Analytical Resources, Incorporated
Analytical Chemists and Consultants

REQUEST FOR RE-EXTRACTION / RE-ANALYSIS
(Organic Analyses)

Todays Date: 10/25/07 **Client Name:** Anchor

ARI Project Number: LR71 **Client Project:** Kimberly Clark Anacortes

Analysis: BANS **Turn Around Time:** ASAP

Project Manager: Sue **Date Sampled:** 9/27/07 & 9/28/07

Criteria Flagged

Unacceptable Blank:	☐	**Unacceptable Surrogate:**	☐
Unacceptable Duplicate:	☐	**Instrument Problem:**	☐
Unacceptable Spike:	☒	**Other:**	☐
Overwrite LIMS:	☐	**Enter as Re-extract:**	☐

Details of Problem / Recommended Corrective Action

SB recoveries no good

Samples Affected

All LR71

Corrective Action Taken

Re-extract

Analyst: [signature] **Supervisor:** _____

Date: 10/25/07 **Date:** _____

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Organic Extractions Benchsheet
8270 BAN / Skydrol / Phenol – Soil/Sediment/Tissue

In-House ☐ | PSDDA ☒ | Macrotip ☒ | Tissuemizer ☐ | KD ☒ | TurboVap ☒

QA LIMs #
EXT LIMs #
Bid # SV1026B-01
ARI Job No(s) LU10, LU21, LR71 (R1)

Client Name / Project ID
Hart Crowser, Inc.
Seattle Public Utilities
Anchor Environmental, LLC

Extraction Requirements	Verify Client ID	Volume Extracted (g)	#1 GPC Y/N	KD	Final Effective Volume	Volume to Lab	Comments
MB: LU10MBS	10	7.50	(REQ) 1:2		1mL	0.5mL	Equivalent to 50g = 7.5g + 2mL DI H_2O see notes
SB: SBS		7.50	1:2 SP 10/31				
SBSD		7.50	↓				
A	Verified	76.64	1:4 10/30		2mL		
LU21 A		29.82	1:2 10/29 SP 10/30		1mL		
B		35.48					
C		34.48					
D		21.82					
E		23.30					
LR71 A2		104.26					
B2		101.30					
C2		75.30					
D2		71.56					
E2		65.54	↓				
EMS2		65.70	1:2 SP 10/31				
EMSD2		65.84	↓ 10/30				
F2		75.68	1:2 SP 10/30				
H2		79.94	↓				
I2		97.18					
J2		65.72	1:2 SP 10/31				
K2		86.34	↓				
L2		76.50					+ DCM RINSE FROM GPC - MP 11/1/07
Analyst/Date	GP 10/27/07	GP 10/27/07		HO 10/29/07 HO 10/31/07		MP 11/1/07	

Spike	Spike ID	Volume	Conc	Analyst	Witness	Solvent / Reagent	ID
Surrogate	A_2	250 µL	100/150 µg/mL	WW	GP	Na_2SO_4 ID:	10/18 #5 21929
LCS	7	250 µL	100 µg/mL	WW	GP	(DCM) CH_2Cl_2 ID:	I3978 22070
LCS(extra)	12	250 µL	200 µg/mL	WW	GP	1:1 DCM/ACE ID:	F867 23292
	10A	250 µL	100/200 µg/mL	WW	GP	Hexane:	
MS/MSD		µL	µg/mL	↓		0.05% HCl/Acetone:	
Extraction Time: 15:40						Neutral Glasswool:	

3009F

Revision 9
01/03/2007

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Organic Extractions Laboratory
Analyst Notes

ARI Job No.: LR71 (RX)

Client ID: Anchor Environmental, LLC

Parameter: BAN

Client Project: Kimberly Clark Anacortes

SOP Number(s): 3445

No Anomalies:

List problems, concerns, corrective actions and any other pertinent information

Analyst Initials:		**Date:**	

Analytical Resources Inc.: Organics Instrument Log

NT-4 Serial No.: GC = US00010849; MS = US72821113

Date: 10/1/07 Analysis: BANS Analyst: LLK

GC Program: ABN Column No: 122191 Column Type: ZB-5

Instrument Tune (.U or .CT.): DT0921 EM Voltage: 1753

Calibration File: 0251001 Curve Date: 10/1/07

IS/SS	Ical/Ccal	LCS/ICV
1449-3	1458-4	
	1459-1,2	
	1462-2,3	

	Time	Filename	LabID	ClientId	DF													
1	1031	0251001.d	ABN 25	ABN 25	1	8.10	110324	10.14	430280	13.00	242988	15.37	380514	19.69	406554	21.84	429313	20.83	598971
2	1104	0801001.d	ABN 80	ABN 80	1	8.11	144455	10.15	529257	13.01	273258	15.38	415414	19.70	448393	21.85	527580	20.84	686610
3	1138	0011001.d	ABN 1	ABN 1	1	8.10	126812	10.14	437688	13.00	231228	15.37	345165	19.68	337796	21.84	357295	20.83	472142
4	1212	0401001.d	ABN 40	ABN 40	1	8.10	109297	10.14	434450	13.00	240213	15.37	370656	19.69	345387	21.84	368819	20.83	519831
5	1246	0051001.d	ABN 5	ABN 5	1	8.10	117611	10.14	404851	13.00	213214	15.37	312873	19.68	273529	21.84	315500	20.83	377218
6	1320	0101001.d	ABN 10	ABN 10	1	8.10	112897	10.14	400792	13.00	221239	15.37	345559	19.68	337352	21.84	363064	20.83	493568
7	1354	icv1001.d	ABN ICV	ABN ICV	1	8.10	115954	10.14	453229	13.00	255917	15.37	392657	19.69	356097	21.84	366502	20.83	513773
8	1428	lq07mb.d	LQ07MBS1	LQ07MBS1	1	8.10	131619	10.14	457819	12.99	242529	15.37	368333	19.68	356298	20.83	492886	21.84	224313
9	1502	lq07sb.d	LQ07LCSS1	LQ07LCSS1	1	8.10	142430	10.14	516774	13.00	280048	15.37	438934	19.69	414720	20.83	626434	21.84	417580
10	1536	lq07sbd.d	LQ07LCSDS1	LQ07LCSDS1	1	8.10	137055	10.14	488606	13.00	261053	15.37	417431	19.69	404001	20.83	618570	21.84	425501
11	1610	lp67mb.d	LP67MBS1	LP67MBS1	1	8.10	142031	10.14	482376	13.00	250218	15.37	357352	19.68	317972	20.83	444181	21.83	338127
12	1644	lp67sb.d	LP67LCSS1	LP67LCSS1	1	8.10	139724	10.14	503957	13.00	264387	15.37	390587	19.68	309728	20.83	483924	21.83	360744
13	1718	lq07a.d	LQ07A	MW-07-04 Cutti	1	8.10	141594	10.14	509807	13.00	268346	15.37	410283	19.68	421618	20.82	609447	21.84	394357
14	1752	lq07b.d	LQ07B	MW-07-01 Cutti	1	8.10	148043	10.13	527610	13.00	281513	15.36	438238	19.67	416425	20.82	609061	21.83	368283
15	1826	lq07c.d	LQ07C	MW-07-02 Cutti	1	8.10	136799	10.13	486628	12.99	257690	15.36	382213	19.68	382119	20.82	559652	21.83	287623
16	1900	lp67d.d	LP67D	DM1-CS	1	8.10	140907	10.14	501452	13.00	266099	15.37	409932	19.68	416290	20.83	644057	21.84	420948
17	1933	lp67dms.d	LP67DMS	DM1-CS MS	1	8.10	146575	10.14	516640	13.00	279561	15.37	387358	19.68	346822	20.83	547036	21.84	436728
18	2007	lp67dmd.d	LP67DMSD	DM1-CS MSD	1	8.10	136535	10.14	512635	13.00	282971	15.37	402280	19.69	366878	20.83	568999	21.84	437279
19	2041	lp67f.d	LP67F	DM2-CS	1	8.10	124380	10.14	457578	13.00	277245	15.38	478850	19.73	489150	20.87	612332	21.91	327645
20	2115	lp67h.d	LP67H	DM3-CS	1	8.10	157275	10.14	572111	13.00	323548	15.37	535049	19.68	532407	20.83	804427	21.84	533237

Maintenance / Comments New liner + wool. Clipped column. Cleaned inlet seal.

LLK 10/2/07

Maintenance Verification (Identify ICal or CCal that demonstrates the instrument is in control): 0251001

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

Analytical Resources, Incorporated
Analytical Chemists and Consultants

GC/MS SVOA Analyst Notes / Corrective Action Log

ARI Project ID: NTA Curve Client ID: ARI

ARI SOP: **801S**(SIM-PNA) **802S**(BTS-HX) **803S**(BTS-PW) (**804S**(8270D) **805S**(BTS-ET)

Parameter(s): BANs

Instrument: NT-1 NT-2 (NT-4) NT-6

Curve Date: 10/1/07 Analysis Start Date: —

DFTPP Tune Meets Criteria?	(YES) / NO	Method Blank in Control?	~~YES / NO~~
DDT Breakdown <20%?	(YES) / NO / NA	LCS / LCSD Recovery in Control?	(YES) / NO
Peak Tailing Factor in Control?	(YES) / NO / NA	MS/MSD Recovery in Control?	~~YES / NO~~
ICal Meets RF & %RSD Criteria?	(YES) / NO	Surrogate Recovery in Control?	(YES) / NO
CCal Meets RF & %RSD Criteria?	~~YES / NO~~	Special Analysis Criteria Met?	(YES) / NO / NA
Internal Standard Meets Criteria?	(YES) / NO		

Detail problems, corrective actions and/or other pertinent information below (use reverse side when necessary): -Dioxane & Dioxane surrogate not curved.

EJK
10/1/07

Additional Details on Reverse: Yes / (No)

Analyst Signature: [signature] **Date:** 10/1/07

Reviewer's Signature: [signature] **Date:** 10/1/07

Analytical Resources Inc.: Organics Instrument Log

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

Date: 10/18/07 Analysis: BANs Analyst: LJK

GC Program: ABNIVL Column No: 125687 Column Type: ZB-5

Instrument Tune (.U or .CT.): 070929 EM Voltage: 1671

Calibration File: cc1018 Curve Date: 10/1/07

IS/SS	Ical/Ccal	LCS/ICV
1449-3	1450-4	
	1457-1,2	
	1462-2,3	

	Time	Filename	LabID	ClientId	DF													
1	1007	cc1018.d	ABN 25		1	7.90	209365	9.96	696408	12.84	426299	15.22	686887	19.56	718747	21.72	680717	20.72	1031594
2	1042	lr71mb.d	LR71MBS1	LR71MBS1	1	7.91	196851	9.97	642624	12.85	392528	15.23	628504	19.57	591236	20.73	863452	21.73	554552
3	1115	lr71sb.d	LR71LCSS1	LR71LCSS1	1	7.91	204541	9.97	663850	12.85	401615	15.23	652120	19.57	650993	20.74	956174	21.73	583887
4	1149	ls28mb2.d	LS28MBS2	LS28MBS2	1	9.96	672871	12.85	401738	15.23	647027	19.57	609783	21.73	622890				
5	1223	ls28sb2.d	LS28LCSS2	LS28LCSS2	1	9.97	638575	12.85	356448	15.23	545203	19.57	455953	21.73	553380				
6	1257	ls28sbd2.d	LS28LCSDS2	LS28LCSDS2	1	9.97	644949	12.85	365200	15.23	555521	19.57	466229	21.73	562484				
7	1331	ls28b.d	LS28B	SOLIDS-5-071002	3	9.99	732671	12.88	445409	15.25	676381	19.58	749991	21.75	813606				
8	1405	lt59p.d	LT59P	D1-S6-b2	1	9.97	657655	12.85	391160	15.23	662687	19.57	662999	21.73	671107				
9	1439	lr71a.d	LR71A	AN-SS-01-070927	1	7.91	189191	9.97	616459	12.85	376667	15.23	660463	19.58	701501	20.74	995717	21.74	580716
10	1513	lr71b.d	LR71B	AN-SS-02-070927	1	7.91	197786	9.97	668243	12.86	428728	15.24	772764	19.60	970550	20.76	1267104	21.77	693915
11	1547	lr71c.d	LR71C	AN-SS-03-070928	1	7.92	202713	9.97	630327	12.85	373356	15.24	659639	19.58	756753	20.74	1082814	21.75	678558
12	1621	lr71d.d	LR71D	AN-SS-07-070928	1	7.92	196689	9.97	614521	12.85	366890	15.24	635257	19.57	752882	20.74	998802	21.74	621049
13	1655	lr71e.d	LR71E	AN-SS-10-070928	1	7.91	197254	9.97	601231	12.85	326575	15.23	507145	19.57	615072	20.73	877776	21.73	589955
14	1729	lr71ems.d	LR71EMS	AN-SS-10-070928 MS	1	7.92	179861	9.97	596899	12.85	381704	15.24	629026	19.57	637723	20.73	931529	21.73	549566
15	1803	lr71emd.d	LR71EMSD	AN-SS-10-070928 MSD	1	7.91	193234	9.97	606199	12.85	362845	15.24	619131	19.57	682731	20.73	1005443	21.73	561100
16	1836	lr71f.d	LR71F	AN-SS-11-070928	1	7.91	189400	9.97	594257	12.85	356615	15.24	642771	19.59	858973	20.74	1211080	21.75	589128
17	1910	lr71h.d	LR71H	AN-SS-04	1	7.91	177695	9.97	520814	12.85	279072	15.24	480458	19.58	775891	20.75	1148629	21.76	615101
18	1944	lr71i.d	LR71I	AN-SS-05	1	7.92	197352	9.97	632048	12.85	393756	15.24	712380	19.59	903473	20.75	1217237	21.75	572397
19	2018	lr71j.d	LR71J	AN-SS-06	1	7.91	203049	9.97	607154	12.85	323111	15.24	496959	19.57	681258	20.73	963453	21.74	534656
20	2051	lr71k.d	LR71K	AN-SS-08	1	7.91	194329	9.97	605202	12.86	382755	15.24	698411	19.60	929702	20.75	1250276	21.77	511997
21	2125	lr71l.d	LR71L	AN-SS-09	1	7.91	194381	9.97	626329	12.85	398480	15.24	717880	19.59	858666	20.75	1251061	21.76	534676

Maintenance / Comments New liner & wool. Clipped column. Cleaned inlet seal.

LJK 10/19/07

Maintenance Verification (Identify ICal or CCal that demonstrates the instrument is in control): cc1018

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

1103

Analytical Resources, Incorporated
Analytical Chemists and Consultants

GC/MS SVOA Analyst Notes / Corrective Action Log

ARI Project ID: LR71 Client ID: Anchor

ARI SOP: **801S**(SIM-PNA) **802S**(BTS-HX) **803S**(BTS-PW) **804S**(8270D) **805S**(BTS-ET)

Parameter(s): BANs

Instrument: NT-1 NT-2 NT-4 NT-6

Curve Date: 10/1/07 Analysis Start Date: 10/18/07

DFTPP Tune Meets Criteria?	YES / NO	Method Blank in Control?	YES / NO
DDT Breakdown <20%?	YES / NO / NA	LCS / LCSD Recovery in Control?	YES / NO
Peak Tailing Factor in Control?	YES / NO / NA	MS/MSD Recovery in Control?	YES / NO
ICal Meets RF & %RSD Criteria?	YES / NO	Surrogate Recovery in Control?	YES / NO
CCal Meets RF & %RSD Criteria?	YES / NO	Special Analysis Criteria Met?	YES / NO / NA
Internal Standard Meets Criteria?	YES / NO		

Detail problems, corrective actions and/or other pertinent information below (use reverse side when necessary): -Low-ish SB recoveries. Attempted to GPC archive of SB, results not much better. Sent for RX.

-2-FBP surrogate low in MB/SB.

LJR
10/25/07

Additional Details on Reverse: Yes / No

Analyst Signature: _____ **Date:** 10/25/07

Reviewer's Signature: _____ **Date:** 10/25/07

Analytical Resources Inc.: Organics Instrument Log

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

Date: 10/19/07 Analysis: BANs Analyst: LJK

GC Program: ABNIUL Column No: 125087 Column Type: ZB-5

Instrument Tune (.U or .CT.): 071029 EM Voltage: 1671

Calibration File: CC1019 Curve Date: 10/1/07

IS/SS	Ical/Ccal	LCS/ICV
1449-3	1458-4	
	1459-1,2	
	1462-2,3	

	Time	Filename	LabID	ClientId	DF															
1	0925	cc1019.d	ABN 25	ABN CCAL	1	7.84	226424	9.91	707249	12.79	406888	15.17	651776	19.51	737814	21.68	694786	20.69	1065410	
2	0959	cc1019a.d	BDPE 25		1	7.83	191934	9.90	611713	12.78	345080	19.50	528222	21.67	548909					
3	1033	lt92mb.d	LT92MBS1	LT92MBS1	1	9.89	638705	12.78	366799	15.17	554576	19.50	518164	21.67	552308					
4	1106	lt92sb.d	LT92LCSS1	LT92LCSS1	1	9.89	639930	12.78	354578	15.17	533945	19.51	527818	21.67	578363					
5	1140	lt92sbd.d	LT92LCSDS1	LT92LCSDS1	1	9.89	658351	12.78	367082	15.17	563583	19.50	561299	21.67	591191					
6	1214	lt94mb.d	LT94MBS1	LT94MBS1	1	7.83	202396	9.90	666394	12.78	392108	15.16	632275	19.50	565386	20.68	821019	21.67	537062	
7	1247	lt94sb.d	LT94LCSS1	LT94LCSS1	1	7.83	208790	9.90	681138	12.78	425327	15.17	663287	19.50	681743	20.68	896204	21.67	550903	
8	1321	lt92a.d	LT92A	I-101607-STK-2	1	9.90	586056	12.78	318346	15.17	499625	19.50	569840	21.67	619653					
9	1355	lt92b.d	LT92B	I-100907-STK-1	1	9.90	558809	12.78	320708	15.17	533086	19.51	630285	21.67	564848					
10	1429	lt93a.d	LT93A	Navy-101607-Fill-1	1	9.90	524773	12.78	288128	15.16	502877	19.50	606132	21.68	610043					
11	1503	lt94a.d	LT94A	CLR-013-101507	1	7.83	163885	9.89	505864	12.78	270171	15.17	443546	19.50	523655	20.68	791833	21.66	383623	
12	1536	lt94b.d	LT94B	CLR-014-101507	1	7.83	201818	9.90	608310	12.78	325333	15.17	548264	19.50	612942	20.68	903305	21.67	561214	
13	1610	lt94c.d	LT94C	CLR-4014-101507	1	7.83	195137	9.90	628381	12.78	355668	15.17	605797	19.50	598700	20.68	865512	21.67	514346	
14	1644	lt94cms.d	LT94CMS	CLR-4014-101507 MS	1	7.83	199491	9.90	638957	12.79	386971	15.17	628304	19.51	668047	20.68	960323	21.67	579268	
15	1717	lt94cmd.d	LT94CMSD	CLR-4014-101507 MSD	1	7.83	194329	9.90	622709	12.78	362871	15.17	591585	19.50	657377	20.68	941734	21.67	553652	
16	1751	lr71fdl.d	LR71F	AN-SS-11-070928	3	7.83	158077	9.90	468974	12.78	256484	15.16	447168	19.51	604323	20.68	847787	21.67	516042	

LJK 10/20/07

Maintenance / Comments New liner + wool. Clipped column. Cleaned inlet seal

Maintenance Verification (Identify ICal or CCal that demonstrates the instrument is in control): CC1019

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

Analytical Resources, Incorporated
Analytical Chemists and Consultants

GC/MS SVOA Analyst Notes / Corrective Action Log

ARI Project ID: NT6 Curve Client ID: ARI

ARI SOP: **801S**(SIM-PNA) **802S**(BTS-HX) **803S**(BTS-PW) **804S**(8270D) **805S**(BTS-ET)

Parameter(s): BANS

Instrument: NT-1 NT-2 NT-4 NT-6

Curve Date: 10/1/07 Analysis Start Date: —

DFTPP Tune Meets Criteria?	YES / NO	Method Blank in Control?	~~YES / NO~~
DDT Breakdown <20%?	YES / NO / NA	LCS / LCSD Recovery in Control?	YES / NO
Peak Tailing Factor in Control?	YES / NO / NA	MS/MSD Recovery in Control?	~~YES / NO~~
ICal Meets RF & %RSD Criteria?	YES / NO	Surrogate Recovery in Control?	YES / NO
CCal Meets RF & %RSD Criteria?	~~YES / NO~~	Special Analysis Criteria Met?	YES / NO / NA
Internal Standard Meets Criteria?	YES / NO		

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

LTK
10/1/07

Additional Details on Reverse: Yes / No

Analyst Signature: [signature] **Date:** 10/1/07

Reviewer's Signature: [signature] **Date:** 10/1/07

Analytical Resources Inc.: Organics Instrument Log
NT-4 Serial No.: GC = US00010849; MS = US72821113

Date: 11/1/07 Analysis: BANs Analyst: EJK

GC Program: ABN Column No: 122191 Column Type: ZB-5

Instrument Tune (U) or .CT.): 070921 EM Voltage: 1388

Calibration File: cc1101 Curve Date: 10/1/07

IS/SS	Ical/Ccal	LCS/ICV
1449-3	1458-4	
	1459-1,2	
	1462-2,3	

	Time	Filename	LabID	ClientId	DF											
1	1435	cc1101.d	ABN 25		1	6.82	145384	8.87	530525	11.68	280701	14.00	391934	18.22	354658	20.33	400782	19.50	506314
2	1506	lu10mb.d	LU10MBS1	LU10MBS1	1	6.82	150402	8.87	557632	11.68	296628	13.99	428044	18.22	370917	19.50	507823	20.32	385229
3	1537	lu10sb.d	LU10LCSS1	LU10LCSS1	1	6.82	165263	8.87	613454	11.69	325298	14.00	467434	18.22	378695	19.50	529884	20.32	392157
4	1608	lu10sbd.d	LU10LCSDS1	LU10LCSDS1	1	6.82	162567	8.87	609064	11.68	327334	14.00	470911	18.22	387827	19.50	530771	20.32	391270
5	1639	lr71a2.d	LR71ARE	AN-SS-01-070927	1	6.82	149931	8.87	560313	11.68	297876	14.00	435451	18.24	502690	19.52	753759	20.35	501155
6	1711	lr71b2.d	LR71BRE	AN-SS-02-070927	1	6.83	133446	8.87	482322	11.68	261814	14.01	419690	18.26	665106	19.54	693549	20.38	496914
7	1742	lr71c2.d	LR71CRE	AN-SS-03-070928	1	6.83	165249	8.87	611125	11.69	318065	14.00	432391	18.23	445581	19.51	622522	20.34	475370
8	1813	lr71d2.d	LR71DRE	AN-SS-07-070928	1	6.82	171353	8.87	635791	11.68	319126	14.00	452619	18.23	450806	19.51	635306	20.34	492085
9	1845	lr71e2.d	LR71ERE	AN-SS-10-070928	1	6.82	166412	8.87	605024	11.68	318217	14.00	442973	18.22	467873	19.50	644799	20.33	492457
10	1916	lr71ems2.d	LR71EMSRE	AN-SS-10-070 MS	1	6.82	169624	8.87	621446	11.69	337720	14.00	442952	18.23	446427	19.51	603758	20.33	516940
11	1947	lr71emd2.d	LR71EMSDRE	AN-SS-10-070 MSD	1	6.82	147079	8.87	543344	11.68	289705	14.00	392842	18.23	420545	19.50	559864	20.34	457106
12	2018	lr71f2.d	LR71FRE	AN-SS-11-070928	1	6.83	165938	8.87	598961	11.68	317563	14.00	443947	18.25	522303	19.52	767428	20.36	527367
13	2050	lr71h2.d	LR71HRE	AN-SS-04	1	6.82	164152	8.87	605587	11.68	309756	14.00	442675	18.25	530706	19.53	720058	20.37	559995
14	2121	lr71i2.d	LR71IRE	AN-SS-05	1	6.83	151499	8.87	551420	11.69	322672	14.01	528121	18.26	583655	19.53	812092	20.36	490412
15	2152	lr71j2.d	LR71JRE	AN-SS-06	1	6.83	170134	8.87	616125	11.69	328811	14.00	471706	18.23	504181	19.51	692029	20.34	562162
16	2223	lr71k2.d	LR71KRE	AN-SS-08	1	6.82	148189	8.87	563265	11.69	333421	14.01	523860	18.29	362137	19.56	738341	20.41	415986
17	2254	lr71l2.d	LR71LRE	AN-SS-09	1	6.83	164643	8.88	587768	11.69	328476	14.00	493723	18.27	557406	19.54	752279	20.39	452167
18	2325	lu10adl.d	LU10A	Pile F	3	6.82	160537	8.88	554804	11.69	327439	14.01	506109	18.25	612050	19.53	843020	20.38	433903
19	2356	lu21adl.d	LU21A	CB106-101807	3	6.83	160366	8.88	576205	11.69	360573	14.02	606707	18.28	629340	19.56	754549	20.42	373453
20	0027	lu21bdl.d	LU21B	CB107-101807sump	3	6.82	165370	8.88	580790	11.70	313362	14.02	491095	18.27	585497	19.54	736049	20.39	469159
21	0058	lu21cdl.d	LU21C	CB107-101807filter	3	6.83	173474	8.88	612378	11.69	329069	14.02	543150	18.26	601456	19.53	819896	20.38	526918
22	0129	lu21ddl.d	LU21D	CB108-101807	3	6.83	177327	8.88	630885	11.69	363675	14.01	574946	18.25	622949	19.54	838818	20.39	505256
23	0159	lu21edl.d	LU21E	CB108-101807D	3	6.82	166997	8.88	599308	11.70	359386	14.02	573327	18.26	601127	19.54	790373	20.38	467961
24	0230	dcm1101.d	DCM GPC RINSE		1	6.82	166532	8.88	542721	11.69	330258	14.00	526528	18.23	579919	19.51	787650	20.35	503609

Maintenance / Comments New liner + wool. Clipped column. Cleaned inlet seal.

EJK 11/2/07

Maintenance Verification (Identify ICal or CCal that demonstrates the instrument is in control): cc1101

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

Analytical Resources, Incorporated
Analytical Chemists and Consultants

GC/MS SVOA Analyst Notes / Corrective Action Log

ARI Project ID: LR71 RX Client ID: Anchor

ARI SOP: **801S**(SIM-PNA) **802S**(BTS-HX) **803S**(BTS-PW) **804S**(8270D) **805S**(BTS-ET)

Parameter(s): BANs

Instrument: NT-1 NT-2 NT-4 NT-6

Curve Date: 10/1/07 Analysis Start Date: 11/1/07

DFTPP Tune Meets Criteria?	YES / NO	Method Blank in Control?	YES / NO
DDT Breakdown <20%?	YES / NO / NA	LCS / LCSD Recovery in Control?	YES / NO
Peak Tailing Factor in Control?	YES / NO / NA	MS/MSD Recovery in Control?	YES / NO
ICal Meets RF & %RSD Criteria?	YES / NO	Surrogate Recovery in Control?	YES / NO
CCal Meets RF & %RSD Criteria?	YES / NO	Special Analysis Criteria Met?	YES / NO / NA
Internal Standard Meets Criteria?	YES / NO		

Detail problems, corrective actions and/or other pertinent information below (use reverse side when necessary): – Bis phthalate in MTB.

– 2-Fluorobiphenyl surrogate low in E.

LJR 11/2/07

Re-extracts – LCS/LCSD/MA 7.5gr = 60gr Equiv

See [illegible]

Additional Details on Reverse: Yes / No

Analyst Signature: [signature] **Date:** 11/2/07

Reviewer's Signature: [signature] **Date:** 11/2/07

PCB Analysis
QC Summary Data

prepared
for

ANCHOR ENVIRONMENTAL

Project : KIMBERLY CLARK ANACORTES

ARI JOB NO. LR71

prepared
by

Analytical Resources, Inc.

ANALYTICAL RESOURCES INCORPORATED

SW8082/PCB SOLIDS SURROGATE RECOVERY SUMMARY

Matrix: Sediment

QC Report No: LR71-Anchor Environmental, LLC
Project: Kimberly Clark Anacortes

Client ID	DCBP % REC	DCBP LCL-UCL	TCMX % REC	TCMX LCL-UCL	TOT OUT
AN-SS-01-070927	106%	32-155	82.0%	33-121	0
AN-SS-02-070927	76.0%	32-155	87.5%	33-121	0
MB-101107	95.8%	54-111	81.5%	37-110	0
LCS-101107	96.0%	54-111	82.5%	37-110	0
AN-SS-03-070928	87.8%	32-155	72.2%	33-121	0
AN-SS-03-070928 MS	99.0%	32-155	80.0%	33-121	0
AN-SS-03-070928 MSD	98.2%	32-155	78.8%	33-121	0
AN-SS-07-070928	102%	32-155	80.0%	33-121	0
AN-SS-10-070928	94.5%	32-155	101%	33-121	0
AN-SS-10-070928 DL	118%	32-155	110%	33-121	0
AN-SS-11-070928	91.2%	32-155	79.8%	33-121	0
AN-SS-11-070928 DL	121%	32-155	85.5%	33-121	0
AN-SS-04	86.0%	32-155	77.0%	33-121	0
AN-SS-04 DL	107%	32-155	85.5%	33-121	0
AN-SS-05	94.5%	32-155	88.5%	33-121	0
AN-SS-06	91.2%	32-155	76.2%	33-121	0
AN-SS-06 DL	95.2%	32-155	88.5%	33-121	0
AN-SS-08	98.8%	32-155	76.2%	33-121	0
AN-SS-09	94.0%	32-155	70.0%	33-121	0

Prep Method: SW3550B
Log Number Range: 07-20766 to 07-20777

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA PCB by GC/ECD
Page 1 of 1

Sample ID: AN-SS-03-070928
MS/MSD

Lab Sample ID: LR71C
LIMS ID: 07-20768
Matrix: Sediment
Data Release Authorized:
Reported: 10/19/07

QC Report No: LR71-Anchor Environmental, LLC
Project: Kimberly Clark Anacortes

Date Sampled: 09/28/07
Date Received: 09/29/07

Date Extracted MS/MSD: 10/11/07

Date Analyzed MS: 10/17/07 12:56
MSD: 10/17/07 13:13
Instrument/Analyst MS: ECD5/PK
MSD: ECD5/PK
GPC Cleanup: No
Sulfur Cleanup: Yes
Acid Cleanup: Yes
Florisil Cleanup: No

Sample Amount MS: 25.4 g-dry-wt
MSD: 25.4 g-dry-wt
Final Extract Volume MS: 1.0 mL
MSD: 1.0 mL
Dilution Factor MS: 1.00
MSD: 1.00
Silica Gel: No

Percent Moisture: 33.2%

Analyte	Sample	MS	Spike Added-MS	MS Recovery	MSD	Spike Added-MSD	MSD Recovery	RPD
Aroclor 1016	< 3.9 U	14.7	19.7	74.6%	13.1	19.7	66.5%	11.5%
Aroclor 1260	< 3.9 U	14.9	19.7	75.6%	15.8	19.7	80.2%	5.9%

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

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA PCB by GC/ECD
Page 1 of 1

Sample ID: LCS-101107
LAB CONTROL

Lab Sample ID: LCS-101107
LIMS ID: 07-20768
Matrix: Sediment
Data Release Authorized:
Reported: 10/19/07

QC Report No: LR71-Anchor Environmental, LLC
Project: Kimberly Clark Anacortes

Date Sampled: NA
Date Received: NA

Date Extracted: 10/11/07
Date Analyzed: 10/17/07 09:30
Instrument/Analyst: ECD5/PK
GPC Cleanup: No
Sulfur Cleanup: Yes
Acid Cleanup: Yes
Florisil Cleanup: No

Sample Amount: 25.0 g-dry-wt
Final Extract Volume: 1.0 mL
Dilution Factor: 1.00
Silica Gel: No

Percent Moisture: NA

Analyte	Lab Control	Spike Added	Recovery
Aroclor 1016	14.2	20.0	71.0%
Aroclor 1260	15.8	20.0	79.0%

PCB Surrogate Recovery

Decachlorobiphenyl	96.0%
Tetrachlorometaxylene	82.5%

Results reported in µg/kg (ppb)

4

PCB METHOD BLANK SUMMARY

BLANK NO.

LR71MBS1

Lab Name: ANALYTICAL RESOURCES, INC Client: ANCHOR

ARI Job No.: LR71 Project: KIMBERLY CLARK ANACO

Lab Sample ID: LR71MBS1 Lab File ID: 1017B003

Date Extracted: 10/11/07 Matrix: SOLID

Date Analyzed: 10/17/07 Instrument ID: ECD5

Time Analyzed: 0913 GC Columns: ZB5/ZB35

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

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED
01	LR71LCSS1	LR71LCSS1	10/17/07
02	AN-SS-01-070927	LR71A	10/17/07
03	AN-SS-02-070927	LR71B	10/17/07
04	AN-SS-03-070928	LR71C	10/17/07
05	AN-SS-03-070928 MS	LR71CMS	10/17/07
06	AN-SS-03-070928 MSD	LR71CMSD	10/17/07
07	AN-SS-07-070928	LR71D	10/17/07
08	AN-SS-10-070928	LR71E	10/17/07
09	AN-SS-11-070928	LR71F	10/17/07
10	AN-SS-04	LR71H	10/17/07
11	AN-SS-05	LR71I	10/17/07
12	AN-SS-06	LR71J	10/17/07
13	AN-SS-10-070928	LR71E	10/17/07
14	AN-SS-11-070928	LR71F	10/17/07
15	AN-SS-04	LR71H	10/17/07
16	AN-SS-06	LR71J	10/17/07
17	AN-SS-08	LR71K	10/18/07
18	AN-SS-09	LR71L	10/18/07

ALL RUNS ARE DUAL COLUMN

FORM IV PCB

FORM 8
PCB INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: ANALYTICAL RESOURCES, INC Client: ANCHOR

ARI Job No.: LR71 Project: KIMBERLY CLARK ANACO

GC Column: ZB5 ID: 0.53(mm) Instrument ID: ECD5

Init. Calib. Date: 10/16/07

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

		IS1 AREA	RT	IS2 AREA	RT
	ICAL MIDPT	31569414	2.327	9983366	11.445
	UPPER LIMIT	63138828	2.427	19966732	11.545
	LOWER LIMIT	15784707	2.227	4991683	11.345

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME	IS1 AREA	RT	IS2 AREA	RT
01	ZZZZZ	ZZZZZ	10/16/07	1324	29692546	2.343	9310326	11.451
02		AR1660 .25	10/16/07	1341	31569414	2.327	9983366	11.445
03		AR1660 .02	10/16/07	1359	31869113	2.322	10042884	11.445
04		AR1660 1.0	10/16/07	1416	31437582	2.320	9610019	11.443
05		AR1660 0.1	10/16/07	1433	34137766	2.325	10882314	11.444
06		AR1660 0.5	10/16/07	1450	33732708	2.324	11150922	11.443
07	ZZZZZ	ZZZZZ	10/16/07	1507	32611268	2.322	10722755	11.443
08		AR1242	10/16/07	1524	33033563	2.323	11364938	11.444
09		AR1248	10/16/07	1542	33462797	2.324	10503875	11.444
10		AR1254	10/16/07	1559	33035889	2.324	10920808	11.444
11		AR2162	10/16/07	1616	32536980	2.325	10398524	11.445
12		AR3268	10/16/07	1633	33893543	2.322	11004559	11.443
13		AR12422	10/17/07	0838	34484538	2.352	10321880	11.458
14		AR16602	10/17/07	0856	33072634	2.330	10646112	11.447
15	LR71MBS1	LR71MBS1	10/17/07	0913	29444181	2.328	10041602	11.446
16	LR71LCSS1	LR71LCSS1	10/17/07	0930	30348589	2.325	10141332	11.443
17	AN-SS-01-070	LR71A	10/17/07	0947	25664591	2.322	9544125	11.445
18	AN-SS-02-070	LR71B	10/17/07	1221	27651855	2.319	12932854	11.495
19	AN-SS-03-070	LR71C	10/17/07	1239	27014845	2.321	9103579	11.442
20	AN-SS-03-070	LR71CMS	10/17/07	1256	25745709	2.321	8704641	11.441
21	AN-SS-03-070	LR71CMSD	10/17/07	1313	28362985	2.323	8352625	11.443
22	AN-SS-07-070	LR71D	10/17/07	1330	26383680	2.322	8279031	11.442
23	AN-SS-10-070	LR71E	10/17/07	1347	27635450	2.320	10095695	11.441
24	AN-SS-11-070	LR71F	10/17/07	1404	27949068	2.320	9980902	11.442
25	AN-SS-04	LR71H	10/17/07	1421	25886290	2.322	10611687	11.446
26	AN-SS-05	LR71I	10/17/07	1439	26785157	2.323	8627398	11.442
27	AN-SS-06	LR71J	10/17/07	1456	27335710	2.325	8603163	11.441
28		AR12542	10/17/07	1656	32465949	2.324	7915567	11.442
29		AR16603	10/17/07	1713	31408365	2.321	8124236	11.442
30	AN-SS-10-070	LR71E	10/17/07	1730	31890129	2.322	8259077	11.441
31	AN-SS-11-070	LR71F	10/17/07	1747	33268391	2.325	9571972	11.441
32	AN-SS-04	LR71H	10/17/07	1804	31648776	2.323	9212077	11.440

IS1 = 1-Bromo-2-Nitrobenzene RT Window = RT +/- .1 min
IS2 = Hexabromobiphenyl

* Indicates value outside QC Limits

FORM 8
PCB INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: ANALYTICAL RESOURCES, INC Client: ANCHOR

ARI Job No.: LR71 Project: KIMBERLY CLARK ANACO

GC Column: ZB5 ID: 0.53(mm) Instrument ID: ECD5

Init. Calib. Date: 10/16/07

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

		IS1 AREA	RT	IS2 AREA	RT
	ICAL MIDPT	31569414	2.327	9983366	11.445
	UPPER LIMIT	63138828	2.427	19966732	11.545
	LOWER LIMIT	15784707	2.227	4991683	11.345

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME	IS1 AREA	RT	IS2 AREA	RT
33	AN-SS-06	LR71J	10/17/07	1822	29440958	2.323	8981736	11.441
34		AR12482	10/17/07	2313	32189513	2.320	8404718	11.441
35		AR16604	10/17/07	2330	31587087	2.323	8289248	11.442
36		AR12543	10/18/07	0918	36072509	2.352	8827155	11.459
37		AR16605	10/18/07	0935	33472339	2.329	9053161	11.446
38	AN-SS-08	LR71K	10/18/07	0953	28444578	2.331	8078427	11.445
39	AN-SS-09	LR71L	10/18/07	1010	30235999	2.325	8481610	11.442
40		AR12423	10/18/07	1719	34952186	2.326	7745613	11.445
41		AR16606	10/18/07	1736	34420131	2.321	7800988	11.444

IS1 = 1-Bromo-2-Nitrobenzene RT Window = RT +/- .1 min
IS2 = Hexabromobiphenyl

* Indicates value outside QC Limits

FORM 8
PCB INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: ANALYTICAL RESOURCES, INC Client: ANCHOR

ARI Job No.: LR71 Project: KIMBERLY CLARK ANACO

GC Column: ZB35 ID: 0.53(mm) Instrument ID: ECD5

Init. Calib. Date: 10/16/07

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

		IS1 AREA	RT	IS2 AREA	RT
	ICAL MIDPT	20324893	3.034	6610345	12.210
	UPPER LIMIT	40649786	3.134	13220690	12.310
	LOWER LIMIT	10162446	2.934	3305172	12.110

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME	IS1 AREA	RT	IS2 AREA	RT
01	ZZZZZ	ZZZZZ	10/16/07	1324	19808511	3.033	6267398	12.213
02		AR1660 .25	10/16/07	1341	20324893	3.034	6610345	12.210
03		AR1660 .02	10/16/07	1359	20963919	3.031	6742790	12.209
04		AR1660 1.0	10/16/07	1416	19760964	3.032	6642198	12.208
05		AR1660 0.1	10/16/07	1433	21895824	3.032	7309482	12.209
06		AR1660 0.5	10/16/07	1450	21386221	3.033	7518202	12.209
07	ZZZZZ	ZZZZZ	10/16/07	1507	21496463	3.030	7132843	12.209
08		AR1242	10/16/07	1524	21255964	3.032	7527133	12.209
09		AR1248	10/16/07	1542	21354940	3.031	6887836	12.208
10		AR1254	10/16/07	1559	21491816	3.032	7199807	12.209
11		AR2162	10/16/07	1616	20535027	3.032	6749695	12.210
12		AR3268	10/16/07	1633	21719653	3.031	7350682	12.209
13		AR12422	10/17/07	0838	21806832	3.036	7197679	12.217
14		AR16602	10/17/07	0856	21040880	3.037	7127495	12.212
15	LR71MBS1	LR71MBS1	10/17/07	0913	20520625	3.034	6754471	12.210
16	LR71LCSS1	LR71LCSS1	10/17/07	0930	20690521	3.034	6753305	12.209
17	AN-SS-01-070	LR71A	10/17/07	0947	18629750	3.028	6402713	12.209
18	AN-SS-02-070	LR71B	10/17/07	1221	19467573	3.031	9973302	12.205
19	AN-SS-03-070	LR71C	10/17/07	1239	19715121	3.031	6668083	12.206
20	AN-SS-03-070	LR71CMS	10/17/07	1256	17951609	3.030	6275679	12.207
21	AN-SS-03-070	LR71CMSD	10/17/07	1313	19868718	3.032	6549618	12.207
22	AN-SS-07-070	LR71D	10/17/07	1330	18562802	3.033	7501255	12.208
23	AN-SS-10-070	LR71E	10/17/07	1347	20521660	3.030	7803250	12.208
24	AN-SS-11-070	LR71F	10/17/07	1404	20263407	3.030	8404341	12.206
25	AN-SS-04	LR71H	10/17/07	1421	19293984	3.031	8689696	12.212
26	AN-SS-05	LR71I	10/17/07	1439	18237246	3.033	7277244	12.208
27	AN-SS-06	LR71J	10/17/07	1456	19224243	3.034	8023706	12.207
28		AR12542	10/17/07	1656	20945819	3.032	5991719	12.208
29		AR16603	10/17/07	1713	20341604	3.029	5780410	12.208
30	AN-SS-10-070	LR71E	10/17/07	1730	20430985	3.031	6175812	12.208
31	AN-SS-11-070	LR71F	10/17/07	1747	21082541	3.032	6321495	12.208
32	AN-SS-04	LR71H	10/17/07	1804	20953076	3.030	6333393	12.206

IS1 = 1-Bromo-2-Nitrobenzene RT Window = RT +/- .1 min
IS2 = Hexabromobiphenyl

* Indicates value outside QC Limits

FORM 8
PCB INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: ANALYTICAL RESOURCES, INC Client: ANCHOR

ARI Job No.: LR71 Project: KIMBERLY CLARK ANACO

GC Column: ZB35 ID: 0.53(mm) Instrument ID: ECD5

Init. Calib. Date: 10/16/07

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

		IS1 AREA	RT	IS2 AREA	RT
	ICAL MIDPT	20324893	3.034	6610345	12.210
	UPPER LIMIT	40649786	3.134	13220690	12.310
	LOWER LIMIT	10162446	2.934	3305172	12.110

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME	IS1 AREA	RT	IS2 AREA	RT
33	AN-SS-06	LR71J	10/17/07	1822	20496114	3.031	6059703	12.207
34		AR12482	10/17/07	2313	21104119	3.029	5880298	12.206
35		AR16604	10/17/07	2330	20325001	3.029	5921235	12.206
36		AR12543	10/18/07	0918	23056781	3.036	6687432	12.218
37		AR16605	10/18/07	0935	21382355	3.035	6406522	12.211
38	AN-SS-08	LR71K	10/18/07	0953	19525495	3.035	5733646	12.209
39	AN-SS-09	LR71L	10/18/07	1010	20977271	3.034	6008669	12.208
40		AR12423	10/18/07	1719	22319519	3.032	5506781	12.208
41		AR16606	10/18/07	1736	22516899	3.030	5502565	12.208

IS1 = 1-Bromo-2-Nitrobenzene RT Window = RT +/- .1 min
IS2 = Hexabromobiphenyl

* Indicates value outside QC Limits

PCB Analysis
Sample Data

prepared
for

ANCHOR ENVIRONMENTAL

Project : KIMBERLY CLARK ANACORTES

ARI JOB NO. LR71

prepared
by

Analytical Resources, Inc.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA PCB by GC/ECD
Page 1 of 1

Sample ID: AN-SS-01-070927
SAMPLE

Lab Sample ID: LR71A
LIMS ID: 07-20766
Matrix: Sediment
Data Release Authorized:
Reported: 10/19/07

QC Report No: LR71-Anchor Environmental, LLC
Project: Kimberly Clark Anacortes

Date Sampled: 09/27/07
Date Received: 09/29/07

Date Extracted: 10/11/07
Date Analyzed: 10/17/07 09:47
Instrument/Analyst: ECD5/PK
GPC Cleanup: No
Sulfur Cleanup: Yes
Acid Cleanup: Yes
Florisil Cleanup: No

Sample Amount: 25.3 g-dry-wt
Final Extract Volume: 1.0 mL
Dilution Factor: 1.00
Silica Gel: No

Percent Moisture: 51.5%

CAS Number	Analyte	RL	Result
12674-11-2	Aroclor 1016	4.0	< 4.0 U
53469-21-9	Aroclor 1242	4.0	< 4.0 U
12672-29-6	Aroclor 1248	4.0	< 4.0 U
11097-69-1	**Aroclor 1254**	**4.0**	**8.6**
11096-82-5	Aroclor 1260	4.0	< 4.0 U
11104-28-2	Aroclor 1221	4.0	< 4.0 U
11141-16-5	Aroclor 1232	4.0	< 4.0 U

Reported in µg/kg (ppb)

PCB Surrogate Recovery

Decachlorobiphenyl	106%
Tetrachlorometaxylene	82.0%

Analytical Resources Inc.
Dual Column PCB Quantitation Report

Data file 1: 20071016.b/1017-1.b/1017B005.d
Data file 2: 20071016.b/1017-2.b/1017B005.d
Method: /chem2/ecd5.i/20071016.b/PCB1.m
Compound Sublist: PCB
Instrument, Inj. Vol.: ecd5.i, 2ul
Quant Method: Internal Std

ARI ID: LR71A
Client ID: AN-SS-01-070927
Injection Date: 17-OCT-2007 09:47
Report Date: 10/17/2007 13:48
Matrix: SOIL
Dilution Factor: 1.000

ZB5 Col RT	ZB5 Col Shift	ZB5 Col Response	ZB35 Col RT	ZB35 Col Shift	ZB35 Col Response	ZB5 on col	ZB35 on col	RPD	Compound/Flag
4.523	0.000	11029423	4.605	0.000	7895701	32.8	32.2	1.7	Tetrachloro-m-xylene MN
11.136	0.001	10560459	11.498	0.002	6535450	34.8	42.5	19.8	Decachlorobiphenyl MN

* Indicates RPD > 40%
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

SURROGATE PERCENT RECOVERY

SURROGATE	Col1	Col2
Tetrachloro-m-xylene	82.0	80.6
Decachlorobiphenyl	87.1	106.3

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	31569414	25664591	-18.7
Hexabromobiphenyl	9983366	9544125	-4.4

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	20324893	18629750	-8.3
Hexabromobiphenyl	6610345	6402713	-3.1

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 16-OCT-2007
<- Indicates standard response outside Limits (-50 to +100%)

Aroclor	Peak#	RT	Shift	ZB5 Col Area	Amount	Peak#	RT	Shift	ZB35 Col Area	Amount	
Aroclor-1016	1	5.694	-0.001	1587384	196.0	1	5.824	0.000	490138	53.2	
Aroclor-1016	2	5.985	-0.006	1109885	45.3	2	6.295	0.002	489806	25.2	
Aroclor-1016	3	6.101	-0.002	604022	56.2	3	6.452	-0.001	175411	22.6	
Aroclor-1016	4	6.355	-0.002	2031841	308.5	4	6.990	0.000	616512	101.0	
	Total Col1Ave (4 peaks):				151.5	Total Col2Ave (4 peaks):				50.5	RPD = 100*
	Corrected Ave (3 peaks):				99.2	Corrected Ave (3 peaks):				33.6	RPD = 99*
Aroclor-1221	1	4.777	-0.006	30108	8.5	1	5.025	-0.041	118317	39.0	
Aroclor-1221	2	4.912	0.003	239796	101.7	2	5.294	0.054	2158718	1235.7	
Aroclor-1221	3	5.000	0.014	416541	52.3	3	---			0.0	
Aroclor-1221	NS	---			----	4	5.824	-0.012	490138	227.6	
	Total Col1Ave (3 peaks):				54.2	Total Col2Ave (3 peaks):				500.8	RPD = 161*
	Corrected Ave: < 3 Peaks					Corrected Ave: < 3 Peaks					
Aroclor-1232	1	5.000	0.016	416541	62.3	1	5.294	-0.029	2158718	477.5	
Aroclor-1232	2	5.694	-0.001	1587384	436.0	2	5.824	-0.001	490138	108.0	
Aroclor-1232	3	5.985	-0.006	1109885	102.3	3	6.295	0.001	489806	57.1	
Aroclor-1232	4	6.101	-0.003	604022	122.6	4	6.585	-0.004	192359	89.5	
	Total Col1Ave (4 peaks):				180.8	Total Col2Ave (4 peaks):				183.0	RPD = 1
	Corrected Ave (3 peaks):				95.8	Corrected Ave (3 peaks):				84.9	RPD = 12
Aroclor-1242	1	5.694	-0.002	1587384	243.1	1	5.294	-0.029	2158718	575.2	
Aroclor-1242	2	5.985	-0.007	1109885	56.6	2	5.824	0.000	490138	66.7	
Aroclor-1242	3	6.101	-0.003	604022	69.7	3	6.295	0.002	489806	32.0	
Aroclor-1242	4	6.731	-0.004	503060	60.6	4	6.452	-0.001	175411	28.7	
Aroclor-1242	NS	---			----	5	7.349	-0.001	942028	160.7	
	Total Col1Ave (4 peaks):				107.5	Total Col2Ave (5 peaks):				172.7	RPD = 47*
	Corrected Ave (3 peaks):				62.3	Corrected Ave (4 peaks):				72.0	RPD = 14
Aroclor-1248	1	5.985	-0.007	1109885	77.6	1	6.295	0.004	489806	42.7	
Aroclor-1248	2	6.101	-0.004	604022	111.0	2	6.655	0.000	795535	125.0	
Aroclor-1248	3	6.355	-0.003	2031841	239.4	3	6.990	0.001	616512	82.5	
Aroclor-1248	4	6.731	-0.005	503060	40.2	4	7.349	-0.001	942028	91.0	
Aroclor-1248	5	7.076	0.002	3843615	232.2	NS	---			----	
	Total Col1Ave (5 peaks):				140.1	Total Col2Ave (4 peaks):				85.3	RPD = 49*
	Corrected Ave (4 peaks):				115.2	Corrected Ave (4 peaks):				85.3	RPD = 30
Aroclor-1254	1	7.321	-0.001	3697805	202.3	1	7.597	0.000	1941764	182.9	
Aroclor-1254	2	7.630	-0.002	2654357	235.8	2	8.036	0.000	1554979	192.2	
Aroclor-1254	3	7.741	-0.004	4758509	212.8	3	8.160	-0.002	3079333	176.7	
Aroclor-1254	4	8.025	-0.007	5426203	225.4	4	8.357	-0.007	3628273	206.3	
Aroclor-1254	5	8.333	-0.003	2890338	204.4	5	8.814	-0.003	2222869	224.6	
	Total Col1Ave (5 peaks):				216.1	Total Col2Ave (5 peaks):				196.6	RPD = 9
	Corrected Ave (5 peaks):				216.1	Corrected Ave (5 peaks):				196.6	RPD = 9
Aroclor-1260	1	8.785	0.005	474959	27.8	1	9.074	0.001	193210	19.6	
Aroclor-1260	2	9.015	-0.034	678833	46.9	2	9.141	0.001	527401	94.5	
Aroclor-1260	3	9.347	-0.002	859153	22.5	3	9.667	0.003	630187	26.8	
Aroclor-1260	4	9.667	-0.023	2638628	149.5	4	10.112	0.008	221860	34.9	
Aroclor-1260	5	9.819	-0.021	553064	50.6	5	10.155	0.001	293518	20.0	
	Total Col1Ave (5 peaks):				59.5	Total Col2Ave (5 peaks):				39.2	RPD = 41*
	Corrected Ave (4 peaks):				36.9	Corrected Ave (4 peaks):				25.3	RPD = 37
Aroclor-1262	1	9.015	-0.035	678833	34.9	1	9.074	0.000	193210	12.0	
Aroclor-1262	2	9.347	-0.004	859153	17.5	2	9.667	0.001	630187	21.2	
Aroclor-1262	3	9.667	-0.024	2638628	176.0	3	10.112	0.009	221860	17.7	
Aroclor-1262	4	9.819	-0.022	553064	25.7	4	10.155	-0.002	293518	15.2	
Aroclor-1262	5	10.358	-0.028	1747393	107.1	5	10.734	-0.012	638868	67.3	
	Total Col1Ave (5 peaks):				72.2	Total Col2Ave (5 peaks):				26.7	RPD = 92*
	Corrected Ave (4 peaks):				46.3	Corrected Ave (4 peaks):				16.5	RPD = 95*
Aroclor-1268	1	9.772	-0.006	421814	7.8	1	10.112	0.011	221860	7.5	
Aroclor-1268	2	9.819	-0.019	553064	10.7	2	10.155	-0.003	293518	10.4	
Aroclor-1268	3	10.133	-0.028	109030	2.5	3	10.503	0.010	1629966	73.4	

Aroclor-1268	4	10.813	0.014	2714734	23.3	4	11.118	-0.033	1833183	28.3

Total Col1Ave (4 peaks): 11.1 Total Col2Ave (4 peaks): 29.9 RPD = 92*

Corrected Ave (3 peaks): 7.0 Corrected Ave (3 peaks): 15.4 RPD = 75*

Total PCB Area Col1 (4.623 - 11.035) = 123045357 Col1 Total PCB = 0.6 ppm*

Total PCB Area Col2 (4.705 - 11.396) = 66206119 Col2 Total PCB = 0.5 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.