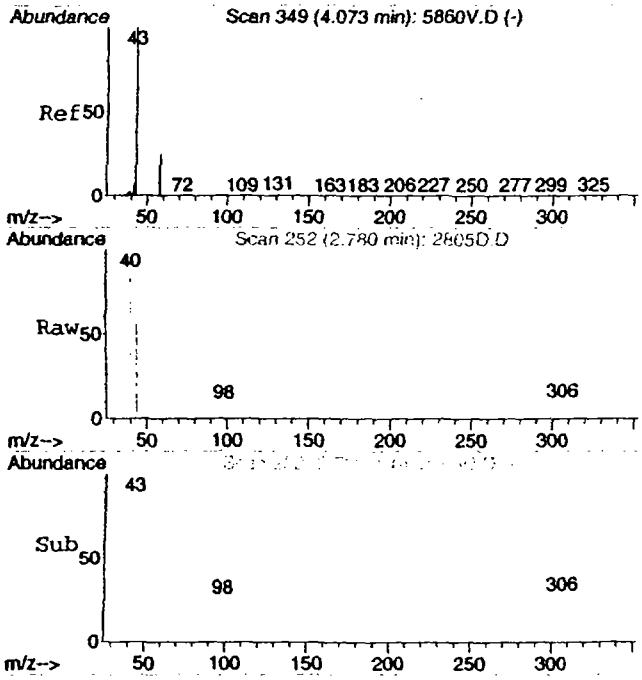
2805D.D DWD.M Thu Sep 06 08:10:06 2007 Page 2



#3
Chloromethane
Concen: 0.35 UG/L
RT: 1.52 min Scan# 76
Delta R.T. 0.00 min
Lab File: 2805D.D
Acq: 6 Sep 2007 7:53

Tgt Ion: 50 Resp: 4378

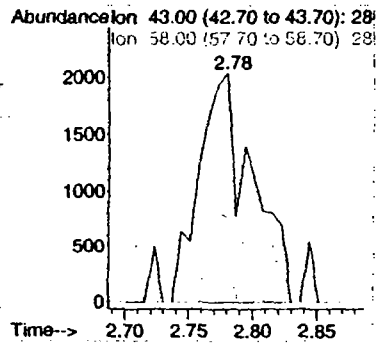


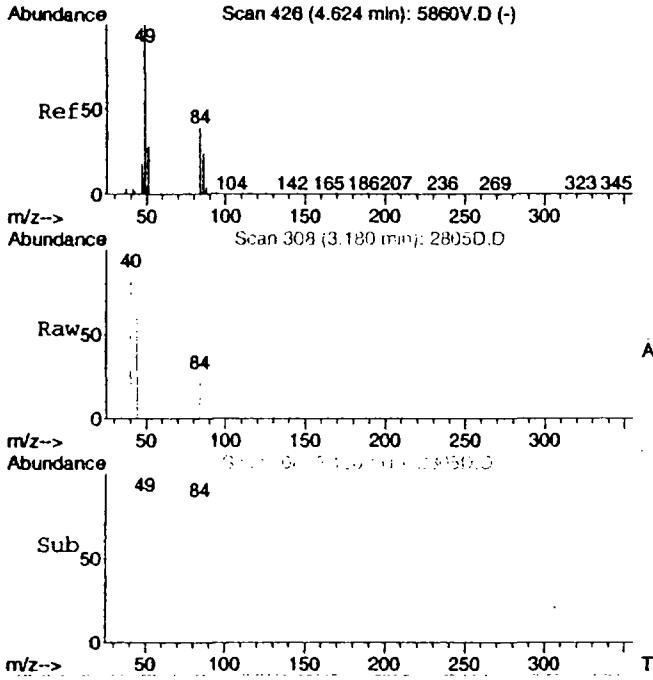


#8
Acetone
Concen: 1.95 UG/L
RT: 2.78 min Scan# 252
Delta R.T. 0.01 min
Lab File: 2805D.D
Acq: 6 Sep 2007 7:53

Tgt Ion: 43 Resp: 5881

Ion	Ratio	Lower	Upper
43	100		
58	22.5	23.1	34.7#

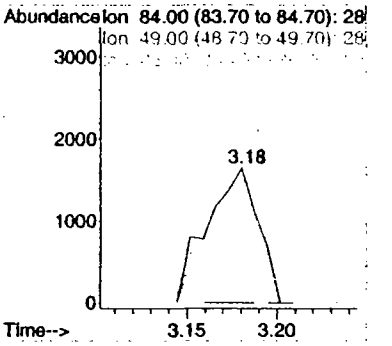


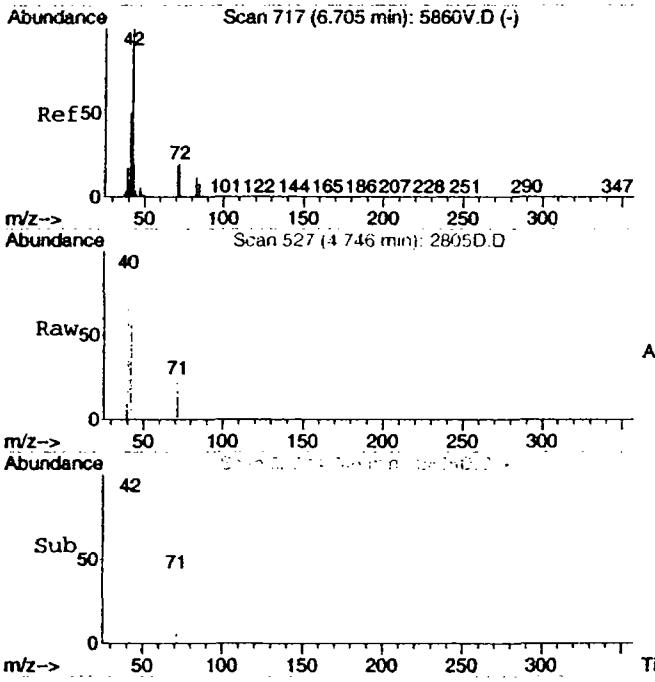


#10
Methylene Chloride
Concen: Below Cal
RT: 3.18 min Scan# 308
Delta R.T. 0.01 min
Lab File: 2805D.D
Acq: 6 Sep 2007 7:53

Tgt Ion: 84 Resp: 3260

Ion	Ratio	Lower	Upper
84	100		
49	162.2	140.2	210.2
86	35.9	51.1	76.7#

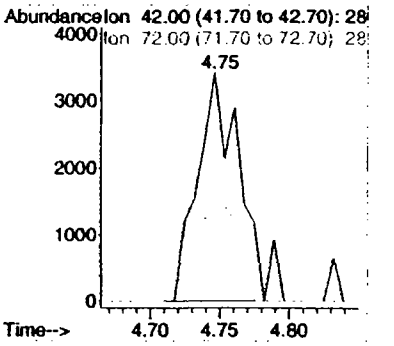


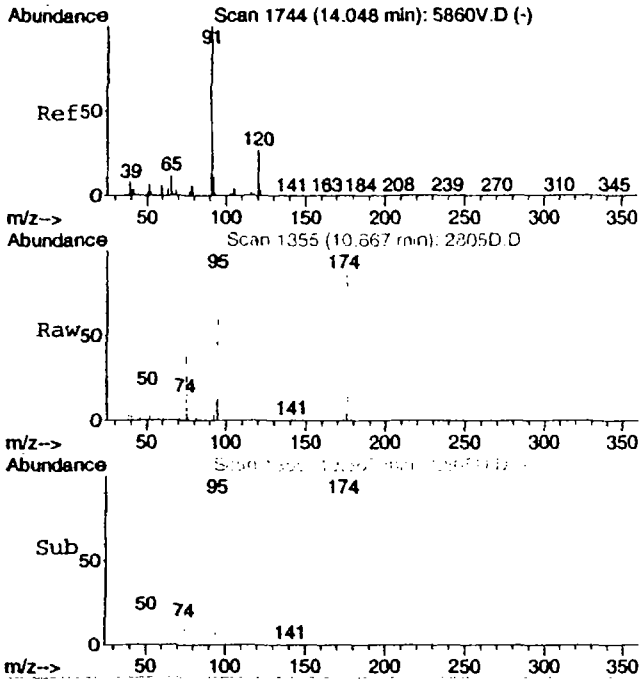


#17
Tetrahydrofuran
Concen: 1.66 UG/L
RT: 4.75 min Scan# 527
Delta R.T. 0.00 min
Lab File: 2805D.D
Acq: 6 Sep 2007 7:53

Tgt Ion: 42 Resp: 7389

Ion	Ratio	Lower	Upper
42	100		
72	38.8	24.5	36.7#

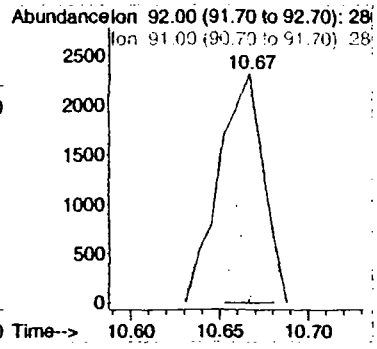




#55
n-Propylbenzene
Concen: 0.70 UG/L
RT: 10.67 min Scan# 1355
Delta R.T. -0.26 min
Lab File: 2805D.D
Acq: 6 Sep 2007 7:53

Tgt Ion: 92 Resp: 4046

Ion	Ratio	Lower	Upper
92	100		
91	16.4	715.8	1073.6#



070

R524561 Heritage Environmental Services, LLC A781257

GC/MS VOA

Method EPA 524.2 REV. 4.1
Sample Description LQ4590
Submitter IDEM - OLQ
Instrument 345 Channel 1

Test Code O516.9.0
Analyst 1062 R. SHAMP
File 2806D.D Date/Time 06Sep07 08:21:00
Dilution Factor 1

CAS	PRM	Parameter	Concentration	RQL	Limit	Units	RT
NA	1807	REGULATED CONTAMINANTS					
71-43-2	151	BENZENE		BDL	0.50	UG/L	
56-23-5	217	CARBON TETRACHLORIDE		BDL	0.50	UG/L	
106-46-7	29	1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)		BDL	0.50	UG/L	
107-06-2	21	1,2-DICHLOROETHANE		BDL	0.50	UG/L	
75-35-4	8	1,1-DICHLOROETHENE		BDL	0.50	UG/L	
71-55-6	2	1,1,1-TRICHLOROETHANE		BDL	0.50	UG/L	
79-01-6	750	TRICHLOROETHENE		BDL	0.50	UG/L	
75-01-4	768	VINYL CHLORIDE		BDL	0.20	UG/L	
108-90-7	231	CHLOROBENZENE		BDL	0.50	UG/L	
95-50-1	20	1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)		BDL	0.50	UG/L	
156-60-5	746	TRANS-1,2-DICHLOROETHENE		BDL	0.50	UG/L	
156-59-2	246	CIS-1,2-DICHLOROETHENE		BDL	0.50	UG/L	
75-09-2	302	DICHLOROMETHANE (METHYLENE CHLORIDE)		BDL	0.50	UG/L	
78-87-5	23	1,2-DICHLOROPROPANE		BDL	0.50	UG/L	
100-41-4	349	ETHYL BENZENE		BDL	0.50	UG/L	
100-42-5	680	STYRENE		BDL	0.50	UG/L	
79-00-5	4	1,1,2-TRICHLOROETHANE		BDL	0.50	UG/L	
127-18-4	703	TETRACHLOROETHENE		BDL	0.50	UG/L	
108-88-3	724	TOLUENE		BDL	0.50	UG/L	
95-47-6	549	O-XYLENE		BDL	0.50	UG/L	
MPXYLENE	492	M/P-XYLENE		BDL	0.50	UG/L	
120-82-1	16	1,2,4-TRICHLOROBENZENE		BDL	0.50	UG/L	
NA	1809	UNREGULATED - MONITORING REQUIRED					
108-86-1	193	BROMOBENZENE		BDL	0.50	UG/L	
75-27-4	195	BROMODICHLOROMETHANE		BDL	0.50	UG/L	
75-25-2	197	BROMOFORM		BDL	0.50	UG/L	
74-83-9	198	BROMOMETHANE		BDL	0.50	UG/L	
124-48-1	233	CHLORODIBROMOMETHANE		BDL	0.50	UG/L	
75-00-3	234	CHLOROETHANE		BDL	0.50	UG/L	
67-66-3	235	CHLOROFORM		BDL	0.50	UG/L	
74-87-3	236	CHLOROMETHANE		BDL	0.50	UG/L	
95-49-8	807	2-CHLOROTOLUENE (O-CHLOROTOLUENE)		BDL	0.50	UG/L	
106-43-4	808	4-CHLOROTOLUENE (P-CHLOROTOLUENE)		BDL	0.50	UG/L	
74-95-3	296	DIBROMOMETHANE		BDL	0.50	UG/L	
541-73-1	26	1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)		BDL	0.50	UG/L	
75-34-3	7	1,1-DICHLOROETHANE		BDL	0.50	UG/L	
563-58-6	10	1,1-DICHLOROPROPENE		BDL	0.50	UG/L	
142-28-9	27	1,3-DICHLOROPROPANE		BDL	0.50	UG/L	
10061-01-5	247	CIS-1,3-DICHLOROPROPENE		BDL	0.50	UG/L	
10061-02-6	747	TRANS-1,3-DICHLOROPROPENE		BDL	0.50	UG/L	
594-20-7	33	2,2-DICHLOROPROPANE		BDL	0.50	UG/L	
630-20-6	1	1,1,1,2-TETRACHLOROETHANE		BDL	0.50	UG/L	
79-34-5	3	1,1,2,2-TETRACHLOROETHANE		BDL	0.50	UG/L	
96-18-4	14	1,2,3-TRICHLOROPROPANE		BDL	0.50	UG/L	

JD 9-10-07
JD 9-10-07

Heritage Environmental Services, LLC

GC/MS VOA

CAS	PRM	Parameter	Concentration	RQL	Limit	Units	RT
NA	1806	MONITORED AT STATE'S DISCRETION					
74-97-5	194	BROMOCHLOROMETHANE		BDL	0.50	UG/L	
104-51-8	519	N-BUTYLBENZENE		BDL	0.50	UG/L	
75-71-8	300	DICHLORODIFLUOROMETHANE		BDL	0.50	UG/L	
75-69-4	372	TRICHLOROFLUOROMETHANE		BDL	0.50	UG/L	
87-68-3	398	HEXACHLOROBUTADIENE		BDL	0.50	UG/L	
98-82-8	432	ISOPROPYLBENZENE (CUMENE)		BDL	0.50	UG/L	
99-87-6	628	4-ISOPROPYLTOLUENE (P-ISOPROPYLTOLUENE)		BDL	0.50	UG/L	
91-20-3	493	NAPHTHALENE		BDL	0.50	UG/L	
103-65-1	532	N-PROPYLBENZENE		BDL	0.50	UG/L	
135-98-8	644	SEC-BUTYLBENZENE		BDL	0.50	UG/L	
98-06-6	702	TERT-BUTYLBENZENE		BDL	0.50	UG/L	
87-61-6	13	1,2,3-TRICHLOROBENZENE		BDL	0.50	UG/L	
95-63-6	17	1,2,4-TRIMETHYLBENZENE		BDL	0.50	UG/L	
108-67-8	25	1,3,5-TRIMETHYLBENZENE		BDL	0.50	UG/L	
106-93-4	18	1,2-DIBROMOETHANE (EDB)		BDL	0.50	UG/L	
96-12-8	19	1,2-DIBROMO-3-CHLOROPROPANE (DBCP)		BDL	0.50	UG/L	
1634-04-4	859	METHYL-T-BUTYL ETHER (MTBE)		BDL	0.50	UG/L	
	972	----------					
591-78-6	60	2-HEXANONE		BDL	2.0	UG/L	
79-46-9	67	2-NITROPROPANE		*			
67-64-1	99	ACETONE (2-PROPANONE)		BDL	4.0	UG/L	
78-93-3	52	2-BUTANONE		BDL	2.0	UG/L	
75-15-0	216	CARBON DISULFIDE		*			
	1804	...					
	971	SURROGATE RECOVERY					
	972	----------					
17060-07-0	301	DICHLOROETHANE-D4	100			% RECOVERY	
2037-26-5	726	TOLUENE-D8	90			% RECOVERY	
460-00-4	196	4-BROMOFLUOROBENZENE	88			% RECOVERY	
	1131	TENTATIVELY IDENTIFIED COMPOUNDS					
	3320	NONE DETECTED					

Comment Note: * Compound searched for but not detected. Standard was unavailable to determine retention time and detection limit.

Qualifiers

BDL Below Detection Limit

* See Note for Parameter

Comments to Laboratory (do not record)

4-HCL VIALS

Need verbals ASAP, in 7 days or sooner.

Note the additional IDEM analytes for drinking water:

CS2, MEK, Acetone, 2-Nitropropane, 2-Hexanone

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\DATA\D090607\2806D.D Vial: 2
Acq On : 6 Sep 2007 8:21 Operator: REGI
Sample : A781257 LQ4590 Inst : GCMS #4
Misc : 9/8/07 Multiplr: 1.00
MS Integration Params: rteint2.p
Quant Time: Sep 06 08:37:23 2007 Quant Results File: DWD.RES

Quant Method : C:\MSDCHEM\1\METHODS\DWD.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Tue Sep 04 10:38:20 2007
Response via : Initial Calibration
DataAcq Meth : DWD

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) FLUOROBENZENE	5.68	96	378720	10.00 UG/L	0.00
38) 2-Bromo-1-chloropropane	7.97	77	157534	10.00 UG/L	0.00
System Monitoring Compounds					
21) Dibromofluoromethane	4.95	113	95785	10.10 UG/L	0.00
Spiked Amount 10.000			Recovery	= 101.00%	
23) 1,2-Dichloroethane-d4	5.30	65	116178	9.96 UG/L	0.00
Spiked Amount 10.000			Recovery	= 99.60%	
33) Toluene-d8	7.51	98	354867	9.04 UG/L	0.00
Spiked Amount 10.000			Recovery	= 90.40%	
51) 4-Bromofluorobenzene	10.67	174	121948	8.75 UG/L	0.00
Spiked Amount 10.000			Recovery	= 87.50%	
Target Compounds					Qvalue
8) ~~Acetone~~	2.77	43	2173	1.16 UG/L #	46
10) ~~Methylene~~ Chloride	3.17	84	1965	Below Cal #	44
17) ~~Tetrahydro~~furan	4.76	42	8173	1.81 UG/L #	88
55) ~~n-Propylben~~zene	10.67	92	3578	0.60 UG/L #	1

No TICs

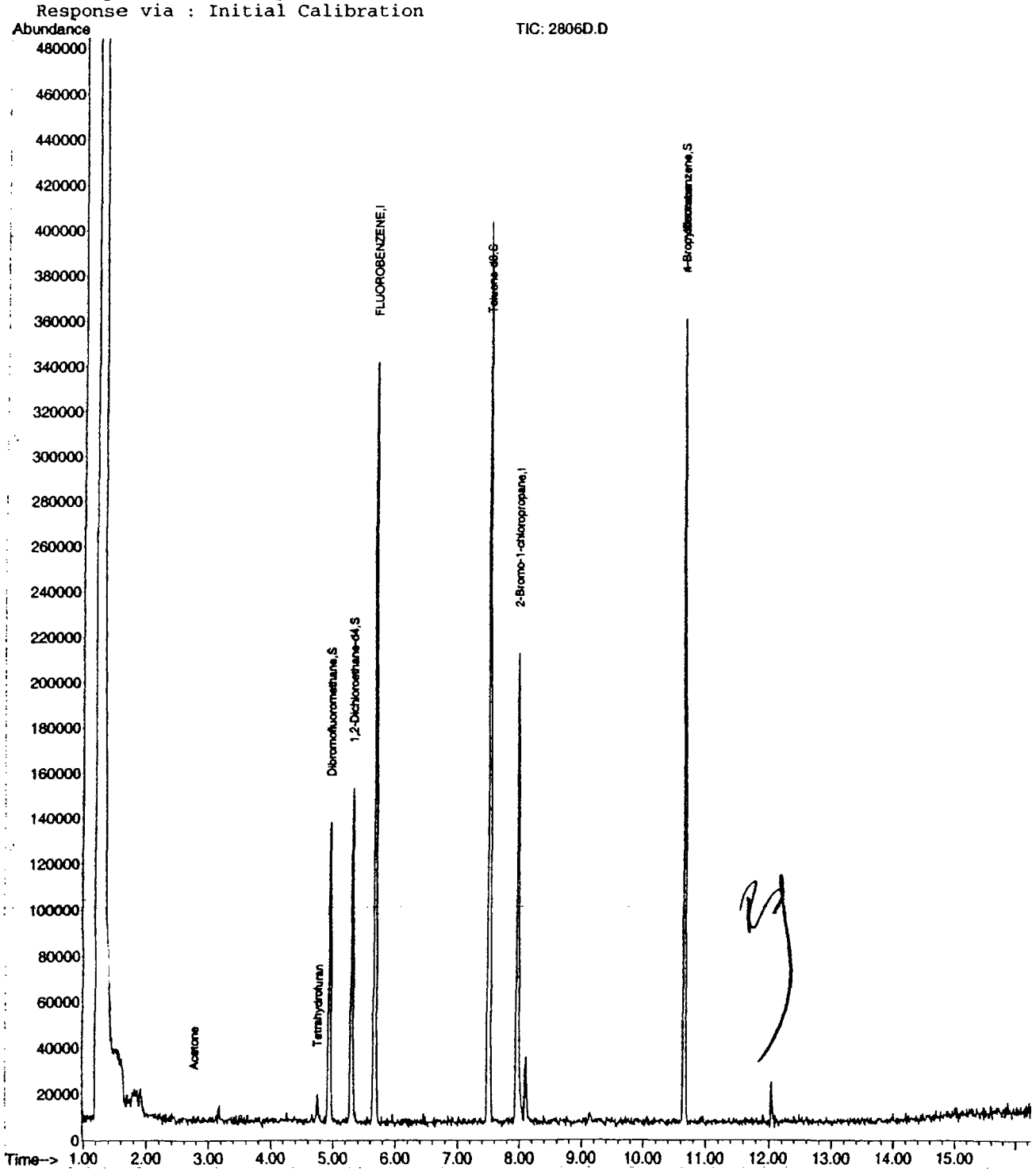
(#) = qualifier out of range (m) = manual integration
2806D.D DWD.M Thu Sep 06 08:37:25 2007

Quantitation Report (Not Reviewed)

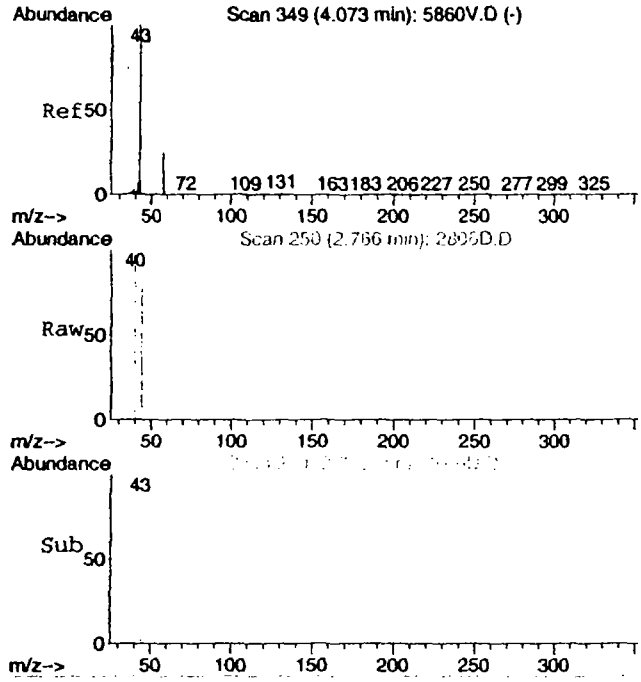
Data File : C:\MSDCHEM\DATA\D090607\2806D.D
Acq On : 6 Sep 2007 8:21
Sample : A781257 LQ4590
Misc : 9/8/07
MS Integration Params: rteint2.p
Quant Time: Sep 6 8:37 2007

Vial: 2
Operator: REGI
Inst : GCMS #4
Multiplr: 1.00
Quant Results File: DWD.RES

Method : C:\MSDCHEM\1\METHODS\DWD.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Tue Sep 04 10:38:20 2007
Response via : Initial Calibration



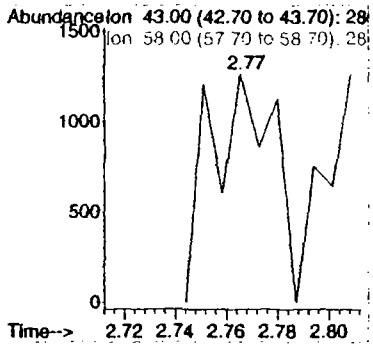
2806D.D DWD.M Thu Sep 06 08:37:26 2007 Page 2

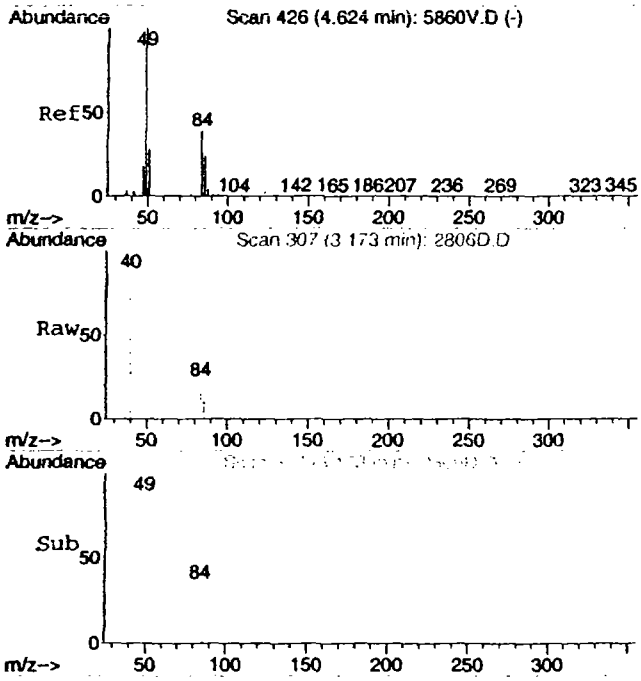


#8
Acetone
Concen: 1.16 UG/L
RT: 2.77 min Scan# 250
Delta R.T. -0.01 min
Lab File: 2806D.D
Acq: 6 Sep 2007 8:21

Tgt Ion: 43 Resp: 2173

Ion	Ratio	Lower	Upper
43	100		
58	0.0	23.1	34.7#

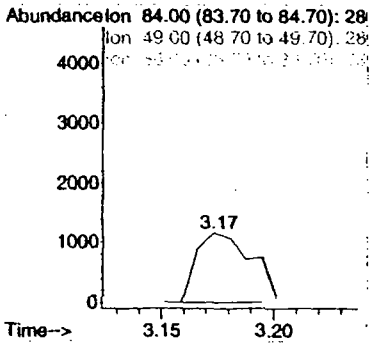


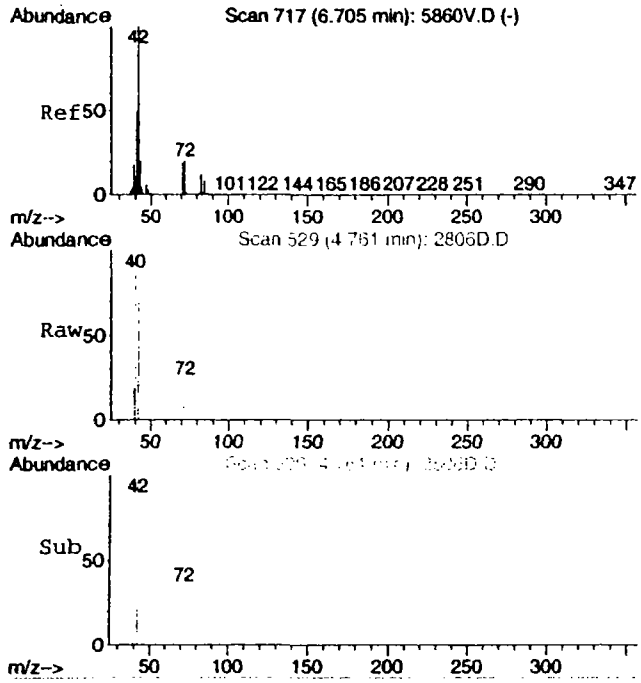


#10
Methylene Chloride
Concen: Below Cal
RT: 3.17 min Scan# 307
Delta R.T. 0.00 min
Lab File: 2806D.D
Acq: 6 Sep 2007 8:21

Tgt Ion: 84 Resp: 1965

Ion	Ratio	Lower	Upper
84	100		
49	259.5	140.2	210.2#
86	98.9	51.1	76.7#

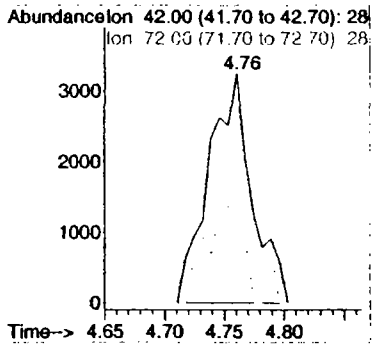


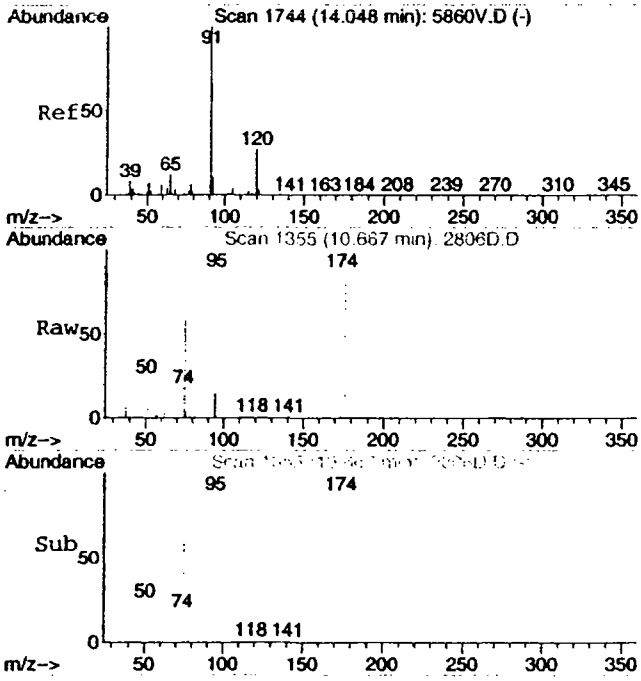


#17
Tetrahydrofuran
Concen: 1.81 UG/L
RT: 4.76 min Scan# 529
Delta R.T. 0.01 min
Lab File: 2806D.D
Acq: 6 Sep 2007 8:21

Tgt Ion: 42 Resp: 8173

Ion	Ratio	Lower	Upper
42	100		
72	37.3	24.5	36.7#

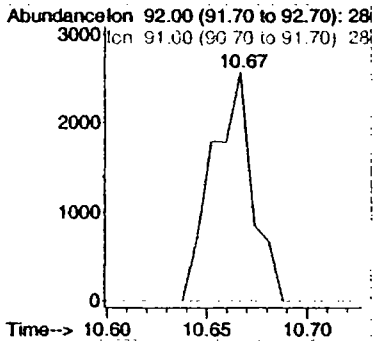




#55
n-Propylbenzene
Concen: 0.60 UG/L
RT: 10.67 min Scan# 1355
Delta R.T. -0.26 min
Lab File: 2806D.D
Acq: 6 Sep 2007 8:21

Tgt Ion: 92 Resp: 3578

Ion	Ratio	Lower	Upper
92	100		
91	0.0	715.8	1073.6#



R524561 Heritage Environmental Services, LLC A781258

GC/MS VOA

Method EPA 524.2 REV. 4.1
Sample Description LQ4591
Submitter IDEM - OLQ
Instrument 345 Channel 1

Test Code O516.9.0
Analyst 1062 R. SHAMP
File 2807D.D Date/Time 06Sep07 08:48:00
Dilution Factor 1

CAS	PRM	Parameter	Concentration	RQL	Limit	Units	RT
NA	1807	REGULATED CONTAMINANTS					
71-43-2	151	BENZENE		BDL	0.50	UG/L	
56-23-5	217	CARBON TETRACHLORIDE		BDL	0.50	UG/L	
106-46-7	29	1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)		BDL	0.50	UG/L	
107-06-2	21	1,2-DICHLOROETHANE		BDL	0.50	UG/L	
75-35-4	8	1,1-DICHLOROETHENE		BDL	0.50	UG/L	
71-55-6	2	1,1,1-TRICHLOROETHANE		BDL	0.50	UG/L	
79-01-6	750	TRICHLOROETHENE		BDL	0.50	UG/L	
75-01-4	768	VINYL CHLORIDE		BDL	0.20	UG/L	
108-90-7	231	CHLOROBENZENE		BDL	0.50	UG/L	
95-50-1	20	1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)		BDL	0.50	UG/L	
156-60-5	746	TRANS-1,2-DICHLOROETHENE		BDL	0.50	UG/L	
156-59-2	246	CIS-1,2-DICHLOROETHENE		BDL	0.50	UG/L	
75-09-2	302	DICHLOROMETHANE (METHYLENE CHLORIDE)		BDL	0.50	UG/L	
78-87-5	23	1,2-DICHLOROPROPANE		BDL	0.50	UG/L	
100-41-4	349	ETHYL BENZENE		BDL	0.50	UG/L	
100-42-5	680	STYRENE		BDL	0.50	UG/L	
79-00-5	4	1,1,2-TRICHLOROETHANE		BDL	0.50	UG/L	
127-18-4	703	TETRACHLOROETHENE		BDL	0.50	UG/L	
108-88-3	724	TOLUENE		BDL	0.50	UG/L	
95-47-6	549	O-XYLENE		BDL	0.50	UG/L	
MPXYLENE	492	M/P-XYLENE		BDL	0.50	UG/L	
120-82-1	16	1,2,4-TRICHLOROBENZENE		BDL	0.50	UG/L	
NA	1809	UNREGULATED - MONITORING REQUIRED					
108-86-1	193	BROMOBENZENE		BDL	0.50	UG/L	
75-27-4	195	BROMODICHLOROMETHANE		BDL	0.50	UG/L	
75-25-2	197	BROMOFORM		BDL	0.50	UG/L	
74-83-9	198	BROMOMETHANE		BDL	0.50	UG/L	
124-48-1	233	CHLORODIBROMOMETHANE		BDL	0.50	UG/L	
75-00-3	234	CHLOROETHANE		BDL	0.50	UG/L	
67-66-3	235	CHLOROFORM		BDL	0.50	UG/L	
74-87-3	236	CHLOROMETHANE		BDL	0.50	UG/L	
95-49-8	807	2-CHLOROTOLUENE (O-CHLOROTOLUENE)		BDL	0.50	UG/L	
106-43-4	808	4-CHLOROTOLUENE (P-CHLOROTOLUENE)		BDL	0.50	UG/L	
74-95-3	296	DIBROMOMETHANE		BDL	0.50	UG/L	
541-73-1	26	1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)		BDL	0.50	UG/L	
75-34-3	7	1,1-DICHLOROETHANE		BDL	0.50	UG/L	
563-58-6	10	1,1-DICHLOROPROPENE		BDL	0.50	UG/L	
142-28-9	27	1,3-DICHLOROPROPANE		BDL	0.50	UG/L	
10061-01-5	247	CIS-1,3-DICHLOROPROPENE		BDL	0.50	UG/L	
10061-02-6	747	TRANS-1,3-DICHLOROPROPENE		BDL	0.50	UG/L	
594-20-7	33	2,2-DICHLOROPROPANE		BDL	0.50	UG/L	
630-20-6	1	1,1,1,2-TETRACHLOROETHANE		BDL	0.50	UG/L	
79-34-5	3	1,1,2,2-TETRACHLOROETHANE		BDL	0.50	UG/L	
96-18-4	14	1,2,3-TRICHLOROPROPANE		BDL	0.50	UG/L	

/ LK 9-10-07

LK 9-10-07

GC/MS VOA

CAS	PRM	Parameter	Concentration	RQL	Limit	Units	RT
NA	1806	MONITORED AT STATE'S DISCRETION					
74-97-5	194	BROMOCHLOROMETHANE		BDL	0.50	UG/L	
104-51-8	519	N-BUTYLBENZENE		BDL	0.50	UG/L	
75-71-8	300	DICHLORODIFLUOROMETHANE		BDL	0.50	UG/L	
75-69-4	372	TRICHLOROFLUOROMETHANE		BDL	0.50	UG/L	
87-68-3	398	HEXACHLOROBUTADIENE		BDL	0.50	UG/L	
98-82-8	432	ISOPROPYLBENZENE (CUMENE)		BDL	0.50	UG/L	
99-87-6	628	4-ISOPROPYLTOLUENE (P-ISOPROPYLTOLUENE)		BDL	0.50	UG/L	
91-20-3	493	NAPHTHALENE		BDL	0.50	UG/L	
103-65-1	532	N-PROPYLBENZENE		BDL	0.50	UG/L	
135-98-8	644	SEC-BUTYLBENZENE		BDL	0.50	UG/L	
98-06-6	702	TERT-BUTYLBENZENE		BDL	0.50	UG/L	
87-61-6	13	1,2,3-TRICHLOROBENZENE		BDL	0.50	UG/L	
95-63-6	17	1,2,4-TRIMETHYLBENZENE		BDL	0.50	UG/L	
108-67-8	25	1,3,5-TRIMETHYLBENZENE		BDL	0.50	UG/L	
106-93-4	18	1,2-DIBROMOETHANE (EDB)		BDL	0.50	UG/L	
96-12-8	19	1,2-DIBROMO-3-CHLOROPROPANE (DBCP)		BDL	0.50	UG/L	
1634-04-4	859	METHYL-T-BUTYL ETHER (MTBE)		BDL	0.50	UG/L	
	972	————————					
591-78-6	60	2-HEXANONE		BDL	2.0	UG/L	
79-46-9	67	2-NITROPROPANE		*			
67-64-1	99	ACETONE (2-PROPANONE)		BDL	4.0	UG/L	
78-93-3	52	2-BUTANONE		BDL	2.0	UG/L	
75-15-0	216	CARBON DISULFIDE		*			
	1804	...					
	971	SURROGATE RECOVERY					
	972	————————					
17060-07-0	301	DICHLOROETHANE-D4	104			% RECOVERY	
2037-26-5	726	TOLUENE-D8	93			% RECOVERY	
460-00-4	196	4-BROMOFLUOROBENZENE	91			% RECOVERY	
	1131	TENTATIVELY IDENTIFIED COMPOUNDS					
	3320	NONE DETECTED					

Comment Note: * Compound searched for but not detected. Standard was unavailable to determine retention time and detection limit.

Qualifiers

* See Note for Parameter

BDL Below Detection Limit

Comments to Laboratory (do not record)

4-HCL VIALS

Need verbals ASAP, in 7 days or sooner.

Note the additional IDEM analytes for drinking water:

CS2, MEK, Acetone, 2-Nitropropane, 2-Hexanone

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\DATA\D090607\2807D.D Vial: 3
Acq On : 6 Sep 2007 8:48 Operator: REGI
Sample : A781258 LQ4591 Inst : GCMS #4
Misc : 9/8/07 Multiplr: 1.00
MS Integration Params: rteint2.p
Quant Time: Sep 06 09:04:46 2007 Quant Results File: DWD.RES

Quant Method : C:\MSDCHEM\1\METHODS\DWD.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Tue Sep 04 10:38:20 2007
Response via : Initial Calibration
DataAcq Meth : DWD

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) FLUOROBENZENE	5.67	96	386374	10.00 UG/L	0.00
38) 2-Bromo-1-chloropropane	7.96	77	154887	10.00 UG/L	0.00
System Monitoring Compounds					
21) Dibromofluoromethane	4.95	113	99766	10.31 UG/L	0.00
Spiked Amount 10.000			Recovery	= 103.10%	
23) 1,2-Dichloroethane-d4	5.30	65	124197	10.44 UG/L	0.00
Spiked Amount 10.000			Recovery	= 104.40%	
33) Toluene-d8	7.51	98	371407	9.28 UG/L	0.00
Spiked Amount 10.000			Recovery	= 92.80%	
51) 4-Bromofluorobenzene	10.67	174	125161	9.13 UG/L	0.00
Spiked Amount 10.000			Recovery	= 91.30%	
Target Compounds					Qvalue
8) Acetone	2.77	43	4671	1.66 UG/L #	83
10) Methylene Chloride	3.18	84	2654	Below Cal	89
17) Tetrahydrofuran	4.75	42	15257	3.31 UG/L #	88
35) trans-1,3-Dichloropropene	7.97	75	3156	0.22 UG/L	100
55) n-Propylbenzene	10.67	92	4342	0.74 UG/L #	1

NOTES

(#) = qualifier out of range (m) = manual integration
2807D.D DWD.M Thu Sep 06 09:04:47 2007

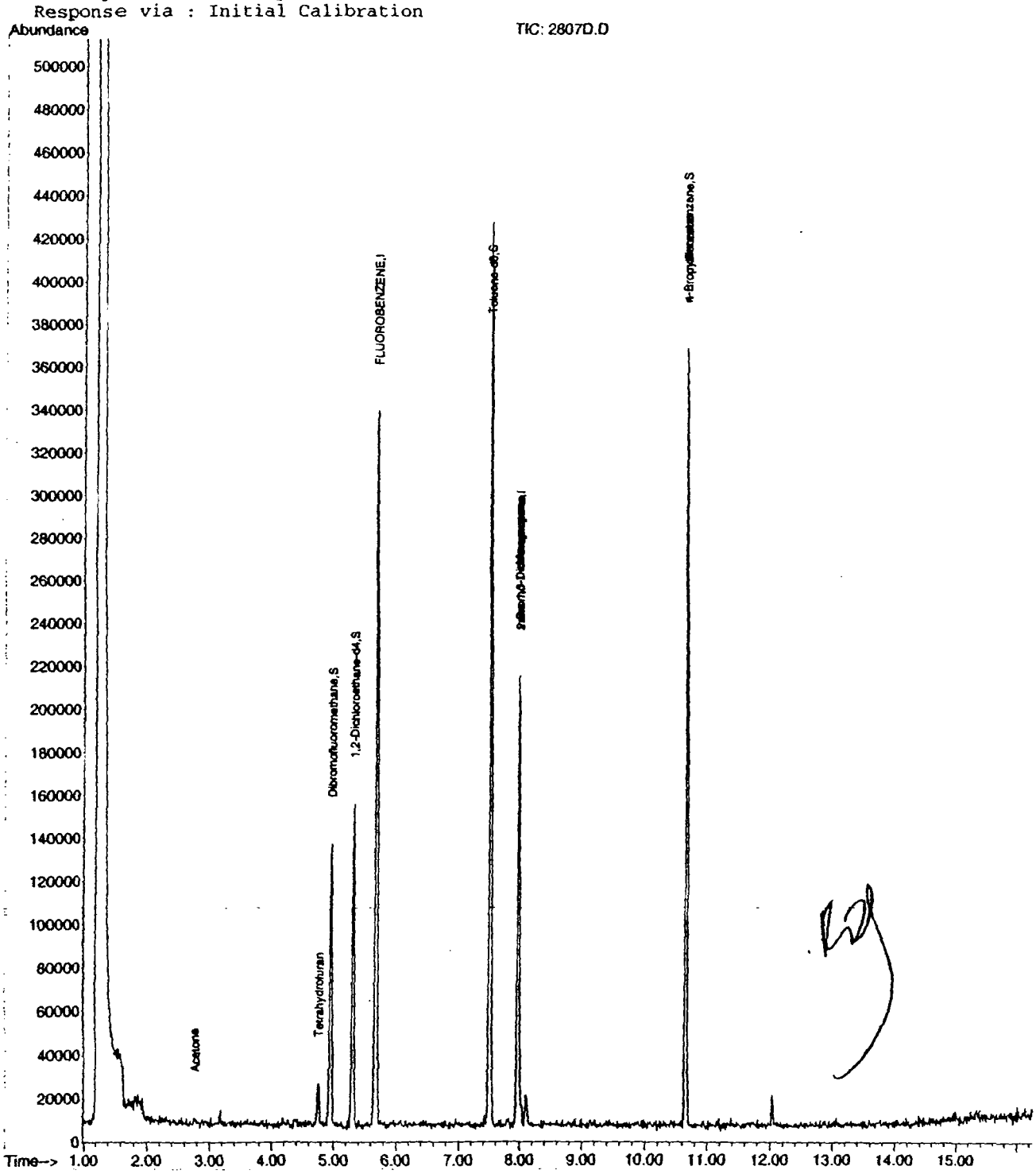
070

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\DATA\D090607\2807D.D
Acq On : 6 Sep 2007 8:48
Sample : A781258 LQ4591
Misc : 9/8/07
MS Integration Params: rteint2.p
Quant Time: Sep 6 9:04 2007

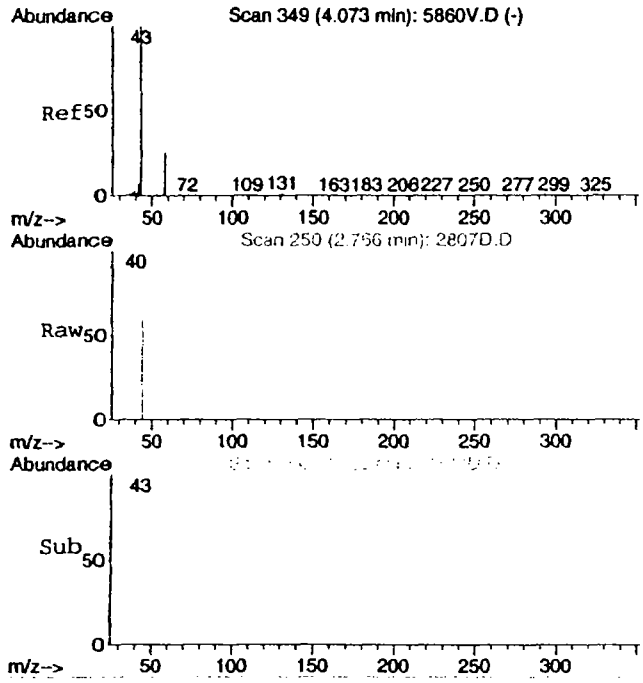
Vial: 3
Operator: REGI
Inst : GCMS #4
Multiplr: 1.00
Quant Results File: DWD.RES

Method : C:\MSDCHEM\1\METHODS\DWD.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Tue Sep 04 10:38:20 2007
Response via : Initial Calibration



2807D.D DWD.M Thu Sep 06 09:04:47 2007

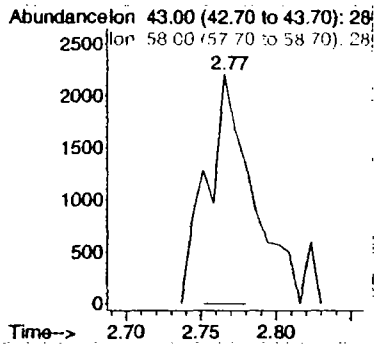
080

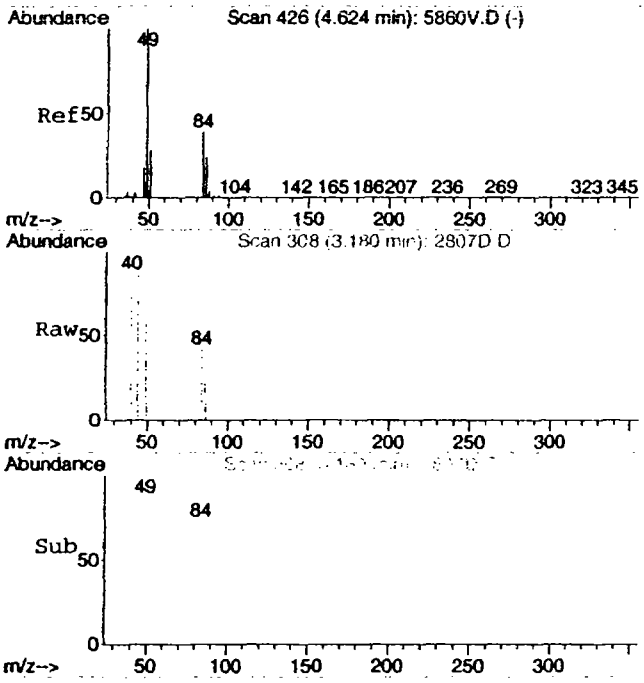


#8
Acetone
Concen: 1.66 UG/L
RT: 2.77 min Scan# 250
Delta R.T. -0.01 min
Lab File: 2807D.D
Acq: 6 Sep 2007 8:48

Tgt Ion: 43 Resp: 4671

Ion	Ratio	Lower	Upper
43	100		
58	19.8	23.1	34.7#

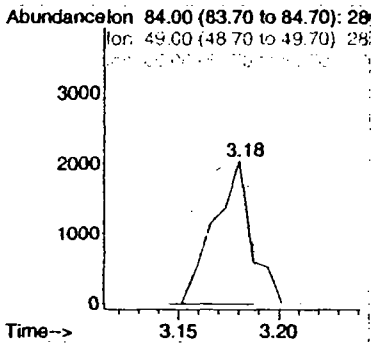


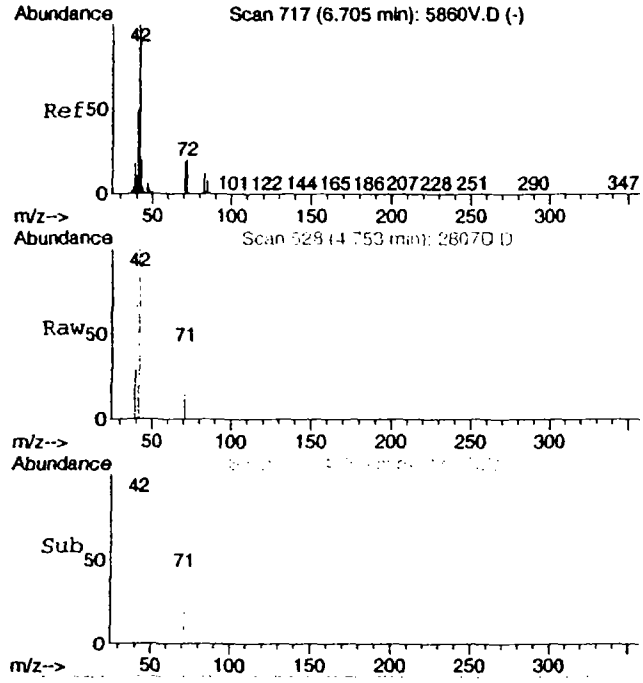


#10
Methylene Chloride
Concen: Below Cal
RT: 3.18 min Scan# 308
Delta R.T. 0.01 min
Lab File: 2807D.D
Acq: 6 Sep 2007 8:48

Tgt Ion: 84 Resp: 2654

Ion	Ratio	Lower	Upper
84	100		
49	158.0	140.2	210.2
86	68.7	51.1	76.7

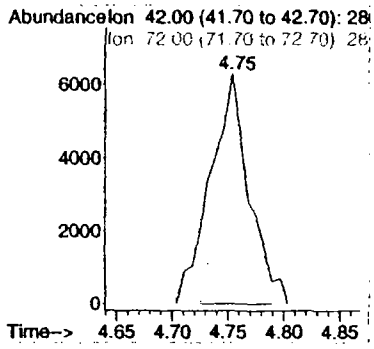


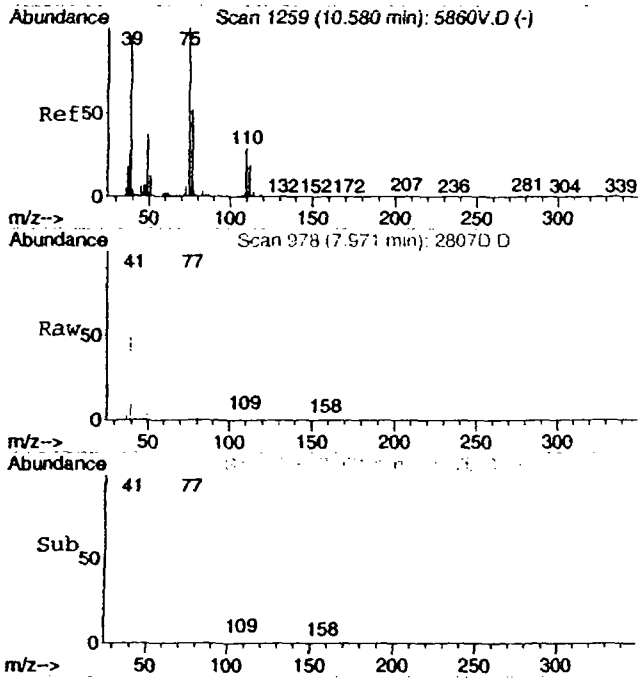


#17
Tetrahydrofuran
Concen: 3.31 UG/L
RT: 4.75 min Scan# 528
Delta R.T. 0.01 min
Lab File: 2807D.D
Acq: 6 Sep 2007 8:48

Tgt Ion: 42 Resp: 15257

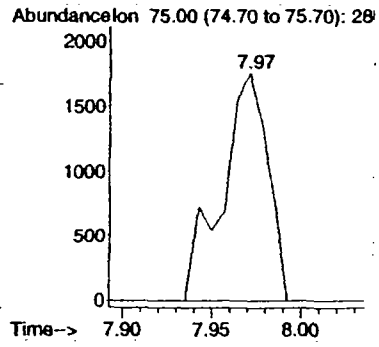
Ion	Ratio	Lower	Upper
42	100		
72	37.0	24.5	36.7#

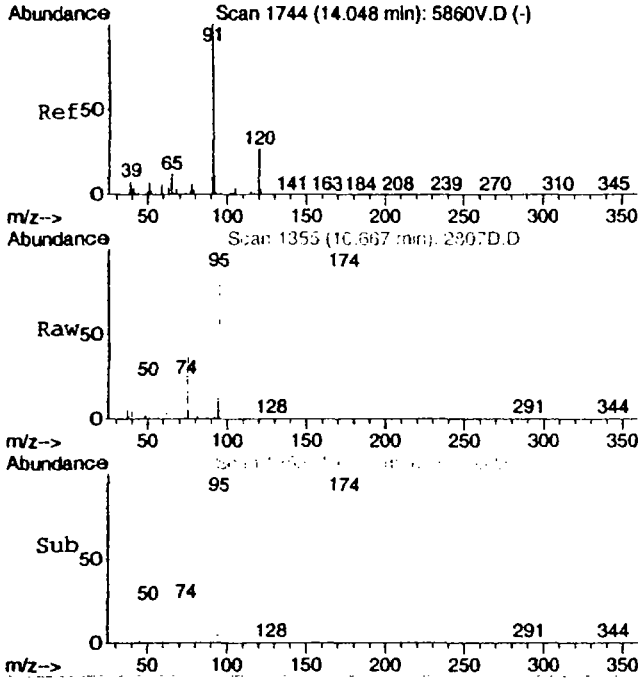




#35
trans-1,3-Dichloropropene
Concen: 0.22 UG/L
RT: 7.97 min Scan# 978
Delta R.T. 0.11 min
Lab File: 2807D.D
Acq: 6 Sep 2007 8:48

Tgt Ion: 75 Resp: 3156

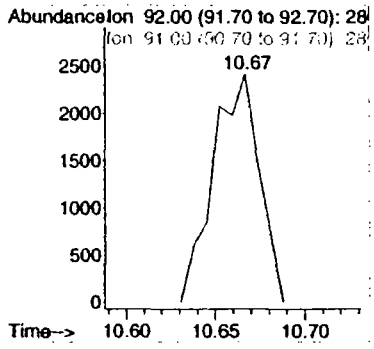




#55
n-Propylbenzene
Concen: 0.74 UG/L
RT: 10.67 min Scan# 1355
Delta R.T. -0.26 min
Lab File: 2807D.D
Acq: 6 Sep 2007 8:48

Tgt Ion: 92 Resp: 4342

Ion	Ratio	Lower	Upper
92	100		
91	0.0	715.8	1073.6#



R524561 Heritage Environmental Services, LLC A781259

GC/MS VOA

Method EPA 524.2 REV. 4.1
Sample Description LQ4592
Submitter IDEM - OLQ
Instrument 345 Channel 1

Test Code O516.9.0
Analyst 1062 R. SHAMP
File 2808D.D Date/Time 06Sep07 09:15:00
Dilution Factor 1

CAS	PRM	Parameter	Concentration	RQL	Limit	Units	RT
NA	1807	REGULATED CONTAMINANTS					
71-43-2	151	BENZENE		BDL	0.50	UG/L	
56-23-5	217	CARBON TETRACHLORIDE		BDL	0.50	UG/L	
106-46-7	29	1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)		BDL	0.50	UG/L	
107-06-2	21	1,2-DICHLOROETHANE		BDL	0.50	UG/L	
75-35-4	8	1,1-DICHLOROETHENE		BDL	0.50	UG/L	
71-55-6	2	1,1,1-TRICHLOROETHANE		BDL	0.50	UG/L	
79-01-6	750	TRICHLOROETHENE		BDL	0.50	UG/L	
75-01-4	768	VINYL CHLORIDE		BDL	0.20	UG/L	
108-90-7	231	CHLOROBENZENE		BDL	0.50	UG/L	
95-50-1	20	1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)		BDL	0.50	UG/L	
156-60-5	746	TRANS-1,2-DICHLOROETHENE		BDL	0.50	UG/L	
156-59-2	246	CIS-1,2-DICHLOROETHENE		BDL	0.50	UG/L	
75-09-2	302	DICHLOROMETHANE (METHYLENE CHLORIDE)		BDL	0.50	UG/L	
78-87-5	23	1,2-DICHLOROPROPANE		BDL	0.50	UG/L	
100-41-4	349	ETHYL BENZENE		BDL	0.50	UG/L	
100-42-5	680	STYRENE		BDL	0.50	UG/L	
79-00-5	4	1,1,2-TRICHLOROETHANE		BDL	0.50	UG/L	
127-18-4	703	TETRACHLOROETHENE		BDL	0.50	UG/L	
108-88-3	724	TOLUENE		BDL	0.50	UG/L	
95-47-6	549	O-XYLENE		BDL	0.50	UG/L	
MPXYLENE	492	M/P-XYLENE		BDL	0.50	UG/L	
120-82-1	16	1,2,4-TRICHLOROBENZENE		BDL	0.50	UG/L	
NA	1809	UNREGULATED - MONITORING REQUIRED					
108-86-1	193	BROMOBENZENE		BDL	0.50	UG/L	
75-27-4	195	BROMODICHLOROMETHANE		BDL	0.50	UG/L	
75-25-2	197	BROMOFORM		BDL	0.50	UG/L	
74-83-9	198	BROMOMETHANE		BDL	0.50	UG/L	
124-48-1	233	CHLORODIBROMOMETHANE		BDL	0.50	UG/L	
75-00-3	234	CHLOROETHANE		BDL	0.50	UG/L	
67-66-3	235	CHLOROFORM		BDL	0.50	UG/L	
74-87-3	236	CHLOROMETHANE		BDL	0.50	UG/L	
95-49-8	807	2-CHLOROTOLUENE (O-CHLOROTOLUENE)		BDL	0.50	UG/L	
106-43-4	808	4-CHLOROTOLUENE (P-CHLOROTOLUENE)		BDL	0.50	UG/L	
74-95-3	296	DIBROMOMETHANE		BDL	0.50	UG/L	
541-73-1	26	1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)		BDL	0.50	UG/L	
75-34-3	7	1,1-DICHLOROETHANE		BDL	0.50	UG/L	
563-58-6	10	1,1-DICHLOROPROPENE		BDL	0.50	UG/L	
142-28-9	27	1,3-DICHLOROPROPANE		BDL	0.50	UG/L	
10061-02-6	747	TRANS-1,3-DICHLOROPROPENE		BDL	0.50	UG/L	
10061-01-5	247	CIS-1,3-DICHLOROPROPENE		BDL	0.50	UG/L	
594-20-7	33	2,2-DICHLOROPROPANE		BDL	0.50	UG/L	
630-20-6	1	1,1,1,2-TETRACHLOROETHANE		BDL	0.50	UG/L	
79-34-5	3	1,1,2,2-TETRACHLOROETHANE		BDL	0.50	UG/L	
96-18-4	14	1,2,3-TRICHLOROPROPANE		BDL	0.50	UG/L	

JS 9-10-07
JS 9-10-07

Heritage Environmental Services, LLC

GC/MS VOA

CAS	PRM	Parameter	Concentration	RQL	Limit	Units	RT
NA	1806	MONITORED AT STATE'S DISCRETION					
74-97-5	194	BROMOCHLOROMETHANE		BDL	0.50	UG/L	
104-51-8	519	N-BUTYLBENZENE		BDL	0.50	UG/L	
75-71-8	300	DICHLORODIFLUOROMETHANE		BDL	0.50	UG/L	
75-69-4	372	TRICHLOROFLUOROMETHANE		BDL	0.50	UG/L	
87-68-3	398	HEXACHLOROBUTADIENE		BDL	0.50	UG/L	
98-82-8	432	ISOPROPYLBENZENE (CUMENE)		BDL	0.50	UG/L	
99-87-6	628	4-ISOPROPYLTOLUENE (P-ISOPROPYLTOLUENE)		BDL	0.50	UG/L	
91-20-3	493	NAPHTHALENE		BDL	0.50	UG/L	
103-65-1	532	N-PROPYLBENZENE		BDL	0.50	UG/L	
135-98-8	644	SEC-BUTYLBENZENE		BDL	0.50	UG/L	
98-06-6	702	TERT-BUTYLBENZENE		BDL	0.50	UG/L	
87-61-6	13	1,2,3-TRICHLOROBENZENE		BDL	0.50	UG/L	
95-63-6	17	1,2,4-TRIMETHYLBENZENE		BDL	0.50	UG/L	
108-67-8	25	1,3,5-TRIMETHYLBENZENE		BDL	0.50	UG/L	
106-93-4	18	1,2-DIBROMOETHANE (EDB)		BDL	0.50	UG/L	
96-12-8	19	1,2-DIBROMO-3-CHLOROPROPANE (DBCP)		BDL	0.50	UG/L	
1634-04-4	859	METHYL-T-BUTYL ETHER (MTBE)		BDL	0.50	UG/L	
	972	————————					
591-78-6	60	2-HEXANONE		BDL	2.0	UG/L	
79-46-9	67	2-NITROPROPANE		*			
67-64-1	99	ACETONE (2-PROPANONE)		BDL	4.0	UG/L	
78-93-3	52	2-BUTANONE		BDL	2.0	UG/L	
75-15-0	216	CARBON DISULFIDE		*			
	1804	...					
	971	SURROGATE RECOVERY					
	972	————————					
17060-07-0	301	DICHLOROETHANE-D4	98			% RECOVERY	
2037-26-5	726	TOLUENE-D8	92			% RECOVERY	
460-00-4	196	4-BROMOFLUOROBENZENE	97			% RECOVERY	
	1131	TENTATIVELY IDENTIFIED COMPOUNDS					
	3320	NONE DETECTED					

Comment Note: * Compound searched for but not detected. Standard was unavailable to determine retention time and detection limit.

Qualifiers

BDL Below Detection Limit

* *See Note for Parameter*

Comments to Laboratory (do not record)

4-HCL VIALS

Need verbals ASAP, in 7 days or sooner.

Note the additional IDEM analytes for drinking water:

CS2, MEK, Acetone, 2-Nitropropane, 2-Hexanone

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\DATA\D090607\2808D.D
Acq On : 6 Sep 2007 9:15
Sample : A781259 LQ4592
Misc : 9/8/07
MS Integration Params: rteint2.p
Quant Time: Sep 06 09:31:42 2007

Vial: 4
Operator: REGI
Inst : GCMS #4
Multiplr: 1.00
Quant Results File: DWD.RES

Quant Method : C:\MSDCHEM\1\METHODS\DWD.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Tue Sep 04 10:38:20 2007
Response via : Initial Calibration
DataAcq Meth : DWD

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) FLUOROBENZENE	5.68	96	378244	10.00 UG/L	0.00
38) 2-Bromo-1-chloropropane	7.96	77	148139	10.00 UG/L	0.00
System Monitoring Compounds					
21) Dibromofluoromethane	4.95	113	96556	10.20 UG/L	0.00
Spiked Amount 10.000			Recovery	= 102.00%	
23) 1,2-Dichloroethane-d4	5.30	65	113675	9.76 UG/L	0.00
Spiked Amount 10.000			Recovery	= 97.60%	
33) Toluene-d8	7.51	98	361367	9.22 UG/L	0.00
Spiked Amount 10.000			Recovery	= 92.20%	
51) 4-Bromofluorobenzene	10.66	174	126712	9.66 UG/L	0.00
Spiked Amount 10.000			Recovery	= 96.60%	
Target Compounds					Qvalue
8) Acetone	2.77	43	3207	1.38 UG/L #	59
10) Methylene Chloride	3.17	84	1732	Below Cal	95
17) Tetrahydrofuran	4.75	42	8213	1.82 UG/L #	79
55) n-Propylbenzene	10.66	92	4264	0.76 UG/L #	1

NO TICS

(#) = qualifier out of range (m) = manual integration
2808D.D DWD.M Thu Sep 06 09:31:43 2007

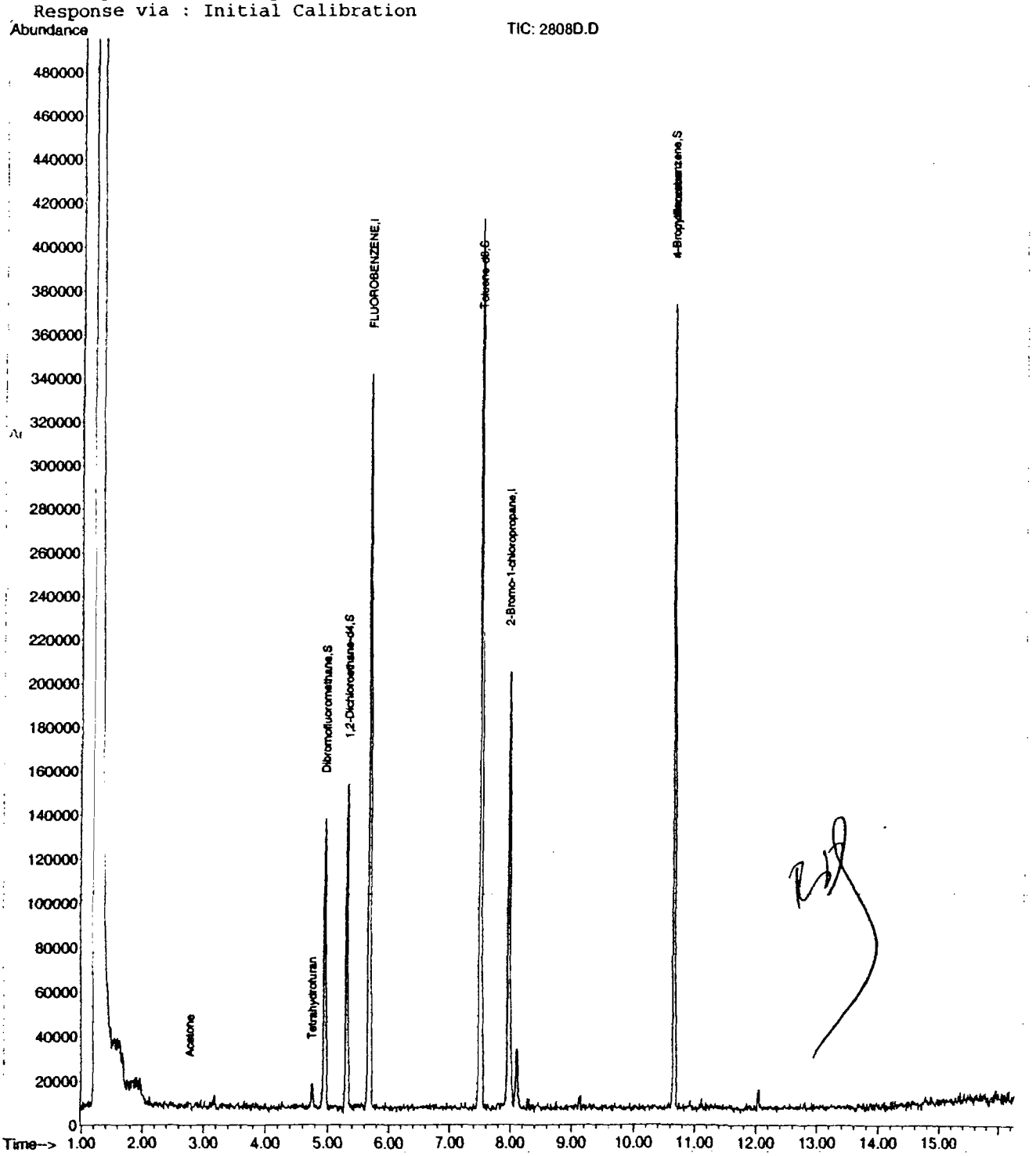
J86

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\DATA\D090607\2808D.D
Acq On : 6 Sep 2007 9:15
Sample : A781259 LQ4592
Misc : 9/8/07
MS Integration Params: rteint2.p
Quant Time: Sep 6 9:31 2007

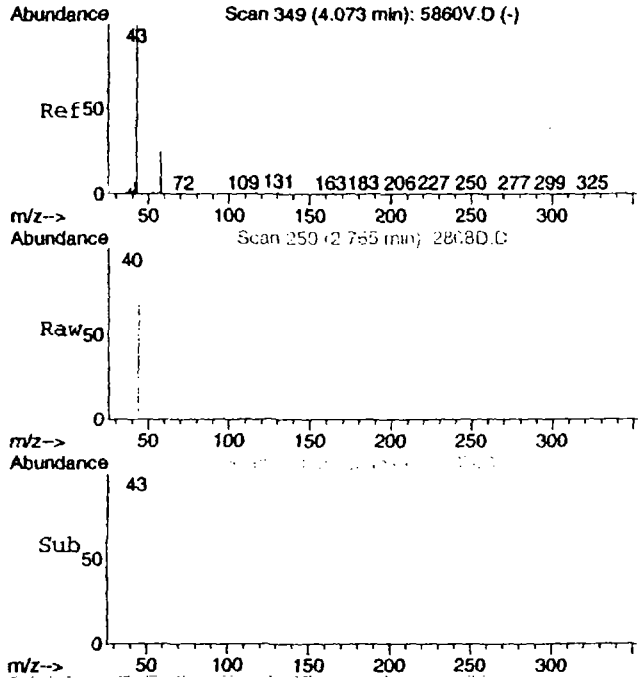
Vial: 4
Operator: REGI
Inst : GCMS #4
Multiplr: 1.00
Quant Results File: DWD.RES

Method : C:\MSDCHEM\1\METHODS\DWD.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Tue Sep 04 10:38:20 2007
Response via : Initial Calibration



2808D.D DWD.M Thu Sep 06 09:31:44 2007

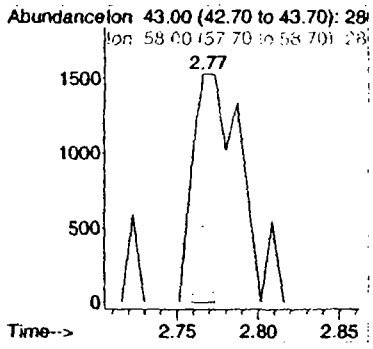
J87

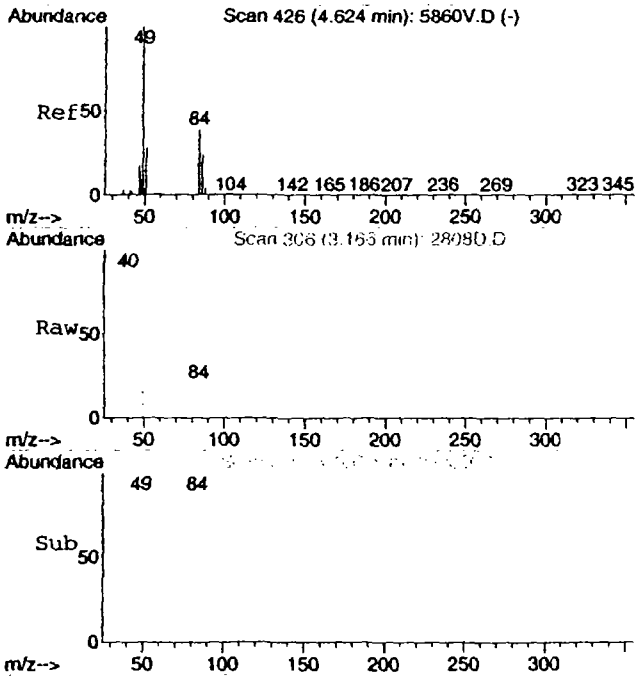


#8
Acetone
Concen: 1.38 UG/L
RT: 2.77 min Scan# 250
Delta R.T. -0.01 min
Lab File: 2808D.D
Acq: 6 Sep 2007 9:15

Tgt Ion: 43 Resp: 3207

Ion	Ratio	Lower	Upper
43	100		
58	7.0	23.1	34.7#

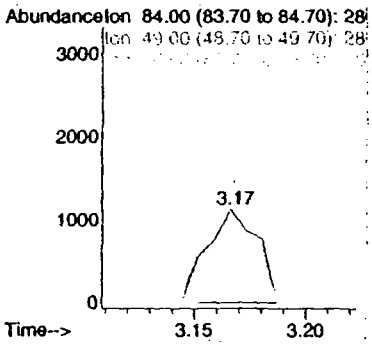


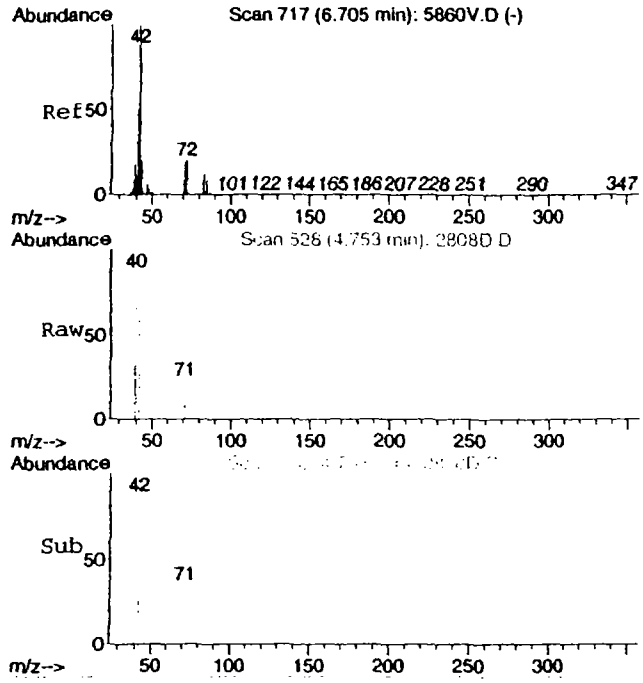


#10
Methylene Chloride
Concen: Below Cal
RT: 3.17 min Scan# 306
Delta R.T. -0.01 min
Lab File: 2808D.D
Acq: 6 Sep 2007 9:15

Tgt Ion: 84 Resp: 1732

Ion	Ratio	Lower	Upper
84	100		
49	181.3	140.2	210.2
86	68.3	51.1	76.7

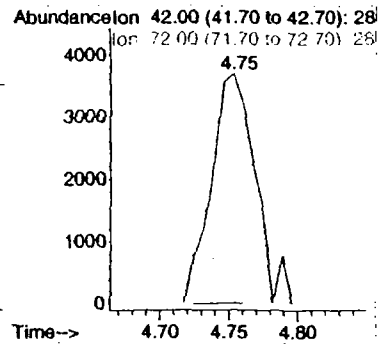


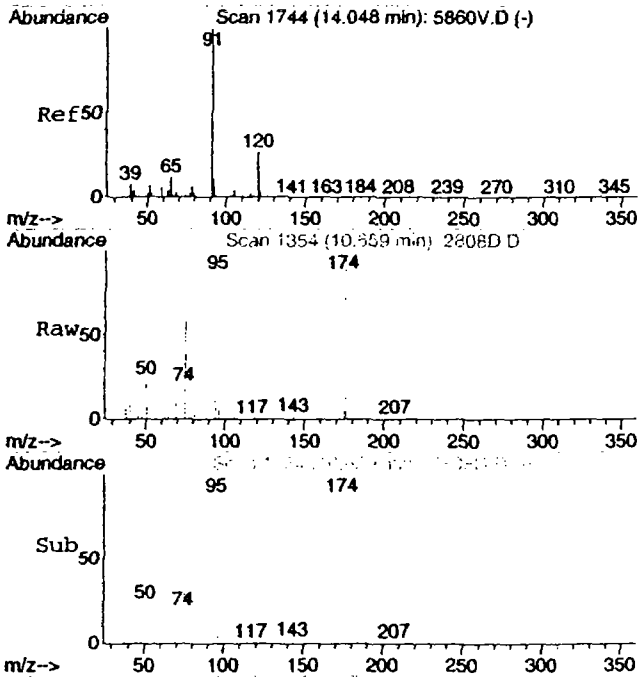


#17
Tetrahydrofuran
Concen: 1.82 UG/L
RT: 4.75 min Scan# 528
Delta R.T. 0.01 min
Lab File: 2808D.D
Acq: 6 Sep 2007 9:15

Tgt Ion: 42 Resp: 8213

Ion	Ratio	Lower	Upper
42	100		
72	18.9	24.5	36.7#

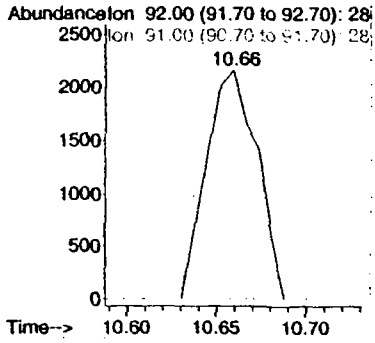




#55
n-Propylbenzene
Concen: 0.76 UG/L
RT: 10.66 min Scan# 1354
Delta R.T. -0.27 min
Lab File: 2808D.D
Acq: 6 Sep 2007 9:15

Tgt Ion: 92 Resp: 4264

Ion	Ratio	Lower	Upper
92	100		
91	0.0	715.8	1073.6#



R524561 Heritage Environmental Services, LLC A781260

GC/MS VOA

Method EPA 524.2 REV. 4.1
Sample Description LQ4593
Submitter IDEM - OLQ
Instrument 345 Channel 1

Test Code O516.9.0
Analyst 1062 R. SHAMP
File 2809D.D Date/Time 06Sep07 09:42:00
Dilution Factor 1

CAS	PRM	Parameter	Concentration	RQL	Limit	Units	RT
NA	1807	REGULATED CONTAMINANTS					
71-43-2	151	BENZENE		BDL	0.50	UG/L	
56-23-5	217	CARBON TETRACHLORIDE		BDL	0.50	UG/L	
106-46-7	29	1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)		BDL	0.50	UG/L	
107-06-2	21	1,2-DICHLOROETHANE		BDL	0.50	UG/L	
75-35-4	8	1,1-DICHLOROETHENE		BDL	0.50	UG/L	
71-55-6	2	1,1,1-TRICHLOROETHANE		BDL	0.50	UG/L	
79-01-6	750	TRICHLOROETHENE		BDL	0.50	UG/L	
75-01-4	768	VINYL CHLORIDE		BDL	0.20	UG/L	
108-90-7	231	CHLOROBENZENE		BDL	0.50	UG/L	
95-50-1	20	1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)		BDL	0.50	UG/L	
156-60-5	746	TRANS-1,2-DICHLOROETHENE		BDL	0.50	UG/L	
156-59-2	246	CIS-1,2-DICHLOROETHENE		BDL	0.50	UG/L	
75-09-2	302	DICHLOROMETHANE (METHYLENE CHLORIDE)		BDL	0.50	UG/L	
78-87-5	23	1,2-DICHLOROPROPANE		BDL	0.50	UG/L	
100-41-4	349	ETHYL BENZENE		BDL	0.50	UG/L	
100-42-5	680	STYRENE		BDL	0.50	UG/L	
79-00-5	4	1,1,2-TRICHLOROETHANE		BDL	0.50	UG/L	
127-18-4	703	TETRACHLOROETHENE		BDL	0.50	UG/L	
108-88-3	724	TOLUENE		BDL	0.50	UG/L	
95-47-6	549	O-XYLENE		BDL	0.50	UG/L	
MPXYLENE	492	M/P-XYLENE		BDL	0.50	UG/L	
120-82-1	16	1,2,4-TRICHLOROBENZENE		BDL	0.50	UG/L	
NA	1809	UNREGULATED - MONITORING REQUIRED					
108-86-1	193	BROMOBENZENE		BDL	0.50	UG/L	
75-27-4	195	BROMODICHLOROMETHANE		BDL	0.50	UG/L	
75-25-2	197	BROMOFORM		BDL	0.50	UG/L	
74-83-9	198	BROMOMETHANE		BDL	0.50	UG/L	
124-48-1	233	CHLORODIBROMOMETHANE		BDL	0.50	UG/L	
75-00-3	234	CHLOROETHANE		BDL	0.50	UG/L	
67-66-3	235	CHLOROFORM		BDL	0.50	UG/L	
74-87-3	236	CHLOROMETHANE		BDL	0.50	UG/L	
95-49-8	807	2-CHLOROTOLUENE (O-CHLOROTOLUENE)		BDL	0.50	UG/L	
106-43-4	808	4-CHLOROTOLUENE (P-CHLOROTOLUENE)		BDL	0.50	UG/L	
74-95-3	296	DIBROMOMETHANE		BDL	0.50	UG/L	
541-73-1	26	1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)		BDL	0.50	UG/L	
75-34-3	7	1,1-DICHLOROETHANE		BDL	0.50	UG/L	
563-58-6	10	1,1-DICHLOROPROPENE		BDL	0.50	UG/L	
142-28-9	27	1,3-DICHLOROPROPANE		BDL	0.50	UG/L	
10061-01-5	247	CIS-1,3-DICHLOROPROPENE		BDL	0.50	UG/L	
10061-02-6	747	TRANS-1,3-DICHLOROPROPENE		BDL	0.50	UG/L	
594-20-7	33	2,2-DICHLOROPROPANE		BDL	0.50	UG/L	
630-20-6	1	1,1,1,2-TETRACHLOROETHANE		BDL	0.50	UG/L	
79-34-5	3	1,1,2,2-TETRACHLOROETHANE		BDL	0.50	UG/L	
96-18-4	14	1,2,3-TRICHLOROPROPANE		BDL	0.50	UG/L	

GC/MS VOA

CAS	PRM	Parameter	Concentration	RQL	Limit	Units	RT
NA	1806	MONITORED AT STATE'S DISCRETION					
74-97-5	194	BROMOCHLOROMETHANE		BDL	0.50	UG/L	
104-51-8	519	N-BUTYLBENZENE		BDL	0.50	UG/L	
75-71-8	300	DICHLORODIFLUOROMETHANE		BDL	0.50	UG/L	
75-69-4	372	TRICHLOROFLUOROMETHANE		BDL	0.50	UG/L	
87-68-3	398	HEXACHLOROBUTADIENE		BDL	0.50	UG/L	
98-82-8	432	ISOPROPYLBENZENE (CUMENE)		BDL	0.50	UG/L	
99-87-6	628	4-ISOPROPYLTOLUENE (P-ISOPROPYLTOLUENE)		BDL	0.50	UG/L	
91-20-3	493	NAPHTHALENE		BDL	0.50	UG/L	
103-65-1	532	N-PROPYLBENZENE		BDL	0.50	UG/L	
135-98-8	644	SEC-BUTYLBENZENE		BDL	0.50	UG/L	
98-06-6	702	TERT-BUTYLBENZENE		BDL	0.50	UG/L	
87-61-6	13	1,2,3-TRICHLOROBENZENE		BDL	0.50	UG/L	
95-63-6	17	1,2,4-TRIMETHYLBENZENE		BDL	0.50	UG/L	
108-67-8	25	1,3,5-TRIMETHYLBENZENE		BDL	0.50	UG/L	
106-93-4	18	1,2-DIBROMOETHANE (EDB)		BDL	0.50	UG/L	
96-12-8	19	1,2-DIBROMO-3-CHLOROPROPANE (DBCP)		BDL	0.50	UG/L	
1634-04-4	859	METHYL-T-BUTYL ETHER (MTBE)		BDL	0.50	UG/L	
	972	————————					
591-78-6	60	2-HEXANONE		BDL	2.0	UG/L	
79-46-9	67	2-NITROPROPANE		*			
67-64-1	99	ACETONE (2-PROPANONE)		BDL	4.0	UG/L	
78-93-3	52	2-BUTANONE		BDL	2.0	UG/L	
75-15-0	216	CARBON DISULFIDE		*			
	1804	...					
	971	SURROGATE RECOVERY					
	972	————————					
17060-07-0	301	DICHLOROETHANE-D4	101			% RECOVERY	
2037-26-5	726	TOLUENE-D8	92			% RECOVERY	
460-00-4	196	4-BROMOFLUOROBENZENE	88			% RECOVERY	
	1804	...					
	1131	TENTATIVELY IDENTIFIED COMPOUNDS					
	972	————————					
	3320	NONE DETECTED					

Comment Note: * Compound searched for but not detected. Standard was unavailable to determine retention time and detection limit.

Qualifiers

* See Note for Parameter

BDL Below Detection Limit

Comments to Laboratory (do not record)

12-HCL VIALS

Need verbals ASAP, in 7 days or sooner.

Note the additional IDEM analytes for drinking water:

**********MS/MSD THIS SAMPLE**********

CS2, MEK, Acetone, 2-Nitropropane, 2-Hexanone

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\DATA\D090607\2809D.D Vial: 5
Acq On : 6 Sep 2007 9:42 Operator: REGI
Sample : A781260 LQ4593 Inst : GCMS #4
Misc : 9/8/07 Multiplr: 1.00
MS Integration Params: rteint2.p
Quant Time: Sep 06 09:58:56 2007 Quant Results File: DWD.RES

Quant Method : C:\MSDCHEM\1\METHODS\DWD.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Tue Sep 04 10:38:20 2007
Response via : Initial Calibration
DataAcq Meth : DWD

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) FLUOROBENZENE	5.68	96	371298	10.00 UG/L	0.00
38) 2-Bromo-1-chloropropane	7.97	77	159024	10.00 UG/L	0.00
System Monitoring Compounds					
21) Dibromofluoromethane	4.95	113	93189	10.03 UG/L	0.01
Spiked Amount 10.000			Recovery	= 100.30%	
23) 1,2-Dichloroethane-d4	5.30	65	115049	10.06 UG/L	0.00
Spiked Amount 10.000			Recovery	= 100.60%	
33) Toluene-d8	7.51	98	354347	9.21 UG/L	0.00
Spiked Amount 10.000			Recovery	= 92.10%	
51) 4-Bromofluorobenzene	10.66	174	124077	8.81 UG/L	0.00
Spiked Amount 10.000			Recovery	= 88.10%	
Target Compounds					Qvalue
3) Chloromethane	1.52	50	2555	0.21 UG/L	100
8) Acetone	2.77	43	3378	1.42 UG/L #	63
10) Methylene Chloride	3.18	84	2746	Below Cal #	55
17) Tetrahydrofuran	4.75	42	7890	1.78 UG/L #	76

NO TIC

(#) = qualifier out of range (m) = manual integration
2809D.D DWD.M Thu Sep 06 09:58:57 2007

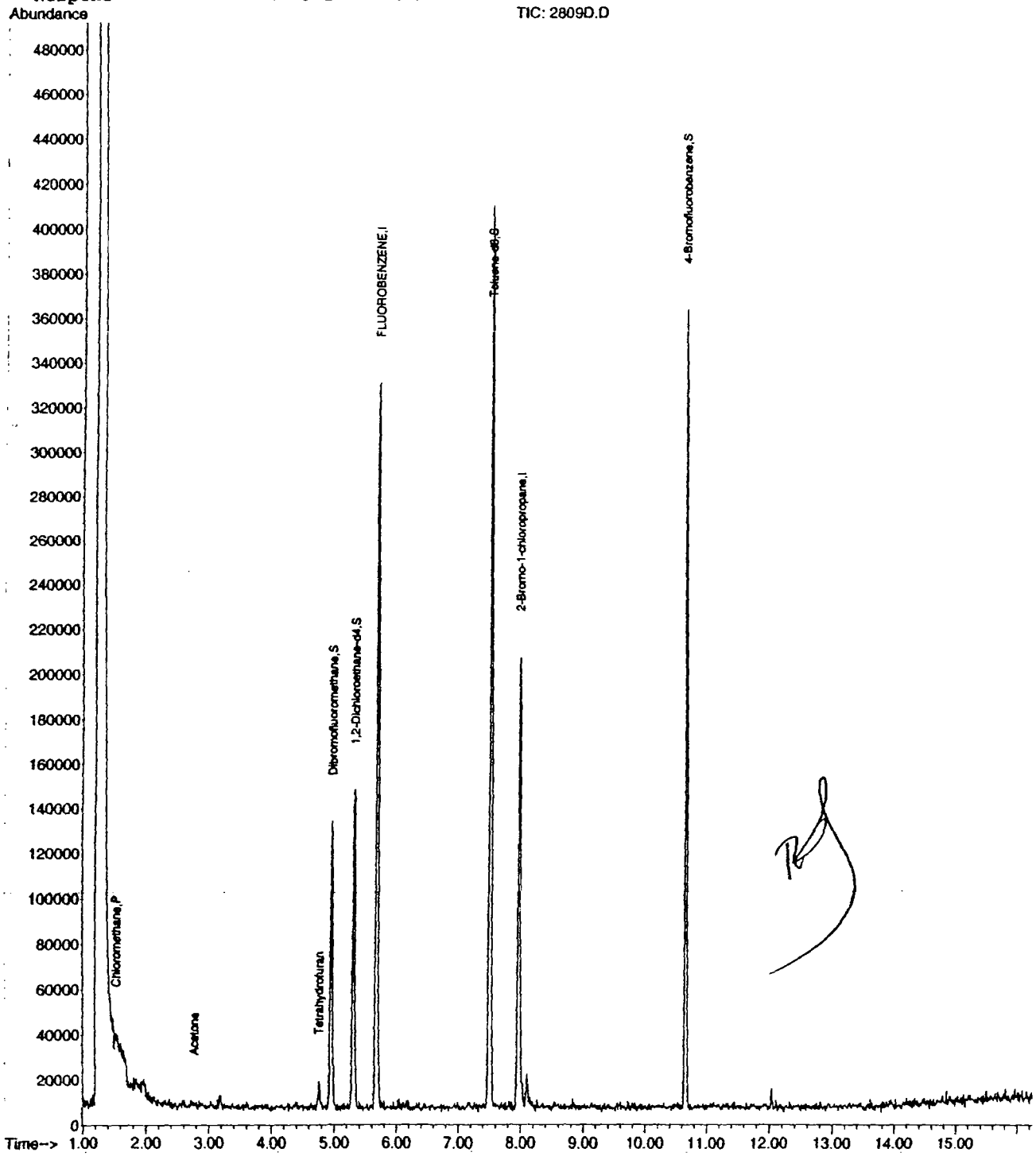
092

Quantitation Report (Not Reviewed)

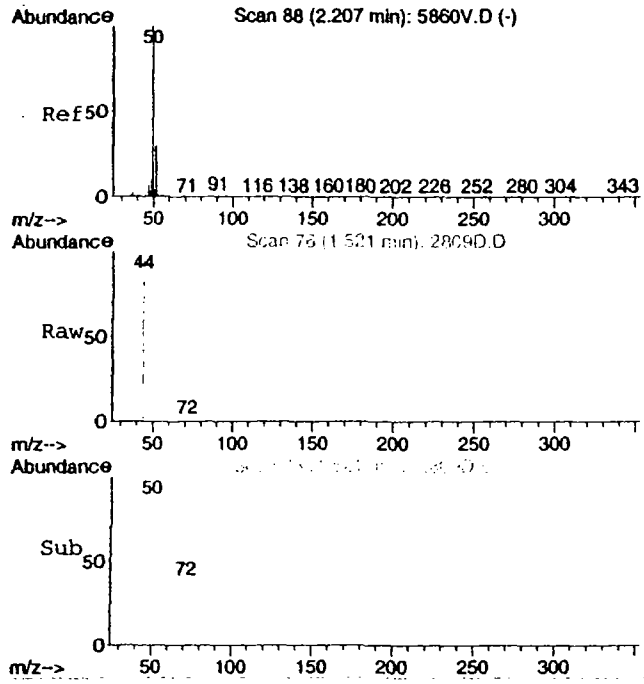
Data File : C:\MSDCHEM\DATA\D090607\2809D.D
Acq On : 6 Sep 2007 9:42
Sample : A781260 LQ4593
Misc : 9/8/07
MS Integration Params: rteint2.p
Quant Time: Sep 6 9:58 2007

Vial: 5
Operator: REGI
Inst : GCMS #4
Multiplr: 1.00
Quant Results File: DWD.RES

Method : C:\MSDCHEM\1\METHODS\DWD.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Tue Sep 04 10:38:20 2007
Response via : Initial Calibration

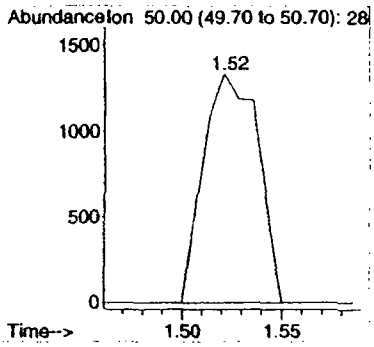


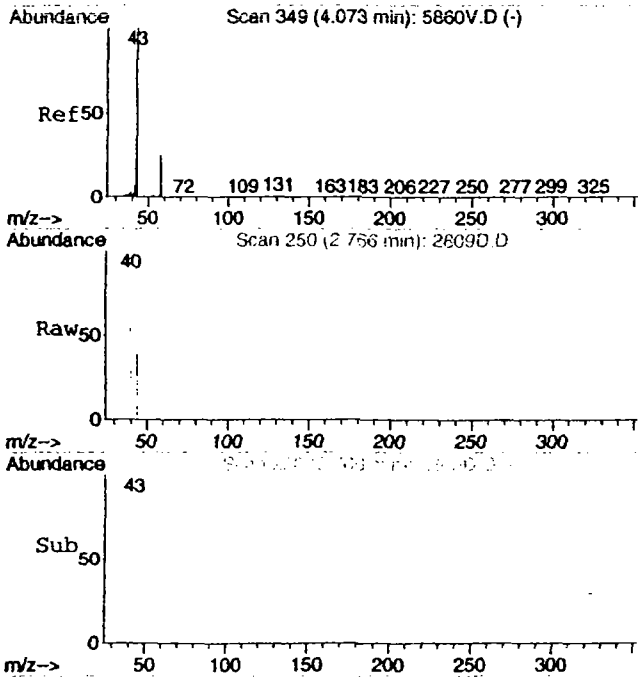
2809D.D DWD.M Thu Sep 06 09:58:57 2007



#3
Chloromethane
Concen: 0.21 UG/L
RT: 1.52 min Scan# 76
Delta R.T. -0.00 min
Lab File: 2809D.D
Acq: 6 Sep 2007 9:42

Tgt Ion: 50 Resp: 2555

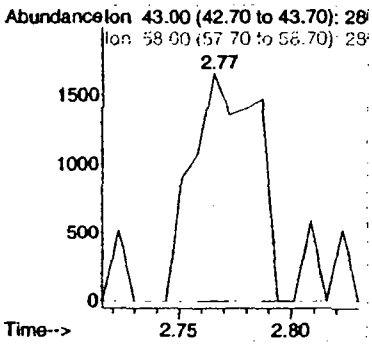


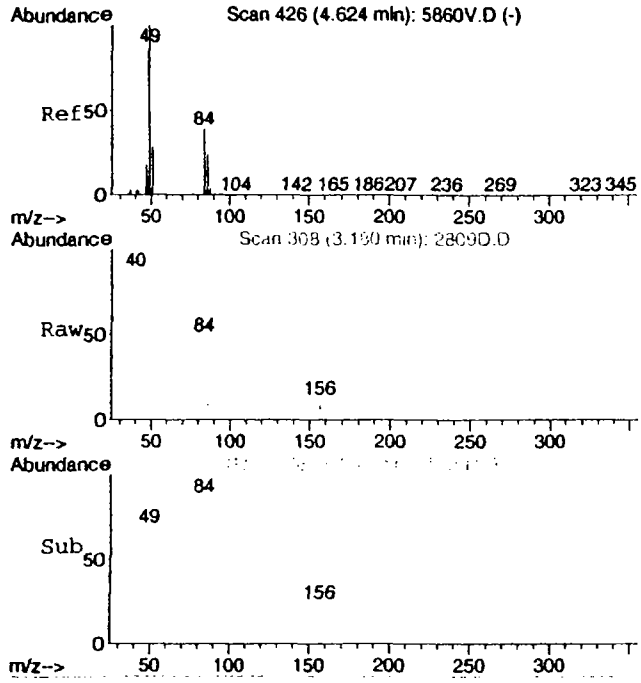


#8
Acetone
Concen: 1.42 UG/L
RT: 2.77 min Scan# 250
Delta R.T. -0.01 min
Lab File: 2809D.D
Acq: 6 Sep 2007 9:42

Tgt Ion: 43 Resp: 3378

Ion	Ratio	Lower	Upper
43	100		
58	9.2	23.1	34.7#

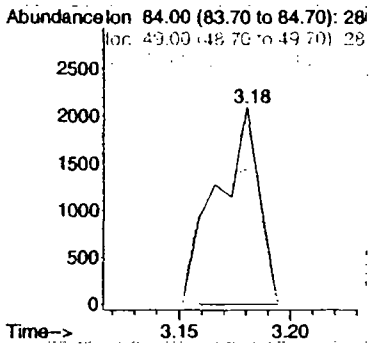


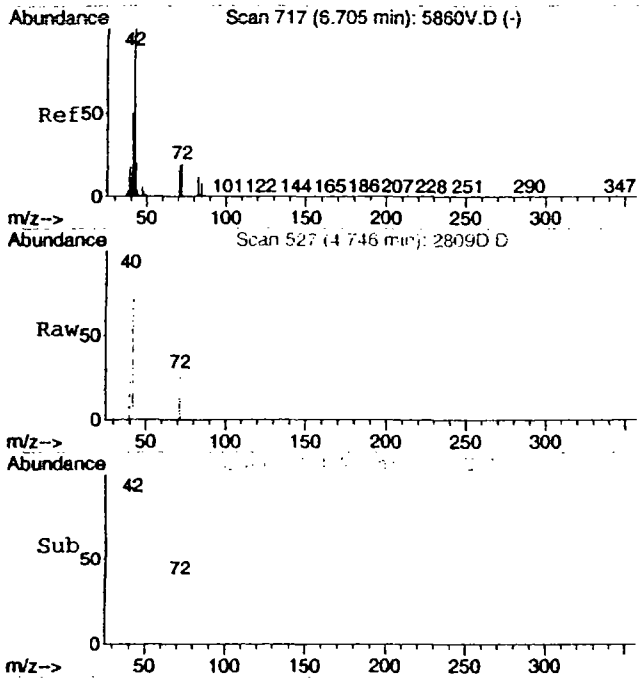


#10
Methylene Chloride
Concen: Below Cal
RT: 3.18 min Scan# 308
Delta R.T. 0.01 min
Lab File: 2809D.D
Acq: 6 Sep 2007 9:42

Tgt Ion: 84 Resp: 2746

Ion	Ratio	Lower	Upper
84	100		
49	98.0	140.2	210.2#
86	76.6	51.1	76.7

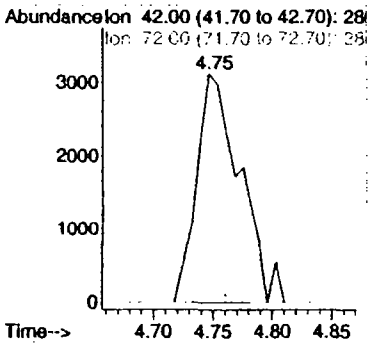




#17
Tetrahydrofuran
Concen: 1.78 UG/L
RT: 4.75 min Scan# 527
Delta R.T. -0.00 min
Lab File: 2809D.D
Acq: 6 Sep 2007 9:42

Tgt Ion: 42 Resp: 7890

Ion	Ratio	Lower	Upper
42	100		
72	17.2	24.5	36.7#



R524561 Heritage Environmental Services, LLC A781261

GC/MS VOA

Method EPA 524.2 REV. 4.1
Sample Description LQ4594
Submitter IDEM - OLQ
Instrument 345 Channel 1

Test Code O516.9.0
Analyst 1062 R. SHAMP
File 2810D.D Date/Time 06Sep07 10:10:00
Dilution Factor 1

CAS	PRM	Parameter	Concentration	RQL	Limit	Units	RT
NA	1807	REGULATED CONTAMINANTS					
71-43-2	151	BENZENE		BDL	0.50	UG/L	
56-23-5	217	CARBON TETRACHLORIDE		BDL	0.50	UG/L	
106-46-7	29	1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)		BDL	0.50	UG/L	
107-06-2	21	1,2-DICHLOROETHANE		BDL	0.50	UG/L	
75-35-4	8	1,1-DICHLOROETHENE		BDL	0.50	UG/L	
71-55-6	2	1,1,1-TRICHLOROETHANE		BDL	0.50	UG/L	
79-01-6	750	TRICHLOROETHENE		BDL	0.50	UG/L	
75-01-4	768	VINYL CHLORIDE		BDL	0.20	UG/L	
108-90-7	231	CHLOROBENZENE		BDL	0.50	UG/L	
95-50-1	20	1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)		BDL	0.50	UG/L	
156-60-5	746	TRANS-1,2-DICHLOROETHENE		BDL	0.50	UG/L	
156-59-2	246	CIS-1,2-DICHLOROETHENE		BDL	0.50	UG/L	
75-09-2	302	DICHLOROMETHANE (METHYLENE CHLORIDE)		BDL	0.50	UG/L	
78-87-5	23	1,2-DICHLOROPROPANE		BDL	0.50	UG/L	
100-41-4	349	ETHYL BENZENE		BDL	0.50	UG/L	
100-42-5	680	STYRENE		BDL	0.50	UG/L	
79-00-5	4	1,1,2-TRICHLOROETHANE		BDL	0.50	UG/L	
127-18-4	703	TETRACHLOROETHENE		BDL	0.50	UG/L	
108-88-3	724	TOLUENE		BDL	0.50	UG/L	
95-47-6	549	O-XYLENE		BDL	0.50	UG/L	
MPXYLENE	492	M/P-XYLENE		BDL	0.50	UG/L	
120-82-1	16	1,2,4-TRICHLOROBENZENE		BDL	0.50	UG/L	
NA	1809	UNREGULATED - MONITORING REQUIRED					
108-86-1	193	BROMOBENZENE		BDL	0.50	UG/L	
75-27-4	195	BROMODICHLOROMETHANE		BDL	0.50	UG/L	
75-25-2	197	BROMOFORM		BDL	0.50	UG/L	
74-83-9	198	BROMOMETHANE		BDL	0.50	UG/L	
124-48-1	233	CHLORODIBROMOMETHANE		BDL	0.50	UG/L	
75-00-3	234	CHLOROETHANE		BDL	0.50	UG/L	
67-66-3	235	CHLOROFORM		BDL	0.50	UG/L	
74-87-3	236	CHLOROMETHANE		BDL	0.50	UG/L	
95-49-8	807	2-CHLOROTOLUENE (O-CHLOROTOLUENE)		BDL	0.50	UG/L	
106-43-4	808	4-CHLOROTOLUENE (P-CHLOROTOLUENE)		BDL	0.50	UG/L	
74-95-3	296	DIBROMOMETHANE		BDL	0.50	UG/L	
541-73-1	26	1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)		BDL	0.50	UG/L	
75-34-3	7	1,1-DICHLOROETHANE		BDL	0.50	UG/L	
563-58-6	10	1,1-DICHLOROPROPENE		BDL	0.50	UG/L	
142-28-9	27	1,3-DICHLOROPROPANE		BDL	0.50	UG/L	
10061-02-6	747	TRANS-1,3-DICHLOROPROPENE		BDL	0.50	UG/L	
10061-01-5	247	CIS-1,3-DICHLOROPROPENE		BDL	0.50	UG/L	
594-20-7	33	2,2-DICHLOROPROPANE		BDL	0.50	UG/L	
630-20-6	1	1,1,1,2-TETRACHLOROETHANE		BDL	0.50	UG/L	
79-34-5	3	1,1,2,2-TETRACHLOROETHANE		BDL	0.50	UG/L	
96-18-4	14	1,2,3-TRICHLOROPROPANE		BDL	0.50	UG/L	

UKS 9-10-07

UKS 9-10-07

GC/MS VOA

CAS	PRM	Parameter	Concentration	RQL	Limit	Units	RT
NA	1806	MONITORED AT STATE'S DISCRETION					
74-97-5	194	BROMOCHLOROMETHANE		BDL	0.50	UG/L	
104-51-8	519	N-BUTYLBENZENE		BDL	0.50	UG/L	
75-71-8	300	DICHLORODIFLUOROMETHANE		BDL	0.50	UG/L	
75-69-4	372	TRICHLOROFLUOROMETHANE		BDL	0.50	UG/L	
87-68-3	398	HEXACHLOROBUTADIENE		BDL	0.50	UG/L	
98-82-8	432	ISOPROPYLBENZENE (CUMENE)		BDL	0.50	UG/L	
99-87-6	628	4-ISOPROPYLTOLUENE (P-ISOPROPYLTOLUENE)		BDL	0.50	UG/L	
91-20-3	493	NAPHTHALENE		BDL	0.50	UG/L	
103-65-1	532	N-PROPYLBENZENE		BDL	0.50	UG/L	
135-98-8	644	SEC-BUTYLBENZENE		BDL	0.50	UG/L	
98-06-6	702	TERT-BUTYLBENZENE		BDL	0.50	UG/L	
87-61-6	13	1,2,3-TRICHLOROBENZENE		BDL	0.50	UG/L	
95-63-6	17	1,2,4-TRIMETHYLBENZENE		BDL	0.50	UG/L	
108-67-8	25	1,3,5-TRIMETHYLBENZENE		BDL	0.50	UG/L	
106-93-4	18	1,2-DIBROMOETHANE (EDB)		BDL	0.50	UG/L	
96-12-8	19	1,2-DIBROMO-3-CHLOROPROPANE (DBCP)		BDL	0.50	UG/L	
1634-04-4	859	METHYL-T-BUTYL ETHER (MTBE)		BDL	0.50	UG/L	
	972	————————					
591-78-6	60	2-HEXANONE		BDL	2.0	UG/L	
79-46-9	67	2-NITROPROPANE		*			
67-64-1	99	ACETONE (2-PROPANONE)		BDL	4.0	UG/L	
78-93-3	52	2-BUTANONE		BDL	2.0	UG/L	
75-15-0	216	CARBON DISULFIDE		*			
	1804	...					
	971	SURROGATE RECOVERY					
	972	————————					
17060-07-0	301	DICHLOROETHANE-D4	104			% RECOVERY	
2037-26-5	726	TOLUENE-D8	94			% RECOVERY	
460-00-4	196	4-BROMOFLUOROBENZENE	85			% RECOVERY	
	1804	...					
	1131	TENTATIVELY IDENTIFIED COMPOUNDS					
	972	————————					
	3320	NONE DETECTED					

Comment Note: * Compound searched for but not detected. Standard was unavailable to determine retention time and detection limit.

Qualifiers

* See Note for Parameter

BDL Below Detection Limit

Comments to Laboratory (do not record)

2-HCL VIALS

Need verbals ASAP, in 7 days or sooner.

Note the additional IDEM analytes for drinking water:

CS2, MEK, Acetone, 2-Nitropropane, 2-Hexanone

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\DATA\D090607\2810D.D Vial: 6
Acq On : 6 Sep 2007 10:10 Operator: REGI
Sample : A781261 LQ4594 Inst : GCMS #4
Misc : 9/8/07 Multiplr: 1.00
MS Integration Params: rteint2.p
Quant Time: Sep 06 10:26:26 2007 Quant Results File: DWD.RES

Quant Method : C:\MSDCHEM\1\METHODS\DWD.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Tue Sep 04 10:38:20 2007
Response via : Initial Calibration
DataAcq Meth : DWD

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) FLUOROBENZENE	5.67	96	367504	10.00	UG/L	0.00
38) 2-Bromo-1-chloropropane	7.96	77	153410	10.00	UG/L	0.00
System Monitoring Compounds						
21) Dibromofluoromethane	4.95	113	90898	9.88	UG/L	0.00
Spiked Amount 10.000			Recovery	=	98.80%	
23) 1,2-Dichloroethane-d4	5.30	65	117853	10.42	UG/L	0.00
Spiked Amount 10.000			Recovery	=	104.20%	
33) Toluene-d8	7.51	98	355930	9.35	UG/L	0.00
Spiked Amount 10.000			Recovery	=	93.50%	
51) 4-Bromofluorobenzene	10.66	174	114857	8.46	UG/L	0.00
Spiked Amount 10.000			Recovery	=	84.60%	
Target Compounds						Qvalue
8) ~~Acetone~~	2.76	43	1546	1.04	UG/L #	46
10) ~~Methylene~~ Chloride	3.17	84	6193	Below Cal	#	73
17) ~~Tetrahydro~~furan	4.76	42	6628	1.51	UG/L #	74
55) n-~~Propylben~~zene	10.65	92	4616	0.80	UG/L #	1
70) ~~Hexachloro~~butadiene	13.73	225	275	Below Cal		100

ND TICs

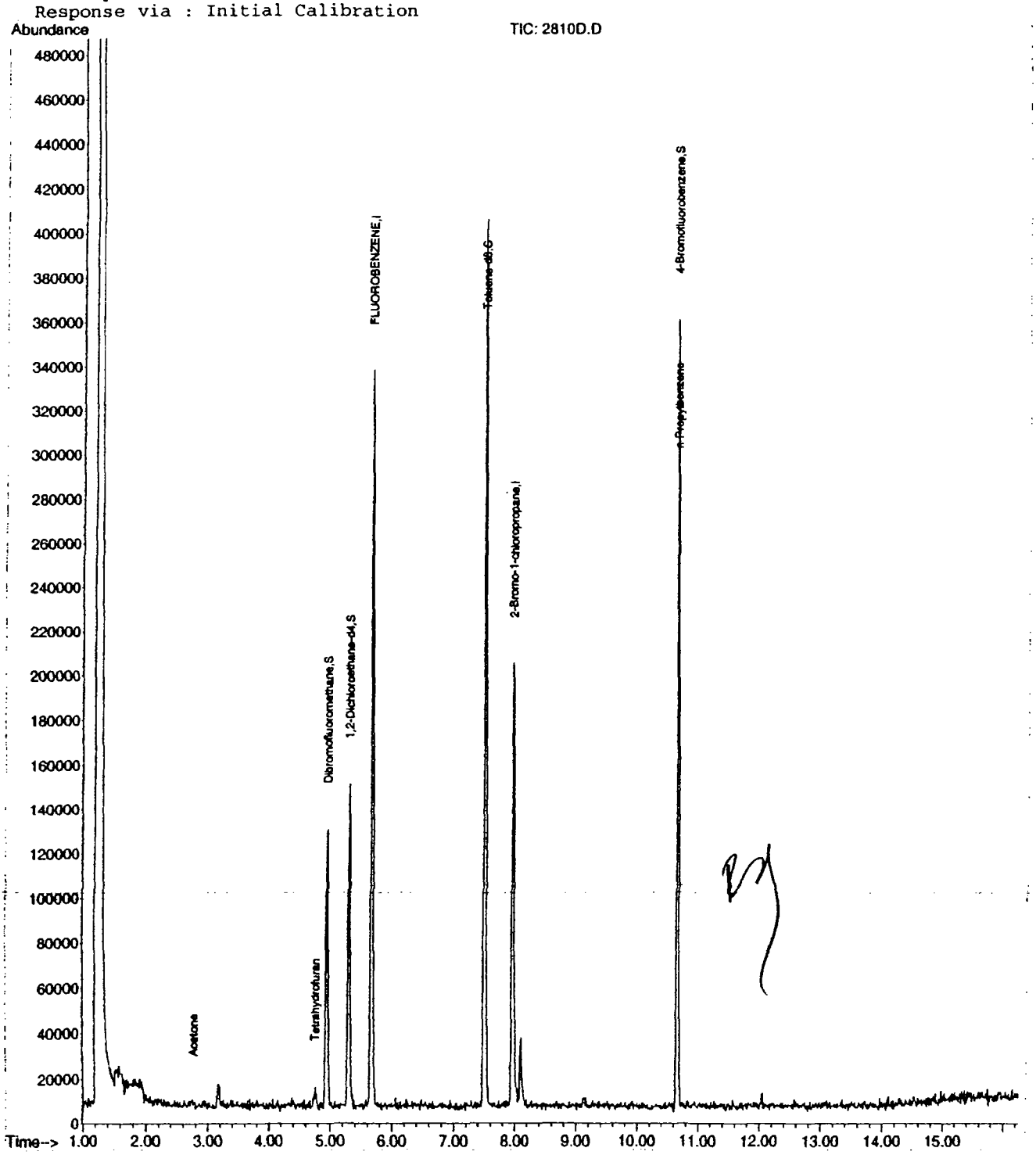
(#) = qualifier out of range (m) = manual integration
2810D.D DWD.M Thu Sep 06 10:26:27 2007

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\DATA\D090607\2810D.D
Acq On : 6 Sep 2007 10:10
Sample : A781261 LQ4594
Misc : 9/8/07
MS Integration Params: rteint2.p
Quant Time: Sep 6 10:26 2007

Vial: 6
Operator: REGI
Inst : GCMS #4
Multiplr: 1.00
Quant Results File: DWD.RES

Method : C:\MSDCHEM\1\METHODS\DWD.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Tue Sep 04 10:38:20 2007
Response via : Initial Calibration



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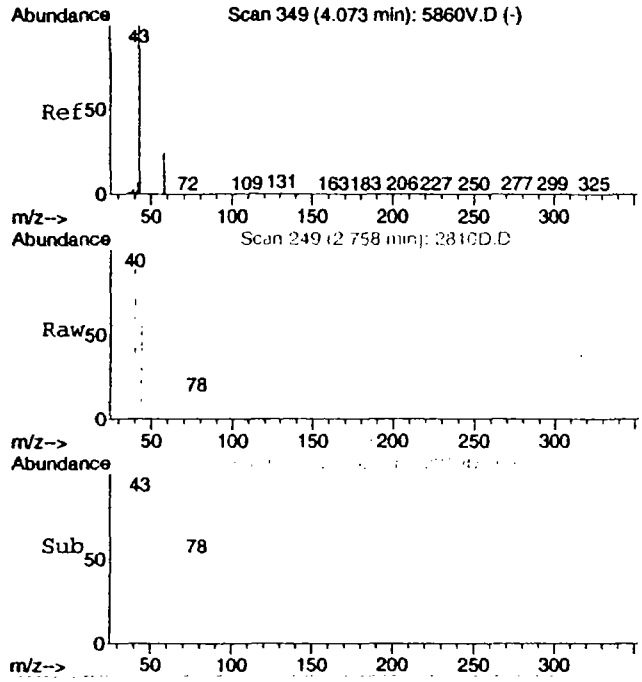
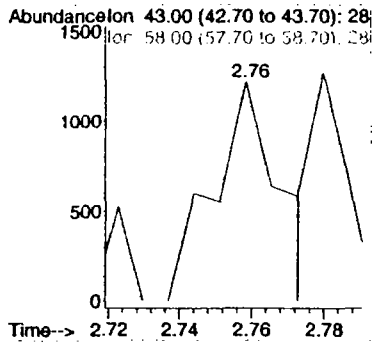
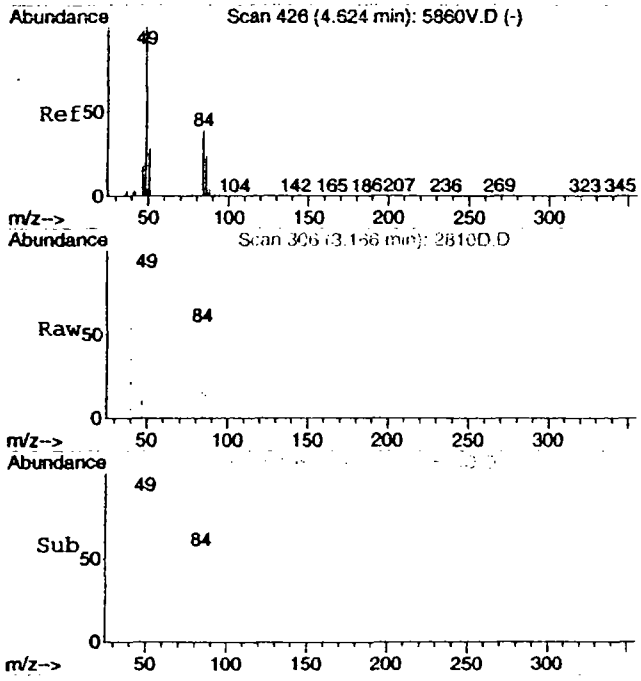


#8
Acetone
Concen: 1.04 UG/L
RT: 2.76 min Scan# 249
Delta R.T. -0.01 min
Lab File: 2810D.D
Acq: 6 Sep 2007 10:10

Tgt Ion: 43 Resp: 1546

Ion	Ratio	Lower	Upper
43	100		
58	0.0	23.1	34.7#

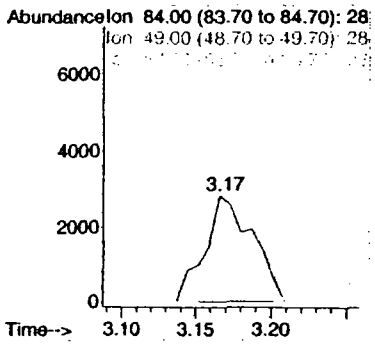


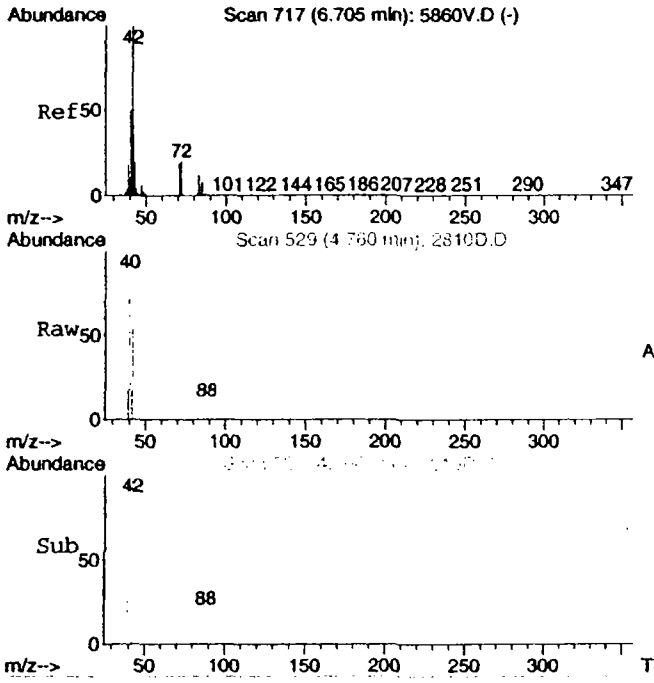


#10
Methylene Chloride
Concen: Below Cal
RT: 3.17 min Scan# 306
Delta R.T. -0.01 min
Lab File: 2810D.D
Acq: 6 Sep 2007 10:10

Tgt Ion: 84 Resp: 6193

Ion	Ratio	Lower	Upper
84	100		
49	132.7	140.2	210.2#
86	49.1	51.1	76.7#

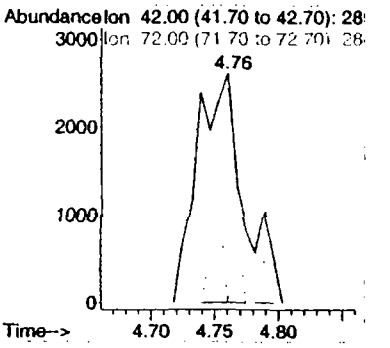


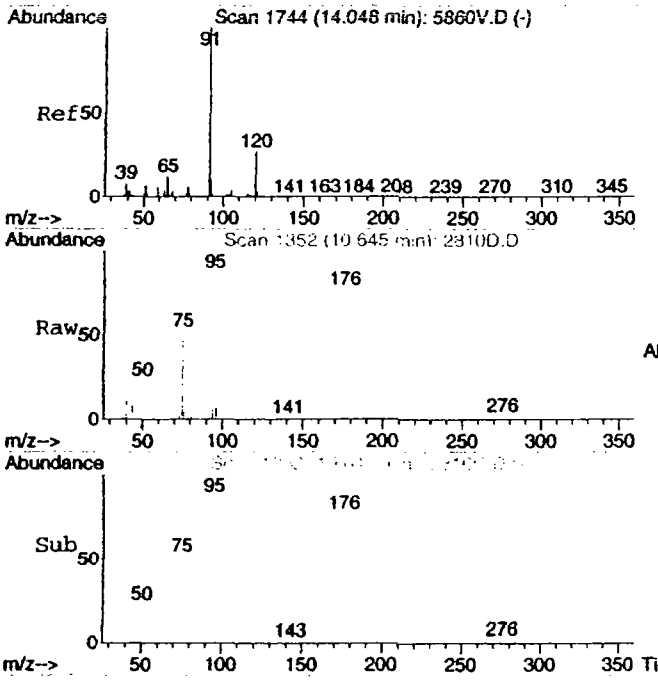


#17
Tetrahydrofuran
Concen: 1.51 UG/L
RT: 4.76 min Scan# 529
Delta R.T. 0.01 min
Lab File: 2810D.D
Acq: 6 Sep 2007 10:10

Tgt Ion: 42 Resp: 6628

Ion	Ratio	Lower	Upper
42	100		
72	16.3	24.5	36.7#

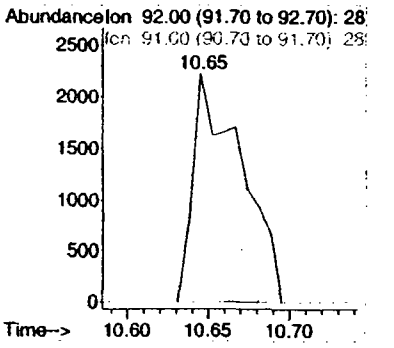


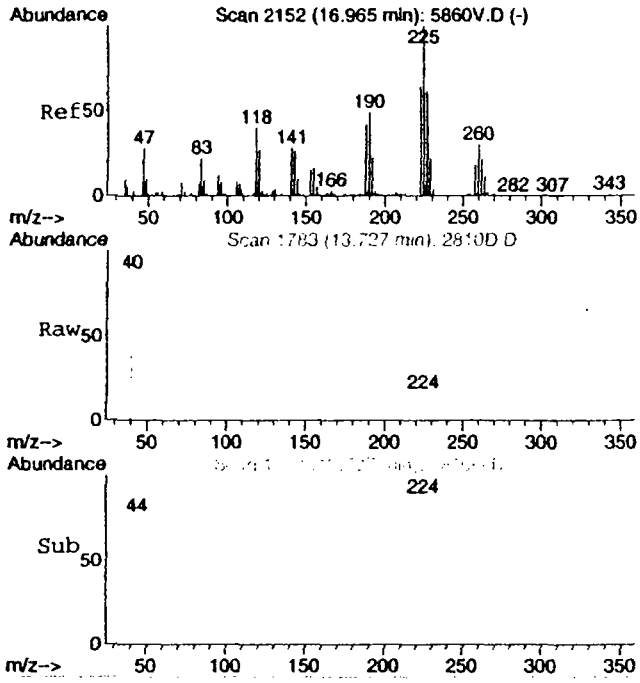


#55
n-Propylbenzene
Concen: 0.80 UG/L
RT: 10.65 min Scan# 1352
Delta R.T. -0.29 min
Lab File: 2810D.D
Acq: 6 Sep 2007 10:10

Tgt Ion: 92 Resp: 4616

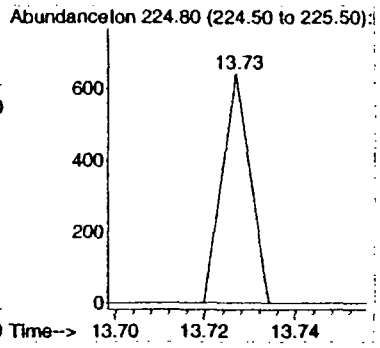
Ion	Ratio	Lower	Upper
92	100		
91	9.4	715.8	1073.6#





#70
Hexachlorobutadiene
Concen: Below Cal
RT: 13.73 min Scan# 1783
Delta R.T. 0.00 min
Lab File: 2810D.D
Acq: 6 Sep 2007 10:10

Tgt Ion:225 Resp: 275



R524561 Heritage Environmental Services, LLC A781262

GC/MS VOA

Method EPA 524.2 REV. 4.1
Sample Description LQ4595
Submitter IDEM - OLQ
Instrument 345 Channel 1

Test Code O516.9.0
Analyst 1062 R. SHAMP
File 2811D.D Date/Time 06Sep07 10:37:00
Dilution Factor 1

CAS	PRM	Parameter	Concentration	RQL	Limit	Units	RT
NA	1807	REGULATED CONTAMINANTS					
71-43-2	151	BENZENE		BDL	0.50	UG/L	
56-23-5	217	CARBON TETRACHLORIDE		BDL	0.50	UG/L	
106-46-7	29	1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)		BDL	0.50	UG/L	
107-06-2	21	1,2-DICHLOROETHANE		BDL	0.50	UG/L	
75-35-4	8	1,1-DICHLOROETHENE		BDL	0.50	UG/L	
71-55-6	2	1,1,1-TRICHLOROETHANE		BDL	0.50	UG/L	
79-01-6	750	TRICHLOROETHENE		BDL	0.50	UG/L	
75-01-4	768	VINYL CHLORIDE		BDL	0.20	UG/L	
108-90-7	231	CHLOROBENZENE		BDL	0.50	UG/L	
95-50-1	20	1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)		BDL	0.50	UG/L	
156-60-5	746	TRANS-1,2-DICHLOROETHENE		BDL	0.50	UG/L	
156-59-2	246	CIS-1,2-DICHLOROETHENE		BDL	0.50	UG/L	
75-09-2	302	DICHLOROMETHANE (METHYLENE CHLORIDE)		BDL	0.50	UG/L	
78-87-5	23	1,2-DICHLOROPROPANE		BDL	0.50	UG/L	
100-41-4	349	ETHYL BENZENE		BDL	0.50	UG/L	
100-42-5	680	STYRENE		BDL	0.50	UG/L	
79-00-5	4	1,1,2-TRICHLOROETHANE		BDL	0.50	UG/L	
127-18-4	703	TETRACHLOROETHENE		BDL	0.50	UG/L	
108-88-3	724	TOLUENE		BDL	0.50	UG/L	
95-47-6	549	O-XYLENE		BDL	0.50	UG/L	
MPXYLENE	492	M/P-XYLENE		BDL	0.50	UG/L	
120-82-1	16	1,2,4-TRICHLOROBENZENE		BDL	0.50	UG/L	
NA	1809	UNREGULATED - MONITORING REQUIRED					
108-86-1	193	BROMOBENZENE		BDL	0.50	UG/L	
75-27-4	195	BROMODICHLOROMETHANE		BDL	0.50	UG/L	
75-25-2	197	BROMOFORM		BDL	0.50	UG/L	
74-83-9	198	BROMOMETHANE		BDL	0.50	UG/L	
124-48-1	233	CHLORODIBROMOMETHANE		BDL	0.50	UG/L	
75-00-3	234	CHLOROETHANE		BDL	0.50	UG/L	
67-66-3	235	CHLOROFORM		BDL	0.50	UG/L	
74-87-3	236	CHLOROMETHANE		BDL	0.50	UG/L	
95-49-8	807	2-CHLOROTOLUENE (O-CHLOROTOLUENE)		BDL	0.50	UG/L	
106-43-4	808	4-CHLOROTOLUENE (P-CHLOROTOLUENE)		BDL	0.50	UG/L	
74-95-3	296	DIBROMOMETHANE		BDL	0.50	UG/L	
541-73-1	26	1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)		BDL	0.50	UG/L	
75-34-3	7	1,1-DICHLOROETHANE		BDL	0.50	UG/L	
563-58-6	10	1,1-DICHLOROPROPENE		BDL	0.50	UG/L	
142-28-9	27	1,3-DICHLOROPROPANE		BDL	0.50	UG/L	
10061-01-5	247	CIS-1,3-DICHLOROPROPENE		BDL	0.50	UG/L	
10061-02-6	747	TRANS-1,3-DICHLOROPROPENE		BDL	0.50	UG/L	
594-20-7	33	2,2-DICHLOROPROPANE		BDL	0.50	UG/L	
630-20-6	1	1,1,1,2-TETRACHLOROETHANE		BDL	0.50	UG/L	
79-34-5	3	1,1,2,2-TETRACHLOROETHANE		BDL	0.50	UG/L	
96-18-4	14	1,2,3-TRICHLOROPROPANE		BDL	0.50	UG/L	

KT 9-10-07

KT 9-10-07

GC/MS VOA

CAS	PRM	Parameter	Concentration	RQL	Limit	Units	RT
NA	1806	MONITORED AT STATE'S DISCRETION					
74-97-5	194	BROMOCHLOROMETHANE		BDL	0.50	UG/L	
104-51-8	519	N-BUTYLBENZENE		BDL	0.50	UG/L	
75-71-8	300	DICHLORODIFLUOROMETHANE		BDL	0.50	UG/L	
75-69-4	372	TRICHLOROFLUOROMETHANE		BDL	0.50	UG/L	
87-68-3	398	HEXACHLOROBUTADIENE		BDL	0.50	UG/L	
98-82-8	432	ISOPROPYLBENZENE (CUMENE)		BDL	0.50	UG/L	
99-87-6	628	4-ISOPROPYLTOLUENE (P-ISOPROPYLTOLUENE)		BDL	0.50	UG/L	
91-20-3	493	NAPHTHALENE		BDL	0.50	UG/L	
103-65-1	532	N-PROPYLBENZENE		BDL	0.50	UG/L	
135-98-8	644	SEC-BUTYLBENZENE		BDL	0.50	UG/L	
98-06-6	702	TERT-BUTYLBENZENE		BDL	0.50	UG/L	
87-61-6	13	1,2,3-TRICHLOROBENZENE		BDL	0.50	UG/L	
95-63-6	17	1,2,4-TRIMETHYLBENZENE		BDL	0.50	UG/L	
108-67-8	25	1,3,5-TRIMETHYLBENZENE		BDL	0.50	UG/L	
106-93-4	18	1,2-DIBROMOETHANE (EDB)		BDL	0.50	UG/L	
96-12-8	19	1,2-DIBROMO-3-CHLOROPROPANE (DBCP)		BDL	0.50	UG/L	
1634-04-4	859	METHYL-T-BUTYL ETHER (MTBE)		BDL	0.50	UG/L	
	972	————————					
591-78-6	60	2-HEXANONE		BDL	2.0	UG/L	
79-46-9	67	2-NITROPROPANE		*			
67-64-1	99	ACETONE (2-PROPANONE)		BDL	4.0	UG/L	
78-93-3	52	2-BUTANONE		BDL	2.0	UG/L	
75-15-0	216	CARBON DISULFIDE		*			
	1804	...					
	971	SURROGATE RECOVERY					
	972	————————					
17060-07-0	301	DICHLOROETHANE-D4	103			% RECOVERY	
2037-26-5	726	TOLUENE-D8	92			% RECOVERY	
460-00-4	196	4-BROMOFLUOROBENZENE	90			% RECOVERY	
	1131	TENTATIVELY IDENTIFIED COMPOUNDS					
	3320	NONE DETECTED					

Comment Note: * Compound searched for but not detected. Standard was unavailable to determine retention time and detection limit.

Qualifiers

BDL Below Detection Limit

* See Note for Parameter

Comments to Laboratory (do not record)

2-HCL VIALS

Need verbals ASAP, in 7 days or sooner.

Note the additional IDEM analytes for drinking water:

CS2, MEK, Acetone, 2-Nitropropane, 2-Hexanone

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\DATA\D090607\2811D.D Vial: 7
Acq On : 6 Sep 2007 10:37 Operator: REGI
Sample : A781262 LQ4595 Inst : GCMS #4
Misc : 9/8/07 Multiplr: 1.00
MS Integration Params: rteint2.p
Quant Time: Sep 06 10:53:44 2007 Quant Results File: DWD.RES

Quant Method : C:\MSDCHEM\1\METHODS\DWD.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Tue Sep 04 10:38:20 2007
Response via : Initial Calibration
DataAcq Meth : DWD

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) FLUOROBENZENE	5.68	96	356384	10.00 UG/L	0.00
38) 2-Bromo-1-chloropropane	7.97	77	147641	10.00 UG/L	0.00
System Monitoring Compounds					
21) Dibromofluoromethane	4.95	113	88169	9.88 UG/L	0.00
Spiked Amount 10.000			Recovery	= 98.80%	
23) 1,2-Dichloroethane-d4	5.30	65	113265	10.32 UG/L	0.00
Spiked Amount 10.000			Recovery	= 103.20%	
33) Toluene-d8	7.51	98	339699	9.20 UG/L	0.00
Spiked Amount 10.000			Recovery	= 92.00%	
51) 4-Bromofluorobenzene	10.66	174	116938	8.95 UG/L	0.00
Spiked Amount 10.000			Recovery	= 89.50%	
Target Compounds					Qvalue
8) ~~Acetone~~	2.77	43	4138	1.62 UG/L	94
10) ~~Methylene~~ Chloride	3.18	84	5373	Below Cal	98
17) ~~Tetrahydrofu~~ran	4.75	42	7826	1.84 UG/L	98
35) ~~trans-1,3-~~Dichloropropene	7.97	75	2842	0.22 UG/L	100
55) ~~n-Propylbenz~~ene	10.66	92	4733	0.85 UG/L #	1

No ECS

(#) = qualifier out of range (m) = manual integration
2811D.D DWD.M Thu Sep 06 10:53:45 2007

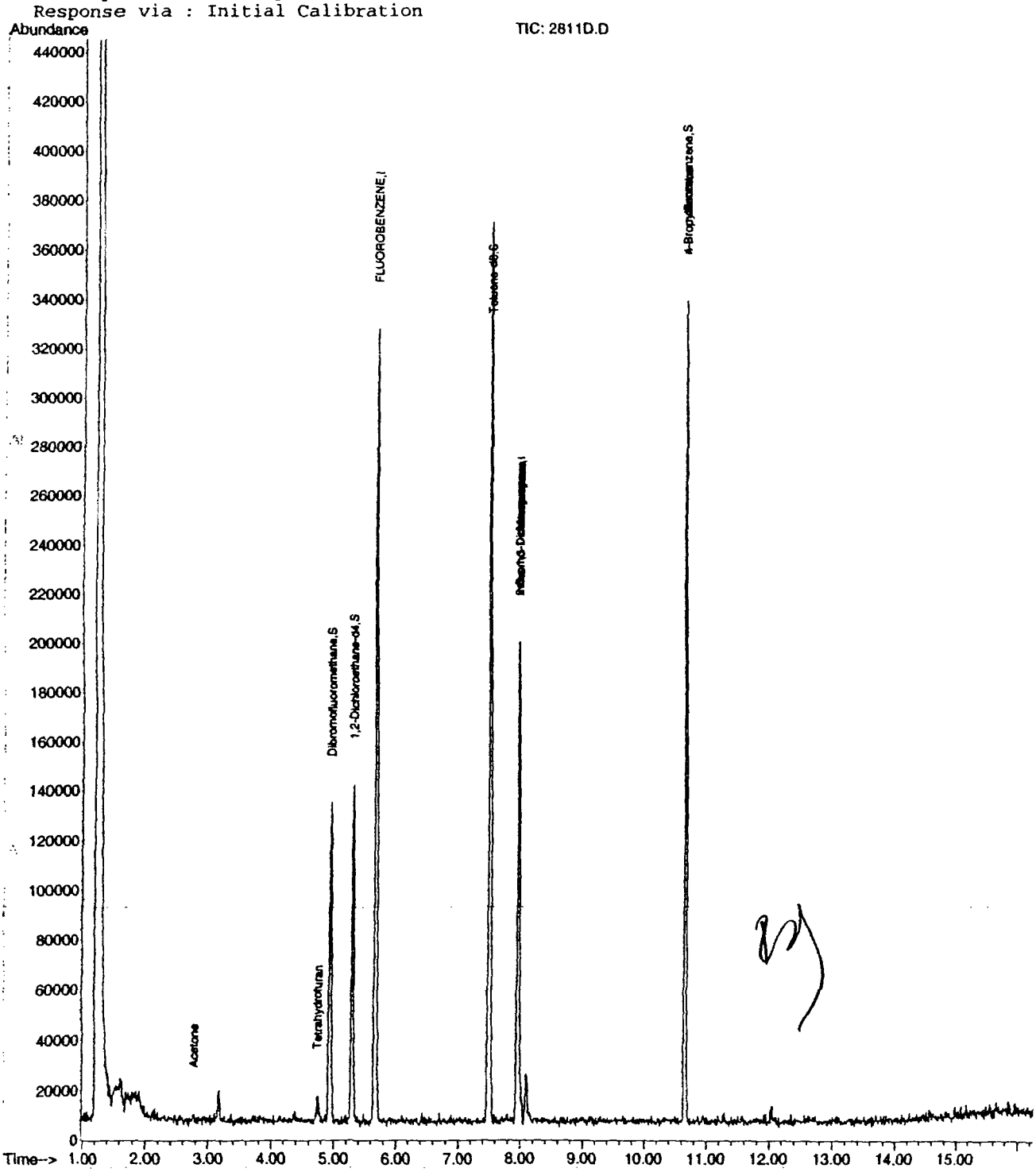
105

Quantitation Report (Not Reviewed)

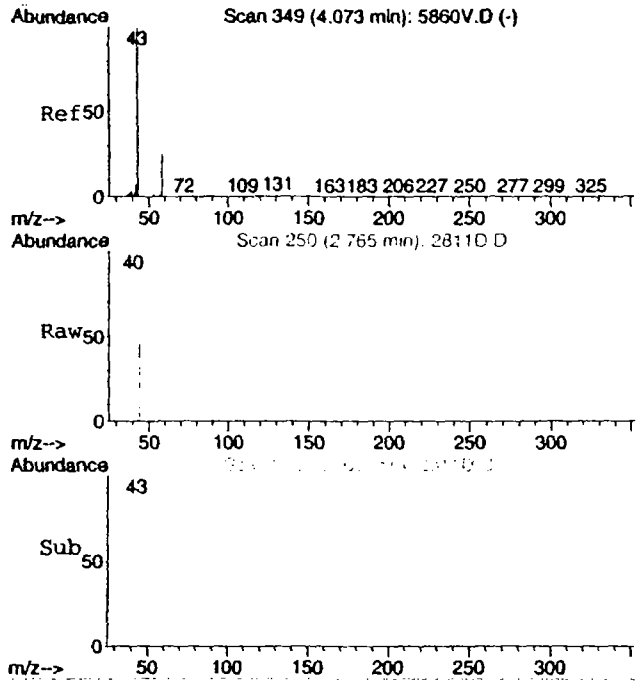
Data File : C:\MSDCHEM\DATA\D090607\2811D.D
Acq On : 6 Sep 2007 10:37
Sample : A781262 LQ4595
Misc : 9/8/07
MS Integration Params: rteint2.p
Quant Time: Sep 6 10:53 2007

Vial: 7
Operator: REGI
Inst : GCMS #4
Multiplr: 1.00
Quant Results File: DWD.RES

Method : C:\MSDCHEM\1\METHODS\DWD.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Tue Sep 04 10:38:20 2007
Response via : Initial Calibration



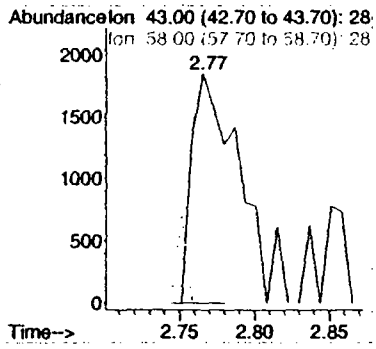
2811D.D DWD.M Thu Sep 06 10:53:46 2007

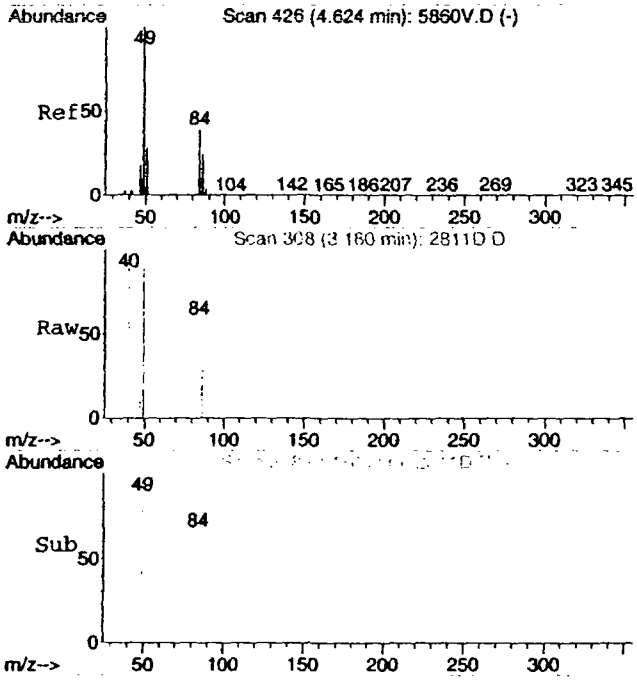


#8
Acetone
Concen: 1.62 UG/L
RT: 2.77 min Scan# 250
Delta R.T. -0.01 min
Lab File: 2811D.D
Acq: 6 Sep 2007 10:37

Tgt Ion: 43 Resp: 4138

Ion	Ratio	Lower	Upper
43	100		
58	25.5	23.1	34.7

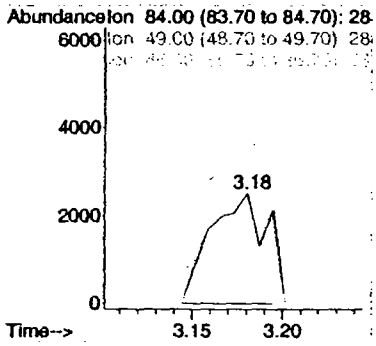


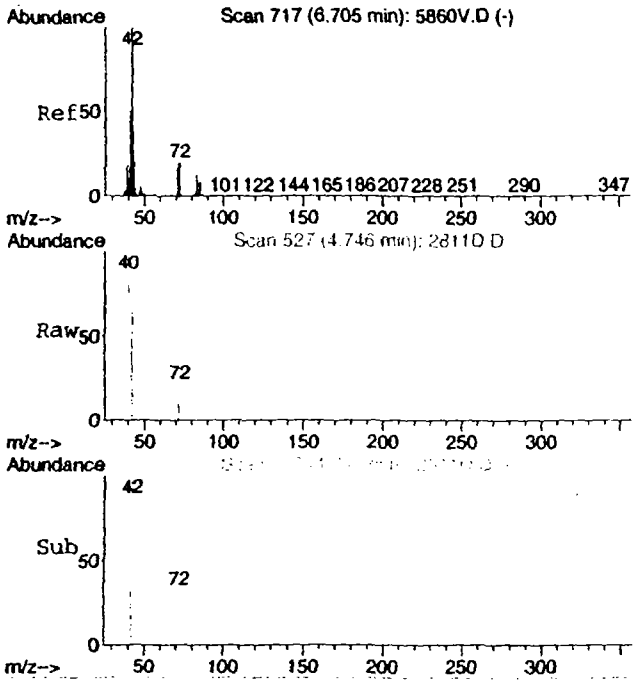


#10
Methylene Chloride
Concen: Below Cal
RT: 3.18 min Scan# 308
Delta R.T. 0.01 min
Lab File: 2811D.D
Acq: 6 Sep 2007 10:37

Tgt Ion: 84 Resp: 5373

Ion	Ratio	Lower	Upper
84	100		
49	173.2	140.2	210.2
86	67.2	51.1	76.7

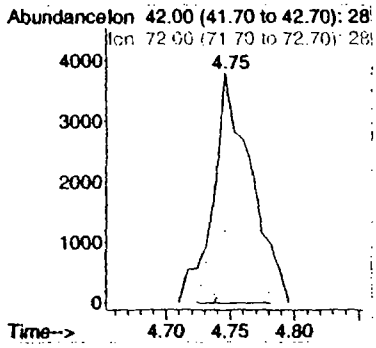


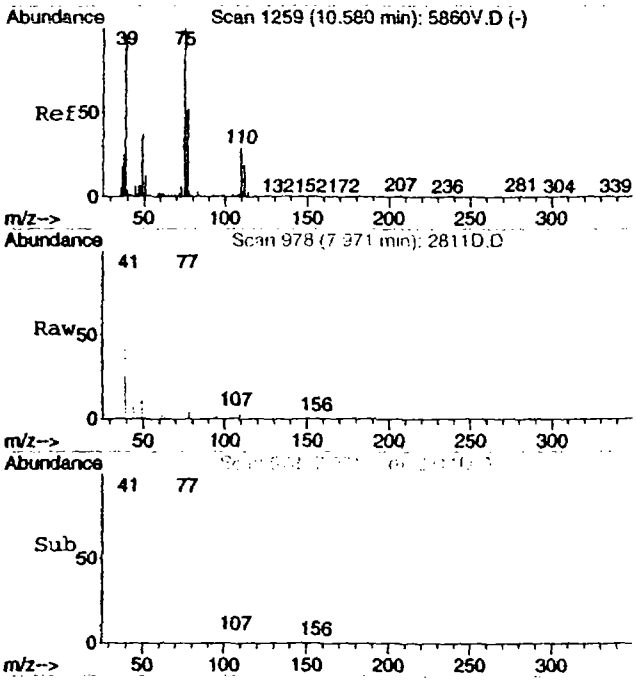


#17
Tetrahydrofuran
Concen: 1.84 UG/L
RT: 4.75 min Scan# 527
Delta R.T. -0.00 min
Lab File: 2811D.D
Acq: 6 Sep 2007 10:37

Tgt Ion: 42 Resp: 7826

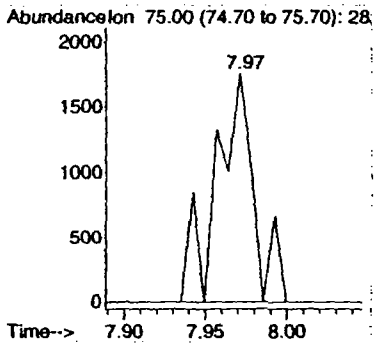
Ion	Ratio	Lower	Upper
42	100		
72	29.5	24.5	36.7

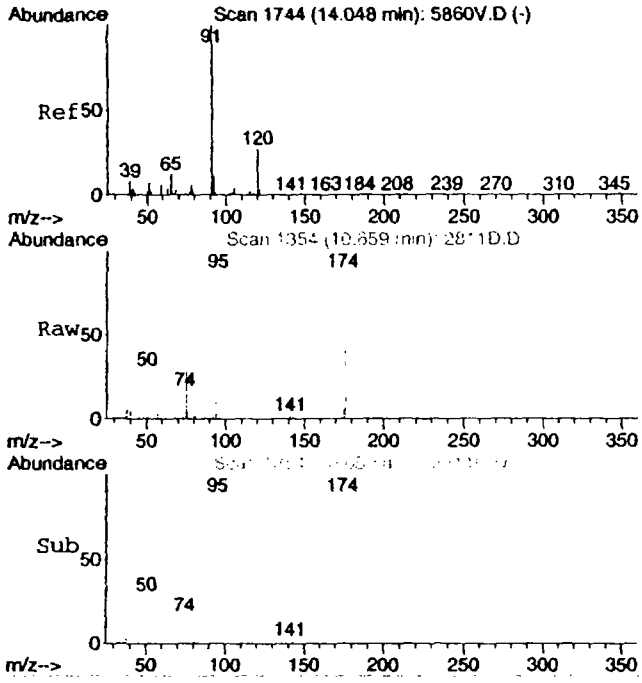




#35
trans-1,3-Dichloropropene
Concen: 0.22 UG/L
RT: 7.97 min Scan# 978
Delta R.T. 0.11 min
Lab File: 2811D.D
Acq: 6 Sep 2007 10:37

Tgt Ion: 75 Resp: 2842

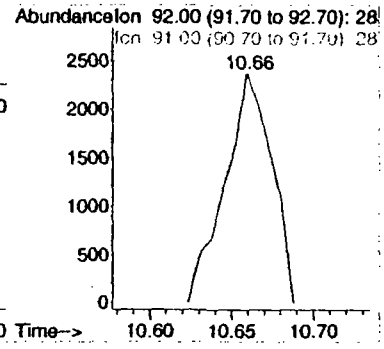




#55
n-Propylbenzene
Concen: 0.85 UG/L
RT: 10.66 min Scan# 1354
Delta R.T. -0.27 min
Lab File: 2811D.D
Acq: 6 Sep 2007 10:37

Tgt Ion: 92 Resp: 4733

Ion	Ratio	Lower	Upper
92	100		
91	0.0	715.8	1073.6#



R524561 Heritage Environmental Services, LLC A781263

GC/MS VOA

Method EPA 524.2 REV. 4.1
Sample Description LQ4598
Submitter IDEM - OLQ
Instrument 345 Channel 1

Test Code O516.9.0
Analyst 1062 R. SHAMP
File 2812D.D Date/Time 06Sep07 11:04:00
Dilution Factor 1

CAS	PRM	Parameter	Concentration	RQL	Limit	Units	RT
NA	1807	REGULATED CONTAMINANTS					
71-43-2	151	BENZENE		BDL	0.50	UG/L	
56-23-5	217	CARBON TETRACHLORIDE		BDL	0.50	UG/L	
106-46-7	29	1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)		BDL	0.50	UG/L	
107-06-2	21	1,2-DICHLOROETHANE		BDL	0.50	UG/L	
75-35-4	8	1,1-DICHLOROETHENE	.53		0.50	UG/L	
71-55-6	2	1,1,1-TRICHLOROETHANE	20		0.50	UG/L	
79-01-6	750	TRICHLOROETHENE	7.0		0.50	UG/L	
75-01-4	768	VINYL CHLORIDE		BDL	0.20	UG/L	
108-90-7	231	CHLOROBENZENE		BDL	0.50	UG/L	
95-50-1	20	1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)		BDL	0.50	UG/L	
156-60-5	746	TRANS-1,2-DICHLOROETHENE		BDL	0.50	UG/L	
156-59-2	246	CIS-1,2-DICHLOROETHENE		BDL	0.50	UG/L	
75-09-2	302	DICHLOROMETHANE (METHYLENE CHLORIDE)		BDL	0.50	UG/L	
78-87-5	23	1,2-DICHLOROPROPANE		BDL	0.50	UG/L	
100-41-4	349	ETHYL BENZENE		BDL	0.50	UG/L	
100-42-5	680	STYRENE		BDL	0.50	UG/L	
79-00-5	4	1,1,2-TRICHLOROETHANE		BDL	0.50	UG/L	
127-18-4	703	TETRACHLOROETHENE		BDL	0.50	UG/L	
108-88-3	724	TOLUENE		BDL	0.50	UG/L	
95-47-6	549	O-XYLENE		BDL	0.50	UG/L	
MPXYLENE	492	M/P-XYLENE		BDL	0.50	UG/L	
120-82-1	16	1,2,4-TRICHLOROBENZENE		BDL	0.50	UG/L	
NA	1809	UNREGULATED - MONITORING REQUIRED					
108-86-1	193	BROMOBENZENE		BDL	0.50	UG/L	
75-27-4	195	BROMODICHLOROMETHANE		BDL	0.50	UG/L	
75-25-2	197	BROMOFORM		BDL	0.50	UG/L	
74-83-9	198	BROMOMETHANE		BDL	0.50	UG/L	
124-48-1	233	CHLORODIBROMOMETHANE		BDL	0.50	UG/L	
75-00-3	234	CHLOROETHANE		BDL	0.50	UG/L	
67-66-3	235	CHLOROFORM		BDL	0.50	UG/L	
74-87-3	236	CHLOROMETHANE		BDL	0.50	UG/L	
95-49-8	807	2-CHLOROTOLUENE (O-CHLOROTOLUENE)		BDL	0.50	UG/L	
106-43-4	808	4-CHLOROTOLUENE (P-CHLOROTOLUENE)		BDL	0.50	UG/L	
74-95-3	296	DIBROMOMETHANE		BDL	0.50	UG/L	
541-73-1	26	1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)		BDL	0.50	UG/L	
75-34-3	7	1,1-DICHLOROETHANE	3.9		0.50	UG/L	
563-58-6	10	1,1-DICHLOROPROPENE		BDL	0.50	UG/L	
142-28-9	27	1,3-DICHLOROPROPANE		BDL	0.50	UG/L	
10061-01-5	247	CIS-1,3-DICHLOROPROPENE		BDL	0.50	UG/L	
10061-02-6	747	TRANS-1,3-DICHLOROPROPENE		BDL	0.50	UG/L	
594-20-7	33	2,2-DICHLOROPROPANE		BDL	0.50	UG/L	
630-20-6	1	1,1,1,2-TETRACHLOROETHANE		BDL	0.50	UG/L	
79-34-5	3	1,1,2,2-TETRACHLOROETHANE		BDL	0.50	UG/L	
96-18-4	14	1,2,3-TRICHLOROPROPANE		BDL	0.50	UG/L	

KS 9-10-07

KS 9-10-07

GC/MS VOA

CAS	PRM	Parameter	Concentration	RQL	Limit	Units	RT
NA	1806	MONITORED AT STATE'S DISCRETION					
74-97-5	194	BROMOCHLOROMETHANE		BDL	0.50	UG/L	
104-51-8	519	N-BUTYLBENZENE		BDL	0.50	UG/L	
75-71-8	300	DICHLORODIFLUOROMETHANE		BDL	0.50	UG/L	
75-69-4	372	TRICHLOROFLUOROMETHANE		BDL	0.50	UG/L	
87-68-3	398	HEXACHLOROBUTADIENE		BDL	0.50	UG/L	
98-82-8	432	ISOPROPYLBENZENE (CUMENE)		BDL	0.50	UG/L	
99-87-6	628	4-ISOPROPYLTOLUENE (P-ISOPROPYLTOLUENE)		BDL	0.50	UG/L	
91-20-3	493	NAPHTHALENE		BDL	0.50	UG/L	
103-65-1	532	N-PROPYLBENZENE		BDL	0.50	UG/L	
135-98-8	644	SEC-BUTYLBENZENE		BDL	0.50	UG/L	
98-06-6	702	TERT-BUTYLBENZENE		BDL	0.50	UG/L	
87-61-6	13	1,2,3-TRICHLOROBENZENE		BDL	0.50	UG/L	
95-63-6	17	1,2,4-TRIMETHYLBENZENE		BDL	0.50	UG/L	
108-67-8	25	1,3,5-TRIMETHYLBENZENE		BDL	0.50	UG/L	
106-93-4	18	1,2-DIBROMOETHANE (EDB)		BDL	0.50	UG/L	
96-12-8	19	1,2-DIBROMO-3-CHLOROPROPANE (DBCP)		BDL	0.50	UG/L	
1634-04-4	859	METHYL-T-BUTYL ETHER (MTBE)		BDL	0.50	UG/L	
	972	————————					
591-78-6	60	2-HEXANONE		BDL	2.0	UG/L	
79-46-9	67	2-NITROPROPANE		*			
67-64-1	99	ACETONE (2-PROPANONE)		BDL	4.0	UG/L	
78-93-3	52	2-BUTANONE		BDL	2.0	UG/L	
75-15-0	216	CARBON DISULFIDE		*			
	1804	...					
	971	SURROGATE RECOVERY					
	972	————————					
17060-07-0	301	DICHLOROETHANE-D4	104			% RECOVERY	
2037-26-5	726	TOLUENE-D8	93			% RECOVERY	
460-00-4	196	4-BROMOFLUOROBENZENE	88			% RECOVERY	
	1131	TENTATIVELY IDENTIFIED COMPOUNDS					
	3320	NONE DETECTED					

Comment Note: * Compound searched for but not detected. Standard was unavailable to determine retention time and detection limit. Note: Sample was rerun to confirm target compounds.

Qualifiers

* See Note for Parameter

BDL Below Detection Limit

Comments to Laboratory (do not record)

6-LT AMBERS, 500ML HNO3 SQPL, 12-HCL VIALS

Need verbals ASAP, in 7 days or sooner.

Note the additional IDEM analytes for drinking water:

CS2, MEK, Acetone, 2-Nitropropane, 2-Hexanone

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\DATA\D090607\2812D.D Vial: 8
Acq On : 6 Sep 2007 11:04 Operator: REGI
Sample : A781263 LQ4598 Inst : GCMS #4
Misc : 9/8/07 Multiplr: 1.00
MS Integration Params: rteint2.p
Quant Time: Sep 06 11:21:09 2007 Quant Results File: DWD.RES

Quant Method : C:\MSDCHEM\1\METHODS\DWD.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Tue Sep 04 10:38:20 2007
Response via : Initial Calibration
DataAcq Meth : DWD

TC#378

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) FLUOROBENZENE	5.68	96	364138	10.00 UG/L	0.00
38) 2-Bromo-1-chloropropane	7.96	77	152541	10.00 UG/L	0.00
System Monitoring Compounds					
21) Dibromofluoromethane	4.95	113	90784	9.96 UG/L	0.00
Spiked Amount 10.000			Recovery	= 99.60%	
23) 1,2-Dichloroethane-d4	5.30	65	116009	10.35 UG/L	0.00
Spiked Amount 10.000			Recovery	= 103.50%	
33) Toluene-d8	7.51	98	352168	9.34 UG/L	0.00
Spiked Amount 10.000			Recovery	= 93.40%	
51) 4-Bromofluorobenzene	10.67	174	118861	8.80 UG/L	0.00
Spiked Amount 10.000			Recovery	= 88.00%	

Target Compounds						Qvalue
8) ~~Acetone~~		2.77	43	5795	1.96 UG/L #	65
9) 1,1-DICHLOROETHENE	0.53	2.71	96	5220	0.53 UG/L	100
10) ~~Methylene Chloride~~		3.19	84	3375	Below Cal #	71
13) 1,1-Dichloroethane	3.9	3.86	63	81678	3.92 UG/L	100
17) ~~Tetrahydrofuran~~		4.75	42	8370	1.93 UG/L	98
20) 1,1,1-Trichloroethane	20	4.97	97	307164	19.58 UG/L	97
27) Trichloroethene	7.0	6.08	130	80559	7.03 UG/L	96
55) ~~n-Propylbenzene~~		10.66	92	4440	0.77 UG/L #	1

NO TICS

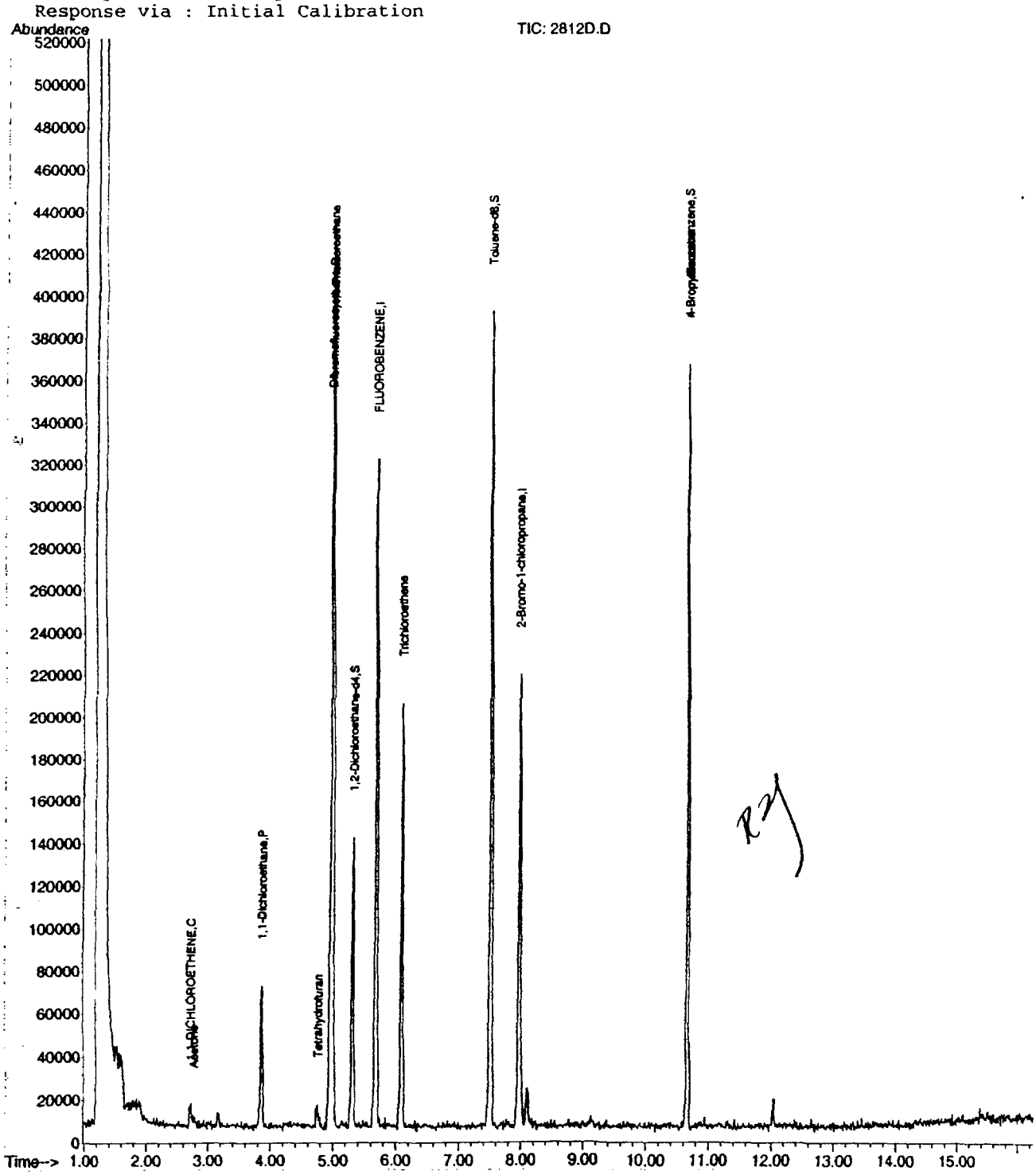
(#) = qualifier out of range (m) = manual integration
2812D.D DWD.M Thu Sep 06 11:21:10 2007

Quantitation Report (Not Reviewed)

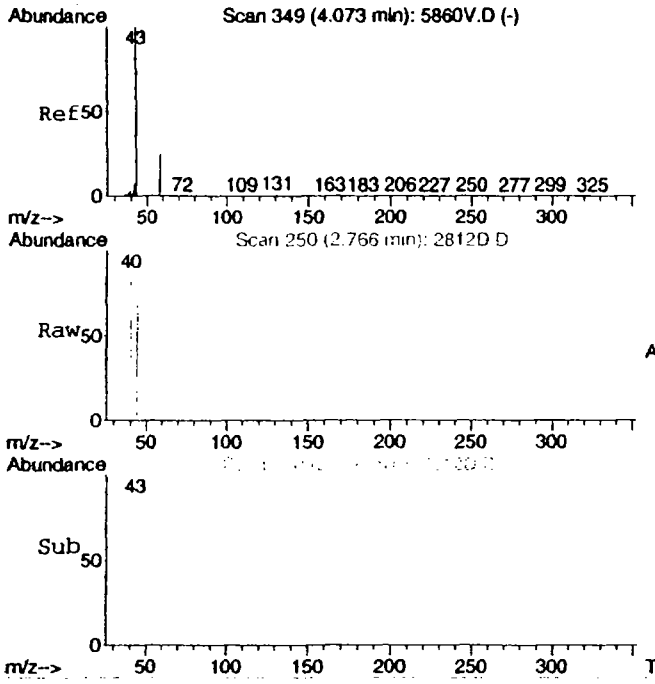
Data File : C:\MSDCHEM\DATA\D090607\2812D.D
Acq On : 6 Sep 2007 11:04
Sample : A781263 LQ4598
Misc : 9/8/07
MS Integration Params: rteint2.p
Quant Time: Sep 6 11:21 2007

Vial: 8
Operator: REGI
Inst : GCMS #4
Multiplr: 1.00
Quant Results File: DWD.RES

Method : C:\MSDCHEM\1\METHODS\DWD.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Tue Sep 04 10:38:20 2007
Response via : Initial Calibration



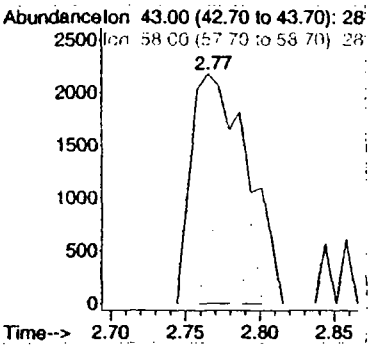
2812D.D DWD.M Thu Sep 06 11:21:10 2007

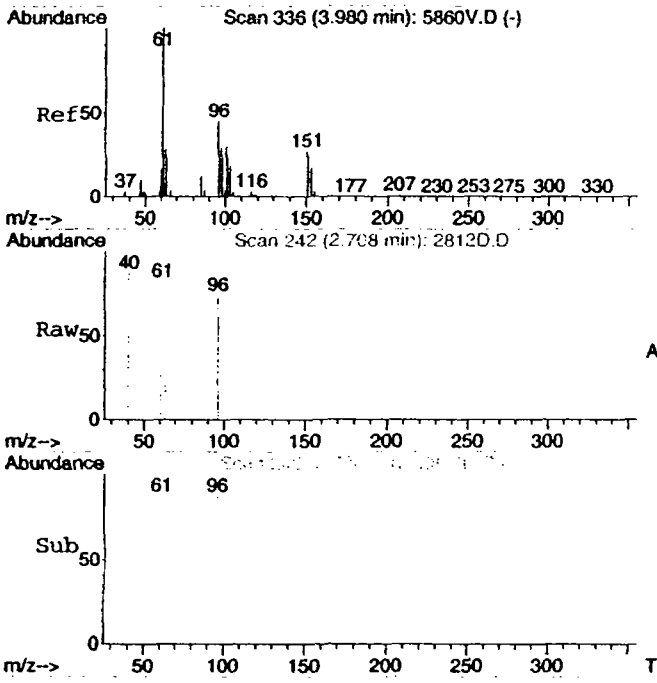


#8
Acetone
Concen: 1.96 UG/L
RT: 2.77 min Scan# 250
Delta R.T. -0.01 min
Lab File: 2812D.D
Acq: 6 Sep 2007 11:04

Tgt Ion: 43 Resp: 5795

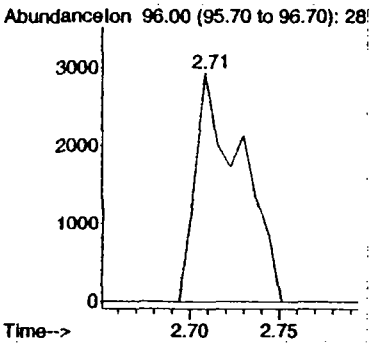
Ion	Ratio	Lower	Upper
43	100		
58	10.4	23.1	34.7#

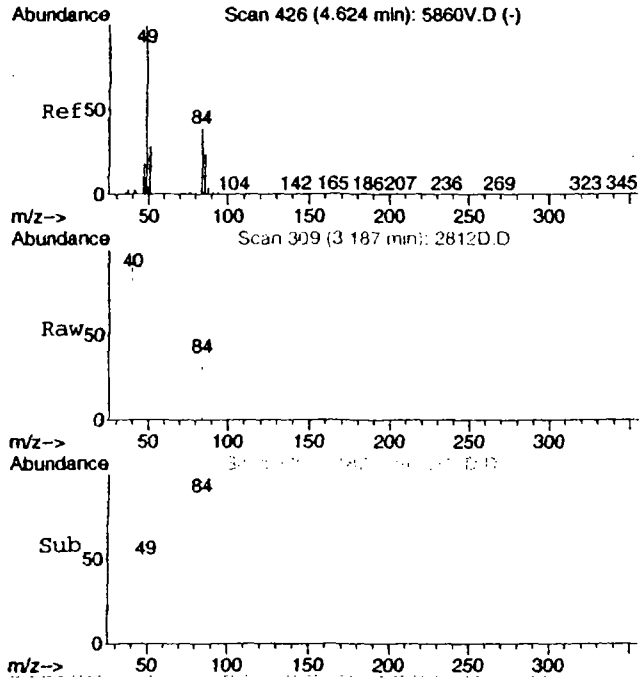




#9
1,1-DICHLOROETHENE
Concen: 0.53 UG/L
RT: 2.71 min Scan# 242
Delta R.T. -0.01 min
Lab File: 2812D.D
Acq: 6 Sep 2007 11:04

Tgt Ion: 96 Resp: 5220

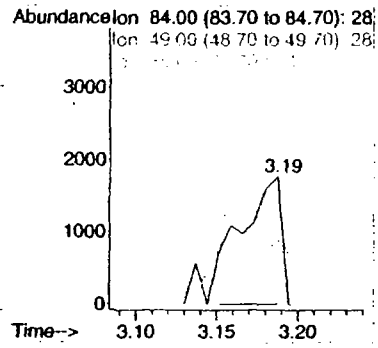


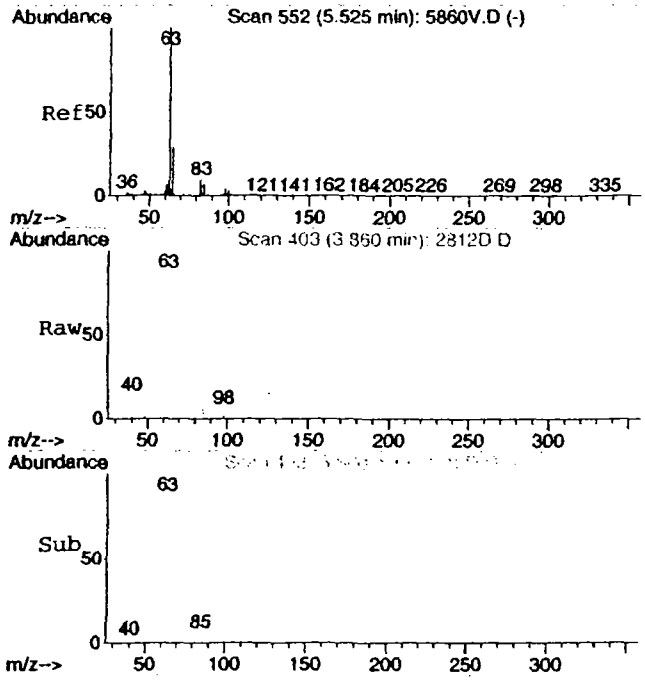


#10
Methylene Chloride
Concen: Below Cal
RT: 3.19 min Scan# 309
Delta R.T. 0.01 min
Lab File: 2812D.D
Acq: 6 Sep 2007 11:04

Tgt Ion: 84 Resp: 3375

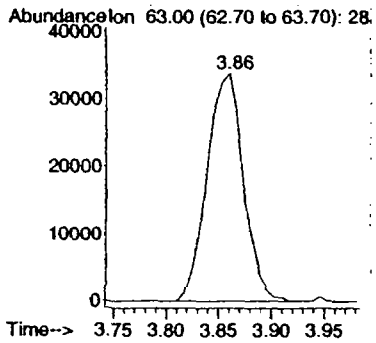
Ion	Ratio	Lower	Upper
84	100		
49	133.2	140.2	210.2#
86	43.3	51.1	76.7#

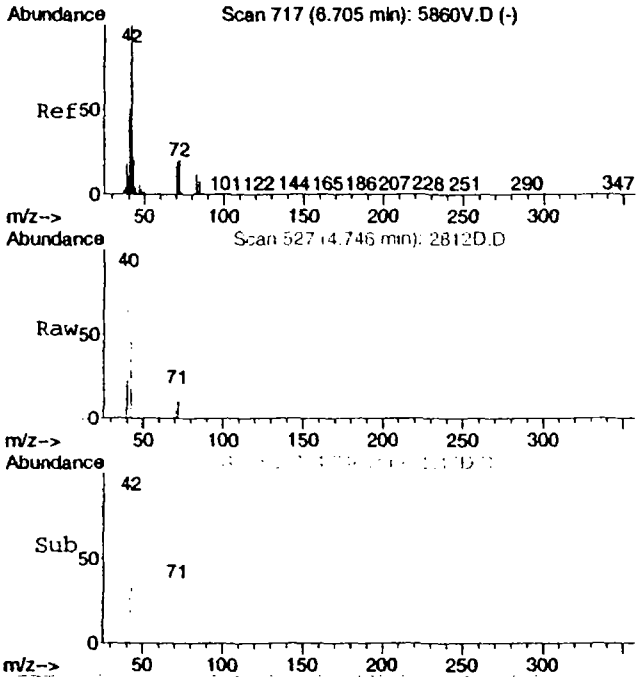




#13
1,1-Dichloroethane
Concen: 3.92 UG/L
RT: 3.86 min Scan# 403
Delta R.T. -0.00 min
Lab File: 2812D.D
Acq: 6 Sep 2007 11:04

Tgt Ion: 63 Resp: 81678

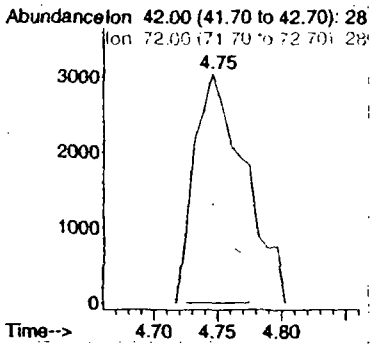


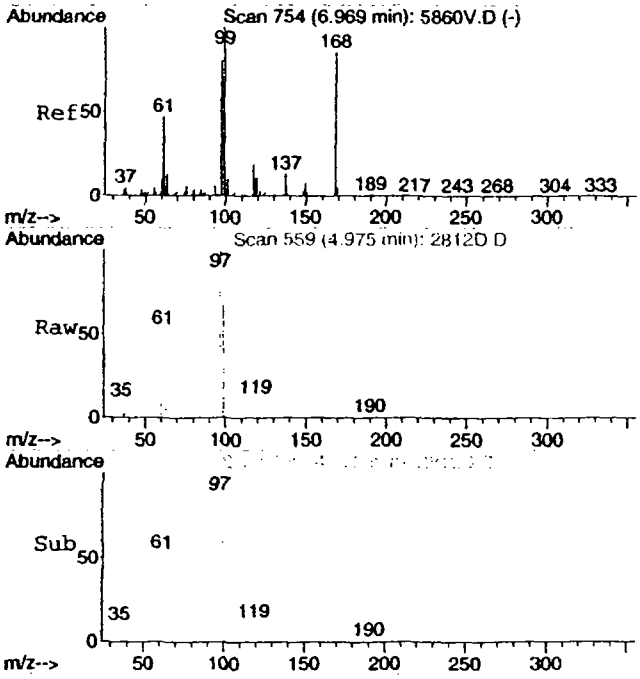


#17
Tetrahydrofuran
Concen: 1.93 UG/L
RT: 4.75 min Scan# 527
Delta R.T. -0.00 min
Lab File: 2812D.D
Acq: 6 Sep 2007 11:04

Tgt Ion: 42 Resp: 8370

Ion	Ratio	Lower	Upper
42	100		
72	29.5	24.5	36.7

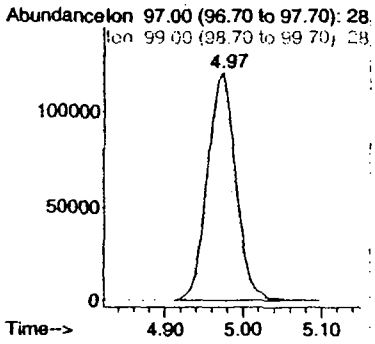


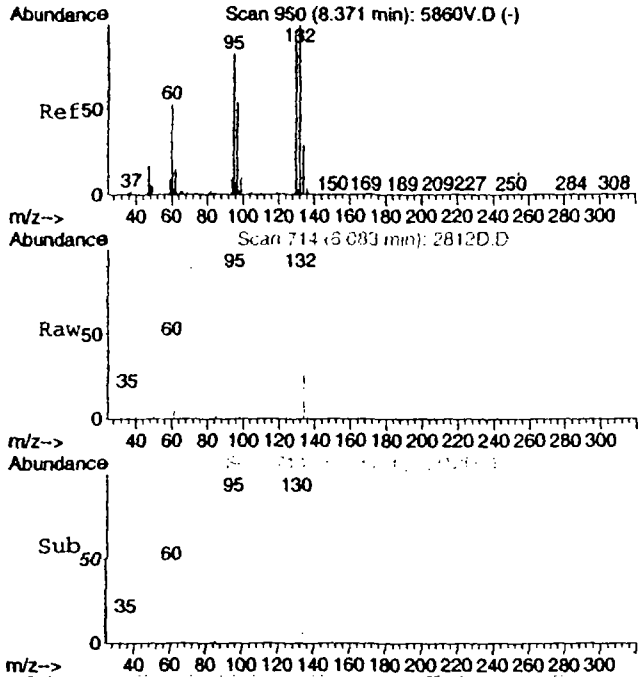


#20
1,1,1-Trichloroethane
Concen: 19.58 UG/L
RT: 4.97 min Scan# 559
Delta R.T. 0.01 min
Lab File: 2812D.D
Acq: 6 Sep 2007 11:04

Tgt Ion: 97 Resp: 307164

Ion	Ratio	Lower	Upper
97	100		
99	66.4	51.1	76.7

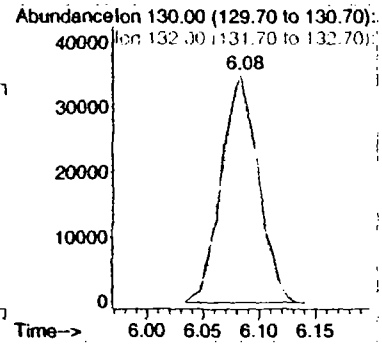


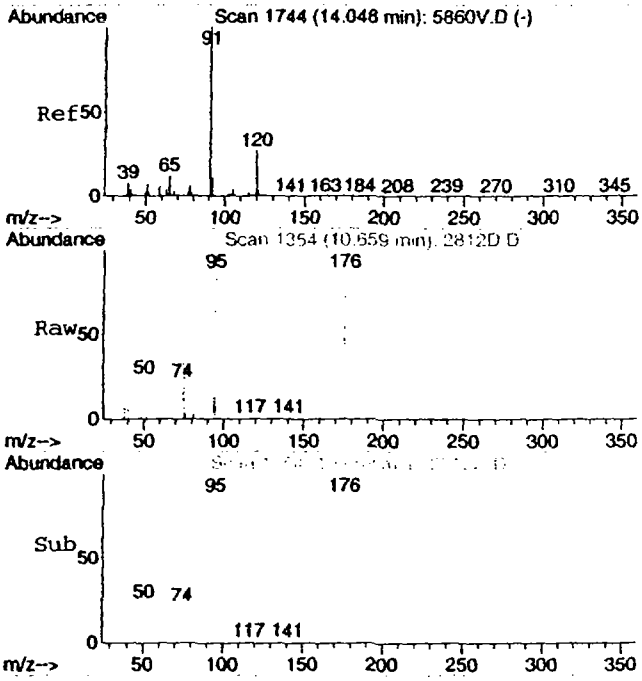


#27
Trichloroethene
Concen: 7.03 UG/L
RT: 6.08 min Scan# 714
Delta R.T. 0.01 min
Lab File: 2812D.D
Acq: 6 Sep 2007 11:04

Tgt Ion:130 Resp: 80559

Ion	Ratio	Lower	Upper
130	100		
132	98.0	82.0	123.0

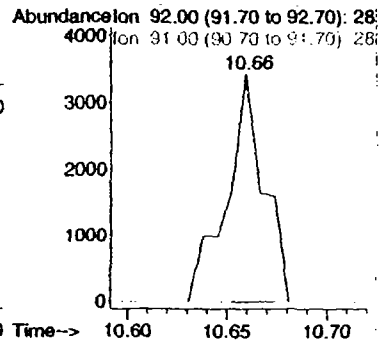




#55
n-Propylbenzene
Concen: 0.77 UG/L
RT: 10.66 min Scan# 1354
Delta R.T. -0.27 min
Lab File: 2812D.D
Acq: 6 Sep 2007 11:04

Tgt Ion: 92 Resp: 4440

Ion	Ratio	Lower	Upper
92	100		
91	10.5	715.8	1073.6#



Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\DATA\D090707\2841D.D Vial: 9
Acq On : 7 Sep 2007 11:39 Operator: REGI
Sample : A781263 LQ4598 Inst : GCMS #4
Misc : 9/7/07 Multiplr: 1.00
MS Integration Params: rteint2.p
Quant Time: Sep 07 11:55:29 2007 Quant Results File: DWD.RES

Quant Method : C:\MSDCHEM\1\METHODS\DWD.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Tue Sep 04 10:38:20 2007
Response via : Initial Calibration
DataAcq Meth : DWD

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) FLUOROBENZENE	5.68	96	353358	10.00	UG/L	0.00
38) 2-Bromo-1-chloropropane	7.97	77	139913	10.00	UG/L	0.00
System Monitoring Compounds						
21) Dibromofluoromethane	4.95	113	87576	9.90	UG/L	0.01
Spiked Amount 10.000			Recovery	=	99.00%	
23) 1,2-Dichloroethane-d4	5.30	65	112168	10.31	UG/L	0.00
Spiked Amount 10.000			Recovery	=	103.10%	
33) Toluene-d8	7.51	98	328863	8.98	UG/L	0.00
Spiked Amount 10.000			Recovery	=	89.80%	
51) 4-Bromofluorobenzene	10.66	174	114723	9.26	UG/L	0.00
Spiked Amount 10.000			Recovery	=	92.60%	
Target Compounds						Qvalue
8) Acetone	2.78	43	1949	1.14	UG/L #	46
9) 1,1-DICHLOROETHENE	2.72	96	4162	0.43	UG/L	100
10) Methylene Chloride	3.18	84	2039	Below Cal	#	84
13) 1,1-Dichloroethane	3.86	63	73248	3.62	UG/L	100
17) Tetrahydrofuran	4.75	42	6394	1.52	UG/L	99
20) 1,1,1-Trichloroethane	4.97	97	290375	19.08	UG/L	97
27) Trichloroethene	6.08	130	76027	6.84	UG/L	90
55) n-Propylbenzene	10.67	92	3137	0.59	UG/L #	1

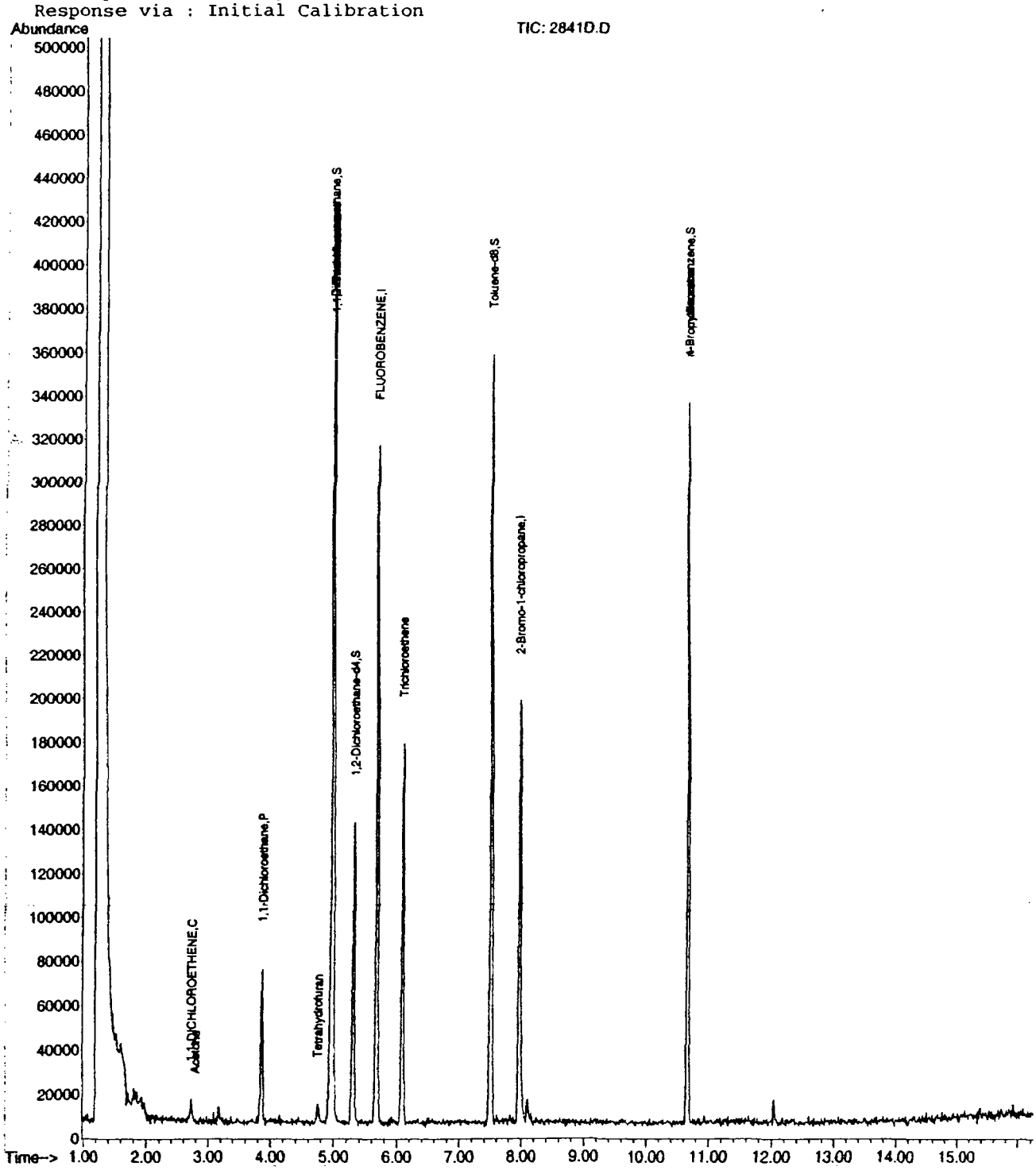
(#) = qualifier out of range (m) = manual integration
2841D.D DWD.M Fri Sep 07 11:55:30 2007

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\DATA\D090707\2841D.D
Acq On : 7 Sep 2007 11:39
Sample : A781263 LQ4598
Misc : 9/7/07
MS Integration Params: rteint2.p
Quant Time: Sep 7 11:55 2007

Vial: 9
Operator: REGI
Inst : GCMS #4
Multiplr: 1.00
Quant Results File: DWD.RES

Method : C:\MSDCHEM\1\METHODS\DWD.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Tue Sep 04 10:38:20 2007
Response via : Initial Calibration



R524561 Heritage Environmental Services, LLC A781264

GC/MS VOA

Method EPA 524.2 REV. 4.1
Sample Description LQ4599
Submitter IDEM - OLQ
Instrument 345 Channel 1

Test Code O516.9.0
Analyst 1062 R. SHAMP
File 2813D.D Date/Time 06Sep07 11:32:00
Dilution Factor 1

CAS	PRM	Parameter	Concentration	RQL	Limit	Units	RT
NA	1807	REGULATED CONTAMINANTS					
71-43-2	151	BENZENE		BDL	0.50	UG/L	
56-23-5	217	CARBON TETRACHLORIDE		BDL	0.50	UG/L	
106-46-7	29	1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)		BDL	0.50	UG/L	
107-06-2	21	1,2-DICHLOROETHANE		BDL	0.50	UG/L	
75-35-4	8	1,1-DICHLOROETHENE	.56		0.50	UG/L	
71-55-6	2	1,1,1-TRICHLOROETHANE	1.8		0.50	UG/L	
79-01-6	750	TRICHLOROETHENE	49		0.50	UG/L	
75-01-4	768	VINYL CHLORIDE		BDL	0.20	UG/L	
108-90-7	231	CHLOROBENZENE		BDL	0.50	UG/L	
95-50-1	20	1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)		BDL	0.50	UG/L	
156-60-5	746	TRANS-1,2-DICHLOROETHENE		BDL	0.50	UG/L	
156-59-2	246	CIS-1,2-DICHLOROETHENE		BDL	0.50	UG/L	
75-09-2	302	DICHLOROMETHANE (METHYLENE CHLORIDE)		BDL	0.50	UG/L	
78-87-5	23	1,2-DICHLOROPROPANE		BDL	0.50	UG/L	
100-41-4	349	ETHYL BENZENE		BDL	0.50	UG/L	
100-42-5	680	STYRENE		BDL	0.50	UG/L	
79-00-5	4	1,1,2-TRICHLOROETHANE		BDL	0.50	UG/L	
127-18-4	703	TETRACHLOROETHENE		BDL	0.50	UG/L	
108-88-3	724	TOLUENE		BDL	0.50	UG/L	
95-47-6	549	O-XYLENE		BDL	0.50	UG/L	
MPXYLENE	492	M/P-XYLENE		BDL	0.50	UG/L	
120-82-1	16	1,2,4-TRICHLOROBENZENE		BDL	0.50	UG/L	
NA	1809	UNREGULATED - MONITORING REQUIRED					
108-86-1	193	BROMOBENZENE		BDL	0.50	UG/L	
75-27-4	195	BROMODICHLOROMETHANE		BDL	0.50	UG/L	
75-25-2	197	BROMOFORM		BDL	0.50	UG/L	
74-83-9	198	BROMOMETHANE		BDL	0.50	UG/L	
124-48-1	233	CHLORODIBROMOMETHANE		BDL	0.50	UG/L	
75-00-3	234	CHLOROETHANE		BDL	0.50	UG/L	
67-66-3	235	CHLOROFORM		BDL	0.50	UG/L	
74-87-3	236	CHLOROMETHANE		BDL	0.50	UG/L	
95-49-8	807	2-CHLOROTOLUENE (O-CHLOROTOLUENE)		BDL	0.50	UG/L	
106-43-4	808	4-CHLOROTOLUENE (P-CHLOROTOLUENE)		BDL	0.50	UG/L	
74-95-3	296	DIBROMOMETHANE		BDL	0.50	UG/L	
541-73-1	26	1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)		BDL	0.50	UG/L	
75-34-3	7	1,1-DICHLOROETHANE	10		0.50	UG/L	
563-58-6	10	1,1-DICHLOROPROPENE		BDL	0.50	UG/L	
142-28-9	27	1,3-DICHLOROPROPANE		BDL	0.50	UG/L	
10061-02-6	747	TRANS-1,3-DICHLOROPROPENE		BDL	0.50	UG/L	
10061-01-5	247	CIS-1,3-DICHLOROPROPENE		BDL	0.50	UG/L	
594-20-7	33	2,2-DICHLOROPROPANE		BDL	0.50	UG/L	
630-20-6	1	1,1,1,2-TETRACHLOROETHANE		BDL	0.50	UG/L	
79-34-5	3	1,1,2,2-TETRACHLOROETHANE		BDL	0.50	UG/L	
96-18-4	14	1,2,3-TRICHLOROPROPANE		BDL	0.50	UG/L	

JS 9-10-07

JS 9-10-07

GC/MS VOA

CAS	PRM	Parameter	Concentration	RQL	Limit	Units	RT
NA	1806	MONITORED AT STATE'S DISCRETION					
74-97-5	194	BROMOCHLOROMETHANE		BDL	0.50	UG/L	
104-51-8	519	N-BUTYLBENZENE		BDL	0.50	UG/L	
75-71-8	300	DICHLORODIFLUOROMETHANE		BDL	0.50	UG/L	
75-69-4	372	TRICHLOROFLUOROMETHANE		BDL	0.50	UG/L	
87-68-3	398	HEXACHLOROBUTADIENE		BDL	0.50	UG/L	
98-82-8	432	ISOPROPYLBENZENE (CUMENE)		BDL	0.50	UG/L	
99-87-6	628	4-ISOPROPYLTOLUENE (P-ISOPROPYLTOLUENE)		BDL	0.50	UG/L	
91-20-3	493	NAPHTHALENE		BDL	0.50	UG/L	
103-65-1	532	N-PROPYLBENZENE		BDL	0.50	UG/L	
135-98-8	644	SEC-BUTYLBENZENE		BDL	0.50	UG/L	
98-06-6	702	TERT-BUTYLBENZENE		BDL	0.50	UG/L	
87-61-6	13	1,2,3-TRICHLOROBENZENE		BDL	0.50	UG/L	
95-63-6	17	1,2,4-TRIMETHYLBENZENE		BDL	0.50	UG/L	
108-67-8	25	1,3,5-TRIMETHYLBENZENE		BDL	0.50	UG/L	
106-93-4	18	1,2-DIBROMOETHANE (EDB)		BDL	0.50	UG/L	
96-12-8	19	1,2-DIBROMO-3-CHLOROPROPANE (DBCP)		BDL	0.50	UG/L	
1634-04-4	859	METHYL-T-BUTYL ETHER (MTBE)		BDL	0.50	UG/L	
	972	————————					
591-78-6	60	2-HEXANONE		BDL	2.0	UG/L	
79-46-9	67	2-NITROPROPANE		*			
67-64-1	99	ACETONE (2-PROPANONE)		BDL	4.0	UG/L	
78-93-3	52	2-BUTANONE		BDL	2.0	UG/L	
75-15-0	216	CARBON DISULFIDE		*			
	1804	...					
	971	SURROGATE RECOVERY					
	972	————————					
17060-07-0	301	DICHLOROETHANE-D4	101			% RECOVERY	
2037-26-5	726	TOLUENE-D8	94			% RECOVERY	
460-00-4	196	4-BROMOFLUOROBENZENE	93			% RECOVERY	
	1131	TENTATIVELY IDENTIFIED COMPOUNDS					
	3320	NONE DETECTED					

Comment Note: * Compound searched for but not detected. Standard was unavailable to determine retention time and detection limit. Note: Sample was rerun to confirm target compounds.

Qualifiers

BDL Below Detection Limit

* See Note for Parameter

Comments to Laboratory (do not record)

4-HCL VIALS

Note the additional IDEM analytes for drinking water:

CS2, MEK, Acetone, 2-Nitropropane, 2-Hexanone

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\DATA\D090607\2813D.D Vial: 9
Acq On : 6 Sep 2007 11:32 Operator: REGI
Sample : A781264 LQ4599 Inst : GCMS #4
Misc : 9/8/07 Multiplr: 1.00
MS Integration Params: rteint2.p
Quant Time: Sep 06 11:48:29 2007 Quant Results File: DWD.RES

Quant Method : C:\MSDCHEM\1\METHODS\DWD.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Tue Sep 04 10:38:20 2007
Response via : Initial Calibration
DataAcq Meth : DWD

TC # 576

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) FLUOROBENZENE	5.67	96	353820	10.00	UG/L	0.00
38) 2-Bromo-1-chloropropane	7.96	77	141192	10.00	UG/L	0.00
System Monitoring Compounds						
21) Dibromofluoromethane	4.95	113	91506	10.33	UG/L	0.00
Spiked Amount 10.000			Recovery	=	103.30%	
23) 1,2-Dichloroethane-d4	5.30	65	110232	10.12	UG/L	0.00
Spiked Amount 10.000			Recovery	=	101.20%	
33) Toluene-d8	7.51	98	344224	9.39	UG/L	0.00
Spiked Amount 10.000			Recovery	=	93.90%	
51) 4-Bromofluorobenzene	10.66	174	115884	9.27	UG/L	0.00
Spiked Amount 10.000			Recovery	=	92.70%	

Target Compounds		R.T.	QIon	Response	Conc	Units		Qvalue
8) ~~Acetone~~		2.77	43	1901	1.13	UG/L	#	46
9) 1,1-DICHLOROETHENE	0.54	2.72	96	5349	0.56	UG/L		100
10) ~~Methylene Chlor~~ide		3.18	84	2541	Below Cal		#	78
13) 1,1-Dichloroethane	10	3.86	63	208505	10.29	UG/L		100
15) ~~cis 1,2-Dichloroeth~~ene		4.45	96	4592	0.40	UG/L	#	71
17) ~~Tetrahydrofuran~~		4.75	42	6099	1.45	UG/L		99
20) 1,1,1-Trichloroethane	1.8	4.98	97	27894	1.83	UG/L		97
27) Trichloroethene	49	6.08	130	549411	49.36	UG/L		94
55) ~~n-Propylbenzene~~		10.67	92	4320	0.81	UG/L	#	1

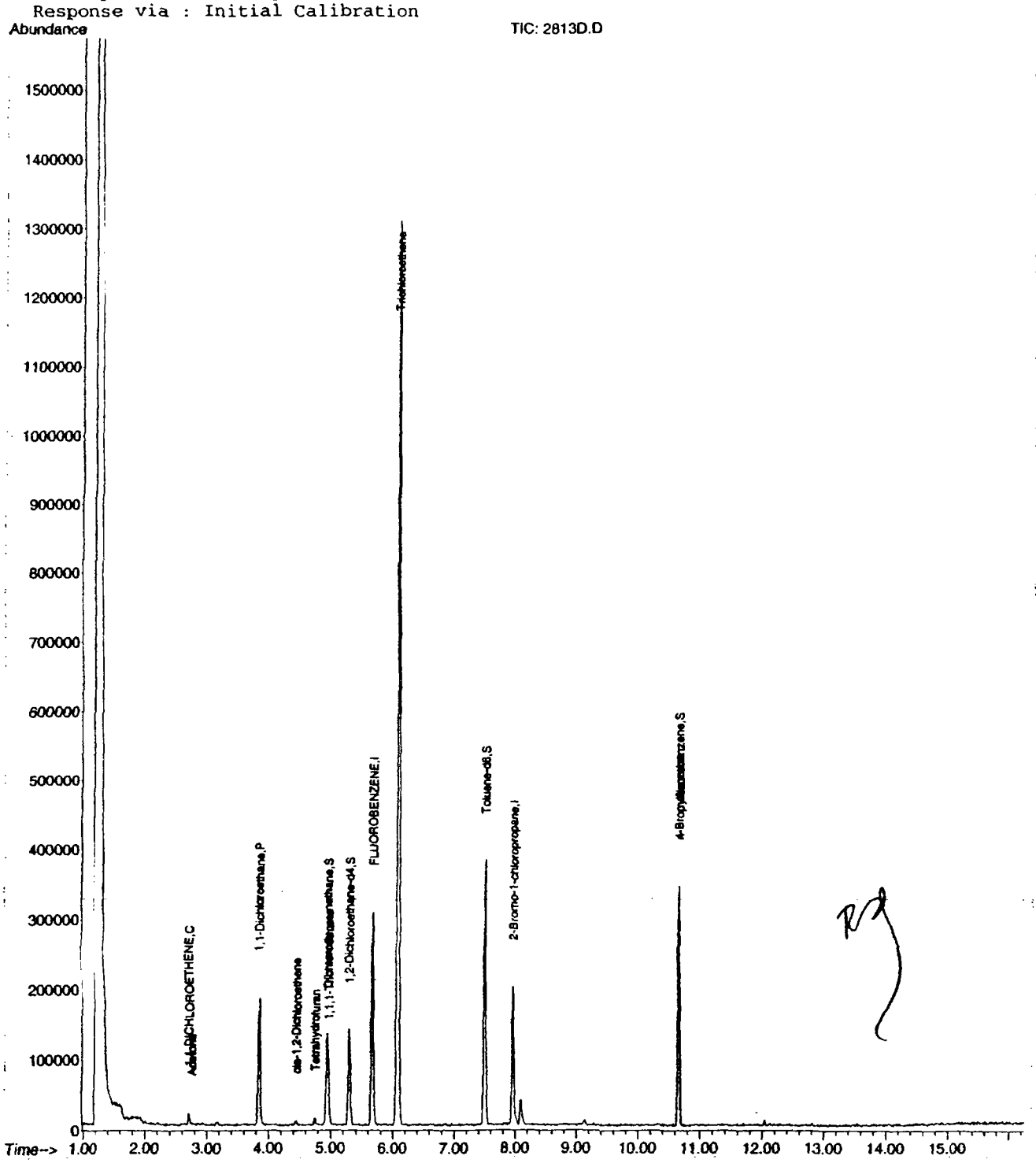
NO TICS

(#) = qualifier out of range (m) = manual integration
2813D.D DWD.M Thu Sep 06 11:48:30 2007

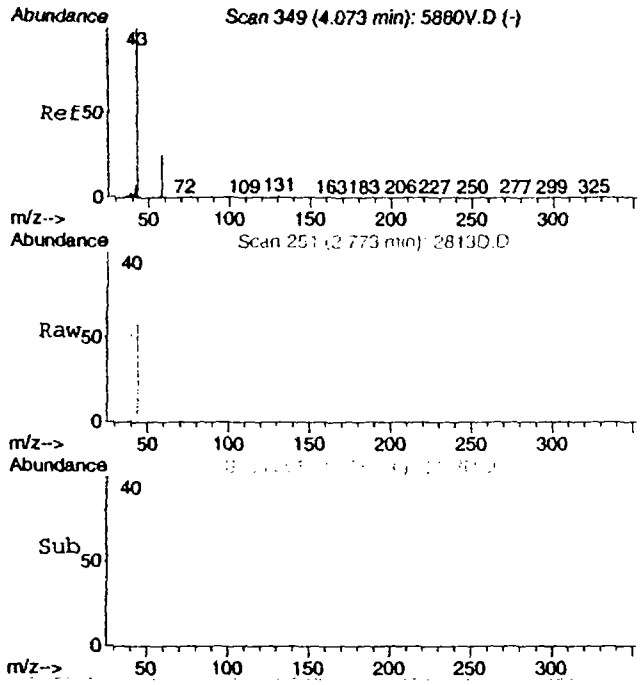
Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\DATA\D090607\2813D.D Vial: 9
Acq On : 6 Sep 2007 11:32 Operator: REGI
Sample : A781264 LQ4599 Inst : GCMS #4
Misc : 9/8/07 Multiplr: 1.00
MS Integration Params: rteint2.p
Quant Time: Sep 6 11:48 2007 Quant Results File: DWD.RES

Method : C:\MSDCHEM\1\METHODS\DWD.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Tue Sep 04 10:38:20 2007
Response via : Initial Calibration



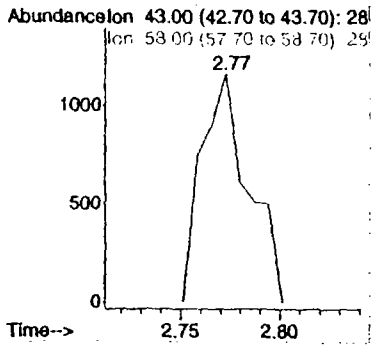
2813D.D DWD.M Thu Sep 06 11:48:30 2007 Page 2

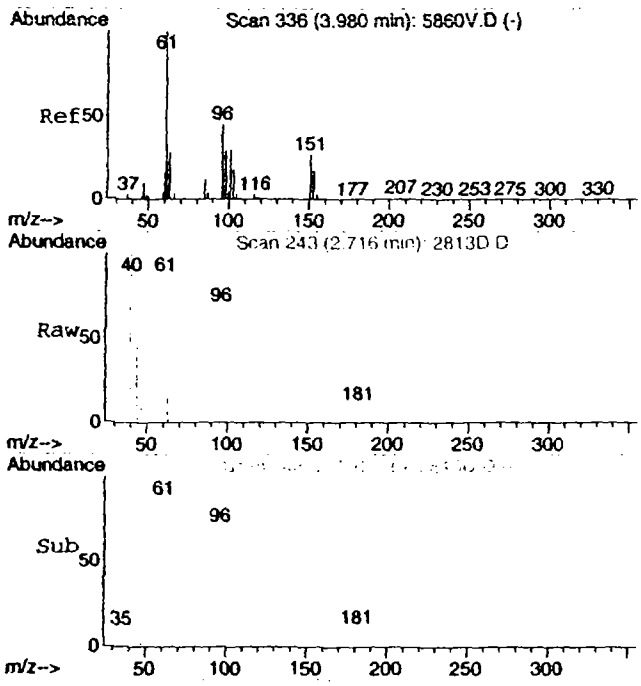


#8
Acetone
Concen: 1.13 UG/L
RT: 2.77 min Scan# 251
Delta R.T. 0.00 min
Lab File: 2813D.D
Acq: 6 Sep 2007 11:32

Tgt Ion: 43 Resp: 1901

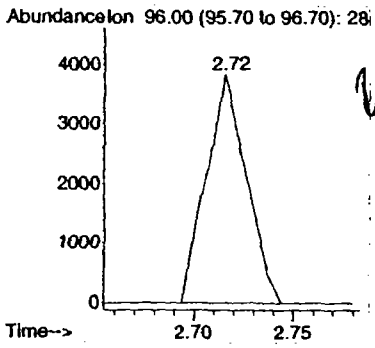
Ion	Ratio	Lower	Upper
43	100		
58	0.0	23.1	34.7#

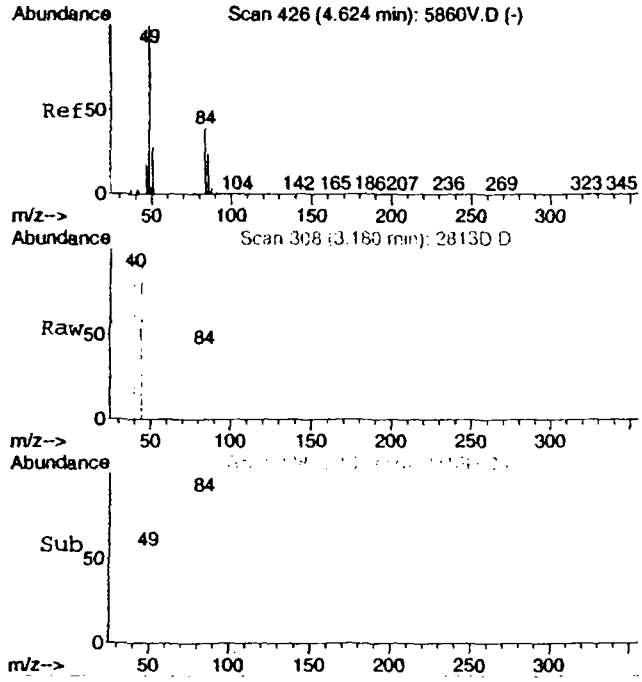




#9
1,1-DICHLOROETHENE
Concen: 0.56 UG/L
RT: 2.72 min Scan# 243
Delta R.T. -0.00 min
Lab File: 2813D.D
Acq: 6 Sep 2007 11:32

Tgt Ion: 96 Resp: 5349

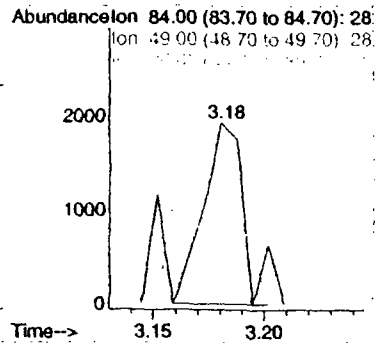


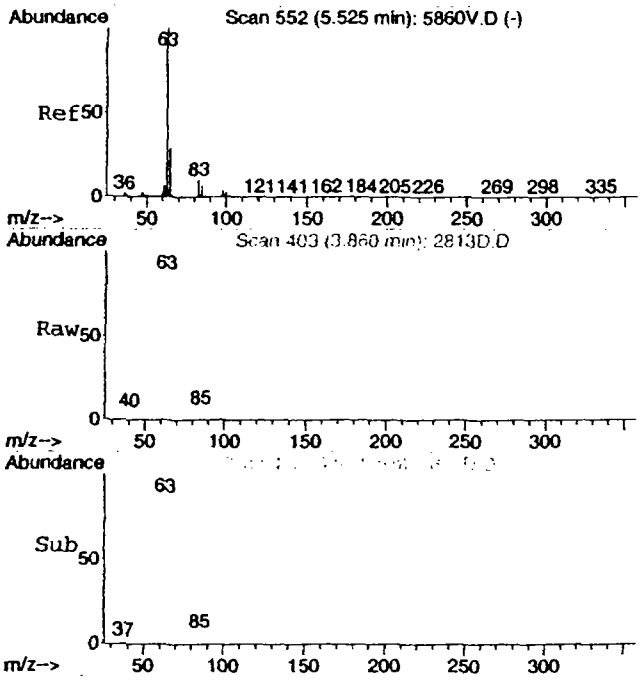


#10
Methylene Chloride
Concen: Below Cal
RT: 3.18 min Scan# 308
Delta R.T. 0.01 min
Lab File: 2813D.D
Acq: 6 Sep 2007 11:32

Tgt Ion: 84 Resp: 2541

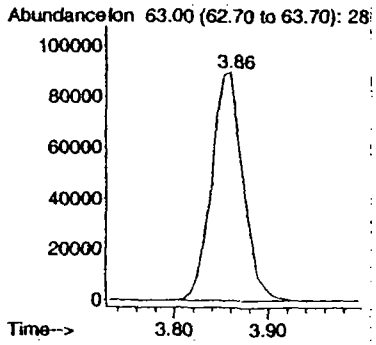
Ion	Ratio	Lower	Upper
84	100		
49	133.9	140.2	210.2#
86	65.8	51.1	76.7

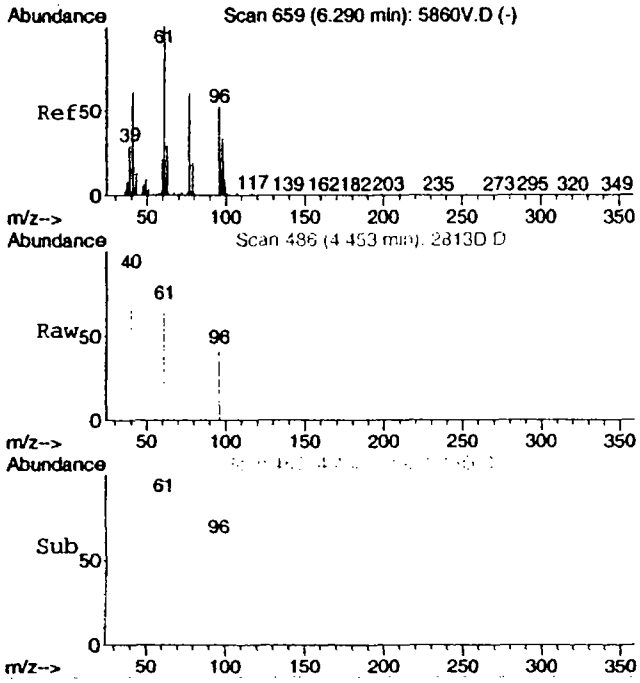




#13
1,1-Dichloroethane
Concen: 10.29 UG/L
RT: 3.86 min Scan# 403
Delta R.T. 0.00 min
Lab File: 2813D.D
Acq: 6 Sep 2007 11:32

Tgt Ion: 63 Resp: 208505

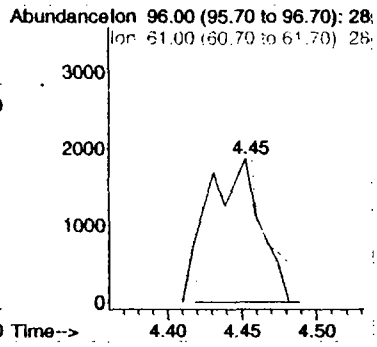


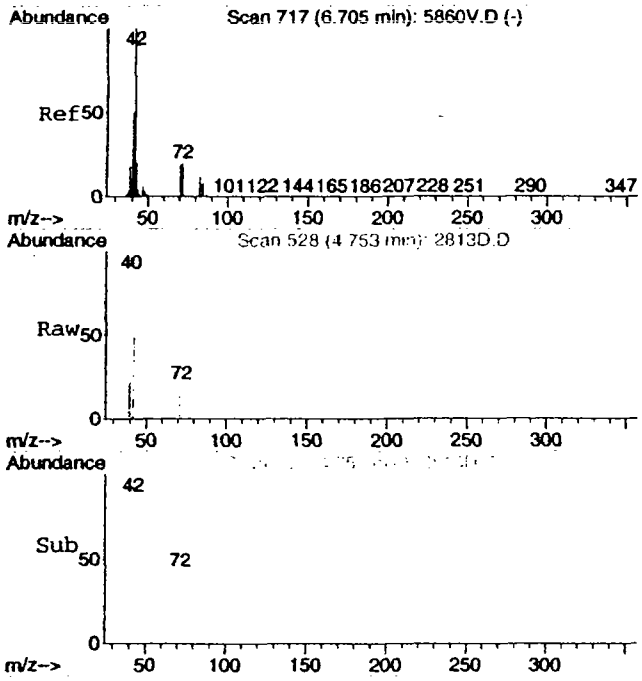


#15
cis-1,2-Dichloroethene
Concen: 0.40 UG/L
RT: 4.45 min Scan# 486
Delta R.T. 0.01 min
Lab File: 2813D.D
Acq: 6 Sep 2007 11:32

Tgt Ion: 96 Resp: 4592

Ion	Ratio	Lower	Upper
96	100		
61	115.7	121.8	182.6#

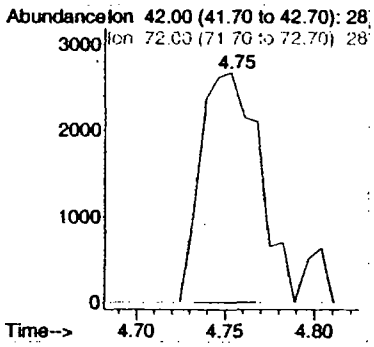


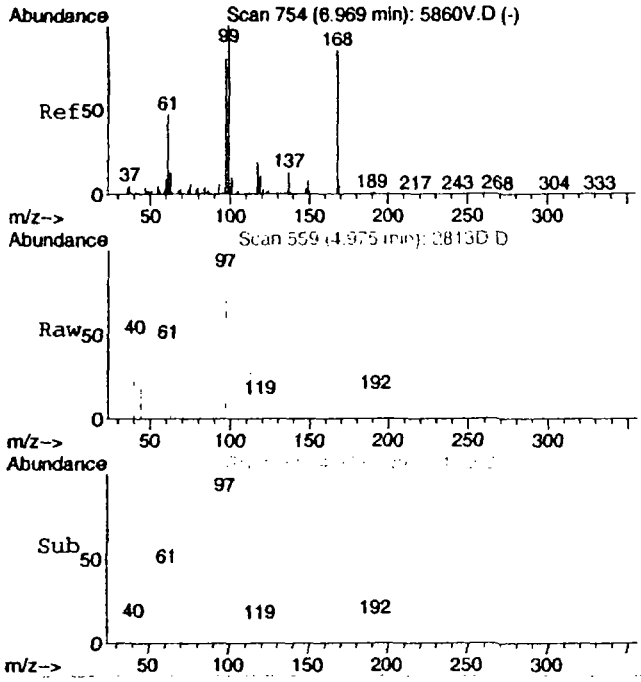


#17
Tetrahydrofuran
Concen: 1.45 UG/L
RT: 4.75 min Scan# 528
Delta R.T. 0.01 min
Lab File: 2813D.D
Acq: 6 Sep 2007 11:32

Tgt Ion: 42 Resp: 6099

Ion	Ratio	Lower	Upper
42	100		
72	31.0	24.5	36.7

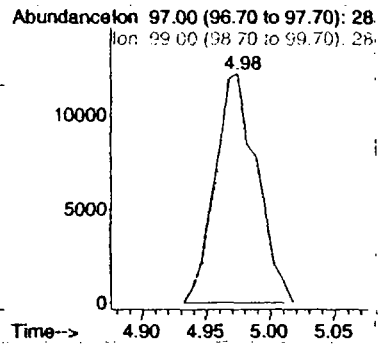


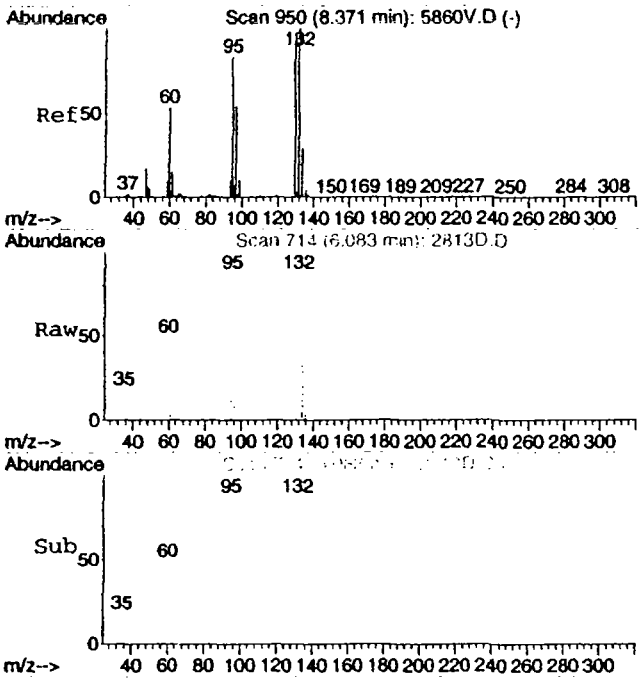


#20
1,1,1-Trichloroethane
Concen: 1.83 UG/L
RT: 4.98 min Scan# 559
Delta R.T. 0.01 min
Lab File: 2813D.D
Acq: 6 Sep 2007 11:32

Tgt Ion: 97 Resp: 27894

Ion	Ratio	Lower	Upper
97	100		
99	61.6	51.1	76.7

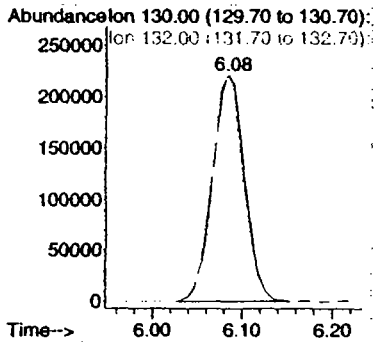


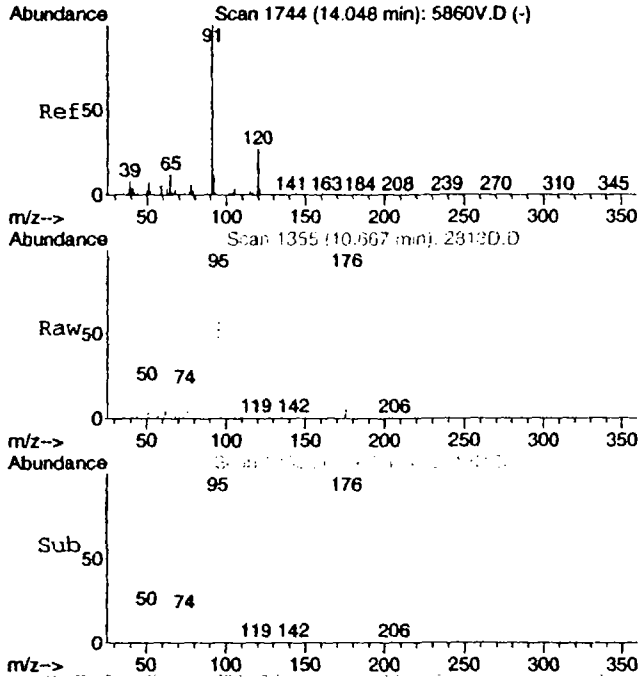


#27
Trichloroethene
Concen: 49.36 UG/L
RT: 6.08 min Scan# 714
Delta R.T. 0.01 min
Lab File: 2813D.D
Acq: 6 Sep 2007 11:32

Tgt Ion:130 Resp: 549411

Ion	Ratio	Lower	Upper
130	100		
132	96.5	82.0	123.0

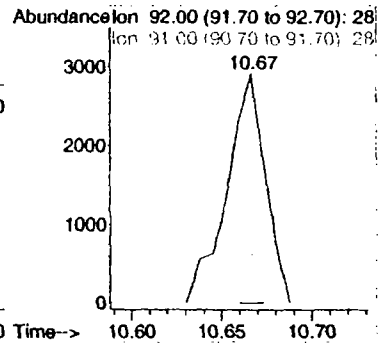




#55
n-Propylbenzene
Concen: 0.81 UG/L
RT: 10.67 min Scan# 1355
Delta R.T. -0.26 min
Lab File: 2813D.D
Acq: 6 Sep 2007 11:32

Tgt Ion: 92 Resp: 4320

Ion	Ratio	Lower	Upper
92	100		
91	6.5	715.8	1073.6#



Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\DATA\D090707\2842D.D Vial: 10
Acq On : 7 Sep 2007 12:06 Operator: REGI
Sample : A781264 LQ4599 Inst : GCMS #4
Misc : 9/7/07 Multiplr: 1.00
MS Integration Params: rteint2.p
Quant Time: Sep 07 12:22:47 2007 Quant Results File: DWD.RES

Quant Method : C:\MSDCHEM\1\METHODS\DWD.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Tue Sep 04 10:38:20 2007
Response via : Initial Calibration
DataAcq Meth : DWD

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) FLUOROBENZENE	5.67	96	305179	10.00	UG/L	0.00
38) 2-Bromo-1-chloropropane	7.96	77	123290	10.00	UG/L	0.00
System Monitoring Compounds						
21) Dibromofluoromethane	4.95	113	73797	9.66	UG/L	0.00
Spiked Amount 10.000			Recovery	=	96.60%	
23) 1,2-Dichloroethane-d4	5.30	65	93505	9.95	UG/L	0.00
Spiked Amount 10.000			Recovery	=	99.50%	
33) Toluene-d8	7.51	98	286611	9.07	UG/L	0.00
Spiked Amount 10.000			Recovery	=	90.70%	
51) 4-Bromofluorobenzene	10.66	174	96906	8.88	UG/L	0.00
Spiked Amount 10.000			Recovery	=	88.80%	
Target Compounds						Qvalue
8) Acetone	2.77	43	6274	2.32	UG/L #	63
9) 1,1-DICHLOROETHENE	2.72	96	5842	0.70	UG/L	100
10) Methylene Chloride	3.17	84	4815	Below Cal		79
13) 1,1-Dichloroethane	3.86	63	199830	11.43	UG/L	100
15) cis-1,2-Dichloroethene	4.45	96	2857	0.29	UG/L	77
17) Tetrahydrofuran	4.75	42	5941	1.63	UG/L	92
20) 1,1,1-Trichloroethane	4.97	97	27699	2.11	UG/L	96
27) Trichloroethene	6.09	130	536235	55.85	UG/L	92

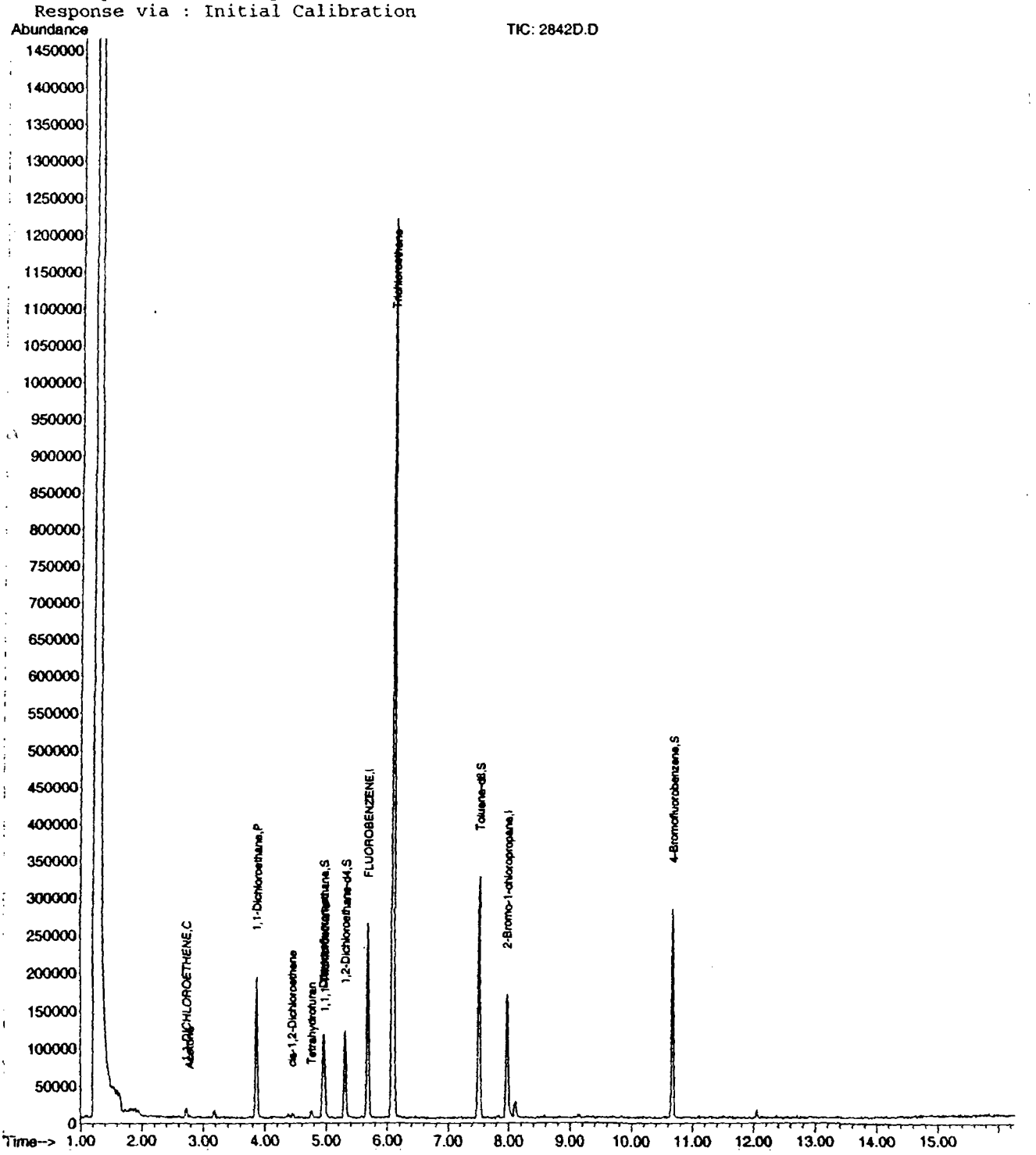
(#) = qualifier out of range (m) = manual integration
2842D.D DWD.M Fri Sep 07 12:22:48 2007

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\DATA\D090707\2842D.D
Acq On : 7 Sep 2007 12:06
Sample : A781264 LQ4599
Misc : 9/7/07
MS Integration Params: rteint2.p
Quant Time: Sep 7 12:22 2007

Vial: 10
Operator: REGI
Inst : GCMS #4
Multiplr: 1.00
Quant Results File: DWD.RES

Method : C:\MSDCHEM\1\METHODS\DWD.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Tue Sep 04 10:38:20 2007
Response via : Initial Calibration



R524561 Heritage Environmental Services, LLC A781265

GC/MS VOA

Method EPA 524.2 REV. 4.1
Sample Description LQ4600
Submitter IDEM - OLQ
Instrument 345 Channel 1

Test Code O516.9.0
Analyst 1062 R. SHAMP
File 2814D.D Date/Time 06Sep07 11:59:00
Dilution Factor 1

CAS	PRM	Parameter	Concentration	RQL	Limit	Units	RT
NA	1807	REGULATED CONTAMINANTS					
71-43-2	151	BENZENE		BDL	0.50	UG/L	
56-23-5	217	CARBON TETRACHLORIDE		BDL	0.50	UG/L	
106-46-7	29	1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)		BDL	0.50	UG/L	
107-06-2	21	1,2-DICHLOROETHANE		BDL	0.50	UG/L	
75-35-4	8	1,1-DICHLOROETHENE		BDL	0.50	UG/L	
71-55-6	2	1,1,1-TRICHLOROETHANE		BDL	0.50	UG/L	
79-01-6	750	TRICHLOROETHENE	49		0.50	UG/L	
75-01-4	768	VINYL CHLORIDE		BDL	0.20	UG/L	
108-90-7	231	CHLOROBENZENE		BDL	0.50	UG/L	
95-50-1	20	1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)		BDL	0.50	UG/L	
156-60-5	746	TRANS-1,2-DICHLOROETHENE		BDL	0.50	UG/L	
156-59-2	246	CIS-1,2-DICHLOROETHENE		BDL	0.50	UG/L	
75-09-2	302	DICHLOROMETHANE (METHYLENE CHLORIDE)		BDL	0.50	UG/L	
78-87-5	23	1,2-DICHLOROPROPANE		BDL	0.50	UG/L	
100-41-4	349	ETHYL BENZENE		BDL	0.50	UG/L	
100-42-5	680	STYRENE		BDL	0.50	UG/L	
79-00-5	4	1,1,2-TRICHLOROETHANE		BDL	0.50	UG/L	
127-18-4	703	TETRACHLOROETHENE		BDL	0.50	UG/L	
108-88-3	724	TOLUENE		BDL	0.50	UG/L	
95-47-6	549	O-XYLENE		BDL	0.50	UG/L	
MPXYLENE	492	M/P-XYLENE		BDL	0.50	UG/L	
120-82-1	16	1,2,4-TRICHLOROBENZENE		BDL	0.50	UG/L	
NA	1809	UNREGULATED - MONITORING REQUIRED					
108-86-1	193	BROMOBENZENE		BDL	0.50	UG/L	
75-27-4	195	BROMODICHLOROMETHANE		BDL	0.50	UG/L	
75-25-2	197	BROMOFORM		BDL	0.50	UG/L	
74-83-9	198	BROMOMETHANE		BDL	0.50	UG/L	
124-48-1	233	CHLORODIBROMOMETHANE		BDL	0.50	UG/L	
75-00-3	234	CHLOROETHANE		BDL	0.50	UG/L	
67-66-3	235	CHLOROFORM		BDL	0.50	UG/L	
74-87-3	236	CHLOROMETHANE		BDL	0.50	UG/L	
95-49-8	807	2-CHLOROTOLUENE (O-CHLOROTOLUENE)		BDL	0.50	UG/L	
106-43-4	808	4-CHLOROTOLUENE (P-CHLOROTOLUENE)		BDL	0.50	UG/L	
74-95-3	296	DIBROMOMETHANE		BDL	0.50	UG/L	
541-73-1	26	1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)		BDL	0.50	UG/L	
75-34-3	7	1,1-DICHLOROETHANE	8.9		0.50	UG/L	
563-58-6	10	1,1-DICHLOROPROPENE		BDL	0.50	UG/L	
142-28-9	27	1,3-DICHLOROPROPANE		BDL	0.50	UG/L	
10061-01-5	247	CIS-1,3-DICHLOROPROPENE		BDL	0.50	UG/L	
10061-02-6	747	TRANS-1,3-DICHLOROPROPENE		BDL	0.50	UG/L	
594-20-7	33	2,2-DICHLOROPROPANE		BDL	0.50	UG/L	
630-20-6	1	1,1,1,2-TETRACHLOROETHANE		BDL	0.50	UG/L	
79-34-5	3	1,1,2,2-TETRACHLOROETHANE		BDL	0.50	UG/L	
96-18-4	14	1,2,3-TRICHLOROPROPANE		BDL	0.50	UG/L	

UK 9-10-07

UK 9-10-07

GC/MS VOA

CAS	PRM	Parameter	Concentration	RQL	Limit	Units	RT
NA	1806	MONITORED AT STATE'S DISCRETION					
74-97-5	194	BROMOCHLOROMETHANE		BDL	0.50	UG/L	
104-51-8	519	N-BUTYLBENZENE		BDL	0.50	UG/L	
75-71-8	300	DICHLORODIFLUOROMETHANE		BDL	0.50	UG/L	
75-69-4	372	TRICHLOROFLUOROMETHANE		BDL	0.50	UG/L	
87-68-3	398	HEXACHLOROBUTADIENE		BDL	0.50	UG/L	
98-82-8	432	ISOPROPYLBENZENE (CUMENE)		BDL	0.50	UG/L	
99-87-6	628	4-ISOPROPYLTOLUENE (P-ISOPROPYLTOLUENE)		BDL	0.50	UG/L	
91-20-3	493	NAPHTHALENE		BDL	0.50	UG/L	
103-65-1	532	N-PROPYLBENZENE		BDL	0.50	UG/L	
135-98-8	644	SEC-BUTYLBENZENE		BDL	0.50	UG/L	
98-06-6	702	TERT-BUTYLBENZENE		BDL	0.50	UG/L	
87-61-6	13	1,2,3-TRICHLOROBENZENE		BDL	0.50	UG/L	
95-63-6	17	1,2,4-TRIMETHYLBENZENE		BDL	0.50	UG/L	
108-67-8	25	1,3,5-TRIMETHYLBENZENE		BDL	0.50	UG/L	
106-93-4	18	1,2-DIBROMOETHANE (EDB)		BDL	0.50	UG/L	
96-12-8	19	1,2-DIBROMO-3-CHLOROPROPANE (DBCP)		BDL	0.50	UG/L	
1634-04-4	859	METHYL-T-BUTYL ETHER (MTBE)		BDL	0.50	UG/L	
	972	————————					
591-78-6	60	2-HEXANONE		BDL	2.0	UG/L	
79-46-9	67	2-NITROPROPANE		*			
67-64-1	99	ACETONE (2-PROPANONE)		BDL	4.0	UG/L	
78-93-3	52	2-BUTANONE		BDL	2.0	UG/L	
75-15-0	216	CARBON DISULFIDE		*			
	1804	...					
	971	SURROGATE RECOVERY					
	972	————————					
17060-07-0	301	DICHLOROETHANE-D4	103			% RECOVERY	
2037-26-5	726	TOLUENE-D8	96			% RECOVERY	
460-00-4	196	4-BROMOFLUOROBENZENE	87			% RECOVERY	
	1131	TENTATIVELY IDENTIFIED COMPOUNDS					
	3320	NONE DETECTED					

Comment Note: * Compound searched for but not detected. Standard was unavailable to determine retention time and detection limit. Note: Sample was rerun to confirm target compounds.

Qualifiers

BDL Below Detection Limit

* See Note for Parameter

Comments to Laboratory (do not record)

4-HCL VIALS

Note the additional IDEM analytes for drinking water:

CS2, MEK, Acetone, 2-Nitropropane, 2-Hexanone

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\DATA\D090607\2814D.D Vial: 10
Acq On : 6 Sep 2007 11:59 Operator: REGI
Sample : A781265 LQ4600 Inst : GCMS #4
Misc : 9/8/07 Multiplr: 1.00
MS Integration Params: rteint2.p
Quant Time: Sep 06 12:15:52 2007 Quant Results File: DWD.RES

Quant Method : C:\MSDCHEM\1\METHODS\DWD.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Tue Sep 04 10:38:20 2007
Response via : Initial Calibration
DataAcq Meth : DWD

TC#378

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) FLUOROBENZENE	5.67	96	364638	10.00 UG/L	0.00
38) 2-Bromo-1-chloropropane	7.97	77	151368	10.00 UG/L	0.00
System Monitoring Compounds					
21) Dibromofluoromethane	4.95	113	92130	10.09 UG/L	0.00
Spiked Amount 10.000			Recovery	= 100.90%	
23) 1,2-Dichloroethane-d4	5.30	65	115024	10.25 UG/L	0.00
Spiked Amount 10.000			Recovery	= 102.50%	
33) Toluene-d8	7.51	98	362978	9.61 UG/L	0.00
Spiked Amount 10.000			Recovery	= 96.10%	
51) 4-Bromofluorobenzene	10.66	174	117112	8.74 UG/L	0.00
Spiked Amount 10.000			Recovery	= 87.40%	
Target Compounds					Qvalue
8) ~~Acetone~~	2.77	43	2215	1.19 UG/L #	46
9) 1,1~~-DICHLOROETHENE~~	2.72	96	3369	0.34 UG/L	100
10) ~~Methylene Chl~~oride	3.17	84	3429	Below Cal #	77
13) 1,1-Dichloroethane 8.9	3.85	63	184945	8.85 UG/L	100
15) ~~cis-1,2-Dichloro~~ethene	4.44	96	4780	0.40 UG/L #	76
17) ~~Tetrahydrofu~~ran	4.76	42	8429	1.94 UG/L	93
27) Trichloroethene 49	6.08	130	567703	49.49 UG/L	94
55) n-~~Propylbenzene~~	10.66	92	3069	0.54 UG/L #	1

No Tej

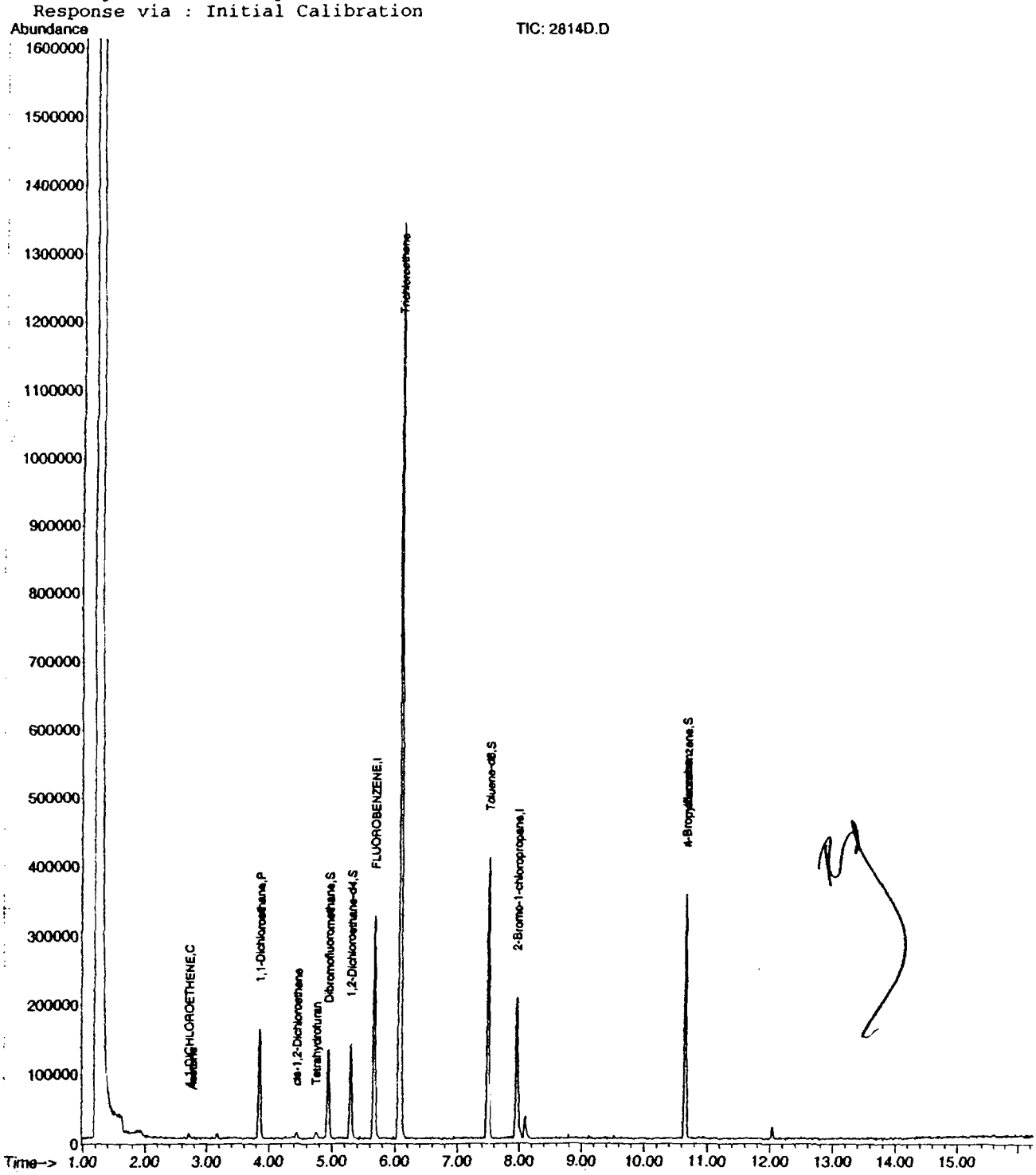
(#) = qualifier out of range (m) = manual integration
2814D.D DWD.M Thu Sep 06 12:15:53 2007

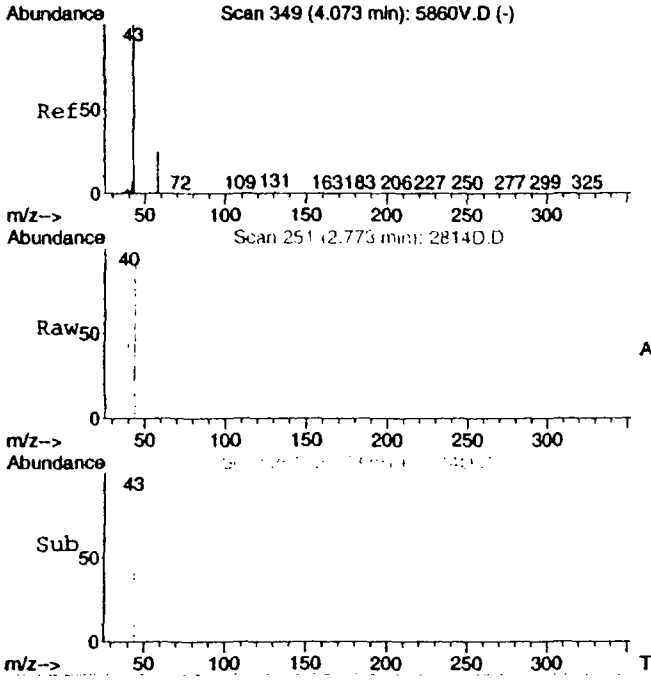
Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\DATA\D090607\2814D.D
Acq On : 6 Sep 2007 11:59
Sample : A781265 LQ4600
Misc : 9/8/07
MS Integration Params: rteint2.p
Quant Time: Sep 6 12:15 2007

Vial: 10
Operator: REGI
Inst : GCMS #4
Multiplr: 1.00
Quant Results File: DWD.RES

Method : C:\MSDCHEM\1\METHODS\DWD.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Tue Sep 04 10:38:20 2007
Response via : Initial Calibration

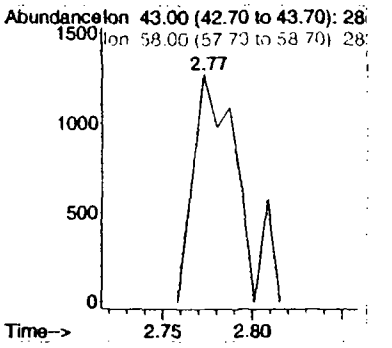


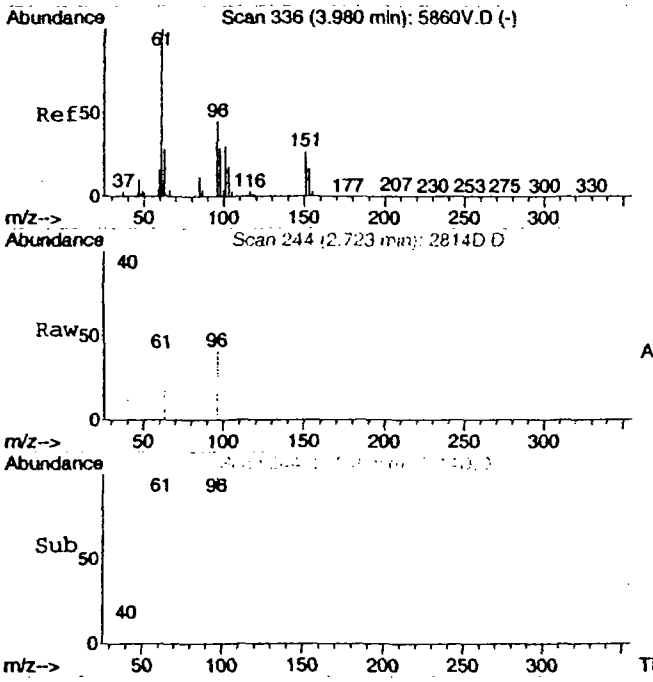


#8
Acetone
Concen: 1.19 UG/L
RT: 2.77 min Scan# 251
Delta R.T. 0.00 min
Lab File: 2814D.D
Acq: 6 Sep 2007 11:59

Tgt Ion: 43 Resp: 2215

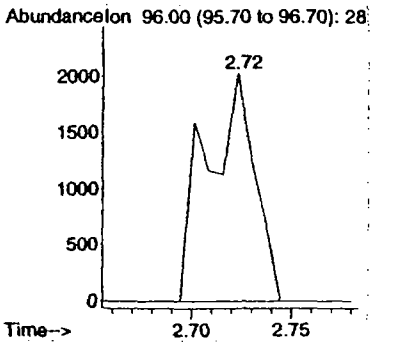
Ion	Ratio	Lower	Upper
43	100		
58	0.0	23.1	34.7#

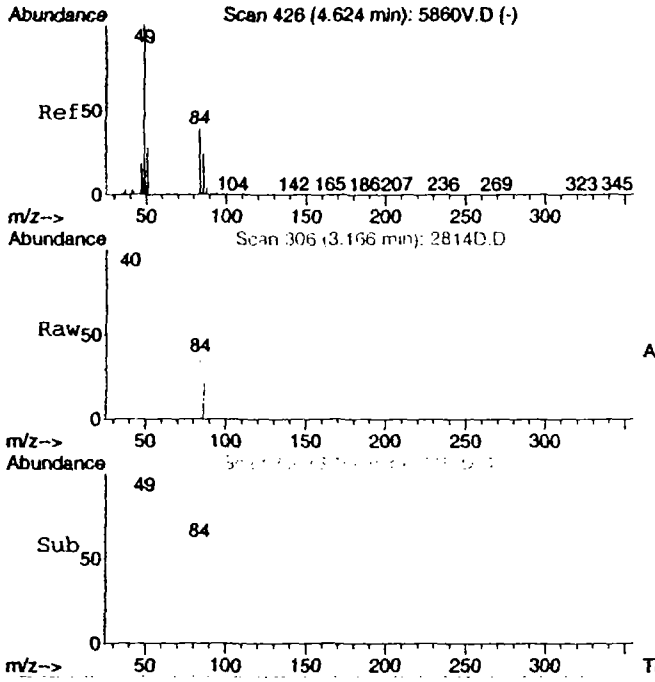




#9
1,1-DICHLOROETHENE
Concen: 0.34 UG/L
RT: 2.72 min Scan# 244
Delta R.T. 0.01 min
Lab File: 2814D.D
Acq: 6 Sep 2007 11:59

Tgt Ion: 96 Resp: 3369

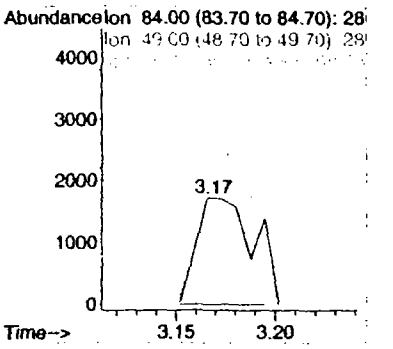


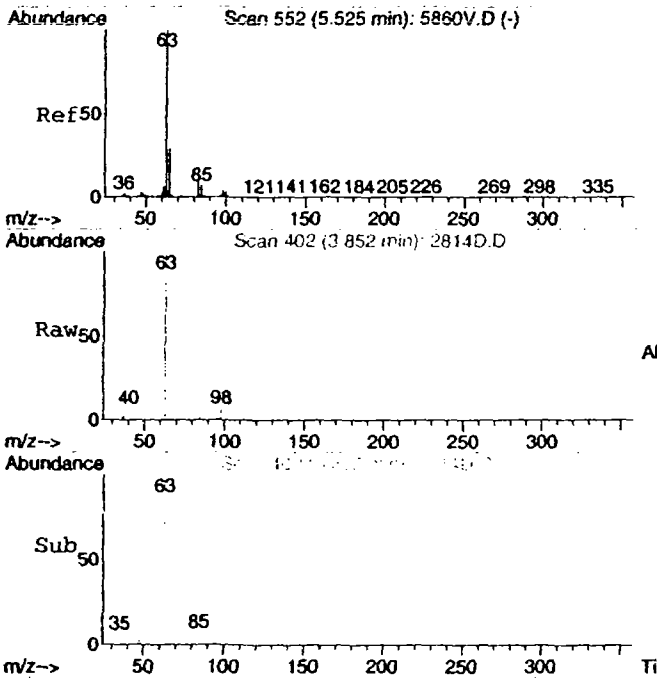


#10
Methylene Chloride
Concen: Below Cal
RT: 3.17 min Scan# 306
Delta R.T. -0.01 min
Lab File: 2814D.D
Acq: 6 Sep 2007 11:59

Tgt Ion: 84 Resp: 3429

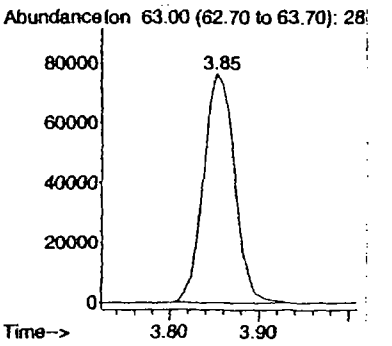
Ion	Ratio	Lower	Upper
84	100		
49	158.2	140.2	210.2
86	22.8	51.1	76.7#

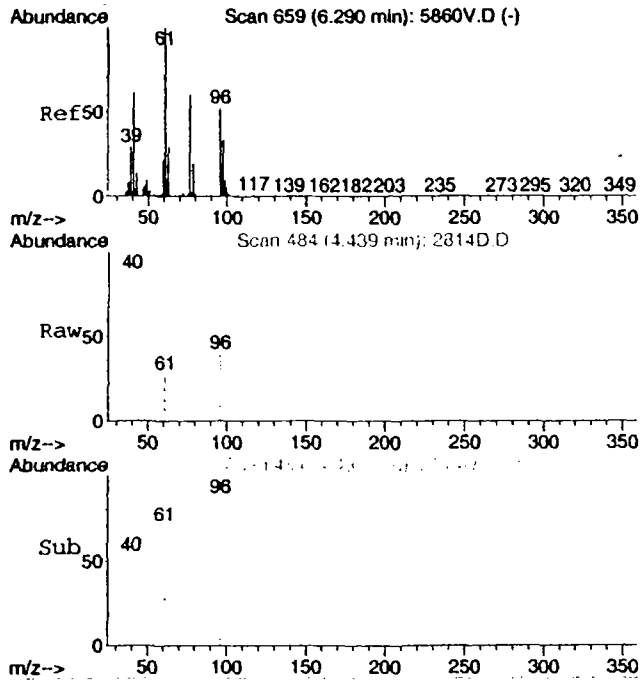




#13
1,1-Dichloroethane
Concen: 8.85 UG/L
RT: 3.85 min Scan# 402
Delta R.T. -0.01 min
Lab File: 2814D.D
Acq: 6 Sep 2007 11:59

Tgt Ion: 63 Resp: 184945

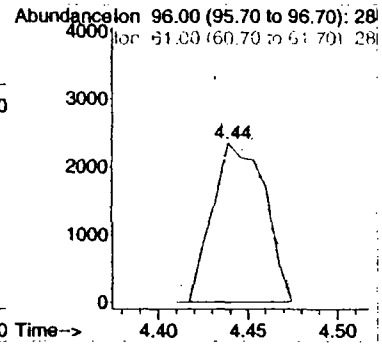


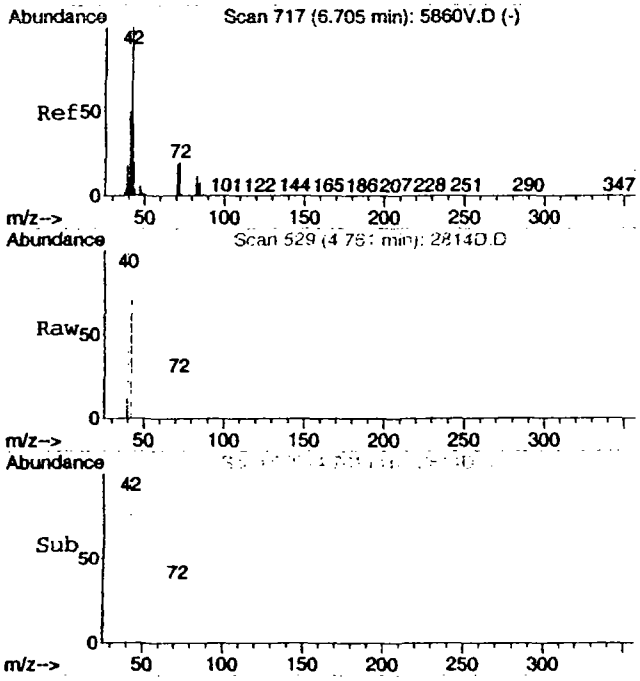


#15
cis-1,2-Dichloroethene
Concen: 0.40 UG/L
RT: 4.44 min Scan# 484
Delta R.T. -0.01 min
Lab File: 2814D.D
Acq: 6 Sep 2007 11:59

Tgt Ion: 96 Resp: 4780

Ion	Ratio	Lower	Upper
96	100		
61	121.5	121.8	182.6#

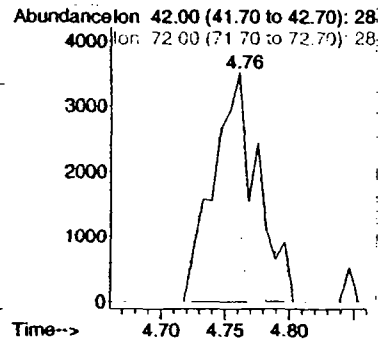


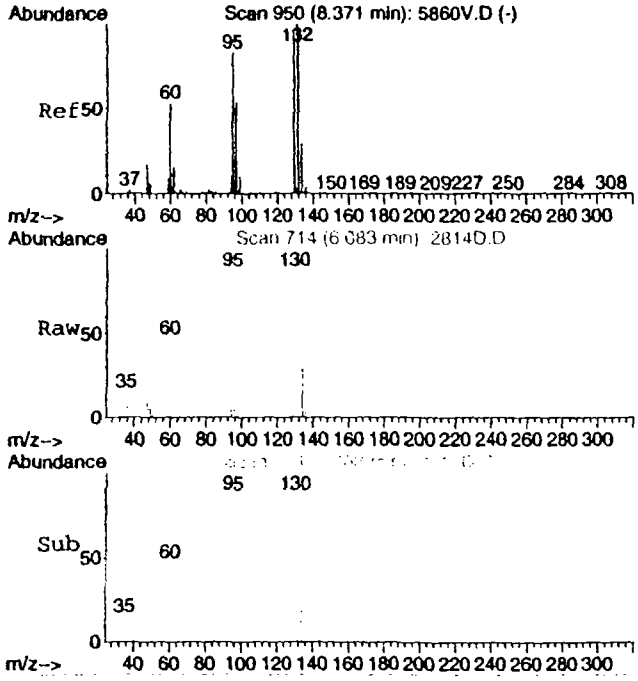


#17
Tetrahydrofuran
Concen: 1.94 UG/L
RT: 4.76 min Scan# 529
Delta R.T. 0.01 min
Lab File: 2814D.D
Acq: 6 Sep 2007 11:59

Tgt Ion: 42 Resp: 8429

Ion	Ratio	Lower	Upper
42	100		
72	26.6	24.5	36.7

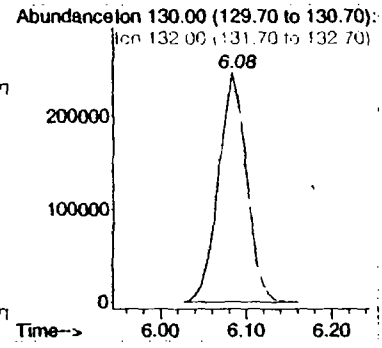


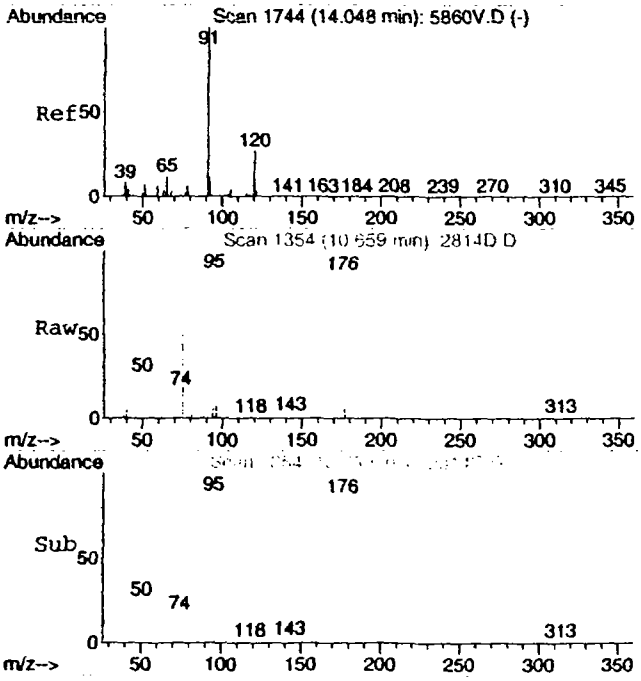


#27
Trichloroethene
Concen: 49.49 UG/L
RT: 6.08 min Scan# 714
Delta R.T. 0.01 min
Lab File: 2814D.D
Acq: 6 Sep 2007 11:59

Tgt Ion:130 Resp: 567703

Ion	Ratio	Lower	Upper
130	100		
132	96.6	82.0	123.0

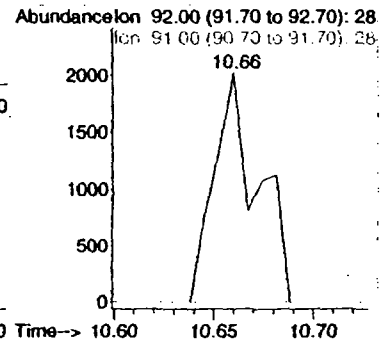




#55
n-Propylbenzene
Concen: 0.54 UG/L
RT: 10.66 min Scan# 1354
Delta R.T. -0.27 min
Lab File: 2814D.D
Acq: 6 Sep 2007 11:59

Tgt Ion: 92 Resp: 3069

Ion	Ratio	Lower	Upper
92	100		
91	0.0	715.8	1073.6#



Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\DATA\D090707\2843D.D Vial: 11
Acq On : 7 Sep 2007 12:33 Operator: REGI
Sample : A781265 LQ4600 Inst : GCMS #4
Misc : 9/7/07 Multiplr: 1.00
MS Integration Params: rteint2.p
Quant Time: Sep 07 12:50:06 2007 Quant Results File: DWD.RES

Quant Method : C:\MSDCHEM\1\METHODS\DWD.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Tue Sep 04 10:38:20 2007
Response via : Initial Calibration
DataAcq Meth : DWD

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) FLUOROBENZENE	5.67	96	341036	10.00	UG/L	0.00
38) 2-Bromo-1-chloropropane	7.97	77	138773	10.00	UG/L	0.00
System Monitoring Compounds						
21) Dibromofluoromethane	4.95	113	87909	10.30	UG/L	0.00
Spiked Amount 10.000			Recovery	=	103.00%	
23) 1,2-Dichloroethane-d4	5.30	65	109230	10.40	UG/L	0.00
Spiked Amount 10.000			Recovery	=	104.00%	
33) Toluene-d8	7.51	98	326475	9.24	UG/L	0.00
Spiked Amount 10.000			Recovery	=	92.40%	
51) 4-Bromofluorobenzene	10.66	174	108654	8.85	UG/L	0.00
Spiked Amount 10.000			Recovery	=	88.50%	

Target Compounds						Qvalue
8) Acetone	2.78	43	3089	1.42	UG/L #	84
9) 1,1-DICHLOROETHENE	2.71	96	3181	0.34	UG/L	100
10) Methylene Chloride	3.18	84	2911	Below Cal	#	83
13) 1,1-Dichloroethane	3.85	63	180928	9.26	UG/L	100
15) cis-1,2-Dichloroethene	4.45	96	4437	0.40	UG/L #	75
17) Tetrahydrofuran	4.75	42	7621	1.87	UG/L	94
27) Trichloroethene	6.08	130	544247	50.73	UG/L	92
55) n-Propylbenzene	10.66	92	3324	0.63	UG/L #	1

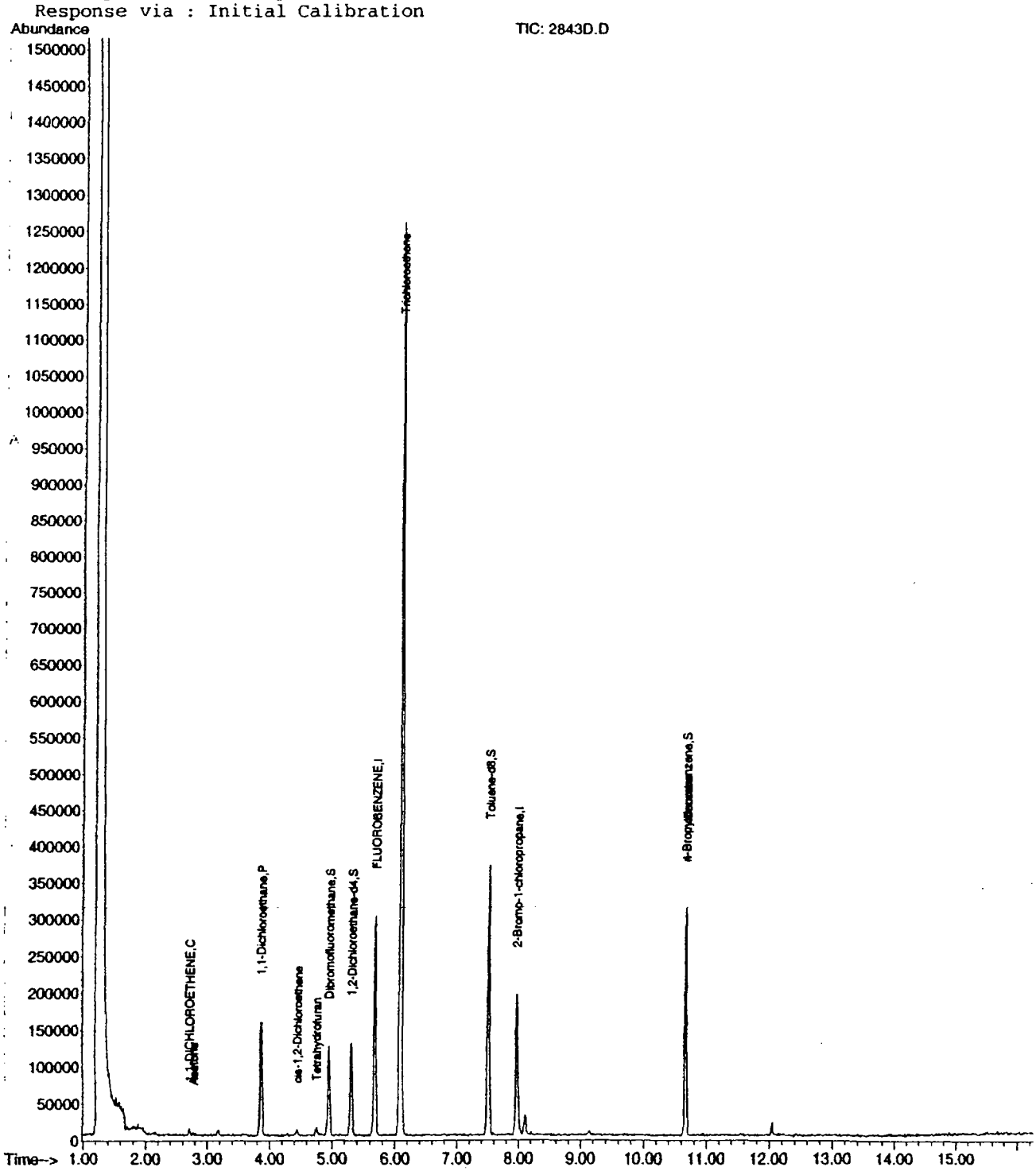
(#) = qualifier out of range (m) = manual integration
2843D.D DWD.M Fri Sep 07 12:50:07 2007

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\DATA\D090707\2843D.D
Acq On : 7 Sep 2007 12:33
Sample : A781265 LQ4600
Misc : 9/7/07
MS Integration Params: rteint2.p
Quant Time: Sep 7 12:50 2007

Vial: 11
Operator: REGI
Inst : GCMS #4
Multiplr: 1.00
Quant Results File: DWD.RES

Method : C:\MSDCHEM\1\METHODS\DWD.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Tue Sep 04 10:38:20 2007
Response via : Initial Calibration



R524561 Heritage Environmental Services, LLC A781266

GC/MS VOA

Method EPA 524.2 REV. 4.1
Sample Description LQ4601
Submitter IDEM - OLQ
Instrument 345 Channel 1

Test Code O516.9.0
Analyst 1062 R. SHAMP
File 2815D.D Date/Time 06Sep07 12:27:00
Dilution Factor 1

CAS	PRM	Parameter	Concentration	RQL	Limit	Units	RT
NA	1807	REGULATED CONTAMINANTS					
71-43-2	151	BENZENE		BDL	0.50	UG/L	
56-23-5	217	CARBON TETRACHLORIDE		BDL	0.50	UG/L	
106-46-7	29	1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)		BDL	0.50	UG/L	
107-06-2	21	1,2-DICHLOROETHANE		BDL	0.50	UG/L	
75-35-4	8	1,1-DICHLOROETHENE		BDL	0.50	UG/L	
71-55-6	2	1,1,1-TRICHLOROETHANE		BDL	0.50	UG/L	
79-01-6	750	TRICHLOROETHENE	21		0.50	UG/L	
75-01-4	768	VINYL CHLORIDE		BDL	0.20	UG/L	
108-90-7	231	CHLOROBENZENE		BDL	0.50	UG/L	
95-50-1	20	1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)		BDL	0.50	UG/L	
156-60-5	746	TRANS-1,2-DICHLOROETHENE		BDL	0.50	UG/L	
156-59-2	246	CIS-1,2-DICHLOROETHENE		BDL	0.50	UG/L	
75-09-2	302	DICHLOROMETHANE (METHYLENE CHLORIDE)		BDL	0.50	UG/L	
78-87-5	23	1,2-DICHLOROPROPANE		BDL	0.50	UG/L	
100-41-4	349	ETHYL BENZENE		BDL	0.50	UG/L	
100-42-5	680	STYRENE		BDL	0.50	UG/L	
79-00-5	4	1,1,2-TRICHLOROETHANE		BDL	0.50	UG/L	
127-18-4	703	TETRACHLOROETHENE		BDL	0.50	UG/L	
108-88-3	724	TOLUENE		BDL	0.50	UG/L	
95-47-6	549	O-XYLENE		BDL	0.50	UG/L	
MPXYLENE	492	M/P-XYLENE		BDL	0.50	UG/L	
120-82-1	16	1,2,4-TRICHLOROBENZENE		BDL	0.50	UG/L	
NA	1809	UNREGULATED - MONITORING REQUIRED					
108-86-1	193	BROMOBENZENE		BDL	0.50	UG/L	
75-27-4	195	BROMODICHLOROMETHANE		BDL	0.50	UG/L	
75-25-2	197	BROMOFORM		BDL	0.50	UG/L	
74-83-9	198	BROMOMETHANE		BDL	0.50	UG/L	
124-48-1	233	CHLORODIBROMOMETHANE		BDL	0.50	UG/L	
75-00-3	234	CHLOROETHANE		BDL	0.50	UG/L	
67-66-3	235	CHLOROFORM		BDL	0.50	UG/L	
74-87-3	236	CHLOROMETHANE		BDL	0.50	UG/L	
95-49-8	807	2-CHLOROTOLUENE (O-CHLOROTOLUENE)		BDL	0.50	UG/L	
106-43-4	808	4-CHLOROTOLUENE (P-CHLOROTOLUENE)		BDL	0.50	UG/L	
74-95-3	296	DIBROMOMETHANE		BDL	0.50	UG/L	
541-73-1	26	1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)		BDL	0.50	UG/L	
75-34-3	7	1,1-DICHLOROETHANE	6.3		0.50	UG/L	
563-58-6	10	1,1-DICHLOROPROPENE		BDL	0.50	UG/L	
142-28-9	27	1,3-DICHLOROPROPANE		BDL	0.50	UG/L	
10061-02-6	747	TRANS-1,3-DICHLOROPROPENE		BDL	0.50	UG/L	
10061-01-5	247	CIS-1,3-DICHLOROPROPENE		BDL	0.50	UG/L	
594-20-7	33	2,2-DICHLOROPROPANE		BDL	0.50	UG/L	
630-20-6	1	1,1,1,2-TETRACHLOROETHANE		BDL	0.50	UG/L	
79-34-5	3	1,1,2,2-TETRACHLOROETHANE		BDL	0.50	UG/L	
96-18-4	14	1,2,3-TRICHLOROPROPANE		BDL	0.50	UG/L	

JS 9-10-07

JS 9-10-07

GC/MS VOA

CAS	PRM	Parameter	Concentration	RQL	Limit	Units	RT
NA	1806	MONITORED AT STATE'S DISCRETION					
74-97-5	194	BROMOCHLOROMETHANE		BDL	0.50	UG/L	
104-51-8	519	N-BUTYLBENZENE		BDL	0.50	UG/L	
75-71-8	300	DICHLORODIFLUOROMETHANE		BDL	0.50	UG/L	
75-69-4	372	TRICHLOROFLUOROMETHANE		BDL	0.50	UG/L	
87-68-3	398	HEXACHLOROBUTADIENE		BDL	0.50	UG/L	
98-82-8	432	ISOPROPYLBENZENE (CUMENE)		BDL	0.50	UG/L	
99-87-6	628	4-ISOPROPYLTOLUENE (P-ISOPROPYLTOLUENE)		BDL	0.50	UG/L	
91-20-3	493	NAPHTHALENE		BDL	0.50	UG/L	
103-65-1	532	N-PROPYLBENZENE		BDL	0.50	UG/L	
135-98-8	644	SEC-BUTYLBENZENE		BDL	0.50	UG/L	
98-06-6	702	TERT-BUTYLBENZENE		BDL	0.50	UG/L	
87-61-6	13	1,2,3-TRICHLOROBENZENE		BDL	0.50	UG/L	
95-63-6	17	1,2,4-TRIMETHYLBENZENE		BDL	0.50	UG/L	
108-67-8	25	1,3,5-TRIMETHYLBENZENE		BDL	0.50	UG/L	
106-93-4	18	1,2-DIBROMOETHANE (EDB)		BDL	0.50	UG/L	
96-12-8	19	1,2-DIBROMO-3-CHLOROPROPANE (DBCP)		BDL	0.50	UG/L	
1634-04-4	859	METHYL-T-BUTYL ETHER (MTBE)		BDL	0.50	UG/L	
	972	----------					
591-78-6	60	2-HEXANONE		BDL	2.0	UG/L	
79-46-9	67	2-NITROPROPANE		*			
67-64-1	99	ACETONE (2-PROPANONE)		BDL	4.0	UG/L	
78-93-3	52	2-BUTANONE		BDL	2.0	UG/L	
75-15-0	216	CARBON DISULFIDE		*			
	1804	...					
	971	SURROGATE RECOVERY					
	972	----------					
17060-07-0	301	DICHLOROETHANE-D4	102			% RECOVERY	
2037-26-5	726	TOLUENE-D8	90			% RECOVERY	
460-00-4	196	4-BROMOFLUOROBENZENE	93			% RECOVERY	
	1131	TENTATIVELY IDENTIFIED COMPOUNDS					
	3320	NONE DETECTED					

Comment Note: * Compound searched for but not detected. Standard was unavailable to determine retention time and detection limit. Note: Sample was rerun to confirm target compounds.

Qualifiers

BDL Below Detection Limit

* See Note for Parameter

Comments to Laboratory (do not record)

4-HCL VIALS

Note the additional IDEM analytes for drinking water:

CS2, MEK, Acetone, 2-Nitropropane, 2-Hexanone

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\DATA\D090607\2815D.D
Acq On : 6 Sep 2007 12:27
Sample : A781266 LQ4601
Misc : 9/8/07
MS Integration Params: rteint2.p
Quant Time: Sep 06 12:43:17 2007

Vial: 11
Operator: REGI
Inst : GCMS #4
Multiplr: 1.00
Quant Results File: DWD.RES

Quant Method : C:\MSDCHEM\1\METHODS\DWD.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Tue Sep 04 10:38:20 2007
Response via : Initial Calibration
DataAcq Meth : DWD

TC#378

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) FLUOROBENZENE	5.67	96	313130	10.00	UG/L	0.00
38) 2-Bromo-1-chloropropane	7.97	77	127803	10.00	UG/L	0.00
System Monitoring Compounds						
21) Dibromofluoromethane	4.95	113	80501	10.27	UG/L	0.00
Spiked Amount 10.000			Recovery	=	102.70%	
23) 1,2-Dichloroethane-d4	5.30	65	98724	10.24	UG/L	0.00
Spiked Amount 10.000			Recovery	=	102.40%	
33) Toluene-d8	7.51	98	292025	9.00	UG/L	0.00
Spiked Amount 10.000			Recovery	=	90.00%	
51) 4-Bromofluorobenzene	10.66	174	104593	9.25	UG/L	0.00
Spiked Amount 10.000			Recovery	=	92.50%	
Target Compounds						Qvalue
3) ~~Chloromethane~~	1.53	50	2807	0.27	UG/L	100
8) ~~Acetone~~	2.78	43	3259	1.53	UG/L #	72
10) ~~Methylene Chloride~~	3.16	84	2767	Below Cal	#	79
13) 1,1-Dichloroethane 6.3	3.85	63	112404	6.27	UG/L	100
15) ~~cis-1,2-Dichloroethene~~	4.44	96	3277	0.32	UG/L	98
17) ~~Tetrahydrofuran~~	4.76	42	6861	1.84	UG/L #	73
27) ~~Trichloroethene~~ 21	6.08	130	211568	21.48	UG/L	92

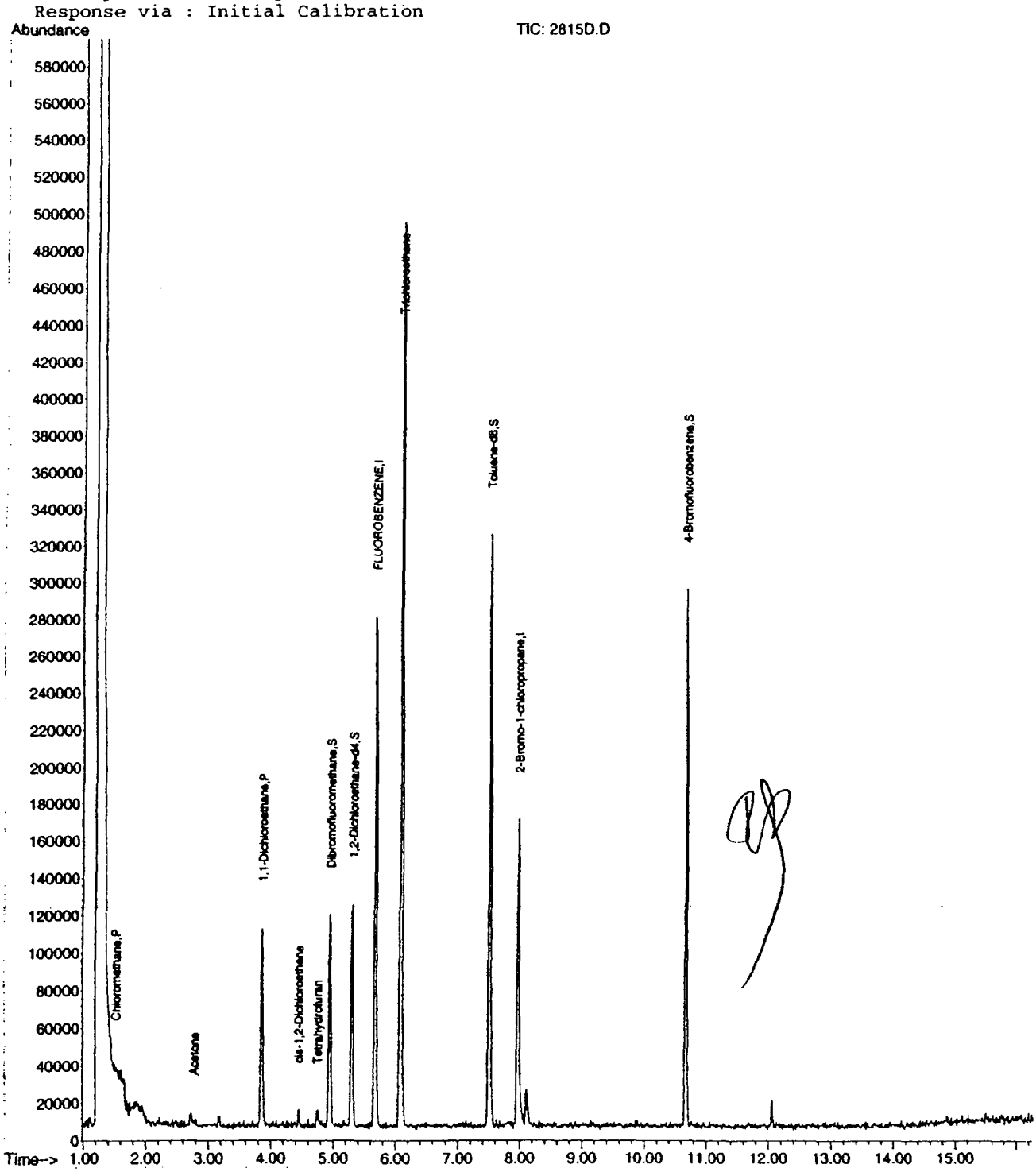
NO TICs

(#) = qualifier out of range (m) = manual integration
2815D.D DWD.M Thu Sep 06 12:43:18 2007

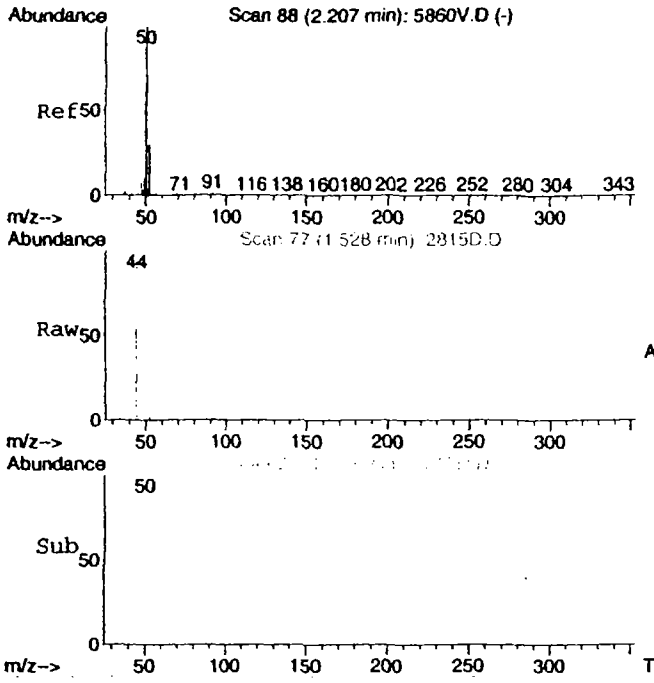
Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\DATA\D090607\2815D.D Vial: 11
Acq On : 6 Sep 2007 12:27 Operator: REGI
Sample : A781266 LQ4601 Inst : GCMS #4
Misc : 9/8/07 Multiplr: 1.00
MS Integration Params: rteint2.p
Quant Time: Sep 6 12:43 2007 Quant Results File: DWD.RES

Method : C:\MSDCHEM\1\METHODS\DWD.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Tue Sep 04 10:38:20 2007
Response via : Initial Calibration

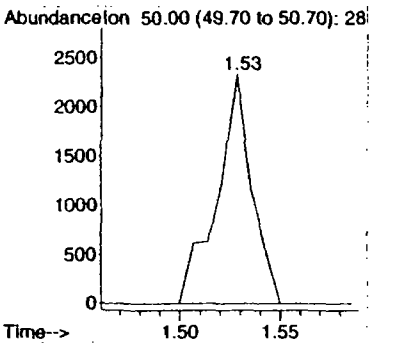


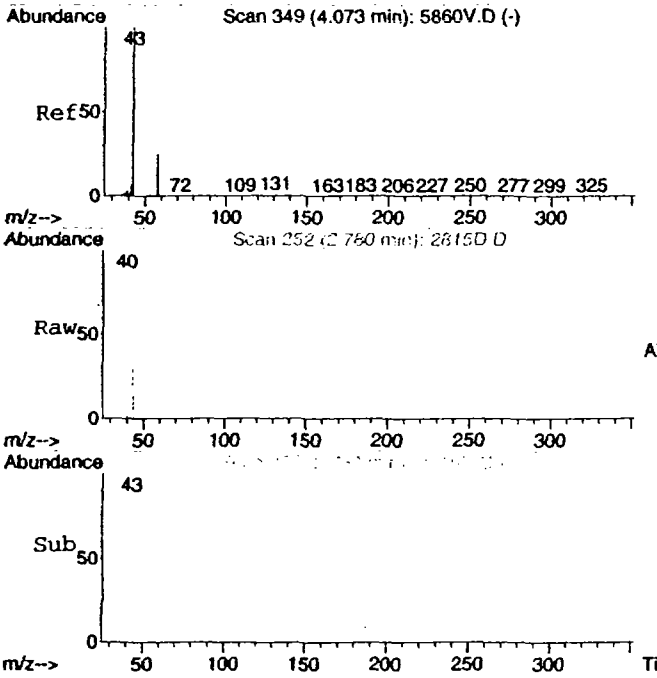
2815D.D DWD.M Thu Sep 06 12:43:18 2007 Page 2



#3
Chloromethane
Concen: 0.27 UG/L
RT: 1.53 min Scan# 77
Delta R.T. 0.01 min
Lab File: 2815D.D
Acq: 6 Sep 2007 12:27

Tgt Ion: 50 Resp: 2807

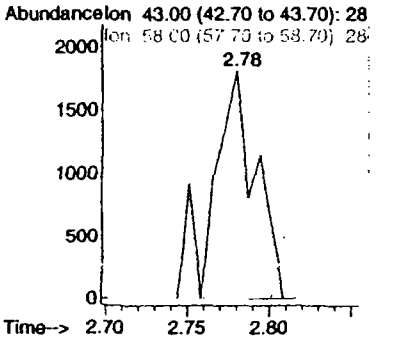


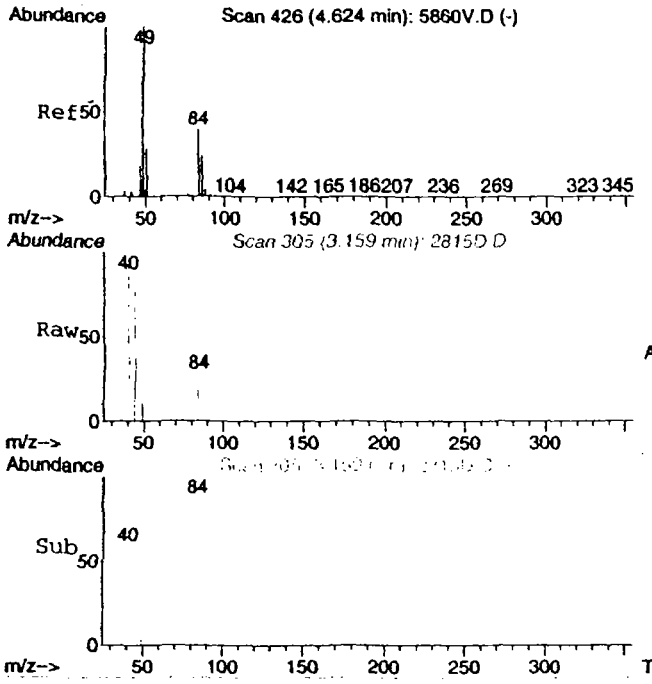


#8
Acetone
Concen: 1.53 UG/L
RT: 2.78 min Scan# 252
Delta R.T. 0.01 min
Lab File: 2815D.D
Acq: 6 Sep 2007 12:27

Tgt Ion: 43 Resp: 3259

Ion	Ratio	Lower	Upper
43	100		
58	13.8	23.1	34.7#

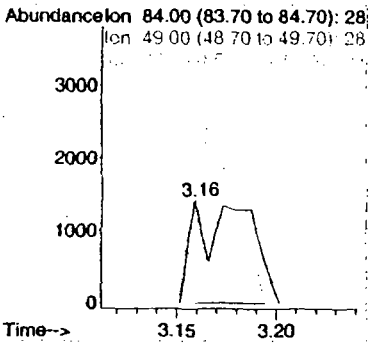


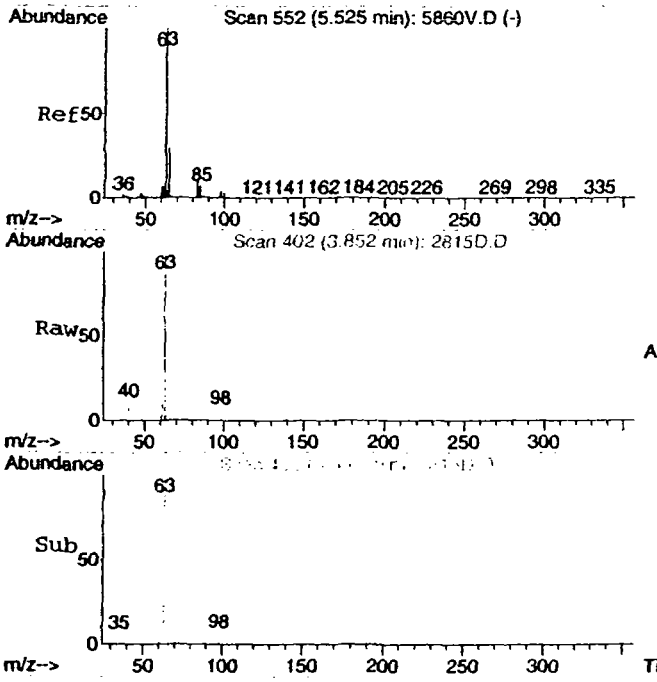


#10
Methylene Chloride
Concen: Below Cal
RT: 3.16 min Scan# 305
Delta R.T. -0.01 min
Lab File: 2815D.D
Acq: 6 Sep 2007 12:27

Tgt Ion: 84 Resp: 2767

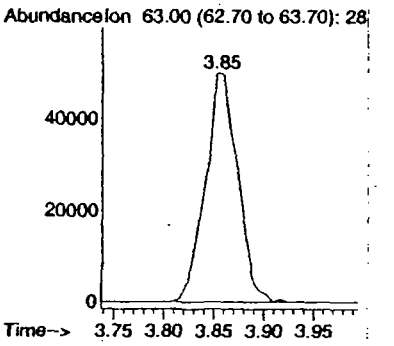
Ion	Ratio	Lower	Upper
84	100		
49	136.9	140.2	210.2#
86	62.6	51.1	76.7

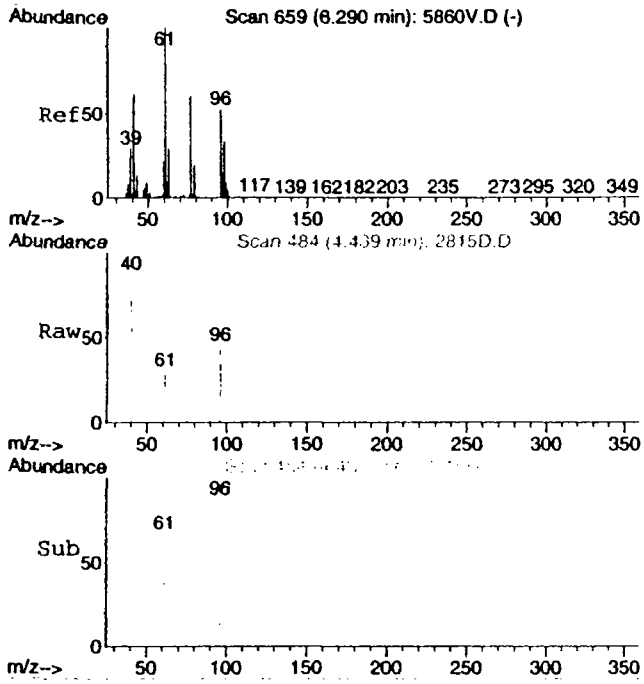




#13
1,1-Dichloroethane
Concen: 6.27 UG/L
RT: 3.85 min Scan# 402
Delta R.T. -0.01 min
Lab File: 2815D.D
Acq: 6 Sep 2007 12:27

Tgt Ion: 63 Resp: 112404

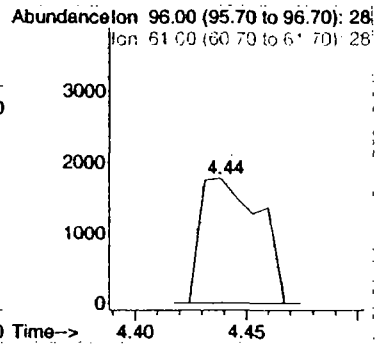


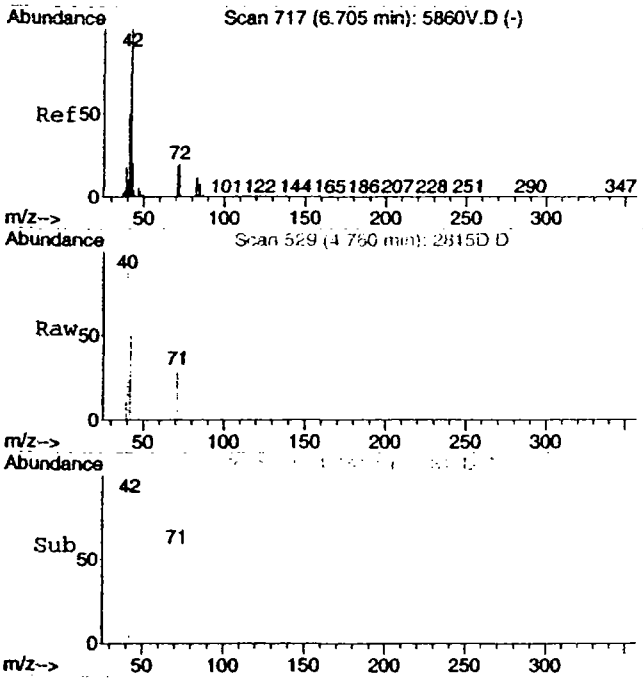


#15
cis-1,2-Dichloroethene
Concen: 0.32 UG/L
RT: 4.44 min Scan# 484
Delta R.T. -0.01 min
Lab File: 2815D.D
Acq: 6 Sep 2007 12:27

Tgt Ion: 96 Resp: 3277

Ion	Ratio	Lower	Upper
96	100		
61	154.2	121.8	182.6

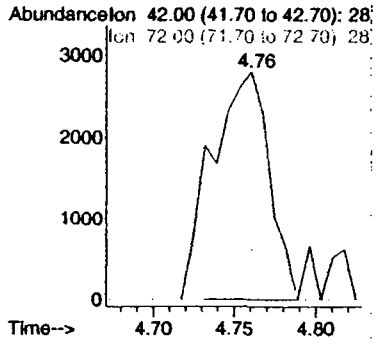


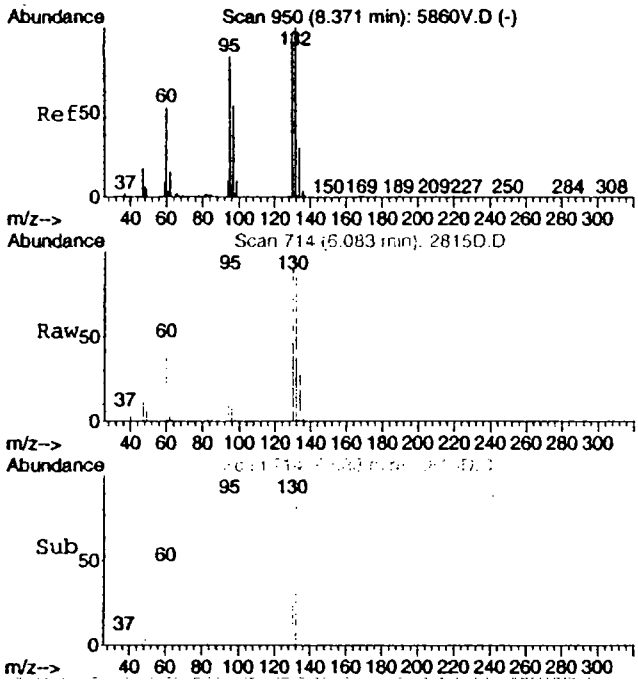


#17
Tetrahydrofuran
Concen: 1.84 UG/L
RT: 4.76 min Scan# 529
Delta R.T. 0.01 min
Lab File: 2815D.D
Acq: 6 Sep 2007 12:27

Tgt Ion: 42 Resp: 6861

Ion	Ratio	Lower	Upper
42	100		
72	45.3	24.5	36.7#

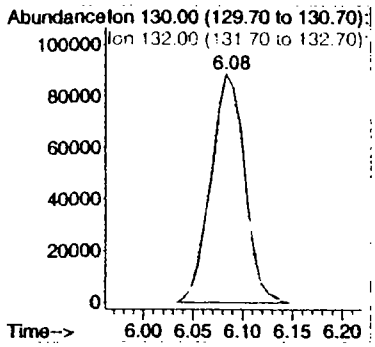




#27
Trichloroethene
Concen: 21.48 UG/L
RT: 6.08 min Scan# 714
Delta R.T. 0.01 min
Lab File: 2815D.D
Acq: 6 Sep 2007 12:27

Tgt Ion:130 Resp: 211568

Ion	Ratio	Lower	Upper
130	100		
132	94.0	82.0	123.0



Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\DATA\D090707\2844D.D Vial: 12
Acq On : 7 Sep 2007 13:01 Operator: REGI
Sample : A781266 LQ4601 Inst : GCMS #4
Misc : 9/7/07 Multiplr: 1.00
MS Integration Params: rteint2.p
Quant Time: Sep 07 13:17:22 2007 Quant Results File: DWD.RES

Quant Method : C:\MSDCHEM\1\METHODS\DWD.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Tue Sep 04 10:38:20 2007
Response via : Initial Calibration
DataAcq Meth : DWD

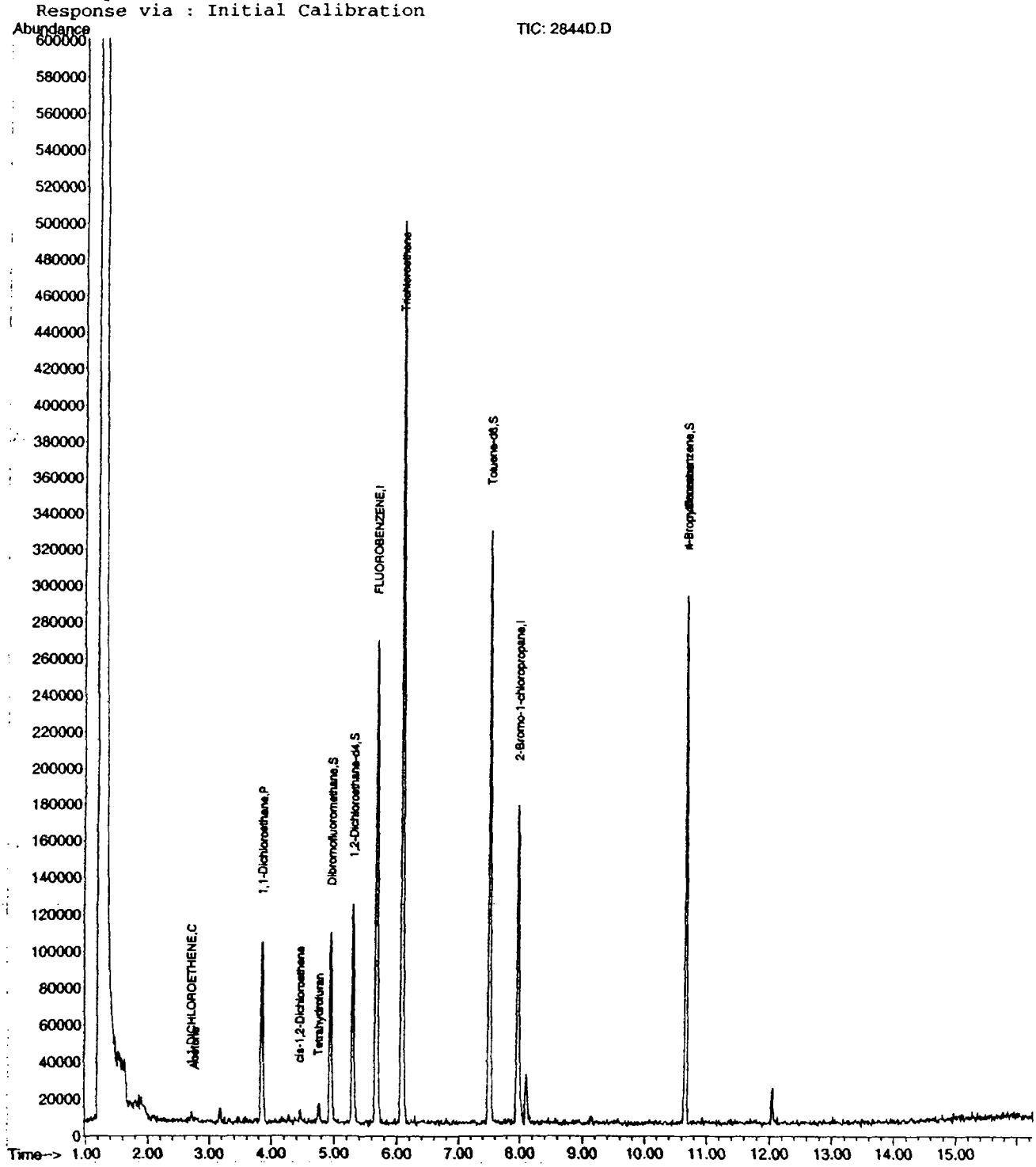
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) FLUOROBENZENE	5.68	96	303065	10.00 UG/L	0.00
38) 2-Bromo-1-chloropropane	7.96	77	126425	10.00 UG/L	0.00
System Monitoring Compounds					
21) Dibromofluoromethane	4.95	113	79078	10.42 UG/L	0.01
Spiked Amount 10.000			Recovery	= 104.20%	
23) 1,2-Dichloroethane-d4	5.30	65	98811	10.59 UG/L	0.00
Spiked Amount 10.000			Recovery	= 105.90%	
33) Toluene-d8	7.51	98	288156	9.18 UG/L	0.00
Spiked Amount 10.000			Recovery	= 91.80%	
51) 4-Bromofluorobenzene	10.67	174	99087	8.85 UG/L	0.00
Spiked Amount 10.000			Recovery	= 88.50%	
Target Compounds					Qvalue
8) Acetone	2.77	43	2104	1.25 UG/L #	68
9) 1,1-DICHLOROETHENE	2.71	96	2129	0.26 UG/L	100
10) Methylene Chloride	3.18	84	3417	Below Cal #	66
13) 1,1-Dichloroethane	3.85	63	114445	6.59 UG/L	100
15) cis-1,2-Dichloroethene	4.45	96	3449	0.35 UG/L	84
17) Tetrahydrofuran	4.75	42	7904	2.19 UG/L	91
27) Trichloroethene	6.08	130	209729	22.00 UG/L	94
55) n-Propylbenzene	10.65	92	3120	0.65 UG/L #	1

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

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\DATA\D090707\2844D.D Vial: 12
Acq On : 7 Sep 2007 13:01 Operator: REGI
Sample : A781266 LQ4601 Inst : GCMS #4
Misc : 9/7/07 Multiplr: 1.00
MS Integration Params: rteint2.p
Quant Time: Sep 7 13:17 2007 Quant Results File: DWD.RES

Method : C:\MSDCHEM\1\METHODS\DWD.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Tue Sep 04 10:38:20 2007
Response via : Initial Calibration



R524561 Heritage Environmental Services, LLC A781267

GC/MS VOA

Method EPA 524.2 REV. 4.1
Sample Description LQ4602
Submitter IDEM - OLQ
Instrument 345 Channel 1

Test Code O516.9.0
Analyst 1062 R. SHAMP
File 2816D.D Date/Time 06Sep07 12:54:00
Dilution Factor 1

CAS	PRM	Parameter	Concentration	RQL	Limit	Units	RT
NA	1807	REGULATED CONTAMINANTS					
71-43-2	151	BENZENE		BDL	0.50	UG/L	
56-23-5	217	CARBON TETRACHLORIDE		BDL	0.50	UG/L	
106-46-7	29	1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)		BDL	0.50	UG/L	
107-06-2	21	1,2-DICHLOROETHANE		BDL	0.50	UG/L	
75-35-4	8	1,1-DICHLOROETHENE		BDL	0.50	UG/L	
71-55-6	2	1,1,1-TRICHLOROETHANE		BDL	0.50	UG/L	
79-01-6	750	TRICHLOROETHENE	1.1		0.50	UG/L	
75-01-4	768	VINYL CHLORIDE		BDL	0.20	UG/L	
108-90-7	231	CHLOROBENZENE		BDL	0.50	UG/L	
95-50-1	20	1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)		BDL	0.50	UG/L	
156-60-5	746	TRANS-1,2-DICHLOROETHENE		BDL	0.50	UG/L	
156-59-2	246	CIS-1,2-DICHLOROETHENE		BDL	0.50	UG/L	
75-09-2	302	DICHLOROMETHANE (METHYLENE CHLORIDE)		BDL	0.50	UG/L	
78-87-5	23	1,2-DICHLOROPROPANE		BDL	0.50	UG/L	
100-41-4	349	ETHYL BENZENE		BDL	0.50	UG/L	
100-42-5	680	STYRENE		BDL	0.50	UG/L	
79-00-5	4	1,1,2-TRICHLOROETHANE		BDL	0.50	UG/L	
127-18-4	703	TETRACHLOROETHENE		BDL	0.50	UG/L	
108-88-3	724	TOLUENE		BDL	0.50	UG/L	
95-47-6	549	O-XYLENE		BDL	0.50	UG/L	
MPXYLENE	492	M/P-XYLENE		BDL	0.50	UG/L	
120-82-1	16	1,2,4-TRICHLOROBENZENE		BDL	0.50	UG/L	
NA	1809	UNREGULATED - MONITORING REQUIRED					
108-86-1	193	BROMOBENZENE		BDL	0.50	UG/L	
75-27-4	195	BROMODICHLOROMETHANE		BDL	0.50	UG/L	
75-25-2	197	BROMOFORM		BDL	0.50	UG/L	
74-83-9	198	BROMOMETHANE		BDL	0.50	UG/L	
124-48-1	233	CHLORODIBROMOMETHANE		BDL	0.50	UG/L	
75-00-3	234	CHLOROETHANE		BDL	0.50	UG/L	
67-66-3	235	CHLOROFORM		BDL	0.50	UG/L	
74-87-3	236	CHLOROMETHANE		BDL	0.50	UG/L	
95-49-8	807	2-CHLOROTOLUENE (O-CHLOROTOLUENE)		BDL	0.50	UG/L	
106-43-4	808	4-CHLOROTOLUENE (P-CHLOROTOLUENE)		BDL	0.50	UG/L	
74-95-3	296	DIBROMOMETHANE		BDL	0.50	UG/L	
541-73-1	26	1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)		BDL	0.50	UG/L	
75-34-3	7	1,1-DICHLOROETHANE	1.8		0.50	UG/L	
563-58-6	10	1,1-DICHLOROPROPENE		BDL	0.50	UG/L	
142-28-9	27	1,3-DICHLOROPROPANE		BDL	0.50	UG/L	
10061-02-6	747	TRANS-1,3-DICHLOROPROPENE		BDL	0.50	UG/L	
10061-01-5	247	CIS-1,3-DICHLOROPROPENE		BDL	0.50	UG/L	
594-20-7	33	2,2-DICHLOROPROPANE		BDL	0.50	UG/L	
630-20-6	1	1,1,1,2-TETRACHLOROETHANE		BDL	0.50	UG/L	
79-34-5	3	1,1,2,2-TETRACHLOROETHANE		BDL	0.50	UG/L	
96-18-4	14	1,2,3-TRICHLOROPROPANE		BDL	0.50	UG/L	

JS 9-10-07

JS 9-10-07

GC/MS VOA

CAS	PRM	Parameter	Concentration	RQL	Limit	Units	RT
NA	1806	MONITORED AT STATE'S DISCRETION					
74-97-5	194	BROMOCHLOROMETHANE		BDL	0.50	UG/L	
104-51-8	519	N-BUTYLBENZENE		BDL	0.50	UG/L	
75-71-8	300	DICHLORODIFLUOROMETHANE		BDL	0.50	UG/L	
75-69-4	372	TRICHLOROFLUOROMETHANE		BDL	0.50	UG/L	
87-68-3	398	HEXACHLOROBUTADIENE		BDL	0.50	UG/L	
98-82-8	432	ISOPROPYLBENZENE (CUMENE)		BDL	0.50	UG/L	
99-87-6	628	4-ISOPROPYLTOLUENE (P-ISOPROPYLTOLUENE)		BDL	0.50	UG/L	
91-20-3	493	NAPHTHALENE		BDL	0.50	UG/L	
103-65-1	532	N-PROPYLBENZENE		BDL	0.50	UG/L	
135-98-8	644	SEC-BUTYLBENZENE		BDL	0.50	UG/L	
98-06-6	702	TERT-BUTYLBENZENE		BDL	0.50	UG/L	
87-61-6	13	1,2,3-TRICHLOROBENZENE		BDL	0.50	UG/L	
95-63-6	17	1,2,4-TRIMETHYLBENZENE		BDL	0.50	UG/L	
108-67-8	25	1,3,5-TRIMETHYLBENZENE		BDL	0.50	UG/L	
106-93-4	18	1,2-DIBROMOETHANE (EDB)		BDL	0.50	UG/L	
96-12-8	19	1,2-DIBROMO-3-CHLOROPROPANE (DBCP)		BDL	0.50	UG/L	
1634-04-4	859	METHYL-T-BUTYL ETHER (MTBE)		BDL	0.50	UG/L	
	972	————————					
591-78-6	60	2-HEXANONE		BDL	2.0	UG/L	
79-46-9	67	2-NITROPROPANE		*			
67-64-1	99	ACETONE (2-PROPANONE)		BDL	4.0	UG/L	
78-93-3	52	2-BUTANONE		BDL	2.0	UG/L	
75-15-0	216	CARBON DISULFIDE		*			
	1804	...					
	971	SURROGATE RECOVERY					
	972	————————					
17060-07-0	301	DICHLOROETHANE-D4	104			% RECOVERY	
2037-26-5	726	TOLUENE-D8	94			% RECOVERY	
460-00-4	196	4-BROMOFLUOROBENZENE	87			% RECOVERY	
	1131	TENTATIVELY IDENTIFIED COMPOUNDS					
	3320	NONE DETECTED					

Comment Note: * Compound searched for but not detected. Standard was unavailable to determine retention time and detection limit. Note: Sample was rerun to confirm target compounds.

Qualifiers

BDL Below Detection Limit

* See Note for Parameter

Comments to Laboratory (do not record)

4-HCL VIALS

Note the additional IDEM analytes for drinking water:

CS2, MEK, Acetone, 2-Nitropropane, 2-Hexanone

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\DATA\D090607\2816D.D Vial: 12
Acq On : 6 Sep 2007 12:54 Operator: REGI
Sample : A781267 LQ4602 Inst : GCMS #4
Misc : 9/8/07 Multiplr: 1.00
MS Integration Params: rteint2.p
Quant Time: Sep 06 13:10:32 2007 Quant Results File: DWD.RES

Quant Method : C:\MSDCHEM\1\METHODS\DWD.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Tue Sep 04 10:38:20 2007
Response via : Initial Calibration
DataAcq Meth : DWD

TC#578

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) FLUOROBENZENE	5.68	96	344025	10.00 UG/L	0.00
38) 2-Bromo-1-chloropropane	7.97	77	145726	10.00 UG/L	0.00
System Monitoring Compounds					
21) Dibromofluoromethane	4.95	113	89358	10.38 UG/L	0.00
Spiked Amount 10.000			Recovery	= 103.80%	
23) 1,2-Dichloroethane-d4	5.30	65	110393	10.42 UG/L	0.00
Spiked Amount 10.000			Recovery	= 104.20%	
33) Toluene-d8	7.51	98	334732	9.39 UG/L	0.00
Spiked Amount 10.000			Recovery	= 93.90%	
51) 4-Bromofluorobenzene	10.66	174	112131	8.69 UG/L	0.00
Spiked Amount 10.000			Recovery	= 86.90%	

Target Compounds						Qvalue
8) ~~Acetone~~		2.78	43	3250	1.45 UG/L #	63
10) ~~Methylene Chloride~~		3.17	84	2503	Below Cal	86
13) 1,1-Dichloroethane	1.8	3.86	63	35367	1.79 UG/L	100
17) Tetrahydrofuran		4.76	42	6745	1.64 UG/L	96
27) Trichloroethene	1.1	6.09	130	11759	1.09 UG/L	90

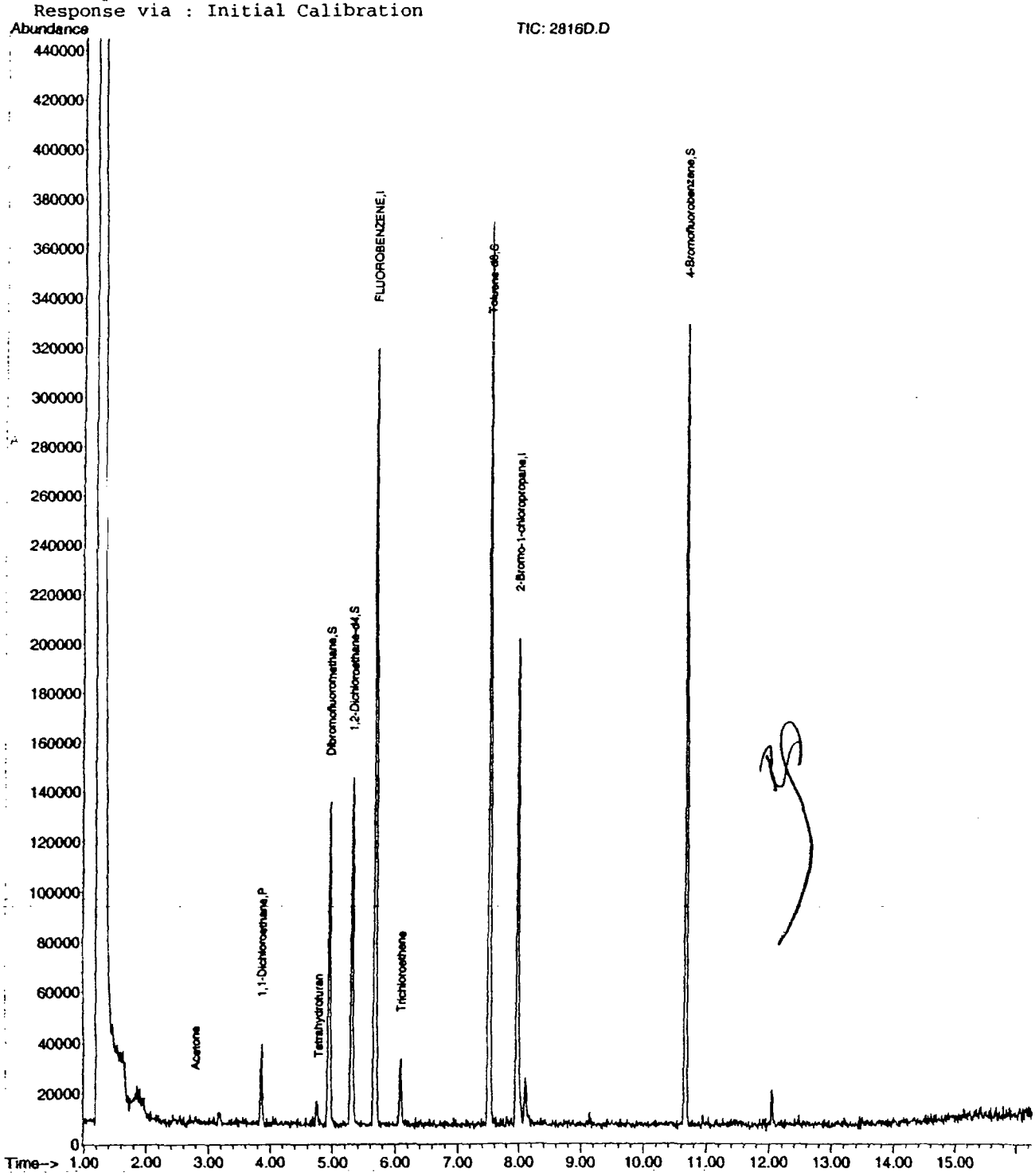
No TICs

(#) = qualifier out of range (m) = manual integration
2816D.D DWD.M Thu Sep 06 13:10:33 2007

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\DATA\D090607\2816D.D Vial: 12
Acq On : 6 Sep 2007 12:54 Operator: REGI
Sample : A781267 LQ4602 Inst : GCMS #4
Misc : 9/8/07 Multiplr: 1.00
MS Integration Params: rteint2.p
Quant Time: Sep 6 13:10 2007 Quant Results File: DWD.RES

Method : C:\MSDCHEM\1\METHODS\DWD.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Tue Sep 04 10:38:20 2007
Response via : Initial Calibration



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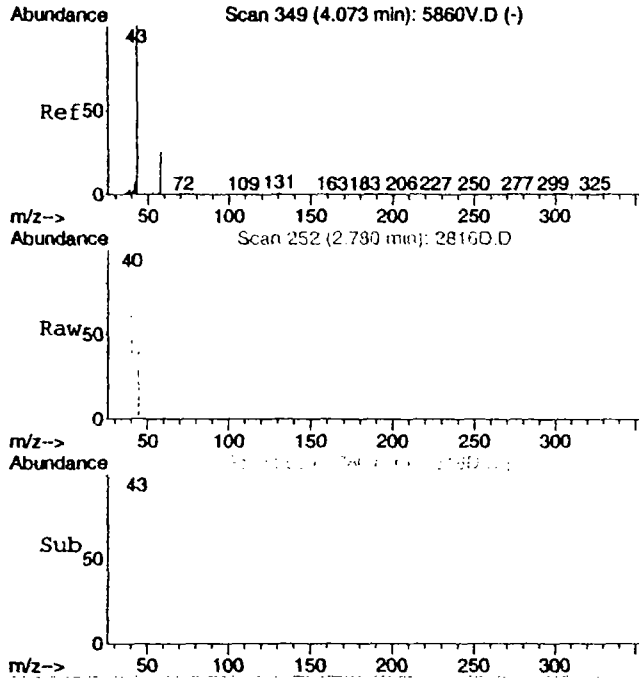
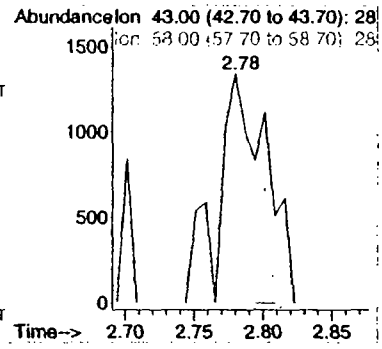
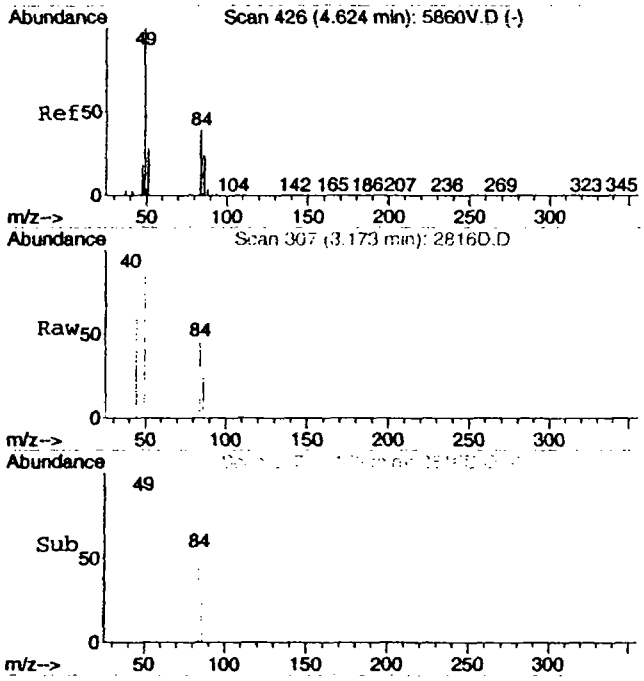


#8
Acetone
Concen: 1.45 UG/L
RT: 2.78 min Scan# 252
Delta R.T. 0.01 min
Lab File: 2816D.D
Acq: 6 Sep 2007 12:54

Tgt Ion: 43 Resp: 3250

Ion	Ratio	Lower	Upper
43	100		
58	9.1	23.1	34.7#

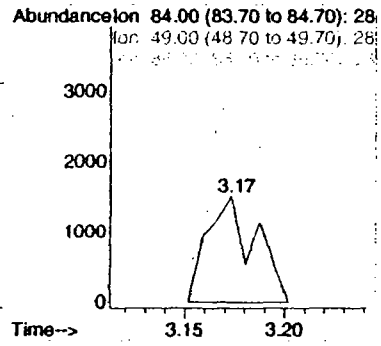


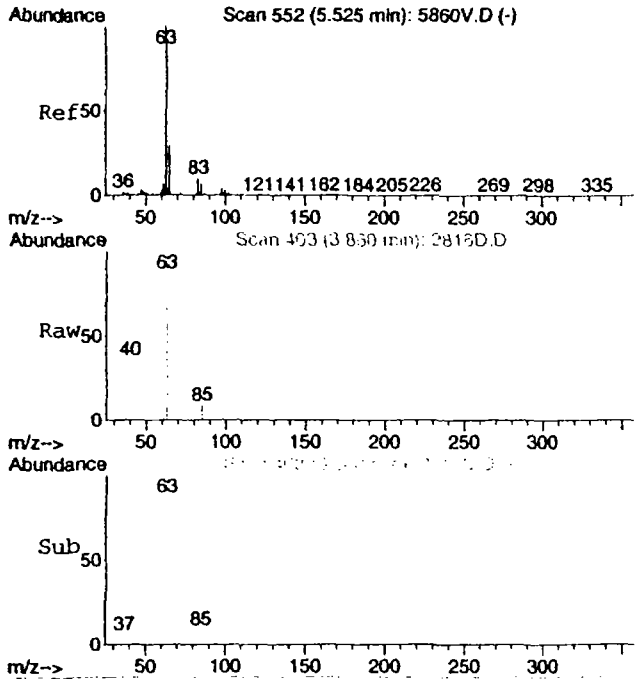


#10
Methylene Chloride
Concen: Below Cal
RT: 3.17 min Scan# 307
Delta R.T. 0.00 min
Lab File: 2816D.D
Acq: 6 Sep 2007 12:54

Tgt Ion: 84 Resp: 2503

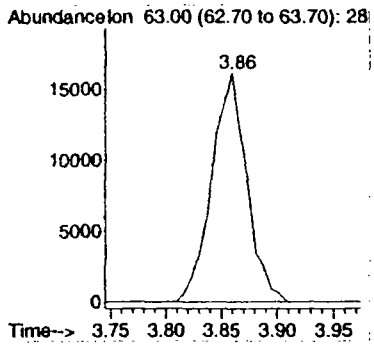
Ion	Ratio	Lower	Upper
84	100		
49	200.2	140.2	210.2
86	67.3	51.1	76.7

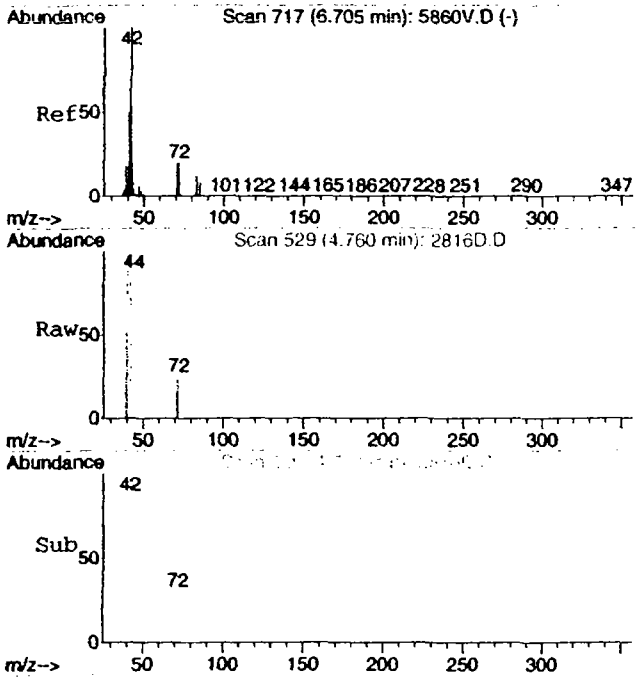




#13
1,1-Dichloroethane
Concen: 1.79 UG/L
RT: 3.86 min Scan# 403
Delta R.T. -0.00 min
Lab File: 2816D.D
Acq: 6 Sep 2007 12:54

Tgt Ion: 63 Resp: 35367

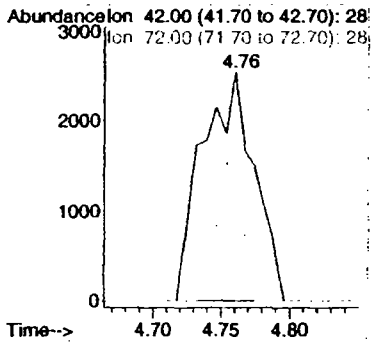


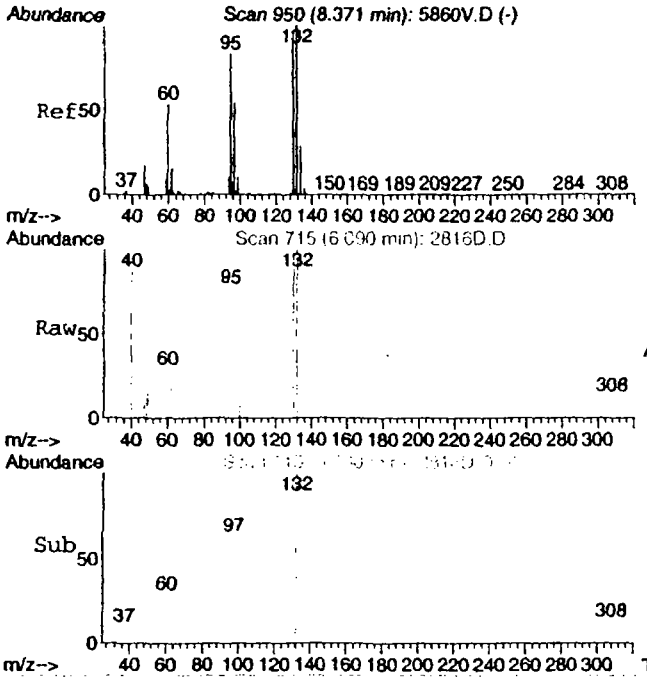


#17
Tetrahydrofuran
Concen: 1.64 UG/L
RT: 4.76 min Scan# 529
Delta R.T. 0.01 min
Lab File: 2816D.D
Acq: 6 Sep 2007 12:54

Tgt Ion: 42 Resp: 6745

Ion	Ratio	Lower	Upper
42	100		
72	32.7	24.5	36.7

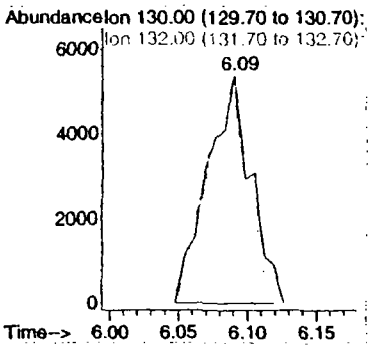




#27
Trichloroethene
Concen: 1.09 UG/L
RT: 6.09 min Scan# 715
Delta R.T. 0.01 min
Lab File: 2816D.D
Acq: 6 Sep 2007 12:54

Tgt Ion:130 Resp: 11759

Ion	Ratio	Lower	Upper
130	100		
132	92.1	82.0	123.0



Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\DATA\D090707\2845D.D Vial: 13
Acq On : 7 Sep 2007 13:28 Operator: REGI
Sample : A781267 LQ4602 Inst : GCMS #4
Misc : 9/7/07 Multiplr: 1.00
MS Integration Params: rteint2.p
Quant Time: Sep 07 13:44:41 2007 Quant Results File: DWD.RES

Quant Method : C:\MSDCHEM\1\METHODS\DWD.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Tue Sep 04 10:38:20 2007
Response via : Initial Calibration
DataAcq Meth : DWD

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) FLUOROBENZENE	5.68	96	329338	10.00	UG/L	0.00
38) 2-Bromo-1-chloropropane	7.96	77	140403	10.00	UG/L	0.00
System Monitoring Compounds						
21) Dibromofluoromethane	4.95	113	83897	10.18	UG/L	0.00
Spiked Amount 10.000			Recovery	=	101.80%	
23) 1,2-Dichloroethane-d4	5.30	65	103037	10.16	UG/L	0.00
Spiked Amount 10.000			Recovery	=	101.60%	
33) Toluene-d8	7.51	98	318858	9.35	UG/L	0.00
Spiked Amount 10.000			Recovery	=	93.50%	
51) 4-Bromofluorobenzene	10.67	174	102235	8.23	UG/L	0.00
Spiked Amount 10.000			Recovery	=	82.30%	
Target Compounds						Qvalue
8) Acetone	2.78	43	2221	1.24	UG/L	100
10) Methylene Chloride	3.18	84	2350	Below Cal		91
13) 1,1-Dichloroethane	3.86	63	30380	1.61	UG/L	100
17) Tetrahydrofuran	4.77	42	6664	1.70	UG/L #	52
27) Trichloroethene	6.08	130	11631	1.12	UG/L	85
35) trans-1,3-Dichloropropene	7.96	75	2898	0.24	UG/L	100

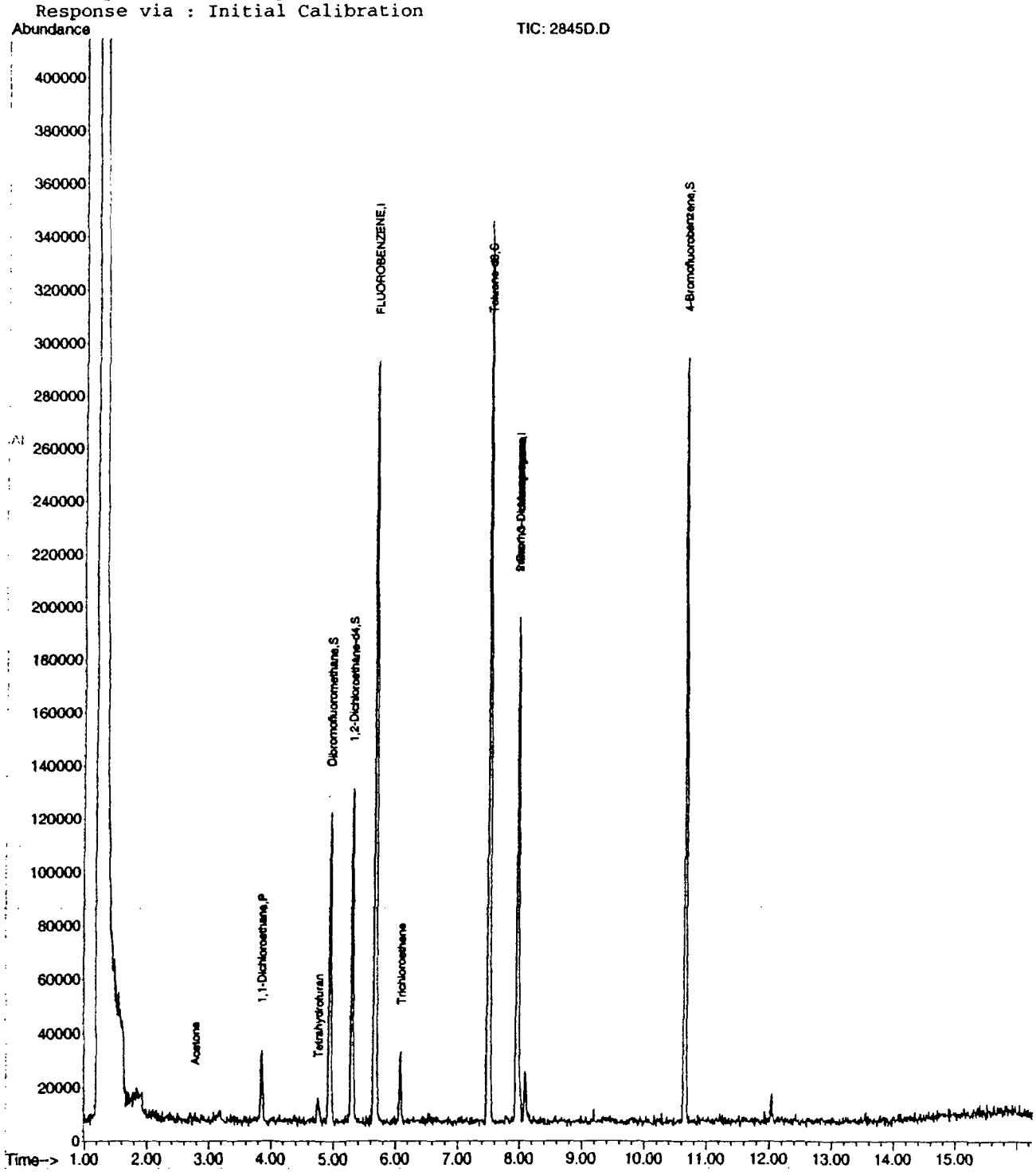
(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\DATA\D090707\2845D.D
Acq On : 7 Sep 2007 13:28
Sample : A781267 LQ4602
Misc : 9/7/07
MS Integration Params: rteint2.p
Quant Time: Sep 7 13:44 2007

Vial: 13
Operator: REGI
Inst : GCMS #4
Multiplr: 1.00
Quant Results File: DWD.RES

Method : C:\MSDCHEM\1\METHODS\DWD.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Tue Sep 04 10:38:20 2007
Response via : Initial Calibration



R524561 Heritage Environmental Services, LLC A781268

GC/MS VOA

Method EPA 524.2 REV. 4.1
Sample Description LQ4603
Submitter IDEM - OLQ
Instrument 345 Channel 1

Test Code O516.9.0
Analyst 1062 R. SHAMP
File 2817D.D Date/Time 06Sep07 13:21:00
Dilution Factor 1

CAS	PRM	Parameter	Concentration	RQL	Limit	Units	RT
NA	1807	REGULATED CONTAMINANTS					
71-43-2	151	BENZENE		BDL	0.50	UG/L	
56-23-5	217	CARBON TETRACHLORIDE		BDL	0.50	UG/L	
106-46-7	29	1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)		BDL	0.50	UG/L	
107-06-2	21	1,2-DICHLOROETHANE		BDL	0.50	UG/L	
75-35-4	8	1,1-DICHLOROETHENE		BDL	0.50	UG/L	
71-55-6	2	1,1,1-TRICHLOROETHANE		BDL	0.50	UG/L	
79-01-6	750	TRICHLOROETHENE	1.1		0.50	UG/L	
75-01-4	768	VINYL CHLORIDE		BDL	0.20	UG/L	
108-90-7	231	CHLOROBENZENE		BDL	0.50	UG/L	
95-50-1	20	1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)		BDL	0.50	UG/L	
156-60-5	746	TRANS-1,2-DICHLOROETHENE		BDL	0.50	UG/L	
156-59-2	246	CIS-1,2-DICHLOROETHENE		BDL	0.50	UG/L	
75-09-2	302	DICHLOROMETHANE (METHYLENE CHLORIDE)		BDL	0.50	UG/L	
78-87-5	23	1,2-DICHLOROPROPANE		BDL	0.50	UG/L	
100-41-4	349	ETHYL BENZENE		BDL	0.50	UG/L	
100-42-5	680	STYRENE		BDL	0.50	UG/L	
79-00-5	4	1,1,2-TRICHLOROETHANE		BDL	0.50	UG/L	
127-18-4	703	TETRACHLOROETHENE		BDL	0.50	UG/L	
108-88-3	724	TOLUENE		BDL	0.50	UG/L	
95-47-6	549	O-XYLENE		BDL	0.50	UG/L	
MPXYLENE	492	M/P-XYLENE		BDL	0.50	UG/L	
120-82-1	16	1,2,4-TRICHLOROBENZENE		BDL	0.50	UG/L	
NA	1809	UNREGULATED - MONITORING REQUIRED					
108-86-1	193	BROMOBENZENE		BDL	0.50	UG/L	
75-27-4	195	BROMODICHLOROMETHANE		BDL	0.50	UG/L	
75-25-2	197	BROMOFORM		BDL	0.50	UG/L	
74-83-9	198	BROMOMETHANE		BDL	0.50	UG/L	
124-48-1	233	CHLORODIBROMOMETHANE		BDL	0.50	UG/L	
75-00-3	234	CHLOROETHANE		BDL	0.50	UG/L	
67-66-3	235	CHLOROFORM		BDL	0.50	UG/L	
74-87-3	236	CHLOROMETHANE		BDL	0.50	UG/L	
95-49-8	807	2-CHLOROTOLUENE (O-CHLOROTOLUENE)		BDL	0.50	UG/L	
106-43-4	808	4-CHLOROTOLUENE (P-CHLOROTOLUENE)		BDL	0.50	UG/L	
74-95-3	296	DIBROMOMETHANE		BDL	0.50	UG/L	
541-73-1	26	1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)		BDL	0.50	UG/L	
75-34-3	7	1,1-DICHLOROETHANE	3.9		0.50	UG/L	
563-58-6	10	1,1-DICHLOROPROPENE		BDL	0.50	UG/L	
142-28-9	27	1,3-DICHLOROPROPANE		BDL	0.50	UG/L	
10061-02-6	747	TRANS-1,3-DICHLOROPROPENE		BDL	0.50	UG/L	
10061-01-5	247	CIS-1,3-DICHLOROPROPENE		BDL	0.50	UG/L	
594-20-7	33	2,2-DICHLOROPROPANE		BDL	0.50	UG/L	
630-20-6	1	1,1,1,2-TETRACHLOROETHANE		BDL	0.50	UG/L	
79-34-5	3	1,1,2,2-TETRACHLOROETHANE		BDL	0.50	UG/L	
96-18-4	14	1,2,3-TRICHLOROPROPANE		BDL	0.50	UG/L	

JK 9-10-07

JK 9-10-07

GC/MS VOA

CAS	PRM	Parameter	Concentration	RQL	Limit	Units	RT
NA	1806	MONITORED AT STATE'S DISCRETION					
74-97-5	194	BROMOCHLOROMETHANE		BDL	0.50	UG/L	
104-51-8	519	N-BUTYLBENZENE		BDL	0.50	UG/L	
75-71-8	300	DICHLORODIFLUOROMETHANE		BDL	0.50	UG/L	
75-69-4	372	TRICHLOROFLUOROMETHANE		BDL	0.50	UG/L	
87-68-3	398	HEXACHLOROBUTADIENE		BDL	0.50	UG/L	
98-82-8	432	ISOPROPYLBENZENE (CUMENE)		BDL	0.50	UG/L	
99-87-6	628	4-ISOPROPYLTOLUENE (P-ISOPROPYLTOLUENE)		BDL	0.50	UG/L	
91-20-3	493	NAPHTHALENE		BDL	0.50	UG/L	
103-65-1	532	N-PROPYLBENZENE		BDL	0.50	UG/L	
135-98-8	644	SEC-BUTYLBENZENE		BDL	0.50	UG/L	
98-06-6	702	TERT-BUTYLBENZENE		BDL	0.50	UG/L	
87-61-6	13	1,2,3-TRICHLOROBENZENE		BDL	0.50	UG/L	
95-63-6	17	1,2,4-TRIMETHYLBENZENE		BDL	0.50	UG/L	
108-67-8	25	1,3,5-TRIMETHYLBENZENE		BDL	0.50	UG/L	
106-93-4	18	1,2-DIBROMOETHANE (EDB)		BDL	0.50	UG/L	
96-12-8	19	1,2-DIBROMO-3-CHLOROPROPANE (DBCP)		BDL	0.50	UG/L	
1634-04-4	859	METHYL-T-BUTYL ETHER (MTBE)		BDL	0.50	UG/L	
	972	————————					
591-78-6	60	2-HEXANONE		BDL	2.0	UG/L	
79-46-9	67	2-NITROPROPANE		*			
67-64-1	99	ACETONE (2-PROPANONE)		BDL	4.0	UG/L	
78-93-3	52	2-BUTANONE		BDL	2.0	UG/L	
75-15-0	216	CARBON DISULFIDE		*			
	1804	...					
	971	SURROGATE RECOVERY					
	972	————————					
17060-07-0	301	DICHLOROETHANE-D4	105			% RECOVERY	
2037-26-5	726	TOLUENE-D8	91			% RECOVERY	
460-00-4	196	4-BROMOFLUOROBENZENE	84			% RECOVERY	
	1131	TENTATIVELY IDENTIFIED COMPOUNDS					
	3320	NONE DETECTED					

Comment Note: * Compound searched for but not detected. Standard was unavailable to determine retention time and detection limit. Note: Sample was rerun to confirm target compounds.

Qualifiers

* See Note for Parameter

BDL Below Detection Limit

Comments to Laboratory (do not record)

4-HCL VIALS

Note the additional IDEM analytes for drinking water:

CS2, MEK, Acetone, 2-Nitropropane, 2-Hexanone

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\DATA\D090607\2817D.D Vial: 13
Acq On : 6 Sep 2007 13:21 Operator: REGI
Sample : A781268 LQ4603 Inst : GCMS #4
Misc : 9/8/07 Multiplr: 1.00
MS Integration Params: rteint2.p
Quant Time: Sep 06 13:37:47 2007 Quant Results File: DWD.RES

Quant Method : C:\MSDCHEM\1\METHODS\DWD.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Tue Sep 04 10:38:20 2007
Response via : Initial Calibration
DataAcq Meth : DWD

TC0378

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) FLUOROBENZENE	5.68	96	356643	10.00 UG/L	0.00
38) 2-Bromo-1-chloropropane	7.96	77	145854	10.00 UG/L	0.00
System Monitoring Compounds					
21) Dibromofluoromethane	4.95	113	91205	10.22 UG/L	0.00
Spiked Amount 10.000			Recovery	= 102.20%	
23) 1,2-Dichloroethane-d4	5.30	65	114989	10.47 UG/L	0.00
Spiked Amount 10.000			Recovery	= 104.70%	
33) Toluene-d8	7.51	98	337813	9.14 UG/L	0.00
Spiked Amount 10.000			Recovery	= 91.40%	
51) 4-Bromofluorobenzene	10.66	174	107776	8.35 UG/L	0.00
Spiked Amount 10.000			Recovery	= 83.50%	
Target Compounds					Qvalue
8) ~~Acetone~~	2.77	43	4231	1.64 UG/L	97
9) ~~1,1-DICHLOROETHENE~~	2.71	96	1954	0.20 UG/L	100
10) ~~Methylene Chloride~~	3.16	84	3609	Below Cal #	76
13) ~~1,1~~-Dichloroethane 3.9	3.86	63	80006	3.92 UG/L	100
15) ~~cis-1,2-Dichloroethene~~	4.44	96	4237	0.36 UG/L	85
17) ~~Tetrahydrofuran~~	4.75	42	8664	2.04 UG/L #	74
27) ~~T~~richloroethene 1.1	6.08	130	12034	1.07 UG/L	87
35) trans-~~1,3-Di~~chloropropene	7.97	75	3604	0.27 UG/L	100
55) n-~~Propylben~~zene	10.66	92	3505	0.64 UG/L #	1

NO MCS

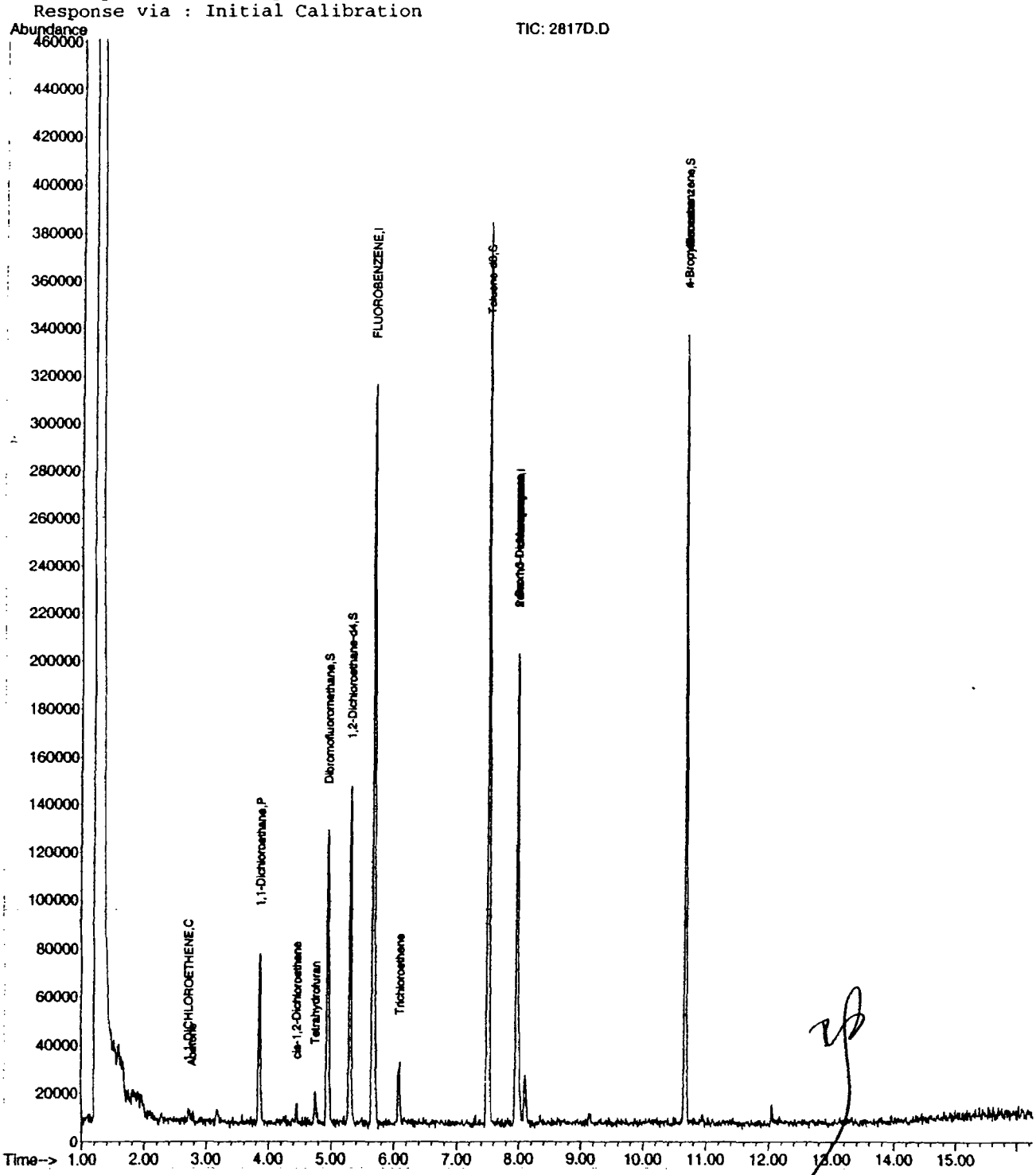
(#) = qualifier out of range (m) = manual integration
2817D.D DWD.M Thu Sep 06 13:37:49 2007

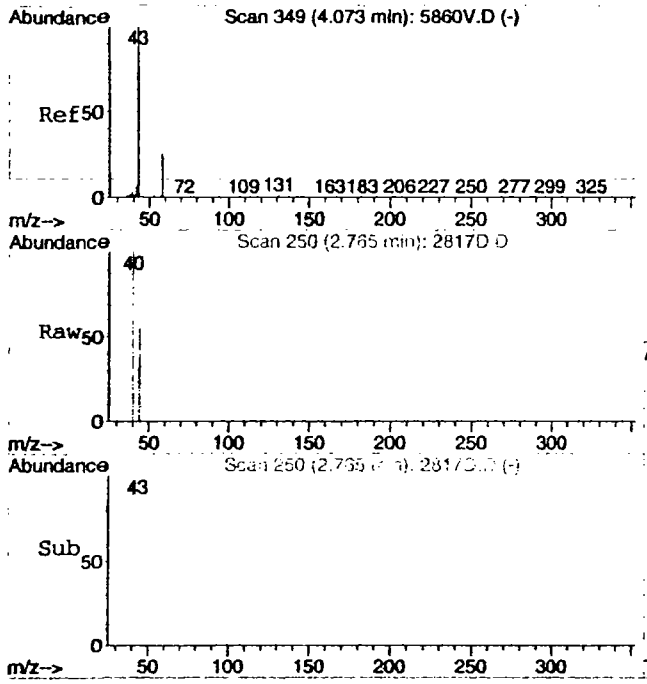
Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\DATA\D090607\2817D.D
Acq On : 6 Sep 2007 13:21
Sample : A781268 LQ4603
Misc : 9/8/07
MS Integration Params: rteint2.p
Quant Time: Sep 6 13:37 2007

Vial: 13
Operator: REGI
Inst : GCMS #4
Multiplr: 1.00
Quant Results File: DWD.RES

Method : C:\MSDCHEM\1\METHODS\DWD.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Tue Sep 04 10:38:20 2007
Response via : Initial Calibration

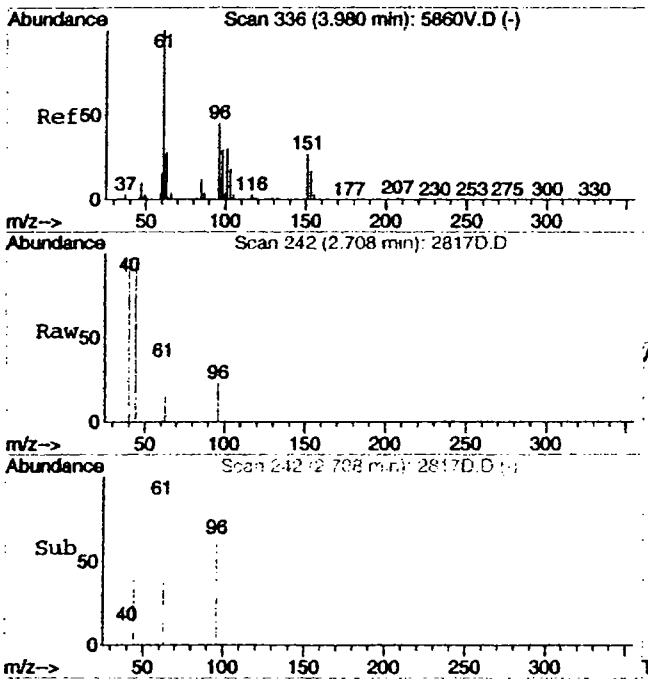




#8
Acetone
Concen: 1.64 UG/L
RT: 2.77 min Scan# 250
Delta R.T. -0.01 min
Lab File: 2817D.D
Acq: 6 Sep 2007 13:21

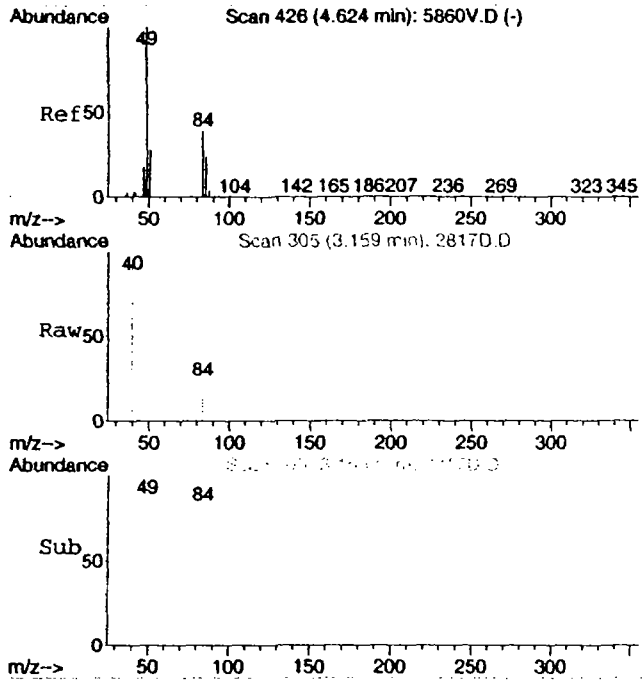
Tgt Ion: 43 Resp: 4231

Ion	Ratio	Lower	Upper
43	100		
58	30.7	23.1	34.7



#9
1,1-DICHLOROETHENE
Concen: 0.20 UG/L
RT: 2.71 min Scan# 242
Delta R.T. -0.01 min
Lab File: 2817D.D
Acq: 6 Sep 2007 13:21

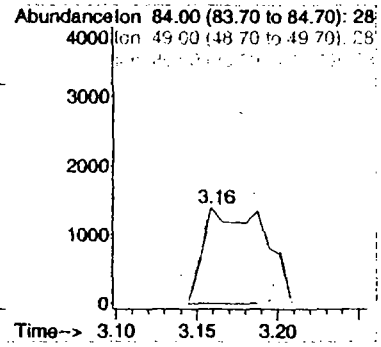
Tgt Ion: 96 Resp: 1954

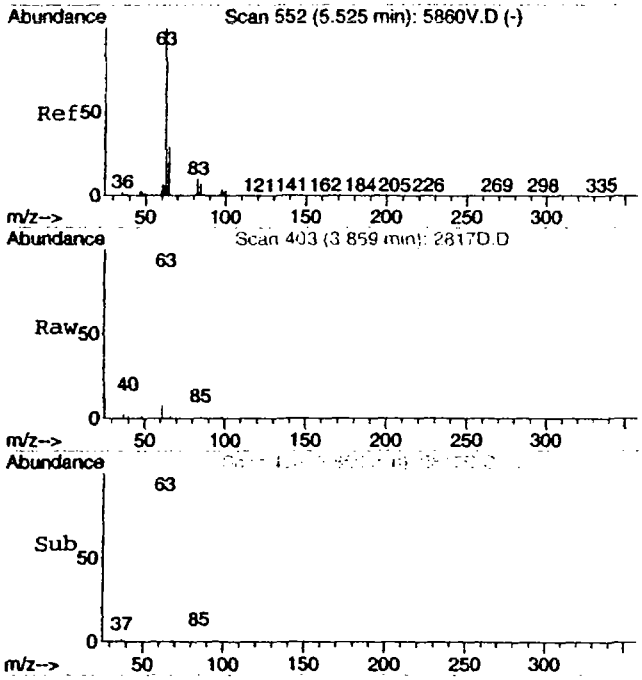


#10
Methylene Chloride
Concen: Below Cal
RT: 3.16 min Scan# 305
Delta R.T. -0.01 min
Lab File: 2817D.D
Acq: 6 Sep 2007 13:21

Tgt Ion: 84 Resp: 3609

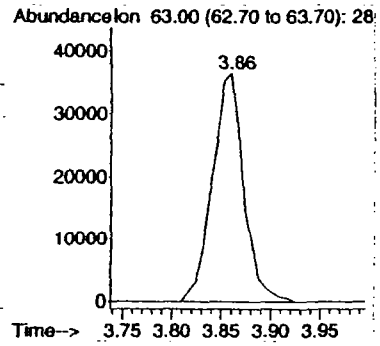
Ion	Ratio	Lower	Upper
84	100		
49	143.1	140.2	210.2
86	42.4	51.1	76.7#

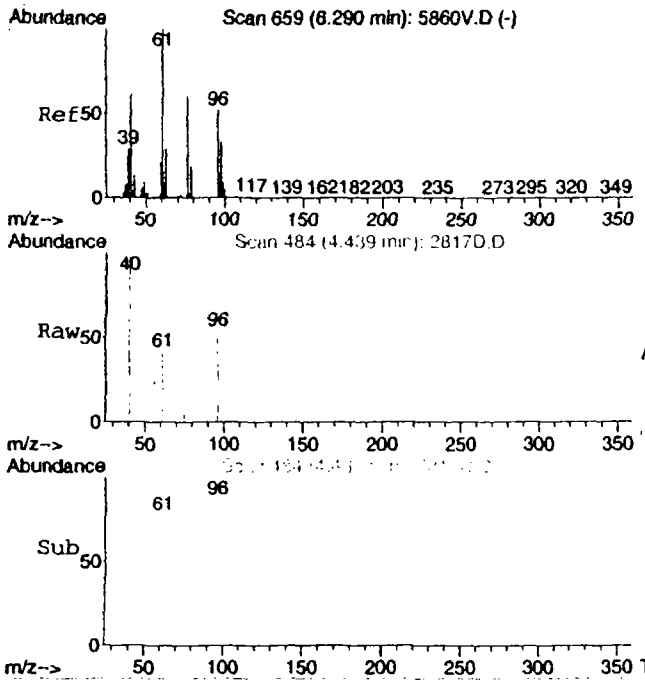




#13
1,1-Dichloroethane
Concen: 3.92 UG/L
RT: 3.86 min Scan# 403
Delta R.T. -0.00 min
Lab File: 2817D.D
Acq: 6 Sep 2007 13:21

Tgt Ion: 63 Resp: 80006

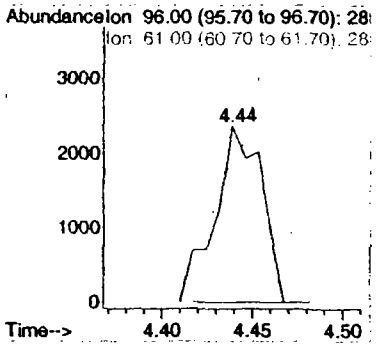


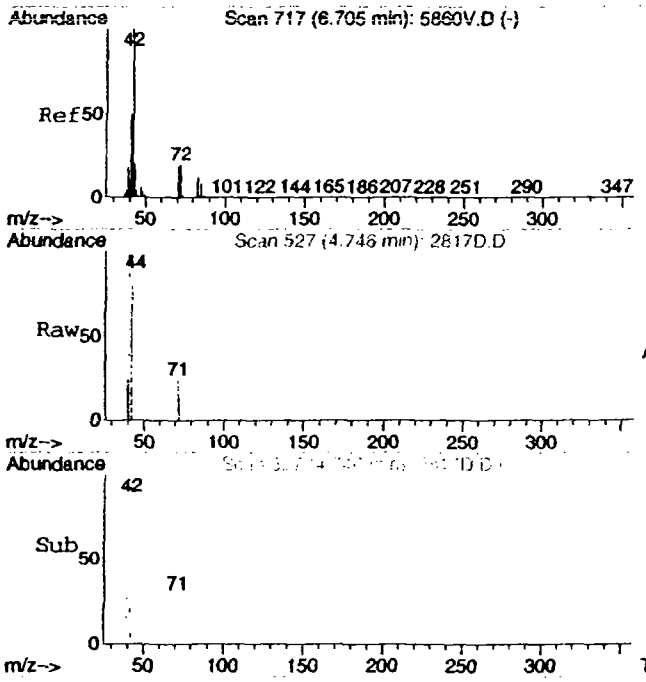


#15
cis-1,2-Dichloroethene
Concen: 0.36 UG/L
RT: 4.44 min Scan# 484
Delta R.T. -0.01 min
Lab File: 2817D.D
Acq: 6 Sep 2007 13:21

Tgt Ion: 96 Resp: 4237

Ion	Ratio	Lower	Upper
96	100		
61	133.0	121.8	182.6

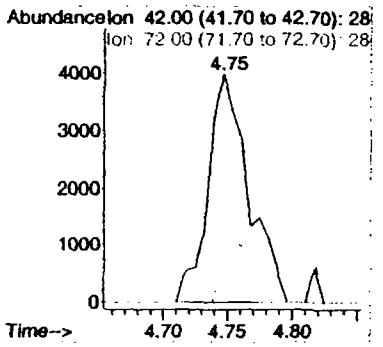


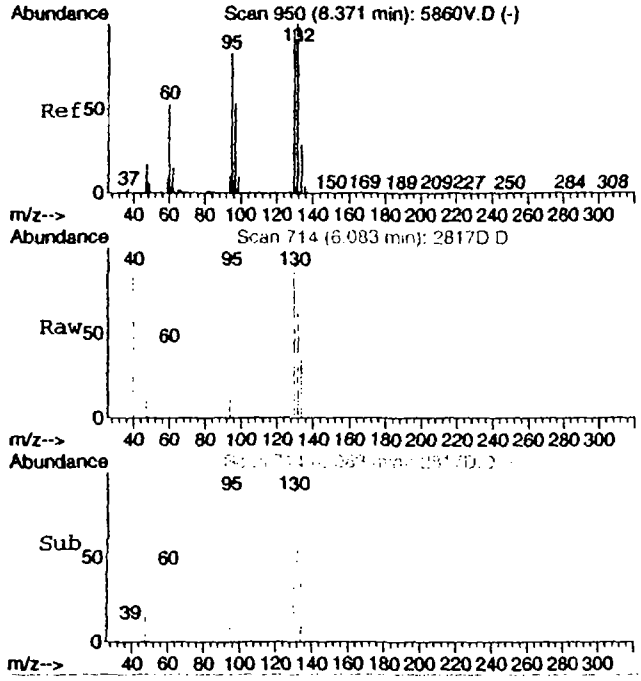


#17
Tetrahydrofuran
Concen: 2.04 UG/L
RT: 4.75 min Scan# 527
Delta R.T. -0.00 min
Lab File: 2817D.D
Acq: 6 Sep 2007 13:21

Tgt Ion: 42 Resp: 8664

Ion	Ratio	Lower	Upper
42	100		
72	16.1	24.5	36.7#

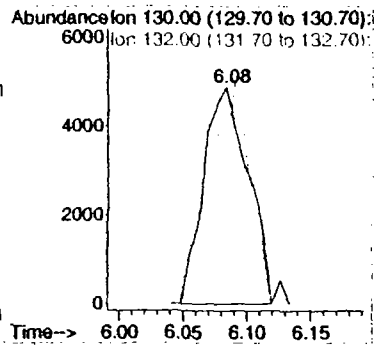


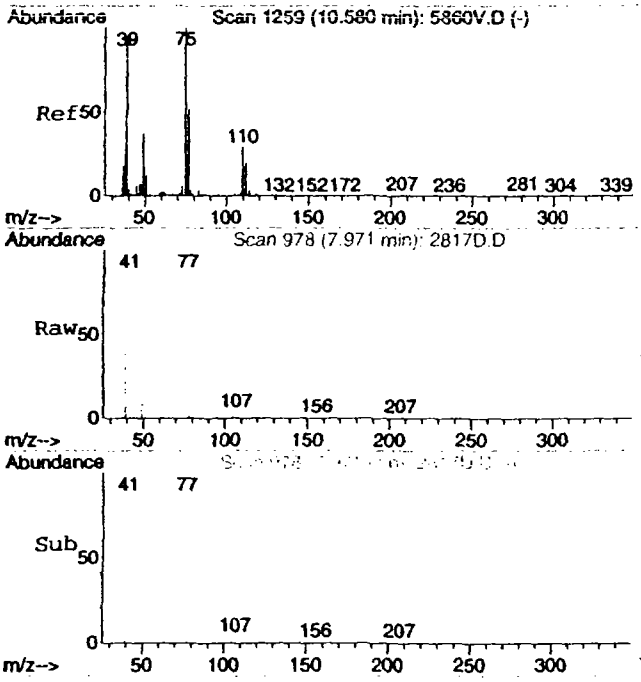


#27
Trichloroethene
Concen: 1.07 UG/L
RT: 6.08 min Scan# 714
Delta R.T. 0.01 min
Lab File: 2817D.D
Acq: 6 Sep 2007 13:21

Tgt Ion:130 Resp: 12034

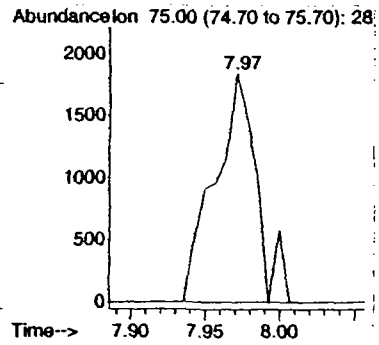
Ion	Ratio	Lower	Upper
130	100		
132	89.3	82.0	123.0

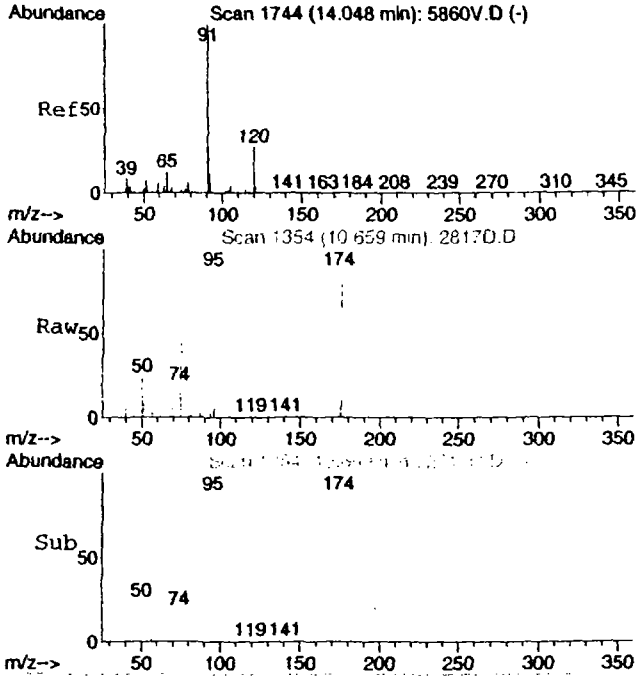




#35
trans-1,3-Dichloropropene
Concen: 0.27 UG/L
RT: 7.97 min Scan# 978
Delta R.T. 0.11 min
Lab File: 2817D.D
Acq: 6 Sep 2007 13:21

Tgt Ion: 75 Resp: 3604

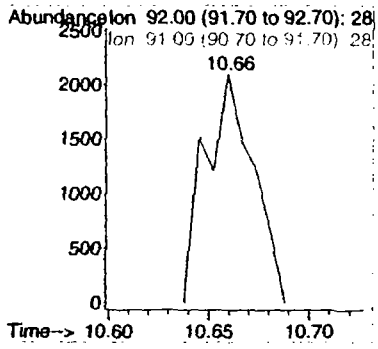




#55
n-Propylbenzene
Concen: 0.64 UG/L
RT: 10.66 min Scan# 1354
Delta R.T. -0.27 min
Lab File: 2817D.D
Acq: 6 Sep 2007 13:21

Tgt Ion: 92 Resp: 3505

Ion	Ratio	Lower	Upper
92	100		
91	0.0	715.8	1073.6#



Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\DATA\D090707\2846D.D Vial: 14
Acq On : 7 Sep 2007 13:55 Operator: REGI
Sample : A781268 LQ4603 Inst : GCMS #4
Misc : 9/7/07 Multiplr: 1.00
MS Integration Params: rteint2.p
Quant Time: Sep 07 14:11:52 2007 Quant Results File: DWD.RES

Quant Method : C:\MSDCHEM\1\METHODS\DWD.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Tue Sep 04 10:38:20 2007
Response via : Initial Calibration
DataAcq Meth : DWD

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) FLUOROBENZENE	5.67	96	333118	10.00	UG/L	0.00
38) 2-Bromo-1-chloropropane	7.96	77	140488	10.00	UG/L	0.00
System Monitoring Compounds						
21) Dibromofluoromethane	4.95	113	88244	10.58	UG/L	0.00
Spiked Amount 10.000			Recovery	=	105.80%	
23) 1,2-Dichloroethane-d4	5.30	65	108865	10.61	UG/L	0.00
Spiked Amount 10.000			Recovery	=	106.10%	
33) Toluene-d8	7.51	98	322008	9.33	UG/L	0.00
Spiked Amount 10.000			Recovery	=	93.30%	
51) 4-Bromofluorobenzene	10.67	174	111559	8.97	UG/L	0.00
Spiked Amount 10.000			Recovery	=	89.70%	

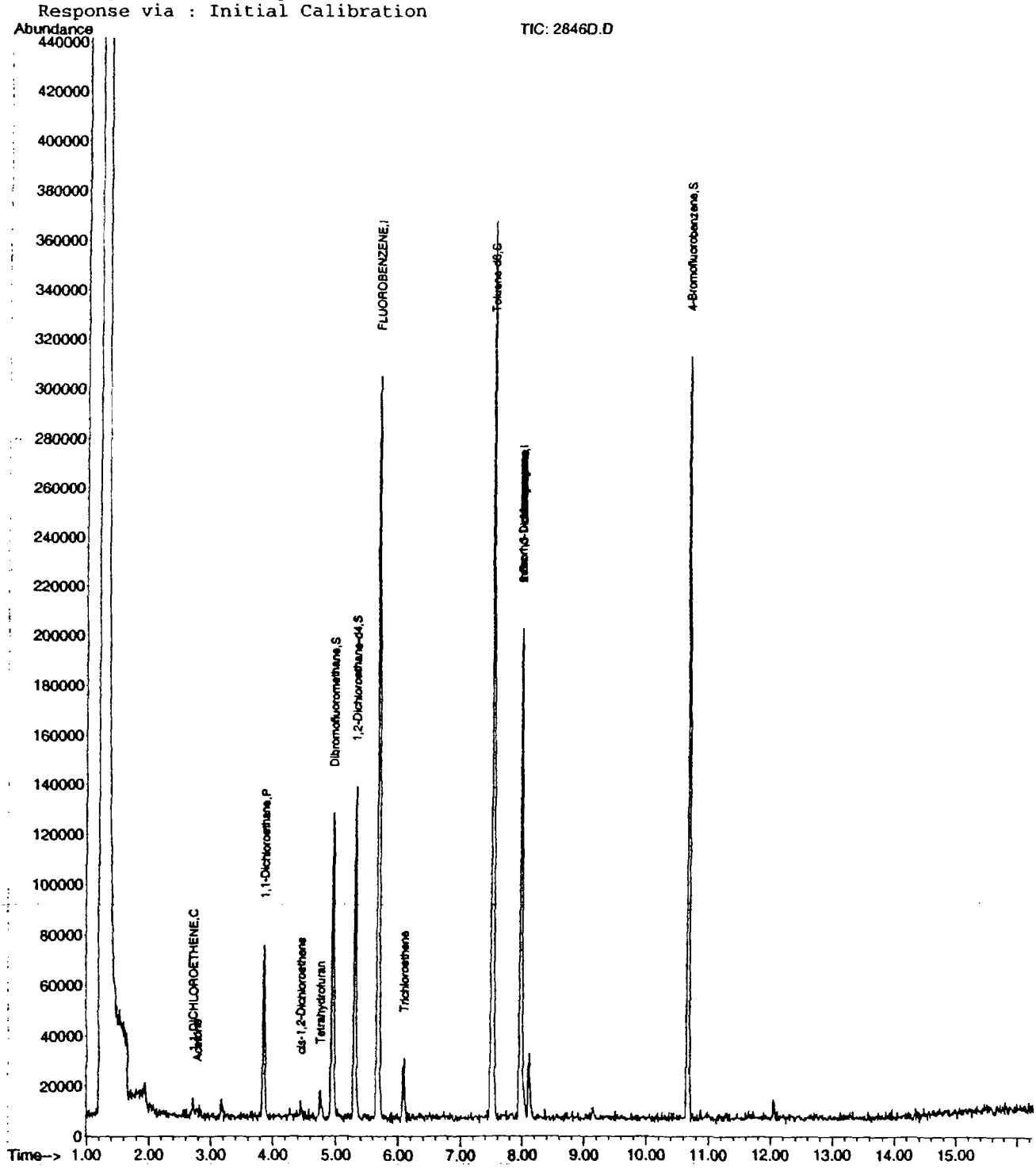
Target Compounds						Qvalue
8) Acetone	2.78	43	3959	1.64	UG/L #	67
9) 1,1-DICHLOROETHENE	2.72	96	2678	0.30	UG/L	100
10) Methylene Chloride	3.17	84	2934	Below Cal	#	88
13) 1,1-Dichloroethane	3.86	63	77716	4.07	UG/L	100
15) cis-1,2-Dichloroethene	4.44	96	3382	0.31	UG/L	85
17) Tetrahydrofuran	4.75	42	9182	2.31	UG/L #	72
27) Trichloroethene	6.08	130	9578	0.91	UG/L	89
35) trans-1,3-Dichloropropene	7.96	75	2625	0.21	UG/L	100

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

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\DATA\D090707\2846D.D Vial: 14
Acq On : 7 Sep 2007 13:55 Operator: REGI
Sample : A781268 LQ4603 Inst : GCMS #4
Misc : 9/7/07 Multiplr: 1.00
MS Integration Params: rteint2.p
Quant Time: Sep 7 14:11 2007 Quant Results File: DWD.RES

Method : C:\MSDCHEM\1\METHODS\DWD.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Tue Sep 04 10:38:20 2007
Response via : Initial Calibration



R524561 Heritage Environmental Services, LLC A781269

GC/MS VOA

Method EPA 524.2 REV. 4.1
Sample Description LQ4604
Submitter IDEM - OLQ
Instrument 345 Channel 1

Test Code O516.9.0
Analyst 1062 R. SHAMP
File 2818D.D Date/Time 06Sep07 13:48:00
Dilution Factor 1

CAS	PRM	Parameter	Concentration	RQL	Limit	Units	RT
NA	1807	REGULATED CONTAMINANTS					
71-43-2	151	BENZENE		BDL	0.50	UG/L	
56-23-5	217	CARBON TETRACHLORIDE		BDL	0.50	UG/L	
106-46-7	29	1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)		BDL	0.50	UG/L	
107-06-2	21	1,2-DICHLOROETHANE		BDL	0.50	UG/L	
75-35-4	8	1,1-DICHLOROETHENE		BDL	0.50	UG/L	
71-55-6	2	1,1,1-TRICHLOROETHANE		BDL	0.50	UG/L	
79-01-6	750	TRICHLOROETHENE		BDL	0.50	UG/L	
75-01-4	768	VINYL CHLORIDE		BDL	0.20	UG/L	
108-90-7	231	CHLOROBENZENE		BDL	0.50	UG/L	
95-50-1	20	1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)		BDL	0.50	UG/L	
156-60-5	746	TRANS-1,2-DICHLOROETHENE		BDL	0.50	UG/L	
156-59-2	246	CIS-1,2-DICHLOROETHENE		BDL	0.50	UG/L	
75-09-2	302	DICHLOROMETHANE (METHYLENE CHLORIDE)		BDL	0.50	UG/L	
78-87-5	23	1,2-DICHLOROPROPANE		BDL	0.50	UG/L	
100-41-4	349	ETHYL BENZENE		BDL	0.50	UG/L	
100-42-5	680	STYRENE		BDL	0.50	UG/L	
79-00-5	4	1,1,2-TRICHLOROETHANE		BDL	0.50	UG/L	
127-18-4	703	TETRACHLOROETHENE		BDL	0.50	UG/L	
108-88-3	724	TOLUENE		BDL	0.50	UG/L	
95-47-6	549	O-XYLENE		BDL	0.50	UG/L	
MPXYLENE	492	M/P-XYLENE		BDL	0.50	UG/L	
120-82-1	16	1,2,4-TRICHLOROBENZENE		BDL	0.50	UG/L	
NA	1809	UNREGULATED - MONITORING REQUIRED					
108-86-1	193	BROMOBENZENE		BDL	0.50	UG/L	
75-27-4	195	BROMODICHLOROMETHANE		BDL	0.50	UG/L	
75-25-2	197	BROMOFORM		BDL	0.50	UG/L	
74-83-9	198	BROMOMETHANE		BDL	0.50	UG/L	
124-48-1	233	CHLORODIBROMOMETHANE		BDL	0.50	UG/L	
75-00-3	234	CHLOROETHANE		BDL	0.50	UG/L	
67-66-3	235	CHLOROFORM		BDL	0.50	UG/L	
74-87-3	236	CHLOROMETHANE		BDL	0.50	UG/L	
95-49-8	807	2-CHLOROTOLUENE (O-CHLOROTOLUENE)		BDL	0.50	UG/L	
106-43-4	808	4-CHLOROTOLUENE (P-CHLOROTOLUENE)		BDL	0.50	UG/L	
74-95-3	296	DIBROMOMETHANE		BDL	0.50	UG/L	
541-73-1	26	1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)		BDL	0.50	UG/L	
75-34-3	7	1,1-DICHLOROETHANE		BDL	0.50	UG/L	
563-58-6	10	1,1-DICHLOROPROPENE		BDL	0.50	UG/L	
142-28-9	27	1,3-DICHLOROPROPANE		BDL	0.50	UG/L	
10061-01-5	247	CIS-1,3-DICHLOROPROPENE		BDL	0.50	UG/L	
10061-02-6	747	TRANS-1,3-DICHLOROPROPENE		BDL	0.50	UG/L	
594-20-7	33	2,2-DICHLOROPROPANE		BDL	0.50	UG/L	
630-20-6	1	1,1,1,2-TETRACHLOROETHANE		BDL	0.50	UG/L	
79-34-5	3	1,1,2,2-TETRACHLOROETHANE		BDL	0.50	UG/L	
96-18-4	14	1,2,3-TRICHLOROPROPANE		BDL	0.50	UG/L	

9-10-07

9-10-07

GC/MS VOA

CAS	PRM	Parameter	Concentration	RQL	Limit	Units	RT
NA	1806	MONITORED AT STATE'S DISCRETION					
74-97-5	194	BROMOCHLOROMETHANE		BDL	0.50	UG/L	
104-51-8	519	N-BUTYLBENZENE		BDL	0.50	UG/L	
75-71-8	300	DICHLORODIFLUOROMETHANE		BDL	0.50	UG/L	
75-69-4	372	TRICHLOROFLUOROMETHANE		BDL	0.50	UG/L	
87-68-3	398	HEXACHLOROBUTADIENE		BDL	0.50	UG/L	
98-82-8	432	ISOPROPYLBENZENE (CUMENE)		BDL	0.50	UG/L	
99-87-6	628	4-ISOPROPYLTOLUENE (P-ISOPROPYLTOLUENE)		BDL	0.50	UG/L	
91-20-3	493	NAPHTHALENE		BDL	0.50	UG/L	
103-65-1	532	N-PROPYLBENZENE		BDL	0.50	UG/L	
135-98-8	644	SEC-BUTYLBENZENE		BDL	0.50	UG/L	
98-06-6	702	TERT-BUTYLBENZENE		BDL	0.50	UG/L	
87-61-6	13	1,2,3-TRICHLOROBENZENE		BDL	0.50	UG/L	
95-63-6	17	1,2,4-TRIMETHYLBENZENE		BDL	0.50	UG/L	
108-67-8	25	1,3,5-TRIMETHYLBENZENE		BDL	0.50	UG/L	
106-93-4	18	1,2-DIBROMOETHANE (EDB)		BDL	0.50	UG/L	
96-12-8	19	1,2-DIBROMO-3-CHLOROPROPANE (DBCP)		BDL	0.50	UG/L	
1634-04-4	859	METHYL-T-BUTYL ETHER (MTBE)		BDL	0.50	UG/L	
	972	----------					
591-78-6	60	2-HEXANONE		BDL	2.0	UG/L	
79-46-9	67	2-NITROPROPANE		*			
67-64-1	99	ACETONE (2-PROPANONE)		BDL	4.0	UG/L	
78-93-3	52	2-BUTANONE		BDL	2.0	UG/L	
75-15-0	216	CARBON DISULFIDE		*			
	1804	...					
	971	SURROGATE RECOVERY					
	972	----------					
17060-07-0	301	DICHLOROETHANE-D4	103			% RECOVERY	
2037-26-5	726	TOLUENE-D8	94			% RECOVERY	
460-00-4	196	4-BROMOFLUOROBENZENE	93			% RECOVERY	
	1131	TENTATIVELY IDENTIFIED COMPOUNDS					
	3320	NONE DETECTED					

Comment Note: * Compound searched for but not detected. Standard was unavailable to determine retention time and detection limit.

Qualifiers

* See Note for Parameter

BDL Below Detection Limit

Comments to Laboratory (do not record)

4-HCL VIALS

Note the additional IDEM analytes for drinking water:

CS2, MEK, Acetone, 2-Nitropropane, 2-Hexanone

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\DATA\D090607\2818D.D Vial: 14
Acq On : 6 Sep 2007 13:48 Operator: REGI
Sample : A781269 LQ4604 Inst : GCMS #4
Misc : 9/8/07 Multiplr: 1.00
MS Integration Params: rteint2.p
Quant Time: Sep 06 14:05:00 2007 Quant Results File: DWD.RES

Quant Method : C:\MSDCHEM\1\METHODS\DWD.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Tue Sep 04 10:38:20 2007
Response via : Initial Calibration
DataAcq Meth : DWD

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) FLUOROBENZENE	5.68	96	339103	10.00 UG/L	0.00
38) 2-Bromo-1-chloropropane	7.96	77	134508	10.00 UG/L	0.00
System Monitoring Compounds					
21) Dibromofluoromethane	4.95	113	88820	10.46 UG/L	0.00
Spiked Amount 10.000			Recovery	= 104.60%	
23) 1,2-Dichloroethane-d4	5.30	65	107775	10.32 UG/L	0.00
Spiked Amount 10.000			Recovery	= 103.20%	
33) Toluene-d8	7.51	98	329783	9.39 UG/L	0.00
Spiked Amount 10.000			Recovery	= 93.90%	
51) 4-Bromofluorobenzene	10.67	174	110637	9.29 UG/L	0.00
Spiked Amount 10.000			Recovery	= 92.90%	
Target Compounds					Qvalue
8) Acetone	2.77	43	5660	2.02 UG/L	99
10) Methylene Chloride	3.17	84	3499	Below Cal #	79
14) 2-Butanone	4.47	72	584	0.44 UG/L	83
17) Tetrahydrofuran	4.75	42	7273	1.80 UG/L #	87
35) trans-1,3-Dichloropropene	7.99	75	2728	0.22 UG/L	100

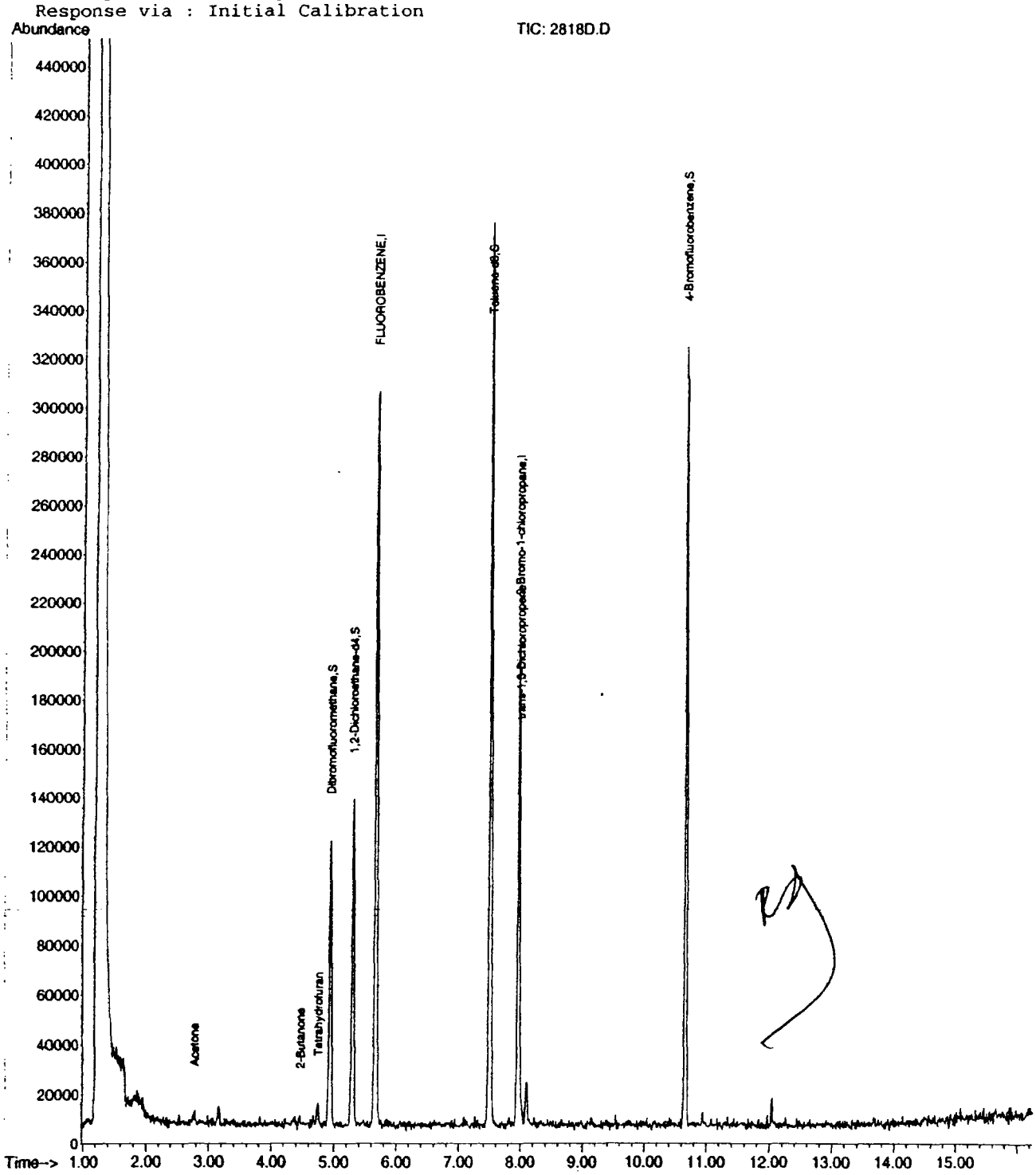
NO TICS

(#) = qualifier out of range (m) = manual integration
2818D.D DWD.M Thu Sep 06 14:05:01 2007

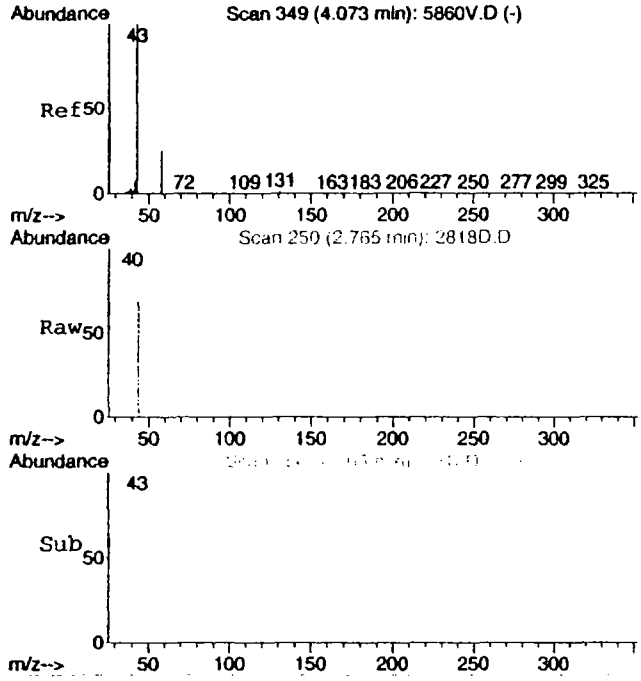
Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\DATA\D090607\2818D.D Vial: 14
Acq On : 6 Sep 2007 13:48 Operator: REGI
Sample : A781269 LQ4604 Inst : GCMS #4
Misc : 9/8/07 Multiplr: 1.00
MS Integration Params: rteint2.p
Quant Time: Sep 6 14:05 2007 Quant Results File: DWD.RES

Method : C:\MSDCHEM\1\METHODS\DWD.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Tue Sep 04 10:38:20 2007
Response via : Initial Calibration



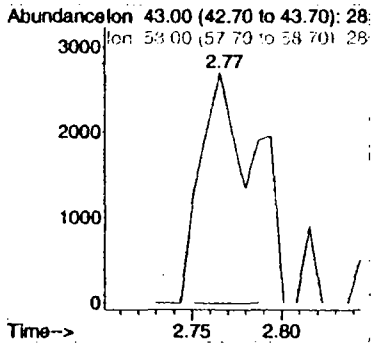
2818D.D DWD.M Thu Sep 06 14:05:01 2007 Page 2

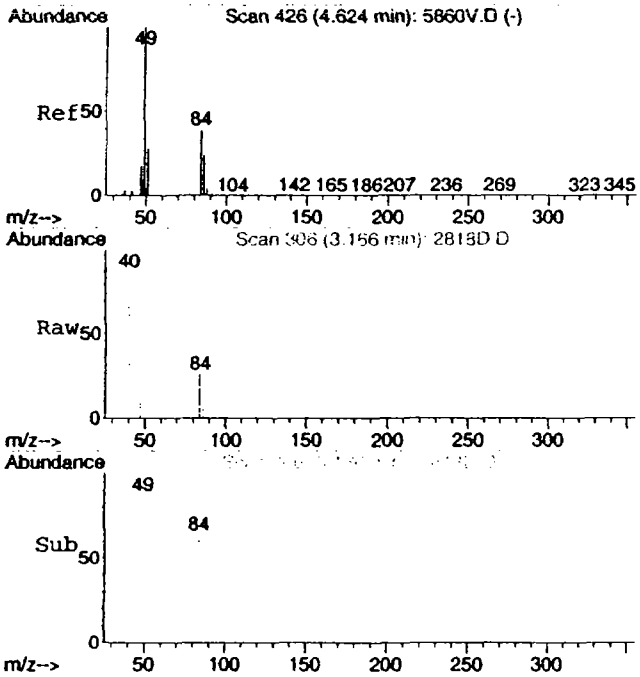


#8
Acetone
Concen: 2.02 UG/L
RT: 2.77 min Scan# 250
Delta R.T. -0.01 min
Lab File: 2818D.D
Acq: 6 Sep 2007 13:48

Tgt Ion: 43 Resp: 5660

Ion	Ratio	Lower	Upper
43	100		
58	29.4	23.1	34.7

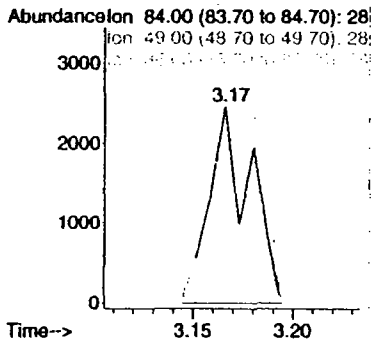


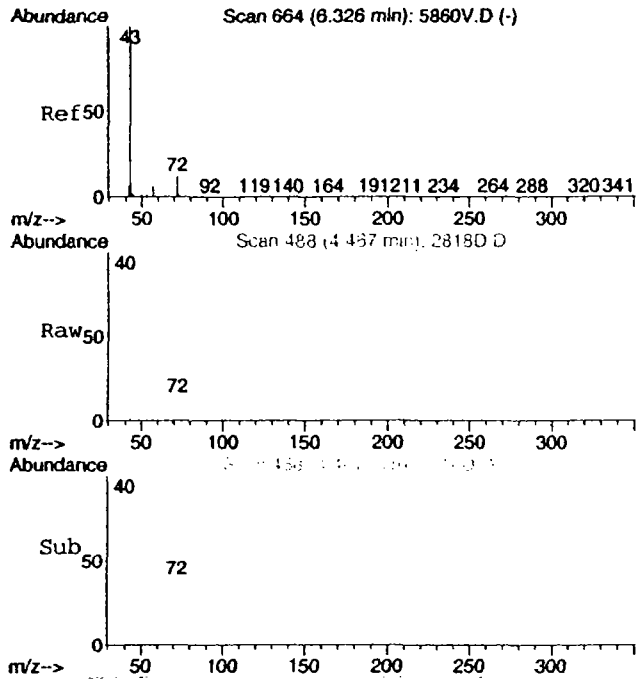


#10
Methylene Chloride
Concen: Below Cal
RT: 3.17 min Scan# 306
Delta R.T. -0.01 min
Lab File: 2818D.D
Acq: 6 Sep 2007 13:48

Tgt Ion: 84 Resp: 3499

Ion	Ratio	Lower	Upper
84	100		
49	135.8	140.2	210.2#
86	65.0	51.1	76.7

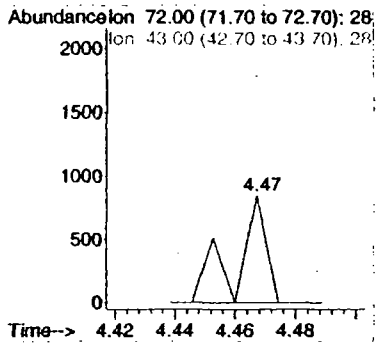


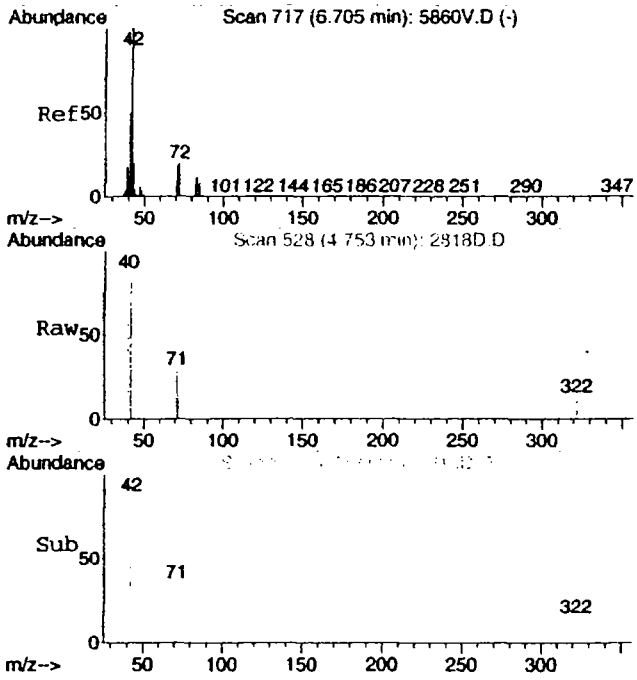


#14
2-Butanone
Concen: 0.44 UG/L
RT: 4.47 min Scan# 488
Delta R.T. -0.01 min
Lab File: 2818D.D
Acq: 6 Sep 2007 13:48

Tgt Ion: 72 Resp: 584

Ion	Ratio	Lower	Upper
72	100		
43	510.8	449.0	673.4

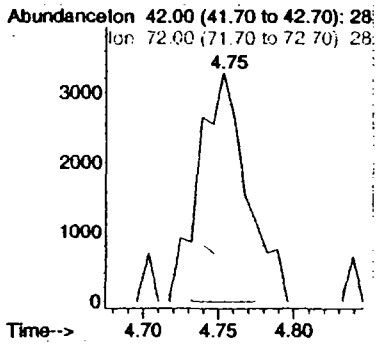


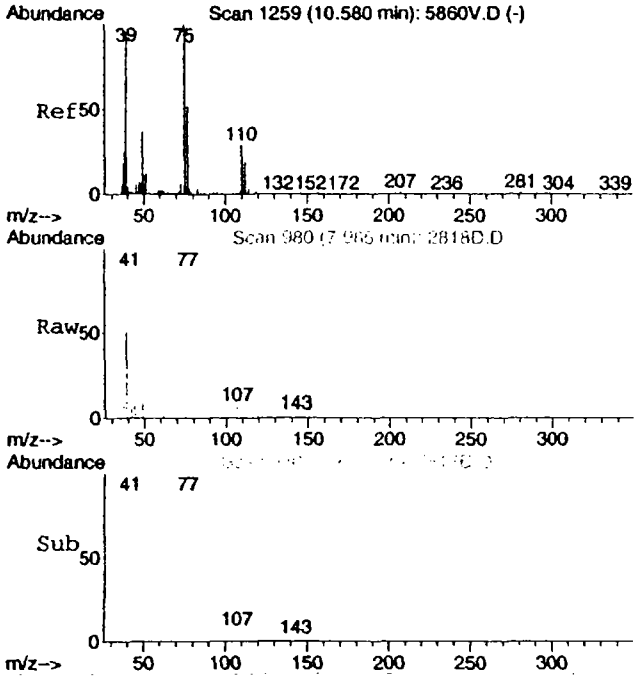


#17
Tetrahydrofuran
Concen: 1.80 UG/L
RT: 4.75 min Scan# 528
Delta R.T. 0.01 min
Lab File: 2818D.D
Acq: 6 Sep 2007 13:48

Tgt Ion: 42 Resp: 7273

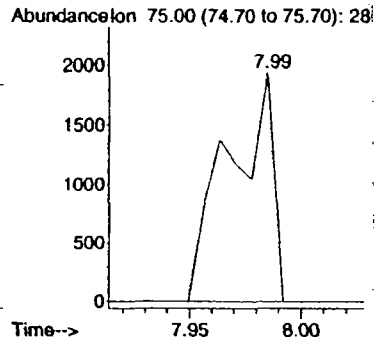
Ion	Ratio	Lower	Upper
42	100		
72	23.5	24.5	36.7#





#35
trans-1,3-Dichloropropene
Concen: 0.22 UG/L
RT: 7.99 min Scan# 980
Delta R.T. 0.13 min
Lab File: 2818D.D
Acq: 6 Sep 2007 13:48

Tgt Ion: 75 Resp: 2728



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R524561 Heritage Environmental Services, LLC A781270

GC/MS VOA

Method EPA 524.2 REV. 4.1 **Test Code** O516.9.0
Sample Description LQ4605 Analyst 1062 R. SHAMP
Submitter IDEM - OLQ File 2819D.D Date/Time 06Sep07 14:16:00
Instrument 345 Channel 1 Dilution Factor 1

CAS	PRM	Parameter	Concentration	RQL	Limit	Units	RT
NA	1807	REGULATED CONTAMINANTS					
71-43-2	151	BENZENE		BDL	0.50	UG/L	
56-23-5	217	CARBON TETRACHLORIDE		BDL	0.50	UG/L	
106-46-7	29	1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)		BDL	0.50	UG/L	
107-06-2	21	1,2-DICHLOROETHANE		BDL	0.50	UG/L	
75-35-4	8	1,1-DICHLOROETHENE		BDL	0.50	UG/L	
71-55-6	2	1,1,1-TRICHLOROETHANE		BDL	0.50	UG/L	
79-01-6	750	TRICHLOROETHENE		BDL	0.50	UG/L	
75-01-4	768	VINYL CHLORIDE		BDL	0.20	UG/L	
108-90-7	231	CHLOROBENZENE		BDL	0.50	UG/L	
95-50-1	20	1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)		BDL	0.50	UG/L	
156-60-5	746	TRANS-1,2-DICHLOROETHENE		BDL	0.50	UG/L	
156-59-2	246	CIS-1,2-DICHLOROETHENE		BDL	0.50	UG/L	
75-09-2	302	DICHLOROMETHANE (METHYLENE CHLORIDE)		BDL	0.50	UG/L	
78-87-5	23	1,2-DICHLOROPROPANE		BDL	0.50	UG/L	
100-41-4	349	ETHYL BENZENE		BDL	0.50	UG/L	
100-42-5	680	STYRENE		BDL	0.50	UG/L	
79-00-5	4	1,1,2-TRICHLOROETHANE		BDL	0.50	UG/L	
127-18-4	703	TETRACHLOROETHENE		BDL	0.50	UG/L	
108-88-3	724	TOLUENE		BDL	0.50	UG/L	
95-47-6	549	O-XYLENE		BDL	0.50	UG/L	
MPXYLENE	492	M/P-XYLENE		BDL	0.50	UG/L	
120-82-1	16	1,2,4-TRICHLOROBENZENE		BDL	0.50	UG/L	
NA	1809	UNREGULATED - MONITORING REQUIRED					
108-86-1	193	BROMOBENZENE		BDL	0.50	UG/L	
75-27-4	195	BROMODICHLOROMETHANE		BDL	0.50	UG/L	
75-25-2	197	BROMOFORM		BDL	0.50	UG/L	
74-83-9	198	BROMOMETHANE		BDL	0.50	UG/L	
124-48-1	233	CHLORODIBROMOMETHANE		BDL	0.50	UG/L	
75-00-3	234	CHLOROETHANE		BDL	0.50	UG/L	
67-66-3	235	CHLOROFORM		BDL	0.50	UG/L	
74-87-3	236	CHLOROMETHANE		BDL	0.50	UG/L	
95-49-8	807	2-CHLOROTOLUENE (O-CHLOROTOLUENE)		BDL	0.50	UG/L	
106-43-4	808	4-CHLOROTOLUENE (P-CHLOROTOLUENE)		BDL	0.50	UG/L	
74-95-3	296	DIBROMOMETHANE		BDL	0.50	UG/L	
541-73-1	26	1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)		BDL	0.50	UG/L	
75-34-3	7	1,1-DICHLOROETHANE		BDL	0.50	UG/L	
563-58-6	10	1,1-DICHLOROPROPENE		BDL	0.50	UG/L	
142-28-9	27	1,3-DICHLOROPROPANE		BDL	0.50	UG/L	
10061-01-5	247	CIS-1,3-DICHLOROPROPENE		BDL	0.50	UG/L	
10061-02-6	747	TRANS-1,3-DICHLOROPROPENE		BDL	0.50	UG/L	
594-20-7	33	2,2-DICHLOROPROPANE		BDL	0.50	UG/L	
630-20-6	1	1,1,1,2-TETRACHLOROETHANE		BDL	0.50	UG/L	
79-34-5	3	1,1,2,2-TETRACHLOROETHANE		BDL	0.50	UG/L	
96-18-4	14	1,2,3-TRICHLOROPROPANE		BDL	0.50	UG/L	

CK 9-10-07

CK 9-10-07

GC/MS VOA

CAS	PRM	Parameter	Concentration	RQL	Limit	Units	RT
NA	1806	MONITORED AT STATE'S DISCRETION					
74-97-5	194	BROMOCHLOROMETHANE		BDL	0.50	UG/L	
104-51-8	519	N-BUTYLBENZENE		BDL	0.50	UG/L	
75-71-8	300	DICHLORODIFLUOROMETHANE		BDL	0.50	UG/L	
75-69-4	372	TRICHLOROFLUOROMETHANE		BDL	0.50	UG/L	
87-68-3	398	HEXACHLOROBUTADIENE		BDL	0.50	UG/L	
98-82-8	432	ISOPROPYLBENZENE (CUMENE)		BDL	0.50	UG/L	
99-87-6	628	4-ISOPROPYLTOLUENE (P-ISOPROPYLTOLUENE)		BDL	0.50	UG/L	
91-20-3	493	NAPHTHALENE		BDL	0.50	UG/L	
103-65-1	532	N-PROPYLBENZENE		BDL	0.50	UG/L	
135-98-8	644	SEC-BUTYLBENZENE		BDL	0.50	UG/L	
98-06-6	702	TERT-BUTYLBENZENE		BDL	0.50	UG/L	
87-61-6	13	1,2,3-TRICHLOROBENZENE		BDL	0.50	UG/L	
95-63-6	17	1,2,4-TRIMETHYLBENZENE		BDL	0.50	UG/L	
108-67-8	25	1,3,5-TRIMETHYLBENZENE		BDL	0.50	UG/L	
106-93-4	18	1,2-DIBROMOETHANE (EDB)		BDL	0.50	UG/L	
96-12-8	19	1,2-DIBROMO-3-CHLOROPROPANE (DBCP)		BDL	0.50	UG/L	
1634-04-4	859	METHYL-T-BUTYL ETHER (MTBE)		BDL	0.50	UG/L	
	972	----------					
591-78-6	60	2-HEXANONE		BDL	2.0	UG/L	
79-46-9	67	2-NITROPROPANE		*			
67-64-1	99	ACETONE (2-PROPANONE)		BDL	4.0	UG/L	
78-93-3	52	2-BUTANONE		BDL	2.0	UG/L	
75-15-0	216	CARBON DISULFIDE		*			
	1804	...					
	971	SURROGATE RECOVERY					
	972	----------					
17060-07-0	301	DICHLOROETHANE-D4	103			% RECOVERY	
2037-26-5	726	TOLUENE-D8	94			% RECOVERY	
460-00-4	196	4-BROMOFLUOROBENZENE	90			% RECOVERY	
	1131	TENTATIVELY IDENTIFIED COMPOUNDS					
	3320	NONE DETECTED					

Comment Note: * Compound searched for but not detected. Standard was unavailable to determine retention time and detection limit.

Qualifiers

BDL Below Detection Limit

* See Note for Parameter

Comments to Laboratory (do not record)

4-HCL VIALS

Note the additional IDEM analytes for drinking water:

CS2, MEK, Acetone, 2-Nitropropane, 2-Hexanone

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\DATA\D090607\2819D.D Vial: 15
Acq On : 6 Sep 2007 14:16 Operator: REGI
Sample : A781270 LQ4605 Inst : GCMS #4
Misc : 9/8/07 Multiplr: 1.00
MS Integration Params: rteint2.p
Quant Time: Sep 06 14:32:19 2007 Quant Results File: DWD.RES

Quant Method : C:\MSDCHEM\1\METHODS\DWD.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Tue Sep 04 10:38:20 2007
Response via : Initial Calibration
DataAcq Meth : DWD

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) FLUOROBENZENE	5.68	96	341951	10.00 UG/L	0.00
38) 2-Bromo-1-chloropropane	7.97	77	144171	10.00 UG/L	0.00
System Monitoring Compounds					
21) Dibromofluoromethane	4.94	113	90272	10.55 UG/L	0.00
Spiked Amount 10.000			Recovery	= 105.50%	
23) 1,2-Dichloroethane-d4	5.30	65	108110	10.27 UG/L	0.00
Spiked Amount 10.000			Recovery	= 102.70%	
33) Toluene-d8	7.51	98	333800	9.42 UG/L	0.00
Spiked Amount 10.000			Recovery	= 94.20%	
51) 4-Bromofluorobenzene	10.67	174	115054	9.02 UG/L	0.00
Spiked Amount 10.000			Recovery	= 90.20%	
Target Compounds					Qvalue
8) ~~Acetone~~	2.79	43	1873	1.14 UG/L #	88
10) ~~Methylene~~ Chloride	3.17	84	2686	Below Cal #	62
17) ~~Tetrahydro~~furan	4.76	42	7817	1.92 UG/L #	86
55) ~~n-Propylb~~enzene	10.67	92	3625	0.66 UG/L #	1

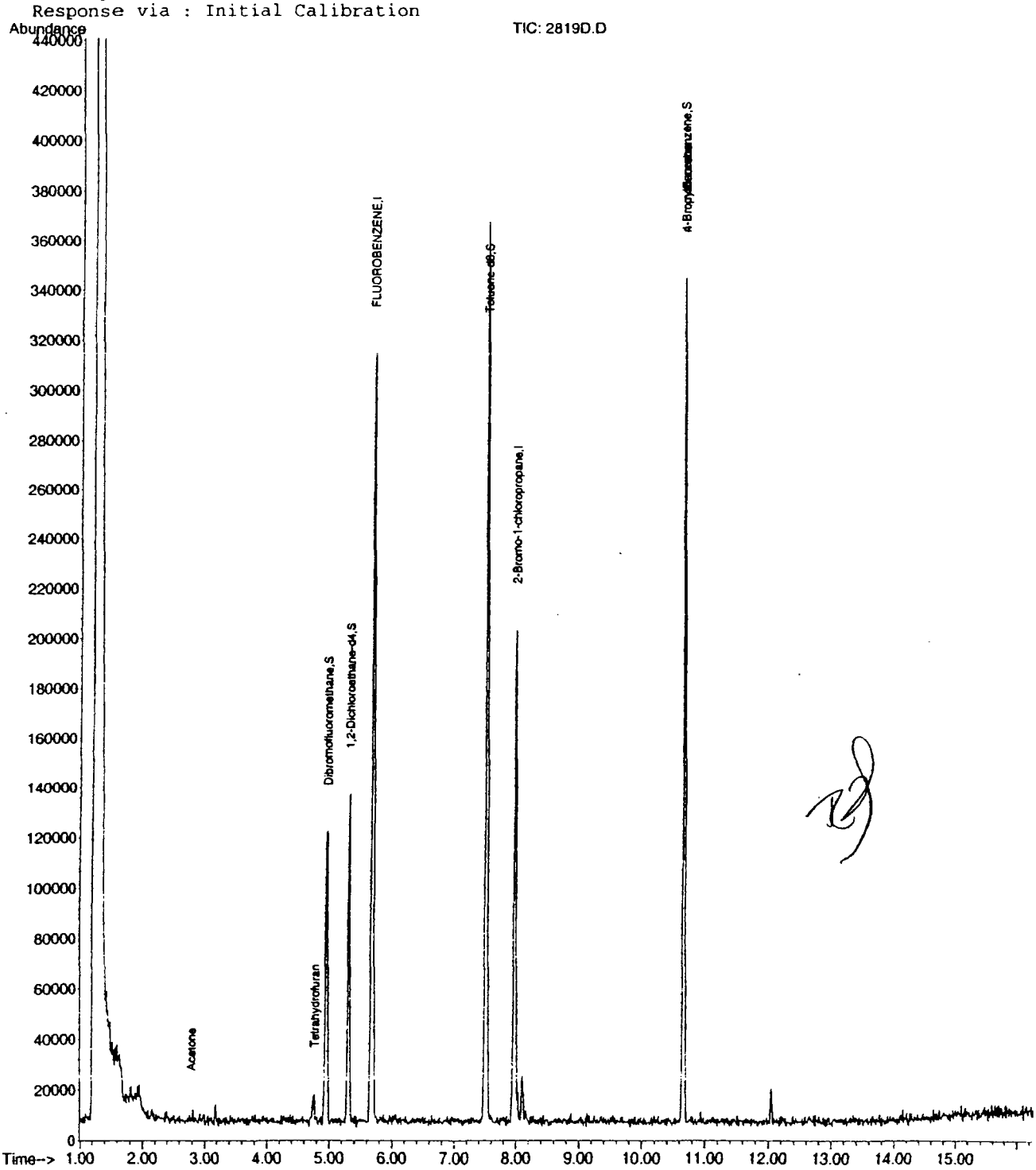
NO TICs

(#) = qualifier out of range (m) = manual integration
2819D.D DWD.M Thu Sep 06 14:32:21 2007

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\DATA\D090607\2819D.D Vial: 15
Acq On : 6 Sep 2007 14:16 Operator: REGI
Sample : A781270 LQ4605 Inst : GCMS #4
Misc : 9/8/07 Multiplr: 1.00
MS Integration Params: rteint2.p
Quant Time: Sep 6 14:32 2007 Quant Results File: DWD.RES

Method : C:\MSDCHEM\1\METHODS\DWD.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Tue Sep 04 10:38:20 2007
Response via : Initial Calibration



2819D.D DWD.M Thu Sep 06 14:32:21 2007 Page 2

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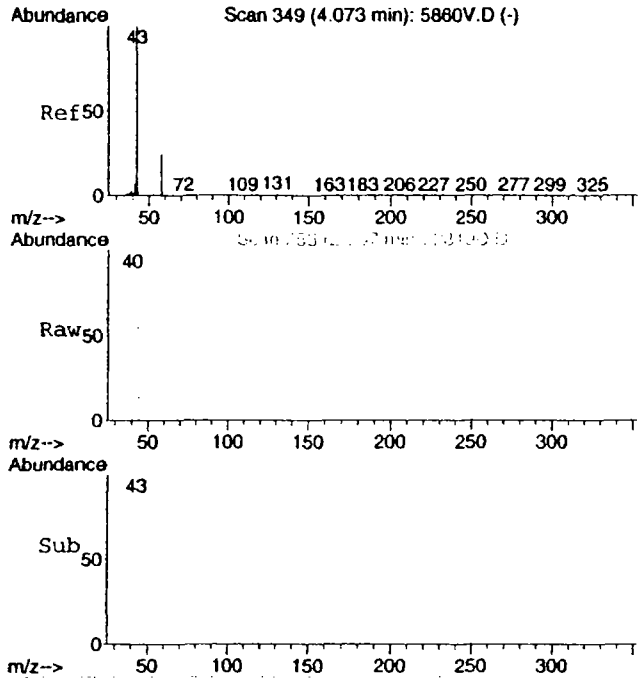
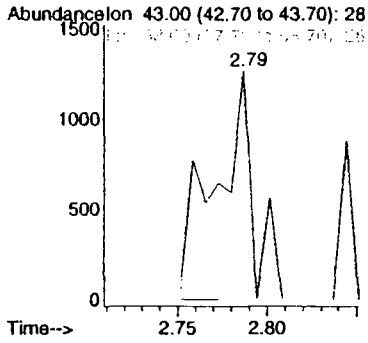
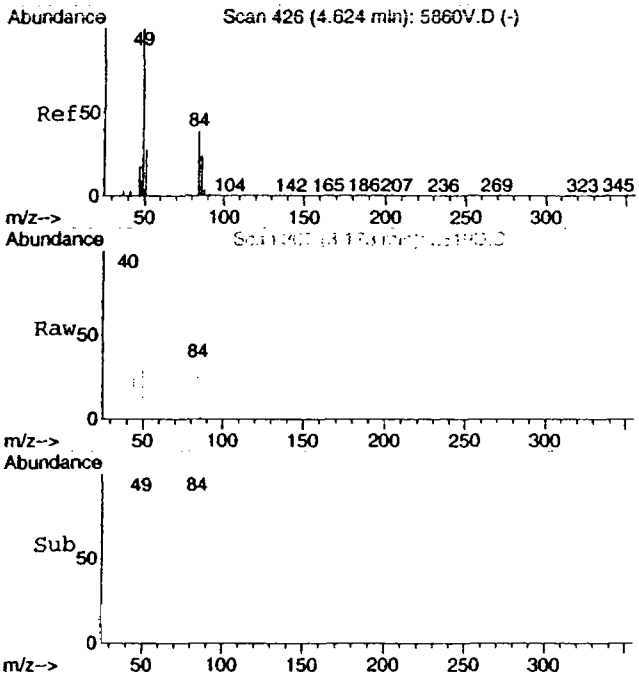


#8
Acetone
Concen: 1.14 UG/L
RT: 2.79 min Scan# 253
Delta R.T. 0.02 min
Lab File: 2819D.D
Acq: 6 Sep 2007 14:16

Tgt Ion: 43 Resp: 1873

Ion	Ratio	Lower	Upper
43	100		
58	35.3	23.1	34.7#

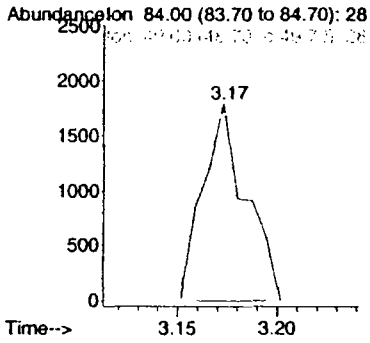


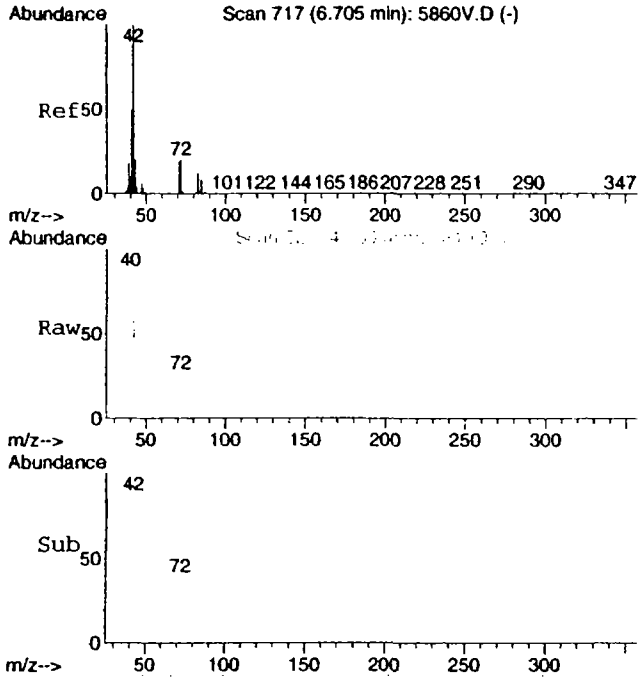


#10
Methylene Chloride
Concen: Below Cal
RT: 3.17 min Scan# 307
Delta R.T. 0.00 min
Lab File: 2819D.D
Acq: 6 Sep 2007 14:16

Tgt Ion: 84 Resp: 2686

Ion	Ratio	Lower	Upper
84	100		
49	119.2	140.2	210.2#
86	39.2	51.1	76.7#

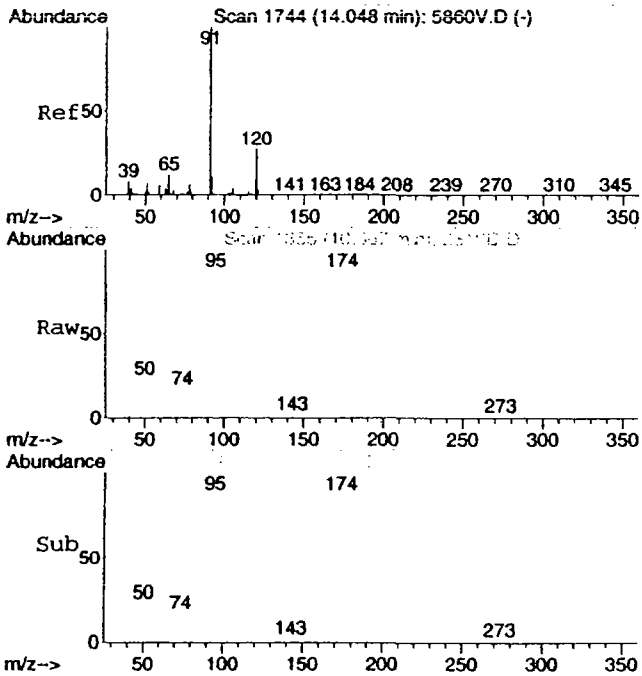




#17
Tetrahydrofuran
Concen: 1.92 UG/L
RT: 4.76 min Scan# 529
Delta R.T. 0.01 min
Lab File: 2819D.D
Acq: 6 Sep 2007 14:16

Tgt Ion: 42 Resp: 7817

Ion	Ratio	Lower	Upper
42	100		
72	22.8	24.5	36.7#



#55
n-Propylbenzene
Concen: 0.66 UG/L
RT: 10.67 min Scan# 1355
Delta R.T. -0.26 min
Lab File: 2819D.D
Acq: 6 Sep 2007 14:16

Tgt Ion: 92 Resp: 3625

Ion	Ratio	Lower	Upper
92	100		
91	0.0	715.8	1073.6#

QC Std# 239 Heritage Environmental Services, Indianapolis
Method# 296 MS/MSD Volatile QC Report-EPA Method 524
Drinking Water

Laboratory Sample # : A781260 LQ4593 Q1594748 Q1594749
Data File :2809D. MS Data File : 2825D. MSD Data File : 2826D.
Date/Time : 6 Sep 2007 9:42 MS Date/Time : 6 Sep 2007 17:18 MSD Date/Time : 6 Sep 2007 17:45
Spike Conc : 10 uG/L
Dilution Factor: 1

Compound	Sample Conc	Spike Conc	Spike % Rec	Spike Dup Conc	Spike Dup % Rec	RPD	Min Recovery *	Max
Benzene	0	9.04	90.4	9.53	95.3	5.3	70.0	130.0
Carbon Tetrachloride	0	8.84	88.4	9.77	97.7	10.0	70.0	130.0
1,4-Dichlorobenzene	0	8.9	89.0	10	100.0	11.6	70.0	130.0
1,2-Dichloroethane	0	8.92	89.2	9.35	93.5	4.7	70.0	130.0
1,1-DICHLOROETHENE	0	9.2	92.0	9.21	92.1	0.1	70.0	130.0
1,1,1-Trichloroethane	0	7.89	78.9	9.38	93.8	17.3	70.0	130.0
Trichloroethene	0	9.18	91.8	8.73	87.3	5.0	70.0	130.0
VINYL CHLORIDE	0	7.77	77.7	9.94	99.4	24.5	70.0	130.0
Bromobenzene	0	9.5	95.0	10.1	101.0	6.1	70.0	130.0
Bromodichloromethane	0	9.32	93.2	9.43	94.3	1.2	70.0	130.0
Bromoform	0	9.55	95.5	9.26	92.6	3.1	70.0	130.0
Bromomethane	0	8.25	82.5	9.06	90.6	9.4	70.0	130.0
Chlorobenzene	0	9.06	90.6	9.77	97.7	7.5	70.0	130.0
Dibromochloromethane	0	9.7	97.0	10.1	101.0	4.0	70.0	130.0
Chloroethane	0	11.2	112.0	9.68	96.8	14.6	70.0	130.0
CHLOROFORM	0	9.05	90.5	9.57	95.7	5.6	70.0	130.0
Chloromethane	0	11.5	115.0	11.1	111.0	3.5	70.0	130.0
2-Chlorotoluene	0	9	90.0	9.97	99.7	10.2	70.0	130.0
4-Chlorotoluene	0	9.06	90.6	10.3	103.0	12.8	70.0	130.0
Dibromomethane	0	9.27	92.7	9.42	94.2	1.6	70.0	130.0
1,3-Dichlorobenzene	0	9.23	92.3	10.1	101.0	9.0	70.0	130.0
1,2-Dichlorobenzene	0	9.22	92.2	10.6	106.0	13.9	70.0	130.0
trans-1,2-Dichloroethene	0	7.76	77.6	9.42	94.2	19.3	70.0	130.0
cis-1,2-Dichloroethene	0	9.23	92.3	9.12	91.2	1.2	70.0	130.0
Methylene Chloride	0	9.42	94.2	10.3	103.0	8.9	70.0	130.0
1,1-Dichloroethane	0	9.17	91.7	9.83	98.3	6.9	70.0	130.0
1,1-Dichloropropene	0	9.12	91.2	9.33	93.3	2.3	70.0	130.0
1,2-DICHLOROPROPANE	0	9.83	98.3	9.65	96.5	1.8	70.0	130.0
1,3-Dichloropropane	0	10.3	103.0	10.3	103.0	0.0	70.0	130.0
cis-1,3-Dichloropropene	0	8.27	82.7	8.51	85.1	2.9	70.0	130.0
trans-1,3-Dichloropropene	0	8.97	89.7	9.04	90.4	0.8	70.0	130.0
2,2-Dichloropropane	0	~~6.12~~ 9.20	~~51.2~~ 92	7.82	78.2	~~41.7~~	70.0	130.0
ETHYL BENZENE	0	9.1	91.0	10.1	101.0	10.4	70.0	130.0
Styrene	0	9.4	94.0	9.67	96.7	2.8	70.0	130.0
1,1,2-Trichloroethane	0	9.65	96.5	10.1	101.0	4.6	70.0	130.0
1,1,1,2-Tetrachloroethane	0	8.72	87.2	9.58	95.8	9.4	70.0	130.0
1,1,2,2-Tetrachloroethane	0	11.7	117.0	10.3	103.0	12.7	70.0	130.0
Tetrachloroethene	0	10.3	103.0	9.85	98.5	4.5	70.0	130.0
1,2,3-Trichloropropane	0	12.8	128.0	10.8	108.0	16.9	70.0	130.0

QC Std# 239 Heritage Environmental Services, Indianapolis
Method# 296 MS/MSD Volatile QC Report-EPA Method 524
Drinking Water

Laboratory Sample # : A781260 LQ4593
Data File :2809D. MS Data File : 2825D. MSD Data File : 2826D.
Date/Time : 6 Sep 2007 9:42 MS Date/Time : 6 Sep 2007 17:18 MSD Date/Time : 6 Sep 2007 17:45
Spike Conc : 10 uG/L
Dilution Factor: 1

Compound	Sample Conc	Spike Conc	Spike % Rec	Spike Dup Conc	Spike Dup % Rec	RPD	Min Recovery *	Max Recovery *
TOLUENE	0	9	90.0	9.24	92.4	2.6	70.0	130.0
o-Xylene	0	9.23	92.3	9.69	96.9	4.9	70.0	130.0
m,p-Xylene	0	19.3	96.5	20.2	101.0	4.6	70.0	130.0
Bromochloromethane	0	9.05	90.5	9.65	96.5	6.4	70.0	130.0
n-Butylbenzene	0	8.45	84.5	9.8	98.0	14.8	70.0	130.0
Dichlorodifluoromethane	0	10.2	102.0	9.72	97.2	4.8	70.0	130.0
Trichlorofluoromethane	0	9.71	97.1	9.76	97.6	0.5	70.0	130.0
Hexachlorobutadiene	0	9.4	94.0	12.1	121.0	25.1	70.0	130.0
Isopropylbenzene	0	9.18	91.8	9.68	96.8	5.3	70.0	130.0
p-Isopropyltoluene	0	8.64	86.4	9.72	97.2	11.8	70.0	130.0
Naphthalene	0	9.51	95.1	10.3	103.0	8.0	70.0	130.0
n-Propylbenzene	0	8.98	89.8	9.62	96.2	6.9	70.0	130.0
sec-Butylbenzene	0	9.1	91.0	9.65	96.5	5.9	70.0	130.0
t-Butylbenzene	0	8.73	87.3	9.51	95.1	8.6	70.0	130.0
1,2,3-Trichlorobenzene	0	8.65	86.5	11.6	116.0	29.1	70.0	130.0
1,2,4-Trichlorobenzene	0	8.2	82.0	10.4	104.0	23.7	70.0	130.0
1,2,4-Trimethylbenzene	0	8.9	89.0	9.9	99.0	10.6	70.0	130.0
1,3,5-Trimethylbenzene	0	8.71	87.1	9.67	96.7	10.4	70.0	130.0

* Advisory Limits Updated 9/05 , 80 - 120% minimum range.

R524561 Heritage Environmental Services, LLC Q1994748

QC Report

QCType SPI01 Duplicate SampleID A781260 DataFile 2825D.D
Date Entered 10Sep07 Duplicate QCSampleID Analyst 1062 R. SHAMP
Analysis Date/Time 06Sep07 17:18:00 Method 296 Matrix 1 Units ug/L

PRM	Parameter	TruVal	SpikeVal	ObsVal	RQL	Rec	Difference
151	BENZENE	0	10	9.04		90.4	
217	CARBON TETRACHLORIDE	0	10	8.84		88.4	
29	1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	0	10	8.9		89	
21	1,2-DICHLOROETHANE	0	10	8.92		89.2	
8	1,1-DICHLOROETHENE	0	10	9.2		92	
2	1,1,1-TRICHLOROETHANE	0	10	7.89		78.9	
750	TRICHLOROETHENE	0	10	9.18		91.8	
768	VINYL CHLORIDE	0	10	7.77		77.7	
193	BROMOBENZENE	0	10	9.5		95	
195	BROMODICHLOROMETHANE	0	10	9.32		93.2	
197	BROMOFORM	0	10	9.55		95.5	
198	BROMOMETHANE	0	10	8.25		82.5	
231	CHLOROBENZENE	0	10	9.06		90.6	
295	DIBROMOCHLOROMETHANE	0	10	9.7		97	
234	CHLOROETHANE	0	10	11.2		112	
235	CHLOROFORM	0	10	9.05		90.5	
236	CHLOROMETHANE	0	10	11.5		115	
807	2-CHLOROTOLUENE (O-CHLOROTOLUENE)	0	10	9		90	
808	4-CHLOROTOLUENE (P-CHLOROTOLUENE)	0	10	9.06		90.6	
296	DIBROMOMETHANE	0	10	9.27		92.7	
26	1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)	0	10	9.23		92.3	
20	1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	0	10	9.22		92.2	
746	TRANS-1,2-DICHLOROETHENE	0	10	7.76		77.6	
246	CIS-1,2-DICHLOROETHENE	0	10	9.23		92.3	
302	DICHLOROMETHANE (METHYLENE CHLORIDE)	0	10	9.42		94.2	
7	1,1-DICHLOROETHANE	0	10	9.17		91.7	
10	1,1-DICHLOROPROPENE	0	10	9.12		91.2	
23	1,2-DICHLOROPROPANE	0	10	9.83		98.3	
27	1,3-DICHLOROPROPANE	0	10	10.3		103	
247	CIS-1,3-DICHLOROPROPENE	0	10	8.27		82.7	
747	TRANS-1,3-DICHLOROPROPENE	0	10	8.97		89.7	
349	ETHYL BENZENE	0	10	9.1		91	
680	STYRENE	0	10	9.4		94	
4	1,1,2-TRICHLOROETHANE	0	10	9.65		96.5	
1	1,1,1,2-TETRACHLOROETHANE	0	10	8.72		87.2	
3	1,1,2,2-TETRACHLOROETHANE	0	10	11.7		117	
703	TETRACHLOROETHENE	0	10	10.3		103	
14	1,2,3-TRICHLOROPROPANE	0	10	12.8		128	
724	TOLUENE	0	10	9		90	
549	O-XYLENE	0	10	9.23		92.3	
492	M/P-XYLENE	0	10	19.3		193	
194	BROMOCHLOROMETHANE	0	10	9.05		90.5	
519	N-BUTYLBENZENE	0	10	8.45		84.5	
300	DICHLORODIFLUOROMETHANE	0	10	10.2		102	

QC Report

PRM	Parameter	TruVal	SpikeVal	ObsVal	RQL	Rec	Difference
372	TRICHLOROFLUOROMETHANE	0	10	9.71		97.1	
398	HEXACHLOROBUTADIENE	0	10	9.4		94	
432	ISOPROPYLBENZENE (CUMENE)	0	10	9.18		91.8	
628	4-ISOPROPYLTOLUENE (P-ISOPROPYLTOLUENE)	0	10	8.64		86.4	
493	NAPHTHALENE	0	10	9.51		95.1	
532	N-PROPYLBENZENE	0	10	8.98		89.8	
644	SEC-BUTYLBENZENE	0	10	9.1		91	
702	TERT-BUTYLBENZENE	0	10	8.73		87.3	
13	1,2,3-TRICHLOROBENZENE	0	10	8.65		86.5	
16	1,2,4-TRICHLOROBENZENE	0	10	8.2		82	
17	1,2,4-TRIMETHYLBENZENE	0	10	8.9		89	
25	1,3,5-TRIMETHYLBENZENE	0	10	8.71		87.1	

Quantitation Report (QT Reviewed)

Data File : K:\DATA\D090607\2825D.D
Acq On : 6 Sep 07 17:18
Sample : A781260 MS LQ4593
Misc : 9/8/07
MS Integration Params: rteint2.p
Quant Time: Sep 10 11:02 19107

Vial: 21
Operator: REGI
Inst : GCMS #4
Multiplr: 1.00
Quant Results File: DWD.RES

Quant Method : C:\MSDCHEM\1\METHODS\DWD.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Tue Sep 04 10:38:20 2007
Response via : Initial Calibration
DataAcq Meth : DWD

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) FLUOROBENZENE	5.68	96	320976	10.00 UG/L	0.00
38) 2-Bromo-1-chloropropane	7.97	77	130308	10.00 UG/L	0.00
System Monitoring Compounds					
21) Dibromofluoromethane	4.95	113	78739	9.80 UG/L	0.00
Spiked Amount 10.000			Recovery	= 98.00%	
23) 1,2-Dichloroethane-d4	5.30	65	93407	9.45 UG/L	0.00
Spiked Amount 10.000			Recovery	= 94.50%	
33) Toluene-d8	7.51	98	323158	9.72 UG/L	0.00
Spiked Amount 10.000			Recovery	= 97.20%	
51) 4-Bromofluorobenzene	10.66	174	108605	9.42 UG/L	0.00
Spiked Amount 10.000			Recovery	= 94.20%	

Target Compounds					Qvalue
2) Dichlorodifluoromethane	1.39	85	49377	10.18 UG/L	100
3) Chloromethane	1.55	50	121879	11.47 UG/L	100
4) VINYL CHLORIDE	1.64	62	87092	7.77 UG/L	91
5) Bromomethane	1.96	94	50542m	8.25 UG/L	3
6) Chloroethane	2.05	64	78299m	11.23 UG/L	94
7) Trichlorofluoromethane	2.25	101	134443m	9.71 UG/L	83
8) Acetone	2.77	43	100633	25.64 UG/L	98
9) 1,1-DICHLOROETHENE	2.74	96	80253m	9.20 UG/L	100
10) Methylene Chloride	3.23	84	93792	9.42 UG/L #	58
11) MTBE	3.45	73	492358	17.86 UG/L	100
12) trans-1,2-Dichloroethene	3.45	96	78767	7.76 UG/L	97
13) 1,1-Dichloroethane	3.86	63	168641	9.17 UG/L	100
14) 2-Butanone	4.46	72	39114	31.45 UG/L	88
15) cis-1,2-Dichloroethene	4.45	96	96936	9.23 UG/L	96
16) CHLOROFORM	4.78	83	155343	9.05 UG/L	99
17) Tetrahydrofuran	4.75	42	137551	35.95 UG/L #	79
18) Bromochloromethane	4.70	128	45782	9.05 UG/L	88
19) 2,2-Dichloropropane	4.45	77	49439	5.12 UG/L	96
20) 1,1,1-Trichloroethane	4.97	97	109090	7.89 UG/L	97
22) 1,1-Dichloropropene	5.16	110	38455	9.12 UG/L	100
24) Carbon Tetrachloride	5.16	117	106477	8.84 UG/L	91
25) 1,2-Dichloroethane	5.39	62	125614	8.92 UG/L	97
26) Benzene	5.37	78	364211	9.04 UG/L	100
27) Trichloroethene	6.09	130	92649	9.18 UG/L	95
28) 1,2-DICHLOROPROPANE	6.34	63	94344	9.83 UG/L	100
29) Bromodichloromethane	6.65	83	113884	9.32 UG/L	98
30) Dibromomethane	6.47	93	53933	9.27 UG/L	89
31) 4-Methyl-2-Pentanone	7.38	43	363855	29.34 UG/L #	96
32) cis-1,3-Dichloropropene	7.18	75	112154	8.27 UG/L	100
34) TOLUENE	7.59	91	372235	9.00 UG/L	100
35) trans-1,3-Dichloropropene	7.86	75	105833	8.97 UG/L	100
36) 1,1,2-Trichloroethane	8.09	97	81099	9.65 UG/L	100
37) 1,2-Dibromoethane	8.71	107	81481	10.03 UG/L	100
39) 2-Hexanone	8.41	43	313668	37.57 UG/L	98
40) 1,3-Dichloropropane	8.30	76	138126	10.33 UG/L	100
41) Tetrachloroethene	8.27	166	98439	10.26 UG/L	94

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

Quantitation Report (QT Reviewed)

Data File : K:\DATA\D090607\2825D.D
Acq On : 6 Sep 07 17:18
Sample : A781260 MS LQ4593
Misc : 9/8/07
MS Integration Params: rteint2.p
Quant Time: Sep 10 11:02 19107

Vial: 21
Operator: REGI
Inst : GCMS #4
Multiplr: 1.00
Quant Results File: DWD.RES

Quant Method : C:\MSDCHEM\1\METHODS\DWD.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Tue Sep 04 10:38:20 2007
Response via : Initial Calibration
DataAcq Meth : DWD

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
42)	Dibromochloromethane	8.59	129	81840	9.70 UG/L		100
43)	Chlorobenzene	9.35	112	219049	9.06 UG/L		99
44)	1,1,1,2-Tetrachloroethane	9.46	131	73817	8.72 UG/L		100
45)	ETHYL BENZENE	9.50	106	115822	9.10 UG/L		78
46)	m,p-Xylene	9.64	106	298263	19.33 UG/L	#	62
47)	o-Xylene	10.09	106	137703	9.23 UG/L		79
48)	Styrene	10.11	104	242936	9.40 UG/L		91
49)	Bromoform	10.30	173	62000	9.55 UG/L		100
50)	1,1,2,2-Tetrachloroethane	10.82	83	127064	11.72 UG/L		100
52)	Isopropylbenzene	10.51	105	357449	9.18 UG/L		100
53)	Bromobenzene	10.81	77	149919	9.50 UG/L		100
54)	1,2,3-Trichloropropane	10.86	110	44830	12.76 UG/L		100
55)	n-Propylbenzene	10.94	92	44247	8.98 UG/L		81
56)	1,3,5-Trimethylbenzene	11.12	105	267481	8.71 UG/L		100
57)	2-Chlorotoluene	11.02	126	85766	9.00 UG/L		100
58)	4-Chlorotoluene	11.13	126	90774	9.06 UG/L		100
59)	t-Butylbenzene	11.44	91	149147	8.73 UG/L	#	62
60)	1,2,4-Trimethylbenzene	11.49	105	275873	8.90 UG/L		100
61)	sec-Butylbenzene	11.65	105	326637	9.10 UG/L		100
62)	p-Isopropyltoluene	11.80	119	278675	8.64 UG/L		100
63)	1,3-Dichlorobenzene	11.75	146	178845	9.23 UG/L		100
64)	1,4-Dichlorobenzene	11.84	146	179416	8.90 UG/L		100
65)	n-Butylbenzene	12.18	92	124416	8.45 UG/L		97
66)	1,2-Dichlorobenzene	12.18	146	167322	9.22 UG/L		100
67)	1,2-Dibromo-3-chloropropan	12.88	157	35516	15.20 UG/L		100
68)	1,2,4-Trichlorobenzene	13.58	180	81255	8.20 UG/L		100
69)	Naphthalene	13.79	128	252221	9.51 UG/L		100
70)	Hexachlorobutadiene	13.73	225	35094	9.40 UG/L		100
71)	1,2,3-Trichlorobenzene	13.99	180	73052	8.65 UG/L		100

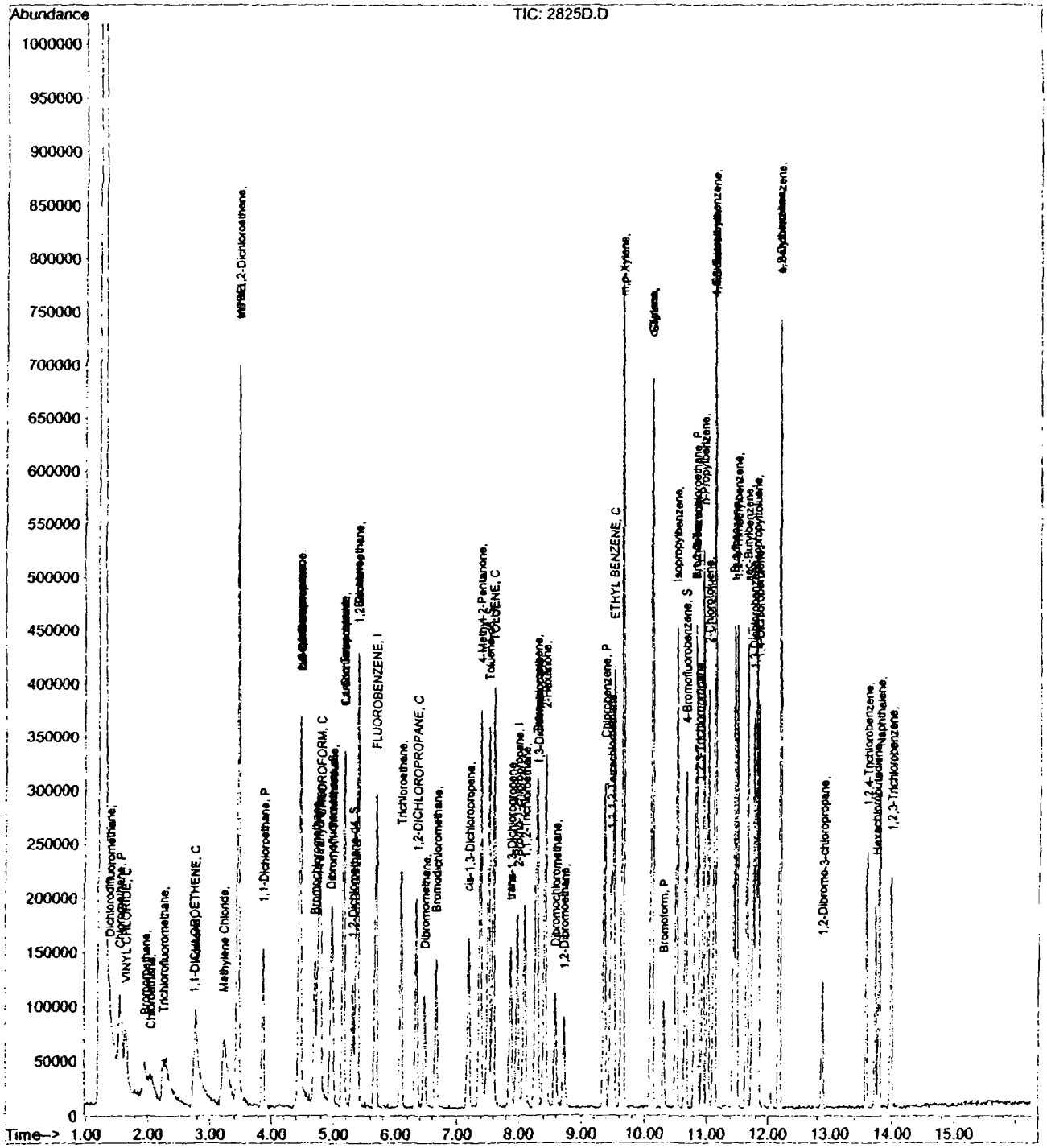
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : K:\DATA\D090607\2825D.D
Acq On : 6 Sep 07 17:18
Sample : A781260 MS LQ4593
Misc : 9/8/07
MS Integration Params: rteint2.p
Quant Time: Sep 10 11:02 19107

Vial: 21
Operator: REGI
Inst : GCMS #4
Multiplr: 1.00
Quant Results File: DWD.RES

Method : K:\1\METHODS\DWD.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Tue Sep 04 10:38:20 2007
Response via : Initial Calibration

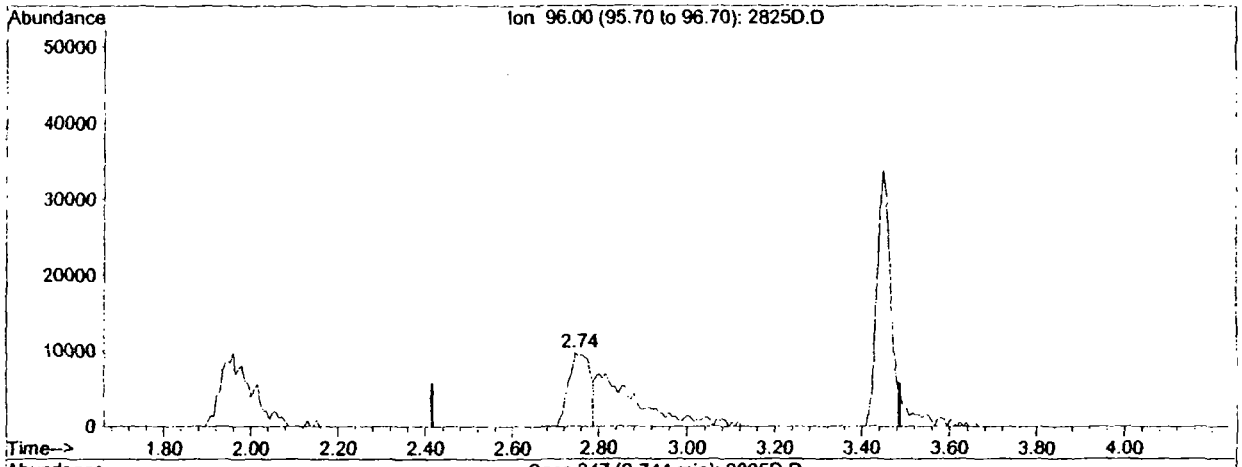


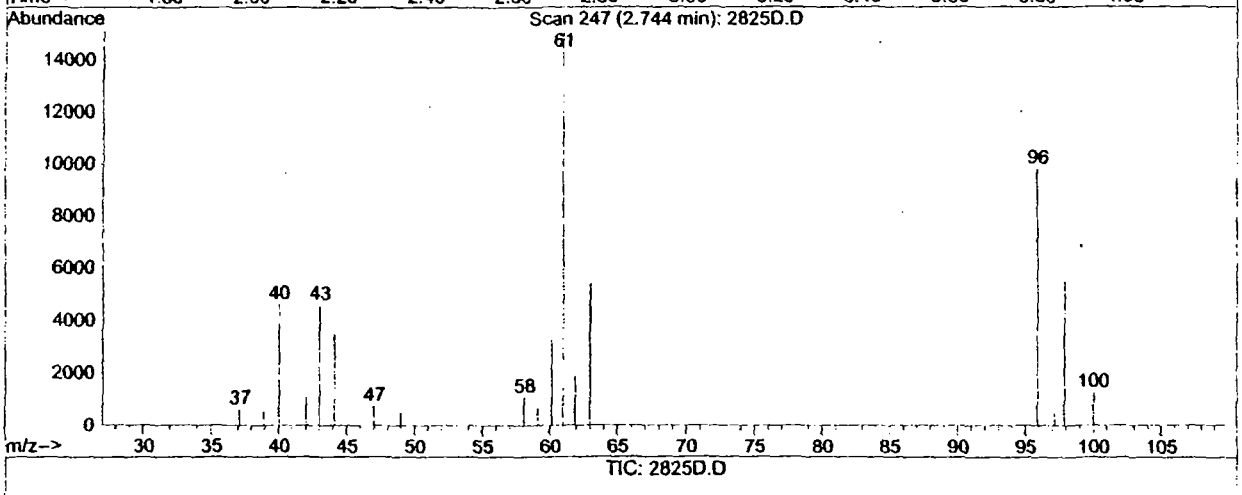
Quantitation Report

Data File : K:\DATA\D090607\2825D.D
Acq On : 6 Sep 07 17:18
Sample : A781260 MS LQ4593
Misc : 9/8/07
Quant Time: Sep 7 5:49 19107

Vial: 21
Operator: REGI
Inst : GCMS #4
Multiplr: 1.00
Quant Results File: temp.res

Method : K:\1\METHODS\DWD.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Tue Sep 04 10:38:20 2007
Response via : Multiple Level Calibration





TIC: 2825D.D

(9) 1,1-DICHLOROETHENE (C)

2.74min 3.89UG/L

response 33921

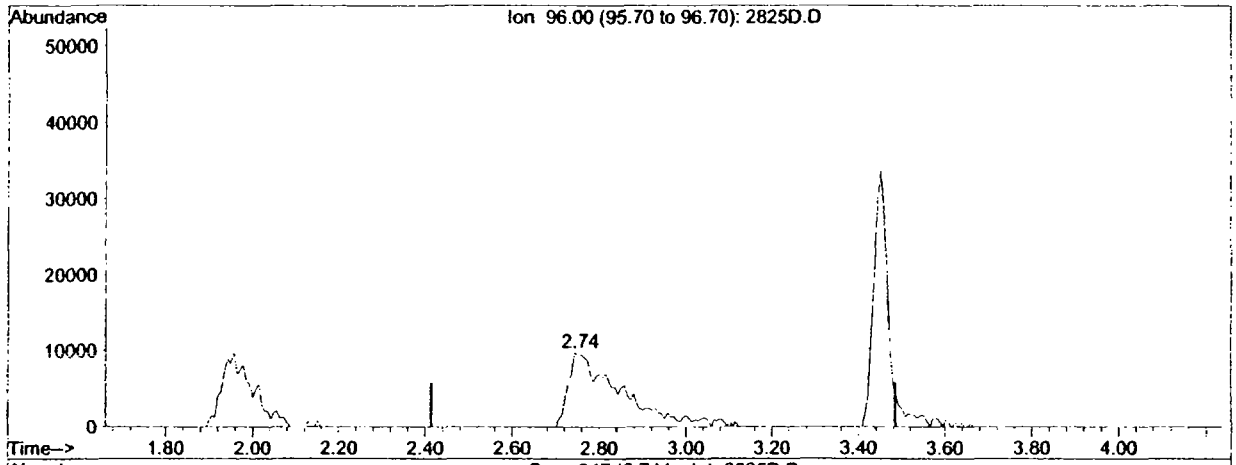
Ion	Exp%	Act%
96.00	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

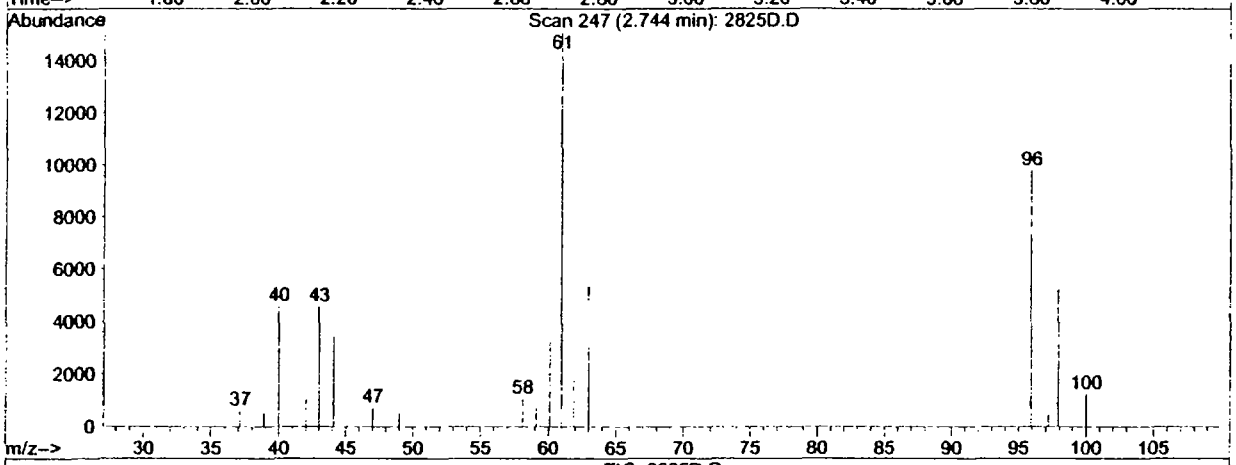
Quantitation Report

Data File : K:\DATA\D090607\2825D.D
Acq On : 6 Sep 07 17:18
Sample : A781260 MS LQ4593
Misc : 9/8/07
Quant Time: Sep 10 11:02 19107

Vial: 21
Operator: REGI
Inst : GCMS #4
Multiplr: 1.00
Quant Results File: temp.res

Method : K:\1\METHODS\DWD.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Tue Sep 04 10:38:20 2007
Response via : Multiple Level Calibration





TIC: 2825D.D

(9) 1,1-DICHLOROETHENE (C)

2.74min 9.20UG/L m

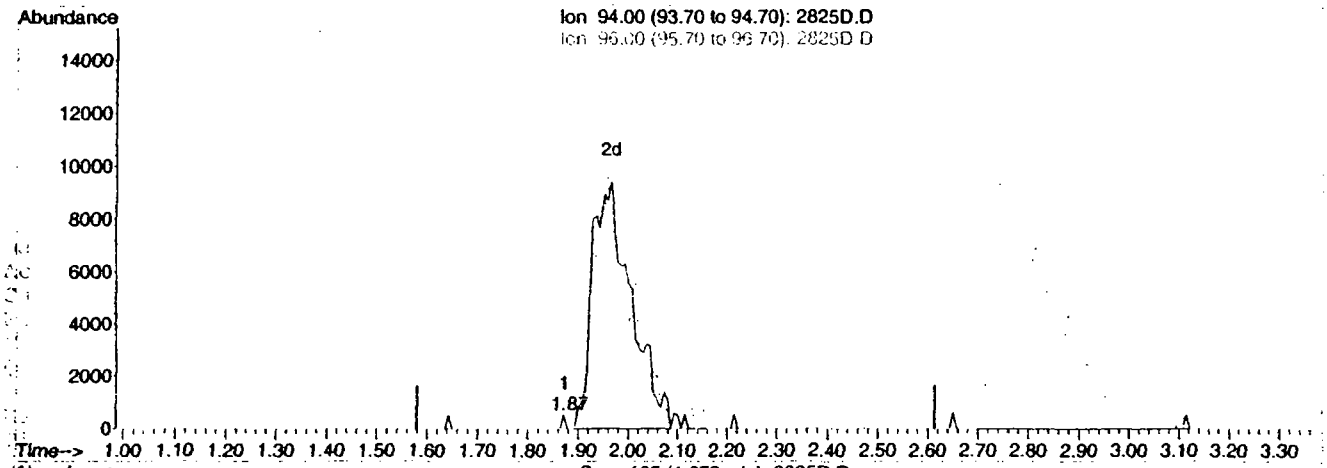
response 80253

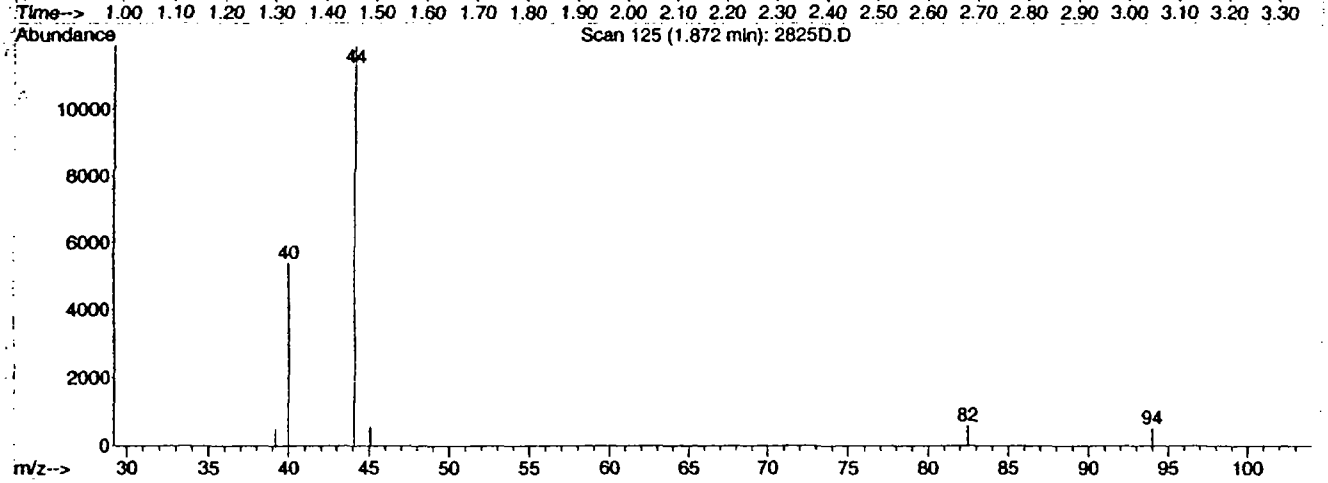
Ion	Exp%	Act%
96.00	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\DATA\D090607\2825D.D Vial: 21
Acq On : 6 Sep 2007 17:18 Operator: REGI
Sample : A781260 MS LQ4593 Inst : GCMS #4
Misc : 9/8/07 Multiplr: 1.00
MS Integration Params: rteint2.p
Quant Time: Sep 6 17:35 2007 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\DWD.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Tue Sep 04 10:38:20 2007
Response via : Multiple Level Calibration





TIC: 2825D.D

(5) Bromomethane

1.87min 0.04UG/L

response 223

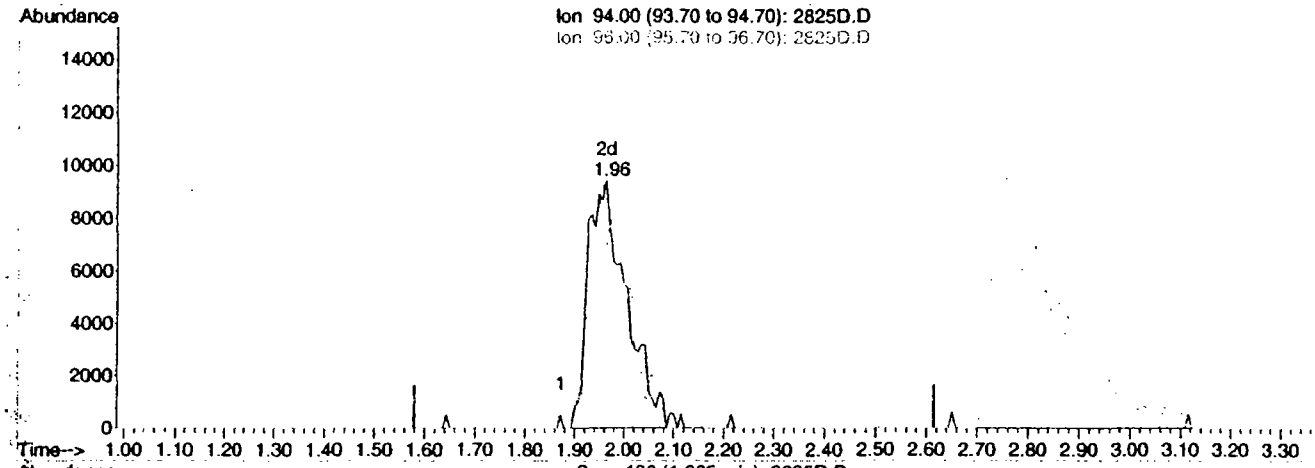
Ion	Exp%	Act%
94.00	100	100
96.00	94.20	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

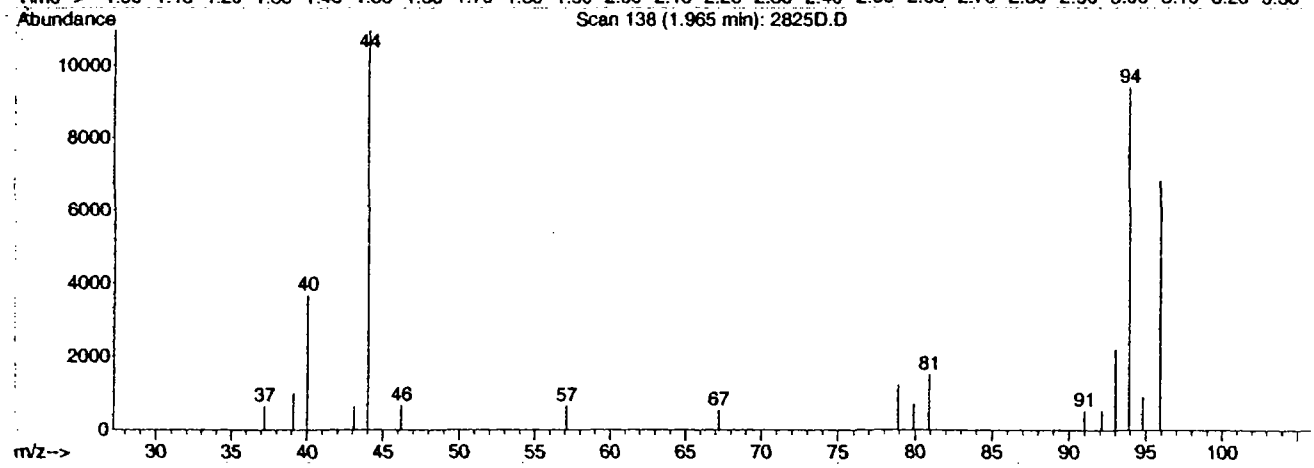
2825D.D DWD.M Fri Sep 07 05:48:55 2007

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\DATA\D090607\2825D.D Vial: 21
Acq On : 6 Sep 2007 17:18 Operator: REGI
Sample : A781260 MS LQ4593 Inst : GCMS #4
Misc : 9/8/07 Multiplr: 1.00
MS Integration Params: rteint2.p
Quant Time: Sep 7 5:48 2007 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\DWD.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Tue Sep 04 10:38:20 2007
Response via : Multiple Level Calibration





TIC: 2825D.D

(5) Bromomethane

1.96min 8.25UG/L m

response 50542

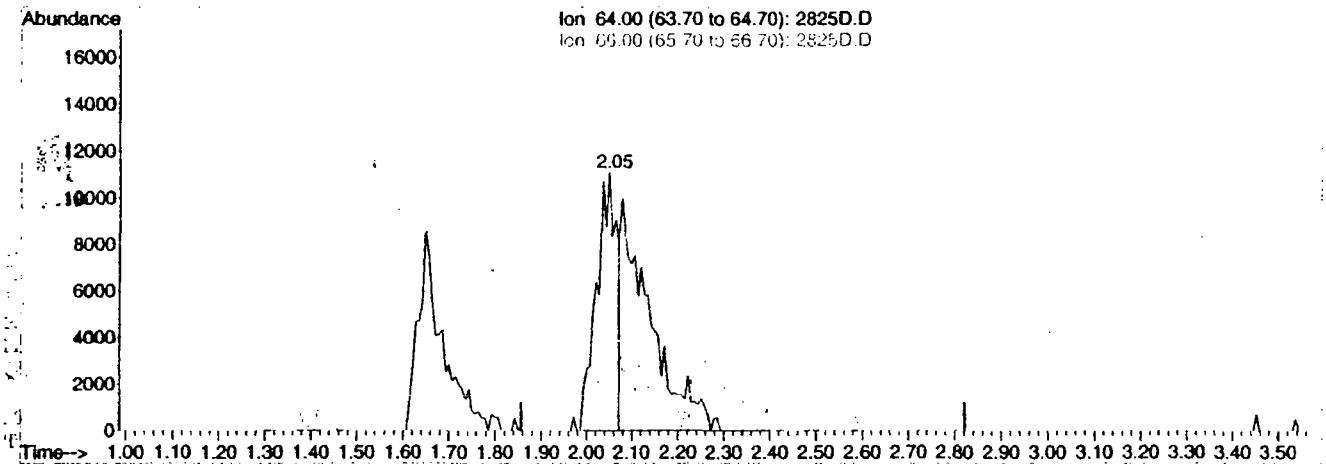
Ion	Exp%	Act%
94.00	100	100
96.00	94.20	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

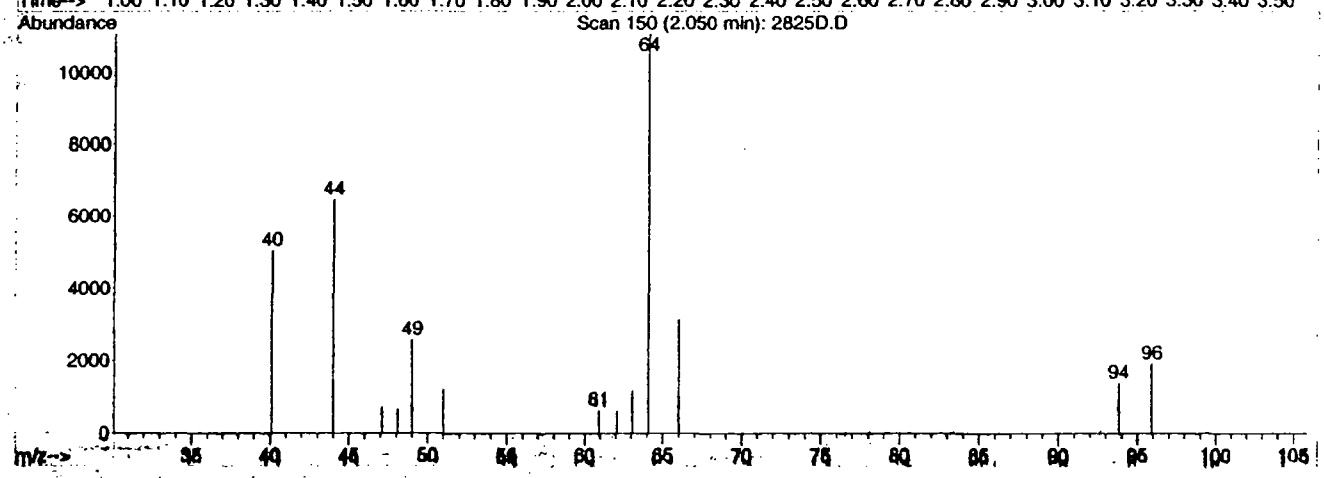
2825D.D DWD.M Fri Sep 07 05:48:59 2007

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\DATA\D090607\2825D.D Vial: 21
Acq On : 6 Sep 2007 17:18 Operator: REGI
Sample : A781260 MS LQ4593 Inst : GCMS #4
Misc : 9/8/07 Multiplr: 1.00
MS Integration Params: rteint2.p
Quant Time: Sep 7 5:48 2007 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\DWD.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Tue Sep 04 10:38:20 2007
Response via : Multiple Level Calibration





TIC: 2825D.D

(6) Chloroethane

2.05min 4.99UG/L

response 34822

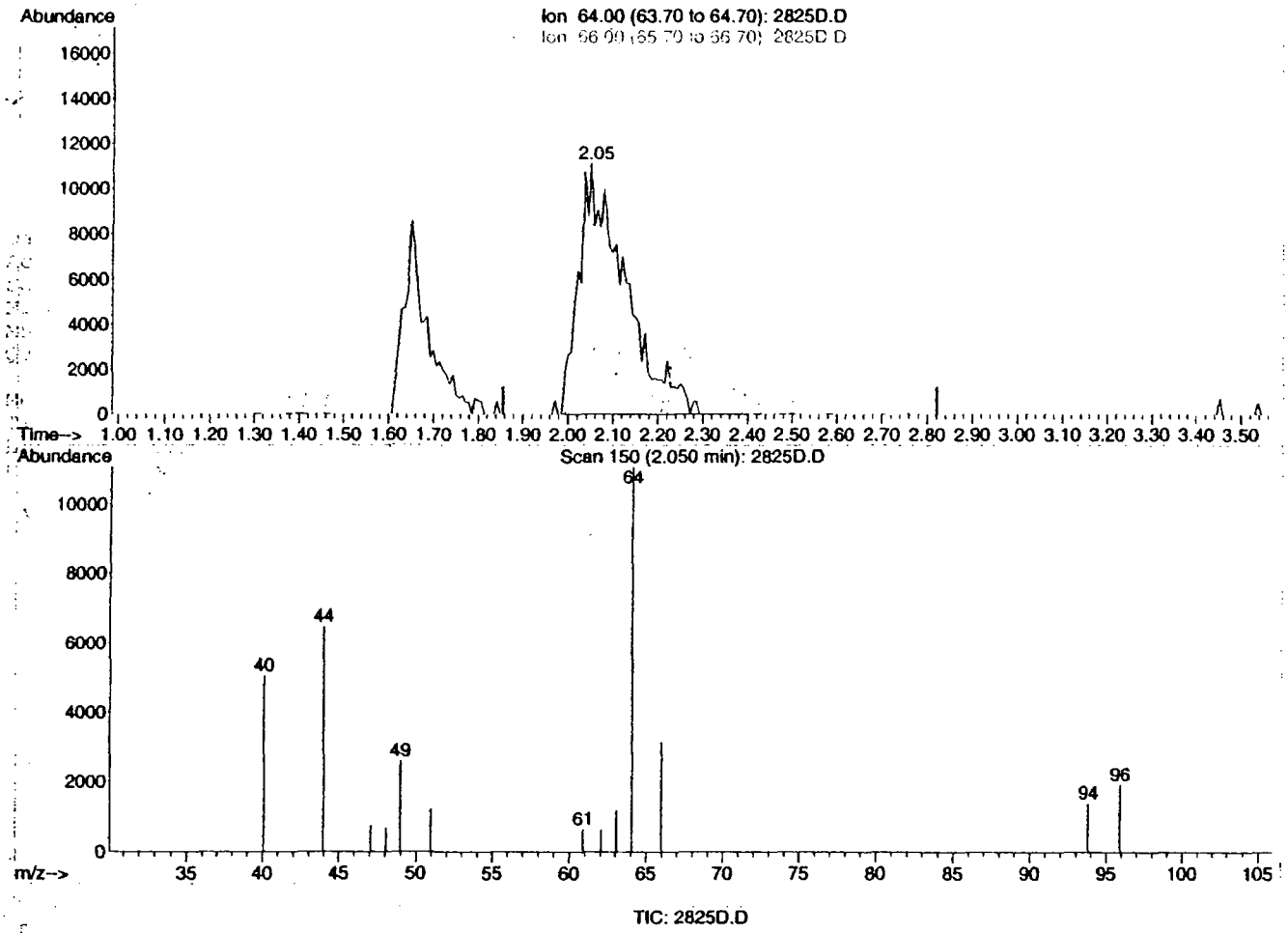
Ion	Exp%	Act%
64.00	100	100
66.00	27.20	24.31
0.00	0.00	0.00
0.00	0.00	0.00

2825D.D DWD.M Fri Sep 07 05:49:03 2007

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\DATA\D090607\2825D.D Vial: 21
Acq On : 6 Sep 2007 17:18 Operator: REGI
Sample : A781260 MS LQ4593 Inst : GCMS #4
Misc : 9/8/07 Multiplr: 1.00
MS Integration Params: rteint2.p
Quant Time: Sep 7 5:49 2007 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\DWD.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Tue Sep 04 10:38:20 2007
Response via : Multiple Level Calibration



(6) Chloroethane

2.05min 11.23UG/L m

response 78299

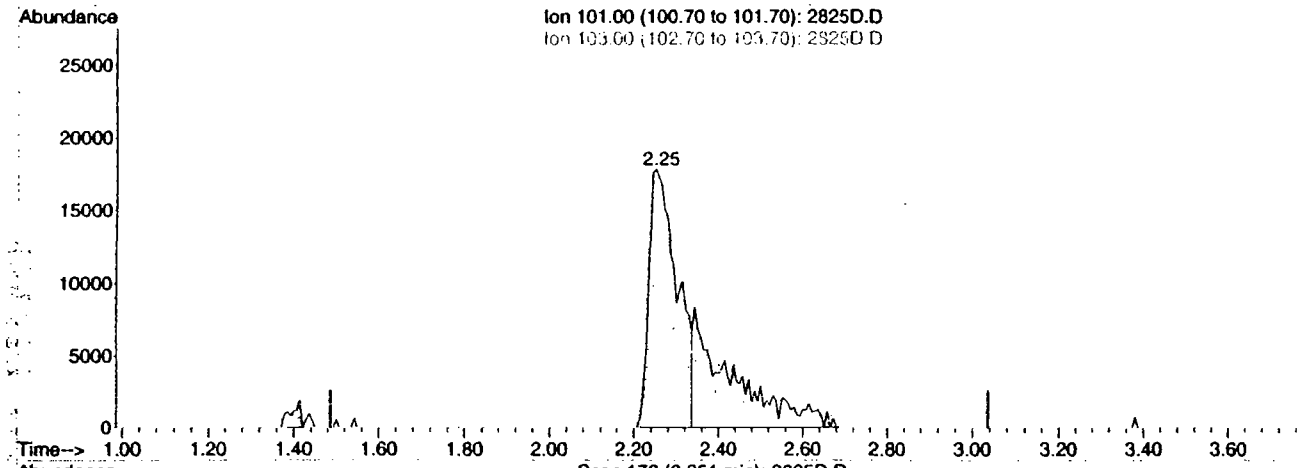
Ion	Exp%	Act%
64.00	100	100
66.00	27.20	10.81#
0.00	0.00	0.00
0.00	0.00	0.00

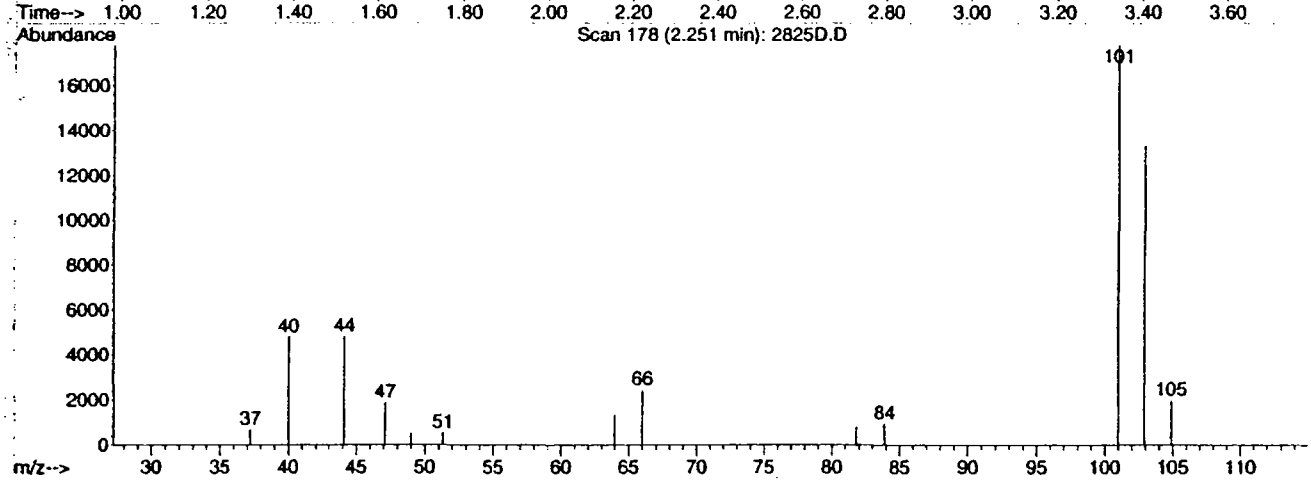
2825D.D DWD.M Fri Sep 07 05:49:07 2007

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\DATA\D090607\2825D.D Vial: 21
Acq On : 6 Sep 2007 17:18 Operator: REGI
Sample : A781260 MS LQ4593 Inst : GCMS #4
Misc : 9/8/07 Multiplr: 1.00
MS Integration Params: rteint2.p
Quant Time: Sep 7 5:49 2007 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\DWD.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Tue Sep 04 10:38:20 2007
Response via : Multiple Level Calibration





TIC: 2825D.D

(7) Trichlorofluoromethane

2.25min 5.99UG/L

response 82854

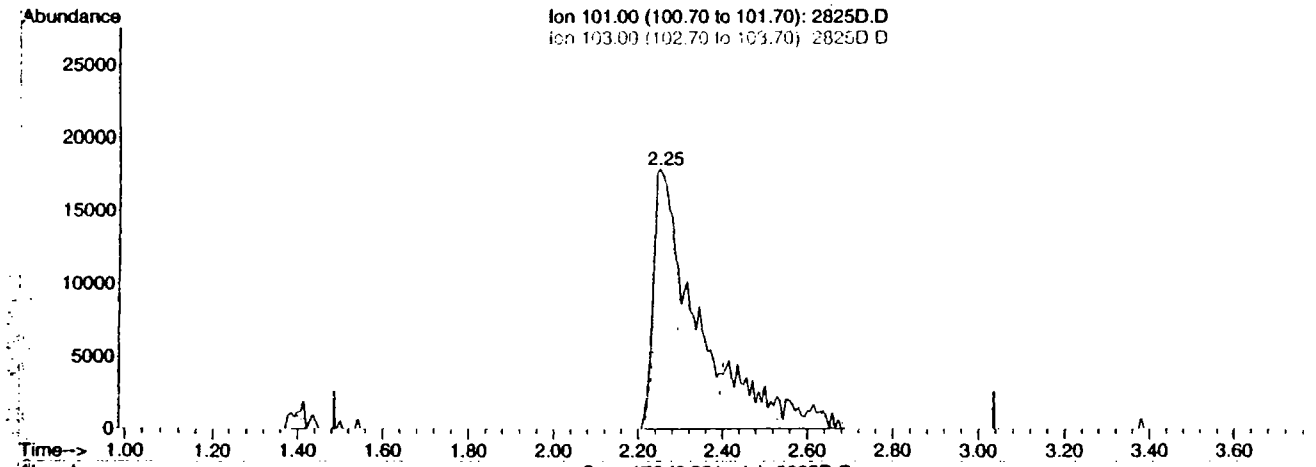
Ion	Exp%	Act%
101.00	100	100
103.00	49.20	60.92#
0.00	0.00	0.00
0.00	0.00	0.00

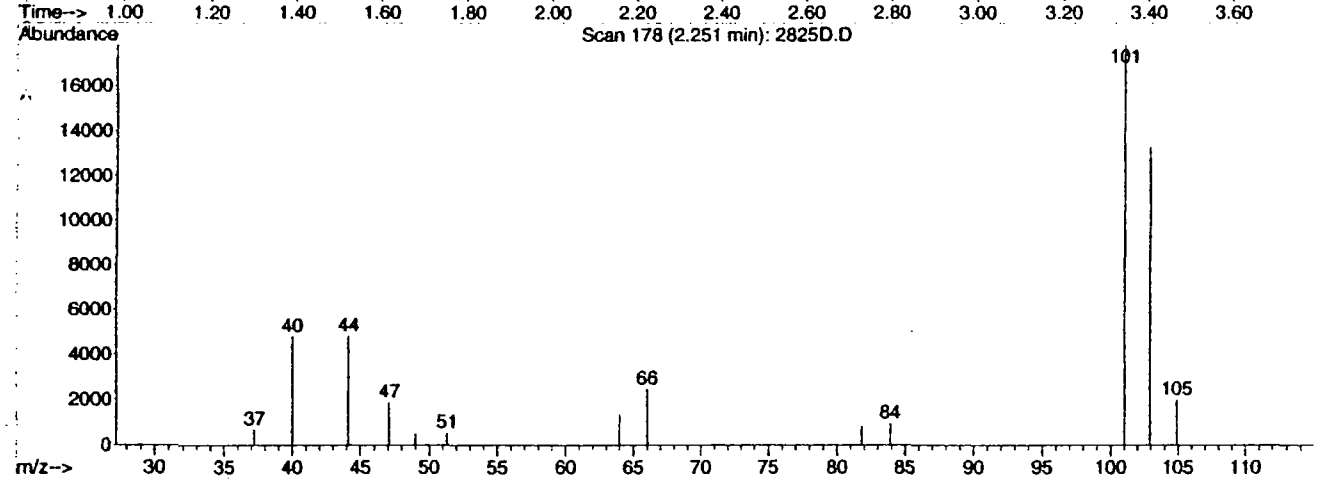
2825D.D DWD.M Fri Sep 07 05:49:12 2007

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\DATA\D090607\2825D.D Vial: 21
Acq On : 6 Sep 2007 17:18 Operator: REGI
Sample : A781260 MS LQ4593 Inst : GCMS #4
Misc : 9/8/07 Multiplr: 1.00
MS Integration Params: rteint2.p
Quant Time: Sep 7 5:49 2007 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\DWD.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Tue Sep 04 10:38:20 2007
Response via : Multiple Level Calibration





TIC: 2825D.D

(7) Trichlorofluoromethane

2.25min 9.71UG/L m

response 134443

Ion	Exp%	Act%
101.00	100	100
103.00	49.20	37.54#
0.00	0.00	0.00
0.00	0.00	0.00

2825D.D DWD.M Fri Sep 07 05:49:16 2007

R524561 Heritage Environmental Services, LLC Q1994749

QC Report

QCType DPS01 Duplicate SampleID A781260 DataFile 2826D.D
Date Entered 10Sep07 Duplicate QCSampleID Q1994748 Analyst 1062 R. SHAMP
Analysis Date/Time 06Sep07 17:45:00 Method 296 Matrix 1 Units ug/L

PRM	Parameter	TruVal	SpikeVal	ObsVal	RQL	Rec	Difference
151	BENZENE	0	10	9.53		95.3	5.3
217	CARBON TETRACHLORIDE	0	10	9.77		97.7	10
29	1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	0	10	10		100.4	12
21	1,2-DICHLOROETHANE	0	10	9.35		93.5	4.7
8	1,1-DICHLOROETHENE	0	10	9.21		92.1	.1
2	1,1,1-TRICHLOROETHANE	0	10	9.38		93.8	17.3
750	TRICHLOROETHENE	0	10	8.73		87.3	5
768	VINYL CHLORIDE	0	10	9.94		99.4	24.5
193	BROMOBENZENE	0	10	10.1		100.7	5.8
195	BROMODICHLOROMETHANE	0	10	9.43		94.3	1.2
197	BROMOFORM	0	10	9.26		92.6	3.1
198	BROMOMETHANE	0	10	9.06		90.6	9.4
231	CHLOROBENZENE	0	10	9.77		97.7	7.5
295	DIBROMOCHLOROMETHANE	0	10	10.1		101.2	4.2
234	CHLOROETHANE	0	10	9.68		96.8	14.8
235	CHLOROFORM	0	10	9.57		95.7	5.6
236	CHLOROMETHANE	0	10	11.1		111.1	3.2
807	2-CHLOROTOLUENE (O-CHLOROTOLUENE)	0	10	9.97		99.7	10.2
808	4-CHLOROTOLUENE (P-CHLOROTOLUENE)	0	10	10.3		102.6	12.4
296	DIBROMOMETHANE	0	10	9.42		94.2	1.6
26	1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)	0	10	10.1		100.9	8.9
20	1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	0	10	10.6		105.5	13.5
746	TRANS-1,2-DICHLOROETHENE	0	10	9.42		94.2	19.3
246	CIS-1,2-DICHLOROETHENE	0	10	9.12		91.2	1.2
302	DICHLOROMETHANE (METHYLENE CHLORIDE)	0	10	10.3		103	8.9
7	1,1-DICHLOROETHANE	0	10	9.83		98.3	6.9
10	1,1-DICHLOROPROPENE	0	10	9.33		93.3	2.3
23	1,2-DICHLOROPROPANE	0	10	9.65		96.5	1.8
27	1,3-DICHLOROPROPANE	0	10	10.3		102.8	.5
247	CIS-1,3-DICHLOROPROPENE	0	10	8.51		85.1	2.9
747	TRANS-1,3-DICHLOROPROPENE	0	10	9.04		90.4	.8
349	ETHYL BENZENE	0	10	10.1		100.6	10
680	STYRENE	0	10	9.67		96.7	2.8
4	1,1,2-TRICHLOROETHANE	0	10	10.1		100.6	4.2
1	1,1,1,2-TETRACHLOROETHANE	0	10	9.58		95.8	9.4
3	1,1,2,2-TETRACHLOROETHANE	0	10	10.3		103.3	12.6
703	TETRACHLOROETHENE	0	10	9.85		98.5	4.1
14	1,2,3-TRICHLOROPROPANE	0	10	10.8		107.9	16.7
724	TOLUENE	0	10	9.24		92.4	2.6
549	O-XYLENE	0	10	9.69		96.9	4.9
492	M/P-XYLENE	0	10	20.2		202.3	4.6
194	BROMOCHLOROMETHANE	0	10	9.65		96.5	6.4
519	N-BUTYLBENZENE	0	10	9.8		98	14.8
300	DICHLORODIFLUOROMETHANE	0	10	9.72		97.2	4.6

JS 9-10-07

US 9-10-07

QC Report

PRM	Parameter	TruVal	SpikeVal	ObsVal	RQL	Rec	Difference
372	TRICHLOROFLUOROMETHANE	0	10	9.76		97.6	.5
398	HEXACHLOROBUTADIENE	0	10	12.1		121.1	25.2
432	ISOPROPYLBENZENE (CUMENE)	0	10	9.68		96.8	5.3
628	4-ISOPROPYLTOLUENE (P-ISOPROPYLTOLUENE)	0	10	9.72		97.2	11.8
493	NAPHTHALENE	0	10	10.3		102.7	7.7
532	N-PROPYLBENZENE	0	10	9.62		96.2	6.9
644	SEC-BUTYLBENZENE	0	10	9.65		96.5	5.9
702	TERT-BUTYLBENZENE	0	10	9.51		95.1	8.6
13	1,2,3-TRICHLOROBENZENE	0	10	11.6		115.8	29
16	1,2,4-TRICHLOROBENZENE	0	10	10.4		103.5	23.2
17	1,2,4-TRIMETHYLBENZENE	0	10	9.9		99	10.6
25	1,3,5-TRIMETHYLBENZENE	0	10	9.67		96.7	10.4

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\DATA\D090607\2826D.D Vial: 22
Acq On : 6 Sep 2007 17:45 Operator: REGI
Sample : A781260 MSD LQ4593 Inst : GCMS #4
Misc : 9/8/07 Multiplr: 1.00
MS Integration Params: rteint2.p
Quant Time: Sep 06 18:02:15 2007 Quant Results File: DWD.RES

Quant Method : C:\MSDCHEM\1\METHODS\DWD.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Tue Sep 04 10:38:20 2007
Response via : Initial Calibration
DataAcq Meth : DWD

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) FLUOROBENZENE	5.67	96	359324	10.00 UG/L	0.00
38) 2-Bromo-1-chloropropane	7.96	77	145939	10.00 UG/L	0.00
System Monitoring Compounds					
21) Dibromofluoromethane	4.95	113	90286	10.04 UG/L	0.00
Spiked Amount 10.000			Recovery	= 100.40%	
23) 1,2-Dichloroethane-d4	5.30	65	116531	10.53 UG/L	0.00
Spiked Amount 10.000			Recovery	= 105.30%	
33) Toluene-d8	7.51	98	362092	9.73 UG/L	0.00
Spiked Amount 10.000			Recovery	= 97.30%	
51) 4-Bromofluorobenzene	10.66	174	124820	9.66 UG/L	0.00
Spiked Amount 10.000			Recovery	= 96.60%	
Target Compounds					Qvalue
2) Dichlorodifluoromethane	1.39	85	52775	9.72 UG/L	100
3) Chloromethane	1.52	50	132164	11.11 UG/L	100
4) VINYL CHLORIDE	1.63	62	124733	9.94 UG/L	97
5) Bromomethane	1.92	94	62135	9.06 UG/L	93
6) Chloroethane	2.01	64	75598	9.68 UG/L #	90
7) Trichlorofluoromethane	2.24	101	151262	9.76 UG/L #	73
8) Acetone	2.76	43	95192	21.72 UG/L	99
9) 1,1-DICHLOROETHENE	2.72	96	90011	9.21 UG/L	100
10) Methylene Chloride	3.17	84	114066	10.30 UG/L	83
11) MTBE	3.44	73	600135	19.45 UG/L	100
12) trans-1,2-Dichloroethene	3.44	96	106969	9.42 UG/L	95
13) 1,1-Dichloroethane	3.85	63	202307	9.83 UG/L	100
14) 2-Butanone	4.46	72	31969	22.96 UG/L	63
15) cis-1,2-Dichloroethene	4.45	96	107177	9.12 UG/L	99
16) CHLOROFORM	4.77	83	183999	9.57 UG/L	99
17) Tetrahydrofuran	4.75	42	95256	22.24 UG/L #	84
18) Bromochloromethane	4.69	128	54660	9.65 UG/L	84
19) 2,2-Dichloropropane	4.44	77	84655	7.82 UG/L	92
20) 1,1,1-Trichloroethane	4.97	97	145217	9.38 UG/L	97
22) 1,1-Dichloropropene	5.15	110	44062	9.33 UG/L	100
24) Carbon Tetrachloride	5.15	117	131739	9.77 UG/L	89
25) 1,2-Dichloroethane	5.38	62	147413	9.35 UG/L	96
26) Benzene	5.37	78	429829	9.53 UG/L	100
27) Trichloroethene	6.08	130	98706	8.73 UG/L	99
28) 1,2-DICHLOROPROPANE	6.33	63	103677	9.65 UG/L	100
29) Bromodichloromethane	6.65	83	129025	9.43 UG/L	96
30) Dibromomethane	6.46	93	61365	9.42 UG/L	95
31) 4-Methyl-2-Pentanone	7.37	43	270586	19.49 UG/L	96
32) cis-1,3-Dichloropropene	7.18	75	129086	8.51 UG/L	100
34) TOLUENE	7.58	91	427745	9.24 UG/L	100
35) trans-1,3-Dichloropropene	7.86	75	119414	9.04 UG/L	100
36) 1,1,2-Trichloroethane	8.09	97	94630	10.06 UG/L	100
37) 1,2-Dibromoethane	8.71	107	84839	9.33 UG/L	97
39) 2-Hexanone	8.41	43	187380	20.04 UG/L	96
40) 1,3-Dichloropropane	8.29	76	153958	10.28 UG/L	100
41) Tetrachloroethene	8.26	166	105761	9.85 UG/L	99
42) Dibromochloromethane	8.58	129	95651	10.12 UG/L	100
43) Chlorobenzene	9.36	112	264609	9.77 UG/L	98
44) 1,1,1,2-Tetrachloroethane	9.46	131	90904	9.58 UG/L	100
45) ETHYL BENZENE	9.49	106	143446	10.06 UG/L	86
46) m,p-Xylene	9.64	106	349679	20.23 UG/L #	64

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

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\DATA\D090607\2826D.D Vial: 22
Acq On : 6 Sep 2007 17:45 Operator: REGI
Sample : A781260 MSD LQ4593 Inst : GCMS #4
Misc : 9/8/07 Multiplr: 1.00
MS Integration Params: rteint2.p
Quant Time: Sep 06 18:02:15 2007 Quant Results File: DWD.RES

Quant Method : C:\MSDCHEM\1\METHODS\DWD.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Tue Sep 04 10:38:20 2007
Response via : Initial Calibration
DataAcq Meth : DWD

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
47)	o-Xylene	10.09	106	161947	9.69	UG/L	#	72
48)	Styrene	10.12	104	279936	9.67	UG/L		92
49)	Bromoform	10.30	173	67299	9.26	UG/L		100
50)	1,1,2,2-Tetrachloroethane	10.82	83	125371	10.33	UG/L		97
52)	Isopropylbenzene	10.51	105	421978	9.68	UG/L		100
53)	Bromobenzene	10.81	77	178064	10.07	UG/L		100
54)	1,2,3-Trichloropropane	10.86	110	42427	10.79	UG/L		100
55)	n-Propylbenzene	10.94	92	53130	9.62	UG/L		82
56)	1,3,5-Trimethylbenzene	11.12	105	332688	9.67	UG/L		100
57)	2-Chlorotoluene	11.02	126	106454	9.97	UG/L		100
58)	4-Chlorotoluene	11.12	126	115158	10.26	UG/L		100
59)	t-Butylbenzene	11.44	91	182034	9.51	UG/L	#	63
60)	1,2,4-Trimethylbenzene	11.49	105	343726	9.90	UG/L		100
61)	sec-Butylbenzene	11.65	105	387875	9.65	UG/L		100
62)	p-Isopropyltoluene	11.79	119	351310	9.72	UG/L		100
63)	1,3-Dichlorobenzene	11.75	146	218953	10.09	UG/L		100
64)	1,4-Dichlorobenzene	11.83	146	226713	10.04	UG/L		100
65)	n-Butylbenzene	12.18	92	161553	9.80	UG/L		96
66)	1,2-Dichlorobenzene	12.18	146	214510	10.55	UG/L		100
67)	1,2-Dibromo-3-chloropropan	12.88	157	26199	10.01	UG/L		100
68)	1,2,4-Trichlorobenzene	13.58	180	114797	10.35	UG/L		100
69)	Naphthalene	13.78	128	304954	10.27	UG/L		100
70)	Hexachlorobutadiene	13.73	225	50318	12.11	UG/L		100
71)	1,2,3-Trichlorobenzene	13.98	180	109531	11.58	UG/L		100

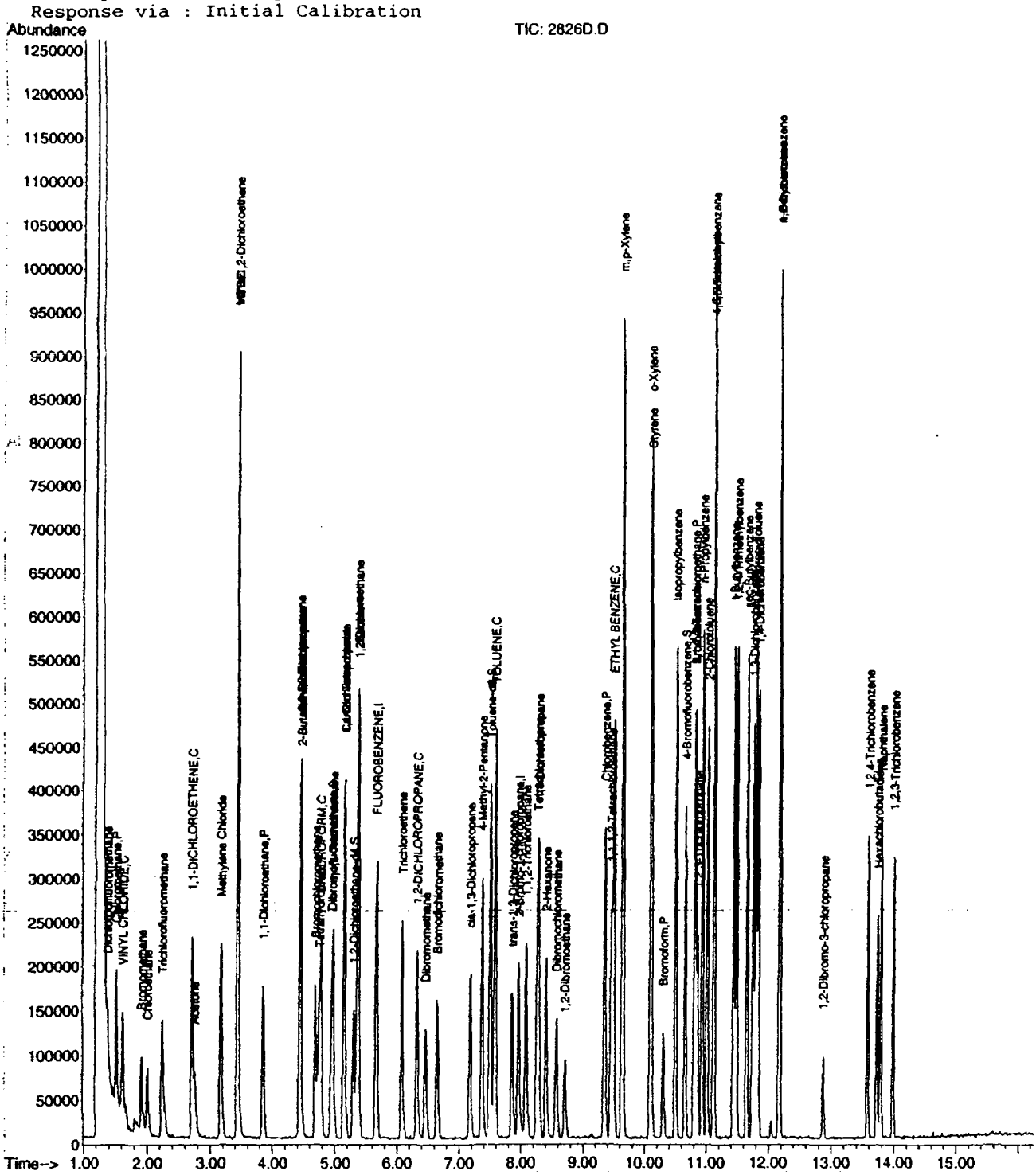
(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\DATA\D090607\2826D.D
Acq On : 6 Sep 2007 17:45
Sample : A781260 MSD LQ4593
Misc : 9/8/07
MS Integration Params: rteint2.p
Quant Time: Sep 6 18:02 2007

Vial: 22
Operator: REGI
Inst : GCMS #4
Multiplr: 1.00
Quant Results File: DWD.RES

Method : C:\MSDCHEM\1\METHODS\DWD.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Tue Sep 04 10:38:20 2007
Response via : Initial Calibration



2826D.D DWD.M Thu Sep 06 18:02:17 2007

5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

EPA Method 524.2 BROMOFLUOROBENZENE (BFB)

Lab Name: _____ Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Lab File ID: 2829D.D BFB Injection Date: 09/07/07

Instrument ID: GCMS#4 BFB Injection Time: 06:03

GC Column: CAP ID: 0.18 (mm) Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	22.3
75	30.0 - 80.0% of mass 95	51.3
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.8
173	Less than 2.0% of mass 174	0.6 (0.7)1
174	50.0 - 100.0% of mass 95	87.9
175	5.0 - 9.0% of mass 174	6.2 (7.0)1
176	95.0 - 101.0% of mass 174	86.4 (98.3)1
177	5.0 - 9.0% of mass 176	5.5 (6.4)2

1-Value is % mass 174 2-Value is % mass 176

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD010	DW STD010	2830D.D	09/07/07	06:24
02	VSTD02	DW STD02	2831D.D	09/07/07	06:53
03	DW BLANK01	DW BLANK	2832D.D	09/07/07	07:25
04	A781413	A781413	2833D.D	09/07/07	08:00
05	A781414	A781414	2834D.D	09/07/07	08:27
06	A781271	A781271 LQ4606	2835D.D	09/07/07	08:55
07	A781272	A781272 LQ4607	2836D.D	09/07/07	09:22
08	A781273	A781273 LQ4608	2837D.D	09/07/07	09:49
09	A781274	A781274 LQ4609	2838D.D	09/07/07	10:17
10	A781275	A781275 LQ4610	2839D.D	09/07/07	10:44
11	A781276	A781276 LQ4597	2840D.D	09/07/07	11:11
12	A781263	A781263 LQ4598	2841D.D	09/07/07	11:39
13	A781264	A781264 LQ4599	2842D.D	09/07/07	12:06
14	A781265	A781265 LQ4600	2843D.D	09/07/07	12:33
15	A781266	A781266 LQ4601	2844D.D	09/07/07	13:01
16	A781267	A781267 LQ4602	2845D.D	09/07/07	13:28
17	A781268	A781268 LQ4603	2846D.D	09/07/07	13:55
18	A781248	A781248 1:5 LQ4581	2847D.D	09/07/07	14:22
19	A781249	A781249 1:10 LQ4582	2848D.D	09/07/07	14:50
20	A781250	A781250 1:10 LQ4583	2849D.D	09/07/07	15:17
21	A781251	A781251 1:10 LQ4584	2850D.D	09/07/07	15:44
22	A781252	A781252 1:10 LQ4585	2851D.D	09/07/07	16:11

 FORM V VOA 3/90

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8A

EPA Method 524.2 VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: _____ Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Lab File ID (Standard): 2831D.D Date Analyzed: 09/07/07

Instrument ID: GCMS#4 Time Analyzed: 06:53

GC Column: CAP ID: 0.18 (mm) Heated Purge: (Y/N) N

		IS1 AREA #	RT #	IS2 AREA #	RT #	AREA #	RT #
	12 HOUR STD	379858	5.68	147575	7.97		
	UPPER LIMIT	569787	6.18	221363	8.47		
	LOWER LIMIT	265901	5.18	103303	7.47		
	EPA SAMPLE NO.						
01	DW BLANK01	372401	5.68	155167	7.97		
02	A781413	365846	5.68	148131	7.96		
03	A781414	311053	5.68	126795	7.96		
04	A781271	355027	5.68	146491	7.97		
05	A781272	350931	5.68	146031	7.96		
06	A781273	356817	5.68	146638	7.97		
07	A781274	356493	5.68	143631	7.97		
08	A781275	340348	5.68	145735	7.97		
09	A781276	336737	5.67	140925	7.97		
10	A781263	353358	5.68	139913	7.97		
11	A781264	305179	5.67	123290	7.96		
12	A781265	341036	5.67	138773	7.97		
13	A781266	303065	5.68	126425	7.96		
14	A781267	329338	5.68	140403	7.96		
15	A781268	333118	5.67	140488	7.96		
16	A781248	331976	5.68	137349	7.97		
17	A781249	320653	5.68	138874	7.96		
18	A781250	306511	5.68	127743	7.96		
19	A781251	331373	5.68	141926	7.96		
20	A781252	337526	5.68	136212	7.97		

IS1 = FLUOROBENZENE

IS2 = 2-BROMO-1-CHLOROPROPANE

AREA UPPER LIMIT = +50% of internal standard area

AREA LOWER LIMIT = - 30% of internal standard area

RT UPPER LIMIT = +0.50 minutes of internal standard RT

RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column to be used to flag values outside QC limit with an asterisk.

* Values outside of contract required QC limits

JM 9-10-07

205

2A
WATER VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: _____ Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Date Injected: 07-Sep-07 Instrument: GCMS#4

	EPA SAMPLE NO.	SMC1 #	SMC2 #	SMC3 #	TOT OUT
01	DW BLANK01	103	93	87	0
02	A781413	100	93	90	0
03	A781414	102	93	90	0
04	A781271	101	92	90	0
05	A781272	104	92	88	0
06	A781273	104	91	87	0
07	A781274	101	89	85	0
08	A781275	110	95	88	0
09	A781276	111	94	90	0
10	A781263	103	90	93	0
11	A781264	100	91	89	0
12	A781265	104	92	89	0
13	A781266	106	92	89	0
14	A781267	102	94	82	0
15	A781268	106	93	90	0
16	A781248	109	94	89	0
17	A781249	104	92	85	0
18	A781250	106	89	88	0
19	A781251	103	94	84	0
20	A781252	102	88	90	0

QC LIMITS

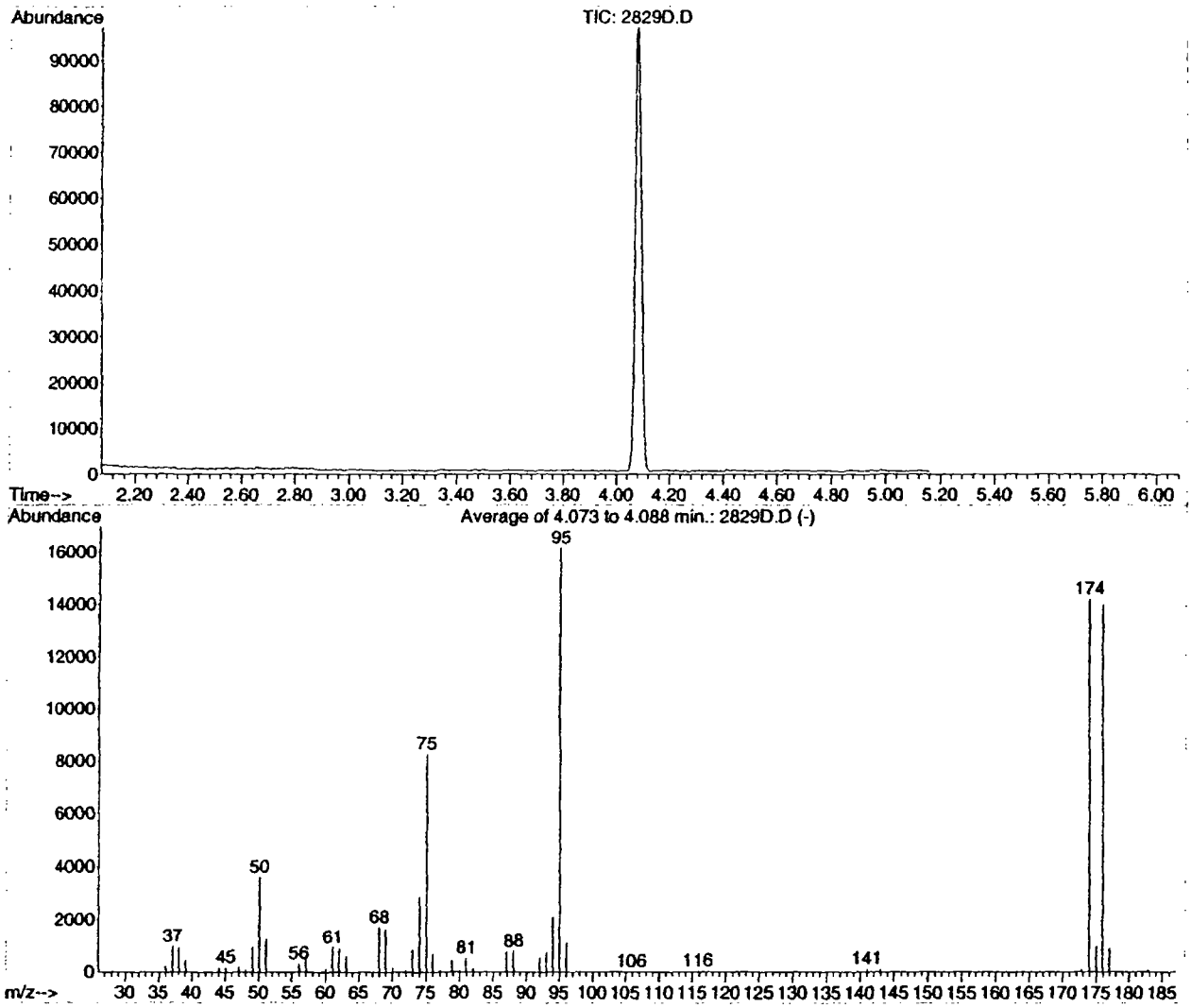
SMC1	=	1,2-Dichloroethane-d4	(80-120)
SMC2	=	Toluene-d8	(80-120)
SMC3	=	4-Bromofluorobenzene	(80-120)

Column to be used to flag recovery values
* Values outside of contract required QC limits
D System Monitoring Compound diluted out

KS 9-10-07

BFB

Data File : C:\MSDCHEM\DATA\D090707\2829D.D Vial: 22
Acq On : 7 Sep 2007 6:03 Operator: REGI
Sample : BFB TUNE CHECK Inst : GCMS #4
Misc : 9/7/07 Multiplr: 1.00
MS Integration Params: rteint2.p
Method : C:\MSDCHEM\1\METHODS\DWD.M (RTE Integrator)
Title : 8260 VOLATILES



Spectrum Information: Average of 4.073 to 4.088 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	22.3	3612	PASS
75	95	30	60	51.3	8292	PASS
95	95	100	100	100.0	16166	PASS
96	95	5	9	6.8	1105	PASS
173	174	0.00	2	0.7	104	PASS
174	95	50	100	87.9	14209	PASS
175	174	5	9	7.0	996	PASS
176	174	95	101	98.3	13962	PASS
177	176	5	9	6.4	892	PASS

JK 9/10/08

2829D.D DWD.M Fri Sep 07 06:08:38 2007

Average of 4.073 to 4.088 min.: 2829D.D
BFB TUNE CHECK
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.05	234	52.00	35	71.95	80	86.95	755
37.10	991	56.00	323	73.05	828	88.00	784
38.10	915	57.05	548	74.00	2877	90.90	34
39.05	432	60.00	151	75.00	8292	92.00	547
44.00	182	61.00	944	76.00	666	93.00	720
45.10	183	62.00	859	77.00	65	94.00	2099
47.05	194	63.05	615	78.00	34	95.00	16166
48.00	96	64.10	35	78.90	434	96.05	1105
49.05	944	68.00	1725	79.95	77	103.90	39
50.05	3612	69.00	1642	80.95	522	105.90	40
51.05	1257	70.00	174	81.95	146	115.85	67

Average of 4.073 to 4.088 min.: 2829D.D
BFB TUNE CHECK
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
116.90	33						
119.00	41						
140.95	150						
142.90	115						
172.75	104						
173.90	14209						
174.95	996						
175.90	13962						
176.95	892						

R524570 Heritage Environmental Services, LLC Q1994788

QC Report

QCType CCVD Duplicate SampleID DataFile 2830D.D
Date Entered 10Sep07 Duplicate QCSampleID Analyst 1062 R. SHAMP
Analysis Date/Time 07Sep0706:24:00 Method Matrix 1 Units

PRM	Parameter	TruVal	SpikeVal	ObsVal	RQL	Rec	Difference
300	DICHLORODIFLUOROMETHANE	0.1511		0.1489			1.5
236	CHLOROMETHANE	0.3312		0.3350			1.1
768	VINYL CHLORIDE	0.3492		0.3221			7.8
198	BROMOMETHANE	0.1909		0.1647			13.7
234	CHLOROETHANE	0.2173		0.2094			3.6
372	TRICHLOROFLUOROMETHANE	0.4313		0.3981			7.7
8	1,1-DICHLOROETHENE	0.2719		0.2626			3.4
302	DICHLOROMETHANE (METHYLENE CHLORIDE)	10		12.47	QDR		24.7
746	TRANS-1,2-DICHLOROETHENE	0.3161		0.2893			8.5
7	1,1-DICHLOROETHANE	0.5728		0.5466			4.6
246	CIS-1,2-DICHLOROETHENE	0.3271		0.2880			12
235	CHLOROFORM	0.5349		0.4985			6.8
194	BROMOCHLOROMETHANE	0.1576		0.1488			5.6
2	1,1,1-TRICHLOROETHANE	0.4307		0.3984			7.5
10	1,1-DICHLOROPROPENE	0.1314		0.1222			7
217	CARBON TETRACHLORIDE	0.3754		0.3589			4.4
21	1,2-DICHLOROETHANE	0.4390		0.3968			9.6
151	BENZENE	1.2552		1.1476			8.6
750	TRICHLOROETHENE	0.3146		0.2647			15.9
23	1,2-DICHLOROPROPANE	0.2990		0.2736			8.5
299	DICHLOROBROMOMETHANE	0.3809		0.3479			8.7
296	DIBROMOMETHANE	0.1813		0.1658			8.5
247	CIS-1,3-DICHLOROPROPENE	0.4223		0.3649			13.6
724	TOLUENE	1.2883		1.1245			12.7
747	TRANS-1,3-DICHLOROPROPENE	0.3675		0.3322			9.6
4	1,1,2-TRICHLOROETHANE	0.2617		0.2439			6.8
27	1,3-DICHLOROPROPANE	1.0264		1.0177			.8
703	TETRACHLOROETHENE	0.7360		0.7243			1.6
295	DIBROMOCHLOROMETHANE	0.6474		0.6671			3
18	1,2-DIBROMOETHANE (EDB)	0.2530		0.2252			11
231	CHLOROBENZENE	1.8557		1.7576			5.3
349	ETHYL BENZENE	0.9769		0.8789			10
1	1,1,1,2-TETRACHLOROETHANE	0.6499		0.5966			8.2
492	M/P-XYLENE	1.1843		1.1696			1.2
549	O-XYLENE	1.1452		1.0867			5.1
680	STYRENE	1.9837		1.8904			4.7
432	ISOPROPYLBENZENE (CUMENE)	2.9880		2.7540			7.8
197	BROMOFORM	0.4981		0.5069			1.8
3	1,1,2,2-TETRACHLOROETHANE	0.8318		0.8656			4.1
532	N-PROPYLBENZENE	0.3782		0.3785			.1
193	BROMOBENZENE	1.2113		1.1465			5.3
25	1,3,5-TRIMETHYLBENZENE	2.3563		2.2431			4.8
807	2-CHLOROTOLUENE (O-CHLOROTOLUENE)	0.7313		0.6824			6.7
808	4-CHLOROTOLUENE (P-CHLOROTOLUENE)	0.7687		0.7674			.2

JK 9-10-07

JK 9-10-07

QC Report

PRM	Parameter	TruVal	SpikeVal	ObsVal	RQL	Rec	Difference
702	TERT-BUTYLBENZENE	1.3112		1.2239			6.7
17	1,2,4-TRIMETHYLBENZENE	2.3787		2.3565			.9
644	SEC-BUTYLBENZENE	2.7532		2.5794			6.3
628	4-ISOPROPYLTOLUENE (P-ISOPROPYLTOLUENE)	2.4762		2.4109			2.6
26	1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)	1.4872		1.4195			4.6
29	1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	1.5475		1.4691			5.1
519	N-BUTYLBENZENE	1.1297		1.0765			4.7
20	1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	1.3929		1.3656			2
19	1,2-DIBROMO-3-CHLOROPROPANE (DBCP)	0.1793		0.1888			5.3
16	1,2,4-TRICHLOROBENZENE	0.7601		0.7490			1.5
398	HEXACHLOROBUTADIENE	10		11.93	QDR		19.3
493	NAPHTHALENE	2.0349		2.0884			2.6
13	1,2,3-TRICHLOROBENZENE	0.6483		0.6684			3.1
14	1,2,3-TRICHLOROPROPANE	0.2695		0.2480			8
99	ACETONE (2-PROPANONE)	20		49.13	QDR		145.7
52	2-BUTANONE	0.0388		0.0507			30.7
91	4-METHYL-2-PENTANONE	0.3864		0.3841			.6
709	TETRAHYDROFURAN	0.1192		0.1329			11.5
60	2-HEXANONE	0.6408		0.6702			4.6
859	METHYL-T-BUTYL ETHER (MTBE)	0.8588		0.8294			3.4
301	DICHLOROETHANE-D4	0.3079		0.3117			1.2
726	TOLUENE-D8	1.0360		0.9636			7
196	4-BROMOFLUOROBENZENE	0.8852		0.8332			5.9

Comment Value reported for analytes calibrated by linear (LIN) or quadratic (QDR) equations is concentration ( ).

Qualifiers

QDR Quadratic Equation Used

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\DATA\D090707\2830D.D Vial: 22
Acq On : 7 Sep 2007 6:24 Operator: REGI
Sample : DW STD010 Inst : GCMS #4
Misc : CALIBRATION CHECK 9/7/07 Multiplr: 1.00
MS Integration Params: rteint2.p
Quant Time: Sep 07 06:40:40 2007 Quant Results File: DWD.RES

Quant Method : C:\MSDCHEM\1\METHODS\DWD.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Tue Sep 04 10:38:20 2007
Response via : Initial Calibration
DataAcq Meth : DWD

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) FLUOROBENZENE	5.68	96	405956	10.00 UG/L	0.00
38) 2-Bromo-1-chloropropane	7.97	77	160028	10.00 UG/L	0.00
System Monitoring Compounds					
21) Dibromofluoromethane	4.95	113	100969	9.94 UG/L	0.00
Spiked Amount 10.000			Recovery =	99.40%	
23) 1,2-Dichloroethane-d4	5.30	65	126544	10.12 UG/L	0.00
Spiked Amount 10.000			Recovery =	101.20%	
33) Toluene-d8	7.51	98	391194	9.30 UG/L	0.00
Spiked Amount 10.000			Recovery =	93.00%	
51) 4-Bromofluorobenzene	10.66	174	133334	9.41 UG/L	0.00
Spiked Amount 10.000			Recovery =	94.10%	
Target Compounds					Qvalue
2) Dichlorodifluoromethane	1.39	85	60434	9.85 UG/L	100
3) Chloromethane	1.53	50	135988	10.12 UG/L	100
4) VINYL CHLORIDE	1.63	62	130761	9.22 UG/L	100
5) Bromomethane	1.92	94	66870	8.63 UG/L	98
6) Chloroethane	2.02	64	85000	9.64 UG/L	94
7) Trichlorofluoromethane	2.24	101	161629	9.23 UG/L #	73
8) Acetone	2.76	43	243265	49.13 UG/L	98
9) 1,1-DICHLOROETHENE	2.72	96	106590	9.66 UG/L	100
10) Methylene Chloride	3.17	84	154350	12.47 UG/L	86
11) MTBE	3.44	73	673371	19.31 UG/L	100
12) trans-1,2-Dichloroethene	3.44	96	117456	9.15 UG/L	95
13) 1,1-Dichloroethane	3.86	63	221894	9.54 UG/L	100
14) 2-Butanone	4.45	72	41175	26.18 UG/L	68
15) cis-1,2-Dichloroethene	4.45	96	116898	8.80 UG/L	95
16) CHLOROFORM	4.78	83	202363	9.32 UG/L	98
17) Tetrahydrofuran	4.75	42	107863	22.29 UG/L #	84
18) Bromochloromethane	4.70	128	60404	9.44 UG/L	84
19) 2,2-Dichloropropane	4.45	77	106831	8.74 UG/L	90
20) 1,1,1-Trichloroethane	4.97	97	161736	9.25 UG/L	96
22) 1,1-Dichloropropene	5.15	110	49588	9.30 UG/L	100
24) Carbon Tetrachloride	5.15	117	145717	9.56 UG/L	91
25) 1,2-Dichloroethane	5.38	62	161064	9.04 UG/L	92
26) Benzene	5.38	78	465869	9.14 UG/L	100
27) Trichloroethene	6.08	130	107463	8.41 UG/L	95
28) 1,2-DICHLOROPROPANE	6.33	63	111078	9.15 UG/L	100
29) Bromodichloromethane	6.66	83	141226	9.13 UG/L	99
30) Dibromomethane	6.47	93	67298	9.14 UG/L	94
31) 4-Methyl-2-Pentanone	7.37	43	311828	19.88 UG/L	98
32) cis-1,3-Dichloropropene	7.18	75	148140	8.64 UG/L	100
34) TOLUENE	7.58	91	456513	8.73 UG/L	100
35) trans-1,3-Dichloropropene	7.86	75	134863	9.04 UG/L	100
36) 1,1,2-Trichloroethane	8.09	97	99010	9.32 UG/L	100
37) 1,2-Dibromoethane	8.72	107	91424	8.90 UG/L	99
39) 2-Hexanone	8.41	43	214515	20.92 UG/L	98
40) 1,3-Dichloropropane	8.29	76	162853	9.91 UG/L	100
41) Tetrachloroethene	8.27	166	115906	9.84 UG/L	98
42) Dibromochloromethane	8.59	129	106753	10.30 UG/L	100
43) Chlorobenzene	9.35	112	281264	9.47 UG/L	98
44) 1,1,1,2-Tetrachloroethane	9.46	131	95468	9.18 UG/L	100
45) ETHYL BENZENE	9.50	106	140642	9.00 UG/L	71
46) m,p-Xylene	9.64	106	374350	19.75 UG/L #	64

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

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\DATA\D090707\2830D.D Vial: 22
Acq On : 7 Sep 2007 6:24 Operator: REGI
Sample : DW STD010 Inst : GCMS #4
Misc : CALIBRATION CHECK 9/7/07 Multiplr: 1.00
MS Integration Params: rteint2.p
Quant Time: Sep 07 06:40:40 2007 Quant Results File: DWD.RES

Quant Method : C:\MSDCHEM\1\METHODS\DWD.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Tue Sep 04 10:38:20 2007
Response via : Initial Calibration
DataAcq Meth : DWD

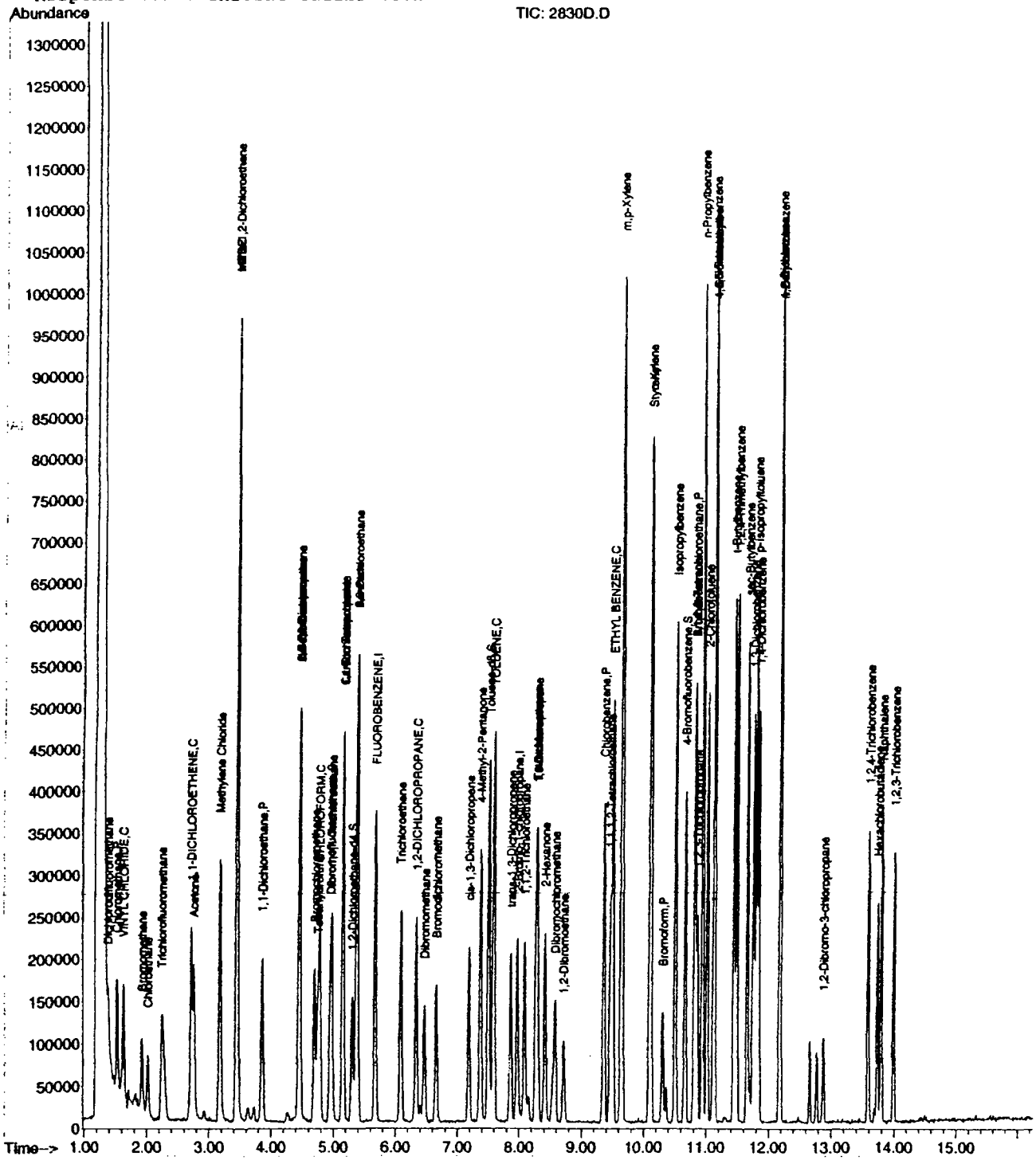
	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
47)	o-Xylene	10.09	106	173896	9.49 UG/L		78
48)	Styrene	10.12	104	302510	9.53 UG/L		90
49)	Bromoform	10.31	173	81122	10.18 UG/L		100
50)	1,1,2,2-Tetrachloroethane	10.82	83	138528	10.41 UG/L		99
52)	Isopropylbenzene	10.51	105	440725	9.22 UG/L		100
53)	Bromobenzene	10.81	77	183473	9.47 UG/L		100
54)	1,2,3-Trichloropropane	10.86	110	39684	9.20 UG/L		100
55)	n-Propylbenzene	10.94	92	60564	10.01 UG/L		89
56)	1,3,5-Trimethylbenzene	11.12	105	358958	9.52 UG/L		100
57)	2-Chlorotoluene	11.02	126	109206	9.33 UG/L		100
58)	4-Chlorotoluene	11.12	126	122801	9.98 UG/L		100
59)	t-Butylbenzene	11.44	91	195865	9.33 UG/L	#	64
60)	1,2,4-Trimethylbenzene	11.49	105	377112	9.91 UG/L		100
61)	sec-Butylbenzene	11.65	105	412769	9.37 UG/L		100
62)	p-Isopropyltoluene	11.80	119	385809	9.74 UG/L		100
63)	1,3-Dichlorobenzene	11.75	146	227159	9.54 UG/L		100
64)	1,4-Dichlorobenzene	11.84	146	235090	9.49 UG/L		100
65)	n-Butylbenzene	12.18	92	172265	9.53 UG/L		95
66)	1,2-Dichlorobenzene	12.18	146	218531	9.80 UG/L		100
67)	1,2-Dibromo-3-chloropropan	12.88	157	30212	10.53 UG/L		100
68)	1,2,4-Trichlorobenzene	13.58	180	119866	9.85 UG/L		100
69)	Naphthalene	13.78	128	334209	10.26 UG/L		100
70)	Hexachlorobutadiene	13.73	225	54353	11.93 UG/L		100
71)	1,2,3-Trichlorobenzene	13.98	180	106960	10.31 UG/L		100

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

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\DATA\D090707\2830D.D Vial: 22
Acq On : 7 Sep 2007 6:24 Operator: REGI
Sample : DW STD010 Inst : GCMS #4
Misc : CALIBRATION CHECK 9/7/07 Multiplr: 1.00
MS Integration Params: rteint2.p
Quant Time: Sep 7 6:40 2007 Quant Results File: DWD.RES

Method : C:\MSDCHEM\1\METHODS\DWD.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Tue Sep 04 10:38:20 2007
Response via : Initial Calibration



R524570 Heritage Environmental Services, LLC Q1994789

QC Report

QCType CCVD | Duplicate SampleID | DataFile 2831D.D
Date Entered 10Sep07 | Duplicate QCSampleID | Analyst 1062 R. SHAMP
Analysis Date/Time 07Sep0706:53:00 | Method | Matrix 1 | Units

PRM	Parameter	TruVal	SpikeVal	ObsVal	RQL	Rec	Difference
300	DICHLORODIFLUOROMETHANE	0.1511		0.1568			3.8
236	CHLOROMETHANE	0.3312		0.3600			8.7
768	VINYL CHLORIDE	0.3492		0.3415			2.2
198	BROMOMETHANE	0.1909		0.1820			4.7
234	CHLOROETHANE	0.2173		0.1982			8.8
372	TRICHLOROFLUOROMETHANE	0.4313		0.3726			13.6
8	1,1-DICHLOROETHENE	0.2719		0.2685			1.3
302	DICHLOROMETHANE (METHYLENE CHLORIDE)	2.0		2.04	QDR		2
746	TRANS-1,2-DICHLOROETHENE	0.3161		0.3198			1.2
7	1,1-DICHLOROETHANE	0.5728		0.5532			3.4
246	CIS-1,2-DICHLOROETHENE	0.3271		0.3001			8.3
235	CHLOROFORM	0.5349		0.5235			2.1
194	BROMOCHLOROMETHANE	0.1576		0.1454			7.7
2	1,1,1-TRICHLOROETHANE	0.4307		0.3867			10.2
10	1,1-DICHLOROPROPENE	0.1314		0.1237			5.9
217	CARBON TETRACHLORIDE	0.3754		0.3696			1.5
21	1,2-DICHLOROETHANE	0.4390		0.4223			3.8
151	BENZENE	1.2552		1.1032			12.1
750	TRICHLOROETHENE	0.3146		0.2848			9.5
23	1,2-DICHLOROPROPANE	0.2990		0.2801			6.3
299	DICHLOROBROMOMETHANE	0.3809		0.3429			10
296	DIBROMOMETHANE	0.1813		0.1507			16.9
247	CIS-1,3-DICHLOROPROPENE	0.4223		0.3575			15.3
724	TOLUENE	1.2883		1.1014			14.5
747	TRANS-1,3-DICHLOROPROPENE	0.3675		0.3349			8.9
4	1,1,2-TRICHLOROETHANE	0.2617		0.2295			12.3
27	1,3-DICHLOROPROPANE	1.0264		1.0408			1.4
703	TETRACHLOROETHENE	0.7360		0.7123			3.2
295	DIBROMOCHLOROMETHANE	0.6474		0.6240			3.6
18	1,2-DIBROMOETHANE (EDB)	0.2530		0.2316			8.5
231	CHLOROBENZENE	1.8557		1.8286			1.5
349	ETHYL BENZENE	0.9769		0.8139			16.7
1	1,1,1,2-TETRACHLOROETHANE	0.6499		0.6012			7.5
492	M/P-XYLENE	1.1843		1.1000			7.1
549	O-XYLENE	1.1452		1.0810			5.6
680	STYRENE	1.9837		1.7833			10.1
432	ISOPROPYLBENZENE (CUMENE)	2.9880		2.7633			7.5
197	BROMOFORM	0.4981		0.4889			1.8
3	1,1,2,2-TETRACHLOROETHANE	0.8318		0.8153			2
532	N-PROPYLBENZENE	0.3782		0.3661			3.2
193	BROMOBENZENE	1.2113		1.0823			10.6
25	1,3,5-TRIMETHYLBENZENE	2.3563		2.0271			14
807	2-CHLOROTOLUENE (O-CHLOROTOLUENE)	0.7313		0.6629			9.4
808	4-CHLOROTOLUENE (P-CHLOROTOLUENE)	0.7687		0.7480			2.7

UK 9/10/07

UK 9/10/07

QC Report

PRM	Parameter	TruVal	SpikeVal	ObsVal	RQL	Rec	Difference
702	TERT-BUTYLBENZENE	1.3112		1.2024			8.3
17	1,2,4-TRIMETHYLBENZENE	2.3787		2.0320			14.6
644	SEC-BUTYLBENZENE	2.7532		2.5476			7.5
628	4-ISOPROPYLTOLUENE (P-ISOPROPYLTOLUENE)	2.4762		2.1616			12.7
26	1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)	1.4872		1.4698			1.2
29	1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	1.5475		1.4621			5.5
519	N-BUTYLBENZENE	1.1297		1.0858			3.9
20	1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	1.3929		1.4193			1.9
19	1,2-DIBROMO-3-CHLOROPROPANE (DBCP)	0.1793		0.1814			1.2
16	1,2,4-TRICHLOROBENZENE	0.7601		0.7541			.8
398	HEXACHLOROBUTADIENE	2.0		2.18	QDR		9
493	NAPHTHALENE	2.0349		1.9337			5
13	1,2,3-TRICHLOROBENZENE	0.6483		0.7661			18.2
14	1,2,3-TRICHLOROPROPANE	0.2695		0.3163			17.4
99	ACETONE (2-PROPANONE)	4.0		4.44	QDR		11
52	2-BUTANONE	0.0388		0.0326			16
91	4-METHYL-2-PENTANONE	0.3864		0.3298			14.6
709	TETRAHYDROFURAN	0.1192		0.1130			5.2
60	2-HEXANONE	0.6408		0.5902			7.9
859	METHYL-T-BUTYL ETHER (MTBE)	0.8588		0.7960			7.3
301	DICHLOROETHANE-D4	0.3079		0.3076			.1
726	TOLUENE-D8	1.0360		0.9532			8
196	4-BROMOFLUOROBENZENE	0.8852		0.8349			5.7

Comment Value reported for analytes calibrated by linear (LIN) or quadratic (QDR) equations is concentration ( ).

Qualifiers

QDR Quadratic Equation Used

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\DATA\D090707\2831D.D Vial: 22
Acq On : 7 Sep 2007 6:53 Operator: REGI
Sample : DW STD02 Inst : GCMS #4
Misc : CALIBRATION CHECK 9/7/07 Multiplr: 1.00
MS Integration Params: rteint2.p
Quant Time: Sep 07 07:09:37 2007 Quant Results File: DWD.RES

Quant Method : C:\MSDCHEM\1\METHODS\DWD.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Tue Sep 04 10:38:20 2007
Response via : Initial Calibration
DataAcq Meth : DWD

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) FLUOROBENZENE	5.68	96	379858	10.00 UG/L	0.00
38) 2-Bromo-1-chloropropane	7.97	77	147575	10.00 UG/L	0.00
System Monitoring Compounds					
21) Dibromofluoromethane	4.94	113	91203	9.59 UG/L	0.00
Spiked Amount 10.000			Recovery	= 95.90%	
23) 1,2-Dichloroethane-d4	5.30	65	116848	9.99 UG/L	0.00
Spiked Amount 10.000			Recovery	= 99.90%	
33) Toluene-d8	7.51	98	362074	9.20 UG/L	0.00
Spiked Amount 10.000			Recovery	= 92.00%	
51) 4-Bromofluorobenzene	10.66	174	123206	9.43 UG/L	0.00
Spiked Amount 10.000			Recovery	= 94.30%	
Target Compounds					Qvalue
2) Dichlorodifluoromethane	1.39	85	11913	2.08 UG/L	100
3) Chloromethane	1.53	50	27353	2.17 UG/L	100
4) VINYL CHLORIDE	1.63	62	25947	1.96 UG/L	89
5) Bromomethane	1.93	94	13824	1.91 UG/L	91
6) Chloroethane	2.01	64	15055	1.82 UG/L	99
7) Trichlorofluoromethane	2.25	101	28306	1.73 UG/L #	80
8) Acetone	2.77	43	18075	4.44 UG/L #	88
9) 1,1-DICHLOROETHENE	2.72	96	20395	1.97 UG/L	100
10) Methylene Chloride	3.18	84	31113	2.04 UG/L	86
11) MTBE	3.44	73	120940	3.71 UG/L	100
12) trans-1,2-Dichloroethene	3.45	96	24299	2.02 UG/L	97
13) 1,1-Dichloroethane	3.86	63	42026	1.93 UG/L	100
14) 2-Butanone	4.47	72	4949	3.36 UG/L	89
15) cis-1,2-Dichloroethene	4.45	96	22801	1.83 UG/L	97
16) CHLOROFORM	4.79	83	39769	1.96 UG/L	96
17) Tetrahydrofuran	4.75	42	17165	3.79 UG/L	91
18) Bromochloromethane	4.70	128	11050	1.85 UG/L	81
19) 2,2-Dichloropropane	4.45	77	22929	2.00 UG/L	92
20) 1,1,1-Trichloroethane	4.97	97	29381	1.80 UG/L	96
22) 1,1-Dichloropropene	5.15	110	9401	1.88 UG/L	100
24) Carbon Tetrachloride	5.15	117	28077	1.97 UG/L	94
25) 1,2-Dichloroethane	5.39	62	32081	1.92 UG/L	98
26) Benzene	5.37	78	83811	1.76 UG/L	100
27) Trichloroethene	6.08	130	21634	1.81 UG/L	88
28) 1,2-DICHLOROPROPANE	6.33	63	21277	1.87 UG/L	100
29) Bromodichloromethane	6.65	83	26054	1.80 UG/L	97
30) Dibromomethane	6.47	93	11451	1.66 UG/L	93
31) 4-Methyl-2-Pentanone	7.38	43	50111	3.41 UG/L	96
32) cis-1,3-Dichloropropene	7.18	75	27160	1.69 UG/L	100
34) TOLUENE	7.59	91	83676	1.71 UG/L	100
35) trans-1,3-Dichloropropene	7.86	75	25440	1.82 UG/L	100
36) 1,1,2-Trichloroethane	8.09	97	17432	1.75 UG/L	100
37) 1,2-Dibromoethane	8.72	107	17592	1.83 UG/L	98
39) 2-Hexanone	8.41	43	34842	3.68 UG/L	98
40) 1,3-Dichloropropane	8.29	76	30720	2.03 UG/L	100
41) Tetrachloroethene	8.28	166	21025	1.94 UG/L	93
42) Dibromochloromethane	8.58	129	18417	1.93 UG/L	100
43) Chlorobenzene	9.35	112	53971	1.97 UG/L	98
44) 1,1,1,2-Tetrachloroethane	9.46	131	17744	1.85 UG/L	100
45) ETHYL BENZENE	9.50	106	24023	1.67 UG/L #	64
46) m,p-Xylene	9.64	106	64935	3.72 UG/L #	72

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

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\DATA\D090707\2831D.D Vial: 22
Acq On : 7 Sep 2007 6:53 Operator: REGI
Sample : DW STD02 Inst : GCMS #4
Misc : CALIBRATION CHECK 9/7/07 Multiplr: 1.00
MS Integration Params: rteint2.p
Quant Time: Sep 07 07:09:37 2007 Quant Results File: DWD.RES

Quant Method : C:\MSDCHEM\1\METHODS\DWD.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Tue Sep 04 10:38:20 2007
Response via : Initial Calibration
DataAcq Meth : DWD

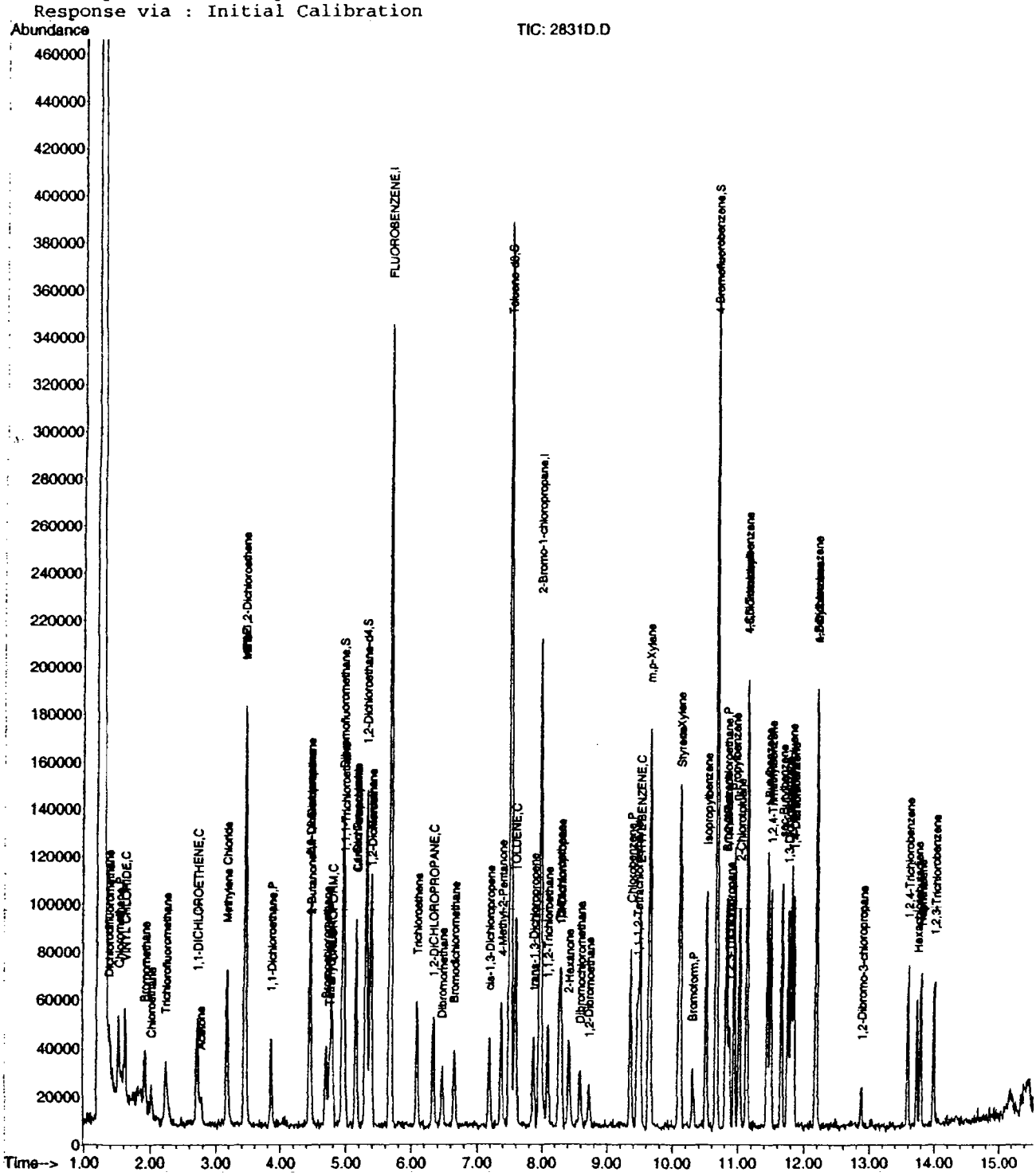
	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
47)	o-Xylene	10.09	106	31906	1.89 UG/L		83
48)	Styrene	10.12	104	52634	1.80 UG/L	#	84
49)	Bromoform	10.30	173	14431	1.96 UG/L		100
50)	1,1,2,2-Tetrachloroethane	10.82	83	24065	1.96 UG/L		95
52)	Isopropylbenzene	10.51	105	81558	1.85 UG/L		100
53)	Bromobenzene	10.81	77	31945	1.79 UG/L		100
54)	1,2,3-Trichloropropane	10.87	110	9336	2.35 UG/L		100
55)	n-Propylbenzene	10.94	92	10805	1.94 UG/L		92
56)	1,3,5-Trimethylbenzene	11.12	105	59830	1.72 UG/L		100
57)	2-Chlorotoluene	11.02	126	19566	1.81 UG/L		100
58)	4-Chlorotoluene	11.12	126	22076	1.95 UG/L		100
59)	t-Butylbenzene	11.44	91	35488	1.83 UG/L	#	63
60)	1,2,4-Trimethylbenzene	11.49	105	59974	1.71 UG/L		100
61)	sec-Butylbenzene	11.65	105	75193	1.85 UG/L		100
62)	p-Isopropyltoluene	11.80	119	63800	1.75 UG/L		100
63)	1,3-Dichlorobenzene	11.75	146	43380	1.98 UG/L		100
64)	1,4-Dichlorobenzene	11.83	146	43155	1.89 UG/L		100
65)	n-Butylbenzene	12.18	92	32046	1.92 UG/L		94
66)	1,2-Dichlorobenzene	12.18	146	41891	2.04 UG/L		100
67)	1,2-Dibromo-3-chloropropan	12.87	157	5354	2.02 UG/L		100
68)	1,2,4-Trichlorobenzene	13.58	180	22256	1.98 UG/L		100
69)	Naphthalene	13.78	128	57074	1.90 UG/L		100
70)	Hexachlorobutadiene	13.73	225	10664	2.18 UG/L		100
71)	1,2,3-Trichlorobenzene	13.99	180	22611	2.36 UG/L		100

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

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\DATA\D090707\2831D.D Vial: 22
Acq On : 7 Sep 2007 6:53 Operator: REGI
Sample : DW STD02 Inst : GCMS #4
Misc : CALIBRATION CHECK 9/7/07 Multiplr: 1.00
MS Integration Params: rteint2.p
Quant Time: Sep 7 7:09 2007 Quant Results File: DWD.RES

Method : C:\MSDCHEM\1\METHODS\DWD.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Tue Sep 04 10:38:20 2007
Response via : Initial Calibration



2831D.D DWD.M Fri Sep 07 07:10:12 2007 Page 3

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R524570 Heritage Environmental Services, LLC Q1994790

QC Report

QCType BLA01 Duplicate SampleID DataFile 2832D.D
Date Entered 10Sep07 Duplicate QCSampleID Analyst 1062 R. SHAMP
Analysis Date/Time 07Sep0707:25:00 Method 296 Matrix 1 Units ug/L

PRM	Parameter	TruVal	SpikeVal	ObsVal	RQL	Rec	Difference
300	DICHLORODIFLUOROMETHANE			0.50	BDL		
236	CHLOROMETHANE			0.50	BDL		
768	VINYL CHLORIDE			0.20	BDL		
198	BROMOMETHANE			0.50	BDL		
234	CHLOROETHANE			0.50	BDL		
372	TRICHLOROFLUOROMETHANE			0.50	BDL		
8	1,1-DICHLOROETHENE			0.50	BDL		
302	DICHLOROMETHANE (METHYLENE CHLORIDE)			0.50	BDL		
746	TRANS-1,2-DICHLOROETHENE			0.50	BDL		
7	1,1-DICHLOROETHANE			0.50	BDL		
246	CIS-1,2-DICHLOROETHENE			0.50	BDL		
235	CHLOROFORM			0.50	BDL		
194	BROMOCHLOROMETHANE			0.50	BDL		
2	1,1,1-TRICHLOROETHANE			0.50	BDL		
10	1,1-DICHLOROPROPENE			0.50	BDL		
217	CARBON TETRACHLORIDE			0.50	BDL		
21	1,2-DICHLOROETHANE			0.50	BDL		
151	BENZENE			0.50	BDL		
750	TRICHLOROETHENE			0.20	BDL		
23	1,2-DICHLOROPROPANE			0.50	BDL		
299	DICHLOROBROMOMETHANE			0.50	BDL		
296	DIBROMOMETHANE			0.50	BDL		
247	CIS-1,3-DICHLOROPROPENE			0.50	BDL		
724	TOLUENE			0.50	BDL		
747	TRANS-1,3-DICHLOROPROPENE			0.50	BDL		
4	1,1,2-TRICHLOROETHANE			0.50	BDL		
27	1,3-DICHLOROPROPANE			0.50	BDL		
703	TETRACHLOROETHENE			0.50	BDL		
295	DIBROMOCHLOROMETHANE			0.50	BDL		
18	1,2-DIBROMOETHANE (EDB)			0.50	BDL		
231	CHLOROBENZENE			0.50	BDL		
349	ETHYL BENZENE			0.50	BDL		
1	1,1,1,2-TETRACHLOROETHANE			0.50	BDL		
492	M/P-XYLENE			0.50	BDL		
549	O-XYLENE			0.50	BDL		
680	STYRENE			0.50	BDL		
432	ISOPROPYLBENZENE (CUMENE)			0.50	BDL		
197	BROMOFORM			0.50	BDL		
3	1,1,2,2-TETRACHLOROETHANE			0.50	BDL		
532	N-PROPYLBENZENE			0.50	BDL		
193	BROMOBENZENE			0.50	BDL		
25	1,3,5-TRIMETHYLBENZENE			0.50	BDL		
807	2-CHLOROTOLUENE (O-CHLOROTOLUENE)			0.50	BDL		
808	4-CHLOROTOLUENE (P-CHLOROTOLUENE)			0.50	BDL		

JB 9-10-07

JB 9-10-07

QC Report

PRM	Parameter	TruVal	SpikeVal	ObsVal	RQL	Rec	Difference
702	TERT-BUTYLBENZENE			0.50	BDL		
17	1,2,4-TRIMETHYLBENZENE			0.50	BDL		
644	SEC-BUTYLBENZENE			0.50	BDL		
628	4-ISOPROPYLTOLUENE (P-ISOPROPYLTOLUENE)			0.50	BDL		
26	1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)			0.50	BDL		
29	1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)			0.20	BDL		
519	N-BUTYLBENZENE			0.50	BDL		
20	1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)			0.50	BDL		
19	1,2-DIBROMO-3-CHLOROPROPANE (DBCP)			0.50	BDL		
16	1,2,4-TRICHLOROBENZENE			0.50	BDL		
398	HEXACHLOROBUTADIENE			0.50	BDL		
493	NAPHTHALENE			0.50	BDL		
13	1,2,3-TRICHLOROBENZENE			0.50	BDL		
14	1,2,3-TRICHLOROPROPANE			0.50	BDL		
99	ACETONE (2-PROPANONE)			4.0	BDL		
52	2-BUTANONE			2.0	BDL		
91	4-METHYL-2-PENTANONE			2.0	BDL		
709	TETRAHYDROFURAN			5.0	BDL		
60	2-HEXANONE			2.0	BDL		
859	METHYL-T-BUTYL ETHER (MTBE)			0.50	BDL		
301	DICHLOROETHANE-D4					103	
726	TOLUENE-D8					93	
196	4-BROMOFLUOROBENZENE					87	

Qualifiers

BDL Below Detection Limit

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\DATA\D090707\2832D.D Vial: 22
Acq On : 7 Sep 2007 7:25 Operator: REGI
Sample : DW BLANK Inst : GCMS #4
Misc : 9/7/07 Multiplr: 1.00
MS Integration Params: rteint2.p
Quant Time: Sep 07 07:44:12 2007 Quant Results File: DWD.RES

Quant Method : C:\MSDCHEM\1\METHODS\DWD.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Tue Sep 04 10:38:20 2007
Response via : Initial Calibration
DataAcq Meth : DWD

Q199479

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) FLUOROBENZENE	5.68	96	372401	10.00 UG/L	0.00
38) 2-Bromo-1-chloropropane	7.97	77	155167	10.00 UG/L	0.00
System Monitoring Compounds					
21) Dibromofluoromethane	4.95	113	93853	10.07 UG/L	0.00
Spiked Amount 10.000			Recovery	= 100.70%	
23) 1,2-Dichloroethane-d4	5.30	65	118029	10.29 UG/L	0.00
Spiked Amount 10.000			Recovery	= 102.90%	
33) Toluene-d8	7.51	98	356909	9.25 UG/L	0.00
Spiked Amount 10.000			Recovery	= 92.50%	
51) 4-Bromofluorobenzene	10.67	174	119107	8.67 UG/L	0.00
Spiked Amount 10.000			Recovery	= 86.70%	

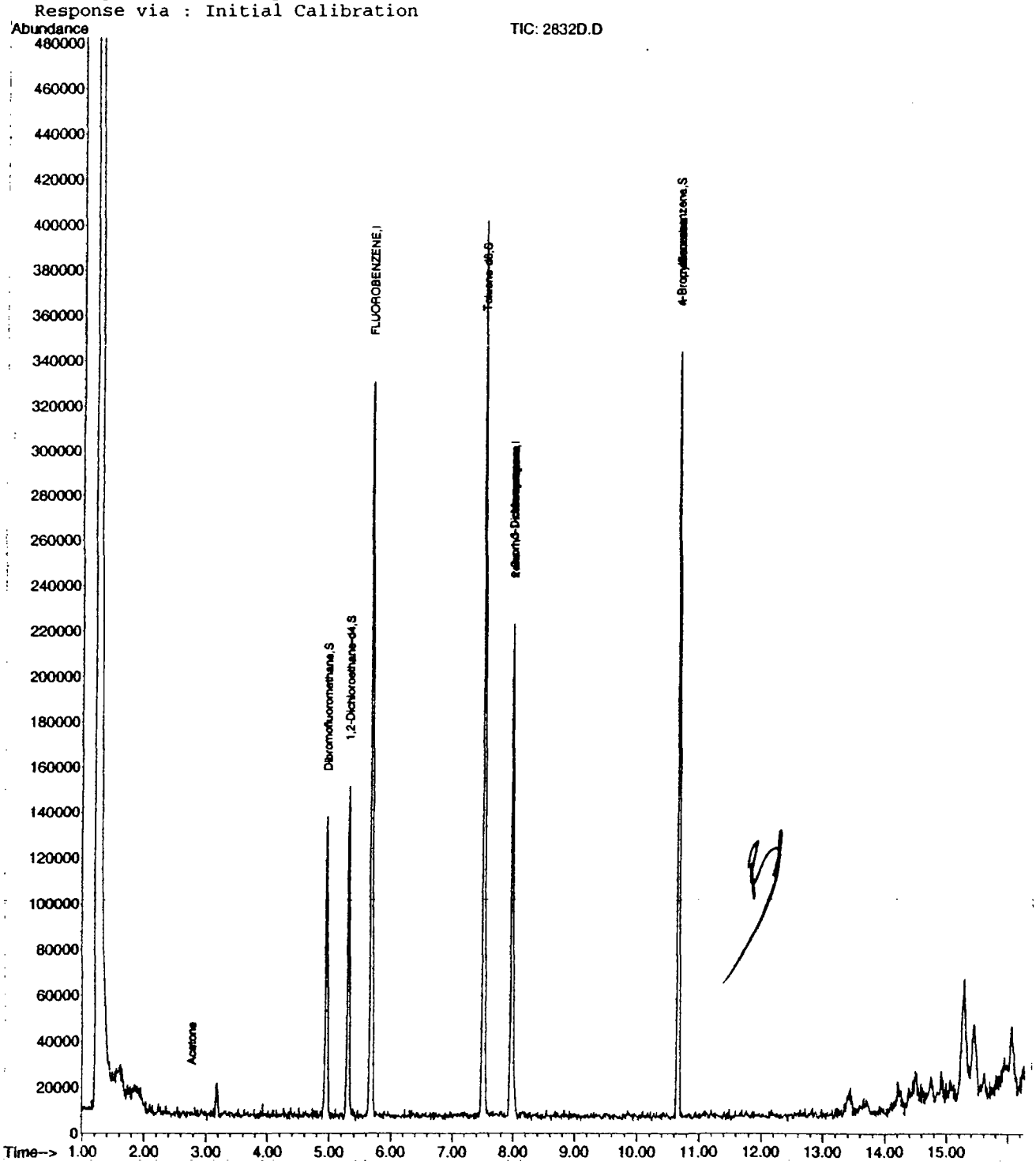
Target Compounds					Qvalue
8) Acetone	2.77	43	1311	0.99 UG/L #	46
10) Methylene Chloride	3.19	84	6079	Below Cal #	87
35) trans-1,3-Dichloropropene	7.96	75	2923	0.21 UG/L	100
55) n-Propylbenzene	10.67	92	3496	0.60 UG/L #	1
70) Hexachlorobutadiene	13.73	225	577	Below Cal	100

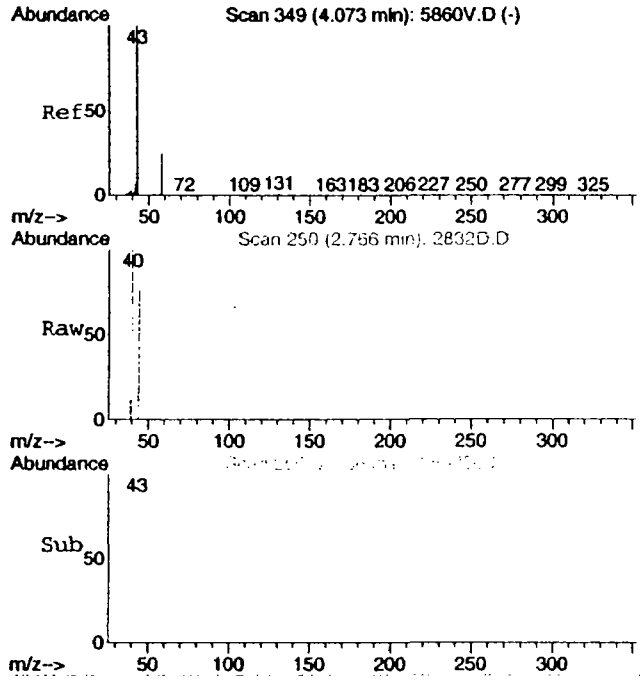
(#) = qualifier out of range (m) = manual integration
2832D.D DWD.M Fri Sep 07 07:44:13 2007

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\DATA\D090707\2832D.D Vial: 22
Acq On : 7 Sep 2007 7:25 Operator: REGI
Sample : DW BLANK Inst : GCMS #4
Misc : 9/7/07 Multiplr: 1.00
MS Integration Params: rteint2.p
Quant Time: Sep 7 7:44 2007 Quant Results File: DWD.RES

Method : C:\MSDCHEM\1\METHODS\DWD.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Tue Sep 04 10:38:20 2007
Response via : Initial Calibration

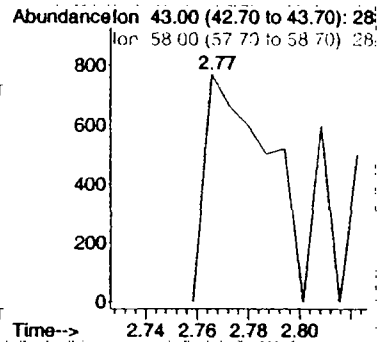


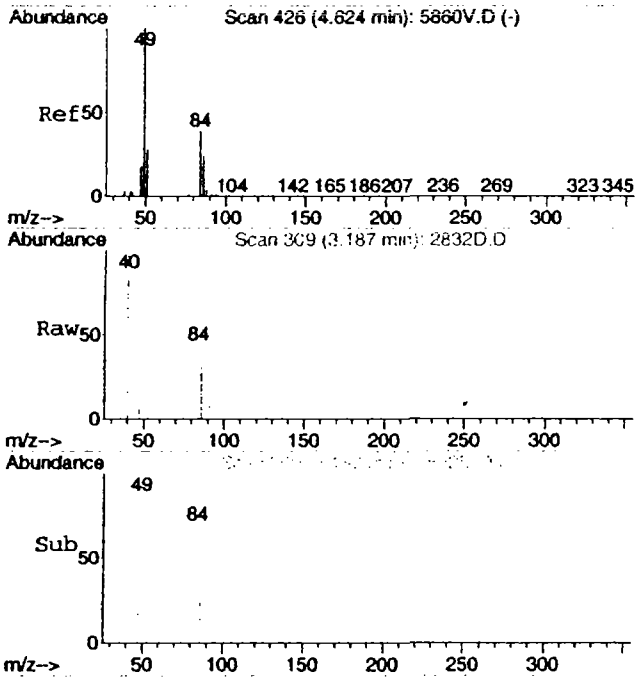


#8
Acetone
Concen: 0.99 UG/L
RT: 2.77 min Scan# 250
Delta R.T. -0.01 min
Lab File: 2832D.D
Acq: 7 Sep 2007 7:25

Tgt Ion: 43 Resp: 1311

Ion	Ratio	Lower	Upper
43	100		
58	0.0	23.1	34.7#

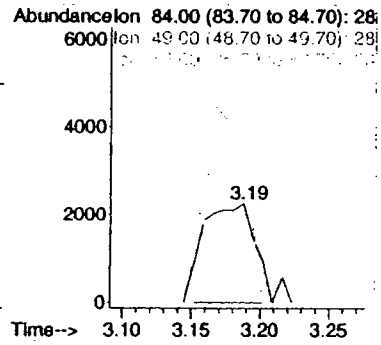




#10
Methylene Chloride
Concen: Below Cal
RT: 3.19 min Scan# 309
Delta R.T. 0.01 min
Lab File: 2832D.D
Acq: 7 Sep 2007 7:25

Tgt Ion: 84 Resp: 6079

Ion	Ratio	Lower	Upper
84	100		
49	160.7	140.2	210.2
86	80.0	51.1	76.7#



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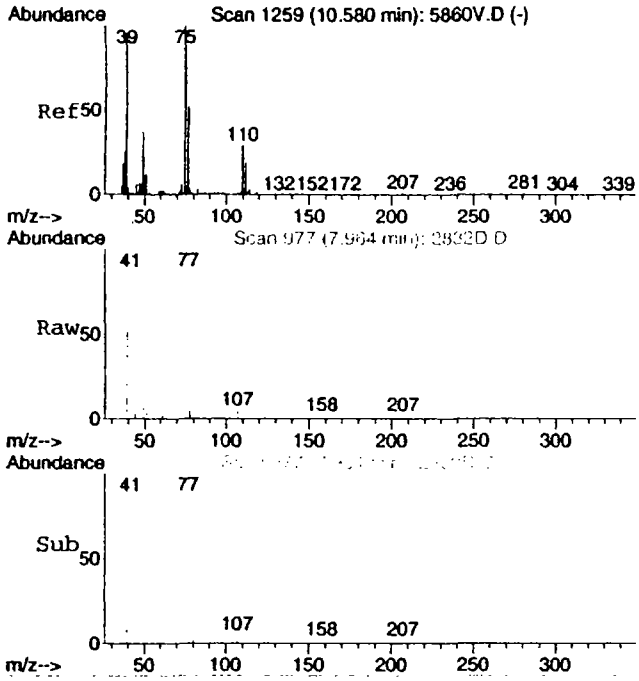
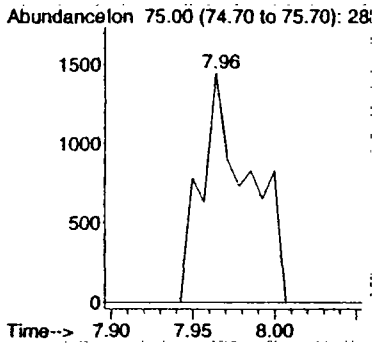
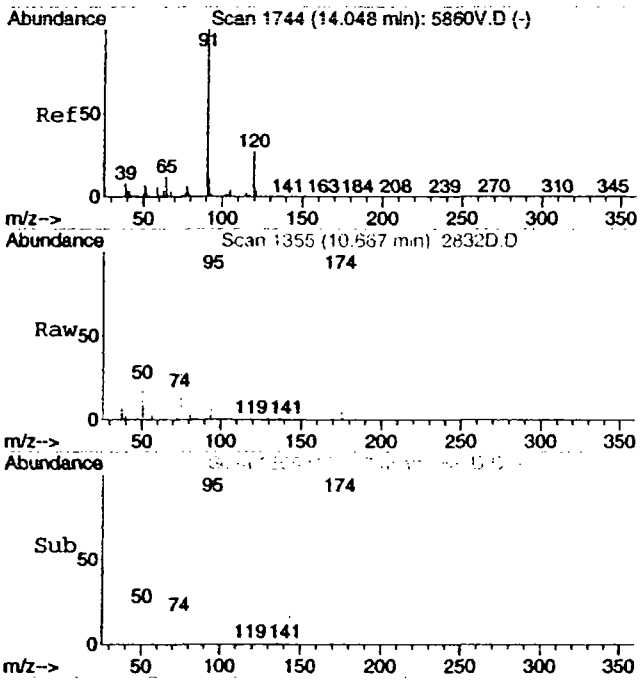


#35
trans-1,3-Dichloropropene
Concen: 0.21 UG/L
RT: 7.96 min Scan# 977
Delta R.T. 0.11 min
Lab File: 2832D.D
Acq: 7 Sep 2007 7:25

Tgt Ion: 75 Resp: 2923

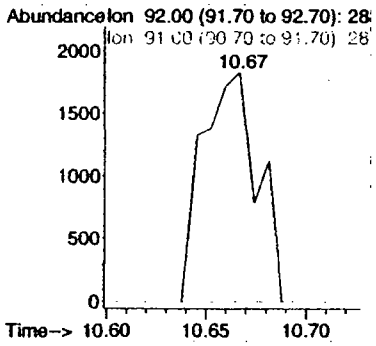


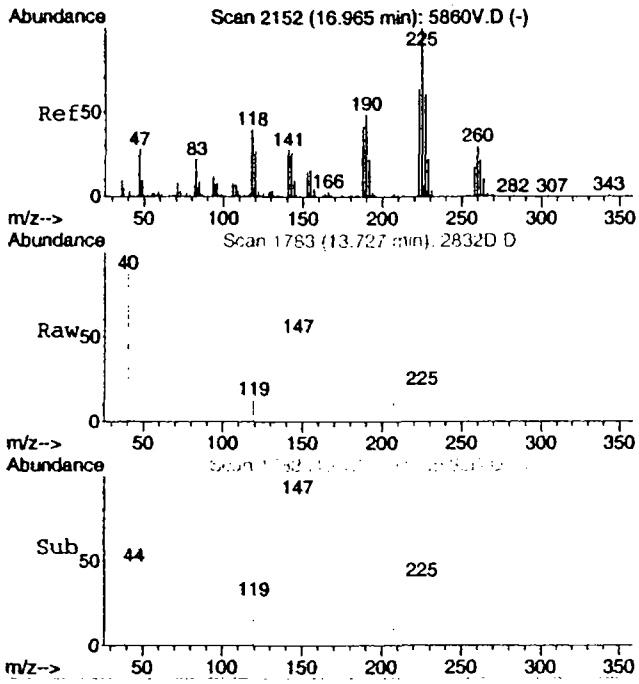


#55
n-Propylbenzene
Concen: 0.60 UG/L
RT: 10.67 min Scan# 1355
Delta R.T. -0.26 min
Lab File: 2832D.D
Acq: 7 Sep 2007 7:25

Tgt Ion: 92 Resp: 3496

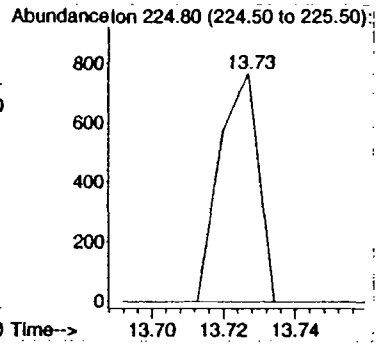
Ion	Ratio	Lower	Upper
92	100		
91	0.0	715.8	1073.6#





#70
Hexachlorobutadiene
Concen: Below Cal
RT: 13.73 min Scan# 1783
Delta R.T. 0.00 min
Lab File: 2832D.D
Acq: 7 Sep 2007 7:25

Tgt Ion:225 Resp: 577



R524570 Heritage Environmental Services, LLC A781271

GC/MS VOA

Method EPA 524.2 REV. 4.1 **Test Code** O516.9.0
Sample Description LQ4606 Analyst 1062 R. SHAMP
Submitter IDEM - OLQ File 2835D.D Date/Time 07Sep07 08:55:00
Instrument 345 Channel 1 Dilution Factor 1

CAS	PRM	Parameter	Concentration	RQL	Limit	Units	RT
NA	1807	REGULATED CONTAMINANTS					
71-43-2	151	BENZENE		BDL	0.50	UG/L	
56-23-5	217	CARBON TETRACHLORIDE		BDL	0.50	UG/L	
106-46-7	29	1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)		BDL	0.50	UG/L	
107-06-2	21	1,2-DICHLOROETHANE		BDL	0.50	UG/L	
75-35-4	8	1,1-DICHLOROETHENE		BDL	0.50	UG/L	
71-55-6	2	1,1,1-TRICHLOROETHANE		BDL	0.50	UG/L	
79-01-6	750	TRICHLOROETHENE		BDL	0.50	UG/L	
75-01-4	768	VINYL CHLORIDE		BDL	0.20	UG/L	
108-90-7	231	CHLOROBENZENE		BDL	0.50	UG/L	
95-50-1	20	1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)		BDL	0.50	UG/L	
156-60-5	746	TRANS-1,2-DICHLOROETHENE		BDL	0.50	UG/L	
156-59-2	246	CIS-1,2-DICHLOROETHENE		BDL	0.50	UG/L	
75-09-2	302	DICHLOROMETHANE (METHYLENE CHLORIDE)		BDL	0.50	UG/L	
78-87-5	23	1,2-DICHLOROPROPANE		BDL	0.50	UG/L	
100-41-4	349	ETHYL BENZENE		BDL	0.50	UG/L	
100-42-5	680	STYRENE		BDL	0.50	UG/L	
79-00-5	4	1,1,2-TRICHLOROETHANE		BDL	0.50	UG/L	
127-18-4	703	TETRACHLOROETHENE		BDL	0.50	UG/L	
108-88-3	724	TOLUENE		BDL	0.50	UG/L	
95-47-6	549	O-XYLENE		BDL	0.50	UG/L	
MPXYLENE	492	M/P-XYLENE		BDL	0.50	UG/L	
120-82-1	16	1,2,4-TRICHLOROBENZENE		BDL	0.50	UG/L	
NA	1809	UNREGULATED - MONITORING REQUIRED					
108-86-1	193	BROMOBENZENE		BDL	0.50	UG/L	
75-27-4	195	BROMODICHLOROMETHANE		BDL	0.50	UG/L	
75-25-2	197	BROMOFORM		BDL	0.50	UG/L	
74-83-9	198	BROMOMETHANE		BDL	0.50	UG/L	
124-48-1	233	CHLORODIBROMOMETHANE		BDL	0.50	UG/L	
75-00-3	234	CHLOROETHANE		BDL	0.50	UG/L	
67-66-3	235	CHLOROFORM		BDL	0.50	UG/L	
74-87-3	236	CHLOROMETHANE		BDL	0.50	UG/L	
95-49-8	807	2-CHLOROTOLUENE (O-CHLOROTOLUENE)		BDL	0.50	UG/L	
106-43-4	808	4-CHLOROTOLUENE (P-CHLOROTOLUENE)		BDL	0.50	UG/L	
74-95-3	296	DIBROMOMETHANE		BDL	0.50	UG/L	
541-73-1	26	1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)		BDL	0.50	UG/L	
75-34-3	7	1,1-DICHLOROETHANE		BDL	0.50	UG/L	
563-58-6	10	1,1-DICHLOROPROPENE		BDL	0.50	UG/L	
142-28-9	27	1,3-DICHLOROPROPANE		BDL	0.50	UG/L	
10061-01-5	247	CIS-1,3-DICHLOROPROPENE		BDL	0.50	UG/L	
10061-02-6	747	TRANS-1,3-DICHLOROPROPENE		BDL	0.50	UG/L	
594-20-7	33	2,2-DICHLOROPROPANE		BDL	0.50	UG/L	
630-20-6	1	1,1,1,2-TETRACHLOROETHANE		BDL	0.50	UG/L	
79-34-5	3	1,1,2,2-TETRACHLOROETHANE		BDL	0.50	UG/L	
96-18-4	14	1,2,3-TRICHLOROPROPANE		BDL	0.50	UG/L	

JKS 9-10-07

JKS 9-10-07

GC/MS VOA

CAS	PRM	Parameter	Concentration	RQL	Limit	Units	RT
NA	1806	MONITORED AT STATE'S DISCRETION					
74-97-5	194	BROMOCHLOROMETHANE		BDL	0.50	UG/L	
104-51-8	519	N-BUTYLBENZENE		BDL	0.50	UG/L	
75-71-8	300	DICHLORODIFLUOROMETHANE		BDL	0.50	UG/L	
75-69-4	372	TRICHLOROFLUOROMETHANE		BDL	0.50	UG/L	
87-68-3	398	HEXACHLOROBUTADIENE		BDL	0.50	UG/L	
98-82-8	432	ISOPROPYLBENZENE (CUMENE)		BDL	0.50	UG/L	
99-87-6	628	4-ISOPROPYLTOLUENE (P-ISOPROPYLTOLUENE)		BDL	0.50	UG/L	
91-20-3	493	NAPHTHALENE		BDL	0.50	UG/L	
103-65-1	532	N-PROPYLBENZENE		BDL	0.50	UG/L	
135-98-8	644	SEC-BUTYLBENZENE		BDL	0.50	UG/L	
98-06-6	702	TERT-BUTYLBENZENE		BDL	0.50	UG/L	
87-61-6	13	1,2,3-TRICHLOROBENZENE		BDL	0.50	UG/L	
95-63-6	17	1,2,4-TRIMETHYLBENZENE		BDL	0.50	UG/L	
108-67-8	25	1,3,5-TRIMETHYLBENZENE		BDL	0.50	UG/L	
106-93-4	18	1,2-DIBROMOETHANE (EDB)		BDL	0.50	UG/L	
96-12-8	19	1,2-DIBROMO-3-CHLOROPROPANE (DBCP)		BDL	0.50	UG/L	
1634-04-4	859	METHYL-T-BUTYL ETHER (MTBE)		BDL	0.50	UG/L	
	972	————————					
591-78-6	60	2-HEXANONE		BDL	2.0	UG/L	
79-46-9	67	2-NITROPROPANE		*			
67-64-1	99	ACETONE (2-PROPANONE)		BDL	4.0	UG/L	
78-93-3	52	2-BUTANONE		BDL	2.0	UG/L	
75-15-0	216	CARBON DISULFIDE		*			
	1804	...					
	971	SURROGATE RECOVERY					
	972	————————					
17060-07-0	301	DICHLOROETHANE-D4	101			% RECOVERY	
2037-26-5	726	TOLUENE-D8	92			% RECOVERY	
460-00-4	196	4-BROMOFLUOROBENZENE	90			% RECOVERY	
	1131	TENTATIVELY IDENTIFIED COMPOUNDS					
	3320	NONE DETECTED					

Comment Note: * Compound searched for but not detected. Standard was unavailable to determine retention time and detection limit.

Qualifiers

BDL Below Detection Limit

* See Note for Parameter

Comments to Laboratory (do not record)

4-HCL VIALS

Note the additional IDEM analytes for drinking water:

CS2, MEK, Acetone, 2-Nitropropane, 2-Hexanone

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\DATA\D090707\2835D.D Vial: 3
Acq On : 7 Sep 2007 8:55 Operator: REGI
Sample : A781271 LQ4606 Inst : GCMS #4
Misc : 9/7/07 Multiplr: 1.00
MS Integration Params: rteint2.p
Quant Time: Sep 07 09:11:42 2007 Quant Results File: DWD.RES

Quant Method : C:\MSDCHEM\1\METHODS\DWD.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Tue Sep 04 10:38:20 2007
Response via : Initial Calibration
DataAcq Meth : DWD

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) FLUOROBENZENE	5.68	96	355027	10.00 UG/L	0.00
38) 2-Bromo-1-chloropropane	7.97	77	146491	10.00 UG/L	0.00
System Monitoring Compounds					
21) Dibromofluoromethane	4.95	113	91259	10.27 UG/L	0.00
Spiked Amount 10.000			Recovery	= 102.70%	
23) 1,2-Dichloroethane-d4	5.30	65	110725	10.13 UG/L	0.00
Spiked Amount 10.000			Recovery	= 101.30%	
33) Toluene-d8	7.51	98	337365	9.17 UG/L	0.00
Spiked Amount 10.000			Recovery	= 91.70%	
51) 4-Bromofluorobenzene	10.67	174	116509	8.99 UG/L	0.00
Spiked Amount 10.000			Recovery	= 89.90%	
Target Compounds					Qvalue
8) ~~Acetone~~	2.77	43	2966	1.37 UG/L #	77
10) ~~Methylene~~ Chloride	3.17	84	2852	Below Cal	93
17) ~~Tetrahydrofuran~~	4.75	42	5389	1.27 UG/L	98

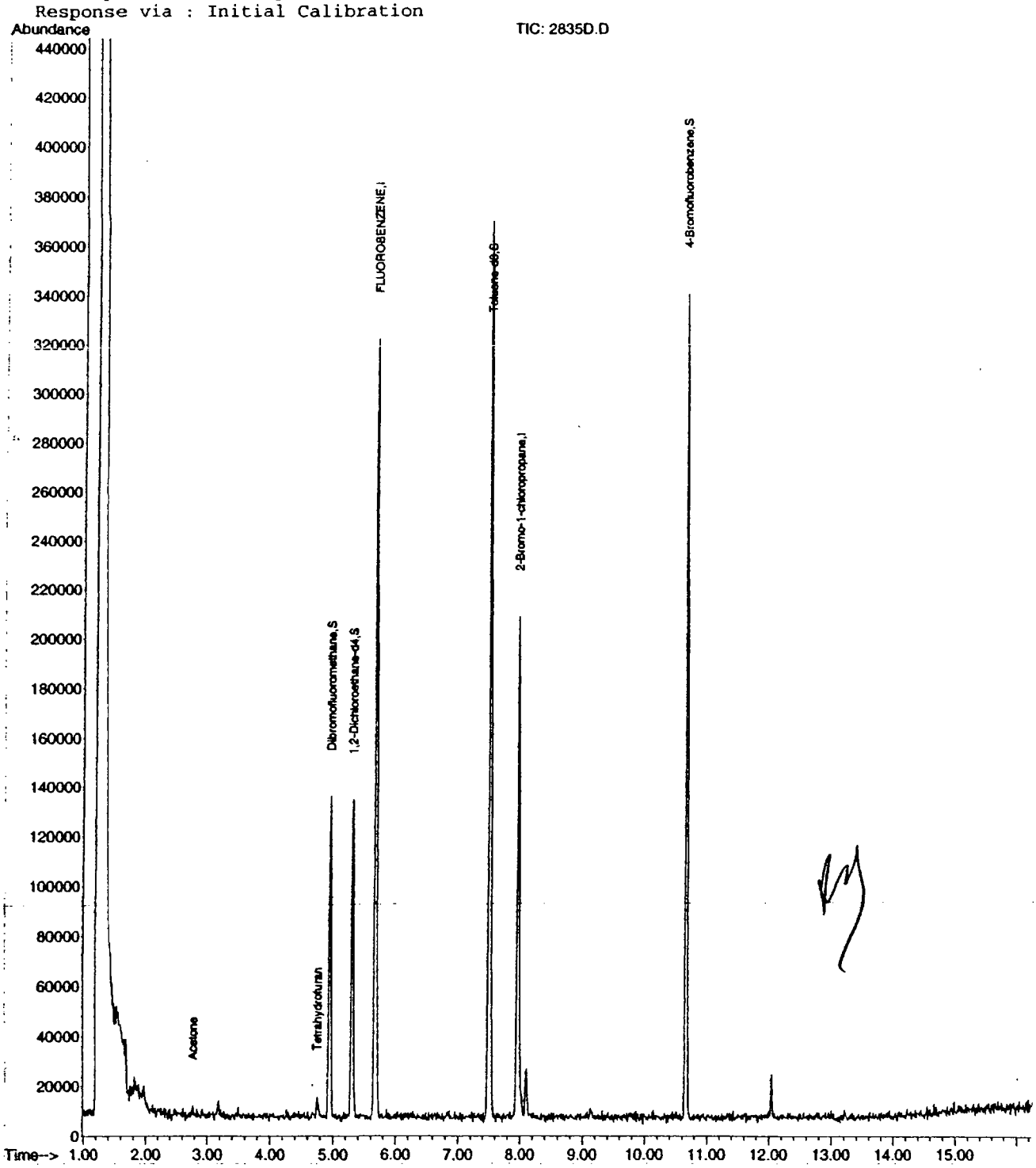
No RCS

(#) = qualifier out of range (m) = manual integration
2835D.D DWD.M Fri Sep 07 09:11:43 2007

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\DATA\D090707\2835D.D Vial: 3
Acq On : 7 Sep 2007 8:55 Operator: REGI
Sample : A781271 LQ4606 Inst : GCMS #4
Misc : 9/7/07 Multiplr: 1.00
MS Integration Params: rteint2.p
Quant Time: Sep 7 9:11 2007 Quant Results File: DWD.RES

Method : C:\MSDCHEM\1\METHODS\DWD.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Tue Sep 04 10:38:20 2007
Response via : Initial Calibration



2835D.D DWD.M Fri Sep 07 09:11:44 2007 Page 2

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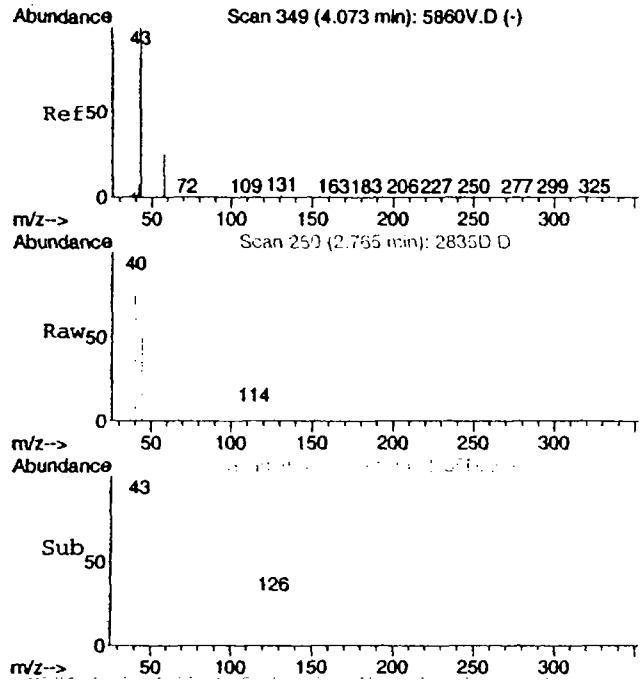
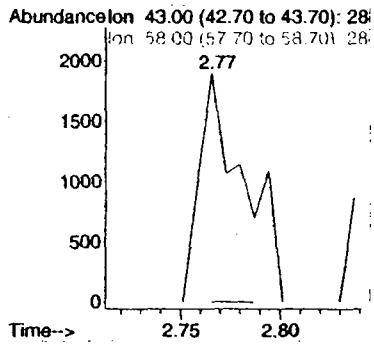
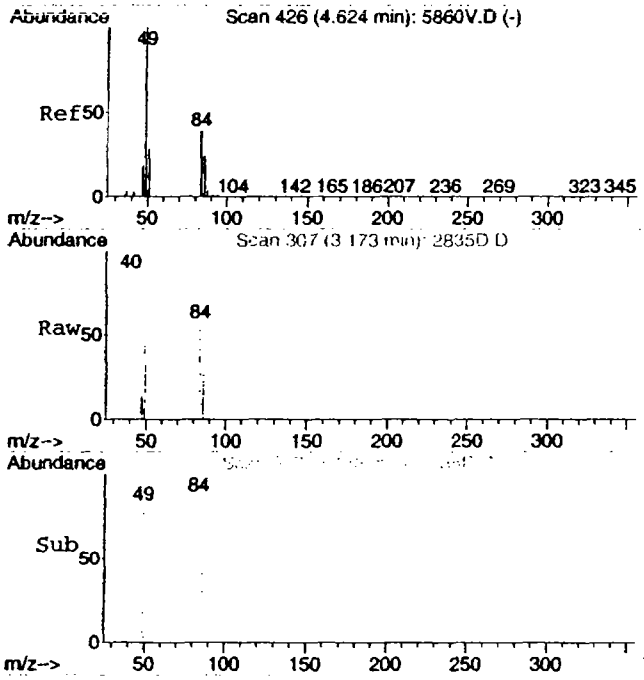


#8
Acetone
Concen: 1.37 UG/L
RT: 2.77 min Scan# 250
Delta R.T. -0.01 min
Lab File: 2835D.D
Acq: 7 Sep 2007 8:55

Tgt Ion: 43 Resp: 2966

Ion	Ratio	Lower	Upper
43	100		
58	16.8	23.1	34.7#

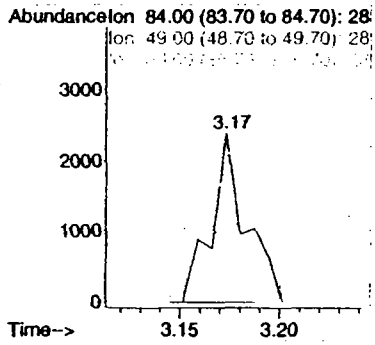


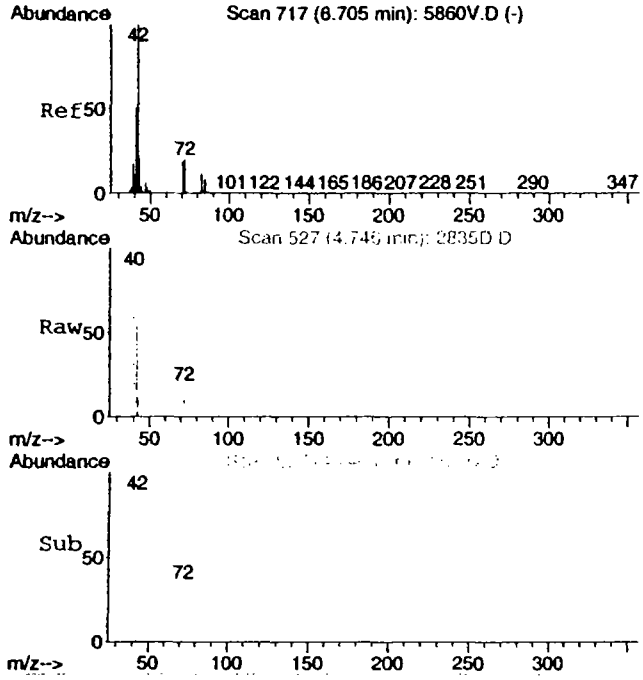


#10
Methylene Chloride
Concen: Below Cal
RT: 3.17 min Scan# 307
Delta R.T. 0.00 min
Lab File: 2835D.D
Acq: 7 Sep 2007 8:55

Tgt Ion: 84 Resp: 2852

Ion	Ratio	Lower	Upper
84	100		
49	166.7	140.2	210.2
86	71.1	51.1	76.7

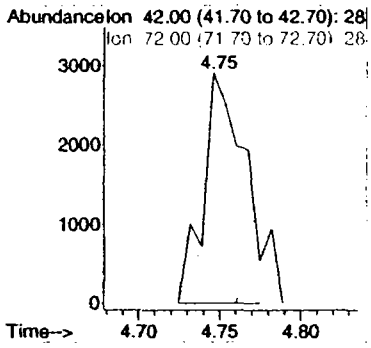




#17
Tetrahydrofuran
Concen: 1.27 UG/L
RT: 4.75 min Scan# 527
Delta R.T. -0.00 min
Lab File: 2835D.D
Acq: 7 Sep 2007 8:55

Tgt Ion: 42 Resp: 5389

Ion	Ratio	Lower	Upper
42	100		
72	29.3	24.5	36.7



R524570 Heritage Environmental Services, LLC A781272

GC/MS VOA

Method EPA 524.2 REV. 4.1
Sample Description LQ4607
Submitter IDEM - OLQ
Instrument 345 Channel 1

Test Code O516.9.0
Analyst 1062 R. SHAMP
File 2836D.D Date/Time 07Sep07 09:22:00
Dilution Factor 1

CAS	PRM	Parameter	Concentration	RQL	Limit	Units	RT
NA	1807	REGULATED CONTAMINANTS					
71-43-2	151	BENZENE		BDL	0.50	UG/L	
56-23-5	217	CARBON TETRACHLORIDE		BDL	0.50	UG/L	
106-46-7	29	1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)		BDL	0.50	UG/L	
107-06-2	21	1,2-DICHLOROETHANE		BDL	0.50	UG/L	
75-35-4	8	1,1-DICHLOROETHENE		BDL	0.50	UG/L	
71-55-6	2	1,1,1-TRICHLOROETHANE		BDL	0.50	UG/L	
79-01-6	750	TRICHLOROETHENE		BDL	0.50	UG/L	
75-01-4	768	VINYL CHLORIDE		BDL	0.20	UG/L	
108-90-7	231	CHLOROBENZENE		BDL	0.50	UG/L	
95-50-1	20	1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)		BDL	0.50	UG/L	
156-60-5	746	TRANS-1,2-DICHLOROETHENE		BDL	0.50	UG/L	
156-59-2	246	CIS-1,2-DICHLOROETHENE		BDL	0.50	UG/L	
75-09-2	302	DICHLOROMETHANE (METHYLENE CHLORIDE)		BDL	0.50	UG/L	
78-87-5	23	1,2-DICHLOROPROPANE		BDL	0.50	UG/L	
100-41-4	349	ETHYL BENZENE		BDL	0.50	UG/L	
100-42-5	680	STYRENE		BDL	0.50	UG/L	
79-00-5	4	1,1,2-TRICHLOROETHANE		BDL	0.50	UG/L	
127-18-4	703	TETRACHLOROETHENE		BDL	0.50	UG/L	
108-88-3	724	TOLUENE		BDL	0.50	UG/L	
95-47-6	549	O-XYLENE		BDL	0.50	UG/L	
MPXYLENE	492	M/P-XYLENE		BDL	0.50	UG/L	
120-82-1	16	1,2,4-TRICHLOROBENZENE		BDL	0.50	UG/L	
NA	1809	UNREGULATED - MONITORING REQUIRED					
108-86-1	193	BROMOBENZENE		BDL	0.50	UG/L	
75-27-4	195	BROMODICHLOROMETHANE		BDL	0.50	UG/L	
75-25-2	197	BROMOFORM		BDL	0.50	UG/L	
74-83-9	198	BROMOMETHANE		BDL	0.50	UG/L	
124-48-1	233	CHLORODIBROMOMETHANE		BDL	0.50	UG/L	
75-00-3	234	CHLOROETHANE		BDL	0.50	UG/L	
67-66-3	235	CHLOROFORM		BDL	0.50	UG/L	
74-87-3	236	CHLOROMETHANE		BDL	0.50	UG/L	
95-49-8	807	2-CHLOROTOLUENE (O-CHLOROTOLUENE)		BDL	0.50	UG/L	
106-43-4	808	4-CHLOROTOLUENE (P-CHLOROTOLUENE)		BDL	0.50	UG/L	
74-95-3	296	DIBROMOMETHANE		BDL	0.50	UG/L	
541-73-1	26	1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)		BDL	0.50	UG/L	
75-34-3	7	1,1-DICHLOROETHANE		BDL	0.50	UG/L	
563-58-6	10	1,1-DICHLOROPROPENE		BDL	0.50	UG/L	
142-28-9	27	1,3-DICHLOROPROPANE		BDL	0.50	UG/L	
10061-02-6	747	TRANS-1,3-DICHLOROPROPENE		BDL	0.50	UG/L	
10061-01-5	247	CIS-1,3-DICHLOROPROPENE		BDL	0.50	UG/L	
594-20-7	33	2,2-DICHLOROPROPANE		BDL	0.50	UG/L	
630-20-6	1	1,1,1,2-TETRACHLOROETHANE		BDL	0.50	UG/L	
79-34-5	3	1,1,2,2-TETRACHLOROETHANE		BDL	0.50	UG/L	
96-18-4	14	1,2,3-TRICHLOROPROPANE		BDL	0.50	UG/L	

/ JS 9-10-07
JS 9-10-07

GC/MS VOA

CAS	PRM	Parameter	Concentration	RQL	Limit	Units	RT
NA	1806	MONITORED AT STATE'S DISCRETION					
74-97-5	194	BROMOCHLOROMETHANE		BDL	0.50	UG/L	
104-51-8	519	N-BUTYLBENZENE		BDL	0.50	UG/L	
75-71-8	300	DICHLORODIFLUOROMETHANE		BDL	0.50	UG/L	
75-69-4	372	TRICHLOROFLUOROMETHANE		BDL	0.50	UG/L	
87-68-3	398	HEXACHLOROBUTADIENE		BDL	0.50	UG/L	
98-82-8	432	ISOPROPYLBENZENE (CUMENE)		BDL	0.50	UG/L	
99-87-6	628	4-ISOPROPYLTOLUENE (P-ISOPROPYLTOLUENE)		BDL	0.50	UG/L	
91-20-3	493	NAPHTHALENE		BDL	0.50	UG/L	
103-65-1	532	N-PROPYLBENZENE		BDL	0.50	UG/L	
135-98-8	644	SEC-BUTYLBENZENE		BDL	0.50	UG/L	
98-06-6	702	TERT-BUTYLBENZENE		BDL	0.50	UG/L	
87-61-6	13	1,2,3-TRICHLOROBENZENE		BDL	0.50	UG/L	
95-63-6	17	1,2,4-TRIMETHYLBENZENE		BDL	0.50	UG/L	
108-67-8	25	1,3,5-TRIMETHYLBENZENE		BDL	0.50	UG/L	
106-93-4	18	1,2-DIBROMOETHANE (EDB)		BDL	0.50	UG/L	
96-12-8	19	1,2-DIBROMO-3-CHLOROPROPANE (DBCP)		BDL	0.50	UG/L	
1634-04-4	859	METHYL-T-BUTYL ETHER (MTBE)		BDL	0.50	UG/L	
	972	----------					
591-78-6	60	2-HEXANONE		BDL	2.0	UG/L	
79-46-9	67	2-NITROPROPANE		*			
67-64-1	99	ACETONE (2-PROPANONE)		BDL	4.0	UG/L	
78-93-3	52	2-BUTANONE		BDL	2.0	UG/L	
75-15-0	216	CARBON DISULFIDE		*			
	1804	...					
	971	SURROGATE RECOVERY					
	972	----------					
17060-07-0	301	DICHLOROETHANE-D4	104			% RECOVERY	
2037-26-5	726	TOLUENE-D8	92			% RECOVERY	
460-00-4	196	4-BROMOFLUOROBENZENE	88			% RECOVERY	
	1131	TENTATIVELY IDENTIFIED COMPOUNDS					
	3320	NONE DETECTED					

Comment Note: * Compound searched for but not detected. Standard was unavailable to determine retention time and detection limit.

Qualifiers

BDL Below Detection Limit

* See Note for Parameter

Comments to Laboratory (do not record)

4-HCL VIALS

Note the additional IDEM analytes for drinking water:

CS2, MEK, Acetone, 2-Nitropropane, 2-Hexanone

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\DATA\D090707\2836D.D Vial: 4
Acq On : 7 Sep 2007 9:22 Operator: REGI
Sample : A781272 LQ4607 Inst : GCMS #4
Misc : 9/7/07 Multiplr: 1.00
MS Integration Params: rteint2.p
Quant Time: Sep 07 09:38:59 2007 Quant Results File: DWD.RES

Quant Method : C:\MSDCHEM\1\METHODS\DWD.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Tue Sep 04 10:38:20 2007
Response via : Initial Calibration
DataAcq Meth : DWD

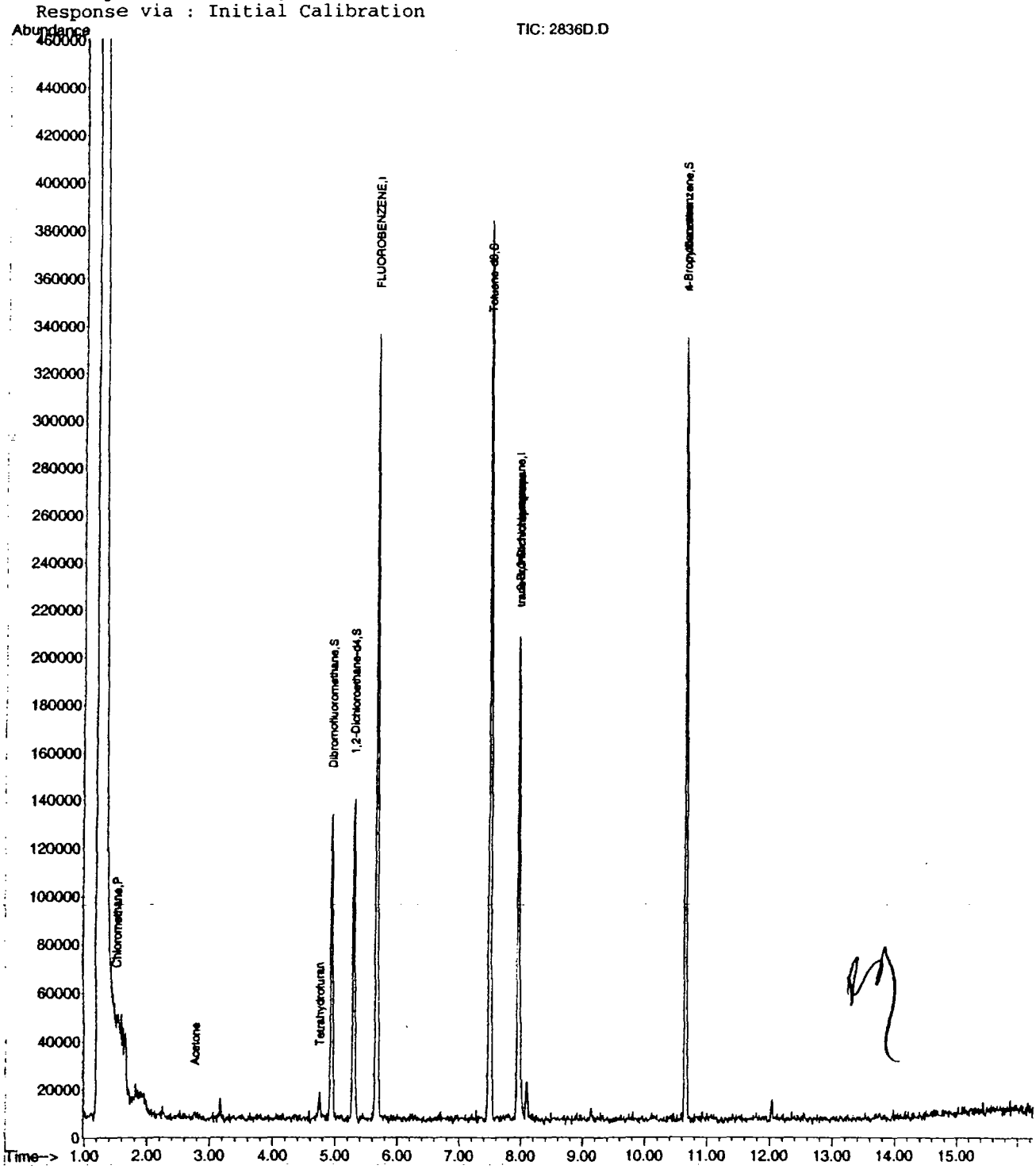
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) FLUOROBENZENE	5.68	96	350931	10.00 UG/L	0.00
38) 2-Bromo-1-chloropropane	7.96	77	146031	10.00 UG/L	0.00
System Monitoring Compounds					
21) Dibromofluoromethane	4.95	113	90204	10.27 UG/L	0.00
Spiked Amount 10.000			Recovery	= 102.70%	
23) 1,2-Dichloroethane-d4	5.30	65	111962	10.36 UG/L	0.00
Spiked Amount 10.000			Recovery	= 103.60%	
33) Toluene-d8	7.51	98	333541	9.17 UG/L	0.00
Spiked Amount 10.000			Recovery	= 91.70%	
51) 4-Bromofluorobenzene	10.67	174	113422	8.77 UG/L	0.00
Spiked Amount 10.000			Recovery	= 87.70%	
Target Compounds					Qvalue
3) Chloromethane	1.52	50	2823	0.24 UG/L	100
8) Acetone	2.77	43	3926	1.59 UG/L #	83
10) Methylene Chloride	3.17	84	2526	Below Cal #	66
17) Tetrahydrofuran	4.75	42	7522	1.80 UG/L #	84
35) trans-1,3-Dichloropropene	7.98	75	2659	0.21 UG/L	100
55) n-Propylbenzene	10.66	92	3768	0.68 UG/L #	1

(#) = qualifier out of range (m) = manual integration
2836D.D DWD.M Fri Sep 07 09:39:00 2007

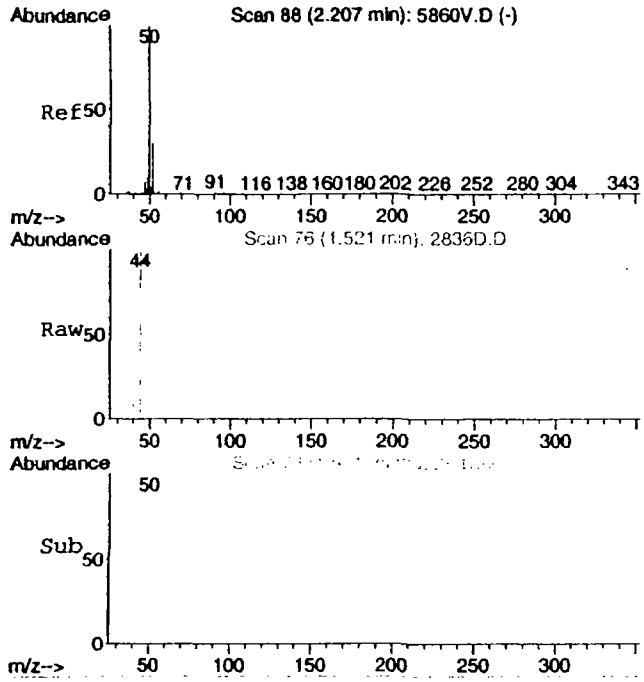
Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\DATA\D090707\2836D.D Vial: 4
Acq On : 7 Sep 2007 9:22 Operator: REGI
Sample : A781272 LQ4607 Inst : GCMS #4
Misc : 9/7/07 Multiplr: 1.00
MS Integration Params: rteint2.p
Quant Time: Sep 7 9:38 2007 Quant Results File: DWD.RES

Method : C:\MSDCHEM\1\METHODS\DWD.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Tue Sep 04 10:38:20 2007
Response via : Initial Calibration

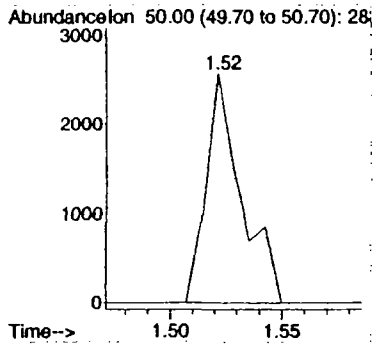


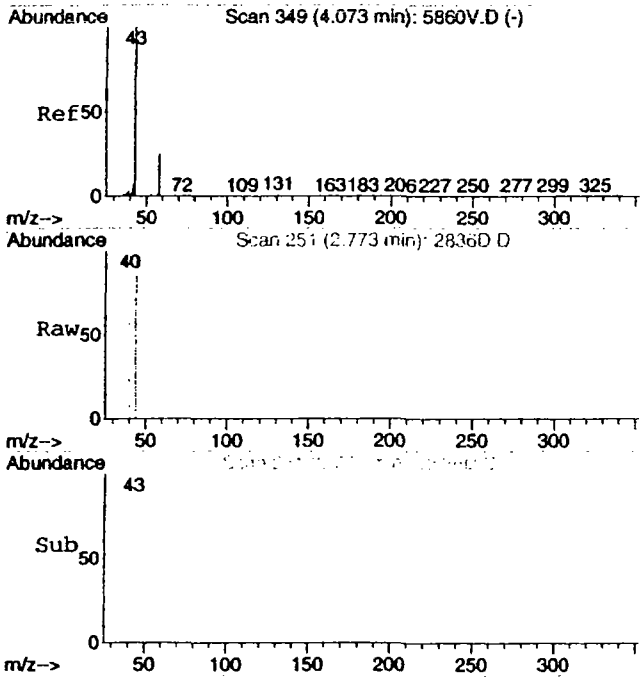
2836D.D DWD.M Fri Sep 07 09:39:00 2007 Page 2



#3
Chloromethane
Concen: 0.24 UG/L
RT: 1.52 min Scan# 76
Delta R.T. -0.00 min
Lab File: 2836D.D
Acq: 7 Sep 2007 9:22

Tgt Ion: 50 Resp: 2823

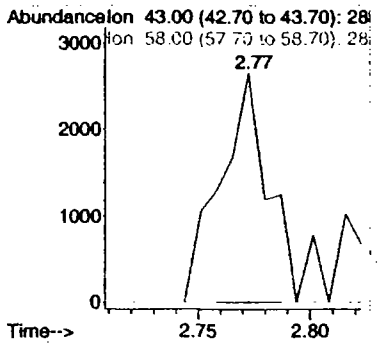


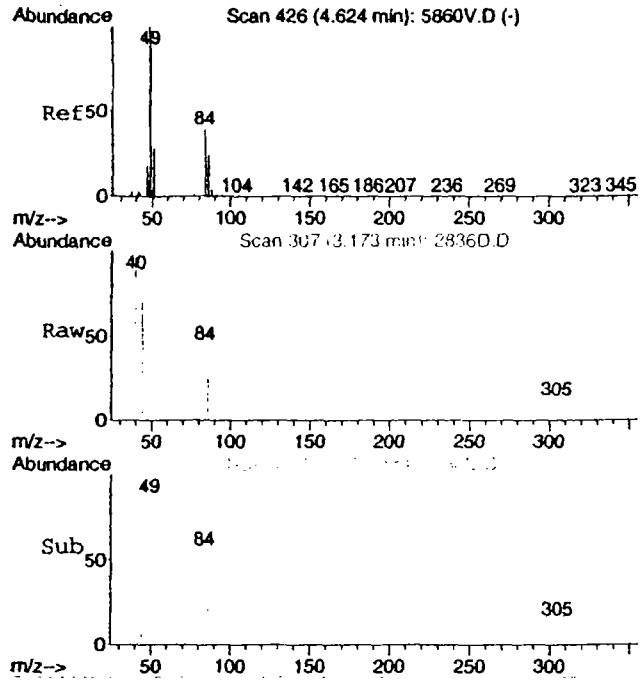


#8
Acetone
Concen: 1.59 UG/L
RT: 2.77 min Scan# 251
Delta R.T. 0.00 min
Lab File: 2836D.D
Acq: 7 Sep 2007 9:22

Tgt Ion: 43 Resp: 3926

Ion	Ratio	Lower	Upper
43	100		
58	19.8	23.1	34.7#

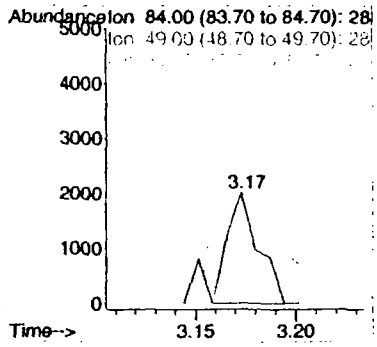


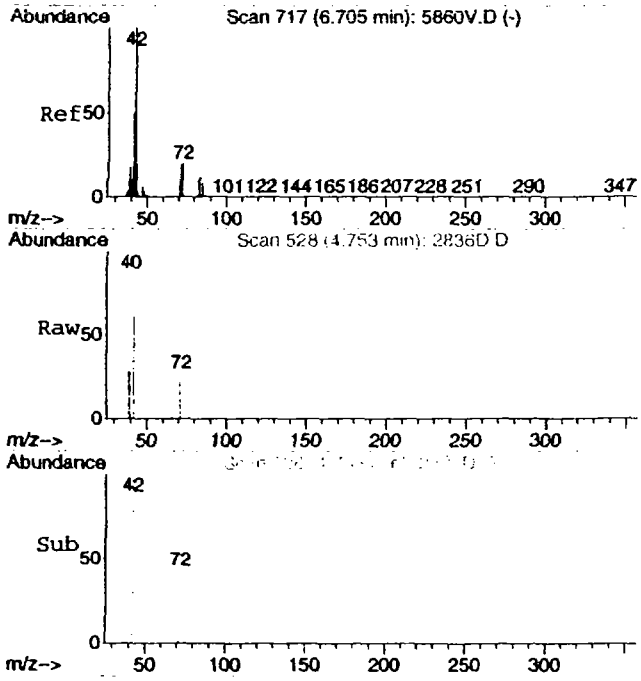


#10
Methylene Chloride
Concen: Below Cal
RT: 3.17 min Scan# 307
Delta R.T. 0.00 min
Lab File: 2836D.D
Acq: 7 Sep 2007 9:22

Tgt Ion: 84 Resp: 2526

Ion	Ratio	Lower	Upper
84	100		
49	217.6	140.2	210.2#
86	99.2	51.1	76.7#

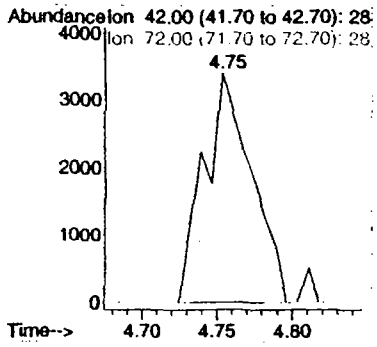


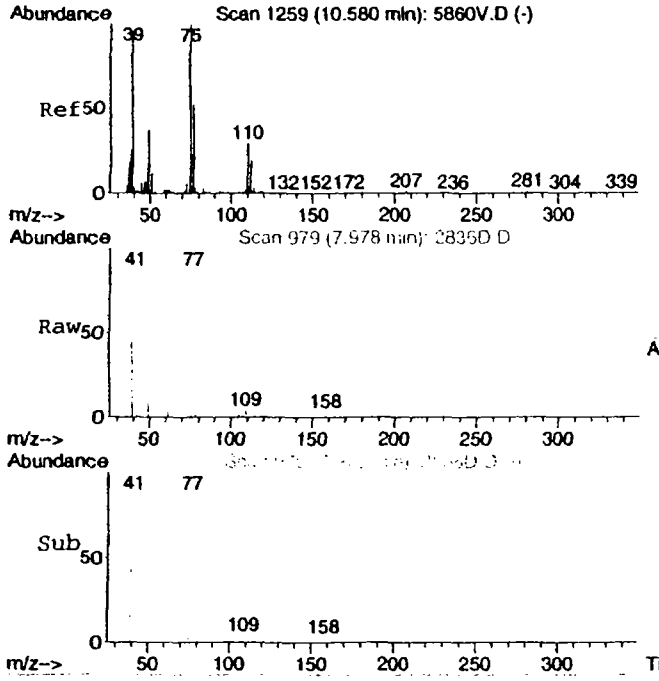


#17
Tetrahydrofuran
Concen: 1.80 UG/L
RT: 4.75 min Scan# 528
Delta R.T. 0.01 min
Lab File: 2836D.D
Acq: 7 Sep 2007 9:22

Tgt Ion: 42 Resp: 7522

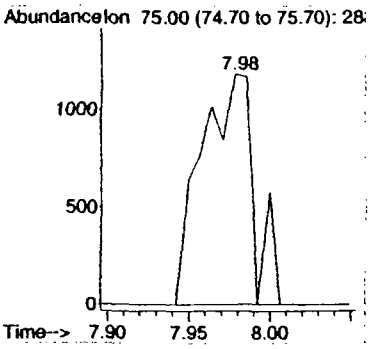
Ion	Ratio	Lower	Upper
42	100		
72	21.8	24.5	36.7#

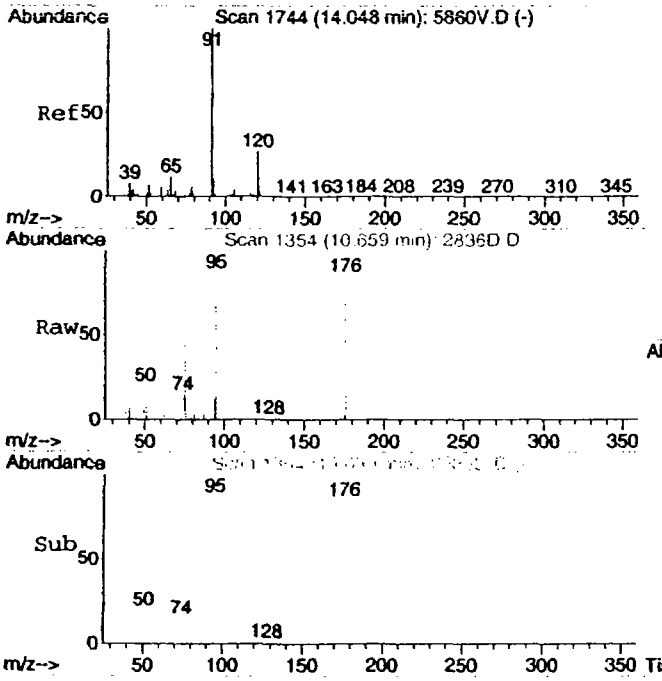




#35
trans-1,3-Dichloropropene
Concen: 0.21 UG/L
RT: 7.98 min Scan# 979
Delta R.T. 0.12 min
Lab File: 2836D.D
Acq: 7 Sep 2007 9:22

Tgt Ion: 75 Resp: 2659

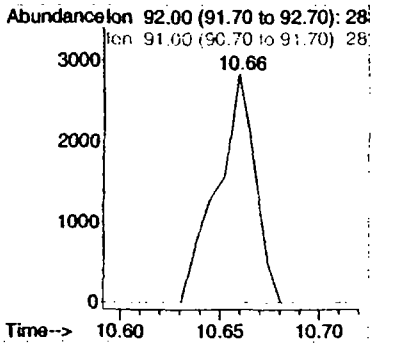




#55
n-Propylbenzene
Concen: 0.68 UG/L
RT: 10.66 min Scan# 1354
Delta R.T. -0.27 min
Lab File: 2836D.D
Acq: 7 Sep 2007 9:22

Tgt Ion: 92 Resp: 3768

Ion	Ratio	Lower	Upper
92	100		
91	0.0	715.8	1073.6#



R524570 Heritage Environmental Services, LLC A781273

GC/MS VOA

Method EPA 524.2 REV. 4.1
Sample Description LQ4608
Submitter IDEM - OLQ
Instrument 345 Channel 1

Test Code O516.9.0
Analyst 1062 R. SHAMP
File 2837D.D Date/Time 07Sep07 09:49:00
Dilution Factor 1

CAS	PRM	Parameter	Concentration	RQL	Limit	Units	RT
NA	1807	REGULATED CONTAMINANTS					
71-43-2	151	BENZENE		BDL	0.50	UG/L	
56-23-5	217	CARBON TETRACHLORIDE		BDL	0.50	UG/L	
106-46-7	29	1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)		BDL	0.50	UG/L	
107-06-2	21	1,2-DICHLOROETHANE		BDL	0.50	UG/L	
75-35-4	8	1,1-DICHLOROETHENE		BDL	0.50	UG/L	
71-55-6	2	1,1,1-TRICHLOROETHANE		BDL	0.50	UG/L	
79-01-6	750	TRICHLOROETHENE		BDL	0.50	UG/L	
75-01-4	768	VINYL CHLORIDE		BDL	0.20	UG/L	
108-90-7	231	CHLOROBENZENE		BDL	0.50	UG/L	
95-50-1	20	1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)		BDL	0.50	UG/L	
156-60-5	746	TRANS-1,2-DICHLOROETHENE		BDL	0.50	UG/L	
156-59-2	246	CIS-1,2-DICHLOROETHENE		BDL	0.50	UG/L	
75-09-2	302	DICHLOROMETHANE (METHYLENE CHLORIDE)		BDL	0.50	UG/L	
78-87-5	23	1,2-DICHLOROPROPANE		BDL	0.50	UG/L	
100-41-4	349	ETHYL BENZENE		BDL	0.50	UG/L	
100-42-5	680	STYRENE		BDL	0.50	UG/L	
79-00-5	4	1,1,2-TRICHLOROETHANE		BDL	0.50	UG/L	
127-18-4	703	TETRACHLOROETHENE		BDL	0.50	UG/L	
108-88-3	724	TOLUENE		BDL	0.50	UG/L	
95-47-6	549	O-XYLENE		BDL	0.50	UG/L	
MPXYLENE	492	M/P-XYLENE		BDL	0.50	UG/L	
120-82-1	16	1,2,4-TRICHLOROBENZENE		BDL	0.50	UG/L	
NA	1809	UNREGULATED - MONITORING REQUIRED					
108-86-1	193	BROMOBENZENE		BDL	0.50	UG/L	
75-27-4	195	BROMODICHLOROMETHANE		BDL	0.50	UG/L	
75-25-2	197	BROMOFORM		BDL	0.50	UG/L	
74-83-9	198	BROMOMETHANE		BDL	0.50	UG/L	
124-48-1	233	CHLORODIBROMOMETHANE		BDL	0.50	UG/L	
75-00-3	234	CHLOROETHANE		BDL	0.50	UG/L	
67-66-3	235	CHLOROFORM		BDL	0.50	UG/L	
74-87-3	236	CHLOROMETHANE		BDL	0.50	UG/L	
95-49-8	807	2-CHLOROTOLUENE (O-CHLOROTOLUENE)		BDL	0.50	UG/L	
106-43-4	808	4-CHLOROTOLUENE (P-CHLOROTOLUENE)		BDL	0.50	UG/L	
74-95-3	296	DIBROMOMETHANE		BDL	0.50	UG/L	
541-73-1	26	1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)		BDL	0.50	UG/L	
75-34-3	7	1,1-DICHLOROETHANE		BDL	0.50	UG/L	
563-58-6	10	1,1-DICHLOROPROPENE		BDL	0.50	UG/L	
142-28-9	27	1,3-DICHLOROPROPANE		BDL	0.50	UG/L	
10061-02-6	747	TRANS-1,3-DICHLOROPROPENE		BDL	0.50	UG/L	
10061-01-5	247	CIS-1,3-DICHLOROPROPENE		BDL	0.50	UG/L	
594-20-7	33	2,2-DICHLOROPROPANE		BDL	0.50	UG/L	
630-20-6	1	1,1,1,2-TETRACHLOROETHANE		BDL	0.50	UG/L	
79-34-5	3	1,1,2,2-TETRACHLOROETHANE		BDL	0.50	UG/L	
96-18-4	14	1,2,3-TRICHLOROPROPANE		BDL	0.50	UG/L	

KS 9-10-07

KS 9-10-07

GC/MS VOA

CAS	PRM	Parameter	Concentration	RQL	Limit	Units	RT
NA	1806	MONITORED AT STATE'S DISCRETION					
74-97-5	194	BROMOCHLOROMETHANE		BDL	0.50	UG/L	
104-51-8	519	N-BUTYLBENZENE		BDL	0.50	UG/L	
75-71-8	300	DICHLORODIFLUOROMETHANE		BDL	0.50	UG/L	
75-69-4	372	TRICHLOROFLUOROMETHANE		BDL	0.50	UG/L	
87-68-3	398	HEXACHLOROBUTADIENE		BDL	0.50	UG/L	
98-82-8	432	ISOPROPYLBENZENE (CUMENE)		BDL	0.50	UG/L	
99-87-6	628	4-ISOPROPYLTOLUENE (P-ISOPROPYLTOLUENE)		BDL	0.50	UG/L	
91-20-3	493	NAPHTHALENE		BDL	0.50	UG/L	
103-65-1	532	N-PROPYLBENZENE		BDL	0.50	UG/L	
135-98-8	644	SEC-BUTYLBENZENE		BDL	0.50	UG/L	
98-06-6	702	TERT-BUTYLBENZENE		BDL	0.50	UG/L	
87-61-6	13	1,2,3-TRICHLOROBENZENE		BDL	0.50	UG/L	
95-63-6	17	1,2,4-TRIMETHYLBENZENE		BDL	0.50	UG/L	
108-67-8	25	1,3,5-TRIMETHYLBENZENE		BDL	0.50	UG/L	
106-93-4	18	1,2-DIBROMOETHANE (EDB)		BDL	0.50	UG/L	
96-12-8	19	1,2-DIBROMO-3-CHLOROPROPANE (DBCP)		BDL	0.50	UG/L	
1634-04-4	859	METHYL-T-BUTYL ETHER (MTBE)		BDL	0.50	UG/L	
	972	----------					
591-78-6	60	2-HEXANONE		BDL	2.0	UG/L	
79-46-9	67	2-NITROPROPANE		*			
67-64-1	99	ACETONE (2-PROPANONE)		BDL	4.0	UG/L	
78-93-3	52	2-BUTANONE		BDL	2.0	UG/L	
75-15-0	216	CARBON DISULFIDE		*			
	1804	...					
	971	SURROGATE RECOVERY					
	972	----------					
17060-07-0	301	DICHLOROETHANE-D4	104			% RECOVERY	
2037-26-5	726	TOLUENE-D8	91			% RECOVERY	
460-00-4	196	4-BROMOFLUOROBENZENE	87			% RECOVERY	
	1131	TENTATIVELY IDENTIFIED COMPOUNDS					
	3320	NONE DETECTED					

Comment Note: * Compound searched for but not detected. Standard was unavailable to determine retention time and detection limit.

Qualifiers

* See Note for Parameter

BDL Below Detection Limit

Comments to Laboratory (do not record)

4-HCL VIALS

Note the additional IDEM analytes for drinking water:

CS2, MEK, Acetone, 2-Nitropropane, 2-Hexanone

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\DATA\D090707\2837D.D
Acq On : 7 Sep 2007 9:49
Sample : A781273 LQ4608
Misc : 9/7/07
MS Integration Params: rteint2.p
Quant Time: Sep 07 10:06:15 2007

Vial: 5
Operator: REGI
Inst : GCMS #4
Multiplr: 1.00
Quant Results File: DWD.RES

Quant Method : C:\MSDCHEM\1\METHODS\DWD.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Tue Sep 04 10:38:20 2007
Response via : Initial Calibration
DataAcq Meth : DWD

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) FLUOROBENZENE	5.68	96	356817	10.00	UG/L	0.00
38) 2-Bromo-1-chloropropane	7.97	77	146638	10.00	UG/L	0.00
System Monitoring Compounds						
21) Dibromofluoromethane	4.95	113	89189	9.98	UG/L	0.00
Spiked Amount 10.000			Recovery	=	99.80%	
23) 1,2-Dichloroethane-d4	5.30	65	113758	10.36	UG/L	0.00
Spiked Amount 10.000			Recovery	=	103.60%	
33) Toluene-d8	7.51	98	337120	9.12	UG/L	0.00
Spiked Amount 10.000			Recovery	=	91.20%	
51) 4-Bromofluorobenzene	10.67	174	112468	8.67	UG/L	0.00
Spiked Amount 10.000			Recovery	=	86.70%	
Target Compounds						Qvalue
8) Acetone	2.78	43	4648	1.73	UG/L #	68
10) Methylene Chloride	3.17	84	3544	Below Cal		84
17) Tetrahydrofuran	4.76	42	8079	1.90	UG/L #	75
35) trans-1,3-Dichloropropene	7.96	75	2993	0.23	UG/L	100
55) n-Propylbenzene	10.66	92	3964	0.71	UG/L #	1

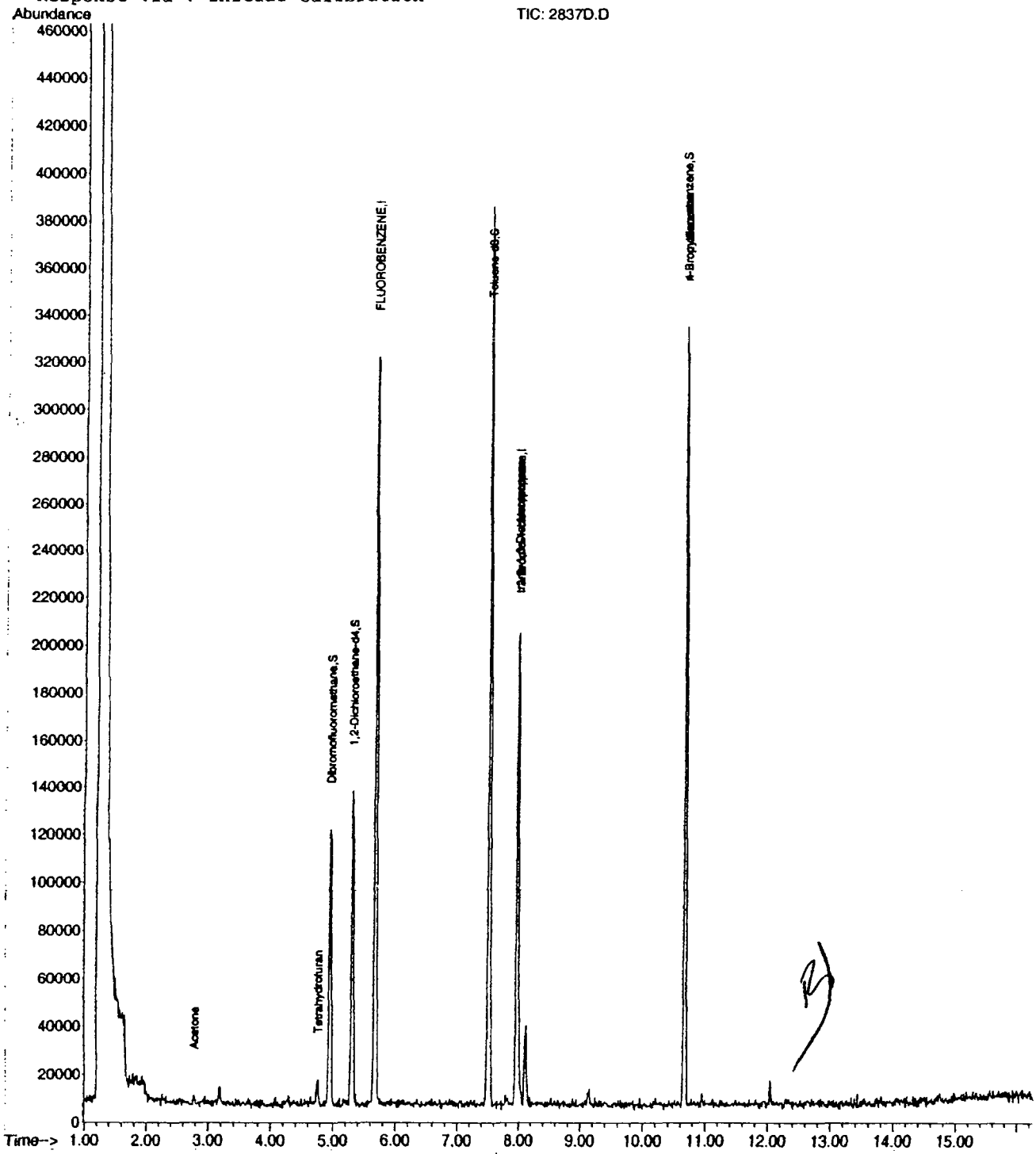
no rg

(#) = qualifier out of range (m) = manual integration
2837D.D DWD.M Fri Sep 07 10:06:16 2007

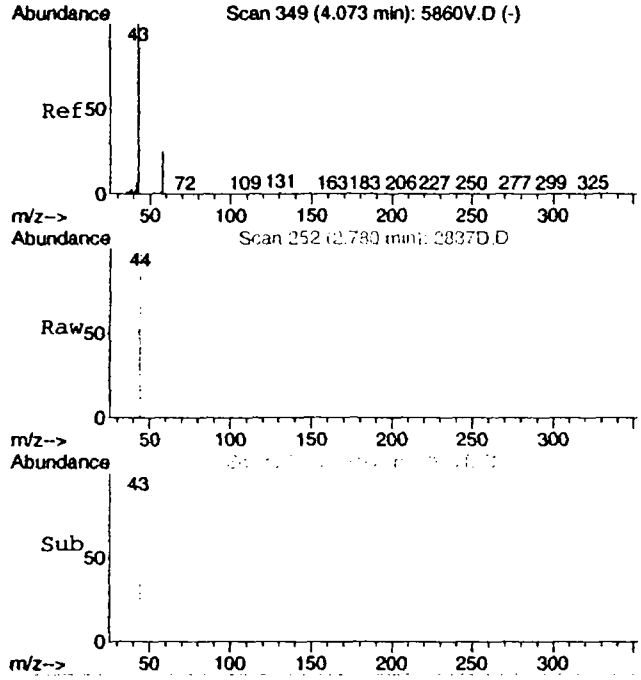
Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\DATA\D090707\2837D.D Vial: 5
Acq On : 7 Sep 2007 9:49 Operator: REGI
Sample : A781273 LQ4608 Inst : GCMS #4
Misc : 9/7/07 Multiplr: 1.00
MS Integration Params: rteint2.p
Quant Time: Sep 7 10:06 2007 Quant Results File: DWD.RES

Method : C:\MSDCHEM\1\METHODS\DWD.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Tue Sep 04 10:38:20 2007
Response via : Initial Calibration



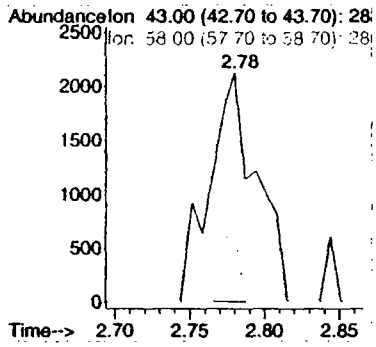
2837D.D DWD.M Fri Sep 07 10:06:16 2007 Page 2

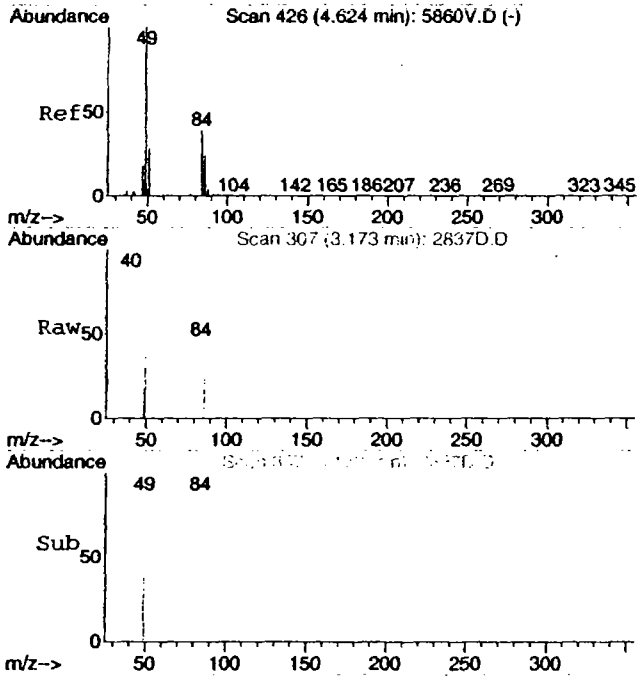


#8
Acetone
Concen: 1.73 UG/L
RT: 2.78 min Scan# 252
Delta R.T. 0.01 min
Lab File: 2837D.D
Acq: 7 Sep 2007 9:49

Tgt Ion: 43 Resp: 4648

Ion	Ratio	Lower	Upper
43	100		
58	11.6	23.1	34.7#

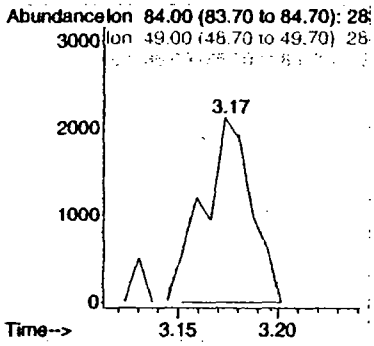


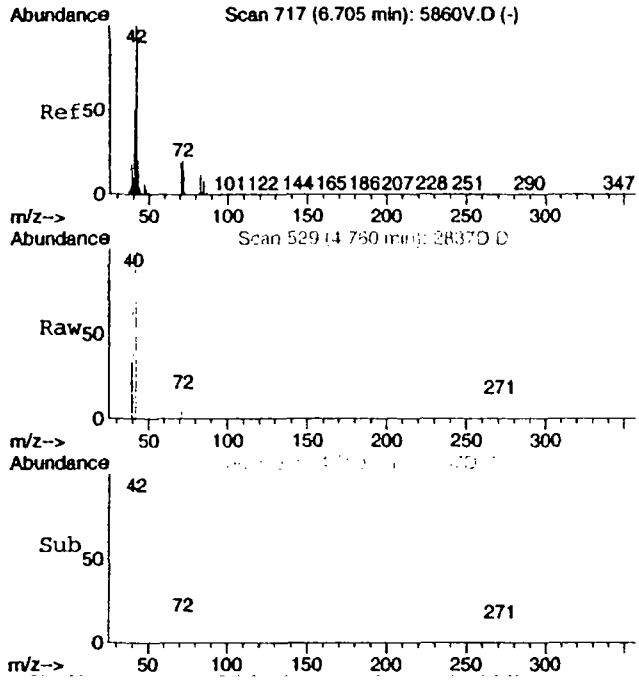


#10
Methylene Chloride
Concen: Below Cal
RT: 3.17 min Scan# 307
Delta R.T. 0.00 min
Lab File: 2837D.D
Acq: 7 Sep 2007 9:49

Tgt Ion: 84 Resp: 3544

Ion	Ratio	Lower	Upper
84	100		
49	149.9	140.2	210.2
86	71.8	51.1	76.7

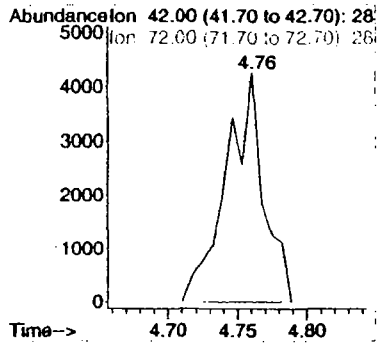


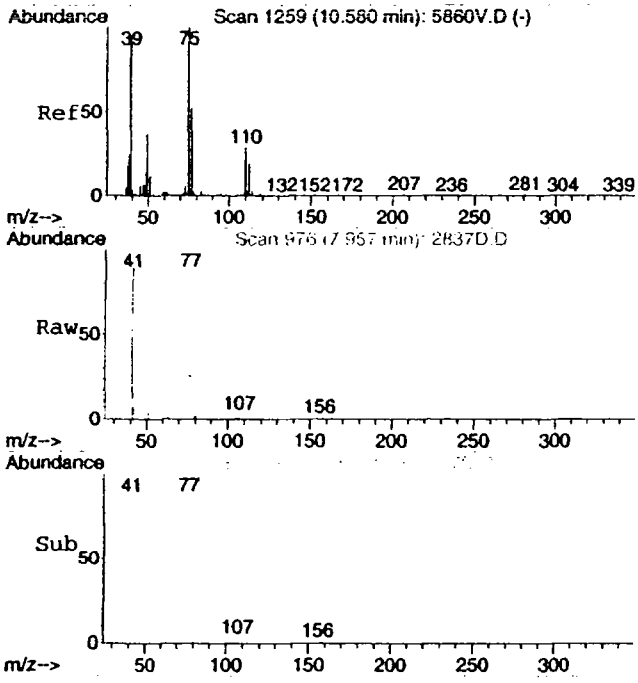


#17
Tetrahydrofuran
Concen: 1.90 UG/L
RT: 4.76 min Scan# 529
Delta R.T. 0.01 min
Lab File: 2837D.D
Acq: 7 Sep 2007 9:49

Tgt Ion: 42 Resp: 8079

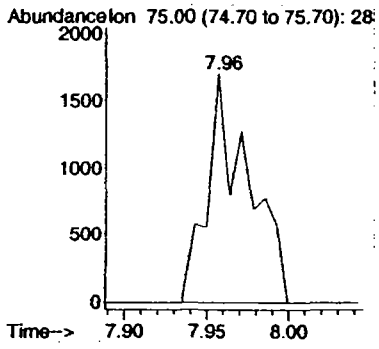
Ion	Ratio	Lower	Upper
42	100		
72	16.8	24.5	36.7#

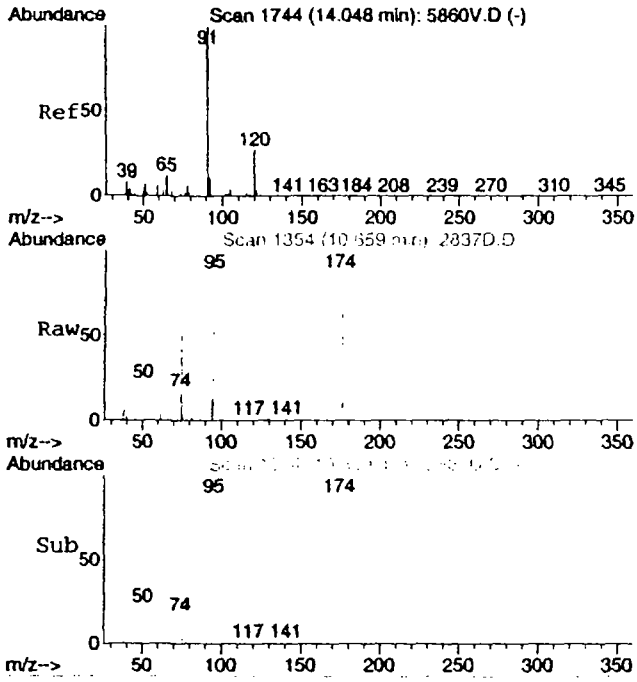




#35
trans-1,3-Dichloropropene
Concen: 0.23 UG/L
RT: 7.96 min Scan# 976
Delta R.T. 0.10 min
Lab File: 2837D.D
Acq: 7 Sep 2007 9:49

Tgt Ion: 75 Resp: 2993

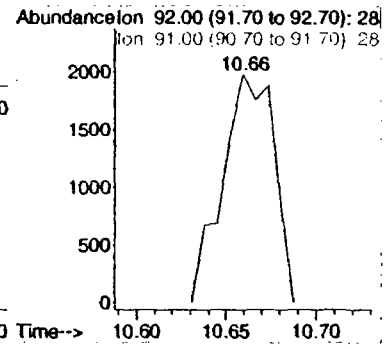




#55
n-Propylbenzene
Concen: 0.71 UG/L
RT: 10.66 min Scan# 1354
Delta R.T. -0.27 min
Lab File: 2837D.D
Acq: 7 Sep 2007 9:49

Tgt Ion: 92 Resp: 3964

Ion	Ratio	Lower	Upper
92	100		
91	0.0	715.8	1073.6#



R524570 Heritage Environmental Services, LLC A781274

GC/MS VOA

Method EPA 524.2 REV. 4.1
Sample Description LQ4609
Submitter IDEM - OLQ
Instrument 345 Channel 1

Test Code O516.9.0
Analyst 1062 R. SHAMP
File 2838D.D Date/Time 07Sep07 10:17:00
Dilution Factor 1

CAS	PRM	Parameter	Concentration	RQL	Limit	Units	RT
NA	1807	REGULATED CONTAMINANTS					
71-43-2	151	BENZENE		BDL	0.50	UG/L	
56-23-5	217	CARBON TETRACHLORIDE		BDL	0.50	UG/L	
106-46-7	29	1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)		BDL	0.50	UG/L	
107-06-2	21	1,2-DICHLOROETHANE		BDL	0.50	UG/L	
75-35-4	8	1,1-DICHLOROETHENE		BDL	0.50	UG/L	
71-55-6	2	1,1,1-TRICHLOROETHANE		BDL	0.50	UG/L	
79-01-6	750	TRICHLOROETHENE		BDL	0.50	UG/L	
75-01-4	768	VINYL CHLORIDE		BDL	0.20	UG/L	
108-90-7	231	CHLOROBENZENE		BDL	0.50	UG/L	
95-50-1	20	1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)		BDL	0.50	UG/L	
156-60-5	746	TRANS-1,2-DICHLOROETHENE		BDL	0.50	UG/L	
156-59-2	246	CIS-1,2-DICHLOROETHENE		BDL	0.50	UG/L	
75-09-2	302	DICHLOROMETHANE (METHYLENE CHLORIDE)		BDL	0.50	UG/L	
78-87-5	23	1,2-DICHLOROPROPANE		BDL	0.50	UG/L	
100-41-4	349	ETHYL BENZENE		BDL	0.50	UG/L	
100-42-5	680	STYRENE		BDL	0.50	UG/L	
79-00-5	4	1,1,2-TRICHLOROETHANE		BDL	0.50	UG/L	
127-18-4	703	TETRACHLOROETHENE		BDL	0.50	UG/L	
108-88-3	724	TOLUENE		BDL	0.50	UG/L	
95-47-6	549	O-XYLENE		BDL	0.50	UG/L	
MPXYLENE	492	M/P-XYLENE		BDL	0.50	UG/L	
120-82-1	16	1,2,4-TRICHLOROBENZENE		BDL	0.50	UG/L	
NA	1809	UNREGULATED - MONITORING REQUIRED					
108-86-1	193	BROMOBENZENE		BDL	0.50	UG/L	
75-27-4	195	BROMODICHLOROMETHANE		BDL	0.50	UG/L	
75-25-2	197	BROMOFORM		BDL	0.50	UG/L	
74-83-9	198	BROMOMETHANE		BDL	0.50	UG/L	
124-48-1	233	CHLORODIBROMOMETHANE		BDL	0.50	UG/L	
75-00-3	234	CHLOROETHANE		BDL	0.50	UG/L	
67-66-3	235	CHLOROFORM		BDL	0.50	UG/L	
74-87-3	236	CHLOROMETHANE		BDL	0.50	UG/L	
95-49-8	807	2-CHLOROTOLUENE (O-CHLOROTOLUENE)		BDL	0.50	UG/L	
106-43-4	808	4-CHLOROTOLUENE (P-CHLOROTOLUENE)		BDL	0.50	UG/L	
74-95-3	296	DIBROMOMETHANE		BDL	0.50	UG/L	
541-73-1	26	1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)		BDL	0.50	UG/L	
75-34-3	7	1,1-DICHLOROETHANE		BDL	0.50	UG/L	
563-58-6	10	1,1-DICHLOROPROPENE		BDL	0.50	UG/L	
142-28-9	27	1,3-DICHLOROPROPANE		BDL	0.50	UG/L	
10061-01-5	247	CIS-1,3-DICHLOROPROPENE		BDL	0.50	UG/L	
10061-02-6	747	TRANS-1,3-DICHLOROPROPENE		BDL	0.50	UG/L	
594-20-7	33	2,2-DICHLOROPROPANE		BDL	0.50	UG/L	
630-20-6	1	1,1,1,2-TETRACHLOROETHANE		BDL	0.50	UG/L	
79-34-5	3	1,1,2,2-TETRACHLOROETHANE		BDL	0.50	UG/L	
96-18-4	14	1,2,3-TRICHLOROPROPANE		BDL	0.50	UG/L	

UK 9-10-07

UK 9-10-07

GC/MS VOA

CAS	PRM	Parameter	Concentration	RQL	Limit	Units	RT
NA	1806	MONITORED AT STATE'S DISCRETION					
74-97-5	194	BROMOCHLOROMETHANE		BDL	0.50	UG/L	
104-51-8	519	N-BUTYLBENZENE		BDL	0.50	UG/L	
75-71-8	300	DICHLORODIFLUOROMETHANE		BDL	0.50	UG/L	
75-69-4	372	TRICHLOROFLUOROMETHANE		BDL	0.50	UG/L	
87-68-3	398	HEXACHLOROBUTADIENE		BDL	0.50	UG/L	
98-82-8	432	ISOPROPYLBENZENE (CUMENE)		BDL	0.50	UG/L	
99-87-6	628	4-ISOPROPYLTOLUENE (P-ISOPROPYLTOLUENE)		BDL	0.50	UG/L	
91-20-3	493	NAPHTHALENE		BDL	0.50	UG/L	
103-65-1	532	N-PROPYLBENZENE		BDL	0.50	UG/L	
135-98-8	644	SEC-BUTYLBENZENE		BDL	0.50	UG/L	
98-06-6	702	TERT-BUTYLBENZENE		BDL	0.50	UG/L	
87-61-6	13	1,2,3-TRICHLOROBENZENE		BDL	0.50	UG/L	
95-63-6	17	1,2,4-TRIMETHYLBENZENE		BDL	0.50	UG/L	
108-67-8	25	1,3,5-TRIMETHYLBENZENE		BDL	0.50	UG/L	
106-93-4	18	1,2-DIBROMOETHANE (EDB)		BDL	0.50	UG/L	
96-12-8	19	1,2-DIBROMO-3-CHLOROPROPANE (DBCP)		BDL	0.50	UG/L	
1634-04-4	859	METHYL-T-BUTYL ETHER (MTBE)		BDL	0.50	UG/L	
	972	————————					
591-78-6	60	2-HEXANONE		BDL	2.0	UG/L	
79-46-9	67	2-NITROPROPANE		*			
67-64-1	99	ACETONE (2-PROPANONE)		BDL	4.0	UG/L	
78-93-3	52	2-BUTANONE		BDL	2.0	UG/L	
75-15-0	216	CARBON DISULFIDE		*			
	1804	...					
	971	SURROGATE RECOVERY					
	972	————————					
17060-07-0	301	DICHLOROETHANE-D4	101			% RECOVERY	
2037-26-5	726	TOLUENE-D8	89			% RECOVERY	
460-00-4	196	4-BROMOFLUOROBENZENE	85			% RECOVERY	
	1131	TENTATIVELY IDENTIFIED COMPOUNDS					
	3320	NONE DETECTED					

Comment Note: * Compound searched for but not detected. Standard was unavailable to determine retention time and detection limit.

Qualifiers

BDL Below Detection Limit

* See Note for Parameter

Comments to Laboratory (do not record)

4-HCL VIALS

Note the additional IDEM analytes for drinking water:

CS2, MEK, Acetone, 2-Nitropropane, 2-Hexanone

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\DATA\D090707\2838D.D Vial: 6
Acq On : 7 Sep 2007 10:17 Operator: REGI
Sample : A781274 LQ4609 Inst : GCMS #4
Misc : 9/7/07 Multiplr: 1.00
MS Integration Params: rteint2.p
Quant Time: Sep 07 10:33:30 2007 Quant Results File: DWD.RES

Quant Method : C:\MSDCHEM\1\METHODS\DWD.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Tue Sep 04 10:38:20 2007
Response via : Initial Calibration
DataAcq Meth : DWD

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) FLUOROBENZENE	5.68	96	356493	10.00 UG/L	0.00
38) 2-Bromo-1-chloropropane	7.97	77	143631	10.00 UG/L	0.00
System Monitoring Compounds					
21) Dibromofluoromethane	4.95	113	86681	9.71 UG/L	0.00
Spiked Amount 10.000			Recovery	= 97.10%	
23) 1,2-Dichloroethane-d4	5.30	65	111109	10.12 UG/L	0.00
Spiked Amount 10.000			Recovery	= 101.20%	
33) Toluene-d8	7.51	98	327896	8.88 UG/L	0.00
Spiked Amount 10.000			Recovery	= 88.80%	
51) 4-Bromofluorobenzene	10.66	174	108467	8.53 UG/L	0.00
Spiked Amount 10.000			Recovery	= 85.30%	
Target Compounds					Qvalue
3) ~~Chloromethane~~	1.52	50	2974	0.25 UG/L	100
~~8) Acetone~~	2.77	43	8752	~~2.63~~ UG/L	97
10) ~~Methylene Chloride~~	3.18	84	5535	Below Cal	94
17) ~~Tetrahydrofuran~~	4.75	42	6480	1.53 UG/L	92
35) ~~trans-1,3-Dichloropropene~~	7.96	75	2725	0.21 UG/L	100
55) ~~n-Propylbenzene~~	10.67	92	4026	0.74 UG/L #	1
70) ~~Hexachlorobutadiene~~	13.76	225	238	Below Cal	100

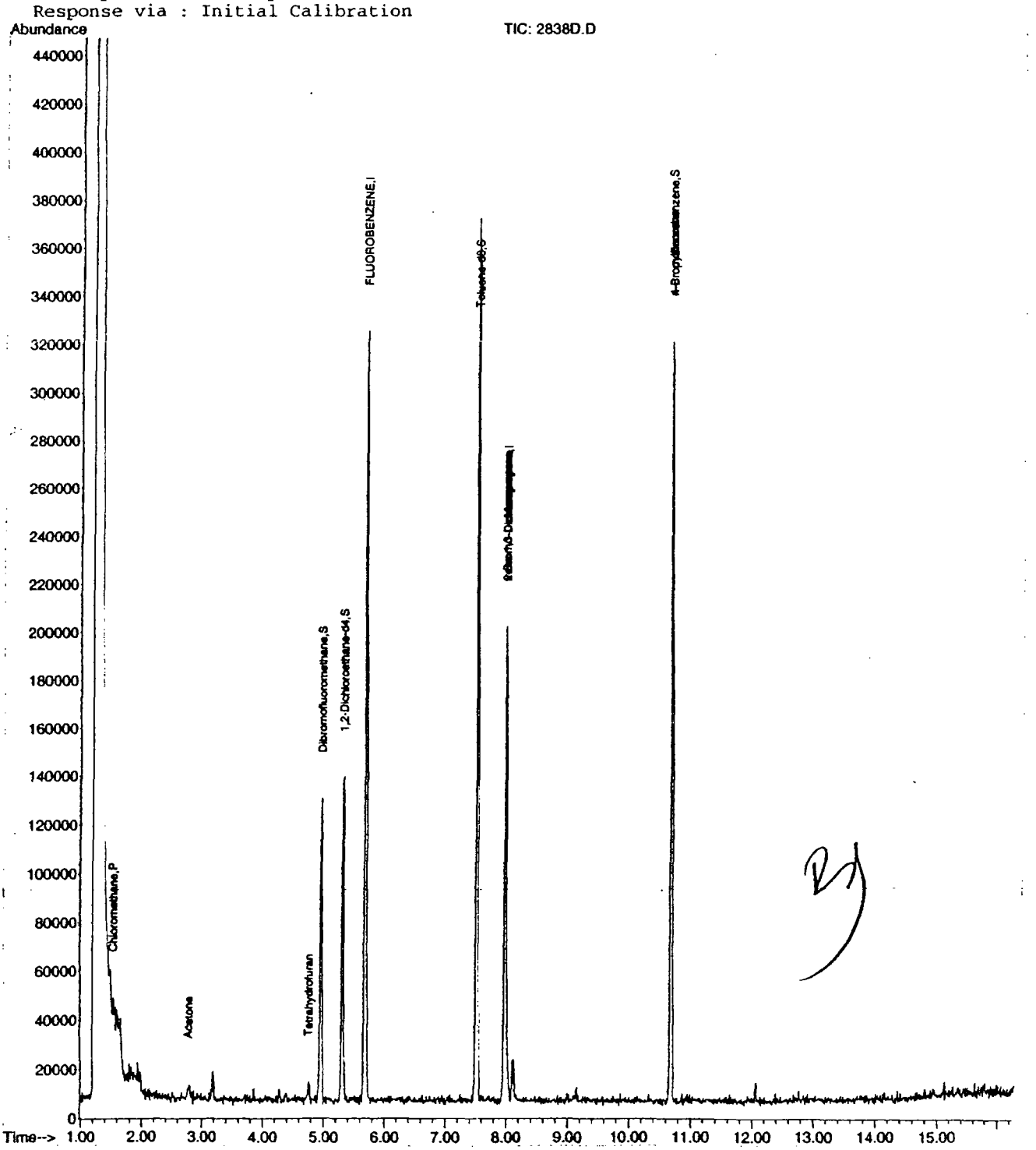
no res

(#) = qualifier out of range (m) = manual integration
2838D.D DWD.M Fri Sep 07 10:33:31 2007

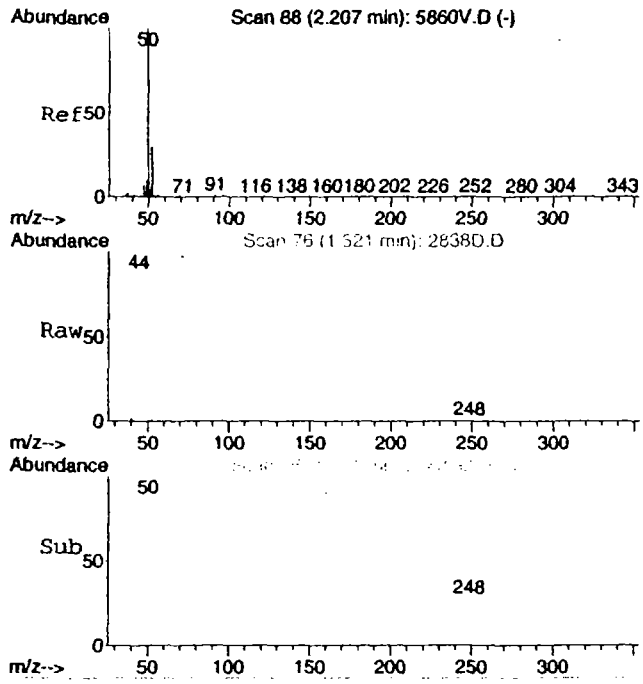
Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\DATA\D090707\2838D.D Vial: 6
Acq On : 7 Sep 2007 10:17 Operator: REGI
Sample : A781274 LQ4609 Inst : GCMS #4
Misc : 9/7/07 Multiplr: 1.00
MS Integration Params: rteint2.p
Quant Time: Sep 7 10:33 2007 Quant Results File: DWD.RES

Method : C:\MSDCHEM\1\METHODS\DWD.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Tue Sep 04 10:38:20 2007
Response via : Initial Calibration

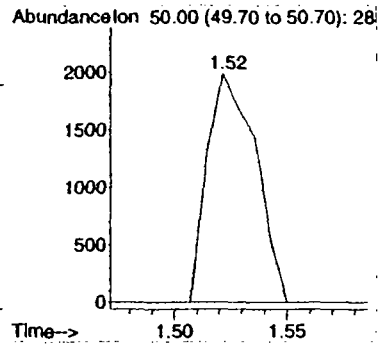


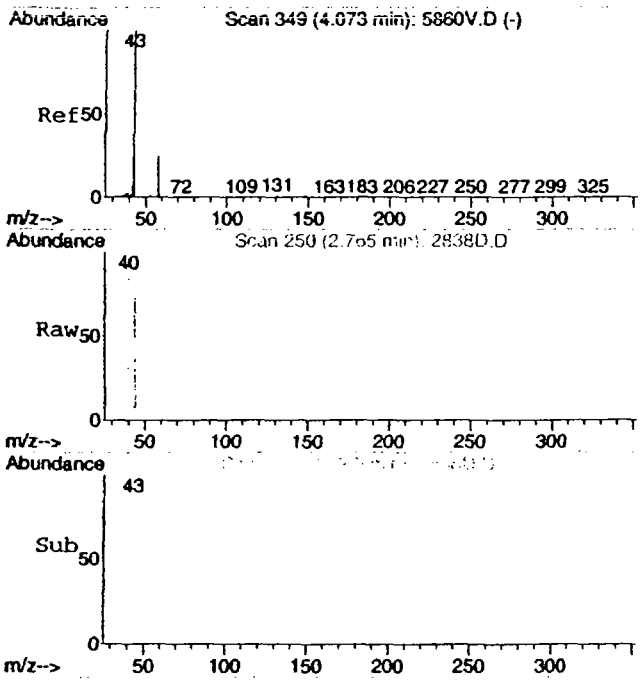
2838D.D DWD.M Fri Sep 07 10:33:31 2007 Page 2



#3
Chloromethane
Concen: 0.25 UG/L
RT: 1.52 min Scan# 76
Delta R.T. -0.00 min
Lab File: 2838D.D
Acq: 7 Sep 2007 10:17

Tgt Ion: 50 Resp: 2974

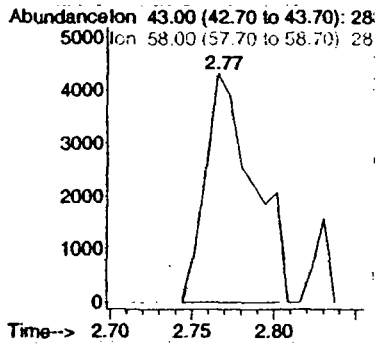


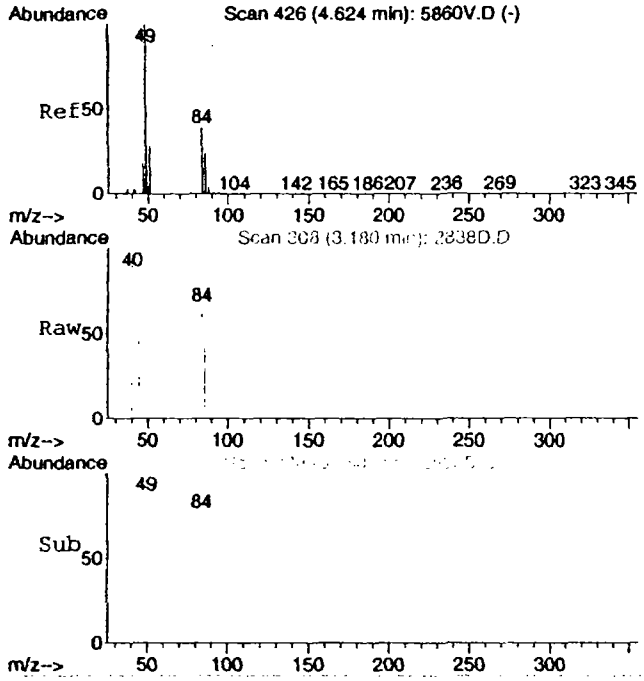


#8
Acetone
Concen: 2.63 UG/L
RT: 2.77 min Scan# 250
Delta R.T. -0.01 min
Lab File: 2838D.D
Acq: 7 Sep 2007 10:17

Tgt Ion: 43 Resp: 8752

Ion	Ratio	Lower	Upper
43	100		
58	27.4	23.1	34.7

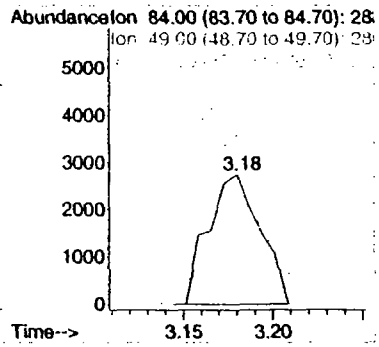


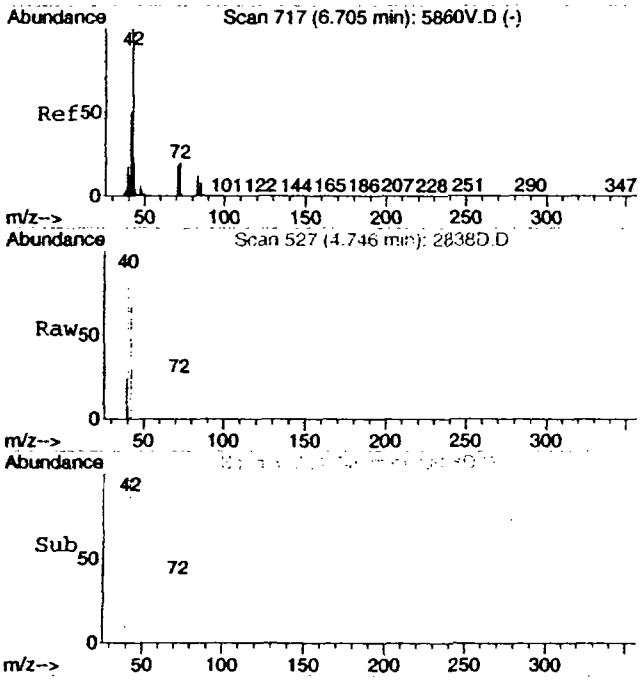


#10
Methylene Chloride
Concen: Below Cal
RT: 3.18 min Scan# 308
Delta R.T. 0.01 min
Lab File: 2838D.D
Acq: 7 Sep 2007 10:17

Tgt Ion: 84 Resp: 5535

Ion	Ratio	Lower	Upper
84	100		
49	168.9	140.2	210.2
86	72.6	51.1	76.7

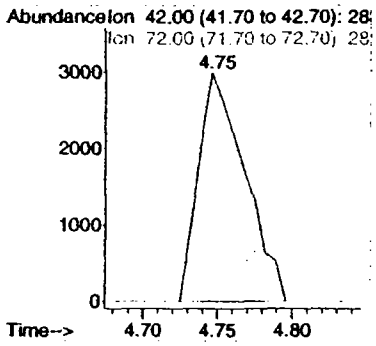


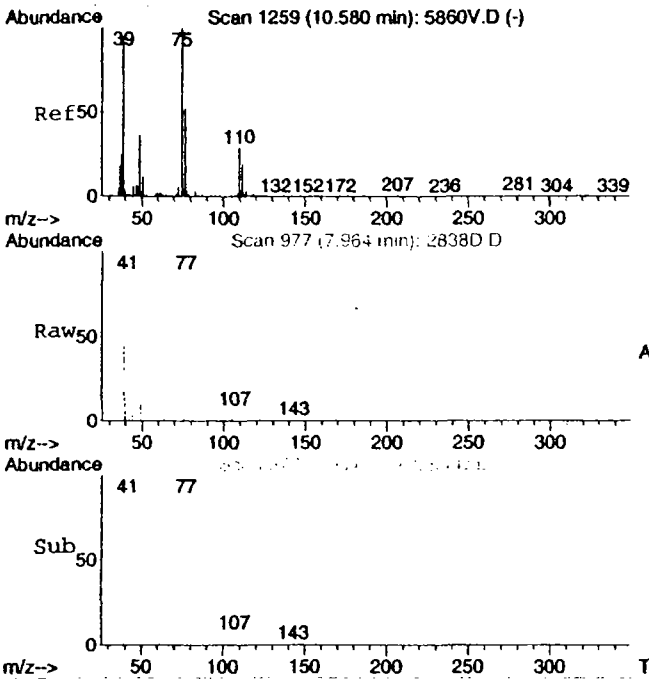


#17
Tetrahydrofuran
Concen: 1.53 UG/L
RT: 4.75 min Scan# 527
Delta R.T. -0.00 min
Lab File: 2838D.D
Acq: 7 Sep 2007 10:17

Tgt Ion: 42 Resp: 6480

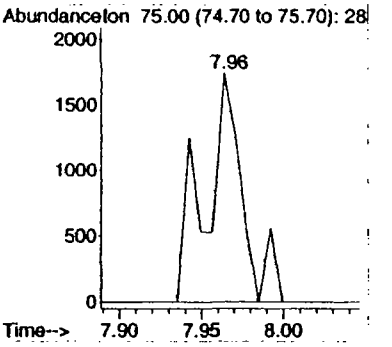
Ion	Ratio	Lower	Upper
42	100		
72	26.1	24.5	36.7

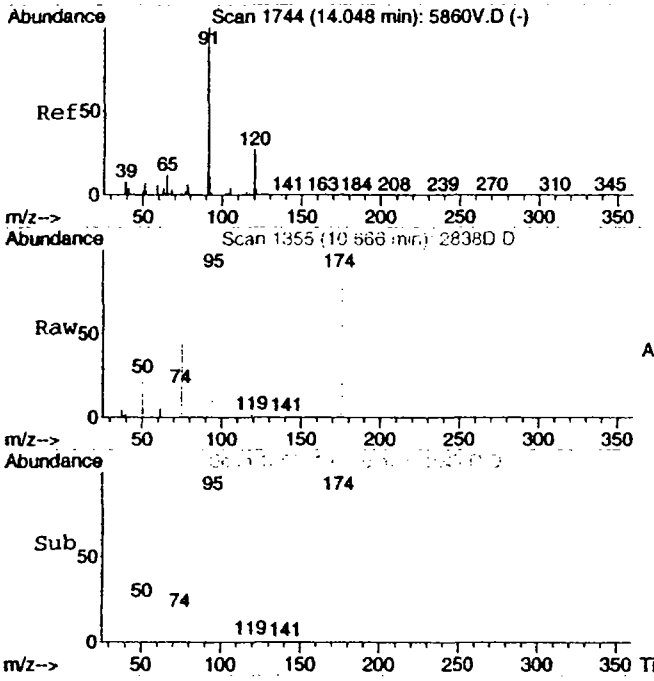




#35
trans-1,3-Dichloropropene
Concen: 0.21 UG/L
RT: 7.96 min Scan# 977
Delta R.T. 0.11 min
Lab File: 2838D.D
Acq: 7 Sep 2007 10:17

Tgt Ion: 75 Resp: 2725

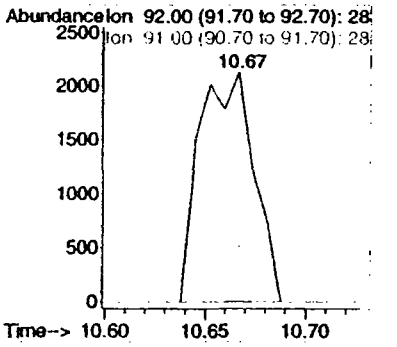


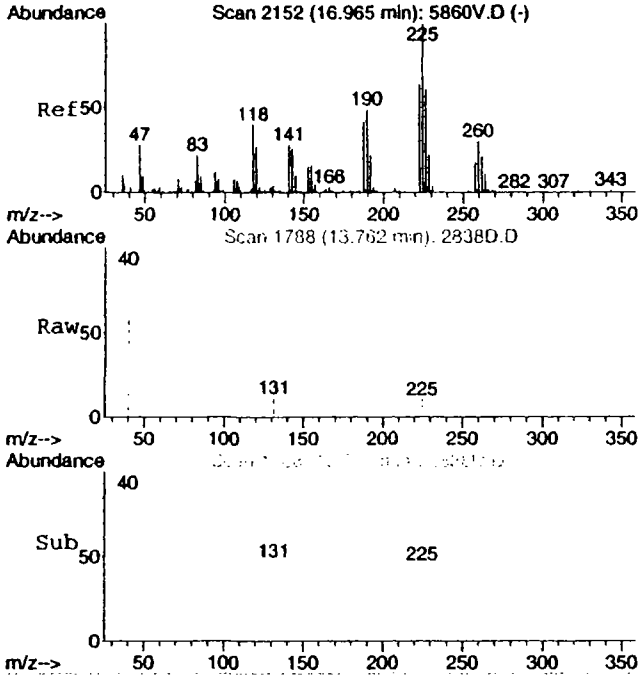


#55
n-Propylbenzene
Concen: 0.74 UG/L
RT: 10.67 min Scan# 1355
Delta R.T. -0.26 min
Lab File: 2838D.D
Acq: 7 Sep 2007 10:17

Tgt Ion: 92 Resp: 4026

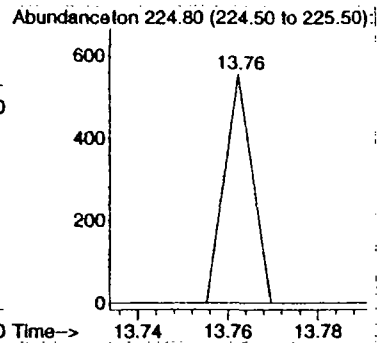
Ion	Ratio	Lower	Upper
92	100		
91	5.6	715.8	1073.6#





#70
Hexachlorobutadiene
Concen: Below Cal
RT: 13.76 min Scan# 1788
Delta R.T. 0.04 min
Lab File: 2838D.D
Acq: 7 Sep 2007 10:17

Tgt Ion:225 Resp: 238



R524570 Heritage Environmental Services, LLC A781275

GC/MS VOA

Method EPA 524.2 REV. 4.1
Sample Description LQ4610
Submitter IDEM - OLQ
Instrument 345 Channel 1

Test Code O516.9.0
Analyst 1062 R. SHAMP
File 2839D.D Date/Time 07Sep07 10:44:00
Dilution Factor 1

CAS	PRM	Parameter	Concentration	RQL	Limit	Units	RT
NA	1807	REGULATED CONTAMINANTS					
71-43-2	151	BENZENE		BDL	0.50	UG/L	
56-23-5	217	CARBON TETRACHLORIDE		BDL	0.50	UG/L	
106-46-7	29	1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)		BDL	0.50	UG/L	
107-06-2	21	1,2-DICHLOROETHANE		BDL	0.50	UG/L	
75-35-4	8	1,1-DICHLOROETHENE		BDL	0.50	UG/L	
71-55-6	2	1,1,1-TRICHLOROETHANE		BDL	0.50	UG/L	
79-01-6	750	TRICHLOROETHENE		BDL	0.50	UG/L	
75-01-4	768	VINYL CHLORIDE		BDL	0.20	UG/L	
108-90-7	231	CHLOROBENZENE		BDL	0.50	UG/L	
95-50-1	20	1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)		BDL	0.50	UG/L	
156-60-5	746	TRANS-1,2-DICHLOROETHENE		BDL	0.50	UG/L	
156-59-2	246	CIS-1,2-DICHLOROETHENE		BDL	0.50	UG/L	
75-09-2	302	DICHLOROMETHANE (METHYLENE CHLORIDE)		BDL	0.50	UG/L	
78-87-5	23	1,2-DICHLOROPROPANE		BDL	0.50	UG/L	
100-41-4	349	ETHYL BENZENE		BDL	0.50	UG/L	
100-42-5	680	STYRENE		BDL	0.50	UG/L	
79-00-5	4	1,1,2-TRICHLOROETHANE		BDL	0.50	UG/L	
127-18-4	703	TETRACHLOROETHENE		BDL	0.50	UG/L	
108-88-3	724	TOLUENE		BDL	0.50	UG/L	
95-47-6	549	O-XYLENE		BDL	0.50	UG/L	
MPXYLENE	492	M/P-XYLENE		BDL	0.50	UG/L	
120-82-1	16	1,2,4-TRICHLOROBENZENE		BDL	0.50	UG/L	
NA	1809	UNREGULATED - MONITORING REQUIRED					
108-86-1	193	BROMOBENZENE		BDL	0.50	UG/L	
75-27-4	195	BROMODICHLOROMETHANE		BDL	0.50	UG/L	
75-25-2	197	BROMOFORM		BDL	0.50	UG/L	
74-83-9	198	BROMOMETHANE		BDL	0.50	UG/L	
124-48-1	233	CHLORODIBROMOMETHANE		BDL	0.50	UG/L	
75-00-3	234	CHLOROETHANE		BDL	0.50	UG/L	
67-66-3	235	CHLOROFORM		BDL	0.50	UG/L	
74-87-3	236	CHLOROMETHANE		BDL	0.50	UG/L	
95-49-8	807	2-CHLOROTOLUENE (O-CHLOROTOLUENE)		BDL	0.50	UG/L	
106-43-4	808	4-CHLOROTOLUENE (P-CHLOROTOLUENE)		BDL	0.50	UG/L	
74-95-3	296	DIBROMOMETHANE		BDL	0.50	UG/L	
541-73-1	26	1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)		BDL	0.50	UG/L	
75-34-3	7	1,1-DICHLOROETHANE		BDL	0.50	UG/L	
563-58-6	10	1,1-DICHLOROPROPENE		BDL	0.50	UG/L	
142-28-9	27	1,3-DICHLOROPROPANE		BDL	0.50	UG/L	
10061-01-5	247	CIS-1,3-DICHLOROPROPENE		BDL	0.50	UG/L	
10061-02-6	747	TRANS-1,3-DICHLOROPROPENE		BDL	0.50	UG/L	
594-20-7	33	2,2-DICHLOROPROPANE		BDL	0.50	UG/L	
630-20-6	1	1,1,1,2-TETRACHLOROETHANE		BDL	0.50	UG/L	
79-34-5	3	1,1,2,2-TETRACHLOROETHANE		BDL	0.50	UG/L	
96-18-4	14	1,2,3-TRICHLOROPROPANE		BDL	0.50	UG/L	

CKS 9-10-07

CKS 9-10-07

GC/MS VOA

CAS	PRM	Parameter	Concentration	RQL	Limit	Units	RT
NA	1806	MONITORED AT STATE'S DISCRETION					
74-97-5	194	BROMOCHLOROMETHANE		BDL	0.50	UG/L	
104-51-8	519	N-BUTYLBENZENE		BDL	0.50	UG/L	
75-71-8	300	DICHLORODIFLUOROMETHANE		BDL	0.50	UG/L	
75-69-4	372	TRICHLOROFLUOROMETHANE		BDL	0.50	UG/L	
87-68-3	398	HEXACHLOROBUTADIENE		BDL	0.50	UG/L	
98-82-8	432	ISOPROPYLBENZENE (CUMENE)		BDL	0.50	UG/L	
99-87-6	628	4-ISOPROPYLTOLUENE (P-ISOPROPYLTOLUENE)		BDL	0.50	UG/L	
91-20-3	493	NAPHTHALENE		BDL	0.50	UG/L	
103-65-1	532	N-PROPYLBENZENE		BDL	0.50	UG/L	
135-98-8	644	SEC-BUTYLBENZENE		BDL	0.50	UG/L	
98-06-6	702	TERT-BUTYLBENZENE		BDL	0.50	UG/L	
87-61-6	13	1,2,3-TRICHLOROBENZENE		BDL	0.50	UG/L	
95-63-6	17	1,2,4-TRIMETHYLBENZENE		BDL	0.50	UG/L	
108-67-8	25	1,3,5-TRIMETHYLBENZENE		BDL	0.50	UG/L	
106-93-4	18	1,2-DIBROMOETHANE (EDB)		BDL	0.50	UG/L	
96-12-8	19	1,2-DIBROMO-3-CHLOROPROPANE (DBCP)		BDL	0.50	UG/L	
1634-04-4	859	METHYL-T-BUTYL ETHER (MTBE)		BDL	0.50	UG/L	
	972	----------					
591-78-6	60	2-HEXANONE		BDL	2.0	UG/L	
79-46-9	67	2-NITROPROPANE		*			
67-64-1	99	ACETONE (2-PROPANONE)		BDL	4.0	UG/L	
78-93-3	52	2-BUTANONE		BDL	2.0	UG/L	
75-15-0	216	CARBON DISULFIDE		*			
	1804	...					
	971	SURROGATE RECOVERY					
	972	----------					
17060-07-0	301	DICHLOROETHANE-D4	110			% RECOVERY	
2037-26-5	726	TOLUENE-D8	95			% RECOVERY	
460-00-4	196	4-BROMOFLUOROBENZENE	88			% RECOVERY	
	1131	TENTATIVELY IDENTIFIED COMPOUNDS					
	3320	NONE DETECTED					

Comment Note: * Compound searched for but not detected. Standard was unavailable to determine retention time and detection limit.

Qualifiers

BDL Below Detection Limit

* See Note for Parameter

Comments to Laboratory (do not record)

4-HCL VIALS

Note the additional IDEM analytes for drinking water:

CS2, MEK, Acetone, 2-Nitropropane, 2-Hexanone

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\DATA\D090707\2839D.D Vial: 7
Acq On : 7 Sep 2007 10:44 Operator: REGI
Sample : A781275 LQ4610 Inst : GCMS #4
Misc : 9/7/07 Multiplr: 1.00
MS Integration Params: rteint2.p
Quant Time: Sep 07 11:00:50 2007 Quant Results File: DWD.RES

Quant Method : C:\MSDCHEM\1\METHODS\DWD.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Tue Sep 04 10:38:20 2007
Response via : Initial Calibration
DataAcq Meth : DWD

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) FLUOROBENZENE	5.68	96	340348	10.00	UG/L	0.00
38) 2-Bromo-1-chloropropane	7.97	77	145735	10.00	UG/L	0.00
System Monitoring Compounds						
21) Dibromofluoromethane	4.95	113	86488	10.15	UG/L	0.00
Spiked Amount 10.000			Recovery	=	101.50%	
23) 1,2-Dichloroethane-d4	5.30	65	114703	10.95	UG/L	0.00
Spiked Amount 10.000			Recovery	=	109.50%	
33) Toluene-d8	7.51	98	334181	9.48	UG/L	0.00
Spiked Amount 10.000			Recovery	=	94.80%	
51) 4-Bromofluorobenzene	10.66	174	113250	8.78	UG/L	0.00
Spiked Amount 10.000			Recovery	=	87.80%	
Target Compounds						Qvalue
3) Chloromethane	1.52	50	2812	0.25	UG/L	100
8) Acetone	2.78	43	6286	2.16	UG/L #	59
10) Methylene Chloride	3.17	84	2019	Below Cal	#	21
17) Tetrahydrofuran	4.76	42	6831	1.68	UG/L #	77
35) trans-1,3-Dichloropropene	7.97	75	2634	0.21	UG/L	100

NO RCS

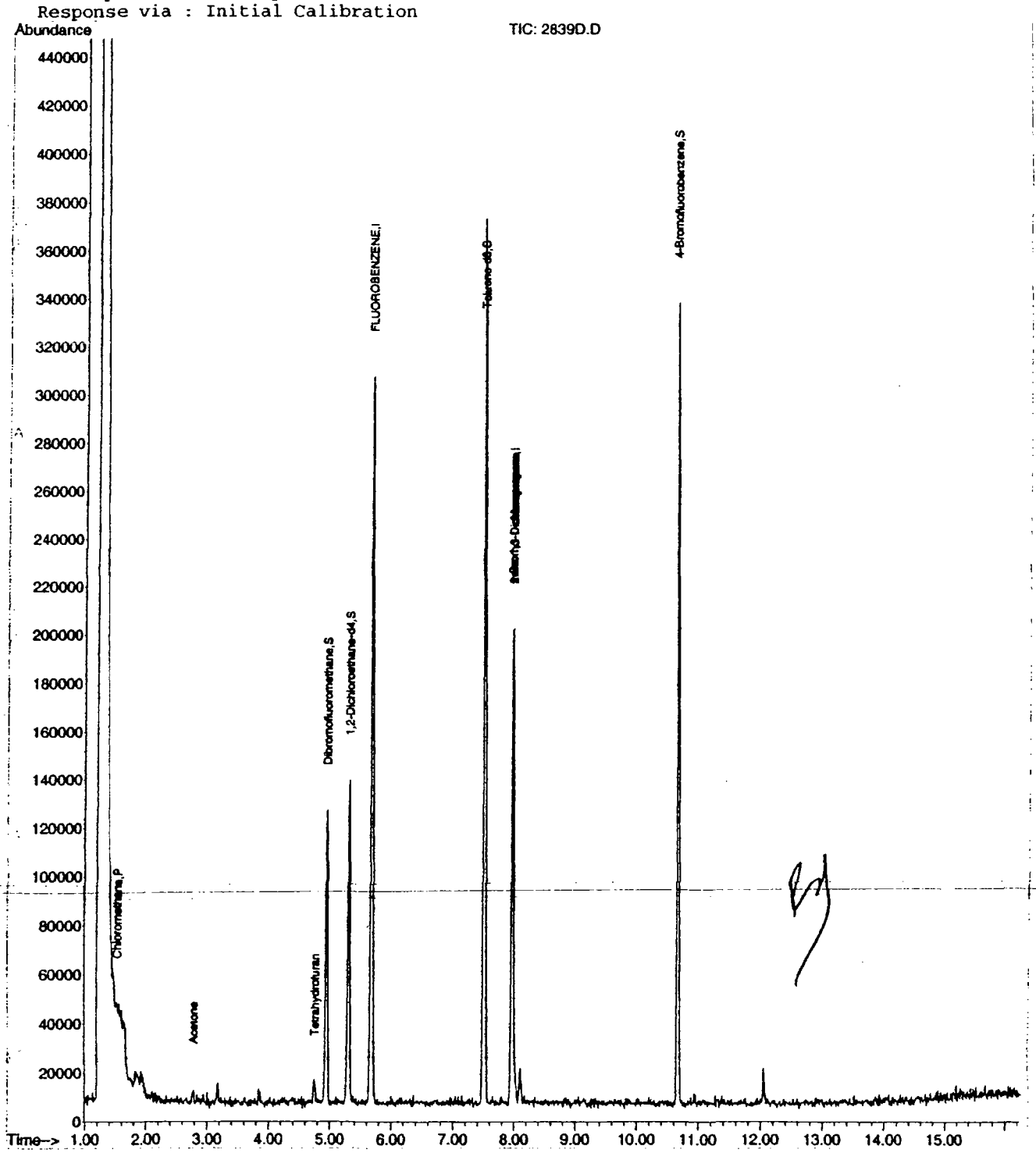
(#) = qualifier out of range (m) = manual integration
2839D.D DWD.M Fri Sep 07 11:00:51 2007

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\DATA\D090707\2839D.D
Acq On : 7 Sep 2007 10:44
Sample : A781275 LQ4610
Misc : 9/7/07
MS Integration Params: rteint2.p
Quant Time: Sep 7 11:00 2007

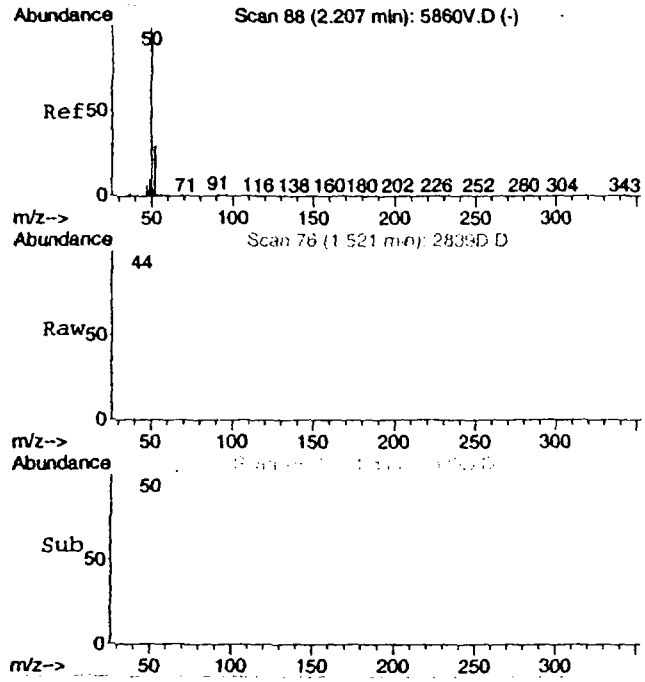
Vial: 7
Operator: REGI
Inst : GCMS #4
Multiplr: 1.00
Quant Results File: DWD.RES

Method : C:\MSDCHEM\1\METHODS\DWD.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Tue Sep 04 10:38:20 2007
Response via : Initial Calibration



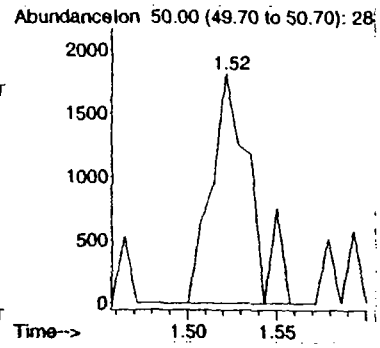
2839D.D DWD.M Fri Sep 07 11:00:51 2007 Page 2

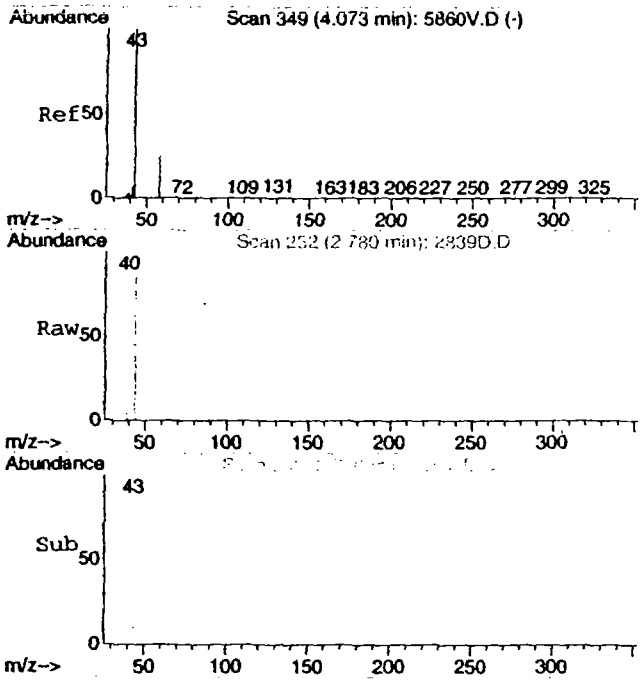
256



#3
Chloromethane
Concen: 0.25 UG/L
RT: 1.52 min Scan# 76
Delta R.T. -0.00 min
Lab File: 2839D.D
Acq: 7 Sep 2007 10:44

Tgt Ion: 50 Resp: 2812

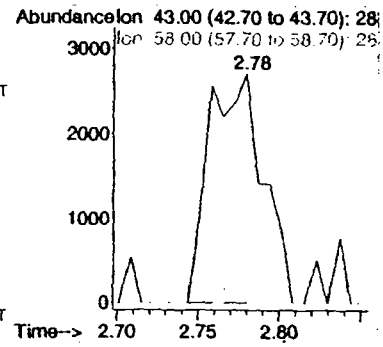


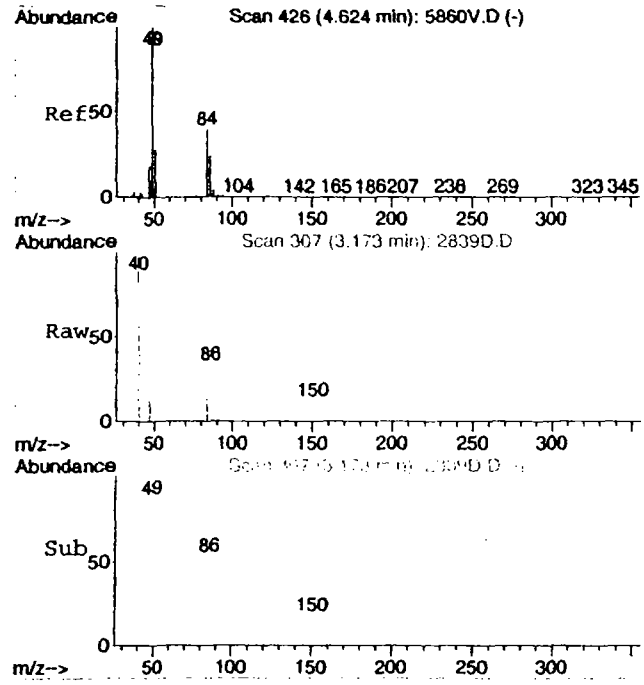


#8
Acetone
Concen: 2.16 UG/L
RT: 2.78 min Scan# 252
Delta R.T. 0.01 min
Lab File: 2839D.D
Acq: 7 Sep 2007 10:44

Tgt Ion: 43 Resp: 6286

Ion	Ratio	Lower	Upper
43	100		
58	7.0	23.1	34.7#

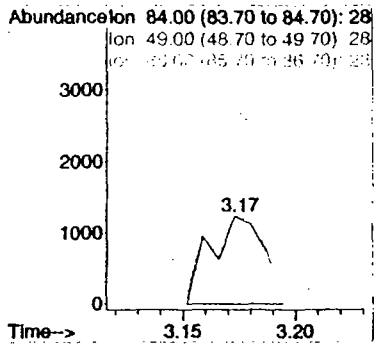


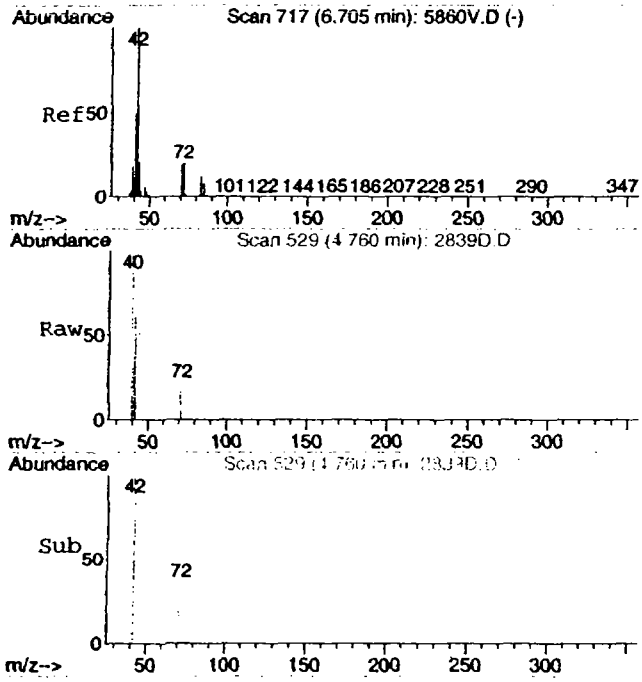


#10
Methylene Chloride
Concen: Below Cal
RT: 3.17 min Scan# 307
Delta R.T. 0.00 min
Lab File: 2839D.D
Acq: 7 Sep 2007 10:44

Tgt Ion: 84 Resp: 2019

Ion	Ratio	Lower	Upper
84	100		
49	294.7	140.2	210.2#
86	112.1	51.1	76.7#

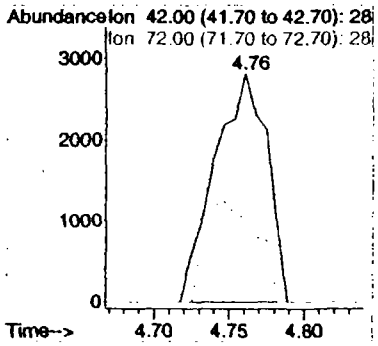


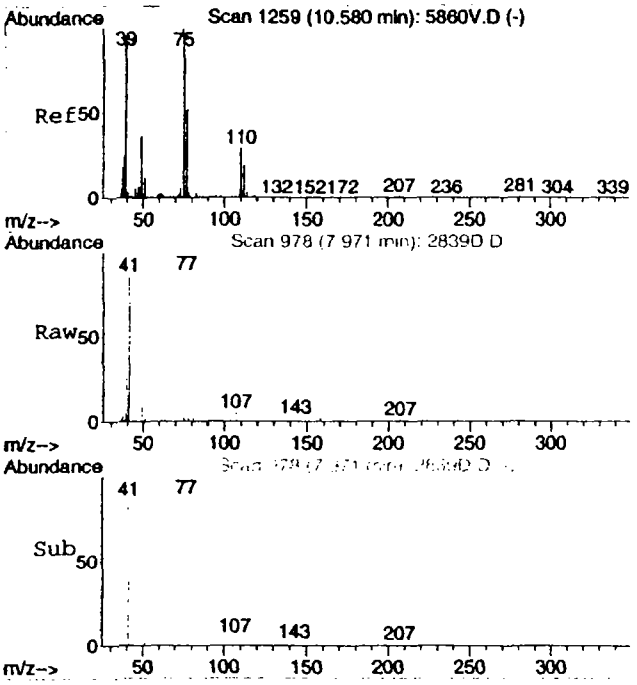


#17
Tetrahydrofuran
Concen: 1.68 UG/L
RT: 4.76 min Scan# 529
Delta R.T. 0.01 min
Lab File: 2839D.D
Acq: 7 Sep 2007 10:44

Tgt Ion: 42 Resp: 6831

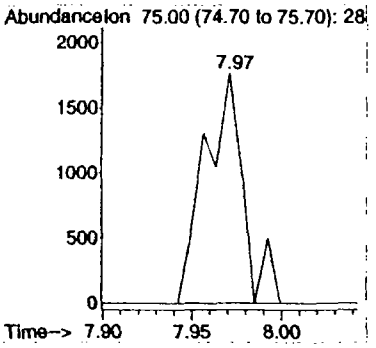
Ion	Ratio	Lower	Upper
42	100		
72	43.1	24.5	36.7#





#35
trans-1,3-Dichloropropene
Concen: 0.21 UG/L
RT: 7.97 min Scan# 978
Delta R.T. 0.11 min
Lab File: 2839D.D
Acq: 7 Sep 2007 10:44

Tgt Ion: 75 Resp: 2634



R524570 Heritage Environmental Services, LLC A781276

GC/MS VOA

Method EPA 524.2 REV. 4.1
Sample Description LQ4597
Submitter IDEM - OLQ
Instrument 345 Channel 1

Test Code O516.9.0
Analyst 1062 R. SHAMP
File 2840D.D Date/Time 07Sep07 11:11:00
Dilution Factor 1

CAS	PRM	Parameter	Concentration	RQL	Limit	Units	RT
NA	1807	REGULATED CONTAMINANTS					
71-43-2	151	BENZENE		BDL	0.50	UG/L	
56-23-5	217	CARBON TETRACHLORIDE		BDL	0.50	UG/L	
106-46-7	29	1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)		BDL	0.50	UG/L	
107-06-2	21	1,2-DICHLOROETHANE		BDL	0.50	UG/L	
75-35-4	8	1,1-DICHLOROETHENE		BDL	0.50	UG/L	
71-55-6	2	1,1,1-TRICHLOROETHANE		BDL	0.50	UG/L	
79-01-6	750	TRICHLOROETHENE		BDL	0.50	UG/L	
75-01-4	768	VINYL CHLORIDE		BDL	0.20	UG/L	
108-90-7	231	CHLOROBENZENE		BDL	0.50	UG/L	
95-50-1	20	1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)		BDL	0.50	UG/L	
156-60-5	746	TRANS-1,2-DICHLOROETHENE		BDL	0.50	UG/L	
156-59-2	246	CIS-1,2-DICHLOROETHENE		BDL	0.50	UG/L	
75-09-2	302	DICHLOROMETHANE (METHYLENE CHLORIDE)		BDL	0.50	UG/L	
78-87-5	23	1,2-DICHLOROPROPANE		BDL	0.50	UG/L	
100-41-4	349	ETHYL BENZENE		BDL	0.50	UG/L	
100-42-5	680	STYRENE		BDL	0.50	UG/L	
79-00-5	4	1,1,2-TRICHLOROETHANE		BDL	0.50	UG/L	
127-18-4	703	TETRACHLOROETHENE		BDL	0.50	UG/L	
108-88-3	724	TOLUENE		BDL	0.50	UG/L	
95-47-6	549	O-XYLENE		BDL	0.50	UG/L	
MPXYLENE	492	M/P-XYLENE		BDL	0.50	UG/L	
120-82-1	16	1,2,4-TRICHLOROBENZENE		BDL	0.50	UG/L	
NA	1809	UNREGULATED - MONITORING REQUIRED					
108-86-1	193	BROMOBENZENE		BDL	0.50	UG/L	
75-27-4	195	BROMODICHLOROMETHANE		BDL	0.50	UG/L	
75-25-2	197	BROMOFORM		BDL	0.50	UG/L	
74-83-9	198	BROMOMETHANE		BDL	0.50	UG/L	
124-48-1	233	CHLORODIBROMOMETHANE		BDL	0.50	UG/L	
75-00-3	234	CHLOROETHANE		BDL	0.50	UG/L	
67-66-3	235	CHLOROFORM		BDL	0.50	UG/L	
74-87-3	236	CHLOROMETHANE		BDL	0.50	UG/L	
95-49-8	807	2-CHLOROTOLUENE (O-CHLOROTOLUENE)		BDL	0.50	UG/L	
106-43-4	808	4-CHLOROTOLUENE (P-CHLOROTOLUENE)		BDL	0.50	UG/L	
74-95-3	296	DIBROMOMETHANE		BDL	0.50	UG/L	
541-73-1	26	1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)		BDL	0.50	UG/L	
75-34-3	7	1,1-DICHLOROETHANE		BDL	0.50	UG/L	
563-58-6	10	1,1-DICHLOROPROPENE		BDL	0.50	UG/L	
142-28-9	27	1,3-DICHLOROPROPANE		BDL	0.50	UG/L	
10061-01-5	247	CIS-1,3-DICHLOROPROPENE		BDL	0.50	UG/L	
10061-02-6	747	TRANS-1,3-DICHLOROPROPENE		BDL	0.50	UG/L	
594-20-7	33	2,2-DICHLOROPROPANE		BDL	0.50	UG/L	
630-20-6	1	1,1,1,2-TETRACHLOROETHANE		BDL	0.50	UG/L	
79-34-5	3	1,1,2,2-TETRACHLOROETHANE		BDL	0.50	UG/L	
96-18-4	14	1,2,3-TRICHLOROPROPANE		BDL	0.50	UG/L	

/ KS 9-10-07

KS 9-10-07

R524570 Heritage Environmental Services, LLC A781276

GC/MS VOA

CAS	PRM	Parameter	Concentration	RQL	Limit	Units	RT
NA	1806	MONITORED AT STATE'S DISCRETION					
74-97-5	194	BROMOCHLOROMETHANE		BDL	0.50	UG/L	
104-51-8	519	N-BUTYLBENZENE		BDL	0.50	UG/L	
75-71-8	300	DICHLORODIFLUOROMETHANE		BDL	0.50	UG/L	
75-69-4	372	TRICHLOROFLUOROMETHANE		BDL	0.50	UG/L	
87-68-3	398	HEXACHLOROBUTADIENE		BDL	0.50	UG/L	
98-82-8	432	ISOPROPYLBENZENE (CUMENE)		BDL	0.50	UG/L	
99-87-6	628	4-ISOPROPYLTOLUENE (P-ISOPROPYLTOLUENE)		BDL	0.50	UG/L	
91-20-3	493	NAPHTHALENE		BDL	0.50	UG/L	
103-65-1	532	N-PROPYLBENZENE		BDL	0.50	UG/L	
135-98-8	644	SEC-BUTYLBENZENE		BDL	0.50	UG/L	
98-06-6	702	TERT-BUTYLBENZENE		BDL	0.50	UG/L	
87-61-6	13	1,2,3-TRICHLOROBENZENE		BDL	0.50	UG/L	
95-63-6	17	1,2,4-TRIMETHYLBENZENE		BDL	0.50	UG/L	
108-67-8	25	1,3,5-TRIMETHYLBENZENE		BDL	0.50	UG/L	
106-93-4	18	1,2-DIBROMOETHANE (EDB)		BDL	0.50	UG/L	
96-12-8	19	1,2-DIBROMO-3-CHLOROPROPANE (DBCP)		BDL	0.50	UG/L	
1634-04-4	859	METHYL-T-BUTYL ETHER (MTBE)		BDL	0.50	UG/L	
	972	————————					
591-78-6	60	2-HEXANONE		BDL	2.0	UG/L	
79-46-9	67	2-NITROPROPANE		*			
67-64-1	99	ACETONE (2-PROPANONE)		BDL	4.0	UG/L	
78-93-3	52	2-BUTANONE		BDL	2.0	UG/L	
75-15-0	216	CARBON DISULFIDE		*			
	1804	...					
	971	SURROGATE RECOVERY					
	972	————————					
17060-07-0	301	DICHLOROETHANE-D4	111			% RECOVERY	
2037-26-5	726	TOLUENE-D8	94			% RECOVERY	
460-00-4	196	4-BROMOFLUOROBENZENE	90			% RECOVERY	
	1131	TENTATIVELY IDENTIFIED COMPOUNDS					
	3320	NONE DETECTED					

Comment Note: * Compound searched for but not detected. Standard was unavailable to determine retention time and detection limit.

Qualifiers

* See Note for Parameter

BDL Below Detection Limit

Comments to Laboratory (do not record)

2-HCL VIALS

Note the additional IDEM analytes for drinking water:

CS2, MEK, Acetone, 2-Nitropropane, 2-Hexanone

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\DATA\D090707\2840D.D Vial: 8
Acq On : 7 Sep 2007 11:11 Operator: REGI
Sample : A781276 LQ4597 Inst : GCMS #4
Misc : 9/7/07 Multiplr: 1.00
MS Integration Params: rteint2.p
Quant Time: Sep 07 11:28:11 2007 Quant Results File: DWD.RES

Quant Method : C:\MSDCHEM\1\METHODS\DWD.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Tue Sep 04 10:38:20 2007
Response via : Initial Calibration
DataAcq Meth : DWD

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) FLUOROBENZENE	5.67	96	336737	10.00 UG/L	0.00
38) 2-Bromo-1-chloropropane	7.97	77	140925	10.00 UG/L	0.00
System Monitoring Compounds					
21) Dibromofluoromethane	4.95	113	88844	10.54 UG/L	0.00
Spiked Amount 10.000			Recovery	= 105.40%	
23) 1,2-Dichloroethane-d4	5.30	65	114902	11.08 UG/L	0.00
Spiked Amount 10.000			Recovery	= 110.80%	
33) Toluene-d8	7.51	98	326065	9.35 UG/L	0.00
Spiked Amount 10.000			Recovery	= 93.50%	
51) 4-Bromofluorobenzene	10.67	174	111668	8.95 UG/L	0.00
Spiked Amount 10.000			Recovery	= 89.50%	
Target Compounds					Qvalue
8) ~~Acetone~~	2.77	43	4885	1.85 UG/L #	55
10) ~~Methylene Chl~~oride	3.18	84	4837	Below Cal #	90
17) Te~~trahydro~~furan	4.75	42	7775	1.94 UG/L #	70
55) ~~n-Propylbenz~~ene	10.66	92	3265	0.61 UG/L #	1

NO MCS

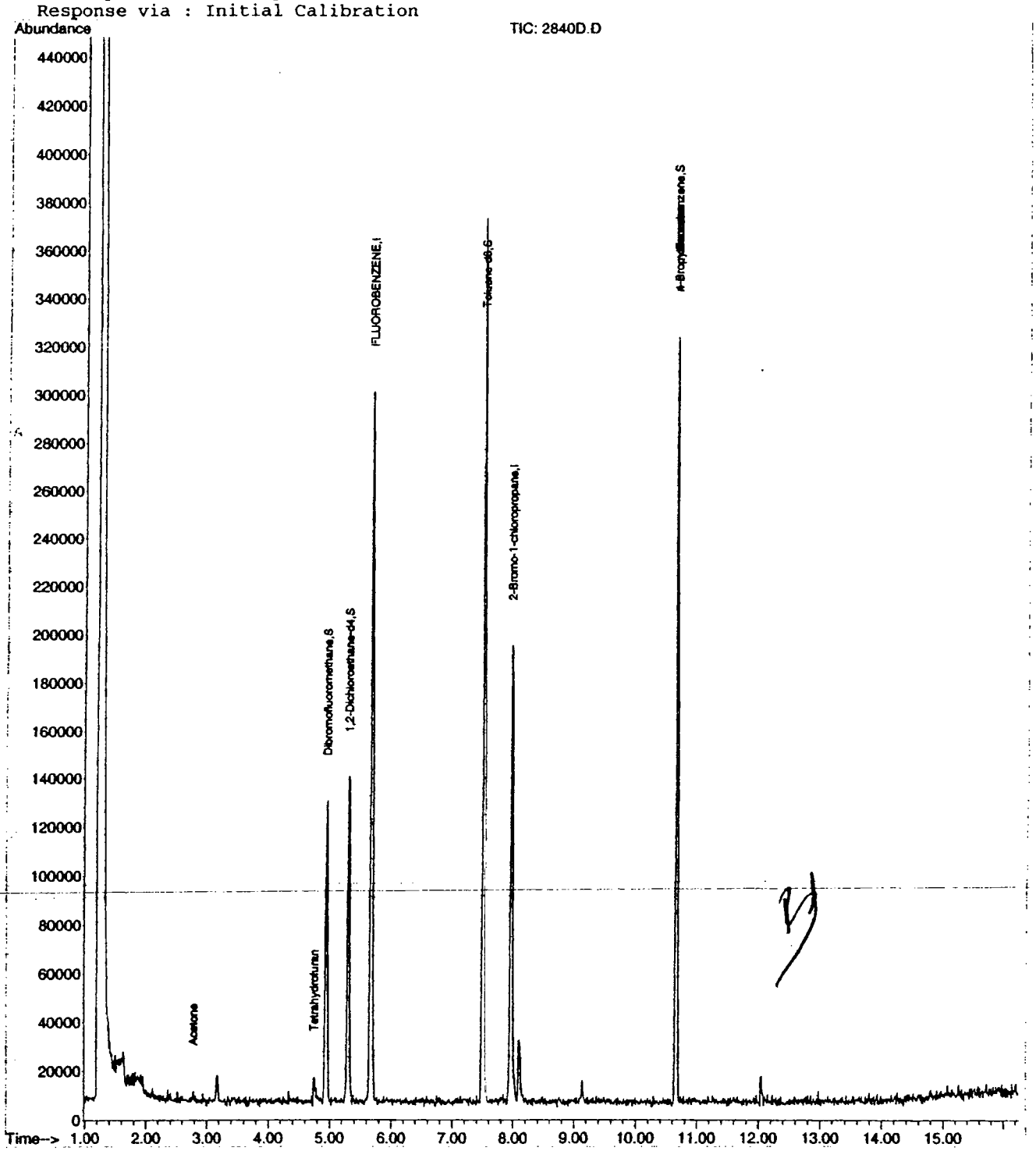
(#) = qualifier out of range (m) = manual integration
2840D.D DWD.M Fri Sep 07 11:28:12 2007

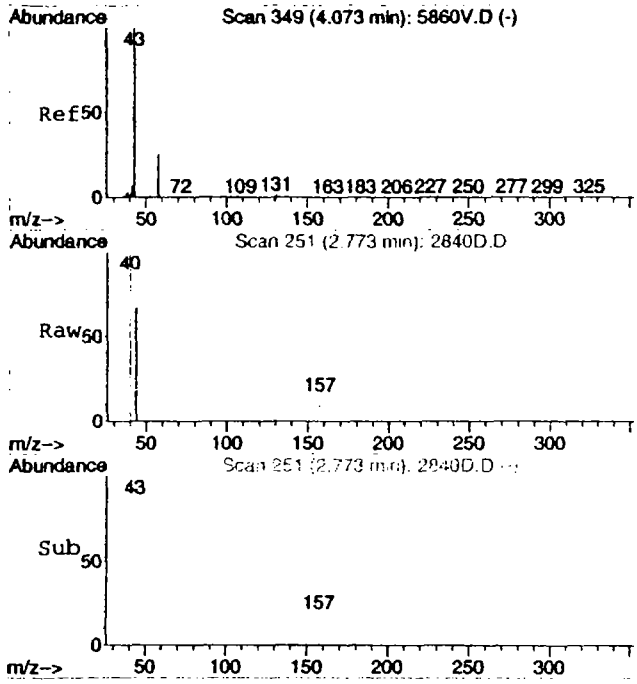
Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\DATA\D090707\2840D.D
Acq On : 7 Sep 2007 11:11
Sample : A781276 LQ4597
Misc : 9/7/07
MS Integration Params: rteint2.p
Quant Time: Sep 7 11:28 2007

Vial: 8
Operator: REGI
Inst : GCMS #4
Multiplr: 1.00
Quant Results File: DWD.RES

Method : C:\MSDCHEM\1\METHODS\DWD.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Tue Sep 04 10:38:20 2007
Response via : Initial Calibration

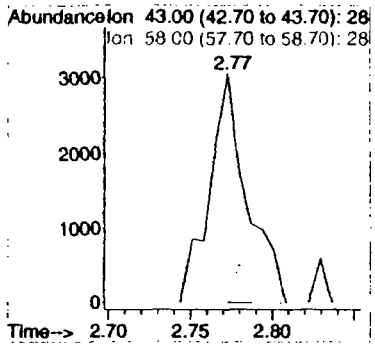


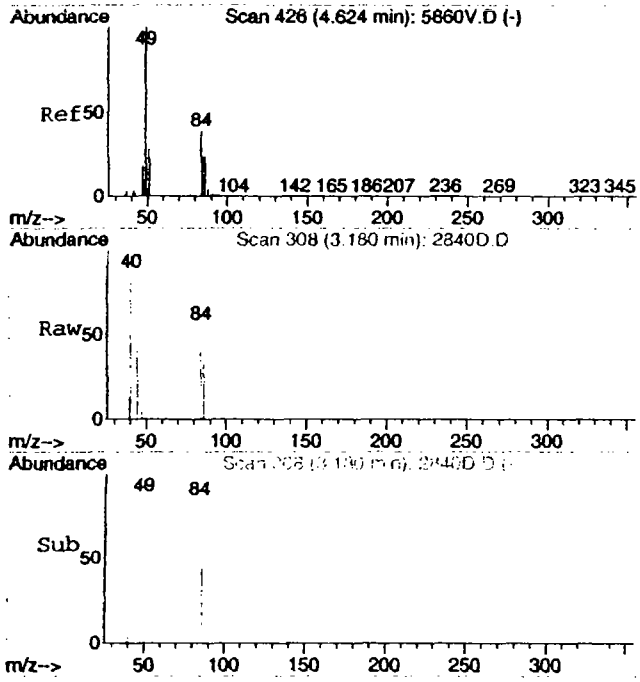


#8
Acetone
Concen: 1.85 UG/L
RT: 2.77 min Scan# 251
Delta R.T. 0.00 min
Lab File: 2840D.D
Acq: 7 Sep 2007 11:11

Tgt Ion: 43 Resp: 4885

Ion	Ratio	Lower	Upper
43	100		
58	4.7	23.1	34.7#

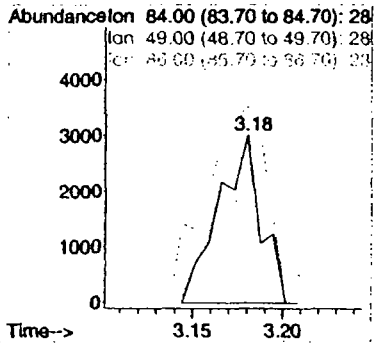


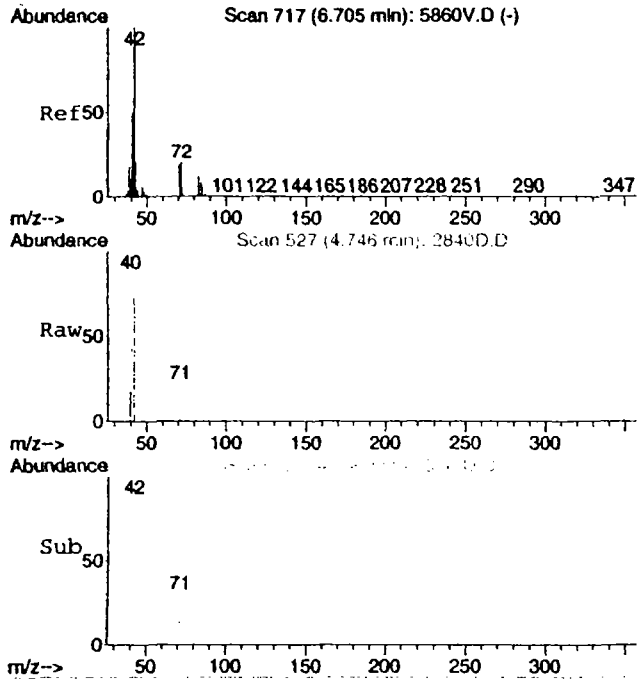


#10
Methylene Chloride
Concen: Below Cal
RT: 3.18 min Scan# 308
Delta R.T. 0.01 min
Lab File: 2840D.D
Acq: 7 Sep 2007 11:11

Tgt Ion: 84 Resp: 4837

Ion	Ratio	Lower	Upper
84	100		
49	172.5	140.2	210.2
86	88.4	51.1	76.7#

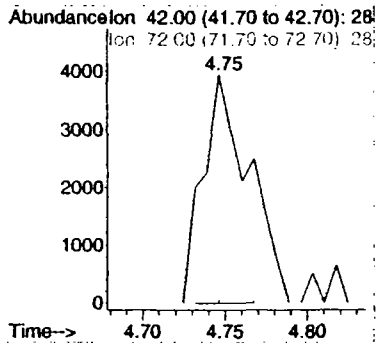


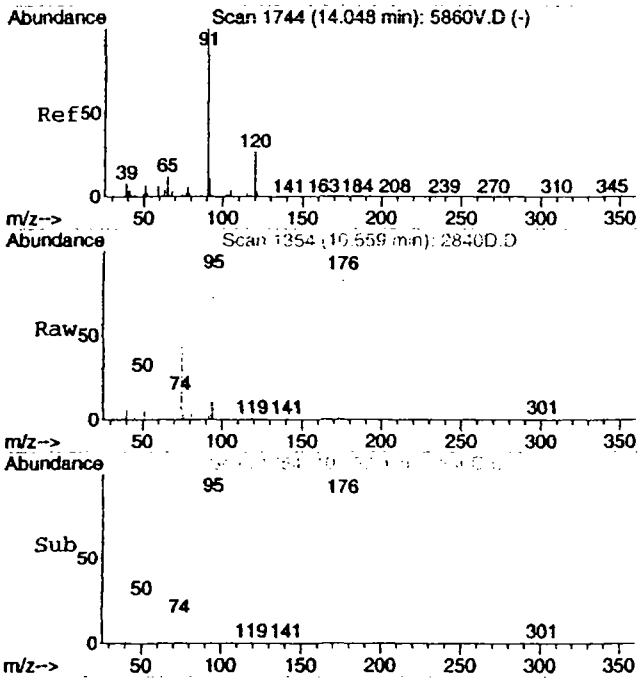


#17
Tetrahydrofuran
Concen: 1.94 UG/L
RT: 4.75 min Scan# 527
Delta R.T. -0.00 min
Lab File: 2840D.D
Acq: 7 Sep 2007 11:11

Tgt Ion: 42 Resp: 7775

Ion	Ratio	Lower	Upper
42	100		
72	14.2	24.5	36.7#

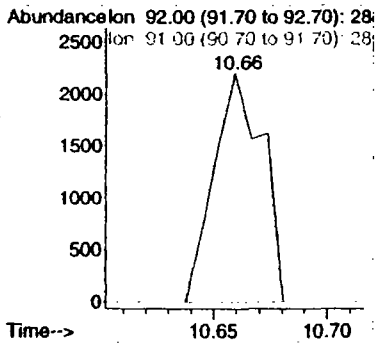




#55
n-Propylbenzene
Concen: 0.61 UG/L
RT: 10.66 min Scan# 1354
Delta R.T. -0.27 min
Lab File: 2840D.D
Acq: 7 Sep 2007 11:11

Tgt Ion: 92 Resp: 3265

Ion	Ratio	Lower	Upper
92	100		
91	0.0	715.8	1073.6#



R524570 Heritage Environmental Services, LLC A781248

GC/MS VOA

Method EPA 524.2 REV. 4.1
Sample Description LQ4581
Submitter IDEM - OLQ
Instrument 345 Channel 1

Test Code O516.9.1
Analyst 1062 R. SHAMP
File 2847D.D Date/Time 07Sep07 14:22:00
Dilution Factor 5

CAS	PRM	Parameter	Concentration	RQL	Limit	Units	RT
79-01-6	750	TRICHLOROETHENE	100		2.5	UG/L	
	1804	...					
	971	SURROGATE RECOVERY					
	972	----------					
17060-07-0	301	DICHLOROETHANE-D4	109			% RECOVERY	
2037-26-5	726	TOLUENE-D8	94			% RECOVERY	
460-00-4	196	4-BROMOFLUOROBENZENE	89			% RECOVERY	

Comment 1:5 Dilution

LKS 9-10-07

LKS 9-10-07

266

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\DATA\D090707\2847D.D Vial: 15
Acq On : 7 Sep 2007 14:22 Operator: REGI
Sample : A781248 1:5 LQ4581 REP Inst : GCMS #4
Misc : 9/7/07 Multiplr: 1.00
MS Integration Params: rteint2.p
Quant Time: Sep 07 14:39:14 2007 Quant Results File: DWD.RES

Quant Method : C:\MSDCHEM\1\METHODS\DWD.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Tue Sep 04 10:38:20 2007
Response via : Initial Calibration
DataAcq Meth : DWD

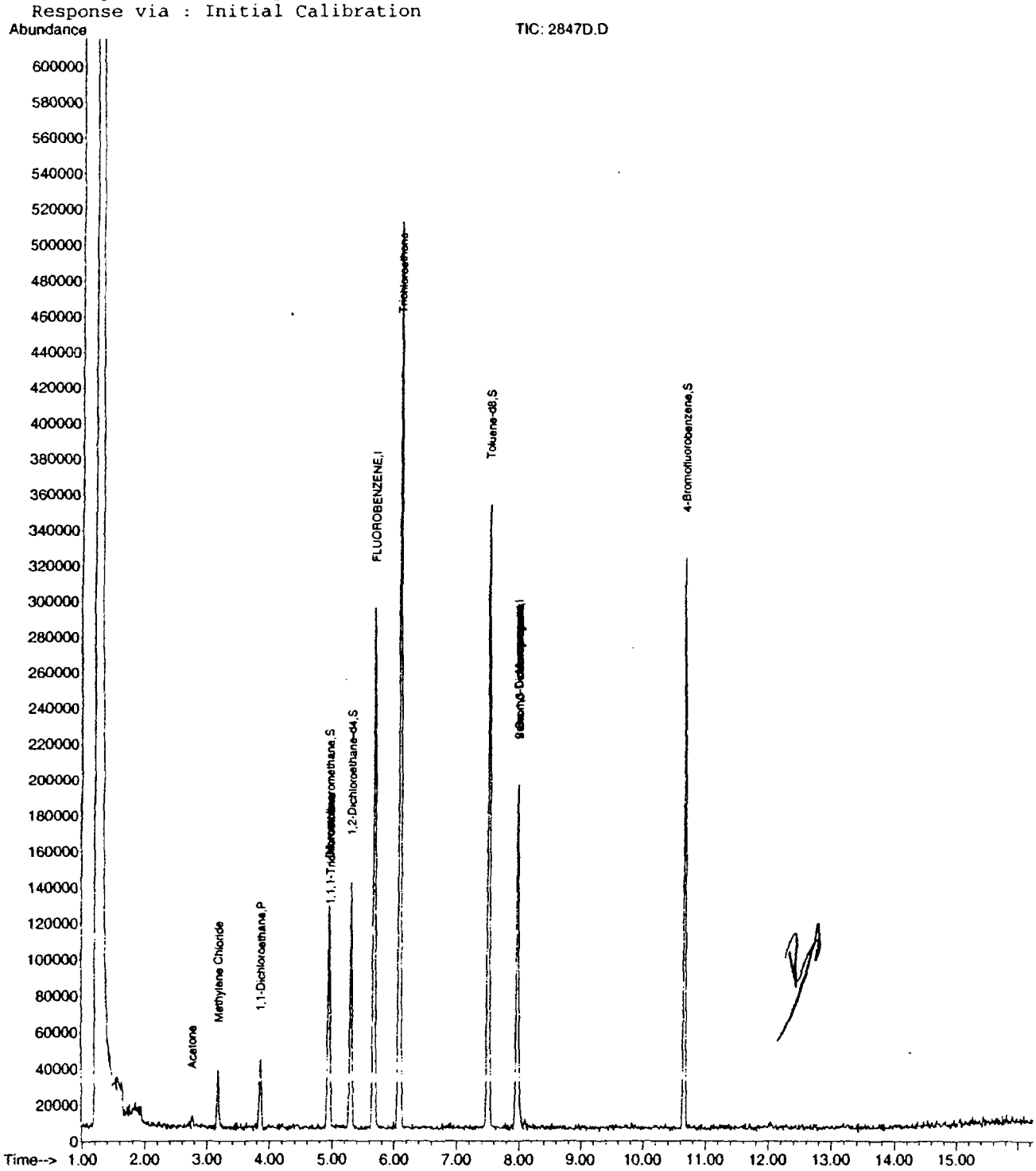
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) FLUOROBENZENE	5.68	96	331976	10.00	UG/L	0.00
38) 2-Bromo-1-chloropropane	7.97	77	137349	10.00	UG/L	0.00
System Monitoring Compounds						
21) Dibromofluoromethane	4.95	113	84481	10.17	UG/L	0.01
Spiked Amount 10.000			Recovery	=	101.70%	
23) 1,2-Dichloroethane-d4	5.30	65	111162	10.88	UG/L	0.00
Spiked Amount 10.000			Recovery	=	108.80%	
33) Toluene-d8	7.51	98	323438	9.40	UG/L	0.00
Spiked Amount 10.000			Recovery	=	94.00%	
51) 4-Bromofluorobenzene	10.66	174	108429	8.92	UG/L	0.00
Spiked Amount 10.000			Recovery	=	89.20%	
Target Compounds						Qvalue
8) Acetone	2.77	43	8653	2.75	UG/L	91
10) Methylene Chloride	3.18	84	14984	0.74	UG/L #	80
13) 1,1-Dichloroethane	3.86	63	43996	2.31	UG/L	100
20) 1,1,1-Trichloroethane	4.97	97	10852	0.76	UG/L	97
27) Trichloroethene 100	6.08	130	218821	20.95	UG/L	93
35) trans-1,3-Dichloropropene	7.98	75	3409	0.28	UG/L	100

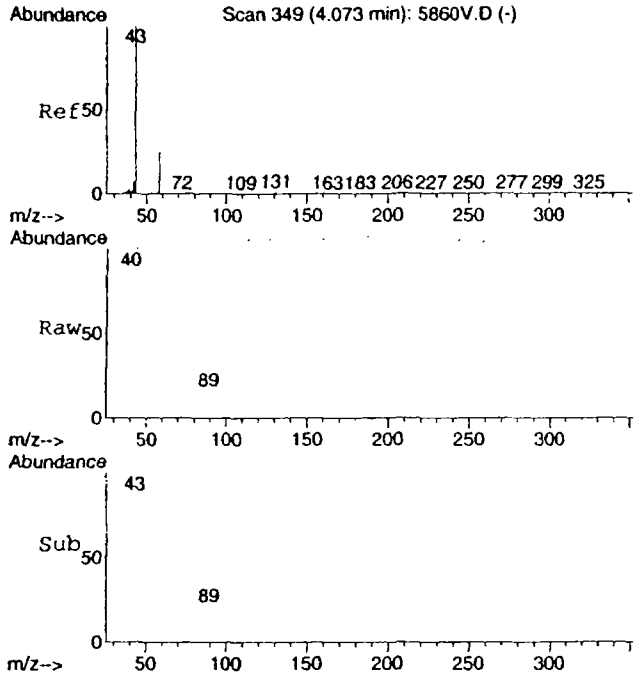
(#) = qualifier out of range (m) = manual integration
2847D.D DWD.M Fri Sep 07 14:39:16 2007

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\DATA\D090707\2847D.D Vial: 15
Acq On : 7 Sep 2007 14:22 Operator: REGI
Sample : A781248 1:5 LQ4581 REP Inst : GCMS #4
Misc : 9/7/07 Multiplr: 1.00
MS Integration Params: rteint2.p
Quant Time: Sep 7 14:39 2007 Quant Results File: DWD.RES

Method : C:\MSDCHEM\1\METHODS\DWD.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Tue Sep 04 10:38:20 2007
Response via : Initial Calibration

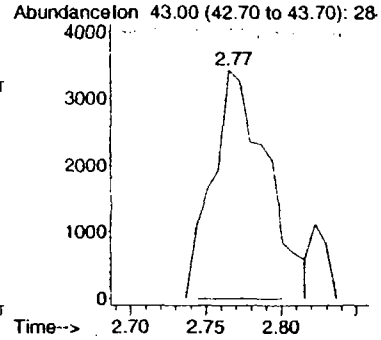


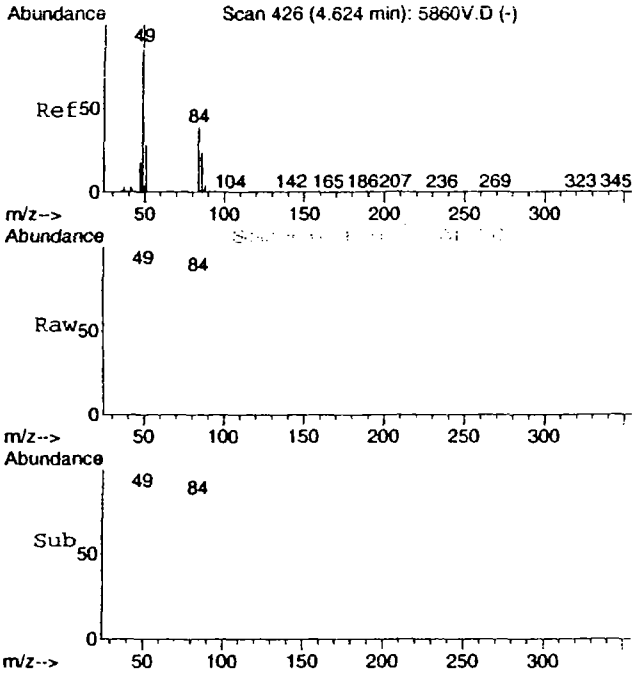


#8
Acetone
Concen: 2.75 UG/L
RT: 2.77 min Scan# 250
Delta R.T. -0.01 min
Lab File: 2847D.D
Acq: 7 Sep 2007 14:22

Tgt Ion: 43 Resp: 8653

Ion	Ratio	Lower	Upper
43	100		
58	24.0	23.1	34.7

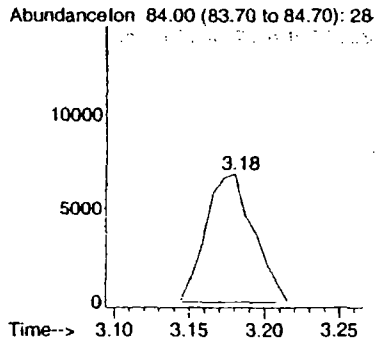


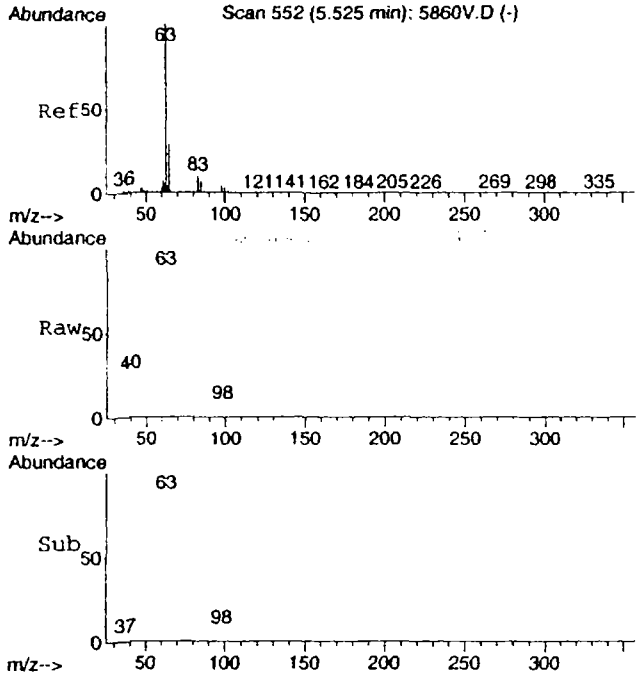


#10
Methylene Chloride
Concen: 0.74 UG/L
RT: 3.18 min Scan# 308
Delta R.T. 0.01 min
Lab File: 2847D.D
Acq: 7 Sep 2007 14:22

Tgt Ion: 84 Resp: 14984

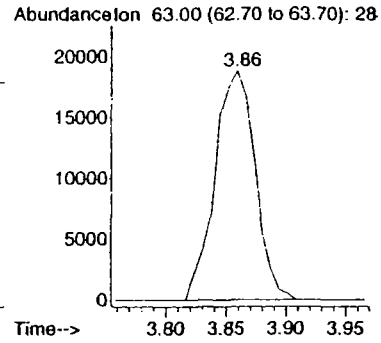
Ion	Ratio	Lower	Upper
84	100		
49	140.1	140.2	210.2#
86	60.3	51.1	76.7

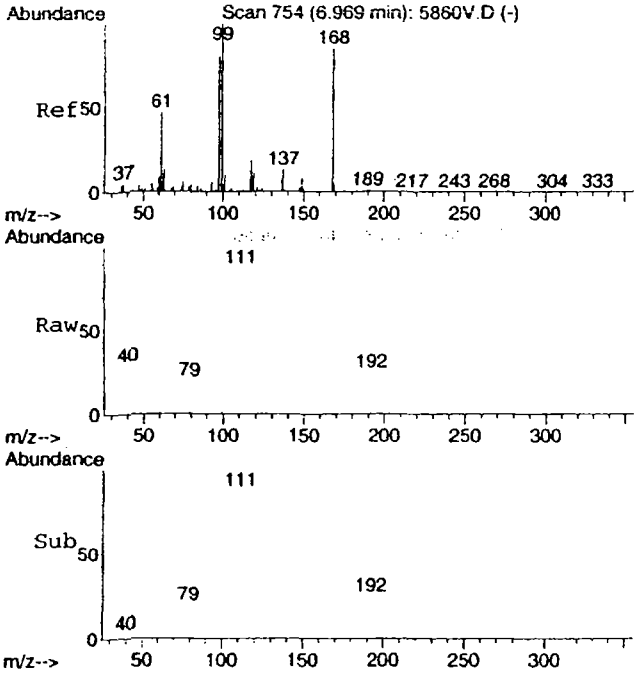




#13
1,1-Dichloroethane
Concen: 2.31 UG/L
RT: 3.86 min Scan# 403
Delta R.T. -0.00 min
Lab File: 2847D.D
Acq: 7 Sep 2007 14:22

Tgt Ion: 63 Resp: 43996

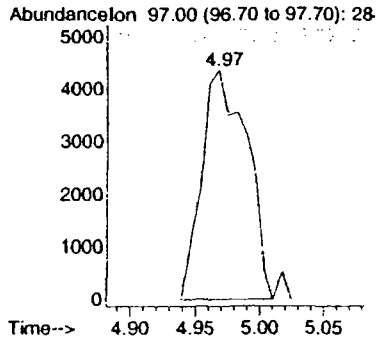


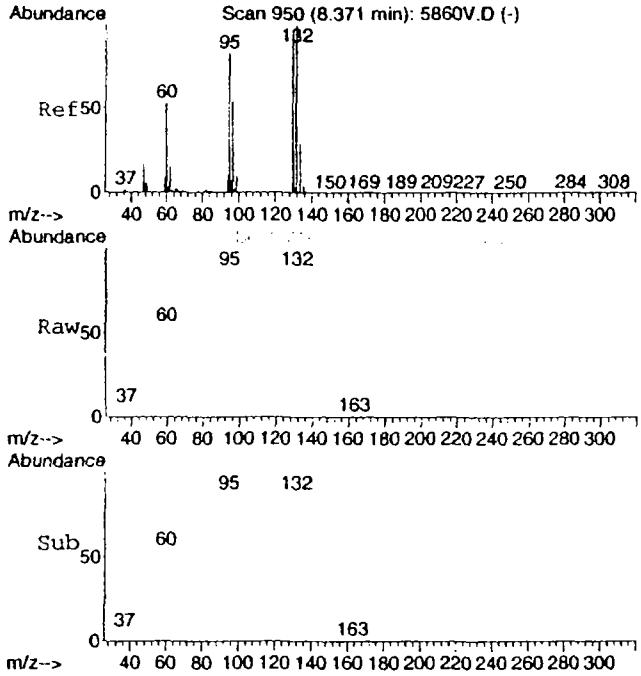


#20
1,1,1-Trichloroethane
Concen: 0.76 UG/L
RT: 4.97 min Scan# 558
Delta R.T. -0.00 min
Lab File: 2847D.D
Acq: 7 Sep 2007 14:22

Tgt Ion: 97 Resp: 10852

Ion	Ratio	Lower	Upper
97	100		
99	66.6	51.1	76.7

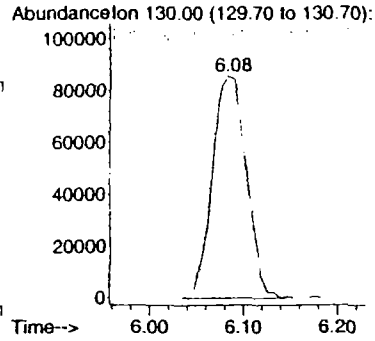


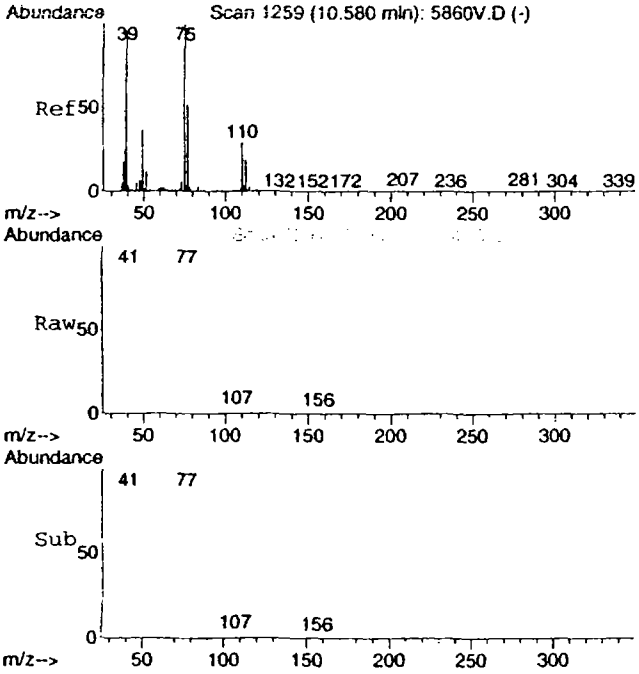


#27
Trichloroethene
Concen: 20.95 UG/L
RT: 6.08 min Scan# 714
Delta R.T. 0.01 min
Lab File: 2847D.D
Acq: 7 Sep 2007 14:22

Tgt Ion:130 Resp: 218821

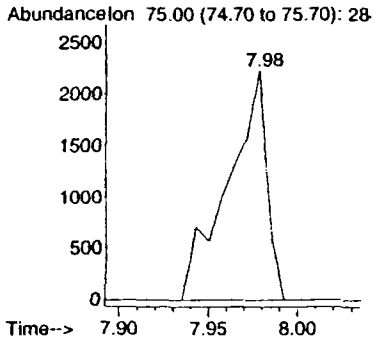
Ion	Ratio	Lower	Upper
130	100		
132	95.8	82.0	123.0





#35
trans-1,3-Dichloropropene
Concen: 0.28 UG/L
RT: 7.98 min Scan# 979
Delta R.T. 0.12 min
Lab File: 2847D.D
Acq: 7 Sep 2007 14:22

Tgt Ion: 75 Resp: 3409



R524570 Heritage Environmental Services, LLC A781249

GC/MS VOA

Method EPA 524.2 REV. 4.1
Sample Description LQ4582
Submitter IDEM - OLQ
Instrument 345 Channel 1

Test Code O516.9.1
Analyst 1062 R. SHAMP
File 2848D.D Date/Time 07Sep07 14:50:00
Dilution Factor 10

CAS	PRM	Parameter	Concentration	RQL	Limit	Units	RT
79-01-6	750	TRICHLOROETHENE	300		5.0	UG/L	
	1804	...					
	971	SURROGATE RECOVERY					
	972	————————					
17060-07-0	301	DICHLOROETHANE-D4	104			% RECOVERY	
2037-26-5	726	TOLUENE-D8	92			% RECOVERY	
460-00-4	196	4-BROMOFLUOROBENZENE	85			% RECOVERY	

Comment 1:10 Dilution

JKS 9-10-07

JKS 9-10-07

272

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\DATA\D090707\2848D.D Vial: 16
Acq On : 7 Sep 2007 14:50 Operator: REGI
Sample : A781249 1:10 LQ4582 REP1 Inst : GCMS #4
Misc : 9/7/07 Multiplr: 1.00
MS Integration Params: rteint2.p
Quant Time: Sep 07 15:06:43 2007 Quant Results File: DWD.RES

Quant Method : C:\MSDCHEM\1\METHODS\DWD.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Tue Sep 04 10:38:20 2007
Response via : Initial Calibration
DataAcq Meth : DWD

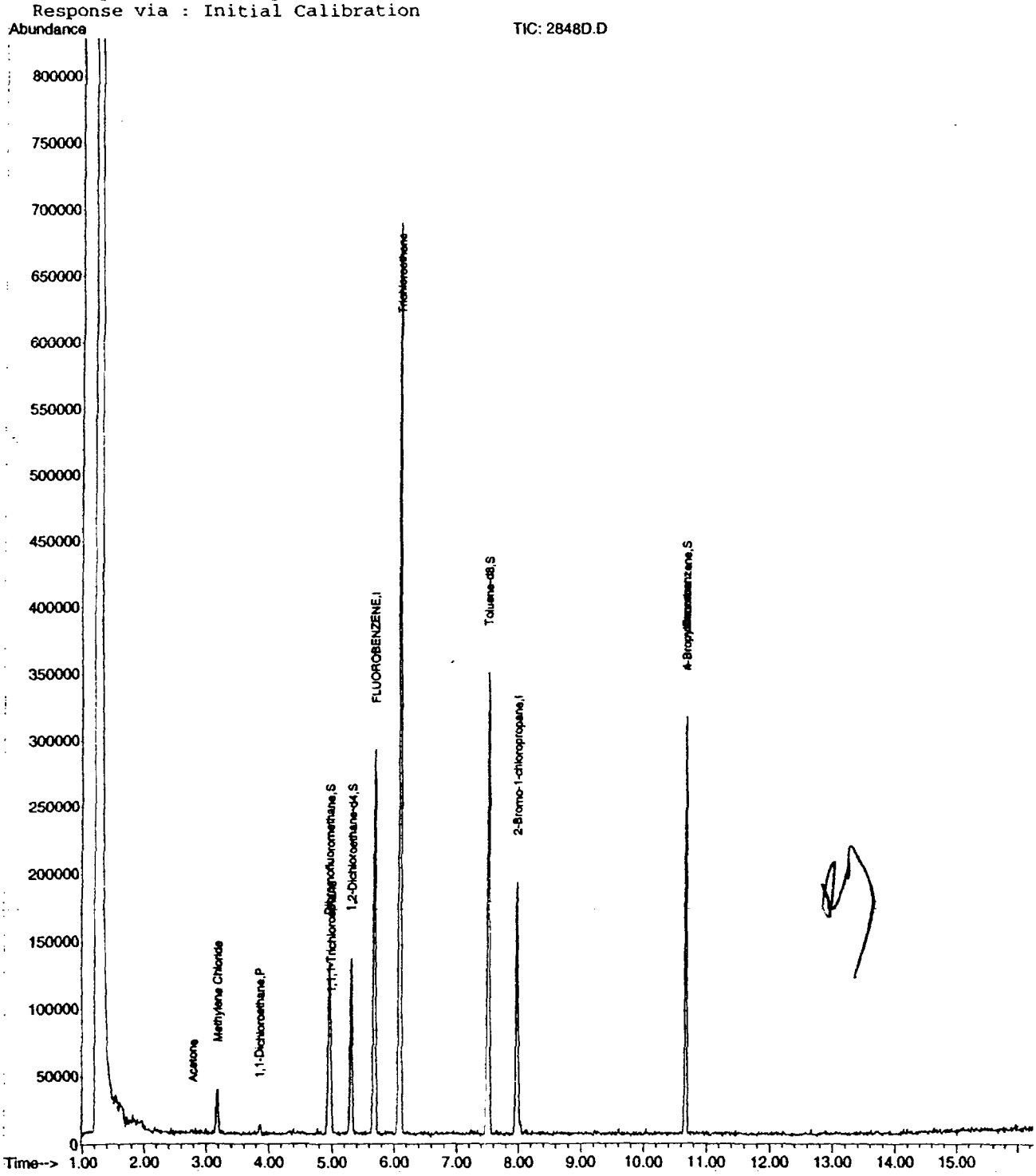
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) FLUOROBENZENE	5.68	96	320653	10.00	UG/L	0.00
38) 2-Bromo-1-chloropropane	7.96	77	138874	10.00	UG/L	0.00
System Monitoring Compounds						
21) Dibromofluoromethane	4.95	113	84787	10.56	UG/L	0.00
Spiked Amount 10.000			Recovery	=	105.60%	
23) 1,2-Dichloroethane-d4	5.30	65	102521	10.38	UG/L	0.00
Spiked Amount 10.000			Recovery	=	103.80%	
33) Toluene-d8	7.51	98	304642	9.17	UG/L	0.00
Spiked Amount 10.000			Recovery	=	91.70%	
51) 4-Bromofluorobenzene	10.66	174	103895	8.45	UG/L	0.00
Spiked Amount 10.000			Recovery	=	84.50%	
Target Compounds						Qvalue
8) Acetone	2.78	43	3053	1.46	UG/L #	60
10) Methylene Chloride	3.18	84	16720	0.99	UG/L	87
13) 1,1-Dichloroethane	3.85	63	7599	0.41	UG/L	100
20) 1,1,1-Trichloroethane	4.98	97	36747	2.66	UG/L	97
27) Trichloroethene 30	6.08	130	299016	29.64	UG/L	92
55) n-Propylbenzene	10.66	92	3748	0.71	UG/L #	1

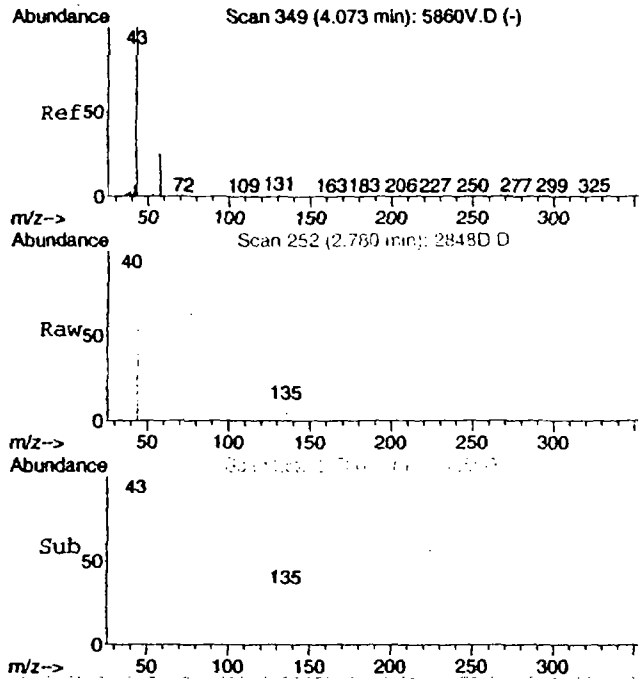
(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\DATA\D090707\2848D.D Vial: 16
Acq On : 7 Sep 2007 14:50 Operator: REGI
Sample : A781249 1:10 LQ4582 REP1 Inst : GCMS #4
Misc : 9/7/07 Multiplr: 1.00
MS Integration Params: rteint2.p
Quant Time: Sep 7 15:06 2007 Quant Results File: DWD.RES

Method : C:\MSDCHEM\1\METHODS\DWD.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Tue Sep 04 10:38:20 2007
Response via : Initial Calibration

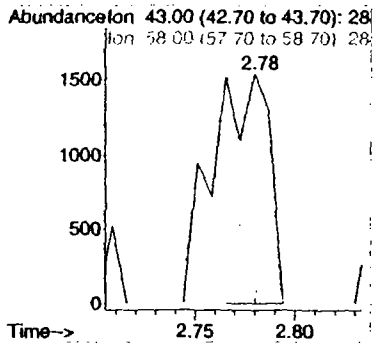


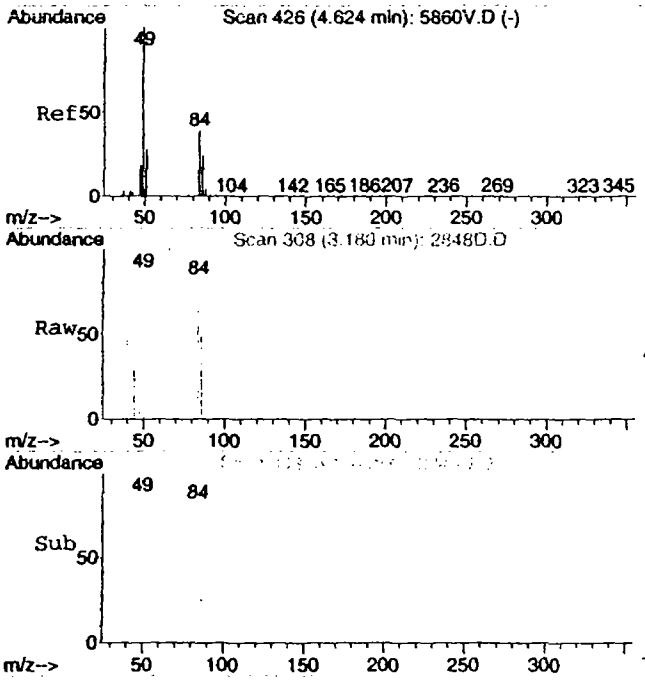


#8
Acetone
Concen: 1.46 UG/L
RT: 2.78 min Scan# 252
Delta R.T. 0.01 min
Lab File: 2848D.D
Acq: 7 Sep 2007 14:50

Tgt Ion: 43 Resp: 3053

Ion	Ratio	Lower	Upper
43	100		
58	7.7	23.1	34.7#

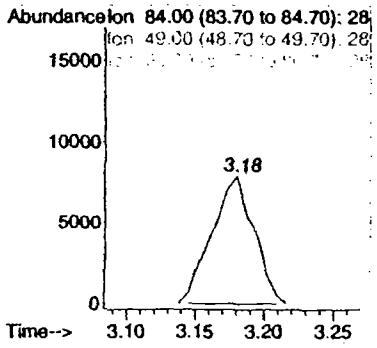


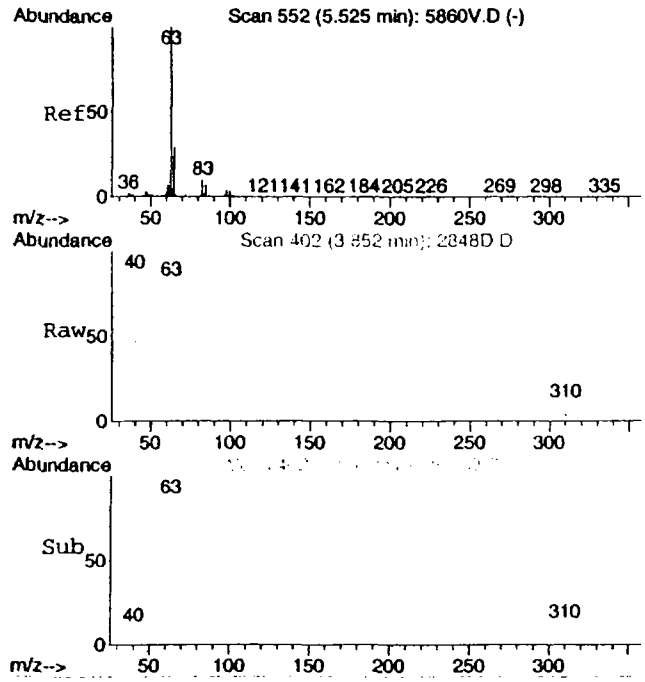


#10
Methylene Chloride
Concen: 0.99 UG/L
RT: 3.18 min Scan# 308
Delta R.T. 0.01 min
Lab File: 2848D.D
Acq: 7 Sep 2007 14:50

Tgt Ion: 84 Resp: 16720

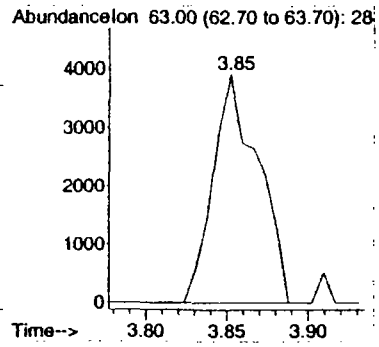
Ion	Ratio	Lower	Upper
84	100		
49	153.4	140.2	210.2
86	58.9	51.1	76.7

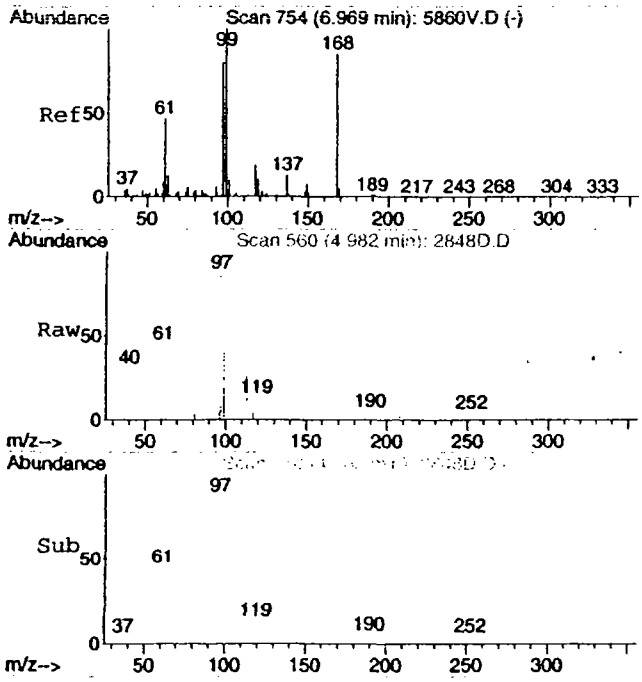




#13
1,1-Dichloroethane
Concen: 0.41 UG/L
RT: 3.85 min Scan# 402
Delta R.T. -0.01 min
Lab File: 2848D.D
Acq: 7 Sep 2007 14:50

Tgt Ion: 63 Resp: 7599

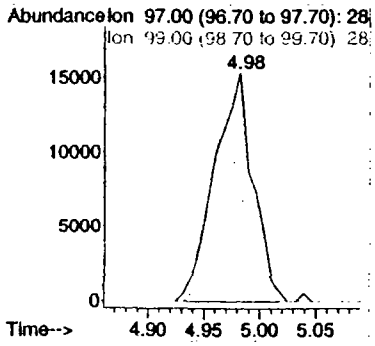


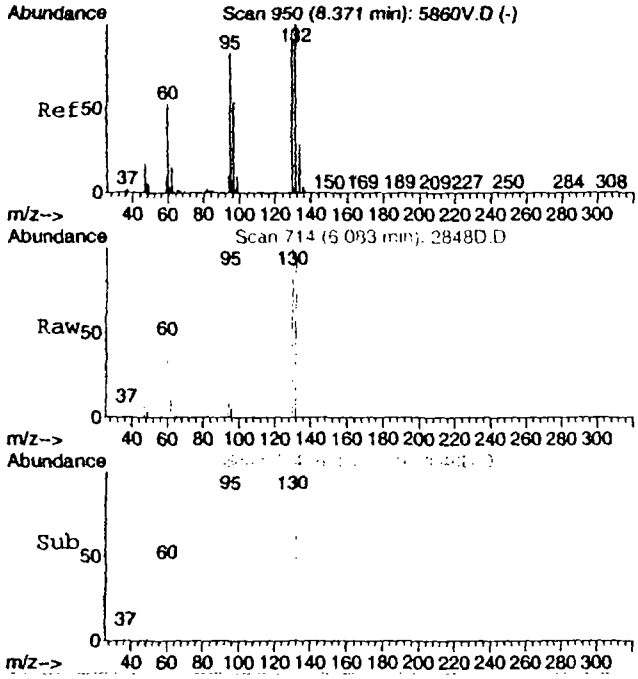


#20
1,1,1-Trichloroethane
Concen: 2.66 UG/L
RT: 4.98 min Scan# 560
Delta R.T. 0.01 min
Lab File: 2848D.D
Acq: 7 Sep 2007 14:50

Tgt Ion: 97 Resp: 36747

Ion	Ratio	Lower	Upper
97	100		
99	61.8	51.1	76.7

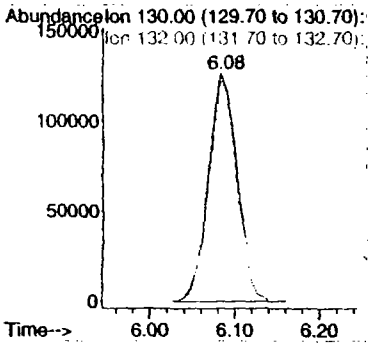


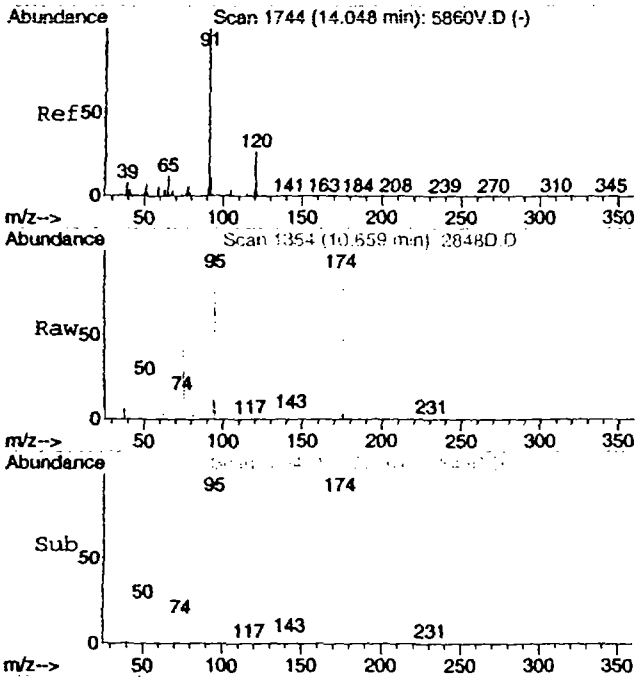


#27
Trichloroethene
Concen: 29.64 UG/L
RT: 6.08 min Scan# 714
Delta R.T. 0.01 min
Lab File: 2848D.D
Acq: 7 Sep 2007 14:50

Tgt Ion:130 Resp: 299016

Ion	Ratio	Lower	Upper
130	100		
132	94.9	82.0	123.0

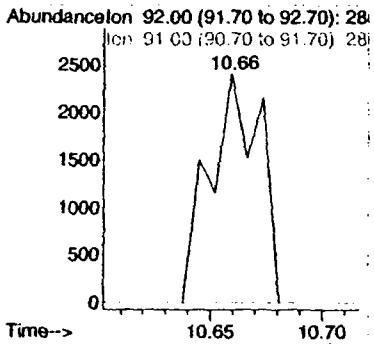




#55
n-Propylbenzene
Concen: 0.71 UG/L
RT: 10.66 min Scan# 1354
Delta R.T. -0.27 min
Lab File: 2848D.D
Acq: 7 Sep 2007 14:50

Tgt Ion: 92 Resp: 3748

Ion	Ratio	Lower	Upper
92	100		
91	0.0	715.8	1073.6#



R524570 Heritage Environmental Services, LLC A781250

GC/MS VOA

Method EPA 524.2 REV. 4.1
Sample Description LQ4583
Submitter IDEM - OLQ
Instrument 345 Channel 1

Test Code O516.9.1
Analyst 1062 R. SHAMP
File 2849D.D Date/Time 07Sep07 15:17:00
Dilution Factor 10

CAS	PRM	Parameter	Concentration	RQL	Limit	Units	RT
79-01-6	750	TRICHLOROETHENE	320		5.0	UG/L	
	1804	...					
	971	SURROGATE RECOVERY					
	972	----------					
17060-07-0	301	DICHLOROETHANE-D4	106			% RECOVERY	
2037-26-5	726	TOLUENE-D8	89			% RECOVERY	
460-00-4	196	4-BROMOFLUOROBENZENE	88			% RECOVERY	

Comment 1:10 Dilution

JS 9-10-07

JS 9-10-07

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\DATA\D090707\2849D.D Vial: 17
Acq On : 7 Sep 2007 15:17 Operator: REGI
Sample : A781250 1:10 LQ4583 REP1 Inst : GCMS #4
Misc : 9/7/07 Multiplr: 1.00
MS Integration Params: rteint2.p
Quant Time: Sep 07 15:33:44 2007 Quant Results File: DWD.RES

Quant Method : C:\MSDCHEM\1\METHODS\DWD.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Tue Sep 04 10:38:20 2007
Response via : Initial Calibration
DataAcq Meth : DWD

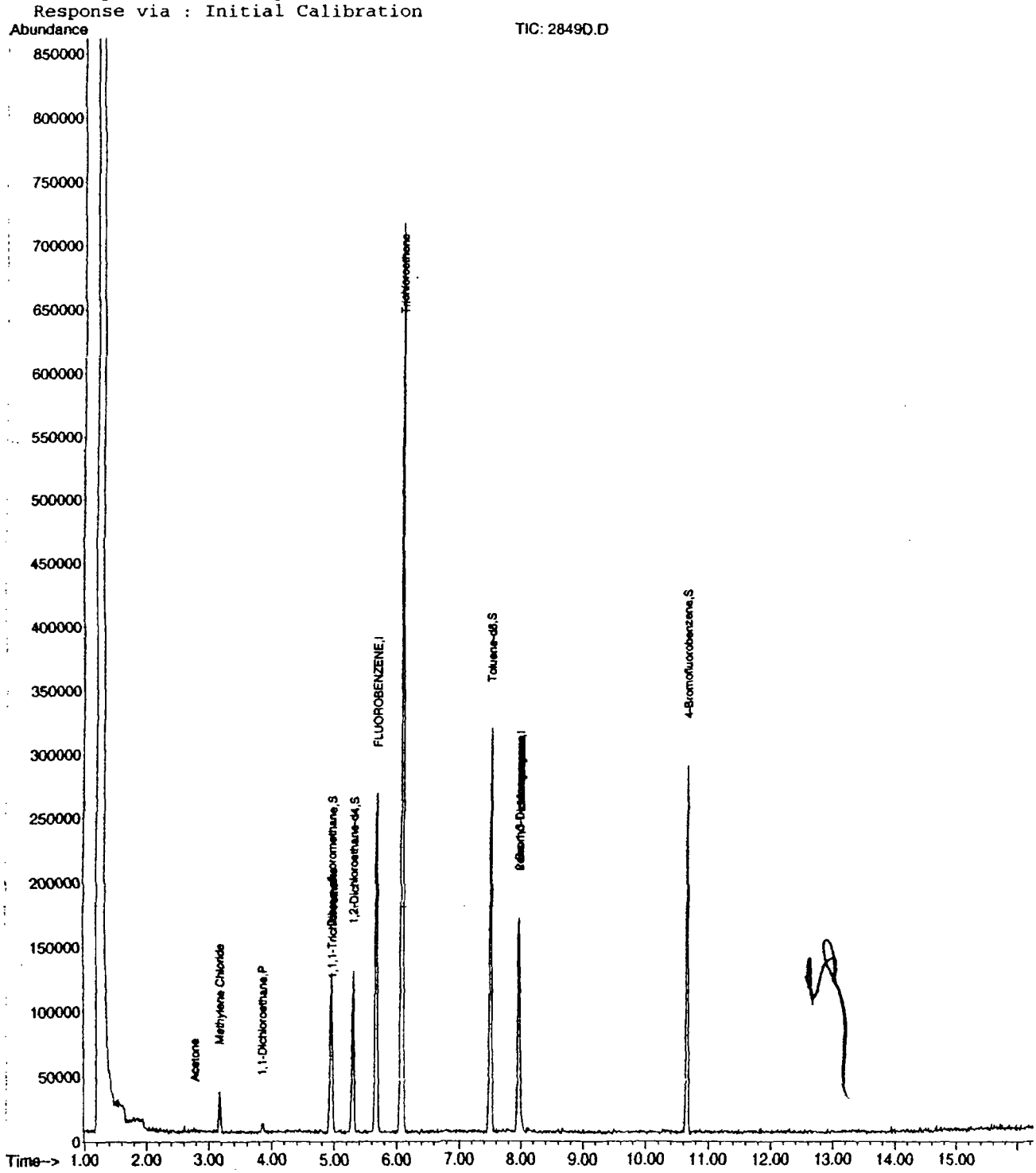
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) FLUOROBENZENE	5.68	96	306511	10.00	UG/L	0.00
38) 2-Bromo-1-chloropropane	7.96	77	127743	10.00	UG/L	0.00
System Monitoring Compounds						
21) Dibromofluoromethane	4.95	113	78726	10.26	UG/L	0.01
Spiked Amount 10.000			Recovery	=	102.60%	
23) 1,2-Dichloroethane-d4	5.30	65	100433	10.64	UG/L	0.00
Spiked Amount 10.000			Recovery	=	106.40%	
33) Toluene-d8	7.51	98	282362	8.89	UG/L	0.00
Spiked Amount 10.000			Recovery	=	88.90%	
51) 4-Bromofluorobenzene	10.66	174	99885	8.83	UG/L	0.00
Spiked Amount 10.000			Recovery	=	88.30%	
Target Compounds						Qvalue
8) Acetone	2.78	43	2646	1.39	UG/L #	61
10) Methylene Chloride	3.17	84	16223	1.02	UG/L #	71
13) 1,1-Dichloroethane	3.86	63	8363	0.48	UG/L	100
20) 1,1,1-Trichloroethane	4.97	97	30769	2.33	UG/L	98
27) Trichloroethene 320	6.08	130	309859	32.13	UG/L	94
35) trans-1,3-Dichloropropene	7.96	75	2320	0.21	UG/L	100

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

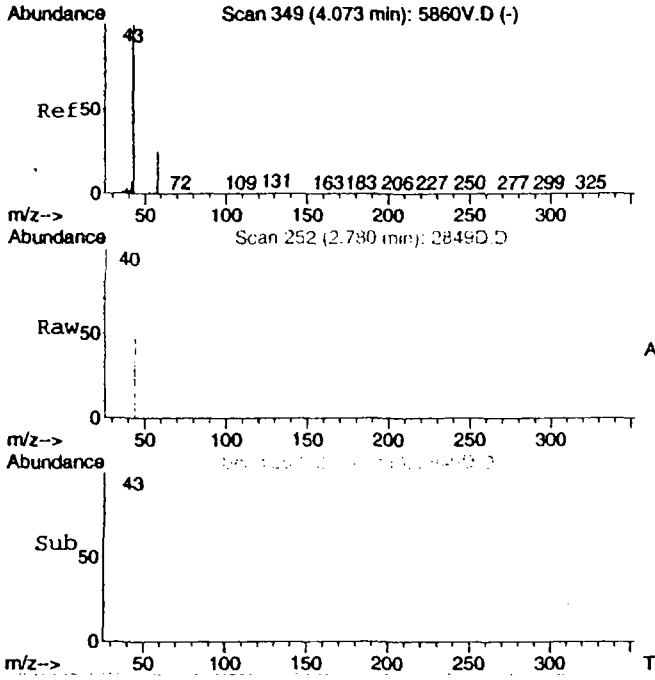
Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\DATA\D090707\2849D.D Vial: 17
Acq On : 7 Sep 2007 15:17 Operator: REGI
Sample : A781250 1:10 LQ4583 REP1 Inst : GCMS #4
Misc : 9/7/07 Multiplr: 1.00
MS Integration Params: rteint2.p
Quant Time: Sep 7 15:33 2007 Quant Results File: DWD.RES

Method : C:\MSDCHEM\1\METHODS\DWD.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Tue Sep 04 10:38:20 2007
Response via : Initial Calibration



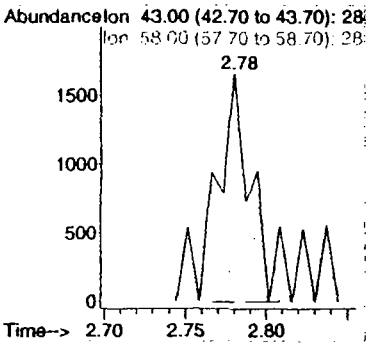
280

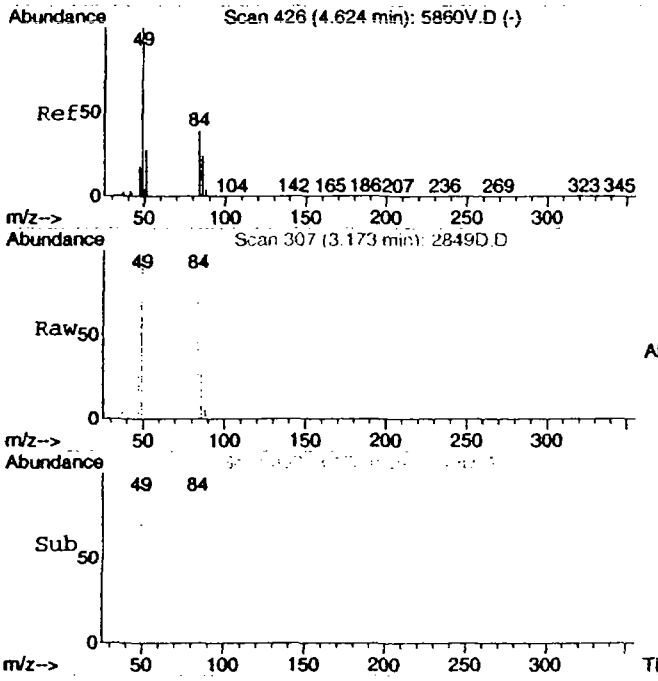


#8
Acetone
Concen: 1.39 UG/L
RT: 2.78 min Scan# 252
Delta R.T. 0.01 min
Lab File: 2849D.D
Acq: 7 Sep 2007 15:17

Tgt Ion: 43 Resp: 2646

Ion	Ratio	Lower	Upper
43	100		
58	8.1	23.1	34.7#

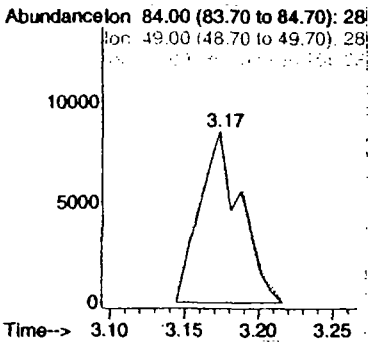


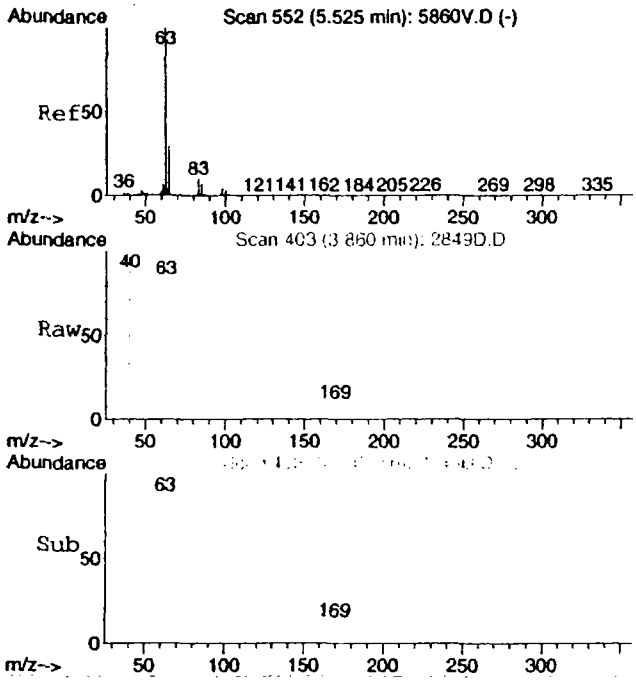


#10
Methylene Chloride
Concen: 1.02 UG/L
RT: 3.17 min Scan# 307
Delta R.T. 0.00 min
Lab File: 2849D.D
Acq: 7 Sep 2007 15:17

Tgt Ion: 84 Resp: 16223

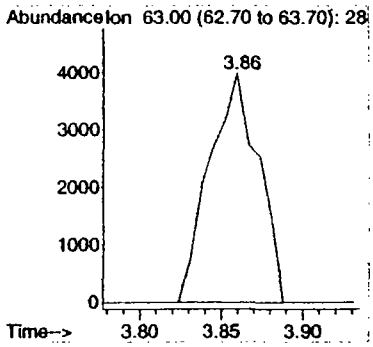
Ion	Ratio	Lower	Upper
84	100		
49	124.0	140.2	210.2#
86	57.6	51.1	76.7

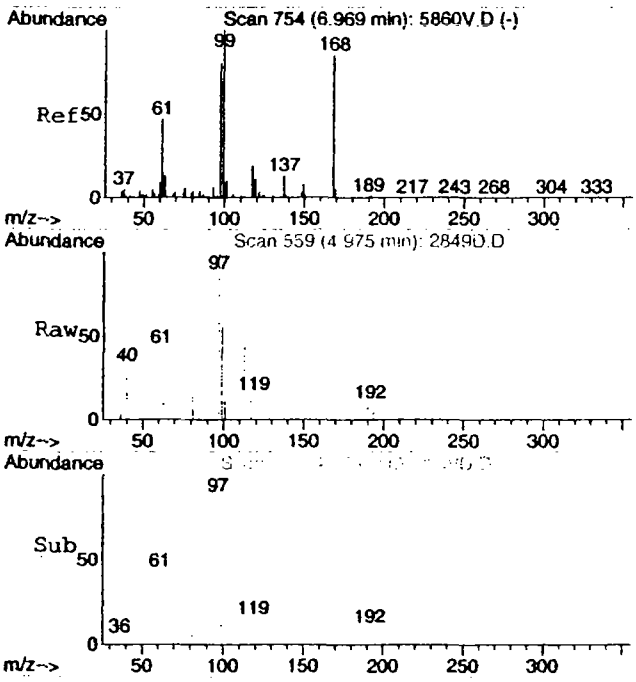




#13
1,1-Dichloroethane
Concen: 0.48 UG/L
RT: 3.86 min Scan# 403
Delta R.T. -0.00 min
Lab File: 2849D.D
Acq: 7 Sep 2007 15:17

Tgt Ion: 63 Resp: 8363

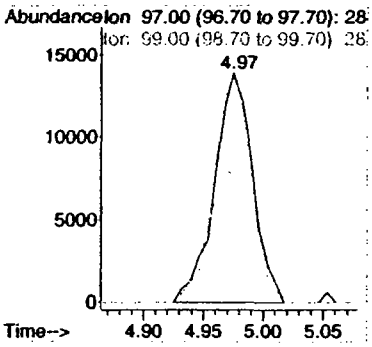




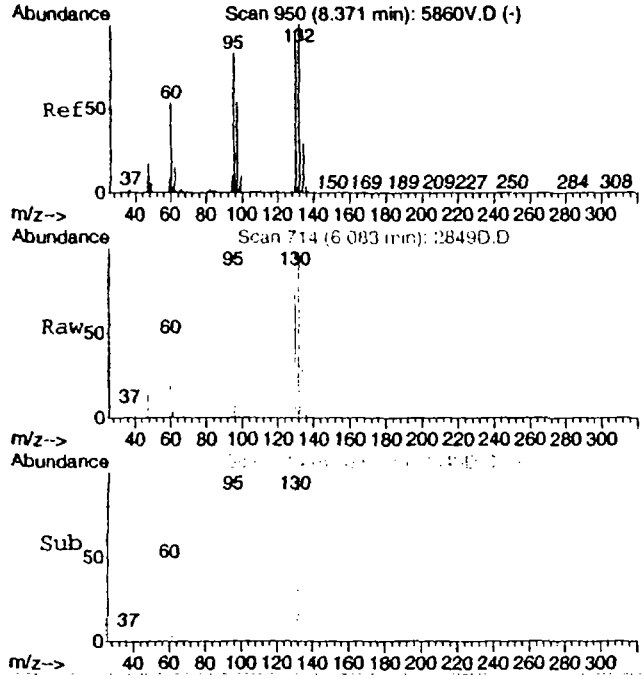
#20
1,1,1-Trichloroethane
Concen: 2.33 UG/L
RT: 4.97 min Scan# 559
Delta R.T. 0.01 min
Lab File: 2849D.D
Acq: 7 Sep 2007 15:17

Tgt Ion: 97 Resp: 30769

Ion	Ratio	Lower	Upper
97	100		
99	65.3	51.1	76.7



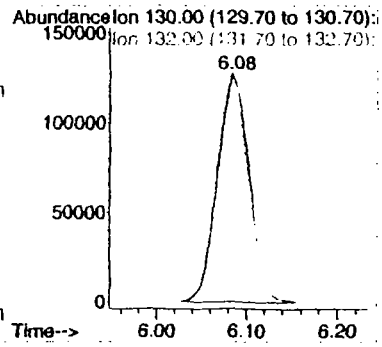
281A

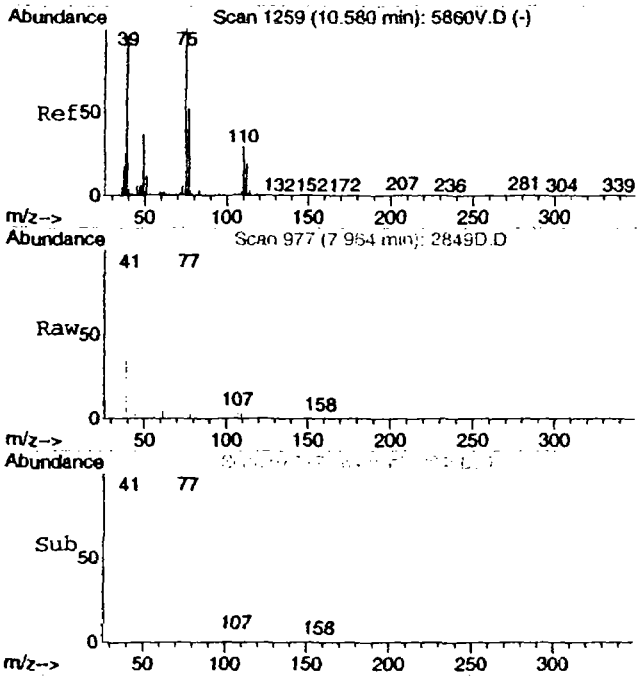


#27
Trichloroethene
Concen: 32.13 UG/L
RT: 6.08 min Scan# 714
Delta R.T. 0.01 min
Lab File: 2849D.D
Acq: 7 Sep 2007 15:17

Tgt Ion:130 Resp: 309859

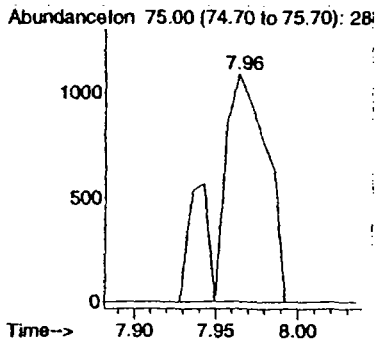
Ion	Ratio	Lower	Upper
130	100		
132	96.6	82.0	123.0





#35
trans-1,3-Dichloropropene
Concen: 0.21 UG/L
RT: 7.96 min Scan# 977
Delta R.T. 0.11 min
Lab File: 2849D.D
Acq: 7 Sep 2007 15:17

Tgt Ion: 75 Resp: 2320



R524570 Heritage Environmental Services, LLC A781251

GC/MS VOA

Method EPA 524.2 REV. 4.1
Sample Description LQ4584
Submitter IDEM - OLQ
Instrument 345 Channel 1

Test Code O516.9.1
Analyst 1062 R. SHAMP
File 2850D.D Date/Time 07Sep07 15:44:00
Dilution Factor 10

CAS	PRM	Parameter	Concentration	RQL	Limit	Units	RT
79-01-6	750	TRICHLOROETHENE	300		5.0	UG/L	
	1804	...					
	971	SURROGATE RECOVERY					
	972	----------					
17060-07-0	301	DICHLOROETHANE-D4	103			% RECOVERY	
2037-26-5	726	TOLUENE-D8	94			% RECOVERY	
460-00-4	196	4-BROMOFLUOROBENZENE	84			% RECOVERY	

Comment 1:10 Dilution

KT 9-10-07

KT 9-10-07

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\DATA\D090707\2850D.D Vial: 18
Acq On : 7 Sep 2007 15:44 Operator: REGI
Sample : A781251 1:10 LQ4584 REP1 Inst : GCMS #4
Misc : 9/7/07 Multiplr: 1.00
MS Integration Params: rteint2.p
Quant Time: Sep 07 16:00:43 2007 Quant Results File: DWD.RES

Quant Method : C:\MSDCHEM\1\METHODS\DWD.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Tue Sep 04 10:38:20 2007
Response via : Initial Calibration
DataAcq Meth : DWD

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) FLUOROBENZENE	5.68	96	331373	10.00	UG/L	0.00
38) 2-Bromo-1-chloropropane	7.96	77	141926	10.00	UG/L	0.00
System Monitoring Compounds						
21) Dibromofluoromethane	4.95	113	88989	10.73	UG/L	0.01
Spiked Amount 10.000			Recovery	=	107.30%	
23) 1,2-Dichloroethane-d4	5.30	65	105222	10.31	UG/L	0.00
Spiked Amount 10.000			Recovery	=	103.10%	
33) Toluene-d8	7.51	98	321836	9.37	UG/L	0.00
Spiked Amount 10.000			Recovery	=	93.70%	
51) 4-Bromofluorobenzene	10.66	174	105415	8.39	UG/L	0.00
Spiked Amount 10.000			Recovery	=	83.90%	
Target Compounds						Qvalue
8) ~~Acetone~~	2.77	43	3971	1.65	UG/L #	72
10) ~~Methylene Chloride~~	3.17	84	18619	1.13	UG/L #	78
13) 1,~~1-Dichloro~~ethane	3.85	63	5349	0.28	UG/L	100
27) Trichloroethene 30	6.08	130	313390	30.06	UG/L	97
~~55) n-Propyl~~benzene	10.67	92	3131	0.58	UG/L #	1

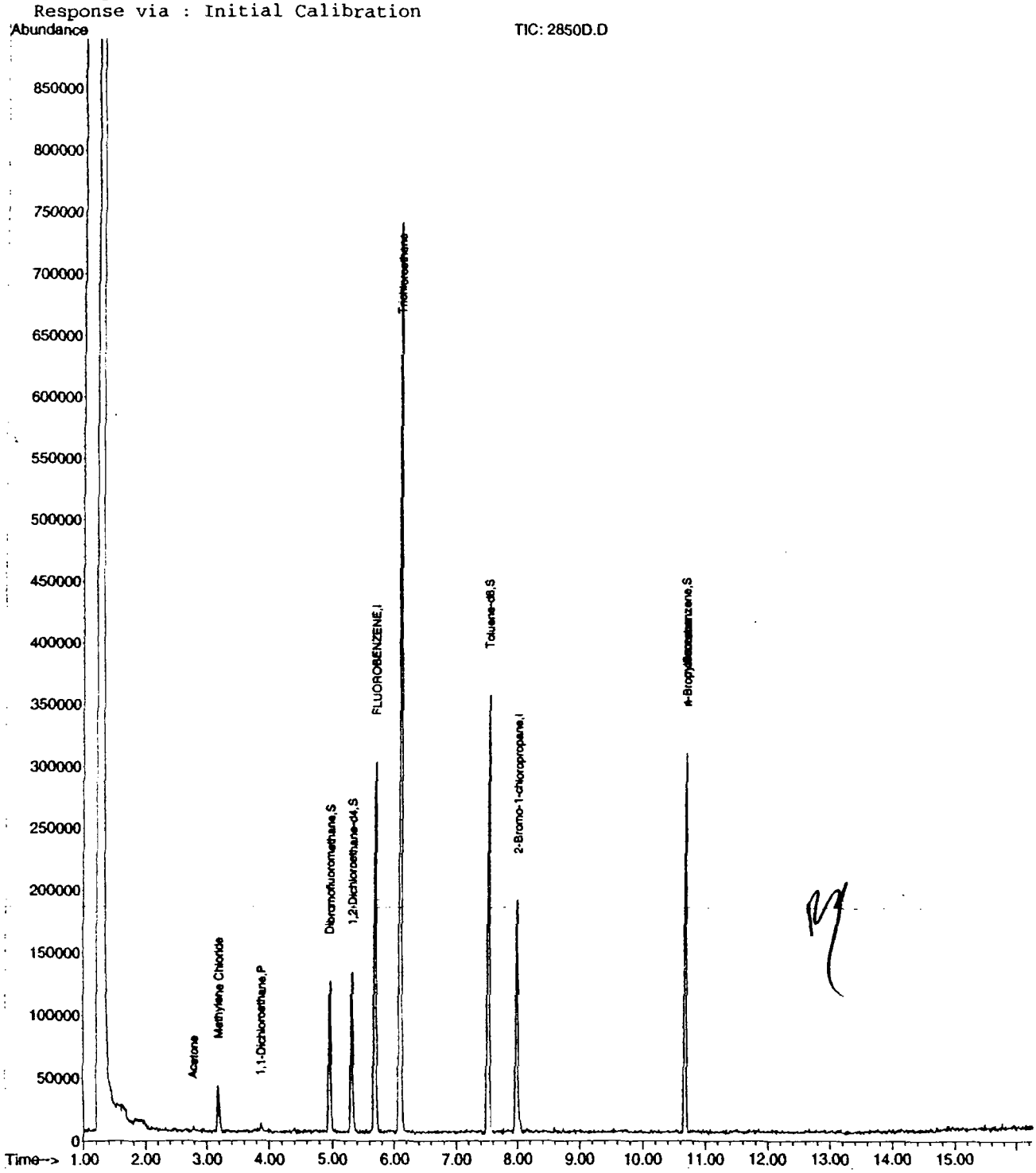
(#) = qualifier out of range (m) = manual integration
2850D.D DWD.M Fri Sep 07 16:00:44 2007

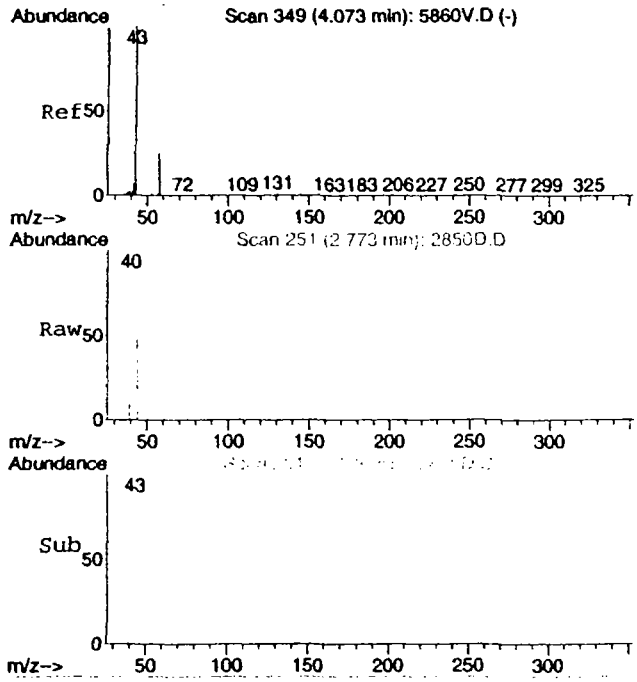
284

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\DATA\D090707\2850D.D Vial: 18
Acq On : 7 Sep 2007 15:44 Operator: REGI
Sample : A781251 1:10 LQ4584 REP1 Inst : GCMS #4
Misc : 9/7/07 Multiplr: 1.00
MS Integration Params: rteint2.p
Quant Time: Sep 7 16:00 2007 Quant Results File: DWD.RES

Method : C:\MSDCHEM\1\METHODS\DWD.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Tue Sep 04 10:38:20 2007
Response via : Initial Calibration

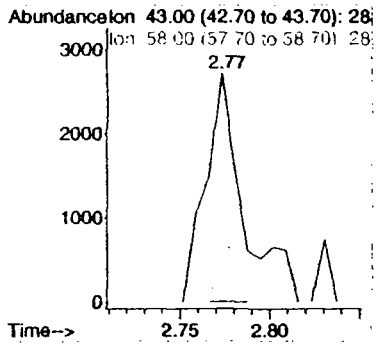


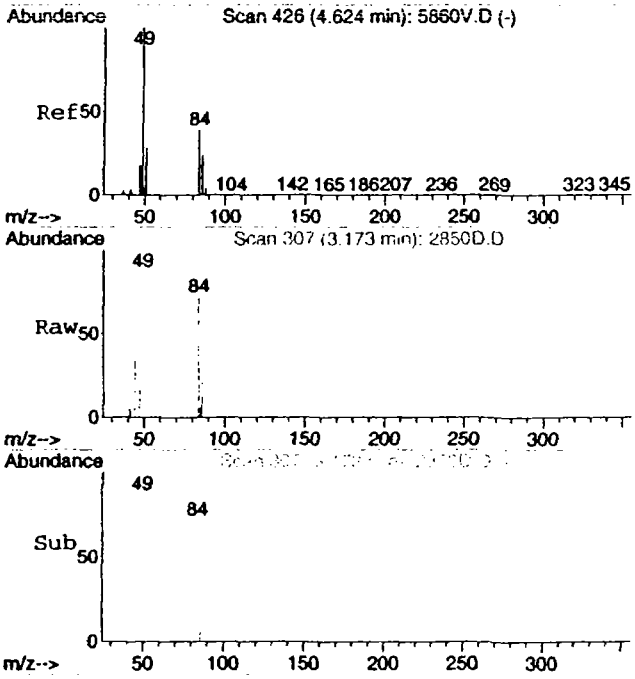


#8
Acetone
Concen: 1.65 UG/L
RT: 2.77 min Scan# 251
Delta R.T. 0.00 min
Lab File: 2850D.D
Acq: 7 Sep 2007 15:44

Tgt Ion: 43 Resp: 3971

Ion	Ratio	Lower	Upper
43	100		
58	14.0	23.1	34.7#

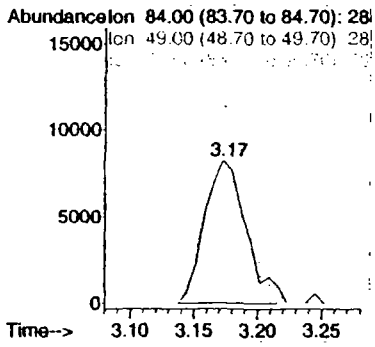


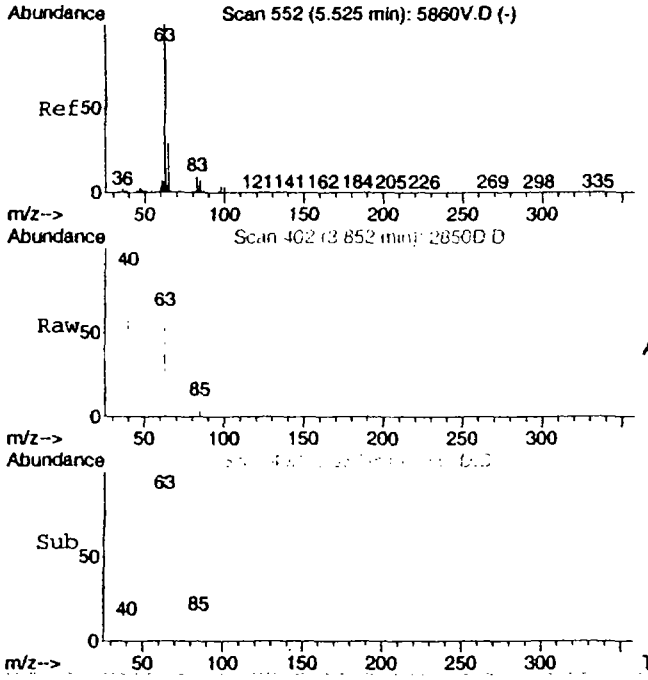


#10
Methylene Chloride
Concen: 1.13 UG/L
RT: 3.17 min Scan# 307
Delta R.T. -0.00 min
Lab File: 2850D.D
Acq: 7 Sep 2007 15:44

Tgt Ion: 84 Resp: 18619

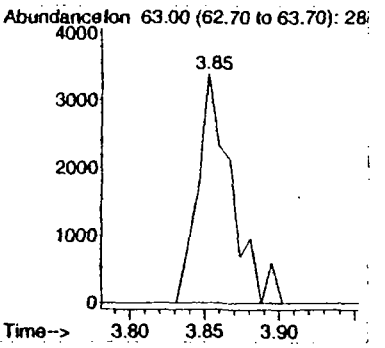
Ion	Ratio	Lower	Upper
84	100		
49	135.0	140.2	210.2#
86	60.6	51.1	76.7

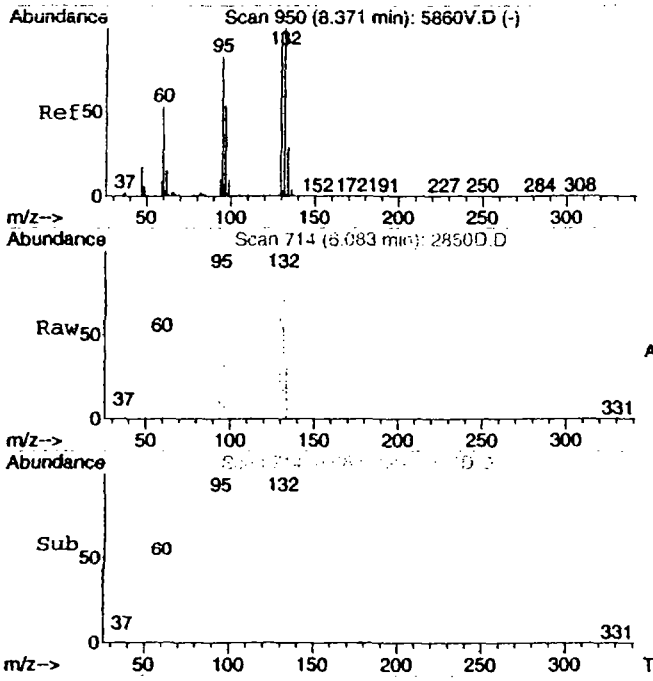




#13
1,1-Dichloroethane
Concen: 0.28 UG/L
RT: 3.85 min Scan# 402
Delta R.T. -0.01 min
Lab File: 2850D.D
Acq: 7 Sep 2007 15:44

Tgt Ion: 63 Resp: 5349

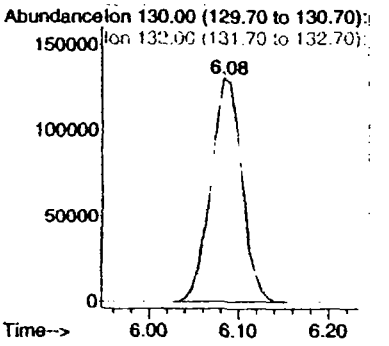


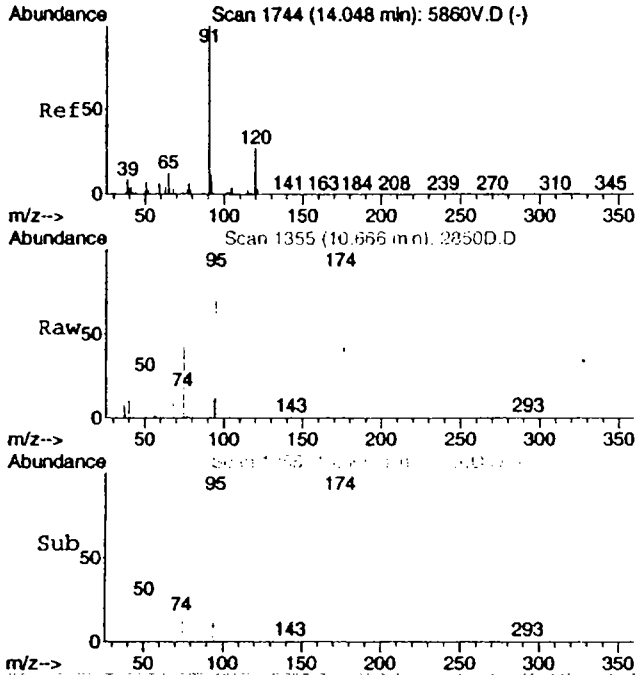


#27
Trichloroethene
Concen: 30.06 UG/L
RT: 6.08 min Scan# 714
Delta R.T. 0.01 min
Lab File: 2850D.D
Acq: 7 Sep 2007 15:44

Tgt Ion:130 Resp: 313390

Ion	Ratio	Lower	Upper
130	100		
132	99.2	82.0	123.0

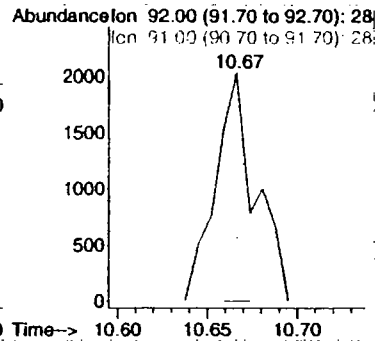




#55
n-Propylbenzene
Concen: 0.58 UG/L
RT: 10.67 min Scan# 1355
Delta R.T. -0.26 min
Lab File: 2850D.D
Acq: 7 Sep 2007 15:44

Tgt Ion: 92 Resp: 3131

Ion	Ratio	Lower	Upper
92	100		
91	8.2	715.8	1073.6#



R524570 Heritage Environmental Services, LLC A781252

GC/MS VOA

Method EPA 524.2 REV. 4.1
Sample Description LQ4585
Submitter IDEM - OLQ
Instrument 345 Channel 1

Test Code O516.9.1
Analyst 1062 R. SHAMP
File 2851D.D Date/Time 07Sep07 16:11:00
Dilution Factor 10

CAS	PRM	Parameter	Concentration	RQL	Limit	Units	RT
79-01-6	750	TRICHLOROETHENE	160		5.0	UG/L	
	1804	...					
	971	SURROGATE RECOVERY					
	972	————————					
17060-07-0	301	DICHLOROETHANE-D4	102			% RECOVERY	
2037-26-5	726	TOLUENE-D8	88			% RECOVERY	
460-00-4	196	4-BROMOFLUOROBENZENE	90			% RECOVERY	

Comment 1:10 Dilution

UK 9-10-07

UK 9-10-07

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\DATA\D090707\2851D.D
Acq On : 7 Sep 2007 16:11
Sample : A781252 1:10 LQ4585 REP1
Misc : 9/7/07
MS Integration Params: rteint2.p
Quant Time: Sep 07 16:28:07 2007

Vial: 19
Operator: REGI
Inst : GCMS #4
Multiplr: 1.00
Quant Results File: DWD.RES

Quant Method : C:\MSDCHEM\1\METHODS\DWD.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Tue Sep 04 10:38:20 2007
Response via : Initial Calibration
DataAcq Meth : DWD

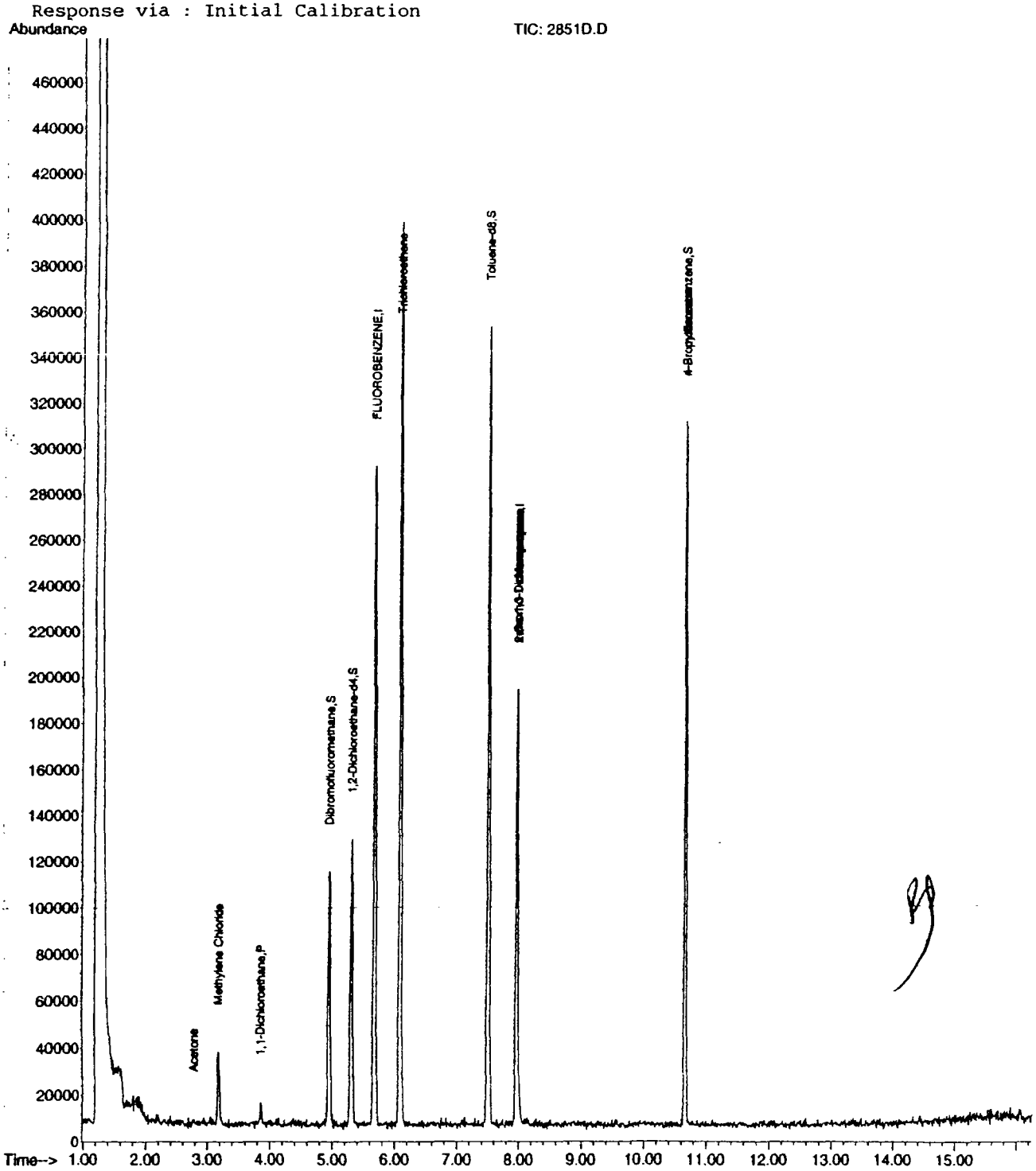
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) FLUOROBENZENE	5.68	96	337526	10.00 UG/L	0.00
38) 2-Bromo-1-chloropropane	7.97	77	136212	10.00 UG/L	0.00
System Monitoring Compounds					
21) Dibromofluoromethane	4.95	113	84343	9.98 UG/L	0.00
Spiked Amount 10.000			Recovery	= 99.80%	
23) 1,2-Dichloroethane-d4	5.30	65	105640	10.17 UG/L	0.00
Spiked Amount 10.000			Recovery	= 101.70%	
33) Toluene-d8	7.51	98	308577	8.82 UG/L	0.00
Spiked Amount 10.000			Recovery	= 88.20%	
51) 4-Bromofluorobenzene	10.66	174	108571	9.01 UG/L	0.00
Spiked Amount 10.000			Recovery	= 90.10%	
Target Compounds					Qvalue
8) ~~Acetone~~	2.78	43	2611	1.32 UG/L #	74
10) Methylene Chloride	3.18	84	16210	0.84 UG/L	84
13) ~~1,1-Dichloroethane~~	3.85	63	10927	0.57 UG/L	100
27) Trichloroethene 160	6.08	130	166256	15.66 UG/L	94
~~35) trans-1,3-Dichloro~~propene	7.96	75	2716	0.22 UG/L	100
55) n-~~Propylbenzene~~	10.66	92	2896	0.56 UG/L #	1

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

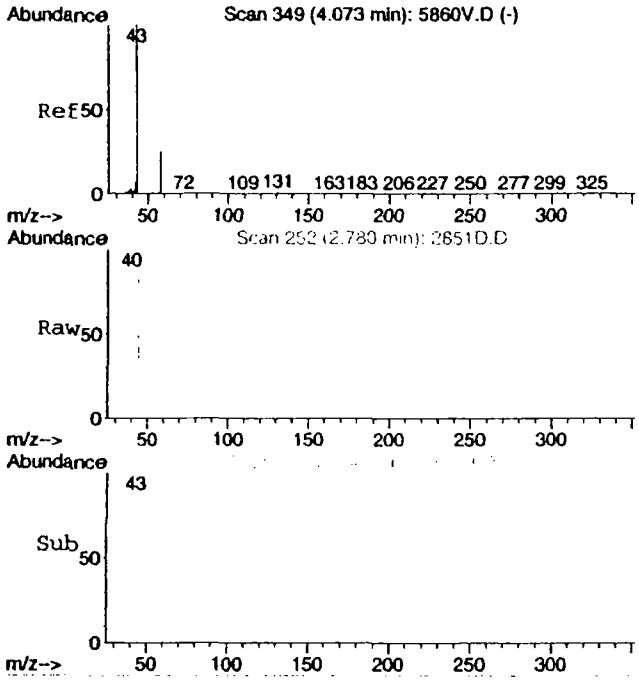
Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\DATA\D090707\2851D.D Vial: 19
Acq On : 7 Sep 2007 16:11 Operator: REGI
Sample : A781252 1:10 LQ4585 REP1 Inst : GCMS #4
Misc : 9/7/07 Multiplr: 1.00
MS Integration Params: rteint2.p
Quant Time: Sep 7 16:28 2007 Quant Results File: DWD.RES

Method : C:\MSDCHEM\1\METHODS\DWD.M (RTE Integrator)
Title : 8260 VOLATILES
Last Update : Tue Sep 04 10:38:20 2007
Response via : Initial Calibration



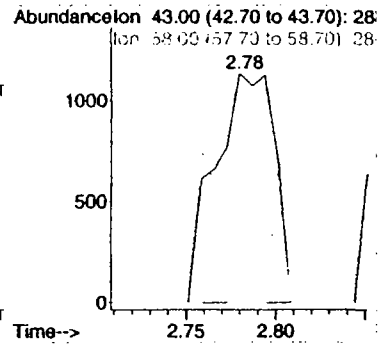
2851D.D DWD.M Fri Sep 07 16:28:09 2007 Page 2

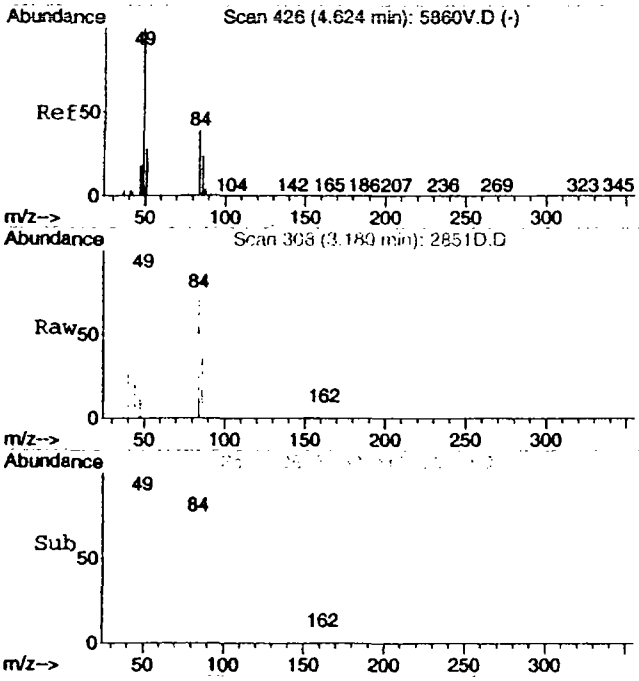


#8
Acetone
Concen: 1.32 UG/L
RT: 2.78 min Scan# 252
Delta R.T. 0.01 min
Lab File: 2851D.D
Acq: 7 Sep 2007 16:11

Tgt Ion: 43 Resp: 2611

Ion	Ratio	Lower	Upper
43	100		
58	14.8	23.1	34.7#

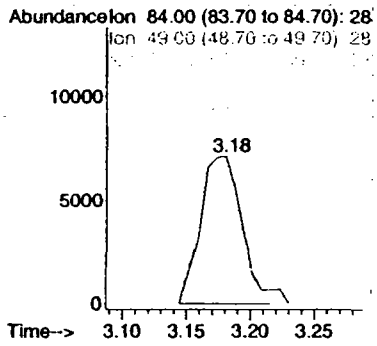


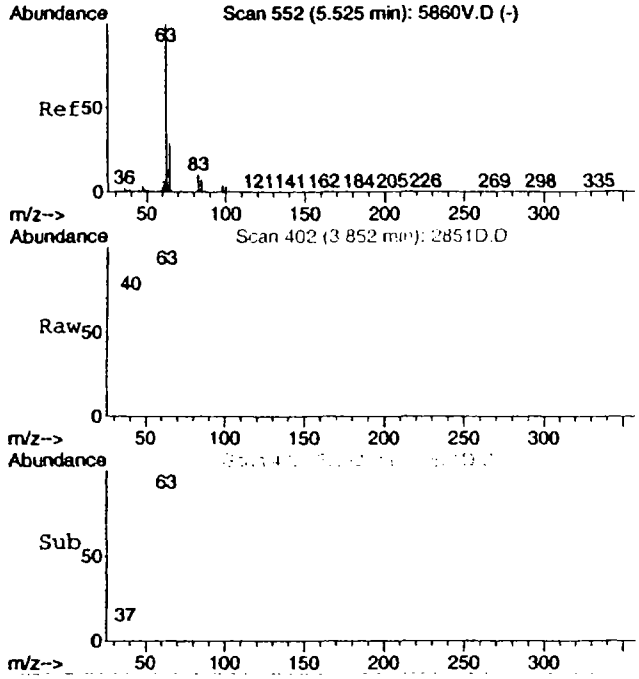


#10
Methylene Chloride
Concen: 0.84 UG/L
RT: 3.18 min Scan# 308
Delta R.T. 0.01 min
Lab File: 2851D.D
Acq: 7 Sep 2007 16:11

Tgt Ion: 84 Resp: 16210

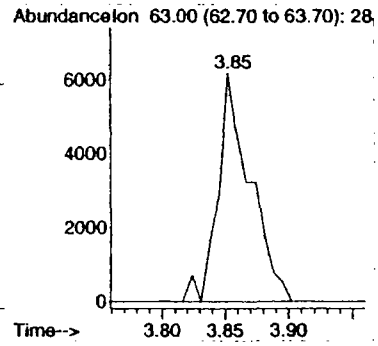
Ion	Ratio	Lower	Upper
84	100		
49	145.8	140.2	210.2
86	63.5	51.1	76.7

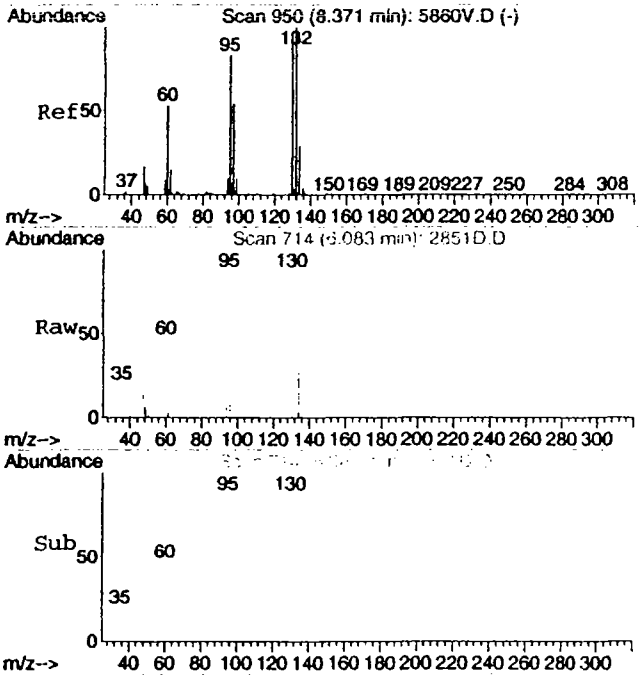




#13
1,1-Dichloroethane
Concen: 0.57 UG/L
RT: 3.85 min Scan# 402
Delta R.T. -0.01 min
Lab File: 2851D.D
Acq: 7 Sep 2007 16:11

Tgt Ion: 63 Resp: 10927

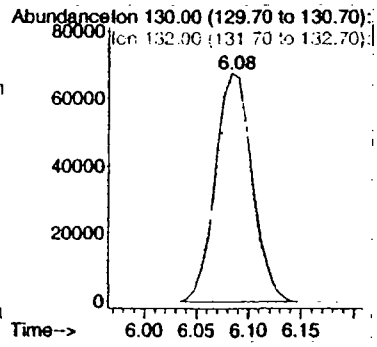


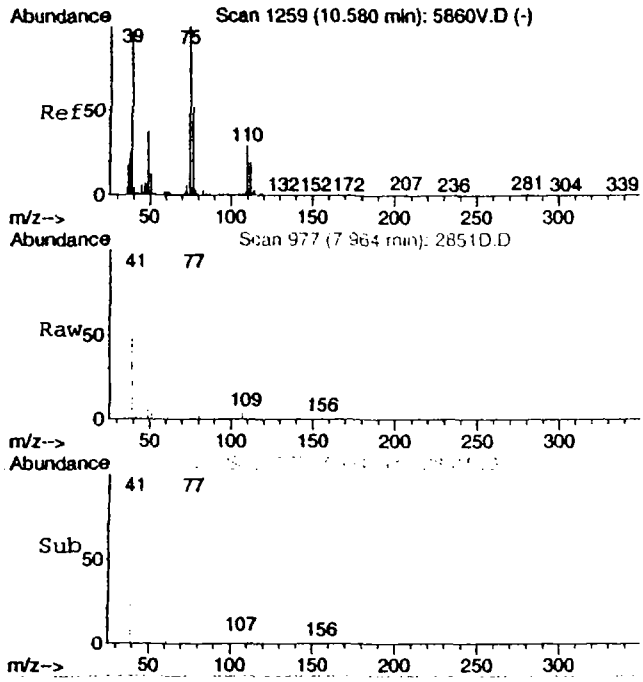


#27
Trichloroethene
Concen: 15.66 UG/L
RT: 6.08 min Scan# 714
Delta R.T. 0.01 min
Lab File: 2851D.D
Acq: 7 Sep 2007 16:11

Tgt Ion:130 Resp: 166256

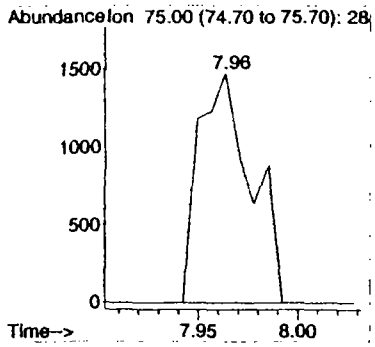
Ion	Ratio	Lower	Upper
130	100		
132	96.2	82.0	123.0

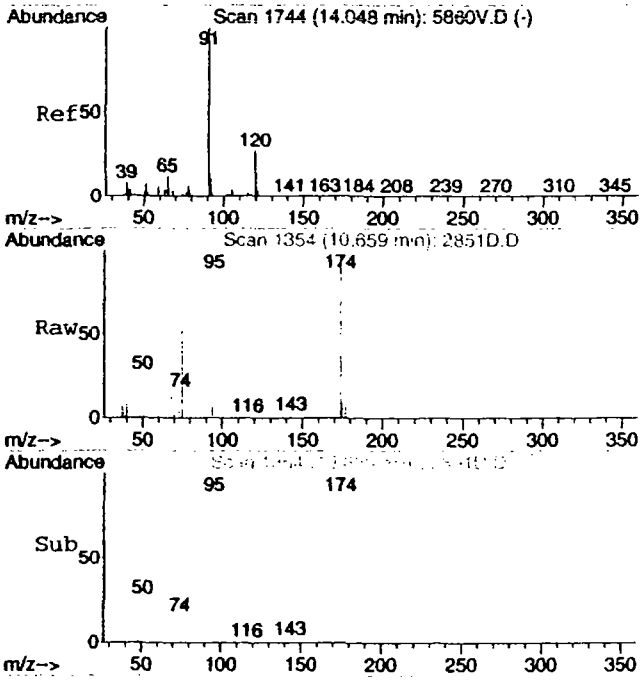




#35
trans-1,3-Dichloropropene
Concen: 0.22 UG/L
RT: 7.96 min Scan# 977
Delta R.T. 0.11 min
Lab File: 2851D.D
Acq: 7 Sep 2007 16:11

Tgt Ion: 75 Resp: 2716

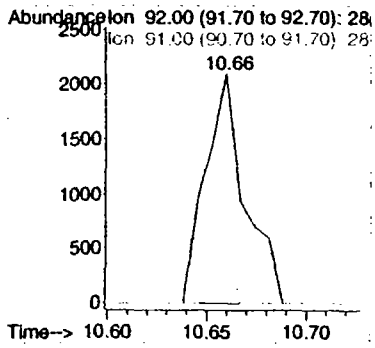




#55
n-Propylbenzene
Concen: 0.56 UG/L
RT: 10.66 min Scan# 1354
Delta R.T. -0.27 min
Lab File: 2851D.D
Acq: 7 Sep 2007 16:11

Tgt Ion: 92 Resp: 2896

Ion	Ratio	Lower	Upper
92	100		
91	18.2	715.8	1073.6#



5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: _____ Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Lab File ID: 4015F.D DFTPP Injection Date: 9/6/2007

Instrument ID: _____ DFTPP Injection Time: 3:04

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 80.0% of mass 198	57.0
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 Relative abundance	58.0
70	Less than 2.0% of mass 69	0.3 (0.5)1
127	25.0 - 75.0% of mass 198	62.5
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	6.8
275	10.0 - 30.0% of mass 198	21.3
365	Greater than 0.75% of mass 198	3.1
441	Present, but less than mass 443	12.4
442	40.0 - 110.0% of mass 198	84.4
443	15.0 - 24.0% of mass 442	16.6 (19.6)2

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

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

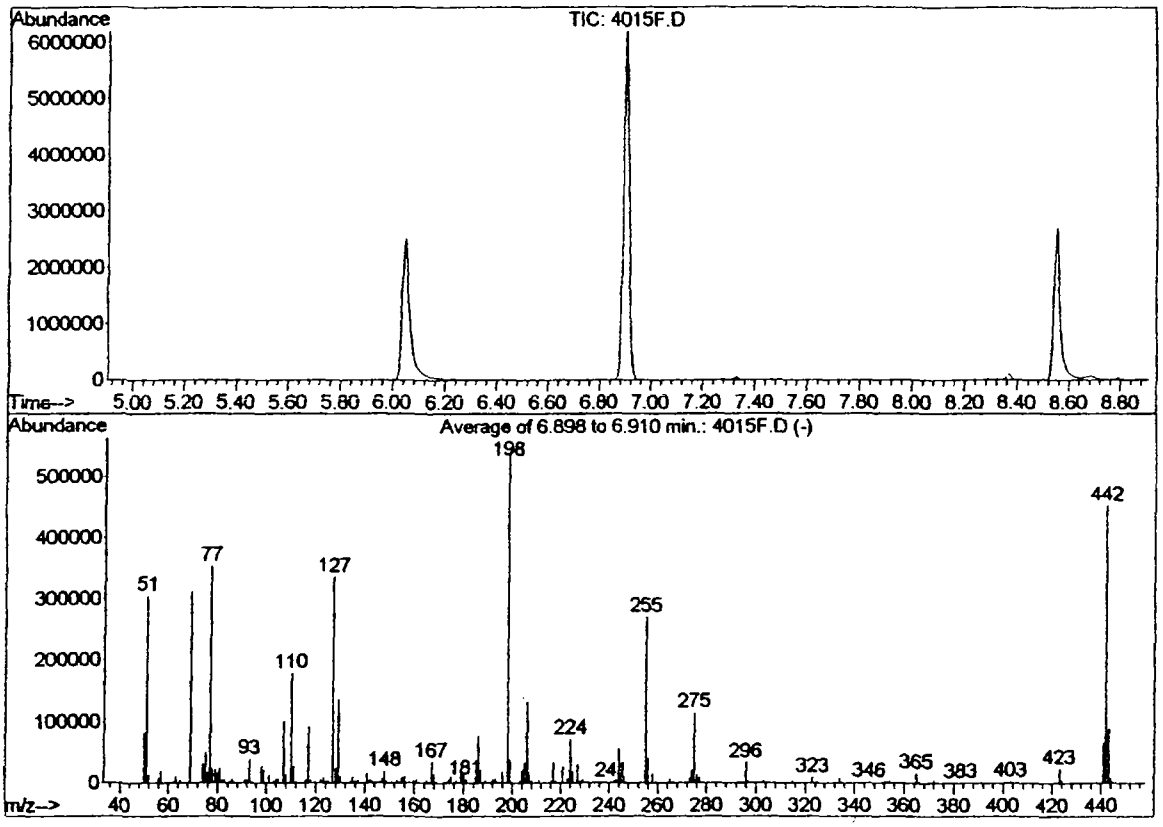
	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	SSTD050	SSTD050	4016F.D	9/6/2007	3:30
02	SSTD010	SSTD010	4017F.D	9/6/2007	4:08
03	SSTD020	SSTD020	4018F.D	9/6/2007	4:47
04	SSTD080	SSTD080	4019F.D	9/6/2007	5:26
05	SSTD100	SSTD100	4020F.D	9/6/2007	6:04
06	SSTD120	SSTD120	4021F.D	9/6/2007	6:43
07	SBLK-897	SBLK-897	4022F.D	9/6/2007	7:22
08	LCS 790	LCS 790	4023F.D	9/6/2007	8:00
09	DLCS 791	DLCS 791	4024F.D	9/6/2007	8:38
10	A781234	A781234	4025F.D	9/6/2007	9:17
11	A781234 MS	A781234 MS	4026F.D	9/6/2007	9:56
12	A781240	A781240	4027F.D	9/6/2007	10:34
13	A781249	A781249	4028F.D	9/6/2007	11:12
14	A781250	A781250	4029F.D	9/6/2007	11:51
15	A781263	A781263	4030F.D	9/6/2007	12:29
16	LCS 782	LCS 782	4031F.D	9/6/2007	13:12

9-11-07

DFTPP

Data File : D:\F090607A\4015F.D
Acq On : 6 Sep 2007 3:04
Sample : DFTPP
Misc : DFTPP
MS Integration Params: rteint.p
Method : C:\MSDCHEM\1\METHODS\DFTPP.M (RTE Integrator)
Title : CLP BNA Calibration

Vial: 1
Operator: JCM
Inst : MSD #6
Multiplr: 1.00



AutoFind: Scans 662, 663, 664; Background Corrected with Scan 653

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	80	57.0	306154	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	58.0	311658	PASS
70	69	0.00	2	0.5	1601	PASS
127	198	25	75	62.5	335509	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	537002	PASS
199	198	5	9	6.8	36512	PASS
275	198	10	30	21.3	114453	PASS
365	198	0.75	100	3.1	16412	PASS
441	443	0.01	100	74.9	66586	PASS
442	198	40	110	84.4	453120	PASS
443	442	15	24	19.6	88933	PASS

4015F.D DFTPP.M Mon Sep 10 15:10:24 2007 RPT01

JM 9-11-07

Average of 6.898 to 6.910 min.: 4015F.D
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
47.00	172	61.00	3677	75.00	49989	86.00	6421
49.00	2924	62.05	4330	76.05	17765	87.00	3161
50.00	83938	63.00	11637	77.00	353621	88.00	1299
51.05	306154	64.00	1695	78.00	24256	89.00	633
52.00	14345	65.00	6059	79.00	21706	91.00	5538
53.05	687	66.90	179	80.00	16878	92.00	6182
55.00	1860	69.00	311658	81.00	23464	93.00	39530
56.00	8606	69.95	1601	82.00	5380	94.00	2886
57.00	20542	71.05	469	83.00	6192	95.00	979
58.00	926	73.00	2479	83.95	1092	96.00	2021
59.90	181	74.00	32005	85.00	4254	97.05	962

Average of 6.898 to 6.910 min.: 4015F.D
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
98.00	28490	109.00	1298	120.90	203	132.95	629
99.00	21720	110.00	178666	122.00	6209	133.95	3924
99.95	1984	111.00	27072	123.00	9593	134.95	10282
101.00	13474	111.95	3344	123.95	4199	136.00	3844
101.90	1088	112.95	1444	125.00	4274	137.00	4778
103.00	4207	114.90	209	127.00	335509	138.00	1103
104.00	8126	116.00	5825	128.00	25970	138.85	763
105.00	8129	117.00	91405	129.00	134381	139.95	1662
106.00	1104	118.00	6026	130.00	11449	140.95	15293
107.00	101085	118.95	758	131.00	2075	142.00	4840
108.00	15523	119.95	1191	132.05	1296	143.00	3772

Average of 6.898 to 6.910 min.: 4015F.D
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
144.00	1029	154.00	3804	164.95	5451	175.00	11263
144.95	1077	155.00	9872	166.00	4446	176.00	3381
146.00	3283	156.00	11235	167.00	35648	176.95	4959
146.95	8239	157.00	2507	168.00	15284	177.95	1831
147.95	19873	157.90	2895	168.95	2875	178.95	20629
148.95	4027	158.95	1818	169.95	613	180.00	14330
150.00	1109	159.95	4761	170.20	562	181.00	6736
150.95	1856	160.95	6865	170.90	1151	181.95	1164
151.50	1010	161.95	2284	171.95	3071	182.95	908
152.00	851	162.90	592	172.95	4179	183.20	209
152.95	4546	164.05	1050	173.95	6779	183.95	2069

Average of 6.898 to 6.910 min.: 4015F.D
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
185.00	11254	195.10	685	207.05	17482	219.00	719
186.00	77072	196.00	18564	208.00	4638	221.00	27418
187.00	21749	197.95	537002	208.90	1342	222.95	7730
188.05	2194	198.95	36512	210.00	1593	224.00	71816
189.00	4768	199.95	2836	210.50	1095	225.05	18618
189.95	1181	201.45	2579	211.00	5529	226.10	1409
190.95	2310	201.95	1116	212.90	260	227.00	30189
192.00	7312	203.00	4433	214.90	1738	228.00	4263
193.00	7525	204.00	19944	216.00	3761	228.95	6044
194.00	2020	205.00	34469	216.95	33586	229.95	957
194.90	790	206.05	132658	218.00	4495	231.00	2547

Average of 6.898 to 6.910 min.: 4015F.D
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
231.80	201	241.95	3954	251.10	329	263.90	966
232.00	172	243.00	4594	252.05	1652	264.95	6587
233.05	576	244.00	55730	253.05	2534	265.95	1323
234.00	2001	245.00	7650	253.90	1522	267.90	423
235.00	2458	246.00	10556	255.00	269888	268.70	180
235.95	1526	247.00	2086	256.00	41728	269.70	193
236.95	2312	248.00	679	257.00	3124	270.10	299
238.10	248	248.95	2039	257.95	15411	271.05	1142
238.95	1443	250.00	717	259.00	2716	272.05	1305
240.05	793	250.40	264	259.95	455	273.00	9002
241.00	2143	250.85	633	261.05	418	274.00	21837

Average of 6.898 to 6.910 min.: 4015F.D
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
275.00	114453	292.95	2228	309.95	569	331.95	1109
276.00	14979	293.90	444	312.90	258	333.00	1178
277.00	10000	294.95	922	314.00	1651	334.00	7610
278.00	1402	295.95	33664	314.95	3856	335.00	2020
279.00	183	297.00	4194	316.00	2228	340.95	1416
283.00	1574	301.00	234	320.95	1324	345.95	2213
284.00	403	302.00	450	321.95	765	346.80	178
285.00	1489	302.20	242	323.05	10113	351.95	3420
289.00	282	303.00	4248	324.00	2367	353.00	2635
290.00	175	303.90	1080	326.95	1898	354.05	4132
292.10	284	308.00	197	328.00	776	355.00	736

Average of 6.898 to 6.910 min.: 4015F.D
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
363.00	179	392.00	171	421.95	2958	428.50	328
364.95	16412	400.90	190	422.95	23616	429.15	653
365.95	2564	401.10	222	424.00	4911	429.90	189
369.90	185	401.90	1699	424.95	802	430.75	1017
371.00	670	402.10	769	425.20	218	431.10	175
372.00	6154	403.00	3418	425.65	511	431.45	510
373.05	1736	404.00	1137	425.95	433	432.00	367
382.85	1688	414.70	192	426.80	336	432.40	265
384.00	181	420.10	175	427.20	597	432.80	765
390.05	902	420.90	1186	428.00	203	433.30	337
391.00	658	421.05	2196	428.30	281	433.95	953

Average of 6.898 to 6.910 min.: 4015F.D
DFTPP
Modified:subtracted

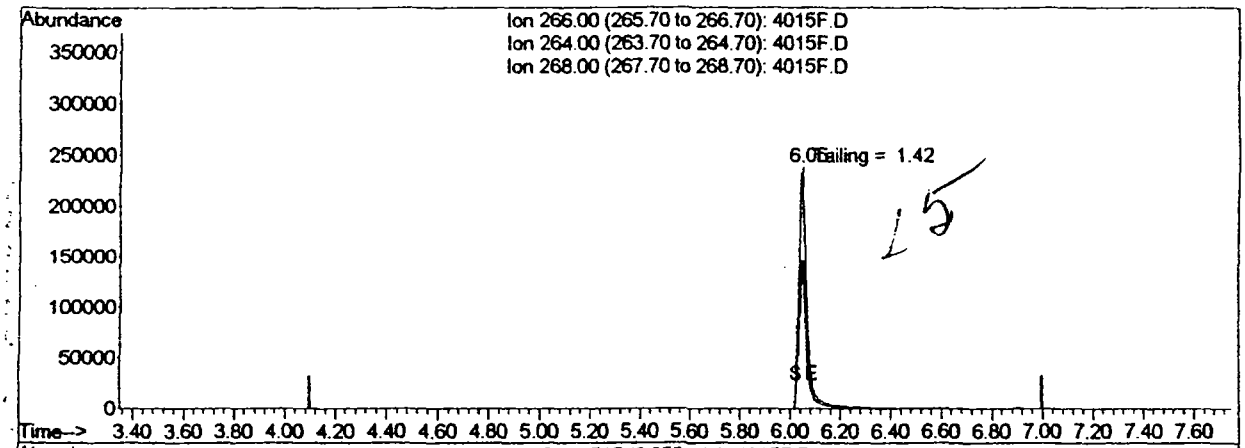
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
434.20	265	443.00	88933				
434.85	1079	444.00	8598				
435.45	678	444.95	838				
436.00	221						
436.30	286						
436.60	199						
437.10	273						
437.35	460						
438.00	431						
441.05	66586						
442.00	453120						

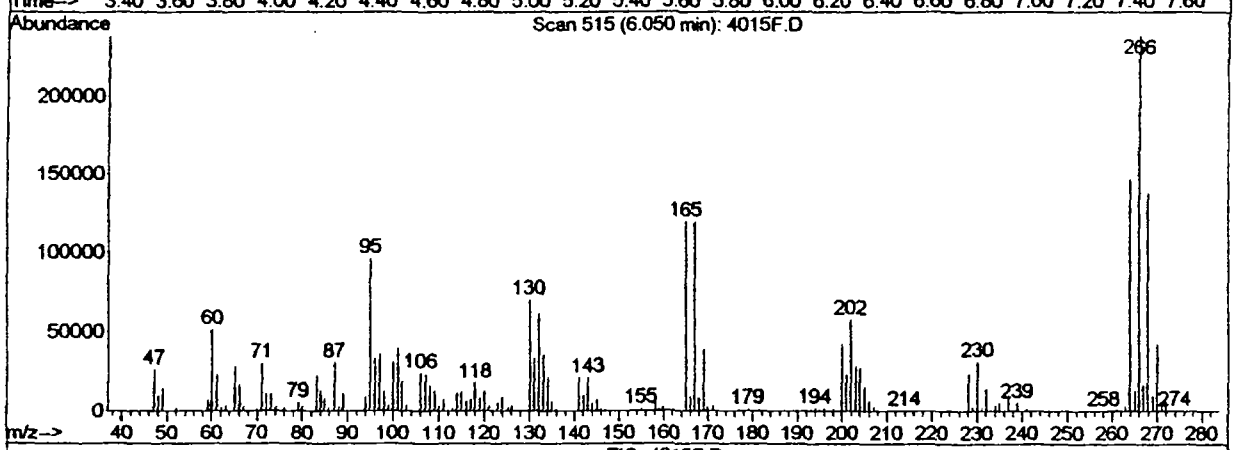
Quantitation Report (Qedit)

Data File : D:\F090607A\4015F.D
Acq On : 6 Sep 2007 3:04
Sample : DFTPP
Misc : DFTPP
MS Integration Params: rteint.p
Quant Time: Sep 10 15:10 2007

Vial: 1
Operator: JCM
Inst : MSD #6
Multiplr: 1.00
Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\DFTPP.M (RTE Integrator)
Title : CLP BNA Calibration
Last Update : Mon Aug 21 15:21:12 2006
Response via : Single Level Calibration





TIC: 4015F.D

(1) Pentachlorophenol (MC)

6.05min 62.76ug/ml

response 508336

Ion	Exp%	Act%
266.00	100	100
264.00	64.20	63.91
268.00	60.20	59.89
0.00	0.00	0.00

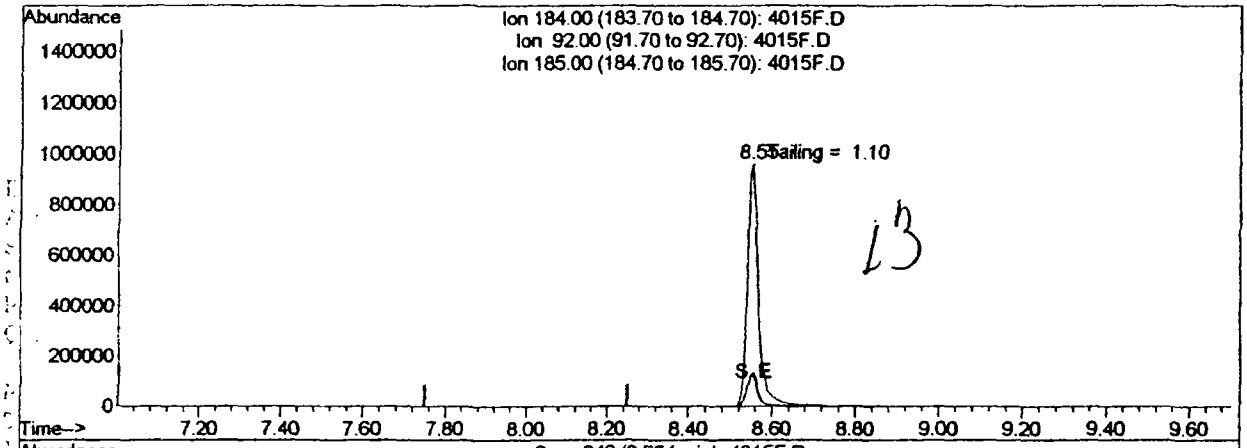
4015F.D DFTPP.M Mon Sep 10 15:10:36 2007 RPT01

Quantitation Report (Qedit)

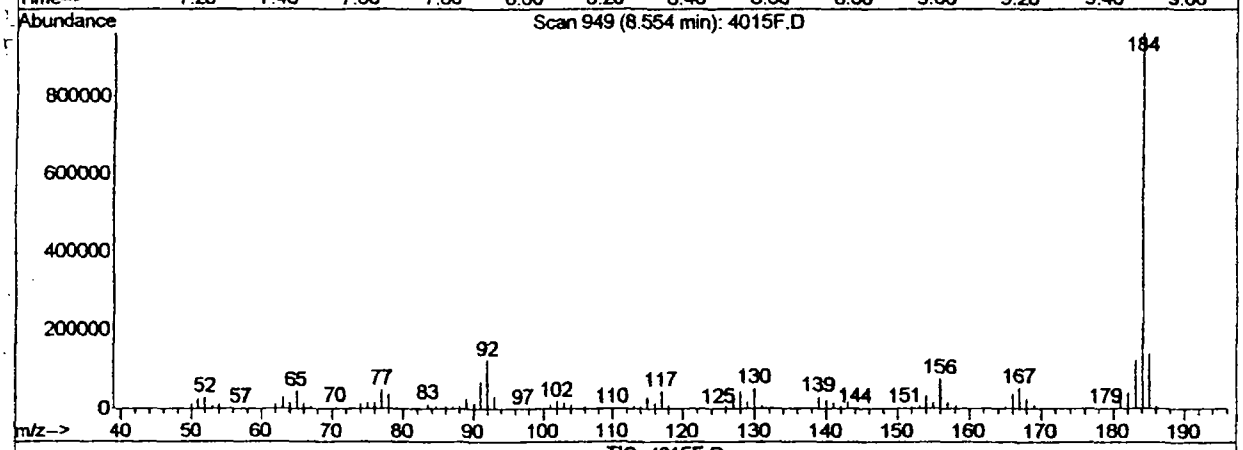
Data File : D:\F090607A\4015F.D
Acq On : 6 Sep 2007 3:04
Sample : DFTPP
Misc : DFTPP
MS Integration Params: rteint.p
Quant Time: Sep 10 15:10 2007

Vial: 1
Operator: JCM
Inst : MSD #6
Multiplr: 1.00
Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\DFTPP.M (RTE Integrator)
Title : CLP BNA Calibration
Last Update : Mon Aug 21 15:21:12 2006
Response via : Single Level Calibration



13



(3) Benzidine

8.55min 31.62ug/ml m

response 1774418

Ion	Exp%	Act%
184.00	100	100
92.00	9.70	0.00#
185.00	14.80	0.00#
0.00	0.00	0.00

JK 9-11-07

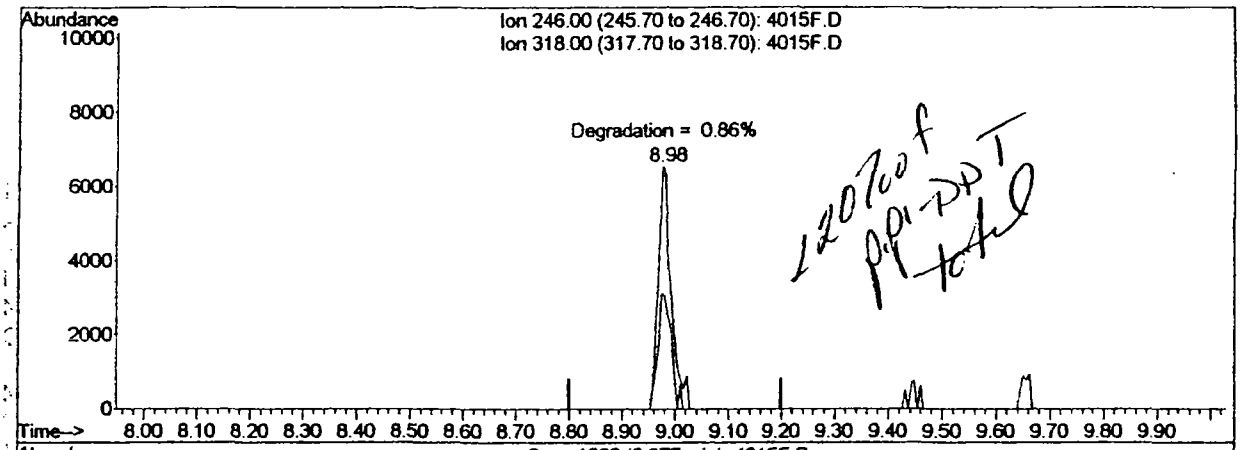
4015F.D DFTPP.M Mon Sep 10 15:10:53 2007 RPT01

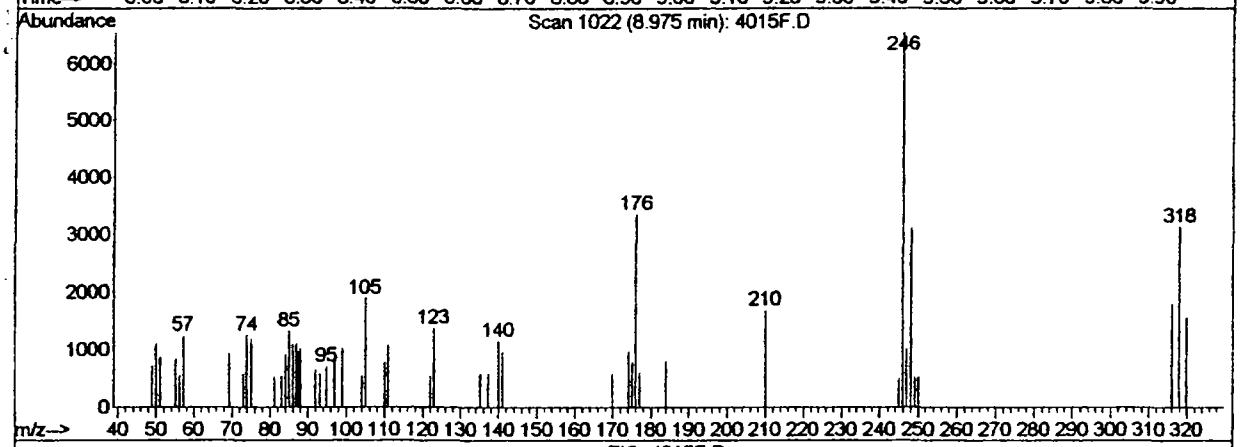
Quantitation Report (Qedit)

Data File : D:\F090607A\4015F.D
Acq On : 6 Sep 2007 3:04
Sample : DFTPP
Misc : DFTPP
MS Integration Params: rteint.p
Quant Time: Sep 10 15:10 2007

Vial: 1
Operator: JCM
Inst : MSD #6
Multiplr: 1.00
Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\DFTPP.M (RTE Integrator)
Title : CLP BNA Calibration
Last Update : Mon Aug 21 15:21:12 2006
Response via : Single Level Calibration





(4) p,p'-DDE

8.98min 0.00ug/ml

response 11066

Ion	Exp%	Act%
246.00	100	100
318.00	34.90	49.59
0.00	0.00	0.00
0.00	0.00	0.00

JS 9/11/07

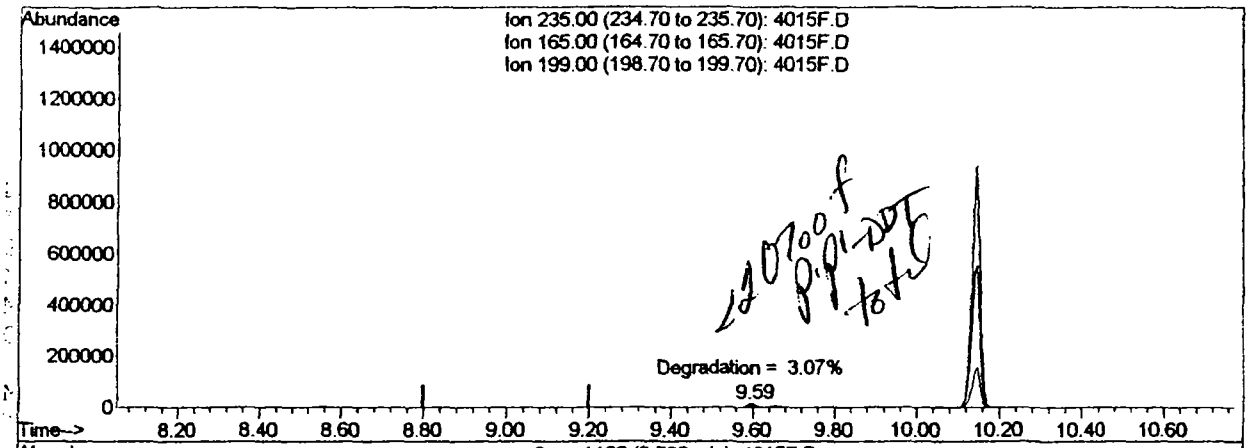
4015F.D DFTPP.M Mon Sep 10 15:11:02 2007 RPT01

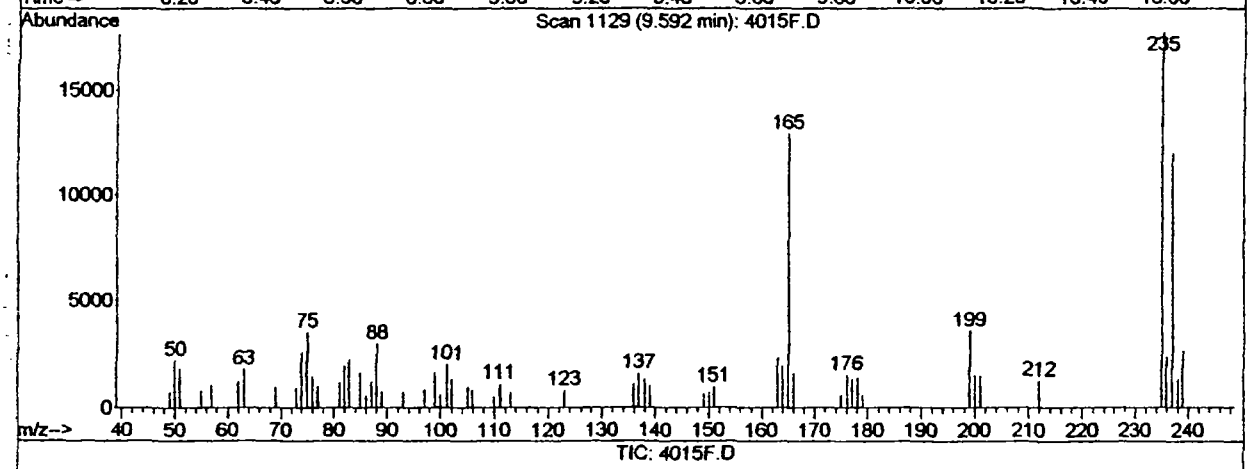
Quantitation Report (Qedit)

Data File : D:\F090607A\4015F.D
Acq On : 6 Sep 2007 3:04
Sample : DFTPP
Misc : DFTPP
MS Integration Params: rteint.p
Quant Time: Sep 10 15:10 2007

Vial: 1
Operator: JCM
Inst : MSD #6
Multiplr: 1.00
Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\DFTPP.M (RTE Integrator)
Title : CLP BNA Calibration
Last Update : Mon Aug 21 15:21:12 2006
Response via : Single Level Calibration





TIC: 4015F.D

(5) p,p'-DDD

9.59min 0.00ug/ml m

response 41857

Ion	Exp%	Act%
235.00	100	100
165.00	63.00	0.00#
199.00	16.30	0.00#
0.00	0.00	0.00

4015F.D DFTPP.M Mon Sep 10 15:11:14 2007 RPT01

Response Factor Report MSD #6

Method : P:\8270F.M (RTE Integrator)
Title : CLP BNA Calibration
Last Update : Mon Sep 10 12:37:28 2007
Response via : Initial Calibration

Calibration Files

50	=4016F.D	10	=4017F.D	20	=4018F.D
80	=4019F.D	100	=4020F.D	120	=4021F.D

	Compound	50	10	20	80	100	120	Avg	%RSD
1)I	1,4-Dichlorobenzene-d	----------ISTD----------							
2)	bis(chloromethyl)et	1.8683	1.7357	1.9417	1.5734	0.7591		1.5756	30.3#
3)	N-Nitrosodimethyl a	0.9617	0.9182		0.9284	0.9417	0.9280	0.9356	1.8
4)	Pyridine	1.8978	1.7579		1.8048	1.7584	1.7531	1.7944	3.4
5)	2-Picoline	1.6514	1.6373		1.5666	1.5390	1.4907	1.5770	4.3
6)	Furfural	0.0002	0.0010		0.0001	0.0001	0.0001	0.0003	134.2#
7)S	2-Fluorophenol	1.4094	1.2949		1.4375	1.4003	1.3940	1.3872	3.9
8)	1,4-Benzoquinone	1.1916	0.7848	1.2258	1.4400	0.0002		0.9285	61.4#
9)	Aniline	2.2268	2.0602	2.4109	2.1667	1.8818	1.7413	2.0813	11.6
10)S	Phenol-d5	1.9405	1.8228		1.9565	1.7409	1.6851	1.8292	6.5
11)MC	Phenol	2.0554	1.9009		2.0503	1.8825	1.8188	1.9416	5.5
12)	bis(2-Chloroethyl)e	1.5850	1.4916		1.7087	1.9081	2.1047	1.7596	14.1
13)S	2-Chlorophenol-d4	1.5469	1.4223		1.6207	1.5473	1.5099	1.5294	4.7
14)MC	2-Chlorophenol	1.5404	1.4086		1.5995	1.5241	1.4884	1.5122	4.7
15)	n-Decane	1.9284	1.7847		2.0103	1.9812	1.9872	1.9383	4.7
16)	1,3-Dichlorobenzene	1.5055	1.4351		1.5816	1.5634	1.5797	1.5330	4.1
17)	Benzyl Chloride	0.0218	0.0192		0.0288	0.0002	0.0001	0.0140	93.6#
18)MC	1,4-Dichlorobenzene	1.5547	1.5030		1.6470	1.6253	1.6281	1.5916	3.8
19)S	1,2-Dichlorobenzene	1.5060	1.4441		1.5884	1.5870	1.5919	1.5435	4.3
20)	1,2-Dichlorobenzene	1.5129	1.3739		1.6005	1.5858	1.5853	1.5317	6.2
21)	Benzyl alcohol	0.9702	0.7641		0.9015	0.8198	0.8482	0.8608	9.2
22)	1-Methyl-2-pyrrolid	1.3699	1.3245		1.3030	1.2641	1.2674	1.3058	3.4
23)	2-Methylphenol	1.3718	1.3203		1.3833	1.2859	1.2158	1.3154	5.2
24)	bis(2-chloroisoprop	2.3513	2.2924		2.5001	2.4420	2.4222	2.4016	3.4
25)	Acetophenone	2.2360	2.1117		2.2540	2.1241	2.1055	2.1663	3.3
26)MP	n-Nitroso-di-n-prop	1.2345	1.1445		1.1543	1.1795	1.1900	1.1806	3.0
27)	4-Methylphenol	1.4514	1.3140		1.4103	1.3896	1.3749	1.3880	3.6
28)	Hexachloroethane	0.7077	0.6778		0.7499	0.7471	0.7469	0.7259	4.4
29)I	Naphthalene-d8	----------ISTD----------							
30)S	Nitrobenzene-d5	0.3995	0.3801		0.4140	0.4002	0.3922	0.3972	3.1
31)	Nitrobenzene	0.4083	0.4036		0.4254	0.4084	0.4005	0.4092	2.4
32)	Isophorone	0.6511	0.6620		0.6858	0.7033	0.7181	0.6841	4.1
33)C	2-Nitrophenol	0.1688	0.1613		0.1779	0.1796	0.1796	0.1734	4.7
34)	2,4-Dimethylphenol	0.3358	0.3237		0.3383	0.3290	0.3355	0.3325	1.8
35)	bis(2-Chloroethoxy)	0.3853	0.3955		0.4016	0.4102	0.4184	0.4022	3.2
36)C	2,4-Dichlorophenol	0.2215	0.1957		0.2357	0.2387	0.2474	0.2278	8.9
37)	Benzoic acid	r = -0.11051 + 0.33626*a						rE2 = 0.993	
38)M	1,2,4-Trichlorobenz	0.2423	0.2335		0.2605	0.2622	0.2604	0.2518	5.2
39)	Naphthalene	0.9875	0.9682		1.0324	1.0258	1.0150	1.0058	2.7
40)	a-Terpineol	0.3188	0.3083		0.3219	0.3242	0.3318	0.3210	2.7
41)	4-Chloroaniline	0.3365	0.3386		0.3493	0.3437	0.3389	0.3414	1.5
42)	Toluenediamine		0.0083	0.0095	0.0083	0.0079	0.0077	0.0083	8.7
43)C	Hexachlorobutadiene	0.1171	0.1110		0.1308	0.1344	0.1342	0.1255	8.6
44)MC	4-Chloro-3-methylph	0.2713	0.2450		0.2966	0.2997	0.3111	0.2847	9.3
45)	2-Methylnaphthalene	0.5591	0.5169		0.5839	0.5753	0.5862	0.5643	5.1

(#) = Out of Range (Advisory for non CCC, SPCC)

Response Factor Report MSD #6

Method : P:\8270F.M (RTE Integrator)
Title : CLP BNA Calibration
Last Update : Mon Sep 10 12:37:28 2007
Response via : Initial Calibration

Calibration Files

50	=4016F.D	10	=4017F.D	20	=4018F.D
80	=4019F.D	100	=4020F.D	120	=4021F.D

Compound 50 10 20 80 100 120 Avg %RSD

46)	1-Methylnaphthalene	0.5857	0.5386		0.6182	0.6180	0.6294	0.5980	6.2
47) I	Acenaphthene-d10	----------ISTD----------							
48)	Phthalic Anhydride	0.1280	0.1726		0.0106	0.0132	0.1991	0.1047	84.5#
49) P	Hexachlorocyclopentad	r = -0.05678 + 0.32054*a						rE2 =	0.997
50)	1,2,4,5-Tetrachloro	0.3875	0.3578		0.4154	0.4255	0.4243	0.4021	7.2
51)	2,3-Dichloroaniline	0.5556	0.5064		0.5863	0.5866	0.5665	0.5603	5.9
52) C	2,4,6-Trichlorophen	0.2958	0.2494		0.3150	0.3163	0.3110	0.2975	9.4
53)	2,4,5-Trichlorophen	0.2915	0.2525		0.3184	0.3424	0.3449	0.3099	12.5
54) S	2-Fluorobiphenyl	1.1386	1.0542		1.2028	1.2376	1.2284	1.1723	6.5
55)	Biphenyl	0.0002		0.0001	0.0001	0.0003		0.0002	52.2#
56)	2-Chloronaphthalene	1.0113	0.9504		1.0864	1.0933	1.0884	1.0460	6.0
57)	Diphenyl ether	0.0001	0.0004	0.0002	0.0001	0.0000	0.0000	0.0001	112.8#
58)	2-Nitroaniline	0.3737	0.3375		0.4011	0.4001	0.3987	0.3822	7.2
59)	Dimethylphthalate	1.1757	1.0097		1.2468	1.2350	1.2134	1.1761	8.2
60)	1,3-Dinitrobenzene	0.1958	0.1634		0.2092	0.2096	0.2105	0.1977	10.2
61)	2,6-Dinitrotoluene	0.2470	0.2277		0.2875	0.2913	0.2904	0.2688	11.0
62)	Acenaphthylene	1.7495	1.5475		1.8611	1.8216	1.7785	1.7516	6.9
63)	3-Nitroaniline	0.2607	0.2780	0.2935	0.2601	0.2436		0.2672	7.2
64) MC	Acenaphthene	1.0486	0.9686		1.1024	1.1025	1.0810	1.0606	5.3
65) P	2,4-Dinitrophenol	0.1261		0.1192	0.1463	0.1574	0.1645	0.1427	13.7
66) MP	4-Nitrophenol	0.1475		0.1343	0.1710	0.1649	0.1682	0.1572	10.0
67)	Dibenzofuran	1.4241	1.3057		1.5204	1.5337	1.5383	1.4644	6.8
68) M	2,4-Dinitrotoluene	0.3152	0.2784		0.3492	0.3505	0.3457	0.3278	9.5
69)	2,3,4,6-Tetrachloroph	r = -0.03316 + 0.22877*a						rE2 =	0.991
70)	Diethylphthalate	1.2387	1.0563		1.3370	1.2879	1.2136	1.2267	8.7
71)	Fluorene	1.1442	1.0032		1.2477	1.2469	1.2160	1.1716	8.8
72)	4-Chlorophenyl-phen	0.4865	0.4111		0.5533	0.5477	0.5331	0.5063	11.7
73)	4-Nitroaniline	0.2518	0.2345		0.2432	0.2274	0.2679	0.2450	6.4
74) I	Phenanthrene-d10	----------ISTD----------							
75)	4,6-Dinitro-2-methy	0.1152		0.1103	0.1283	0.1277	0.1337	0.1230	8.0
76) C	n-Nitrosodiphenylam	0.5216	0.4506		0.5880	0.5435	0.5529	0.5313	9.6
77) S	2,4,6-Tribromopheno	0.0735	0.0626	0.0697	0.0865	0.0871	0.0912	0.0785	14.6
78)	Azobenzene	1.1630	1.1029		1.2391	1.2144	1.2018	1.1842	4.5
79)	alpha-BHC	0.1328	0.1278		0.1528	0.1541	0.1539	0.1443	8.9
80)	4-Bromophenyl-pheny	0.1631	0.1475		0.1814	0.1890	0.1921	0.1746	10.8
81)	Hexachlorobenzene	0.1633	0.1502		0.1847	0.1920	0.1952	0.1771	11.0
82)	beta-BHC	0.1040	0.0997		0.1084	0.1157	0.1224	0.1100	8.3
83) MC	Pentachlorophenol	0.0914		0.0796	0.1060	0.1093	0.1141	0.1001	14.3
84)	gamma-BHC	0.1085	0.1074	0.1137	0.1197		0.1003	0.1099	6.6
85)	n-Octadecane	0.6738	0.6299		0.7221	0.7126	0.7127	0.6902	5.6
86)	Phenanthrene	1.0561	0.9520		1.1211	1.1134	1.0972	1.0680	6.5
87)	Anthracene	1.0410	0.9189		1.1025	1.0629	1.0620	1.0375	6.7
88)	delta-BHC	0.1067	0.0946		0.1073	0.1057	0.1067	0.1042	5.2
89)	Carbazole	0.9175	0.8514		0.9585	0.9282	0.9454	0.9202	4.5
90)	Heptachlor	0.0765	0.0686		0.0873	0.0889	0.0889	0.0820	11.1

(#) = Out of Range (Advisory for non CCC, SPCC)

Response Factor Report MSD #6

Method : P:\8270F.M (RTE Integrator)
Title : CLP BNA Calibration
Last Update : Mon Sep 10 12:37:28 2007
Response via : Initial Calibration

Calibration Files

50	=4016F.D	10	=4017F.D	20	=4018F.D
80	=4019F.D	100	=4020F.D	120	=4021F.D

	Compound	50	10	20	80	100	120	Avg	%RSD
91)	Di-n-butylphthalate	1.2379	1.2168		1.2257	1.2385	1.2473	1.2332	1.0
92)	Aldrin	0.0424	0.0400		0.0456	0.0464	0.0459	0.0441	6.3
93)	Heptachlor epoxide	0.1229	0.1283		0.1200	0.1153	0.1136	0.1200	4.9
94) C	Fluoranthene	0.8758	0.8581		0.9031	0.9046	0.9695	0.9022	4.7
95) I	Chrysene-d12	----------ISTD----------							
96)	Benzidine	0.3013	0.2849	0.3133	0.3059	0.3308	0.3753	0.3186	9.9
97) M	Pyrene	1.2222	1.3033		1.2534	1.3443	1.3707	1.2988	4.7
98)	alpha-Endosulfan	0.0324	0.0353		0.0321	0.0347	0.0336	0.0336	4.1
99)	p,p'-DDE	0.2537	0.2566		0.2518	0.2730	0.2786	0.2628	4.6
100) S	Terphenyl-d14	0.8919	0.8815		0.9237	1.0029	1.0055	0.9411	6.3

101)	Dieldrin	0.4058	0.4461		0.3787	0.3963	0.3740	0.4002	7.2
102)	Endrin	0.0119	0.0122		0.0117	0.0124	0.0125	0.0121	2.9
103)	Endrin aldehyde	0.0371	0.0449		0.0351	0.0363	0.0350	0.0377	10.9
104)	beta-Endosulfan	0.0370	0.0413		0.0403	0.0432	0.0457	0.0415	7.8
105)	p,p'-DDD	0.3619	0.3853		0.3906	0.4221	0.4478	0.4015	8.4
106)	Butylbenzylphthalat	0.5723	0.6520		0.6232	0.6515	0.6806	0.6359	6.4
107)	Endosulfan sulfate	0.0542	0.0564	0.0586	0.0591	0.0597		0.0576	3.9
108)	p,p'-DDT	0.3644	0.3545		0.3940	0.4198	0.4306	0.3927	8.5
109)	4,4'-Methylene-Bis(	0.1579	0.1415		0.1430	0.1327	0.1151	0.1381	11.4
110)	Methoxychlor	0.8748	0.8623		0.8744	0.7708	0.8597	0.8484	5.2
111)	Benzo[a]anthracene	0.8760	0.8371		0.9490	0.9706	1.0040	0.9274	7.4
112)	3,3'-Dichlorobenzid	0.3387	0.2911	0.3612	0.3069	0.2873	0.2461	0.3052	13.3
113)	Chrysene	1.0193	1.0052		1.0605	1.0564	1.0703	1.0424	2.7
114)	bis(2-Ethylhexyl)ph	0.8954	0.9874		0.8954	0.9269	0.9413	0.9293	4.1
115) I	Perylene-d12	----------ISTD----------							
116) C	Di-n-octylphthalate	2.6771	2.1363	2.3040	2.9801		2.9306	2.6056	14.4
117)	Benzo[b]fluoranthene	r = 0.06435 + 0.97200*a + 0.24574*aE2 rE2 = 0.993							
118)	Benzo[k]fluoranthen	1.4061	1.0786		1.3758	1.2683	1.1965	1.2650	10.6
119) C	Benzo[a]pyrene	1.1063	0.9222		1.1547	1.1781	1.2161	1.1155	10.3
120)	Indeno[1,2,3-cd]pyr	0.5849	0.4817	0.4780		0.6300	0.5023	0.5354	12.8
121)	Dibenz[a,h]anthracene	r = -0.08273 + 0.59848*a rE2 = 0.998							
122)	Benzo[g,h,i]perylen	0.4508	0.3896	0.3612		0.4602	0.3282	0.3980	14.3

(#) = Out of Range (Advisory for non CCC, SPCC) 0 SPCC fail 0 CCC fail

8270F.M Mon Sep 10 15:20:38 2007

Average RSD= 11.94

Response Factor Report MSD #6

Method : C:\MSDCHEM\1\METHODS\8270F.M (RTE Integrator)
Title : CLP BNA Calibration
Last Update : Mon Sep 10 12:27:29 2007
Response via : Initial Calibration

Calibration Files
50 =4016F.D 10 =4017F.D 20 =4018F.D
80 =4019F.D 100 =4020F.D 120 =4021F.D

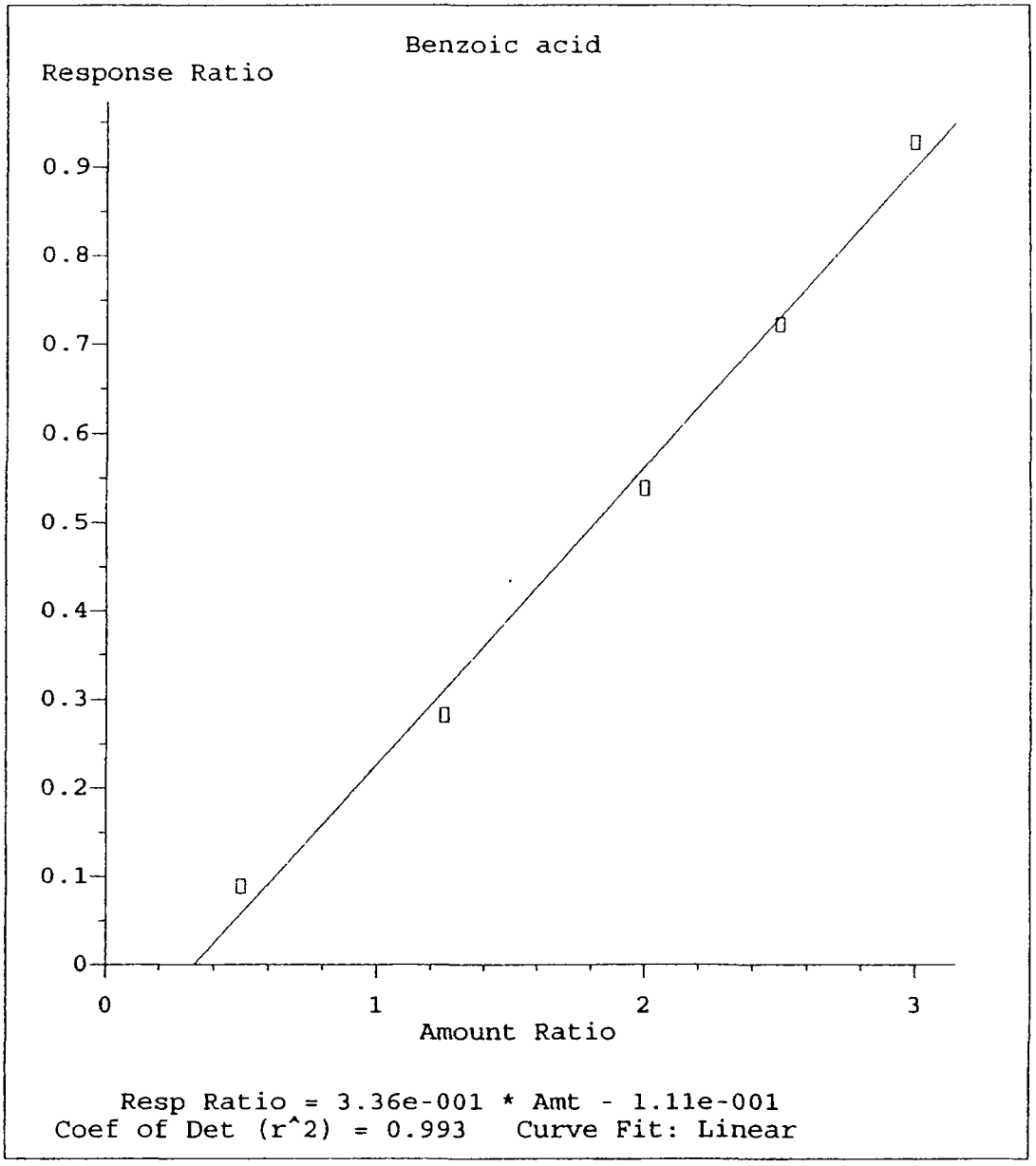
		Compound	50	10	20	80	100	120	Avg	%RSD
1)	I	1,4-Dichlorobenzene-d	----------			ISTD	----------			
2)		bis(chloromethyl)	1.868	1.736	1.942	1.573	0.759		1.576	30.31
3)		N-Nitrosodimethyl	0.962	0.918		0.928	0.942	0.928	0.936	1.80
4)		Pyridine	1.898	1.758		1.805	1.758	1.753	1.794	3.43
5)		2-Picoline	1.651	1.637		1.567	1.539	1.491	1.577	4.27
6)		Furfural	0.000	0.001		0.000	0.000	0.000	0.000#	134.25
7)	S	2-Fluorophenol	1.409	1.295		1.437	1.400	1.394	1.387	3.91
8)		1,4-Benzoquinone	1.192	0.785	1.226	1.440	0.000		0.928	61.44
9)		Aniline	2.227	2.060	2.411	2.167	1.882	1.741	2.081	11.63
10)	S	Phenol-d5	1.941	1.823		1.956	1.741	1.685	1.829	6.54
11)	MC	Phenol	2.055	1.901		2.050	1.883	1.819	1.942	5.46#
12)		bis(2-Chloroethyl	1.585	1.492		1.709	1.908	2.105	1.760	14.09
13)	S	2-Chlorophenol-d4	1.547	1.422		1.621	1.547	1.510	1.529	4.72
14)	MC	2-Chlorophenol	1.540	1.409		1.600	1.524	1.488	1.512	4.66#
15)		n-Decane	1.928	1.785		2.010	1.981	1.987	1.938	4.69
16)		1,3-Dichlorobenze	1.505	1.435		1.582	1.563	1.580	1.533	4.10
17)		Benzyl Chloride	0.022	0.019		0.029	0.000	0.000	0.014#	93.65
18)	MC	1,4-Dichlorobenze	1.555	1.503		1.647	1.625	1.628	1.592	3.81#
19)	S	1,2-Dichlorobenze	1.506	1.444		1.588	1.587	1.592	1.544	4.29
20)		1,2-Dichlorobenze	1.513	1.374		1.601	1.586	1.585	1.532	6.18
21)		Benzyl alcohol	0.970	0.764		0.902	0.820	0.848	0.861	9.15
22)		1-Methyl-2-pyrrol	1.370	1.325		1.303	1.264	1.267	1.306	3.36
23)		2-Methylphenol	1.372	1.320		1.383	1.286	1.216	1.315	5.18
24)		bis(2-chloroisopr	2.351	2.292		2.500	2.442	2.422	2.402	3.37
25)		Acetophenone	2.236	2.112		2.254	2.124	2.106	2.166	3.34
26)	MP	n-Nitroso-di-n-pr	1.235	1.144		1.154	1.179	1.190	1.181	2.99
27)		4-Methylphenol	1.451	1.314		1.410	1.390	1.375	1.388	3.63
28)		Hexachloroethane	0.708	0.678		0.750	0.747	0.747	0.726	4.42
29)	I	Naphthalene-d8	----------			ISTD	----------			
30)	S	Nitrobenzene-d5	0.400	0.380		0.414	0.400	0.392	0.397	3.12
31)		Nitrobenzene	0.408	0.404		0.425	0.408	0.401	0.409	2.35
32)		Isophorone	0.651	0.662		0.686	0.703	0.718	0.684	4.08
33)	C	2-Nitrophenol	0.169	0.161		0.178	0.180	0.180	0.173	4.70#
34)		2,4-Dimethylpheno	0.336	0.324		0.338	0.329	0.336	0.332	1.81
35)		bis(2-Chloroethox	0.385	0.395		0.402	0.410	0.418	0.402	3.18
36)	C	2,4-Dichloropheno	0.221	0.196		0.236	0.239	0.247	0.228	8.89#
37)		Benzoic acid	0.225		0.176	0.269	0.289	0.309	0.254	20.95
38)	M	1,2,4-Trichlorobe	0.242	0.233		0.261	0.262	0.260	0.252	5.19
39)		Naphthalene	0.988	0.968		1.032	1.026	1.015	1.006	2.70
40)		a-Terpineol	0.319	0.308		0.322	0.324	0.332	0.321	2.67
41)		4-Chloroaniline	0.336	0.339		0.349	0.344	0.339	0.341	1.51
42)		Toluenediamine		0.008	0.010	0.008	0.008	0.008	0.008#	8.70
43)	C	Hexachlorobutadie	0.117	0.111		0.131	0.134	0.134	0.126	8.58#
44)	MC	4-Chloro-3-methyl	0.271	0.245		0.297	0.300	0.311	0.285	9.32#
45)		2-Methylnaphthale	0.559	0.517		0.584	0.575	0.586	0.564	5.06
46)		1-Methylnaphthale	0.586	0.539		0.618	0.618	0.629	0.598	6.19
47)	I	Acenaphthene-d10	----------			ISTD	----------			

48)		Phthalic Anhydrid	0.128	0.173		0.011	0.013	0.199	0.105	84.46
49)	P	Hexachlorocyclope	0.244	0.159	0.223	0.292	0.301	0.304	0.254	22.45
50)		1,2,4,5-Tetrachlo	0.387	0.358		0.415	0.426	0.424	0.402	7.25
51)		2,3-Dichloroanili	0.556	0.506		0.586	0.587	0.567	0.560	5.87
52)	C	2,4,6-Trichloroph	0.296	0.249		0.315	0.316	0.311	0.297	9.45#
53)		2,4,5-Trichloroph	0.291	0.253		0.318	0.342	0.345	0.310	12.48
54)	S	2-Fluorobiphenyl	1.139	1.054		1.203	1.238	1.228	1.172	6.53
55)		Biphenyl	0.000			0.000	0.000	0.000	0.000#	52.15
56)		2-Chloronaphthale	1.011	0.950		1.086	1.093	1.088	1.046	6.05
57)		Diphenyl ether	0.000	0.000	0.000	0.000	0.000	0.000	0.000#	112.81
58)		2-Nitroaniline	0.374	0.337		0.401	0.400	0.399	0.382	7.19
59)		Dimethylphthalate	1.176	1.010		1.247	1.235	1.213	1.176	8.24
60)		1,3-Dinitrobenzen	0.196	0.163		0.209	0.210	0.211	0.198	10.17
61)		2,6-Dinitrotoluen	0.247	0.228		0.288	0.291	0.290	0.269	10.99
62)		Acenaphthylene	1.750	1.548		1.861	1.822	1.778	1.752	6.95
63)		3-Nitroaniline	0.261	0.278	0.294	0.260	0.244		0.267	7.15
64)	MC	Acenaphthene	1.049	0.969		1.102	1.103	1.081	1.061	5.28#
65)	P	2,4-Dinitrophenol	0.126		0.119	0.146	0.157	0.165	0.143	13.71
66)	MP	4-Nitrophenol	0.148		0.134	0.171	0.165	0.168	0.157	10.00
67)		Dibenzofuran	1.424	1.306		1.520	1.534	1.538	1.464	6.85
68)	M	2,4-Dinitrotoluen	0.315	0.278		0.349	0.350	0.346	0.328	9.51
69)		2,3,4,6-Tetrachlo	0.174	0.149	0.178	0.212	0.222		0.187	15.94
70)		Diethylphthalate	1.239	1.056		1.337	1.288	1.214	1.227	8.67
71)		Fluorene	1.144	1.003		1.248	1.247	1.216	1.172	8.80
72)		4-Chlorophenyl-ph	0.486	0.411		0.553	0.548	0.533	0.506	11.73
73)		4-Nitroaniline	0.252	0.234		0.243	0.227	0.268	0.245	6.43
74)	I	Phenanthrene-d10	----------ISTD----------							
75)		4,6-Dinitro-2-met	0.115		0.110	0.128	0.128	0.134	0.123	8.01
76)	C	n-Nitrosodiphenyl	0.522	0.451		0.588	0.544	0.553	0.531	9.61#
77)	S	2,4,6-Tribromophe	0.074	0.063	0.070	0.087	0.087	0.091	0.078	14.56
78)		Azobenzene	1.163	1.103		1.239	1.214	1.202	1.184	4.49
79)		alpha-BHC	0.133	0.128		0.153	0.154	0.154	0.144	8.95
80)		4-Bromophenyl-phe	0.163	0.148		0.181	0.189	0.192	0.175	10.81
81)		Hexachlorobenzene	0.163	0.150		0.185	0.192	0.195	0.177	11.02
82)		beta-BHC	0.104	0.100		0.108	0.116	0.122	0.110	8.27
83)	MC	Pentachlorophenol	0.091		0.080	0.106	0.109	0.114	0.100	14.25#
84)		gamma-BHC	0.109	0.107	0.114	0.120		0.100	0.110	6.61
85)		n-Octadecane	0.674	0.630		0.722	0.713	0.713	0.690	5.58
86)		Phenanthrene	1.056	0.952		1.121	1.113	1.097	1.068	6.51
87)		Anthracene	1.041	0.919		1.102	1.063	1.062	1.037	6.74
88)		delta-BHC	0.107	0.095		0.107	0.106	0.107	0.104	5.19
89)		Carbazole	0.918	0.851		0.959	0.928	0.945	0.920	4.52
90)		Heptachlor	0.077	0.069		0.087	0.089	0.089	0.082	11.11
91)		Di-n-butylphthala	1.238	1.217		1.226	1.238	1.247	1.233	0.97
92)		Aldrin	0.042	0.040		0.046	0.046	0.046	0.044#	6.26
93)		Heptachlor epoxid	0.123	0.128		0.120	0.115	0.114	0.120	4.94
94)	C	Fluoranthene	0.876	0.858		0.903	0.905	0.970	0.902	4.70#
95)	I	Chrysene-d12	----------ISTD----------							
96)		Benzidine	0.301	0.285	0.313	0.306	0.331	0.375	0.319	9.92
97)	M	Pyrene	1.222	1.303		1.253	1.344	1.371	1.299	4.75
98)		alpha-Endosulfan	0.032	0.035		0.032	0.035	0.034	0.034#	4.07
99)		p,p'-DDE	0.254	0.257		0.252	0.273	0.279	0.263	4.65
100)	S	Terphenyl-d14	0.892	0.882		0.924	1.003	1.006	0.941	6.34
101)		Dieldrin	0.406	0.446		0.379	0.396	0.374	0.400	7.18
102)		Endrin	0.012	0.012		0.012	0.012	0.012	0.012#	2.95
103)		Endrin aldehyde	0.037	0.045		0.035	0.036	0.035	0.038#	10.93
104)		beta-Endosulfan	0.037	0.041		0.040	0.043	0.046	0.041#	7.84
105)		p,p'-DDD	0.362	0.385		0.391	0.422	0.448	0.402	8.37
106)		Butylbenzylphthal	0.572	0.652		0.623	0.651	0.681	0.636	6.44
107)		Endosulfan sulfat	0.054	0.056	0.059	0.059	0.060		0.058	3.91
108)		p,p'-DDT	0.364	0.355		0.394	0.420	0.431	0.393	8.48

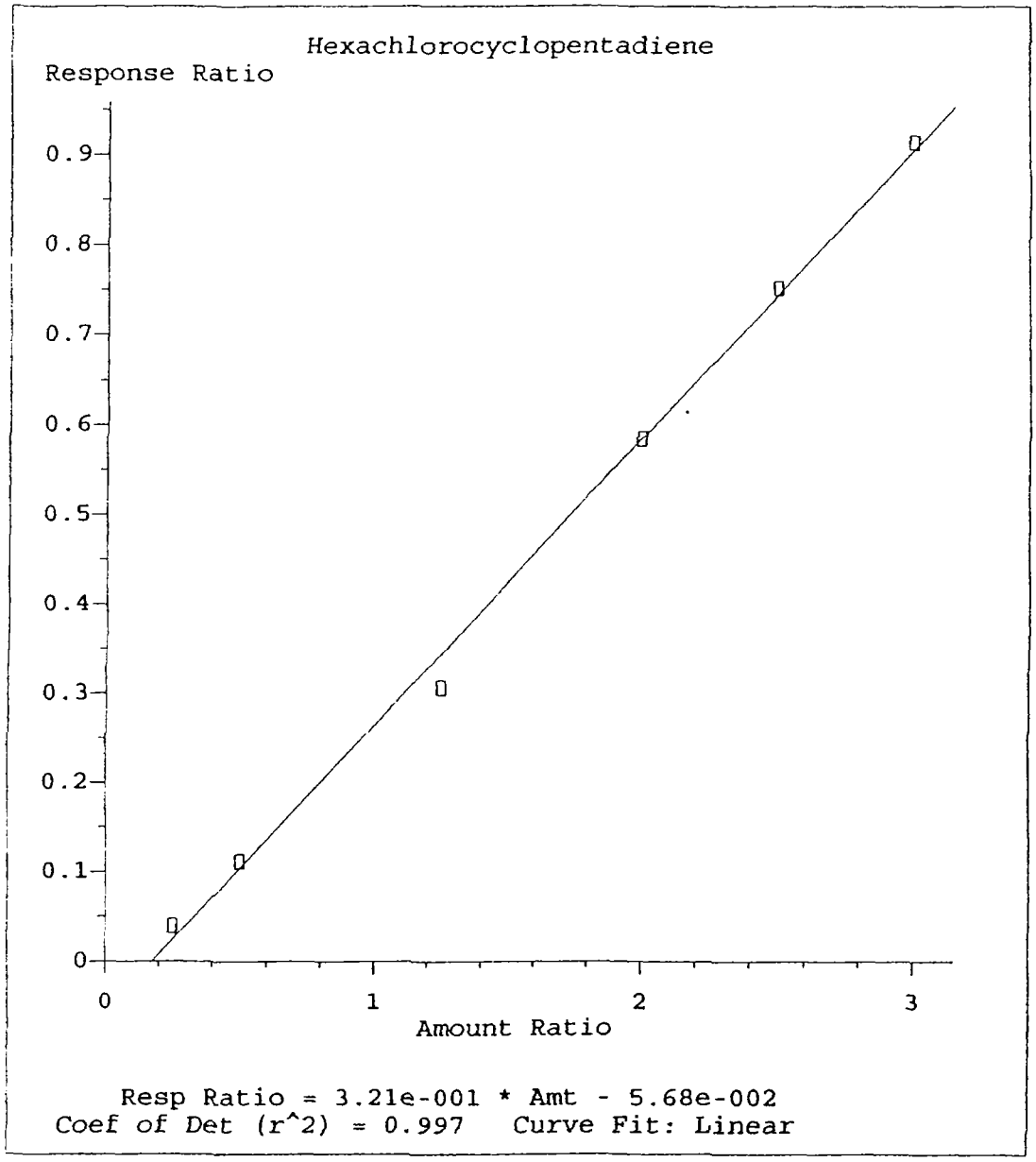
109)		4,4'-Methylene-Bi	0.158	0.142		0.143	0.133	0.115	0.138	11.38
110)		Methoxychlor	0.875	0.862		0.874	0.771	0.860	0.848	5.18
111)		Benzo[a]anthracen	0.876	0.837		0.949	0.971	1.004	0.927	7.43
112)		3,3'-Dichlorobenz	0.339	0.291	0.361	0.307	0.287	0.246	0.305	13.33
113)		Chrysene	1.019	1.005		1.061	1.056	1.070	1.042	2.72
114)		bis(2-Ethylhexyl)	0.895	0.987		0.895	0.927	0.941	0.929	4.11
115)	I	Perylene-d12	----------ISTD----------							
116)	C	Di-n-octylphthala	2.677	2.136	2.304	2.980		2.931	2.606	14.39# GDR
117)		Benzo[b]fluoranth	1.451	1.074		1.500	1.512	1.778	1.463	17.23
118)		Benzo[k]fluoranth	1.406	1.079		1.376	1.268	1.197	1.265	10.58
119)	C	Benzo[a]pyrene	1.106	0.922		1.155	1.178	1.216	1.116	10.32#
120)		Indeno[1,2,3-cd]p	0.585	0.482	0.478		0.630	0.502	0.535	12.76
121)		Dibenz[a,h]anthra	0.507	0.379	0.411	0.556	0.572		0.485	17.80 LH
122)		Benzo[g,h,i]peryl	0.451	0.390	0.361		0.460	0.328	0.398	14.29

(#) = Out of Range

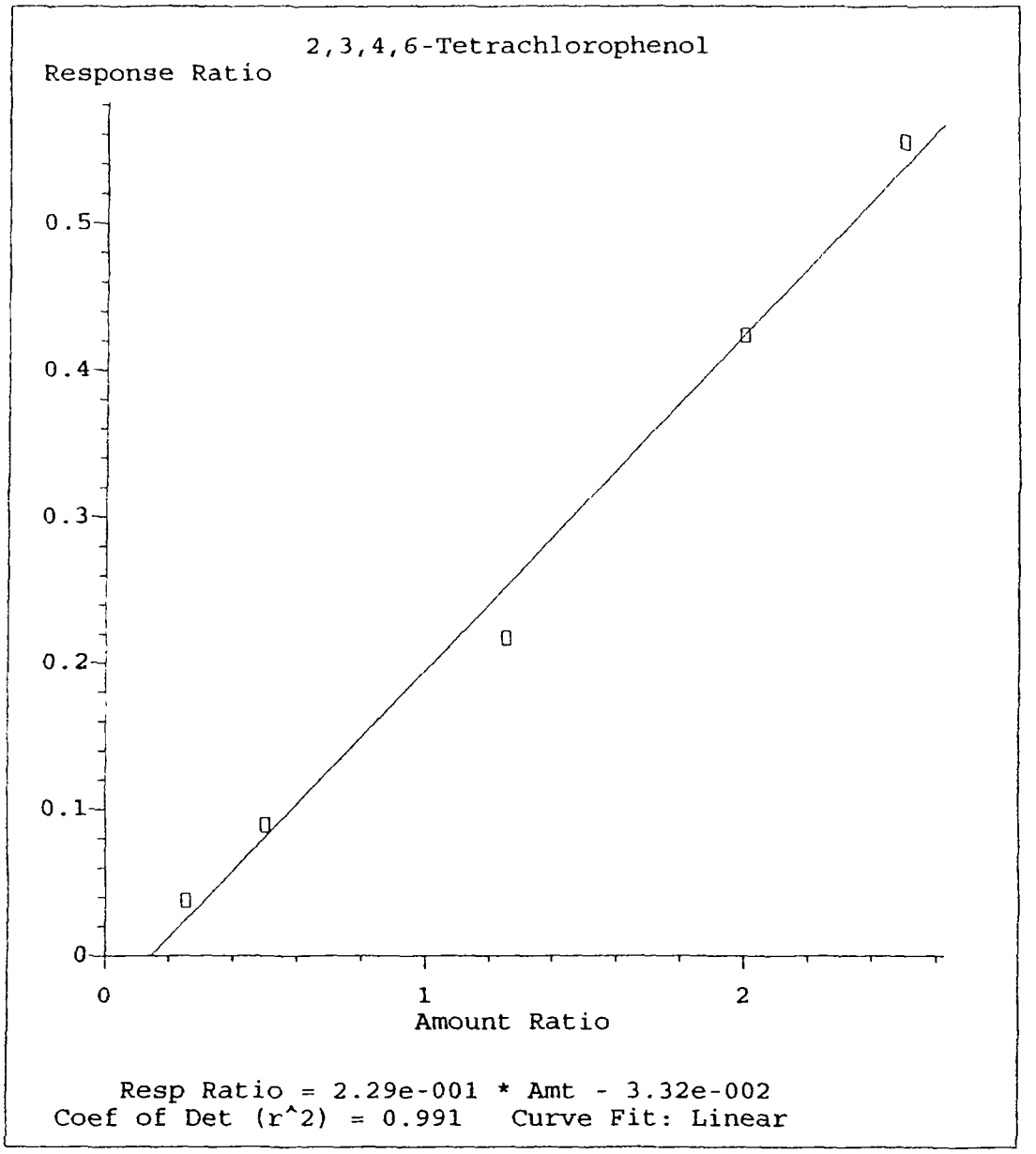
8270F.M Mon Sep 10 12:37:35 2007 RPT01



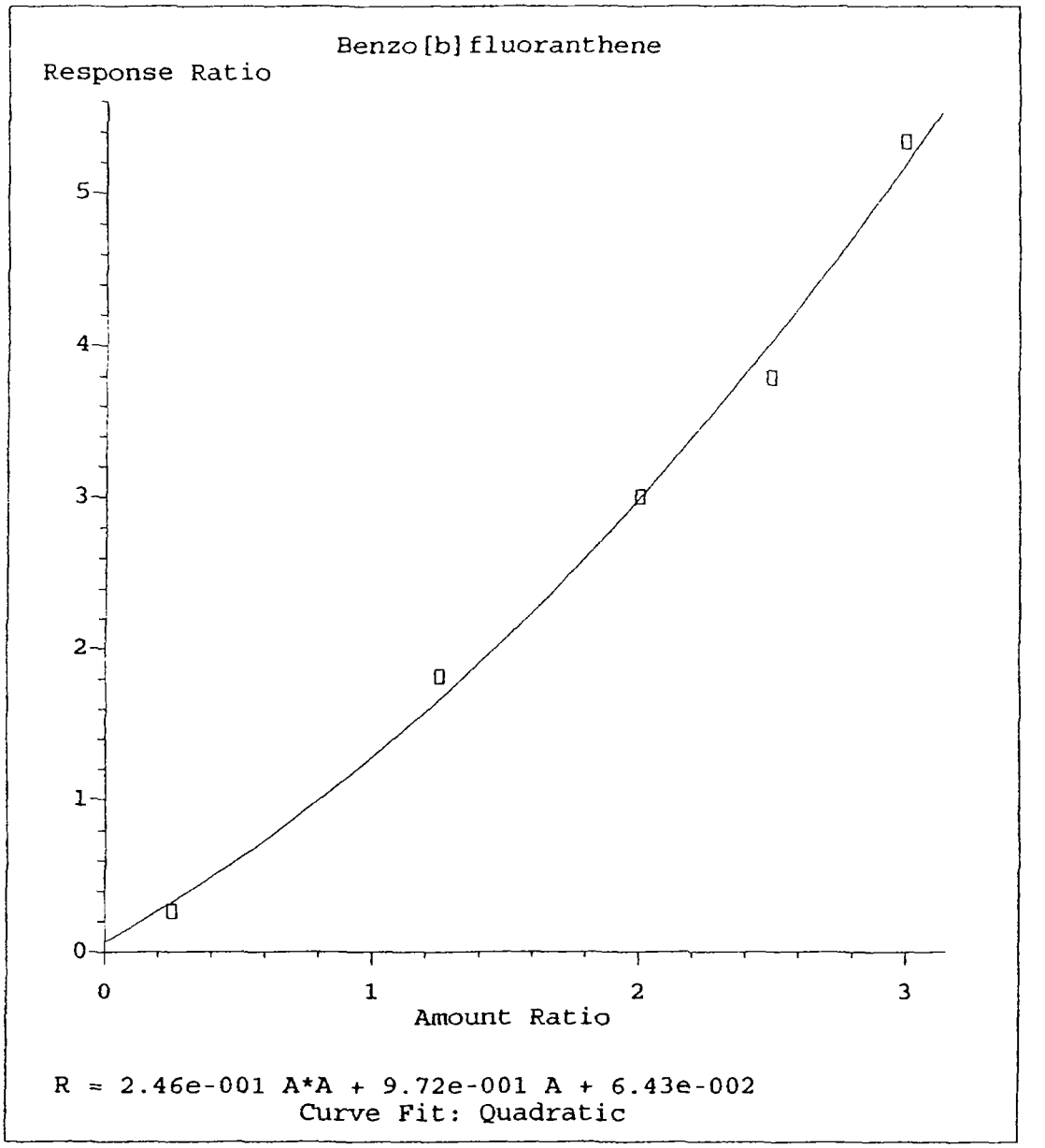
Method Name: C:\MSDCHEM\1\METHODS\8270F.M
Calibration Table Last Updated: Fri Sep 07 04:02:55 2007



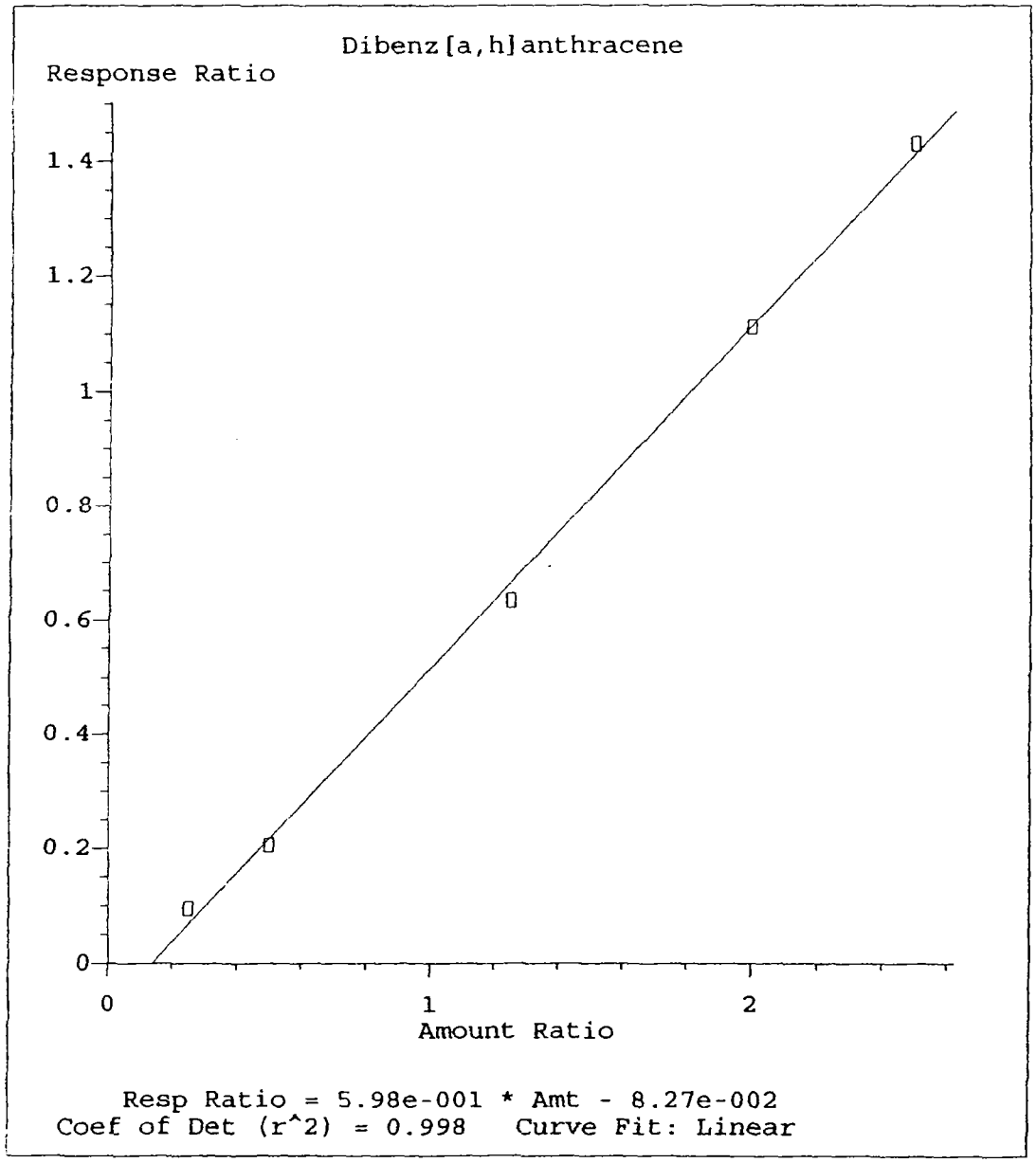
Method Name: C:\MSDCHEM\1\METHODS\8270F.M
Calibration Table Last Updated: Fri Sep 07 04:02:55 2007



Method Name: C:\MSDCHEM\1\METHODS\8270F.M
Calibration Table Last Updated: Fri Sep 07 04:02:55 2007



Method Name: C:\MSDCHEM\1\METHODS\8270F.M
Calibration Table Last Updated: Fri Sep 07 04:02:55 2007



Method Name: C:\MSDCHEM\1\METHODS\8270F.M
Calibration Table Last Updated: Mon Sep 10 12:37:28 2007

Quantitation Report (QT Reviewed)

Data File : D:\F090607A\4016F.D
Acq On : 6 Sep 2007 3:30
Sample : SSTD050
Misc : CAL SSTD
MS Integration Params: RTEINT4.P
Quant Time: Sep 07 01:51:05 2007

Vial: 2
Operator: JCM
Inst : MSD #6
Multiplr: 1.00
Quant Results File: 8270F.RES

Quant Method : C:\MSDCHEM\1\METHODS\8270F.M (RTE Integrator)
Title : CLP BNA Calibration
Last Update : Thu Sep 06 15:00:14 2007
Response via : Initial Calibration
DataAcq Meth : 8270F

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	8.39	152	389352	40.00	ug/ml	-0.03
29) Naphthalene-d8	11.48	136	1747340	40.00	ug/ml	-0.02
47) Acenaphthene-d10	15.29	164	930094	40.00	ug/ml	-0.02
74) Phenanthrene-d10	18.27	188	1378091	40.00	ug/ml	-0.02
95) Chrysene-d12	23.59	240	992899	40.00	ug/ml	-0.03
115) Perylene-d12	26.23	264	478684	40.00	ug/ml	-0.02

System Monitoring Compounds						
7) 2-Fluorophenol	5.69	112	685950	49.71	ug/ml	-0.02
Spiked Amount 200.000	Range 21 - 100		Recovery = 24.86%			
10) Phenol-d5	7.84	99	944423	51.89	ug/ml	-0.03
Spiked Amount 200.000	Range 10 - 94		Recovery = 25.95%			
13) 2-Chlorophenol-d4	7.97	132	752869	50.39	ug/ml	-0.03
Spiked Amount 200.000	Range 27 - 123		Recovery = 25.20%#			
19) 1,2-Dichlorobenzene-d4	8.85	150	732965	49.27	ug/ml	-0.03
Spiked Amount 100.000	Range 32 - 220		Recovery = 49.27%			
30) Nitrobenzene-d5	9.87	82	872585	50.44	ug/ml	-0.03
Spiked Amount 100.000	Range 18 - 57		Recovery = 50.44%			
54) 2-Fluorobiphenyl	13.94	172	1323775	48.79	ug/ml	-0.02
Spiked Amount 100.000	Range 22 - 58		Recovery = 48.79%			
77) 2,4,6-Tribromophenol	16.93	330	126683	46.95	ug/ml	-0.02
Spiked Amount 200.000	Range 10 - 123		Recovery = 23.48%			
100) Terphenyl-d14	21.56	244	1107007	44.53	ug/ml	-0.02
Spiked Amount 100.000	Range 17 - 71		Recovery = 44.53%			

Target Compounds						Qvalue
2) bis(chloromethyl)ether	~~3.10~~	~~79~~	909304	61.30	ug/ml#	19
3) N-Nitrosodimethyl amine	3.13	42	468058	53.19	ug/ml#	55
4) Pyridine	3.10	79	923651	52.03	ug/ml#	50
5) 2-Picoline	4.40	93	803710	50.94	ug/ml#	97
9) Aniline	7.74	93	1083757	53.83	ug/ml	99
11) Phenol	7.86	94	1000328	51.92	ug/ml#	77
12) bis(2-Chloroethyl)ether	7.93	93	771396	44.93	ug/ml#	1
14) 2-Chlorophenol	8.01	128	749720	50.55	ug/ml	93
15) n-Decane	8.16	57	938534	49.53	ug/ml	90
16) 1,3-Dichlorobenzene	8.30	146	732702	49.21	ug/ml#	98
17) Benzyl Chloride	7.74	91	10632	75.39	ug/ml#	1
18) 1,4-Dichlorobenzene	8.43	146	756669	49.27	ug/ml#	98
20) 1,2-Dichlorobenzene	8.89	146	736307	49.99	ug/ml#	98
21) Benzyl alcohol	8.90	108	472179	51.64	ug/ml#	68
23) 2-Methylphenol	9.33	108	667638	51.25	ug/ml	95
24) bis(2-chloroisopropyl)ethe	9.28	45	1144331	48.23	ug/ml#	89

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

Quantitation Report (QT Reviewed)

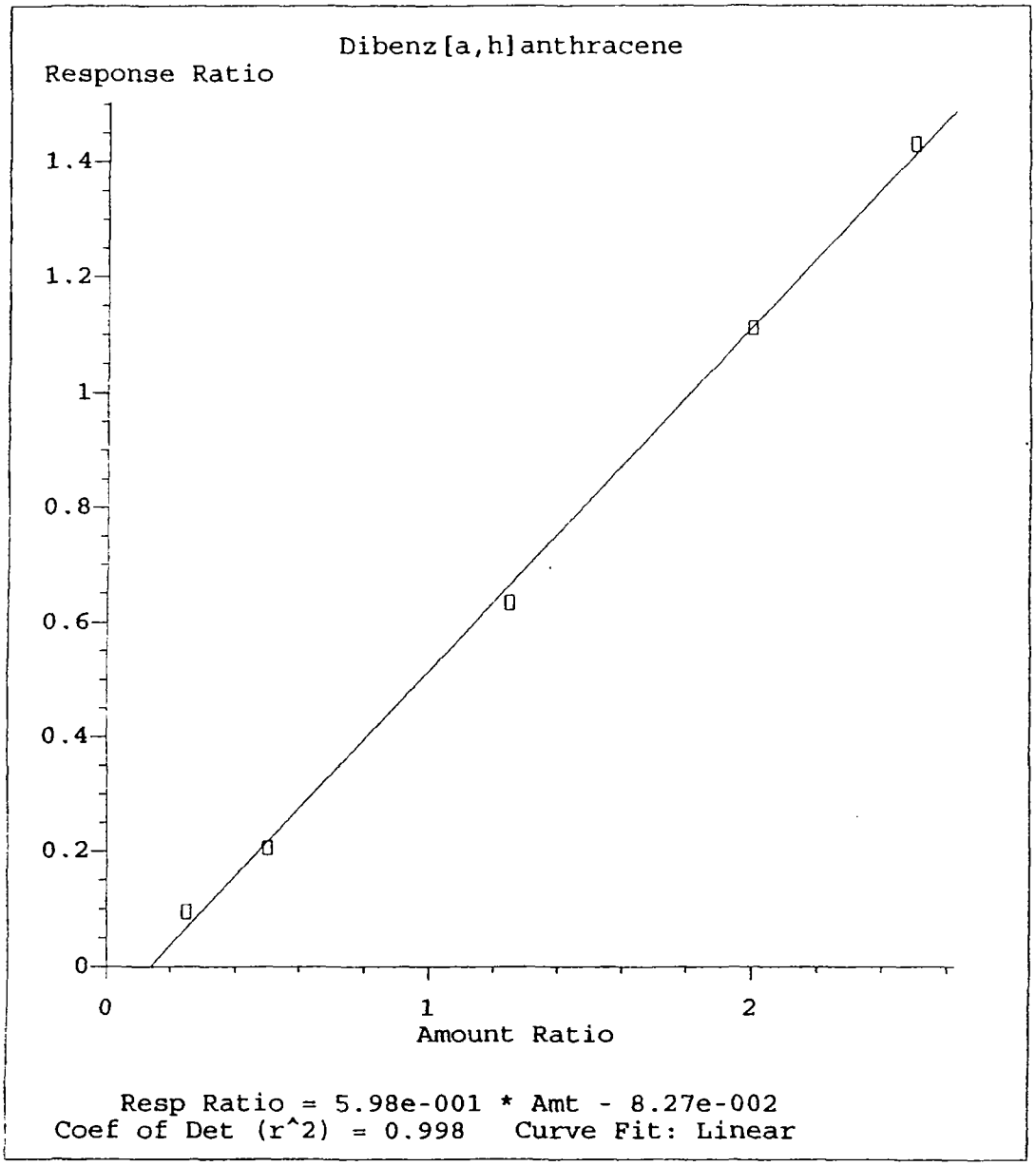
Data File : D:\F090607A\4016F.D
Acq On : 6 Sep 2007 3:30
Sample : SSTD050
Misc : CAL SSTD
MS Integration Params: RTEINT4.P
Quant Time: Sep 07 01:51:05 2007

Vial: 2
Operator: JCM
Inst : MSD #6
Multiplr: 1.00
Quant Results File: 8270F.RES

Quant Method : C:\MSDCHEM\1\METHODS\8270F.M (RTE Integrator)
Title : CLP BNA Calibration
Last Update : Thu Sep 06 15:00:14 2007
Response via : Initial Calibration
DataAcq Meth : 8270F

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
25)	Acetophenone	9.53	105	1088233	51.06	ug/ml#	84
26)	n-Nitroso-di-n-propylamine	9.66	70	600831	52.80	ug/ml#	14
27)	4-Methylphenol	9.69	108	706382	52.28	ug/ml	97
28)	Hexachloroethane	9.63	117	344421	49.72	ug/ml#	77
31)	Nitrobenzene	9.92	77	891718	50.38	ug/ml#	77
32)	Isophorone	10.51	82	1422016	47.98	ug/ml#	83
33)	2-Nitrophenol	10.68	139	368598	47.88	ug/ml#	70
34)	2,4-Dimethylphenol	10.93	107	733429	50.54	ug/ml	85
35)	bis(2-Chloroethoxy)methane	11.11	93	841633	47.87	ug/ml	98
36)	2,4-Dichlorophenol	11.28	162	483708	49.58	ug/ml#	91
37)	Benzoic acid	11.46	105	492390m	51.66	ug/ml	
38)	1,2,4-Trichlorobenzene	11.41	180	529271	48.37	ug/ml	98
39)	Naphthalene	11.52	128	2156893	50.04	ug/ml	99
40)	a-Terpineol	11.61	59	696240	51.53	ug/ml#	92
41)	4-Chloroaniline	11.77	127	734896	55.15	ug/ml	98
42)	Toluenediamine	11.97	122	20258	58.72	ug/ml	79
43)	Hexachlorobutadiene	11.97	225	255859	47.61	ug/ml	99
44)	4-Chloro-3-methylphenol	12.96	107	592631	48.31	ug/ml#	1
45)	2-Methylnaphthalene	13.08	141	2442309	101.83	ug/ml#	67
46)	1-Methylnaphthalene	13.29	142	1279226	49.75	ug/ml	97
48)	Phthalic Anhydride	13.44	104	148833m	28.52	ug/ml	
49)	Hexachlorocyclopentadiene	13.57	237	284082	45.26	ug/ml	99
50)	1,2,4,5-Tetrachlorobenzene	13.51	216	450474	48.58	ug/ml	98
51)	2,3-Dichloroaniline	13.77	161	645978	51.34	ug/ml	100
52)	2,4,6-Trichlorophenol	13.78	196	343932	49.66	ug/ml	99
53)	2,4,5-Trichlorophenol	13.89	196	338885	46.06	ug/ml	98
56)	2-Chloronaphthalene	14.09	162	1175718	48.38	ug/ml	95
58)	2-Nitroaniline	14.44	65	434508	48.19	ug/ml#	74
59)	Dimethylphthalate	14.95	163	1366947	53.04	ug/ml	99
60)	1,3-Dinitrobenzene	14.94	168	227608	49.48	ug/ml#	20
61)	2,6-Dinitrotoluene	15.06	165	287204	48.58	ug/ml#	37
62)	Acenaphthylene	14.96	152	2034027	51.03	ug/ml	98
63)	3-Nitroaniline	15.32	138	303082	51.91	ug/ml#	24
64)	Acenaphthene	15.35	153	1219171	50.33	ug/ml	98
65)	2,4-Dinitrophenol	15.53	184	146662	46.31	ug/ml#	56
66)	4-Nitrophenol	15.83	109	171513	52.50	ug/ml#	66
67)	Dibenzofuran	15.69	168	1655645	48.60	ug/ml	92
68)	2,4-Dinitrotoluene	15.85	165	366442	46.31	ug/ml#	40
69)	2,3,4,6-Tetrachlorophenol	16.07	232	201842	45.49	ug/ml	96
70)	Diethylphthalate	16.41	149	1440083	51.31	ug/ml	97
71)	Fluorene	16.39	166	1330260	49.38	ug/ml	99

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



Method Name: C:\MSDCHEM\1\METHODS\8270F.M
Calibration Table Last Updated: Mon Sep 10 12:37:28 2007

Quantitation Report (QT Reviewed)

Data File : D:\F090607A\4016F.D
Acq On : 6 Sep 2007 3:30
Sample : SSTD050
Misc : CAL SSTD
MS Integration Params: RTEINT4.P
Quant Time: Sep 07 01:51:05 2007

Vial: 2
Operator: JCM
Inst : MSD #6
Multiplr: 1.00
Quant Results File: 8270F.RES

Quant Method : C:\MSDCHEM\1\METHODS\8270F.M (RTE Integrator)
Title : CLP BNA Calibration
Last Update : Thu Sep 06 15:00:14 2007
Response via : Initial Calibration
DataAcq Meth : 8270F

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	8.39	152	389352	40.00	ug/ml	-0.03
29) Naphthalene-d8	11.48	136	1747340	40.00	ug/ml	-0.02
47) Acenaphthene-d10	15.29	164	930094	40.00	ug/ml	-0.02
74) Phenanthrene-d10	18.27	188	1378091	40.00	ug/ml	-0.02
95) Chrysene-d12	23.59	240	992899	40.00	ug/ml	-0.03
115) Perylene-d12	26.23	264	478684	40.00	ug/ml	-0.02

System Monitoring Compounds						
7) 2-Fluorophenol	5.69	112	685950	49.71	ug/ml	-0.02
Spiked Amount 200.000	Range 21 - 100		Recovery = 24.86%			
10) Phenol-d5	7.84	99	944423	51.89	ug/ml	-0.03
Spiked Amount 200.000	Range 10 - 94		Recovery = 25.95%			
13) 2-Chlorophenol-d4	7.97	132	752869	50.39	ug/ml	-0.03
Spiked Amount 200.000	Range 27 - 123		Recovery = 25.20%#			
19) 1,2-Dichlorobenzene-d4	8.85	150	732965	49.27	ug/ml	-0.03
Spiked Amount 100.000	Range 32 - 220		Recovery = 49.27%			
30) Nitrobenzene-d5	9.87	82	872585	50.44	ug/ml	-0.03
Spiked Amount 100.000	Range 18 - 57		Recovery = 50.44%			
54) 2-Fluorobiphenyl	13.94	172	1323775	48.79	ug/ml	-0.02
Spiked Amount 100.000	Range 22 - 58		Recovery = 48.79%			
77) 2,4,6-Tribromophenol	16.93	330	126683	46.95	ug/ml	-0.02
Spiked Amount 200.000	Range 10 - 123		Recovery = 23.48%			
100) Terphenyl-d14	21.56	244	1107007	44.53	ug/ml	-0.02
Spiked Amount 100.000	Range 17 - 71		Recovery = 44.53%			

Target Compounds						Qvalue
2) bis(chloromethyl)ether	~~3.10~~	~~79~~	909304	61.30	ug/ml#	19
3) N-Nitrosodimethyl amine	3.13	42	468058	53.19	ug/ml#	55
4) Pyridine	3.10	79	923651	52.03	ug/ml#	50
5) 2-Picoline	4.40	93	803710	50.94	ug/ml#	97
9) Aniline	7.74	93	1083757	53.83	ug/ml	99
11) Phenol	7.86	94	1000328	51.92	ug/ml#	77
12) bis(2-Chloroethyl)ether	7.93	93	771396	44.93	ug/ml#	1
14) 2-Chlorophenol	8.01	128	749720	50.55	ug/ml	93
15) n-Decane	8.16	57	938534	49.53	ug/ml	90
16) 1,3-Dichlorobenzene	8.30	146	732702	49.21	ug/ml#	98
17) Benzyl Chloride	7.74	91	10632	75.39	ug/ml#	1
18) 1,4-Dichlorobenzene	8.43	146	756669	49.27	ug/ml#	98
20) 1,2-Dichlorobenzene	8.89	146	736307	49.99	ug/ml#	98
21) Benzyl alcohol	8.90	108	472179	51.64	ug/ml#	68
23) 2-Methylphenol	9.33	108	667638	51.25	ug/ml	95
24) bis(2-chloroisopropyl)ethe	9.28	45	1144331	48.23	ug/ml#	89

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

Quantitation Report (QT Reviewed)

Data File : D:\F090607A\4016F.D
Acq On : 6 Sep 2007 3:30
Sample : SSTD050
Misc : CAL SSTD
MS Integration Params: RTEINT4.P
Quant Time: Sep 07 01:51:05 2007

Vial: 2
Operator: JCM
Inst : MSD #6
Multiplr: 1.00
Quant Results File: 8270F.RES

Quant Method : C:\MSDCHEM\1\METHODS\8270F.M (RTE Integrator)
Title : CLP BNA Calibration
Last Update : Thu Sep 06 15:00:14 2007
Response via : Initial Calibration
DataAcq Meth : 8270F

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
25)	Acetophenone	9.53	105	1088233	51.06 ug/ml#	84
26)	n-Nitroso-di-n-propylamine	9.66	70	600831	52.80 ug/ml#	14
27)	4-Methylphenol	9.69	108	706382	52.28 ug/ml	97
28)	Hexachloroethane	9.63	117	344421	49.72 ug/ml#	77
31)	Nitrobenzene	9.92	77	891718	50.38 ug/ml#	77
32)	Isophorone	10.51	82	1422016	47.98 ug/ml#	83
33)	2-Nitrophenol	10.68	139	368598	47.88 ug/ml#	70
34)	2,4-Dimethylphenol	10.93	107	733429	50.54 ug/ml	85
35)	bis(2-Chloroethoxy)methane	11.11	93	841633	47.87 ug/ml	98
36)	2,4-Dichlorophenol	11.28	162	483708	49.58 ug/ml#	91
37)	Benzoic acid	11.46	105	492390m	51.66 ug/ml	
38)	1,2,4-Trichlorobenzene	11.41	180	529271	48.37 ug/ml	98
39)	Naphthalene	11.52	128	2156893	50.04 ug/ml	99
40)	a-Terpineol	11.61	59	696240	51.53 ug/ml#	92
41)	4-Chloroaniline	11.77	127	734896	55.15 ug/ml	98
42)	Toluenediamine	11.97	122	20258	58.72 ug/ml	79
43)	Hexachlorobutadiene	11.97	225	255859	47.61 ug/ml	99
44)	4-Chloro-3-methylphenol	12.96	107	592631	48.31 ug/ml#	1
45)	2-Methylnaphthalene	13.08	141	2442309	101.83 ug/ml#	67
46)	1-Methylnaphthalene	13.29	142	1279226	49.75 ug/ml	97
48)	Phthalic Anhydride	13.44	104	148833m	28.52 ug/ml	
49)	Hexachlorocyclopentadiene	13.57	237	284082	45.26 ug/ml	99
50)	1,2,4,5-Tetrachlorobenzene	13.51	216	450474	48.58 ug/ml	98
51)	2,3-Dichloroaniline	13.77	161	645978	51.34 ug/ml	100
52)	2,4,6-Trichlorophenol	13.78	196	343932	49.66 ug/ml	99
53)	2,4,5-Trichlorophenol	13.89	196	338885	46.06 ug/ml	98
56)	2-Chloronaphthalene	14.09	162	1175718	48.38 ug/ml	95
58)	2-Nitroaniline	14.44	65	434508	48.19 ug/ml#	74
59)	Dimethylphthalate	14.95	163	1366947	53.04 ug/ml	99
60)	1,3-Dinitrobenzene	14.94	168	227608	49.48 ug/ml#	20
61)	2,6-Dinitrotoluene	15.06	165	287204	48.58 ug/ml#	37
62)	Acenaphthylene	14.96	152	2034027	51.03 ug/ml	98
63)	3-Nitroaniline	15.32	138	303082	51.91 ug/ml#	24
64)	Acenaphthene	15.35	153	1219171	50.33 ug/ml	98
65)	2,4-Dinitrophenol	15.53	184	146662	46.31 ug/ml#	56
66)	4-Nitrophenol	15.83	109	171513	52.50 ug/ml#	66
67)	Dibenzofuran	15.69	168	1655645	48.60 ug/ml	92
68)	2,4-Dinitrotoluene	15.85	165	366442	46.31 ug/ml#	40
69)	2,3,4,6-Tetrachlorophenol	16.07	232	201842	45.49 ug/ml	96
70)	Diethylphthalate	16.41	149	1440083	51.31 ug/ml	97
71)	Fluorene	16.39	166	1330260	49.38 ug/ml	99

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

Quantitation Report (QT Reviewed)

Data File : D:\F090607A\4016F.D
Acq On : 6 Sep 2007 3:30
Sample : SSTD050
Misc : CAL SSTD
MS Integration Params: RTEINT4.P
Quant Time: Sep 07 01:51:05 2007

Vial: 2
Operator: JCM
Inst : MSD #6
Multiplr: 1.00
Quant Results File: 8270F.RES

Quant Method : C:\MSDCHEM\1\METHODS\8270F.M (RTE Integrator)
Title : CLP BNA Calibration
Last Update : Thu Sep 06 15:00:14 2007
Response via : Initial Calibration
DataAcq Meth : 8270F

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
72)	4-Chlorophenyl-phenylether	16.44	204	565570	49.16	ug/ml	94
73)	4-Nitroaniline	16.62	138	292754	50.49	ug/ml#	28
75)	4,6-Dinitro-2-methylphenol	16.68	198	198427	46.09	ug/ml	100
76)	n-Nitrosodiphenylamine	16.72	169	898592	50.27	ug/ml#	79
78)	Azobenzene	16.76	77	2003353	52.16	ug/ml#	79
79)	alpha-BHC	17.51	181	228758	47.39	ug/ml#	81
80)	4-Bromophenyl-phenylether	17.41	248	280889	47.76	ug/ml	96
81)	Hexachlorobenzene	17.66	284	281230	47.02	ug/ml	88
82)	beta-BHC	18.03	181	179214	48.66	ug/ml	100
83)	Pentachlorophenol	18.08	266	157467	47.84	ug/ml	97
84)	gamma-BHC	18.11	181	186955	49.61	ug/ml	96
85)	n-Octadecane	18.23	57	1160766	51.19	ug/ml#	85
86)	Phenanthrene	18.32	178	1819308	50.60	ug/ml	99
87)	Anthracene	18.41	178	1793297	50.33	ug/ml	99
88)	delta-BHC	18.53	181	183856	52.97	ug/ml	96
89)	Carbazole	18.80	167	3161109	101.46	ug/ml	96
90)	Heptachlor	19.35	272	131832	48.10	ug/ml	82
91)	Di-n-butylphthalate	19.69	149	2132341	49.90	ug/ml#	98
92)	Aldrin	19.93	263	73109	49.24	ug/ml#	62
93)	Heptachlor epoxide	20.59	81	211781	53.16	ug/ml#	85
94)	Fluoranthene	20.71	202	1508690	48.30	ug/ml#	87
96)	Benzidine	21.05	184	373934	46.19	ug/ml#	100
97)	Pyrene	21.13	202	1516858	44.56	ug/ml#	85
98)	alpha-Endosulfan	21.18	237	40252	46.90	ug/ml	87
99)	p,p'-DDE	21.53	246	314935	45.01	ug/ml#	67
101)	Dieldrin	21.60	79	503647	49.83	ug/ml	96
102)	Endrin	21.95	195	14729	45.27	ug/ml#	39
103)	Endrin aldehyde	21.95	67	46074	47.95	ug/ml#	95
104)	beta-Endosulfan	22.09	195	45910	42.79	ug/ml	95
105)	p,p'-DDD	22.17	235	449101	41.74	ug/ml#	80
106)	Butylbenzylphthalate	22.66	149	710341	42.09	ug/ml#	67
107)	Endosulfan sulfate	22.76	272	67317	49.46	ug/ml	67
108)	p,p'-DDT	22.75	235	452256	44.92	ug/ml	98
109)	4,4'-Methylene-Bis(2-chlor	23.60	231	195977	61.50	ug/ml#	80
110)	Methoxychlor	23.61	227	1085723m	50.39	ug/ml	
111)	Benzo[a]anthracene	23.55	228	1087241	45.87	ug/ml#	89
112)	3,3'-Dichlorobenzidine	23.60	252	420400	63.87	ug/ml	99
113)	Chrysene	23.65	228	1265029	48.37	ug/ml#	57
114)	bis(2-Ethylhexyl)phthalate	23.91	149	1111249	47.34	ug/ml#	98
116)	Di-n-octylphthalate	25.07	149	1601884	35.76	ug/ml	100
117)	Benzo[b]fluoranthene	25.59	252	868471m	48.11	ug/ml	

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

Quantitation Report (QT Reviewed)

Data File : D:\F090607A\4016F.D
Acq On : 6 Sep 2007 3:30
Sample : SSTD050
Misc : CAL SSTD
MS Integration Params: RTEINT4.P
Quant Time: Sep 07 01:51:05 2007

Vial: 2
Operator: JCM
Inst : MSD #6
Multiplr: 1.00
Quant Results File: 8270F.RES

Quant Method : C:\MSDCHEM\1\METHODS\8270F.M (RTE Integrator)
Title : CLP BNA Calibration
Last Update : Thu Sep 06 15:00:14 2007
Response via : Initial Calibration
DataAcq Meth : 8270F

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
118)	Benzo[k]fluoranthene	25.64	252	841353	49.85	ug/ml	99
119)	Benzo[a]pyrene	26.14	252	661977	49.08	ug/ml	99
120)	Indeno[1,2,3-cd]pyrene	28.18	276	350006	46.31	ug/ml#	83
121)	Dibenz[a,h]anthracene	28.22	278	303451	46.14	ug/ml	93
122)	Benzo[g,h,i]perylene	28.72	276	269713	46.33	ug/ml	97

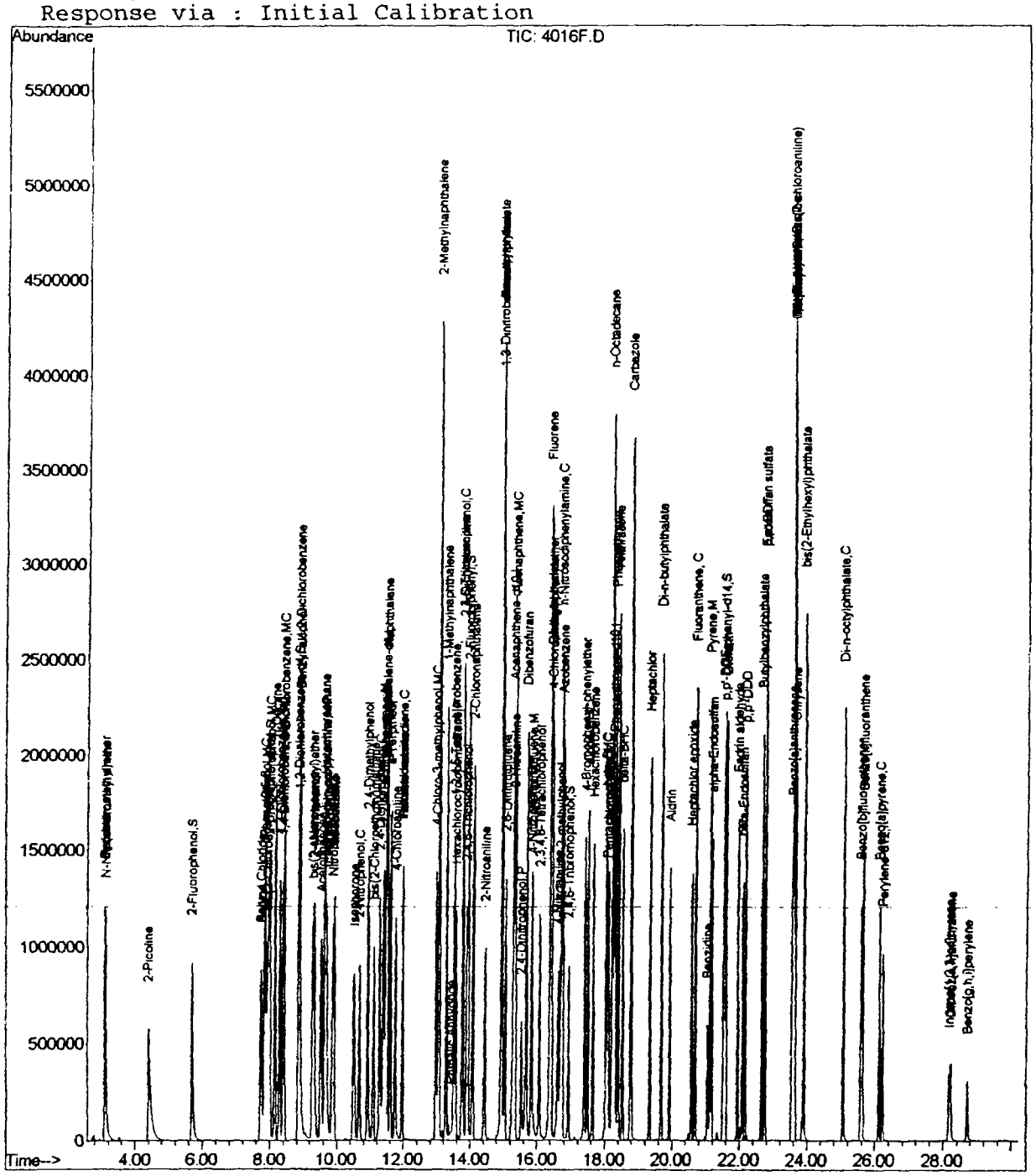
(#) = qualifier out of range (m) = manual integration

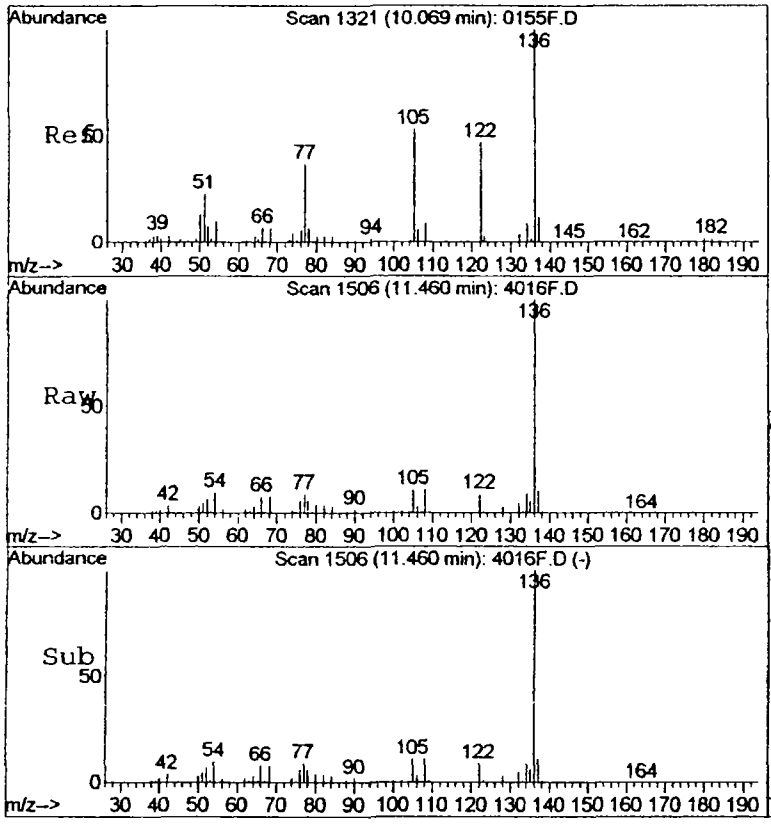
Quantitation Report (QT Reviewed)

Data File : D:\F090607A\4016F.D
Acq On : 6 Sep 2007 3:30
Sample : SSTD050
Misc : CAL SSTD
MS Integration Params: RTEINT4.P
Quant Time: Sep 7 1:53 2007

Vial: 2
Operator: JCM
Inst : MSD #6
Multiplr: 1.00
Quant Results File: 8270F.RES

Method : C:\MSDCHEM\1\METHODS\8270F.M (RTE Integrator)
Title : CLP BNA Calibration
Last Update : Fri Sep 07 04:02:55 2007
Response via : Initial Calibration

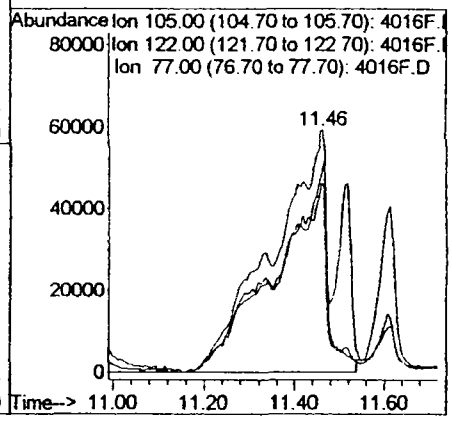


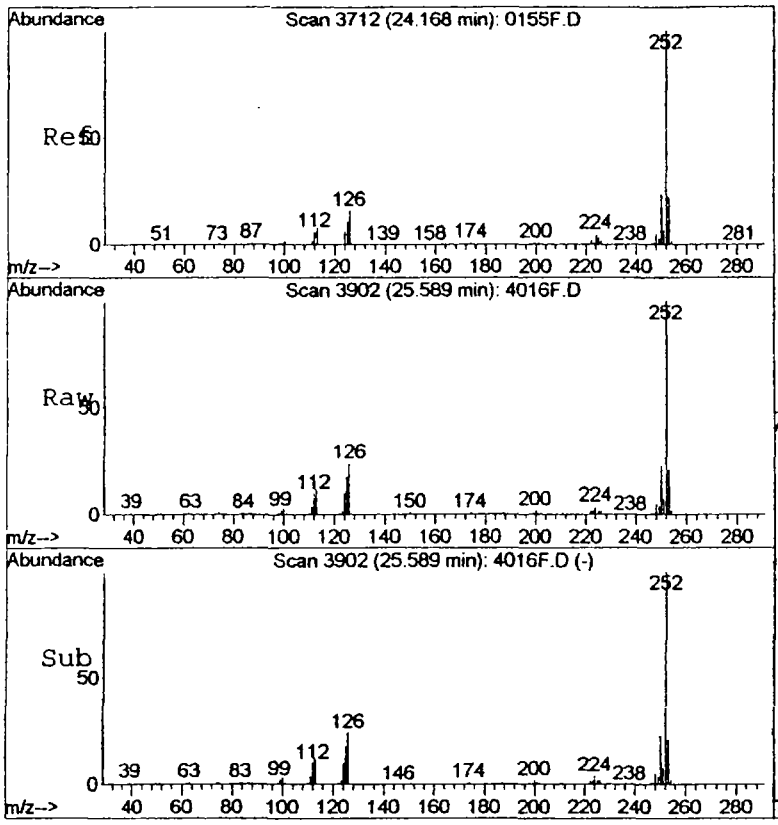


#37
Benzoic acid
Concen: 51.66 ug/ml m
RT: 11.46 min Scan# 1506
Delta R.T. -0.02 min
Lab File: 4016F.D
Acq: 6 Sep 2007 3:30

Tgt Ion:105 Resp: 492390

Ion	Ratio	Lower	Upper
105	100		
122	7.3	0.0	0.0#
77	6.1	33.6	50.4#

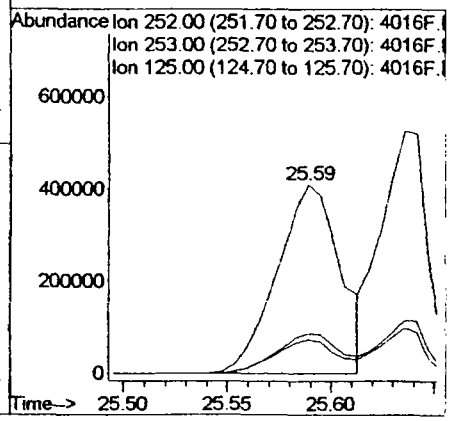




#117
Benzo[b]fluoranthene
Concen: 48.11 ug/ml m
RT: 25.59 min Scan# 3902
Delta R.T. -0.02 min
Lab File: 4016F.D
Acq: 6 Sep 2007 3:30

Tgt Ion:252 Resp: 868471

Ion	Ratio	Lower	Upper
252	100		
253	19.4	17.4	26.0
125	16.3	15.7	23.5



Quantitation Report (QT Reviewed)

Data File : D:\F090607A\4017F.D
Acq On : 6 Sep 2007 4:08
Sample : SSTD010
Misc : CAL SSTD
MS Integration Params: RTEINT4.P
Quant Time: Sep 07 01:54:17 2007

Vial: 3
Operator: JCM
Inst : MSD #6
Multiplr: 1.00
Quant Results File: 8270F.RES

Quant Method : C:\MSDCHEM\1\METHODS\8270F.M (RTE Integrator)
Title : CLP BNA Calibration
Last Update : Thu Sep 06 15:00:14 2007
Response via : Initial Calibration
DataAcq Meth : 8270F

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	8.38	152	385053	40.00	ug/ml	-0.04
29) Naphthalene-d8	11.46	136	1697413	40.00	ug/ml	-0.04
47) Acenaphthene-d10	15.28	164	889882	40.00	ug/ml	-0.04
74) Phenanthrene-d10	18.25	188	1247402	40.00	ug/ml	-0.04
95) Chrysene-d12	23.58	240	822829	40.00	ug/ml	-0.04
115) Perylene-d12	26.23	264	516889	40.00	ug/ml	-0.03
System Monitoring Compounds						
7) 2-Fluorophenol	5.70	112	124654	9.13	ug/ml	-0.01
Spiked Amount 200.000	Range 21 - 100		Recovery = 4.57%#			
10) Phenol-d5	7.82	99	175464	9.75	ug/ml	-0.05
Spiked Amount 200.000	Range 10 - 94		Recovery = 4.88%#			
13) 2-Chlorophenol-d4	7.95	132	136914	9.27	ug/ml	-0.05
Spiked Amount 200.000	Range 27 - 123		Recovery = 4.63%#			
19) 1,2-Dichlorobenzene-d4	8.84	150	139018	9.45	ug/ml	-0.04
Spiked Amount 100.000	Range 32 - 220		Recovery = 9.45%#			
30) Nitrobenzene-d5	9.84	82	161285	9.60	ug/ml	-0.06
Spiked Amount 100.000	Range 18 - 57		Recovery = 9.60%#			
54) 2-Fluorobiphenyl	13.92	172	234522	9.04	ug/ml	-0.04
Spiked Amount 100.000	Range 22 - 58		Recovery = 9.04%#			
77) 2,4,6-Tribromophenol	16.91	330	19536	8.00	ug/ml	-0.04
Spiked Amount 200.000	Range 10 - 123		Recovery = 4.00%#			
100) Terphenyl-d14	21.54	244	181335	8.80	ug/ml	-0.05
Spiked Amount 100.000	Range 17 - 71		Recovery = 8.80%#			

Target Compounds						Qvalue
2) bis(chloromethyl)ether	3.10	79	167086	11.39	ug/ml#	20
3) N-Nitrosodimethyl amine	3.11	42	88387	10.16	ug/ml#	60
4) Pyridine	3.10	79	169224	9.64	ug/ml#	49
5) 2-Picoline	4.40	93	157610	10.10	ug/ml	98
9) Aniline	7.72	93	198320	9.96	ug/ml	98
11) Phenol	7.84	94	182987	9.60	ug/ml#	78
12) bis(2-Chloroethyl)ether	7.90	93	143591	8.46	ug/ml#	1
14) 2-Chlorophenol	7.99	128	135595	9.24	ug/ml	93
15) n-Decane	8.15	57	171797	9.17	ug/ml	91
16) 1,3-Dichlorobenzene	8.28	146	138150	9.38	ug/ml#	98
17) Benzyl Chloride	7.72	91	1848	13.25	ug/ml#	1
18) 1,4-Dichlorobenzene	8.42	146	144688	9.53	ug/ml	98
20) 1,2-Dichlorobenzene	8.87	146	132252	9.08	ug/ml#	97
21) Benzyl alcohol	8.88	108	73553	8.13	ug/ml#	64
23) 2-Methylphenol	9.30	108	127101	9.87	ug/ml	97
24) bis(2-chloroisopropyl)ethe	9.26	45	220674	9.40	ug/ml#	89

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

Quantitation Report (QT Reviewed)

Data File : D:\F090607A\4017F.D
Acq On : 6 Sep 2007 4:08
Sample : SSTD010
Misc : CAL SSTD
MS Integration Params: RTEINT4.P
Quant Time: Sep 07 01:54:17 2007

Vial: 3
Operator: JCM
Inst : MSD #6
Multiplr: 1.00
Quant Results File: 8270F.RES

Quant Method : C:\MSDCHEM\1\METHODS\8270F.M (RTE Integrator)
Title : CLP BNA Calibration
Last Update : Thu Sep 06 15:00:14 2007
Response via : Initial Calibration
DataAcq Meth : 8270F

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
25)	Acetophenone	9.50	105	203283	9.64	ug/ml#	84
26)	n-Nitroso-di-n-propylamine	9.61	70	110172	9.79	ug/ml#	10
27)	4-Methylphenol	9.68	108	126486	9.47	ug/ml	95
28)	Hexachloroethane	9.62	117	65244	9.52	ug/ml#	75
31)	Nitrobenzene	9.89	77	171287	9.96	ug/ml#	75
32)	Isophorone	10.47	82	280931	9.76	ug/ml#	83
33)	2-Nitrophenol	10.66	139	68453	9.15	ug/ml#	72
34)	2,4-Dimethylphenol	10.91	107	137364	9.74	ug/ml	84
35)	bis(2-Chloroethoxy)methane	11.08	93	167818	9.83	ug/ml	98
36)	2,4-Dichlorophenol	11.27	162	83028	8.76	ug/ml#	91
37)	Benzoic acid	11.28	105	57448m	10.66	ug/ml	
38)	1,2,4-Trichlorobenzene	11.38	180	99079	9.32	ug/ml	97
39)	Naphthalene	11.50	128	410838	9.81	ug/ml	99
40)	a-Terpineol	11.58	59	130824	9.97	ug/ml#	91
41)	4-Chloroaniline	11.75	127	143687	11.10	ug/ml	99
42)	Toluenediamine	11.96	122	3535	10.55	ug/ml#	60
43)	Hexachlorobutadiene	11.97	225	47089	9.02	ug/ml	98
44)	4-Chloro-3-methylphenol	12.96	107	103962	8.72	ug/ml#	1
45)	2-Methylnaphthalene	13.05	141	438665	18.83	ug/ml#	68
46)	1-Methylnaphthalene	13.27	142	228547	9.15	ug/ml	96
48)	Phthalic Anhydride	13.32	104	38406	7.69	ug/ml#	79
49)	Hexachlorocyclopentadiene	13.56	237	35377	10.43	ug/ml	98
50)	1,2,4,5-Tetrachlorobenzene	13.50	216	79594	8.97	ug/ml	99
51)	2,3-Dichloroaniline	13.75	161	112667	9.36	ug/ml	99
52)	2,4,6-Trichlorophenol	13.78	196	55482	8.37	ug/ml	98
53)	2,4,5-Trichlorophenol	13.90	196	56184	7.98	ug/ml	97
56)	2-Chloronaphthalene	14.07	162	211435	9.09	ug/ml	95
58)	2-Nitroaniline	14.43	65	75081	8.70	ug/ml#	74
59)	Dimethylphthalate	14.92	163	224620	9.11	ug/ml#	84
60)	1,3-Dinitrobenzene	14.92	168	36354	8.26	ug/ml#	2
61)	2,6-Dinitrotoluene	15.03	165	50648	8.95	ug/ml#	29
62)	Acenaphthylene	14.95	152	344280	9.03	ug/ml	98
63)	3-Nitroaniline	15.30	138	61856	11.07	ug/ml#	14
64)	Acenaphthene	15.33	153	215487	9.30	ug/ml	99
65)	2,4-Dinitrophenol	15.53	184	13064	14.48	ug/ml#	48
66)	4-Nitrophenol	15.87	109	15995	14.36	ug/ml#	63
67)	Dibenzofuran	15.66	168	290471	8.91	ug/ml	93
68)	2,4-Dinitrotoluene	15.82	165	61945	8.18	ug/ml#	63
69)	2,3,4,6-Tetrachlorophenol	16.06	232	33092	7.80	ug/ml	99
70)	Diethylphthalate	16.38	149	235003	8.75	ug/ml	97
71)	Fluorene	16.37	166	223190	8.66	ug/ml	98

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

Quantitation Report (QT Reviewed)

Data File : D:\F090607A\4017F.D
Acq On : 6 Sep 2007 4:08
Sample : SSTD010
Misc : CAL SSTD
MS Integration Params: RTEINT4.P
Quant Time: Sep 07 01:54:17 2007

Vial: 3
Operator: JCM
Inst : MSD #6
Multiplr: 1.00
Quant Results File: 8270F.RES

Quant Method : C:\MSDCHEM\1\METHODS\8270F.M (RTE Integrator)
Title : CLP BNA Calibration
Last Update : Thu Sep 06 15:00:14 2007
Response via : Initial Calibration
DataAcq Meth : 8270F

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
72)	4-Chlorophenyl-phenylether	16.42	204	91453	8.31	ug/ml	93
73)	4-Nitroaniline	16.56	138	52169	9.40	ug/ml#	30
75)	4,6-Dinitro-2-methylphenol	16.64	198	28436	7.30	ug/ml	100
76)	n-Nitrosodiphenylamine	16.69	169	140520	8.69	ug/ml#	77
78)	Azobenzene	16.73	77	343945	9.89	ug/ml#	79
79)	alpha-BHC	17.49	181	39847	9.12	ug/ml#	78
80)	4-Bromophenyl-phenylether	17.39	248	46009	8.64	ug/ml	94
81)	Hexachlorobenzene	17.65	284	46831	8.65	ug/ml	90
82)	beta-BHC	18.01	181	31076m	9.32	ug/ml	
83)	Pentachlorophenol	18.06	266	16747	16.41	ug/ml	95
84)	gamma-BHC	18.09	181	33488	9.82	ug/ml	94
85)	n-Octadecane	18.21	57	196423	9.57	ug/ml#	85
86)	Phenanthrene	18.29	178	296888m	9.12	ug/ml	
87)	Anthracene	18.38	178	286550	8.89	ug/ml	98
88)	delta-BHC	18.52	181	29503	9.39	ug/ml	100
89)	Carbazole	18.76	167	531006	18.83	ug/ml	96
90)	Heptachlor	19.34	272	21382	8.62	ug/ml	76
91)	Di-n-butylphthalate	19.67	149	379465	9.81	ug/ml#	98
92)	Aldrin	19.93	263	12486	9.29	ug/ml#	42
93)	Heptachlor epoxide	20.58	81	40021	11.10	ug/ml#	83
94)	Fluoranthene	20.68	202	267599	9.46	ug/ml#	87
96)	Benzidine	21.04	184	58607	8.74	ug/ml#	100
97)	Pyrene	21.11	202	268101	9.50	ug/ml#	83
98)	alpha-Endosulfan	21.17	237	7254	10.20	ug/ml	80
99)	p,p'-DDE	21.51	246	52787	9.10	ug/ml#	67
101)	Dieldrin	21.59	79	91765	10.96	ug/ml#	95
102)	Endrin	21.94	195	2509	9.31	ug/ml#	25
103)	Endrin aldehyde	21.93	67	9235	11.60	ug/ml#	85
104)	beta-Endosulfan	22.08	195	8502	9.56	ug/ml	94
105)	p,p'-DDD	22.16	235	79263	8.89	ug/ml#	78
106)	Butylbenzylphthalate	22.65	149	134127	9.59	ug/ml#	64
107)	Endosulfan sulfate	22.74	272	11612	10.30	ug/ml#	60
108)	p,p'-DDT	22.74	235	72927	8.74	ug/ml	95
109)	4,4'-Methylene-Bis(2-chlor	23.58	231	29109	11.02	ug/ml#	72
110)	Methoxychlor	23.59	227	177385	9.93	ug/ml#	4
111)	Benzo[a]anthracene	23.54	228	172202	8.77	ug/ml#	88
112)	3,3'-Dichlorobenzidine	23.58	252	59891	10.98	ug/ml#	92
113)	Chrysene	23.62	228	206778	9.54	ug/ml#	57
114)	bis(2-Ethylhexyl)phthalate	23.90	149	203119	10.44	ug/ml	97
116)	Di-n-octylphthalate	25.06	149	276058	9.87	ug/ml	99
117)	Benzo[b]fluoranthene	25.57	252	138834m	7.12	ug/ml	

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

Quantitation Report (QT Reviewed)

Data File : D:\F090607A\4017F.D
Acq On : 6 Sep 2007 4:08
Sample : SSTD010
Misc : CAL SSTD
MS Integration Params: RTEINT4.P
Quant Time: Sep 07 01:54:17 2007

Vial: 3
Operator: JCM
Inst : MSD #6
Multiplr: 1.00
Quant Results File: 8270F.RES

Quant Method : C:\MSDCHEM\1\METHODS\8270F.M (RTE Integrator)
Title : CLP BNA Calibration
Last Update : Thu Sep 06 15:00:14 2007
Response via : Initial Calibration
DataAcq Meth : 8270F

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
118)	Benzo[k]fluoranthene	25.61	252	139373	7.65	ug/ml	98
119)	Benzo[a]pyrene	26.12	252	119175	8.18	ug/ml	99
120)	Indeno[1,2,3-cd]pyrene	28.18	276	62250	7.63	ug/ml#	73
121)	Dibenz[a,h]anthracene	28.22	278	49023	6.90	ug/ml	92
122)	Benzo[g,h,i]perylene	28.71	276	50345	8.01	ug/ml	94

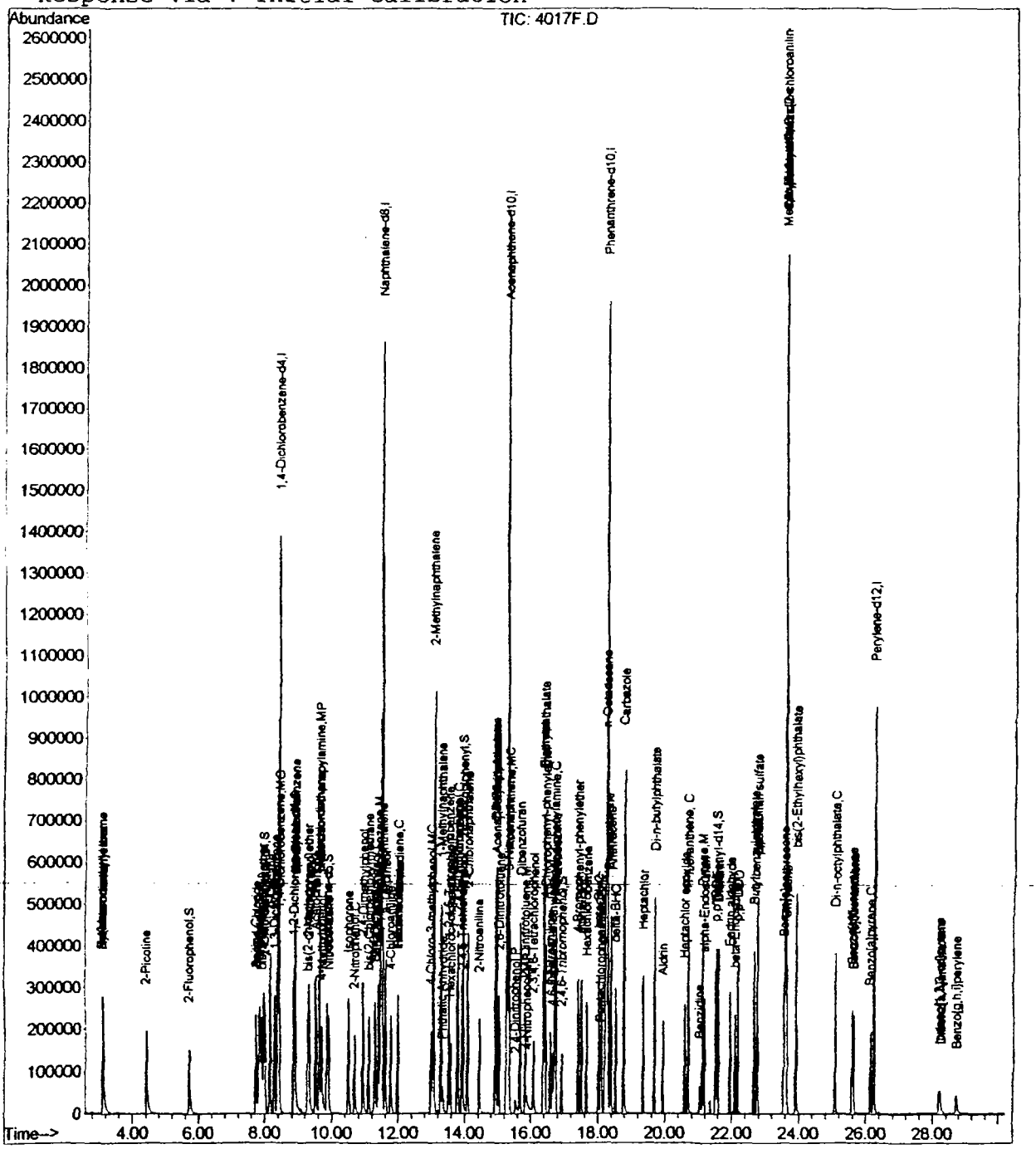
(#) = qualifier out of range (m) = manual integration

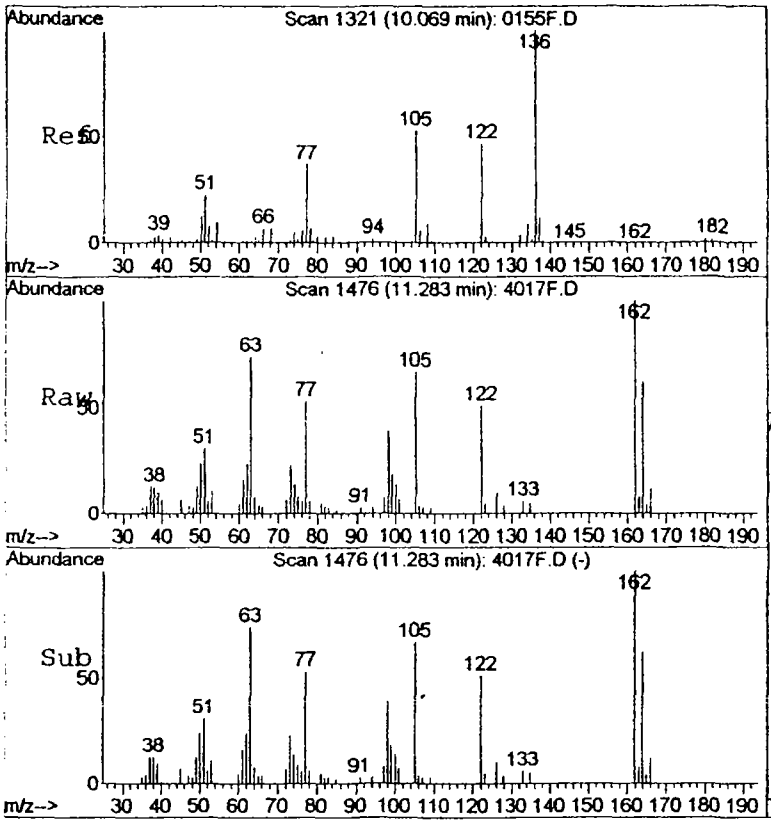
Quantitation Report (QT Reviewed)

Data File : D:\F090607A\4017F.D
Acq On : 6 Sep 2007 4:08
Sample : SSTD010
Misc : CAL SSTD
MS Integration Params: RTEINT4.P
Quant Time: Sep 7 2:35 2007

Vial: 3
Operator: JCM
Inst : MSD #6
Multiplr: 1.00
Quant Results File: 8270F.RES

Method : C:\MSDCHEM\1\METHODS\8270F.M (RTE Integrator)
Title : CLP BNA Calibration
Last Update : Fri Sep 07 04:02:55 2007
Response via : Initial Calibration

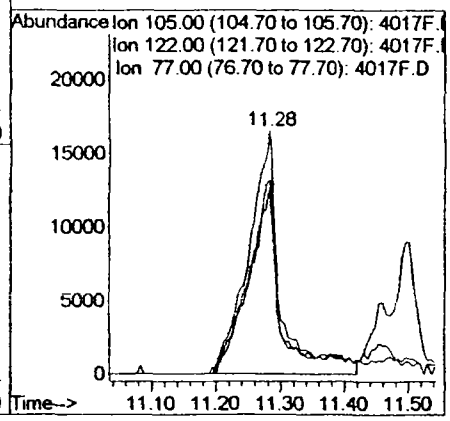


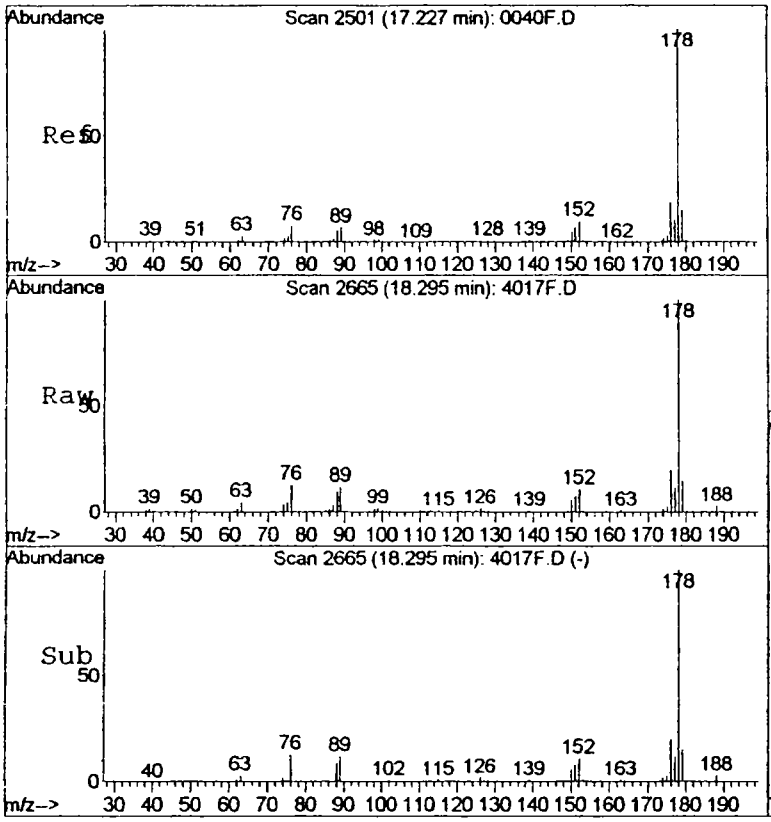


#37
Benzoic acid
Concen: 10.66 ug/ml m
RT: 11.28 min Scan# 1476
Delta R.T. -0.20 min
Lab File: 4017F.D
Acq: 6 Sep 2007 4:08

Tgt Ion:105 Resp: 57448

Ion	Ratio	Lower	Upper
105	100		
122	0.0	0.0	0.0
77	13.0	33.6	50.4#

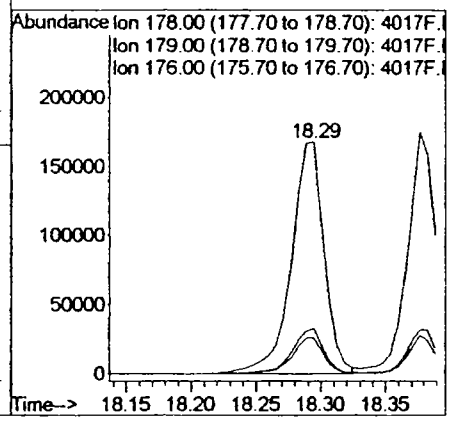


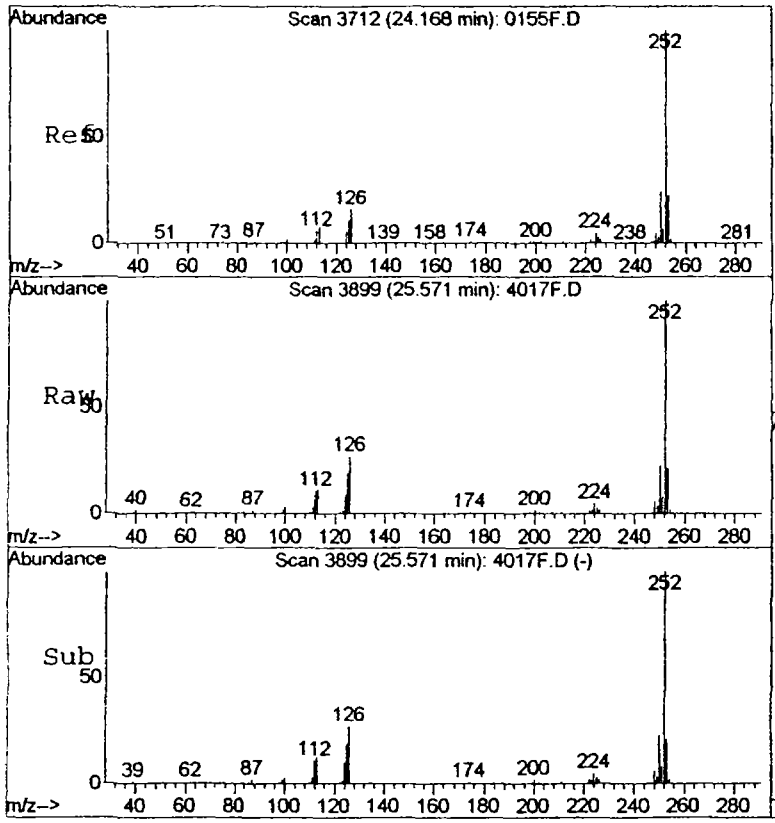


#86
Phenanthrene
Concen: 9.12 ug/ml m
RT: 18.29 min Scan# 2665
Delta R.T. -0.05 min
Lab File: 4017F.D
Acq: 6 Sep 2007 4:08

Tgt Ion:178 Resp: 296888

Ion	Ratio	Lower	Upper
178	100		
179	14.5	11.8	17.8
176	18.4	14.6	22.0

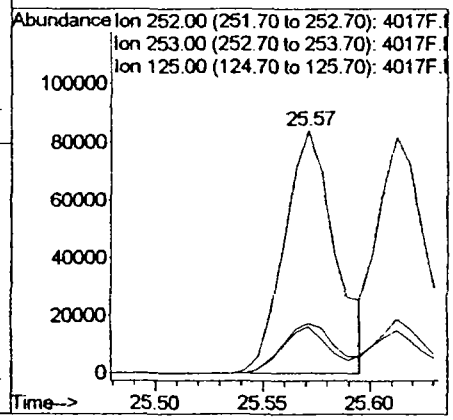




#117
Benzo[b]fluoranthene
Concen: 7.12 ug/ml m
RT: 25.57 min Scan# 3899
Delta R.T. -0.04 min
Lab File: 4017F.D
Acq: 6 Sep 2007 4:08

Tgt Ion:252 Resp: 138834

Ion	Ratio	Lower	Upper
252	100		
253	20.7	17.4	26.0
125	18.7	15.7	23.5



Quantitation Report (QT Reviewed)

Data File : D:\F090607A\4018F.D
Acq On : 6 Sep 2007 4:47
Sample : SSTD020
Misc : CAL SSTD
MS Integration Params: RTEINT4.P
Quant Time: Sep 07 02:35:14 2007

Vial: 4
Operator: JCM
Inst : MSD #6
Multiplr: 1.00
Quant Results File: 8270F.RES

Quant Method : C:\MSDCHEM\1\METHODS\8270F.M (RTE Integrator)
Title : CLP BNA Calibration
Last Update : Thu Sep 06 15:00:14 2007
Response via : Initial Calibration
DataAcq Meth : 8270F

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	8.39	152	384124	40.00	ug/ml	-0.04
29) Naphthalene-d8	11.47	136	1742557	40.00	ug/ml	-0.04
47) Acenaphthene-d10	15.28	164	933026	40.00	ug/ml	-0.03
74) Phenanthrene-d10	18.26	188	1398342	40.00	ug/ml	-0.03
95) Chrysene-d12	23.59	240	959895	40.00	ug/ml	-0.03
115) Perylene-d12	26.23	264	580912	40.00	ug/ml	-0.02

System Monitoring Compounds

7) 2-Fluorophenol	5.69	112	282032	20.72	ug/ml	-0.02
Spiked Amount 200.000	Range 21 - 100		Recovery = 10.36%#			
10) Phenol-d5	7.82	99	391136	21.78	ug/ml	-0.05
Spiked Amount 200.000	Range 10 - 94		Recovery = 10.89%			
13) 2-Chlorophenol-d4	7.96	132	305580	20.73	ug/ml	-0.04
Spiked Amount 200.000	Range 27 - 123		Recovery = 10.37%#			
19) 1,2-Dichlorobenzene-d4	8.84	150	303974	20.71	ug/ml	-0.04
Spiked Amount 100.000	Range 32 - 220		Recovery = 20.71%#			
30) Nitrobenzene-d5	9.85	82	362446	21.01	ug/ml	-0.05
Spiked Amount 100.000	Range 18 - 57		Recovery = 21.01%			
54) 2-Fluorobiphenyl	13.93	172	539527	19.82	ug/ml	-0.04
Spiked Amount 100.000	Range 22 - 58		Recovery = 19.82%#			
77) 2,4,6-Tribromophenol	16.91	330	48762	17.81	ug/ml	-0.04
Spiked Amount 200.000	Range 10 - 123		Recovery = 8.90%#			
100) Terphenyl-d14	21.55	244	460619	19.17	ug/ml	-0.04
Spiked Amount 100.000	Range 17 - 71		Recovery = 19.17%			

Target Compounds						Qvalue
2) bis(chloromethyl)ether	3.10	79	372923	25.48	ug/ml#	19
3) N-Nitrosodimethyl amine	3.12	42	201976	23.26	ug/ml#	61
4) Pyridine	3.10	79	372923	21.29	ug/ml#	51
5) 2-Picoline	4.40	93	336937	21.65	ug/ml#	96
9) Aniline	7.72	93	463046	23.31	ug/ml	99
11) Phenol	7.85	94	413901	21.77	ug/ml#	81
12) bis(2-Chloroethyl)ether	7.91	93	313830	18.53	ug/ml#	1
14) 2-Chlorophenol	7.99	128	304867	20.84	ug/ml	93
15) n-Decane	8.15	57	389526	20.84	ug/ml	90
16) 1,3-Dichlorobenzene	8.29	146	302098	20.56	ug/ml#	99
17) Benzyl Chloride	7.72	91	4663	33.52	ug/ml#	1
18) 1,4-Dichlorobenzene	8.42	146	315555	20.83	ug/ml#	97
20) 1,2-Dichlorobenzene	8.88	146	304116	20.93	ug/ml#	98
21) Benzyl alcohol	8.88	108	181672	20.14	ug/ml#	64
23) 2-Methylphenol	9.30	108	274948	21.39	ug/ml	97
24) bis(2-chloroisopropyl)ethe	9.27	45	486344	20.78	ug/ml#	89

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

Quantitation Report (QT Reviewed)

Data File : D:\F090607A\4018F.D
Acq On : 6 Sep 2007 4:47
Sample : SSTD020
Misc : CAL SSTD
MS Integration Params: RTEINT4.P
Quant Time: Sep 07 02:35:14 2007

Vial: 4
Operator: JCM
Inst : MSD #6
Multiplr: 1.00
Quant Results File: 8270F.RES

Quant Method : C:\MSDCHEM\1\METHODS\8270F.M (RTE Integrator)
Title : CLP BNA Calibration
Last Update : Thu Sep 06 15:00:14 2007
Response via : Initial Calibration
DataAcq Meth : 8270F

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
25)	Acetophenone	9.50	105	458636	21.81	ug/ml#	84
26)	n-Nitroso-di-n-propylamine	9.63	70	250874	22.35	ug/ml#	11
27)	4-Methylphenol	9.67	108	284626	21.35	ug/ml	97
28)	Hexachloroethane	9.63	117	149788	21.92	ug/ml#	73
31)	Nitrobenzene	9.90	77	377122	21.37	ug/ml#	76
32)	Isophorone	10.48	82	619961	20.98	ug/ml#	82
33)	2-Nitrophenol	10.66	139	154236	20.09	ug/ml#	70
34)	2,4-Dimethylphenol	10.91	107	307995	21.28	ug/ml	84
35)	bis(2-Chloroethoxy)methane	11.09	93	368923	21.04	ug/ml	97
36)	2,4-Dichlorophenol	11.27	162	193684	19.91	ug/ml#	92
37)	Benzoic acid	11.35	105	153758m	21.00	ug/ml	
38)	1,2,4-Trichlorobenzene	11.39	180	216889	19.88	ug/ml	99
39)	Naphthalene	11.51	128	917265	21.34	ug/ml	99
40)	a-Terpineol	11.60	59	296029	21.97	ug/ml#	92
41)	4-Chloroaniline	11.75	127	314287	23.65	ug/ml	100
42)	Toluenediamine	11.97	122	8300	24.12	ug/ml#	64
43)	Hexachlorobutadiene	11.97	225	103770	19.36	ug/ml	98
44)	4-Chloro-3-methylphenol	12.96	107	235581	19.26	ug/ml#	1
45)	2-Methylnaphthalene	13.06	141	1023957	42.81	ug/ml#	67
46)	1-Methylnaphthalene	13.28	142	532275	20.76	ug/ml	96
48)	Phthalic Anhydride	13.33	104	30521	5.83	ug/ml#	81
49)	Hexachlorocyclopentadiene	13.57	237	103837	19.81	ug/ml	98
50)	1,2,4,5-Tetrachlorobenzene	13.51	216	180766	19.43	ug/ml	98
51)	2,3-Dichloroaniline	13.76	161	257676	20.41	ug/ml	100
52)	2,4,6-Trichlorophenol	13.78	196	131406	18.91	ug/ml	100
53)	2,4,5-Trichlorophenol	13.89	196	134459	18.22	ug/ml	99
56)	2-Chloronaphthalene	14.08	162	479312	19.66	ug/ml	95
58)	2-Nitroaniline	14.43	65	180663	19.97	ug/ml#	73
59)	Dimethylphthalate	14.93	163	542456	20.98	ug/ml#	96
60)	1,3-Dinitrobenzene	14.92	168	89321	19.36	ug/ml#	8
61)	2,6-Dinitrotoluene	15.04	165	120476	20.31	ug/ml#	34
62)	Acenaphthylene	14.95	152	820726	20.52	ug/ml	98
63)	3-Nitroaniline	15.30	138	136937	23.38	ug/ml#	17
64)	Acenaphthene	15.34	153	505354	20.80	ug/ml	98
65)	2,4-Dinitrophenol	15.52	184	55614	24.48	ug/ml#	63
66)	4-Nitrophenol	15.84	109	62671	25.63	ug/ml#	66
67)	Dibenzofuran	15.67	168	684414	20.03	ug/ml	90
68)	2,4-Dinitrotoluene	15.82	165	149825	18.88	ug/ml#	45
69)	2,3,4,6-Tetrachlorophenol	16.07	232	83059	18.66	ug/ml	99
70)	Diethylphthalate	16.39	149	591453	21.01	ug/ml	96
71)	Fluorene	16.37	166	543662	20.12	ug/ml	98

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

Quantitation Report (QT Reviewed)

Data File : D:\F090607A\4018F.D
Acq On : 6 Sep 2007 4:47
Sample : SSTD020
Misc : CAL SSTD
MS Integration Params: RTEINT4.P
Quant Time: Sep 07 02:35:14 2007

Vial: 4
Operator: JCM
Inst : MSD #6
Multiplr: 1.00
Quant Results File: 8270F.RES

Quant Method : C:\MSDCHEM\1\METHODS\8270F.M (RTE Integrator)
Title : CLP BNA Calibration
Last Update : Thu Sep 06 15:00:14 2007
Response via : Initial Calibration
DataAcq Meth : 8270F

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
72)	4-Chlorophenyl-phenylether	16.43	204	221675	19.21 ug/ml	92
73)	4-Nitroaniline	16.58	138	122008	20.98 ug/ml#	28
75)	4,6-Dinitro-2-methylphenol	16.65	198	77103	17.65 ug/ml	100
76)	n-Nitrosodiphenylamine	16.70	169	341726	18.84 ug/ml#	77
78)	Azobenzene	16.74	77	798092	20.48 ug/ml#	79
79)	alpha-BHC	17.50	181	93176	19.02 ug/ml#	78
80)	4-Bromophenyl-phenylether	17.40	248	109307	18.31 ug/ml	93
81)	Hexachlorobenzene	17.65	284	113404	18.69 ug/ml	90
82)	beta-BHC	18.02	181	75052	20.08 ug/ml	98
83)	Pentachlorophenol	18.06	266	55641	24.63 ug/ml	94
84)	gamma-BHC	18.10	181	79525	20.80 ug/ml	95
85)	n-Octadecane	18.22	57	482533	20.97 ug/ml#	87
86)	Phenanthrene	18.30	178	754223	20.67 ug/ml	99
87)	Anthracene	18.39	178	727449	20.12 ug/ml	98
88)	delta-BHC	18.52	181	75075	21.32 ug/ml	96
89)	Carbazole	18.78	167	1350155	42.71 ug/ml	96
90)	Heptachlor	19.34	272	51112	18.38 ug/ml#	72
91)	Di-n-butylphthalate	19.68	149	923095	21.29 ug/ml#	98
92)	Aldrin	19.93	263	29414	19.52 ug/ml#	44
93)	Heptachlor epoxide	20.59	81	96963	23.99 ug/ml#	83
94)	Fluoranthene	20.69	202	663561	20.94 ug/ml#	87
96)	Benzidine	21.04	184	150384	19.22 ug/ml#	100
97)	Pyrene	21.12	202	661063	20.09 ug/ml#	85
98)	alpha-Endosulfan	21.18	237	17810	21.47 ug/ml	87
99)	p,p'-DDE	21.51	246	134203	19.84 ug/ml#	68
101)	Dieldrin	21.59	79	226317	23.16 ug/ml#	95
102)	Endrin	21.94	195	6492	20.64 ug/ml#	43
103)	Endrin aldehyde	21.94	67	22816	24.56 ug/ml#	91
104)	beta-Endosulfan	22.09	195	21012	20.26 ug/ml	92
105)	p,p'-DDD	22.17	235	187945	18.07 ug/ml#	77
106)	Butylbenzylphthalate	22.66	149	306254	18.77 ug/ml#	63
107)	Endosulfan sulfate	22.75	272	28106	21.36 ug/ml#	63
108)	p,p'-DDT	22.75	235	182314	18.73 ug/ml	94
109)	4,4'-Methylene-Bis(2-chlor	23.59	231	81811	26.56 ug/ml#	78
110)	Methoxychlor	23.60	227	457877	21.98 ug/ml#	6
111)	Benzo[a]anthracene	23.54	228	424773	18.54 ug/ml#	88
112)	3,3'-Dichlorobenzidine	23.58	252	173336	27.24 ug/ml	96
113)	Chrysene	23.63	228	525203	20.77 ug/ml#	58
114)	bis(2-Ethylhexyl)phthalate	23.90	149	468805	20.66 ug/ml	97
116)	Di-n-octylphthalate	25.06	149	669221	15.56 ug/ml	100
117)	Benzo[b]fluoranthene	25.58	252	370891m	16.93 ug/ml	

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

Quantitation Report (QT Reviewed)

Data File : D:\F090607A\4018F.D
Acq On : 6 Sep 2007 4:47
Sample : SSTD020
Misc : CAL SSTD
MS Integration Params: RTEINT4.P
Quant Time: Sep 07 02:35:14 2007

Vial: 4
Operator: JCM
Inst : MSD #6
Multiplr: 1.00
Quant Results File: 8270F.RES

Quant Method : C:\MSDCHEM\1\METHODS\8270F.M (RTE Integrator)
Title : CLP BNA Calibration
Last Update : Thu Sep 06 15:00:14 2007
Response via : Initial Calibration
DataAcq Meth : 8270F

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
118)	Benzo[k]fluoranthene	25.62	252	370760	18.10 ug/ml	98
119)	Benzo[a]pyrene	26.13	252	305462	18.66 ug/ml	99
120)	Indeno[1,2,3-cd]pyrene	28.17	276	138834	15.14 ug/ml#	82
121)	Dibenz[a,h]anthracene	28.21	278	119259	14.94 ug/ml	95
122)	Benzo[g,h,i]perylene	28.71	276	104922	14.85 ug/ml	97

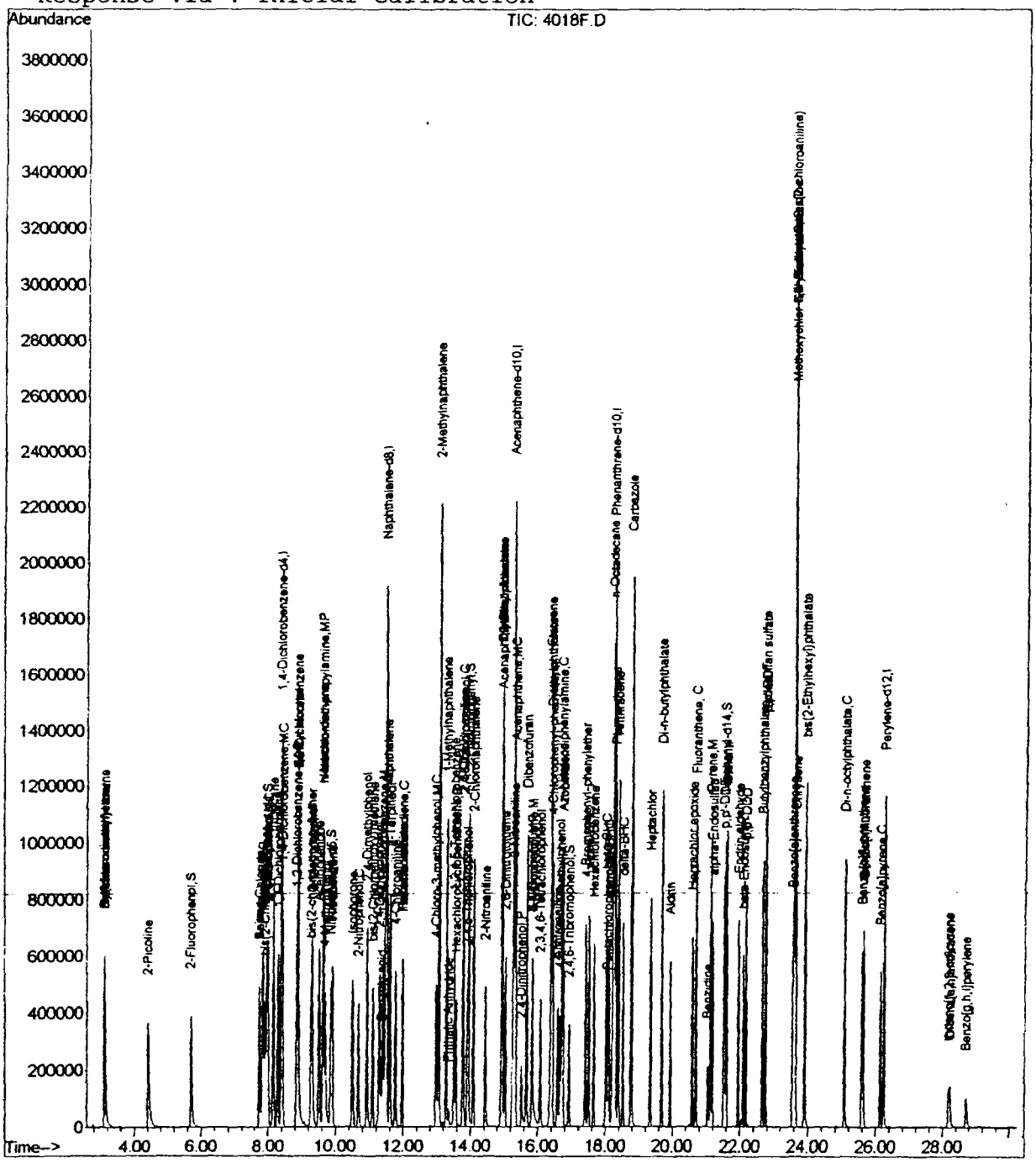
(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

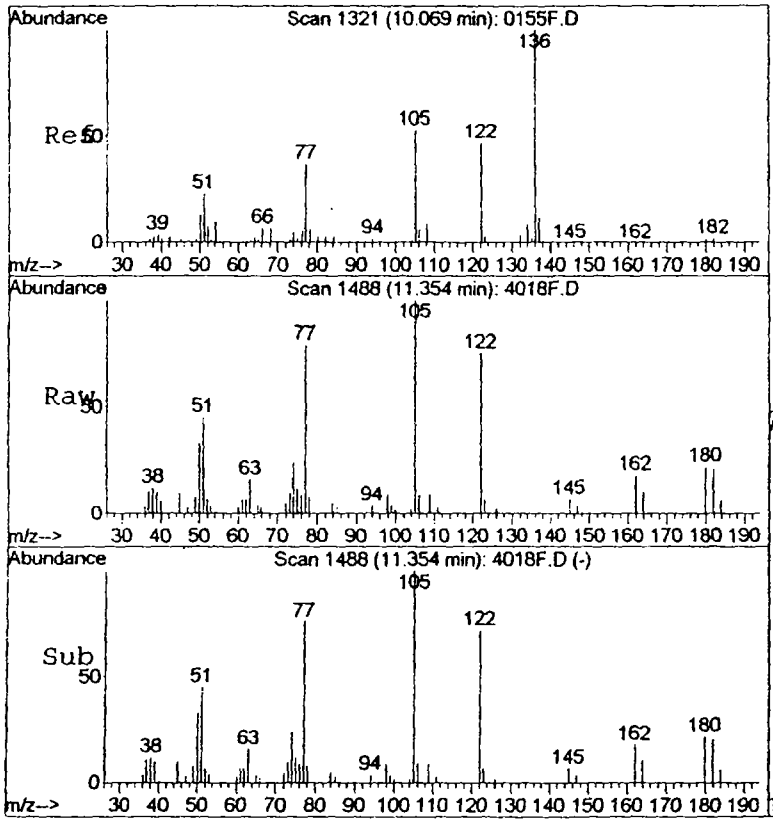
Data File : D:\F090607A\4018F.D
Acq On : 6 Sep 2007 4:47
Sample : SSTD020
Misc : CAL SSTD
MS Integration Params: RTEINT4.P
Quant Time: Sep 7 2:37 2007

Vial: 4
Operator: JCM
Inst : MSD #6
Multiplr: 1.00
Quant Results File: 8270F.RES

Method : C:\MSDCHEM\1\METHODS\8270F.M (RTE Integrator)
Title : CLP BNA Calibration
Last Update : Fri Sep 07 04:02:55 2007
Response via : Initial Calibration



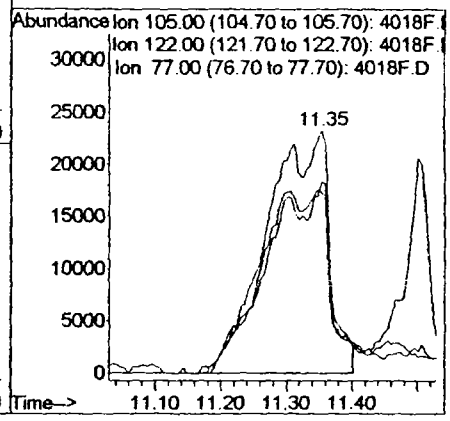
330

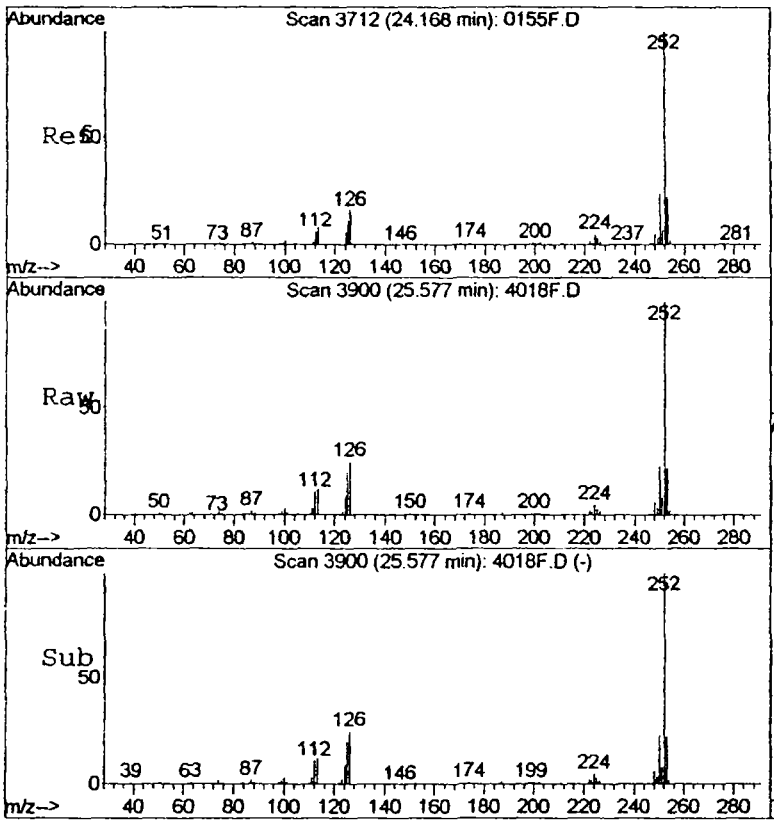


#37
Benzoic acid
Concen: 21.00 ug/ml m
RT: 11.35 min Scan# 1488
Delta R.T. -0.13 min
Lab File: 4018F.D
Acq: 6 Sep 2007 4:47

Tgt Ion:105 Resp: 153758

Ion	Ratio	Lower	Upper
105	100		
122	0.0	0.0	0.0
77	0.0	33.6	50.4#

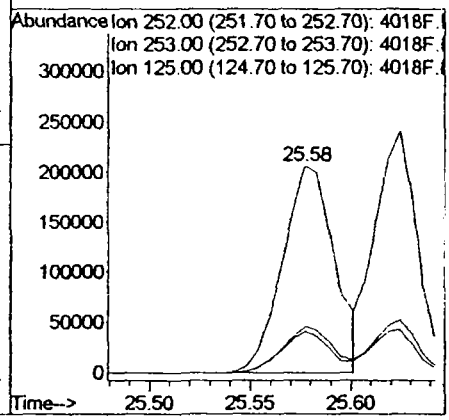




#117
Benzo[b]fluoranthene
Concen: 16.93 ug/ml m
RT: 25.58 min Scan# 3900
Delta R.T. -0.04 min
Lab File: 4018F.D
Acq: 6 Sep 2007 4:47

Tgt Ion:252 Resp: 370891

Ion	Ratio	Lower	Upper
252	100		
253	20.8	17.4	26.0
125	17.3	15.7	23.5



Quantitation Report (QT Reviewed)

Data File : D:\F090607A\4019F.D
Acq On : 6 Sep 2007 5:26
Sample : SSTD080
Misc : CAL SSTD
MS Integration Params: RTEINT4.P
Quant Time: Sep 07 02:58:47 2007

Vial: 5
Operator: JCM
Inst : MSD #6
Multiplr: 1.00
Quant Results File: 8270F.RES

Quant Method : C:\MSDCHEM\1\METHODS\8270F.M (RTE Integrator)
Title : CLP BNA Calibration
Last Update : Thu Sep 06 15:00:14 2007
Response via : Initial Calibration
DataAcq Meth : 8270F

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	8.41	152	407608	40.00	ug/ml	-0.01
29) Naphthalene-d8	11.49	136	1834164	40.00	ug/ml	-0.01
47) Acenaphthene-d10	15.30	164	984985	40.00	ug/ml	-0.01
74) Phenanthrene-d10	18.28	188	1446222	40.00	ug/ml	0.00
95) Chrysene-d12	23.60	240	1069245	40.00	ug/ml	-0.02
115) Perylene-d12	26.24	264	459013	40.00	ug/ml	-0.02
System Monitoring Compounds						
7) 2-Fluorophenol	5.73	112	1171843	81.12	ug/ml	0.02
Spiked Amount 200.000	Range 21 - 100		Recovery = 40.56%			
10) Phenol-d5	7.87	99	1594959	83.70	ug/ml	0.00
Spiked Amount 200.000	Range 10 - 94		Recovery = 41.85%			
13) 2-Chlorophenol-d4	8.00	132	1321226	84.47	ug/ml	0.00
Spiked Amount 200.000	Range 27 - 123		Recovery = 42.23%			
19) 1,2-Dichlorobenzene-d4	8.88	150	1294923	83.15	ug/ml	0.00
Spiked Amount 100.000	Range 32 - 220		Recovery = 83.15%			
30) Nitrobenzene-d5	9.90	82	1518724	83.64	ug/ml	0.00
Spiked Amount 100.000	Range 18 - 57		Recovery = 83.64%#			
54) 2-Fluorobiphenyl	13.96	172	2369464	82.47	ug/ml	0.00
Spiked Amount 100.000	Range 22 - 58		Recovery = 82.47%#			
77) 2,4,6-Tribromophenol	16.94	330	250206	88.37	ug/ml	0.00
Spiked Amount 200.000	Range 10 - 123		Recovery = 44.19%			
100) Terphenyl-d14	21.58	244	1975259	73.78	ug/ml	0.00
Spiked Amount 100.000	Range 17 - 71		Recovery = 73.78%#			

Target Compounds						Qvalue
2) bis(chloromethyl)ether	3.18	79	1282630	82.60	ug/ml#	19
3) N-Nitrosodimethyl amine	3.20	42	756853	82.15	ug/ml#	60
4) Pyridine	3.18	79	1471276	79.16	ug/ml#	51
5) 2-Picoline	4.45	93	1277087	77.32	ug/ml	99
9) Aniline	7.76	93	1766291	83.80	ug/ml	99
11) Phenol	7.90	94	1671399	82.86	ug/ml#	76
12) bis(2-Chloroethyl)ether	7.97	93	1392930	77.50	ug/ml#	1
14) 2-Chlorophenol	8.04	128	1303943	83.98	ug/ml	93
15) n-Decane	8.18	57	1638800	82.62	ug/ml	89
16) 1,3-Dichlorobenzene	8.32	146	1289311	82.71	ug/ml#	98
18) 1,4-Dichlorobenzene	8.45	146	1342697	83.51	ug/ml#	98
20) 1,2-Dichlorobenzene	8.91	146	1304758	84.62	ug/ml#	98
21) Benzyl alcohol	8.92	108	734944m	76.78	ug/ml	
23) 2-Methylphenol	9.35	108	1127714	82.69	ug/ml	93
24) bis(2-chloroisopropyl)ethe	9.30	45	2038104	82.05	ug/ml#	89
25) Acetophenone	9.57	105	1837502	82.35	ug/ml#	84

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

Quantitation Report (QT Reviewed)

Data File : D:\F090607A\4019F.D
Acq On : 6 Sep 2007 5:26
Sample : SSTD080
Misc : CAL SSTD
MS Integration Params: RTEINT4.P
Quant Time: Sep 07 02:58:47 2007

Vial: 5
Operator: JCM
Inst : MSD #6
Multiplr: 1.00
Quant Results File: 8270F.RES

Quant Method : C:\MSDCHEM\1\METHODS\8270F.M (RTE Integrator)
Title : CLP BNA Calibration
Last Update : Thu Sep 06 15:00:14 2007
Response via : Initial Calibration
DataAcq Meth : 8270F

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
26)	n-Nitroso-di-n-propylamine	9.70	70	941030	79.00 ug/ml#	28
27)	4-Methylphenol	9.73	108	1149671	81.27 ug/ml	96
28)	Hexachloroethane	9.64	117	611362	84.31 ug/ml#	77
31)	Nitrobenzene	9.95	77	1560623	84.00 ug/ml#	77
32)	Isophorone	10.54	82	2515811	80.87 ug/ml#	82
33)	2-Nitrophenol	10.69	139	652643	80.77 ug/ml#	71
34)	2,4-Dimethylphenol	10.95	107	1241175	81.48 ug/ml	85
35)	bis(2-Chloroethoxy)methane	11.13	93	1473022	79.82 ug/ml	98
36)	2,4-Dichlorophenol	11.29	162	864650	84.42 ug/ml#	92
37)	Benzoic acid	11.54	105	987853m	84.03 ug/ml	
38)	1,2,4-Trichlorobenzene	11.41	180	955730	83.22 ug/ml	98
39)	Naphthalene	11.54	128	3787207	83.70 ug/ml	99
40)	a-Terpineol	11.63	59	1180876	83.26 ug/ml#	92
41)	4-Chloroaniline	11.78	127	1281276	91.59 ug/ml	100
42)	Toluenediamine	11.98	122	30496	84.21 ug/ml#	60
43)	Hexachlorobutadiene	11.98	225	479836	85.07 ug/ml	99
44)	4-Chloro-3-methylphenol	12.98	107	1087873	84.48 ug/ml#	1
45)	2-Methylnaphthalene	13.09	141	4284011	170.17 ug/ml#	68
46)	1-Methylnaphthalene	13.31	142	2267593	84.02 ug/ml	97
49)	Hexachlorocyclopentadiene	13.58	237	574746	81.71 ug/ml	99
50)	1,2,4,5-Tetrachlorobenzene	13.53	216	818356	83.33 ug/ml	98
51)	2,3-Dichloroaniline	13.78	161	1154957	86.68 ug/ml	100
52)	2,4,6-Trichlorophenol	13.80	196	620446	84.59 ug/ml	99
53)	2,4,5-Trichlorophenol	13.90	196	627206	80.50 ug/ml	99
56)	2-Chloronaphthalene	14.11	162	2140267	83.16 ug/ml	96
58)	2-Nitroaniline	14.47	65	790164	82.75 ug/ml#	74
59)	Dimethylphthalate	14.97	163	2456161m	89.99 ug/ml	
60)	1,3-Dinitrobenzene	14.96	168	412105	84.59 ug/ml#	28
61)	2,6-Dinitrotoluene	15.08	165	566435m	90.47 ug/ml	
62)	Acenaphthylene	14.97	152	3666259	86.85 ug/ml	98
63)	3-Nitroaniline	15.35	138	512400	82.87 ug/ml#	34
64)	Acenaphthene	15.37	153	2171631	84.65 ug/ml	98
65)	2,4-Dinitrophenol	15.56	184	288167	76.33 ug/ml#	57
66)	4-Nitrophenol	15.84	109	336873	88.63 ug/ml#	65
67)	Dibenzofuran	15.70	168	2995223	83.03 ug/ml	92
68)	2,4-Dinitrotoluene	15.87	165	687923	82.10 ug/ml#	42
69)	2,3,4,6-Tetrachlorophenol	16.09	232	417122	88.77 ug/ml	100
70)	Diethylphthalate	16.44	149	2633793	88.62 ug/ml	98
71)	Fluorene	16.41	166	2457868	86.16 ug/ml	99
72)	4-Chlorophenyl-phenylether	16.45	204	1089926	89.45 ug/ml	96
73)	4-Nitroaniline	16.67	138	479143	78.03 ug/ml#	30

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

Quantitation Report (QT Reviewed)

Data File : D:\F090607A\4019F.D
Acq On : 6 Sep 2007 5:26
Sample : SSTD080
Misc : CAL SSTD
MS Integration Params: RTEINT4.P
Quant Time: Sep 07 02:58:47 2007

Vial: 5
Operator: JCM
Inst : MSD #6
Multiplr: 1.00
Quant Results File: 8270F.RES

Quant Method : C:\MSDCHEM\1\METHODS\8270F.M (RTE Integrator)
Title : CLP BNA Calibration
Last Update : Thu Sep 06 15:00:14 2007
Response via : Initial Calibration
DataAcq Meth : 8270F

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
75)	4,6-Dinitro-2-methylphenol	16.72	198	371224	82.17	ug/ml	100
76)	n-Nitrosodiphenylamine	16.75	169	1700739	90.67	ug/ml#	78
78)	Azobenzene	16.77	77	3583942	88.92	ug/ml#	79
79)	alpha-BHC	17.52	181	441974	87.24	ug/ml#	84
80)	4-Bromophenyl-phenylether	17.42	248	524694	85.00	ug/ml	96
81)	Hexachlorobenzene	17.68	284	534270	85.12	ug/ml	87
82)	beta-BHC	18.06	181	313416	81.09	ug/ml	98
83)	Pentachlorophenol	18.10	266	306696	78.33	ug/ml	97
84)	gamma-BHC	18.12	181	346195	87.55	ug/ml	100
85)	n-Octadecane	18.24	57	2088502	87.76	ug/ml#	84
86)	Phenanthrene	18.34	178	3242726	85.94	ug/ml	99
87)	Anthracene	18.43	178	3188850	85.29	ug/ml	99
88)	delta-BHC	18.54	181	310425	85.23	ug/ml	99
89)	Carbazole	18.83	167	5545073	169.59	ug/ml	97
90)	Heptachlor	19.36	272	252417	87.76	ug/ml	88
91)	Di-n-butylphthalate	19.70	149	3545244	79.06	ug/ml#	98
92)	Aldrin	19.94	263	131983	84.70	ug/ml#	69
93)	Heptachlor epoxide	20.60	81	347050	83.01	ug/ml#	86
94)	Fluoranthene	20.72	202	2612223	79.69	ug/ml#	86
96)	Benzidine	21.07	184	654065	75.03	ug/ml#	100
97)	Pyrene	21.15	202	2680306	73.12	ug/ml#	86
98)	alpha-Endosulfan	21.20	237	68657	74.29	ug/ml	88
99)	p,p'-DDE	21.54	246	538453	71.47	ug/ml#	65
101)	Dieldrin	21.61	79	809780	74.40	ug/ml	97
102)	Endrin	21.96	195	24974	71.28	ug/ml#	33
103)	Endrin aldehyde	21.96	67	75138	72.61	ug/ml#	92
104)	beta-Endosulfan	22.10	195	86167	74.57	ug/ml	94
105)	p,p'-DDD	22.19	235	835311	72.09	ug/ml#	83
106)	Butylbenzylphthalate	22.68	149	1332786	73.34	ug/ml#	70
107)	Endosulfan sulfate	22.77	272	126375	86.23	ug/ml#	65
108)	p,p'-DDT	22.77	235	842495	77.70	ug/ml	98
109)	4,4'-Methylene-Bis(2-chlor	23.62	231	305910	89.15	ug/ml#	81
110)	Methoxychlor	23.63	227	1869901m	80.59	ug/ml	
111)	Benzo[a]anthracene	23.57	228	2029339	79.51	ug/ml#	89
112)	3,3'-Dichlorobenzidine	23.61	252	656385	92.61	ug/ml	99
113)	Chrysene	23.67	228	2267947	80.53	ug/ml#	56
114)	bis(2-Ethylhexyl)phthalate	23.91	149	1914717	75.75	ug/ml#	99
116)	Di-n-octylphthalate	25.08	149	2735833	59.83	ug/ml	100
117)	Benzo[b]fluoranthene	25.61	252	1377240	79.56	ug/ml	99
118)	Benzo[k]fluoranthene	25.65	252	1262981	78.05	ug/ml	98
119)	Benzo[a]pyrene	26.15	252	1060069	81.96	ug/ml	99

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

Quantitation Report (QT Reviewed)

Data File : D:\F090607A\4019F.D Vial: 5
Acq On : 6 Sep 2007 5:26 Operator: JCM
Sample : SSTD080 Inst : MSD #6
Misc : CAL SSTD Multiplr: 1.00
MS Integration Params: RTEINT4.P
Quant Time: Sep 07 02:58:47 2007 Quant Results File: 8270F.RES

Quant Method : C:\MSDCHEM\1\METHODS\8270F.M (RTE Integrator)
Title : CLP BNA Calibration
Last Update : Thu Sep 06 15:00:14 2007
Response via : Initial Calibration
DataAcq Meth : 8270F

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
120)	Indeno[1,2,3-cd]pyrene	28.20	276	575082	79.36 ug/ml#	86
121)	Dibenz[a,h]anthracene	28.24	278	510389	80.93 ug/ml	95
122)	Benzo[g,h,i]perylene	28.73	276	419586	75.16 ug/ml	95

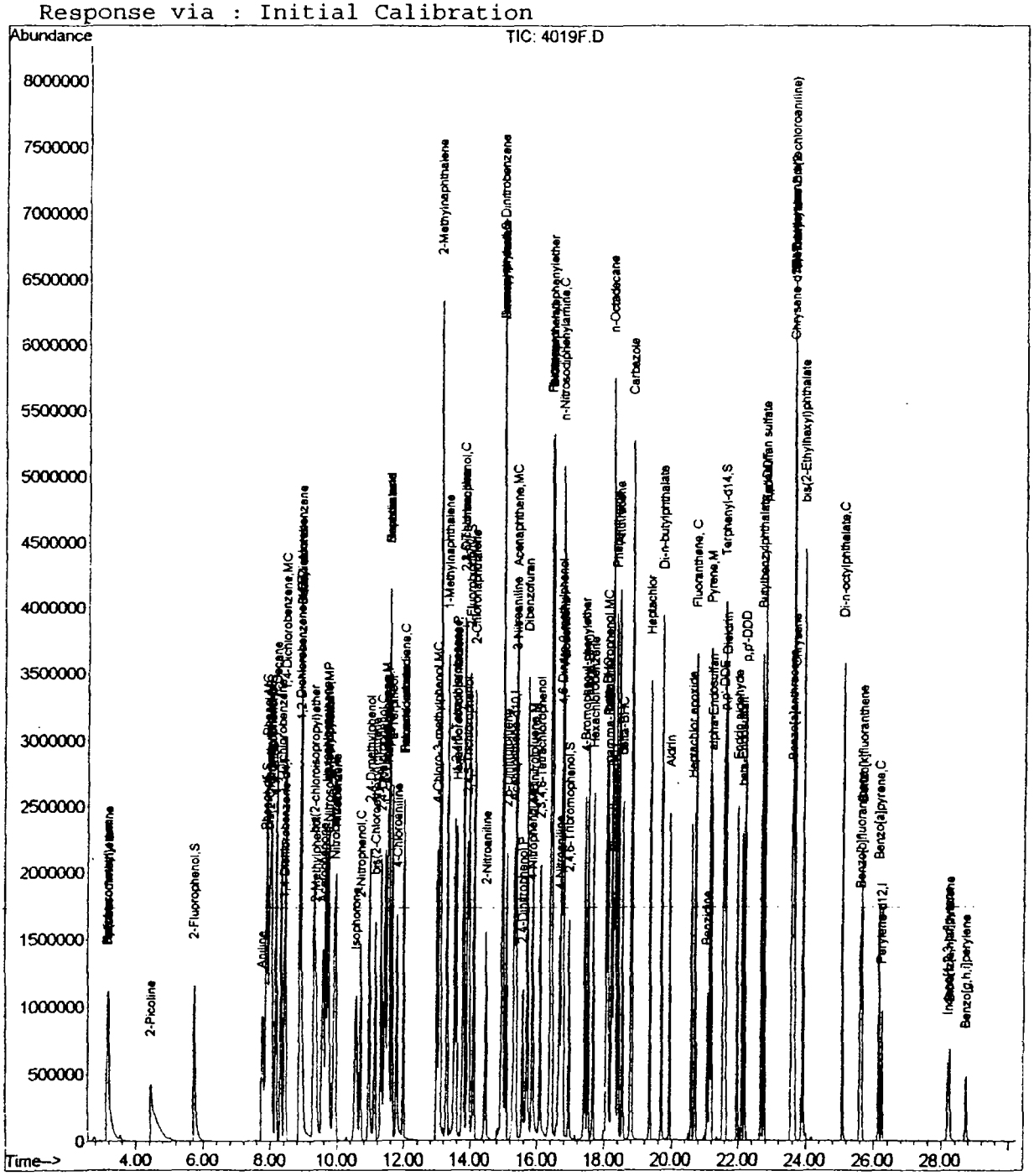
(#) = qualifier out of range (m) = manual integration

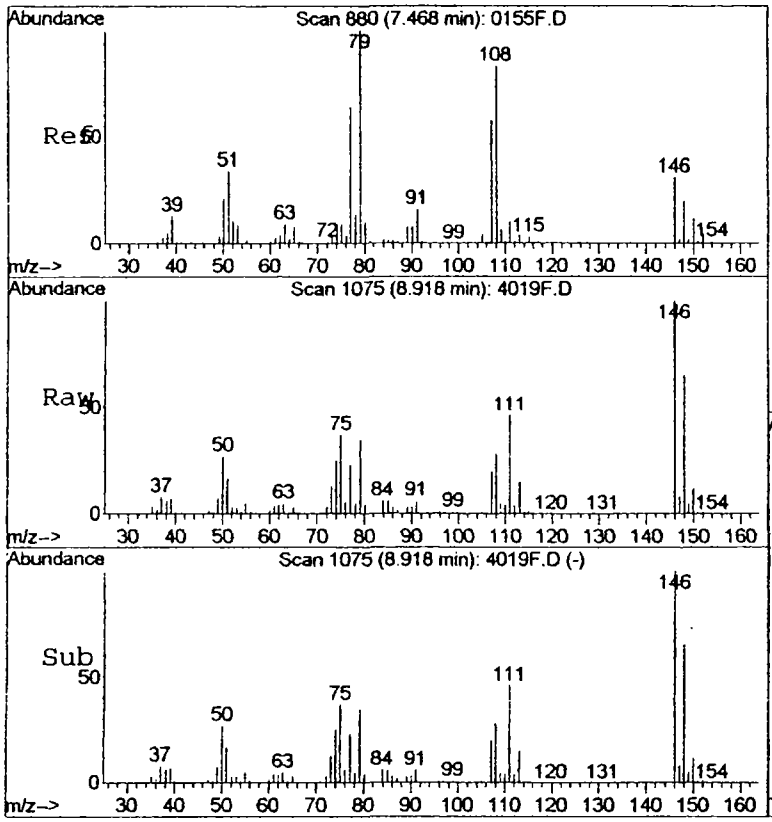
Quantitation Report (QT Reviewed)

Data File : D:\F090607A\4019F.D
Acq On : 6 Sep 2007 5:26
Sample : SSTD080
Misc : CAL SSTD
MS Integration Params: RTEINT4.P
Quant Time: Sep 7 3:54 2007

Vial: 5
Operator: JCM
Inst : MSD #6
Multiplr: 1.00
Quant Results File: 8270F.RES

Method : C:\MSDCHEM\1\METHODS\8270F.M (RTE Integrator)
Title : CLP BNA Calibration
Last Update : Fri Sep 07 04:02:55 2007
Response via : Initial Calibration

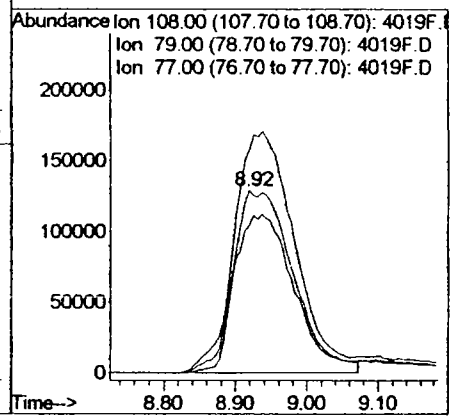


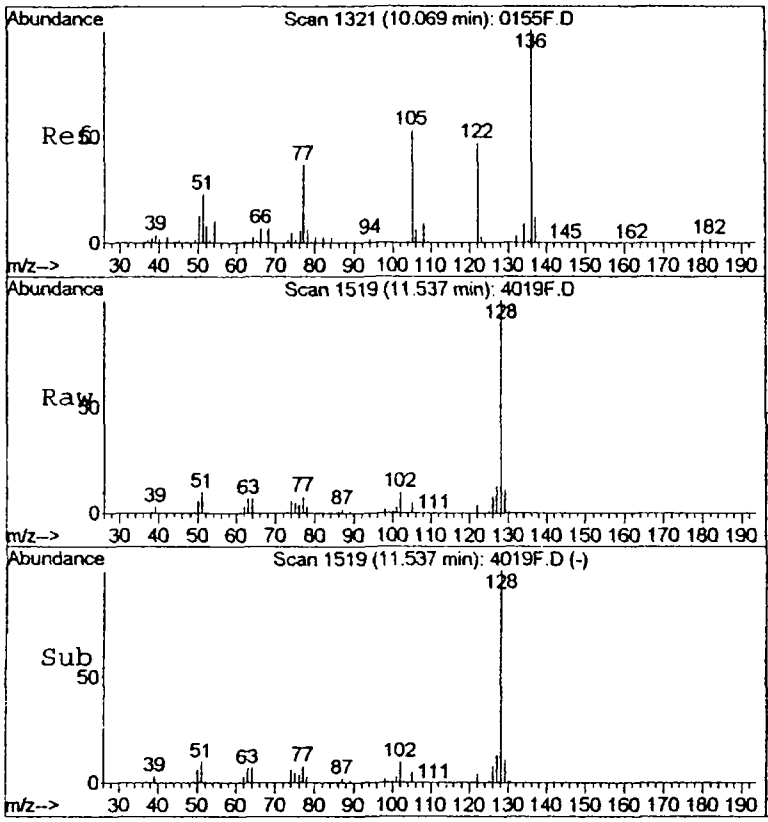


#21
Benzyl alcohol
Concen: 76.78 ug/ml m
RT: 8.92 min Scan# 1075
Delta R.T. -0.01 min
Lab File: 4019F.D
Acq: 6 Sep 2007 5:26

Tgt Ion:108 Resp: 734944

Ion	Ratio	Lower	Upper
108	100		
79	133.2	84.1	126.1#
77	93.4	50.4	75.6#

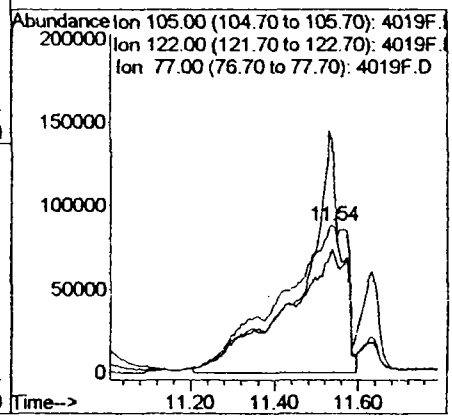


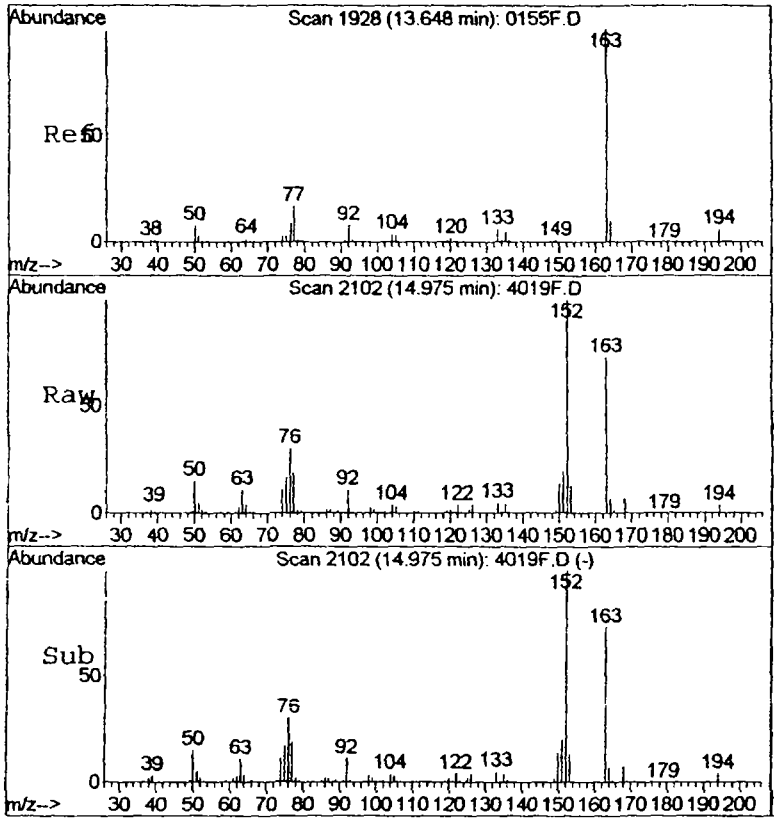


#37
Benzoic acid
Concen: 84.03 ug/ml m
RT: 11.54 min Scan# 1519
Delta R.T. 0.05 min
Lab File: 4019F.D
Acq: 6 Sep 2007 5:26

Tgt Ion:105 Resp: 987853

Ion	Ratio	Lower	Upper
105	100		
122	13.2	0.0	0.0#
77	14.7	33.6	50.4#

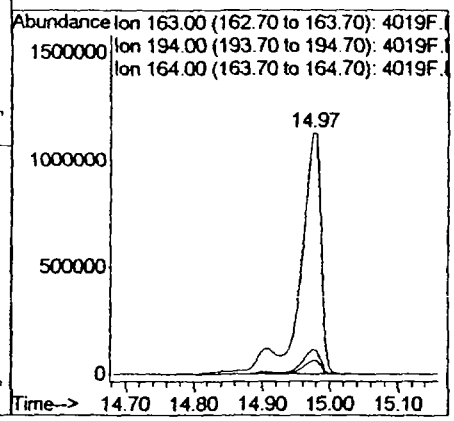


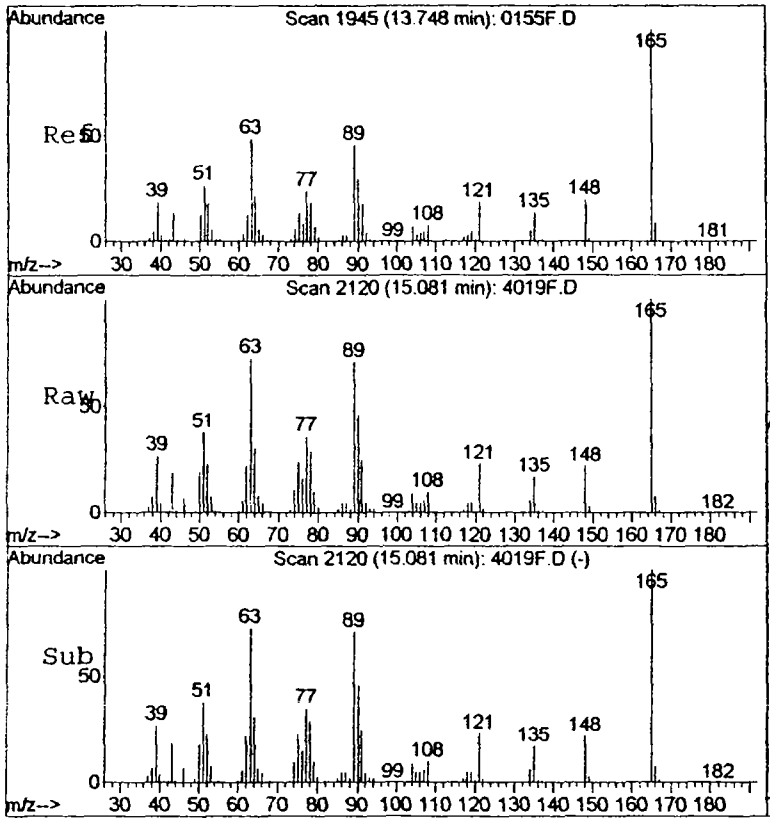


#59
Dimethylphthalate
Concen: 89.99 ug/ml m
RT: 14.97 min Scan# 2102
Delta R.T. 0.01 min
Lab File: 4019F.D
Acq: 6 Sep 2007 5:26

Tgt Ion:163 Resp: 2456161

Ion	Ratio	Lower	Upper
163	100		
194	4.8	3.6	5.4
164	8.8	6.6	9.8

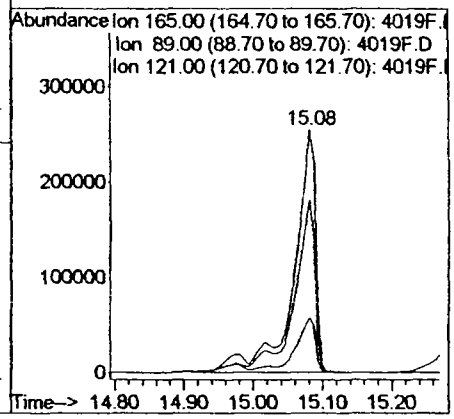




#61
2,6-Dinitrotoluene
Concen: 90.47 ug/ml m
RT: 15.08 min Scan# 2120
Delta R.T. 0.00 min
Lab File: 4019F.D
Acq: 6 Sep 2007 5:26

Tgt Ion:165 Resp: 566435

Ion	Ratio	Lower	Upper
165	100		
89	57.1	23.1	34.7#
121	18.4	10.6	16.0#



Quantitation Report (QT Reviewed)

Data File : D:\F090607A\4020F.D
Acq On : 6 Sep 2007 6:04
Sample : SSTD100
Misc : CAL SSTD
MS Integration Params: RTEINT4.P
Quant Time: Sep 07 03:44:36 2007

Vial: 6
Operator: JCM
Inst : MSD #6
Multiplr: 1.00
Quant Results File: 8270F.RES

Quant Method : C:\MSDCHEM\1\METHODS\8270F.M (RTE Integrator)
Title : CLP BNA Calibration
Last Update : Thu Sep 06 15:00:14 2007
Response via : Initial Calibration
DataAcq Meth : 8270F

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	8.42	152	435091	40.00	ug/ml	0.00
29) Naphthalene-d8	11.50	136	1934403	40.00	ug/ml	0.00
47) Acenaphthene-d10	15.30	164	1027038	40.00	ug/ml	-0.01
74) Phenanthrene-d10	18.29	188	1499957	40.00	ug/ml	0.00
95) Chrysene-d12	23.61	240	1021100	40.00	ug/ml	-0.01
115) Perylene-d12	26.24	264	445182	40.00	ug/ml	-0.02
System Monitoring Compounds						
7) 2-Fluorophenol	5.78	112	1523166	98.78	ug/ml	0.07
Spiked Amount 200.000	Range 21 - 100		Recovery = 49.39%			
10) Phenol-d5	7.90	99	1893678	93.10	ug/ml	0.04
Spiked Amount 200.000	Range 10 - 94		Recovery = 46.55%			
13) 2-Chlorophenol-d4	8.03	132	1683037	100.81	ug/ml	0.03
Spiked Amount 200.000	Range 27 - 123		Recovery = 50.41%			
19) 1,2-Dichlorobenzene-d4	8.89	150	1726244	103.85	ug/ml	0.00
Spiked Amount 100.000	Range 32 - 220		Recovery = 103.85%			
30) Nitrobenzene-d5	9.92	82	1935131	101.05	ug/ml	0.02
Spiked Amount 100.000	Range 18 - 57		Recovery = 101.05%#			
54) 2-Fluorobiphenyl	13.97	172	3177561	106.07	ug/ml	0.00
Spiked Amount 100.000	Range 22 - 58		Recovery = 106.07%#			
77) 2,4,6-Tribromophenol	16.96	330	326695	111.25	ug/ml	0.00
Spiked Amount 200.000	Range 10 - 123		Recovery = 55.63%			
100) Terphenyl-d14	21.58	244	2560089	100.14	ug/ml	0.00
Spiked Amount 100.000	Range 17 - 71		Recovery = 100.14%#			

Target Compounds						Qvalue
2) bis(chloromethyl)ether	3.26	79	825671	49.81	ug/ml#	17
3) N-Nitrosodimethyl amine	3.29	42	1024304m	104.16	ug/ml	
4) Pyridine	3.26	79	1912621m	96.41	ug/ml	
5) 2-Picoline	4.52	93	1673977m	94.94	ug/ml	
9) Aniline	7.79	93	2046863	90.97	ug/ml	99
11) Phenol	7.92	94	2047656	95.10	ug/ml#	51
12) bis(2-Chloroethyl)ether	8.00	93	2075524	108.19	ug/ml#	1
14) 2-Chlorophenol	8.06	128	1657817	100.03	ug/ml	93
15) n-Decane	8.19	57	2155012	101.78	ug/ml	88
16) 1,3-Dichlorobenzene	8.33	146	1700509	102.20	ug/ml#	98
18) 1,4-Dichlorobenzene	8.46	146	1767847	103.01	ug/ml#	99
20) 1,2-Dichlorobenzene	8.92	146	1724899	104.80	ug/ml#	98
21) Benzyl alcohol	8.96	108	891709m	87.28	ug/ml	
23) 2-Methylphenol	9.37	108	1398671	96.08	ug/ml	88
24) bis(2-chloroisopropyl)ethe	9.31	45	2656252	100.18	ug/ml#	71
25) Acetophenone	9.59	105	2310480	97.00	ug/ml#	84

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

Quantitation Report (QT Reviewed)

Data File : D:\F090607A\4020F.D
Acq On : 6 Sep 2007 6:04
Sample : SSTD100
Misc : CAL SSTD
MS Integration Params: RTEINT4.P
Quant Time: Sep 07 03:44:36 2007

Vial: 6
Operator: JCM
Inst : MSD #6
Multiplr: 1.00
Quant Results File: 8270F.RES

Quant Method : C:\MSDCHEM\1\METHODS\8270F.M (RTE Integrator)
Title : CLP BNA Calibration
Last Update : Thu Sep 06 15:00:14 2007
Response via : Initial Calibration
DataAcq Meth : 8270F

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
26)	n-Nitroso-di-n-propylamine	9.71	70	1282930m	100.90 ug/ml	
27)	4-Methylphenol	9.75	108	1511469	100.10 ug/ml	100
28)	Hexachloroethane	9.64	117	812660	104.99 ug/ml#	77
31)	Nitrobenzene	9.96	77	1974872	100.79 ug/ml#	78
32)	Isophorone	10.57	82	3401190	103.66 ug/ml#	82
33)	2-Nitrophenol	10.71	139	868707	101.94 ug/ml#	72
34)	2,4-Dimethylphenol	10.96	107	1590921	99.02 ug/ml	86
35)	bis(2-Chloroethoxy)methane	11.14	93	1983924	101.94 ug/ml	98
36)	2,4-Dichlorophenol	11.31	162	1154313	106.87 ug/ml#	92
37)	Benzoic acid	11.62	105	1396695m	103.82 ug/ml	
38)	1,2,4-Trichlorobenzene	11.42	180	1267905	104.68 ug/ml	98
39)	Naphthalene	11.54	128	4960942	103.96 ug/ml	99
40)	a-Terpineol	11.65	59	1567917	104.83 ug/ml#	92
41)	4-Chloroaniline	11.80	127	1661905	112.65 ug/ml	99
42)	Toluenediamine	11.98	122	37991	99.47 ug/ml#	55
43)	Hexachlorobutadiene	11.99	225	649773	109.23 ug/ml	99
44)	4-Chloro-3-methylphenol	12.98	107	1449352	106.72 ug/ml#	1
45)	2-Methylnaphthalene	13.10	141	5564275	209.57 ug/ml#	67
46)	1-Methylnaphthalene	13.31	142	2988874	105.01 ug/ml	98
48)	Phthalic Anhydride	13.38	104	34003	5.90 ug/ml#	91
49)	Hexachlorocyclopentadiene	13.58	237	772004	103.76 ug/ml	99
50)	1,2,4,5-Tetrachlorobenzene	13.54	216	1092616	106.70 ug/ml	98
51)	2,3-Dichloroaniline	13.80	161	1506149	108.40 ug/ml	100
52)	2,4,6-Trichlorophenol	13.81	196	812147	106.19 ug/ml	99
53)	2,4,5-Trichlorophenol	13.90	196	879112	108.21 ug/ml	100
56)	2-Chloronaphthalene	14.11	162	2807058	104.60 ug/ml	96
58)	2-Nitroaniline	14.48	65	1027264	103.18 ug/ml#	75
59)	Dimethylphthalate	14.99	163	3171018m	111.43 ug/ml	
60)	1,3-Dinitrobenzene	14.97	168	538250	105.96 ug/ml#	33
61)	2,6-Dinitrotoluene	15.10	165	747866m	114.56 ug/ml	
62)	Acenaphthylene	14.98	152	4677255	106.26 ug/ml	98
63)	3-Nitroaniline	15.36	138	625453	97.01 ug/ml#	38
64)	Acenaphthene	15.38	153	2830834	105.83 ug/ml	98
65)	2,4-Dinitrophenol	15.57	184	404116	98.79 ug/ml#	65
66)	4-Nitrophenol	15.85	109	423439	104.74 ug/ml#	65
67)	Dibenzofuran	15.71	168	3937922	104.69 ug/ml	93
68)	2,4-Dinitrotoluene	15.89	165	899845	102.99 ug/ml#	47
69)	2,3,4,6-Tetrachlorophenol	16.09	232	569510	116.24 ug/ml	100
70)	Diethylphthalate	16.45	149	3306857	106.71 ug/ml	98
71)	Fluorene	16.41	166	3201515	107.63 ug/ml	99
72)	4-Chlorophenyl-phenylether	16.46	204	1406339	110.69 ug/ml	97

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

Quantitation Report (QT Reviewed)

Data File : D:\F090607A\4020F.D
Acq On : 6 Sep 2007 6:04
Sample : SSTD100
Misc : CAL SSTD
MS Integration Params: RTEINT4.P
Quant Time: Sep 07 03:44:36 2007

Vial: 6
Operator: JCM
Inst : MSD #6
Multiplr: 1.00
Quant Results File: 8270F.RES

Quant Method : C:\MSDCHEM\1\METHODS\8270F.M (RTE Integrator)
Title : CLP BNA Calibration
Last Update : Thu Sep 06 15:00:14 2007
Response via : Initial Calibration
DataAcq Meth : 8270F

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
73) 4-Nitroaniline	16.70	138	583930	91.20 ug/ml#	29
75) 4,6-Dinitro-2-methylphenol	16.74	198	478875	102.20 ug/ml	100
76) n-Nitrosodiphenylamine	16.76	169	2038125	104.76 ug/ml#	74
78) Azobenzene	16.78	77	4553919	108.93 ug/ml#	78
79) alpha-BHC	17.53	181	577903	109.99 ug/ml#	85
80) 4-Bromophenyl-phenylether	17.43	248	708797	110.72 ug/ml	96
81) Hexachlorobenzene	17.69	284	719891	110.59 ug/ml	85
82) beta-BHC	18.07	181	433749	108.20 ug/ml	99
83) Pentachlorophenol	18.11	266	410004	97.43 ug/ml	96
84) gamma-BHC	18.13	181	415719	101.36 ug/ml	98
85) n-Octadecane	18.25	57	2672077	108.26 ug/ml#	82
86) Phenanthrene	18.35	178	4175011	106.68 ug/ml	99
87) Anthracene	18.44	178	3985821	102.78 ug/ml	99
88) delta-BHC	18.55	181	396496	104.96 ug/ml	100
89) Carbazole	18.84	167	6961231	205.28 ug/ml	97
90) Heptachlor	19.37	272	333255	111.71 ug/ml	93
91) Di-n-butylphthalate	19.71	149	4644106	99.86 ug/ml#	98
92) Aldrin	19.95	263	174112	107.73 ug/ml	78
93) Heptachlor epoxide	20.60	81	432401	99.72 ug/ml#	87
94) Fluoranthene	20.73	202	3392084	99.77 ug/ml#	87
96) Benzidine	21.07	184	844399	101.43 ug/ml#	100
97) Pyrene	21.15	202	3431700	98.04 ug/ml#	85
98) alpha-Endosulfan	21.21	237	88497	100.27 ug/ml	89
99) p,p'-DDE	21.55	246	696926	96.86 ug/ml#	65
101) Dieldrin	21.62	79	1011633	97.32 ug/ml	99
102) Endrin	21.97	195	31774	94.96 ug/ml#	31
103) Endrin aldehyde	21.97	67	92616	93.72 ug/ml#	93
104) beta-Endosulfan	22.11	195	110156	99.83 ug/ml	93
105) p,p'-DDD	22.19	235	1077429	97.37 ug/ml#	84
106) Butylbenzylphthalate	22.69	149	1663060	95.82 ug/ml#	70
107) Endosulfan sulfate	22.78	272	152461	108.93 ug/ml#	72
108) p,p'-DDT	22.77	235	1071772	103.51 ug/ml	96
109) 4,4'-Methylene-Bis(2-chlor	23.63	231	338852	103.40 ug/ml#	81
110) Methoxychlor	23.63	227	1967600	88.80 ug/ml#	6
111) Benzo[a]anthracene	23.58	228	2477748	101.66 ug/ml#	89
112) 3,3'-Dichlorobenzidine	23.61	252	733320	108.34 ug/ml	98
113) Chrysene	23.67	228	2696772	100.27 ug/ml#	57
114) bis(2-Ethylhexyl)phthalate	23.92	149	2366055	98.02 ug/ml#	99
116) Di-n-octylphthalate	25.08	149	3163313	70.38 ug/ml	100
117) Benzo[b]fluoranthene	25.61	252	1683302	100.26 ug/ml	99
118) Benzo[k]fluoranthene	25.66	252	1411510	89.93 ug/ml	98

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

Quantitation Report (QT Reviewed)

Data File : D:\F090607A\4020F.D
Acq On : 6 Sep 2007 6:04
Sample : SSTD100
Misc : CAL SSTD
MS Integration Params: RTEINT4.P
Quant Time: Sep 07 03:44:36 2007

Vial: 6
Operator: JCM
Inst : MSD #6
Multiplr: 1.00
Quant Results File: 8270F.RES

Quant Method : C:\MSDCHEM\1\METHODS\8270F.M (RTE Integrator)
Title : CLP BNA Calibration
Last Update : Thu Sep 06 15:00:14 2007
Response via : Initial Calibration
DataAcq Meth : 8270F

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
119) Benzo[a]pyrene	26.15	252	1311186	104.52 ug/ml	99
120) Indeno[1,2,3-cd]pyrene	28.20	276	701137m	99.76 ug/ml	
121) Dibenz[a,h]anthracene	28.24	278	636829	104.11 ug/ml	94
122) Benzo[g,h,i]perylene	28.74	276	512127	94.58 ug/ml	95

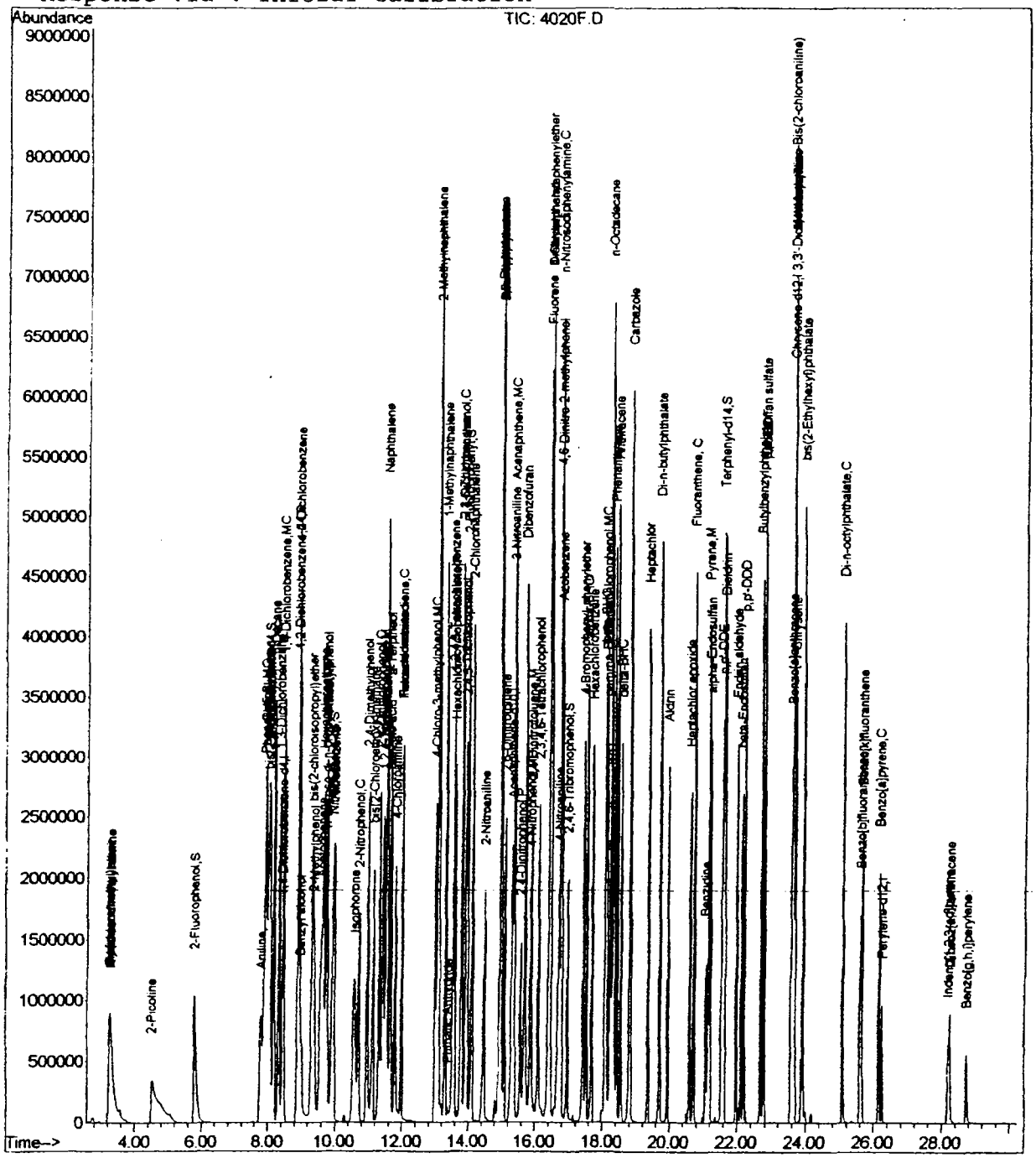
(#) = qualifier out of range (m) = manual integration

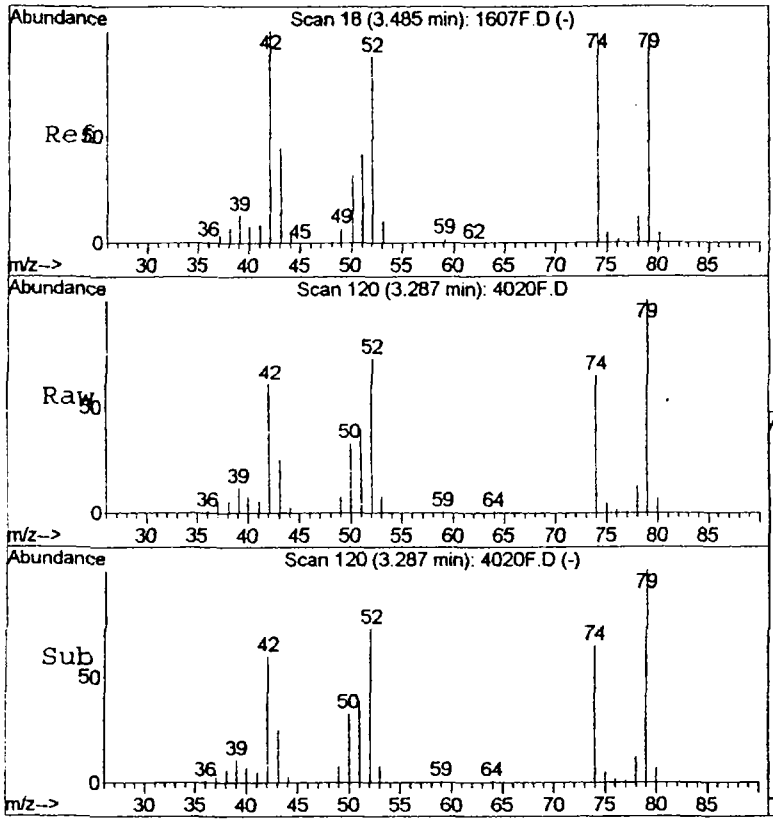
Quantitation Report (QT Reviewed)

Data File : D:\F090607A\4020F.D
Acq On : 6 Sep 2007 6:04
Sample : SSTD100
Misc : CAL SSTD
MS Integration Params: RTEINT4.P
Quant Time: Sep 7 3:56 2007

Vial: 6
Operator: JCM
Inst : MSD #6
Multiplr: 1.00
Quant Results File: 8270F.RES

Method : C:\MSDCHEM\1\METHODS\8270F.M (RTE Integrator)
Title : CLP BNA Calibration
Last Update : Fri Sep 07 04:02:55 2007
Response via : Initial Calibration

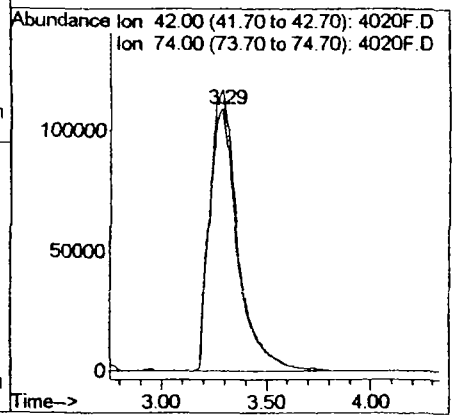


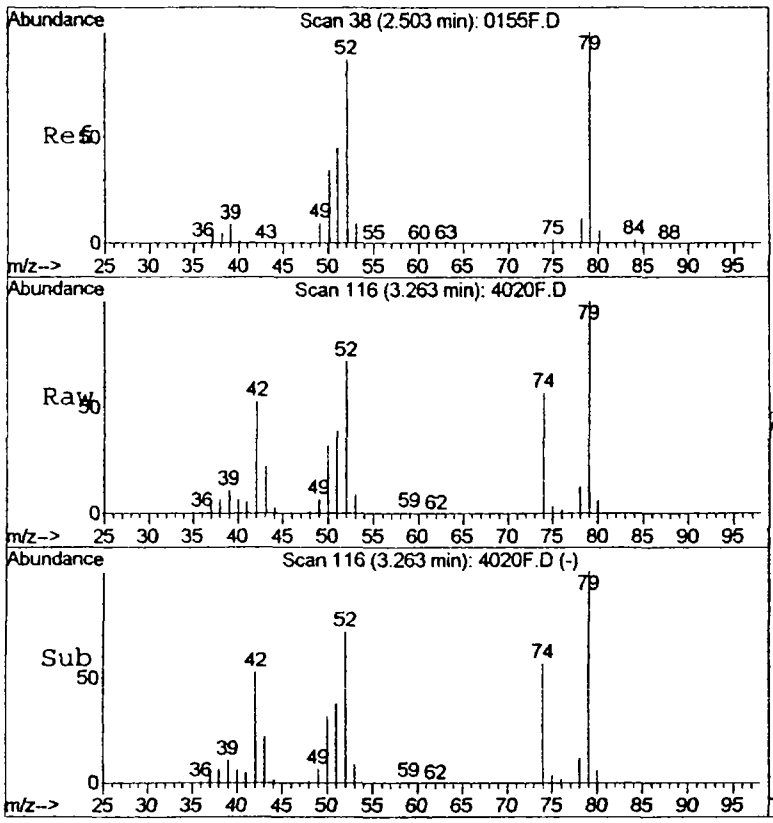


#3
N-Nitrosodimethyl amine
Concen: 104.16 ug/ml m
RT: 3.29 min Scan# 120
Delta R.T. 0.15 min
Lab File: 4020F.D
Acq: 6 Sep 2007 6:04

Tgt Ion: 42 Resp: 1024304

Ion	Ratio	Lower	Upper
42	100		
74	65.5	58.2	87.4

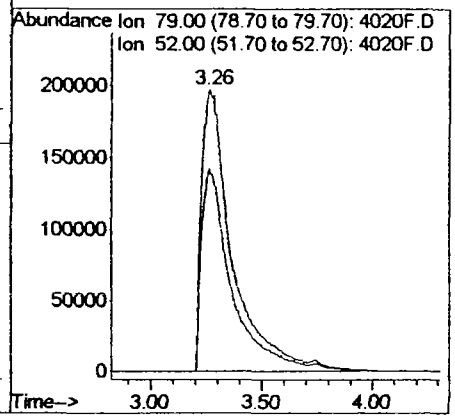


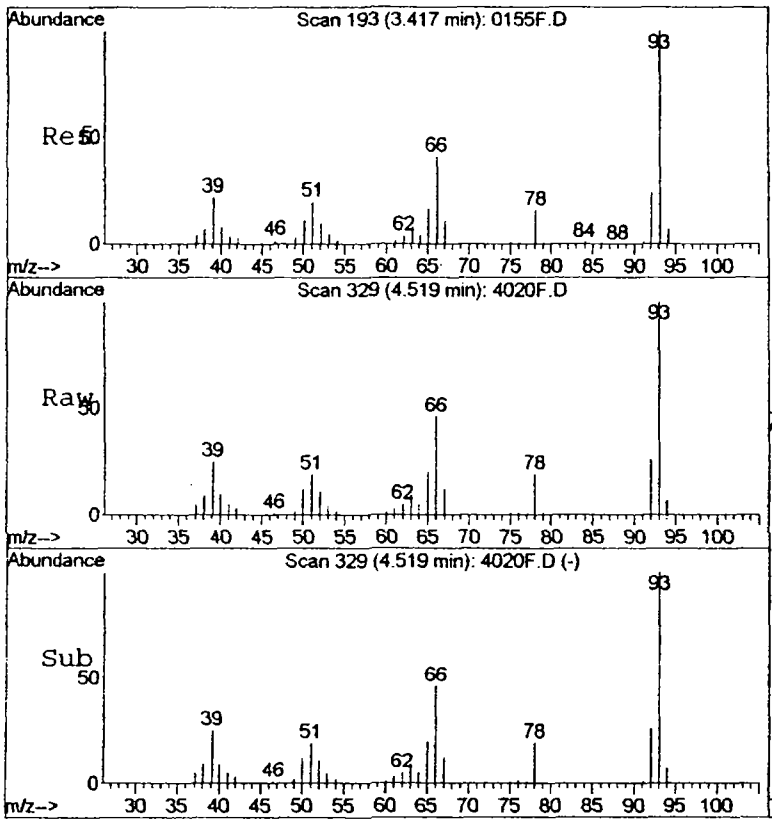


#4
Pyridine
Concen: 96.41 ug/ml m
RT: 3.26 min Scan# 116
Delta R.T. 0.15 min
Lab File: 4020F.D
Acq: 6 Sep 2007 6:04

Tgt Ion: 79 Resp: 1912621

Ion	Ratio	Lower	Upper
79	100		
52	69.0	102.8	154.2#

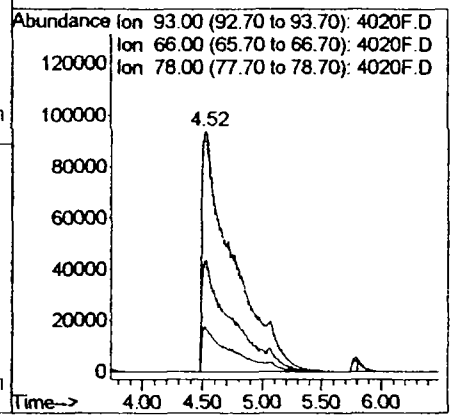


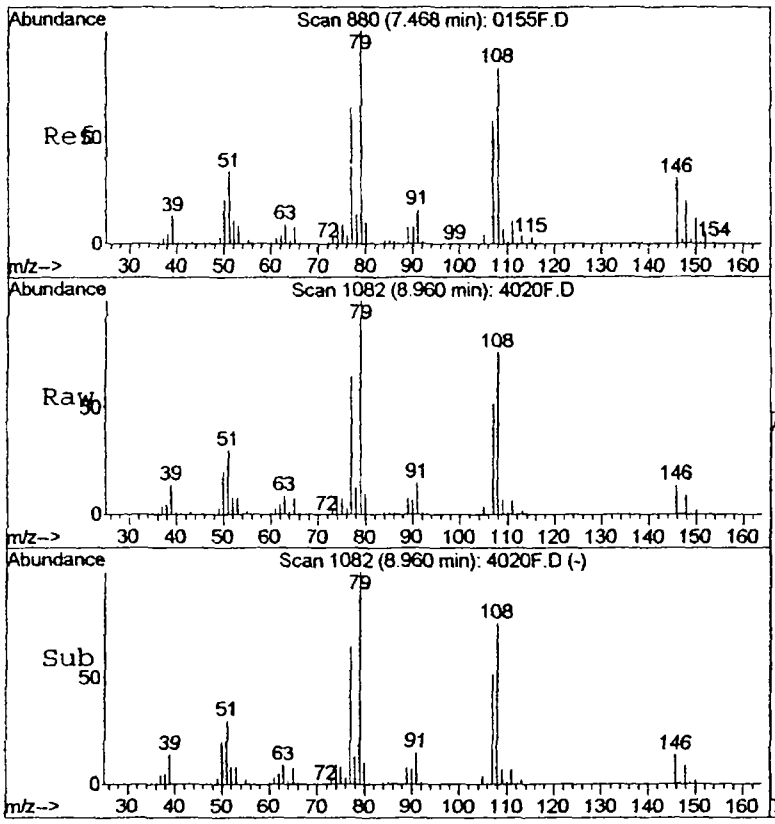


#5
2-Picoline
Concen: 94.94 ug/ml m
RT: 4.52 min Scan# 329
Delta R.T. 0.11 min
Lab File: 4020F.D
Acq: 6 Sep 2007 6:04

Tgt Ion: 93 Resp: 1673977

Ion	Ratio	Lower	Upper
93	100		
66	29.1	35.4	53.2#
78	10.4	11.8	17.6#

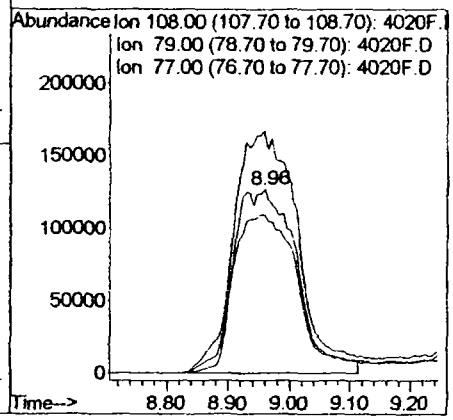


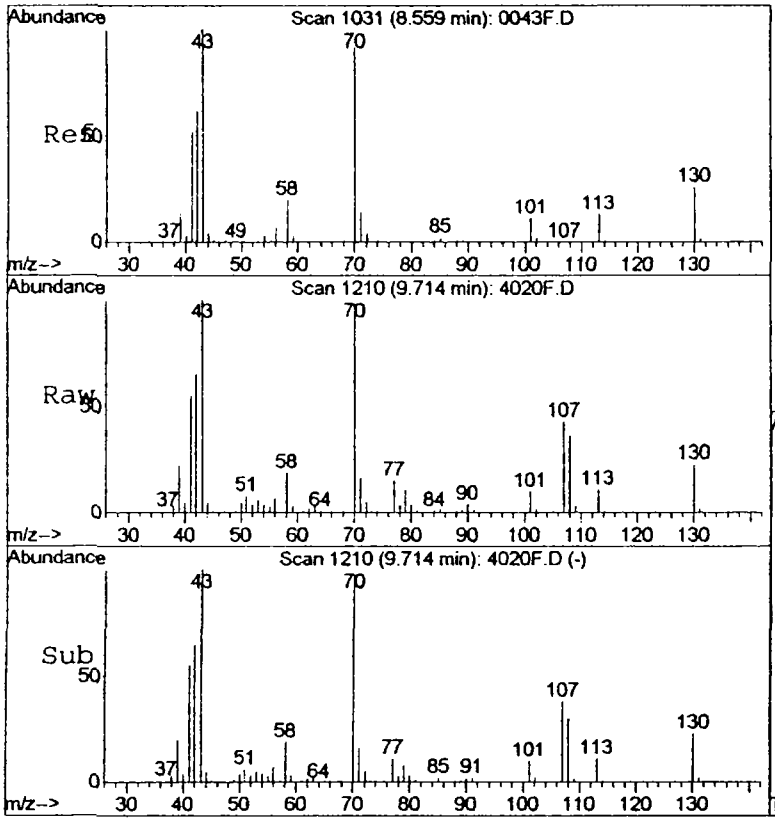


#21
Benzyl alcohol
Concen: 87.28 ug/ml m
RT: 8.96 min Scan# 1082
Delta R.T. 0.03 min
Lab File: 4020F.D
Acq: 6 Sep 2007 6:04

Tgt Ion:108 Resp: 891709

Ion	Ratio	Lower	Upper
108	100		
79	135.0	84.1	126.1#
77	94.4	50.4	75.6#

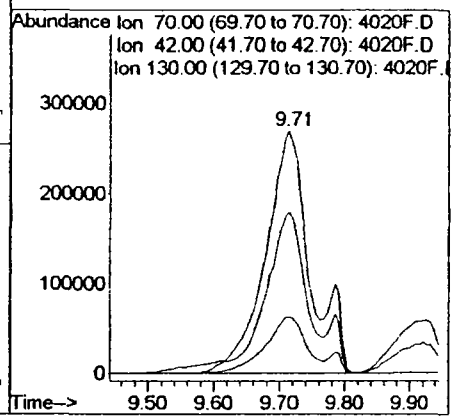


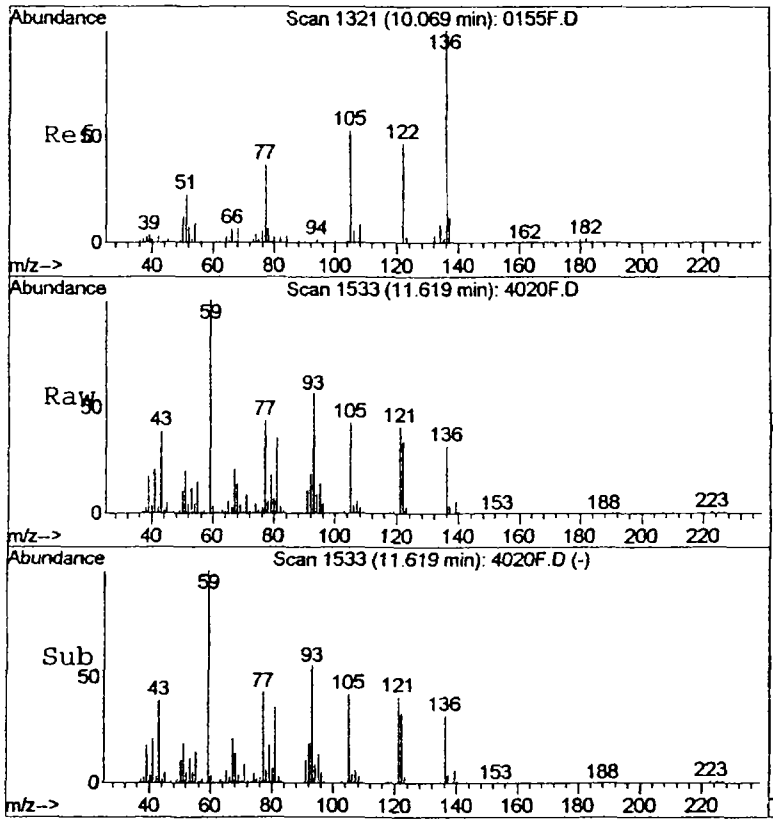


#26
n-Nitroso-di-n-propylamine
Concen: 100.90 ug/ml m
RT: 9.71 min Scan# 1210
Delta R.T. 0.03 min
Lab File: 4020F.D
Acq: 6 Sep 2007 6:04

Tgt Ion: 70 Resp: 1282930

Ion	Ratio	Lower	Upper
70	100		
42	62.2	16.7	25.1#
130	21.3	5.4	8.2#

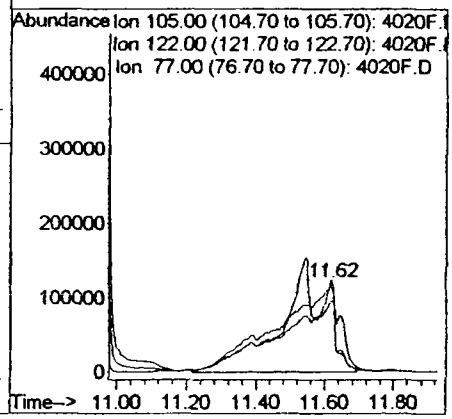


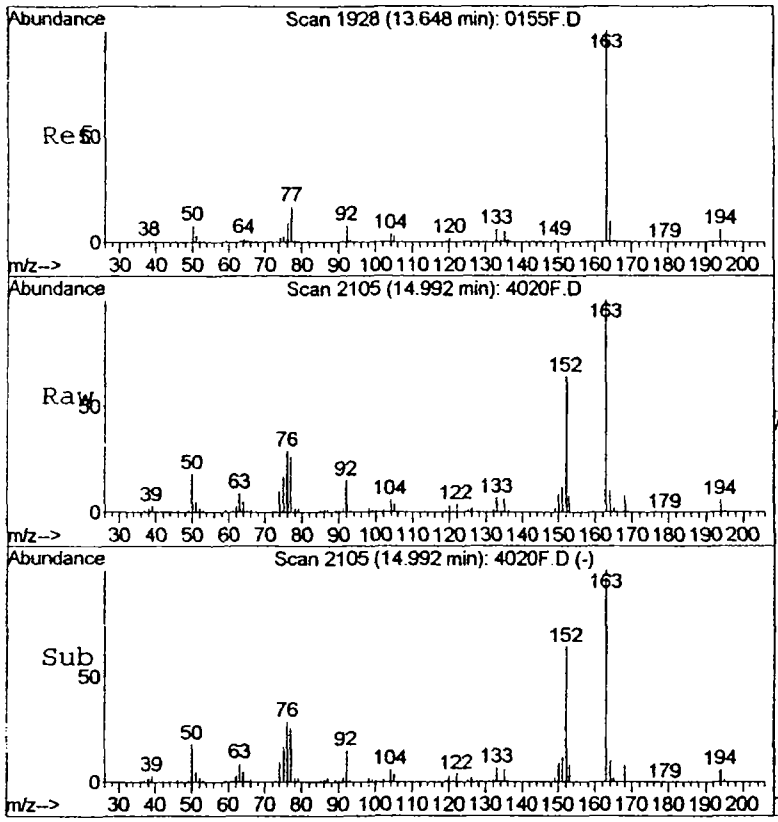


#37
Benzoic acid
Concen: 103.82 ug/ml m
RT: 11.62 min Scan# 1533
Delta R.T. 0.14 min
Lab File: 4020F.D
Acq: 6 Sep 2007 6:04

Tgt Ion:105 Resp: 1396695

Ion	Ratio	Lower	Upper
105	100		
122	13.1	0.0	0.0#
77	12.5	33.6	50.4#

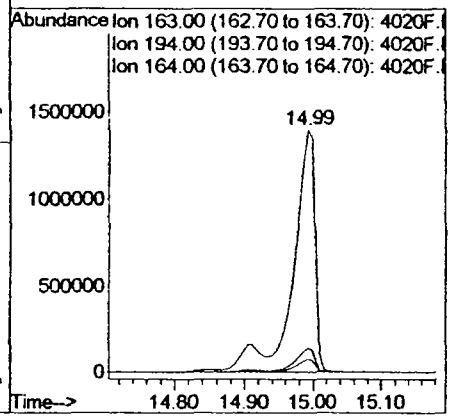


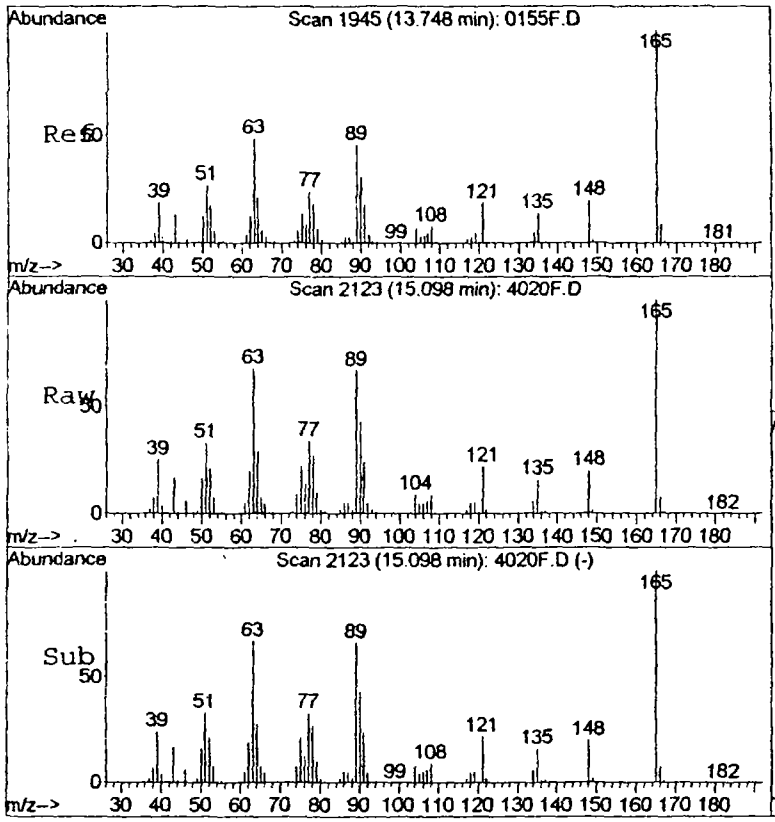


#59
Dimethylphthalate
Concen: 111.43 ug/ml m
RT: 14.99 min Scan# 2105
Delta R.T. 0.02 min
Lab File: 4020F.D
Acq: 6 Sep 2007 6:04

Tgt Ion:163 Resp: 3171018

Ion	Ratio	Lower	Upper
163	100		
194	0.6	3.6	5.4#
164	1.1	6.6	9.8#

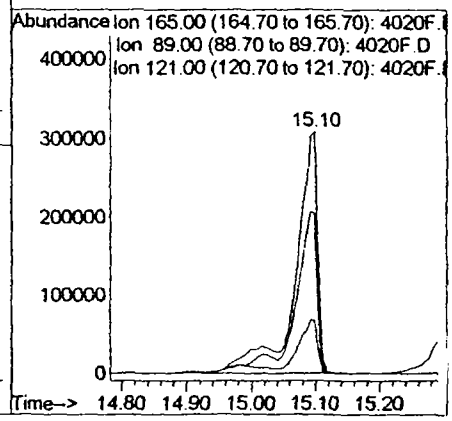


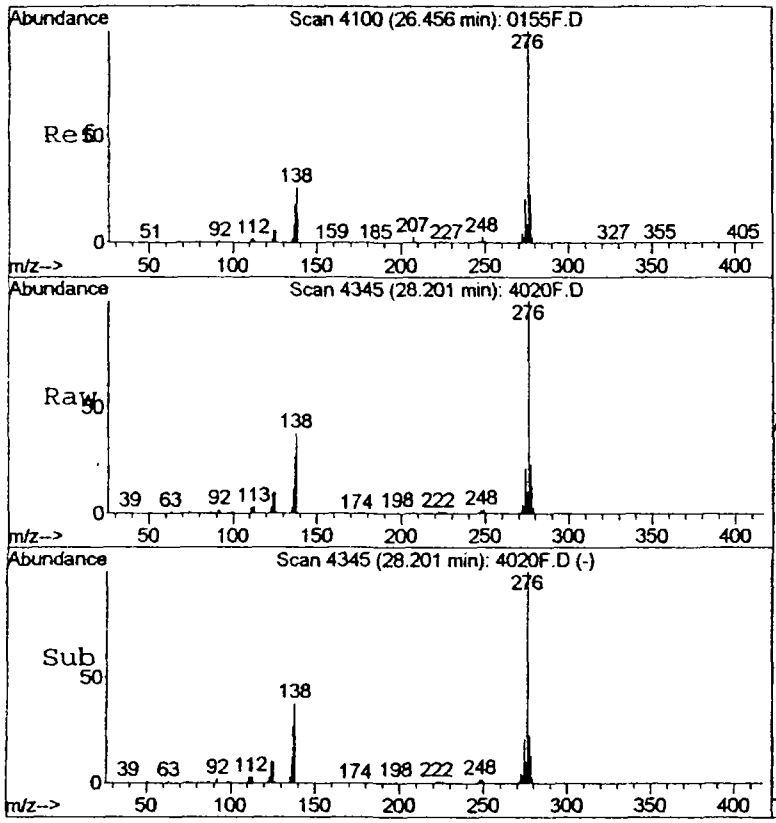


#61
2,6-Dinitrotoluene
Concen: 114.56 ug/ml m
RT: 15.10 min Scan# 2123
Delta R.T. 0.02 min
Lab File: 4020F.D
Acq: 6 Sep 2007 6:04

Tgt Ion:165 Resp: 747866

Ion	Ratio	Lower	Upper
165	100		
89	56.4	23.1	34.7#
121	18.4	10.6	16.0#

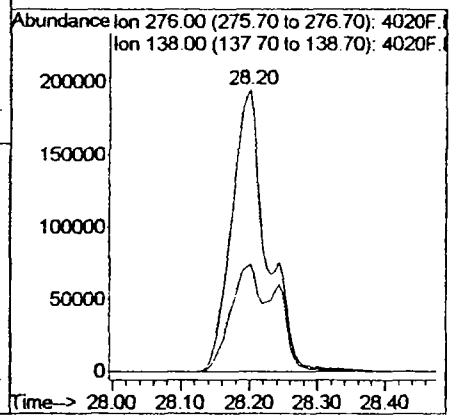




#120
Indeno[1,2,3-cd]pyrene
Concen: 99.76 ug/ml m
RT: 28.20 min Scan# 4345
Delta R.T. -0.02 min
Lab File: 4020F.D
Acq: 6 Sep 2007 6:04

Tgt Ion:276 Resp: 701137

Ion	Ratio	Lower	Upper
276	100		
138	30.9	33.7	50.5#



Quantitation Report (QT Reviewed)

Data File : D:\F090607A\4021F.D
Acq On : 6 Sep 2007 6:43
Sample : SSTD120
Misc : CAL SSTD
MS Integration Params: RTEINT4.P
Quant Time: Sep 07 03:46:35 2007

Vial: 7
Operator: JCM
Inst : MSD #6
Multiplr: 1.00
Quant Results File: 8270F.RES

Quant Method : C:\MSDCHEM\1\METHODS\8270F.M (RTE Integrator)
Title : CLP BNA Calibration
Last Update : Thu Sep 06 15:00:14 2007
Response via : Initial Calibration
DataAcq Meth : 8270F

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	8.43	152	438080	40.00	ug/ml	0.00
29) Naphthalene-d8	11.50	136	1936467	40.00	ug/ml	0.00
47) Acenaphthene-d10	15.30	164	1064529	40.00	ug/ml	0.00
74) Phenanthrene-d10	18.30	188	1512779	40.00	ug/ml	0.01
95) Chrysene-d12	23.61	240	1076572	40.00	ug/ml	0.00
115) Perylene-d12	26.24	264	420690	40.00	ug/ml	-0.01
System Monitoring Compounds						
7) 2-Fluorophenol	5.80	112	1832024	118.00	ug/ml	0.09
Spiked Amount 200.000	Range 21 - 100		Recovery = 59.00%			
10) Phenol-d5	7.92	99	2214658	108.14	ug/ml	0.05
Spiked Amount 200.000	Range 10 - 94		Recovery = 54.07%			
13) 2-Chlorophenol-d4	8.04	132	1984360	118.05	ug/ml	0.04
Spiked Amount 200.000	Range 27 - 123		Recovery = 59.02%			
19) 1,2-Dichlorobenzene-d4	8.89	150	2092158	125.00	ug/ml	0.01
Spiked Amount 100.000	Range 32 - 220		Recovery = 125.00%			
30) Nitrobenzene-d5	9.93	82	2278316	118.85	ug/ml	0.02
Spiked Amount 100.000	Range 18 - 57		Recovery = 118.85%#			
54) 2-Fluorobiphenyl	13.97	172	3923136	126.34	ug/ml	0.00
Spiked Amount 100.000	Range 22 - 58		Recovery = 126.34%#			
77) 2,4,6-Tribromophenol	16.96	330	413951	139.77	ug/ml	0.01
Spiked Amount 200.000	Range 10 - 123		Recovery = 69.89%			
100) Terphenyl-d14	21.60	244	3247527	120.48	ug/ml	0.01
Spiked Amount 100.000	Range 17 - 71		Recovery = 120.48%#			

Target Compounds						Qvalue
3) N-Nitrosodimethyl amine	3.35	42	1219557m	123.17	ug/ml	
4) Pyridine	3.33	79	2303981m	115.34	ug/ml	
5) 2-Picoline	4.57	93	1959199m	110.36	ug/ml	
9) Aniline	7.80	93	2288451	101.02	ug/ml	98
11) Phenol	7.94	94	2390400	110.26	ug/ml#	51
12) bis(2-Chloroethyl)ether	8.03	93	2766096m	143.20	ug/ml	
14) 2-Chlorophenol	8.07	128	1956064	117.22	ug/ml	93
15) n-Decane	8.19	57	2611639	122.51	ug/ml	88
16) 1,3-Dichlorobenzene	8.34	146	2076079	123.92	ug/ml#	98
18) 1,4-Dichlorobenzene	8.47	146	2139698	123.82	ug/ml	99
20) 1,2-Dichlorobenzene	8.93	146	2083434	125.72	ug/ml#	98
21) Benzyl alcohol	8.94	108	1114693m	108.36	ug/ml	
23) 2-Methylphenol	9.38	108	1597900	109.01	ug/ml	91
24) bis(2-chloroisopropyl)ethe	9.31	45	3183406	119.24	ug/ml#	77
25) Acetophenone	9.60	105	2767160	115.39	ug/ml#	84
26) n-Nitroso-di-n-propylamine	9.73	70	1563903m	122.16	ug/ml	

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

Quantitation Report (QT Reviewed)

Data File : D:\F090607A\4021F.D
Acq On : 6 Sep 2007 6:43
Sample : SSTD120
Misc : CAL SSTD
MS Integration Params: RTEINT4.P
Quant Time: Sep 07 03:46:35 2007

Vial: 7
Operator: JCM
Inst : MSD #6
Multiplr: 1.00
Quant Results File: 8270F.RES

Quant Method : C:\MSDCHEM\1\METHODS\8270F.M (RTE Integrator)
Title : CLP BNA Calibration
Last Update : Thu Sep 06 15:00:14 2007
Response via : Initial Calibration
DataAcq Meth : 8270F

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
27)	4-Methylphenol	9.77	108	1806950	118.85	ug/ml	99
28)	Hexachloroethane	9.65	117	981545	125.95	ug/ml#	77
31)	Nitrobenzene	9.97	77	2326813	118.62	ug/ml#	78
32)	Isophorone	10.59	82	4171828	127.01	ug/ml#	82
33)	2-Nitrophenol	10.71	139	1043370	122.30	ug/ml#	73
34)	2,4-Dimethylphenol	10.98	107	1949274	121.20	ug/ml	86
35)	bis(2-Chloroethoxy)methane	11.15	93	2430386	124.75	ug/ml	98
36)	2,4-Dichlorophenol	11.32	162	1437481	132.94	ug/ml#	92
37)	Benzoic acid	11.65	105	1795554m	123.75	ug/ml	
38)	1,2,4-Trichlorobenzene	11.43	180	1512900	124.77	ug/ml	99
39)	Naphthalene	11.55	128	5896778	123.43	ug/ml	99
40)	a-Terpineol	11.65	59	1927572	128.73	ug/ml#	92
41)	4-Chloroaniline	11.80	127	1968736	133.30	ug/ml	97
42)	Toluenediamine	11.99	122	44506	116.41	ug/ml#	55
43)	Hexachlorobutadiene	11.99	225	779827	130.95	ug/ml	100
44)	4-Chloro-3-methylphenol	12.99	107	1807289	132.93	ug/ml#	1
45)	2-Methylnaphthalene	13.11	141	6810378	256.23	ug/ml#	65
46)	1-Methylnaphthalene	13.32	142	3656576	128.33	ug/ml	98
48)	Phthalic Anhydride	13.52	104	635913m	106.45	ug/ml	
49)	Hexachlorocyclopentadiene	13.59	237	971741	124.88	ug/ml#	99
50)	1,2,4,5-Tetrachlorobenzene	13.54	216	1354944	127.65	ug/ml	97
51)	2,3-Dichloroaniline	13.80	161	1809237	125.63	ug/ml	99
52)	2,4,6-Trichlorophenol	13.81	196	993270	125.30	ug/ml	100
53)	2,4,5-Trichlorophenol	13.91	196	1101486	130.81	ug/ml	100
56)	2-Chloronaphthalene	14.13	162	3475966	124.97	ug/ml	96
58)	2-Nitroaniline	14.49	65	1273404	123.39	ug/ml#	76
59)	Dimethylphthalate	15.01	163	3875079m	131.37	ug/ml	
60)	1,3-Dinitrobenzene	14.99	168	672262	127.68	ug/ml#	39
61)	2,6-Dinitrotoluene	15.11	165	927557m	137.08	ug/ml	
62)	Acenaphthylene	14.99	152	5679686	124.49	ug/ml	98
63)	3-Nitroaniline	15.37	138	773517	115.75	ug/ml#	36
64)	Acenaphthene	15.39	153	3452109	124.51	ug/ml	98
65)	2,4-Dinitrophenol	15.58	184	525492	121.08	ug/ml#	79
66)	4-Nitrophenol	15.86	109	537176	125.90	ug/ml#	65
67)	Dibenzofuran	15.72	168	4912798	126.01	ug/ml	94
68)	2,4-Dinitrotoluene	15.91	165	1104076	121.92	ug/ml#	49
69)	2,3,4,6-Tetrachlorophenol	16.11	232	718645	141.51	ug/ml	99
70)	Diethylphthalate	16.46	149	3875761	120.66	ug/ml	98
71)	Fluorene	16.43	166	3883504	125.96	ug/ml	99
72)	4-Chlorophenyl-phenylether	16.47	204	1702449	129.28	ug/ml	97
73)	4-Nitroaniline	16.72	138	855508m	128.91	ug/ml	

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

Quantitation Report (QT Reviewed)

Data File : D:\F090607A\4021F.D
Acq On : 6 Sep 2007 6:43
Sample : SSTD120
Misc : CAL SSTD
MS Integration Params: RTEINT4.P
Quant Time: Sep 07 03:46:35 2007

Vial: 7
Operator: JCM
Inst : MSD #6
Multiplr: 1.00
Quant Results File: 8270F.RES

Quant Method : C:\MSDCHEM\1\METHODS\8270F.M (RTE Integrator)
Title : CLP BNA Calibration
Last Update : Thu Sep 06 15:00:14 2007
Response via : Initial Calibration
DataAcq Meth : 8270F

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
75)	4,6-Dinitro-2-methylphenol	16.76	198	606806	128.41 ug/ml	100
76)	n-Nitrosodiphenylamine	16.77	169	2509270	127.88 ug/ml#	81
78)	Azobenzene	16.80	77	5454143	129.36 ug/ml#	78
79)	alpha-BHC	17.54	181	698665	131.84 ug/ml#	87
80)	4-Bromophenyl-phenylether	17.43	248	871778	135.02 ug/ml	95
81)	Hexachlorobenzene	17.70	284	885710	134.91 ug/ml#	84
82)	beta-BHC	18.08	181	555391	137.37 ug/ml	93
83)	Pentachlorophenol	18.11	266	517988	118.95 ug/ml	96
84)	gamma-BHC	18.14	181	455082	110.02 ug/ml	97
85)	n-Octadecane	18.25	57	3234279	129.93 ug/ml#	80
86)	Phenanthrene	18.36	178	4979500	126.16 ug/ml	99
87)	Anthracene	18.45	178	4819664	123.23 ug/ml	99
88)	delta-BHC	18.55	181	484316	127.12 ug/ml	99
89)	Carbazole	18.85	167	8580722	250.89 ug/ml	97
90)	Heptachlor	19.37	272	403240	134.02 ug/ml	96
91)	Di-n-butylphthalate	19.72	149	5660533	120.68 ug/ml#	98
92)	Aldrin	19.95	263	208524	127.93 ug/ml	81
93)	Heptachlor epoxide	20.61	81	515643	117.91 ug/ml#	88
94)	Fluoranthene	20.74	202	4400132	128.32 ug/ml#	87
96)	Benzidine	21.09	184	1212141	138.11 ug/ml#	100
97)	Pyrene	21.17	202	4427040	119.95 ug/ml#	85
98)	alpha-Endosulfan	21.21	237	108517	116.61 ug/ml	89
99)	p,p'-DDE	21.56	246	899913	118.63 ug/ml#	65
101)	Dieldrin	21.63	79	1207958	110.22 ug/ml	99
102)	Endrin	21.97	195	40360	114.41 ug/ml#	26
103)	Endrin aldehyde	21.97	67	113104	108.55 ug/ml#	91
104)	beta-Endosulfan	22.12	195	147659	126.92 ug/ml	94
105)	p,p'-DDD	22.20	235	1446172	123.95 ug/ml#	86
106)	Butylbenzylphthalate	22.70	149	2198053	120.12 ug/ml#	73
107)	Endosulfan sulfate	22.78	272	189848	128.65 ug/ml	76
108)	p,p'-DDT	22.78	235	1390813	127.40 ug/ml	95
109)	4,4'-Methylene-Bis(2-chlor	23.63	231	371704	107.58 ug/ml#	82
110)	Methoxychlor	23.64	227	2776624m	118.85 ug/ml	
111)	Benzo[a]anthracene	23.58	228	3242770	126.19 ug/ml#	89
112)	3,3'-Dichlorobenzidine	23.62	252	794707	111.36 ug/ml	99
113)	Chrysene	23.68	228	3456907	121.91 ug/ml#	56
114)	bis(2-Ethylhexyl)phthalate	23.93	149	3040103	119.46 ug/ml#	99
116)	Di-n-octylphthalate	25.09	149	3698569	85.90 ug/ml	100
117)	Benzo[b]fluoranthene	25.62	252	2244403	141.46 ug/ml	95
118)	Benzo[k]fluoranthene	25.67	252	1510091	101.82 ug/ml	99
119)	Benzo[a]pyrene	26.16	252	1534814	129.47 ug/ml	99

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

Quantitation Report (QT Reviewed)

Data File : D:\F090607A\4021F.D
Acq On : 6 Sep 2007 6:43
Sample : SSTD120
Misc : CAL SSTD
MS Integration Params: RTEINT4.P
Quant Time: Sep 07 03:46:35 2007

Vial: 7
Operator: JCM
Inst : MSD #6
Multiplr: 1.00
Quant Results File: 8270F.RES

Quant Method : C:\MSDCHEM\1\METHODS\8270F.M (RTE Integrator)
Title : CLP BNA Calibration
Last Update : Thu Sep 06 15:00:14 2007
Response via : Initial Calibration
DataAcq Meth : 8270F

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
120)	Indeno[1,2,3-cd]pyrene	28.20	276	633926	95.45 ug/ml#	83
121)	Dibenz[a,h]anthracene	28.24	278	597007	103.29 ug/ml	94
122)	Benzo[g,h,i]perylene	28.74	276	414252	80.96 ug/ml	94

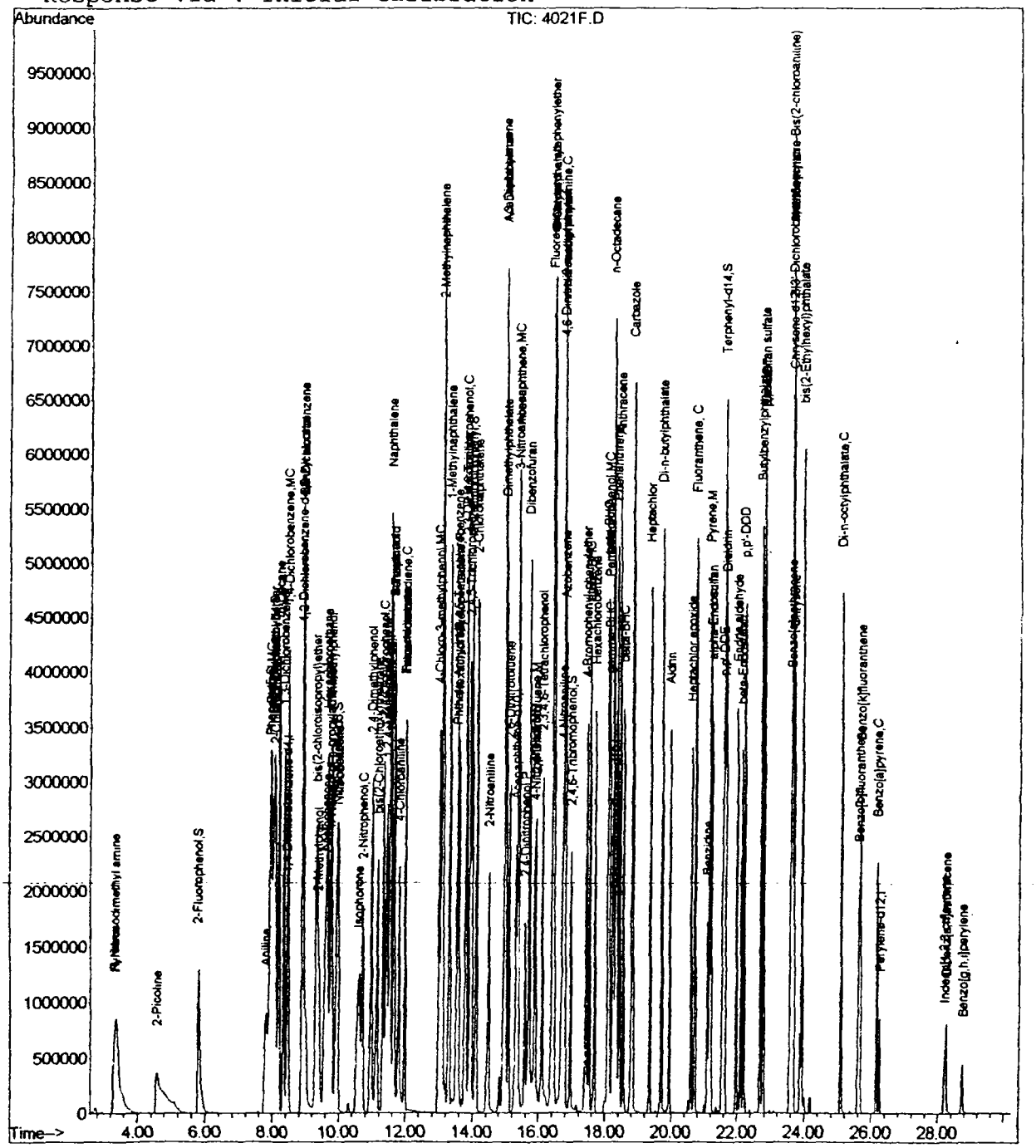
(#) = qualifier out of range (m) = manual integration

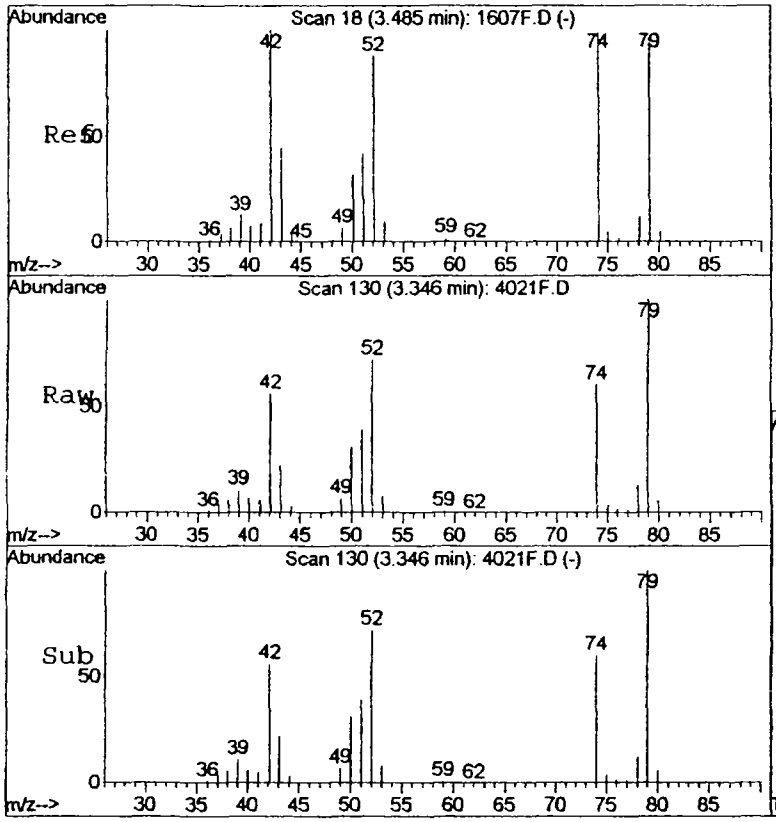
Quantitation Report (QT Reviewed)

Data File : D:\F090607A\4021F.D
Acq On : 6 Sep 2007 6:43
Sample : SSTD120
Misc : CAL SSTD
MS Integration Params: RTEINT4.P
Quant Time: Sep 7 3:48 2007

Vial: 7
Operator: JCM
Inst : MSD #6
Multiplr: 1.00
Quant Results File: 8270F.RES

Method : C:\MSDCHEM\1\METHODS\8270F.M (RTE Integrator)
Title : CLP BNA Calibration
Last Update : Fri Sep 07 04:02:55 2007
Response via : Initial Calibration

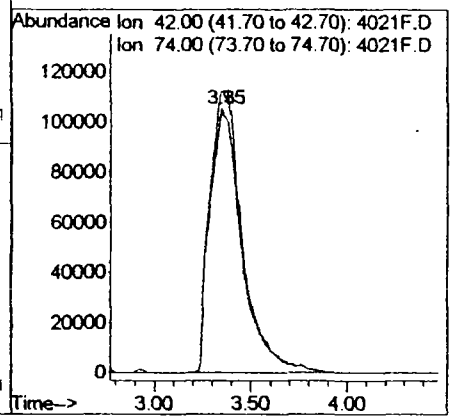


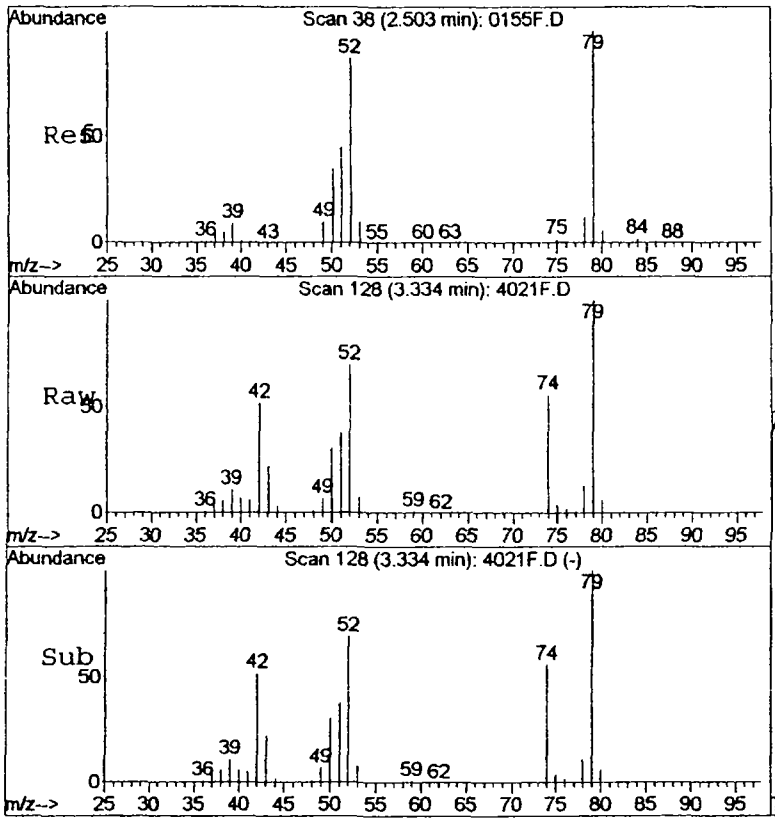


#3
N-Nitrosodimethyl amine
Concen: 123.17 ug/ml m
RT: 3.35 min Scan# 130
Delta R.T. 0.21 min
Lab File: 4021F.D
Acq: 6 Sep 2007 6:43

Tgt Ion: 42 Resp: 1219557

Ion	Ratio	Lower	Upper
42	100		
74	0.0	58.2	87.4#

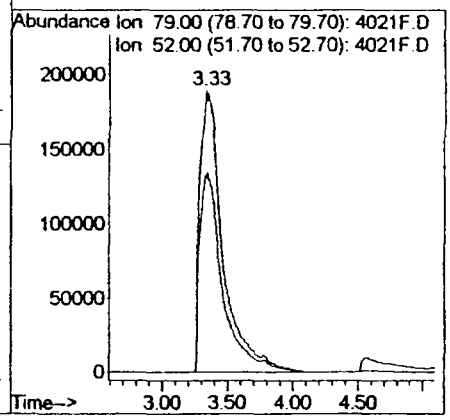


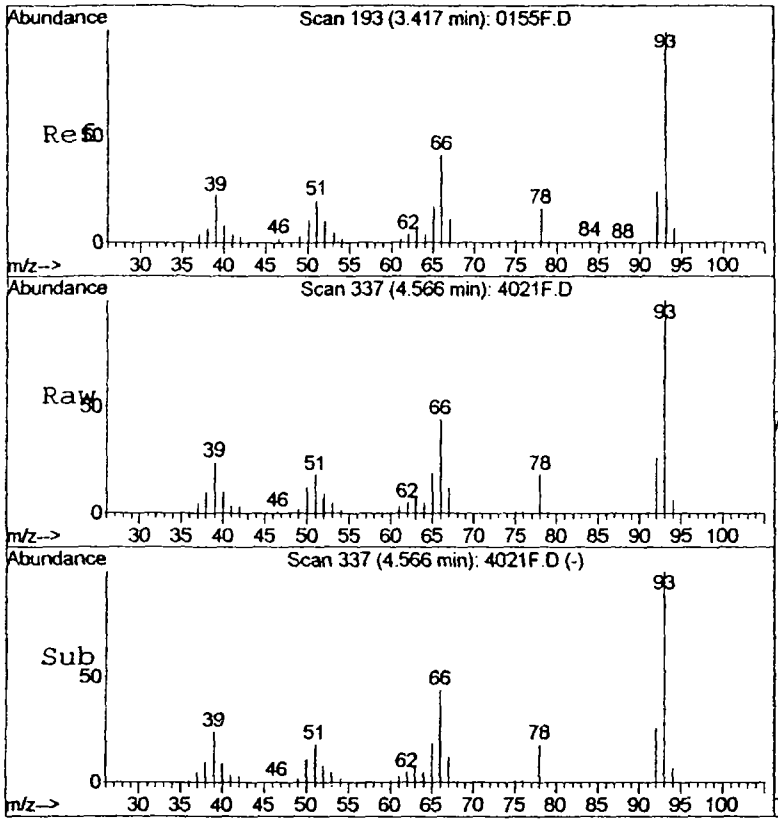


#4
Pyridine
Concen: 115.34 ug/ml m
RT: 3.33 min Scan# 128
Delta R.T. 0.22 min
Lab File: 4021F.D
Acq: 6 Sep 2007 6:43

Tgt Ion: 79 Resp: 2303981

Ion	Ratio	Lower	Upper
79	100		
52	66.3	102.8	154.2#

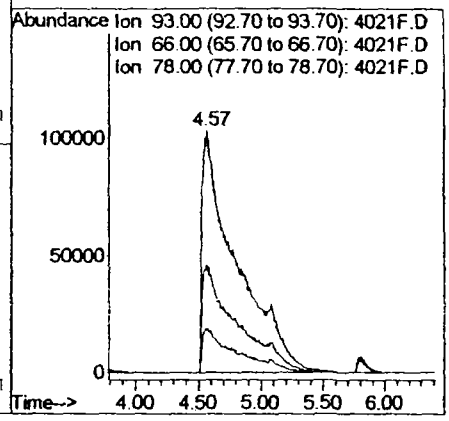


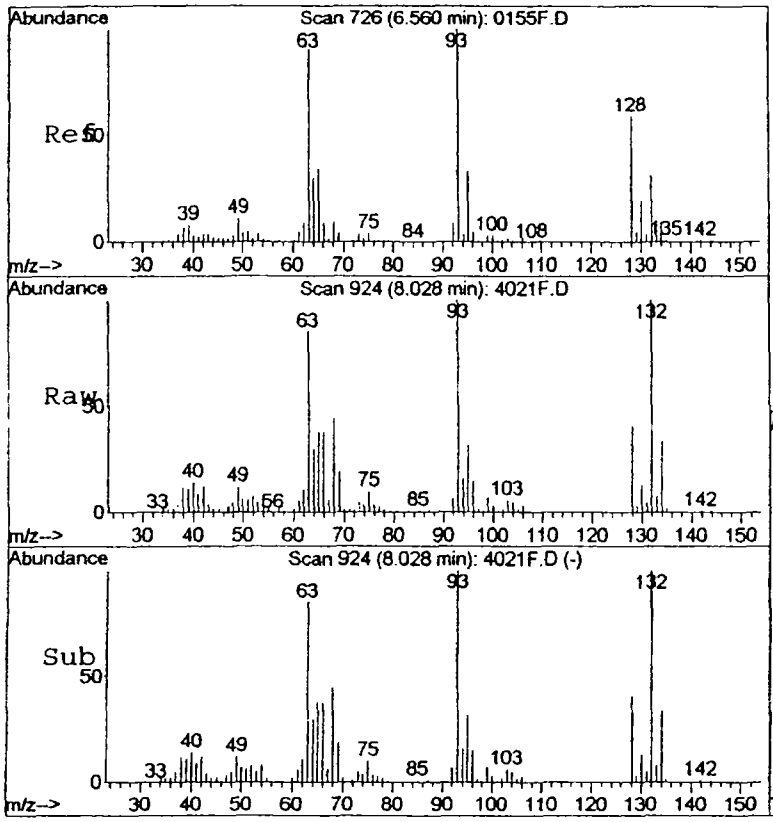


#5
2-Picoline
Concen: 110.36 ug/ml m
RT: 4.57 min Scan# 337
Delta R.T. 0.15 min
Lab File: 4021F.D
Acq: 6 Sep 2007 6:43

Tgt Ion: 93 Resp: 1959199

Ion	Ratio	Lower	Upper
93	100		
66	19.1	35.4	53.2#
78	3.5	11.8	17.6#

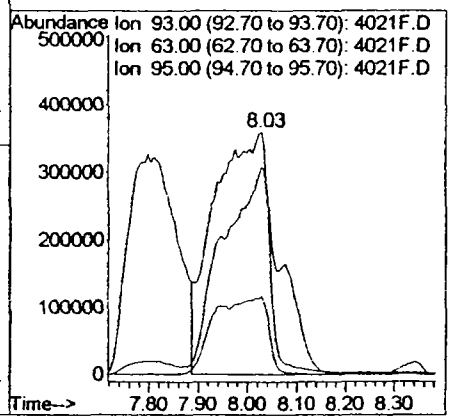


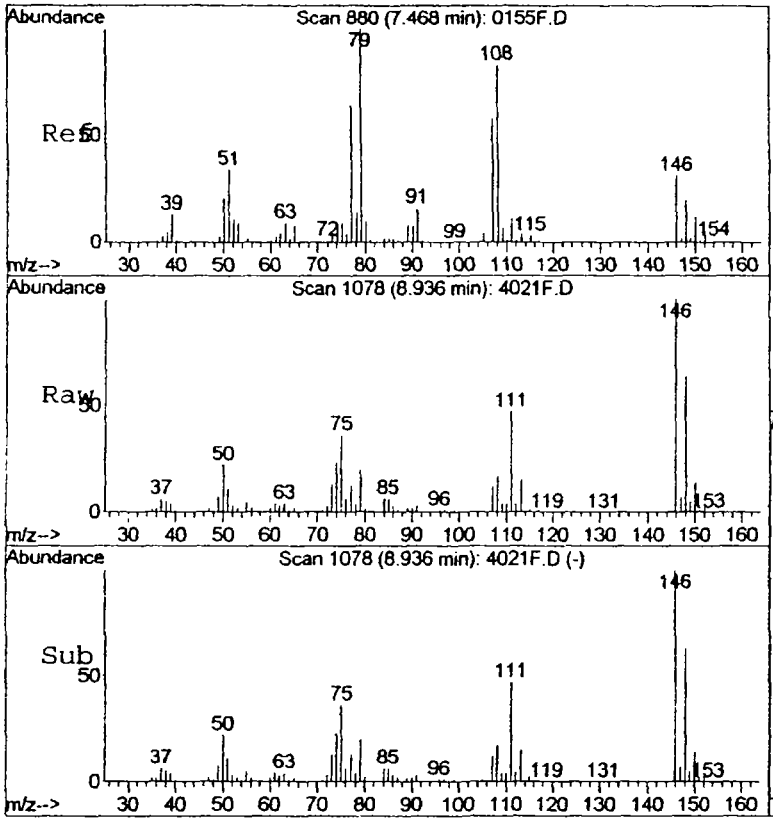


#12
bis(2-Chloroethyl)ether
Concen: 143.20 ug/ml m
RT: 8.03 min Scan# 924
Delta R.T. 0.07 min
Lab File: 4021F.D
Acq: 6 Sep 2007 6:43

Tgt Ion: 93 Resp: 2766096

Ion	Ratio	Lower	Upper
93	100		
63	0.0	5.8	8.8#
95	11.9	0.2	0.4#

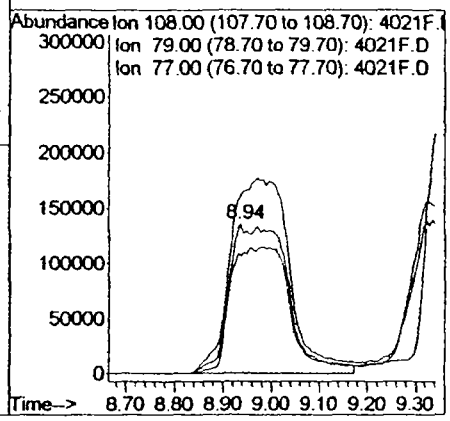


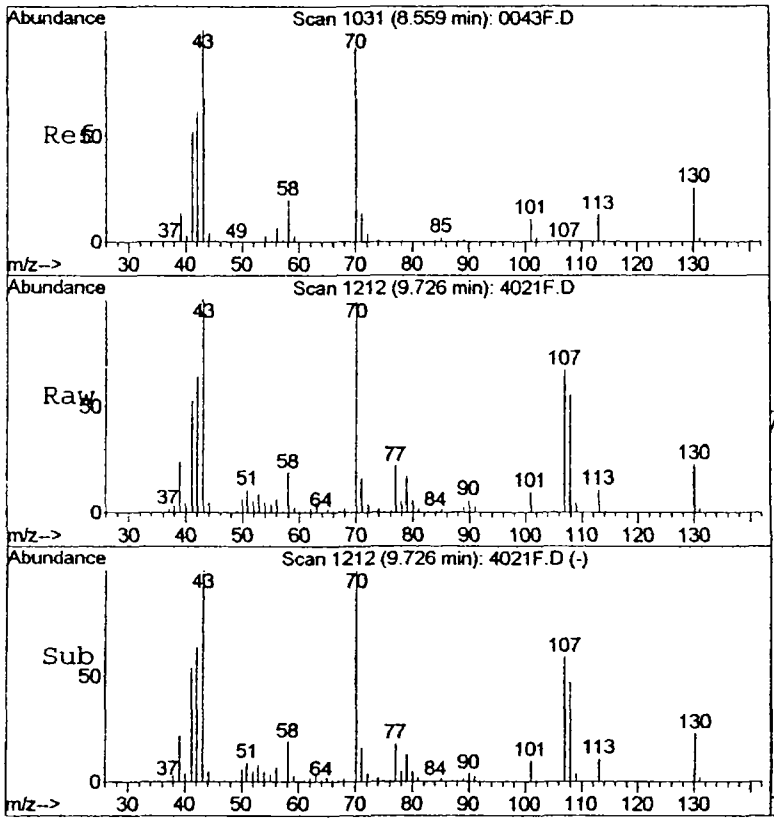


#21
Benzyl alcohol
Concen: 108.36 ug/ml m
RT: 8.94 min Scan# 1078
Delta R.T. 0.01 min
Lab File: 4021F.D
Acq: 6 Sep 2007 6:43

Tgt Ion:108 Resp: 1114693

Ion	Ratio	Lower	Upper
108	100		
79	0.0	84.1	126.1#
77	42.3	50.4	75.6#

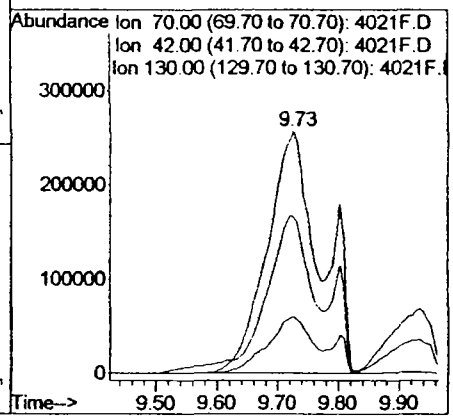


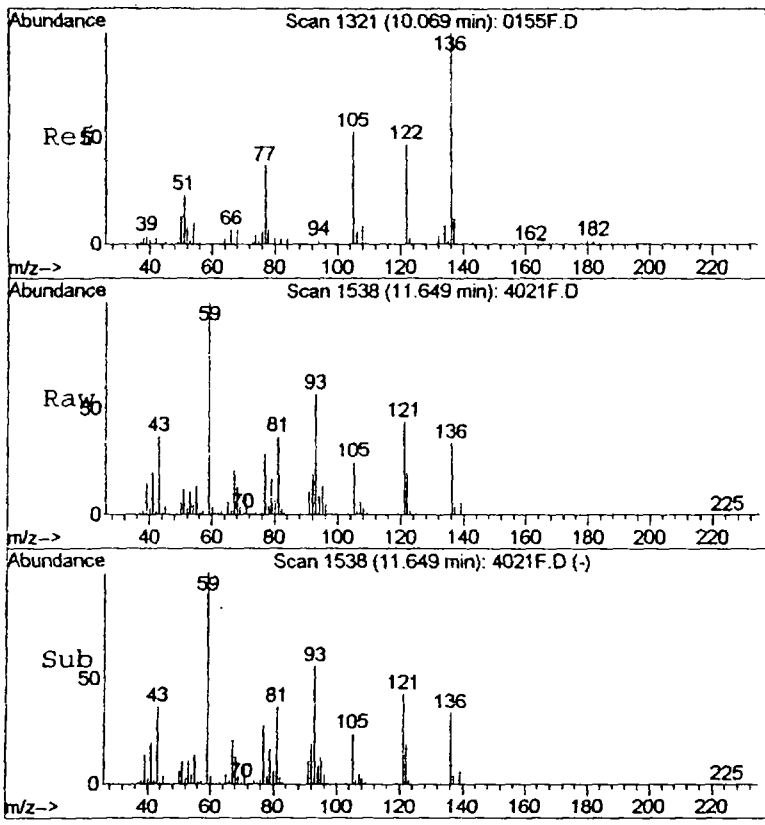


#26
n-Nitroso-di-n-propylamine
Concen: 122.16 ug/ml m
RT: 9.73 min Scan# 1212
Delta R.T. 0.04 min
Lab File: 4021F.D
Acq: 6 Sep 2007 6:43

Tgt Ion: 70 Resp: 1563903

Ion	Ratio	Lower	Upper
70	100		
42	55.5	16.7	25.1#
130	19.1	5.4	8.2#

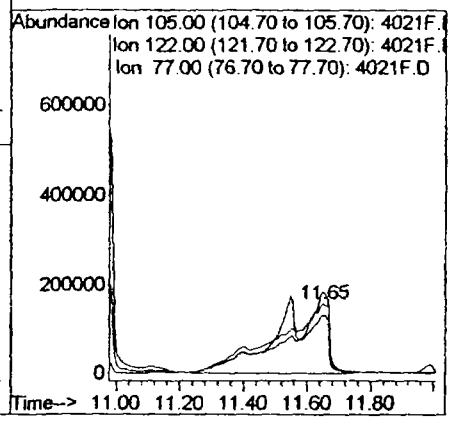


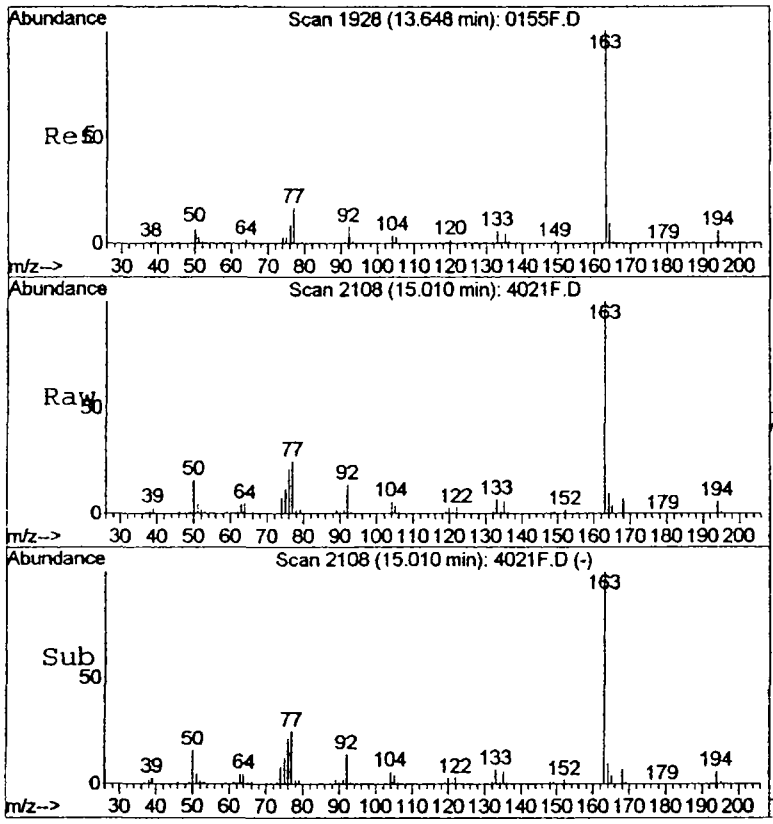


#37
Benzoic acid
Concen: 123.75 ug/ml m
RT: 11.65 min Scan# 1538
Delta R.T. 0.17 min
Lab File: 4021F.D
Acq: 6 Sep 2007 6:43

Tgt Ion:105 Resp: 1795554

Ion	Ratio	Lower	Upper
105	100		
122	13.7	0.0	0.0#
77	13.0	33.6	50.4#

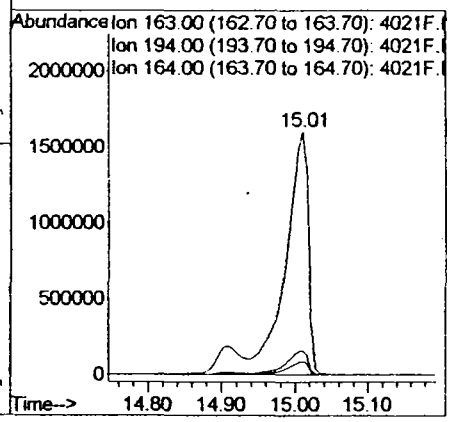


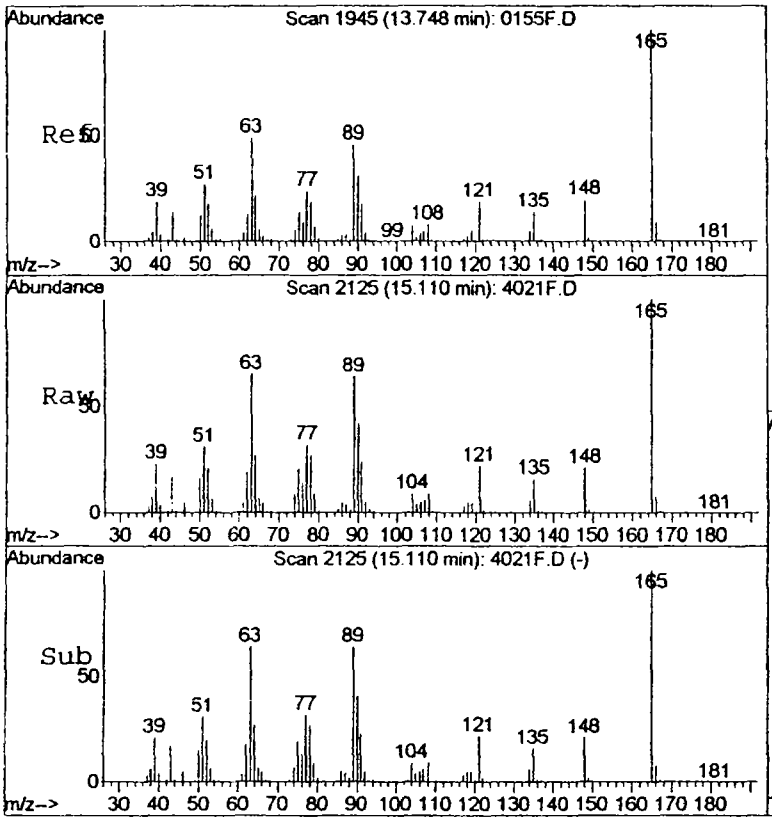


#59
Dimethylphthalate
Concen: 131.37 ug/ml m
RT: 15.01 min Scan# 2108
Delta R.T. 0.04 min
Lab File: 4021F.D
Acq: 6 Sep 2007 6:43

Tgt Ion:163 Resp: 3875079

Ion	Ratio	Lower	Upper
163	100		
194	0.6	3.6	5.4#
164	1.0	6.6	9.8#

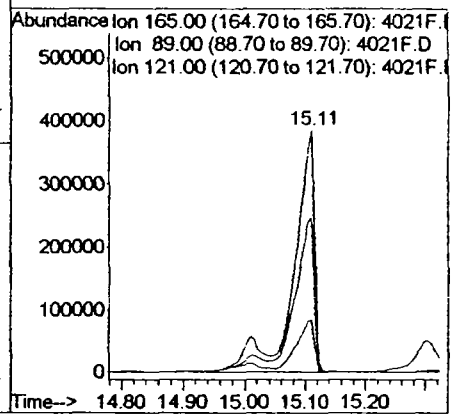


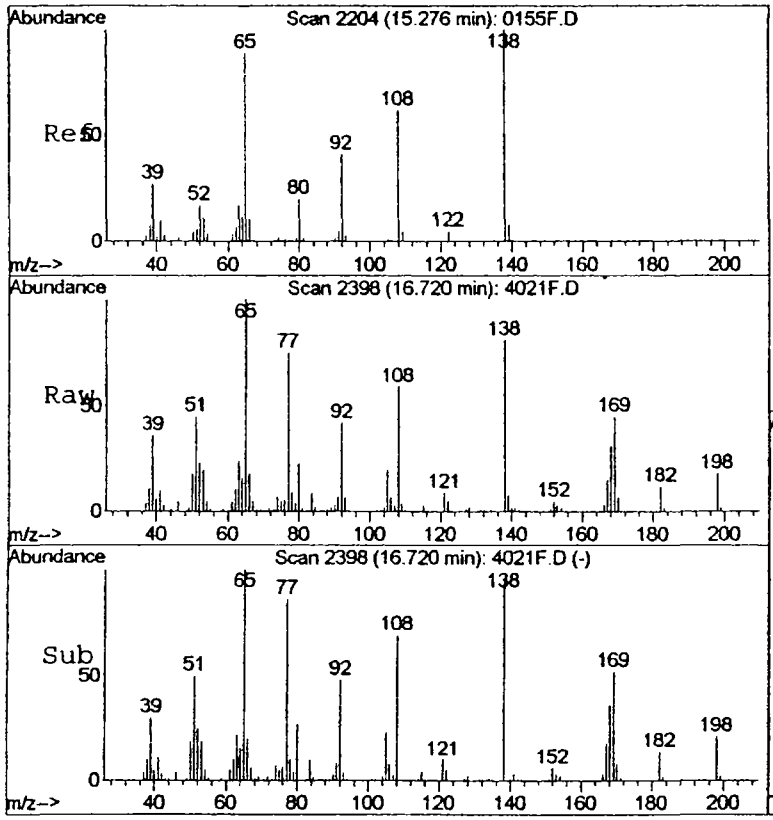


#61
2,6-Dinitrotoluene
Concen: 137.08 ug/ml m
RT: 15.11 min Scan# 2125
Delta R.T. 0.03 min
Lab File: 4021F.D
Acq: 6 Sep 2007 6:43

Tgt Ion:165 Resp: 927557

Ion	Ratio	Lower	Upper
165	100		
89	56.6	23.1	34.7#
121	18.7	10.6	16.0#

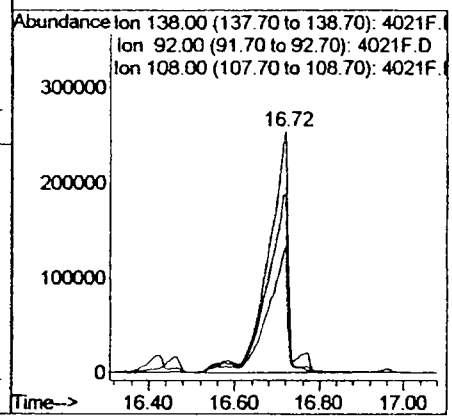




#73
4-Nitroaniline
Concen: 128.91 ug/ml m
RT: 16.72 min Scan# 2398
Delta R.T. 0.08 min
Lab File: 4021F.D
Acq: 6 Sep 2007 6:43

Tgt Ion:138 Resp: 855508

Ion	Ratio	Lower	Upper
138	100		
92	2.7	21.0	31.6#
108	4.4	28.3	42.5#



5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: _____ Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Lab File ID: 4015F.D DFTPP Injection Date: 9/6/2007

Instrument ID: _____ DFTPP Injection Time: 3:04

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 80.0% of mass 198	57.0
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 Relative abundance	58.0
70	Less than 2.0% of mass 69	0.3 (0.5)1
127	25.0 - 75.0% of mass 198	62.5
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	6.8
275	10.0 - 30.0% of mass 198	21.3
365	Greater than 0.75% of mass 198	3.1
441	Present, but less than mass 443	12.4
442	40.0 - 110.0% of mass 198	84.4
443	15.0 - 24.0% of mass 442	16.6 (19.6)2

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

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	SSTD050	SSTD050	4016F.D	9/6/2007	3:30
02	SSTD010	SSTD010	4017F.D	9/6/2007	4:08
03	SSTD020	SSTD020	4018F.D	9/6/2007	4:47
04	SSTD080	SSTD080	4019F.D	9/6/2007	5:26
05	SSTD100	SSTD100	4020F.D	9/6/2007	6:04
06	SSTD120	SSTD120	4021F.D	9/6/2007	6:43
07	SBLK-897	SBLK-897	4022F.D	9/6/2007	7:22
08	LCS 790	LCS 790	4023F.D	9/6/2007	8:00
09	DLCS 791	DLCS 791	4024F.D	9/6/2007	8:38
10	A781234	A781234	4025F.D	9/6/2007	9:17
11	A781234 MS	A781234 MS	4026F.D	9/6/2007	9:56
12	A781240	A781240	4027F.D	9/6/2007	10:34
13	A781249	A781249	4028F.D	9/6/2007	11:12
14	A781250	A781250	4029F.D	9/6/2007	11:51
15	A781263	A781263	4030F.D	9/6/2007	12:29
16	LCS 782	LCS 782	4031F.D	9/6/2007	13:12

CD 9-11-07

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: _____ Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Lab File ID (Standard): 4016F.D Date Analyzed: 9/6/2007

Instrument ID: _____ Time Analyzed: 3:30

		IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
	12 HOUR STD	389352	8.39	1747340	11.48	930094	15.29
	UPPER LIMIT	778704	8.89	3494680	11.98	1860188	15.79
	LOWER LIMIT	194676	7.89	873670	10.98	465047	14.79
	EPA SAMPLE NO.						
01	SBLK-897	344678	8.38	1489311	11.45	772667	15.27
02	LCS 790	357717	8.40	1571124	11.49	782276	15.30
03	DLCS 791	381365	8.40	1713122	11.49	909239	15.30
04	A781234	359695	8.38	1518309	11.45	797403	15.27
05	A781234 MS	379431	8.41	1682770	11.49	909258	15.29
06	A781240	371349	8.38	1548949	11.45	822923	15.27
07	A781249	354041	8.38	1509613	11.45	787186	15.27
08	A781250	342149	8.38	1477578	11.45	796460	15.28
09	A781263	332173	8.38	1457736	11.45	779657	15.28
10	LCS 782	313263	8.40	1349443	11.48	679516	15.29

IS1 = 1,4-Dichlorobenzene-d4
IS2 = Naphthalene-d8
IS3 = Acenaphthene-d10
IS4 = Phenanthrene-d10
IS5 = Chrysene-d12
IS6 = Perylene-d12

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

JR 9-11-07

Column to be used to flag values outside QC limit with an asterisk.
* Values outside of contract required QC limits

8C

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: _____ Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Lab File ID (Standard): 4016F.D Date Analyzed: 9/6/2007

Instrument ID: _____ Time Analyzed: 3:30

		IS4 AREA #	RT #	IS5 AREA #	RT #	IS6 AREA #	RT #
	12 HOUR STD	1378091	18.27	992899	23.59	478684	26.23
	UPPER LIMIT	2756182	17.77	1985798	23.09	957368	25.73
	LOWER LIMIT	689046	18.77	496450	24.09	239342	26.73
	EPA SAMPLE NO.						
01	SBLK-897	1010357	18.25	629473	23.57	335616	26.22
02	LCS 790	1139274	18.29	766768	23.60	375659	26.24
03	DLCS 791	1391953	18.30	1013715	23.61	415473	26.24
04	A781234	1021022	18.25	609999	23.57	325006	26.22
05	A781234 MS	1261187	18.29	1008198	23.61	450781	26.24
06	A781240	1067666	18.25	691710	23.58	389877	26.23
07	A781249	1051930	18.25	661490	23.58	359320	26.22
08	A781250	1050317	18.25	610407	23.57	322604	26.22
09	A781263	1069047	18.25	732788	23.58	409839	26.23
10	LCS 782	1056526	18.28	762663	23.60	315904	26.23

IS1 = 1,4-Dichlorobenzene-d4
IS2 = Naphthalene-d8
IS3 = Acenaphthene-d10
IS4 = Phenanthrene-d10
IS5 = Chrysene-d12
IS6 = Perylene-d12

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

Column to be used to flag values outside QC limit with an asterisk.
* Values outside of contract required QC limits

JK 9-11-07

2C

WATER SEMIVOLATILE SURROGATE RECOVERY

Lab Name: _____ Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

	EPA SAMPLE NO.	S1 2FP #	S2 PHL #	S3 2CP #	S4 DCB #	S5 NBZ #	S6 FBP #	S7 TBP #	S8 TPH #	TOT OUT
01	SBLK-897	72	43	107	68	105	94	130	44	0
02	LCS 790	81	56	108	97	106	106	132 *	42	1
03	DLCS 791	66	42	99	91	98	95	120	34	0
04	A781234	51	29	95	85	103	104	126	67	0
05	A781234 MS	62	37	100	96	101	98	130 *	36	1
06	A781240	62	35	99	79	103	99	127	40	0
07	A781249	65	38	102	79	103	99	123	249 *	1
08	A781250	61	37	96	75	97	93	117	112	0
09	A781263	60	38	99	70	99	91	124	140	0
10	LCS 782	58	37	88	44	87	58	106	69	0

QC LIMITS

S1	2FP	=	2-Fluorophenol	(11-100)
S2	PHL	=	Phenol-d5	(10-100)
S3	2CP	=	2-Chlorophenol-d4	(27-123)
S4	DCB	=	1,2-Dichlorobenzene-d4	(32-220)
S5	NBZ	=	Nitrobenzene-d5	(47-131)
S6	FBP	=	2-Fluorobiphenyl	(41-126)
S7	TBP	=	2,4,6-Tribromophenol	(21-130)
S8	TPH	=	Terphenyl-d14	(10-145)

Column to be used to flag recovery values

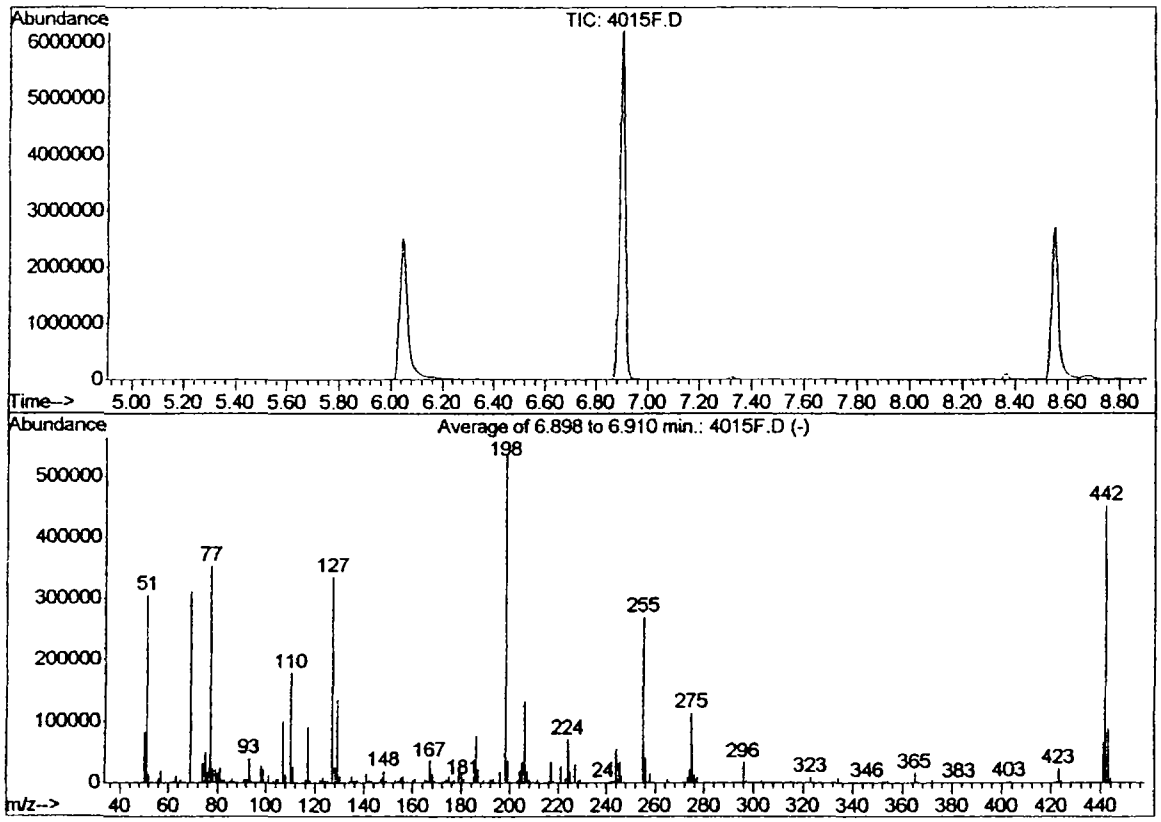
* Values outside of contract required QC limits

D Surrogate diluted out

DFTPP

Data File : D:\F090607A\4015F.D
Acq On : 6 Sep 2007 3:04
Sample : DFTPP
Misc : DFTPP
MS Integration Params: rteint.p
Method : C:\MSDCHEM\1\METHODS\DFTPP.M (RTE Integrator)
Title : CLP BNA Calibration

Vial: 1
Operator: JCM
Inst : MSD #6
Multiplr: 1.00



AutoFind: Scans 662, 663, 664; Background Corrected with Scan 653

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	80	57.0	306154	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	58.0	311658	PASS
70	69	0.00	2	0.5	1601	PASS
127	198	25	75	62.5	335509	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	537002	PASS
199	198	5	9	6.8	36512	PASS
275	198	10	30	21.3	114453	PASS
365	198	0.75	100	3.1	16412	PASS
441	443	0.01	100	74.9	66586	PASS
442	198	40	110	84.4	453120	PASS
443	442	15	24	19.6	88933	PASS

4015F.D DFTPP.M Mon Sep 10 15:10:24 2007 RPT01

JK 9-11-07

Average of 6.898 to 6.910 min.: 4015F.D
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
47.00	172	61.00	3677	75.00	49989	86.00	6421
49.00	2924	62.05	4330	76.05	17765	87.00	3161
50.00	83938	63.00	11637	77.00	353621	88.00	1299
51.05	306154	64.00	1695	78.00	24256	89.00	633
52.00	14345	65.00	6059	79.00	21706	91.00	5538
53.05	687	66.90	179	80.00	16878	92.00	6182
55.00	1860	69.00	311658	81.00	23464	93.00	39530
56.00	8606	69.95	1601	82.00	5380	94.00	2886
57.00	20542	71.05	469	83.00	6192	95.00	979
58.00	926	73.00	2479	83.95	1092	96.00	2021
59.90	181	74.00	32005	85.00	4254	97.05	962

Average of 6.898 to 6.910 min.: 4015F.D
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
98.00	28490	109.00	1298	120.90	203	132.95	629
99.00	21720	110.00	178666	122.00	6209	133.95	3924
99.95	1984	111.00	27072	123.00	9593	134.95	10282
101.00	13474	111.95	3344	123.95	4199	136.00	3844
101.90	1088	112.95	1444	125.00	4274	137.00	4778
103.00	4207	114.90	209	127.00	335509	138.00	1103
104.00	8126	116.00	5825	128.00	25970	138.85	763
105.00	8129	117.00	91405	129.00	134381	139.95	1662
106.00	1104	118.00	6026	130.00	11449	140.95	15293
107.00	101085	118.95	758	131.00	2075	142.00	4840
108.00	15523	119.95	1191	132.05	1296	143.00	3772

Average of 6.898 to 6.910 min.: 4015F.D
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
144.00	1029	154.00	3804	164.95	5451	175.00	11263
144.95	1077	155.00	9872	166.00	4446	176.00	3381
146.00	3283	156.00	11235	167.00	35648	176.95	4959
146.95	8239	157.00	2507	168.00	15284	177.95	1831
147.95	19873	157.90	2895	168.95	2875	178.95	20629
148.95	4027	158.95	1818	169.95	613	180.00	14330
150.00	1109	159.95	4761	170.20	562	181.00	6736
150.95	1856	160.95	6865	170.90	1151	181.95	1164
151.50	1010	161.95	2284	171.95	3071	182.95	908
152.00	851	162.90	592	172.95	4179	183.20	209
152.95	4546	164.05	1050	173.95	6779	183.95	2069

Average of 6.898 to 6.910 min.: 4015F.D
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
185.00	11254	195.10	685	207.05	17482	219.00	719
186.00	77072	196.00	18564	208.00	4638	221.00	27418
187.00	21749	197.95	537002	208.90	1342	222.95	7730
188.05	2194	198.95	36512	210.00	1593	224.00	71816
189.00	4768	199.95	2836	210.50	1095	225.05	18618
189.95	1181	201.45	2579	211.00	5529	226.10	1409
190.95	2310	201.95	1116	212.90	260	227.00	30189
192.00	7312	203.00	4433	214.90	1738	228.00	4263
193.00	7525	204.00	19944	216.00	3761	228.95	6044
194.00	2020	205.00	34469	216.95	33586	229.95	957
194.90	790	206.05	132658	218.00	4495	231.00	2547

Average of 6.898 to 6.910 min.: 4015F.D
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
231.80	201	241.95	3954	251.10	329	263.90	966
232.00	172	243.00	4594	252.05	1652	264.95	6587
233.05	576	244.00	55730	253.05	2534	265.95	1323
234.00	2001	245.00	7650	253.90	1522	267.90	423
235.00	2458	246.00	10556	255.00	269888	268.70	180
235.95	1526	247.00	2086	256.00	41728	269.70	193
236.95	2312	248.00	679	257.00	3124	270.10	299
238.10	248	248.95	2039	257.95	15411	271.05	1142
238.95	1443	250.00	717	259.00	2716	272.05	1305
240.05	793	250.40	264	259.95	455	273.00	9002
241.00	2143	250.85	633	261.05	418	274.00	21837

Average of 6.898 to 6.910 min.: 4015F.D
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
275.00	114453	292.95	2228	309.95	569	331.95	1109
276.00	14979	293.90	444	312.90	258	333.00	1178
277.00	10000	294.95	922	314.00	1651	334.00	7610
278.00	1402	295.95	33664	314.95	3856	335.00	2020
279.00	183	297.00	4194	316.00	2228	340.95	1416
283.00	1574	301.00	234	320.95	1324	345.95	2213
284.00	403	302.00	450	321.95	765	346.80	178
285.00	1489	302.20	242	323.05	10113	351.95	3420
289.00	282	303.00	4248	324.00	2367	353.00	2635
290.00	175	303.90	1080	326.95	1898	354.05	4132
292.10	284	308.00	197	328.00	776	355.00	736

Average of 6.898 to 6.910 min.: 4015F.D
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
363.00	179	392.00	171	421.95	2958	428.50	328
364.95	16412	400.90	190	422.95	23616	429.15	653
365.95	2564	401.10	222	424.00	4911	429.90	189
369.90	185	401.90	1699	424.95	802	430.75	1017
371.00	670	402.10	769	425.20	218	431.10	175
372.00	6154	403.00	3418	425.65	511	431.45	510
373.05	1736	404.00	1137	425.95	433	432.00	367
382.85	1688	414.70	192	426.80	336	432.40	265
384.00	181	420.10	175	427.20	597	432.80	765
390.05	902	420.90	1186	428.00	203	433.30	337
391.00	658	421.05	2196	428.30	281	433.95	953

Average of 6.898 to 6.910 min.: 4015F.D
DFTPP
Modified:subtracted

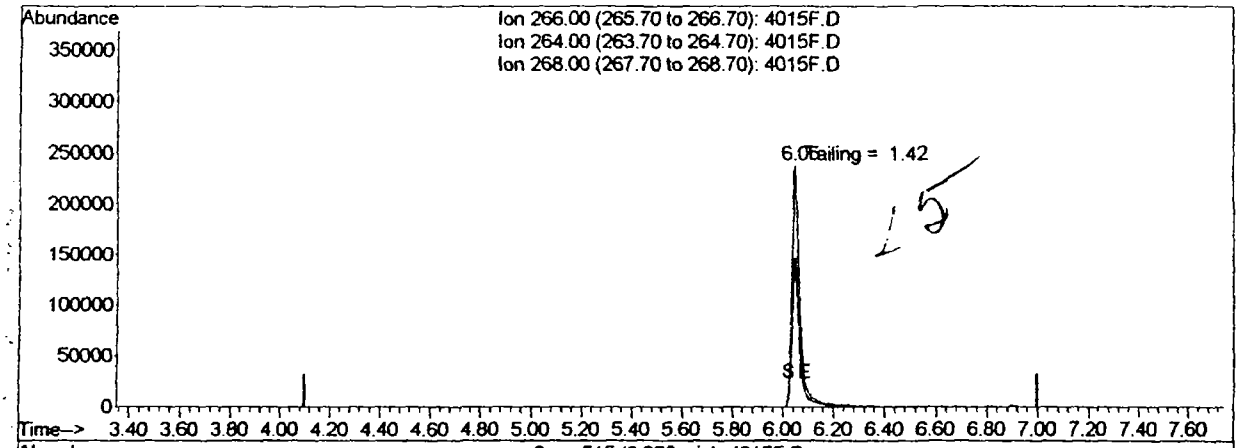
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
434.20	265	443.00	88933				
434.85	1079	444.00	8598				
435.45	678	444.95	838				
436.00	221						
436.30	286						
436.60	199						
437.10	273						
437.35	460						
438.00	431						
441.05	66586						
442.00	453120						

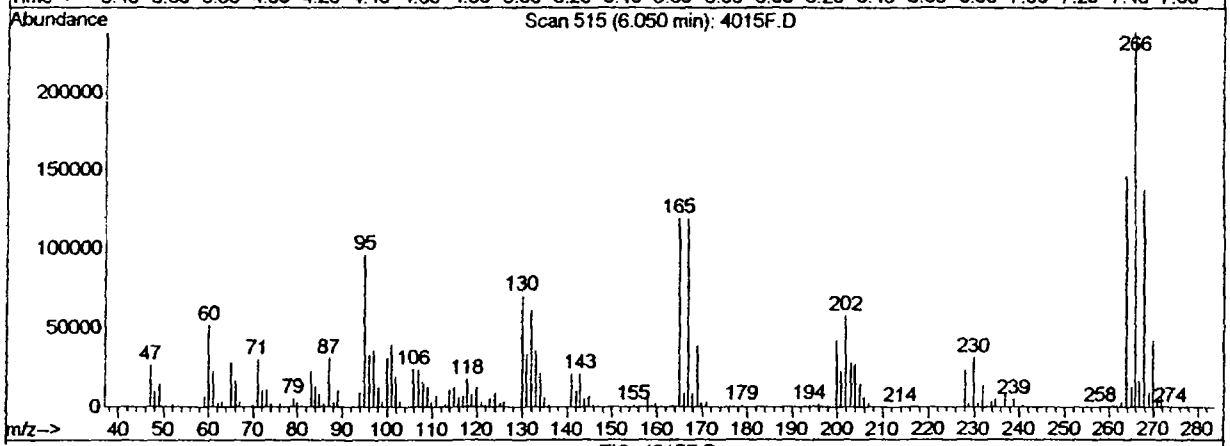
Quantitation Report (Qedit)

Data File : D:\F090607A\4015F.D
Acq On : 6 Sep 2007 3:04
Sample : DFTPP
Misc : DFTPP
MS Integration Params: rteint.p
Quant Time: Sep 10 15:10 2007

Vial: 1
Operator: JCM
Inst : MSD #6
Multiplr: 1.00
Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\DFTPP.M (RTE Integrator)
Title : CLP BNA Calibration
Last Update : Mon Aug 21 15:21:12 2006
Response via : Single Level Calibration





(1) Pentachlorophenol (MC)

6.05min 62.76ug/ml

response 508338

Ion	Exp%	Act%
266.00	100	100
264.00	64.20	63.91
268.00	60.20	59.89
0.00	0.00	0.00

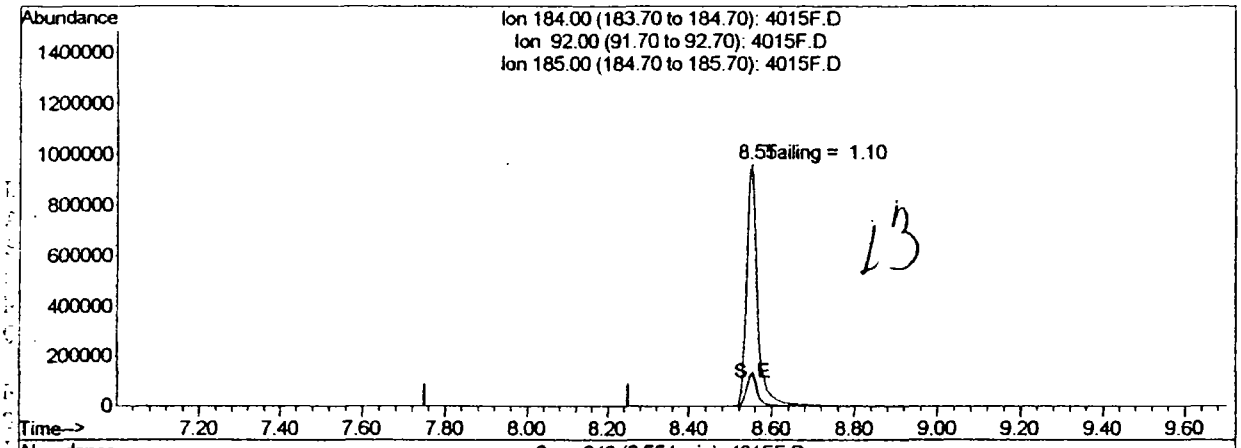
4015F.D DFTPP.M Mon Sep 10 15:10:36 2007 RPT01

Quantitation Report (Qedit)

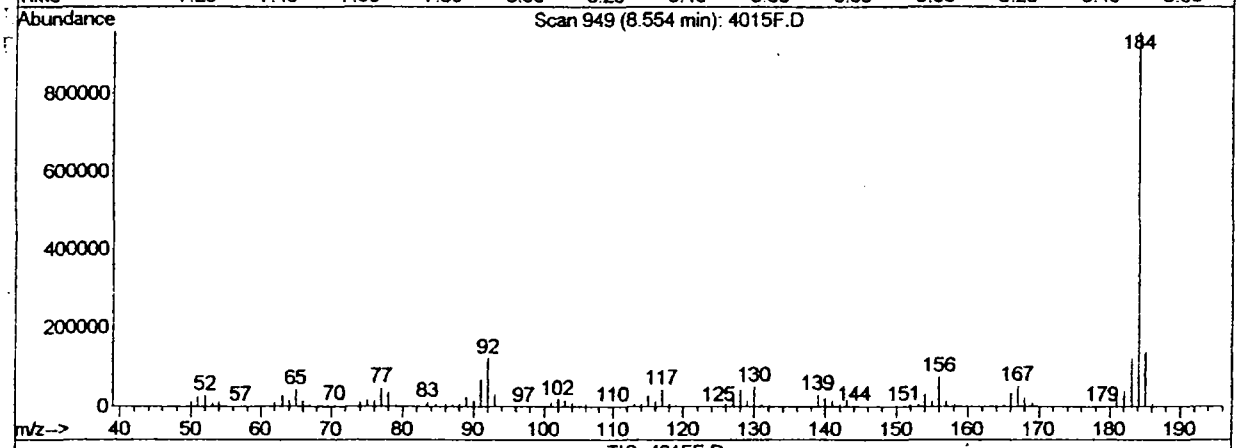
Data File : D:\F090607A\4015F.D
Acq On : 6 Sep 2007 3:04
Sample : DFTPP
Misc : DFTPP
MS Integration Params: rteint.p
Quant Time: Sep 10 15:10 2007

Vial: 1
Operator: JCM
Inst : MSD #6
Multiplr: 1.00
Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\DFTPP.M (RTE Integrator)
Title : CLP BNA Calibration
Last Update : Mon Aug 21 15:21:12 2006
Response via : Single Level Calibration



13



(3) Benzidine

8.55min 31.62ug/ml m

response 1774418

Ion	Exp%	Act%
184.00	100	100
92.00	9.70	0.00#
185.00	14.80	0.00#
0.00	0.00	0.00

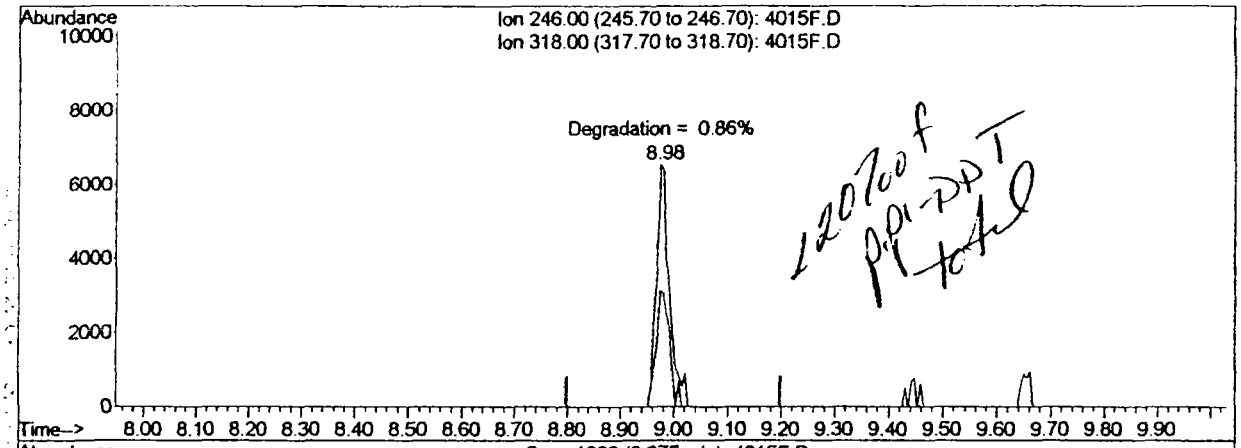
4015F.D DFTPP.M Mon Sep 10 15:10:53 2007 RPT01

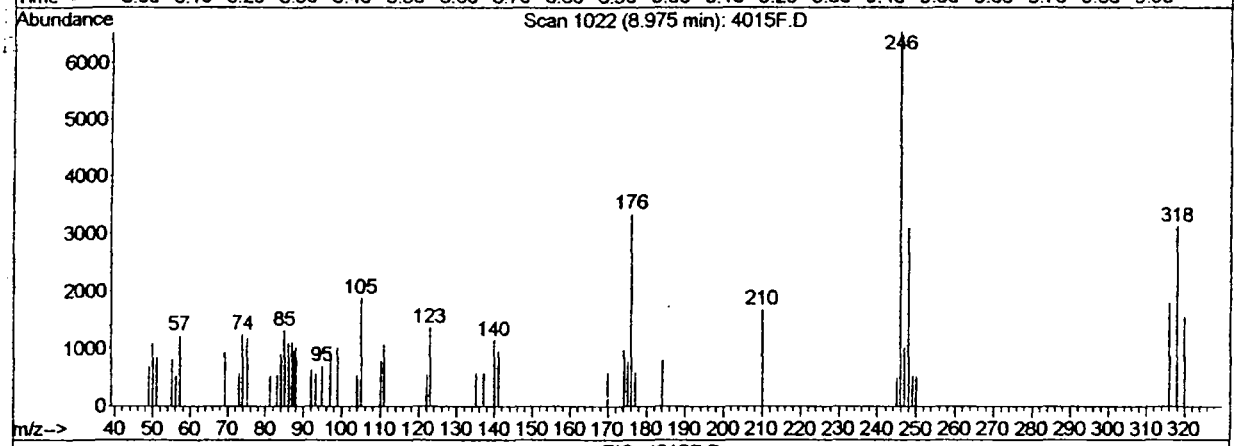
Quantitation Report (Qedit)

Data File : D:\F090607A\4015F.D
Acq On : 6 Sep 2007 3:04
Sample : DFTPP
Misc : DFTPP
MS Integration Params: rteint.p
Quant Time: Sep 10 15:10 2007

Vial: 1
Operator: JCM
Inst : MSD #6
Multiplr: 1.00
Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\DFTPP.M (RTE Integrator)
Title : CLP BNA Calibration
Last Update : Mon Aug 21 15:21:12 2006
Response via : Single Level Calibration





TIC: 4015F.D

(4) p,p'-DDE

8.98min 0.00ug/ml

response 11066

Ion	Exp%	Act%
246.00	100	100
318.00	34.90	49.59
0.00	0.00	0.00
0.00	0.00	0.00

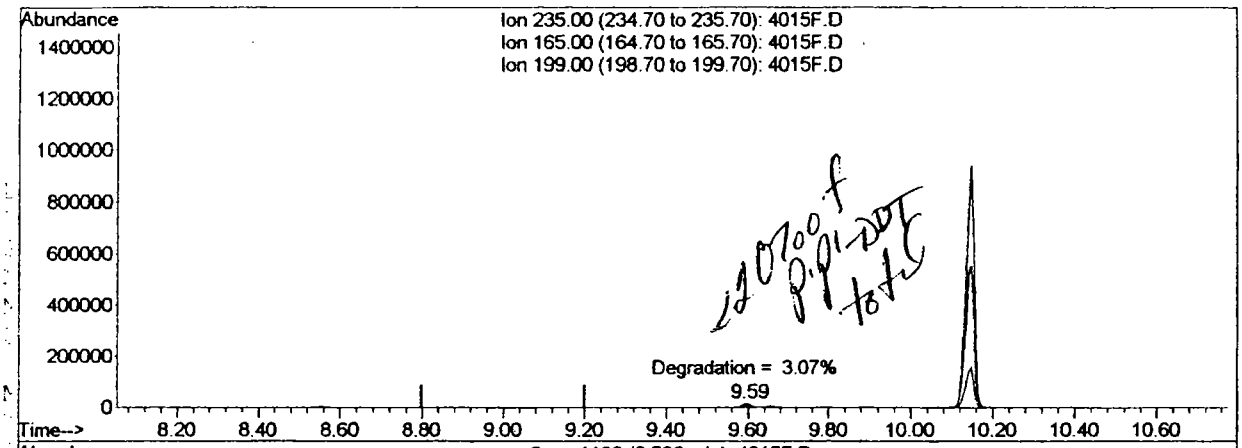
4015F.D DFTPP.M Mon Sep 10 15:11:02 2007 RPT01

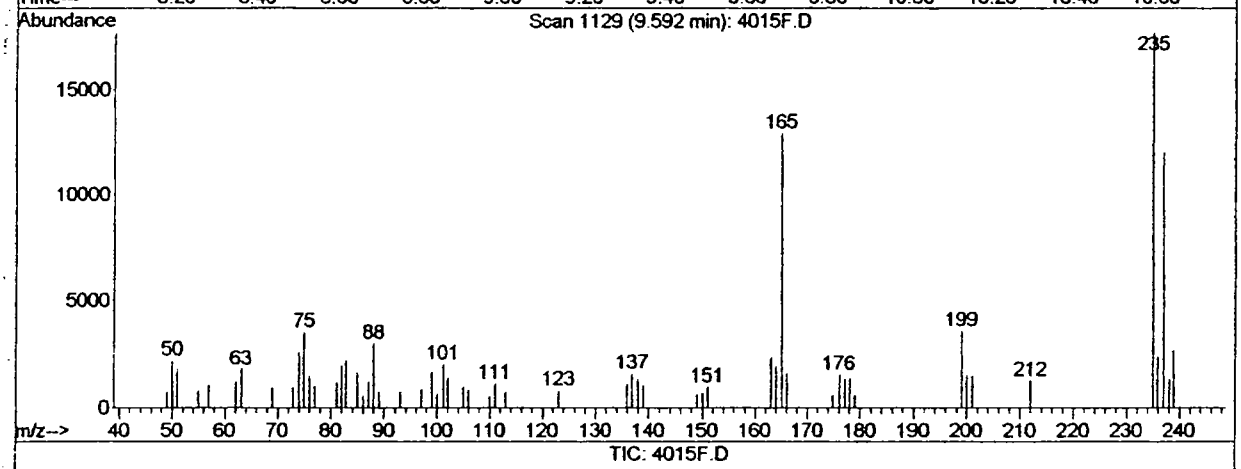
Quantitation Report (Qedit)

Data File : D:\F090607A\4015F.D
Acq On : 6 Sep 2007 3:04
Sample : DFTPP
Misc : DFTPP
MS Integration Params: rteint.p
Quant Time: Sep 10 15:10 2007

Vial: 1
Operator: JCM
Inst : MSD #6
Multiplr: 1.00
Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\DFTPP.M (RTE Integrator)
Title : CLP BNA Calibration
Last Update : Mon Aug 21 15:21:12 2006
Response via : Single Level Calibration





TIC: 4015F.D

(5) p,p'-DDD

9.59min 0.00ug/ml m

response 41857

Ion	Exp%	Act%
235.00	100	100
165.00	63.00	0.00#
199.00	16.30	0.00#
0.00	0.00	0.00

4015F.D DFTPP.M Mon Sep 10 15:11:14 2007 RPT01

R524579 Heritage Environmental Services, LLC Q1994865

QC Report

QCType CAL01 Duplicate SampleID DataFile 4016F.D
Date Entered 10Sep07 Duplicate QCSampleID Analyst 3196 C. WILLHITE
Analysis Date/Time 06Sep0703:30:00 Method Matrix Units

PRM	Parameter	TruVal	SpikeVal	ObsVal	RQL	Rec	Difference
521	N-NITROSODIMETHYLAMINE	0.9356					1.8
625	PYRIDINE	1.7944					3.4
68	2-PICOLINE (2-METHYLPYRIDINE)	1.5770					4.3
127	ANILINE	2.0813					11.6
598	PHENOL	1.9416					5.5
183	BIS(2-CHLOROETHYL)ETHER	1.7596					14.1
56	2-CHLOROPHENOL	1.5122					4.7
26	1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)	1.5331					4.1
29	1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	1.5916					3.8
20	1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	1.5317					6.2
160	BENZYL ALCOHOL	0.8608					9.2
61	2-METHYLPHENOL (O-CRESOL)	1.3154					5.2
184	BIS(2-CHLOROISOPROPYL)ETHER	2.4016					3.4
531	N-NITROSO-DI-N-PROPYLAMINE	1.1806					3
90	4-METHYLPHENOL (P-CRESOL)	1.3880					3.6
402	HEXACHLOROETHANE	0.7259					4.4
503	NITROBENZENE	0.4092					2.4
431	ISOPHORONE	0.6841					4.1
66	2-NITROPHENOL	0.1734					4.7
46	2,4-DIMETHYLPHENOL	0.3325					1.8
182	BIS(2-CHLOROETHOXY)METHANE	0.4022					3.2
44	2,4-DICHLOROPHENOL	0.2278					8.9
153	BENZOIC ACID				LIN		0.993
16	1,2,4-TRICHLOROBENZENE	0.2518					5.2
493	NAPHTHALENE	1.0058					2.7
85	4-CHLOROANILINE	0.3414					1.5
2809	TOLUENE-2,4-DIAMINE	0.0083					8.4
398	HEXACHLOROBUTADIENE	0.1255					8.6
89	4-CHLORO-3-METHYLPHENOL (P-CHLORO-M-CRES	0.2847					9.3
62	2-METHYLNAPHTHALENE	0.5643					5.1
399	HEXACHLOROCYCLOPENTADIENE				LIN		0.997
15	1,2,4,5-TETRACHLOROBENZENE	0.4021					7.2
42	2,4,6-TRICHLOROPHENOL	0.2975					9.4
40	2,4,5-TRICHLOROPHENOL	0.3099					12.5
55	2-CHLORONAPHTHALENE	1.0460					6
65	2-NITROANILINE (O-NITROANILINE)	0.3822					7.2
310	DIMETHYLPHTHALATE	1.1761					8.2
489	1,3-DINITROBENZENE (M-DINITROBENZENE)	0.1977					10.2
50	2,6-DINITROTOLUENE	0.2688					11
98	ACENAPHTHYLENE	1.7516					6.9
76	3-NITROANILINE (M-NITROANILINE)	0.2672					7.1
97	ACENAPHTHENE	1.0606					5.3
47	2,4-DINITROPHENOL	0.1427					13.7
93	4-NITROPHENOL	0.1572					10

/CK 9-11-07

CKS 9-11-07

QC Report

PRM	Parameter	TruVal	SpikeVal	ObsVal	RQL	Rec	Difference
293	DIBENZOFURAN	1.4644					6.8
48	2,4-DINITROTOLUENE	0.3278					9.5
34	2,3,4,6-TETRACHLOROPHENOL				LIN		0.991
306	DIETHYLPHTHALATE	1.2267					8.7
366	FLUORENE	1.1716					8.8
88	4-CHLOROPHENYL-PHENYLETHER	0.5063					11.7
92	4-NITROANILINE (P-NITROANILINE)	0.2450					6.4
1810	2-METHYL-4,6-DINITROPHENOL	0.1230					8
522	N-NITROSODIPHENYLAMINE	0.5313					9.6
2834	AZOBENZENE	1.1842					4.5
117	ALPHA-BHC	0.1443					8.9
84	4-BROMODIPHENYL ETHER	0.1746					10.8
397	HEXACHLOROBENZENE	0.1771					11
168	BETA-BHC	0.1100					8.3
577	PENTACHLOROPHENOL	0.1001					14.2
380	GAMMA-BHC (LINDANE)	0.1099					6.6
597	PHENANTHRENE	1.0680					6.5
128	ANTHRACENE	1.0375					6.7
290	DELTA-BHC	0.1042					5.2
213	CARBAZOLE	0.9202					4.5
391	HEPTACHLOR	0.0820					11.1
329	DI-N-BUTYLPHTHALATE	1.2332					1
111	ALDRIN	0.0441					6.3
394	HEPTACHLOR EPOXIDE	0.1200					4.9
363	FLUORANTHENE	0.9022					4.7
152	BENZIDINE	0.3186					9.9
624	PYRENE	1.2988					4.7
119	ALPHA-ENDOSULFAN	0.0336					4.2
78	4,4'-DDE	0.2627					4.6
303	DIELDRIN	0.4002					7.2
338	ENDRIN	0.0121					2.8
339	ENDRIN ALDEHYDE	0.0377					11
169	BETA-ENDOSULFAN	0.0415					7.8
77	4,4'-DDD	0.4015					8.4
202	BENZYLBUTYLPHTHALATE (BUTYLBENZYLPHTHAL/	0.6359					6.4
337	ENDOSULFAN SULFATE	0.0576					3.9
79	4,4'-DDT	0.3927					8.5
474	METHOXYCHLOR	0.8484					5.2
155	BENZO(A)ANTHRACENE	0.9273					7.4
70	3,3'-DICHLOROBENZIDINE	0.3052					13.3
245	CHRYSENE	1.0423					2.7
185	BIS(2-ETHYLHEXYL)PHTHALATE	0.9293					4.1
330	DI-N-OCTYLPHTHALATE	2.6056					14.4
157	BENZO(B)FLUORANTHENE (3,4-BENZOFLUORANTH				QDR		0.993
159	BENZO(K)FLUORANTHENE	1.2651					10.6
156	BENZO(A)PYRENE	1.1155					10.3
413	INDENO(1,2,3-CD)PYRENE	0.5354					12.8

QC Report

PRM	Parameter	TruVal	SpikeVal	ObsVal	RQL	Rec	Difference
294	DIBENZ(A,H)ANTHRACENE				LIN		0.998
158	BENZO(G,H,I)PERYLENE	0.3980					14.3
887	1-METHYLNAPHTHALENE	0.5980					6.2
59	2-FLUOROPHENOL	1.3872					3.9
601	PHENOL-D5	1.8292					6.5
1185	2-CHLOROPHENOL-D4	1.5294					4.7
1186	1,2-DICHLOROBENZENE-D4	1.5435					4.3
504	NITROBENZENE-D5	0.3972					3.1
58	2-FLUOROBIPHENYL	1.1723					6.5
41	2,4,6-TRIBROMOPHENOL	0.0784					14.6
701	TERPHENYL-D14	0.9411					6.3

Comment Value reported for analytes calibrated by linear (LIN) or quadratic (QDR) equations is r2 (Coef. of Determination).

Qualifiers

LIN Linear Regression Used
QDR Quadratic Equation Used

Quantitation Report (QT Reviewed)

Data File : D:\F090607A\4016F.D
Acq On : 6 Sep 2007 3:30
Sample : SSTD050
Misc : CAL SSTD
MS Integration Params: RTEINT4.P
Quant Time: Sep 07 01:51:05 2007

Vial: 2
Operator: JCM
Inst : MSD #6
Multiplr: 1.00
Quant Results File: 8270F.RES

Quant Method : C:\MSDCHEM\1\METHODS\8270F.M (RTE Integrator)
Title : CLP BNA Calibration
Last Update : Thu Sep 06 15:00:14 2007
Response via : Initial Calibration
DataAcq Meth : 8270F

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	8.39	152	389352	40.00	ug/ml	-0.03
29) Naphthalene-d8	11.48	136	1747340	40.00	ug/ml	-0.02
47) Acenaphthene-d10	15.29	164	930094	40.00	ug/ml	-0.02
74) Phenanthrene-d10	18.27	188	1378091	40.00	ug/ml	-0.02
95) Chrysene-d12	23.59	240	992899	40.00	ug/ml	-0.03
115) Perylene-d12	26.23	264	478684	40.00	ug/ml	-0.02

System Monitoring Compounds						
7) 2-Fluorophenol	5.69	112	685950	49.71	ug/ml	-0.02
Spiked Amount 200.000	Range 21 - 100		Recovery = 24.86%			
10) Phenol-d5	7.84	99	944423	51.89	ug/ml	-0.03
Spiked Amount 200.000	Range 10 - 94		Recovery = 25.95%			
13) 2-Chlorophenol-d4	7.97	132	752869	50.39	ug/ml	-0.03
Spiked Amount 200.000	Range 27 - 123		Recovery = 25.20%#			
19) 1,2-Dichlorobenzene-d4	8.85	150	732965	49.27	ug/ml	-0.03
Spiked Amount 100.000	Range 32 - 220		Recovery = 49.27%			
30) Nitrobenzene-d5	9.87	82	872585	50.44	ug/ml	-0.03
Spiked Amount 100.000	Range 18 - 57		Recovery = 50.44%			
54) 2-Fluorobiphenyl	13.94	172	1323775	48.79	ug/ml	-0.02
Spiked Amount 100.000	Range 22 - 58		Recovery = 48.79%			
77) 2,4,6-Tribromophenol	16.93	330	126683	46.95	ug/ml	-0.02
Spiked Amount 200.000	Range 10 - 123		Recovery = 23.48%			
100) Terphenyl-d14	21.56	244	1107007	44.53	ug/ml	-0.02
Spiked Amount 100.000	Range 17 - 71		Recovery = 44.53%			

Target Compounds						Qvalue
2) bis(chloromethyl)ether	~~3.10~~	~~79~~	909304	61.30	ug/ml#	19
3) N-Nitrosodimethyl amine	3.13	42	468058	53.19	ug/ml#	55
4) Pyridine	3.10	79	923651	52.03	ug/ml#	50
5) 2-Picoline	4.40	93	803710	50.94	ug/ml#	97
9) Aniline	7.74	93	1083757	53.83	ug/ml	99
11) Phenol	7.86	94	1000328	51.92	ug/ml#	77
~~12) bis(2-Chloroethyl)ether~~	~~7.93~~	~~93~~	~~771396~~	~~44.93~~	~~ug/ml#~~	~~1~~
14) 2-Chlorophenol	8.01	128	749720	50.55	ug/ml	93
15) n-Decane	8.16	57	938534	49.53	ug/ml	90
16) 1,3-Dichlorobenzene	8.30	146	732702	49.21	ug/ml#	98
17) Benzyl Chloride	7.74	91	10632	75.39	ug/ml#	1
18) 1,4-Dichlorobenzene	8.43	146	756669	49.27	ug/ml#	98
20) 1,2-Dichlorobenzene	8.89	146	736307	49.99	ug/ml#	98
21) Benzyl alcohol	8.90	108	472179	51.64	ug/ml#	68
23) 2-Methylphenol	9.33	108	667638	51.25	ug/ml	95
24) bis(2-chloroisopropyl)ethe	9.28	45	1144331	48.23	ug/ml#	89

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

Quantitation Report (QT Reviewed)

Data File : D:\F090607A\4016F.D
Acq On : 6 Sep 2007 3:30
Sample : SSTD050
Misc : CAL SSTD
MS Integration Params: RTEINT4.P
Quant Time: Sep 07 01:51:05 2007

Vial: 2
Operator: JCM
Inst : MSD #6
Multiplr: 1.00
Quant Results File: 8270F.RES

Quant Method : C:\MSDCHEM\1\METHODS\8270F.M (RTE Integrator)
Title : CLP BNA Calibration
Last Update : Thu Sep 06 15:00:14 2007
Response via : Initial Calibration
DataAcq Meth : 8270F

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
25)	Acetophenone	9.53	105	1088233	51.06 ug/ml#	84
26)	n-Nitroso-di-n-propylamine	9.66	70	600831	52.80 ug/ml#	14
27)	4-Methylphenol	9.69	108	706382	52.28 ug/ml	97
28)	Hexachloroethane	9.63	117	344421	49.72 ug/ml#	77
31)	Nitrobenzene	9.92	77	891718	50.38 ug/ml#	77
32)	Isophorone	10.51	82	1422016	47.98 ug/ml#	83
33)	2-Nitrophenol	10.68	139	368598	47.88 ug/ml#	70
34)	2,4-Dimethylphenol	10.93	107	733429	50.54 ug/ml	85
35)	bis(2-Chloroethoxy)methane	11.11	93	841633	47.87 ug/ml	98
36)	2,4-Dichlorophenol	11.28	162	483708	49.58 ug/ml#	91
37)	Benzoic acid	11.46	105	492390m	51.66 ug/ml	
38)	1,2,4-Trichlorobenzene	11.41	180	529271	48.37 ug/ml	98
39)	Naphthalene	11.52	128	2156893	50.04 ug/ml	99
40)	a-Terpineol	11.61	59	696240	51.53 ug/ml#	92
41)	4-Chloroaniline	11.77	127	734896	55.15 ug/ml	98
42)	Toluenediamine	11.97	122	20258	58.72 ug/ml	79
43)	Hexachlorobutadiene	11.97	225	255859	47.61 ug/ml	99
44)	4-Chloro-3-methylphenol	12.96	107	592631	48.31 ug/ml#	1
45)	2-Methylnaphthalene	13.08	141	2442309	101.83 ug/ml#	67
46)	1-Methylnaphthalene	13.29	142	1279226	49.75 ug/ml	97
48)	Phthalic Anhydride	13.44	104	148833m	28.52 ug/ml	
49)	Hexachlorocyclopentadiene	13.57	237	284082	45.26 ug/ml	99
50)	1,2,4,5-Tetrachlorobenzene	13.51	216	450474	48.58 ug/ml	98
51)	2,3-Dichloroaniline	13.77	161	645978	51.34 ug/ml	100
52)	2,4,6-Trichlorophenol	13.78	196	343932	49.66 ug/ml	99
53)	2,4,5-Trichlorophenol	13.89	196	338885	46.06 ug/ml	98
56)	2-Chloronaphthalene	14.09	162	1175718	48.38 ug/ml	95
58)	2-Nitroaniline	14.44	65	434508	48.19 ug/ml#	74
59)	Dimethylphthalate	14.95	163	1366947	53.04 ug/ml	99
60)	1,3-Dinitrobenzene	14.94	168	227608	49.48 ug/ml#	20
61)	2,6-Dinitrotoluene	15.06	165	287204	48.58 ug/ml#	37
62)	Acenaphthylene	14.96	152	2034027	51.03 ug/ml	98
63)	3-Nitroaniline	15.32	138	303082	51.91 ug/ml#	24
64)	Acenaphthene	15.35	153	1219171	50.33 ug/ml	98
65)	2,4-Dinitrophenol	15.53	184	146662	46.31 ug/ml#	56
66)	4-Nitrophenol	15.83	109	171513	52.50 ug/ml#	66
67)	Dibenzofuran	15.69	168	1655645	48.60 ug/ml	92
68)	2,4-Dinitrotoluene	15.85	165	366442	46.31 ug/ml#	40
69)	2,3,4,6-Tetrachlorophenol	16.07	232	201842	45.49 ug/ml	96
70)	Diethylphthalate	16.41	149	1440083	51.31 ug/ml	97
71)	Fluorene	16.39	166	1330260	49.38 ug/ml	99

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

Quantitation Report (QT Reviewed)

Data File : D:\F090607A\4016F.D
Acq On : 6 Sep 2007 3:30
Sample : SSTD050
Misc : CAL SSTD
MS Integration Params: RTEINT4.P
Quant Time: Sep 07 01:51:05 2007

Vial: 2
Operator: JCM
Inst : MSD #6
Multiplr: 1.00
Quant Results File: 8270F.RES

Quant Method : C:\MSDCHEM\1\METHODS\8270F.M (RTE Integrator)
Title : CLP BNA Calibration
Last Update : Thu Sep 06 15:00:14 2007
Response via : Initial Calibration
DataAcq Meth : 8270F

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
72)	4-Chlorophenyl-phenylether	16.44	204	565570	49.16	ug/ml	94
73)	4-Nitroaniline	16.62	138	292754	50.49	ug/ml#	28
75)	4,6-Dinitro-2-methylphenol	16.68	198	198427	46.09	ug/ml	100
76)	n-Nitrosodiphenylamine	16.72	169	898592	50.27	ug/ml#	79
78)	Azobenzene	16.76	77	2003353	52.16	ug/ml#	79
79)	alpha-BHC	17.51	181	228758	47.39	ug/ml#	81
80)	4-Bromophenyl-phenylether	17.41	248	280889	47.76	ug/ml	96
81)	Hexachlorobenzene	17.66	284	281230	47.02	ug/ml	88
82)	beta-BHC	18.03	181	179214	48.66	ug/ml	100
83)	Pentachlorophenol	18.08	266	157467	47.84	ug/ml	97
84)	gamma-BHC	18.11	181	186955	49.61	ug/ml	96
85)	n-Octadecane	18.23	57	1160766	51.19	ug/ml#	85
86)	Phenanthrene	18.32	178	1819308	50.60	ug/ml	99
87)	Anthracene	18.41	178	1793297	50.33	ug/ml	99
88)	delta-BHC	18.53	181	183856	52.97	ug/ml	96
89)	Carbazole	18.80	167	3161109	101.46	ug/ml	96
90)	Heptachlor	19.35	272	131832	48.10	ug/ml	82
91)	Di-n-butylphthalate	19.69	149	2132341	49.90	ug/ml#	98
92)	Aldrin	19.93	263	73109	49.24	ug/ml#	62
93)	Heptachlor epoxide	20.59	81	211781	53.16	ug/ml#	85
94)	Fluoranthene	20.71	202	1508690	48.30	ug/ml#	87
96)	Benzidine	21.05	184	373934	46.19	ug/ml#	100
97)	Pyrene	21.13	202	1516858	44.56	ug/ml#	85
98)	alpha-Endosulfan	21.18	237	40252	46.90	ug/ml	87
99)	p,p'-DDE	21.53	246	314935	45.01	ug/ml#	67
101)	Dieldrin	21.60	79	503647	49.83	ug/ml	96
102)	Endrin	21.95	195	14729	45.27	ug/ml#	39
103)	Endrin aldehyde	21.95	67	46074	47.95	ug/ml#	95
104)	beta-Endosulfan	22.09	195	45910	42.79	ug/ml	95
105)	p,p'-DDD	22.17	235	449101	41.74	ug/ml#	80
106)	Butylbenzylphthalate	22.66	149	710341	42.09	ug/ml#	67
~~107)~~	~~Endosulfan sulfate~~	~~22.76~~	~~272~~	~~67317~~	~~49.46~~	~~ug/ml~~	~~67~~
108)	p,p'-DDT	22.75	235	452256	44.92	ug/ml	98
109)	4,4'-Methylene-Bis(2-chlor	23.60	231	195977	61.50	ug/ml#	80
110)	Methoxychlor	23.61	227	1085723m	50.39	ug/ml	
111)	Benzo[a]anthracene	23.55	228	1087241	45.87	ug/ml#	89
112)	3,3'-Dichlorobenzidine	23.60	252	420400	63.87	ug/ml	99
113)	Chrysene	23.65	228	1265029	48.37	ug/ml#	57
114)	bis(2-Ethylhexyl)phthalate	23.91	149	1111249	47.34	ug/ml#	98
116)	Di-n-octylphthalate	25.07	149	1601884	35.76	ug/ml	100
117)	Benzo[b]fluoranthene	25.59	252	868471m	48.11	ug/ml	

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

Quantitation Report (QT Reviewed)

Data File : D:\F090607A\4016F.D
Acq On : 6 Sep 2007 3:30
Sample : SSTD050
Misc : CAL SSTD
MS Integration Params: RTEINT4.P
Quant Time: Sep 07 01:51:05 2007

Vial: 2
Operator: JCM
Inst : MSD #6
Multiplr: 1.00
Quant Results File: 8270F.RES

Quant Method : C:\MSDCHEM\1\METHODS\8270F.M (RTE Integrator)
Title : CLP BNA Calibration
Last Update : Thu Sep 06 15:00:14 2007
Response via : Initial Calibration
DataAcq Meth : 8270F

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
118)	Benzo[k]fluoranthene	25.64	252	841353	49.85 ug/ml	99
119)	Benzo[a]pyrene	26.14	252	661977	49.08 ug/ml	99
120)	Indeno[1,2,3-cd]pyrene	28.18	276	350006	46.31 ug/ml#	83
121)	Dibenz[a,h]anthracene	28.22	278	303451	46.14 ug/ml	93
122)	Benzo[g,h,i]perylene	28.72	276	269713	46.33 ug/ml	97

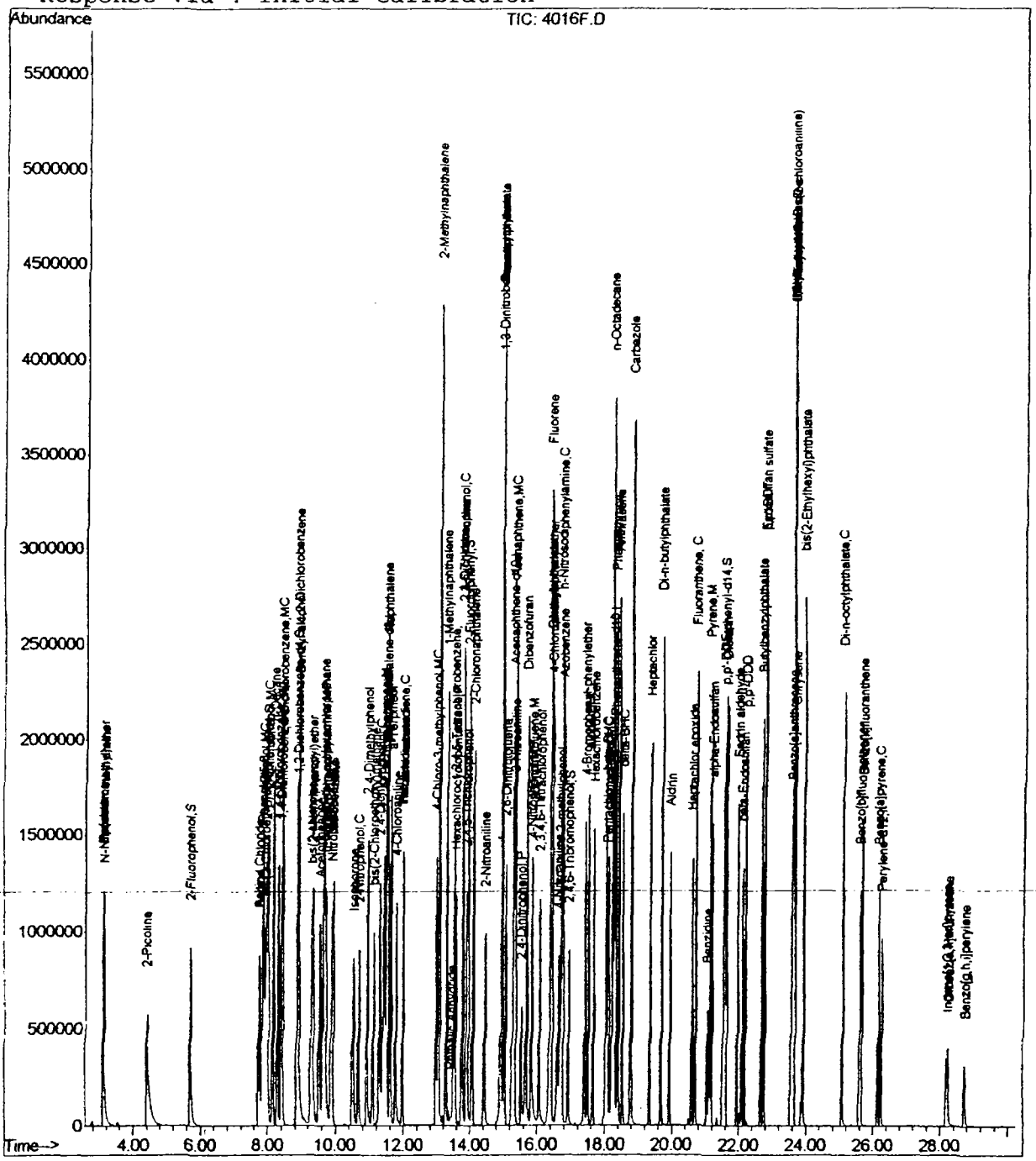
(#) = qualifier out of range (m) = manual integration

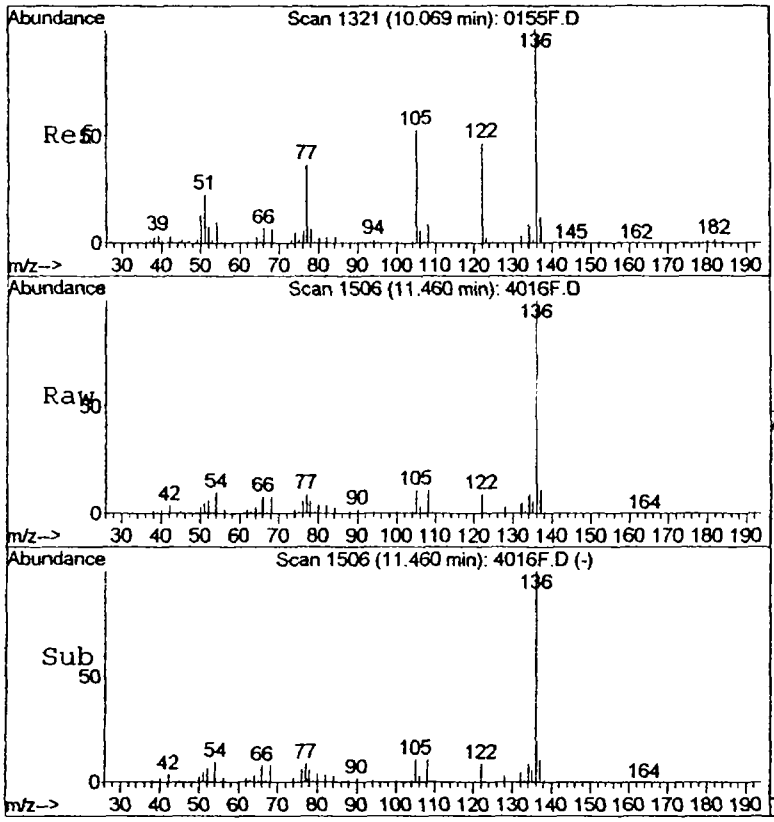
Quantitation Report (QT Reviewed)

Data File : D:\F090607A\4016F.D
Acq On : 6 Sep 2007 3:30
Sample : SSTD050
Misc : CAL SSTD
MS Integration Params: RTEINT4.P
Quant Time: Sep 7 1:53 2007

Vial: 2
Operator: JCM
Inst : MSD #6
Multiplr: 1.00
Quant Results File: 8270F.RES

Method : C:\MSDCHEM\1\METHODS\8270F.M (RTE Integrator)
Title : CLP BNA Calibration
Last Update : Fri Sep 07 04:02:55 2007
Response via : Initial Calibration

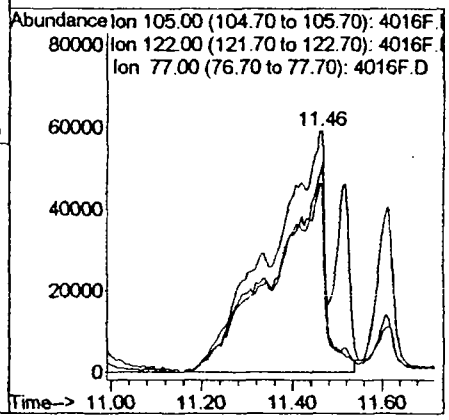


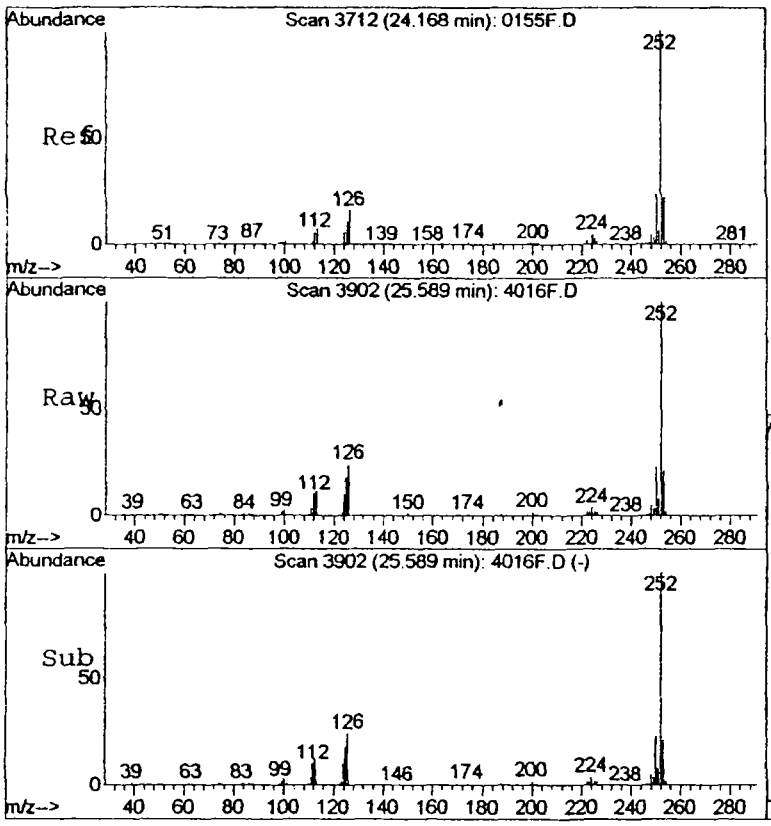


#37
Benzoic acid
Concen: 51.66 ug/ml m
RT: 11.46 min Scan# 1506
Delta R.T. -0.02 min
Lab File: 4016F.D
Acq: 6 Sep 2007 3:30

Tgt Ion:105 Resp: 492390

Ion	Ratio	Lower	Upper
105	100		
122	7.3	0.0	0.0#
77	6.1	33.6	50.4#

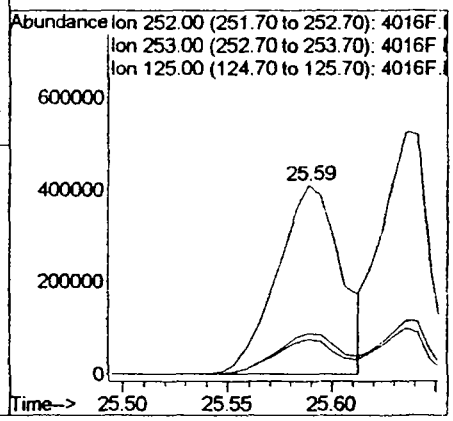




#117
Benzo[b]fluoranthene
Concen: 48.11 ug/ml m
RT: 25.59 min Scan# 3902
Delta R.T. -0.02 min
Lab File: 4016F.D
Acq: 6 Sep 2007 3:30

Tgt Ion:252 Resp: 868471

Ion	Ratio	Lower	Upper
252	100		
253	19.4	17.4	26.0
125	16.3	15.7	23.5



R524579 Heritage Environmental Services, LLC Q1993690

QC Report

QCType BLA02 Duplicate SampleID DataFile 4022F.D
Date Entered 06Sep07 Duplicate QCSampleID Analyst 3196 C. WILLHITE
Analysis Date/Time 06Sep0707:22:00 Method 187 Matrix 1 Units ug/L

PRM	Parameter	TruVal	SpikeVal	ObsVal	RQL	Rec	Difference
97	ACENAPHTHENE			10.	BDL		
98	ACENAPHTHYLENE			10.	BDL		
128	ANTHRACENE			10.	BDL		
155	BENZO(A)ANTHRACENE			10.	BDL		
156	BENZO(A)PYRENE			10.	BDL		
157	BENZO(B)FLUORANTHENE (3,4-BENZOFLUORANTH			10.	BDL		
158	BENZO(G,H,I)PERYLENE			10.	BDL		
159	BENZO(K)FLUORANTHENE			10.	BDL		
160	BENZYL ALCOHOL			10.	BDL		
202	BENZYLBUTYLPHTHALATE (BUTYLBENZYLPHTHALA			10.	BDL		
182	BIS(2-CHLOROETHOXY)METHANE			10.	BDL		
183	BIS(2-CHLOROETHYL)ETHER			10.	BDL		
184	BIS(2-CHLOROISOPROPYL)ETHER			10.	BDL		
185	BIS(2-ETHYLHEXYL)PHTHALATE			10.	BDL		
84	4-BROMODIPHENYL ETHER			10.	BDL		
213	CARBAZOLE			10.	BDL		
85	4-CHLOROANILINE			10.	BDL		
55	2-CHLORONAPHTHALENE			10.	BDL		
88	4-CHLOROPHENYL-PHENYLETHER			10.	BDL		
245	CHRYSENE			10.	BDL		
294	DIBENZ(A,H)ANTHRACENE			10.	BDL		
293	DIBENZOFURAN			10.	BDL		
20	1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)			10.	BDL		
26	1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)			10.	BDL		
29	1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)			10.	BDL		
70	3,3'-DICHLOROBENZIDINE			20.	BDL		
306	DIETHYLPHTHALATE			10.	BDL		
310	DIMETHYLPHTHALATE			10.	BDL		
329	DI-N-BUTYLPHTHALATE			10.	BDL		
489	1,3-DINITROBENZENE (M-DINITROBENZENE)			50.	BDL		
48	2,4-DINITROTOLUENE			10.	BDL		
50	2,6-DINITROTOLUENE			10.	BDL		
330	DI-N-OCTYLPHTHALATE			10.	BDL		
363	FLUORANTHENE			10.	BDL		
366	FLUORENE			10.	BDL		
397	HEXACHLOROBENZENE			10.	BDL		
398	HEXACHLOROBUTADIENE			10.	BDL		
399	HEXACHLOROCYCLOPENTADIENE			10.	BDL		
402	HEXACHLOROETHANE			10.	BDL		
413	INDENO(1,2,3-CD)PYRENE			10.	BDL		
431	ISOPHORONE			10.	BDL		
62	2-METHYLNAPHTHALENE			10.	BDL		
493	NAPHTHALENE			10.	BDL		
65	2-NITROANILINE (O-NITROANILINE)			50.	BDL		

JKS 9-11-07

JKS 9-11-07

QC Report

PRM	Parameter	TruVal	SpikeVal	ObsVal	RQL	Rec	Difference
76	3-NITROANILINE (M-NITROANILINE)			50.	BDL		
92	4-NITROANILINE (P-NITROANILINE)			50.	BDL		
503	NITROBENZENE			10.	BDL		
522	N-NITROSODIPHENYLAMINE			10.	BDL		
531	N-NITROSO-DI-N-PROPYLAMINE			10.	BDL		
597	PHENANTHRENE			10.	BDL		
68	2-PICOLINE (2-METHYLPYRIDINE)			50.	BDL		
624	PYRENE			10.	BDL		
625	PYRIDINE			50.	BDL		
15	1,2,4,5-TETRACHLOROBENZENE			10.	BDL		
16	1,2,4-TRICHLOROBENZENE			10.	BDL		
153	BENZOIC ACID			50.	BDL		
89	4-CHLORO-3-METHYLPHENOL (P-CHLORO-M-CRES			10.	BDL		
56	2-CHLOROPHENOL			10.	BDL		
44	2,4-DICHLOROPHENOL			10.	BDL		
46	2,4-DIMETHYLPHENOL			10.	BDL		
1810	2-METHYL-4,6-DINITROPHENOL			50.	BDL		
47	2,4-DINITROPHENOL			50.	BDL		
61	2-METHYLPHENOL (O-CRESOL)			10.	BDL		
90	4-METHYLPHENOL (P-CRESOL)			10.	BDL		
66	2-NITROPHENOL			10.	BDL		
93	4-NITROPHENOL			50.	BDL		
577	PENTACHLOROPHENOL			50.	BDL		
598	PHENOL			10.	BDL		
34	2,3,4,6-TETRACHLOROPHENOL			10.	BDL		
40	2,4,5-TRICHLOROPHENOL			50.	BDL		
42	2,4,6-TRICHLOROPHENOL			10.	BDL		
59	2-FLUOROPHENOL					72	
601	PHENOL-D5					43	
504	NITROBENZENE-D5					105	
58	2-FLUOROBIPHENYL					94	
41	2,4,6-TRIBROMOPHENOL					130	
701	TERPHENYL-D14					44	
972	----------						
1131	TENTATIVELY IDENTIFIED COMPOUNDS						
1804	...						
3320	NONE DETECTED						

Qualifiers

BDL Below Detection Limit

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SBLK-897

Lab Name: _____ Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: SBLK-897

Sample wt/vol: 1000 (g/ml) ML Lab File ID: 4022F.D

Level: (low/med) LOW Date Received: _____

% Moisture: _____ decanted: (Y/N) N Date Extracted:

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 9/6/2007

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

Quantitation Report (Not Reviewed)

Data File : D:\F090607A\4022F.D
Acq On : 6 Sep 2007 7:22
Sample : SBLK-897
Misc : 1000ML-1ML
MS Integration Params: RTEINT4.P
Quant Time: Sep 07 12:15:32 2007

Vial: 8
Operator: JCM
Inst : MSD #6
Multiplr: 1.00
Quant Results File: 8270F.RES

Quant Method : C:\MSDCHEM\1\METHODS\8270F.M (RTE Integrator)
Title : CLP BNA Calibration
Last Update : Fri Sep 07 04:02:55 2007
Response via : Initial Calibration
DataAcq Meth : 8270F

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	8.38	152	344678	40.00	ug/ml	-0.01
29) Naphthalene-d8	11.45	136	1489311	40.00	ug/ml	-0.02
47) Acenaphthene-d10	15.27	164	772667	40.00	ug/ml	-0.02
74) Phenanthrene-d10	18.25	188	1010357	40.00	ug/ml	-0.02
95) Chrysene-d12	23.57	240	629473	40.00	ug/ml	-0.02
115) Perylene-d12	26.22	264	335616	40.00	ug/ml	-0.01
System Monitoring Compounds						
7) 2-Fluorophenol	5.67	112	1710916	143.13	ug/ml	-0.02
Spiked Amount 200.000	Range 21 - 100		Recovery = 71.56%			
10) Phenol-d5	7.82	99	1359363	86.24	ug/ml	-0.02
Spiked Amount 200.000	Range 10 - 94		Recovery = 43.12%			
13) 2-Chlorophenol-d4	7.96	132	2829907	214.73	ug/ml	0.00
Spiked Amount 200.000	Range 27 - 123		Recovery = 107.36%			
19) 1,2-Dichlorobenzene-d4	8.85	150	902611	67.86	ug/ml	0.00
Spiked Amount 100.000	Range 32 - 220		Recovery = 67.86%			
30) Nitrobenzene-d5	9.86	82	1552654	104.99	ug/ml	-0.01
Spiked Amount 100.000	Range 18 - 57		Recovery = 104.99%#			
54) 2-Fluorobiphenyl	13.93	172	2120736	93.65	ug/ml	-0.01
Spiked Amount 100.000	Range 22 - 58		Recovery = 93.65%#			
77) 2,4,6-Tribromophenol	16.93	330	513893	259.30	ug/ml	0.00
Spiked Amount 200.000	Range 10 - 123		Recovery = 129.65%#			
100) Terphenyl-d14	21.54	244	645729	43.60	ug/ml	-0.02
Spiked Amount 100.000	Range 17 - 71		Recovery = 43.60%			

Target Compounds						Qvalue
37) Benzoic acid	11.46	105	1979	13.30	ug/ml#	1
59) Dimethylphthalate	15.27	163	125239	5.51	ug/ml#	1
61) 2,6-Dinitrotoluene	15.27	165	99127	19.09	ug/ml#	54

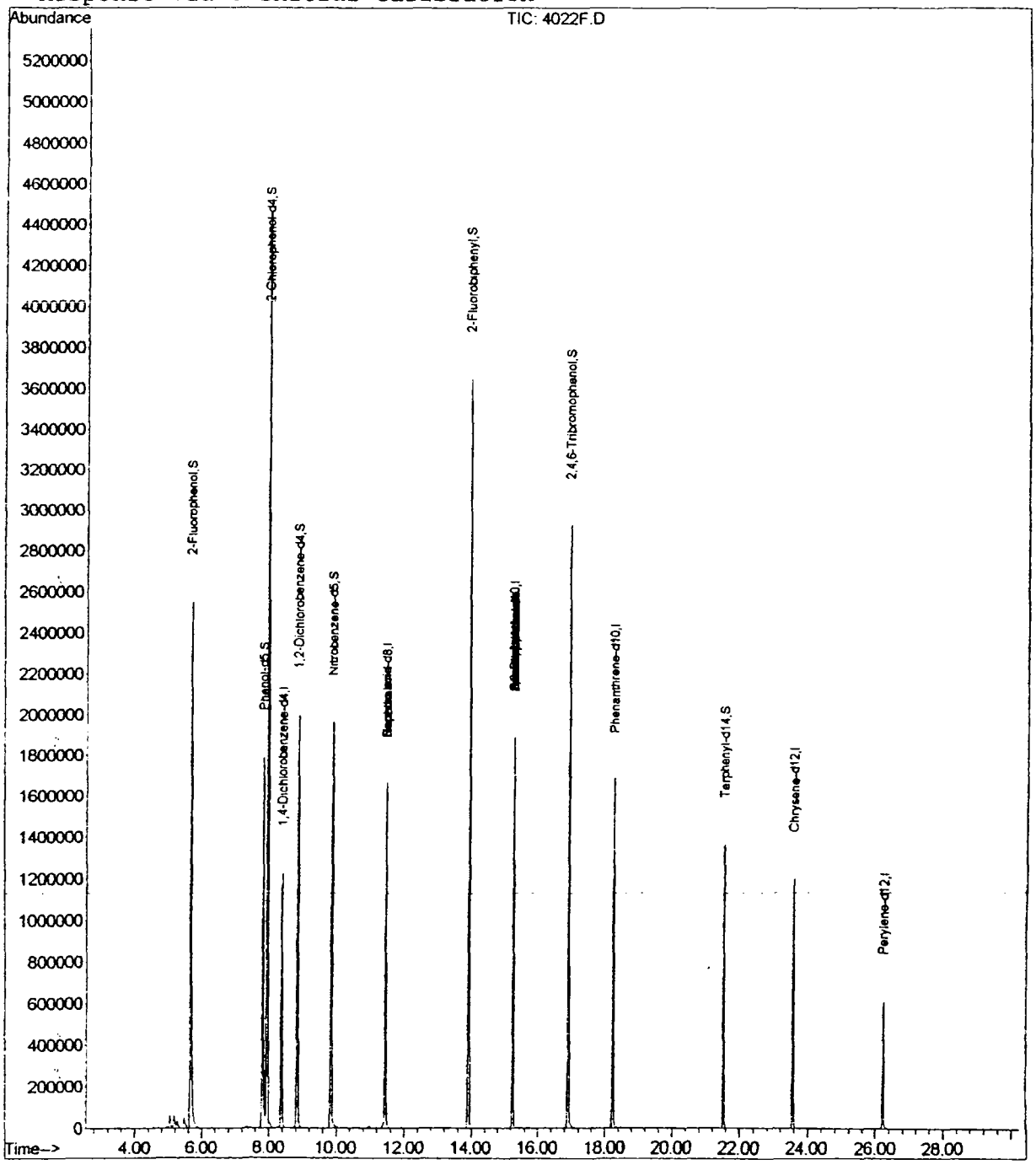
(#) = qualifier out of range (m) = manual integration

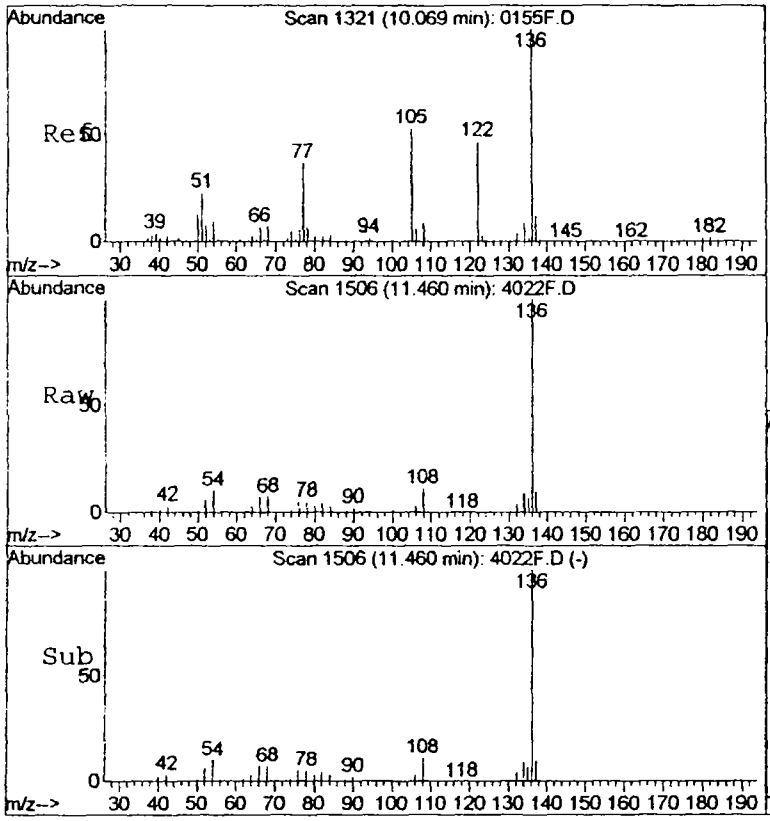
Quantitation Report (Not Reviewed)

Data File : D:\F090607A\4022F.D
Acq On : 6 Sep 2007 7:22
Sample : SBLK-897
Misc : 1000ML-1ML
MS Integration Params: RTEINT4.P
Quant Time: Sep 7 12:15 2007

Vial: 8
Operator: JCM
Inst : MSD #6
Multiplr: 1.00
Quant Results File: 8270F.RES

Method : C:\MSDCHEM\1\METHODS\8270F.M (RTE Integrator)
Title : CLP BNA Calibration
Last Update : Fri Sep 07 04:02:55 2007
Response via : Initial Calibration

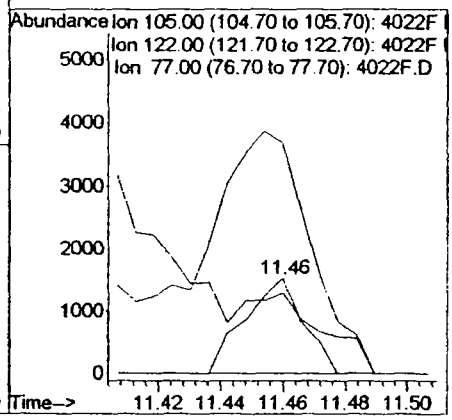


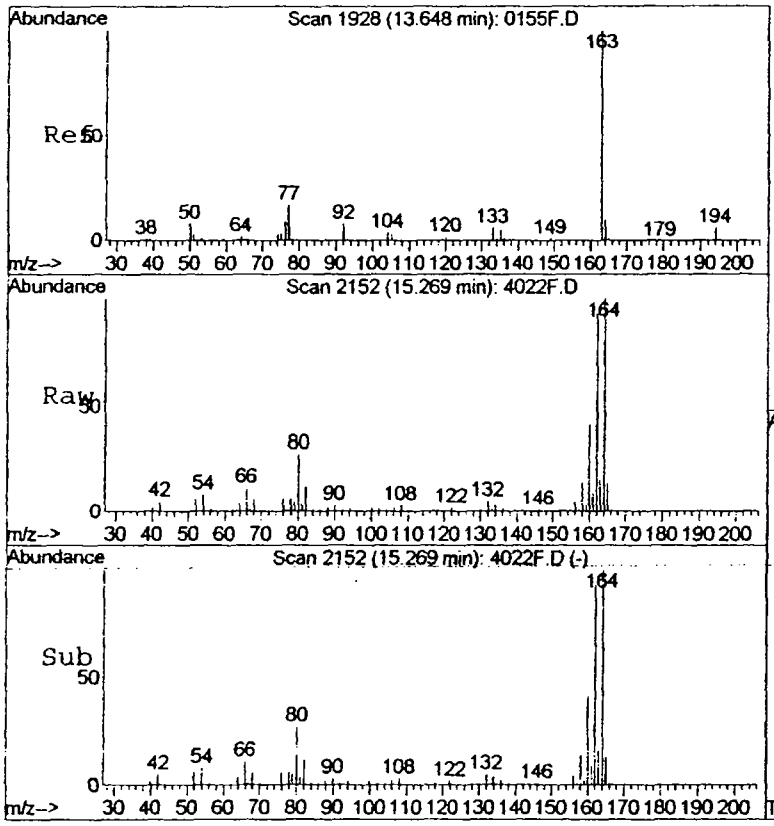


#37
Benzoic acid
Concen: 13.30 ug/ml
RT: 11.46 min Scan# 1506
Delta R.T. 0.00 min
Lab File: 4022F.D
Acq: 6 Sep 2007 7:22

Tgt Ion:105 Resp: 1979

Ion	Ratio	Lower	Upper
105	100		
122	0.0	0.0	0.0
77	440.3	33.6	50.4#

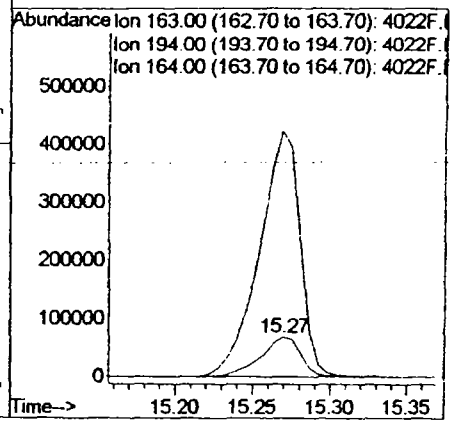


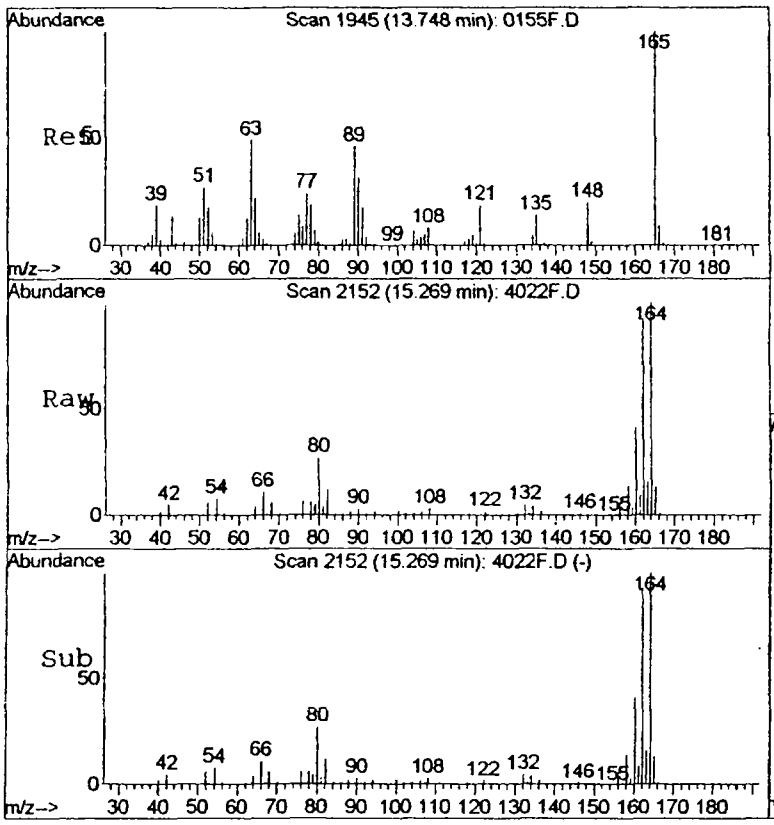


#59
Dimethylphthalate
Concen: 5.51 ug/ml
RT: 15.27 min Scan# 2152
Delta R.T. 0.32 min
Lab File: 4022F.D
Acq: 6 Sep 2007 7:22

Tgt Ion:163 Resp: 125239

Ion	Ratio	Lower	Upper
163	100		
194	0.0	3.6	5.4#
164	616.9	6.6	9.8#

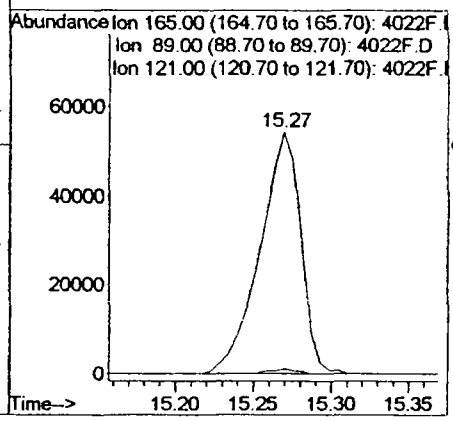




#61
2,6-Dinitrotoluene
Concen: 19.09 ug/ml
RT: 15.27 min Scan# 2152
Delta R.T. 0.21 min
Lab File: 4022F.D
Acq: 6 Sep 2007 7:22

Tgt Ion:165 Resp: 99127

Ion	Ratio	Lower	Upper
165	100		
89	1.4	23.1	34.7#
121	0.0	10.6	16.0#



LSC Area Percent Report

Data File : D:\F090607A\4022F.D Vial: 8
Acq On : 6 Sep 2007 7:22 Operator: JCM
Sample : SBLK-897 Inst : MSD #6
Misc : 1000ML-1ML Multiplr: 1.00
MS Integration Params: Lscint.p

Method : C:\MSDCHEM\1\METHODS\8270F.M (RTE Integrator)
Title : CLP BNA Calibration
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

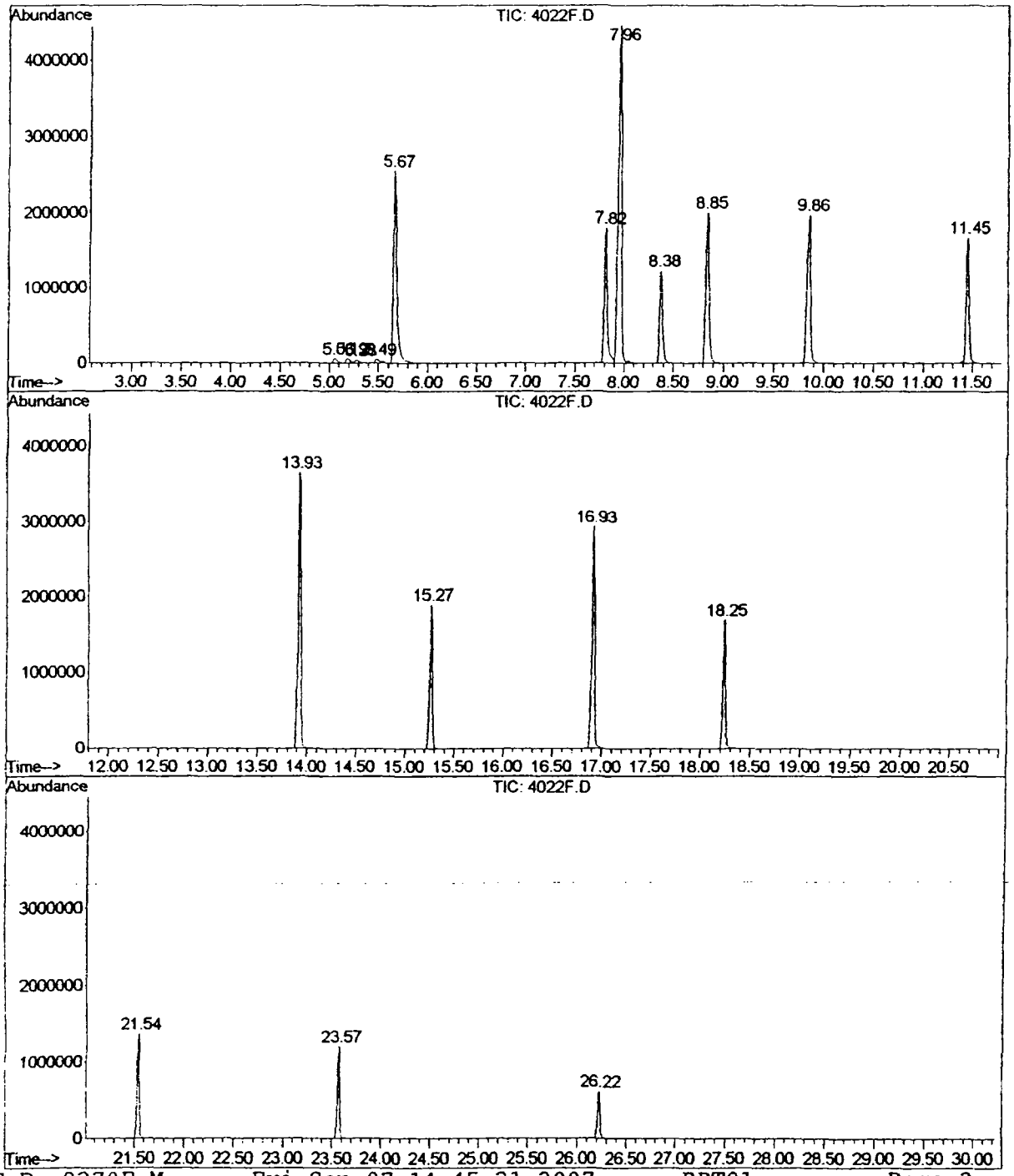
Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	5.056	414	420	434	rBV	60499	167486	1.53%	0.273%
2	5.191	434	443	451	rVV	59474	164621	1.51%	0.269%
3	5.280	452	458	479	rVB	37827	120953	1.11%	0.198%
4	5.486	486	493	501	rBV	50734	146418	1.34%	0.239%
5	5.669	516	524	562	rBV	2550233	6308231	57.68%	10.301%
6	7.821	877	889	902	rBV	1793805	3993884	36.52%	6.522%
7	7.963	902	913	924	rVV	4465414	10935955	100.00%	17.858%
8	8.382	975	984	1003	rBV	1227426	2551570	23.33%	4.167%
9	8.847	1054	1063	1080	rBV2	1999026	4410515	40.33%	7.202%
10	9.862	1223	1235	1256	rBV	1964294	4793033	43.83%	7.827%
11	11.454	1497	1505	1524	rVB	1665876	3356093	30.69%	5.480%
12	13.931	1914	1925	1945	rBV	3651996	6891004	63.01%	11.253%
13	15.269	2141	2152	2169	rBV	1889866	3454226	31.59%	5.641%
14	16.926	2421	2433	2449	rBV	2929390	5889938	53.86%	9.618%
15	18.247	2646	2657	2670	rBV	1687798	2827999	25.86%	4.618%
16	21.544	3203	3216	3224	rBV	1369756	2196163	20.08%	3.586%
17	23.572	3552	3560	3572	rBV	1204357	1964346	17.96%	3.208%
18	26.220	4002	4009	4019	rBV	613333	1066429	9.75%	1.741%

Sum of corrected areas: 61238864

LSC Report - Integrated Chromatogram

File : D:\F090607A\4022F.D
Operator : JCM
Acquired : 6 Sep 2007 7:22 using AcqMethod 8270F
Instrument : MSD #6
Sample Name: SBLK-897
Misc Info : 1000ML-1ML
Vial Number: 8
Quant File :8270F.RES (RTE Integrator)



Tentatively Identified Compound (LSC) summary

Operator ID: JCM Date Acquired: 6 Sep 2007 7:22
Data File: D:\F090607A\4022F.D
Name: SBLK-897
Misc: 1000ML-1ML
Method: C:\MSDCHEM\1\METHODS\8270F.M (RTE Integrator)
Title: CLP BNA Calibration
Library Searched: C:\DATABASE\NBS75K.L

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--- #	RT	Resp	Conc

*no tgt hits

QC Std# 535
Method# 187

Heritage Environmental Services, Indianapolis
LCS Semi-Volatile QC Report-EPA Method 8270
Water

LCS Data File : 4023F. DLCS Data File : 4024F.
LCS Date/Time : 6 Sep 2007 8:00 DLCS Date/Time : 6 Sep 2007 8:38
Spike Conc : 100 uG/L 100 uG/L
Prep Factor: 1

Compound	Spike Conc	Spike % Rec	Spike Dup Conc	Spike Dup % Rec	RPD	Min % Recovery	Max *
Acenaphthene	115	115.0	106	106.0	8.1	83	118
Acenaphthylene	116	116.0 *	105	105.0	10.0	78	113
Anthracene	112	112.0	103	103.0	8.4	80	114
Benzo(a)anthracene	113	113.0	105	105.0	7.3	80	119
Benzo(a)pyrene	107	107.0	99.6	99.6	7.2	76	119
Benzo(b)fluoranthene	103	103.0	109	109.0	5.7	72	148
Benzo(g,h,i)perylene	151	151.0 *	97.2	97.2	43.4	55	140
Benzo(k)fluoranthene	108	108.0	89	89.0	19.3	65	126
Benzyl alcohol	107	107.0	104	104.0	2.8	69	108
Butylbenzylphthalate	105	105.0	98.1	98.1	6.8	77	120
bis(2-Chloroethoxy)methane	103	103.0	97.5	97.5	5.5	81	115
bis(2-Chloroethyl)ether	96.3	96.3	93.8	93.8	2.6	69	111
bis(2-chloroisopropyl)ether	104	104.0	98.9	98.9	5.0	78	116
bis(2-Ethylhexyl)phthalate	105	105.0	95.4	95.4	9.6	76	119
4-Bromophenyl-phenylether	120	120.0	110	110.0	8.7	84	126
Carbazole	105	105.0	102	102.0	2.9	73	108
4-Chloroaniline	116	116.0	119	119.0	2.6	46	160
2-Chloronaphthalene	143	143.0 *	130	130.0	9.5	88	136
4-Chlorophenyl-phenylether	119	119.0 *	110	110.0	7.9	81	118
Chrysene	104	104.0	97.3	97.3	6.7	80	120
Dibenz(a,h)anthracene	130	130.0	92.6	92.6	33.6	63	145
Dibenzofuran	108	108.0	101	101.0	6.7	81	119
1,2-Dichlorobenzene	106	106.0 *	98.8	98.8	7.0	68	102
1,3-Dichlorobenzene	102	102.0 *	95.5	95.5	6.6	65	99
1,4-Dichlorobenzene	103	103.0 *	95.4	95.4	7.7	68	102
3,3'-Dichlorobenzidine	107	107.0	102	102.0	4.8	65	188
Diethylphthalate	116	116.0	109	109.0	6.2	80	118
Dimethylphthalate	115	115.0	107	107.0	7.2	82	120
Di-n-butylphthalate	102	102.0	96.6	96.6	5.4	75	112
1,3-Dinitrobenzene	121	121.0	117	117.0	3.4	83	123
2,4-Dinitrotoluene	116	116.0 *	113	113.0	2.6	76	114
2,6-Dinitrotoluene	114	114.0	109	109.0	4.5	77	118
Di-n-octylphthalate	114	114.0	123	123.0	7.6	63	142
Fluoranthene	98.7	98.7	97.4	97.4	1.3	75	118
Fluorene	117	117.0	111	111.0	5.3	81	120
Hexachlorobenzene	115	115.0	106	106.0	8.1	75	116
Hexachlorobutadiene	108	108.0 *	100	100.0	7.7	65	104
Hexachlorocyclopentadiene	93.5	93.5 *	84.6	84.6 *	10.0	39	79
Hexachloroethane	103	103.0 *	96.1	96.1	6.9	60	97

QC Std# 535
Method# 187

Heritage Environmental Services, Indianapolis
LCS Semi-Volatile QC Report-EPA Method 8270
Water

LCS Data File : 4023F. DLCS Data File : 4024F.
LCS Date/Time : 6 Sep 2007 8:00 DLCS Date/Time : 6 Sep 2007 8:38
Spike Conc : 100 uG/L 100 uG/L
Prep Factor: 1

Compound	Spike Conc	Spike % Rec	Spike Dup Conc	Spike Dup % Rec	RPD	Min % Recovery *	Max *
Indeno(1,2,3-cd)pyrene	145	145.0 *	100	100.0	36.7	63	140
Isophorone	90.4	90.4	88.1	88.1	2.6	69	105
2-Methylnaphthalene	99.7	99.7	94.5	94.5	5.4	74	115
Naphthalene	109	109.0	101	101.0	7.6	80	113
2-Nitroaniline	107	107.0	102	102.0	4.8	84	123
3-Nitroaniline	129	129.0	128	128.0	0.8	67	181
4-Nitroaniline	105	105.0	111	111.0	5.6	73	142
Nitrobenzene	106	106.0	99.3	99.3	6.5	74	106
n-Nitrosodiphenylamine	218	109.0	196	98.0	10.6	77	113
n-Nitroso-di-n-propylamine	98.4	98.4	94.1	94.1	4.5	71	110
Phenanthrene	113	113.0	101	101.0	11.2	80	117
2-Picoline	40.2	40.2	58.4	58.4	36.9	4	90
Pyrene	104	104.0	94.6	94.6	9.5	73	123
Pyridine	27.5	27.5	47.4	47.4	53.1	D	63
1,2,4,5-Tetrachlorobenzene	114	114.0	103	103.0	10.1	78	120
1,2,4-Trichlorobenzene	105	105.0 *	97.6	97.6	7.3	71	102
Benzoic acid	30.7	30.7	24	24.0	24.5	D	56
4-Chloro-3-methylphenol	105	105.0	101	101.0	3.9	79	118
2-Chlorophenol	109	109.0	100	100.0	8.6	78	111
2,4-Dichlorophenol	104	104.0	96.9	96.9	7.1	78	112
2,4-Dimethylphenol	91.4	91.4	79.1	79.1	14.4	52	104
4,6-Dinitro-2-methylphenol	127	127.0	114	114.0	10.8	71	139
2,4-Dinitrophenol	98.7	98.7	103	103.0	4.3	56	121
2-Methylphenol	98.5	98.5	88.3	88.3	10.9	71	107
4-Methylphenol	91	91.0	79.4	79.4	13.6	64	100
2-Nitrophenol	106	106.0	99.5	99.5	6.3	81	114
4-Nitrophenol	54.6	54.6	44.7	44.7	19.9	27	74
Pentachlorophenol	115	115.0	113	113.0	1.8	62	124
Phenol	61.2	61.2	47.4	47.4	25.4	33	73
2,3,4,6-Tetrachlorophenol	117	117.0	113	113.0	3.5	82	129
2,4,5-Trichlorophenol	110	110.0	99.1	99.1	10.4	79	118
2,4,6-Trichlorophenol	108	108.0	98	98.0	9.7	81	124

* Laboratory Generated Limits (based on >20 analyses) are used as Warning Limits. Updated 12/03

Quantitation Report (QT Reviewed)

Data File : D:\F090607A\4023F.D
Acq On : 6 Sep 2007 8:00
Sample : LCS 790
Misc : 1000ML-1ML
MS Integration Params: RTEINT4.P
Quant Time: Sep 07 12:32:16 2007

Vial: 9
Operator: JCM
Inst : MSD #6
Multiplr: 1.00
Quant Results File: 8270F.RES

Quant Method : C:\MSDCHEM\1\METHODS\8270F.M (RTE Integrator)
Title : CLP BNA Calibration
Last Update : Fri Sep 07 04:02:55 2007
Response via : Initial Calibration
DataAcq Meth : 8270F

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	8.40	152	357717	40.00	ug/ml	0.00
29) Naphthalene-d8	11.49	136	1571124	40.00	ug/ml	0.01
47) Acenaphthene-d10	15.30	164	782276	40.00	ug/ml	0.01
74) Phenanthrene-d10	18.29	188	1139274	40.00	ug/ml	0.02
95) Chrysene-d12	23.60	240	766768	40.00	ug/ml	0.00
115) Perylene-d12	26.24	264	375659	40.00	ug/ml	0.00
System Monitoring Compounds						
7) 2-Fluorophenol	5.71	112	2021214	162.92	ug/ml	0.02
Spiked Amount 200.000	Range 21 - 100		Recovery = 81.46%			
10) Phenol-d5	7.87	99	1818070	111.14	ug/ml	0.04
Spiked Amount 200.000	Range 10 - 94		Recovery = 55.57%			
13) 2-Chlorophenol-d4	8.01	132	2957812	216.25	ug/ml	0.04
Spiked Amount 200.000	Range 27 - 123		Recovery = 108.13%			
19) 1,2-Dichlorobenzene-d4	8.88	150	1345157	97.45	ug/ml	0.02
Spiked Amount 100.000	Range 32 - 220		Recovery = 97.45%			
30) Nitrobenzene-d5	9.91	82	1651717	105.88	ug/ml	0.04
Spiked Amount 100.000	Range 18 - 57		Recovery = 105.88%#			
54) 2-Fluorobiphenyl	13.97	172	2430515	106.01	ug/ml	0.02
Spiked Amount 100.000	Range 22 - 58		Recovery = 106.01%#			
77) 2,4,6-Tribromophenol	16.96	330	591985	264.90	ug/ml	0.04
Spiked Amount 200.000	Range 10 - 123		Recovery = 132.45%#			
100) Terphenyl-d14	21.56	244	761205	42.19	ug/ml	0.00
Spiked Amount 100.000	Range 17 - 71		Recovery = 42.19%			

Target Compounds						Qvalue
2) bis(chloromethyl)ether	3.12	79	425214	30.18	ug/ml#	19
3) N-Nitrosodimethyl amine	3.13	42	642763	76.82	ug/ml#	64
4) Pyridine	3.12	79	441082	27.49	ug/ml#	51
5) 2-Picoline	4.50	93	566447m	40.17	ug/ml	
9) Aniline	7.78	93	1387378	74.54	ug/ml	99
11) Phenol	7.90	94	1062450	61.19	ug/ml#	76
~~12) bis(2-Chloroethyl)ether~~	~~7.98~~	~~93~~	~~1514706~~	~~96.26~~	~~ug/ml#~~	~~1~~
14) 2-Chlorophenol	8.04	128	1467404	108.51	ug/ml#	87
16) 1,3-Dichlorobenzene	8.31	146	1394234	101.70	ug/ml#	98
17) Benzyl Chloride	7.79	91	16123	128.55	ug/ml#	1
18) 1,4-Dichlorobenzene	8.45	146	1461541	102.68	ug/ml#	98
20) 1,2-Dichlorobenzene	8.91	146	1448988	105.78	ug/ml#	98
21) Benzyl alcohol	8.92	108	822246	106.82	ug/ml#	68
23) 2-Methylphenol	9.35	108	1159059	98.53	ug/ml	95
24) bis(2-chloroisopropyl)ethe	9.30	45	2228877	103.78	ug/ml#	68
25) Acetophenone	9.57	105	1971127	101.75	ug/ml#	84

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

Quantitation Report (QT Reviewed)

Data File : D:\F090607A\4023F.D
Acq On : 6 Sep 2007 8:00
Sample : LCS 790
Misc : 1000ML-1ML
MS Integration Params: RTEINT4.P
Quant Time: Sep 07 12:32:16 2007

Vial: 9
Operator: JCM
Inst : MSD #6
Multiplr: 1.00
Quant Results File: 8270F.RES

Quant Method : C:\MSDCHEM\1\METHODS\8270F.M (RTE Integrator)
Title : CLP BNA Calibration
Last Update : Fri Sep 07 04:02:55 2007
Response via : Initial Calibration
DataAcq Meth : 8270F

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
26)	n-Nitroso-di-n-propylamine	9.70	70	1038796	98.39	ug/ml#	15
27)	4-Methylphenol	9.73	108	1129912	91.03	ug/ml	98
28)	Hexachloroethane	9.64	117	669236	103.10	ug/ml#	76
31)	Nitrobenzene	9.95	77	1704686	106.05	ug/ml#	78
32)	Isophorone	10.56	82	2427630	90.35	ug/ml#	82
33)	2-Nitrophenol	10.70	139	718927	105.53	ug/ml#	70
34)	2,4-Dimethylphenol	10.95	107	1193031	91.36	ug/ml	85
35)	bis(2-Chloroethoxy)methane	11.13	93	1626211	102.94	ug/ml	98
36)	2,4-Dichlorophenol	11.29	162	927049	103.61	ug/ml#	92
37)	Benzoic acid	11.40	105	231553m	30.68	ug/ml	
38)	1,2,4-Trichlorobenzene	11.41	180	1038581	105.02	ug/ml	98
39)	Naphthalene	11.54	128	4311245	109.13	ug/ml	99
41)	4-Chloroaniline	11.80	127	1556264	116.06	ug/ml	99
42)	Toluenediamine	11.98	122	34398	105.04	ug/ml#	59
43)	Hexachlorobutadiene	11.98	225	530353	107.59	ug/ml	99
44)	4-Chloro-3-methylphenol	12.98	107	1177582	105.29	ug/ml#	1
45)	2-Methylnaphthalene	13.08	141	2210128	99.72	ug/ml#	67
49)	Hexachlorocyclopentadiene	13.58	237	542003	93.54	ug/ml#	99
50)	1,2,4,5-Tetrachlorobenzene	13.53	216	898453	114.25	ug/ml	98
52)	2,4,6-Trichlorophenol	13.81	196	627225	107.80	ug/ml	100
53)	2,4,5-Trichlorophenol	13.90	196	663731	109.50	ug/ml	96
56)	2-Chloronaphthalene	14.11	162	2919218	142.71	ug/ml	95
58)	2-Nitroaniline	14.47	65	799794	106.99	ug/ml#	74
59)	Dimethylphthalate	14.99	163	2646066m	115.04	ug/ml	
60)	1,3-Dinitrobenzene	14.97	168	468565	121.19	ug/ml#	32
61)	2,6-Dinitrotoluene	15.09	165	599849m	114.11	ug/ml	
62)	Acenaphthylene	14.97	152	3980128	116.18	ug/ml	99
63)	3-Nitroaniline	15.36	138	671937	128.59	ug/ml#	36
64)	Acenaphthene	15.38	153	2391542	115.30	ug/ml	98
65)	2,4-Dinitrophenol	15.58	184	275564	98.73	ug/ml#	56
66)	4-Nitrophenol	15.87	109	167984	54.64	ug/ml#	59
67)	Dibenzofuran	15.71	168	3090857	107.92	ug/ml	93
68)	2,4-Dinitrotoluene	15.90	165	741373	115.64	ug/ml#	37
69)	2,3,4,6-Tetrachlorophenol	16.11	232	498863	117.30	ug/ml	98
70)	Diethylphthalate	16.45	149	2777911	115.79	ug/ml	98
71)	Fluorene	16.41	166	2681703	117.04	ug/ml	99
72)	4-Chlorophenyl-phenylether	16.45	204	1174131	118.57	ug/ml	96
73)	4-Nitroaniline	16.68	138	503819m	105.16	ug/ml	
75)	4,6-Dinitro-2-methylphenol	16.74	198	443596m	126.58	ug/ml	
76)	n-Nitrosodiphenylamine	16.76	169	3300175	218.07	ug/ml#	82
78)	Azobenzene	16.78	77	3792059	112.43	ug/ml#	77

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

Quantitation Report (QT Reviewed)

Data File : D:\F090607A\4023F.D
Acq On : 6 Sep 2007 8:00
Sample : LCS 790
Misc : 1000ML-1ML
MS Integration Params: RTEINT4.P
Quant Time: Sep 07 12:32:16 2007

Vial: 9
Operator: JCM
Inst : MSD #6
Multiplr: 1.00
Quant Results File: 8270F.RES

Quant Method : C:\MSDCHEM\1\METHODS\8270F.M (RTE Integrator)
Title : CLP BNA Calibration
Last Update : Fri Sep 07 04:02:55 2007
Response via : Initial Calibration
DataAcq Meth : 8270F

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
79)	alpha-BHC	17.53	181	453256	110.29 ug/ml#	43
80)	4-Bromophenyl-phenylether	17.43	248	599124	120.46 ug/ml	97
81)	Hexachlorobenzene	17.69	284	579987	115.01 ug/ml	87
82)	beta-BHC	18.08	181	373450m	119.18 ug/ml	
83)	Pentachlorophenol	18.11	266	326582	114.55 ug/ml	97
84)	gamma-BHC	18.13	181	310614	99.21 ug/ml	100
86)	Phenanthrene	18.35	178	3428680	112.72 ug/ml	99
87)	Anthracene	18.44	178	3296944	111.58 ug/ml	99
88)	delta-BHC	18.55	181	296270	99.81 ug/ml	99
89)	Carbazole	18.81	167	2750357	104.94 ug/ml	97
90)	Heptachlor	19.36	272	248733	106.48 ug/ml	89
91)	Di-n-butylphthalate	19.70	149	3585396	102.08 ug/ml#	98
92)	Aldrin	19.95	263	198378	157.95 ug/ml	75
93)	Heptachlor epoxide	20.59	81	330347	96.62 ug/ml#	86
94)	Fluoranthene	20.72	202	2535328	98.66 ug/ml#	86
96)	Benzidine	21.06	184	115071	18.84 ug/ml#	100
97)	Pyrene	21.15	202	2592923	104.15 ug/ml#	84
98)	alpha-Endosulfan	21.20	237	66013	102.45 ug/ml	85
99)	p,p'-DDE	21.53	246	496607	98.59 ug/ml#	64
101)	Dieldrin	21.61	79	612095	79.79 ug/ml	96
102)	Endrin	21.96	195	24426	104.99 ug/ml#	37
103)	Endrin aldehyde	21.96	67	70987	98.25 ug/ml#	91
104)	beta-Endosulfan	22.11	195	77831	97.84 ug/ml	94
105)	p,p'-DDD	22.19	235	765834	99.50 ug/ml#	83
106)	Butylbenzylphthalate	22.68	149	1280498	105.04 ug/ml#	69
107)	Endosulfan sulfate	22.76	272	115313	104.41 ug/ml#	68
108)	p,p'-DDT	22.76	235	795972	105.75 ug/ml	99
110)	Methoxychlor	23.61	227	1741898	107.11 ug/ml#	6
111)	Benzo[a]anthracene	23.57	228	2002906	112.67 ug/ml#	90
112)	3,3'-Dichlorobenzidine	23.61	252	626844	107.14 ug/ml	99
113)	Chrysene	23.66	228	2084655	104.33 ug/ml#	55
114)	bis(2-Ethylhexyl)phthalate	23.91	149	1866086	104.76 ug/ml#	98
116)	Di-n-octylphthalate	25.08	149	2787600	113.92 ug/ml	100
117)	Benzo[b]fluoranthene	25.62	252	1586751	103.49 ug/ml	99
118)	Benzo[k]fluoranthene	25.67	252	1282043m	107.91 ug/ml	
119)	Benzo[a]pyrene	26.15	252	1119865	106.90 ug/ml	99
120)	Indeno[1,2,3-cd]pyrene	28.21	276	728927	144.97 ug/ml	99
121)	Dibenz[a,h]anthracene	28.23	278	335218	65.17 ug/ml#	90
122)	Benzo[g,h,i]perylene	28.74	276	565020	151.17 ug/ml	96

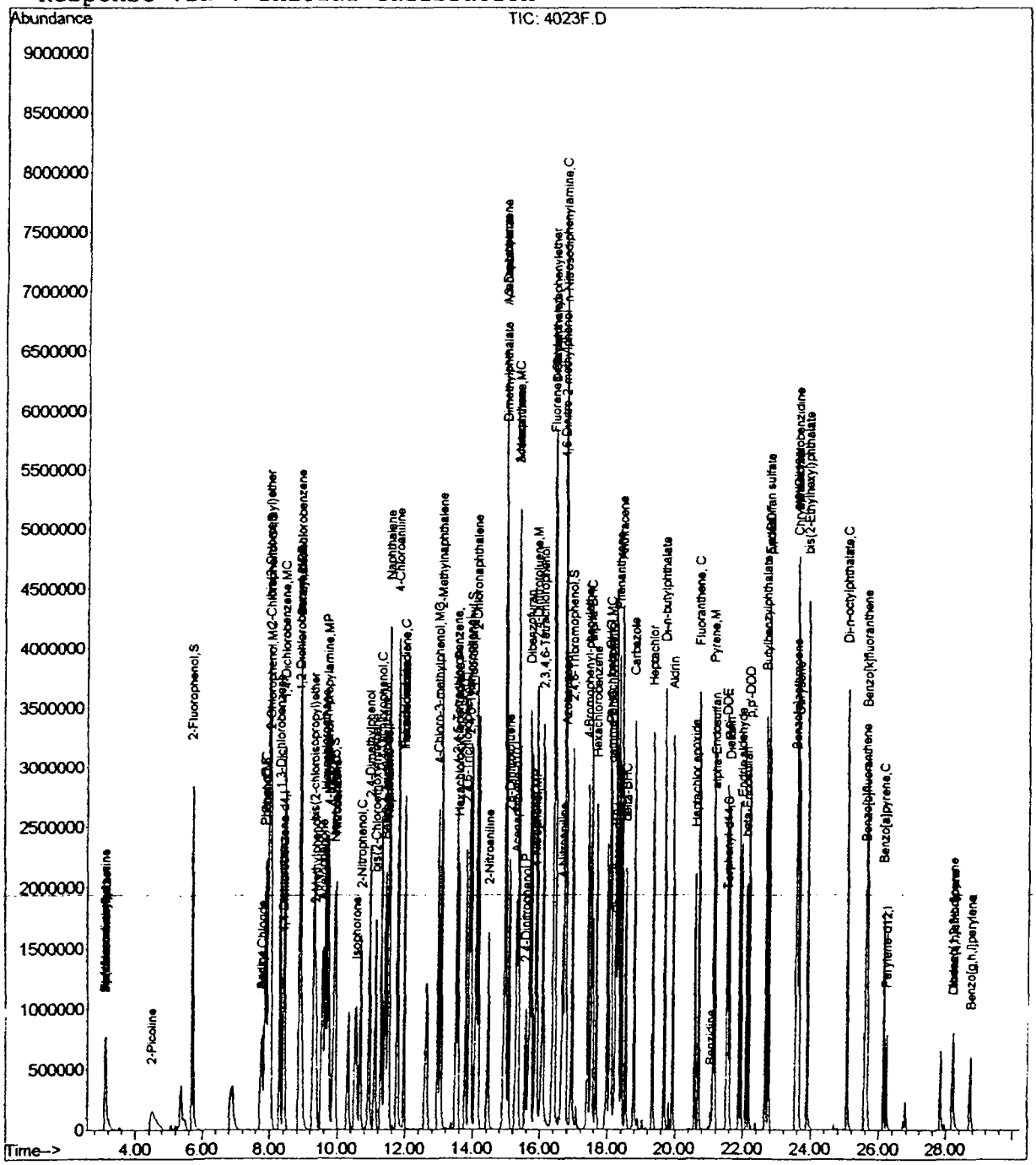
(#) = qualifier out of range (m) = manual integration

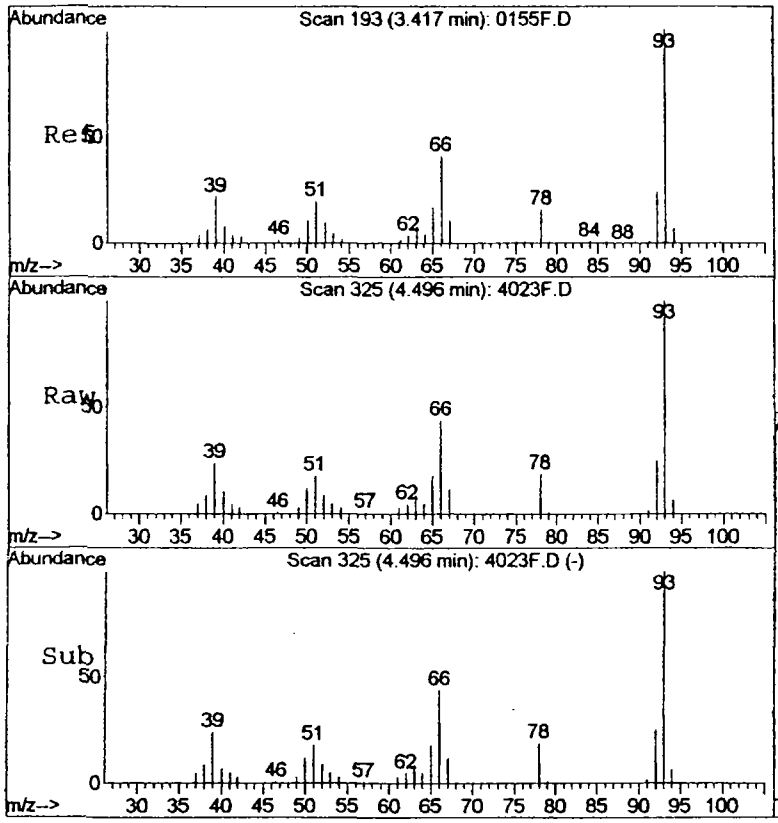
Quantitation Report (QT Reviewed)

Data File : D:\F090607A\4023F.D
Acq On : 6 Sep 2007 8:00
Sample : LCS 790
Misc : 1000ML-1ML
MS Integration Params: RTEINT4.P
Quant Time: Sep 7 12:43 2007

Vial: 9
Operator: JCM
Inst : MSD #6
Multiplr: 1.00
Quant Results File: 8270F.RES

Method : C:\MSDCHEM\1\METHODS\8270F.M (RTE Integrator)
Title : CLP BNA Calibration
Last Update : Fri Sep 07 04:02:55 2007
Response via : Initial Calibration

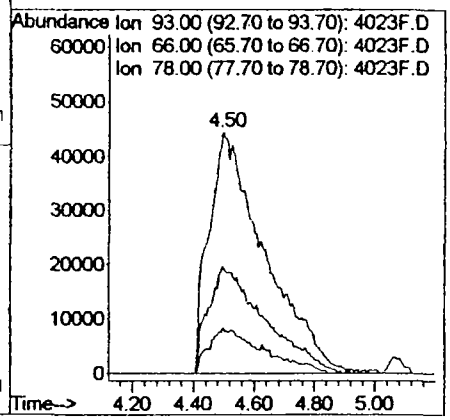


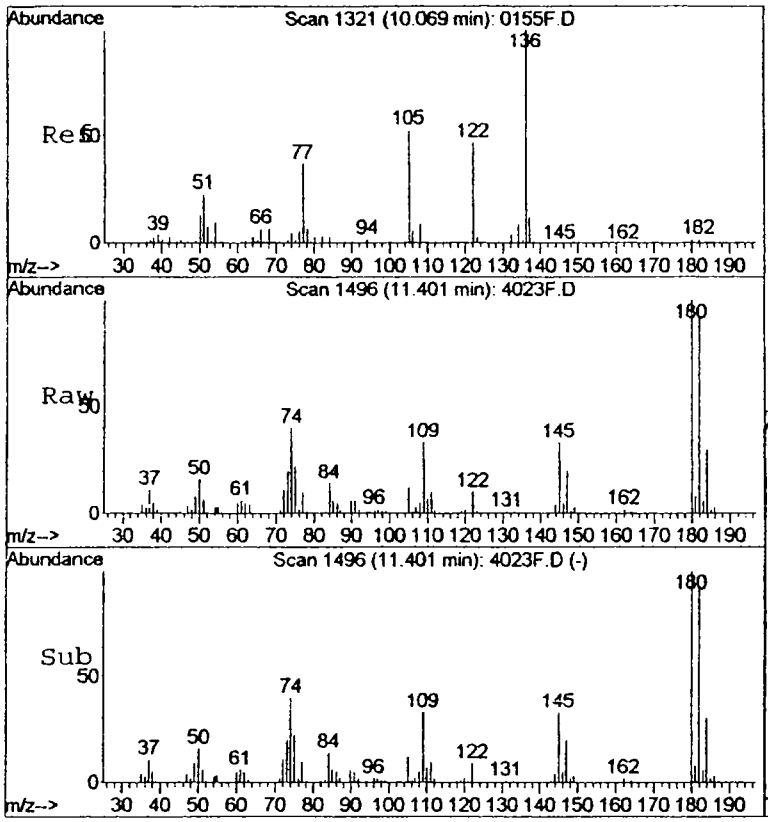


#5
2-Picoline
Concen: 40.17 ug/ml m
RT: 4.50 min Scan# 325
Delta R.T. 0.09 min
Lab File: 4023F.D
Acq: 6 Sep 2007 8:00

Tgt Ion: 93 Resp: 566447

Ion	Ratio	Lower	Upper
93	100		
66	42.1	35.4	53.2
78	6.4	11.8	17.6#

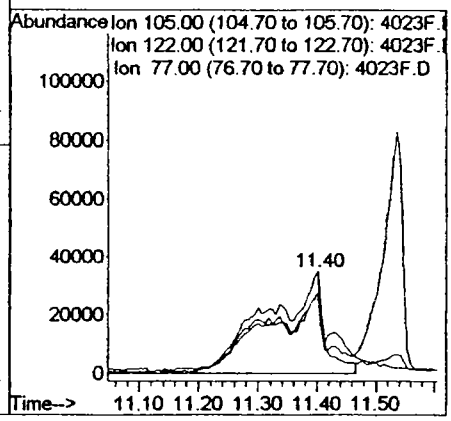


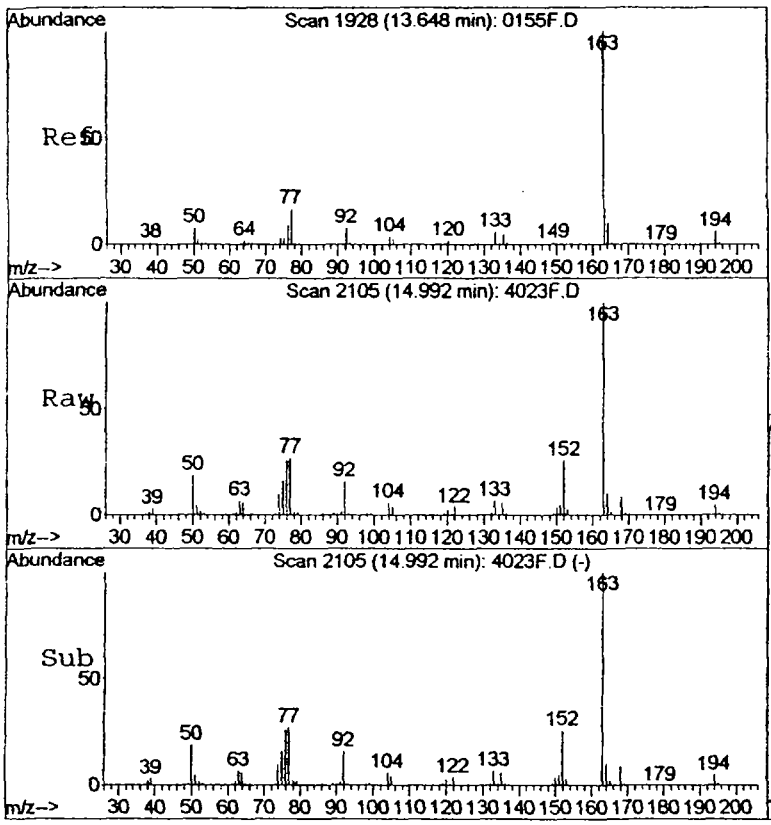


#37
Benzoic acid
Concen: 30.68 ug/ml m
RT: 11.40 min Scan# 1496
Delta R.T. -0.06 min
Lab File: 4023F.D
Acq: 6 Sep 2007 8:00

Tgt Ion:105 Resp: 231553

Ion	Ratio	Lower	Upper
105	100		
122	9.1	0.0	0.0#
77	16.0	33.6	50.4#

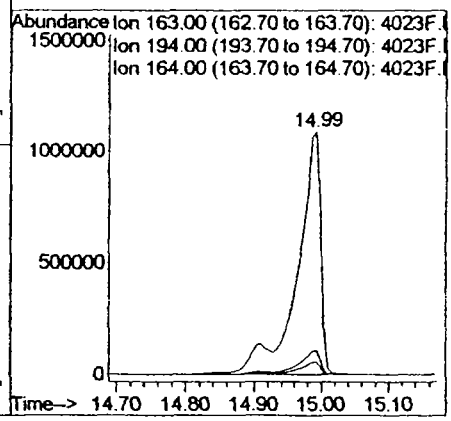


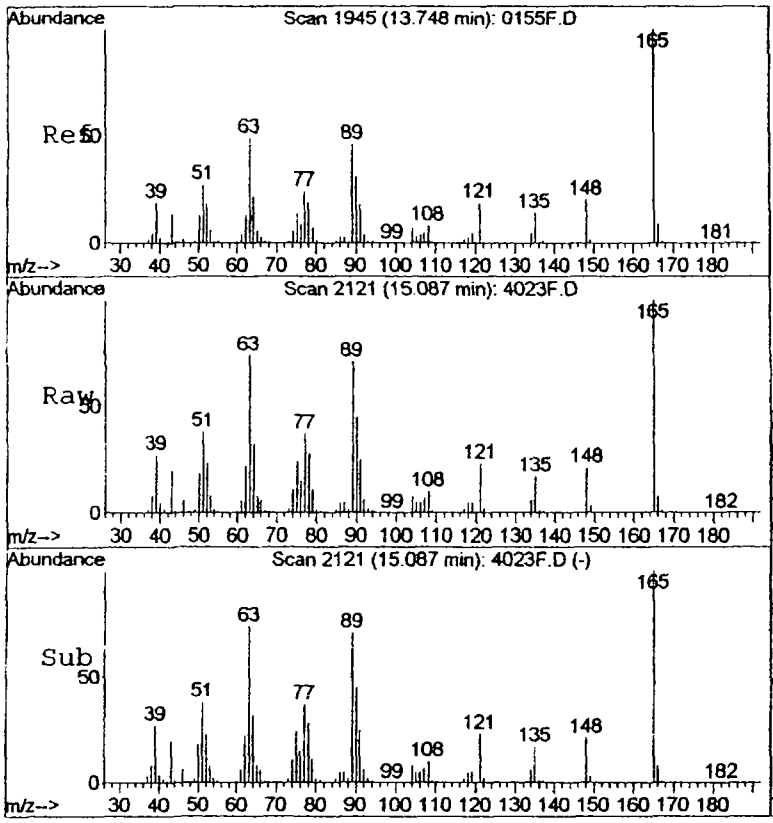


#59
Dimethylphthalate
Concen: 115.04 ug/ml m
RT: 14.99 min Scan# 2105
Delta R.T. 0.04 min
Lab File: 4023F.D
Acq: 6 Sep 2007 8:00

Tgt Ion:163 Resp: 2646066

Ion	Ratio	Lower	Upper
163	100		
194	0.6	3.6	5.4#
164	1.3	6.6	9.8#

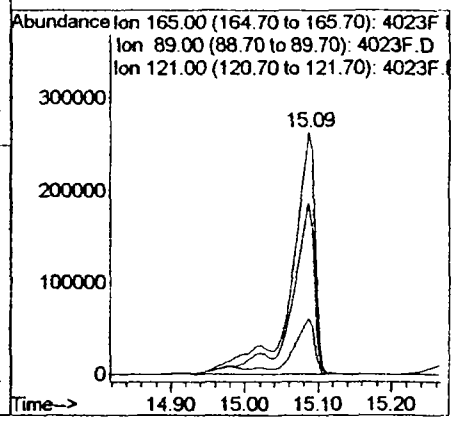


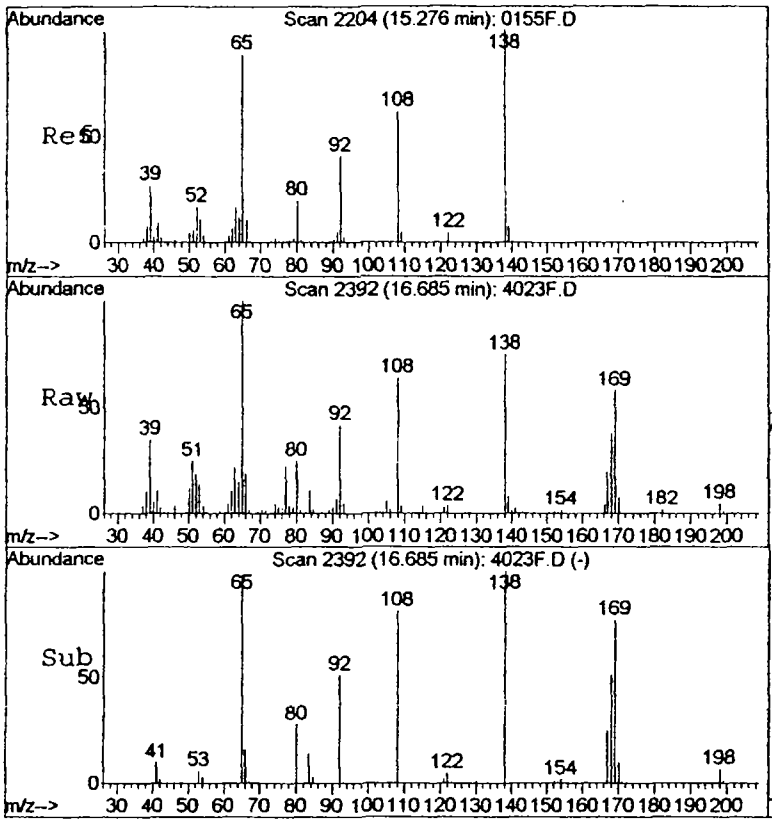


#61
2,6-Dinitrotoluene
Concen: 114.11 ug/ml m
RT: 15.09 min Scan# 2121
Delta R.T. 0.03 min
Lab File: 4023F.D
Acq: 6 Sep 2007 8:00

Tgt Ion:165 Resp: 599849

Ion	Ratio	Lower	Upper
165	100		
89	57.7	23.1	34.7#
121	18.9	10.6	16.0#

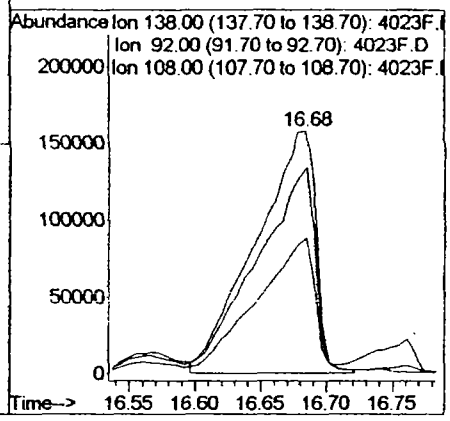


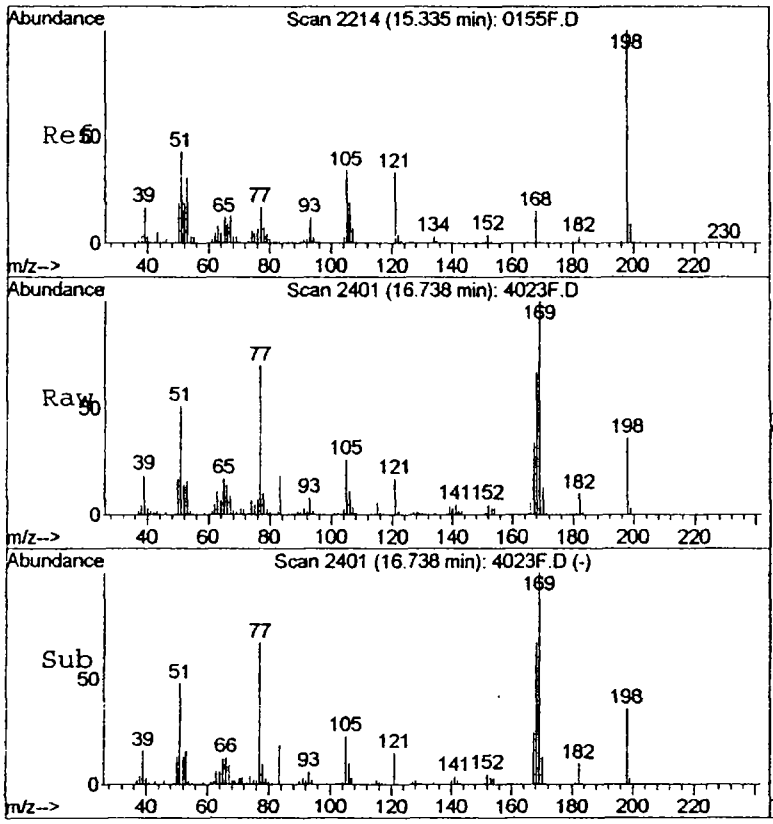


#73
4-Nitroaniline
Concen: 105.16 ug/ml m
RT: 16.68 min Scan# 2392
Delta R.T. 0.07 min
Lab File: 4023F.D
Acq: 6 Sep 2007 8:00

Tgt Ion:138 Resp: 503819

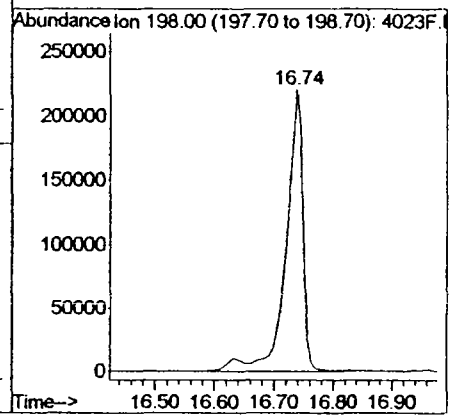
Ion	Ratio	Lower	Upper
138	100		
92	3.8	21.0	31.6#
108	0.0	28.3	42.5#

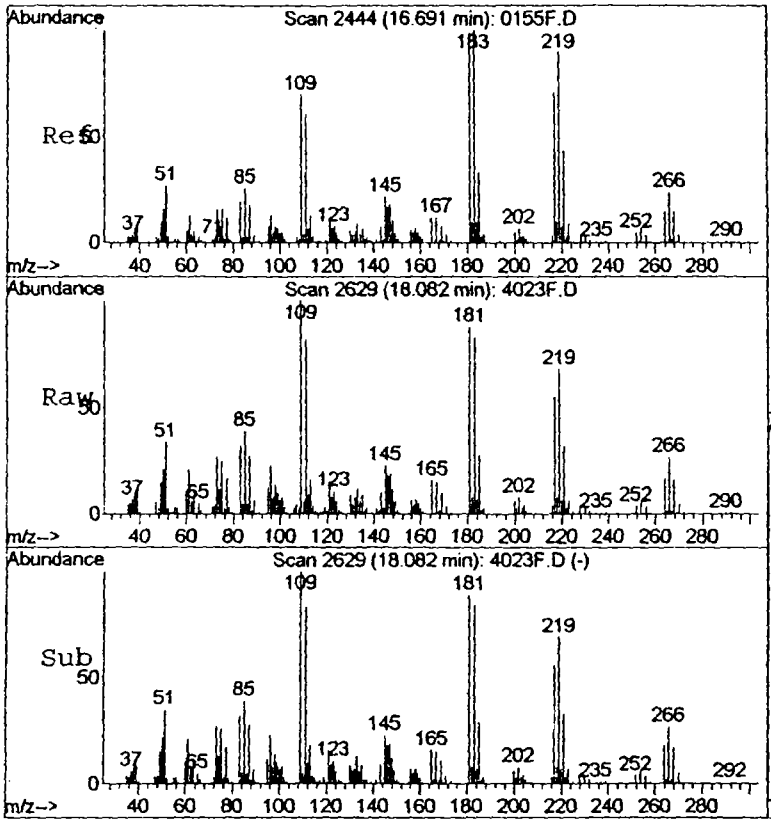




#75
4,6-Dinitro-2-methylphenol
Concen: 126.58 ug/ml m
RT: 16.74 min Scan# 2401
Delta R.T. 0.05 min
Lab File: 4023F.D
Acq: 6 Sep 2007 8:00

Tgt Ion:198 Resp: 443596

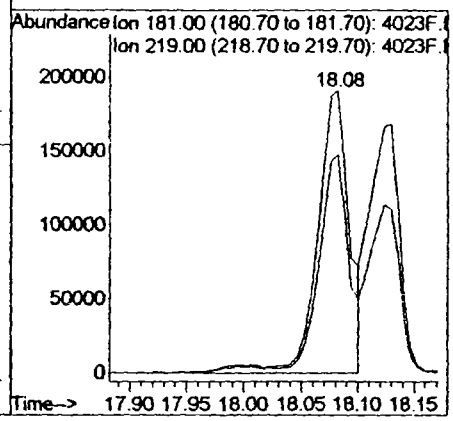


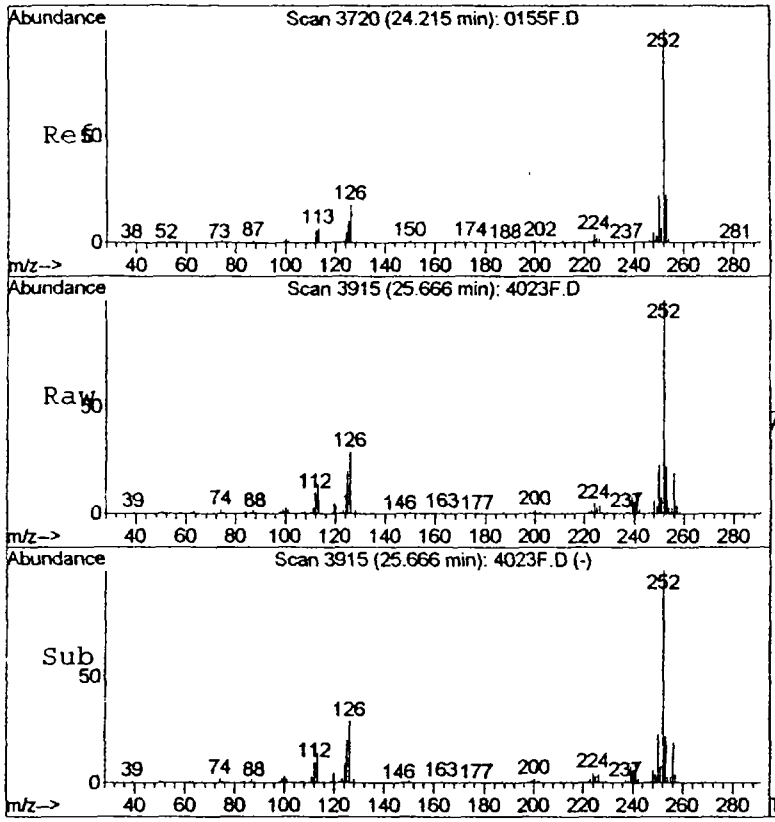


#82
beta-BHC
Concen: 119.18 ug/ml m
RT: 18.08 min Scan# 2629
Delta R.T. 0.05 min
Lab File: 4023F.D
Acq: 6 Sep 2007 8:00

Tgt Ion:181 Resp: 373450

Ion	Ratio	Lower	Upper
181	100		
219	3.3	59.8	89.6#

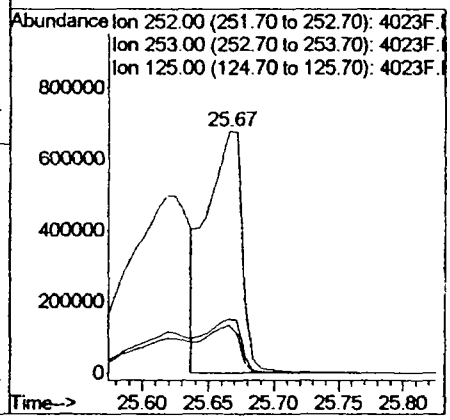




#118
Benzo[k]fluoranthene
Concen: 107.91 ug/ml m
RT: 25.67 min Scan# 3915
Delta R.T. 0.03 min
Lab File: 4023F.D
Acq: 6 Sep 2007 8:00

Tgt Ion:252 Resp: 1282043

Ion	Ratio	Lower	Upper
252	100		
253	27.4	17.2	25.8#
125	24.0	15.2	22.8#



R524579 Heritage Environmental Services, LLC Q1993692

QC Report

QCType DLCS Duplicate SampleID DataFile 4024F.D
Date Entered 06Sep07 Duplicate QCSampleID Q1993691 Analyst 3196 C. WILLHITE
Analysis Date/Time 06Sep0708:38:00 Method 187 Matrix 1 Units ug/L

PRM	Parameter	TruVal	SpikeVal	ObsVal	RQL	Rec	Difference
97	ACENAPHTHENE	100		106		106.0	8.1
98	ACENAPHTHYLENE	100		105		105.0	10
128	ANTHRACENE	100		103		103	8.4
155	BENZO(A)ANTHRACENE	100		105		105	7.3
156	BENZO(A)PYRENE	100		99.6		99.6	7.2
157	BENZO(B)FLUORANTHENE (3,4-BENZOFLUORANTH	100		109		109	5.7
158	BENZO(G,H,I)PERYLENE	100		97.2		97.2	43.4
159	BENZO(K)FLUORANTHENE	100		89		89	19.3
160	BENZYL ALCOHOL	100		104		104	2.8
202	BENZYLBUTYLPHTHALATE (BUTYLBENZYLPHTHALA	100		98.1		98.1	6.8
182	BIS(2-CHLOROETHOXY)METHANE	100		97.5		97.5	5.5
184	BIS(2-CHLOROISOPROPYL)ETHER	100		98.9		98.9	5
183	BIS(2-CHLOROETHYL)ETHER	100		93.8		93.8	2.6
185	BIS(2-ETHYLHEXYL)PHTHALATE	100		95.4		95.4	9.6
84	4-BROMODIPHENYL ETHER	100		110		110	8.7
213	CARBAZOLE	100		102		102	2.9
85	4-CHLOROANILINE	100		119		119	2.6
55	2-CHLORONAPHTHALENE	100		130		130	9.5
88	4-CHLOROPHENYL-PHENYLETHER	100		110		110	7.9
245	CHRYSENE	100		97.3		97.3	6.7
294	DIBENZ(A,H)ANTHRACENE	50		46.3		92.6	33.6
293	DIBENZOFURAN	100		101		101	6.7
20	1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	100		98.8		98.8	7
26	1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)	100		95.5		95.5	6.6
29	1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	100		95.4		95.4	7.7
70	3,3'-DICHLOROBENZIDINE	100		102		102	4.8
306	DIETHYLPHTHALATE	100		109		109	6.2
310	DIMETHYLPHTHALATE	100		107		107	7.2
329	DI-N-BUTYLPHTHALATE	100		96.6		96.6	5.4
489	1,3-DINITROBENZENE (M-DINITROBENZENE)	100		117		117	3.4
48	2,4-DINITROTOLUENE	100		113		113	2.6
50	2,6-DINITROTOLUENE	100		109		109	4.5
330	DI-N-OCTYLPHTHALATE	100		123		123	7.6
363	FLUORANTHENE	100		97.4		97.4	1.3
366	FLUORENE	100		111		111	5.3
397	HEXACHLOROBENZENE	100		106		106	8.1
398	HEXACHLOROBUTADIENE	100		100		100	7.7
399	HEXACHLOROCYCLOPENTADIENE	100		84.6	!	84.6	10
402	HEXACHLOROETHANE	100		96.1		96.1	6.9
413	INDENO(1,2,3-CD)PYRENE	100		100		100	36.7
431	ISOPHORONE	100		88.1		88.1	2.6
62	2-METHYLNAPHTHALENE	100		94.5		94.5	5.4
493	NAPHTHALENE	100		101		101	7.6
65	2-NITROANILINE (O-NITROANILINE)	100		102		102	4.8

KS 9/11/07

KS 9/11/07

QC Report

PRM	Parameter	TruVal	SpikeVal	ObsVal	RQL	Rec	Difference
76	3-NITROANILINE (M-NITROANILINE)	100		128		128	.8
92	4-NITROANILINE (P-NITROANILINE)	100		111		111	5.6
503	NITROBENZENE	100		99.3		99.3	6.5
522	N-NITROSODIPHENYLAMINE	200		196		98.0	10.6
531	N-NITROSO-DI-N-PROPYLAMINE	100		94.1		94.1	4.5
597	PHENANTHRENE	100		101		101	11.2
68	2-PICOLINE (2-METHYLPYRIDINE)	100		58.4		58.4	36.9
624	PYRENE	100		94.6		94.6	9.5
625	PYRIDINE	100		47.4		47.4	53.1
15	1,2,4,5-TETRACHLOROBENZENE	100		103		103	10.1
16	1,2,4-TRICHLOROBENZENE	100		97.6		97.6	7.3
153	BENZOIC ACID	100		24		24	24.5
89	4-CHLORO-3-METHYLPHENOL (P-CHLORO-M-CRES	100		101		101	3.9
56	2-CHLOROPHENOL	100		100		100	8.6
44	2,4-DICHLOROPHENOL	100		96.9		96.9	7.1
46	2,4-DIMETHYLPHENOL	100		79.1		79.1	14.4
1810	2-METHYL-4,6-DINITROPHENOL	100		114		114	10.8
47	2,4-DINITROPHENOL	100		103		103	4.3
61	2-METHYLPHENOL (O-CRESOL)	100		88.3		88.3	10.9
90	4-METHYLPHENOL (P-CRESOL)	100		79.4		79.4	13.6
66	2-NITROPHENOL	100		99.5		99.5	6.3
93	4-NITROPHENOL	100		44.7		44.7	19.9
577	PENTACHLOROPHENOL	100		113		113	1.8
598	PHENOL	100		47.4		47.4	25.4
34	2,3,4,6-TETRACHLOROPHENOL	100		113		113	3.5
40	2,4,5-TRICHLOROPHENOL	100		99.1		99.1	10.4
42	2,4,6-TRICHLOROPHENOL	100		98		98	9.7

Qualifiers

! Outside Lab Generated Control Limits

Quantitation Report (QT Reviewed)

Data File : D:\F090607A\4024F.D
Acq On : 6 Sep 2007 8:38
Sample : DLCS 791
Misc : 1000ML-1ML
MS Integration Params: RTEINT4.P
Quant Time: Sep 07 12:45:39 2007

Vial: 10
Operator: JCM
Inst : MSD #6
Multiplr: 1.00
Quant Results File: 8270F.RES

Quant Method : C:\MSDCHEM\1\METHODS\8270F.M (RTE Integrator)
Title : CLP BNA Calibration
Last Update : Fri Sep 07 04:02:55 2007
Response via : Initial Calibration
DataAcq Meth : 8270F

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	8.40	152	381365	40.00 ug/ml	0.00
29) Naphthalene-d8	11.49	136	1713122	40.00 ug/ml	0.01
47) Acenaphthene-d10	15.30	164	909239	40.00 ug/ml	0.01
74) Phenanthrene-d10	18.30	188	1391953	40.00 ug/ml	0.03
95) Chrysene-d12	23.61	240	1013715	40.00 ug/ml	0.02
115) Perylene-d12	26.24	264	415473	40.00 ug/ml	0.00

System Monitoring Compounds					
7) 2-Fluorophenol	5.70	112	1745306	131.96 ug/ml	0.01
Spiked Amount 200.000	Range 21 - 100		Recovery = 65.98%		
10) Phenol-d5	7.86	99	1477830	84.74 ug/ml	0.02
Spiked Amount 200.000	Range 10 - 94		Recovery = 42.37%		
13) 2-Chlorophenol-d4	8.00	132	2877568	197.34 ug/ml	0.04
Spiked Amount 200.000	Range 27 - 123		Recovery = 98.67%		
19) 1,2-Dichlorobenzene-d4	8.87	150	1339040	90.99 ug/ml	0.02
Spiked Amount 100.000	Range 32 - 220		Recovery = 90.99%		
30) Nitrobenzene-d5	9.91	82	1672350	98.31 ug/ml	0.04
Spiked Amount 100.000	Range 18 - 57		Recovery = 98.31%#		
54) 2-Fluorobiphenyl	13.97	172	2520035	94.57 ug/ml	0.02
Spiked Amount 100.000	Range 22 - 58		Recovery = 94.57%#		
77) 2,4,6-Tribromophenol	16.97	330	655948	240.24 ug/ml	0.04
Spiked Amount 200.000	Range 10 - 123		Recovery = 120.12%		
100) Terphenyl-d14	21.57	244	813640	34.11 ug/ml	0.00
Spiked Amount 100.000	Range 17 - 71		Recovery = 34.11%		

Target Compounds					Qvalue
2) bis(chloromethyl)ether	3.10	79	791812	52.71 ug/ml#	19
3) N-Nitrosodimethyl amine	3.14	42	643502	72.14 ug/ml#	60
4) Pyridine	3.10	79	811051	47.41 ug/ml#	50
5) 2-Picoline	4.41	93	878075m	58.40 ug/ml	
9) Aniline	7.78	93	1819356	91.69 ug/ml	98
11) Phenol	7.89	94	876945	47.37 ug/ml#	75
~~12) bis(2-Chloroethyl)ether~~	~~7.98~~	~~93~~	~~1574185~~	~~93.83 ug/ml#~~	~~1~~
14) 2-Chlorophenol	8.04	128	1442281	100.04 ug/ml#	87
16) 1,3-Dichlorobenzene	8.31	146	1395094	95.45 ug/ml#	98
17) Benzyl Chloride	7.76	91	20887	156.20 ug/ml#	1
18) 1,4-Dichlorobenzene	8.45	146	1448272	95.44 ug/ml#	99
20) 1,2-Dichlorobenzene	8.91	146	1442386	98.77 ug/ml#	98
21) Benzyl alcohol	8.91	108	852941	103.93 ug/ml#	69
23) 2-Methylphenol	9.35	108	1107200	88.28 ug/ml	95
24) bis(2-chloroisopropyl)ethe	9.30	45	2264622	98.90 ug/ml#	68
25) Acetophenone	9.56	105	2036458	98.60 ug/ml#	84

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

Quantitation Report (QT Reviewed)

Data File : D:\F090607A\4024F.D
Acq On : 6 Sep 2007 8:38
Sample : DLCS 791
Misc : 1000ML-1ML
MS Integration Params: RTEINT4.P
Quant Time: Sep 07 12:45:39 2007

Vial: 10
Operator: JCM
Inst : MSD #6
Multiplr: 1.00
Quant Results File: 8270F.RES

Quant Method : C:\MSDCHEM\1\METHODS\8270F.M (RTE Integrator)
Title : CLP BNA Calibration
Last Update : Fri Sep 07 04:02:55 2007
Response via : Initial Calibration
DataAcq Meth : 8270F

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
26)	n-Nitroso-di-n-propylamine	9.70	70	1059308	94.11 ug/ml#	14
27)	4-Methylphenol	9.71	108	1050306	79.37 ug/ml	97
28)	Hexachloroethane	9.64	117	665048	96.10 ug/ml#	76
31)	Nitrobenzene	9.95	77	1739764	99.26 ug/ml#	78
32)	Isophorone	10.54	82	2580961	88.10 ug/ml#	82
33)	2-Nitrophenol	10.70	139	739388	99.54 ug/ml#	71
34)	2,4-Dimethylphenol	10.95	107	1126453	79.11 ug/ml	86
35)	bis(2-Chloroethoxy)methane	11.13	93	1678530	97.45 ug/ml	98
36)	2,4-Dichlorophenol	11.29	162	945153	96.88 ug/ml#	92
37)	Benzoic acid	11.39	105	155819m	23.96 ug/ml	
38)	1,2,4-Trichlorobenzene	11.42	180	1052768	97.63 ug/ml	98
39)	Naphthalene	11.54	128	4347882	100.94 ug/ml	99
41)	4-Chloroaniline	11.80	127	1740704	119.06 ug/ml	99
42)	Toluenediamine	11.98	122	33691	94.35 ug/ml#	57
43)	Hexachlorobutadiene	11.98	225	538393	100.17 ug/ml	99
44)	4-Chloro-3-methylphenol	12.98	107	1231202	100.96 ug/ml#	1
45)	2-Methylnaphthalene	13.08	141	2283743	94.50 ug/ml#	67
49)	Hexachlorocyclopentadiene	13.58	237	564484	84.56 ug/ml	99
50)	1,2,4,5-Tetrachlorobenzene	13.53	216	944991	103.39 ug/ml	98
52)	2,4,6-Trichlorophenol	13.81	196	662382	97.95 ug/ml	99
53)	2,4,5-Trichlorophenol	13.90	196	698389	99.13 ug/ml	100
56)	2-Chloronaphthalene	14.11	162	3102183	130.48 ug/ml	96
58)	2-Nitroaniline	14.47	65	884138	101.76 ug/ml#	75
59)	Dimethylphthalate	15.00	163	2860686m	107.00 ug/ml	
60)	1,3-Dinitrobenzene	14.99	168	527919	117.47 ug/ml#	39
61)	2,6-Dinitrotoluene	15.09	165	666133m	109.03 ug/ml	
62)	Acenaphthylene	14.98	152	4177181	104.91 ug/ml	98
63)	3-Nitroaniline	15.37	138	777997	128.10 ug/ml#	34
64)	Acenaphthene	15.38	153	2544935	105.56 ug/ml	98
65)	2,4-Dinitrophenol	15.59	184	335583	103.45 ug/ml#	58
66)	4-Nitrophenol	15.88	109	159559	44.65 ug/ml#	55
67)	Dibenzofuran	15.71	168	3361116	100.97 ug/ml	93
68)	2,4-Dinitrotoluene	15.91	165	839625	112.68 ug/ml#	35
69)	2,3,4,6-Tetrachlorophenol	16.11	232	557162	112.94 ug/ml	99
70)	Diethylphthalate	16.45	149	3037424	108.93 ug/ml	97
71)	Fluorene	16.41	166	2943380	110.52 ug/ml	99
72)	4-Chlorophenyl-phenylether	16.46	204	1263963	109.82 ug/ml	96
73)	4-Nitroaniline	16.70	138	618580m	111.09 ug/ml	
75)	4,6-Dinitro-2-methylphenol	16.74	198	489292	114.27 ug/ml	100
76)	n-Nitrosodiphenylamine	16.77	169	3625888	196.10 ug/ml#	82
78)	Azobenzene	16.78	77	4134903	100.34 ug/ml#	75

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

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Quant Method : C:\MSDCHEM\1\METHODS\8270F.M (RTE Integrator)
Title : CLP BNA Calibration
Last Update : Fri Sep 07 04:02:55 2007
Response via : Initial Calibration
DataAcq Meth : 8270F

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
79)	alpha-BHC	17.53	181	511040	101.78	ug/ml#	61
80)	4-Bromophenyl-phenylether	17.43	248	668119	109.95	ug/ml	97
81)	Hexachlorobenzene	17.69	284	650201	105.53	ug/ml	86
82)	beta-BHC	18.09	181	462039	120.68	ug/ml	99
83)	Pentachlorophenol	18.11	266	394065	113.13	ug/ml	98
84)	gamma-BHC	18.13	181	298224m	77.96	ug/ml	
86)	Phenanthrene	18.36	178	3765131	101.31	ug/ml	100
87)	Anthracene	18.45	178	3724886	103.18	ug/ml	99
88)	delta-BHC	18.55	181	340155	93.79	ug/ml	99
89)	Carbazole	18.81	167	3261244	101.84	ug/ml	97
90)	Heptachlor	19.36	272	280734	98.36	ug/ml	89
91)	Di-n-butylphthalate	19.71	149	4146140	96.61	ug/ml#	98
92)	Aldrin	19.95	263	221975	144.65	ug/ml	79
93)	Heptachlor epoxide	20.60	81	373636	89.45	ug/ml#	87
94)	Fluoranthene	20.73	202	3056587	97.35	ug/ml#	87
96)	Benzidine	21.07	184	452929	56.10	ug/ml#	100
97)	Pyrene	21.15	202	3114831	94.63	ug/ml#	85
98)	alpha-Endosulfan	21.20	237	76196	89.45	ug/ml	86
99)	p,p'-DDE	21.54	246	576042	86.50	ug/ml#	62
101)	Dieldrin	21.61	79	695143	68.54	ug/ml	97
102)	Endrin	21.97	195	28317	92.06	ug/ml#	31
103)	Endrin aldehyde	21.96	67	81973	85.82	ug/ml#	91
104)	beta-Endosulfan	22.12	195	98684	93.84	ug/ml	94
105)	p,p'-DDD	22.19	235	946958	93.06	ug/ml#	83
106)	Butylbenzylphthalate	22.69	149	1581326	98.12	ug/ml#	71
107)	Endosulfan sulfate	22.77	272	143052	97.97	ug/ml#	66
108)	p,p'-DDT	22.77	235	968122	97.28	ug/ml	98
110)	Methoxychlor	23.63	227	2089657	97.19	ug/ml#	6
111)	Benzo[a]anthracene	23.58	228	2471551	105.16	ug/ml#	90
112)	3,3'-Dichlorobenzidine	23.61	252	786772	101.72	ug/ml	98
113)	Chrysene	23.67	228	2570627	97.31	ug/ml#	56
~~114)~~	~~bis(2-Ethylhexyl)phthalate~~	~~23.92~~	~~149~~	~~2245703~~	~~95.36~~	~~ug/ml#~~	~~98~~
116)	Di-n-octylphthalate	25.09	149	3336173	123.27	ug/ml	100
117)	Benzo[b]fluoranthene	25.63	252	1881518m	108.84	ug/ml	
118)	Benzo[k]fluoranthene	25.67	252	1168801m	88.95	ug/ml	
119)	Benzo[a]pyrene	26.16	252	1154228	99.62	ug/ml	99
120)	Indeno[1,2,3-cd]pyrene	28.20	276	556359	100.05	ug/ml	99
121)	Dibenz[a,h]anthracene	28.22	278	253406	46.29	ug/ml#	91
122)	Benzo[g,h,i]perylene	28.73	276	401627	97.15	ug/ml	95

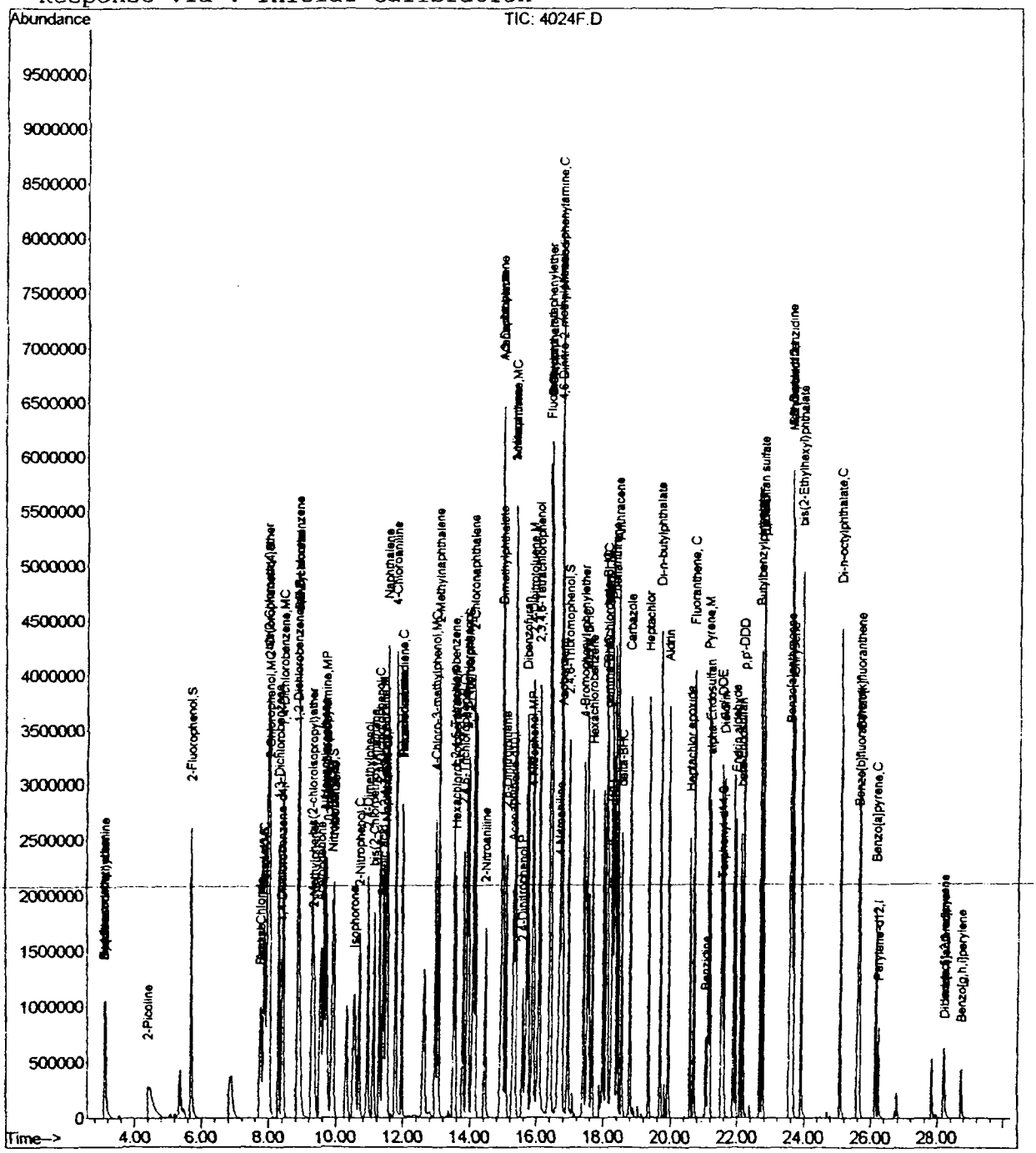
(#) = qualifier out of range (m) = manual integration

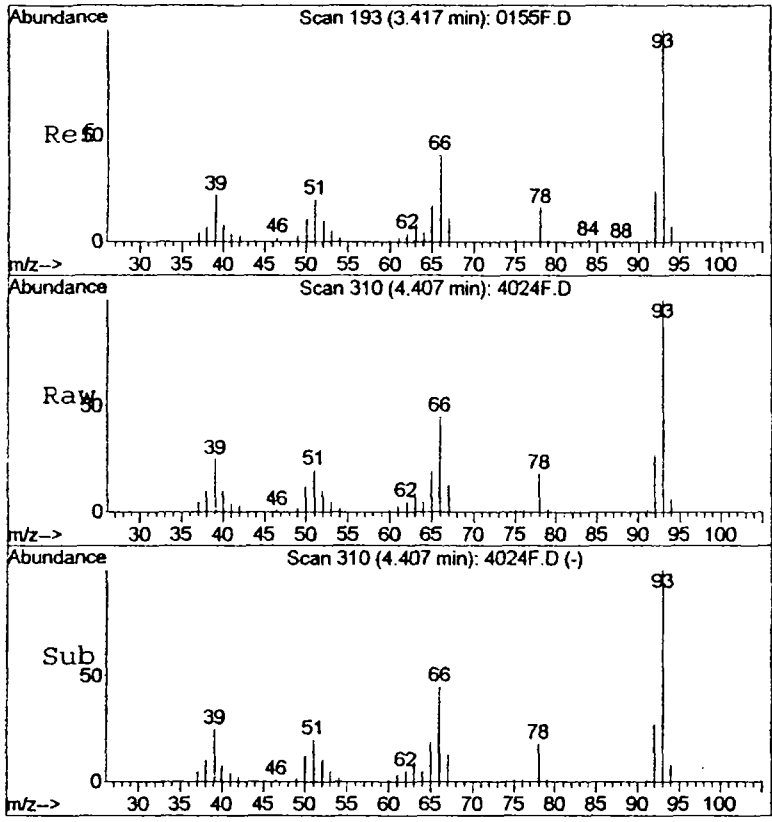
Quantitation Report (QT Reviewed)

Data File : D:\F090607A\4024F.D
Acq On : 6 Sep 2007 8:38
Sample : DLCS 791
Misc : 1000ML-1ML
MS Integration Params: RTEINT4.P
Quant Time: Sep 7 13:58 2007

Vial: 10
Operator: JCM
Inst : MSD #6
Multiplr: 1.00
Quant Results File: 8270F.RES

Method : C:\MSDCHEM\1\METHODS\8270F.M (RTE Integrator)
Title : CLP BNA Calibration
Last Update : Fri Sep 07 04:02:55 2007
Response via : Initial Calibration

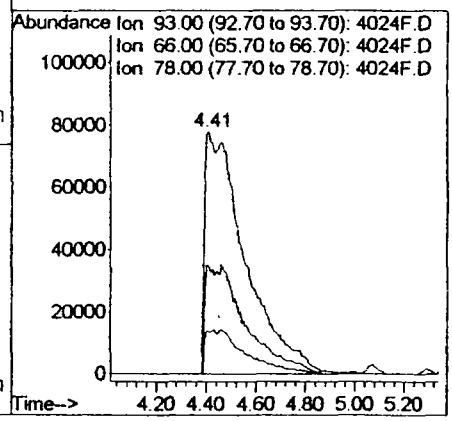


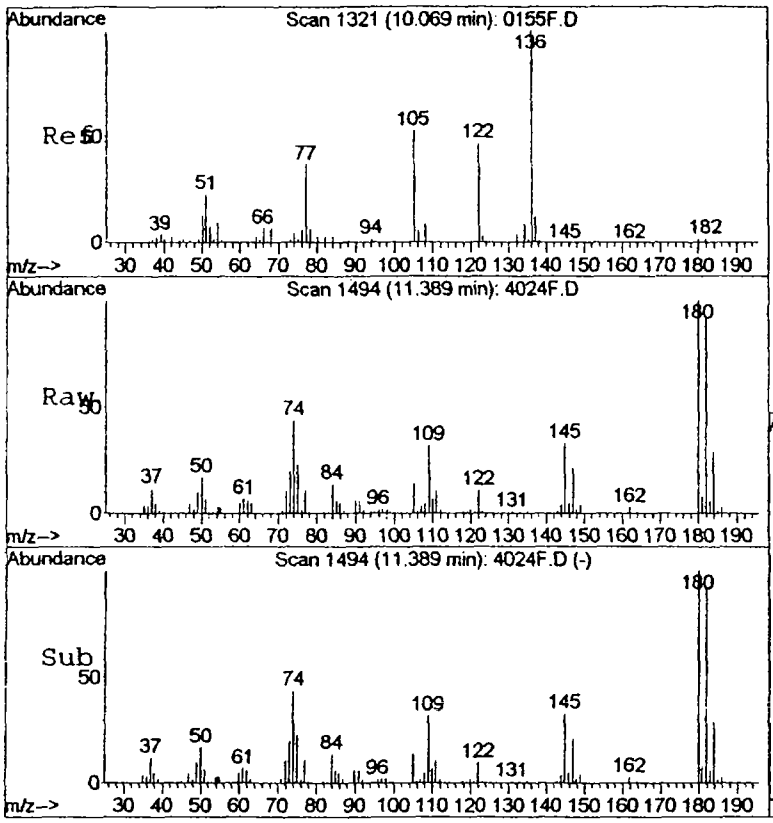


#5
2-Picoline
Concen: 58.40 ug/ml m
RT: 4.41 min Scan# 310
Delta R.T. 0.01 min
Lab File: 4024F.D
Acq: 6 Sep 2007 8:38

Tgt Ion: 93 Resp: 878075

Ion	Ratio	Lower	Upper
93	100		
66	9.8	35.4	53.2#
78	2.3	11.8	17.6#

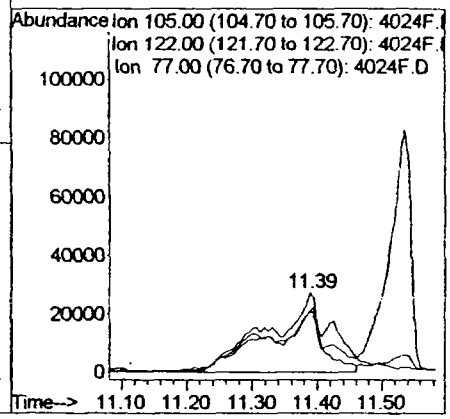


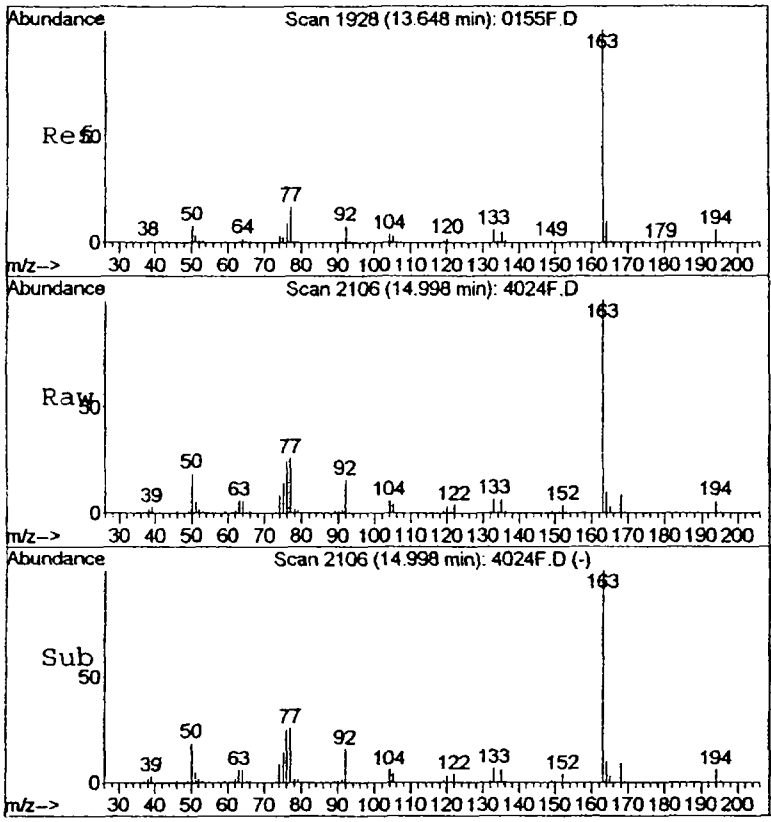


#37
Benzoic acid
Concen: 23.96 ug/ml m
RT: 11.39 min Scan# 1494
Delta R.T. -0.07 min
Lab File: 4024F.D
Acq: 6 Sep 2007 8:38

Tgt Ion:105 Resp: 155819

Ion	Ratio	Lower	Upper
105	100		
122	34.4	0.0	0.0#
77	16.3	33.6	50.4#

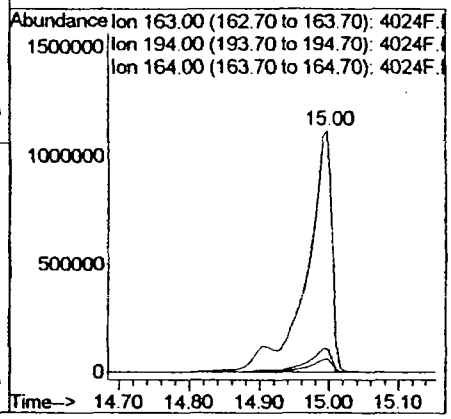


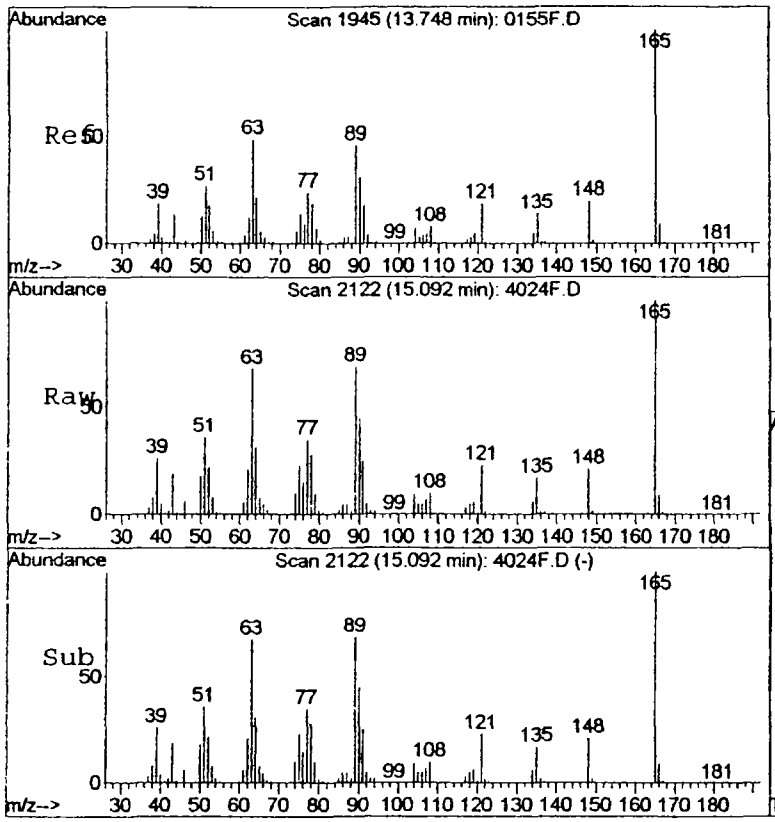


#59
Dimethylphthalate
Concen: 107.00 ug/ml m
RT: 15.00 min Scan# 2106
Delta R.T. 0.05 min
Lab File: 4024F.D
Acq: 6 Sep 2007 8:38

Tgt Ion:163 Resp: 2860686

Ion	Ratio	Lower	Upper
163	100		
194	0.5	3.6	5.4#
164	0.0	6.6	9.8#

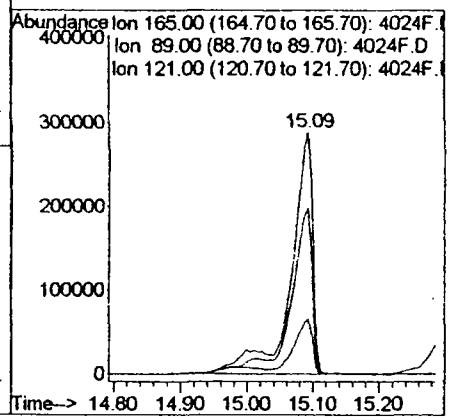


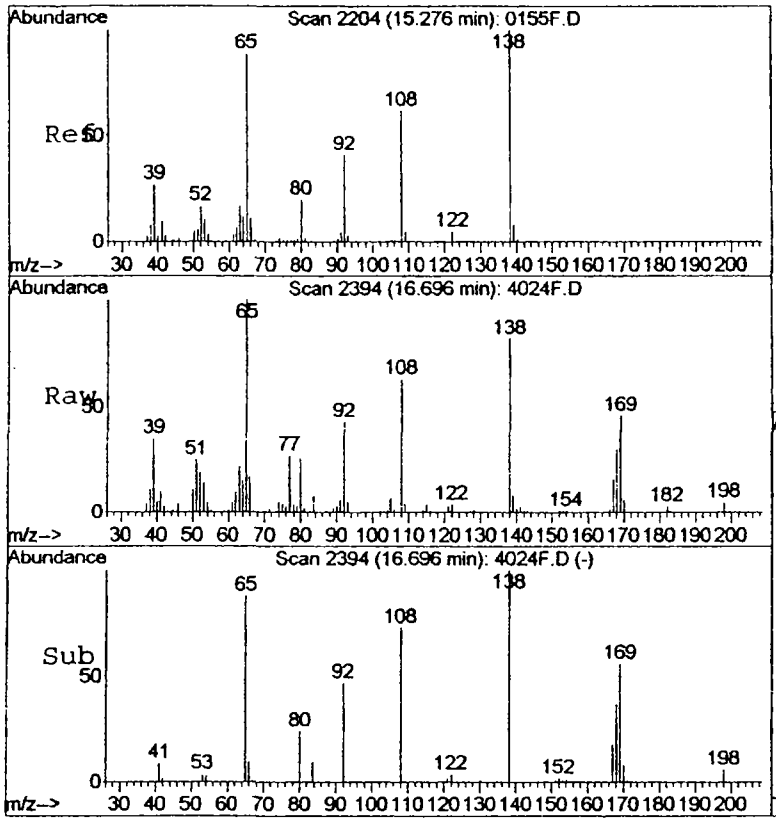


#61
2,6-Dinitrotoluene
Concen: 109.03 ug/ml m
RT: 15.09 min Scan# 2122
Delta R.T. 0.04 min
Lab File: 4024F.D
Acq: 6 Sep 2007 8:38

Tgt Ion:165 Resp: 666133

Ion	Ratio	Lower	Upper
165	100		
89	58.6	23.1	34.7#
121	19.2	10.6	16.0#

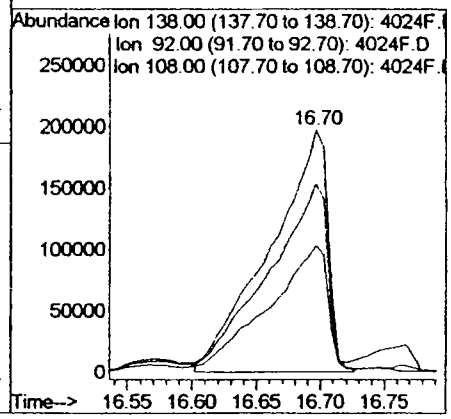


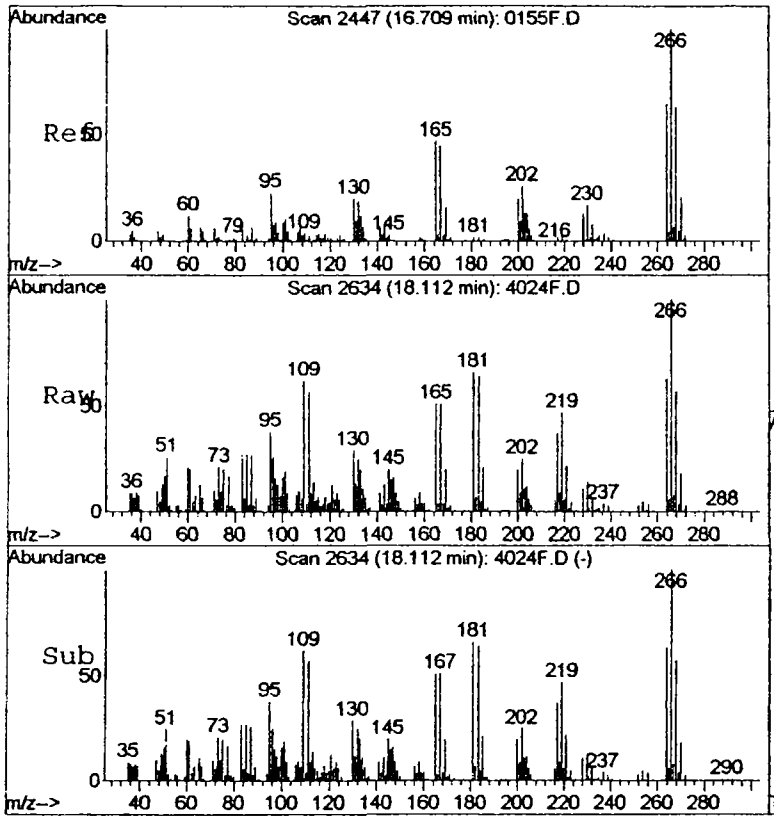


#73
4-Nitroaniline
Concen: 111.09 ug/ml m
RT: 16.70 min Scan# 2394
Delta R.T. 0.08 min
Lab File: 4024F.D
Acq: 6 Sep 2007 8:38

Tgt Ion:138 Resp: 618580

Ion	Ratio	Lower	Upper
138	100		
92	3.1	21.0	31.6#
108	4.3	28.3	42.5#

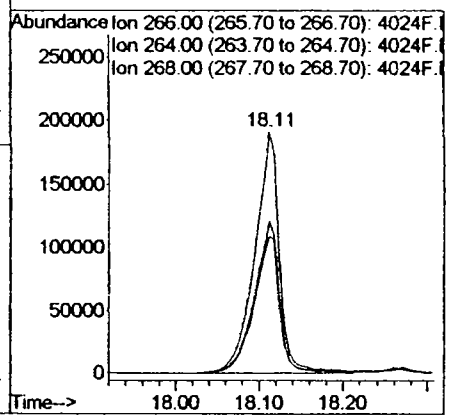


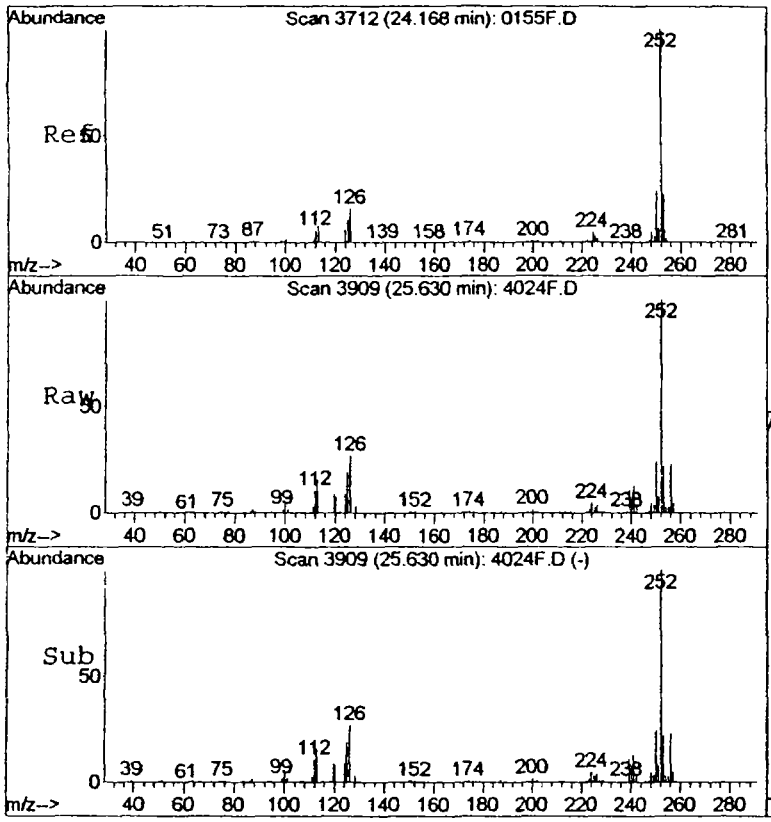


#83
Pentachlorophenol
Concen: 113.13 ug/ml
RT: 18.11 min Scan# 2634
Delta R.T. 0.04 min
Lab File: 4024F.D
Acq: 6 Sep 2007 8:38

Tgt Ion:266 Resp: 394065

Ion	Ratio	Lower	Upper
266	100		
264	64.0	51.0	76.6
268	60.1	51.0	76.6

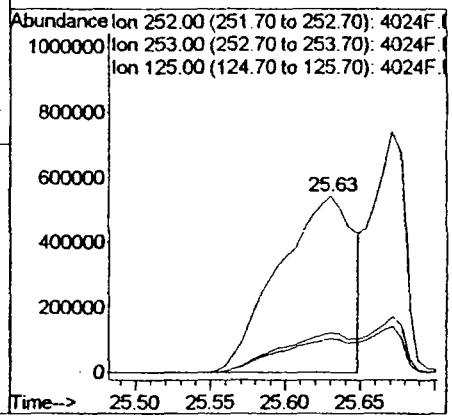


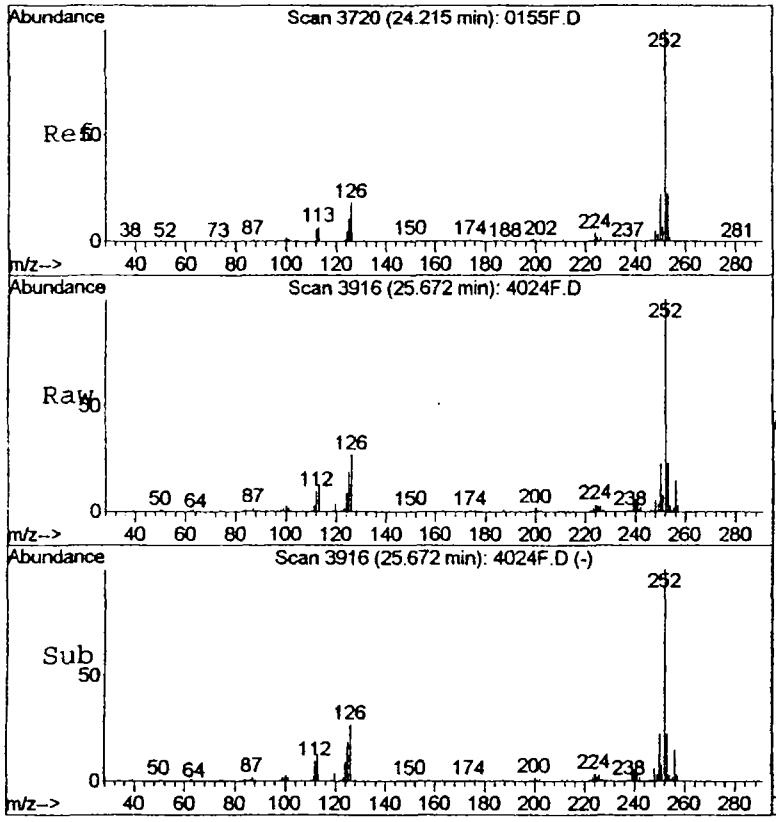


#117
Benzo[b]fluoranthene
Concen: 108.84 ug/ml m
RT: 25.63 min Scan# 3909
Delta R.T. 0.04 min
Lab File: 4024F.D
Acq: 6 Sep 2007 8:38

Tgt Ion:252 Resp: 1881518

Ion	Ratio	Lower	Upper
252	100		
253	18.7	17.4	26.0
125	16.3	15.7	23.5

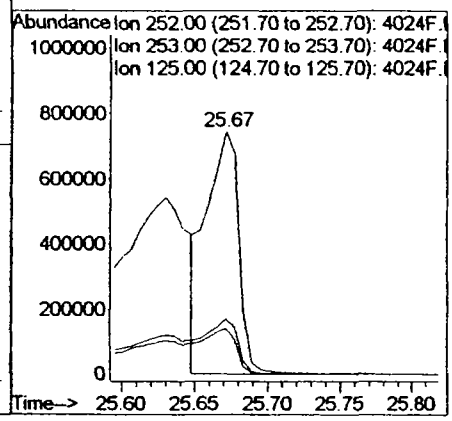




#118
Benzo[k]fluoranthene
Concen: 88.95 ug/ml m
RT: 25.67 min Scan# 3916
Delta R.T. 0.04 min
Lab File: 4024F.D
Acq: 6 Sep 2007 8:38

Tgt Ion:252 Resp: 1168801

Ion	Ratio	Lower	Upper
252	100		
253	33.2	17.2	25.8#
125	28.7	15.2	22.8#



R524579 Heritage Environmental Services, LLC A781234

GC/MS SVOA

Method SW846-8270C
Sample Description LQ4570
Submitter IDEM - OLQ
Instrument 343 Channel 1

Test Code O531.1.0
Analyst 3196 C. WILLHITE
File 4025F.D Date/Time 06Sep07 09:17:00
Dilution Factor 1

Prep : 1000 mL 1.0 mL

CAS	PRM	Parameter	Concentration	RQL	Limit	Units	RT
83-32-9	97	ACENAPHTHENE		BDL	10	UG/L	
208-96-8	98	ACENAPHTHYLENE		BDL	10	UG/L	
120-12-7	128	ANTHRACENE		BDL	10	UG/L	
56-55-3	163	BENZ(A)ANTHRACENE		BDL	10	UG/L	
50-32-8	156	BENZO(A)PYRENE		BDL	10	UG/L	
205-99-2	157	BENZO(B)FLUORANTHENE		BDL	10	UG/L	
191-24-2	158	BENZO(G,H,I)PERYLENE		BDL	10	UG/L	
207-08-9	159	BENZO(K)FLUORANTHENE		BDL	10	UG/L	
100-51-6	160	BENZYL ALCOHOL		BDL	10	UG/L	
85-68-7	202	(BENZYLBUTYLPHTHALATE) BUTYLBENZYLPHTHAL		BDL	10	UG/L	
111-91-1	182	BIS(2-CHLOROETHOXY)METHANE		BDL	10	UG/L	
111-44-4	183	BIS(2-CHLOROETHYL)ETHER		BDL	10	UG/L	
108-60-1	184	BIS(2-CHLOROISOPROPYL)ETHER		BDL	10	UG/L	
117-81-7	185	BIS(2-ETHYLHEXYL)PHTHALATE		BDL	10	UG/L	
101-55-3	84	4-BROMODIPHENYL ETHER		BDL	10	UG/L	
86-74-8	213	CARBAZOLE		BDL	10	UG/L	
106-47-8	85	4-CHLOROANILINE		BDL	10	UG/L	
91-58-7	55	2-CHLORONAPHTHALENE		BDL	10	UG/L	
7005-72-3	88	4-CHLOROPHENYL-PHENYLETHER		BDL	10	UG/L	
218-01-9	245	CHRYSENE		BDL	10	UG/L	
53-70-3	294	DIBENZ(A,H)ANTHRACENE		BDL	10	UG/L	
132-64-9	293	DIBENZOFURAN		BDL	10	UG/L	
91-94-1	70	3,3'-DICHLOROBENZIDINE		BDL	20	UG/L	
84-66-2	306	DIETHYLPHTHALATE		BDL	10	UG/L	
131-11-3	310	DIMETHYLPHTHALATE		BDL	10	UG/L	
84-74-2	329	DI-N-BUTYLPHTHALATE		BDL	10	UG/L	
121-14-2	48	2,4-DINITROTOLUENE		BDL	10	UG/L	
606-20-2	50	2,6-DINITROTOLUENE		BDL	10	UG/L	
117-84-0	330	DI-N-OCTYLPHTHALATE		BDL	10	UG/L	
206-44-0	363	FLUORANTHENE		BDL	10	UG/L	
86-73-7	366	FLUORENE		BDL	10	UG/L	
118-74-1	397	HEXACHLOROBENZENE		BDL	10	UG/L	
87-68-3	398	HEXACHLOROBUTADIENE		BDL	10	UG/L	
77-47-4	399	HEXACHLOROCYCLOPENTADIENE		BDL	10	UG/L	
67-72-1	402	HEXACHLOROETHANE		BDL	10	UG/L	
193-39-5	413	INDENO(1,2,3-CD)PYRENE		BDL	10	UG/L	
78-59-1	431	ISOPHORONE		BDL	10	UG/L	
91-57-6	62	2-METHYLNAPHTHALENE		BDL	10	UG/L	
88-74-4	65	2-NITROANILINE (O-NITROANILINE)		BDL	50	UG/L	
99-09-2	76	3-NITROANILINE (M-NITROANILINE)		BDL	50	UG/L	
100-01-6	92	4-NITROANILINE (P-NITROANILINE)		BDL	50	UG/L	
98-95-3	503	NITROBENZENE		BDL	10	UG/L	
86-30-6	522	N-NITROSODIPHENYLAMINE		BDL	10	UG/L	
621-64-7	531	N-NITROSO-DI-N-PROPYLAMINE		BDL	10	UG/L	

LKS 9-11-07

LKS 9-11-07

85-01-8	597	PHENANTHRENE	BDL	10	UG/L
129-00-0	624	PYRENE	BDL	10	UG/L
120-82-1	16	1,2,4-TRICHLOROBENZENE	BDL	10	UG/L
65-85-0	153	BENZOIC ACID	BDL	50	UG/L
59-50-7	89	4-CHLORO-3-METHYLPHENOL	BDL	10	UG/L
95-57-8	56	2-CHLOROPHENOL	BDL	10	UG/L
120-83-2	44	2,4-DICHLOROPHENOL	BDL	10	UG/L
105-67-9	46	2,4-DIMETHYLPHENOL	BDL	10	UG/L
534-52-1	81	4,6-DINITRO-O-CRESOL	BDL	50	UG/L
51-28-5	47	2,4-DINITROPHENOL	BDL	50	UG/L
95-48-7	61	2-METHYLPHENOL (O-CRESOL)	BDL	10	UG/L
106-44-5	90	4-METHYLPHENOL (P-CRESOL)	BDL	10	UG/L
88-75-5	66	2-NITROPHENOL	BDL	10	UG/L
108-39-4	74	3-METHYLPHENOL (M-CRESOL)	BDL	10	UG/L
100-02-7	93	4-NITROPHENOL	BDL	50	UG/L
87-86-5	577	PENTACHLOROPHENOL	BDL	50	UG/L
108-95-2	598	PHENOL	BDL	10	UG/L
95-95-4	40	2,4,5-TRICHLOROPHENOL	BDL	10	UG/L
88-06-2	42	2,4,6-TRICHLOROPHENOL	BDL	10	UG/L
91-57-6	62	2-METHYLNAPHTHALENE	BDL	10	UG/L
90-12-0	887	1-METHYLNAPHTHALENE	BDL	10	UG/L
	1804	...			
	971	SURROGATE RECOVERY			
	972	----------			
367-12-4	59	2-FLUOROPHENOL	51		% RECOVERY
4165-62-2	601	PHENOL-D5	29		% RECOVERY
4165-60-0	504	NITROBENZENE-D5	103		% RECOVERY
321-60-8	58	2-FLUOROBIPHENYL	104		% RECOVERY
118-79-6	41	2,4,6-TRIBROMOPHENOL	126		% RECOVERY
98904-43-9	701	TERPHENYL-D14	67		% RECOVERY
	972	----------			
	1131	TENTATIVELY IDENTIFIED COMPOUNDS			
	1804	...			
	3320	NONE DETECTED			

Comment NA

Qualifiers

BDL Below Detection Limit

Comments to Laboratory (do not record)

6-LT AMBERS, 500ML HNO3 SQPL, 12-HCL VIALS
Need verbals ASAP, in 7 days or sooner.
Note the additional IDEM analytes for drinking water:
**********MS/MSD THIS SAMPLE**********
CS2, MEK, Acetone, 2-Nitropropane, 2-Hexanone

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

A781234

Lab Name: _____ Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: A781234

Sample wt/vol: 1000 (g/ml) ML Lab File ID: 4025F.D

Level: (low/med) LOW Date Received: _____

% Moisture: _____ decanted: (Y/N) N Date Extracted:

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 9/6/2007

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____

CONCENTRATION UNITS:

Number TICs found: 0 (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

Quantitation Report (Not Reviewed)

Data File : D:\F090607A\4025F.D
Acq On : 6 Sep 2007 9:17
Sample : A781234
Misc : 1000ML-1ML
MS Integration Params: RTEINT4.P
Quant Time: Sep 07 12:15:36 2007

Vial: 11
Operator: JCM
Inst : MSD #6
Multiplr: 1.00
Quant Results File: 8270F.RES

Quant Method : C:\MSDCHEM\1\METHODS\8270F.M (RTE Integrator)
Title : CLP BNA Calibration
Last Update : Fri Sep 07 04:02:55 2007
Response via : Initial Calibration
DataAcq Meth : 8270F

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	8.38	152	359695	40.00	ug/ml	-0.01
29) Naphthalene-d8	11.45	136	1518309	40.00	ug/ml	-0.02
47) Acenaphthene-d10	15.27	164	797403	40.00	ug/ml	-0.02
74) Phenanthrene-d10	18.25	188	1021022	40.00	ug/ml	-0.02
95) Chrysene-d12	23.57	240	609999	40.00	ug/ml	-0.02
115) Perylene-d12	26.22	264	325006	40.00	ug/ml	-0.01
System Monitoring Compounds						
7) 2-Fluorophenol	5.67	112	1276839	102.36	ug/ml	-0.02
Spiked Amount 200.000	Range 21 - 100		Recovery = 51.18%			
10) Phenol-d5	7.82	99	939263	57.10	ug/ml	-0.02
Spiked Amount 200.000	Range 10 - 94		Recovery = 28.55%			
13) 2-Chlorophenol-d4	7.96	132	2607145	189.57	ug/ml	0.00
Spiked Amount 200.000	Range 27 - 123		Recovery = 94.78%			
19) 1,2-Dichlorobenzene-d4	8.85	150	1184410	85.33	ug/ml	0.00
Spiked Amount 100.000	Range 32 - 220		Recovery = 85.33%			
30) Nitrobenzene-d5	9.87	82	1551513	102.91	ug/ml	0.00
Spiked Amount 100.000	Range 18 - 57		Recovery = 102.91%#			
54) 2-Fluorobiphenyl	13.94	172	2422088	103.64	ug/ml	0.00
Spiked Amount 100.000	Range 22 - 58		Recovery = 103.64%#			
77) 2,4,6-Tribromophenol	16.93	330	502924	251.12	ug/ml	0.00
Spiked Amount 200.000	Range 10 - 123		Recovery = 125.56%#			
100) Terphenyl-d14	21.55	244	963102	67.11	ug/ml	-0.01
Spiked Amount 100.000	Range 17 - 71		Recovery = 67.11%			

Target Compounds						Qvalue
37) Benzoic acid	11.46	105	1850	13.29	ug/ml#	1
59) Dimethylphthalate	15.27	163	127587	5.44	ug/ml#	1
61) 2,6-Dinitrotoluene	15.27	165	102055	19.05	ug/ml#	54

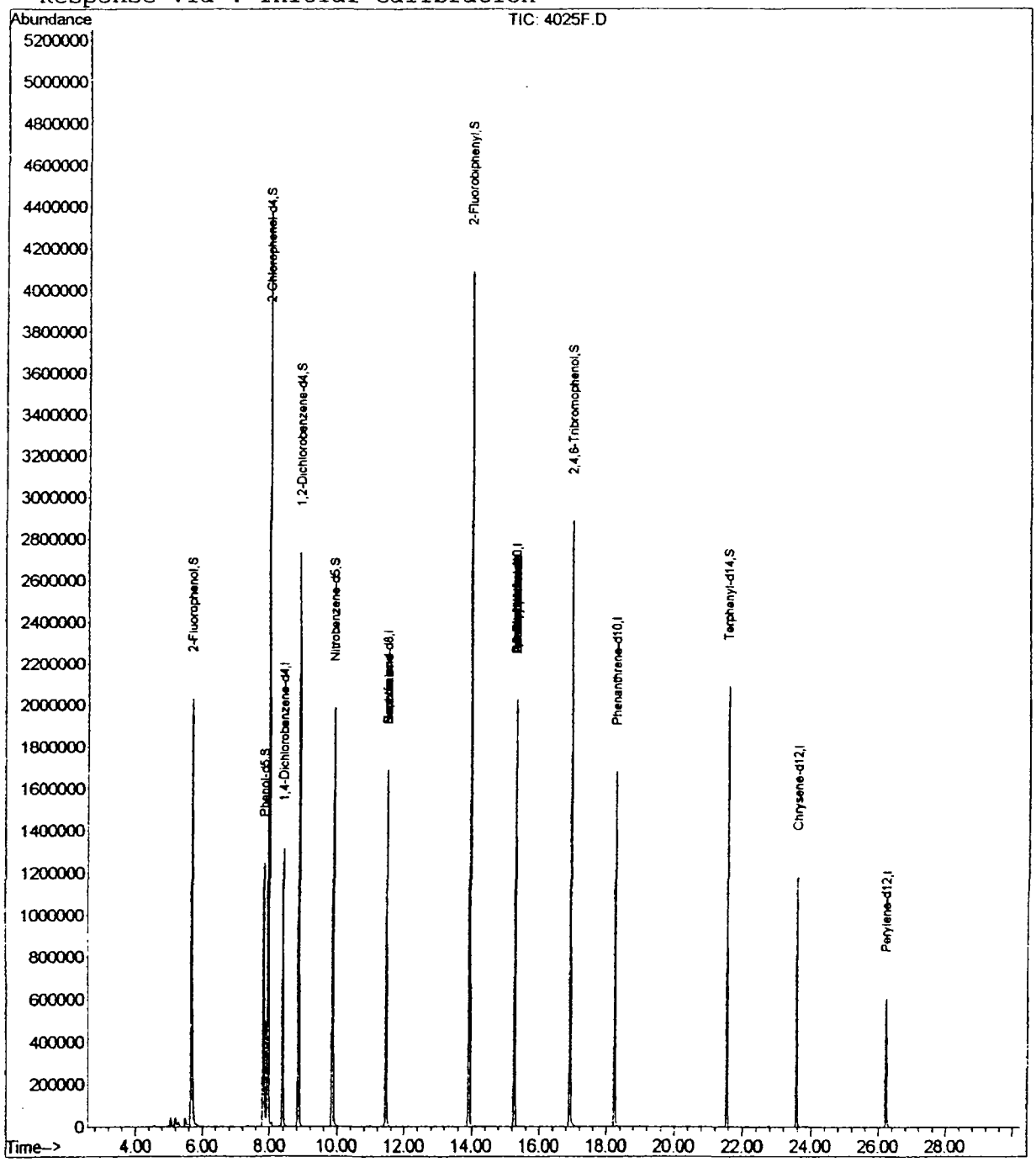
(#) = qualifier out of range (m) = manual integration

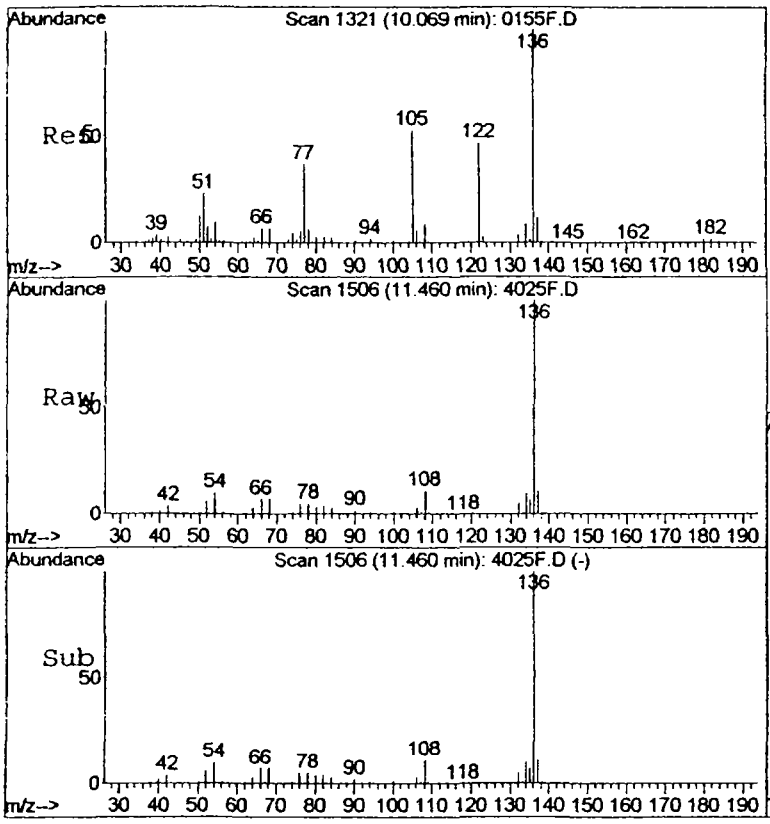
Quantitation Report (Not Reviewed)

Data File : D:\F090607A\4025F.D
Acq On : 6 Sep 2007 9:17
Sample : A781234
Misc : 1000ML-1ML
MS Integration Params: RTEINT4.P
Quant Time: Sep 7 12:15 2007

Vial: 11
Operator: JCM
Inst : MSD #6
Multiplr: 1.00
Quant Results File: 8270F.RES

Method : C:\MSDCHEM\1\METHODS\8270F.M (RTE Integrator)
Title : CLP BNA Calibration
Last Update : Fri Sep 07 04:02:55 2007
Response via : Initial Calibration

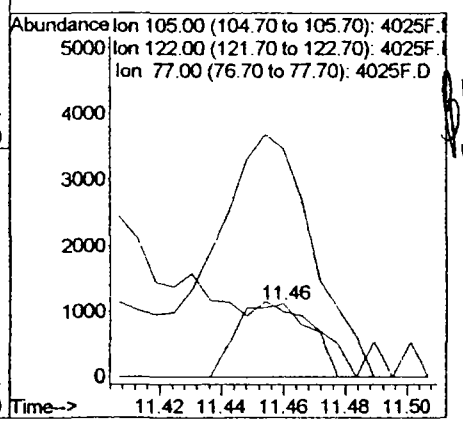


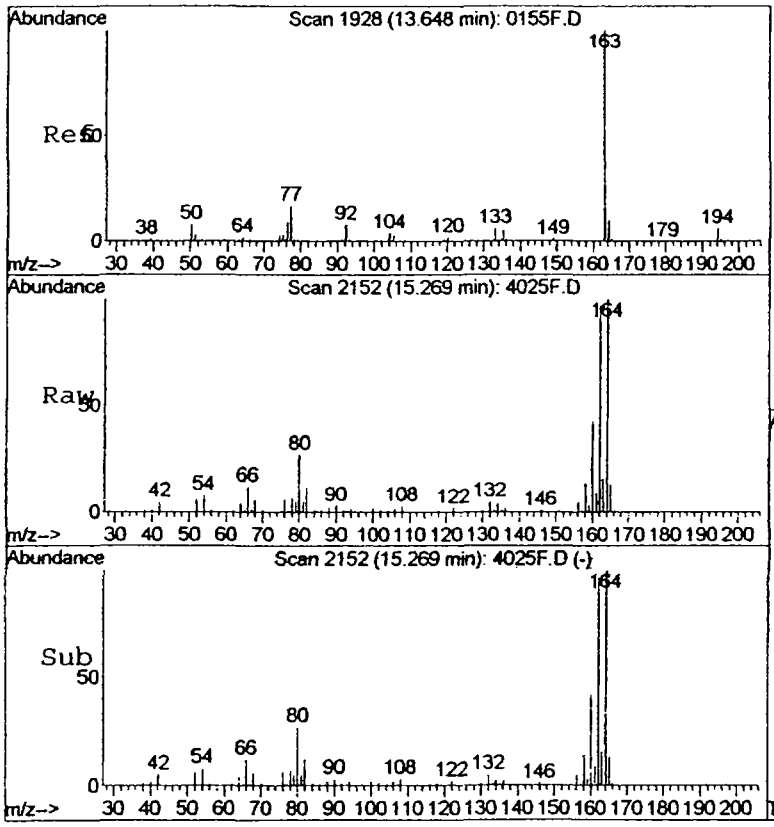


#37
Benzoic acid
Concen: 13.29 ug/ml
RT: 11.46 min Scan# 1506
Delta R.T. 0.00 min
Lab File: 4025F.D
Acq: 6 Sep 2007 9:17

Tgt Ion:105 Resp: 1850

Ion	Ratio	Lower	Upper
105	100		
122	0.0	0.0	0.0
77	441.0	33.6	50.4#

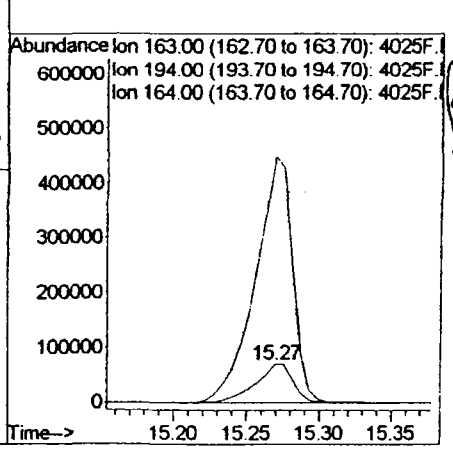


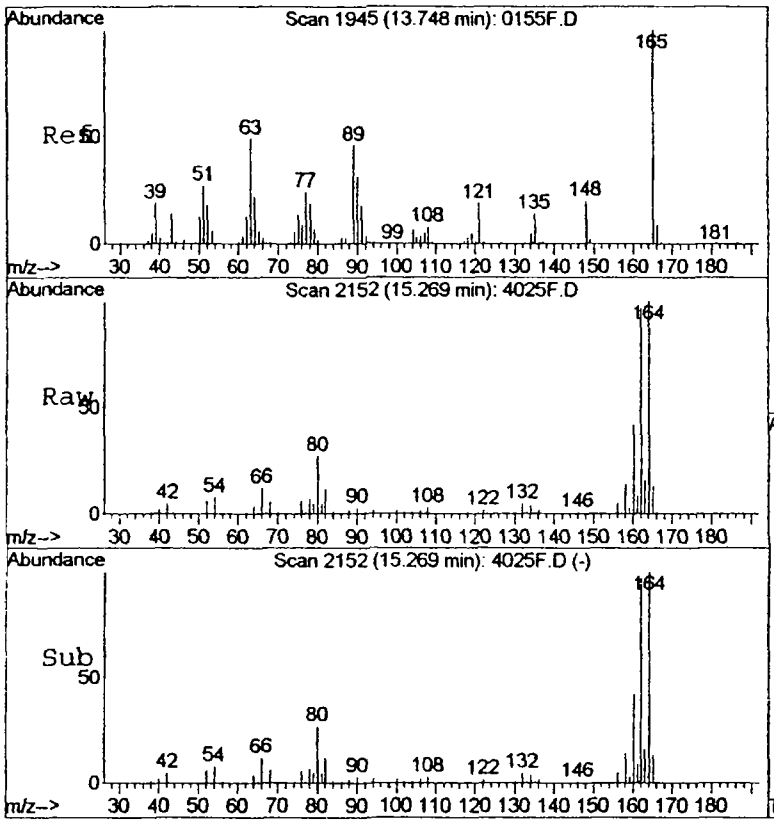


#59
Dimethylphthalate
Concen: 5.44 ug/ml
RT: 15.27 min Scan# 2152
Delta R.T. 0.32 min
Lab File: 4025F.D
Acq: 6 Sep 2007 9:17

Tgt Ion:163 Resp: 127587

Ion	Ratio	Lower	Upper
163	100		
194	0.0	3.6	5.4#
164	624.8	6.6	9.8#

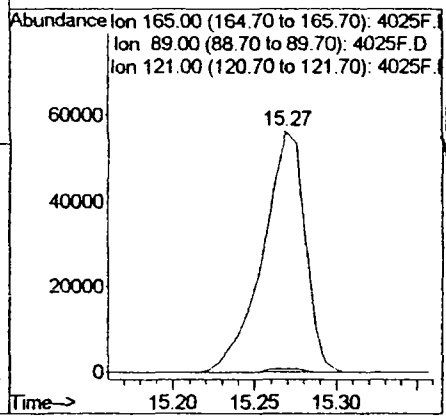




#61
2,6-Dinitrotoluene
Concen: 19.05 ug/ml
RT: 15.27 min Scan# 2152
Delta R.T. 0.21 min
Lab File: 4025F.D
Acq: 6 Sep 2007 9:17

Tgt Ion:165 Resp: 102055

Ion	Ratio	Lower	Upper
165	100		
89	1.3	23.1	34.7#
121	0.0	10.6	16.0#



LSC Area Percent Report

Data File : D:\F090607A\4025F.D
Acq On : 6 Sep 2007 9:17
Sample : A781234
Misc : 1000ML-1ML
MS Integration Params: Lscint.p

Vial: 11
Operator: JCM
Inst : MSD #6
Multiplr: 1.00

Method : C:\MSDCHEM\1\METHODS\8270F.M (RTE Integrator)
Title : CLP BNA Calibration
Smoothing : OFF
Sampling : 1
Start Thrs: 0.2
Stop Thrs : 0

Filtering: 5
Min Area: 1 % of largest Peak
Max Peaks: 100
Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

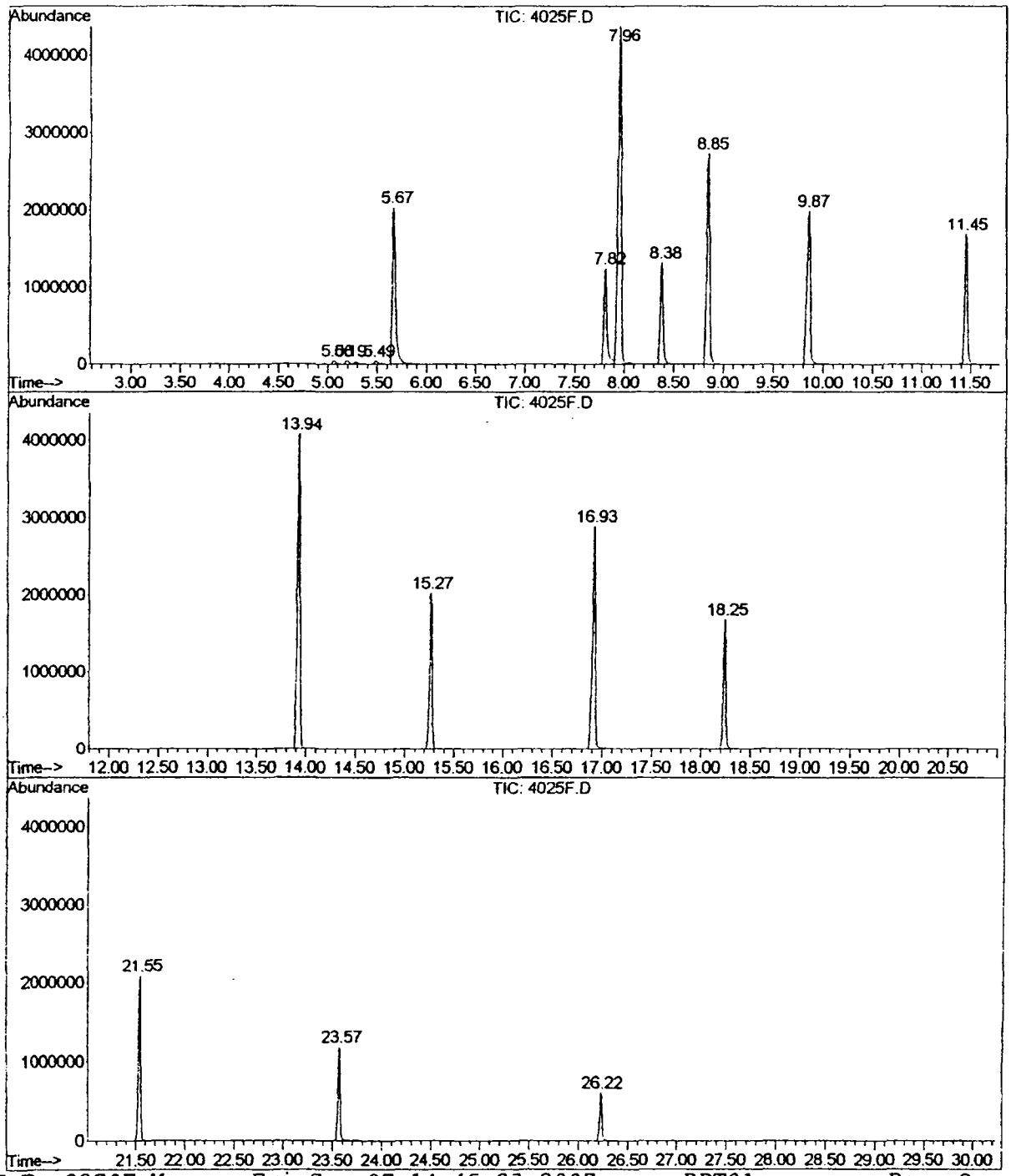
Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	5.062	415	421	435	rBV	44348	115872	1.14%	0.190%
2	5.191	435	443	452	rBV	44712	122862	1.21%	0.202%
3	5.486	486	493	501	rBV	43479	116065	1.14%	0.190%
4	5.669	517	524	544	rBV	2033162	4714076	46.47%	7.732%
5	7.816	878	888	902	rBV	1245975	2780005	27.40%	4.560%
6	7.963	902	913	924	rVV	4376340	10144931	100.00%	16.640%
7	8.382	975	984	1004	rBV	1317267	2667846	26.30%	4.376%
8	8.853	1053	1064	1086	rBV2	2734620	5785452	57.03%	9.490%
9	9.868	1223	1236	1258	rBV	1988867	4779648	47.11%	7.840%
10	11.454	1497	1505	1526	rVB	1688184	3444469	33.95%	5.650%
11	13.937	1914	1926	1940	rBV	4088254	7874102	77.62%	12.916%
12	15.269	2142	2152	2170	rVB	2026106	3567770	35.17%	5.852%
13	16.926	2421	2433	2446	rBV	2888736	5779818	56.97%	9.480%
14	18.247	2647	2657	2672	rBV	1681337	2856705	28.16%	4.686%
15	21.549	3204	3217	3225	rBV	2091135	3269023	32.22%	5.362%
16	23.572	3552	3560	3574	rBV	1181989	1912786	18.85%	3.137%
17	26.220	4002	4009	4027	rBV	603226	1034420	10.20%	1.697%

Sum of corrected areas: 60965850

LSC Report - Integrated Chromatogram

File : D:\F090607A\4025F.D
Operator : JCM
Acquired : 6 Sep 2007 9:17 using AcqMethod 8270F
Instrument : MSD #6
Sample Name: A781234
Misc Info : 1000ML-1ML
Vial Number: 11
Quant File :8270F.RES (RTE Integrator)



Tentatively Identified Compound (LSC) summary

Operator ID: JCM Date Acquired: 6 Sep 2007 9:17
Data File: D:\F090607A\4025F.D
Name: A781234
Misc: 1000ML-1ML
Method: C:\MSDCHEM\1\METHODS\8270F.M (RTE Integrator)
Title: CLP BNA Calibration
Library Searched: C:\DATABASE\NBS75K.L

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--- #	RT	Resp	Conc

QC Std# 535
Method# 187

Heritage Environmental Services, Indianapolis
MS/MSD Semi-Volatile QC Report-EPA Method 8270
Water

Laboratory Sample # : A781234
Data File :4025F. MS Data File : 4026F.
Date/Time : 6 Sep 2007 9:17 MS Date/Time : 6 Sep 2007 9:56
Spike Conc : 100 uG/L 100 uG/L
Prep Factor: 1

Compound	Sample Conc	Spike Conc	Spike % Rec	Min % Recovery *	Max % Recovery *
Acenaphthene	0	102	102.0	65	118
Acenaphthylene	0	102	102.0	66	117
Anthracene	0	107	107.0	63	119
Benzo(a)anthracene	0	107	107.0	64	129
Benzo(a)pyrene	0	101	101.0	61	122
Benzo(b)fluoranthene	0	96.2	96.2	61	126
Benzo(g,h,i)perylene	0	92.7	92.7	45	151
Benzo(k)fluoranthene	0	99.4	99.4	62	125
Benzyl alcohol	0	98.2	98.2	49	109
Butylbenzylphthalate	0	98.1	98.1	66	125
bis(2-Chloroethoxy)methane	0	100	100.0	69	122
bis(2-Chloroethyl)ether	0	97.6	97.6	63	117
bis(2-chloroisopropyl)ether	0	103	103.0	66	119
bis(2-Ethylhexyl)phthalate	0	95.1	95.1	62	124
4-Bromophenyl-phenylether	0	108	108.0	63	128
Carbazole	0	101	101.0	63	121
4-Chloroaniline	0	113	113.0	27	177
2-Chloronaphthalene	0	101	101.0	60	113
4-Chlorophenyl-phenylether	0	104	104.0	64	122
Chrysene	0	95.4	95.4	61	123
Dibenz(a,h)anthracene	0	90.8	90.8	56	138
Dibenzofuran	0	97.2	97.2	65	120
1,2-Dichlorobenzene	0	101	101.0	61	103
1,3-Dichlorobenzene	0	101	101.0	59	103
1,4-Dichlorobenzene	0	99.4	99.4	60	104
3,3'-Dichlorobenzidine	0	106	106.0	11	179
Diethylphthalate	0	104	104.0	67	120
Dimethylphthalate	0	102	102.0	51	131
Di-n-butylphthalate	0	104	104.0	62	115
1,3-Dinitrobenzene	0	99.5	99.5	68	130
2,4-Dinitrotoluene	0	101	101.0	61	121
2,6-Dinitrotoluene	0	97.3	97.3	65	117
Di-n-octylphthalate	0	113	113.0	60	128
Fluoranthene	0	104	104.0	59	118
Fluorene	0	104	104.0	63	120
Hexachlorobenzene	0	108	108.0	57	122
Hexachlorobutadiene	0	102	102.0	55	109
Hexachlorocyclopentadiene	0	82.9	82.9	41	107
Hexachloroethane	0	99.7	99.7	53	104

QC Std# 535
Method# 187

Heritage Environmental Services, Indianapolis
MS/MSD Semi-Volatile QC Report-EPA Method 8270
Water

Laboratory Sample # : A781234
Data File :4025F. MS Data File : 4026F.
Date/Time : 6 Sep 2007 9:17 MS Date/Time : 6 Sep 2007 9:56
Spike Conc : 100 uG/L 100 uG/L
Prep Factor: 1

Compound	Sample Conc	Spike Conc	Spike % Rec	Min % Recovery *	Max % Recovery *
Indeno(1,2,3-cd)pyrene	0	106	106.0	55	139
Isophorone	0	96.8	96.8	61	114
2-Methylnaphthalene	0	95	95.0	62	117
Naphthalene	0	102	102.0	68	116
2-Nitroaniline	0	97.6	97.6	68	123
3-Nitroaniline	0	120	120.0	44	173
4-Nitroaniline	0	98.3	98.3	50	146
Nitrobenzene	0	101	101.0	61	115
n-Nitrosodiphenylamine	0	116	116.0	65	127
n-Nitroso-di-n-propylamine	0	98.5	98.5	66	125
Phenanthrene	0	106	106.0	65	121
2-Picoline	0	90.3	90.3	D	120
Pyrene	0	94.3	94.3	62	133
Pyridine	0	50.7	50.7	D	94
1,2,4,5-Tetrachlorobenzene	0	75	75.0	58	121
1,2,4-Trichlorobenzene	0	101	101.0	60	109
Benzoic acid	0	28.6	28.6	7	64
4-Chloro-3-methylphenol	0	99.3	99.3	61	122
2-Chlorophenol	0	102	102.0	62	111
2,4-Dichlorophenol	0	99.3	99.3	69	112
2,4-Dimethylphenol	0	84.5	84.5	53	103
4,6-Dinitro-2-methylphenol	0	117	117.0	40	134
2,4-Dinitrophenol	0	98.8	98.8	18	138
2-Methylphenol	0	85	85.0	39	116
4-Methylphenol	0	73.5	73.5	46	102
2-Nitrophenol	0	105	105.0	69	120
4-Nitrophenol	0	33.5	33.5	D	78
Pentachlorophenol	0	112	112.0	41	131
Phenol	0	35.9	35.9	14	74
2,3,4,6-Tetrachlorophenol	0	95.9	95.9	59	130
2,4,5-Trichlorophenol	0	99.3	99.3	68	121
2,4,6-Trichlorophenol	0	98.6	98.6	70	117

* Laboratory Generated Limits (based on >20 analyses) are used as Warning Limits. Updated 12/03

R524579 Heritage Environmental Services, LLC Q1993693

QC Report

QCType SPI02 Duplicate SampleID A781234 DataFile 4026F.D
Date Entered 06Sep07 Duplicate QCSampleID Analyst 3196 C. WILLHITE
Analysis Date/Time 06Sep0709:56:00 Method 187 Matrix 1 Units ug/L

PRM	Parameter	TruVal	SpikeVal	ObsVal	RQL	Rec	Difference
97	ACENAPHTHENE	0	100	102		102	
98	ACENAPHTHYLENE	0	100	102		102	
128	ANTHRACENE	0	100	107		107	
155	BENZO(A)ANTHRACENE	0	100	107		107	
156	BENZO(A)PYRENE	0	100	101		101	
157	BENZO(B)FLUORANTHENE (3,4-BENZOFLUORANTH	0	100	96.2		96.2	
158	BENZO(G,H,I)PERYLENE	0	100	92.7		92.7	
159	BENZO(K)FLUORANTHENE	0	100	99.4		99.4	
160	BENZYL ALCOHOL	0	100	98.2		98.2	
202	BENZYLBUTYLPHTHALATE (BUTYLBENZYLPHTHALA	0	100	98.1		98.1	
182	BIS(2-CHLOROETHOXY)METHANE	0	100	100		100	
184	BIS(2-CHLOROISOPROPYL)ETHER	0	100	103		103	
183	BIS(2-CHLOROETHYL)ETHER	0	100	97.6		97.6	
185	BIS(2-ETHYLHEXYL)PHTHALATE	0	100	95.1		95.1	
84	4-BROMODIPHENYL ETHER	0	100	108		108	
213	CARBAZOLE	0	100	101		101	
85	4-CHLOROANILINE	0	100	113		113	
55	2-CHLORONAPHTHALENE	0	100	101		101	
88	4-CHLOROPHENYL-PHENYLETHER	0	100	104		104	
245	CHRYSENE	0	100	95.4		95.4	
294	DIBENZ(A,H)ANTHRACENE	0	100	90.8		90.8	
293	DIBENZOFURAN	0	100	97.2		97.2	
20	1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	0	100	101		101	
26	1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)	0	100	101		101	
29	1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	0	100	99.4		99.4	
70	3,3'-DICHLOROBENZIDINE	0	100	106		106	
306	DIETHYLPHTHALATE	0	100	104		104	
310	DIMETHYLPHTHALATE	0	100	102		102	
329	DI-N-BUTYLPHTHALATE	0	100	104		104	
489	1,3-DINITROBENZENE (M-DINITROBENZENE)	0	100	99.5		99.5	
48	2,4-DINITROTOLUENE	0	100	101		101	
50	2,6-DINITROTOLUENE	0	100	97.3		97.3	
330	DI-N-OCTYLPHTHALATE	0	100	113		113	
363	FLUORANTHENE	0	100	104		104	
366	FLUORENE	0	100	104		104	
397	HEXACHLOROBENZENE	0	100	108		108	
398	HEXACHLOROBUTADIENE	0	100	102		102	
399	HEXACHLOROCYCLOPENTADIENE	0	100	82.9		82.9	
402	HEXACHLOROETHANE	0	100	99.7		99.7	
413	INDENO(1,2,3-CD)PYRENE	0	100	106		106	
431	ISOPHORONE	0	100	96.8		96.8	
62	2-METHYLNAPHTHALENE	0	100	95		95	
493	NAPHTHALENE	0	100	102		102	
65	2-NITROANILINE (O-NITROANILINE)	0	100	97.6		97.6	

LB 9-11-07

LB 9-11-07

QC Report

PRM	Parameter	TruVal	SpikeVal	ObsVal	RQL	Rec	Difference
76	3-NITROANILINE (M-NITROANILINE)	0	100	120		120	
92	4-NITROANILINE (P-NITROANILINE)	0	100	98.3		98.3	
503	NITROBENZENE	0	100	101		101	
522	N-NITROSODIPHENYLAMINE	0	100	116		116	
531	N-NITROSO-DI-N-PROPYLAMINE	0	100	98.5		98.5	
597	PHENANTHRENE	0	100	106		106	
68	2-PICOLINE (2-METHYLPYRIDINE)	0	100	90.3		90.3	
624	PYRENE	0	100	94.3		94.3	
625	PYRIDINE	0	100	50.7		50.7	
15	1,2,4,5-TETRACHLOROBENZENE	0	100	75		75	
16	1,2,4-TRICHLOROBENZENE	0	100	101		101	
153	BENZOIC ACID	0	100	28.6		28.6	
89	4-CHLORO-3-METHYLPHENOL (P-CHLORO-M-CRES	0	100	99.3		99.3	
56	2-CHLOROPHENOL	0	100	102		102	
44	2,4-DICHLOROPHENOL	0	100	99.3		99.3	
46	2,4-DIMETHYLPHENOL	0	100	84.5		84.5	
1810	2-METHYL-4,6-DINITROPHENOL	0	100	117		117	
47	2,4-DINITROPHENOL	0	100	98.8		98.8	
61	2-METHYLPHENOL (O-CRESOL)	0	100	85		85	
90	4-METHYLPHENOL (P-CRESOL)	0	100	73.5		73.5	
66	2-NITROPHENOL	0	100	105		105	
93	4-NITROPHENOL	0	100	33.5		33.5	
577	PENTACHLOROPHENOL	0	100	112		112	
598	PHENOL	0	100	35.9		35.9	
34	2,3,4,6-TETRACHLOROPHENOL	0	100	95.9		95.9	
40	2,4,5-TRICHLOROPHENOL	0	100	99.3		99.3	
42	2,4,6-TRICHLOROPHENOL	0	100	98.6		98.6	

Quantitation Report (QT Reviewed)

Data File : D:\F090607A\4026F.D
Acq On : 6 Sep 2007 9:56
Sample : A781234 MS
Misc : 1000ML-1ML
MS Integration Params: RTEINT4.P
Quant Time: Sep 07 13:59:12 2007

Vial: 12
Operator: JCM
Inst : MSD #6
Multiplr: 1.00
Quant Results File: 8270F.RES

Quant Method : C:\MSDCHEM\1\METHODS\8270F.M (RTE Integrator)
Title : CLP BNA Calibration
Last Update : Fri Sep 07 04:02:55 2007
Response via : Initial Calibration
DataAcq Meth : 8270F

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	8.41	152	379431	40.00	ug/ml	0.02
29) Naphthalene-d8	11.49	136	1682770	40.00	ug/ml	0.01
47) Acenaphthene-d10	15.29	164	909258	40.00	ug/ml	0.00
74) Phenanthrene-d10	18.29	188	1261187	40.00	ug/ml	0.02
95) Chrysene-d12	23.61	240	1008198	40.00	ug/ml	0.02
115) Perylene-d12	26.24	264	450781	40.00	ug/ml	0.00
System Monitoring Compounds						
7) 2-Fluorophenol	5.73	112	1638298	124.50	ug/ml	0.04
Spiked Amount 200.000	Range 21 - 100		Recovery = 62.25%			
10) Phenol-d5	7.87	99	1267070	73.03	ug/ml	0.03
Spiked Amount 200.000	Range 10 - 94		Recovery = 36.52%			
13) 2-Chlorophenol-d4	8.01	132	2891130	199.28	ug/ml	0.04
Spiked Amount 200.000	Range 27 - 123		Recovery = 99.64%			
19) 1,2-Dichlorobenzene-d4	8.88	150	1402584	95.80	ug/ml	0.02
Spiked Amount 100.000	Range 32 - 220		Recovery = 95.80%			
30) Nitrobenzene-d5	9.90	82	1686957	100.96	ug/ml	0.03
Spiked Amount 100.000	Range 18 - 57		Recovery = 100.96%#			
54) 2-Fluorobiphenyl	13.96	172	2612707	98.04	ug/ml	0.02
Spiked Amount 100.000	Range 22 - 58		Recovery = 98.04%#			
77) 2,4,6-Tribromophenol	16.96	330	643951	260.30	ug/ml	0.04
Spiked Amount 200.000	Range 10 - 123		Recovery = 130.15%#			
100) Terphenyl-d14	21.57	244	842688	35.53	ug/ml	0.00
Spiked Amount 100.000	Range 17 - 71		Recovery = 35.53%			

Target Compounds						Qvalue
3) N-Nitrosodimethyl amine	3.51	42	525956m	59.26	ug/ml	
4) Pyridine	3.36	79	862240	50.66	ug/ml#	48
5) 2-Picoline	4.47	93	1351312	90.33	ug/ml	98
9) Aniline	7.76	93	2124519	107.61	ug/ml	99
11) Phenol	7.89	94	661638	35.92	ug/ml#	82
12) bis(2-Chloroethyl)ether	7.99	93	1629818	97.64	ug/ml#	1
14) 2-Chlorophenol	8.05	128	1459011	101.71	ug/ml#	89
16) 1,3-Dichlorobenzene	8.32	146	1471529	101.19	ug/ml#	98
17) Benzyl Chloride	7.77	91	24591	184.84	ug/ml#	1
18) 1,4-Dichlorobenzene	8.45	146	1500588	99.39	ug/ml#	99
20) 1,2-Dichlorobenzene	8.91	146	1469255	101.13	ug/ml#	98
21) Benzyl alcohol	8.92	108	801846	98.21	ug/ml#	71
23) 2-Methylphenol	9.32	108	1060059	84.95	ug/ml	95
24) bis(2-chloroisopropyl)ethe	9.30	45	2345405	102.95	ug/ml#	25
26) n-Nitroso-di-n-propylamine	9.70	70	1102557m	98.46	ug/ml	
27) 4-Methylphenol	9.71	108	968011	73.52	ug/ml	97

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

Quantitation Report (QT Reviewed)

Data File : D:\F090607A\4026F.D
Acq On : 6 Sep 2007 9:56
Sample : A781234 MS
Misc : 1000ML-1ML
MS Integration Params: RTEINT4.P
Quant Time: Sep 07 13:59:12 2007

Vial: 12
Operator: JCM
Inst : MSD #6
Multiplr: 1.00
Quant Results File: 8270F.RES

Quant Method : C:\MSDCHEM\1\METHODS\8270F.M (RTE Integrator)
Title : CLP BNA Calibration
Last Update : Fri Sep 07 04:02:55 2007
Response via : Initial Calibration
DataAcq Meth : 8270F

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
28)	Hexachloroethane	9.64	117	686384	99.69	ug/ml#	77
31)	Nitrobenzene	9.95	77	1742212	101.19	ug/ml#	78
32)	Isophorone	10.55	82	2785851	96.80	ug/ml#	83
33)	2-Nitrophenol	10.69	139	766854	105.10	ug/ml#	73
34)	2,4-Dimethylphenol	10.95	107	1182424	84.54	ug/ml	86
35)	bis(2-Chloroethoxy)methane	11.13	93	1693529	100.09	ug/ml	98
36)	2,4-Dichlorophenol	11.29	162	951184	99.26	ug/ml#	92
37)	Benzoic acid	11.38	105	218872m	28.62	ug/ml	
38)	1,2,4-Trichlorobenzene	11.42	180	1073565	101.35	ug/ml	99
39)	Naphthalene	11.54	128	4301564	101.66	ug/ml	99
41)	4-Chloroaniline	11.78	127	1626281	113.24	ug/ml	100
42)	Toluenediamine	11.98	122	33003	94.09	ug/ml#	60
43)	Hexachlorobutadiene	11.98	225	536275	101.57	ug/ml	99
44)	4-Chloro-3-methylphenol	12.96	107	1189232	99.28	ug/ml#	1
45)	2-Methylnaphthalene	13.08	141	2256180	95.04	ug/ml#	67
49)	Hexachlorocyclopentadiene	13.58	237	552440	82.90	ug/ml	98
50)	1,2,4,5-Tetrachlorobenzene	13.52	216	685540	75.00	ug/ml	98
52)	2,4,6-Trichlorophenol	13.80	196	666580	98.57	ug/ml	99
53)	2,4,5-Trichlorophenol	13.89	196	699668	99.31	ug/ml	97
56)	2-Chloronaphthalene	14.11	162	2393134	100.65	ug/ml	96
58)	2-Nitroaniline	14.47	65	848348	97.64	ug/ml#	75
59)	Dimethylphthalate	14.99	163	2723138m	101.86	ug/ml	
60)	1,3-Dinitrobenzene	14.97	168	447128	99.49	ug/ml#	28
61)	2,6-Dinitrotoluene	15.09	165	594291	97.27	ug/ml#	40
62)	Acenaphthylene	14.97	152	4055589	101.85	ug/ml	99
63)	3-Nitroaniline	15.36	138	731000	120.36	ug/ml#	32
64)	Acenaphthene	15.38	153	2452381	101.72	ug/ml	99
65)	2,4-Dinitrophenol	15.56	184	320395	98.76	ug/ml#	64
66)	4-Nitrophenol	15.85	109	119754	33.51	ug/ml#	63
67)	Dibenzofuran	15.71	168	3235793	97.20	ug/ml	94
68)	2,4-Dinitrotoluene	15.88	165	751478	100.85	ug/ml#	60
69)	2,3,4,6-Tetrachlorophenol	16.09	232	468515	95.89	ug/ml	99
70)	Diethylphthalate	16.44	149	2893830m	103.78	ug/ml	
71)	Fluorene	16.41	166	2760483	103.65	ug/ml	99
72)	4-Chlorophenyl-phenylether	16.45	204	1196446	103.95	ug/ml	96
73)	4-Nitroaniline	16.68	138	547303m	98.29	ug/ml	
75)	4,6-Dinitro-2-methylphenol	16.74	198	454794m	117.23	ug/ml	
76)	n-Nitrosodiphenylamine	16.77	169	1939605	115.78	ug/ml#	80
78)	Azobenzene	16.79	77	7599062	203.52	ug/ml#	80
79)	alpha-BHC	17.53	181	486809	107.01	ug/ml#	85
80)	4-Bromophenyl-phenylether	17.43	248	594061	107.90	ug/ml	97

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

Quantitation Report (QT Reviewed)

Data File : D:\F090607A\4026F.D
Acq On : 6 Sep 2007 9:56
Sample : A781234 MS
Misc : 1000ML-1ML
MS Integration Params: RTEINT4.P
Quant Time: Sep 07 13:59:12 2007

Vial: 12
Operator: JCM
Inst : MSD #6
Multiplr: 1.00
Quant Results File: 8270F.RES

Quant Method : C:\MSDCHEM\1\METHODS\8270F.M (RTE Integrator)
Title : CLP BNA Calibration
Last Update : Fri Sep 07 04:02:55 2007
Response via : Initial Calibration
DataAcq Meth : 8270F

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
81)	Hexachlorobenzene	17.69	284	603978	108.19 ug/ml	85
82)	beta-BHC	18.06	181	339338	97.82 ug/ml	96
83)	Pentachlorophenol	18.09	266	353500	112.00 ug/ml	96
84)	gamma-BHC	18.12	181	367453	106.02 ug/ml	100
86)	Phenanthrene	18.34	178	3567996	105.96 ug/ml	99
87)	Anthracene	18.43	178	3509879	107.30 ug/ml	99
88)	delta-BHC	18.54	181	343614	104.57 ug/ml	98
89)	Carbazole	18.80	167	2936274	101.20 ug/ml	96
90)	Heptachlor	19.36	272	275543	106.55 ug/ml	90
91)	Di-n-butylphthalate	19.70	149	4038941	103.87 ug/ml#	98
92)	Aldrin	19.95	263	223192	160.53 ug/ml	80
93)	Heptachlor epoxide	20.60	81	375006	99.08 ug/ml#	88
94)	Fluoranthene	20.72	202	2963597	104.18 ug/ml#	87
96)	Benzidine	21.07	184	783086	97.52 ug/ml#	100
97)	Pyrene	21.15	202	3086561	94.29 ug/ml#	86
98)	alpha-Endosulfan	21.20	237	77885	91.93 ug/ml	87
99)	p,p'-DDE	21.54	246	596435	90.06 ug/ml#	62
101)	Dieldrin	21.61	79	693699	68.78 ug/ml	97
102)	Endrin	21.96	195	28438	92.96 ug/ml#	32
103)	Endrin aldehyde	21.96	67	83236	87.62 ug/ml#	92
104)	beta-Endosulfan	22.10	195	101341	96.89 ug/ml	95
105)	p,p'-DDD	22.19	235	956036	94.47 ug/ml#	84
106)	Butylbenzylphthalate	22.69	149	1572788	98.12 ug/ml#	71
107)	Endosulfan sulfate	22.77	272	144185	99.29 ug/ml	71
108)	p,p'-DDT	22.77	235	1003651	101.41 ug/ml	97
110)	Methoxychlor	23.63	227	2107788	98.57 ug/ml#	6
111)	Benzo[a]anthracene	23.58	228	2502569	107.07 ug/ml#	90
112)	3,3'-Dichlorobenzidine	23.61	252	812289	105.59 ug/ml	97
113)	Chrysene	23.68	228	2505620	95.37 ug/ml#	55
114)	bis(2-Ethylhexyl)phthalate	23.92	149	2227652	95.11 ug/ml#	98
116)	Di-n-octylphthalate	25.08	149	3304569	112.54 ug/ml	100
117)	Benzo[b]fluoranthene	25.61	252	1723327	96.19 ug/ml	97
118)	Benzo[k]fluoranthene	25.65	252	1417423	99.42 ug/ml	98
119)	Benzo[a]pyrene	26.16	252	1267190	100.80 ug/ml	99
120)	Indeno[1,2,3-cd]pyrene	28.20	276	637278	105.62 ug/ml#	85
121)	Dibenz[a,h]anthracene	28.24	278	575180	90.81 ug/ml	93
122)	Benzo[g,h,i]perylene	28.73	276	415585	92.66 ug/ml	95

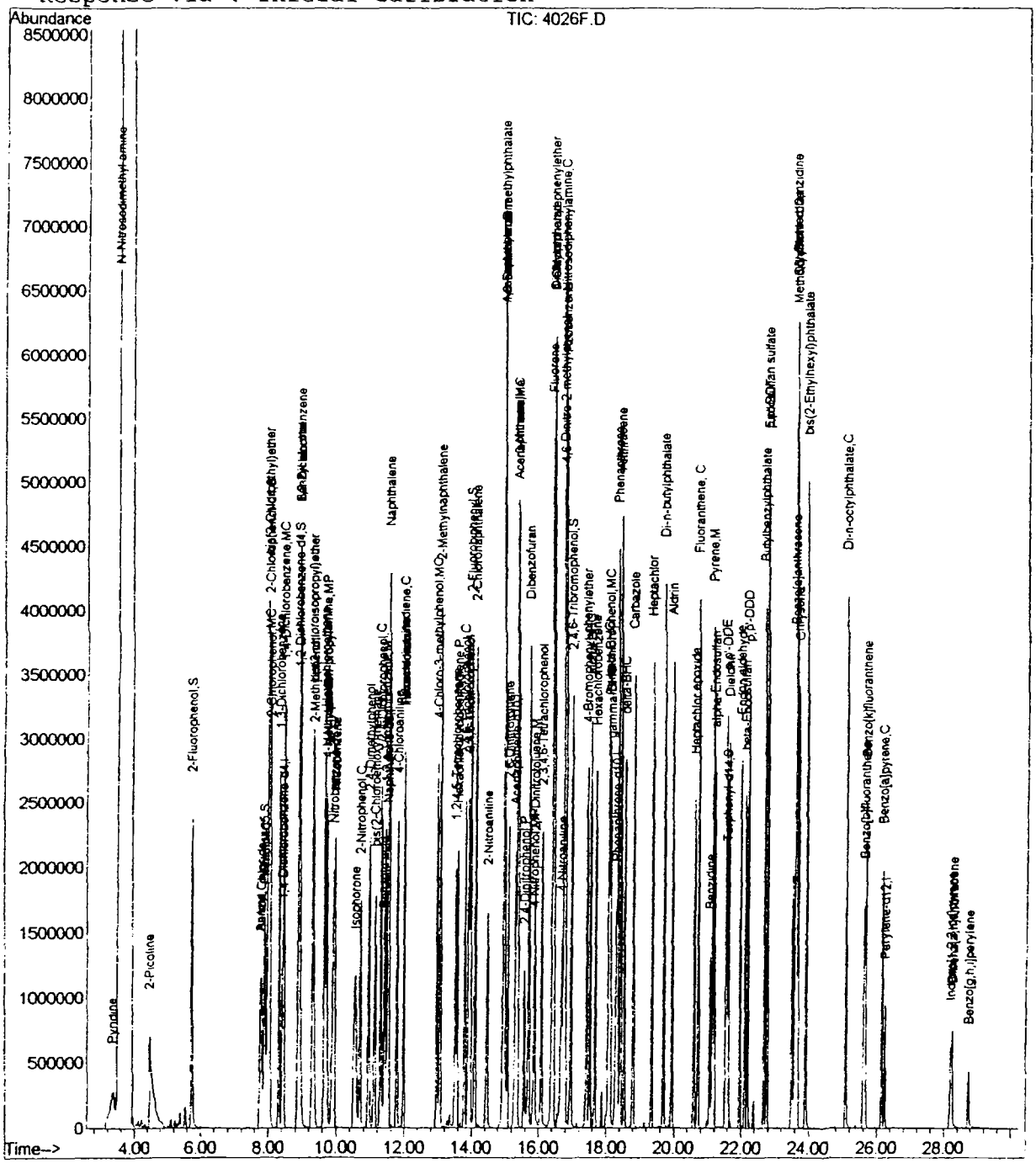
(#) = qualifier out of range (m) = manual integration

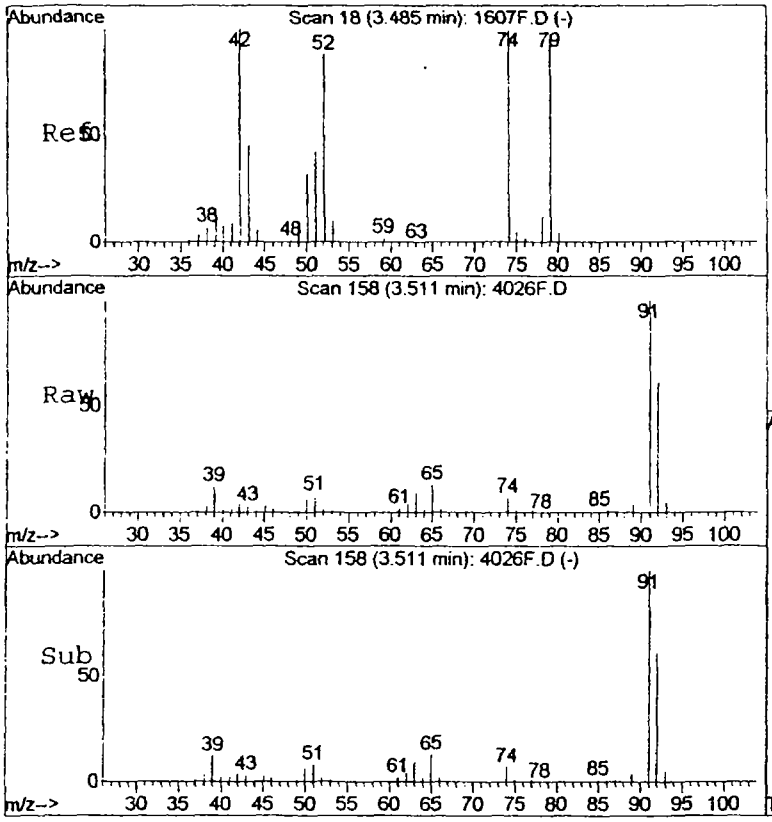
Quantitation Report (QT Reviewed)

Data File : D:\F090607A\4026F.D
Acq On : 6 Sep 2007 9:56
Sample : A781234 MS
Misc : 1000ML-1ML
MS Integration Params: RTEINT4.P
Quant Time: Sep 7 14:26 2007

Vial: 12
Operator: JCM
Inst : MSD #6
Multiplr: 1.00
Quant Results File: 8270F.RES

Method : C:\MSDCHEM\1\METHODS\8270F.M (RTE Integrator)
Title : CLP BNA Calibration
Last Update : Fri Sep 07 04:02:55 2007
Response via : Initial Calibration

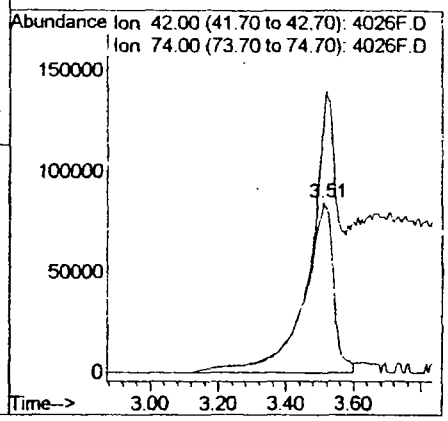


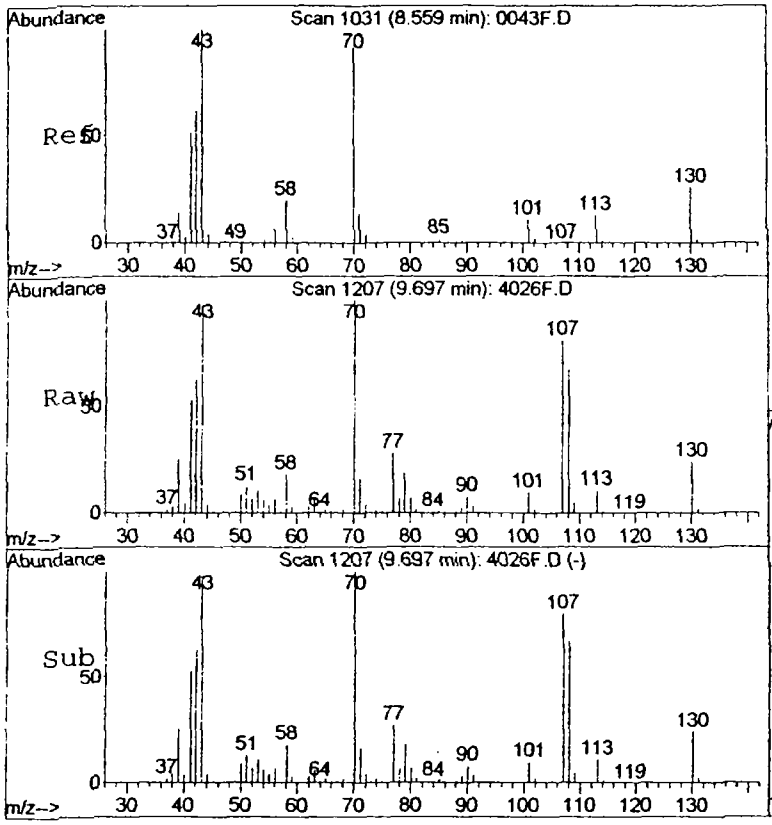


#3
N-Nitrosodimethyl amine
Concen: 59.26 ug/ml m
RT: 3.51 min Scan# 158
Delta R.T. 0.38 min
Lab File: 4026F.D
Acq: 6 Sep 2007 9:56

Tgt Ion: 42 Resp: 525956

Ion	Ratio	Lower	Upper
42	100		
74	3.3	58.2	87.4#

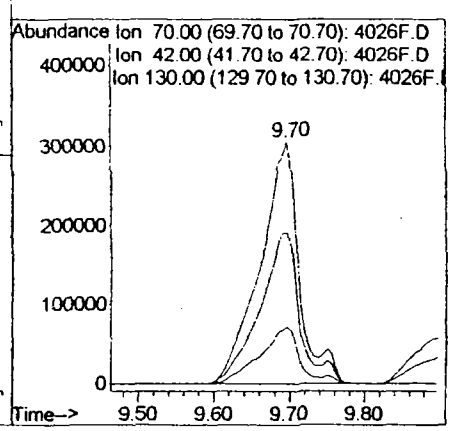


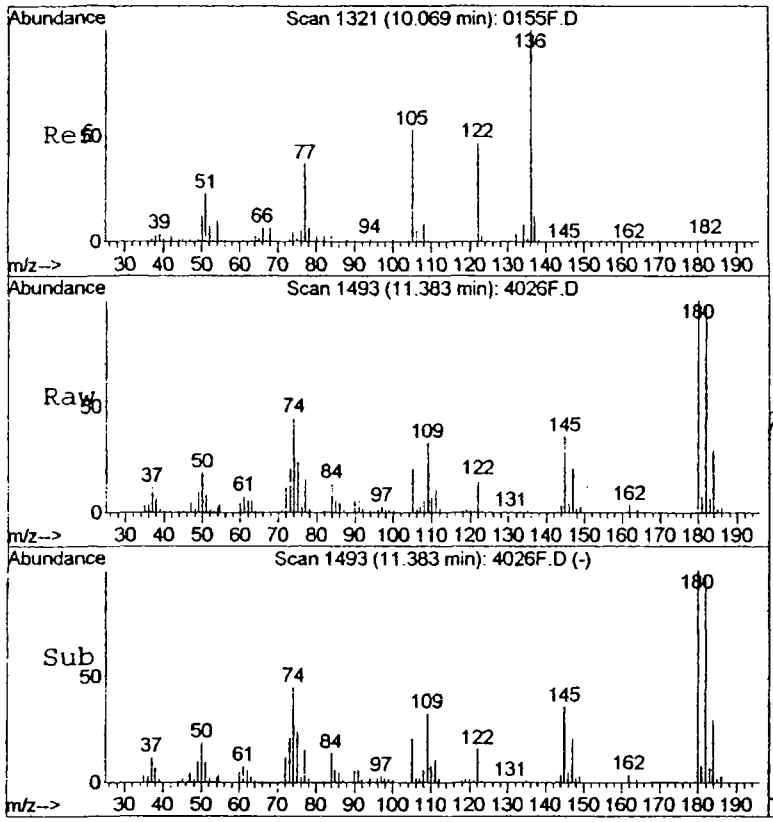


#26
n-Nitroso-di-n-propylamine
Concen: 98.46 ug/ml m
RT: 9.70 min Scan# 1207
Delta R.T. 0.04 min
Lab File: 4026F.D
Acq: 6 Sep 2007 9:56

Tgt Ion: 70 Resp: 1102557

Ion	Ratio	Lower	Upper
70	100		
42	61.7	16.7	25.1#
130	23.2	5.4	8.2#

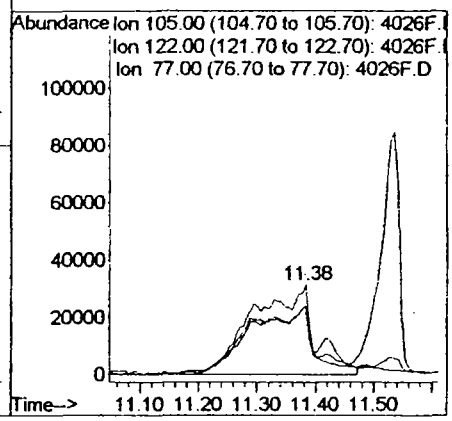


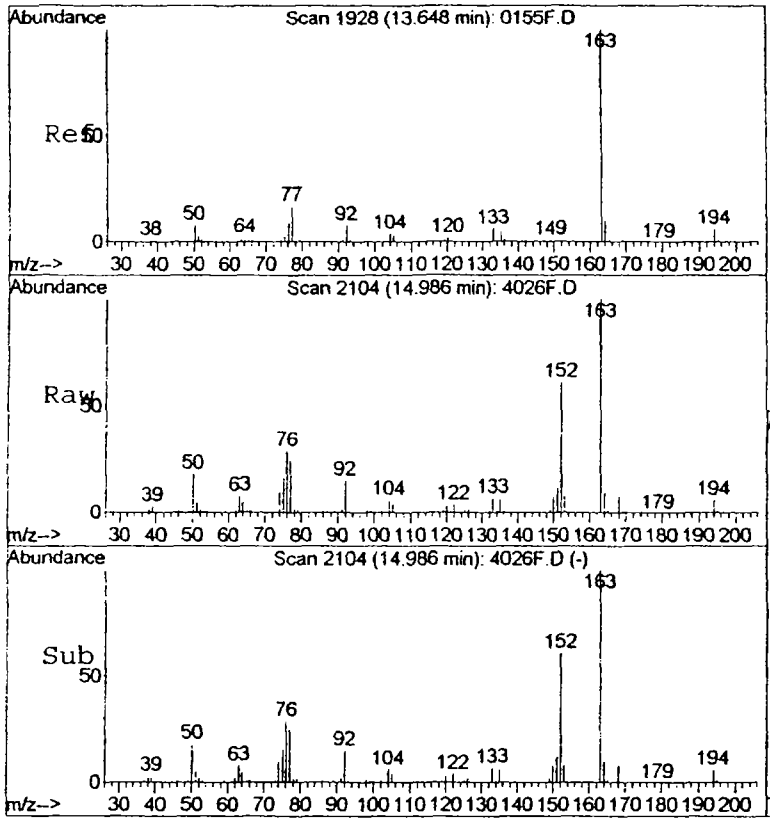


#37
Benzoic acid
Concen: 28.62 ug/ml m
RT: 11.38 min Scan# 1493
Delta R.T. -0.08 min
Lab File: 4026F.D
Acq: 6 Sep 2007 9:56

Tgt Ion:105 Resp: 218872

Ion	Ratio	Lower	Upper
105	100		
122	0.0	0.0	0.0
77	0.0	33.6	50.4#

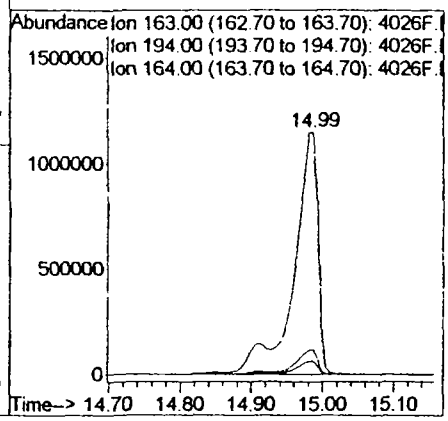


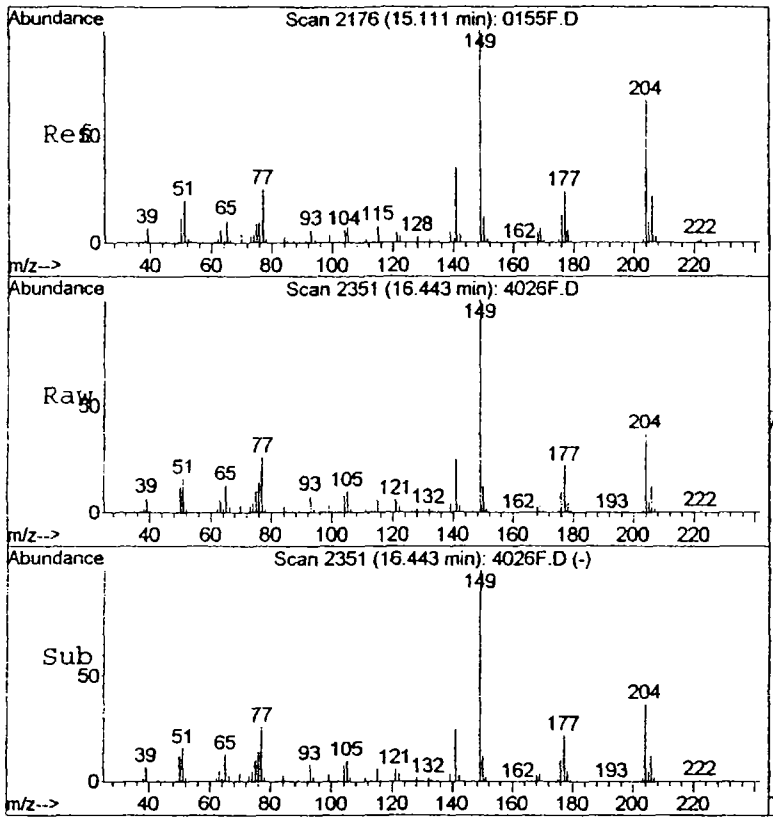


#59
Dimethylphthalate
Concen: 101.86 ug/ml m
RT: 14.99 min Scan# 2104
Delta R.T. 0.04 min
Lab File: 4026F.D
Acq: 6 Sep 2007 9:56

Tgt Ion:163 Resp: 2723138

Ion	Ratio	Lower	Upper
163	100		
194	4.8	3.6	5.4
164	8.6	6.6	9.8

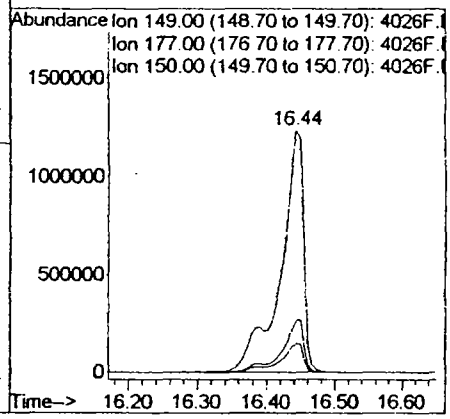


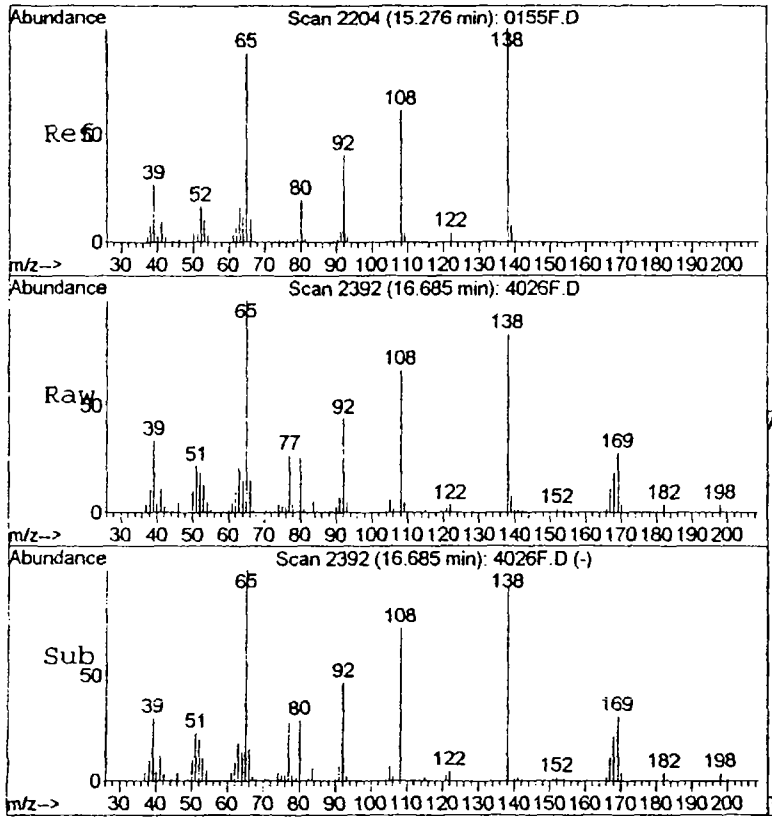


#70
Diethylphthalate
Concen: 103.78 ug/ml m
RT: 16.44 min Scan# 2351
Delta R.T. 0.03 min
Lab File: 4026F.D
Acq: 6 Sep 2007 9:56

Tgt Ion:149 Resp: 2893830

Ion	Ratio	Lower	Upper
149	100		
177	17.5	17.7	26.5#
150	12.2	10.1	15.1

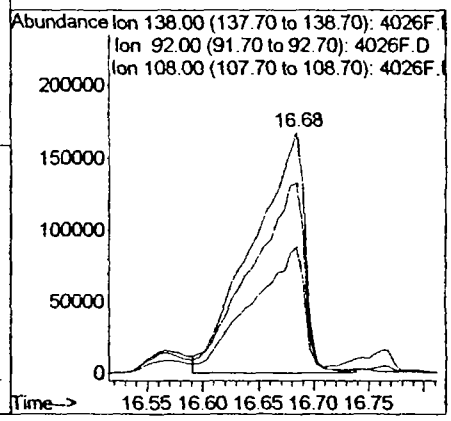


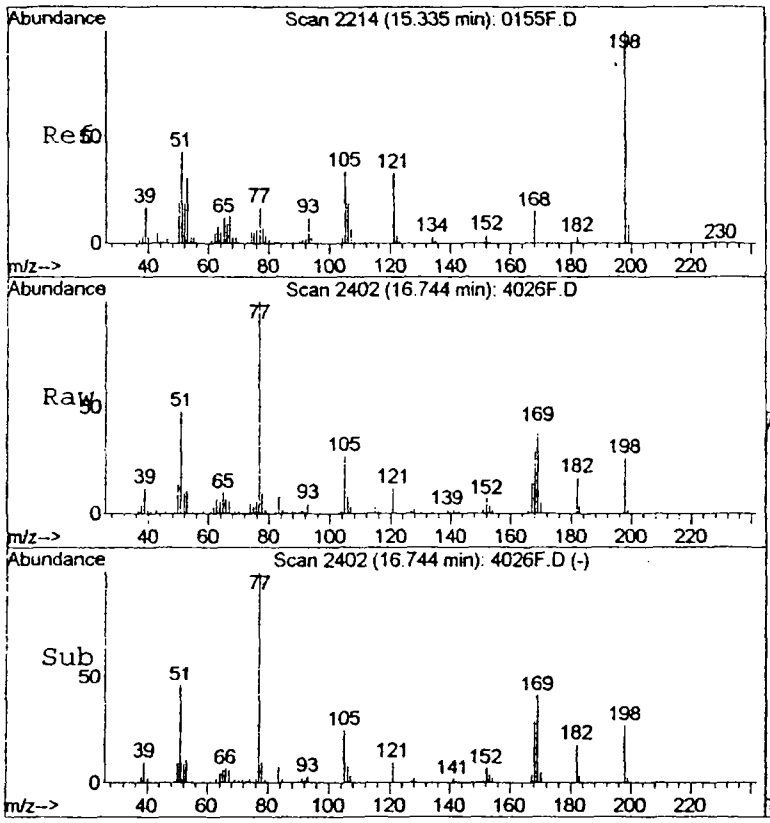


#73
4-Nitroaniline
Concen: 98.29 ug/ml m
RT: 16.68 min Scan# 2392
Delta R.T. 0.06 min
Lab File: 4026F.D
Acq: 6 Sep 2007 9:56

Tgt Ion:138 Resp: 547303

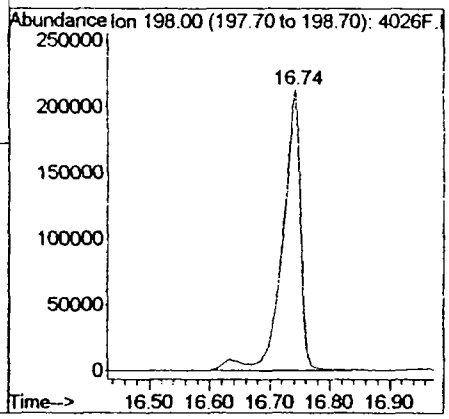
Ion	Ratio	Lower	Upper
138	100		
92	4.2	21.0	31.6#
108	6.3	28.3	42.5#





#75
4,6-Dinitro-2-methylphenol
Concen: 117.23 ug/ml m
RT: 16.74 min Scan# 2402
Delta R.T. 0.06 min
Lab File: 4026F.D
Acq: 6 Sep 2007 9:56

Tgt Ion:198 Resp: 454794



R524579 Heritage Environmental Services, LLC A781240

GC/MS SVOA

Method SW846-8270C
Sample Description LQ4575
Submitter IDEM - OLQ
Instrument 343 Channel 1

Test Code O531.1.0
Analyst 3196 C. WILLHITE
File 4027F.D Date/Time 06Sep07 10:34:00
Dilution Factor 1

Prep : 1000 mL 1.0 mL

CAS	PRM	Parameter	Concentration	RQL	Limit	Units	RT
83-32-9	97	ACENAPHTHENE		BDL	10	UG/L	
208-96-8	98	ACENAPHTHYLENE		BDL	10	UG/L	
120-12-7	128	ANTHRACENE		BDL	10	UG/L	
56-55-3	163	BENZ(A)ANTHRACENE		BDL	10	UG/L	
50-32-8	156	BENZO(A)PYRENE		BDL	10	UG/L	
205-99-2	157	BENZO(B)FLUORANTHENE		BDL	10	UG/L	
191-24-2	158	BENZO(G,H,I)PERYLENE		BDL	10	UG/L	
207-08-9	159	BENZO(K)FLUORANTHENE		BDL	10	UG/L	
100-51-6	160	BENZYL ALCOHOL		BDL	10	UG/L	
85-68-7	202	(BENZYLBUTYLPHTHALATE) BUTYLBENZYLPHTHAL		BDL	10	UG/L	
111-91-1	182	BIS(2-CHLOROETHOXY)METHANE		BDL	10	UG/L	
111-44-4	183	BIS(2-CHLOROETHYL)ETHER		BDL	10	UG/L	
108-60-1	184	BIS(2-CHLOROISOPROPYL)ETHER		BDL	10	UG/L	
117-81-7	185	BIS(2-ETHYLHEXYL)PHTHALATE		BDL	10	UG/L	
101-55-3	84	4-BROMODIPHENYL ETHER		BDL	10	UG/L	
86-74-8	213	CARBAZOLE		BDL	10	UG/L	
106-47-8	85	4-CHLOROANILINE		BDL	10	UG/L	
91-58-7	55	2-CHLORONAPHTHALENE		BDL	10	UG/L	
7005-72-3	88	4-CHLOROPHENYL-PHENYLETHER		BDL	10	UG/L	
218-01-9	245	CHRYSENE		BDL	10	UG/L	
53-70-3	294	DIBENZ(A,H)ANTHRACENE		BDL	10	UG/L	
132-64-9	293	DIBENZOFURAN		BDL	10	UG/L	
91-94-1	70	3,3'-DICHLOROBENZIDINE		BDL	20	UG/L	
84-66-2	306	DIETHYLPHTHALATE		BDL	10	UG/L	
131-11-3	310	DIMETHYLPHTHALATE		BDL	10	UG/L	
84-74-2	329	DI-N-BUTYLPHTHALATE		BDL	10	UG/L	
121-14-2	48	2,4-DINITROTOLUENE		BDL	10	UG/L	
606-20-2	50	2,6-DINITROTOLUENE		BDL	10	UG/L	
117-84-0	330	DI-N-OCTYLPHTHALATE		BDL	10	UG/L	
206-44-0	363	FLUORANTHENE		BDL	10	UG/L	
86-73-7	366	FLUORENE		BDL	10	UG/L	
118-74-1	397	HEXACHLOROBENZENE		BDL	10	UG/L	
87-68-3	398	HEXACHLOROBUTADIENE		BDL	10	UG/L	
77-47-4	399	HEXACHLOROCYCLOPENTADIENE		BDL	10	UG/L	
67-72-1	402	HEXACHLOROETHANE		BDL	10	UG/L	
193-39-5	413	INDENO(1,2,3-CD)PYRENE		BDL	10	UG/L	
78-59-1	431	ISOPHORONE		BDL	10	UG/L	
91-57-6	62	2-METHYLNAPHTHALENE		BDL	10	UG/L	
88-74-4	65	2-NITROANILINE (O-NITROANILINE)		BDL	50	UG/L	
99-09-2	76	3-NITROANILINE (M-NITROANILINE)		BDL	50	UG/L	
100-01-6	92	4-NITROANILINE (P-NITROANILINE)		BDL	50	UG/L	
98-95-3	503	NITROBENZENE		BDL	10	UG/L	
86-30-6	522	N-NITROSODIPHENYLAMINE		BDL	10	UG/L	
621-64-7	531	N-NITROSO-DI-N-PROPYLAMINE		BDL	10	UG/L	

/ KS 9-11-07

KS 9-11-07

GC/MS SVOA

CAS	PRM	Parameter	Concentration	RQL	Limit	Units	RT
85-01-8	597	PHENANTHRENE		BDL	10	UG/L	
129-00-0	624	PYRENE		BDL	10	UG/L	
120-82-1	16	1,2,4-TRICHLOROBENZENE		BDL	10	UG/L	
65-85-0	153	BENZOIC ACID		BDL	50	UG/L	
59-50-7	89	4-CHLORO-3-METHYLPHENOL		BDL	10	UG/L	
95-57-8	56	2-CHLOROPHENOL		BDL	10	UG/L	
120-83-2	44	2,4-DICHLOROPHENOL		BDL	10	UG/L	
105-67-9	46	2,4-DIMETHYLPHENOL		BDL	10	UG/L	
534-52-1	81	4,6-DINITRO-O-CRESOL		BDL	50	UG/L	
51-28-5	47	2,4-DINITROPHENOL		BDL	50	UG/L	
95-48-7	61	2-METHYLPHENOL (O-CRESOL)		BDL	10	UG/L	
106-44-5	90	4-METHYLPHENOL (P-CRESOL)		BDL	10	UG/L	
88-75-5	66	2-NITROPHENOL		BDL	10	UG/L	
108-39-4	74	3-METHYLPHENOL (M-CRESOL)		BDL	10	UG/L	
100-02-7	93	4-NITROPHENOL		BDL	50	UG/L	
87-86-5	577	PENTACHLOROPHENOL		BDL	50	UG/L	
108-95-2	598	PHENOL		BDL	10	UG/L	
95-95-4	40	2,4,5-TRICHLOROPHENOL		BDL	10	UG/L	
88-06-2	42	2,4,6-TRICHLOROPHENOL		BDL	10	UG/L	
91-57-6	62	2-METHYLNAPHTHALENE		BDL	10	UG/L	
90-12-0	887	1-METHYLNAPHTHALENE		BDL	10	UG/L	
	1804	...					
	971	SURROGATE RECOVERY					
	972	————————					
367-12-4	59	2-FLUOROPHENOL	62			% RECOVERY	
4165-62-2	601	PHENOL-D5	35			% RECOVERY	
4165-60-0	504	NITROBENZENE-D5	103			% RECOVERY	
321-60-8	58	2-FLUOROBIPHENYL	99			% RECOVERY	
118-79-6	41	2,4,6-TRIBROMOPHENOL	127			% RECOVERY	
98904-43-9	701	TERPHENYL-D14	40			% RECOVERY	
	972	————————					
	1131	TENTATIVELY IDENTIFIED COMPOUNDS					
	1804	...					
	3320	NONE DETECTED					

Comment NA

Qualifiers

BDL Below Detection Limit

Comments to Laboratory (do not record)

6-LT AMBERS, 500ML HNO3 SQPL, 4-HCL VIALS

Need verbals ASAP, in 7 days or sooner.

Note the additional IDEM analytes for drinking water:

CS2, MEK, Acetone, 2-Nitropropane, 2-Hexanone

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

A781240

Lab Name: _____ Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: A781240

Sample wt/vol: 1000 (g/ml) ML Lab File ID: 4027F.D

Level: (low/med) LOW Date Received: _____

% Moisture: _____ decanted: (Y/N) N Date Extracted:

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 9/6/2007

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____

CONCENTRATION UNITS:

Number TICs found: 0 (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

Quantitation Report (Not Reviewed)

Data File : D:\F090607A\4027F.D
Acq On : 6 Sep 2007 10:34
Sample : A781240
Misc : 1000ML-1ML
MS Integration Params: RTEINT4.P
Quant Time: Sep 07 12:15:41 2007

Vial: 13
Operator: JCM
Inst : MSD #6
Multiplr: 1.00
Quant Results File: 8270F.RES

Quant Method : C:\MSDCHEM\1\METHODS\8270F.M (RTE Integrator)
Title : CLP BNA Calibration
Last Update : Fri Sep 07 04:02:55 2007
Response via : Initial Calibration
DataAcq Meth : 8270F

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	8.38	152	371349	40.00	ug/ml	-0.01
29) Naphthalene-d8	11.45	136	1548949	40.00	ug/ml	-0.02
47) Acenaphthene-d10	15.27	164	822923	40.00	ug/ml	-0.02
74) Phenanthrene-d10	18.25	188	1067666	40.00	ug/ml	-0.02
95) Chrysene-d12	23.58	240	691710	40.00	ug/ml	-0.01
115) Perylene-d12	26.23	264	389877	40.00	ug/ml	0.00
System Monitoring Compounds						
7) 2-Fluorophenol	5.67	112	1592320	123.64	ug/ml	-0.02
Spiked Amount 200.000	Range 21 - 100		Recovery = 61.82%			
10) Phenol-d5	7.82	99	1199157	70.62	ug/ml	-0.02
Spiked Amount 200.000	Range 10 - 94		Recovery = 35.31%			
13) 2-Chlorophenol-d4	7.97	132	2804948	197.55	ug/ml	0.00
Spiked Amount 200.000	Range 27 - 123		Recovery = 98.78%			
19) 1,2-Dichlorobenzene-d4	8.85	150	1128133	78.73	ug/ml	0.00
Spiked Amount 100.000	Range 32 - 220		Recovery = 78.73%			
30) Nitrobenzene-d5	9.87	82	1584634	103.03	ug/ml	0.00
Spiked Amount 100.000	Range 18 - 57		Recovery = 103.03%#			
54) 2-Fluorobiphenyl	13.94	172	2376352	98.53	ug/ml	0.00
Spiked Amount 100.000	Range 22 - 58		Recovery = 98.53%#			
77) 2,4,6-Tribromophenol	16.93	330	533657	254.82	ug/ml	0.00
Spiked Amount 200.000	Range 10 - 123		Recovery = 127.41%#			
100) Terphenyl-d14	21.54	244	650630	39.98	ug/ml	-0.02
Spiked Amount 100.000	Range 17 - 71		Recovery = 39.98%			

Target Compounds						Qvalue
37) Benzoic acid	11.45	105	2035	13.30	ug/ml#	1
59) Dimethylphthalate	15.27	163	133746	5.53	ug/ml#	1
61) 2,6-Dinitrotoluene	15.27	165	107047	19.36	ug/ml#	54

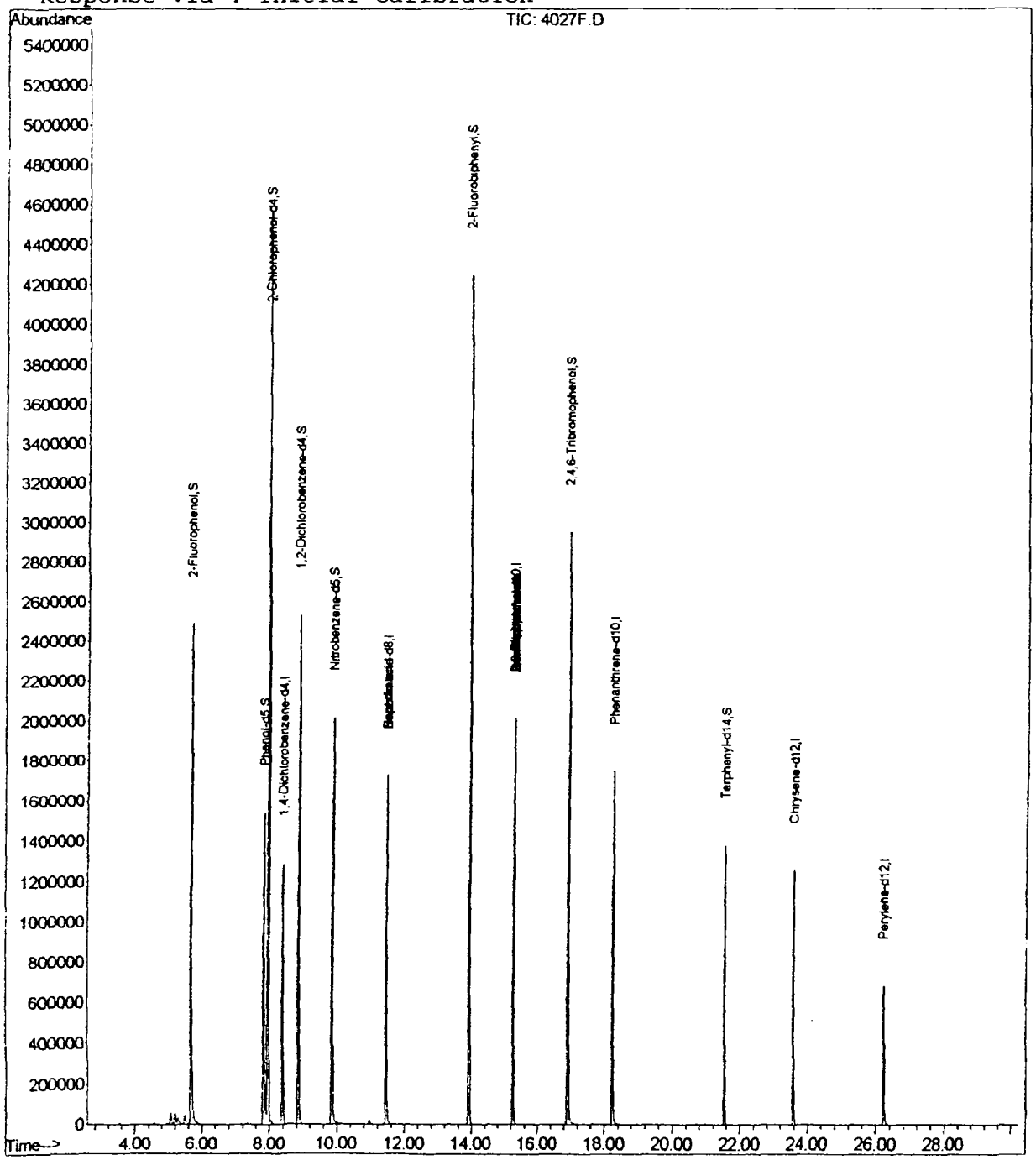
(#) = qualifier out of range (m) = manual integration

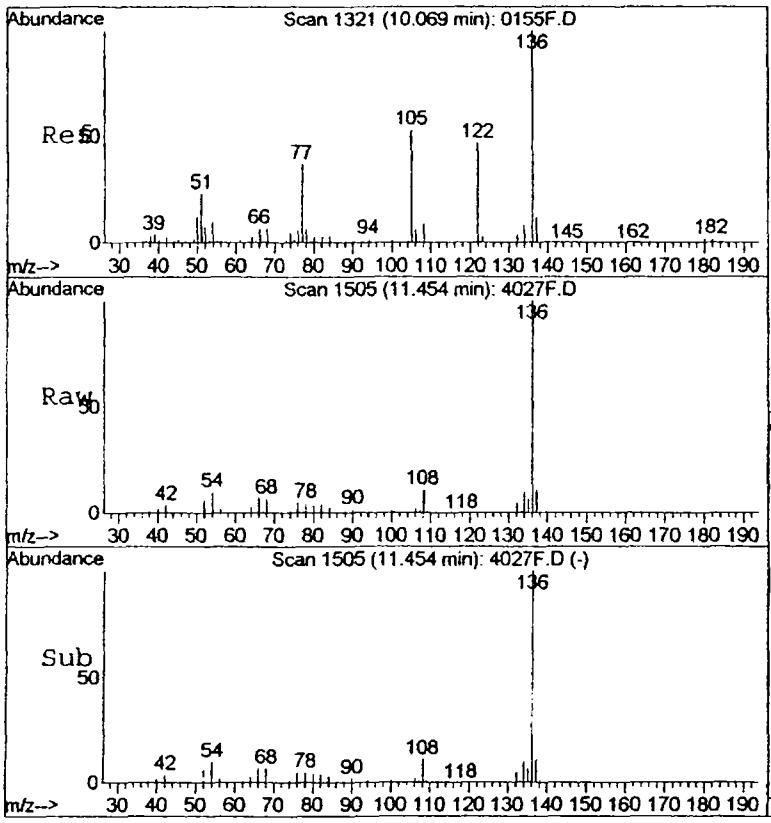
Quantitation Report (Not Reviewed)

Data File : D:\F090607A\4027F.D
Acq On : 6 Sep 2007 10:34
Sample : A781240
Misc : 1000ML-1ML
MS Integration Params: RTEINT4.P
Quant Time: Sep 7 12:15 2007

Vial: 13
Operator: JCM
Inst : MSD #6
Multiplr: 1.00
Quant Results File: 8270F.RES

Method : C:\MSDCHEM\1\METHODS\8270F.M (RTE Integrator)
Title : CLP BNA Calibration
Last Update : Fri Sep 07 04:02:55 2007
Response via : Initial Calibration

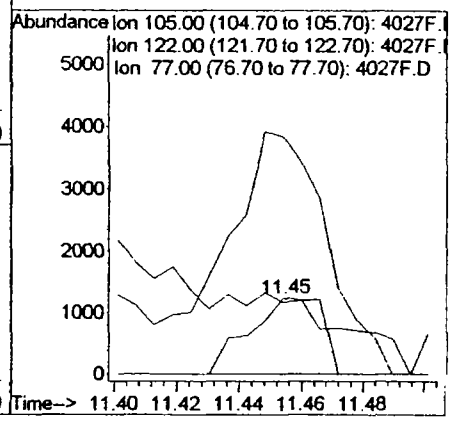


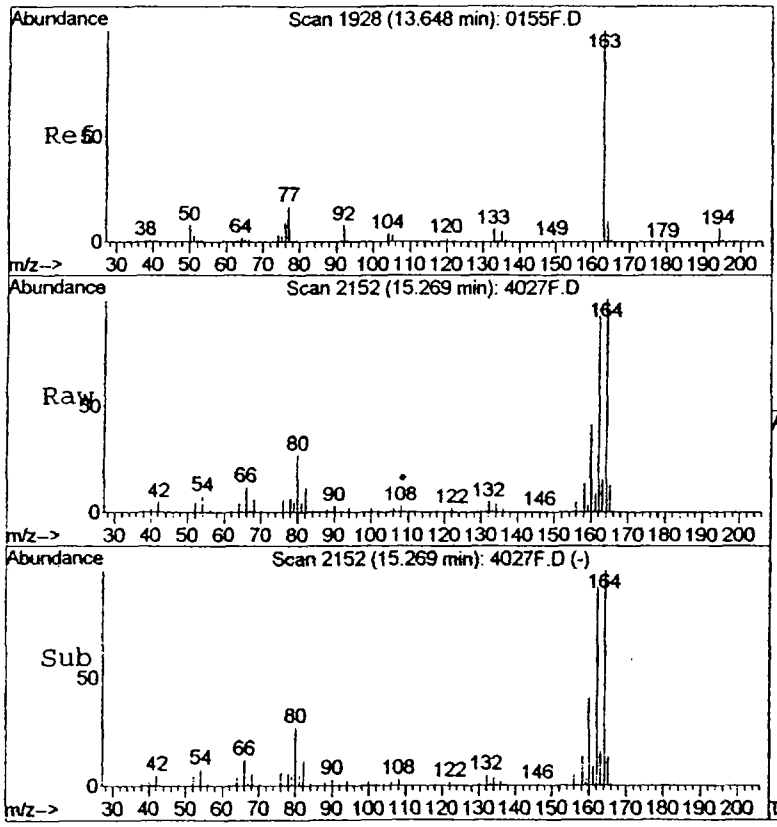


#37
Benzoic acid
Concen: 13.30 ug/ml
RT: 11.45 min Scan# 1505
Delta R.T. -0.00 min
Lab File: 4027F.D
Acq: 6 Sep 2007 10:34

Tgt Ion:105 Resp: 2035

Ion	Ratio	Lower	Upper
105	100		
122	0.0	0.0	0.0
77	440.4	33.6	50.4#

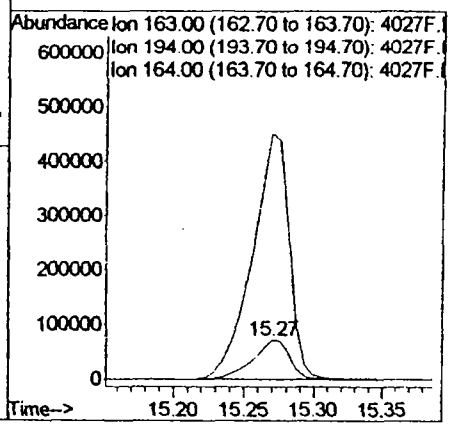


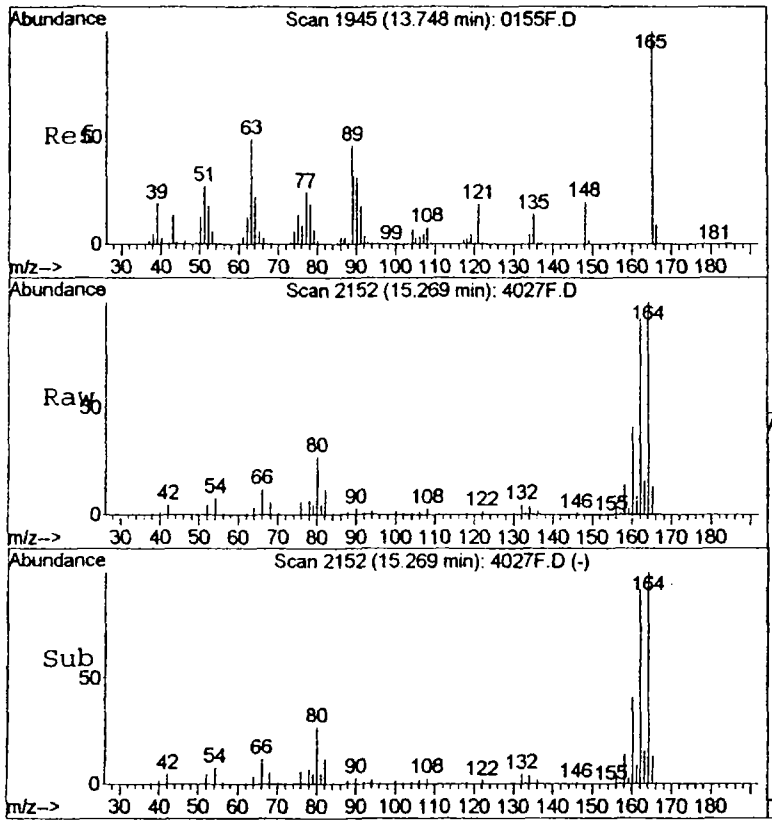


#59
Dimethylphthalate
Concen: 5.53 ug/ml
RT: 15.27 min Scan# 2152
Delta R.T. 0.32 min
Lab File: 4027F.D
Acq: 6 Sep 2007 10:34

Tgt Ion:163 Resp: 133746

Ion	Ratio	Lower	Upper
163	100		
194	0.0	3.6	5.4#
164	615.0	6.6	9.8#

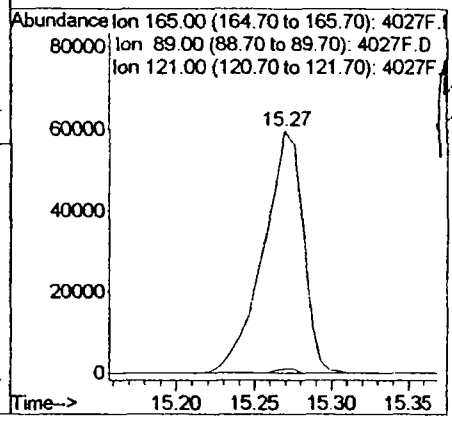




#61
2,6-Dinitrotoluene
Concen: 19.36 ug/ml
RT: 15.27 min Scan# 2152
Delta R.T. 0.21 min
Lab File: 4027F.D
Acq: 6 Sep 2007 10:34

Tgt Ion:165 Resp: 107047

Ion	Ratio	Lower	Upper
165	100		
89	1.0	23.1	34.7#
121	0.0	10.6	16.0#



LSC Area Percent Report

Data File : D:\F090607A\4027F.D
Acq On : 6 Sep 2007 10:34
Sample : A781240
Misc : 1000ML-1ML
MS Integration Params: Lscint.p

Vial: 13
Operator: JCM
Inst : MSD #6
Multiplr: 1.00

Method : C:\MSDCHEM\1\METHODS\8270F.M (RTE Integrator)
Title : CLP BNA Calibration
Smoothing : OFF
Sampling : 1
Start Thrs: 0.2
Stop Thrs : 0

Filtering: 5
Min Area: 1 % of largest Peak
Max Peaks: 100
Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

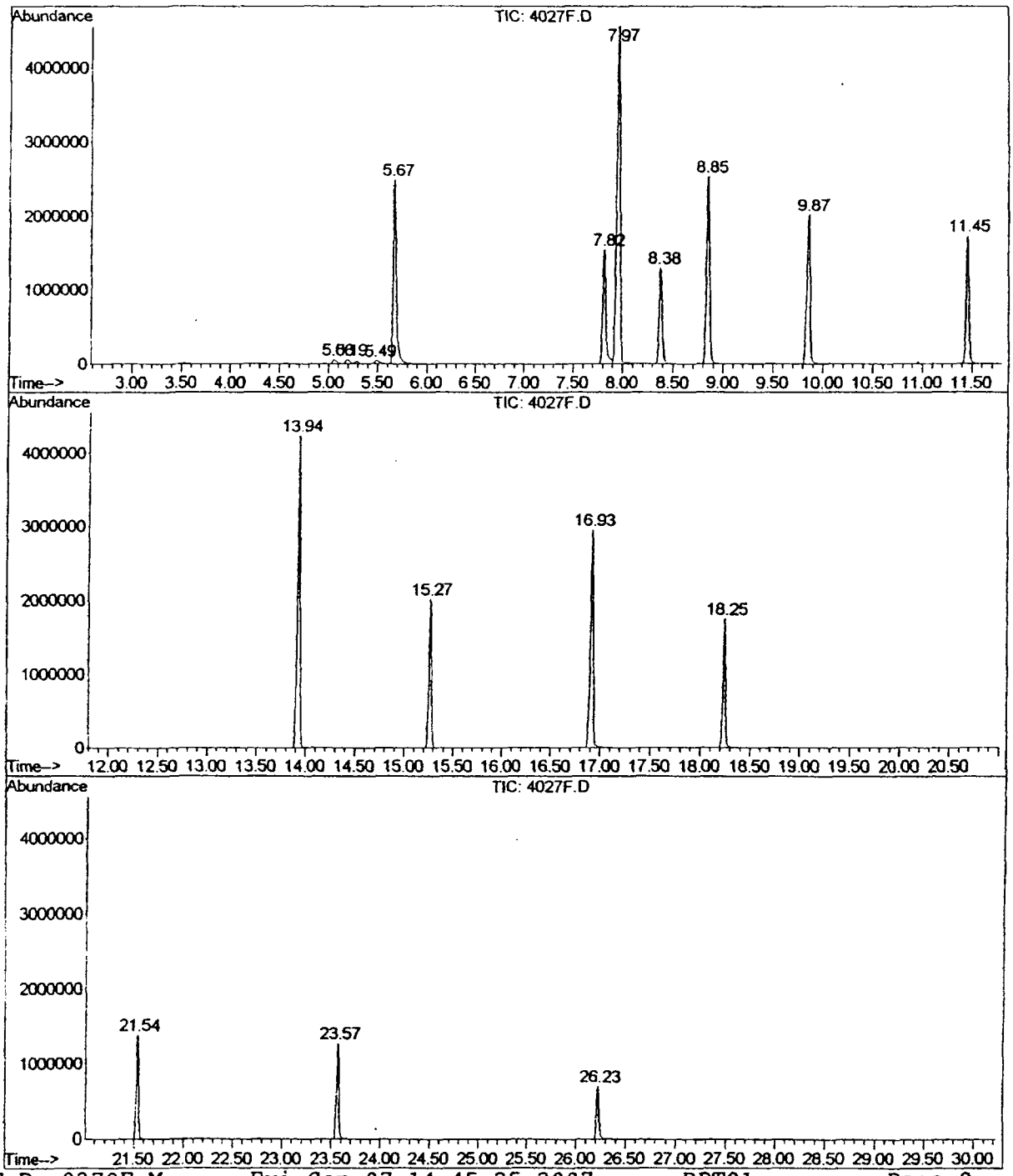
Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	5.056	413	420	435	rBV	59287	156014	1.44%	0.248%
2	5.192	435	443	452	rVV2	57539	161080	1.49%	0.256%
3	5.486	486	493	501	rBV	48428	136086	1.26%	0.216%
4	5.669	516	524	551	rBV	2491243	5787296	53.41%	9.182%
5	7.822	878	889	902	rBV	1544382	3495854	32.26%	5.547%
6	7.969	902	914	924	rVV	4567386	10835149	100.00%	17.192%
7	8.382	976	984	1000	rBV	1293971	2714698	25.05%	4.307%
8	8.854	1053	1064	1080	rBV2	2531808	5447449	50.28%	8.643%
9	9.868	1223	1236	1264	rBV	2020167	4881307	45.05%	7.745%
10	11.454	1497	1505	1529	rVB	1727999	3477960	32.10%	5.518%
11	13.937	1914	1926	1940	rBV	4246341	7741356	71.45%	12.283%
12	15.269	2142	2152	2169	rBV	2013645	3659966	33.78%	5.807%
13	16.926	2421	2433	2454	rBV	2953536	5964006	55.04%	9.463%
14	18.247	2641	2657	2672	rBV	1751893	2978863	27.49%	4.726%
15	21.538	3206	3215	3223	rBV	1381519	2205648	20.36%	3.500%
16	23.572	3552	3560	3578	rBV	1261384	2145724	19.80%	3.405%
17	26.226	4002	4010	4024	rBV	684582	1237328	11.42%	1.963%

Sum of corrected areas: 63025784

LSC Report - Integrated Chromatogram

File : D:\F090607A\4027F.D
Operator : JCM
Acquired : 6 Sep 2007 10:34 using AcqMethod 8270F
Instrument : MSD #6
Sample Name: A781240
Misc Info : 1000ML-1ML
Vial Number: 13
Quant File :8270F.RES (RTE Integrator)



Tentatively Identified Compound (LSC) summary

Operator ID: JCM Date Acquired: 6 Sep 2007 10:34
Data File: D:\F090607A\4027F.D
Name: A781240
Misc: 1000ML-1ML
Method: C:\MSDCHEM\1\METHODS\8270F.M (RTE Integrator)
Title: CLP BNA Calibration
Library Searched: C:\DATABASE\NBS75K.L

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--- #	RT	Resp	Conc

R524579 Heritage Environmental Services, LLC A781249

GC/MS SVOA

Method SW846-8270C
Sample Description LQ4582
Submitter IDEM - OLQ
Instrument 343 Channel 1

Test Code O531.1.0
Analyst 3196 C. WILLHITE
File 4028F.D Date/Time 06Sep07 11:12:00
Dilution Factor 1

Prep : 1000 mL 1.0 mL

CAS	PRM	Parameter	Concentration	RQL	Limit	Units	RT
83-32-9	97	ACENAPHTHENE		BDL	10	UG/L	
208-96-8	98	ACENAPHTHYLENE		BDL	10	UG/L	
120-12-7	128	ANTHRACENE		BDL	10	UG/L	
56-55-3	163	BENZ(A)ANTHRACENE		BDL	10	UG/L	
50-32-8	156	BENZO(A)PYRENE		BDL	10	UG/L	
205-99-2	157	BENZO(B)FLUORANTHENE		BDL	10	UG/L	
191-24-2	158	BENZO(G,H,I)PERYLENE		BDL	10	UG/L	
207-08-9	159	BENZO(K)FLUORANTHENE		BDL	10	UG/L	
100-51-6	160	BENZYL ALCOHOL		BDL	10	UG/L	
85-68-7	202	(BENZYLBUTYLPHTHALATE) BUTYLBENZYLPHTHAL		BDL	10	UG/L	
111-91-1	182	BIS(2-CHLOROETHOXY)METHANE		BDL	10	UG/L	
111-44-4	183	BIS(2-CHLOROETHYL)ETHER		BDL	10	UG/L	
108-60-1	184	BIS(2-CHLOROISOPROPYL)ETHER		BDL	10	UG/L	
117-81-7	185	BIS(2-ETHYLHEXYL)PHTHALATE		BDL	10	UG/L	
101-55-3	84	4-BROMODIPHENYL ETHER		BDL	10	UG/L	
86-74-8	213	CARBAZOLE		BDL	10	UG/L	
106-47-8	85	4-CHLOROANILINE		BDL	10	UG/L	
91-58-7	55	2-CHLORONAPHTHALENE		BDL	10	UG/L	
7005-72-3	88	4-CHLOROPHENYL-PHENYLETHER		BDL	10	UG/L	
218-01-9	245	CHRYSENE		BDL	10	UG/L	
53-70-3	294	DIBENZ(A,H)ANTHRACENE		BDL	10	UG/L	
132-64-9	293	DIBENZOFURAN		BDL	10	UG/L	
91-94-1	70	3,3'-DICHLOROBENZIDINE		BDL	20	UG/L	
84-66-2	306	DIETHYLPHTHALATE		BDL	10	UG/L	
131-11-3	310	DIMETHYLPHTHALATE		BDL	10	UG/L	
84-74-2	329	DI-N-BUTYLPHTHALATE		BDL	10	UG/L	
121-14-2	48	2,4-DINITROTOLUENE		BDL	10	UG/L	
606-20-2	50	2,6-DINITROTOLUENE		BDL	10	UG/L	
117-84-0	330	DI-N-OCTYLPHTHALATE		BDL	10	UG/L	
206-44-0	363	FLUORANTHENE		BDL	10	UG/L	
86-73-7	366	FLUORENE		BDL	10	UG/L	
118-74-1	397	HEXACHLOROBENZENE		BDL	10	UG/L	
87-68-3	398	HEXACHLOROBUTADIENE		BDL	10	UG/L	
77-47-4	399	HEXACHLOROCYCLOPENTADIENE		BDL	10	UG/L	
67-72-1	402	HEXACHLOROETHANE		BDL	10	UG/L	
193-39-5	413	INDENO(1,2,3-CD)PYRENE		BDL	10	UG/L	
78-59-1	431	ISOPHORONE		BDL	10	UG/L	
91-57-6	62	2-METHYLNAPHTHALENE		BDL	10	UG/L	
88-74-4	65	2-NITROANILINE (O-NITROANILINE)		BDL	50	UG/L	
99-09-2	76	3-NITROANILINE (M-NITROANILINE)		BDL	50	UG/L	
100-01-6	92	4-NITROANILINE (P-NITROANILINE)		BDL	50	UG/L	
98-95-3	503	NITROBENZENE		BDL	10	UG/L	
86-30-6	522	N-NITROSODIPHENYLAMINE		BDL	10	UG/L	
621-64-7	531	N-NITROSO-DI-N-PROPYLAMINE		BDL	10	UG/L	

UB 9-11-07
UB 9-11-07

GC/MS SVOA

CAS	PRM	Parameter	Concentration	RQL	Limit	Units	RT
85-01-8	597	PHENANTHRENE		BDL	10	UG/L	
129-00-0	624	PYRENE		BDL	10	UG/L	
120-82-1	16	1,2,4-TRICHLOROBENZENE		BDL	10	UG/L	
65-85-0	153	BENZOIC ACID		BDL	50	UG/L	
59-50-7	89	4-CHLORO-3-METHYLPHENOL		BDL	10	UG/L	
95-57-8	56	2-CHLOROPHENOL		BDL	10	UG/L	
120-83-2	44	2,4-DICHLOROPHENOL		BDL	10	UG/L	
105-67-9	46	2,4-DIMETHYLPHENOL		BDL	10	UG/L	
534-52-1	81	4,6-DINITRO-O-CRESOL		BDL	50	UG/L	
51-28-5	47	2,4-DINITROPHENOL		BDL	50	UG/L	
95-48-7	61	2-METHYLPHENOL (O-CRESOL)		BDL	10	UG/L	
106-44-5	90	4-METHYLPHENOL (P-CRESOL)		BDL	10	UG/L	
88-75-5	66	2-NITROPHENOL		BDL	10	UG/L	
108-39-4	74	3-METHYLPHENOL (M-CRESOL)		BDL	10	UG/L	
100-02-7	93	4-NITROPHENOL		BDL	50	UG/L	
87-86-5	577	PENTACHLOROPHENOL		BDL	50	UG/L	
108-95-2	598	PHENOL		BDL	10	UG/L	
95-95-4	40	2,4,5-TRICHLOROPHENOL		BDL	10	UG/L	
88-06-2	42	2,4,6-TRICHLOROPHENOL		BDL	10	UG/L	
91-57-6	62	2-METHYLNAPHTHALENE		BDL	10	UG/L	
90-12-0	887	1-METHYLNAPHTHALENE		BDL	10	UG/L	
	1804	...					
	971	SURROGATE RECOVERY					
	972	----------					
367-12-4	59	2-FLUOROPHENOL	65			% RECOVERY	
4165-62-2	601	PHENOL-D5	38			% RECOVERY	
4165-60-0	504	NITROBENZENE-D5	103			% RECOVERY	
321-60-8	58	2-FLUOROBIPHENYL	99			% RECOVERY	
118-79-6	41	2,4,6-TRIBROMOPHENOL	123			% RECOVERY	
98904-43-9	701	TERPHENYL-D14	249			% RECOVERY	
	972	----------					
	1131	TENTATIVELY IDENTIFIED COMPOUNDS					
	1804	...					
	3320	NONE DETECTED					

Comment NA

Qualifiers

BDL Below Detection Limit

Comments to Laboratory (do not record)

6-LT AMBERS, 500ML HNO3 SQPL, 12-HCL VIALS
Need verbals ASAP, in 7 days or sooner.
Note the additional IDEM analytes for drinking water:
CS2, MEK, Acetone, 2-Nitropropane, 2-Hexanone

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

A781249

Lab Name: _____ Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: A781249

Sample wt/vol: 1000 (g/ml) ML Lab File ID: 4028F.D

Level: (low/med) LOW Date Received: _____

% Moisture: _____ decanted: (Y/N) N Date Extracted:

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 9/6/2007

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____

CONCENTRATION UNITS:

Number TICs found: 0 (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

Quantitation Report (Not Reviewed)

Data File : D:\F090607A\4028F.D
Acq On : 6 Sep 2007 11:12
Sample : A781249
Misc : 1000ML-1ML
MS Integration Params: RTEINT4.P
Quant Time: Sep 07 12:15:45 2007

Vial: 14
Operator: JCM
Inst : MSD #6
Multiplr: 1.00
Quant Results File: 8270F.RES

Quant Method : C:\MSDCHEM\1\METHODS\8270F.M (RTE Integrator)
Title : CLP BNA Calibration
Last Update : Fri Sep 07 04:02:55 2007
Response via : Initial Calibration
DataAcq Meth : 8270F

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	8.38	152	354041	40.00	ug/ml	-0.01
29) Naphthalene-d8	11.45	136	1509613	40.00	ug/ml	-0.02
47) Acenaphthene-d10	15.27	164	787186	40.00	ug/ml	-0.02
74) Phenanthrene-d10	18.25	188	1051930	40.00	ug/ml	-0.02
95) Chrysene-d12	23.58	240	661490	40.00	ug/ml	-0.01
115) Perylene-d12	26.22	264	359320	40.00	ug/ml	-0.01
System Monitoring Compounds						
7) 2-Fluorophenol	5.68	112	1596466	130.02	ug/ml	-0.02
Spiked Amount 200.000	Range 21 - 100		Recovery = 65.01%			
10) Phenol-d5	7.82	99	1245487	76.93	ug/ml	-0.02
Spiked Amount 200.000	Range 10 - 94		Recovery = 38.47%			
13) 2-Chlorophenol-d4	7.96	132	2759619	203.86	ug/ml	0.00
Spiked Amount 200.000	Range 27 - 123		Recovery = 101.93%			
19) 1,2-Dichlorobenzene-d4	8.85	150	1084018	79.35	ug/ml	0.00
Spiked Amount 100.000	Range 32 - 220		Recovery = 79.35%			
30) Nitrobenzene-d5	9.87	82	1539160	102.68	ug/ml	0.00
Spiked Amount 100.000	Range 18 - 57		Recovery = 102.68%#			
54) 2-Fluorobiphenyl	13.94	172	2272499	98.50	ug/ml	0.00
Spiked Amount 100.000	Range 22 - 58		Recovery = 98.50%#			
77) 2,4,6-Tribromophenol	16.93	330	507546	245.98	ug/ml	0.00
Spiked Amount 200.000	Range 10 - 123		Recovery = 122.99%			
100) Terphenyl-d14	21.57	244	3881188	249.38	ug/ml	0.01
Spiked Amount 100.000	Range 17 - 71		Recovery = 249.38%#			

Target Compounds						Qvalue
37) Benzoic acid	11.45	105	2487	13.34	ug/ml#	1
59) Dimethylphthalate	15.27	163	127249	5.50	ug/ml#	1
61) 2,6-Dinitrotoluene	15.27	165	102174	19.32	ug/ml#	54
99) p,p'-DDE	21.57	246	69328	15.95	ug/ml#	44
103) Endrin aldehyde	21.57	67	6895	11.06	ug/ml#	64

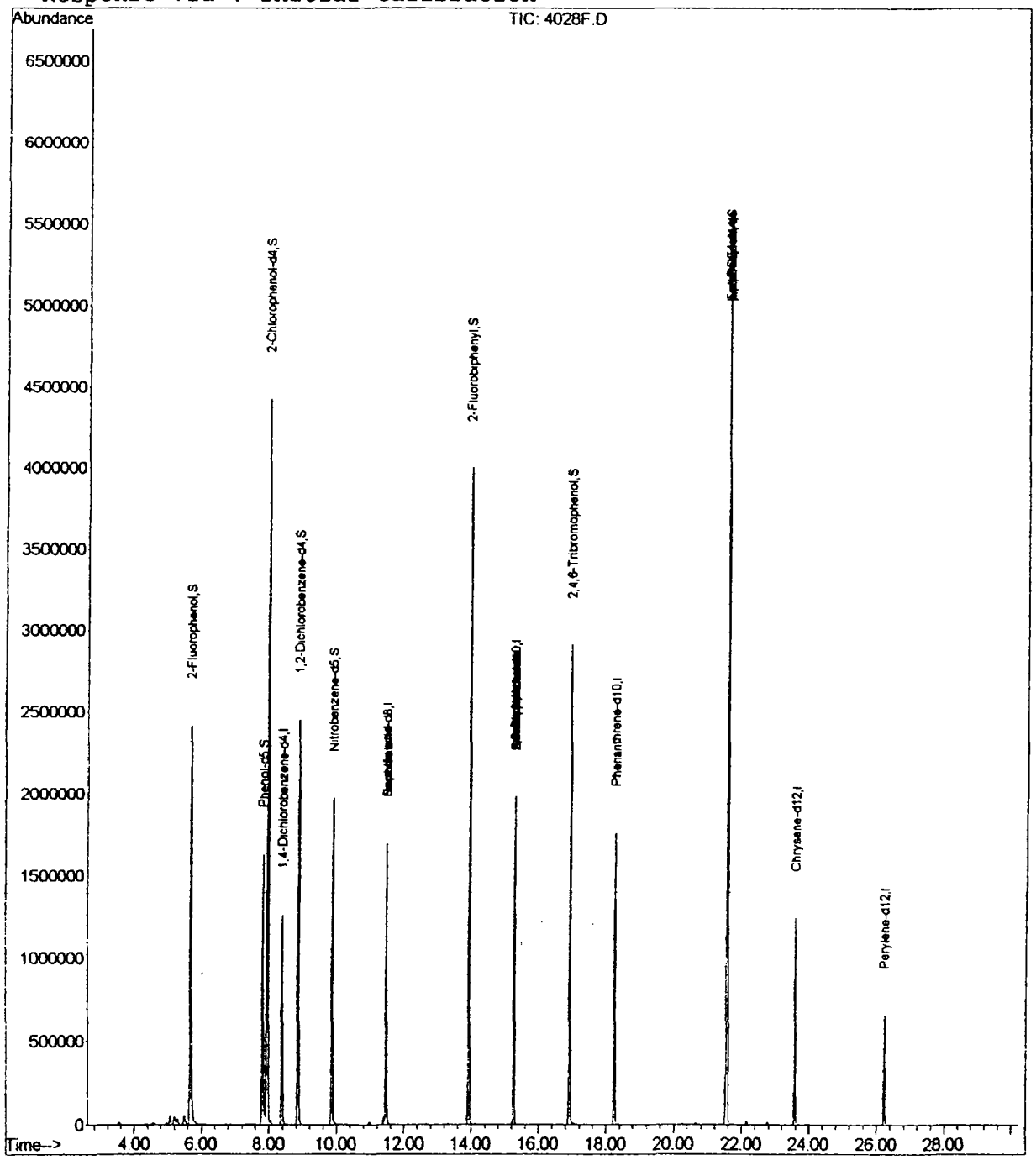
(#) = qualifier out of range (m) = manual integration

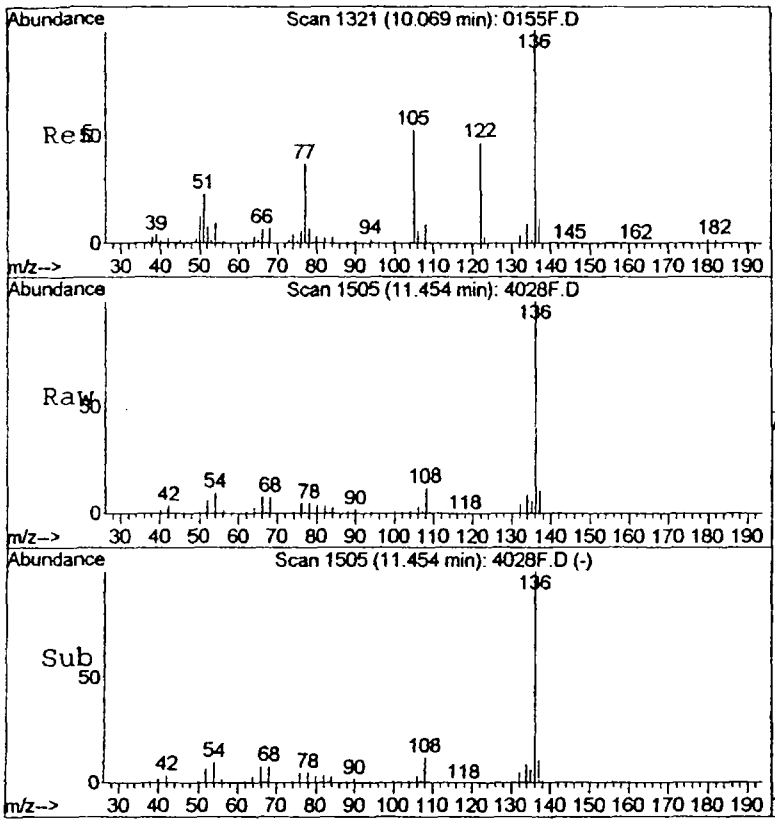
Quantitation Report (Not Reviewed)

Data File : D:\F090607A\4028F.D
Acq On : 6 Sep 2007 11:12
Sample : A781249
Misc : 1000ML-1ML
MS Integration Params: RTEINT4.P
Quant Time: Sep 7 12:15 2007

Vial: 14
Operator: JCM
Inst : MSD #6
Multiplr: 1.00
Quant Results File: 8270F.RES

Method : C:\MSDCHEM\1\METHODS\8270F.M (RTE Integrator)
Title : CLP BNA Calibration
Last Update : Fri Sep 07 04:02:55 2007
Response via : Initial Calibration

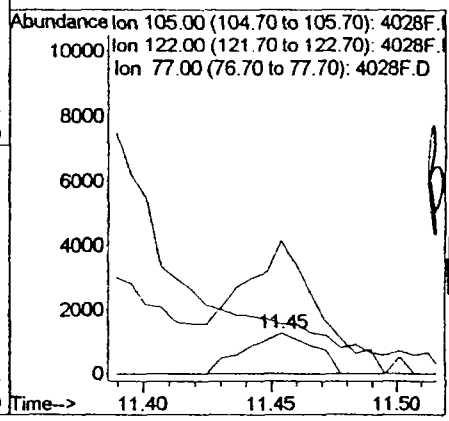


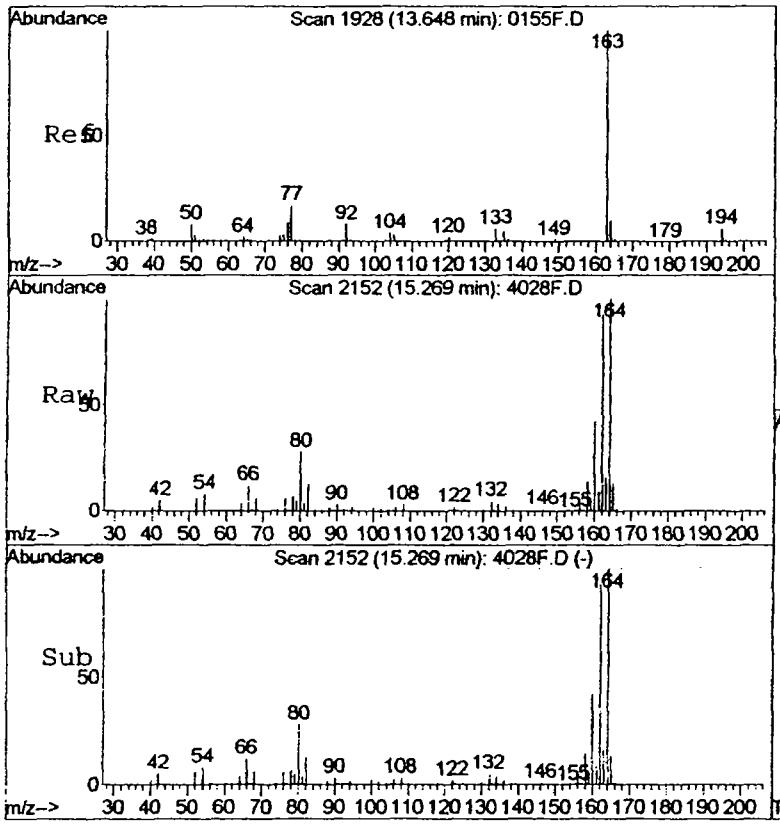


#37
Benzoic acid
Concen: 13.34 ug/ml
RT: 11.45 min Scan# 1505
Delta R.T. -0.00 min
Lab File: 4028F.D
Acq: 6 Sep 2007 11:12

Tgt Ion:105 Resp: 2487

Ion	Ratio	Lower	Upper
105	100		
122	0.0	0.0	0.0
77	366.3	33.6	50.4#

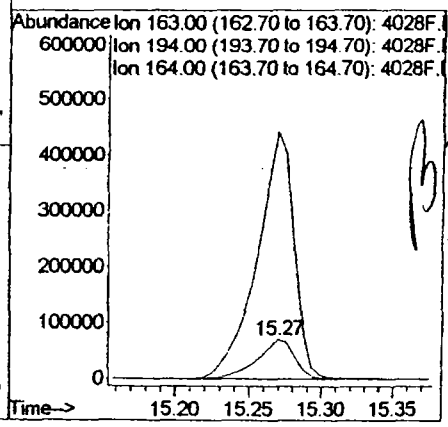


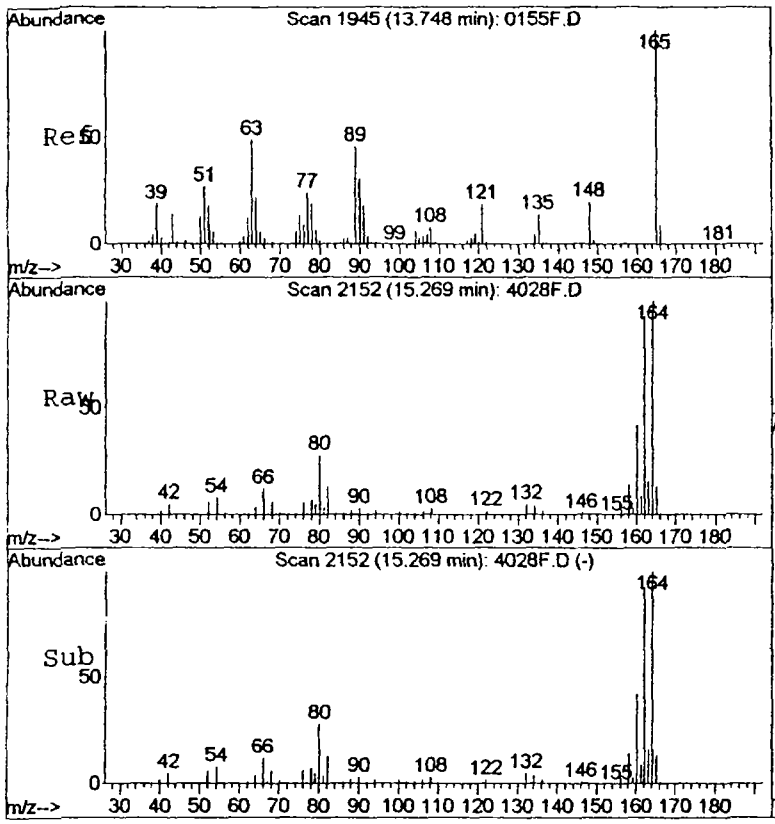


#59
Dimethylphthalate
Concen: 5.50 ug/ml
RT: 15.27 min Scan# 2152
Delta R.T. 0.32 min
Lab File: 4028F.D
Acq: 6 Sep 2007 11:12

Tgt Ion:163 Resp: 127249

Ion	Ratio	Lower	Upper
163	100		
194	0.0	3.6	5.4#
164	618.1	6.6	9.8#

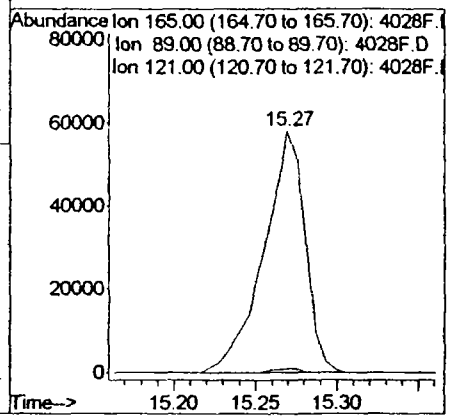


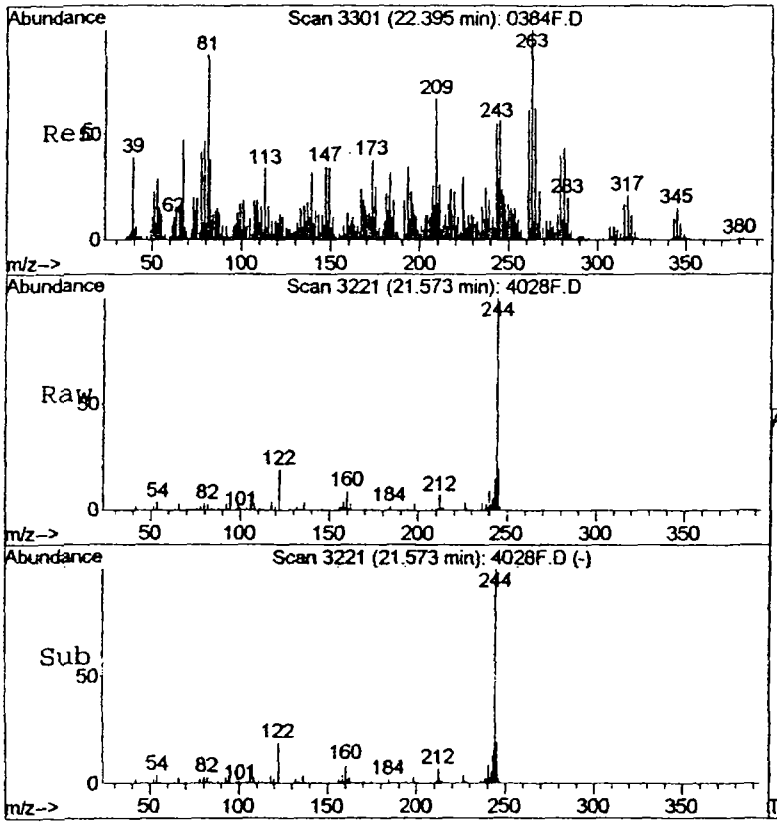


#61
2,6-Dinitrotoluene
Concen: 19.32 ug/ml
RT: 15.27 min Scan# 2152
Delta R.T. 0.21 min
Lab File: 4028F.D
Acq: 6 Sep 2007 11:12

Tgt Ion:165 Resp: 102174

Ion	Ratio	Lower	Upper
165	100		
89	1.1	23.1	34.7#
121	0.0	10.6	16.0#

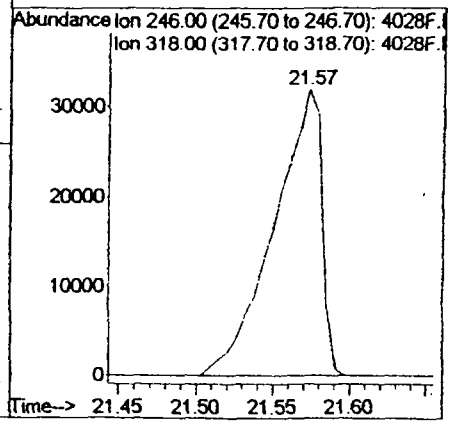


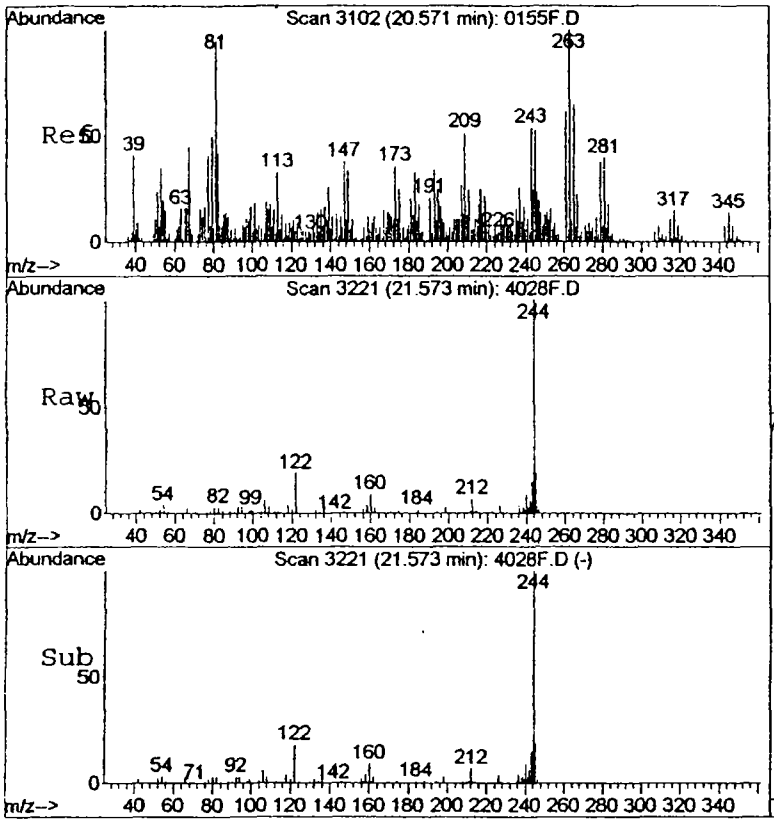


#99
p,p'-DDE
Concen: 15.95 ug/ml
RT: 21.57 min Scan# 3221
Delta R.T. 0.04 min
Lab File: 4028F.D
Acq: 6 Sep 2007 11:12

Tgt Ion:246 Resp: 69328

Ion	Ratio	Lower	Upper
246	100		
318	0.0	24.2	36.2#

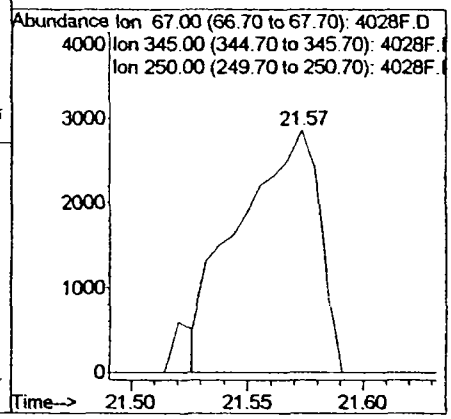




#103
Endrin aldehyde
Concen: 11.06 ug/ml
RT: 21.57 min Scan# 3221
Delta R.T. -0.38 min
Lab File: 4028F.D
Acq: 6 Sep 2007 11:12

Tgt Ion: 67 Resp: 6895

Ion	Ratio	Lower	Upper
67	100		
345	0.0	11.0	16.6#
250	0.0	13.0	19.4#



LSC Area Percent Report

Data File : D:\F090607A\4028F.D
Acq On : 6 Sep 2007 11:12
Sample : A781249
Misc : 1000ML-1ML
MS Integration Params: Lscint.p

Vial: 14
Operator: JCM
Inst : MSD #6
Multiplr: 1.00

Method : C:\MSDCHEM\1\METHODS\8270F.M (RTE Integrator)
Title : CLP BNA Calibration
Smoothing : OFF
Sampling : 1
Start Thrs: 0.2
Stop Thrs : 0

Filtering: 5
Min Area: 1 % of largest Peak
Max Peaks: 100
Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

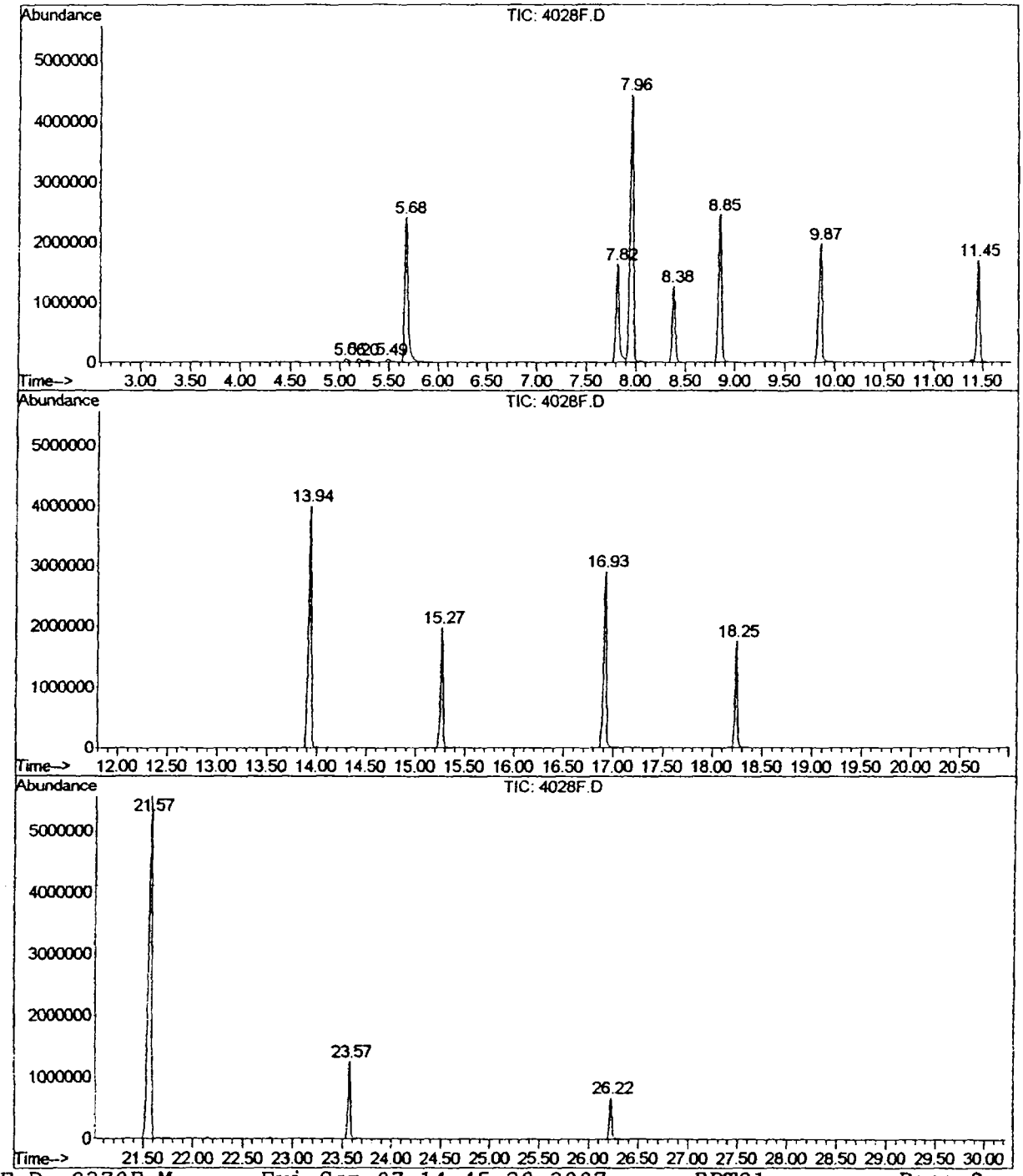
Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	5.062	414	421	435	rBV2	50274	142235	1.14%	0.196%
2	5.197	435	444	452	rVV	52428	149146	1.19%	0.206%
3	5.486	486	493	501	rBV	51208	149512	1.20%	0.206%
4	5.675	517	525	546	rBV	2414587	5901600	47.18%	8.140%
5	7.816	877	888	902	rBV	1634245	3718157	29.72%	5.128%
6	7.963	902	913	923	rVV	4428581	10779726	86.17%	14.868%
7	8.382	975	984	1001	rBV	1264257	2631019	21.03%	3.629%
8	8.854	1054	1064	1080	rBV2	2453396	5365287	42.89%	7.400%
9	9.868	1223	1236	1257	rBV	1975195	4756859	38.02%	6.561%
10	11.454	1497	1505	1516	rVB	1687146	3378854	27.01%	4.660%
11	13.937	1914	1926	1940	rBV	4002864	7452690	59.57%	10.279%
12	15.269	2141	2152	2162	rBV	1985110	3534499	28.25%	4.875%
13	16.926	2421	2433	2456	rBV	2915381	5878658	46.99%	8.108%
14	18.247	2645	2657	2671	rBV	1763243	2933209	23.45%	4.046%
15	21.573	3204	3221	3225	rBV	5582198	12509824	100.00%	17.255%
16	23.572	3553	3560	3577	rVB	1248986	2082692	16.65%	2.873%
17	26.220	4002	4009	4028	rBV	658815	1137143	9.09%	1.568%

Sum of corrected areas: 72501110

LSC Report - Integrated Chromatogram

File : D:\F090607A\4028F.D
Operator : JCM
Acquired : 6 Sep 2007 11:12 using AcqMethod 8270F
Instrument : MSD #6
Sample Name: A781249
Misc Info : 1000ML-1ML
Vial Number: 14
Quant File :8270F.RES (RTE Integrator)



Tentatively Identified Compound (LSC) summary

Operator ID: JCM Date Acquired: 6 Sep 2007 11:12
Data File: D:\F090607A\4028F.D
Name: A781249
Misc: 1000ML-1ML
Method: C:\MSDCHEM\1\METHODS\8270F.M (RTE Integrator)
Title: CLP BNA Calibration
Library Searched: C:\DATABASE\NBS75K.L

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--- #	RT	Resp	Conc

R524579 Heritage Environmental Services, LLC A781250

GC/MS SVOA

Method SW846-8270C
Sample Description LQ4583
Submitter IDEM - OLQ
Instrument 343 Channel 1

Test Code O531.1.0
Analyst 3196 C. WILLHITE
File 4029F.D Date/Time 06Sep07 11:51:00
Dilution Factor 1

Prep : 1000 mL 1.0 mL

CAS	PRM	Parameter	Concentration	RQL	Limit	Units	RT
83-32-9	97	ACENAPHTHENE		BDL	10	UG/L	
208-96-8	98	ACENAPHTHYLENE		BDL	10	UG/L	
120-12-7	128	ANTHRACENE		BDL	10	UG/L	
56-55-3	163	BENZ(A)ANTHRACENE		BDL	10	UG/L	
50-32-8	156	BENZO(A)PYRENE		BDL	10	UG/L	
205-99-2	157	BENZO(B)FLUORANTHENE		BDL	10	UG/L	
191-24-2	158	BENZO(G,H,I)PERYLENE		BDL	10	UG/L	
207-08-9	159	BENZO(K)FLUORANTHENE		BDL	10	UG/L	
100-51-6	160	BENZYL ALCOHOL		BDL	10	UG/L	
85-68-7	202	(BENZYLBUTYLPHTHALATE) BUTYLBENZYLPHTHAL		BDL	10	UG/L	
111-91-1	182	BIS(2-CHLOROETHOXY)METHANE		BDL	10	UG/L	
111-44-4	183	BIS(2-CHLOROETHYL)ETHER		BDL	10	UG/L	
108-60-1	184	BIS(2-CHLOROISOPROPYL)ETHER		BDL	10	UG/L	
117-81-7	185	BIS(2-ETHYLHEXYL)PHTHALATE		BDL	10	UG/L	
101-55-3	84	4-BROMODIPHENYL ETHER		BDL	10	UG/L	
86-74-8	213	CARBAZOLE		BDL	10	UG/L	
106-47-8	85	4-CHLOROANILINE		BDL	10	UG/L	
91-58-7	55	2-CHLORONAPHTHALENE		BDL	10	UG/L	
7005-72-3	88	4-CHLOROPHENYL-PHENYLETHER		BDL	10	UG/L	
218-01-9	245	CHRYSENE		BDL	10	UG/L	
53-70-3	294	DIBENZ(A,H)ANTHRACENE		BDL	10	UG/L	
132-64-9	293	DIBENZOFURAN		BDL	10	UG/L	
91-94-1	70	3,3'-DICHLOROBENZIDINE		BDL	20	UG/L	
84-66-2	306	DIETHYLPHTHALATE		BDL	10	UG/L	
131-11-3	310	DIMETHYLPHTHALATE		BDL	10	UG/L	
84-74-2	329	DI-N-BUTYLPHTHALATE		BDL	10	UG/L	
121-14-2	48	2,4-DINITROTOLUENE		BDL	10	UG/L	
606-20-2	50	2,6-DINITROTOLUENE		BDL	10	UG/L	
117-84-0	330	DI-N-OCTYLPHTHALATE		BDL	10	UG/L	
206-44-0	363	FLUORANTHENE		BDL	10	UG/L	
86-73-7	366	FLUORENE		BDL	10	UG/L	
118-74-1	397	HEXACHLOROBENZENE		BDL	10	UG/L	
87-68-3	398	HEXACHLOROBUTADIENE		BDL	10	UG/L	
77-47-4	399	HEXACHLOROCYCLOPENTADIENE		BDL	10	UG/L	
67-72-1	402	HEXACHLOROETHANE		BDL	10	UG/L	
193-39-5	413	INDENO(1,2,3-CD)PYRENE		BDL	10	UG/L	
78-59-1	431	ISOPHORONE		BDL	10	UG/L	
91-57-6	62	2-METHYLNAPHTHALENE		BDL	10	UG/L	
88-74-4	65	2-NITROANILINE (O-NITROANILINE)		BDL	50	UG/L	
99-09-2	76	3-NITROANILINE (M-NITROANILINE)		BDL	50	UG/L	
100-01-6	92	4-NITROANILINE (P-NITROANILINE)		BDL	50	UG/L	
98-95-3	503	NITROBENZENE		BDL	10	UG/L	
86-30-6	522	N-NITROSODIPHENYLAMINE		BDL	10	UG/L	
621-64-7	531	N-NITROSO-DI-N-PROPYLAMINE		BDL	10	UG/L	

/ cts 9-11-07

VO 9-11-07

GC/MS SVOA

CAS	PRM	Parameter	Concentration	RQL	Limit	Units	RT
85-01-8	597	PHENANTHRENE		BDL	10	UG/L	
129-00-0	624	PYRENE		BDL	10	UG/L	
120-82-1	16	1,2,4-TRICHLOROBENZENE		BDL	10	UG/L	
65-85-0	153	BENZOIC ACID		BDL	50	UG/L	
59-50-7	89	4-CHLORO-3-METHYLPHENOL		BDL	10	UG/L	
95-57-8	56	2-CHLOROPHENOL		BDL	10	UG/L	
120-83-2	44	2,4-DICHLOROPHENOL		BDL	10	UG/L	
105-67-9	46	2,4-DIMETHYLPHENOL		BDL	10	UG/L	
534-52-1	81	4,6-DINITRO-O-CRESOL		BDL	50	UG/L	
51-28-5	47	2,4-DINITROPHENOL		BDL	50	UG/L	
95-48-7	61	2-METHYLPHENOL (O-CRESOL)		BDL	10	UG/L	
106-44-5	90	4-METHYLPHENOL (P-CRESOL)		BDL	10	UG/L	
88-75-5	66	2-NITROPHENOL		BDL	10	UG/L	
108-39-4	74	3-METHYLPHENOL (M-CRESOL)		BDL	10	UG/L	
100-02-7	93	4-NITROPHENOL		BDL	50	UG/L	
87-86-5	577	PENTACHLOROPHENOL		BDL	50	UG/L	
108-95-2	598	PHENOL		BDL	10	UG/L	
95-95-4	40	2,4,5-TRICHLOROPHENOL		BDL	10	UG/L	
88-06-2	42	2,4,6-TRICHLOROPHENOL		BDL	10	UG/L	
91-57-6	62	2-METHYLNAPHTHALENE		BDL	10	UG/L	
90-12-0	887	1-METHYLNAPHTHALENE		BDL	10	UG/L	
	1804	...					
	971	SURROGATE RECOVERY					
	972	----------					
367-12-4	59	2-FLUOROPHENOL	61			% RECOVERY	
4165-62-2	601	PHENOL-D5	37			% RECOVERY	
4165-60-0	504	NITROBENZENE-D5	97			% RECOVERY	
321-60-8	58	2-FLUOROBIPHENYL	93			% RECOVERY	
118-79-6	41	2,4,6-TRIBROMOPHENOL	117			% RECOVERY	
98904-43-9	701	TERPHENYL-D14	112			% RECOVERY	
	972	----------					
	1131	TENTATIVELY IDENTIFIED COMPOUNDS					
	1804	...					
	3320	NONE DETECTED					

Comment NA

Qualifiers

BDL Below Detection Limit

Comments to Laboratory (do not record)

6-LT AMBERS, 500ML HNO3 SQPL, 12-HCL VIALS
Need verbals ASAP, in 7 days or sooner.
Note the additional IDEM analytes for drinking water:
CS2, MEK, Acetone, 2-Nitropropane, 2-Hexanone

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

A781250

Lab Name: _____ Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER — Lab Sample ID: A781250

Sample wt/vol: 1000 (g/ml) ML — Lab File ID: 4029F.D

Level: (low/med) LOW — Date Received: _____

% Moisture: _____ decanted: (Y/N) N — Date Extracted:

Concentrated Extract Volume: 1000 (uL) — Date Analyzed: 9/6/2007

Injection Volume: 1.0 (uL) — Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____

Number TICs found: 0 — CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

Quantitation Report (Not Reviewed)

Data File : D:\F090607A\4029F.D
Acq On : 6 Sep 2007 11:51
Sample : A781250
Misc : 1000ML-1ML
MS Integration Params: RTEINT4.P
Quant Time: Sep 07 12:15:50 2007

Vial: 15
Operator: JCM
Inst : MSD #6
Multiplr: 1.00
Quant Results File: 8270F.RES

Quant Method : C:\MSDCHEM\1\METHODS\8270F.M (RTE Integrator)
Title : CLP BNA Calibration
Last Update : Fri Sep 07 04:02:55 2007
Response via : Initial Calibration
DataAcq Meth : 8270F

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	8.38	152	342149	40.00	ug/ml	-0.01
29) Naphthalene-d8	11.45	136	1477578	40.00	ug/ml	-0.02
47) Acenaphthene-d10	15.28	164	796460	40.00	ug/ml	-0.01
74) Phenanthrene-d10	18.25	188	1050317	40.00	ug/ml	-0.02
95) Chrysene-d12	23.57	240	610407	40.00	ug/ml	-0.02
115) Perylene-d12	26.22	264	322604	40.00	ug/ml	-0.01
System Monitoring Compounds						
7) 2-Fluorophenol	5.67	112	1442426	121.56	ug/ml	-0.02
Spiked Amount 200.000	Range 21 - 100		Recovery = 60.78%			
10) Phenol-d5	7.82	99	1161142	74.21	ug/ml	-0.02
Spiked Amount 200.000	Range 10 - 94		Recovery = 37.10%			
13) 2-Chlorophenol-d4	7.97	132	2517335	192.42	ug/ml	0.00
Spiked Amount 200.000	Range 27 - 123		Recovery = 96.21%			
19) 1,2-Dichlorobenzene-d4	8.85	150	993381	75.24	ug/ml	0.00
Spiked Amount 100.000	Range 32 - 220		Recovery = 75.24%			
30) Nitrobenzene-d5	9.86	82	1423433	97.02	ug/ml	-0.01
Spiked Amount 100.000	Range 18 - 57		Recovery = 97.02%#			
54) 2-Fluorobiphenyl	13.94	172	2167188	92.84	ug/ml	0.00
Spiked Amount 100.000	Range 22 - 58		Recovery = 92.84%#			
77) 2,4,6-Tribromophenol	16.93	330	483443	234.66	ug/ml	0.00
Spiked Amount 200.000	Range 10 - 123		Recovery = 117.33%			
100) Terphenyl-d14	21.56	244	1603247	111.64	ug/ml	0.00
Spiked Amount 100.000	Range 17 - 71		Recovery = 111.64%#			

Target Compounds						Qvalue
37) Benzoic acid	11.46	105	3082	13.39	ug/ml#	1
59) Dimethylphthalate	15.28	163	129431	5.53	ug/ml#	1
61) 2,6-Dinitrotoluene	15.28	165	102547	19.16	ug/ml#	54
99) p,p'-DDE	21.56	246	29135	7.27	ug/ml#	44
103) Endrin aldehyde	21.55	67	2924	5.08	ug/ml#	64

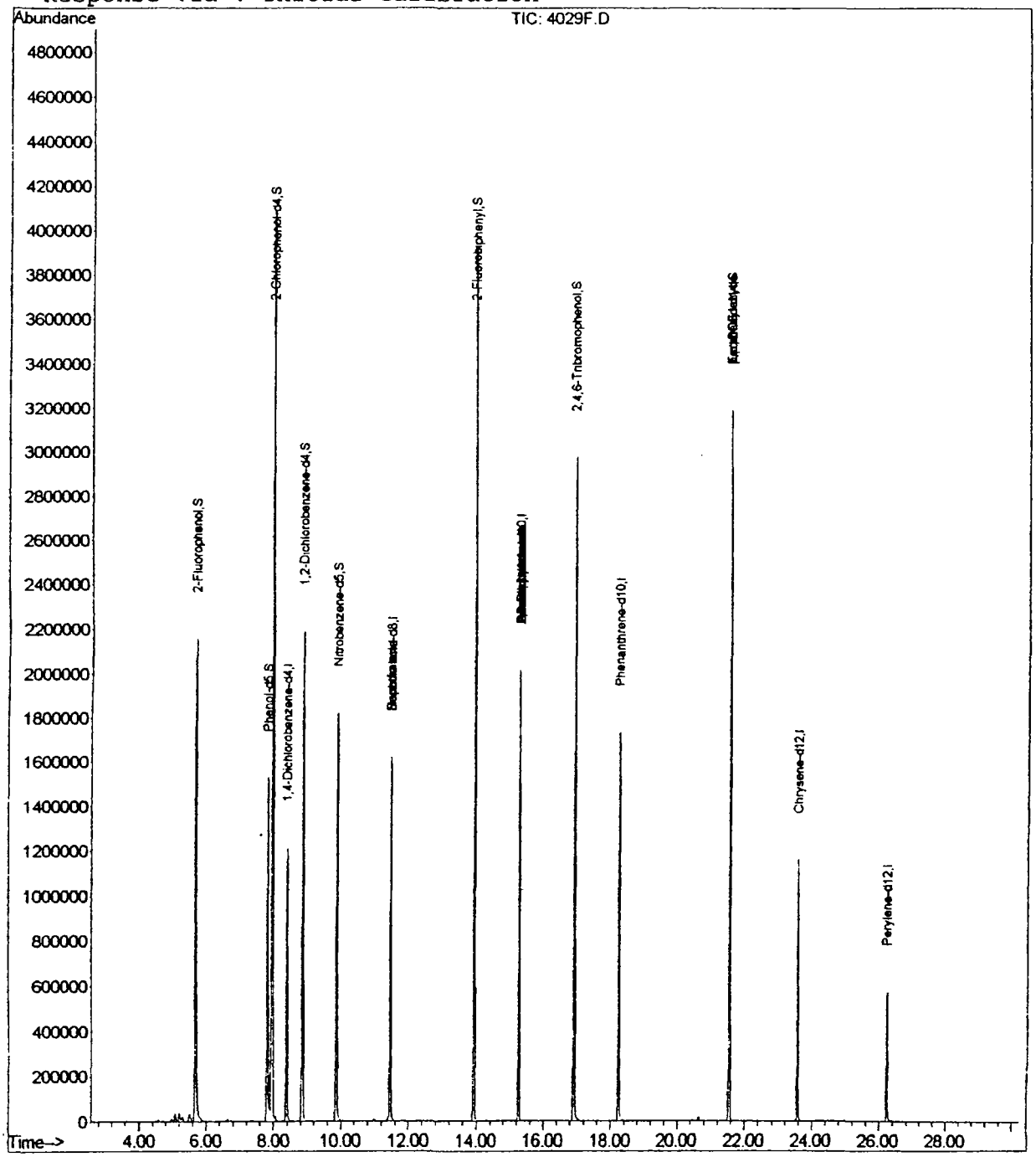
(#) = qualifier out of range (m) = manual integration

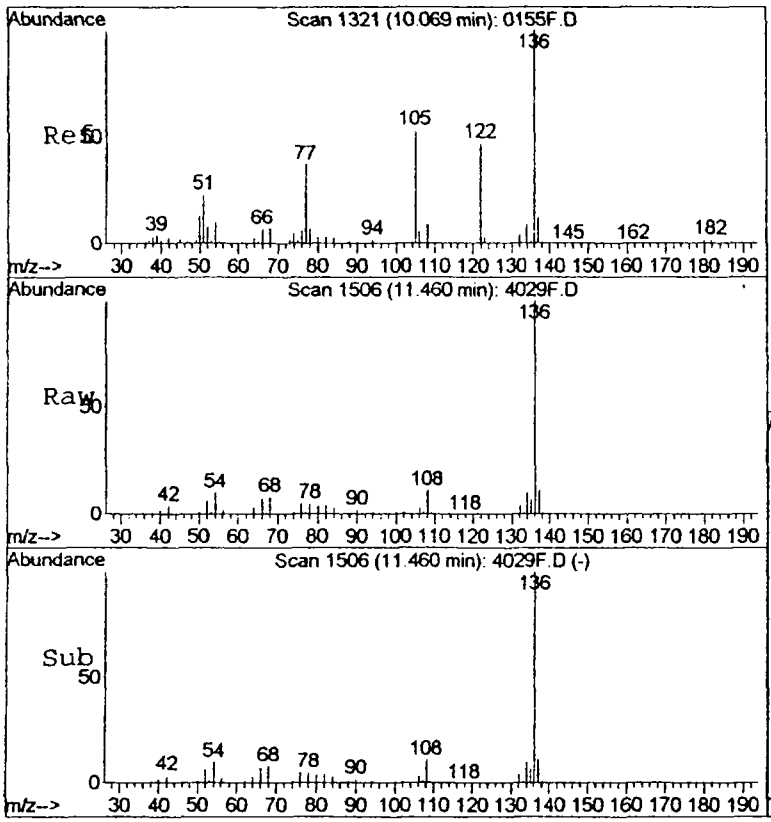
Quantitation Report (Not Reviewed)

Data File : D:\F090607A\4029F.D
Acq On : 6 Sep 2007 11:51
Sample : A781250
Misc : 1000ML-1ML
MS Integration Params: RTEINT4.P
Quant Time: Sep 7 12:15 2007

Vial: 15
Operator: JCM
Inst : MSD #6
Multiplr: 1.00
Quant Results File: 8270F.RES

Method : C:\MSDCHEM\1\METHODS\8270F.M (RTE Integrator)
Title : CLP BNA Calibration
Last Update : Fri Sep 07 04:02:55 2007
Response via : Initial Calibration

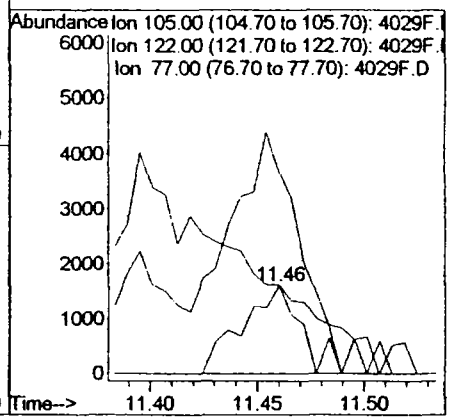


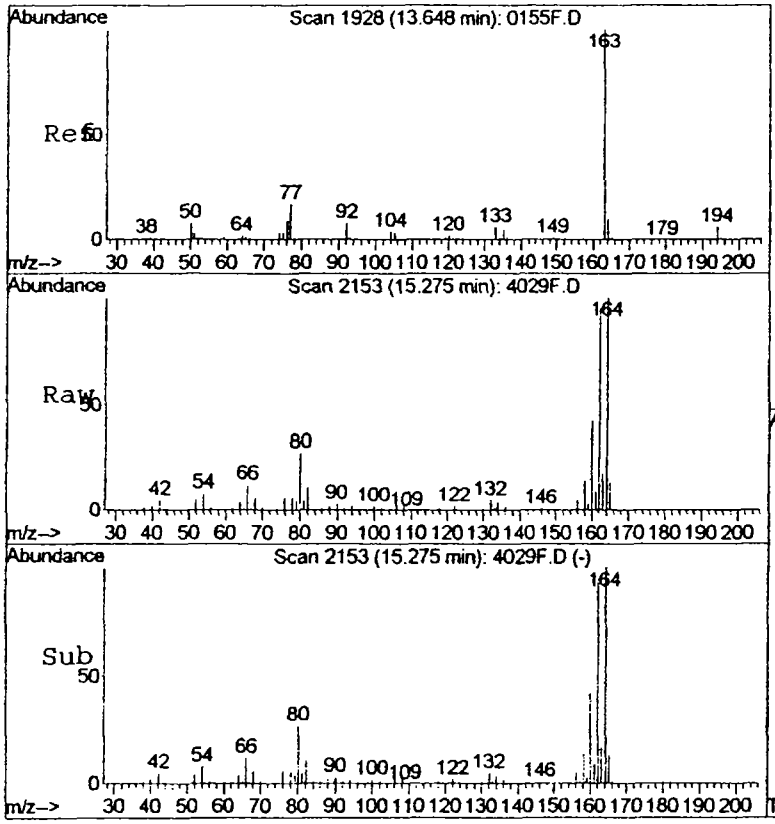


#37
Benzoic acid
Concen: 13.39 ug/ml
RT: 11.46 min Scan# 1506
Delta R.T. 0.00 min
Lab File: 4029F.D
Acq: 6 Sep 2007 11:51

Tgt Ion:105 Resp: 3082

Ion	Ratio	Lower	Upper
105	100		
122	0.0	0.0	0.0
77	327.5	33.6	50.4#

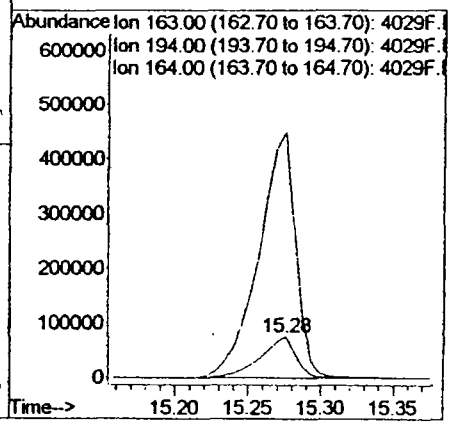


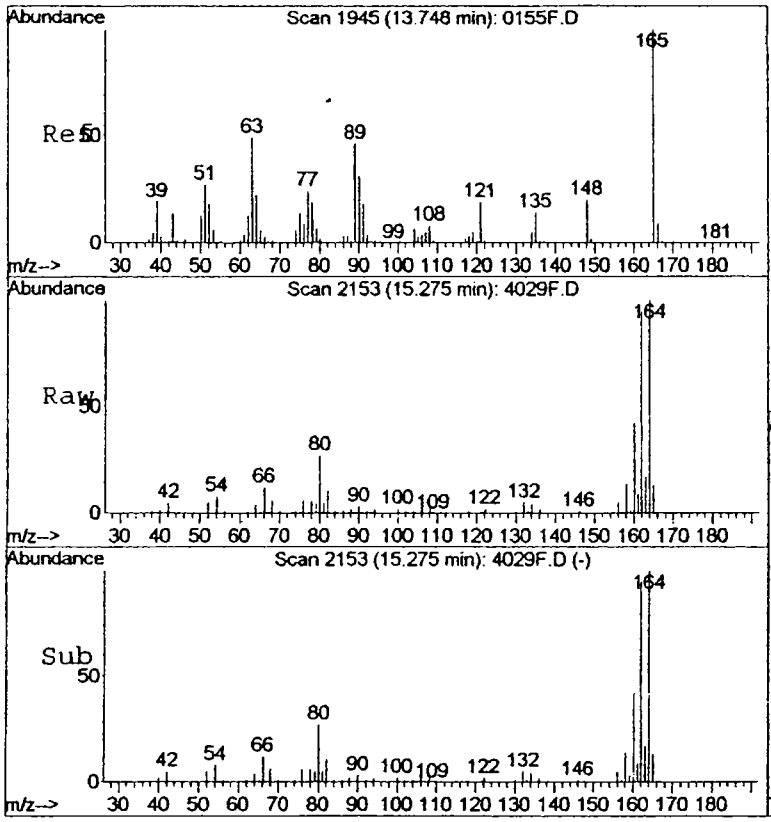


#59
Dimethylphthalate
Concen: 5.53 ug/ml
RT: 15.28 min Scan# 2153
Delta R.T. 0.32 min
Lab File: 4029F.D
Acq: 6 Sep 2007 11:51

Tgt Ion:163 Resp: 129431

Ion	Ratio	Lower	Upper
163	100		
194	0.0	3.6	5.4#
164	615.1	6.6	9.8#

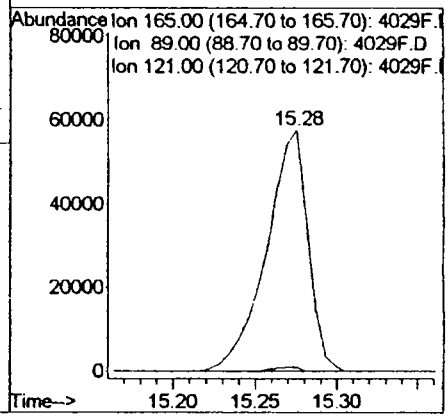


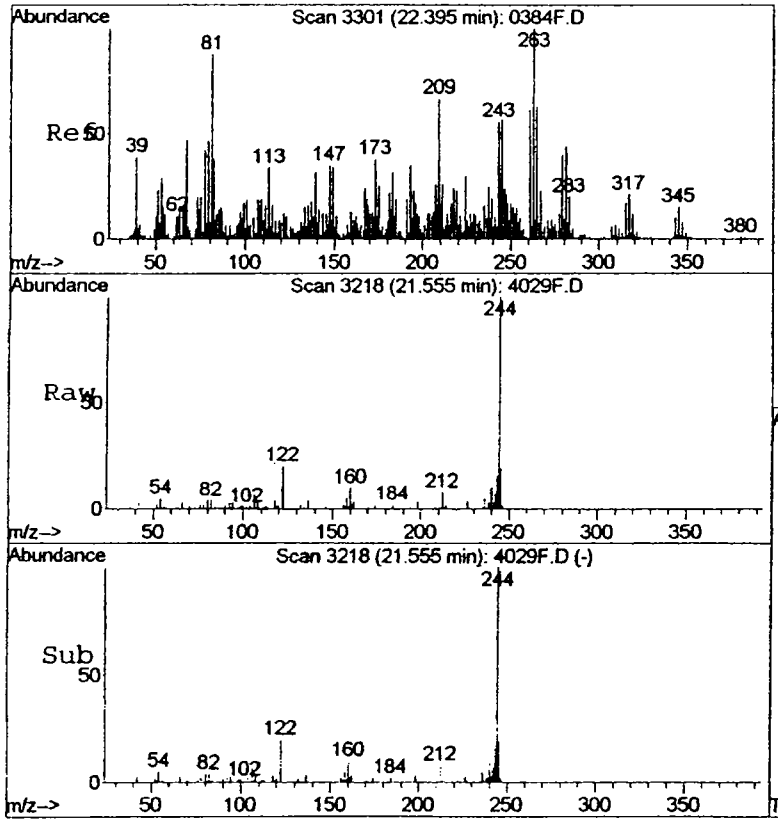


#61
2,6-Dinitrotoluene
Concen: 19.16 ug/ml
RT: 15.28 min Scan# 2153
Delta R.T. 0.22 min
Lab File: 4029F.D
Acq: 6 Sep 2007 11:51

Tgt Ion:165 Resp: 102547

Ion	Ratio	Lower	Upper
165	100		
89	1.1	23.1	34.7#
121	0.0	10.6	16.0#

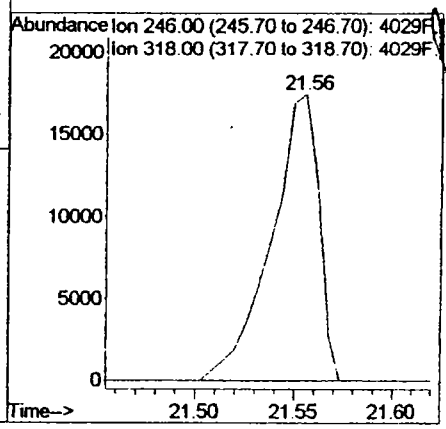


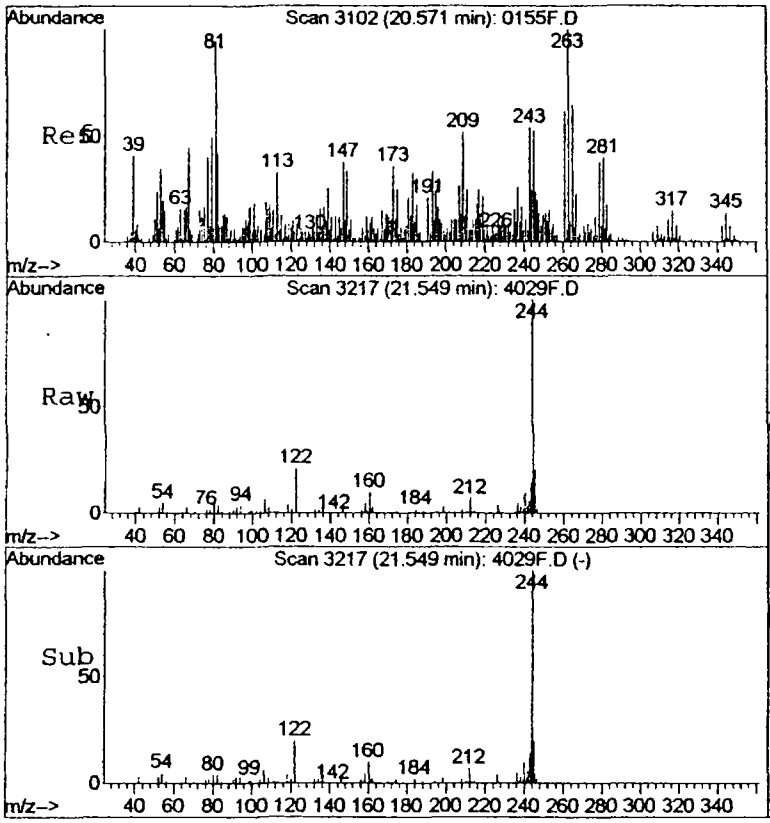


#99
p,p'-DDE
Concen: 7.27 ug/ml
RT: 21.56 min Scan# 3218
Delta R.T. 0.02 min
Lab File: 4029F.D
Acq: 6 Sep 2007 11:51

Tgt Ion:246 Resp: 29135

Ion	Ratio	Lower	Upper
246	100		
318	0.0	24.2	36.2#

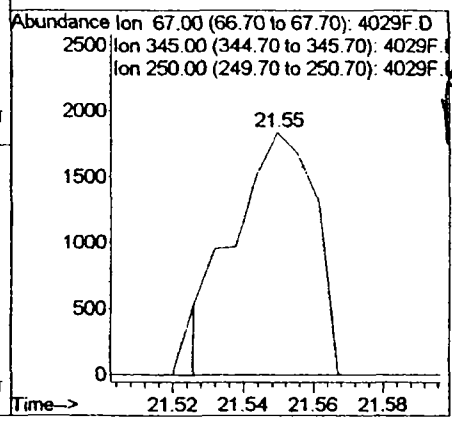




#103
Endrin aldehyde
Concen: 5.08 ug/ml
RT: 21.55 min Scan# 3217
Delta R.T. -0.40 min
Lab File: 4029F.D
Acq: 6 Sep 2007 11:51

Tgt Ion: 67 Resp: 2924

Ion	Ratio	Lower	Upper
67	100		
345	0.0	11.0	16.6#
250	0.0	13.0	19.4#



LSC Area Percent Report

Data File : D:\F090607A\4029F.D
Acq On : 6 Sep 2007 11:51
Sample : A781250
Misc : 1000ML-1ML
MS Integration Params: Lscint.p

Vial: 15
Operator: JCM
Inst : MSD #6
Multiplr: 1.00

Method : C:\MSDCHEM\1\METHODS\8270F.M (RTE Integrator)
Title : CLP BNA Calibration
Smoothing : OFF
Sampling : 1
Start Thrs: 0.2
Stop Thrs : 0

Filtering: 5
Min Area: 1 % of largest Peak
Max Peaks: 100
Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

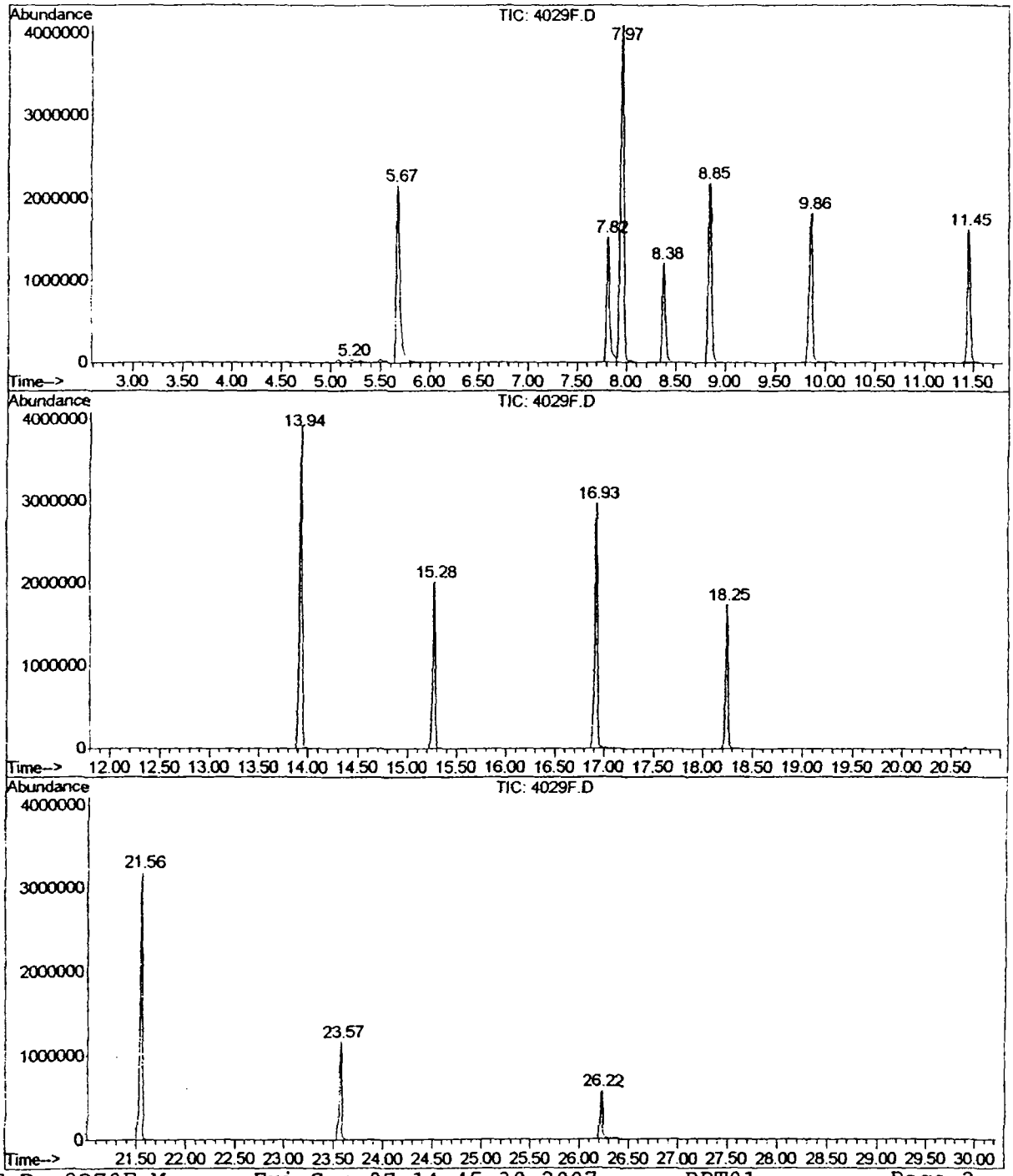
Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	5.197	436	444	454	rVV	35871	103505	1.04%	0.168%
2	5.675	517	525	548	rBV	2155600	5369193	53.73%	8.707%
3	7.816	878	888	902	rBV	1531927	3456117	34.58%	5.605%
4	7.969	902	914	924	rVV	4090189	9993395	100.00%	16.207%
5	8.382	975	984	1001	rBV	1213118	2558542	25.60%	4.149%
6	8.853	1053	1064	1083	rBV2	2187230	4949183	49.52%	8.026%
7	9.862	1223	1235	1255	rBV	1823907	4392969	43.96%	7.124%
8	11.454	1497	1505	1517	rVB	1613571	3314456	33.17%	5.375%
9	13.937	1914	1926	1939	rBV	3918989	7114717	71.19%	11.538%
10	15.275	2141	2153	2162	rBV	2017142	3571528	35.74%	5.792%
11	16.926	2421	2433	2444	rBV	2977217	5612267	56.16%	9.102%
12	18.247	2647	2657	2674	rBV	1735485	2947391	29.49%	4.780%
13	21.555	3204	3218	3231	rBV	3191108	5357674	53.61%	8.689%
14	23.572	3552	3560	3575	rBV	1161778	1892850	18.94%	3.070%
15	26.220	4002	4009	4030	rBV2	573332	1028543	10.29%	1.668%

Sum of corrected areas: 61662330

LSC Report - Integrated Chromatogram

File : D:\F090607A\4029F.D
Operator : JCM
Acquired : 6 Sep 2007 11:51 using AcqMethod 8270F
Instrument : MSD #6
Sample Name: A781250
Misc Info : 1000ML-1ML
Vial Number: 15
Quant File :8270F.RES (RTE Integrator)



Tentatively Identified Compound (LSC) summary

Operator ID: JCM Date Acquired: 6 Sep 2007 11:51
Data File: D:\F090607A\4029F.D
Name: A781250
Misc: 1000ML-1ML
Method: C:\MSDCHEM\1\METHODS\8270F.M (RTE Integrator)
Title: CLP BNA Calibration
Library Searched: C:\DATABASE\NBS75K.L

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--- #	RT	Resp	Conc

R524579 Heritage Environmental Services, LLC A781263

GC/MS SVOA

Method SW846-8270C
Sample Description LQ4598
Submitter IDEM - OLQ
Instrument 343 Channel 1

Test Code O531.1.0
Analyst 3196 C. WILLHITE
File 4030F.D Date/Time 06Sep07 12:29:00
Dilution Factor 1

Prep : 1000 mL 1.0 mL

CAS	PRM	Parameter	Concentration	RQL	Limit	Units	RT
83-32-9	97	ACENAPHTHENE		BDL	10	UG/L	
208-96-8	98	ACENAPHTHYLENE		BDL	10	UG/L	
120-12-7	128	ANTHRACENE		BDL	10	UG/L	
56-55-3	163	BENZ(A)ANTHRACENE		BDL	10	UG/L	
50-32-8	156	BENZO(A)PYRENE		BDL	10	UG/L	
205-99-2	157	BENZO(B)FLUORANTHENE		BDL	10	UG/L	
191-24-2	158	BENZO(G,H,I)PERYLENE		BDL	10	UG/L	
207-08-9	159	BENZO(K)FLUORANTHENE		BDL	10	UG/L	
100-51-6	160	BENZYL ALCOHOL		BDL	10	UG/L	
85-68-7	202	(BENZYLBUTYLPHTHALATE) BUTYLBENZYLPHTHAL		BDL	10	UG/L	
111-91-1	182	BIS(2-CHLOROETHOXY)METHANE		BDL	10	UG/L	
111-44-4	183	BIS(2-CHLOROETHYL)ETHER		BDL	10	UG/L	
108-60-1	184	BIS(2-CHLOROISOPROPYL)ETHER		BDL	10	UG/L	
117-81-7	185	BIS(2-ETHYLHEXYL)PHTHALATE		BDL	10	UG/L	
101-55-3	84	4-BROMODIPHENYL ETHER		BDL	10	UG/L	
86-74-8	213	CARBAZOLE		BDL	10	UG/L	
106-47-8	85	4-CHLOROANILINE		BDL	10	UG/L	
91-58-7	55	2-CHLORONAPHTHALENE		BDL	10	UG/L	
7005-72-3	88	4-CHLOROPHENYL-PHENYLETHER		BDL	10	UG/L	
218-01-9	245	CHRYSENE		BDL	10	UG/L	
53-70-3	294	DIBENZ(A,H)ANTHRACENE		BDL	10	UG/L	
132-64-9	293	DIBENZOFURAN		BDL	10	UG/L	
91-94-1	70	3,3'-DICHLOROBENZIDINE		BDL	20	UG/L	
84-66-2	306	DIETHYLPHTHALATE		BDL	10	UG/L	
131-11-3	310	DIMETHYLPHTHALATE		BDL	10	UG/L	
84-74-2	329	DI-N-BUTYLPHTHALATE		BDL	10	UG/L	
121-14-2	48	2,4-DINITROTOLUENE		BDL	10	UG/L	
606-20-2	50	2,6-DINITROTOLUENE		BDL	10	UG/L	
117-84-0	330	DI-N-OCTYLPHTHALATE		BDL	10	UG/L	
206-44-0	363	FLUORANTHENE		BDL	10	UG/L	
86-73-7	366	FLUORENE		BDL	10	UG/L	
118-74-1	397	HEXACHLOROBENZENE		BDL	10	UG/L	
87-68-3	398	HEXACHLOROBUTADIENE		BDL	10	UG/L	
77-47-4	399	HEXACHLOROCYCLOPENTADIENE		BDL	10	UG/L	
67-72-1	402	HEXACHLOROETHANE		BDL	10	UG/L	
193-39-5	413	INDENO(1,2,3-CD)PYRENE		BDL	10	UG/L	
78-59-1	431	ISOPHORONE		BDL	10	UG/L	
91-57-6	62	2-METHYLNAPHTHALENE		BDL	10	UG/L	
88-74-4	65	2-NITROANILINE (O-NITROANILINE)		BDL	50	UG/L	
99-09-2	76	3-NITROANILINE (M-NITROANILINE)		BDL	50	UG/L	
100-01-6	92	4-NITROANILINE (P-NITROANILINE)		BDL	50	UG/L	
98-95-3	503	NITROBENZENE		BDL	10	UG/L	
86-30-6	522	N-NITROSODIPHENYLAMINE		BDL	10	UG/L	
621-64-7	531	N-NITROSO-DI-N-PROPYLAMINE		BDL	10	UG/L	

JS 9-11-07

JS 9-11-07

GC/MS SVOA

CAS	PRM	Parameter	Concentration	RQL	Limit	Units	RT
85-01-8	597	PHENANTHRENE		BDL	10	UG/L	
129-00-0	624	PYRENE		BDL	10	UG/L	
120-82-1	16	1,2,4-TRICHLOROBENZENE		BDL	10	UG/L	
65-85-0	153	BENZOIC ACID		BDL	50	UG/L	
59-50-7	89	4-CHLORO-3-METHYLPHENOL		BDL	10	UG/L	
95-57-8	56	2-CHLOROPHENOL		BDL	10	UG/L	
120-83-2	44	2,4-DICHLOROPHENOL		BDL	10	UG/L	
105-67-9	46	2,4-DIMETHYLPHENOL		BDL	10	UG/L	
534-52-1	81	4,6-DINITRO-O-CRESOL		BDL	50	UG/L	
51-28-5	47	2,4-DINITROPHENOL		BDL	50	UG/L	
95-48-7	61	2-METHYLPHENOL (O-CRESOL)		BDL	10	UG/L	
106-44-5	90	4-METHYLPHENOL (P-CRESOL)		BDL	10	UG/L	
88-75-5	66	2-NITROPHENOL		BDL	10	UG/L	
108-39-4	74	3-METHYLPHENOL (M-CRESOL)		BDL	10	UG/L	
100-02-7	93	4-NITROPHENOL		BDL	50	UG/L	
87-86-5	577	PENTACHLOROPHENOL		BDL	50	UG/L	
108-95-2	598	PHENOL		BDL	10	UG/L	
95-95-4	40	2,4,5-TRICHLOROPHENOL		BDL	10	UG/L	
88-06-2	42	2,4,6-TRICHLOROPHENOL		BDL	10	UG/L	
91-57-6	62	2-METHYLNAPHTHALENE		BDL	10	UG/L	
90-12-0	887	1-METHYLNAPHTHALENE		BDL	10	UG/L	
	1804	...					
	971	SURROGATE RECOVERY					
	972	----------					
367-12-4	59	2-FLUOROPHENOL	60			% RECOVERY	
4165-62-2	601	PHENOL-D5	38			% RECOVERY	
4165-60-0	504	NITROBENZENE-D5	99			% RECOVERY	
321-60-8	58	2-FLUOROBIPHENYL	91			% RECOVERY	
118-79-6	41	2,4,6-TRIBROMOPHENOL	124			% RECOVERY	
98904-43-9	701	TERPHENYL-D14	140			% RECOVERY	
	972	----------					
	1131	TENTATIVELY IDENTIFIED COMPOUNDS					
	1804	...					
	3320	NONE DETECTED					

Comment NA

Qualifiers

BDL Below Detection Limit

Comments to Laboratory (do not record)

6-LT AMBERS, 500ML HNO3 SQPL, 12-HCL VIALS
Need verbals ASAP, in 7 days or sooner.
Note the additional IDEM analytes for drinking water:
CS2, MEK, Acetone, 2-Nitropropane, 2-Hexanone

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

A781263

Lab Name: _____ Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: A781263

Sample wt/vol: 1000 (g/ml) ML Lab File ID: 4030F.D

Level: (low/med) LOW Date Received: _____

% Moisture: _____ decanted: (Y/N) N Date Extracted:

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 9/6/2007

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____

CONCENTRATION UNITS:

Number TICs found: 0 *(ug/L or ug/Kg)* UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

Quantitation Report (Not Reviewed)

Data File : D:\F090607A\4030F.D
Acq On : 6 Sep 2007 12:29
Sample : A781263
Misc : 1000ML-1ML
MS Integration Params: RTEINT4.P
Quant Time: Sep 07 12:15:56 2007

Vial: 16
Operator: JCM
Inst : MSD #6
Multiplr: 1.00
Quant Results File: 8270F.RES

Quant Method : C:\MSDCHEM\1\METHODS\8270F.M (RTE Integrator)
Title : CLP BNA Calibration
Last Update : Fri Sep 07 04:02:55 2007
Response via : Initial Calibration
DataAcq Meth : 8270F

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	8.38	152	332173	40.00	ug/ml	-0.01
29) Naphthalene-d8	11.45	136	1457736	40.00	ug/ml	-0.02
47) Acenaphthene-d10	15.28	164	779657	40.00	ug/ml	-0.01
74) Phenanthrene-d10	18.25	188	1069047	40.00	ug/ml	-0.02
95) Chrysene-d12	23.58	240	732788	40.00	ug/ml	-0.01
115) Perylene-d12	26.23	264	409839	40.00	ug/ml	0.00
System Monitoring Compounds						
7) 2-Fluorophenol	5.67	112	1389428	120.61	ug/ml	-0.02
Spiked Amount 200.000	Range 21 - 100		Recovery = 60.31%			
10) Phenol-d5	7.82	99	1148187	75.59	ug/ml	-0.02
Spiked Amount 200.000	Range 10 - 94		Recovery = 37.80%			
13) 2-Chlorophenol-d4	7.96	132	2526588	198.93	ug/ml	0.00
Spiked Amount 200.000	Range 27 - 123		Recovery = 99.47%			
19) 1,2-Dichlorobenzene-d4	8.85	150	897615	70.03	ug/ml	0.00
Spiked Amount 100.000	Range 32 - 220		Recovery = 70.03%			
30) Nitrobenzene-d5	9.86	82	1429785	98.78	ug/ml	-0.01
Spiked Amount 100.000	Range 18 - 57		Recovery = 98.78%#			
54) 2-Fluorobiphenyl	13.94	172	2081936	91.11	ug/ml	0.00
Spiked Amount 100.000	Range 22 - 58		Recovery = 91.11%#			
77) 2,4,6-Tribromophenol	16.93	330	518358	247.19	ug/ml	0.00
Spiked Amount 200.000	Range 10 - 123		Recovery = 123.59%#			
100) Terphenyl-d14	21.57	244	2412095	139.91	ug/ml	0.00
Spiked Amount 100.000	Range 17 - 71		Recovery = 139.91%#			

Target Compounds						Qvalue
37) Benzoic acid	11.45	105	3801	13.46	ug/ml#	34
59) Dimethylphthalate	15.28	163	128761	5.62	ug/ml#	1
61) 2,6-Dinitrotoluene	15.27	165	100979	19.27	ug/ml#	54
99) p,p'-DDE	21.57	246	42211	8.77	ug/ml#	44
103) Endrin aldehyde	21.56	67	4115	5.96	ug/ml#	64

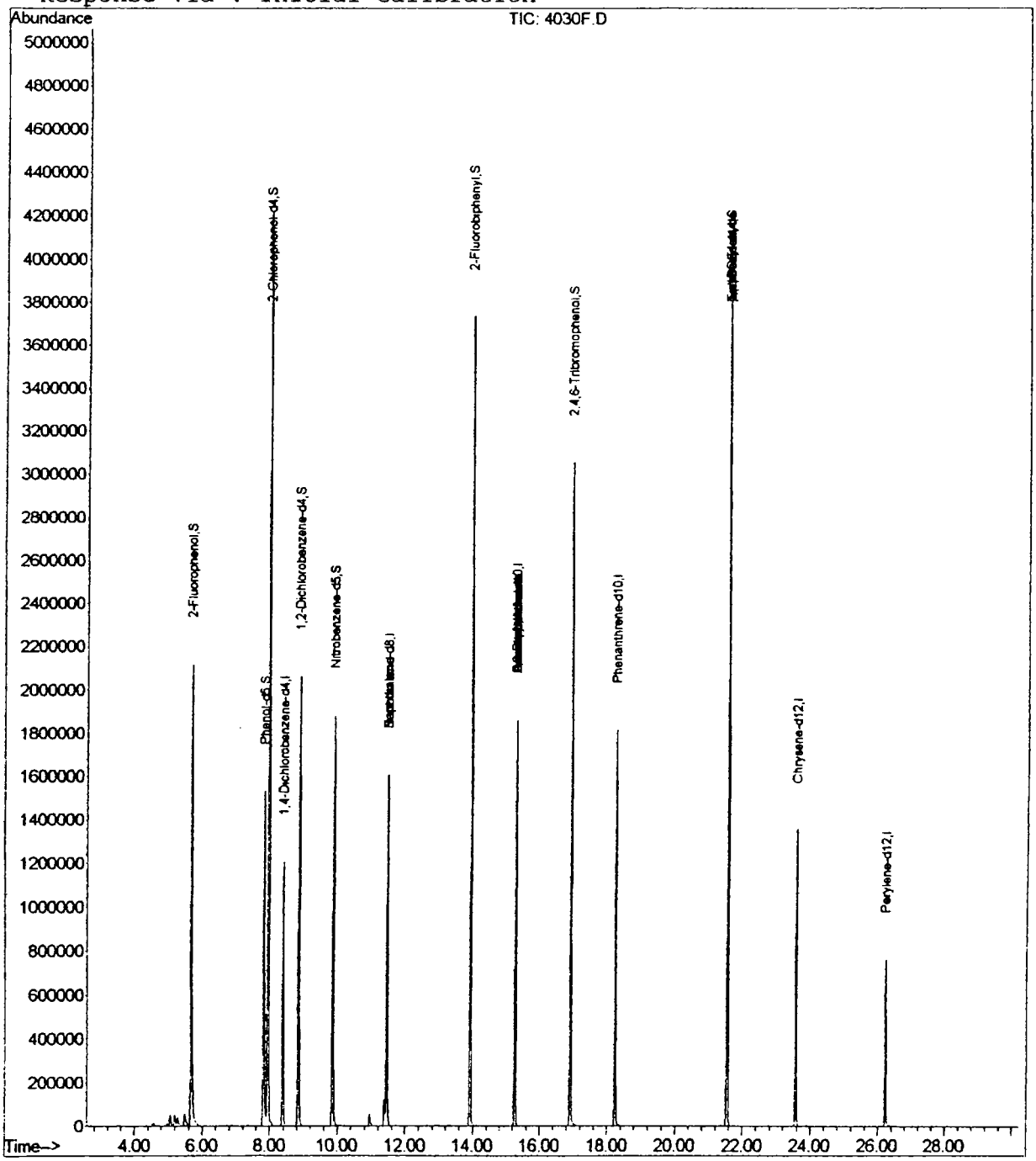
(#) = qualifier out of range (m) = manual integration

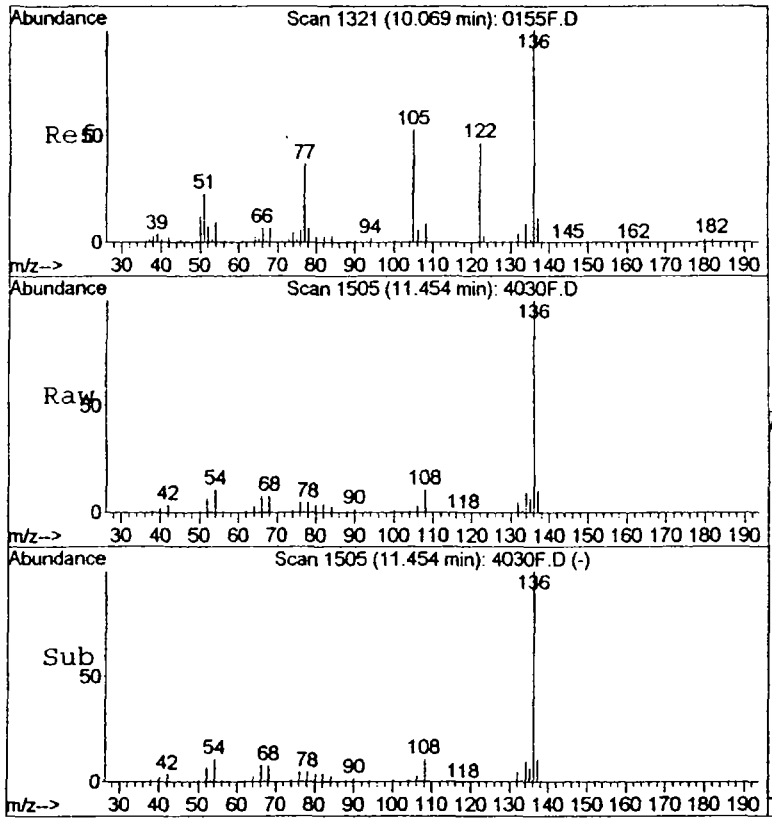
Quantitation Report (Not Reviewed)

Data File : D:\F090607A\4030F.D
Acq On : 6 Sep 2007 12:29
Sample : A781263
Misc : 1000ML-1ML
MS Integration Params: RTEINT4.P
Quant Time: Sep 7 12:15 2007

Vial: 16
Operator: JCM
Inst : MSD #6
Multiplr: 1.00
Quant Results File: 8270F.RES

Method : C:\MSDCHEM\1\METHODS\8270F.M (RTE Integrator)
Title : CLP BNA Calibration
Last Update : Fri Sep 07 04:02:55 2007
Response via : Initial Calibration

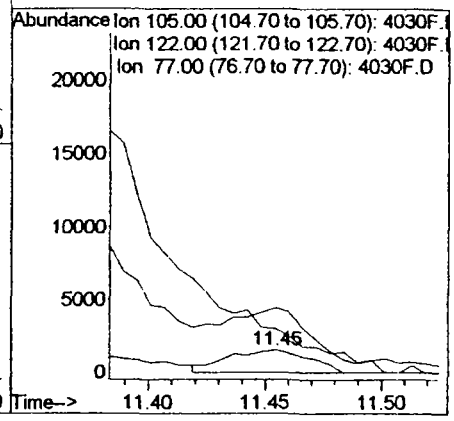


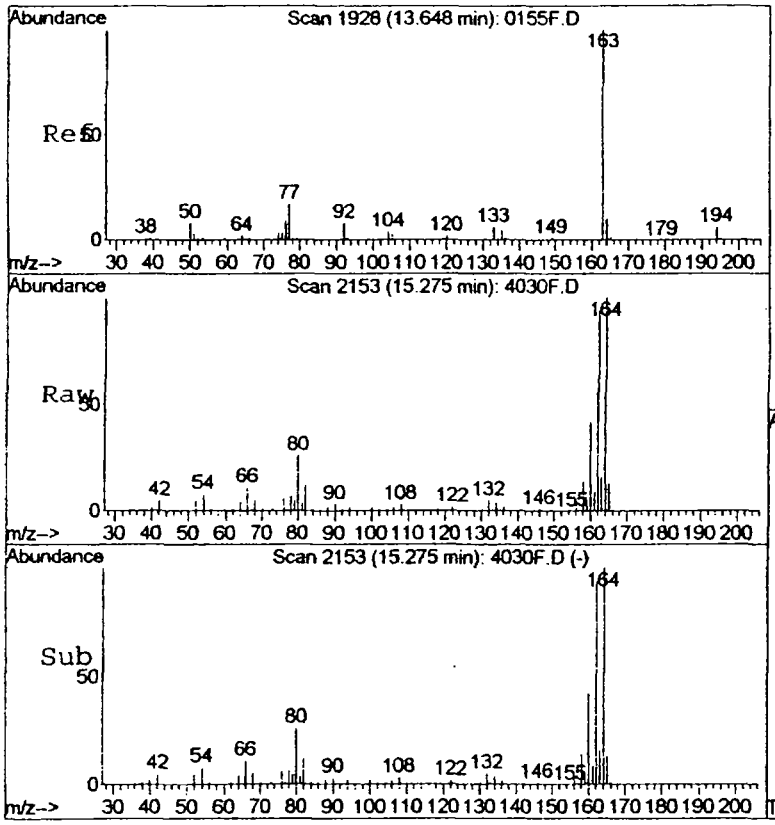


#37
Benzoic acid
Concen: 13.46 ug/ml
RT: 11.45 min Scan# 1505
Delta R.T. -0.00 min
Lab File: 4030F.D
Acq: 6 Sep 2007 12:29

Tgt Ion:105 Resp: 3801

Ion	Ratio	Lower	Upper
105	100		
122	0.0	0.0	0.0
77	0.0	33.6	50.4#

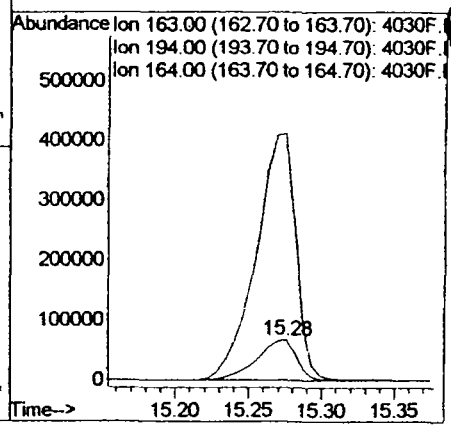


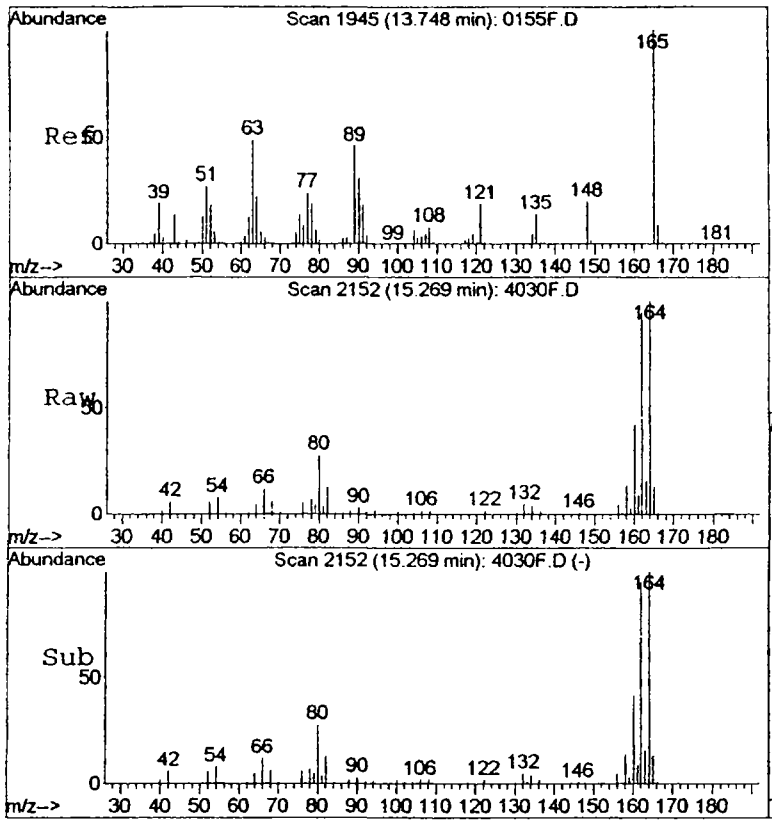


#59
Dimethylphthalate
Concen: 5.62 ug/ml
RT: 15.28 min Scan# 2153
Delta R.T. 0.32 min
Lab File: 4030F.D
Acq: 6 Sep 2007 12:29

Tgt Ion:163 Resp: 128761

Ion	Ratio	Lower	Upper
163	100		
194	0.0	3.6	5.4#
164	605.5	6.6	9.8#

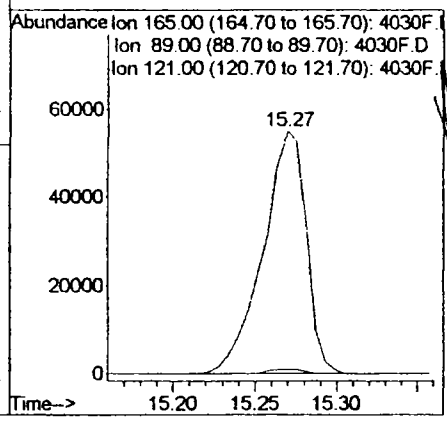


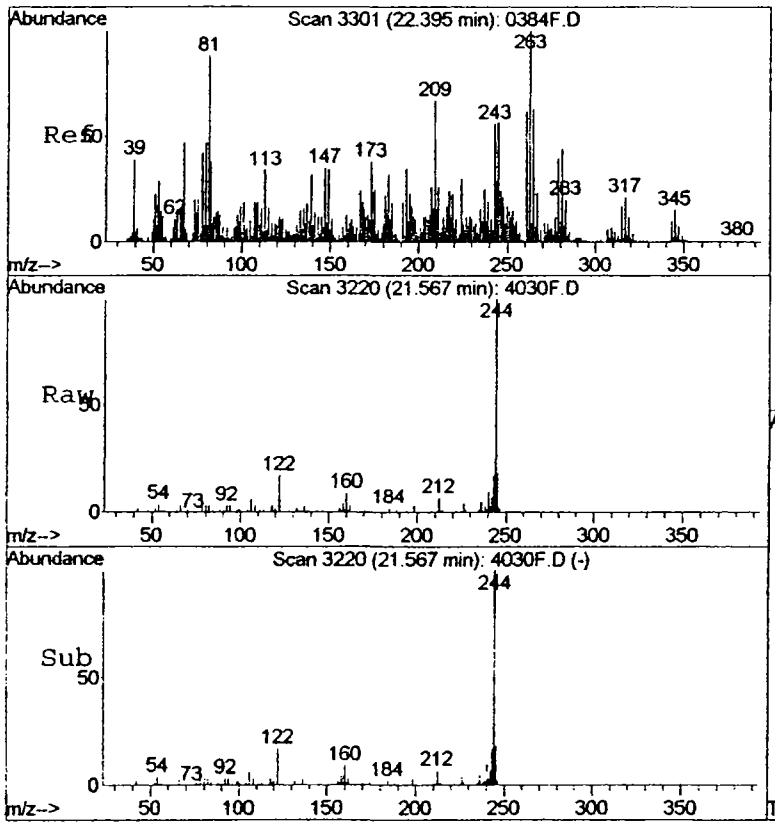


#61
2,6-Dinitrotoluene
Concen: 19.27 ug/ml
RT: 15.27 min Scan# 2152
Delta R.T. 0.21 min
Lab File: 4030F.D
Acq: 6 Sep 2007 12:29

Tgt Ion:165 Resp: 100979

Ion	Ratio	Lower	Upper
165	100		
89	1.4	23.1	34.7#
121	0.0	10.6	16.0#

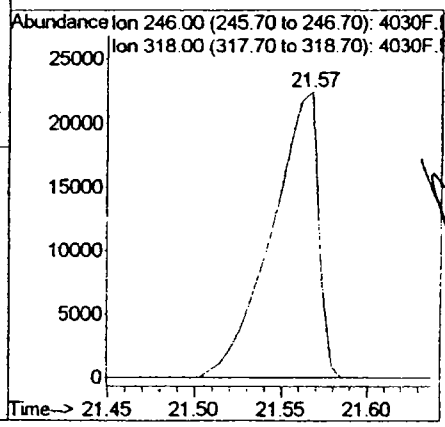


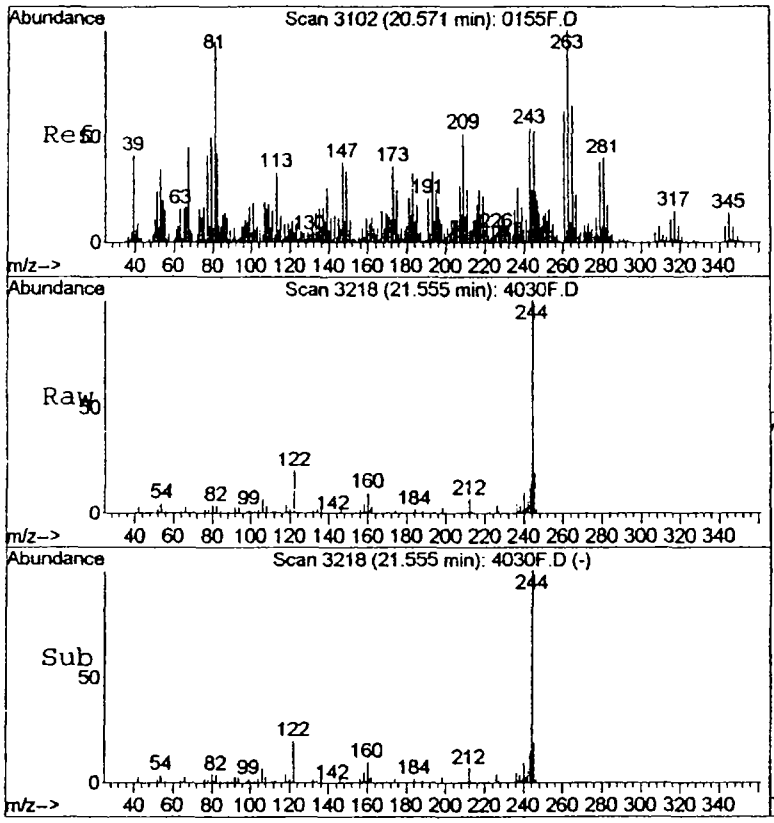


#99
p,p'-DDE
Concen: 8.77 ug/ml
RT: 21.57 min Scan# 3220
Delta R.T. 0.04 min
Lab File: 4030F.D
Acq: 6 Sep 2007 12:29

Tgt Ion:246 Resp: 42211

Ion	Ratio	Lower	Upper
246	100		
318	0.0	24.2	36.2#

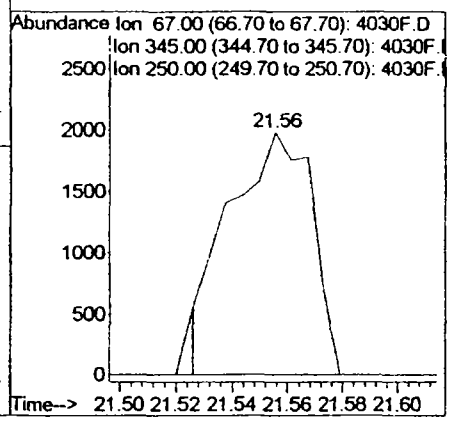




#103
Endrin aldehyde
Concen: 5.96 ug/ml
RT: 21.56 min Scan# 3218
Delta R.T. -0.39 min
Lab File: 4030F.D
Acq: 6 Sep 2007 12:29

Tgt Ion: 67 Resp: 4115

Ion	Ratio	Lower	Upper
67	100		
345	0.0	11.0	16.6#
250	0.0	13.0	19.4#



LSC Area Percent Report

Data File : D:\F090607A\4030F.D
Acq On : 6 Sep 2007 12:29
Sample : A781263
Misc : 1000ML-1ML
MS Integration Params: Lscint.p

Vial: 16
Operator: JCM
Inst : MSD #6
Multiplr: 1.00

Method : C:\MSDCHEM\1\METHODS\8270F.M (RTE Integrator)
Title : CLP BNA Calibration
Smoothing : OFF
Sampling : 1
Start Thrs: 0.2
Stop Thrs : 0

Filtering: 5
Min Area: 1 % of largest Peak
Max Peaks: 100
Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

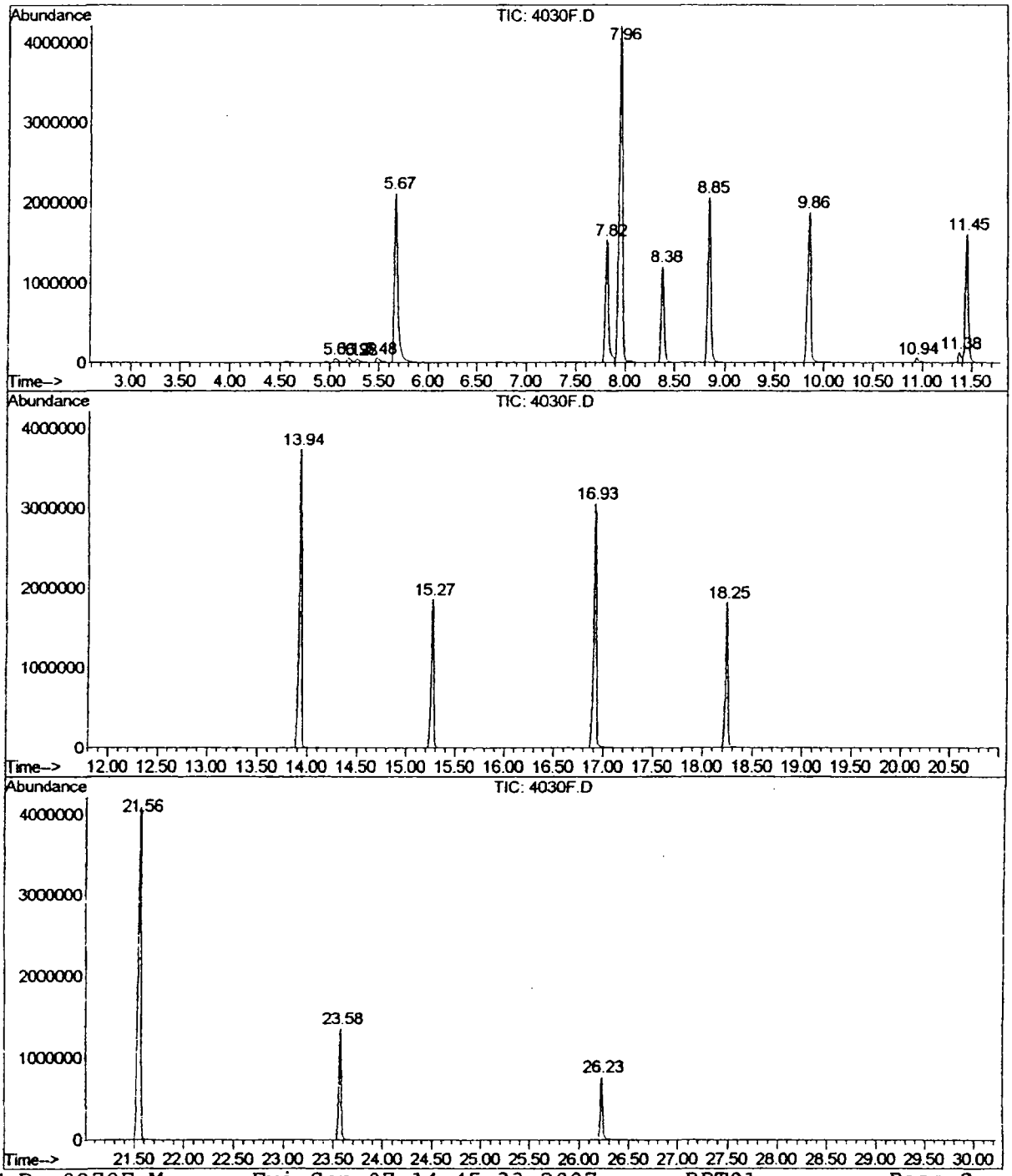
Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	5.056	414	420	436	rVB2	50312	136585	1.36%	0.209%
2	5.191	436	443	452	rVV	49670	138530	1.38%	0.212%
3	5.280	452	458	473	rVB2	38776	115484	1.15%	0.177%
4	5.480	485	492	501	rBV	58604	162797	1.62%	0.249%
5	5.669	516	524	562	rBV	2118031	5247888	52.36%	8.033%
6	7.816	878	888	902	rBV	1535861	3439004	34.31%	5.264%
7	7.963	902	913	924	rVV	4218628	10022988	100.00%	15.343%
8	8.382	975	984	1004	rBV	1207249	2493084	24.87%	3.816%
9	8.848	1053	1063	1081	rBV2	2060773	4506607	44.96%	6.899%
10	9.862	1223	1235	1254	rBV	1883699	4431594	44.21%	6.784%
11	10.941	1412	1418	1424	rBV2	58353	118812	1.19%	0.182%
12	11.377	1486	1492	1497	rBV	123470	268362	2.68%	0.411%
13	11.454	1497	1505	1522	rVB	1610066	3404051	33.96%	5.211%
14	13.937	1914	1926	1940	rBV	3733735	6852986	68.37%	10.490%
15	15.269	2142	2152	2162	rBV	1864470	3514855	35.07%	5.380%
16	16.926	2421	2433	2446	rBV	3056198	5939966	59.26%	9.093%
17	18.247	2647	2657	2669	rBV	1817512	3020298	30.13%	4.623%
18	21.561	3204	3219	3223	rBV	4090822	7911509	78.93%	12.111%
19	23.578	3552	3561	3577	rBV	1356745	2288681	22.83%	3.503%
20	26.226	4002	4010	4023	rBV	760786	1312320	13.09%	2.009%

Sum of corrected areas: 65326401

LSC Report - Integrated Chromatogram

File : D:\F090607A\4030F.D
Operator : JCM
Acquired : 6 Sep 2007 12:29 using AcqMethod 8270F
Instrument : MSD #6
Sample Name: A781263
Misc Info : 1000ML-1ML
Vial Number: 16
Quant File :8270F.RES (RTE Integrator)



Tentatively Identified Compound (LSC) summary

Operator ID: JCM Date Acquired: 6 Sep 2007 12:29
Data File: D:\F090607A\4030F.D
Name: A781263
Misc: 1000ML-1ML
Method: C:\MSDCHEM\1\METHODS\8270F.M (RTE Integrator)
Title: CLP BNA Calibration
Library Searched: C:\DATABASE\NBS75K.L

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--- #	RT	Resp	Conc

Book No. TITLE

Date	Time	Sample No.	Entire Contents Used (Y/N)	Initials	Group	IN/OUT
9-4-07	1345	A781234-A781238, A781240, A781241 A781243-A781275, A781276	—	JK	RCUB	IN
9/4/07	1445	A781234, A781249-250, A781240 A781263	Y	BN	GC	out
9/5/07	0701	A781234-241, 243-245, 248-255	Y	RJ	VOLS	out
9-5-07	0858	A781234, 240, 249, 250, 263	Y	CRJ	Gems	out
9-5-07	10:17	A781234 240, 249, 250, 263	N	JJC	metals	out
9-5-07	1020	A781231, A781240, A781249, A781250 A781263	Y	Ian	GC/PCB	out
9-5-07	10:31	A781234, 240, 249, 250, 263	N	JJC	Metal	IN
9-6-07	07:15	A781254-270, 255, 244, 240, 253, 243	Y	RJ	VOLS	out
9-6-07	1316	A781234, 240, 249, 250, 263	N	Jan	metal	out
9-6-07	13:25	A781234, 240, 249, 250, 263	N	Sam	metals	in
9-7-07	07:19	A781271-276, 263-268, 248-252	Y	RJ	VOLS	out

To Page No.

Witnessed & Understood by me,	Date	Invented by	Date
		Recorded by	

H. J
Lilly + FOEM
3326

Heritage Laboratories, Inc Indianapolis, Indiana
Semi-Volatile Organic Extraction Bench Sheet

Matrix: Aqueous / Solid / Waste Dilution

Sample Type: 8270 / 625 / TCLP / 625.2 / 548

	Analyst Initials	Date Extracted	Time Extracted	Run Number	Sample Description	Sample Number	Test Code	Init Wt (g) Vol (mL)	Final Vol (mL)	pH Check	Surrogate added*	Box Number	BLA Number	LCS Number	Comments	Reviewed By Review Date
1	JCM 9-4-07	8-31-07		R524277	T1872	A780594-P	P233.4	1000 ml	1.0 ml	A(2) B(10) N(7)	081607/0.5ml 083007/1.0ml	W-165	Q1992647	Q1992648		LAB 1022 9-4-07
2					T1465	595-P		1000 ml		A(2) B(10) N(7)			↑894	784 ↑		
3					T1877	596-N		1000 ml		A(2) B(10) N(7)						
4					T1023	597-1		1000 ml		A(2) B(10) N(7)						
5					T1828	598-D		1000 ml		A(2) B(10) N(7)						
6	JCM 9-4-07 RAB				T1857	599-M		1000 ml		A(2) B(10) N(7)						
7					Rep	600-M		1000 ml		A(2) B(10) N(7)						
8					Field Blank	601-M		1000 ml		A(2) B(10) N(7)						
9	JCM 9-4-07	9-5-07			LQ 4570	A781234-M	P233.4	1000-l		A(2) B(10) N(7)	090407/.5ml 083007/1.0ml	W-166				
10					LQ 4575	240		1000 ml		A(2) B(10) N(7)			897↑	790↑	LCS	
11					LQ4582	249		1000 ml		A(2) B(10) N(7)				791	DLCS	
12					LQ4583	250		1000 ml		A(2) B(10) N(7)						
13					LQ4598	263		1000		A(2) B(10) N(7)						
14					MS	234 MS		1000-l		A(2) B(10) N(7)	090407/.5ml 091707/1.0ml					
15										A(2) B(10) N(7)						
16										A(2) B(10) N(7)						
17										A(2) B(10) N(7)						
18										A(2) B(10) N(7)						
19										A(2) B(10) N(7)						
20										A(2) B(10) N(7)						
MS	JCM 9-4-07	8-31-07			MS Q1992649	A780597MS	P233.4	1000ml	1.0 ml	A(2) B(10) N(7)	083007/0.5ml 090707/1.0ml	W-165	All			LAB 1022 9-4-07
MSD					MSD Q1992650	A780597MSD		1000 ml	1.0 ml	A(2) B(10) N(7)						

Bla 897
LCS 790
Shared on 3329-3326

* Amount and identification number of surrogate standard added.

Additional Comments:

	Lot #
Methylene Chloride	47012
Acetone	
Balance Number	

	Lot #
Acid (1:1 H_2SO_4)	2007051 (8-30-07)
Base (1N NaOH)	064436 (8-24-07)
Granular Na_2SO_4	E22601

Sheet Number:

Accuracy and Precision for Method 524.2

Heritage Environmental Services, LLC

Regina Shamp GCMS#9 1UG/L

Mar 18,1999 ISTD and Std used: #031699

PARAMETERS	6040J	6041J	6042J	6043J	% rec	% rec	% rec	% rec	Average	Std. Dev.	
Dichlorodifluoromethane	0.66	0.61	0.72	0.68	66	61	72	68	66.75	4.57	
Chloromethane	0.58	0.59	0.61	0.59	58	59	61	59	59.25	1.26	
Vinyl Chloride	0.53	0.55	0.65	0.62	53	55	65	62	58.75	5.68	
Bromomethane	0.89	0.90	1.00	0.99	89	90	100	99	94.50	5.80	
Chloroethane	0.62	0.61	0.70	0.68	62	61	70	68	65.25	4.43	
Trichlorofluoromethane	0.87	0.84	0.98	0.90	87	84	98	90	89.75	6.02	
1,1-Dichloroethene	0.67	0.64	0.71	0.64	67	64	71	64	66.50	3.32	
Methylene Chloride	1.41	1.24	1.16	1.20	141	124	116	120	125.25	11.00	
1,2-Dichloroethene(trans)	0.71	0.70	0.72	0.74	71	70	72	74	71.75	1.71	
1,1-Dichloroethane	0.71	0.72	0.79	0.78	71	72	79	78	75.00	4.08	
MTBE	1.80	1.87	1.93	1.95	90	94	97	98	94.38	3.38	2PPB
2,2-Dichloropropane	0.99	0.99	0.98	0.97	99	99	98	97	98.25	0.96	
2-butanone	1.67	1.56	1.38	1.19	84	78	69	60	72.50	10.53	2PPB
1,2-Dichloroethene(cis)	0.77	0.77	0.81	0.81	77	77	81	81	79.00	2.31	
Chloroform	0.94	0.95	1.02	1.02	94	95	102	102	98.25	4.35	
Tetrahydrofuran	1.74	1.03	1.22	0.41	87	52	61	21	55.00	27.46	2PPB
Bromochloromethane	0.73	0.84	0.90	0.91	37	84	90	91	75.38	26.10	
1,1,1-Trichloroethane	1.02	0.97	1.03	1.03	102	97	103	103	101.25	2.87	
1,1-Dichloropropene	0.73	0.66	0.73	0.70	73	66	73	70	70.50	3.32	
Carbon Tetrachloride	1.02	0.95	1.01	1.01	102	95	101	101	99.75	3.20	
1,2-Dichloroethane	0.97	0.99	1.15	1.11	97	99	115	111	105.50	8.85	
Benzene	0.87	0.81	0.82	0.83	87	81	82	83	83.25	2.63	
Trichloroethene	0.85	0.79	0.83	0.81	85	79	83	81	82.00	2.58	
1,2-Dichloropropane	0.90	0.83	0.88	0.95	90	83	88	95	89.00	4.97	
Bromodichloromethane	0.94	0.96	0.98	0.98	94	96	98	98	96.50	1.91	
Dibromomethane	0.78	0.78	0.88	0.88	78	78	88	88	83.00	5.77	
cis-1,3-Dichloropropene	0.84	0.80	0.84	0.86	84	80	84	86	83.50	2.52	
4-methyl-2-pentanone	1.33	1.53	1.58	1.64	67	77	79	82	76.00	6.72	2PPB
Toluene	0.94	0.89	0.93	0.92	94	89	93	92	92.00	2.16	

2-hexanone	1.12	1.33	1.44	1.58	56	67	72	79	68.38	9.71	2PPB
trans-1,3-Dichloropropene	0.87	0.95	1.03	0.88	87	95	103	88	93.25	7.41	
1,1,2-Trichloroethane	0.81	0.78	0.83	0.82	81	78	83	82	81.00	2.16	
1,3-Dichloropropane	0.87	0.90	0.97	0.93	87	90	97	93	91.75	4.27	
Tetrachloroethene	0.94	0.92	1.00	0.92	94	92	100	92	94.50	3.79	
Dibromochloromethane	0.99	0.98	1.00	1.07	99	98	100	107	101.00	4.08	
1,2-Dibromomethane	0.83	0.84	0.88	0.81	83	84	88	81	84.00	2.94	
Chlorobenzene	0.97	0.89	0.94	0.96	97	89	94	96	94.00	3.56	
1,1,1,2-Tetrachloroethane	1.00	1.01	1.00	1.02	100	101	100	102	100.75	0.96	
Ethyl Benzene	0.93	0.88	0.91	0.92	93	88	91	92	91.00	2.16	
m,p-Xylene	1.85	1.77	1.87	1.88	93	89	94	94	92.13	2.50	2PPB
o-Xylene	0.92	0.87	0.92	0.95	92	87	92	95	91.50	3.32	
Styrene	0.88	0.87	0.89	0.91	88	87	89	91	88.75	1.71	
Bromoform	0.97	1.02	0.99	1.00	97	102	99	100	99.50	2.08	
Isopropylbenzene	0.92	0.87	0.91	0.91	92	87	91	91	90.25	2.22	
1,1,2,2-Tetrachloroethane	0.79	0.82	0.77	0.81	79	82	77	81	79.75	2.22	
1,2,3-Trichloropropane	0.85	0.81	0.86	0.83	85	81	86	83	83.75	2.22	
n-Propylbenzene	0.86	0.76	0.84	0.85	86	76	84	85	82.75	4.57	
Bromobenzene	0.97	0.92	0.96	0.98	97	92	96	98	95.75	2.63	
1,3,5-Trimethylbenzene	1.01	1.00	1.03	1.05	101	100	103	105	102.25	2.22	
2-Chlorotoluene	0.94	0.99	0.97	0.97	94	99	97	97	96.75	2.06	
4-Chlorotoluene	0.92	1.31	1.07	1.10	92	131	107	110	110.00	16.06	
t-Butylbenzene	0.98	0.93	0.97	1.01	98	93	97	101	97.25	3.30	
1,2,4-Trimethylbenzene	1.03	0.98	1.01	1.04	103	98	101	104	101.50	2.65	
sec-Butylbenzene	0.94	0.87	0.89	0.91	94	87	89	91	90.25	2.99	
p-Isopropyltoluene	1.03	0.94	0.98	1.01	103	94	98	101	99.00	3.92	
1,3-Dichlorobenzene	1.03	0.99	1.00	1.04	103	99	100	104	101.50	2.38	
1,4-Dichlorobenzene	1.06	1.00	1.01	1.09	106	100	101	109	104.00	4.24	
n-Butylbenzene	0.91	0.83	0.85	0.85	91	83	85	85	86.00	3.46	
1,2-Dichlorobenzene	1.02	0.99	1.02	1.09	102	99	102	109	103.00	4.24	
1,2,4-Trichlorobenzene	1.17	1.03	0.86	1.13	117	103	86	113	104.75	13.82	
Hexachlorobutadiene	1.22	1.00	0.81	0.99	122	100	81	99	100.50	16.78	
Naphthalene	1.13	0.98	0.87	1.08	113	98	87	108	101.50	11.50	
1,2,3-Trichlorobenzene	1.29	1.03	0.87	1.19	129	103	87	119	109.50	18.43	

Regina Shamp
GCMS#9
5ppb

MAR 23,1999
DW Accuracy and Precision
ISTD and Std used : #032399

	6060J	6061J	6063J	6064J	% rec	% rec	% rec	% rec	average	std dev	
Acetone	8.48	10.19	10.2	10.66	84.8	101.9	102	106.6	98.83	9.60	10PPB

Regina Shamp
GCMS#9
1ppb

AUG 3,1999
DW Accuracy and Precision
ISTD and Std used: 109 and 141

	7390J	7391J	7392J	7393J						
1,2-Dibromochloropropane	0.74	0.53	0.63	0.56	74	53	63	56	61.50	9.33

SAVED AS DWAPJ.XLS

ACCURACY & PRECISION
625 & 8270
ANALYST: COURTNEY WILLHITE
ANALYZED 6-12-01

	5050Q CONC	5051Q CONC	5052Q CONC	5053Q CONC	AVE CONC	STD.DEV CONC	5050Q %REC	5051Q %REC	5052Q %REC	5053Q %REC	AVE %REC	STD.DEV %REC	LIMITS	RANGE LOW	HIGH
1,4-Dichlorobenzene-c	40	40	40	40											
bis(chloromethyl)ether	53.63	59.94	56.75	54.92	56.31	2.7377	107.26	119.88	113.5	109.84	112.62	5.48			
N-Nitrosodimethyl ami	54.17	55.69	52.83	57.19	54.97	1.885595	108.34	111.38	105.66	114.38	109.94	3.77			
Pyridine	54.84	59.49	57.14	59.47	57.74	2.223008	109.68	118.98	114.28	118.94	115.47	4.45			
2-Picoline	53.2	53.77	56.67	58.08	55.43	2.330136	106.4	107.54	113.34	116.16	110.86	4.66			
Furfural	0	0	0	0	0.00	0	0	0	0	0	0.00	0.00			
2-Fluorophenol	56.22	57.87	57.9	54.98	56.74	1.413091	112.44	115.74	115.8	109.96	113.49	2.83			
Aniline	55.91	57.22	57.02	61.14	57.82	2.285496	111.82	114.44	114.04	122.28	115.65	4.57			
Phenol-d5	55.68	56.64	57.83	58.15	57.08	1.134446	111.36	113.28	115.66	116.3	114.15	2.27			
Phenol	55.72	56.11	58.52	55.51	56.47	1.392372	111.44	112.22	117.04	111.02	112.93	2.78	22.6	16.6	100
bis(2-Chloroethyl)ethe	53.91	53	53.09	53.06	53.27	0.431625	107.82	106	106.18	106.12	106.53	0.86	55	42.9	126
2-Chlorophenol-d4	53.48	55.2	55.58	54.78	54.76	0.913747	106.96	110.4	111.16	109.56	109.52	1.83			
2-Chlorophenol	54.49	55.41	55.28	54.05	54.81	0.648299	108.98	110.82	110.56	108.1	109.62	1.30	26.7	36.2	120.4
n-Decane	57.86	60.48	59.66	54.27	58.07	2.758035	115.72	120.96	119.32	108.54	116.14	5.52			
1,3-Dichlorobenzene	55.26	57.7	56.8	53.38	55.79	1.893594	110.52	115.4	113.6	106.76	111.57	3.79	41.7	16.7	153.9
1,4-Dichlorobenzene	55.38	57.84	56.61	51.8	55.41	2.606266	110.76	115.68	113.22	103.6	110.82	5.21	32.1	37.3	106.7
1,2-Dichlorobenzene-c	55.67	56.81	56.07	51.15	54.93	2.560592	111.34	113.62	112.14	102.3	109.85	5.12			
1,2-Dichlorobenzene	56.86	57.81	57.33	52.6	56.15	2.398235	113.72	115.62	114.66	105.2	112.30	4.80	30.9	48.6	153.9
Benzyl alcohol	56.61	54.34	54.9	54.29	55.04	1.085802	113.22	108.68	109.8	108.58	110.07	2.17			
2-Methylphenol	53.57	55.26	52.99	56.17	54.50	1.473259	107.14	110.52	105.98	112.34	109.00	2.95			
bis(2-chloroisopropyl)e	55.13	53.96	55.25	57.98	55.58	1.702528	110.26	107.92	110.5	115.96	111.16	3.41	46.3	62.8	138.6
Acetophenone	56.59	56.6	56.89	51.5	55.40	2.600391	113.18	113.2	113.78	103	110.79	5.20			
n-Nitroso-di-n-propylar	54.42	53.88	55.27	56.21	54.95	1.019101	108.84	107.76	110.54	112.42	109.89	2.04	55.4	13.6	197.3
4-Methylphenol	57.65	56.41	55.55	47.8	54.35	4.452568	115.3	112.82	111.1	95.6	108.71	8.91			
Hexachloroethane	56.33	55.04	56.12	54.63	55.53	0.824257	112.66	110.08	112.24	109.26	111.06	1.65	24.5	55.2	100
Naphthalene-d8	40	40	40	40	40.00	0	80	80	80	80	80.00	0.00			
Nitrobenzene-d5	55.8	55.79	57.53	58.09	56.80	1.185619	111.6	111.58	115.06	116.18	113.61	2.37			
Nitrobenzene	55.81	55.77	58.65	56.21	56.61	1.374433	111.62	111.54	117.3	112.42	113.22	2.75	39.3	54.3	157.6
Isophorone	52.9	52.64	54.77	55.86	54.04	1.538925	105.8	105.28	109.54	111.72	108.09	3.08	63.3	46.6	180.2
2-Nitrophenol	55.29	53.71	55.92	56.16	55.27	1.102815	110.58	107.42	111.84	112.32	110.54	2.21	35.2	45	166.7
2,4-Dimethylphenol	55.89	54.8	56.57	51.42	54.67	2.28603	111.78	109.6	113.14	102.84	109.34	4.57	26.1	41.8	109
bis(2-Chloroethoxy)me	55.41	56.59	57.37	54.36	55.93	1.322179	110.82	113.18	114.74	108.72	111.87	2.64	34.5	49.2	164.7
2,4-Dichlorophenol	53.93	52.65	55.61	51.37	53.39	1.811813	107.86	105.3	111.22	102.74	106.78	3.62	26.4	52.5	121.7
Benzoic acid	53.85	49.79	54.22	61.67	54.88	4.95004	107.7	99.58	108.44	123.34	109.77	9.90			
1,2,4-Trichlorobenzen	53.35	55.03	54.24	50.08	53.18	2.174465	106.7	110.06	108.48	100.16	106.35	4.35	26.1	57.3	129.2
Naphthalene	55.14	56.44	56.16	47.78	53.88	4.104859	110.28	112.88	112.32	95.56	107.76	8.21	30.1	35.6	119.6
a-Terpineol	55.24	56.28	56.85	52.15	55.13	2.095503	110.48	112.56	113.7	104.3	110.26	4.19			
4-Chloroaniline	53.3	54.84	56.99	56.17	55.33	1.614734	106.6	109.68	113.98	112.34	110.65	3.23			
Toluenediamine	51.5	52.82	58.87	44.97	52.04	5.701865	103	105.64	117.74	89.94	104.08	11.40			

Hexachlorobutadiene	53.93	54.04	54.1	49.65	52.93	2.1878	107.86	108.08	108.2	99.3	105.86	4.38	26.3	37.8	102.2
4-Chloro-3-methylpher	53.78	51.43	57.02	52.61	53.71	2.4062	107.56	102.86	114.04	105.22	107.42	4.81	37.2	40.8	127.9
2-Methylnaphthalene	51.85	53.78	56.06	50.03	52.93	2.588165	103.7	107.56	112.12	100.06	105.86	5.18			
Acenaphthene-d10	40	40	40	40	40.00	0	80	80	80	80	80.00	0.00			
Hexachlorocyclopenta	54.83	58.69	60.3	53.55	56.84	3.175861	109.66	117.38	120.6	107.1	113.69	6.35			
1,2,4,5-Tetrachlorober	51.71	57.06	56.57	49.44	53.70	3.725323	103.42	114.12	113.14	98.88	107.39	7.45			
2,3-Dichloroaniline	56.52	59.49	59.62	49.88	56.38	4.562137	113.04	118.98	119.24	99.76	112.76	9.12			
2,4,6-Trichlorophenol	52.31	57.98	56.55	47.86	53.68	4.563482	104.62	115.96	113.1	95.72	107.35	9.13	31.7	52.4	129.2
2,4,5-Trichlorophenol	51.2	52.98	55.99	52.21	53.10	2.063048	102.4	105.96	111.98	104.42	106.19	4.13			
2-Fluorobiphenyl	53.02	56.57	57.9	51.01	54.63	3.170326	106.04	113.14	115.8	102.02	109.25	6.34			
2-Chloronaphthalene	53.26	56.03	57.57	49.35	54.05	3.606701	106.52	112.06	115.14	98.7	108.11	7.21	13	64.5	113.5
2-Nitroaniline	55.3	57.21	59.5	62.17	58.55	2.964507	110.6	114.42	119	124.34	117.09	5.93			
Dimethylphthalate	50.38	53.63	55.39	54.36	53.44	2.163993	100.76	107.26	110.78	108.72	106.88	4.33	23.2	10	100
1,3-Dinitrobenzene	53.27	52.89	57.42	62.28	56.47	4.386149	106.54	105.78	114.84	124.56	112.93	8.77			
2,6-Dinitrotoluene	52.34	53.52	55.35	56.57	54.45	1.881604	104.68	107.04	110.7	113.14	108.89	3.76	29.6	68.1	136.7
Acenaphthylene	53.14	56.88	57.37	50.93	54.58	3.080595	106.28	113.76	114.74	101.86	109.16	6.16	40.2	53.5	126
3-Nitroaniline	57.73	58.55	61.24	63.86	60.35	2.781876	115.46	117.1	122.48	127.72	120.69	5.56			
Acenaphthene	53.79	56.65	57.52	50.8	54.69	3.043715	107.58	113.3	115.04	101.6	109.38	6.09	27.6	60.1	132.3
2,4-Dinitrophenol	49.61	45.66	51.5	63.15	52.48	7.517947	99.22	91.32	103	126.3	104.96	15.04	49.8	10	172.9
4-Nitrophenol	54.17	52.47	57.12	63.96	56.93	5.065116	108.34	104.94	114.24	127.92	113.86	10.13	47.2	13	106.5
Dibenzofuran	51.05	51.98	55.27	49.45	51.94	2.455109	102.1	103.96	110.54	98.9	103.88	4.91			
2,4-Dinitrotoluene	54.52	54.15	57.14	59.49	56.33	2.494668	109.04	108.3	114.28	118.98	112.65	4.99	21.8	47.5	126.9
2,3,4,6-Tetrachlorophe	55.41	53.96	54.62	53.42	54.35	0.858967	110.82	107.92	109.24	106.84	108.71	1.72			
Diethylphthalate	52.64	52.79	56.56	52.9	53.72	1.894666	105.28	105.58	113.12	105.8	107.45	3.79	26.5	10	100
Fluorene	53.26	55.78	56.76	49.87	53.92	3.074805	106.52	111.56	113.52	99.74	107.84	6.15	20.7	71.6	106.4
4-Chlorophenyl-phenyl	53.61	55.33	55.3	47.93	53.04	3.501841	107.22	110.66	110.6	95.86	106.09	7.00	33.4	38.4	144.7
4-Nitroaniline	54.55	54.45	57.23	61.99	57.06	3.532983	109.1	108.9	114.46	123.98	114.11	7.07			
Phenanthrene-d10	40	40	40	40	40.00	0	80	80	80	80	80.00	0.00			
4,6-Dinitro-2-methylph	55.56	50.91	51.82	62.8	55.27	5.406696	111.12	101.82	103.64	125.6	110.55	10.81	93.2	53	100
n-Nitrosodiphenylamin	55.33	53.66	53.97	55.26	54.56	0.864272	110.66	107.32	107.94	110.52	109.11	1.73			
2,4,6-Tribromophenol	51.01	52.64	48.89	56.09	52.16	3.038129	102.02	105.28	97.78	112.18	104.32	6.08			
Azobenzene	56.67	57.49	58.07	56.04	57.07	0.893919	113.34	114.98	116.14	112.08	114.14	1.79			
alpha-BHC	52.62	56.29	52.42	54.44	53.94	1.809721	105.24	112.58	104.84	108.88	107.89	3.62			
4-Bromophenyl-phenyl	51.66	56.51	54.38	52.61	53.79	2.135088	103.32	113.02	108.76	105.22	107.58	4.27	23	64.9	114.4
Hexachlorobenzene	53.16	51.25	52.36	50.57	51.84	1.150898	106.32	102.5	104.72	101.14	103.67	2.30	24.9	7.8	141.5
beta-BHC	55.41	54.78	56.14	57.32	55.91	1.090546	110.82	109.56	112.28	114.64	111.83	2.18	31.5	41.5	130.6
Pentachlorophenol	50.18	45.4	49.97	58.27	50.96	5.352199	100.36	90.8	99.94	116.54	101.91	10.70	48.9	36.1	151.8
gamma-BHC	53	57.46	54.47	52.16	54.27	2.329598	106	114.92	108.94	104.32	108.55	4.66	21.6	10	100
n-Octadecane	57.08	60.69	59.41	48.95	56.53	5.27127	114.16	121.38	118.82	97.9	113.07	10.54			
Phenanthrene	54.71	56.04	54.55	52.82	54.53	1.321237	109.42	112.08	109.1	105.64	109.06	2.64	20.8	65.2	106.7
Anthracene	54.24	56.92	57.19	49.93	54.57	3.367759	108.48	113.84	114.38	99.86	109.14	6.74	32	43.4	118
delta-BHC	54.75	54.51	57.45	53.37	55.02	1.728236	109.5	109.02	114.9	106.74	110.04	3.46			
Carbazole	55.7	57.62	56.57	51.7	55.40	2.586972	111.4	115.24	113.14	103.4	110.80	5.17			
Heptachlor	52.63	52.34	52.84	53.48	52.82	0.483899	105.26	104.68	105.68	106.96	105.65	0.97	37.2	10	172.2
Di-n-butylphthalate	54.64	54.17	56.5	53.95	54.82	1.159612	109.28	108.34	113	107.9	109.63	2.32	16.7	8.4	111
Aldrin	52.75	52.17	54.62	55.86	53.85	1.699549	105.5	104.34	109.24	111.72	107.70	3.40	39	7.2	152.2
Heptachlor epoxide	53.87	55.36	57.45	55.64	55.58	1.4689	107.74	110.72	114.9	111.28	111.16	2.94	54.7	70.9	109.4
Fluoranthene	55.08	56.5	54.73	53.12	54.86	1.388341	110.16	113	109.46	106.24	109.72	2.78	32.8	42.9	121.3
Chrysene-d12	40	40	40	40	40.00	0	80	80	80	80	80.00	0.00			

Benzidine	53.6	49.47	56.95	59.5	54.66	4.341114	107.2	98.94	113.9	119	109.76	8.68			
Pyrene	54.96	54.64	53.33	50.03	53.24	2.25319	109.92	109.28	106.66	100.06	106.48	4.51	25.2	69.6	100
alpha-Endosulfan	50.26	50.35	52.83	50.9	51.09	1.197233	100.52	100.7	105.66	101.8	102.17	2.39			
p,p'-DDE	54.61	53.26	54.04	50.99	53.23	1.589434	109.22	106.52	108.08	101.98	106.45	3.18	32	19.2	119.7
Terphenyl-d14	56.84	53.44	51.63	50.37	53.07	2.811488	113.68	106.88	103.26	100.74	106.14	5.62			
Dieldrin	54.94	53.17	56.43	51.93	54.12	1.975439	109.88	106.34	112.86	103.86	108.24	3.95	30.7	44.3	119.3
Endrin	52.79	50.44	53.91	47.81	51.24	2.704088	105.58	100.88	107.82	95.62	102.48	5.41			
Endrin aldehyde	51.49	53.71	51.41	43.94	50.14	4.266938	102.98	107.42	102.82	87.88	100.28	8.53	32.5	10	188.8
beta-Endosulfan	54.44	52.95	53.06	49.68	52.53	2.0189	108.88	105.9	106.12	99.36	105.07	4.04			
p,p'-DDD	56.39	50.91	53.29	50.65	52.81	2.665983	112.78	101.82	106.58	101.3	105.62	5.33	31.1	10	134.5
Butylbenzylphthalate	53.79	52.86	55.62	51.48	53.44	1.737131	107.58	105.72	111.24	102.96	106.88	3.47	23.4	10	139.9
Endosulfan sulfate	55.8	49.92	54.03	53.03	53.20	2.465502	111.6	99.84	108.06	106.06	106.39	4.93	16.7	10	103.5
p,p'-DDT	52.03	45.31	50.71	50.36	49.60	2.950631	104.06	90.62	101.42	100.72	99.21	5.90	61.6	10	170.6
Methoxychlor	51.98	47.16	51.23	49.93	50.08	2.119851	103.96	94.32	102.46	99.86	100.15	4.24			
Benzo[a]anthracene	52.04	51.98	54.31	50.46	52.20	1.586787	104.08	103.96	108.62	100.92	104.40	3.17	27.6	41.8	133
3,3'-Dichlorobenzidine	53.82	49.03	50.24	52.69	51.45	2.196581	107.64	98.06	100.48	105.38	102.89	4.39	71.4	8.2	212.5
Chrysene	51.89	52.55	55.45	49.09	52.25	2.610562	103.78	105.1	110.9	98.18	104.49	5.22	48.3	44.1	139.9
bis(2-Ethylhexyl)phtha	55.92	51.75	54.4	50.33	53.10	2.525721	111.84	103.5	108.8	100.66	106.20	5.05	41.1	28.9	136.8
Perylene-d12	40	40	40	40	40.00	0	80	80	80	80	80.00	0.00			
Di-n-octylphthalate	61.25	59.81	60.1	55.21	59.09	2.661984	122.5	119.62	120.2	110.42	118.19	5.32	31.4	18.6	131.6
Benzo[b]fluoranthene	53.94	57.9	53.8	52.95	54.65	2.212018	107.88	115.8	107.6	105.9	109.30	4.42	38.8	42	140.4
Benzo[k]fluoranthene	57.14	59.38	56.35	50.76	55.91	3.683781	114.28	118.76	112.7	101.52	111.82	7.33	32.3	25.2	145.7
Benzo[a]pyrene	52.61	52.24	54.34	52.87	53.02	0.92038	105.22	104.48	108.68	105.74	106.03	1.84	39	31.7	148
Indeno[1,2,3-cd]pyren	56.6	54.87	57	53.73	55.55	1.52532	113.2	109.74	114	107.46	111.10	3.05	44.6	10	150.9
Dibenz[a,h]anthracene	53.82	53.74	55.22	54.37	54.29	0.68183	107.64	107.48	110.44	108.74	108.58	1.36	70	10	199.7
Benzo[g,h,i]perylene	52.97	54.35	56.29	52.79	54.10	1.617776	105.94	108.7	112.58	105.58	108.20	3.24	58.9	10	195