FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-53458-1

SDG No.:

Client Sample ID: SB-32-0 | Lab Sample ID: 280-53458-24

Matrix: Solid | Lab File ID: 0401A078.D

Analysis Method: 8082A | Date Collected: 03/18/2014 09:10

Extraction Method: 3546 | Date Extracted: 03/27/2014 14:30

Sample wt/vol: 30.8(g) | Date Analyzed: 04/02/2014 17:37

Con. Extract Vol.: 10(mL) | Dilution Factor: 5

Injection Volume: 1(uL) | GC Column: CLP1 ID: 0.32(mm)

% Moisture: 4.3 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 219270 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
11104-28-2	PCB-1221	ND		240	79
12674-11-2	PCB-1016	ND		170	26
11141-16-5	PCB-1232	ND		170	26
53469-21-9	PCB-1242	ND		170	46
12672-29-6	PCB-1248	790		170	29
11097-69-1	PCB-1254	ND		170	28
11096-82-5	PCB-1260	ND		170	13
37324-23-5	PCB-1262	ND		170	59
11100-14-4	PCB-1268	ND		170	20
1336-36-3	Polychlorinated biphenyls, Total	790		170	13

CAS NO.	SURROGATE	%REC	Q	LIMITS
877-09-8	Tetrachloro-m-xylene	98	D	53-128
2051-24-3	DCB Decachlorobiphenyl	130	D	59-130

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A078.D
Lims ID: 280-53458-A-24-A Lab Sample ID: 280-53458-24
Client ID: SB-32-0
Sample Type: Client
Inject. Date: 02-Apr-2014 17:37:17 ALS Bottle#: 78 Worklist Smp#: 79
Injection Vol: 1.0 ul Dil. Factor: 5.0000
Sample Info: 280-53458-A-24-A
Operator ID: JAX Instrument ID: SGC_P3a

Method: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\PCB_P3a.m
Limit Group: GCSV - 8082
Last Update: 03-Apr-2014 08:32:55 Calib Date: 02-Apr-2014 02:52:35
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A037.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Process Host: XAWRK052

First Level Reviewer: jacksonto Date: 03-Apr-2014 06:54:37

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
$ 1 Tetrachloro-m-xylene					
2.848	2.845	0.003	15435628	3.91	
2 PCB-1221					
	3.042				
	3.179				
	3.216				
3 PCB-1232					
	3.214				
	3.554				
	4.018				
	4.158				
	4.608				
4 PCB-1248					
3.555	3.554	0.001	22121081	380.3	
4.018	4.014	0.004	60846402	390.6	
4.608	4.611	-0.003	59695482	369.7	
0.0	5.311	-5.311	0	0	E
5.852	5.851	0.001	60542243	723.1	
	Average of Peak Amounts =			465.9	
5 PCB-1016					
	3.555				
	4.019				
	4.159				
	4.222				
	4.609				

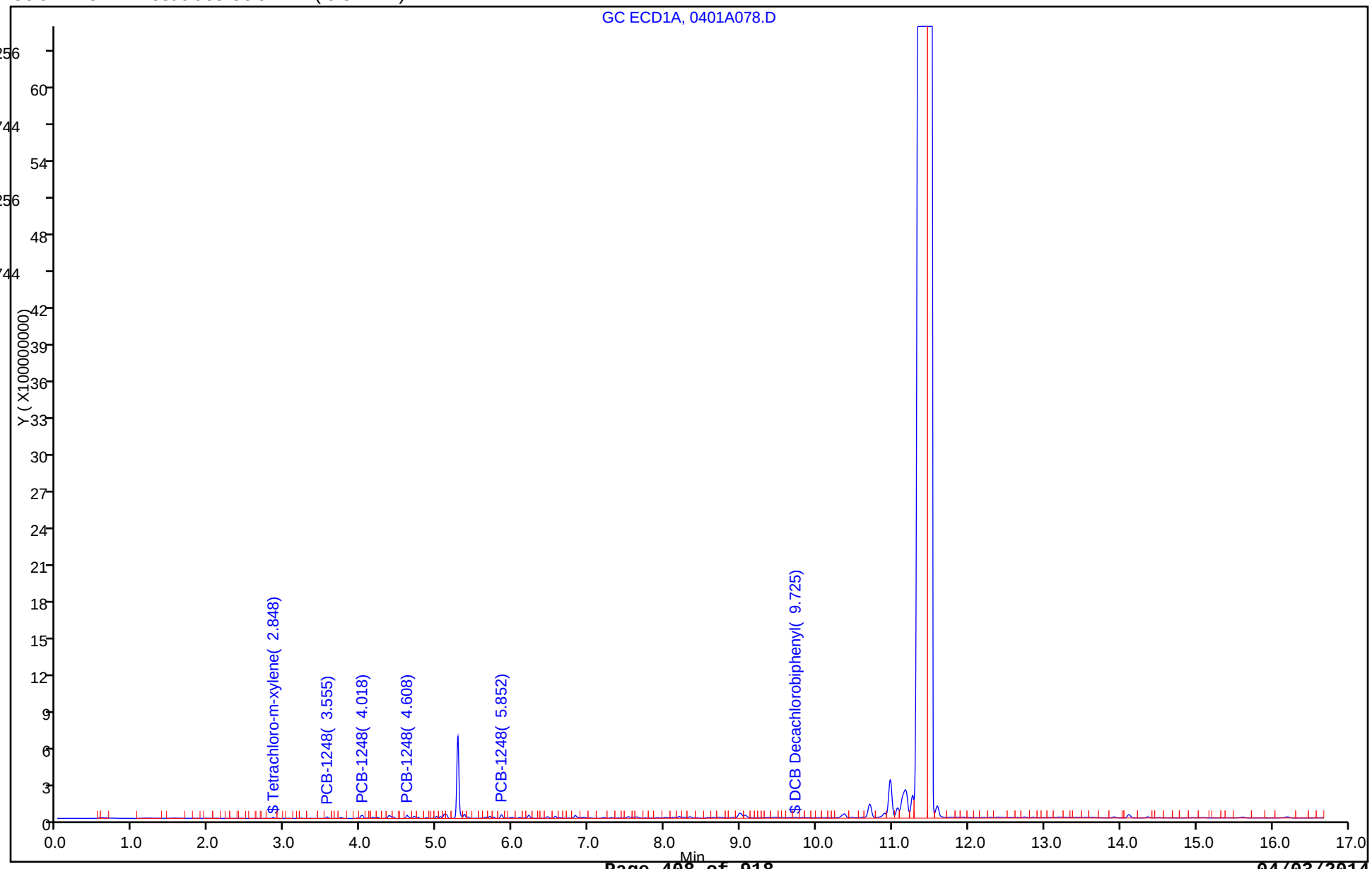
RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
6 PCB-1242					
3.556					
4.019					
4.159					
4.222					
4.609					
7 PCB-1254					
5.049					
5.366					
5.852					
6.209					
6.822					
10 PCB-1262					
6.088					
6.454					
7.044					
7.424					
8.254					
8 PCB-1260					
6.089					
6.819					
7.312					
7.749					
8.132					
12 PCB-1268					
8.196					
8.246					
8.519					
8.639					
9.442					
$ 13 DCB Decachlorobiphenyl					
9.725	9.715	0.010	26758350	5.22	
S 15 Polychlorinated biphenyls, Total					
				465.9	

Report Date: 03-Apr-2014 08:33:02 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A078.D				
Injection Date:	02-Apr-2014 17:37:17	Instrument ID:	SGC_P3a	Operator ID:	JAX
Lims ID:	280-53458-A-24-A	Lab Sample ID:	280-53458-24	Worklist Smp#:	79
Client ID:	SB-32-0				
Injection Vol:	1.0 ul	Dil. Factor:	5.0000	ALS Bottle#:	78
Method:	PCB_P3a	Limit Group:	GCSV - 8082		

Column: CLP1 Pesticides Column 1 (0.32 mm)



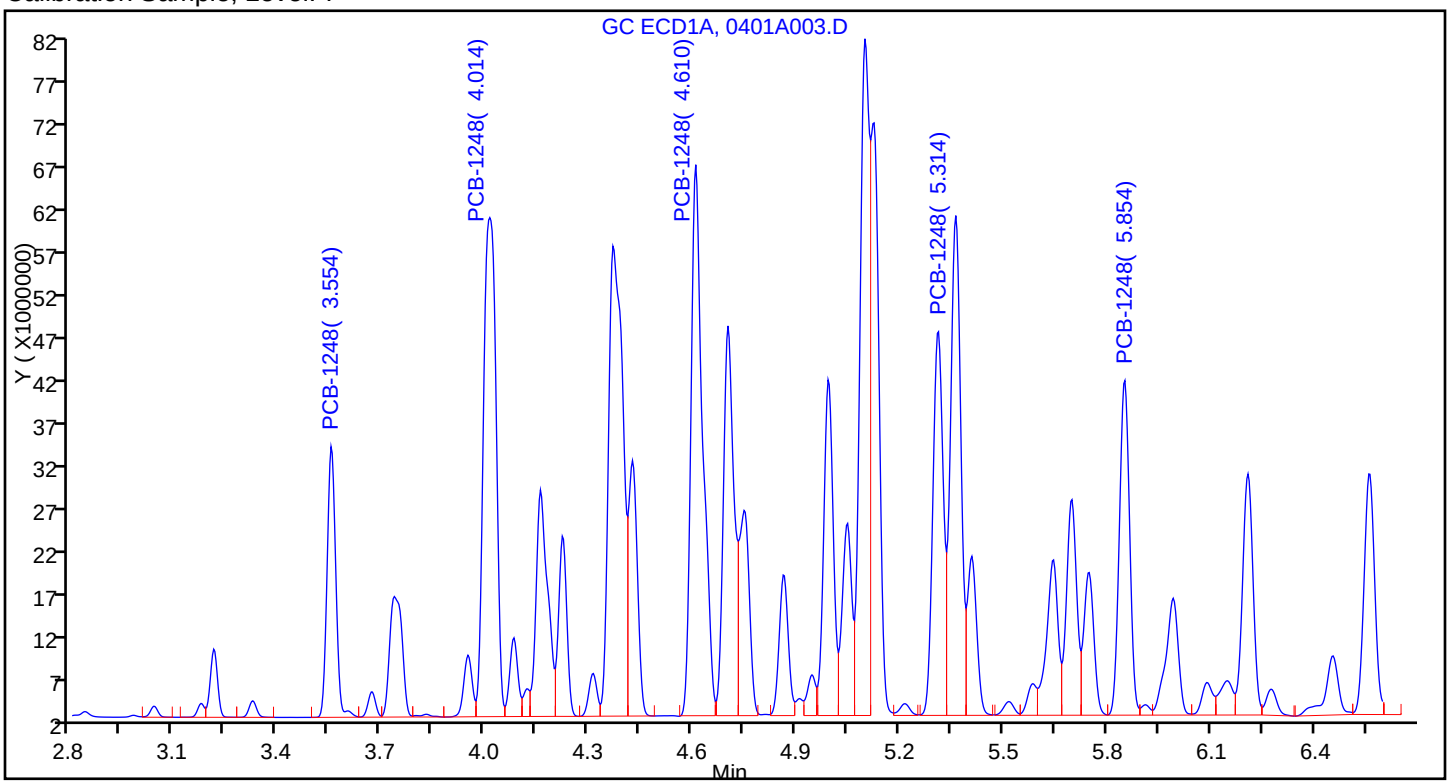
Report Date: 03-Apr-2014 08:33:03 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

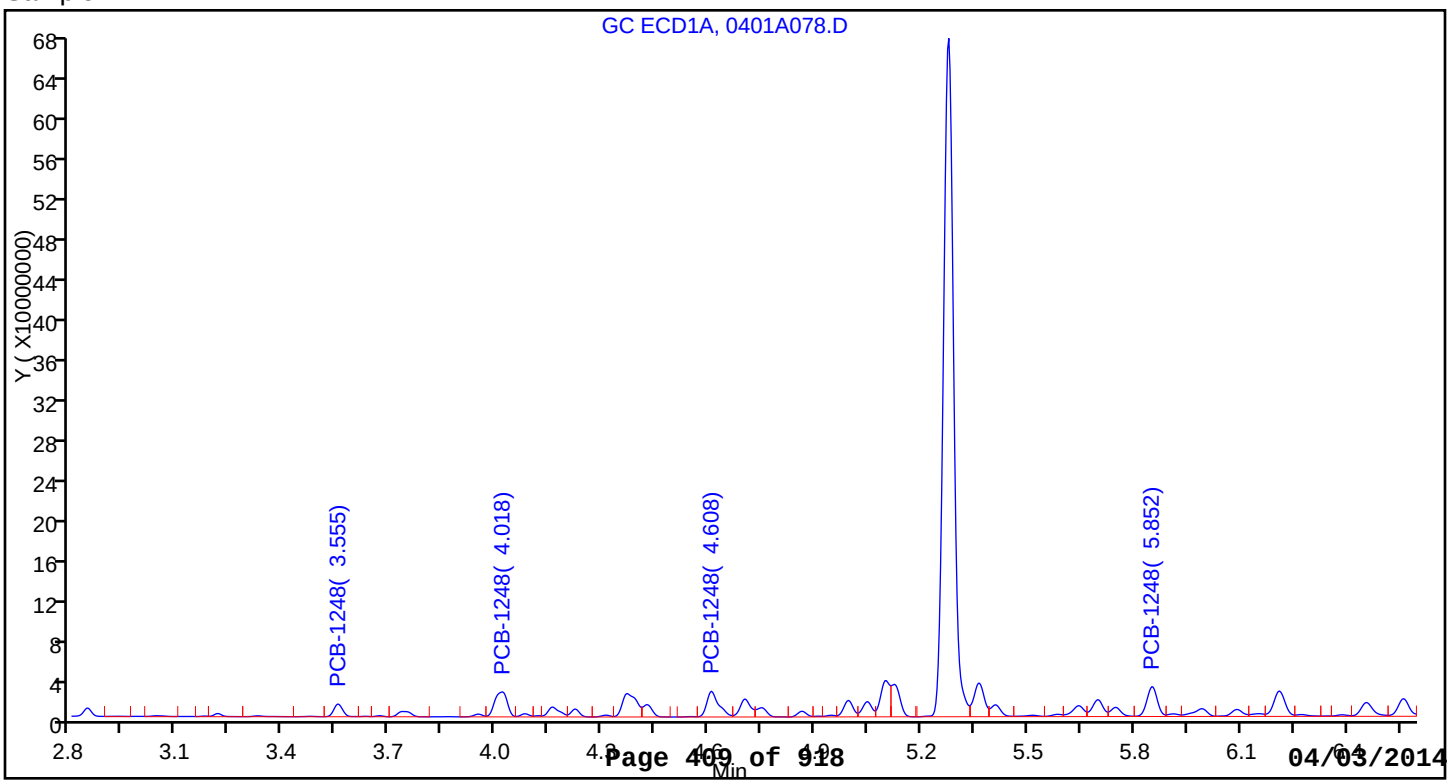
Data File:	\\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A078.D				
Injection Date:	02-Apr-2014 17:37:17	Instrument ID:	SGC_P3a		
Lims ID:	280-53458-A-24-A	Lab Sample ID:	280-53458-24		
Client ID:	SB-32-0				
Operator ID:	JAX	ALS Bottle#:	78	Worklist Smp#:	79
Injection Vol:	1.0 ul	Dil. Factor:	5.0000		
Method:	PCB_P3a	Limit Group:	GCSV - 8082		
Column:	CLP1 Pesticides Column 1 (0.32 mm)	Detector	GC ECD1A		

4 PCB-1248, CAS: 12672-29-6

Calibration Sample, Level: 7



Sample



FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-53458-1

SDG No.:

Client Sample ID: SB-32-0 | Lab Sample ID: 280-53458-24

Matrix: Solid | Lab File ID: 0401B078.D

Analysis Method: 8082A | Date Collected: 03/18/2014 09:10

Extraction Method: 3546 | Date Extracted: 03/27/2014 14:30

Sample wt/vol: 30.8(g) | Date Analyzed: 04/02/2014 17:58

Con. Extract Vol.: 10(mL) | Dilution Factor: 5

Injection Volume: 1(uL) | GC Column: CLP2 ID: 0.32(mm)

% Moisture: 4.3 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 219272 | Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
877-09-8	Tetrachloro-m-xylene	77	D	53-128
2051-24-3	DCB Decachlorobiphenyl	3316	X D	59-130

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B078.D
Lims ID: 280-53458-A-24-A Lab Sample ID: 280-53458-24
Client ID: SB-32-0
Sample Type: Client
Inject. Date: 02-Apr-2014 17:58:44 ALS Bottle#: 78 Worklist Smp#: 79
Injection Vol: 1.0 ul Dil. Factor: 5.0000
Sample Info: 280-53458-A-24-A
Operator ID: JAX Instrument ID: SGC_P3b

Method: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\PCB_P3b.m
Limit Group: GCSV - 8082
Last Update: 03-Apr-2014 09:29:39 Calib Date: 02-Apr-2014 03:13:50
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B037.D

Column 1 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK052

First Level Reviewer: jacksonto Date: 03-Apr-2014 08:13:16

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
$ 14 Tetrachloro-m-xylene					
2.862	2.862	0.0	43288120	3.08	
3 PCB-1221					
	3.165				
	3.292				
	3.348				
7 PCB-1232					
	3.166				
	3.346				
	4.196				
	4.340				
	4.870				
10 PCB-1242					
	3.347				
	4.193				
	4.340				
	4.867				
	5.007				
1 PCB-1016					
	3.738				
	4.195				
	4.342				
	4.868				
	5.008				

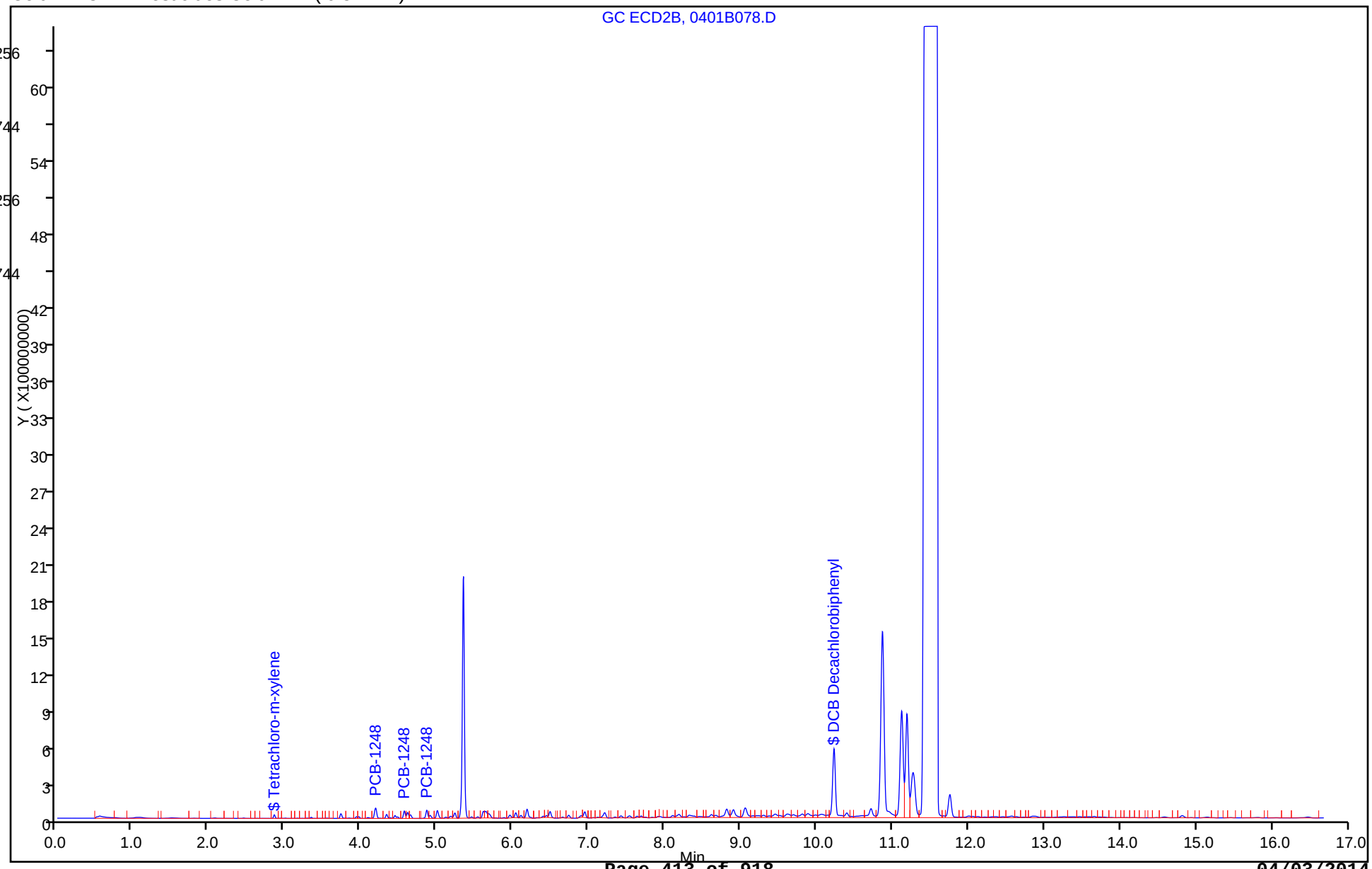
RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
4 PCB-1248					
4.195	4.194	0.001	179284211	360.4	
4.572	4.571	0.001	105331201	357.9	
4.868	4.868	0.0	124902876	314.7	
5.371	5.321	0.050	0	0	
0.0	5.371	-5.371	0	0	E
	Average of Peak Amounts =			344.3	
9 PCB-1254					
	5.368				
	5.612				
	6.038				
	6.735				
	7.212				
12 PCB-1260					
	6.448				
	6.735				
	7.208				
	8.108				
	8.618				
5 PCB-1262					
	6.733				
	7.743				
	8.110				
	8.613				
	9.463				
13 PCB-1268					
	8.610				
	8.673				
	9.030				
	9.173				
	9.927				
$ 15 DCB Decachlorobiphenyl					
10.232	10.295	-0.064	1557492471	132.6	
S 8 Polychlorinated biphenyls, Total					
				344.3	

Report Date: 03-Apr-2014 09:29:48 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B078.D				
Injection Date:	02-Apr-2014 17:58:44	Instrument ID:	SGC_P3b	Operator ID:	JAX
Lims ID:	280-53458-A-24-A	Lab Sample ID:	280-53458-24	Worklist Smp#:	79
Client ID:	SB-32-0				
Injection Vol:	1.0 ul	Dil. Factor:	5.0000	ALS Bottle#:	78
Method:	PCB_P3b	Limit Group:	GCSV - 8082		

Column: CLP2 Pesticides Column 2 (0.32 mm)



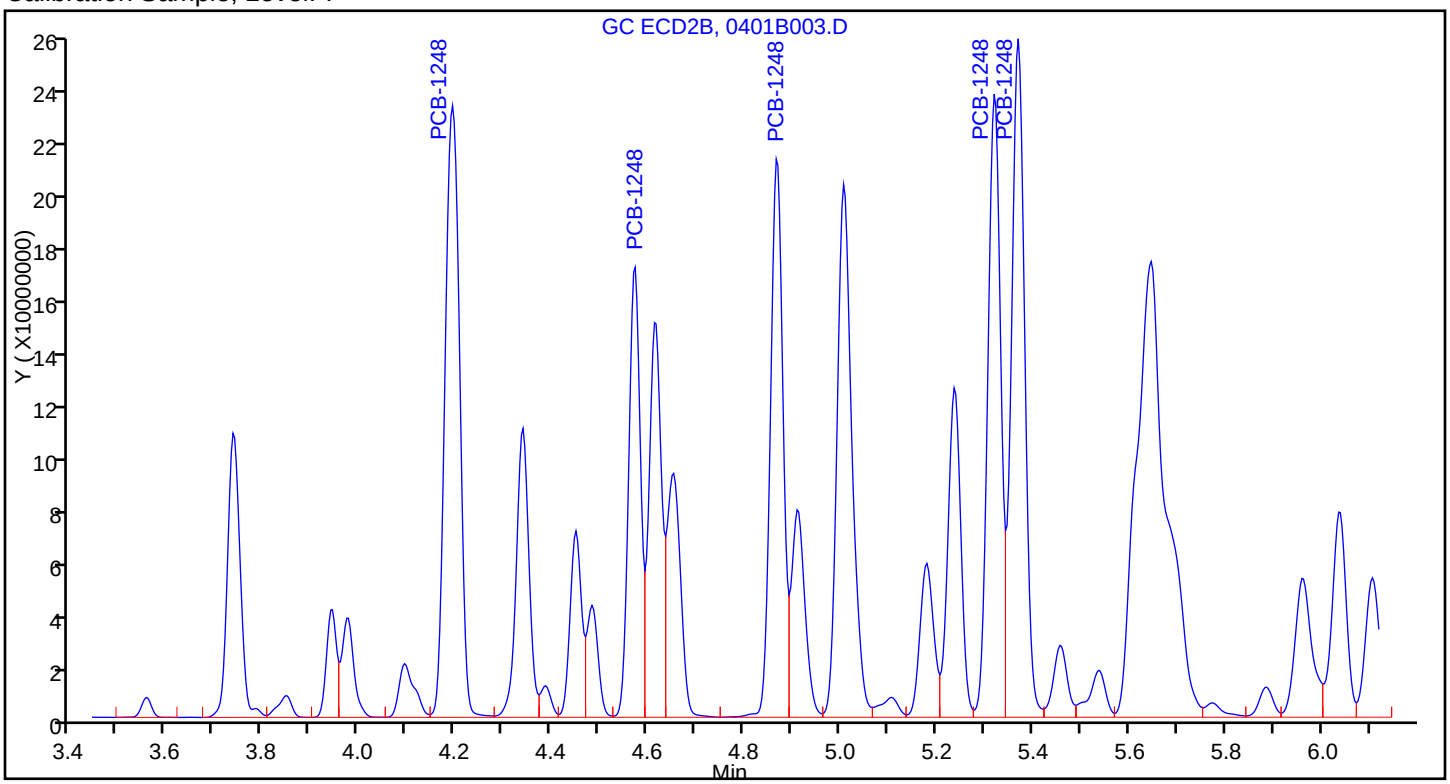
Report Date: 03-Apr-2014 09:29:48 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

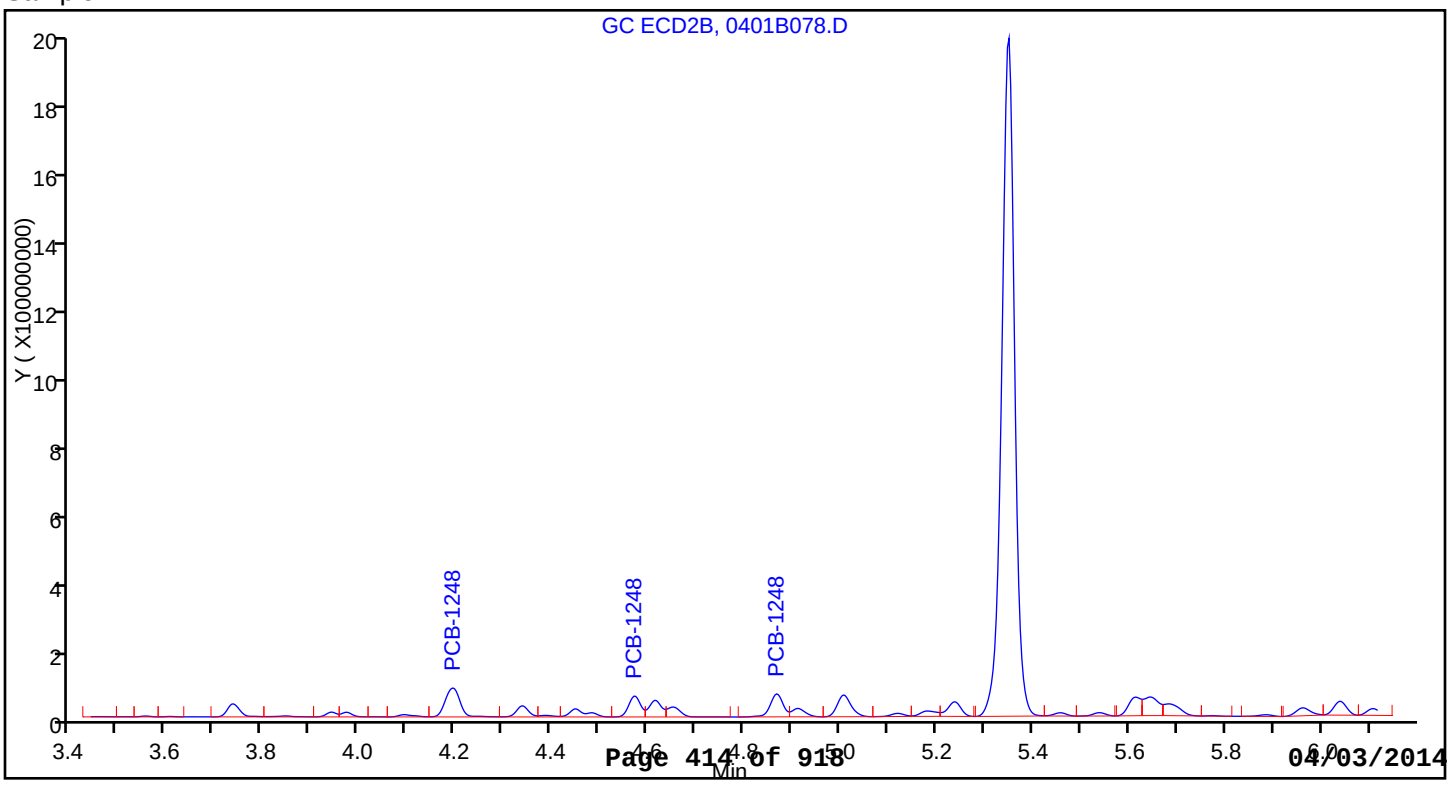
Data File:	\\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B078.D				
Injection Date:	02-Apr-2014 17:58:44	Instrument ID:	SGC_P3b		
Lims ID:	280-53458-A-24-A	Lab Sample ID:	280-53458-24		
Client ID:	SB-32-0				
Operator ID:	JAX	ALS Bottle#:	78	Worklist Smp#:	79
Injection Vol:	1.0 ul	Dil. Factor:	5.0000		
Method:	PCB_P3b	Limit Group:	GCSV - 8082		
Column:	CLP2 Pesticides Column 2 (0.32 mm)	Detector	GC ECD2B		

4 PCB-1248, CAS: 12672-29-6

Calibration Sample, Level: 7



Sample



FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-53458-1

SDG No.:

Client Sample ID: SB-33-0 | Lab Sample ID: 280-53458-25

Matrix: Solid | Lab File ID: 0401A079.D

Analysis Method: 8082A | Date Collected: 03/19/2014 15:05

Extraction Method: 3546 | Date Extracted: 03/27/2014 14:30

Sample wt/vol: 30.4(g) | Date Analyzed: 04/02/2014 17:58

Con. Extract Vol.: 10(mL) | Dilution Factor: 5

Injection Volume: 1(uL) | GC Column: CLP1 ID: 0.32(mm)

% Moisture: 4.6 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 219270 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
11104-28-2	PCB-1221	ND		240	81
12674-11-2	PCB-1016	ND		170	26
11141-16-5	PCB-1232	ND		170	26
53469-21-9	PCB-1242	ND		170	47
12672-29-6	PCB-1248	700		170	29
11097-69-1	PCB-1254	ND		170	29
11096-82-5	PCB-1260	ND		170	14
37324-23-5	PCB-1262	ND		170	60
11100-14-4	PCB-1268	ND		170	20
1336-36-3	Polychlorinated biphenyls, Total	700		170	14

CAS NO.	SURROGATE	%REC	Q	LIMITS
877-09-8	Tetrachloro-m-xylene	79	D	53-128
2051-24-3	DCB Decachlorobiphenyl	122	D	59-130

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A079.D
Lims ID: 280-53458-A-25-A Lab Sample ID: 280-53458-25
Client ID: SB-33-0
Sample Type: Client
Inject. Date: 02-Apr-2014 17:58:44 ALS Bottle#: 79 Worklist Smp#: 80
Injection Vol: 1.0 ul Dil. Factor: 5.0000
Sample Info: 280-53458-A-25-A
Operator ID: JAX Instrument ID: SGC_P3a

Method: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\PCB_P3a.m
Limit Group: GCSV - 8082
Last Update: 03-Apr-2014 08:32:55 Calib Date: 02-Apr-2014 02:52:35
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A037.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Process Host: XAWRK052

First Level Reviewer: jacksonto Date: 03-Apr-2014 06:55:22

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
$ 1 Tetrachloro-m-xylene					
2.846	2.845	0.001	12873647	3.17	
2 PCB-1221					
	3.042				
	3.179				
	3.216				
3 PCB-1232					
	3.214				
	3.554				
	4.018				
	4.158				
	4.608				
4 PCB-1248					
3.556	3.554	0.002	11686024	196.2	
4.016	4.014	0.002	42385299	269.0	
4.609	4.611	-0.002	51821684	319.4	
5.309	5.311	-0.002	49896207	510.4	
5.849	5.851	-0.002	62084342	741.8	
	Average of Peak Amounts =			407.4	
5 PCB-1016					
	3.555				
	4.019				
	4.159				
	4.222				
	4.609				

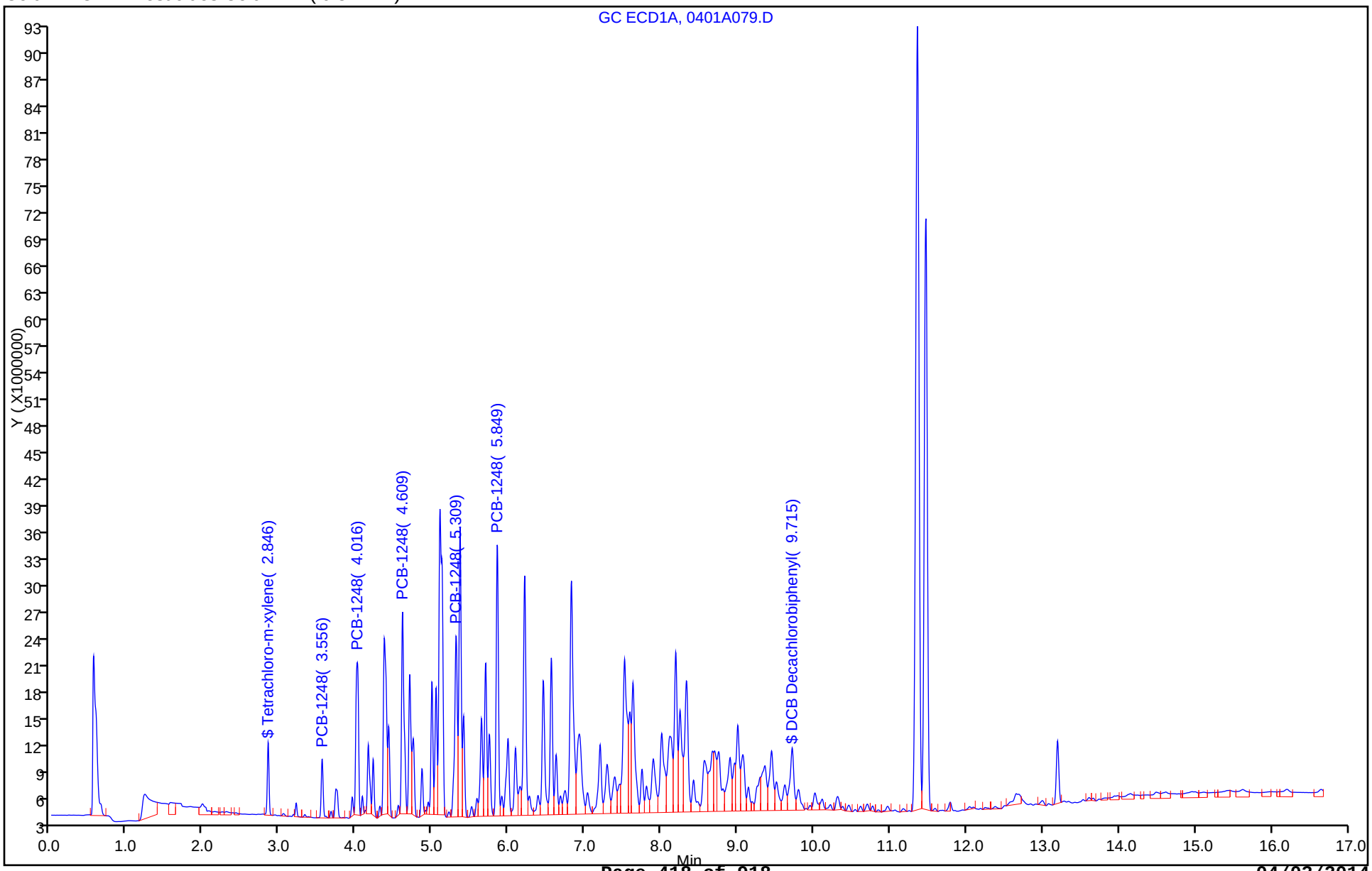
RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
6 PCB-1242					
3.556					
4.019					
4.159					
4.222					
4.609					
7 PCB-1254					
5.049					
5.366					
5.852					
6.209					
6.822					
10 PCB-1262					
6.088					
6.454					
7.044					
7.424					
8.254					
8 PCB-1260					
6.089					
6.819					
7.312					
7.749					
8.132					
12 PCB-1268					
8.196					
8.246					
8.519					
8.639					
9.442					
$ 13 DCB Decachlorobiphenyl					
9.715	9.715	0.0	25213998	4.89	
S 15 Polychlorinated biphenyls, Total					
				407.4	

Report Date: 03-Apr-2014 08:33:03 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A079.D				
Injection Date:	02-Apr-2014 17:58:44	Instrument ID:	SGC_P3a	Operator ID:	JAX
Lims ID:	280-53458-A-25-A	Lab Sample ID:	280-53458-25	Worklist Smp#:	80
Client ID:	SB-33-0				
Injection Vol:	1.0 ul	Dil. Factor:	5.0000	ALS Bottle#:	79
Method:	PCB_P3a	Limit Group:	GCSV - 8082		

Column: CLP1 Pesticides Column 1 (0.32 mm)



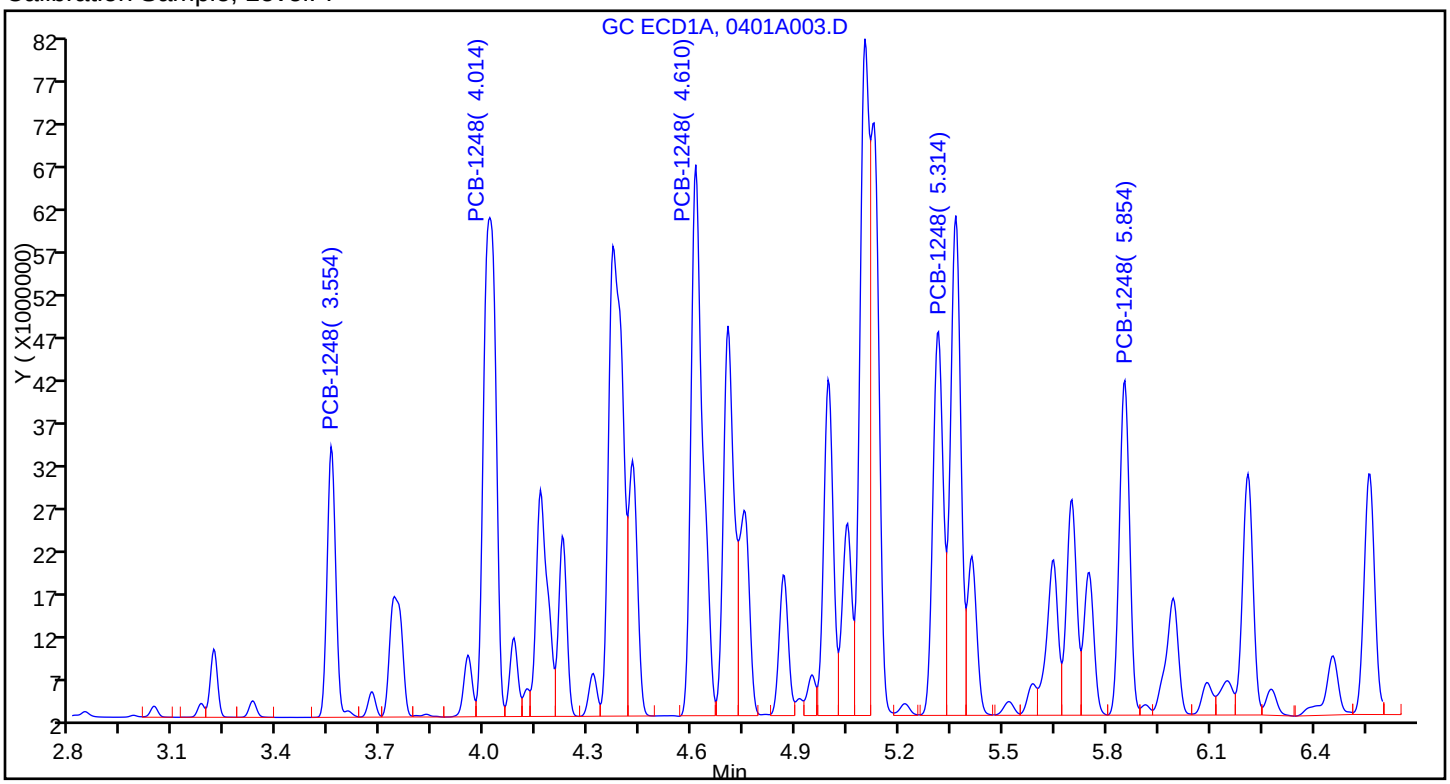
Report Date: 03-Apr-2014 08:33:03 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A079.D				
Injection Date:	02-Apr-2014 17:58:44	Instrument ID:	SGC_P3a		
Lims ID:	280-53458-A-25-A	Lab Sample ID:	280-53458-25		
Client ID:	SB-33-0				
Operator ID:	JAX	ALS Bottle#:	79	Worklist Smp#:	80
Injection Vol:	1.0 ul	Dil. Factor:	5.0000		
Method:	PCB_P3a	Limit Group:	GCSV - 8082		
Column:	CLP1 Pesticides Column 1 (0.32 mm)	Detector	GC ECD1A		

4 PCB-1248, CAS: 12672-29-6

Calibration Sample, Level: 7



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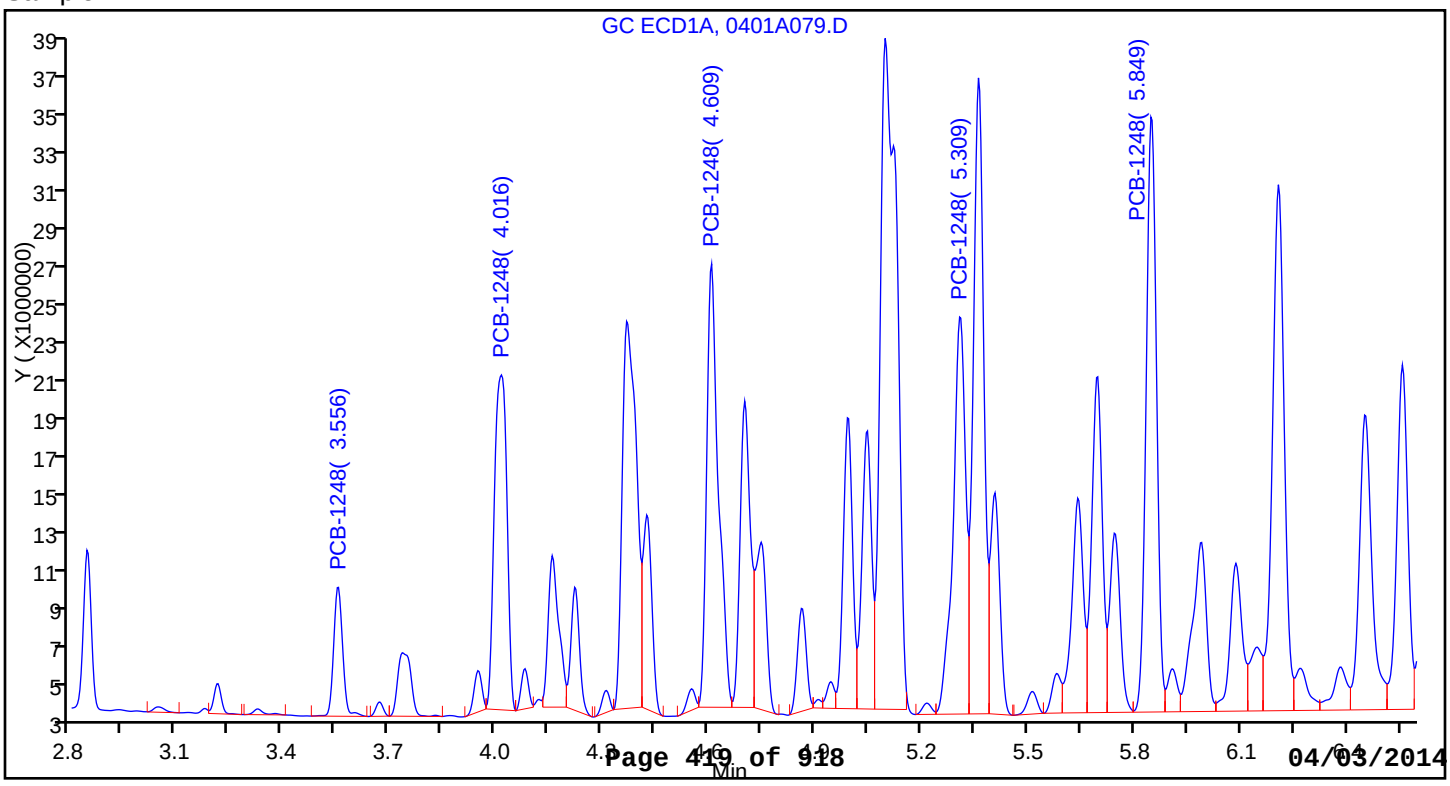


FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-53458-1

SDG No.:

Client Sample ID: SB-33-0 | Lab Sample ID: 280-53458-25

Matrix: Solid | Lab File ID: 0401B079.D

Analysis Method: 8082A | Date Collected: 03/19/2014 15:05

Extraction Method: 3546 | Date Extracted: 03/27/2014 14:30

Sample wt/vol: 30.4(g) | Date Analyzed: 04/02/2014 18:20

Con. Extract Vol.: 10(mL) | Dilution Factor: 5

Injection Volume: 1(uL) | GC Column: CLP2 ID: 0.32(mm)

% Moisture: 4.6 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 219272 | Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
877-09-8	Tetrachloro-m-xylene	78	D	53-128
2051-24-3	DCB Decachlorobiphenyl	71	D	59-130

TestAmerica Denver
Target Compound Quantitation Report

Data File:	\\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B079.D				
Lims ID:	280-53458-A-25-A	Lab Sample ID:	280-53458-25		
Client ID:	SB-33-0				
Sample Type:	Client				
Inject. Date:	02-Apr-2014 18:20:11	ALS Bottle#:	79	Worklist Smp#:	80
Injection Vol:	1.0 ul	Dil. Factor:	5.0000		
Sample Info:	280-53458-A-25-A				
Operator ID:	JAX	Instrument ID:	SGC_P3b		
Method:	\\Denchrom\ChromData\SGC_P3b\20140401-21601.b\PCB_P3b.m				
Limit Group:	GCSV - 8082				
Last Update:	03-Apr-2014 09:29:39	Calib Date:	02-Apr-2014 03:13:50		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B037.D				
Column 1 :	CLP2 Pesticides Column 2 (0.32 mm)		Det: GC ECD2B		
Process Host:	XAWRK052				
First Level Reviewer: jacksonto		Date:	03-Apr-2014 08:13:35		

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
$ 14 Tetrachloro-m-xylene					
2.860	2.862	-0.002	43799081	3.12	
3 PCB-1221					
	3.165				
	3.292				
	3.348				
7 PCB-1232					
	3.166				
	3.346				
	4.196				
	4.340				
	4.870				
10 PCB-1242					
	3.347				
	4.193				
	4.340				
	4.867				
	5.007				
1 PCB-1016					
	3.738				
	4.195				
	4.342				
	4.868				
	5.008				

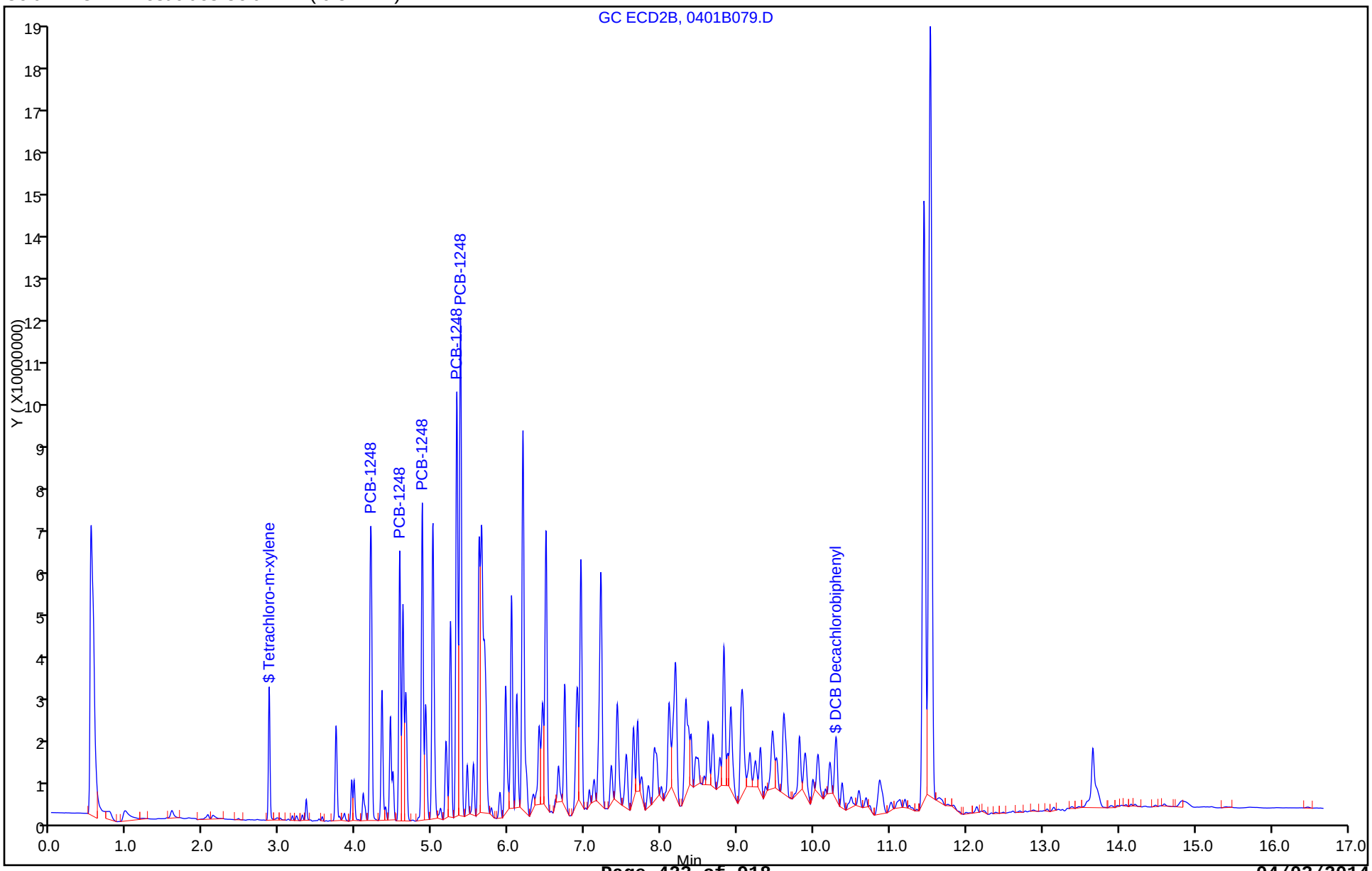
RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
4 PCB-1248					
4.194	4.194	0.0	139934612	279.3	
4.570	4.571	-0.001	104951495	356.6	
4.867	4.868	-0.001	128798283	325.1	
5.320	5.321	-0.001	180419864	405.6	
5.367	5.371	-0.004	223248130	446.1	
	Average of Peak Amounts =			362.5	
9 PCB-1254					
	5.368				
	5.612				
	6.038				
	6.735				
	7.212				
12 PCB-1260					
	6.448				
	6.735				
	7.208				
	8.108				
	8.618				
5 PCB-1262					
	6.733				
	7.743				
	8.110				
	8.613				
	9.463				
13 PCB-1268					
	8.610				
	8.673				
	9.030				
	9.173				
	9.927				
$ 15 DCB Decachlorobiphenyl					
10.290	10.295	-0.005	35584629	2.83	
S 8 Polychlorinated biphenyls, Total					
				362.5	

Report Date: 03-Apr-2014 09:29:48 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B079.D				
Injection Date:	02-Apr-2014 18:20:11	Instrument ID:	SGC_P3b	Operator ID:	JAX
Lims ID:	280-53458-A-25-A	Lab Sample ID:	280-53458-25	Worklist Smp#:	80
Client ID:	SB-33-0				
Injection Vol:	1.0 ul	Dil. Factor:	5.0000	ALS Bottle#:	79
Method:	PCB_P3b	Limit Group:	GCSV - 8082		

Column: CLP2 Pesticides Column 2 (0.32 mm)



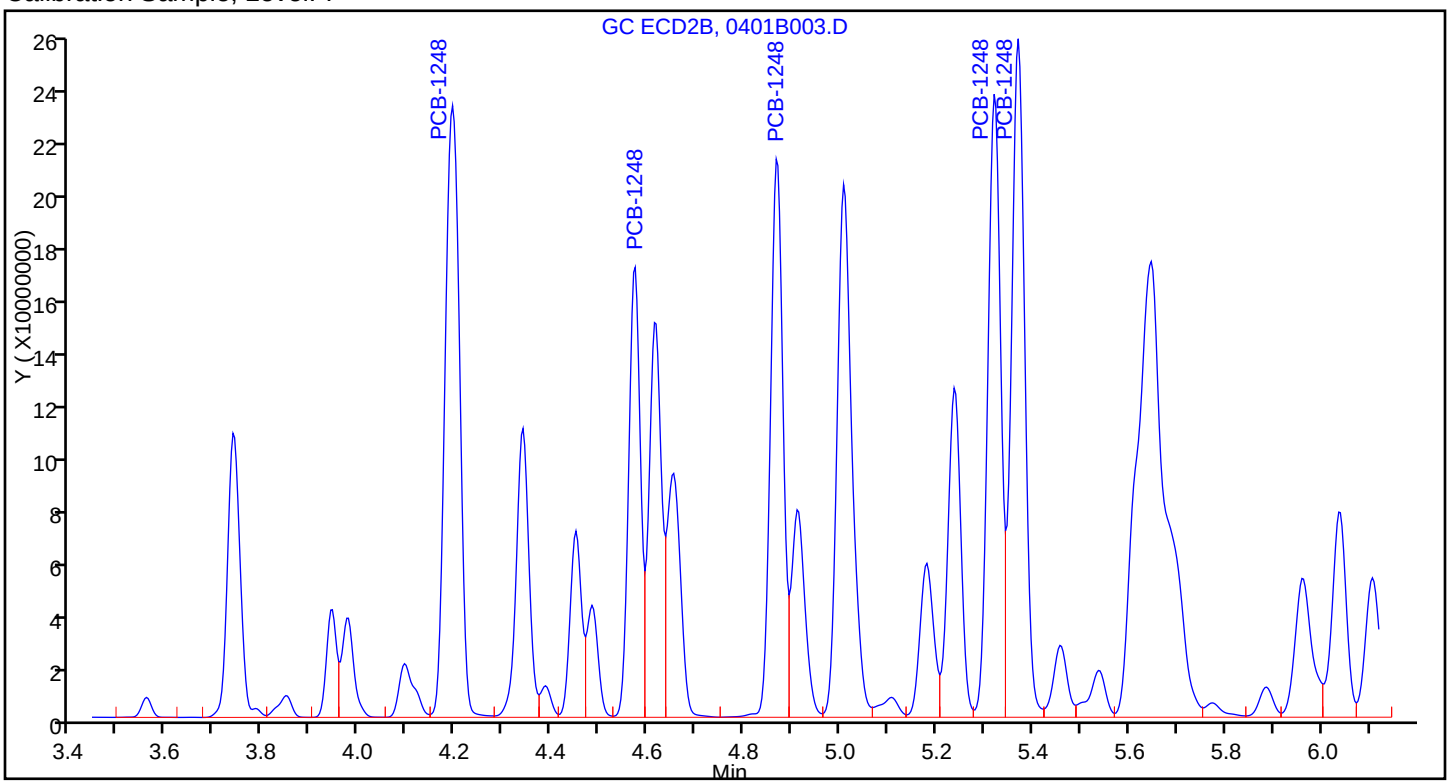
Report Date: 03-Apr-2014 09:29:48 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

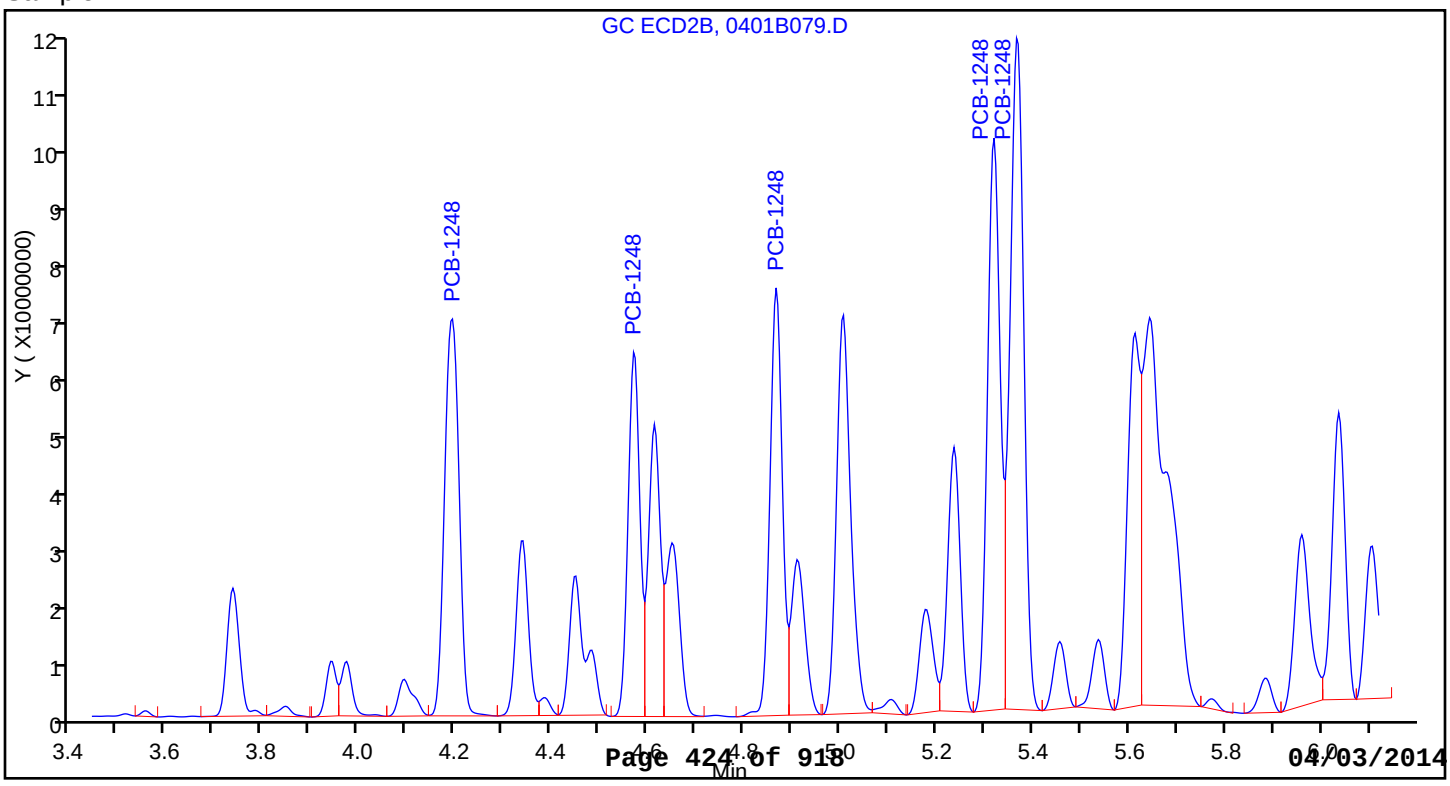
Data File:	\\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B079.D				
Injection Date:	02-Apr-2014 18:20:11	Instrument ID:	SGC_P3b		
Lims ID:	280-53458-A-25-A	Lab Sample ID:	280-53458-25		
Client ID:	SB-33-0				
Operator ID:	JAX	ALS Bottle#:	79	Worklist Smp#:	80
Injection Vol:	1.0 ul	Dil. Factor:	5.0000		
Method:	PCB_P3b	Limit Group:	GCSV - 8082		
Column:	CLP2 Pesticides Column 2 (0.32 mm)	Detector	GC ECD2B		

4 PCB-1248, CAS: 12672-29-6

Calibration Sample, Level: 7



Sample



FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-53458-1

SDG No.:

Client Sample ID: SB-34-0 | Lab Sample ID: 280-53458-26

Matrix: Solid | Lab File ID: 0401A080.D

Analysis Method: 8082A | Date Collected: 03/19/2014 11:30

Extraction Method: 3546 | Date Extracted: 03/27/2014 14:30

Sample wt/vol: 30.5(g) | Date Analyzed: 04/02/2014 18:20

Con. Extract Vol.: 10(mL) | Dilution Factor: 20

Injection Volume: 1(uL) | GC Column: CLP1 ID: 0.32(mm)

% Moisture: 5.5 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 219270 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
11104-28-2	PCB-1221	ND		980	320
12674-11-2	PCB-1016	ND		690	110
11141-16-5	PCB-1232	ND		690	110
53469-21-9	PCB-1242	ND		690	190
12672-29-6	PCB-1248	4100		690	120
11097-69-1	PCB-1254	ND		690	110
11096-82-5	PCB-1260	ND		690	55
37324-23-5	PCB-1262	ND		690	240
11100-14-4	PCB-1268	ND		690	82
1336-36-3	Polychlorinated biphenyls, Total	4100		690	55

CAS NO.	SURROGATE	%REC	Q	LIMITS
877-09-8	Tetrachloro-m-xylene	70	D	53-128
2051-24-3	DCB Decachlorobiphenyl	83	D	59-130

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A080.D
Lims ID: 280-53458-A-26-A Lab Sample ID: 280-53458-26
Client ID: SB-34-0
Sample Type: Client
Inject. Date: 02-Apr-2014 18:20:11 ALS Bottle#: 80 Worklist Smp#: 81
Injection Vol: 1.0 ul Dil. Factor: 20.0000
Sample Info: 280-53458-A-26-A
Operator ID: JAX Instrument ID: SGC_P3a

Method: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\PCB_P3a.m
Limit Group: GCSV - 8082
Last Update: 03-Apr-2014 08:32:55 Calib Date: 02-Apr-2014 02:52:35
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A037.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Process Host: XAWRK052

First Level Reviewer: jacksonto Date: 03-Apr-2014 06:56:06

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
$ 1 Tetrachloro-m-xylene					
2.848	2.845	0.003	4267891	0.7002	
2 PCB-1221					
	3.042				
	3.179				
	3.216				
3 PCB-1232					
	3.214				
	3.554				
	4.018				
	4.158				
	4.608				
4 PCB-1248					M
3.554	3.554	0.0	20247786	347.3	
4.011	4.014	-0.003	66653888	428.8	M
4.608	4.611	-0.003	85293834	533.2	M
5.311	5.311	0.0	64365416	660.7	M
5.851	5.851	0.0	82156852	986.2	M
	Average of Peak Amounts =			591.3	
5 PCB-1016					
	3.555				
	4.019				
	4.159				
	4.222				
	4.609				

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
6 PCB-1242					
3.556					
4.019					
4.159					
4.222					
4.609					
7 PCB-1254					M
5.049					
5.366					
5.852					
6.209					
6.822					
10 PCB-1262					
6.088					
6.454					
7.044					
7.424					
8.254					
8 PCB-1260					
6.089					
6.819					
7.312					
7.749					
8.132					
12 PCB-1268					
8.196					
8.246					
8.519					
8.639					
9.442					
$ 13 DCB Decachlorobiphenyl					
9.714	9.715	-0.001	6206464	0.8261	
S 15 Polychlorinated biphenyls, Total					
				591.3	

QC Flag Legend

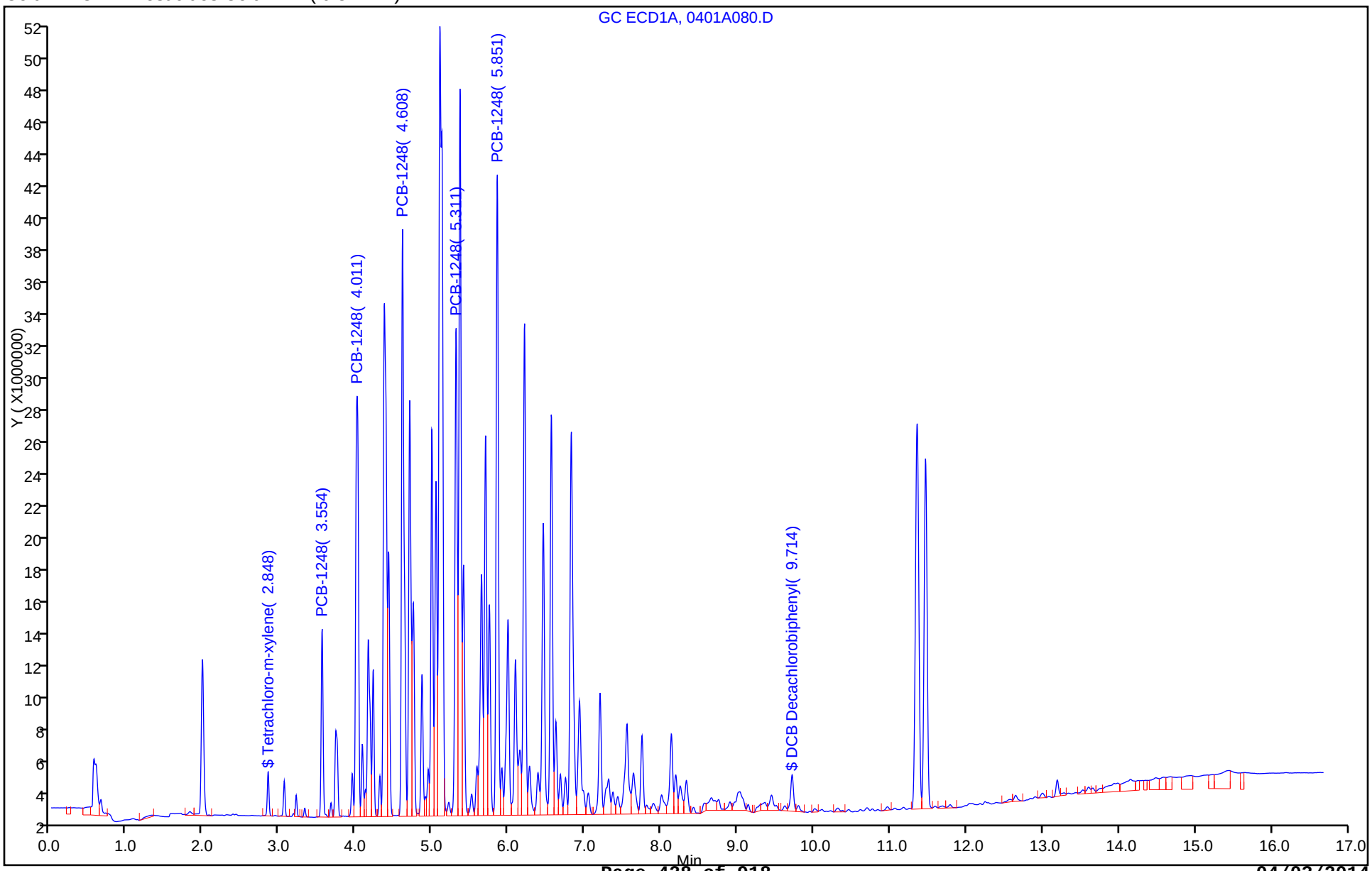
Review Flags
M - Manually Integrated

Report Date: 03-Apr-2014 08:33:04 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A080.D				
Injection Date:	02-Apr-2014 18:20:11	Instrument ID:	SGC_P3a	Operator ID:	JAX
Lims ID:	280-53458-A-26-A	Lab Sample ID:	280-53458-26	Worklist Smp#:	81
Client ID:	SB-34-0				
Injection Vol:	1.0 ul	Dil. Factor:	20.0000	ALS Bottle#:	80
Method:	PCB_P3a	Limit Group:	GCSV - 8082		

Column: CLP1 Pesticides Column 1 (0.32 mm)



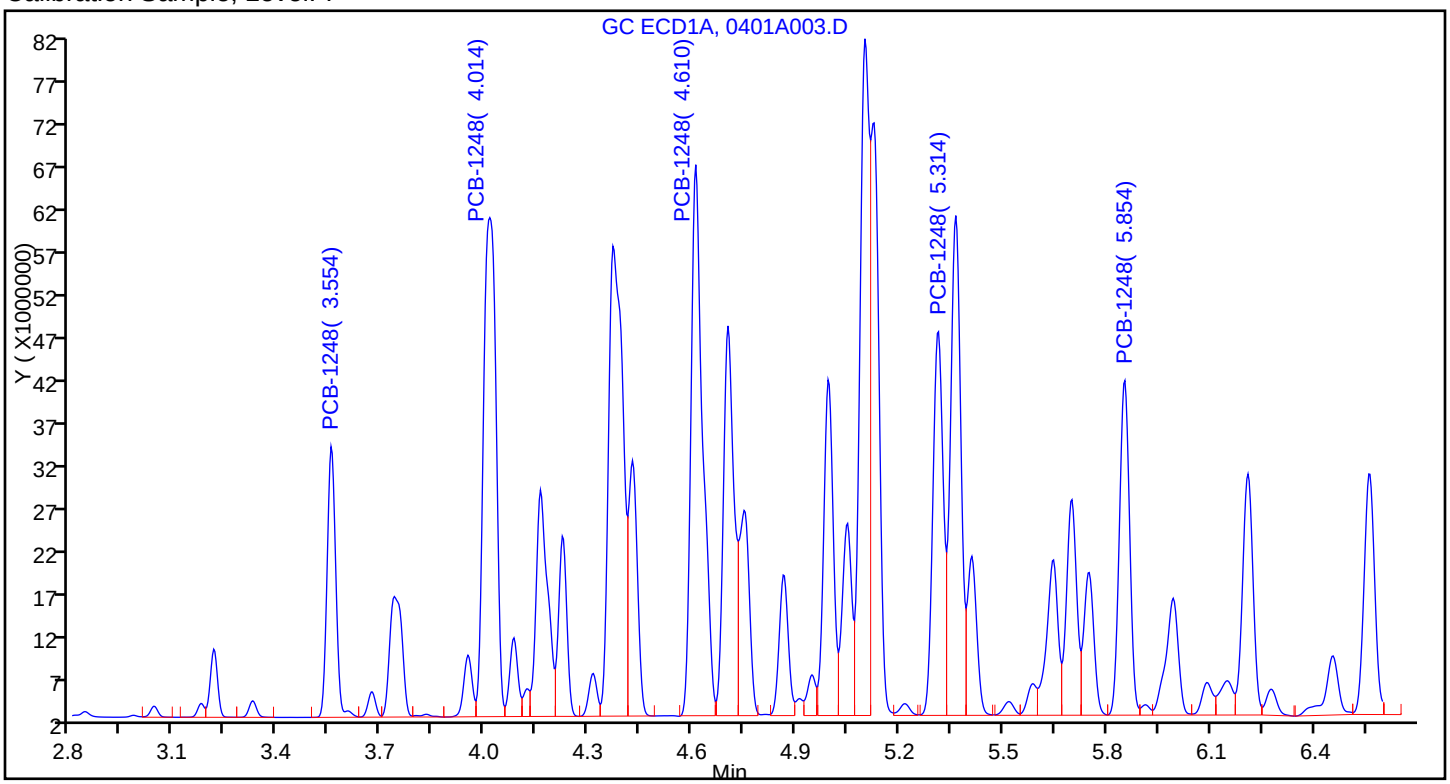
Report Date: 03-Apr-2014 08:33:04 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

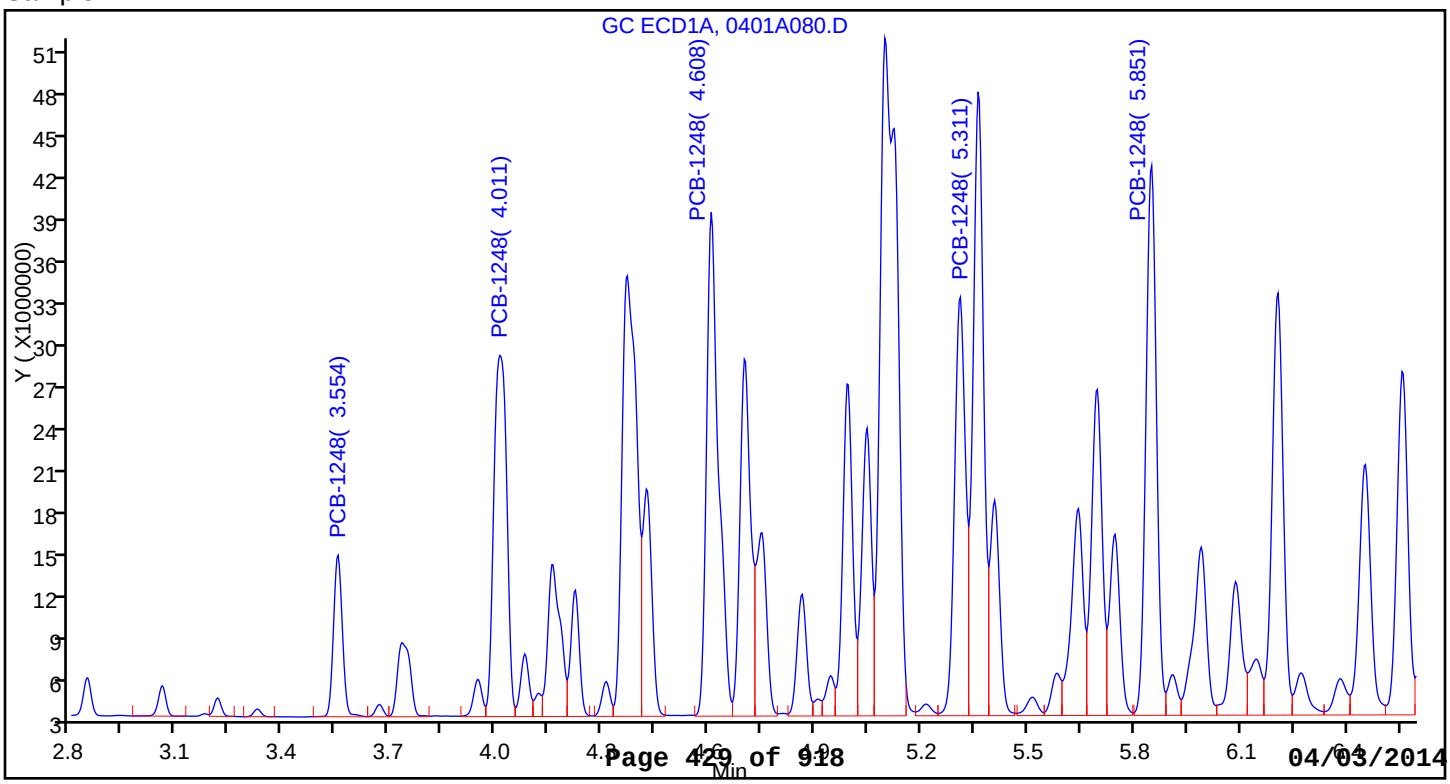
Data File:	\\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A080.D				
Injection Date:	02-Apr-2014 18:20:11	Instrument ID:	SGC_P3a		
Lims ID:	280-53458-A-26-A	Lab Sample ID:	280-53458-26		
Client ID:	SB-34-0				
Operator ID:	JAX	ALS Bottle#:	80	Worklist Smp#:	81
Injection Vol:	1.0 ul	Dil. Factor:	20.0000		
Method:	PCB_P3a	Limit Group:	GCSV - 8082		
Column:	CLP1 Pesticides Column 1 (0.32 mm)	Detector	GC ECD1A		

4 PCB-1248, CAS: 12672-29-6

Calibration Sample, Level: 7



Sample

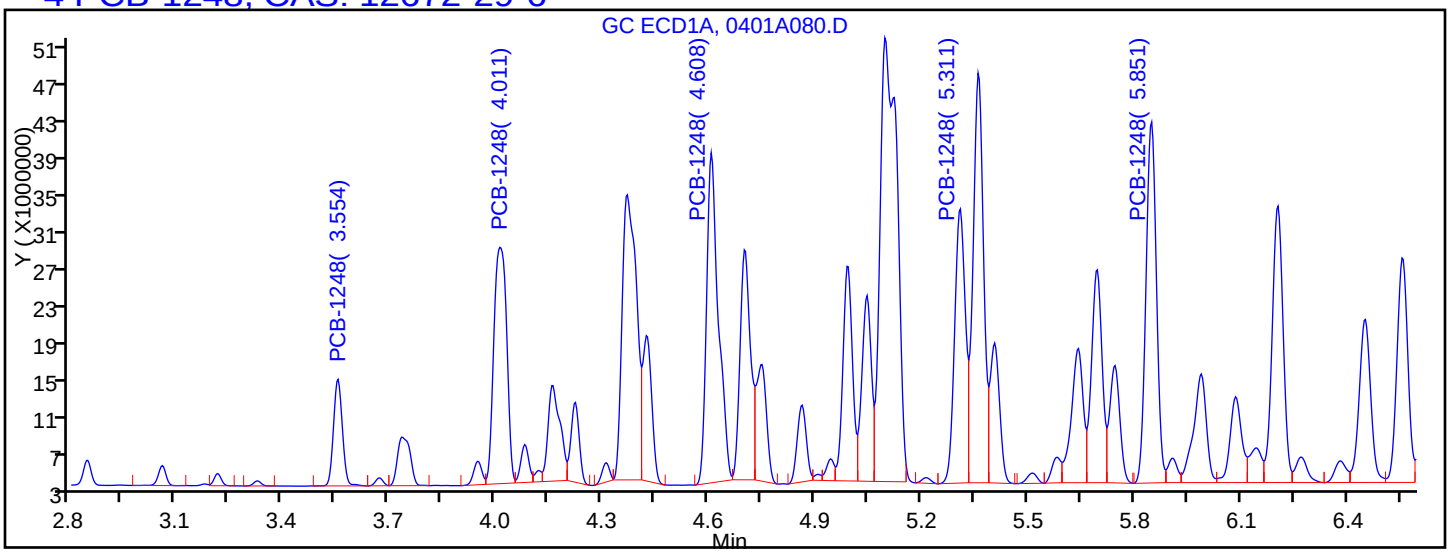


Report Date: 03-Apr-2014 08:33:04 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

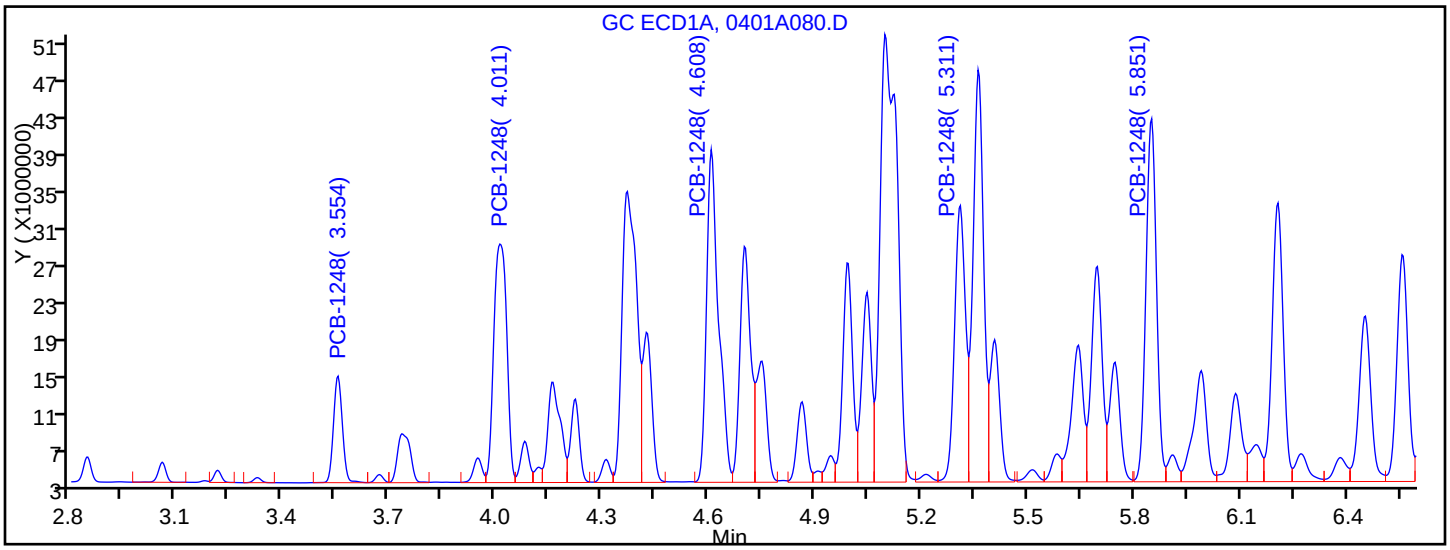
Data File:	\\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A080.D				
Injection Date:	02-Apr-2014 18:20:11	Instrument ID:	SGC_P3a		
Lims ID:	280-53458-A-26-A	Lab Sample ID:	280-53458-26		
Client ID:	SB-34-0				
Operator ID:	JAX	ALS Bottle#:	80	Worklist Smp#:	81
Injection Vol:	1.0 ul	Dil. Factor:	20.0000		
Method:	PCB_P3a	Limit Group:	GCSV - 8082		
Column:	CLP1 Pesticides Column 1 (0.32 mm)	Detector	GC ECD1A		

4 PCB-1248, CAS: 12672-29-6



Processing Integration Results

RT = 3.554	Response = 20247786	
RT = 4.011	Response = 65438121	M
RT = 4.608	Response = 83118548	M
RT = 5.311	Response = 63210678	M
RT = 5.851	Response = 80936847	M



Manual Integration Results

RT = 3.554	Response = 20247786	
RT = 4.011	Response = 66653888	M
RT = 4.608	Response = 85293834	M
RT = 5.311	Response = 64365416	M
RT = 5.851	Response = 82156852	M

Reviewer: jacksonto, 03-Apr-2014 06:56:06
Audit Action: Assigned New Baseline
Audit Reason: Baseline Smoothing

FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-53458-1

SDG No.:

Client Sample ID: SB-34-0 | Lab Sample ID: 280-53458-26

Matrix: Solid | Lab File ID: 0401B080.D

Analysis Method: 8082A | Date Collected: 03/19/2014 11:30

Extraction Method: 3546 | Date Extracted: 03/27/2014 14:30

Sample wt/vol: 30.5(g) | Date Analyzed: 04/02/2014 18:41

Con. Extract Vol.: 10(mL) | Dilution Factor: 20

Injection Volume: 1(uL) | GC Column: CLP2 ID: 0.32(mm)

% Moisture: 5.5 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 219272 | Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
877-09-8	Tetrachloro-m-xylene	77	D	53-128
2051-24-3	DCB Decachlorobiphenyl	88	D	59-130

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B080.D
Lims ID: 280-53458-A-26-A Lab Sample ID: 280-53458-26
Client ID: SB-34-0
Sample Type: Client
Inject. Date: 02-Apr-2014 18:41:33 ALS Bottle#: 80 Worklist Smp#: 81
Injection Vol: 1.0 ul Dil. Factor: 20.0000
Sample Info: 280-53458-A-26-A
Operator ID: JAX Instrument ID: SGC_P3b

Method: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\PCB_P3b.m
Limit Group: GCSV - 8082
Last Update: 03-Apr-2014 09:29:39 Calib Date: 02-Apr-2014 03:13:50
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B037.D

Column 1 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK052

First Level Reviewer: jacksonto Date: 03-Apr-2014 08:13:47

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
$ 14 Tetrachloro-m-xylene					
2.864	2.862	0.002	15011207	0.7684	
3 PCB-1221					
	3.165				
	3.292				
	3.348				
7 PCB-1232					
	3.166				
	3.346				
	4.196				
	4.340				
	4.870				
10 PCB-1242					
	3.347				
	4.193				
	4.340				
	4.867				
	5.007				
1 PCB-1016					
	3.738				
	4.195				
	4.342				
	4.868				
	5.008				

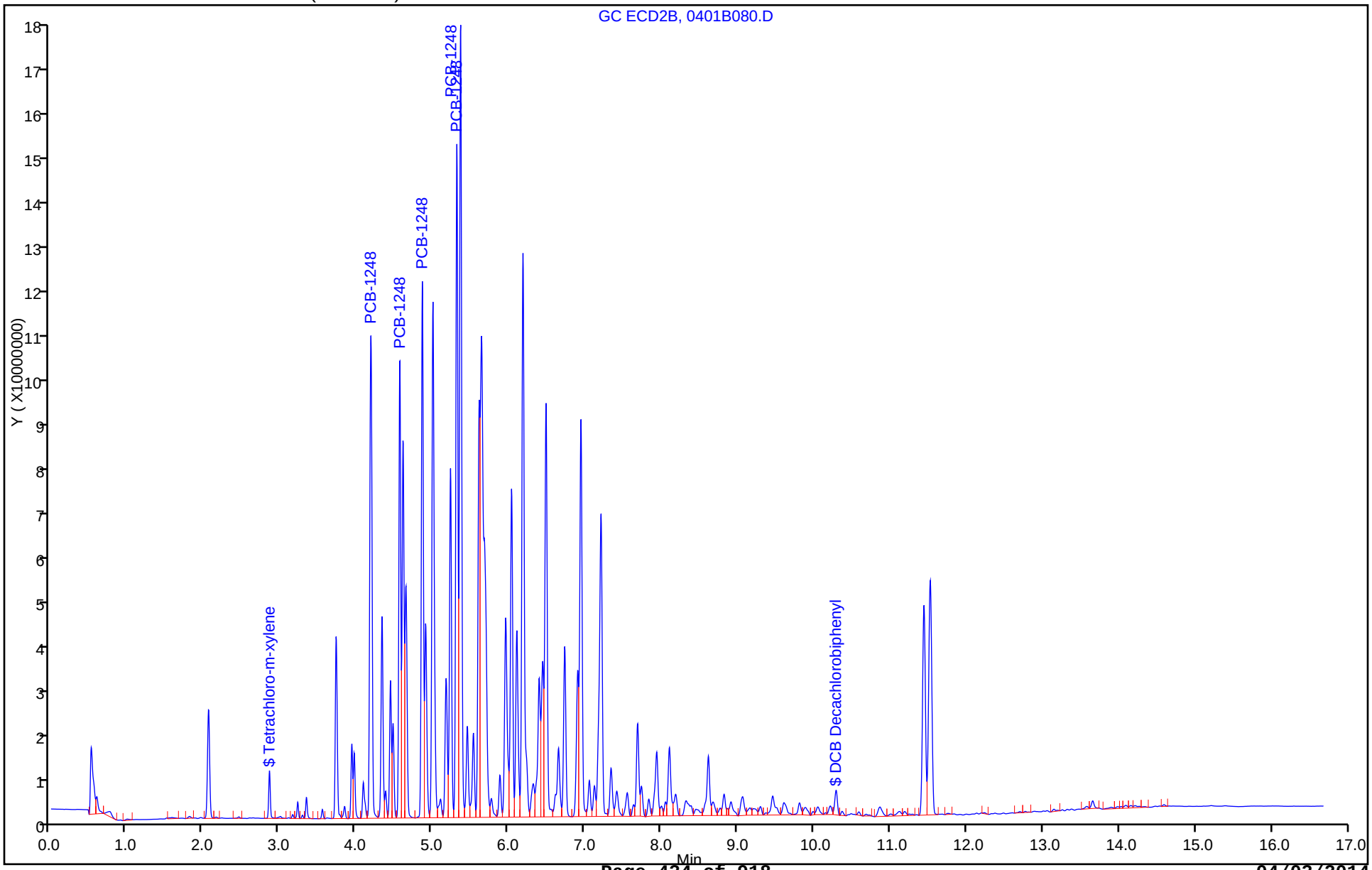
RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
4 PCB-1248					
4.194	4.194	0.0	216884699	437.8	
4.574	4.571	0.003	168016960	576.9	
4.867	4.868	-0.001	207640028	534.2	
5.320	5.321	-0.001	268734153	608.8	
5.370	5.371	-0.001	330831643	666.3	
	Average of Peak Amounts =			564.8	
9 PCB-1254					
	5.368				
	5.612				
	6.038				
	6.735				
	7.212				
12 PCB-1260					
	6.448				
	6.735				
	7.208				
	8.108				
	8.618				
5 PCB-1262					
	6.733				
	7.743				
	8.110				
	8.613				
	9.463				
13 PCB-1268					
	8.610				
	8.673				
	9.030				
	9.173				
	9.927				
$ 15 DCB Decachlorobiphenyl					
10.290	10.295	-0.005	12787592	0.8842	
S 8 Polychlorinated biphenyls, Total					
				564.8	

Report Date: 03-Apr-2014 09:29:49 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B080.D				
Injection Date:	02-Apr-2014 18:41:33	Instrument ID:	SGC_P3b	Operator ID:	JAX
Lims ID:	280-53458-A-26-A	Lab Sample ID:	280-53458-26	Worklist Smp#:	81
Client ID:	SB-34-0				
Injection Vol:	1.0 ul	Dil. Factor:	20.0000	ALS Bottle#:	80
Method:	PCB_P3b	Limit Group:	GCSV - 8082		

Column: CLP2 Pesticides Column 2 (0.32 mm)



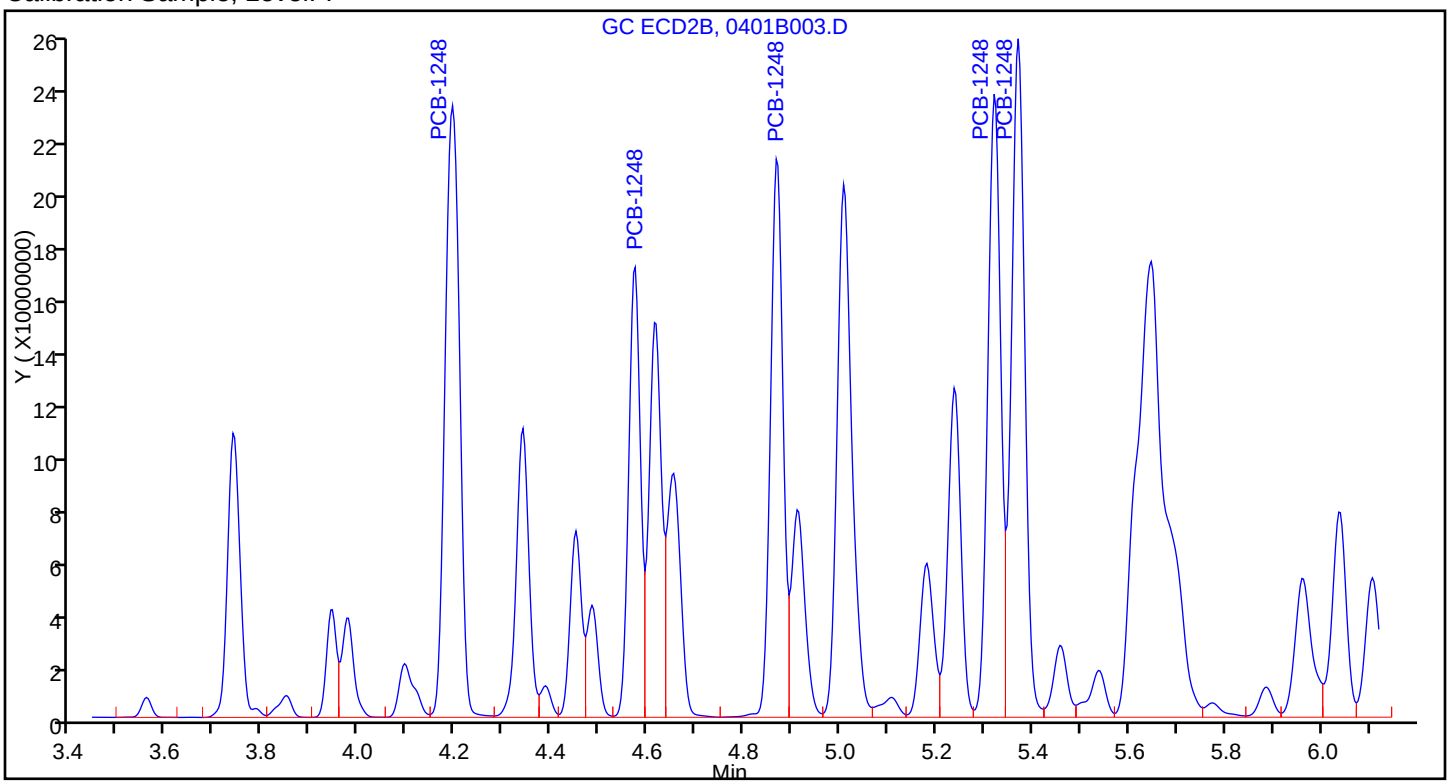
Report Date: 03-Apr-2014 09:29:49 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

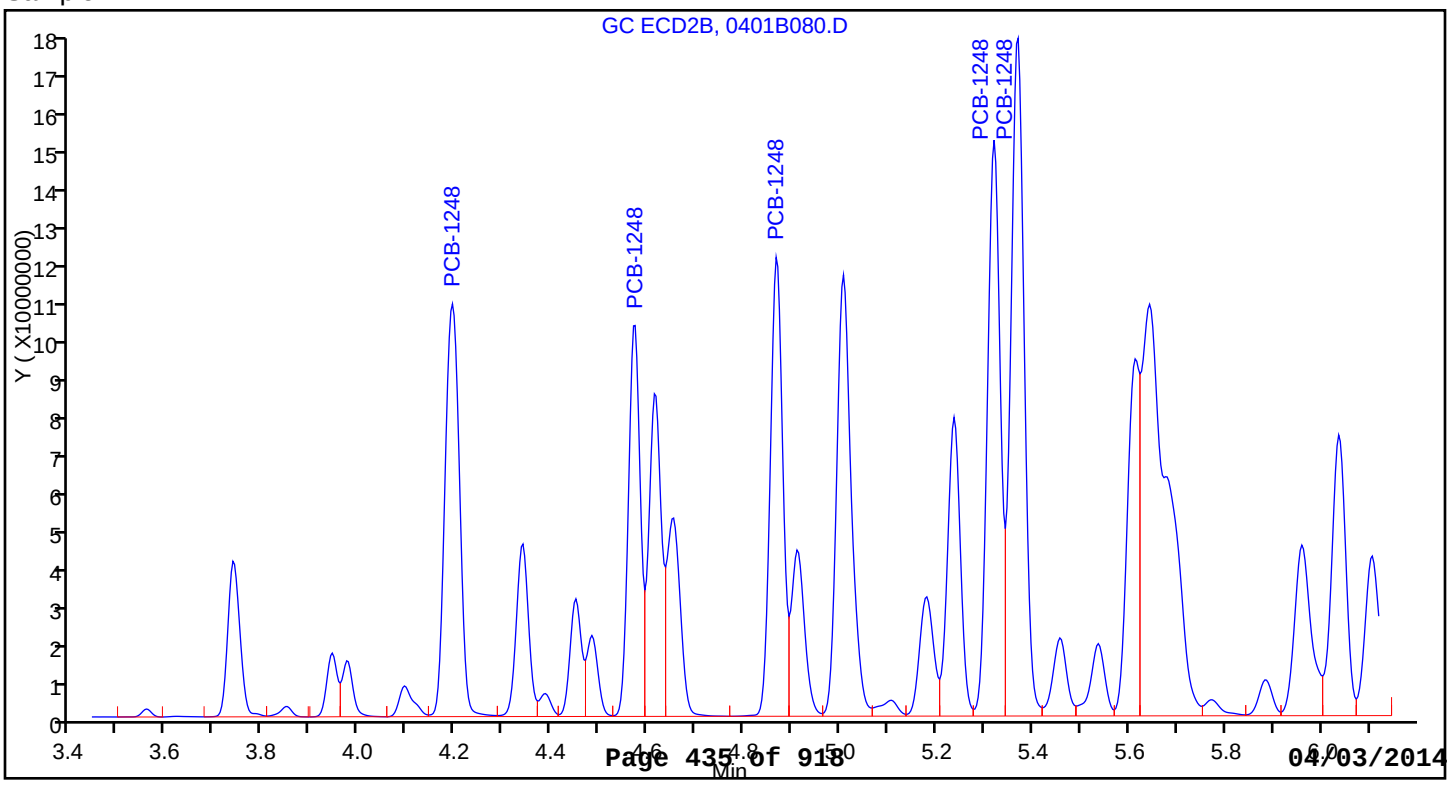
Data File:	\\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B080.D				
Injection Date:	02-Apr-2014 18:41:33	Instrument ID:	SGC_P3b		
Lims ID:	280-53458-A-26-A	Lab Sample ID:	280-53458-26		
Client ID:	SB-34-0				
Operator ID:	JAX	ALS Bottle#:	80	Worklist Smp#:	81
Injection Vol:	1.0 ul	Dil. Factor:	20.0000		
Method:	PCB_P3b	Limit Group:	GCSV - 8082		
Column:	CLP2 Pesticides Column 2 (0.32 mm)	Detector	GC ECD2B		

4 PCB-1248, CAS: 12672-29-6

Calibration Sample, Level: 7



Sample



FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-53458-1

SDG No.:

Client Sample ID: SB-35-0 | Lab Sample ID: 280-53458-27

Matrix: Solid | Lab File ID: 0401A081.D

Analysis Method: 8082A | Date Collected: 03/19/2014 09:00

Extraction Method: 3546 | Date Extracted: 03/27/2014 14:30

Sample wt/vol: 30.2(g) | Date Analyzed: 04/02/2014 18:41

Con. Extract Vol.: 10(mL) | Dilution Factor: 5

Injection Volume: 1(uL) | GC Column: CLP1 ID: 0.32(mm)

% Moisture: 7.8 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 219270 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
11104-28-2	PCB-1221	ND		250	84
12674-11-2	PCB-1016	ND		180	27
11141-16-5	PCB-1232	ND		180	28
53469-21-9	PCB-1242	ND		180	49
12672-29-6	PCB-1248	1000		180	30
11097-69-1	PCB-1254	ND		180	30
11096-82-5	PCB-1260	ND		180	14
37324-23-5	PCB-1262	ND		180	62
11100-14-4	PCB-1268	ND		180	21
1336-36-3	Polychlorinated biphenyls, Total	1000		180	14

CAS NO.	SURROGATE	%REC	Q	LIMITS
877-09-8	Tetrachloro-m-xylene	81	D	53-128
2051-24-3	DCB Decachlorobiphenyl	101	D	59-130

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A081.D
Lims ID: 280-53458-A-27-A Lab Sample ID: 280-53458-27
Client ID: SB-35-0
Sample Type: Client
Inject. Date: 02-Apr-2014 18:41:33 ALS Bottle#: 81 Worklist Smp#: 82
Injection Vol: 1.0 ul Dil. Factor: 5.0000
Sample Info: 280-53458-A-27-A
Operator ID: JAX Instrument ID: SGC_P3a

Method: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\PCB_P3a.m
Limit Group: GCSV - 8082
Last Update: 03-Apr-2014 08:32:55 Calib Date: 02-Apr-2014 02:52:35
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A037.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Process Host: XAWRK052

First Level Reviewer: jacksonto Date: 03-Apr-2014 06:56:21

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
$ 1 Tetrachloro-m-xylene					
2.848	2.845	0.003	13173363	3.26	
2 PCB-1221					
	3.042				
	3.179				
	3.216				
3 PCB-1232					
	3.214				
	3.554				
	4.018				
	4.158				
	4.608				
4 PCB-1248					
3.554	3.554	0.0	22988511	395.6	
4.018	4.014	0.004	64160501	412.4	
4.608	4.611	-0.003	82308216	514.1	
5.311	5.311	0.0	54301178	556.1	
5.848	5.851	-0.003	75727211	908.0	
	Average of Peak Amounts =			557.2	
5 PCB-1016					
	3.555				
	4.019				
	4.159				
	4.222				
	4.609				

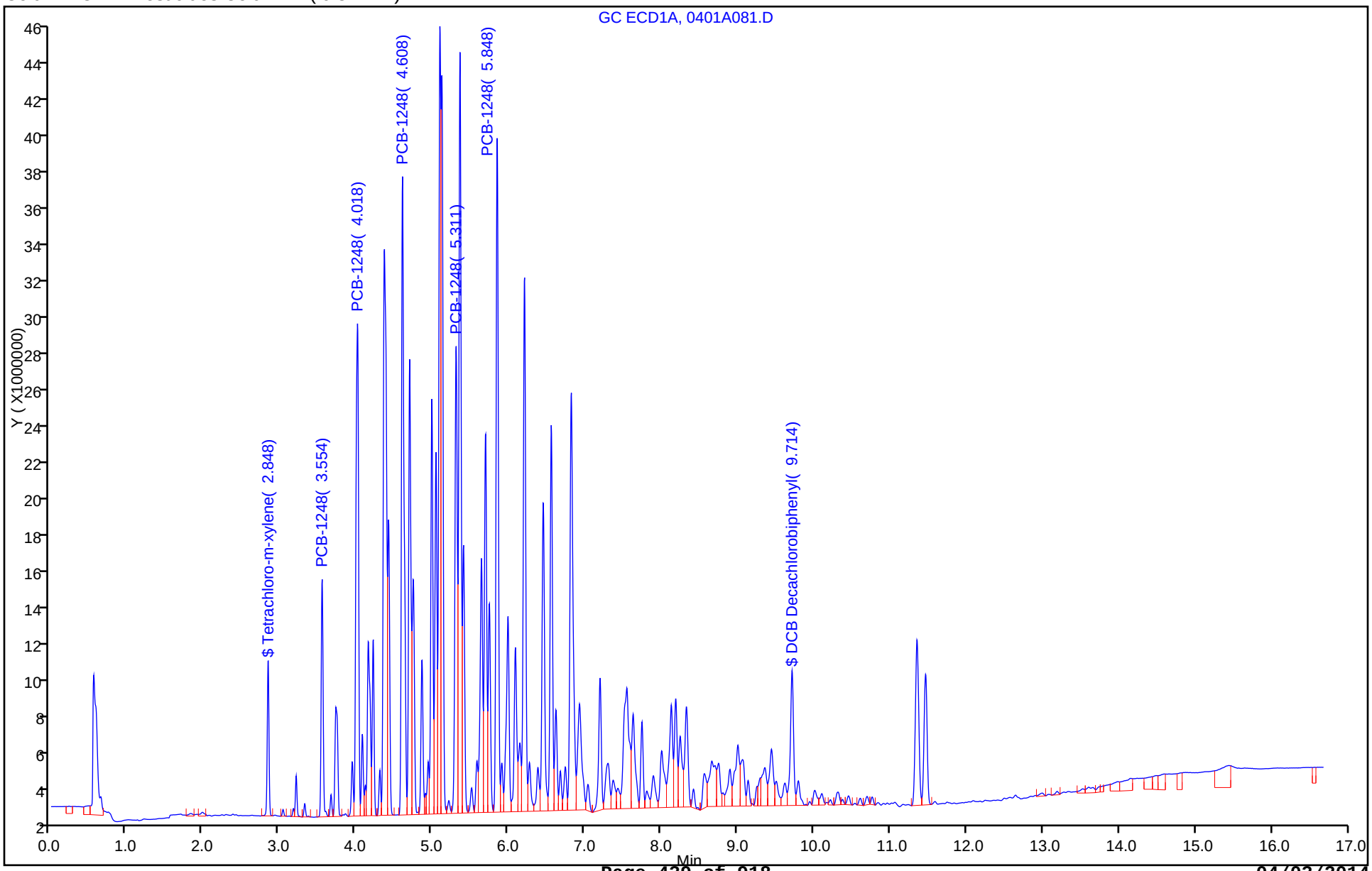
RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
6 PCB-1242					
3.556					
4.019					
4.159					
4.222					
4.609					
7 PCB-1254					
5.049					
5.366					
5.852					
6.209					
6.822					
10 PCB-1262					
6.088					
6.454					
7.044					
7.424					
8.254					
8 PCB-1260					
6.089					
6.819					
7.312					
7.749					
8.132					
12 PCB-1268					
8.196					
8.246					
8.519					
8.639					
9.442					
$ 13 DCB Decachlorobiphenyl					
9.714	9.715	-0.001	21269916	4.05	
S 15 Polychlorinated biphenyls, Total					
				557.2	

Report Date: 03-Apr-2014 08:33:05 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A081.D				
Injection Date:	02-Apr-2014 18:41:33	Instrument ID:	SGC_P3a	Operator ID:	JAX
Lims ID:	280-53458-A-27-A	Lab Sample ID:	280-53458-27	Worklist Smp#:	82
Client ID:	SB-35-0				
Injection Vol:	1.0 ul	Dil. Factor:	5.0000	ALS Bottle#:	81
Method:	PCB_P3a	Limit Group:	GCSV - 8082		

Column: CLP1 Pesticides Column 1 (0.32 mm)



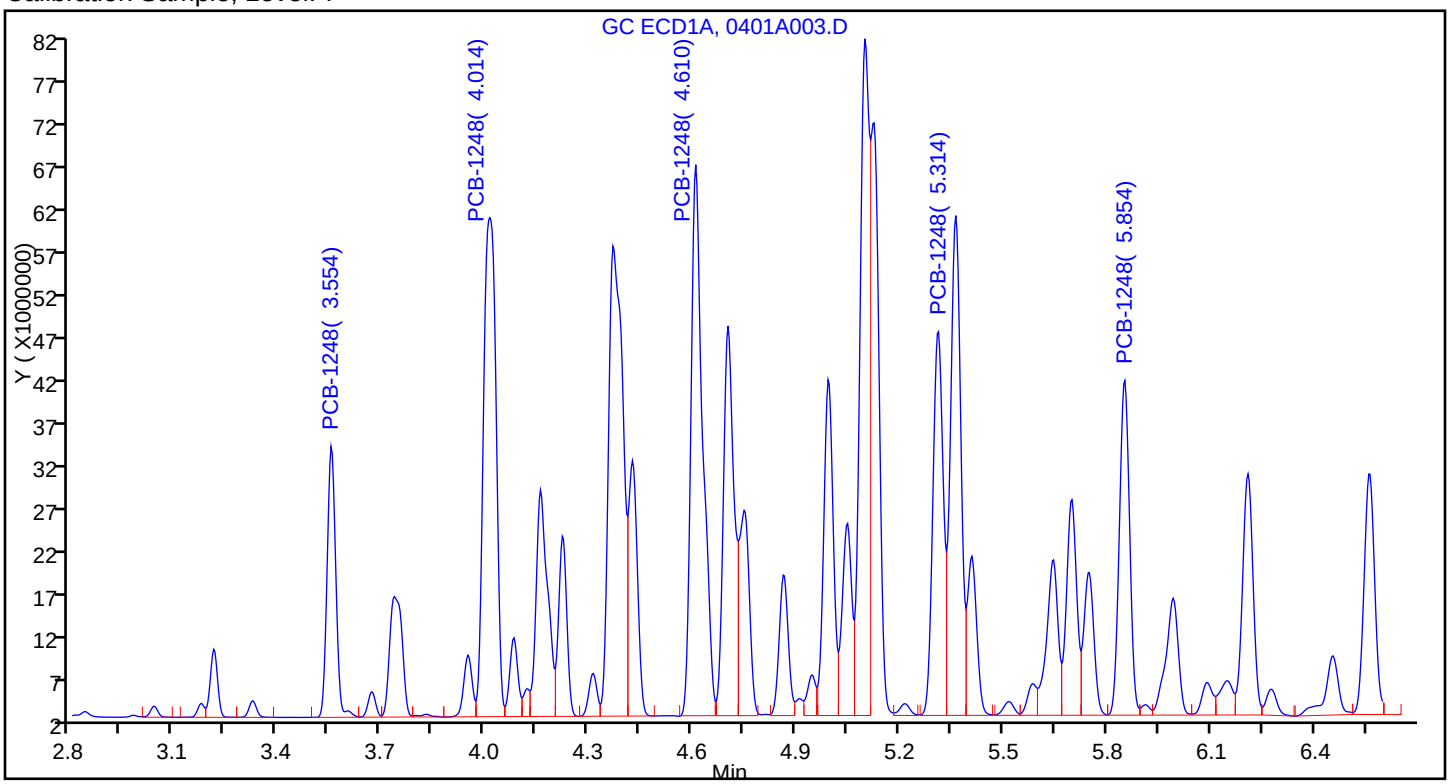
Report Date: 03-Apr-2014 08:33:05 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

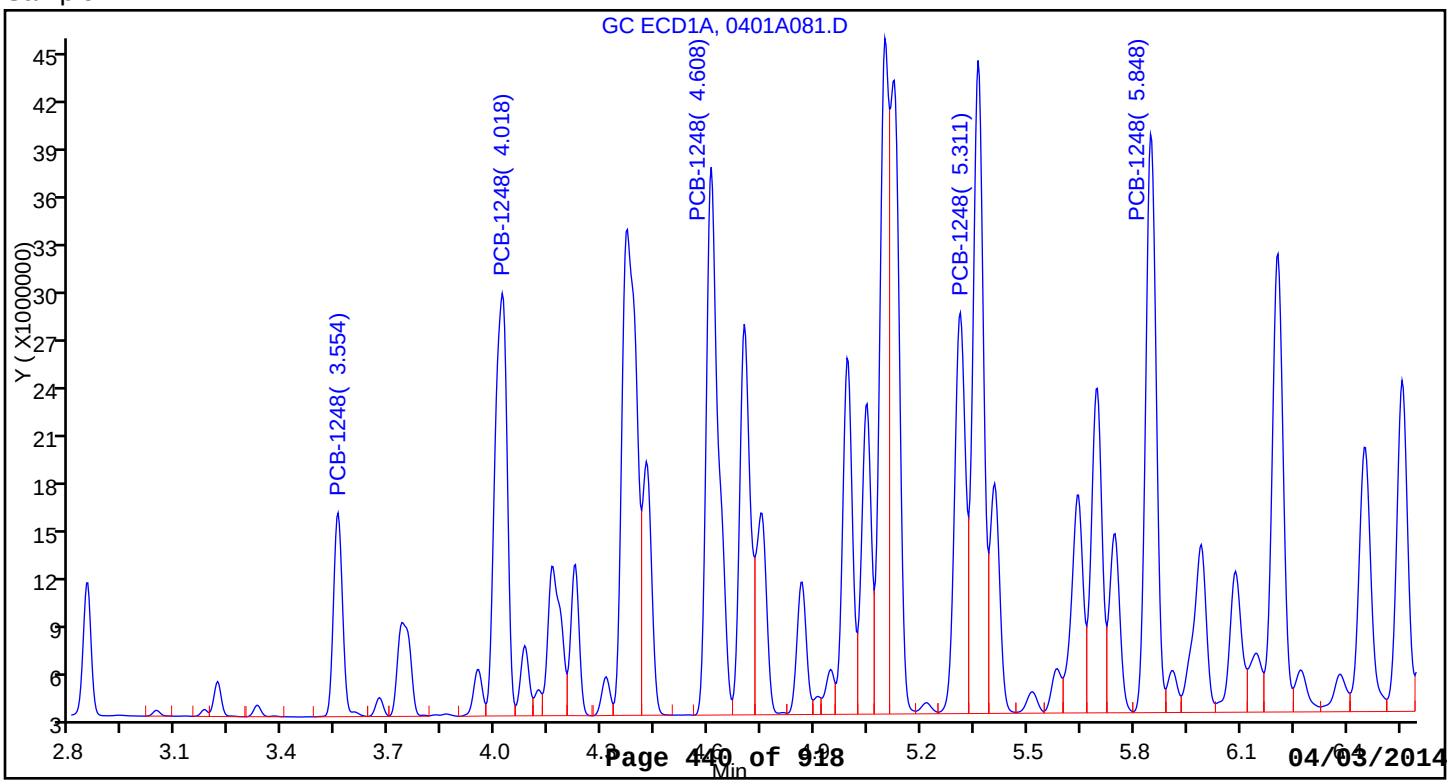
Data File:	\\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A081.D				
Injection Date:	02-Apr-2014 18:41:33	Instrument ID:	SGC_P3a		
Lims ID:	280-53458-A-27-A	Lab Sample ID:	280-53458-27		
Client ID:	SB-35-0				
Operator ID:	JAX	ALS Bottle#:	81	Worklist Smp#:	82
Injection Vol:	1.0 ul	Dil. Factor:	5.0000		
Method:	PCB_P3a	Limit Group:	GCSV - 8082		
Column:	CLP1 Pesticides Column 1 (0.32 mm)	Detector	GC ECD1A		

4 PCB-1248, CAS: 12672-29-6

Calibration Sample, Level: 7



Sample



FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-53458-1

SDG No.:

Client Sample ID: SB-35-0 | Lab Sample ID: 280-53458-27

Matrix: Solid | Lab File ID: 0401B081.D

Analysis Method: 8082A | Date Collected: 03/19/2014 09:00

Extraction Method: 3546 | Date Extracted: 03/27/2014 14:30

Sample wt/vol: 30.2(g) | Date Analyzed: 04/02/2014 19:02

Con. Extract Vol.: 10(mL) | Dilution Factor: 5

Injection Volume: 1(uL) | GC Column: CLP2 ID: 0.32(mm)

% Moisture: 7.8 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 219272 | Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
877-09-8	Tetrachloro-m-xylene	84	D	53-128
2051-24-3	DCB Decachlorobiphenyl	92	D	59-130

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B081.D
Lims ID: 280-53458-A-27-A Lab Sample ID: 280-53458-27
Client ID: SB-35-0
Sample Type: Client
Inject. Date: 02-Apr-2014 19:02:56 ALS Bottle#: 81 Worklist Smp#: 82
Injection Vol: 1.0 ul Dil. Factor: 5.0000
Sample Info: 280-53458-A-27-A
Operator ID: JAX Instrument ID: SGC_P3b

Method: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\PCB_P3b.m
Limit Group: GCSV - 8082
Last Update: 03-Apr-2014 09:29:39 Calib Date: 02-Apr-2014 03:13:50
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B037.D

Column 1 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK052

First Level Reviewer: jacksonto Date: 03-Apr-2014 08:13:57

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
$ 14 Tetrachloro-m-xylene					
2.865	2.862	0.003	46836468	3.37	
3 PCB-1221					
	3.165				
	3.292				
	3.348				
7 PCB-1232					
	3.166				
	3.346				
	4.196				
	4.340				
	4.870				
10 PCB-1242					
	3.347				
	4.193				
	4.340				
	4.867				
	5.007				
1 PCB-1016					
	3.738				
	4.195				
	4.342				
	4.868				
	5.008				

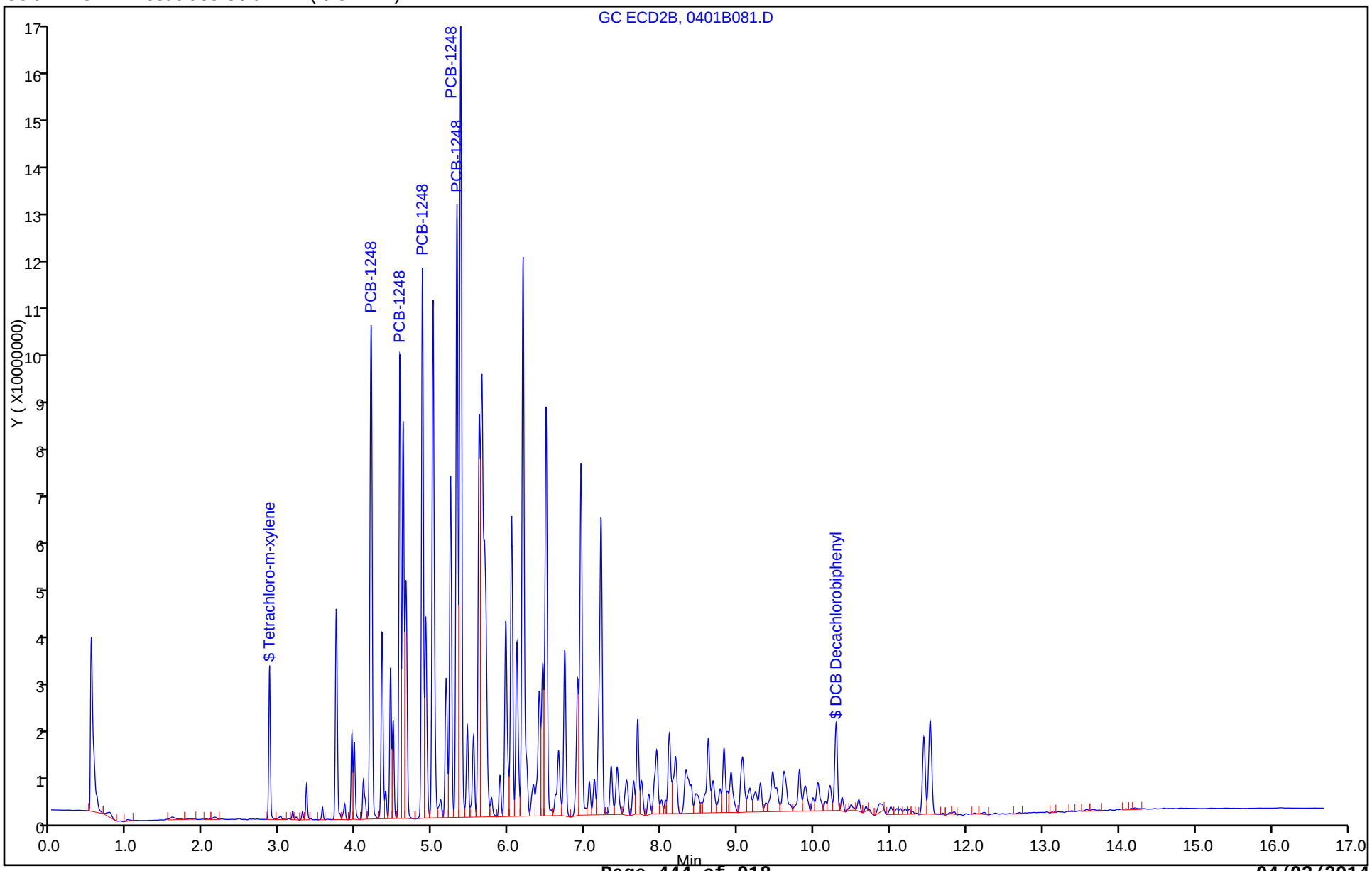
RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
4 PCB-1248					
4.195	4.194	0.001	213944888	431.8	
4.572	4.571	0.001	164609133	565.0	
4.869	4.868	0.001	205234896	527.8	
5.322	5.321	0.001	237274991	536.4	
5.372	5.371	0.001	321552021	647.3	
	Average of Peak Amounts =			541.7	
9 PCB-1254					
	5.368				
	5.612				
	6.038				
	6.735				
	7.212				
12 PCB-1260					
	6.448				
	6.735				
	7.208				
	8.108				
	8.618				
5 PCB-1262					
	6.733				
	7.743				
	8.110				
	8.613				
	9.463				
13 PCB-1268					
	8.610				
	8.673				
	9.030				
	9.173				
	9.927				
$ 15 DCB Decachlorobiphenyl					
10.292	10.295	-0.003	45682801	3.69	
S 8 Polychlorinated biphenyls, Total					
				541.7	

Report Date: 03-Apr-2014 09:29:50 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B081.D				
Injection Date:	02-Apr-2014 19:02:56	Instrument ID:	SGC_P3b	Operator ID:	JAX
Lims ID:	280-53458-A-27-A	Lab Sample ID:	280-53458-27	Worklist Smp#:	82
Client ID:	SB-35-0				
Injection Vol:	1.0 ul	Dil. Factor:	5.0000	ALS Bottle#:	81
Method:	PCB_P3b	Limit Group:	GCSV - 8082		

Column: CLP2 Pesticides Column 2 (0.32 mm)



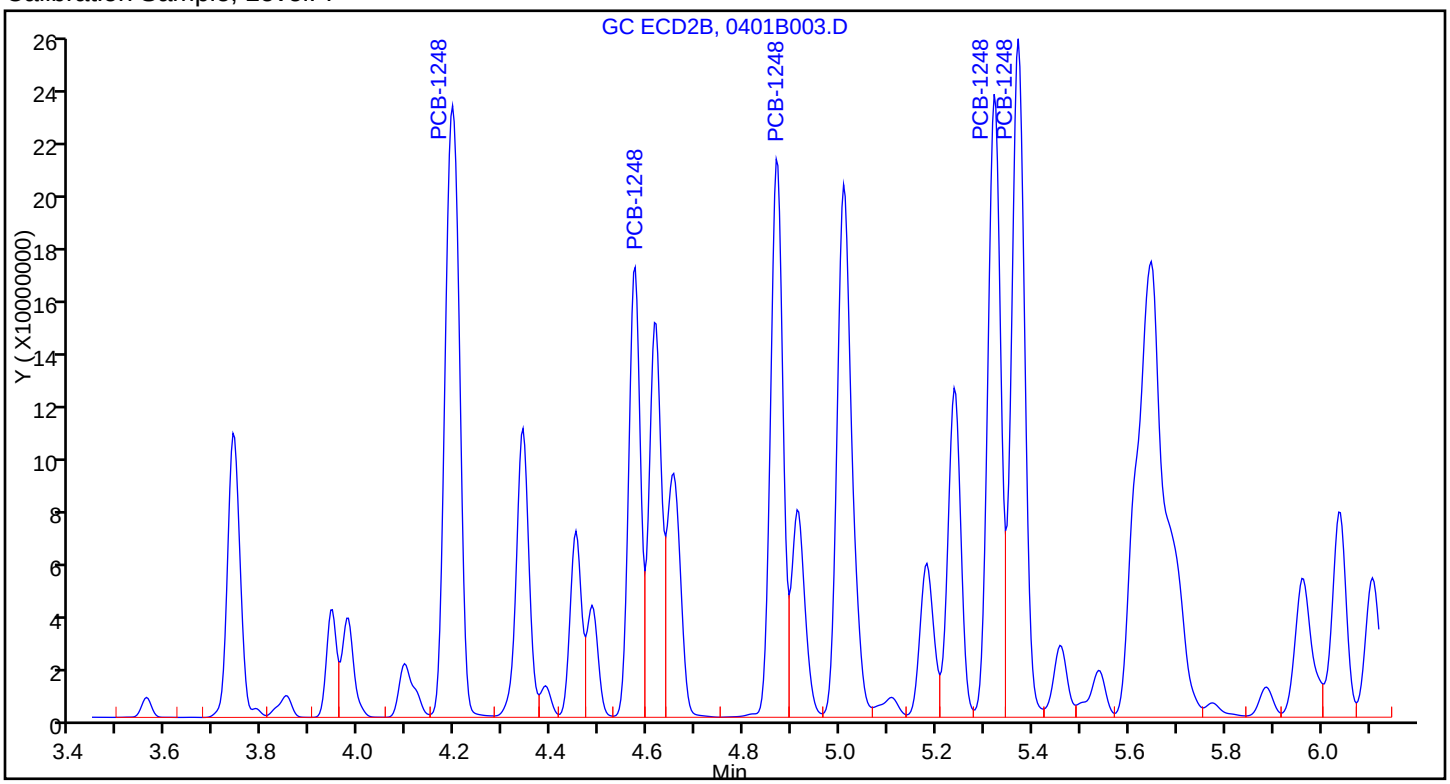
Report Date: 03-Apr-2014 09:29:50 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

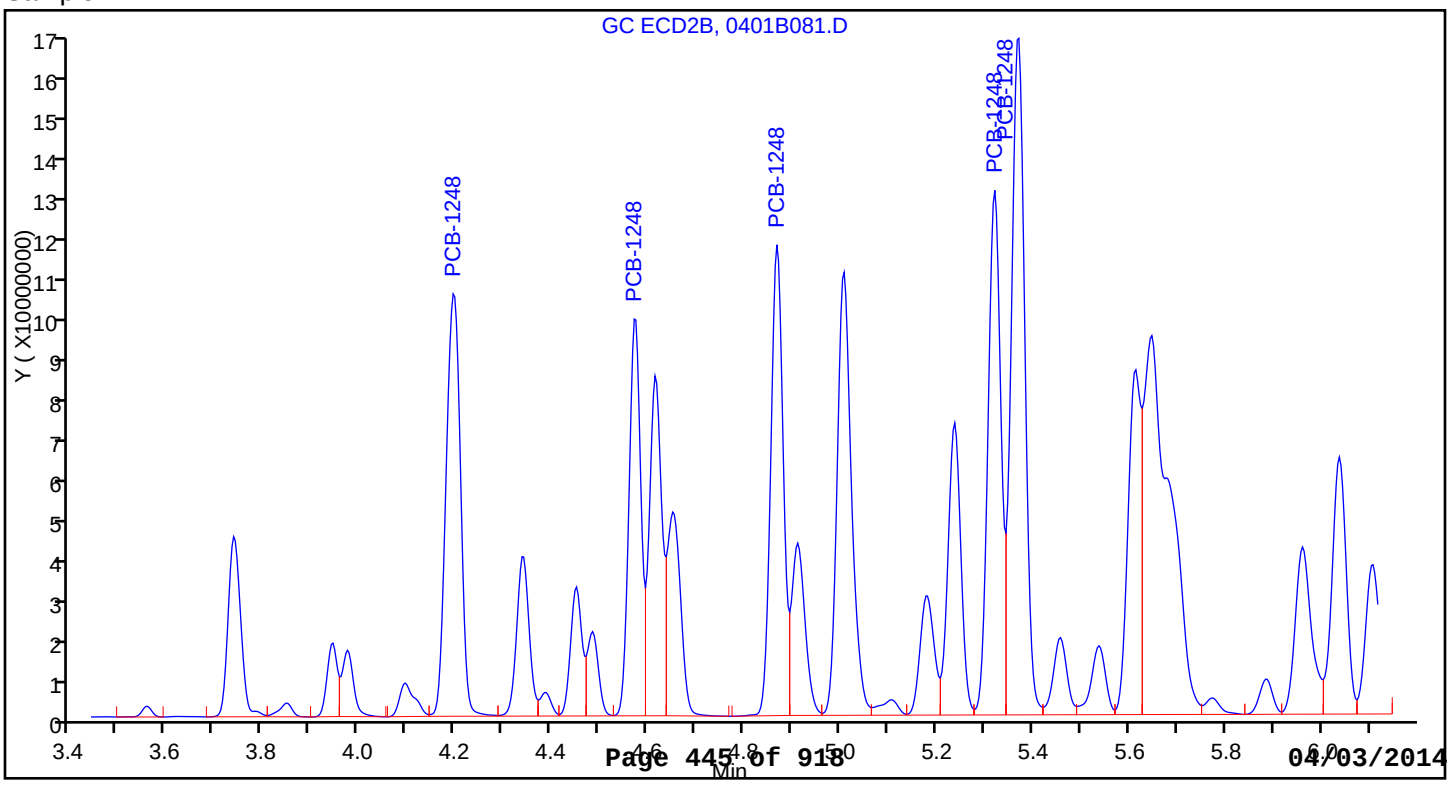
Data File:	\\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B081.D				
Injection Date:	02-Apr-2014 19:02:56	Instrument ID:	SGC_P3b		
Lims ID:	280-53458-A-27-A	Lab Sample ID:	280-53458-27		
Client ID:	SB-35-0				
Operator ID:	JAX	ALS Bottle#:	81	Worklist Smp#:	82
Injection Vol:	1.0 ul	Dil. Factor:	5.0000		
Method:	PCB_P3b	Limit Group:	GCSV - 8082		
Column:	CLP2 Pesticides Column 2 (0.32 mm)	Detector	GC ECD2B		

4 PCB-1248, CAS: 12672-29-6

Calibration Sample, Level: 7



Sample



FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-53458-1

SDG No.:

Client Sample ID: SB-40-0 | Lab Sample ID: 280-53458-28

Matrix: Solid | Lab File ID: 0401A082.D

Analysis Method: 8082A | Date Collected: 03/18/2014 14:50

Extraction Method: 3546 | Date Extracted: 03/27/2014 14:30

Sample wt/vol: 30.6(g) | Date Analyzed: 04/02/2014 19:02

Con. Extract Vol.: 10(mL) | Dilution Factor: 20

Injection Volume: 1(uL) | GC Column: CLP1 ID: 0.32(mm)

% Moisture: 4.3 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 219270 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
11104-28-2	PCB-1221	ND		960	320
12674-11-2	PCB-1016	ND		680	100
11141-16-5	PCB-1232	ND		680	100
53469-21-9	PCB-1242	ND		680	190
12672-29-6	PCB-1248	ND		680	110
11097-69-1	PCB-1254	3600		680	110
11096-82-5	PCB-1260	ND		680	54
37324-23-5	PCB-1262	ND		680	240
11100-14-4	PCB-1268	ND		680	81
1336-36-3	Polychlorinated biphenyls, Total	3600		680	54

CAS NO.	SURROGATE	%REC	Q	LIMITS
877-09-8	Tetrachloro-m-xylene	68	D	53-128
2051-24-3	DCB Decachlorobiphenyl	1015	D X	59-130

TestAmerica Denver
Target Compound Quantitation Report

Data File:	\\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A082.D				
Lims ID:	280-53458-A-28-A	Lab Sample ID:	280-53458-28		
Client ID:	SB-40-0				
Sample Type:	Client				
Inject. Date:	02-Apr-2014 19:02:56	ALS Bottle#:	82	Worklist Smp#:	83
Injection Vol:	1.0 ul	Dil. Factor:	20.0000		
Sample Info:	280-53458-A-28-A				
Operator ID:	JAX	Instrument ID:	SGC_P3a		
Method:	\\Denchrom\ChromData\SGC_P3a\20140401-21600.b\PCB_P3a.m				
Limit Group:	GCSV - 8082				
Last Update:	03-Apr-2014 08:32:55	Calib Date:	02-Apr-2014 02:52:35		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A037.D				
Column 1 :	CLP1 Pesticides Column 1 (0.32 mm)		Det: GC ECD1A		
Process Host:	XAWRK052				
First Level Reviewer: jacksonto		Date:	03-Apr-2014 06:57:03		

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
$ 1 Tetrachloro-m-xylene					
2.846	2.845	0.001	4186103	0.6768	
2 PCB-1221					
3.042					
3.179					
3.216					
3 PCB-1232					
3.214					
3.554					
4.018					
4.158					
4.608					
4 PCB-1248					
3.554					
4.014					
4.611					
5.311					
5.851					
5 PCB-1016					
3.555					
4.019					
4.159					
4.222					
4.609					

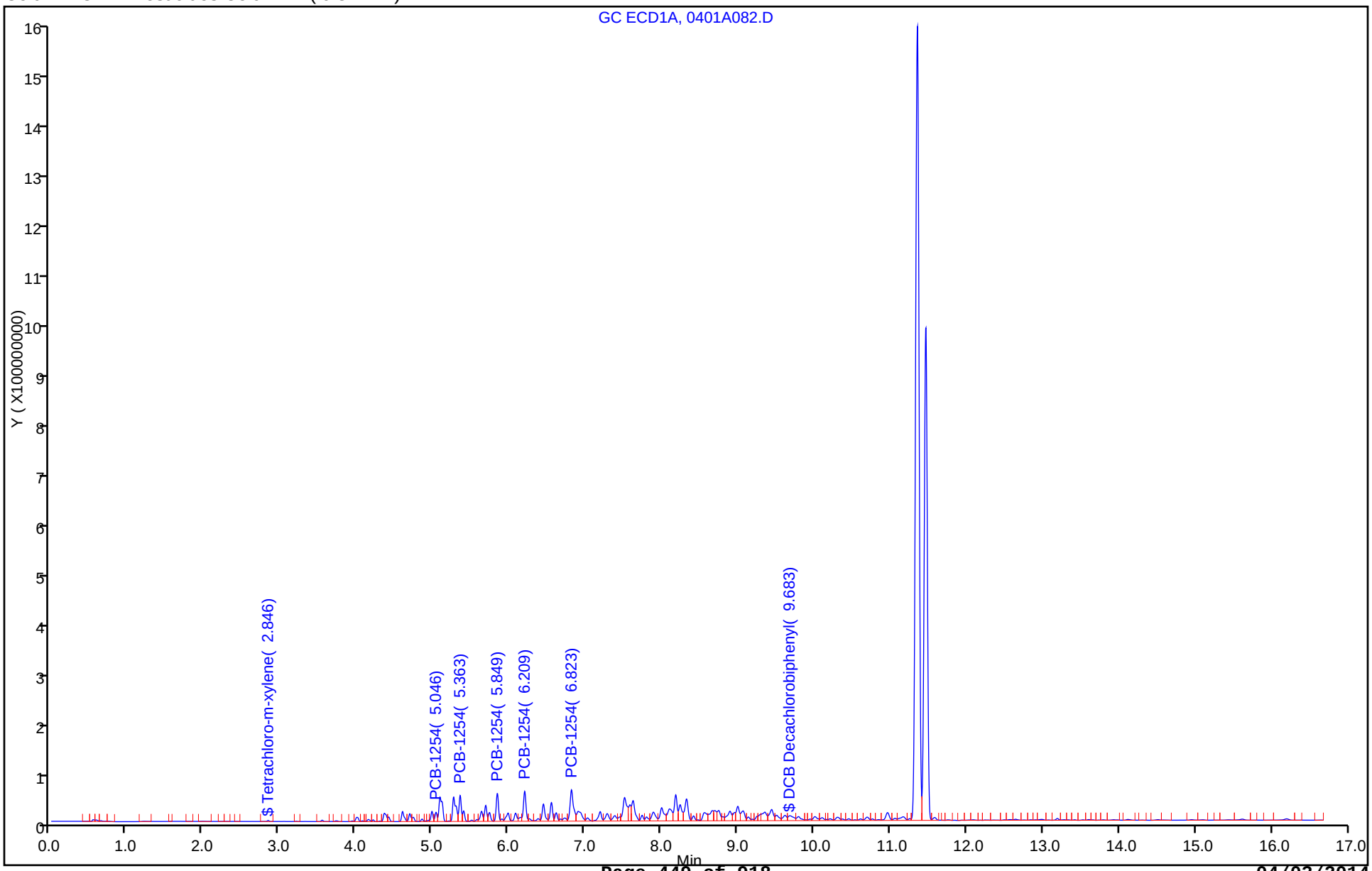
RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
6 PCB-1242					
	3.556				
	4.019				
	4.159				
	4.222				
	4.609				
7 PCB-1254					
5.046	5.049	-0.003	35727049	255.4	
5.363	5.366	-0.003	108631610	561.5	
5.849	5.852	-0.003	118348966	439.3	
6.209	6.209	0.0	143055640	679.7	
6.823	6.822	0.001	196621509	675.2	
	Average of Peak Amounts =			522.2	
10 PCB-1262					
	6.088				
	6.454				
	7.044				
	7.424				
	8.254				
8 PCB-1260					
	6.089				
	6.819				
	7.312				
	7.749				
	8.132				
12 PCB-1268					
	8.196				
	8.246				
	8.519				
	8.639				
	9.442				
$ 13 DCB Decachlorobiphenyl					
9.683	9.715	-0.032	49858263	10.2	
S 15 Polychlorinated biphenyls, Total					
				522.2	

Report Date: 03-Apr-2014 08:33:05 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A082.D				
Injection Date:	02-Apr-2014 19:02:56	Instrument ID:	SGC_P3a	Operator ID:	JAX
Lims ID:	280-53458-A-28-A	Lab Sample ID:	280-53458-28	Worklist Smp#:	83
Client ID:	SB-40-0				
Injection Vol:	1.0 ul	Dil. Factor:	20.0000	ALS Bottle#:	82
Method:	PCB_P3a	Limit Group:	GCSV - 8082		

Column: CLP1 Pesticides Column 1 (0.32 mm)



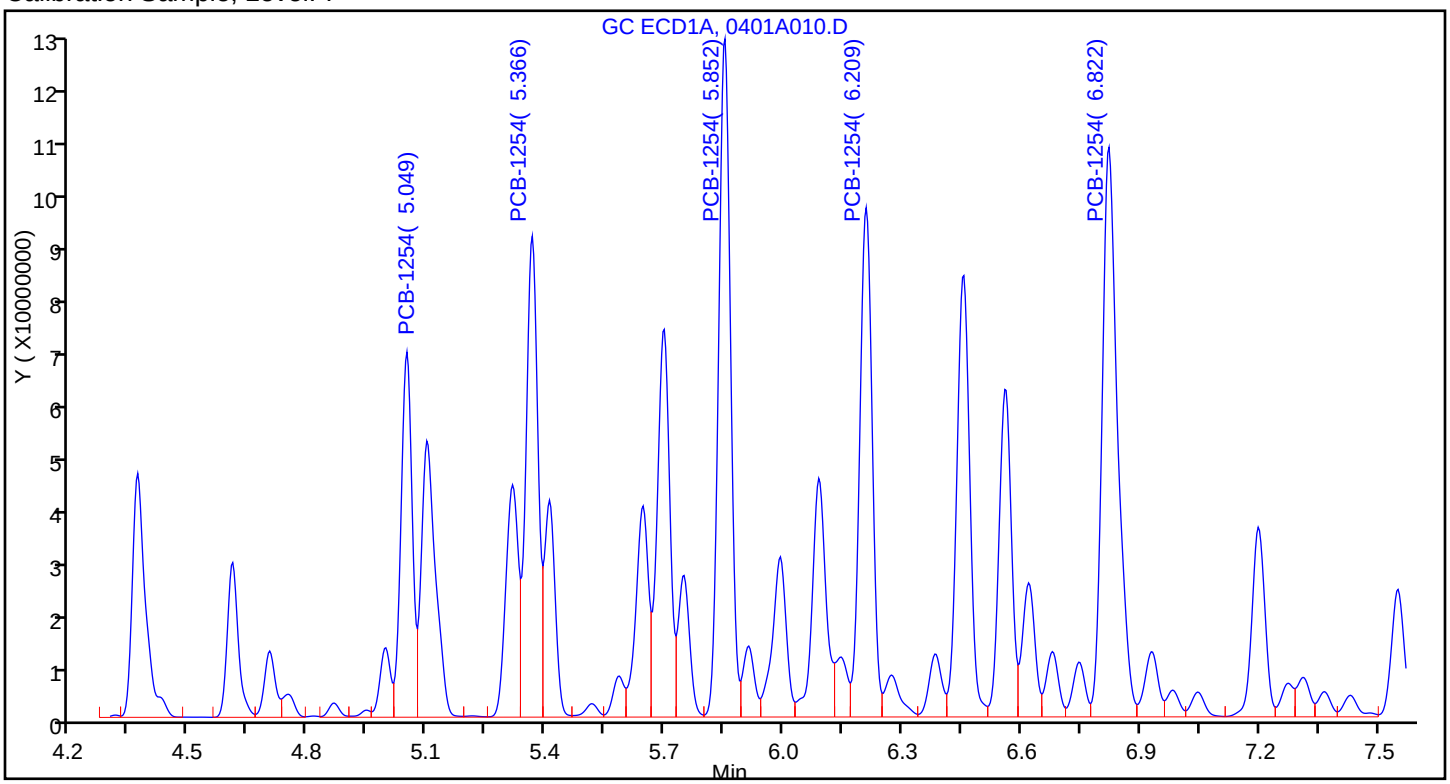
Report Date: 03-Apr-2014 08:33:05 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

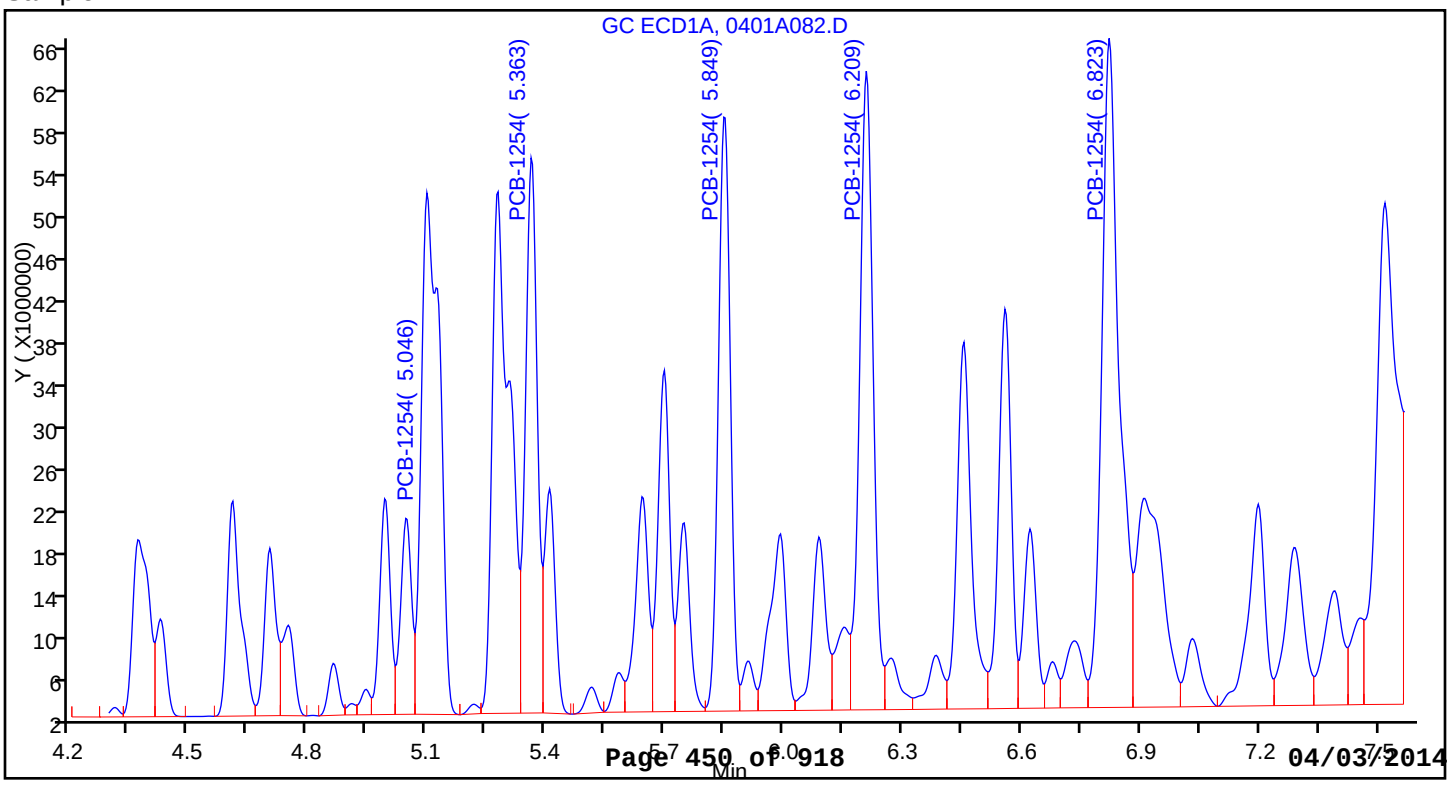
Data File:	\\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A082.D				
Injection Date:	02-Apr-2014 19:02:56	Instrument ID:	SGC_P3a		
Lims ID:	280-53458-A-28-A	Lab Sample ID:	280-53458-28		
Client ID:	SB-40-0				
Operator ID:	JAX	ALS Bottle#:	82	Worklist Smp#:	83
Injection Vol:	1.0 ul	Dil. Factor:	20.0000		
Method:	PCB_P3a	Limit Group:	GCSV - 8082		
Column:	CLP1 Pesticides Column 1 (0.32 mm)	Detector	GC ECD1A		

7 PCB-1254, CAS: 11097-69-1

Calibration Sample, Level: 7



Sample



FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-53458-1

SDG No.:

Client Sample ID: SB-40-0 | Lab Sample ID: 280-53458-28

Matrix: Solid | Lab File ID: 0401B082.D

Analysis Method: 8082A | Date Collected: 03/18/2014 14:50

Extraction Method: 3546 | Date Extracted: 03/27/2014 14:30

Sample wt/vol: 30.6(g) | Date Analyzed: 04/02/2014 19:24

Con. Extract Vol.: 10(mL) | Dilution Factor: 20

Injection Volume: 1(uL) | GC Column: CLP2 ID: 0.32(mm)

% Moisture: 4.3 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 219272 | Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
877-09-8	Tetrachloro-m-xylene	0	*X D*	53-128
2051-24-3	DCB Decachlorobiphenyl	0	*X D*	59-130

TestAmerica Denver
Target Compound Quantitation Report

Data File:	\\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B082.D				
Lims ID:	280-53458-A-28-A	Lab Sample ID:	280-53458-28		
Client ID:	SB-40-0				
Sample Type:	Client				
Inject. Date:	02-Apr-2014 19:24:15	ALS Bottle#:	82	Worklist Smp#:	83
Injection Vol:	1.0 ul	Dil. Factor:	20.0000		
Sample Info:	280-53458-A-28-A				
Operator ID:	JAX	Instrument ID:	SGC_P3b		
Method:	\\Denchrom\ChromData\SGC_P3b\20140401-21601.b\PCB_P3b.m				
Limit Group:	GCSV - 8082				
Last Update:	03-Apr-2014 09:29:39	Calib Date:	02-Apr-2014 03:13:50		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B037.D				
Column 1 :	CLP2 Pesticides Column 2 (0.32 mm)		Det: GC ECD2B		
Process Host:	XAWRK052				
First Level Reviewer: jacksonto		Date:	03-Apr-2014 08:15:28		

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
$ 14 Tetrachloro-m-xylene					
2.862					
3 PCB-1221					
3.165					
3.292					
3.348					
7 PCB-1232					
3.166					
3.346					
4.196					
4.340					
4.870					
10 PCB-1242					
3.347					
4.193					
4.340					
4.867					
5.007					
1 PCB-1016					
3.738					
4.195					
4.342					
4.868					
5.008					

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
4 PCB-1248					M
	4.194				
	4.571				
	4.868				
	5.321				
	5.371				
9 PCB-1254					M
0.0	5.368	-5.368	0	0	
5.613	5.612	0.001	239684891	458.8	M
6.037	6.038	-0.001	191284877	438.9	M
6.733	6.735	-0.002	150285232	456.5	
7.210	7.212	-0.002	364223759	459.7	
	Average of Peak Amounts =			453.5	
12 PCB-1260					
	6.448				
	6.735				
	7.208				
	8.108				
	8.618				
5 PCB-1262					
	6.733				
	7.743				
	8.110				
	8.613				
	9.463				
13 PCB-1268					
	8.610				
	8.673				
	9.030				
	9.173				
	9.927				
$ 15 DCB Decachlorobiphenyl					
	10.295				
S 8 Polychlorinated biphenyls, Total					
				453.5	

QC Flag Legend

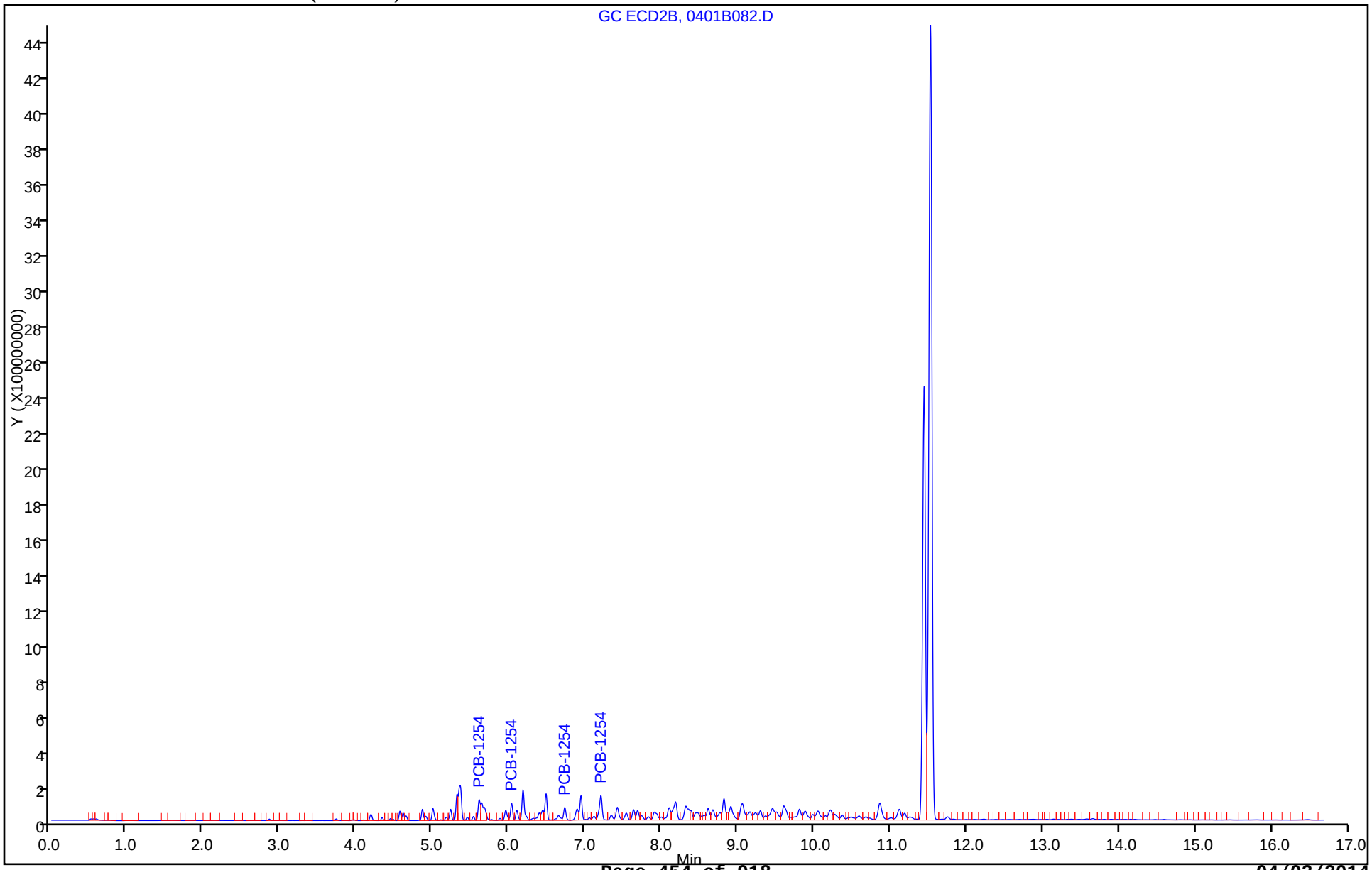
Review Flags
M - Manually Integrated

Report Date: 03-Apr-2014 09:29:51 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B082.D				
Injection Date:	02-Apr-2014 19:24:15	Instrument ID:	SGC_P3b	Operator ID:	JAX
Lims ID:	280-53458-A-28-A	Lab Sample ID:	280-53458-28	Worklist Smp#:	83
Client ID:	SB-40-0				
Injection Vol:	1.0 ul	Dil. Factor:	20.0000	ALS Bottle#:	82
Method:	PCB_P3b	Limit Group:	GCSV - 8082		

Column: CLP2 Pesticides Column 2 (0.32 mm)



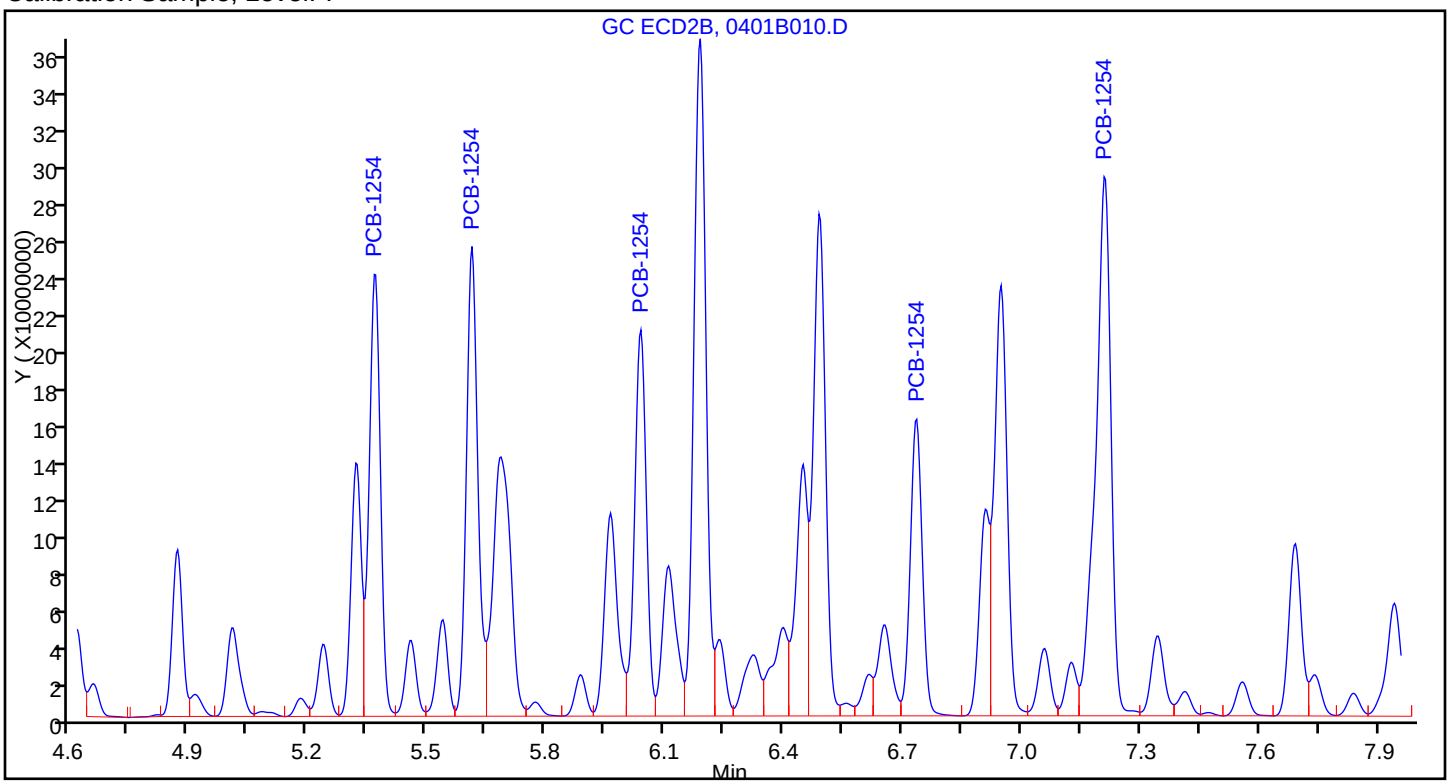
Report Date: 03-Apr-2014 09:29:51 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

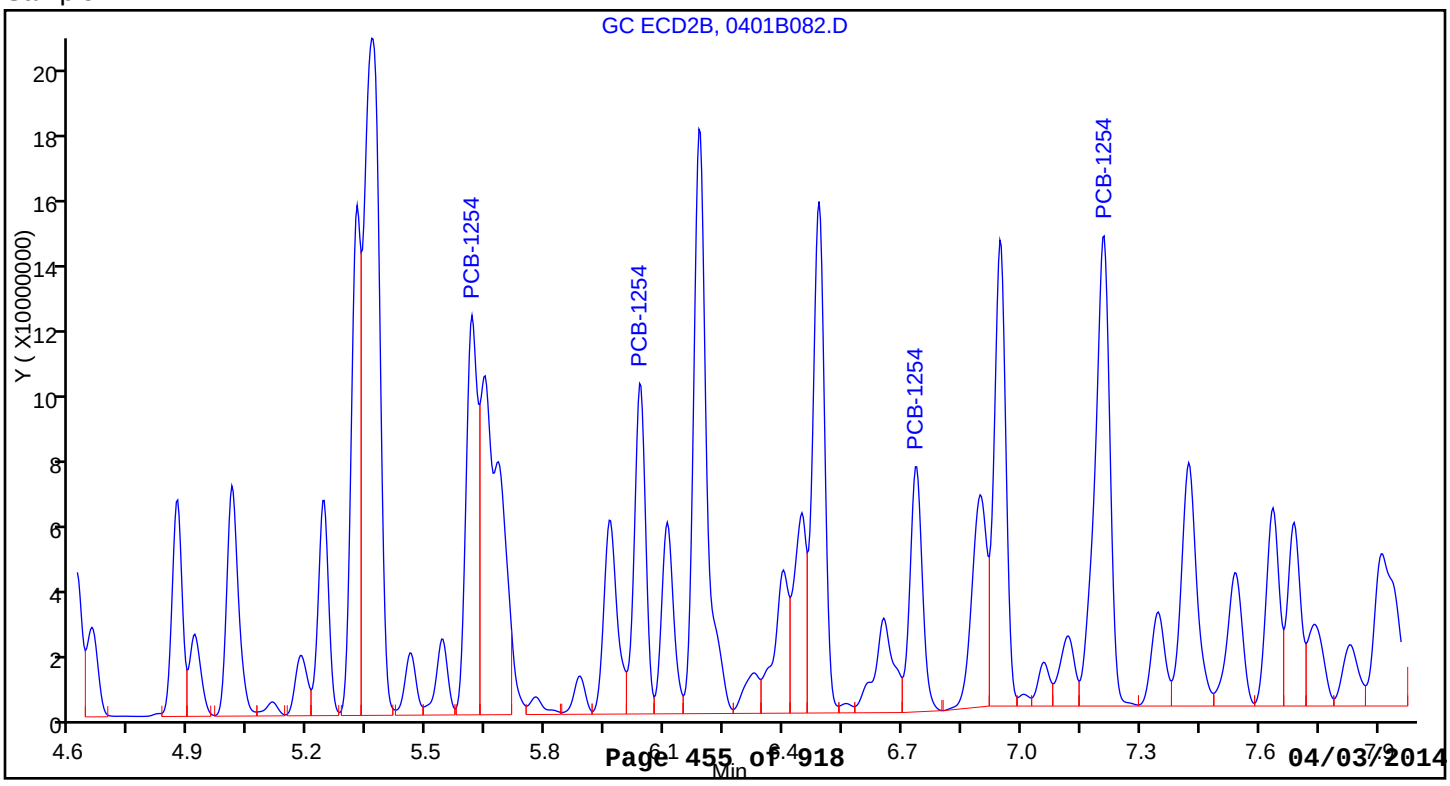
Data File:	\\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B082.D				
Injection Date:	02-Apr-2014 19:24:15	Instrument ID:	SGC_P3b		
Lims ID:	280-53458-A-28-A	Lab Sample ID:	280-53458-28		
Client ID:	SB-40-0				
Operator ID:	JAX	ALS Bottle#:	82	Worklist Smp#:	83
Injection Vol:	1.0 ul	Dil. Factor:	20.0000		
Method:	PCB_P3b	Limit Group:	GCSV - 8082		
Column:	CLP2 Pesticides Column 2 (0.32 mm)	Detector	GC ECD2B		

9 PCB-1254, CAS: 11097-69-1

Calibration Sample, Level: 7



Sample

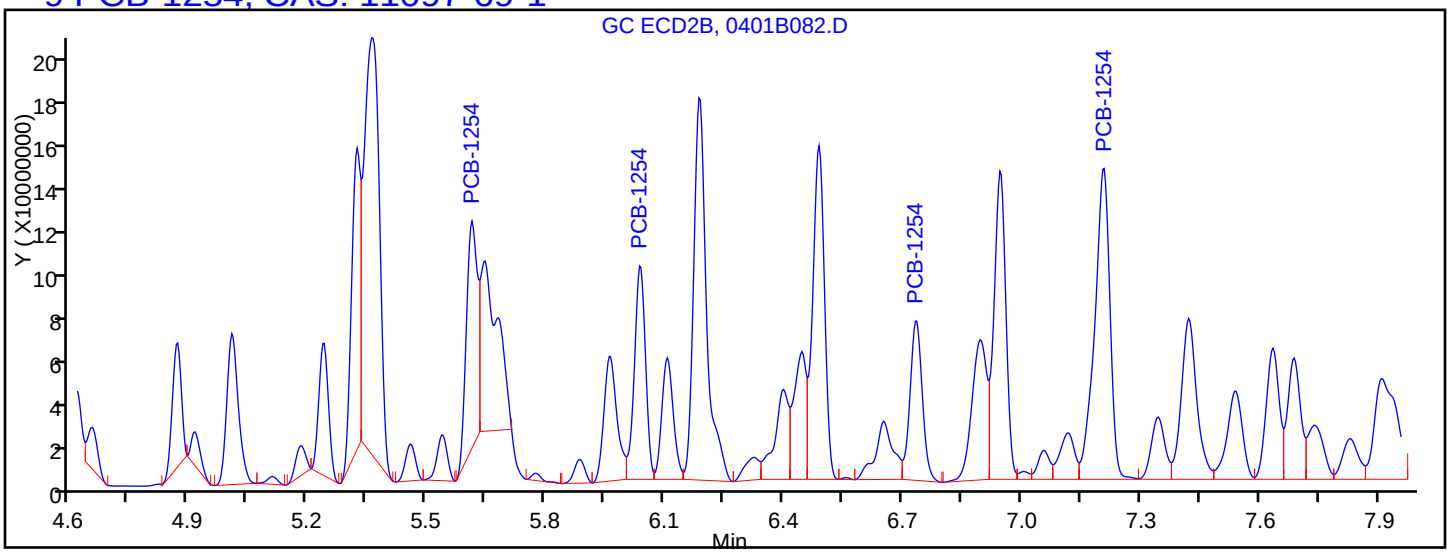


Report Date: 03-Apr-2014 09:29:51 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

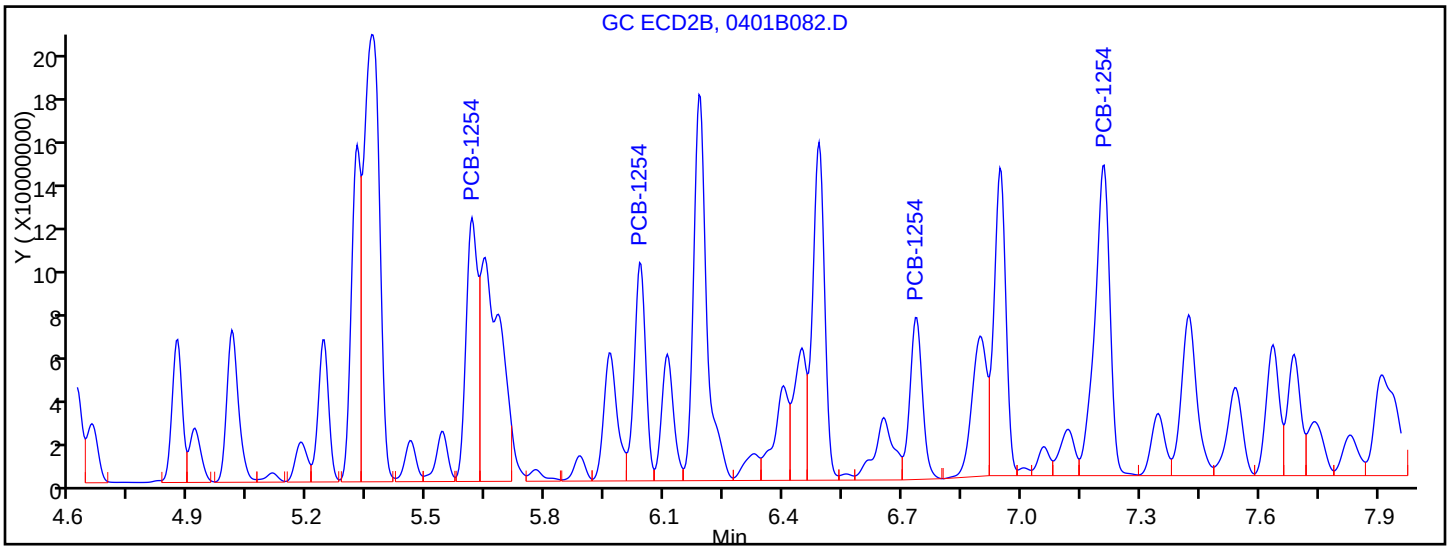
Data File:	\\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B082.D				
Injection Date:	02-Apr-2014 19:24:15	Instrument ID:	SGC_P3b		
Lims ID:	280-53458-A-28-A	Lab Sample ID:	280-53458-28		
Client ID:	SB-40-0				
Operator ID:	JAX	ALS Bottle#:	82	Worklist Smp#:	83
Injection Vol:	1.0 ul	Dil. Factor:	20.0000		
Method:	PCB_P3b	Limit Group:	GCSV - 8082		
Column:	CLP2 Pesticides Column 2 (0.32 mm)	Detector	GC ECD2B		

9 PCB-1254, CAS: 11097-69-1



Processing Integration Results

RT = 5.360	Response = 488141456	
RT = 5.613	Response = 194722400	M
RT = 6.037	Response = 181822661	M
RT = 6.733	Response = 150285232	
RT = 7.210	Response = 364223759	



Manual Integration Results

RT = 0.000	Response = 0	
RT = 5.613	Response = 239684891	M
RT = 6.037	Response = 191284877	M
RT = 6.733	Response = 150285232	
RT = 7.210	Response = 364223759	

Reviewer: jacksonto, 03-Apr-2014 08:15:28

Audit Action: Assigned New Baseline

Audit Reason: Baseline Smoothing

FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-53458-1

SDG No.:

Client Sample ID: SB-41-0 | Lab Sample ID: 280-53458-29

Matrix: Solid | Lab File ID: 0401A083.D

Analysis Method: 8082A | Date Collected: 03/19/2014 11:15

Extraction Method: 3546 | Date Extracted: 03/27/2014 14:30

Sample wt/vol: 30.9(g) | Date Analyzed: 04/02/2014 19:24

Con. Extract Vol.: 10(mL) | Dilution Factor: 5

Injection Volume: 1(uL) | GC Column: CLP1 ID: 0.32(mm)

% Moisture: 3.3 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 219270 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
11104-28-2	PCB-1221	ND		240	78
12674-11-2	PCB-1016	ND		170	26
11141-16-5	PCB-1232	ND		170	26
53469-21-9	PCB-1242	ND		170	46
12672-29-6	PCB-1248	ND		170	28
11097-69-1	PCB-1254	520		170	28
11096-82-5	PCB-1260	ND		170	13
37324-23-5	PCB-1262	ND		170	58
11100-14-4	PCB-1268	ND		170	20
1336-36-3	Polychlorinated biphenyls, Total	520		170	13

CAS NO.	SURROGATE	%REC	Q	LIMITS
877-09-8	Tetrachloro-m-xylene	34	D X	53-128
2051-24-3	DCB Decachlorobiphenyl	119	D	59-130

TestAmerica Denver
Target Compound Quantitation Report

Data File:	\\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A083.D				
Lims ID:	280-53458-A-29-A	Lab Sample ID:	280-53458-29		
Client ID:	SB-41-0				
Sample Type:	Client				
Inject. Date:	02-Apr-2014 19:24:14	ALS Bottle#:	83	Worklist Smp#:	84
Injection Vol:	1.0 ul	Dil. Factor:	5.0000		
Sample Info:	280-53458-A-29-A				
Operator ID:	JAX	Instrument ID:	SGC_P3a		
Method:	\\Denchrom\ChromData\SGC_P3a\20140401-21600.b\PCB_P3a.m				
Limit Group:	GCSV - 8082				
Last Update:	03-Apr-2014 08:32:55	Calib Date:	02-Apr-2014 02:52:35		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A037.D				
Column 1 :	CLP1 Pesticides Column 1 (0.32 mm)		Det: GC ECD1A		
Process Host:	XAWRK052				
First Level Reviewer: jacksonto		Date:	03-Apr-2014 06:57:27		

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
$ 1 Tetrachloro-m-xylene					
2.847	2.845	0.002	6589976	1.37	
2 PCB-1221					
3.042					
3.179					
3.216					
3 PCB-1232					
3.214					
3.554					
4.018					
4.158					
4.608					
4 PCB-1248					
3.554					
4.014					
4.611					
5.311					
5.851					
5 PCB-1016					
3.555					
4.019					
4.159					
4.222					
4.609					

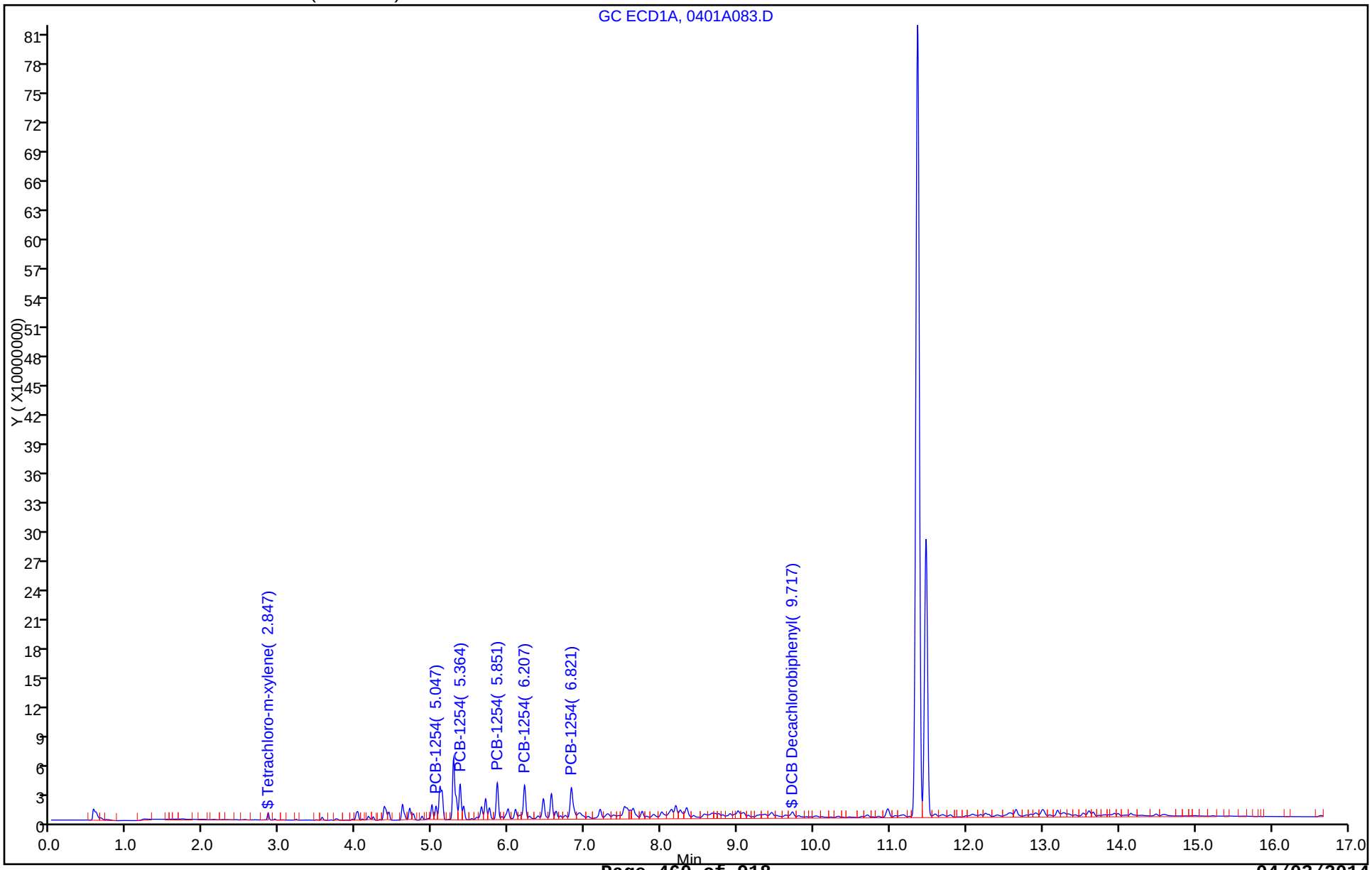
RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
6 PCB-1242					
	3.556				
	4.019				
	4.159				
	4.222				
	4.609				
7 PCB-1254					
5.047	5.049	-0.002	24564168	171.3	
5.364	5.366	-0.002	75453924	386.0	
5.851	5.852	-0.001	78883775	288.8	
6.207	6.209	-0.002	81064446	380.2	
6.821	6.822	-0.001	96817406	327.2	
	Average of Peak Amounts =			310.7	
10 PCB-1262					
	6.088				
	6.454				
	7.044				
	7.424				
	8.254				
8 PCB-1260					
	6.089				
	6.819				
	7.312				
	7.749				
	8.132				
12 PCB-1268					
	8.196				
	8.246				
	8.519				
	8.639				
	9.442				
$ 13 DCB Decachlorobiphenyl					
9.717	9.715	0.002	24623628	4.76	
S 15 Polychlorinated biphenyls, Total					
				310.7	

Report Date: 03-Apr-2014 08:33:06 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A083.D				
Injection Date:	02-Apr-2014 19:24:14	Instrument ID:	SGC_P3a	Operator ID:	JAX
Lims ID:	280-53458-A-29-A	Lab Sample ID:	280-53458-29	Worklist Smp#:	84
Client ID:	SB-41-0				
Injection Vol:	1.0 ul	Dil. Factor:	5.0000	ALS Bottle#:	83
Method:	PCB_P3a	Limit Group:	GCSV - 8082		

Column: CLP1 Pesticides Column 1 (0.32 mm)



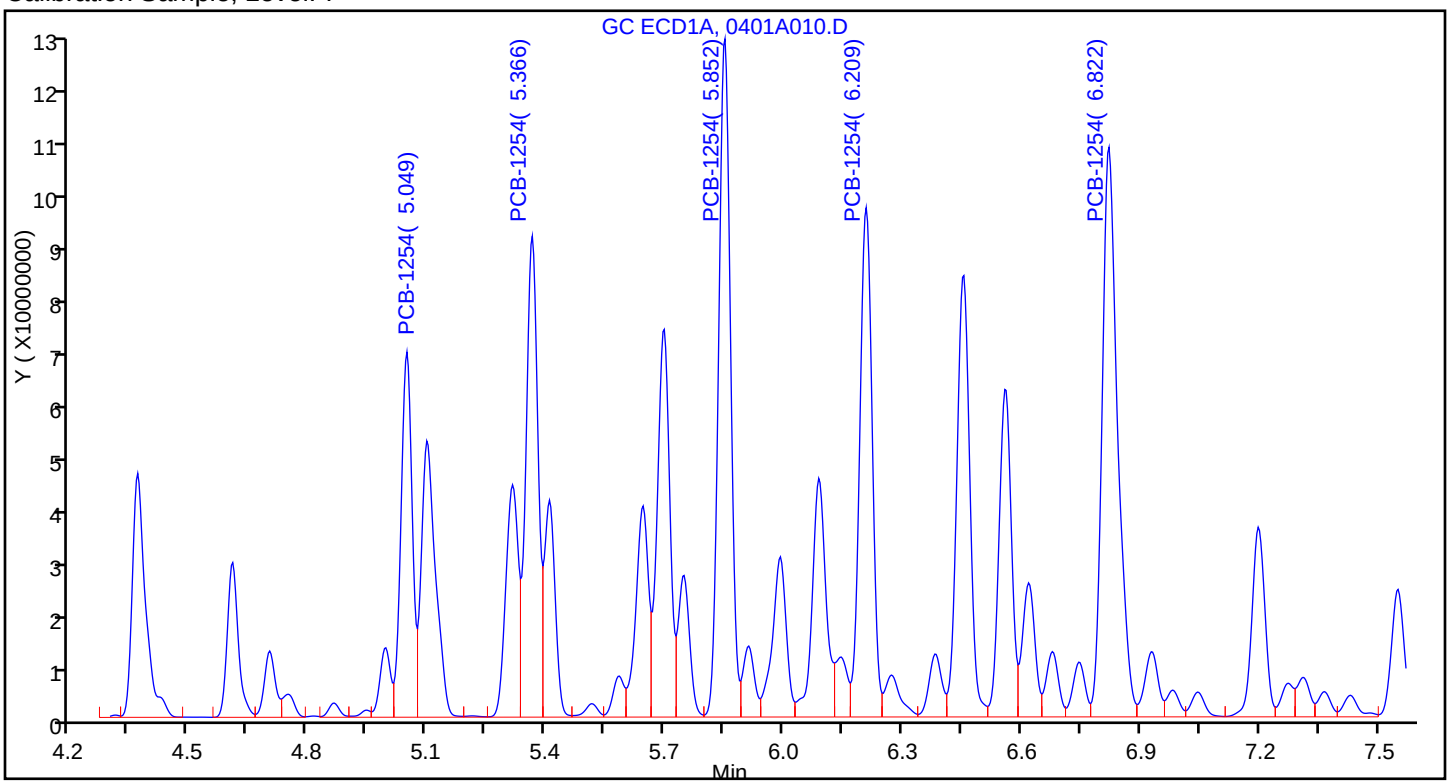
Report Date: 03-Apr-2014 08:33:06 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

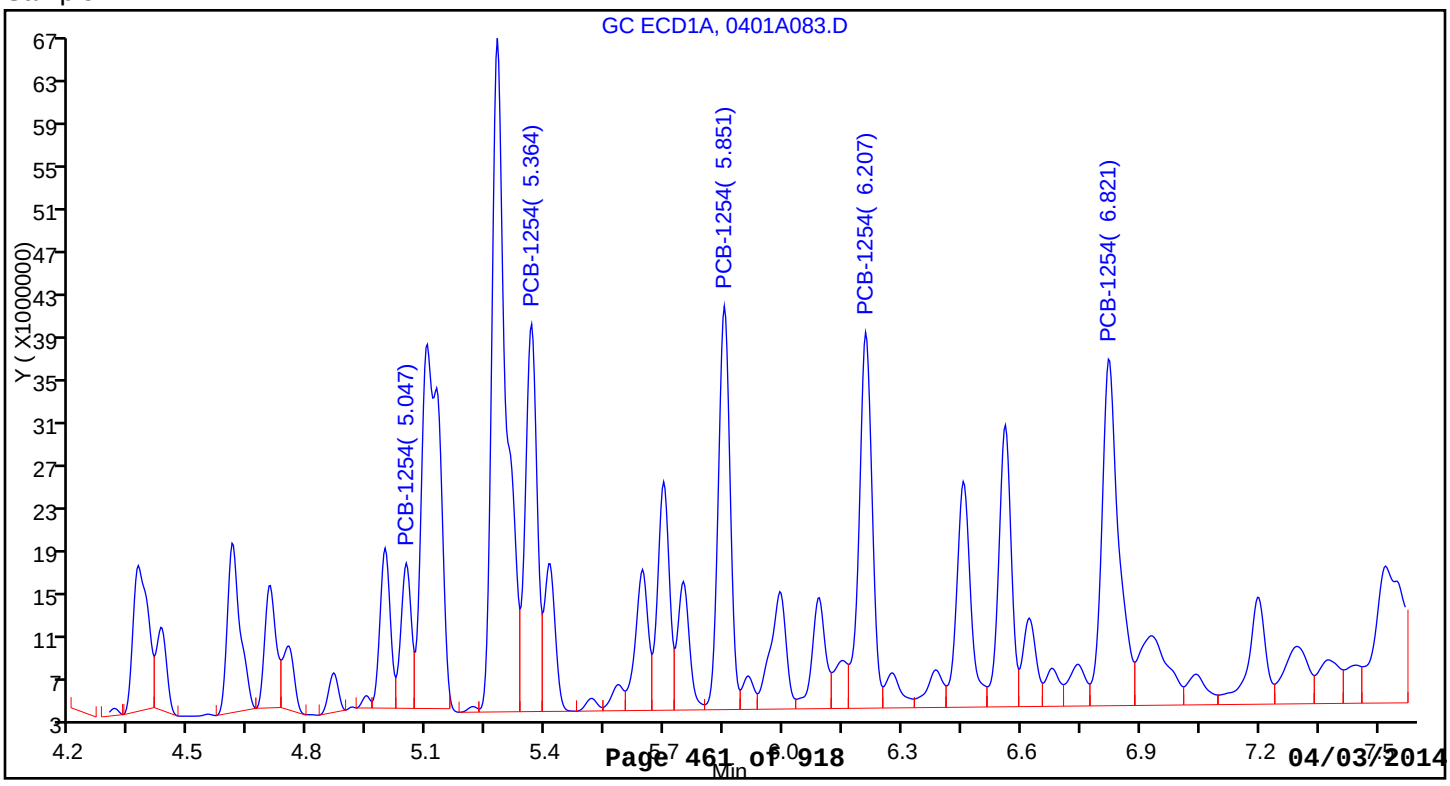
Data File:	\\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A083.D				
Injection Date:	02-Apr-2014 19:24:14	Instrument ID:	SGC_P3a		
Lims ID:	280-53458-A-29-A	Lab Sample ID:	280-53458-29		
Client ID:	SB-41-0				
Operator ID:	JAX	ALS Bottle#:	83	Worklist Smp#:	84
Injection Vol:	1.0 ul	Dil. Factor:	5.0000		
Method:	PCB_P3a	Limit Group:	GCSV - 8082		
Column:	CLP1 Pesticides Column 1 (0.32 mm)	Detector	GC ECD1A		

7 PCB-1254, CAS: 11097-69-1

Calibration Sample, Level: 7



Sample



FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-53458-1

SDG No.:

Client Sample ID: SB-41-0 | Lab Sample ID: 280-53458-29

Matrix: Solid | Lab File ID: 0401B083.D

Analysis Method: 8082A | Date Collected: 03/19/2014 11:15

Extraction Method: 3546 | Date Extracted: 03/27/2014 14:30

Sample wt/vol: 30.9(g) | Date Analyzed: 04/02/2014 19:45

Con. Extract Vol.: 10(mL) | Dilution Factor: 5

Injection Volume: 1(uL) | GC Column: CLP2 ID: 0.32(mm)

% Moisture: 3.3 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 219272 | Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
877-09-8	Tetrachloro-m-xylene	72	D	53-128
2051-24-3	DCB Decachlorobiphenyl	98	D	59-130

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B083.D
Lims ID: 280-53458-A-29-A Lab Sample ID: 280-53458-29
Client ID: SB-41-0
Sample Type: Client
Inject. Date: 02-Apr-2014 19:45:33 ALS Bottle#: 83 Worklist Smp#: 84
Injection Vol: 1.0 ul Dil. Factor: 5.0000
Sample Info: 280-53458-A-29-A
Operator ID: JAX Instrument ID: SGC_P3b

Method: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\PCB_P3b.m
Limit Group: GCSV - 8082
Last Update: 03-Apr-2014 09:29:39 Calib Date: 02-Apr-2014 03:13:50
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B037.D

Column 1 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK052

First Level Reviewer: jacksonto Date: 03-Apr-2014 08:16:12

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
$ 14 Tetrachloro-m-xylene					
2.865	2.862	0.003	41073070	2.89	
3 PCB-1221					
	3.165				
	3.292				
	3.348				
7 PCB-1232					
	3.166				
	3.346				
	4.196				
	4.340				
	4.870				
10 PCB-1242					
	3.347				
	4.193				
	4.340				
	4.867				
	5.007				
1 PCB-1016					
	3.738				
	4.195				
	4.342				
	4.868				
	5.008				

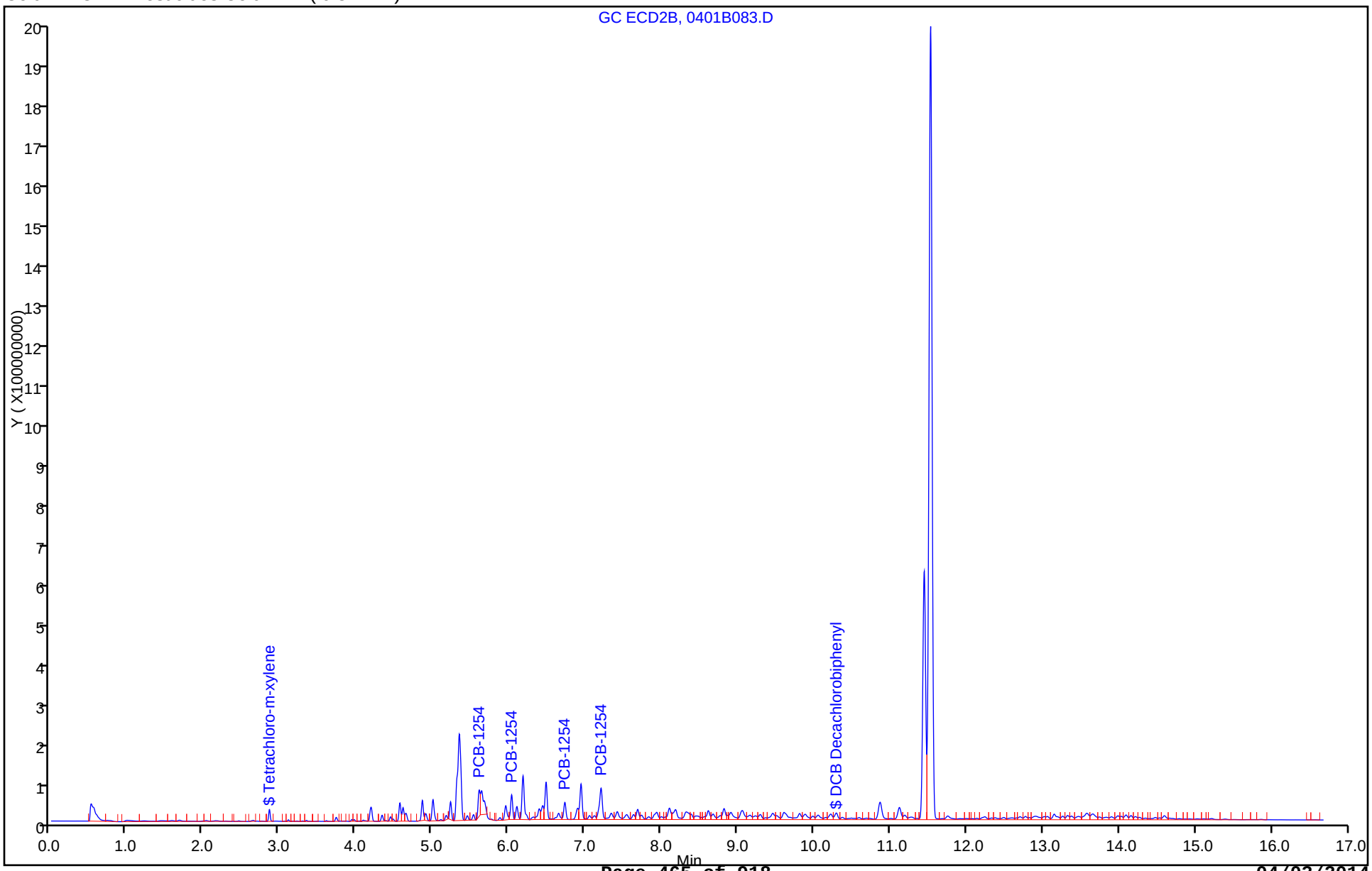
RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
4 PCB-1248					
	4.194				
	4.571				
	4.868				
	5.321				
	5.371				
9 PCB-1254					
0.0	5.368	-5.368	0	0	
5.615	5.612	0.003	115251012	213.4	
6.038	6.038	0.0	112866081	255.1	
6.735	6.735	0.0	86227290	257.4	
7.211	7.212	-0.001	211093222	261.9	
	Average of Peak Amounts =			247.0	
12 PCB-1260					
	6.448				
	6.735				
	7.208				
	8.108				
	8.618				
5 PCB-1262					
	6.733				
	7.743				
	8.110				
	8.613				
	9.463				
13 PCB-1268					
	8.610				
	8.673				
	9.030				
	9.173				
	9.927				
$ 15 DCB Decachlorobiphenyl					
10.295	10.295	0.0	48225777	3.91	
S 8 Polychlorinated biphenyls, Total					
				247.0	

Report Date: 03-Apr-2014 09:29:51 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B083.D				
Injection Date:	02-Apr-2014 19:45:33	Instrument ID:	SGC_P3b	Operator ID:	JAX
Lims ID:	280-53458-A-29-A	Lab Sample ID:	280-53458-29	Worklist Smp#:	84
Client ID:	SB-41-0				
Injection Vol:	1.0 ul	Dil. Factor:	5.0000	ALS Bottle#:	83
Method:	PCB_P3b	Limit Group:	GCSV - 8082		

Column: CLP2 Pesticides Column 2 (0.32 mm)



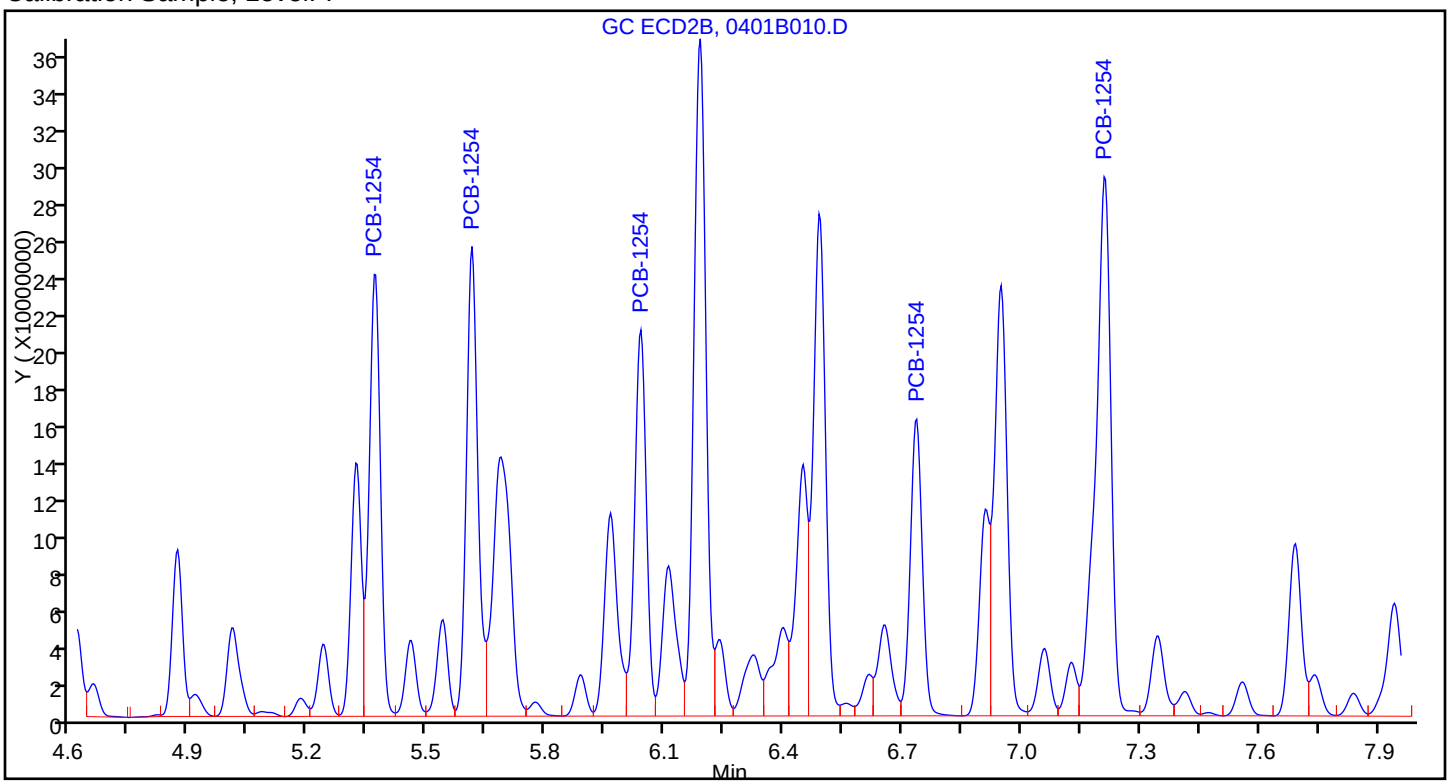
Report Date: 03-Apr-2014 09:29:51 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

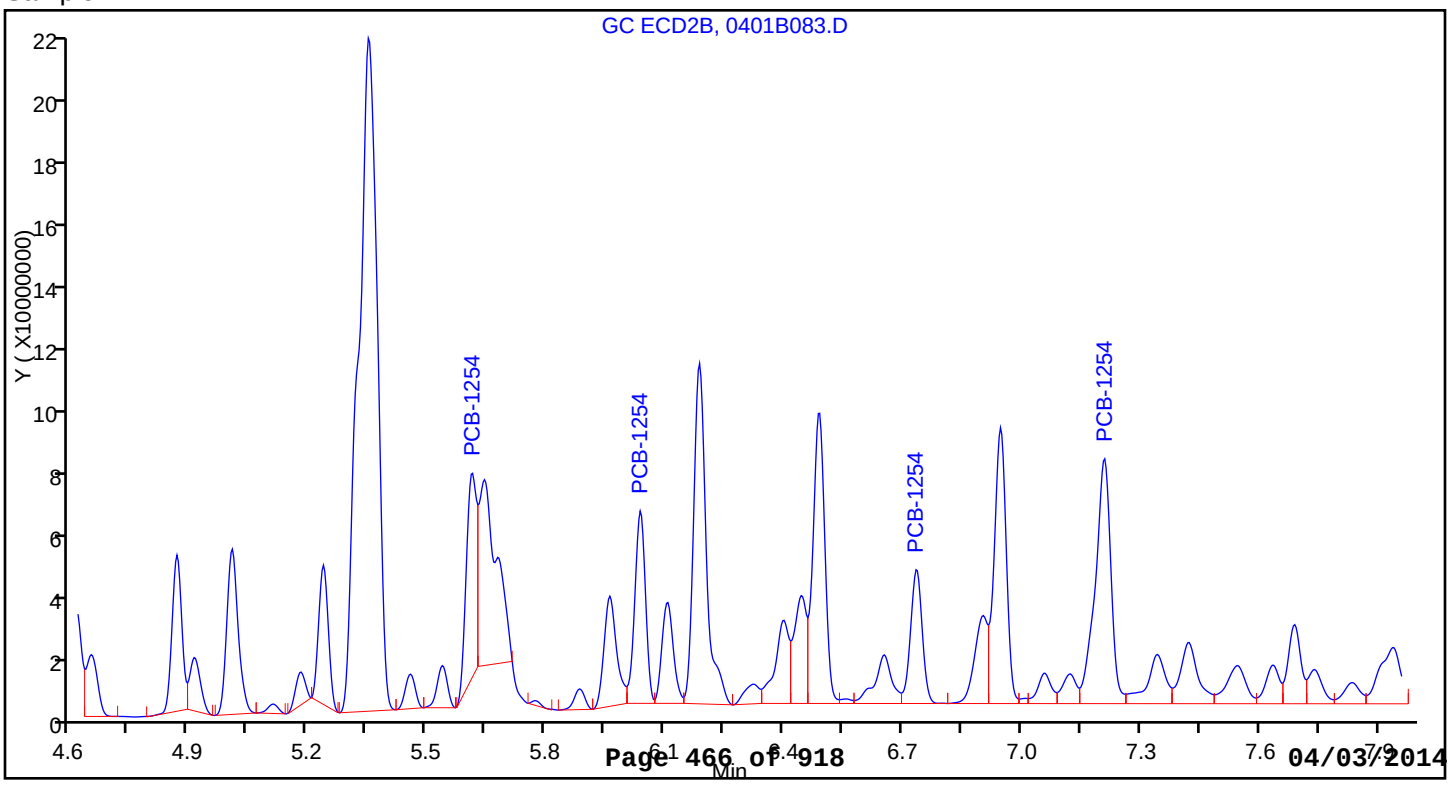
Data File:	\\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B083.D				
Injection Date:	02-Apr-2014 19:45:33	Instrument ID:	SGC_P3b		
Lims ID:	280-53458-A-29-A	Lab Sample ID:	280-53458-29		
Client ID:	SB-41-0				
Operator ID:	JAX	ALS Bottle#:	83	Worklist Smp#:	84
Injection Vol:	1.0 ul	Dil. Factor:	5.0000		
Method:	PCB_P3b	Limit Group:	GCSV - 8082		
Column:	CLP2 Pesticides Column 2 (0.32 mm)	Detector	GC ECD2B		

9 PCB-1254, CAS: 11097-69-1

Calibration Sample, Level: 7



Sample



FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-53458-1

SDG No.:

Client Sample ID: SB-42-0 | Lab Sample ID: 280-53458-30

Matrix: Solid | Lab File ID: 0401A084.D

Analysis Method: 8082A | Date Collected: 03/20/2014 09:02

Extraction Method: 3546 | Date Extracted: 03/27/2014 14:30

Sample wt/vol: 30.6(g) | Date Analyzed: 04/02/2014 19:45

Con. Extract Vol.: 10(mL) | Dilution Factor: 10

Injection Volume: 1(uL) | GC Column: CLP1 ID: 0.32(mm)

% Moisture: 6.3 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 219270 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
11104-28-2	PCB-1221	ND		490	160
12674-11-2	PCB-1016	ND		350	53
11141-16-5	PCB-1232	ND		350	54
53469-21-9	PCB-1242	ND		350	95
12672-29-6	PCB-1248	1800		350	59
11097-69-1	PCB-1254	ND		350	58
11096-82-5	PCB-1260	ND		350	28
37324-23-5	PCB-1262	ND		350	120
11100-14-4	PCB-1268	ND		350	41
1336-36-3	Polychlorinated biphenyls, Total	1800		350	28

CAS NO.	SURROGATE	%REC	Q	LIMITS
877-09-8	Tetrachloro-m-xylene	80	D	53-128
2051-24-3	DCB Decachlorobiphenyl	0	D X	59-130

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A084.D
Lims ID: 280-53458-A-30-A Lab Sample ID: 280-53458-30
Client ID: SB-42-0
Sample Type: Client
Inject. Date: 02-Apr-2014 19:45:33 ALS Bottle#: 84 Worklist Smp#: 85
Injection Vol: 1.0 ul Dil. Factor: 10.0000
Sample Info: 280-53458-A-30-A
Operator ID: JAX Instrument ID: SGC_P3a

Method: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\PCB_P3a.m
Limit Group: GCSV - 8082
Last Update: 03-Apr-2014 08:32:55 Calib Date: 02-Apr-2014 02:52:35
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A037.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Process Host: XAWRK052

First Level Reviewer: jacksonto Date: 03-Apr-2014 06:57:50

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
$ 1 Tetrachloro-m-xylene					
2.845	2.845	0.0	7419308	1.61	
2 PCB-1221					
	3.042				
	3.179				
	3.216				
3 PCB-1232					
	3.214				
	3.554				
	4.018				
	4.158				
	4.608				
4 PCB-1248					
3.552	3.554	-0.002	10391450	173.4	
4.015	4.014	0.001	40776222	258.4	
4.609	4.611	-0.002	57813526	357.6	
5.309	5.311	-0.002	80229484	825.6	
5.852	5.851	0.001	77411295	928.5	
	Average of Peak Amounts =			508.7	
5 PCB-1016					
	3.555				
	4.019				
	4.159				
	4.222				
	4.609				

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags

6 PCB-1242
3.556
4.019
4.159
4.222
4.609

7 PCB-1254
5.049
5.366
5.852
6.209
6.822

10 PCB-1262
6.088
6.454
7.044
7.424
8.254

8 PCB-1260
6.089
6.819
7.312
7.749
8.132

12 PCB-1268
8.196
8.246
8.519
8.639
9.442

$ 13 DCB Decachlorobiphenyl
9.715

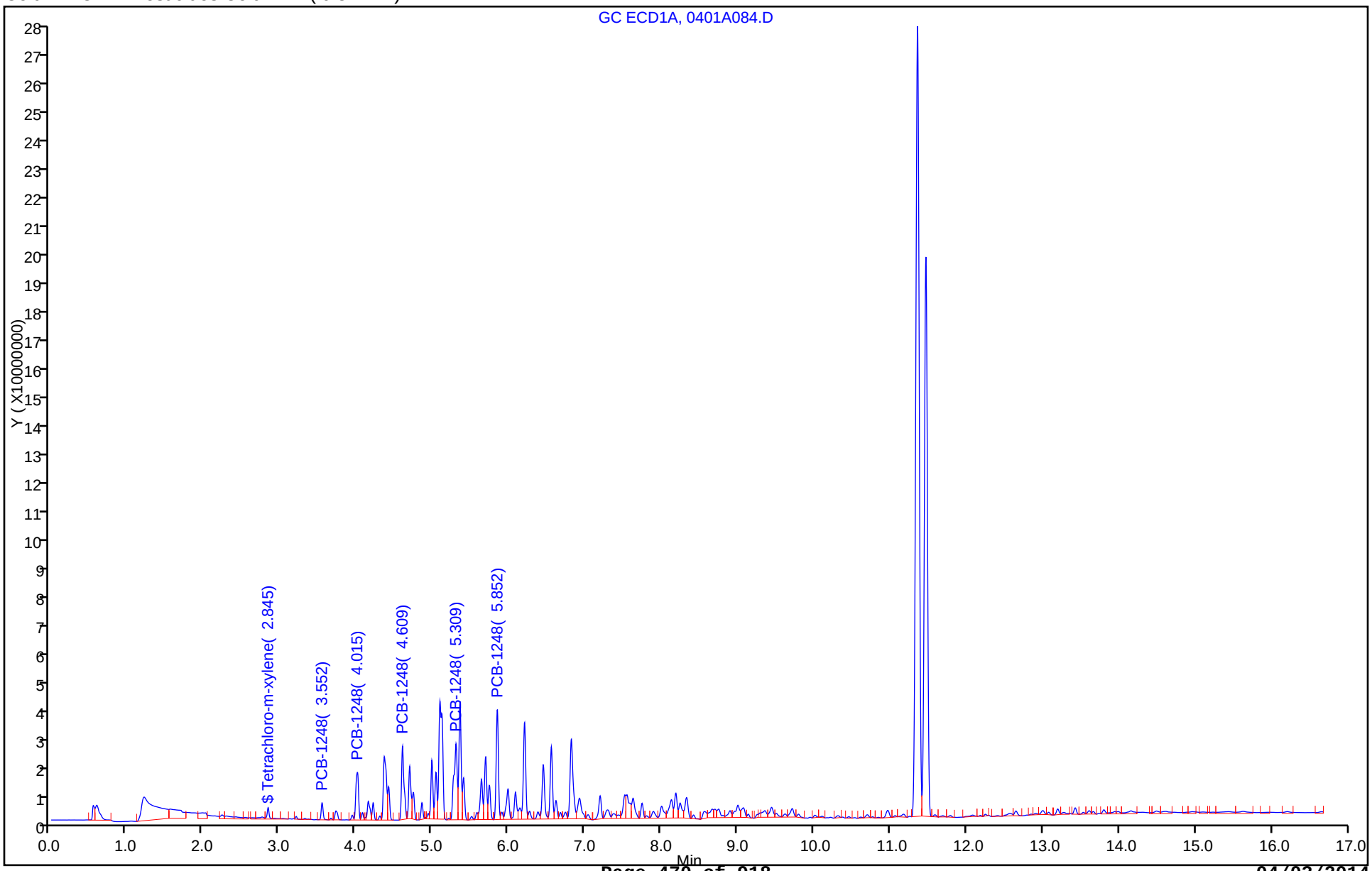
S 15 Polychlorinated biphenyls, Total
508.7

Report Date: 03-Apr-2014 08:33:07 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A084.D				
Injection Date:	02-Apr-2014 19:45:33	Instrument ID:	SGC_P3a	Operator ID:	JAX
Lims ID:	280-53458-A-30-A	Lab Sample ID:	280-53458-30	Worklist Smp#:	85
Client ID:	SB-42-0				
Injection Vol:	1.0 ul	Dil. Factor:	10.0000	ALS Bottle#:	84
Method:	PCB_P3a	Limit Group:	GCSV - 8082		

Column: CLP1 Pesticides Column 1 (0.32 mm)



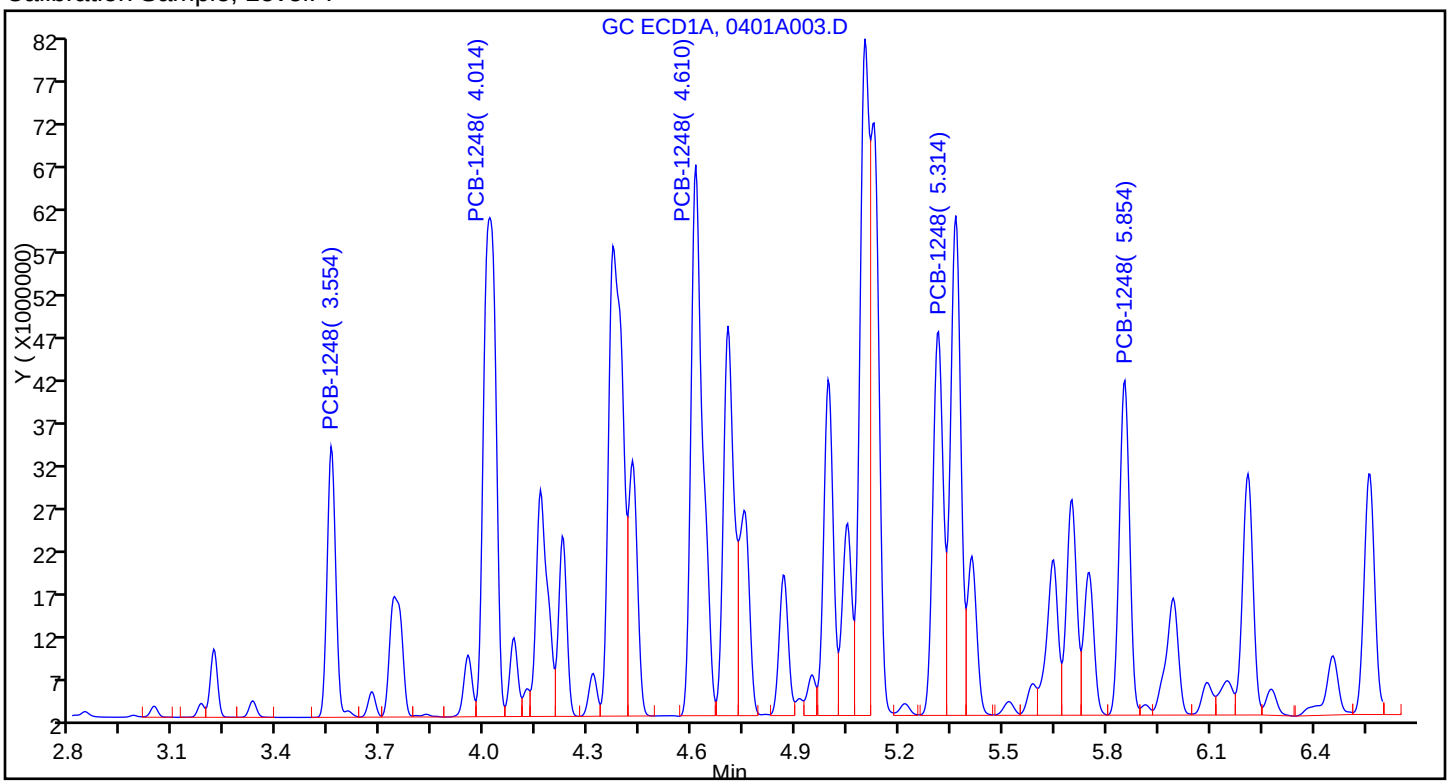
Report Date: 03-Apr-2014 08:33:07 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

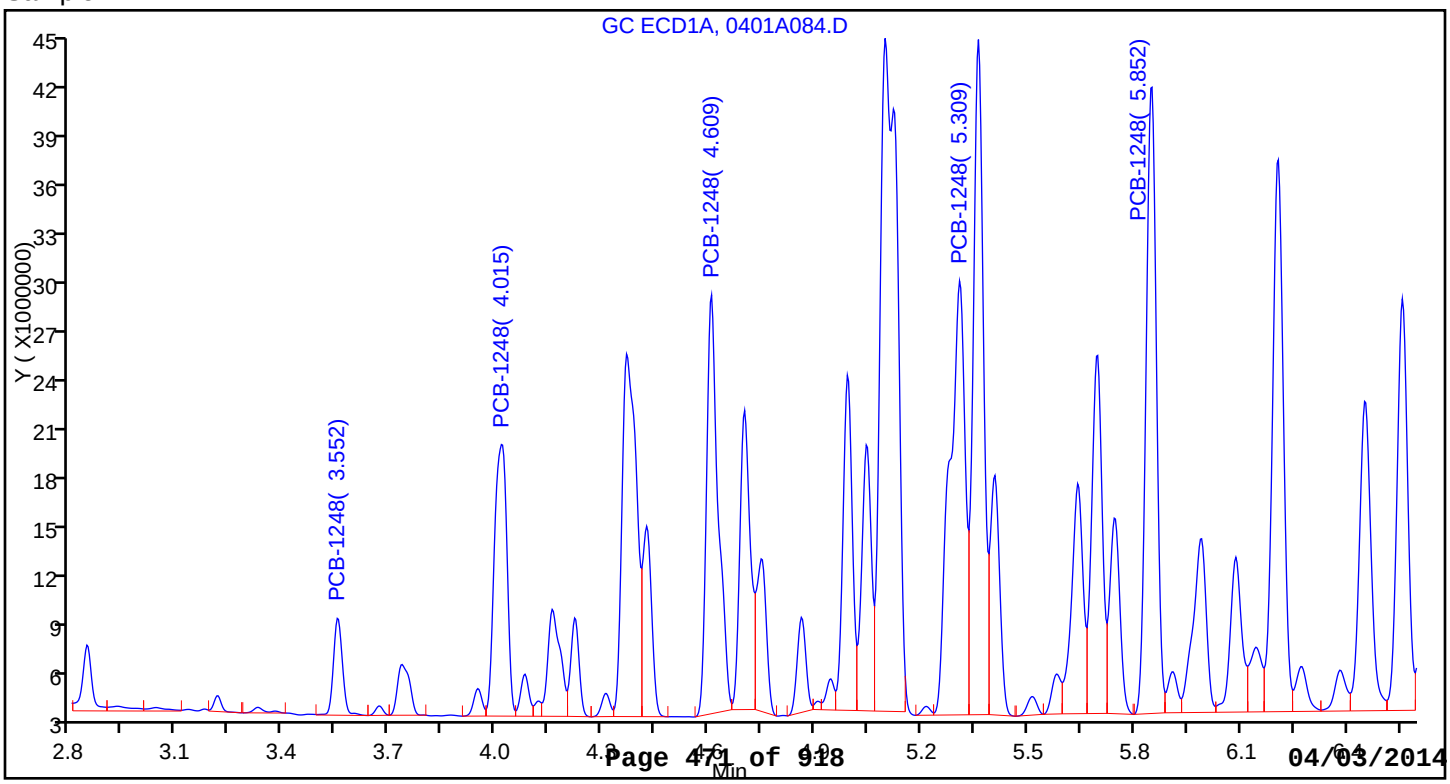
Data File:	\\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A084.D				
Injection Date:	02-Apr-2014 19:45:33	Instrument ID:	SGC_P3a		
Lims ID:	280-53458-A-30-A	Lab Sample ID:	280-53458-30		
Client ID:	SB-42-0				
Operator ID:	JAX	ALS Bottle#:	84	Worklist Smp#:	85
Injection Vol:	1.0 ul	Dil. Factor:	10.0000		
Method:	PCB_P3a	Limit Group:	GCSV - 8082		
Column:	CLP1 Pesticides Column 1 (0.32 mm)	Detector	GC ECD1A		

4 PCB-1248, CAS: 12672-29-6

Calibration Sample, Level: 7



Sample



FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-53458-1

SDG No.:

Client Sample ID: SB-42-0 | Lab Sample ID: 280-53458-30

Matrix: Solid | Lab File ID: 0401B084.D

Analysis Method: 8082A | Date Collected: 03/20/2014 09:02

Extraction Method: 3546 | Date Extracted: 03/27/2014 14:30

Sample wt/vol: 30.6(g) | Date Analyzed: 04/02/2014 20:06

Con. Extract Vol.: 10(mL) | Dilution Factor: 10

Injection Volume: 1(uL) | GC Column: CLP2 ID: 0.32(mm)

% Moisture: 6.3 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 219272 | Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
877-09-8	Tetrachloro-m-xylene	0	*X D*	53-128
2051-24-3	DCB Decachlorobiphenyl	0	*X D*	59-130

TestAmerica Denver
Target Compound Quantitation Report

Data File:	\\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B084.D				
Lims ID:	280-53458-A-30-A	Lab Sample ID:	280-53458-30		
Client ID:	SB-42-0				
Sample Type:	Client				
Inject. Date:	02-Apr-2014 20:06:57	ALS Bottle#:	84	Worklist Smp#:	85
Injection Vol:	1.0 ul	Dil. Factor:	10.0000		
Sample Info:	280-53458-A-30-A				
Operator ID:	JAX	Instrument ID:	SGC_P3b		
Method:	\\Denchrom\ChromData\SGC_P3b\20140401-21601.b\PCB_P3b.m				
Limit Group:	GCSV - 8082				
Last Update:	03-Apr-2014 09:29:39	Calib Date:	02-Apr-2014 03:13:50		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B037.D				
Column 1 :	CLP2 Pesticides Column 2 (0.32 mm)		Det: GC ECD2B		
Process Host:	XAWRK052				
First Level Reviewer: jacksonto		Date:	03-Apr-2014 08:18:39		

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
$ 14 Tetrachloro-m-xylene					
2.862					
3 PCB-1221					
3.165					
3.292					
3.348					
7 PCB-1232					M
3.166					
3.346					
4.196					
4.340					
4.870					
10 PCB-1242					M
3.347					
4.193					
4.340					
4.867					
5.007					
1 PCB-1016					M
3.738					
4.195					
4.342					
4.868					
5.008					

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
4 PCB-1248					M
4.194	4.194	0.0	135972742	271.1	M
4.574	4.571	0.003	115029900	391.8	M
4.867	4.868	-0.001	142493413	361.4	M
5.320	5.321	-0.001	223385024	504.4	M
5.367	5.371	-0.004	335380123	675.6	M
	Average of Peak Amounts =			440.9	
9 PCB-1254					
	5.368				
	5.612				
	6.038				
	6.735				
	7.212				
12 PCB-1260					M
	6.448				
	6.735				
	7.208				
	8.108				
	8.618				
5 PCB-1262					M
	6.733				
	7.743				
	8.110				
	8.613				
	9.463				
13 PCB-1268					
	8.610				
	8.673				
	9.030				
	9.173				
	9.927				
$ 15 DCB Decachlorobiphenyl					
	10.295				
S 8 Polychlorinated biphenyls, Total					
				440.9	

QC Flag Legend

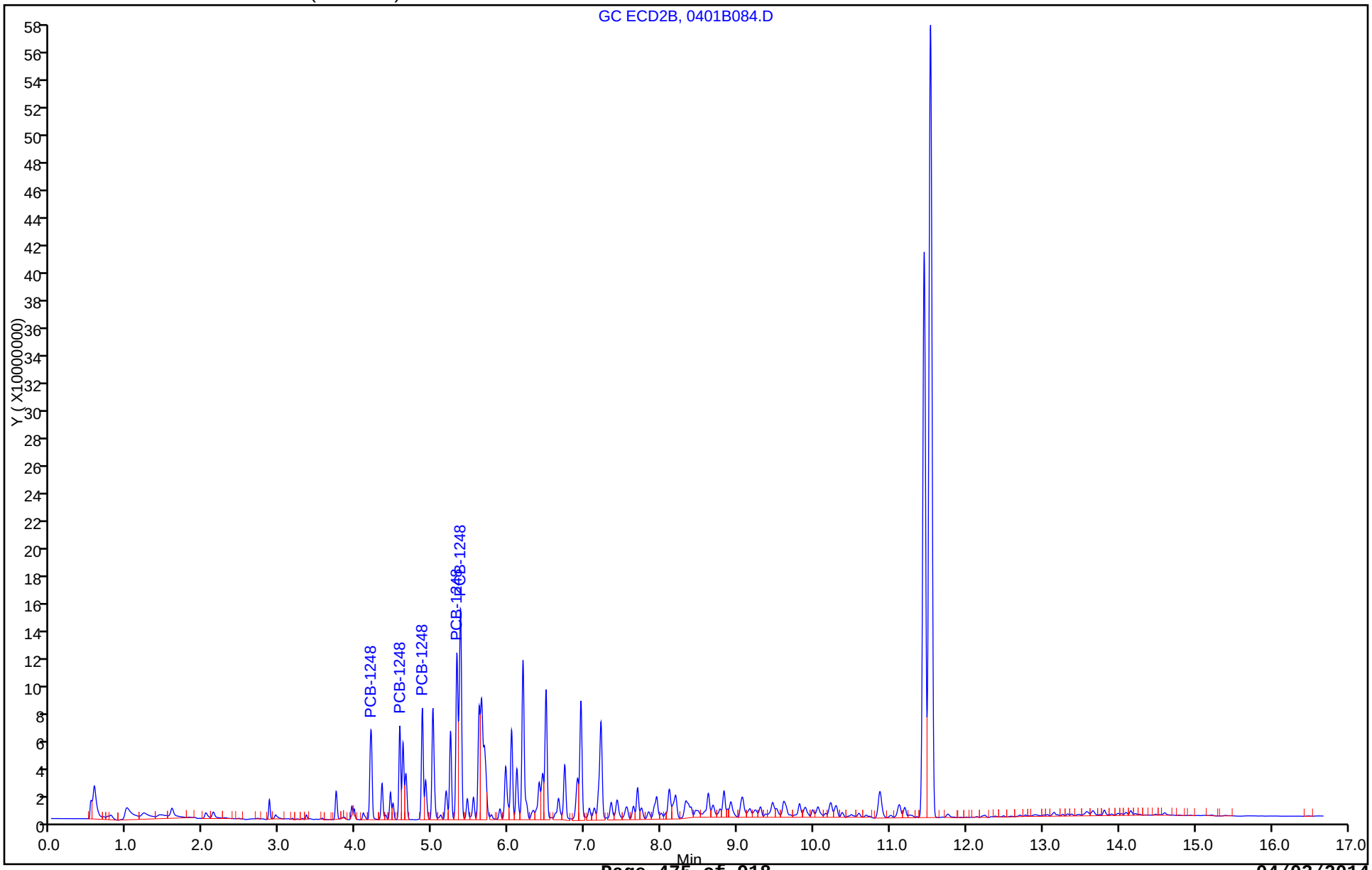
Review Flags
M - Manually Integrated

Report Date: 03-Apr-2014 09:29:52 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B084.D				
Injection Date:	02-Apr-2014 20:06:57	Instrument ID:	SGC_P3b	Operator ID:	JAX
Lims ID:	280-53458-A-30-A	Lab Sample ID:	280-53458-30	Worklist Smp#:	85
Client ID:	SB-42-0				
Injection Vol:	1.0 ul	Dil. Factor:	10.0000	ALS Bottle#:	84
Method:	PCB_P3b	Limit Group:	GCSV - 8082		

Column: CLP2 Pesticides Column 2 (0.32 mm)



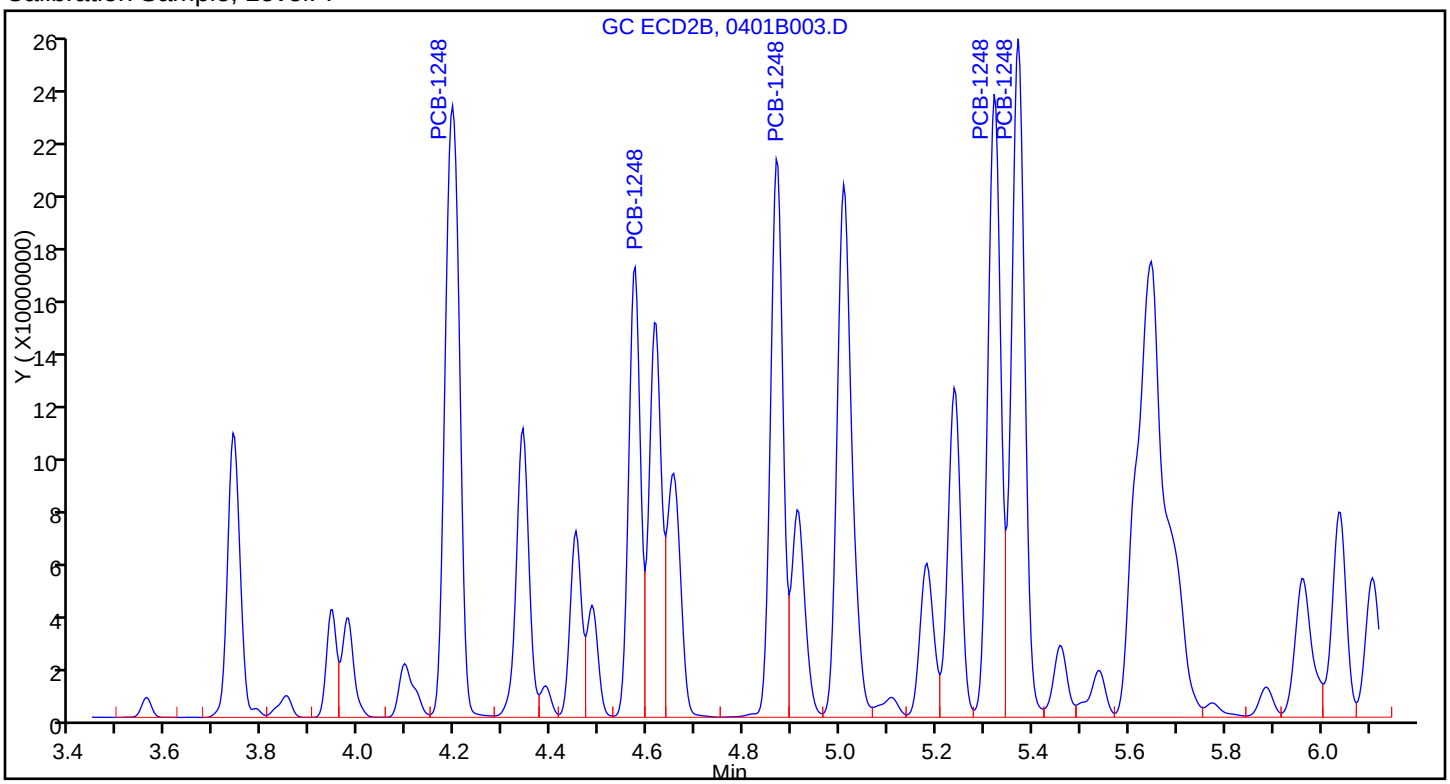
Report Date: 03-Apr-2014 09:29:52 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

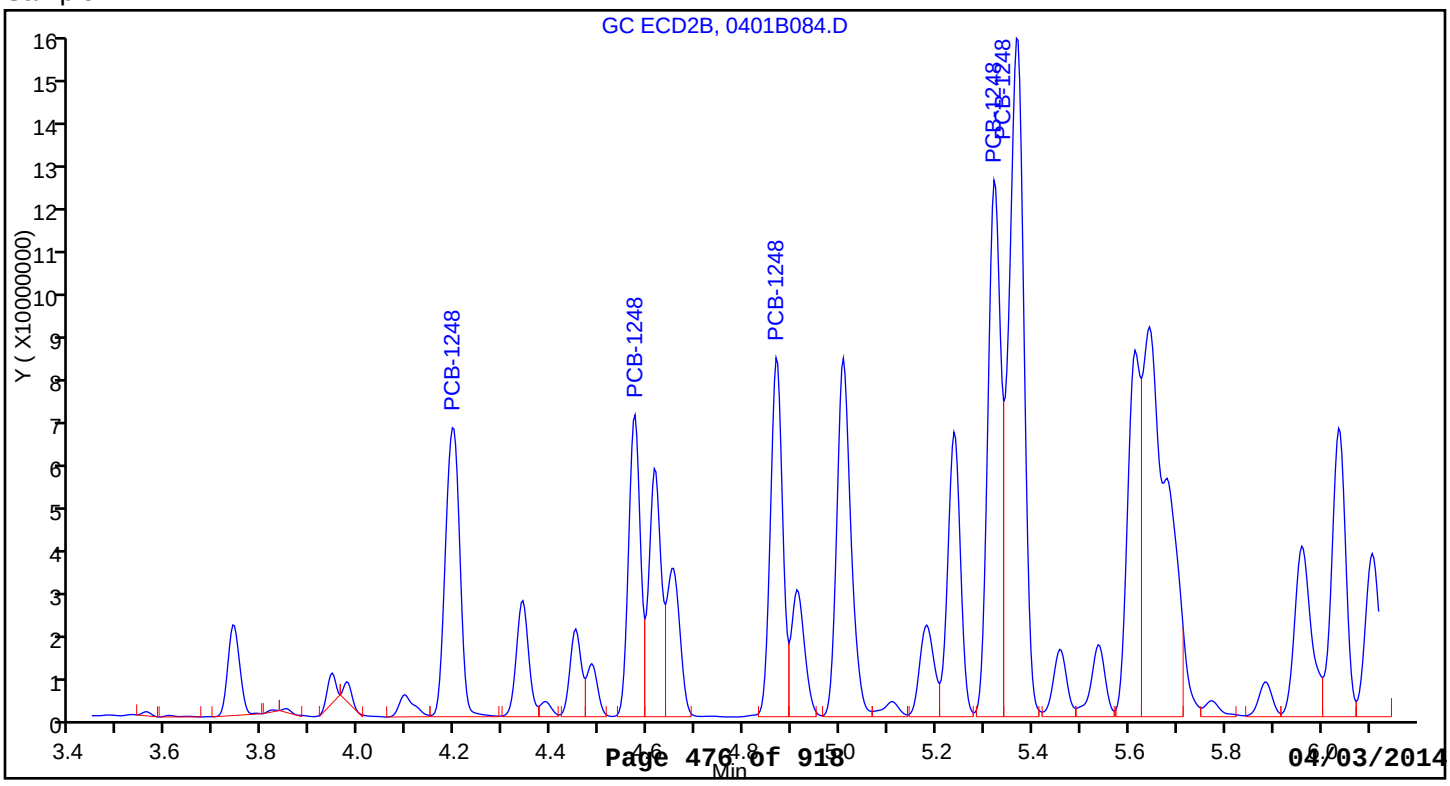
Data File:	\\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B084.D				
Injection Date:	02-Apr-2014 20:06:57	Instrument ID:	SGC_P3b		
Lims ID:	280-53458-A-30-A	Lab Sample ID:	280-53458-30		
Client ID:	SB-42-0				
Operator ID:	JAX	ALS Bottle#:	84	Worklist Smp#:	85
Injection Vol:	1.0 ul	Dil. Factor:	10.0000		
Method:	PCB_P3b	Limit Group:	GCSV - 8082		
Column:	CLP2 Pesticides Column 2 (0.32 mm)	Detector	GC ECD2B		

4 PCB-1248, CAS: 12672-29-6

Calibration Sample, Level: 7



Sample

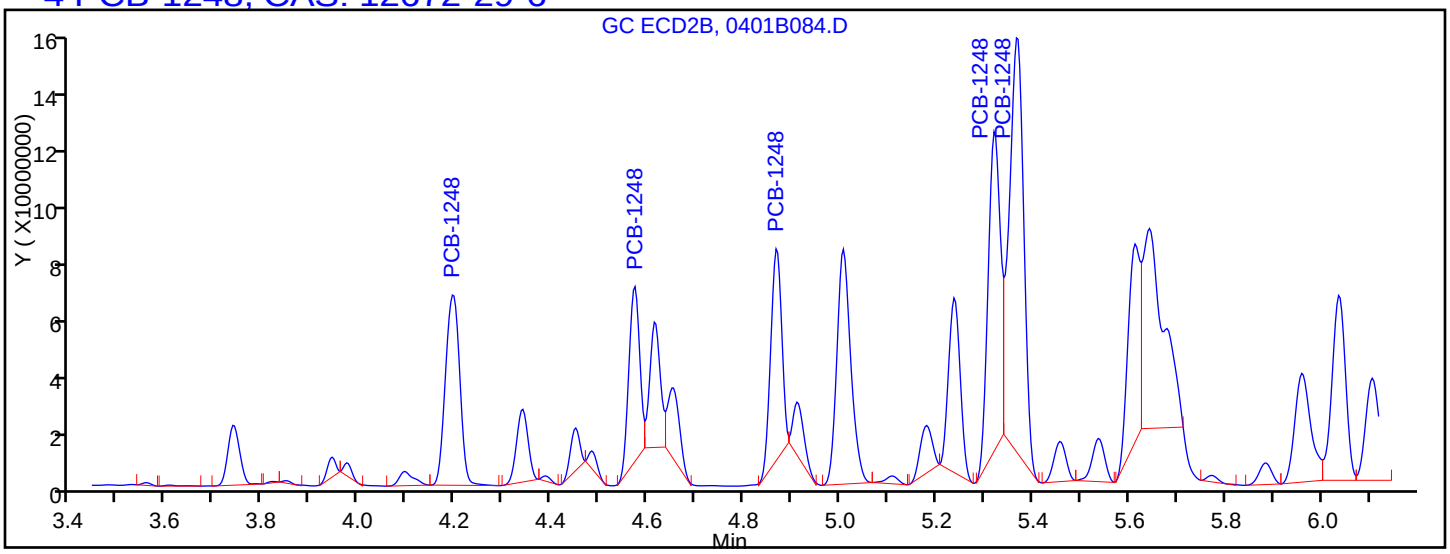


Report Date: 03-Apr-2014 09:29:52 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

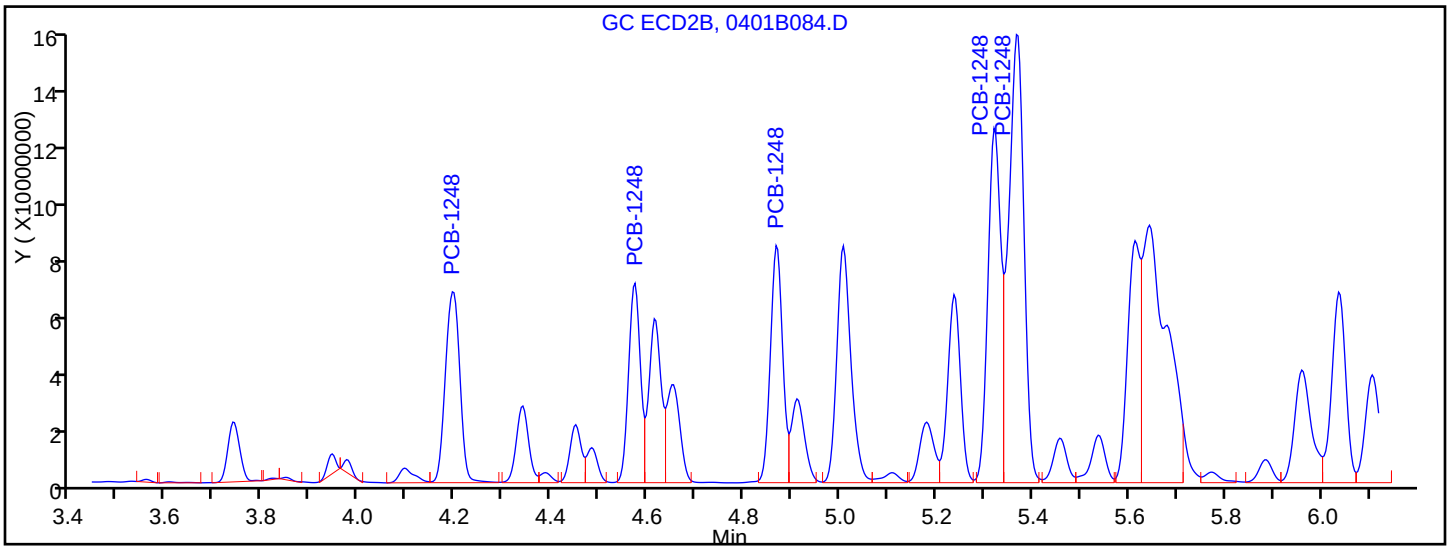
Data File:	\\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B084.D				
Injection Date:	02-Apr-2014 20:06:57	Instrument ID:	SGC_P3b		
Lims ID:	280-53458-A-30-A	Lab Sample ID:	280-53458-30		
Client ID:	SB-42-0				
Operator ID:	JAX	ALS Bottle#:	84	Worklist Smp#:	85
Injection Vol:	1.0 ul	Dil. Factor:	10.0000		
Method:	PCB_P3b	Limit Group:	GCSV - 8082		
Column:	CLP2 Pesticides Column 2 (0.32 mm)	Detector	GC ECD2B		

4 PCB-1248, CAS: 12672-29-6



Processing Integration Results

RT = 4.194	Response = 134154453	M
RT = 4.574	Response = 92993252	M
RT = 4.867	Response = 114486858	M
RT = 5.320	Response = 191924216	M
RT = 5.367	Response = 294380918	M



Manual Integration Results

RT = 4.194	Response = 135972742	M
RT = 4.574	Response = 115029900	M
RT = 4.867	Response = 142493413	M
RT = 5.320	Response = 223385024	M
RT = 5.367	Response = 335380123	M

Reviewer: jacksonto, 03-Apr-2014 08:18:39

Audit Action: Assigned New Baseline

Audit Reason: Baseline Smoothing

FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-53458-1

SDG No.:

Client Sample ID: SB-43-0 | Lab Sample ID: 280-53458-31

Matrix: Solid | Lab File ID: 0401A087.D

Analysis Method: 8082A | Date Collected: 03/20/2014 09:15

Extraction Method: 3546 | Date Extracted: 03/27/2014 14:30

Sample wt/vol: 32.2(g) | Date Analyzed: 04/02/2014 20:49

Con. Extract Vol.: 10(mL) | Dilution Factor: 1000

Injection Volume: 1(uL) | GC Column: CLP1 ID: 0.32(mm)

% Moisture: 4.3 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 219270 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
11104-28-2	PCB-1221	ND		46000	15000
12674-11-2	PCB-1016	ND		32000	5000
11141-16-5	PCB-1232	ND		32000	5000
53469-21-9	PCB-1242	ND		32000	8900
12672-29-6	PCB-1248	160000		32000	5500
11097-69-1	PCB-1254	ND		32000	5400
11096-82-5	PCB-1260	ND		32000	2600
37324-23-5	PCB-1262	ND		32000	11000
11100-14-4	PCB-1268	ND		32000	3800
1336-36-3	Polychlorinated biphenyls, Total	160000		32000	2600

CAS NO.	SURROGATE	%REC	Q	LIMITS
877-09-8	Tetrachloro-m-xylene	0	D X	53-128
2051-24-3	DCB Decachlorobiphenyl	0	D X	59-130

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A087.D
Lims ID: 280-53458-A-31-A Lab Sample ID: 280-53458-31
Client ID: SB-43-0
Sample Type: Client
Inject. Date: 02-Apr-2014 20:49:30 ALS Bottle#: 87 Worklist Smp#: 86
Injection Vol: 1.0 ul Dil. Factor: 1000.0000
Sample Info: 280-53458-A-31-A
Operator ID: JAX Instrument ID: SGC_P3a

Method: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\PCB_P3a.m
Limit Group: GCSV - 8082
Last Update: 03-Apr-2014 09:08:00 Calib Date: 02-Apr-2014 02:52:35
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A037.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Process Host: XAWRK052

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
$ 1 Tetrachloro-m-xylene					
	2.845				
2 PCB-1221					
	3.042				
	3.179				
	3.216				
3 PCB-1232					
	3.214				
	3.554				
	4.018				
	4.158				
	4.608				
4 PCB-1248					
3.552	3.554	-0.002	21937350	377.1	
4.016	4.014	0.002	68009552	437.8	
4.609	4.611	-0.002	85678611	535.6	
5.309	5.311	-0.002	65807225	675.7	
0.0	5.851	-5.851	0	0	E
	Average of Peak Amounts =			506.6	
5 PCB-1016					
	3.555				
	4.019				
	4.159				
	4.222				
	4.609				

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags

6 PCB-1242
3.556
4.019
4.159
4.222
4.609

7 PCB-1254
5.049
5.366
5.852
6.209
6.822

10 PCB-1262
6.088
6.454
7.044
7.424
8.254

8 PCB-1260
6.089
6.819
7.312
7.749
8.132

12 PCB-1268
8.196
8.246
8.519
8.639
9.442

$ 13 DCB Decachlorobiphenyl
9.715

S 15 Polychlorinated biphenyls, Total

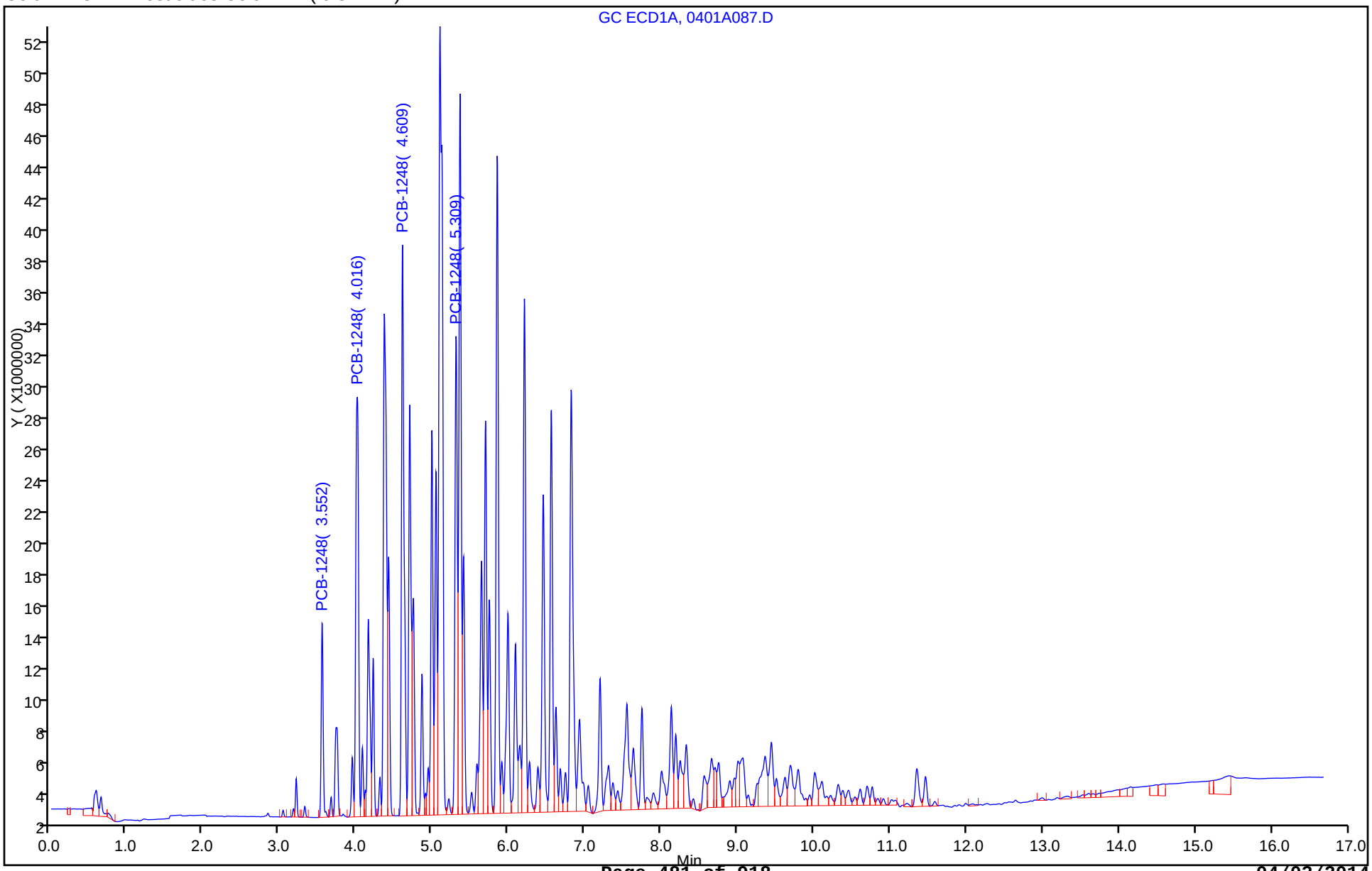
506.6

Report Date: 03-Apr-2014 09:08:00 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A087.D				
Injection Date:	02-Apr-2014 20:49:30	Instrument ID:	SGC_P3a	Operator ID:	JAX
Lims ID:	280-53458-A-31-A	Lab Sample ID:	280-53458-31	Worklist Smp#:	86
Client ID:	SB-43-0				
Injection Vol:	1.0 ul	Dil. Factor:	1000.0000	ALS Bottle#:	87
Method:	PCB_P3a	Limit Group:	GCSV - 8082		

Column: CLP1 Pesticides Column 1 (0.32 mm)



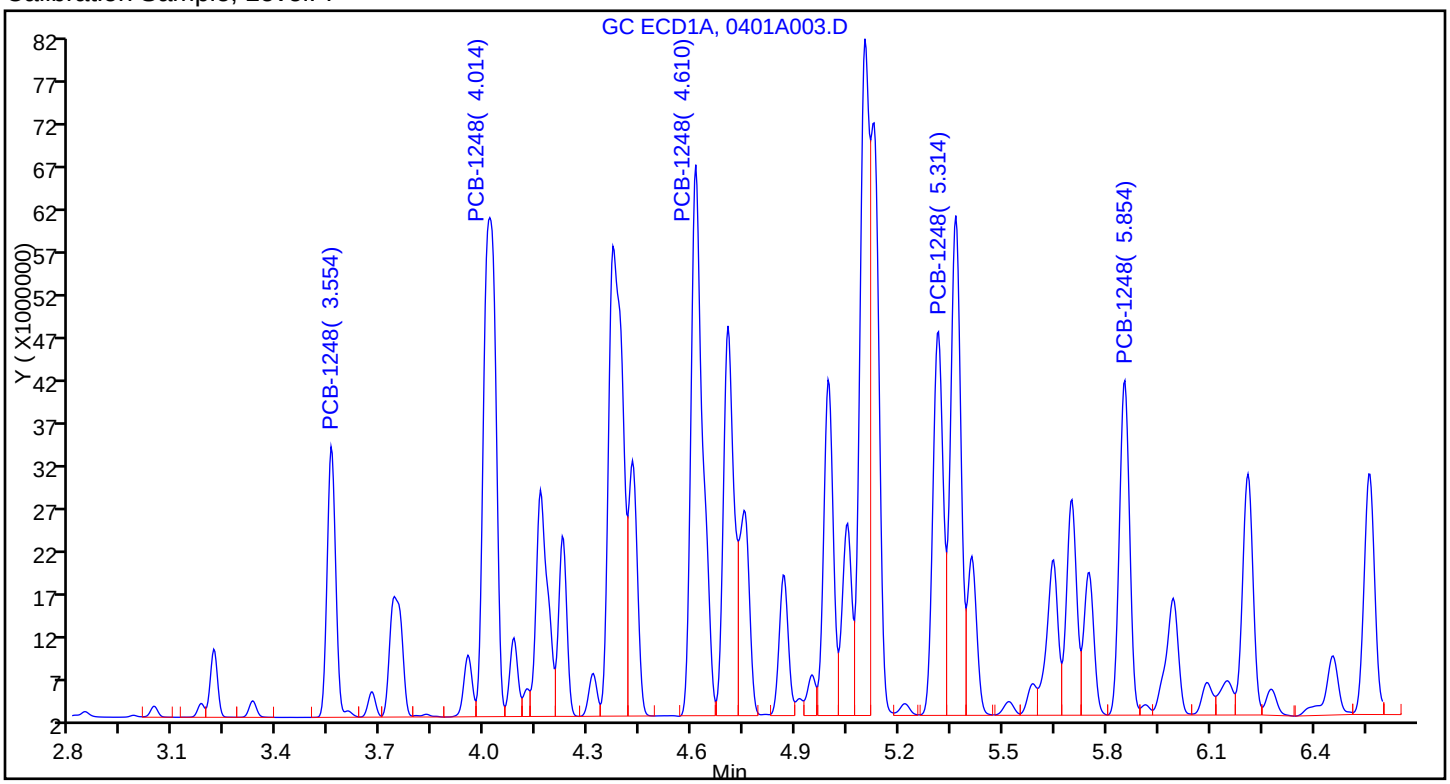
Report Date: 03-Apr-2014 09:08:01 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

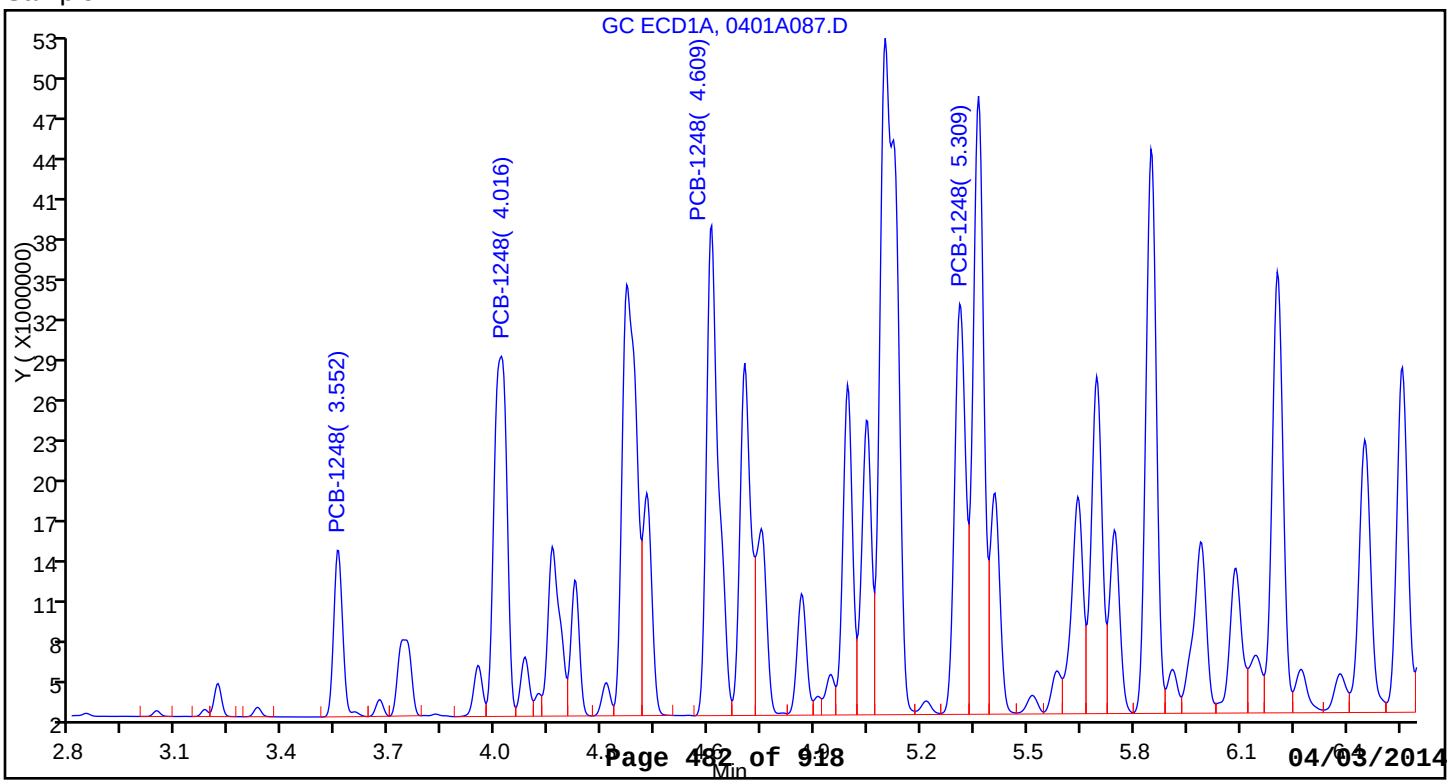
Data File:	\\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A087.D				
Injection Date:	02-Apr-2014 20:49:30	Instrument ID:	SGC_P3a		
Lims ID:	280-53458-A-31-A	Lab Sample ID:	280-53458-31		
Client ID:	SB-43-0				
Operator ID:	JAX	ALS Bottle#:	87	Worklist Smp#:	86
Injection Vol:	1.0 ul	Dil. Factor:	1000.0000		
Method:	PCB_P3a	Limit Group:	GCSV - 8082		
Column:	CLP1 Pesticides Column 1 (0.32 mm)	Detector	GC ECD1A		

4 PCB-1248, CAS: 12672-29-6

Calibration Sample, Level: 7



Sample



FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-53458-1

SDG No.:

Client Sample ID: SB-44-0 | Lab Sample ID: 280-53458-32

Matrix: Solid | Lab File ID: 0401A088.D

Analysis Method: 8082A | Date Collected: 03/20/2014 09:10

Extraction Method: 3546 | Date Extracted: 03/27/2014 14:30

Sample wt/vol: 31.2(g) | Date Analyzed: 04/02/2014 21:11

Con. Extract Vol.: 10(mL) | Dilution Factor: 10

Injection Volume: 1(uL) | GC Column: CLP1 ID: 0.32(mm)

% Moisture: 5.0 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 219270 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
11104-28-2	PCB-1221	ND		480	160
12674-11-2	PCB-1016	ND		330	52
11141-16-5	PCB-1232	ND		330	52
53469-21-9	PCB-1242	ND		330	92
12672-29-6	PCB-1248	2300		330	57
11097-69-1	PCB-1254	ND		330	56
11096-82-5	PCB-1260	ND		330	27
37324-23-5	PCB-1262	ND		330	120
11100-14-4	PCB-1268	ND		330	40
1336-36-3	Polychlorinated biphenyls, Total	2300		330	27

CAS NO.	SURROGATE	%REC	Q	LIMITS
877-09-8	Tetrachloro-m-xylene	88	D	53-128
2051-24-3	DCB Decachlorobiphenyl	254	D X	59-130

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A088.D
Lims ID: 280-53458-A-32-A Lab Sample ID: 280-53458-32
Client ID: SB-44-0
Sample Type: Client
Inject. Date: 02-Apr-2014 21:11:03 ALS Bottle#: 88 Worklist Smp#: 87
Injection Vol: 1.0 ul Dil. Factor: 10.0000
Sample Info: 280-53458-A-32-A
Operator ID: JAX Instrument ID: SGC_P3a

Method: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\PCB_P3a.m
Limit Group: GCSV - 8082
Last Update: 03-Apr-2014 08:32:47 Calib Date: 02-Apr-2014 02:52:35
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A037.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Process Host: XAWRK052

First Level Reviewer: jacksonto Date: 03-Apr-2014 06:59:04

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
$ 1 Tetrachloro-m-xylene					
2.847	2.845	0.002	7929797	1.75	
2 PCB-1221					
	3.042				
	3.179				
	3.216				
3 PCB-1232					
	3.214				
	3.554				
	4.018				
	4.158				
	4.608				
4 PCB-1248					
3.554	3.554	0.0	28973336	501.2	
4.017	4.014	0.003	93520113	605.8	
4.607	4.611	-0.004	111834668	702.7	
5.311	5.311	0.0	87746711	903.8	
0.0	5.851	-5.851	0	0	E
	Average of Peak Amounts =			678.4	
5 PCB-1016					
	3.555				
	4.019				
	4.159				
	4.222				
	4.609				

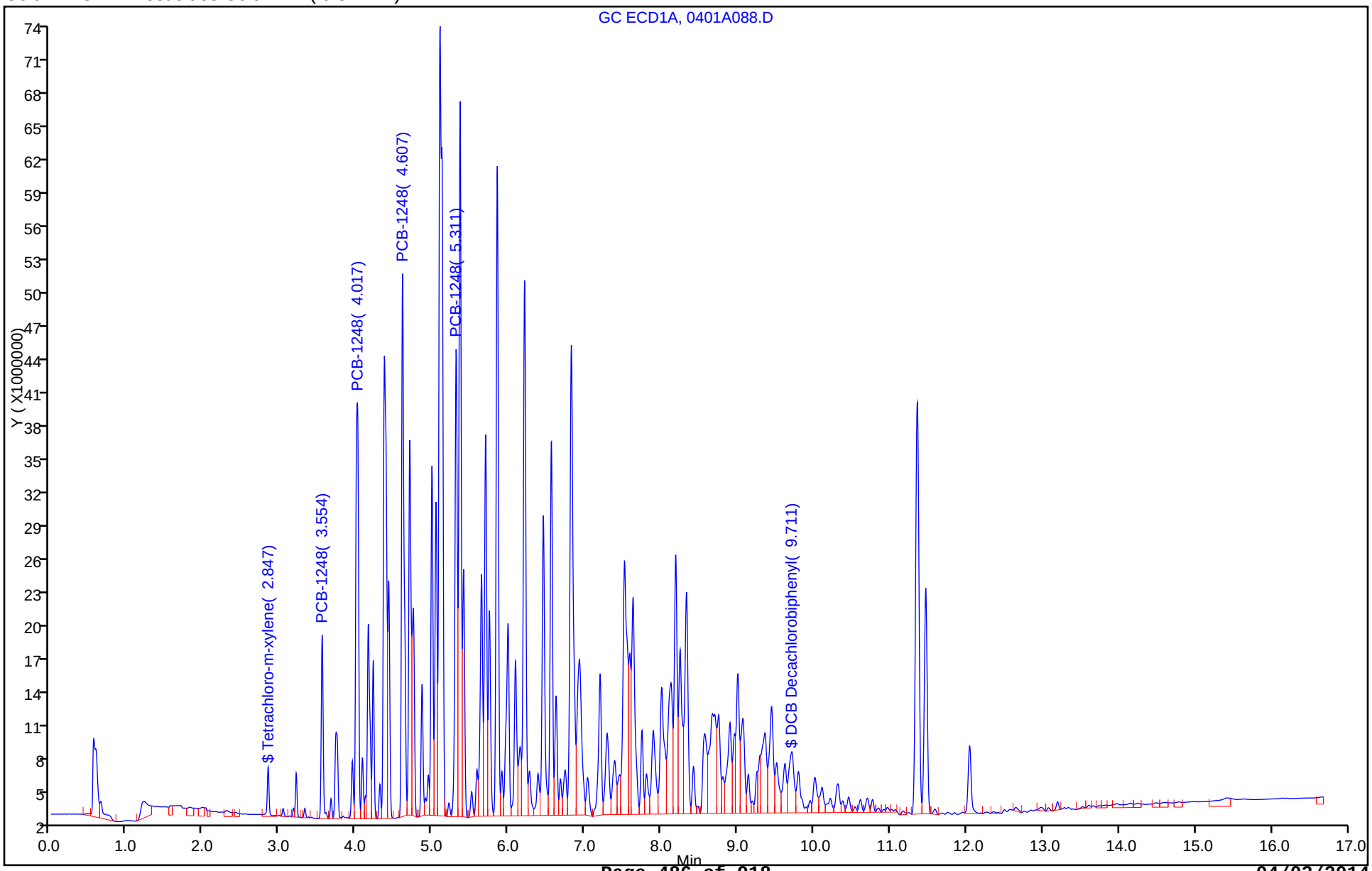
RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
6 PCB-1242					
3.556					
4.019					
4.159					
4.222					
4.609					
7 PCB-1254					
5.049					
5.366					
5.852					
6.209					
6.822					
10 PCB-1262					
6.088					
6.454					
7.044					
7.424					
8.254					
8 PCB-1260					
6.089					
6.819					
7.312					
7.749					
8.132					
12 PCB-1268					
8.196					
8.246					
8.519					
8.639					
9.442					
$ 13 DCB Decachlorobiphenyl					
9.711	9.715	-0.004	26132724	5.08	
S 15 Polychlorinated biphenyls, Total					
				678.4	

Report Date: 03-Apr-2014 08:32:49 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A088.D				
Injection Date:	02-Apr-2014 21:11:03	Instrument ID:	SGC_P3a	Operator ID:	JAX
Lims ID:	280-53458-A-32-A	Lab Sample ID:	280-53458-32	Worklist Smp#:	87
Client ID:	SB-44-0				
Injection Vol:	1.0 ul	Dil. Factor:	10.0000	ALS Bottle#:	88
Method:	PCB_P3a	Limit Group:	GCSV - 8082		

Column: CLP1 Pesticides Column 1 (0.32 mm)



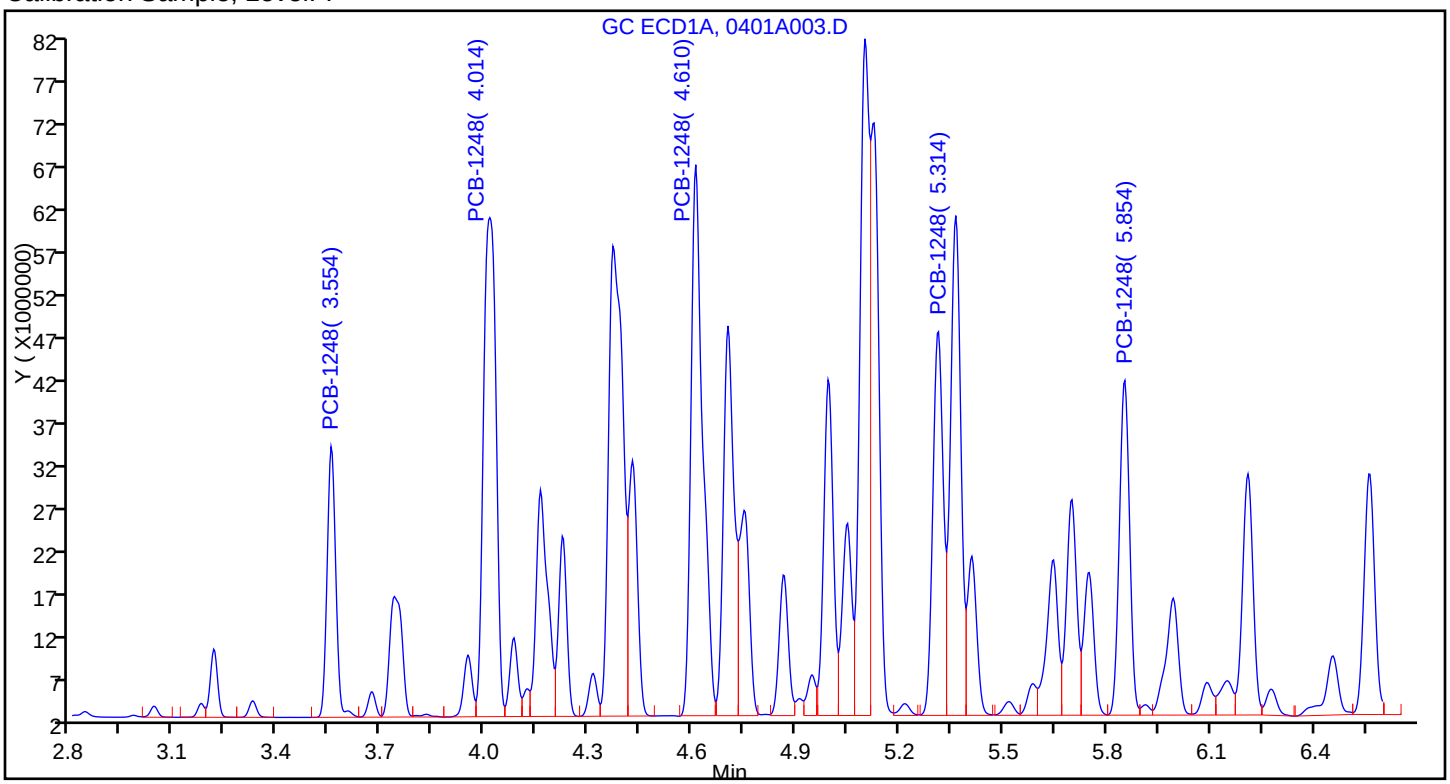
Report Date: 03-Apr-2014 08:32:49 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

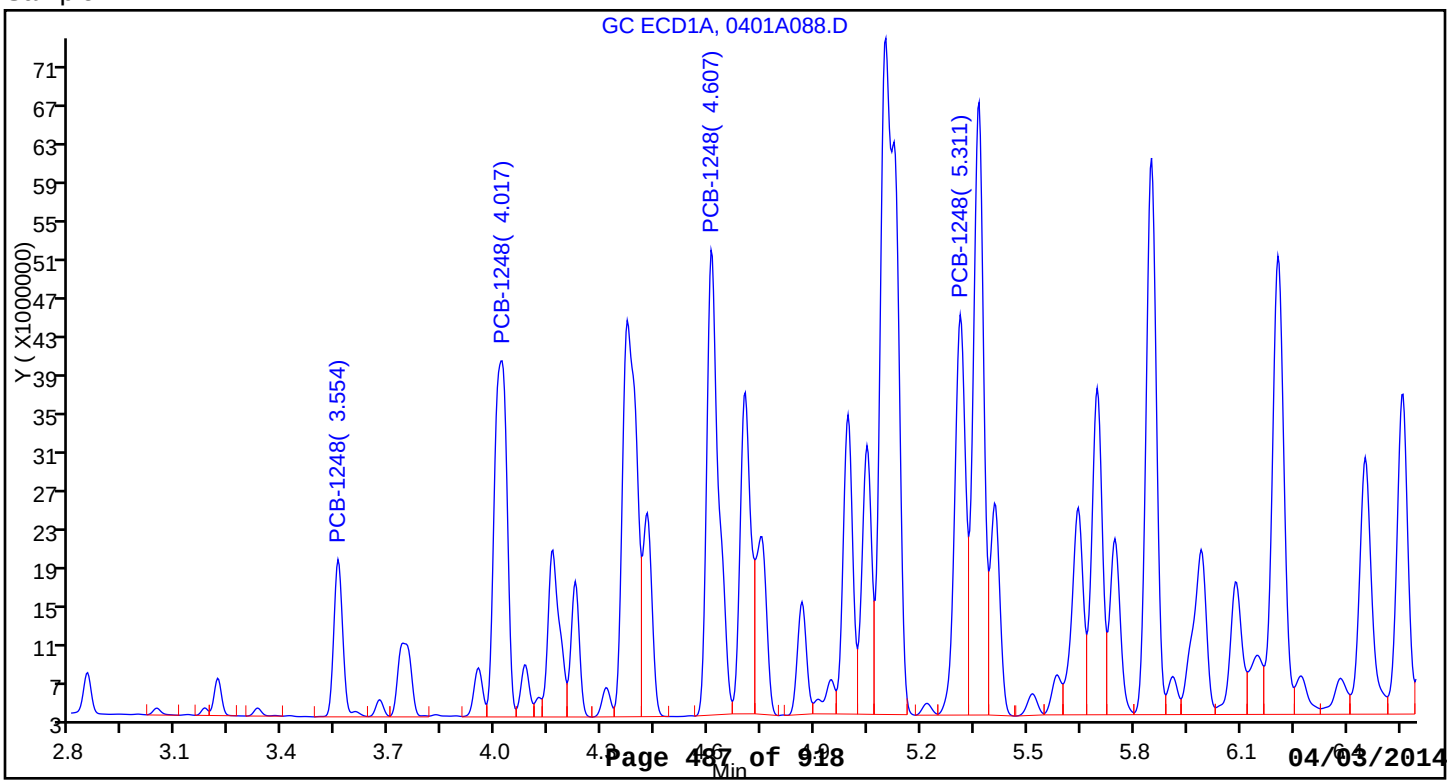
Data File:	\\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A088.D				
Injection Date:	02-Apr-2014 21:11:03	Instrument ID:	SGC_P3a		
Lims ID:	280-53458-A-32-A	Lab Sample ID:	280-53458-32		
Client ID:	SB-44-0				
Operator ID:	JAX	ALS Bottle#:	88	Worklist Smp#:	87
Injection Vol:	1.0 ul	Dil. Factor:	10.0000		
Method:	PCB_P3a	Limit Group:	GCSV - 8082		
Column:	CLP1 Pesticides Column 1 (0.32 mm)	Detector	GC ECD1A		

4 PCB-1248, CAS: 12672-29-6

Calibration Sample, Level: 7



Sample



FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-53458-1

SDG No.:

Client Sample ID: SB-44-0 | Lab Sample ID: 280-53458-32

Matrix: Solid | Lab File ID: 0401B088.D

Analysis Method: 8082A | Date Collected: 03/20/2014 09:10

Extraction Method: 3546 | Date Extracted: 03/27/2014 14:30

Sample wt/vol: 31.2(g) | Date Analyzed: 04/02/2014 21:32

Con. Extract Vol.: 10(mL) | Dilution Factor: 10

Injection Volume: 1(uL) | GC Column: CLP2 ID: 0.32(mm)

% Moisture: 5.0 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 219272 | Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
877-09-8	Tetrachloro-m-xylene	72	D	53-128
2051-24-3	DCB Decachlorobiphenyl	231	X D	59-130

TestAmerica Denver
Target Compound Quantitation Report

Data File:	\\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B088.D				
Lims ID:	280-53458-A-32-A	Lab Sample ID:	280-53458-32		
Client ID:	SB-44-0				
Sample Type:	Client				
Inject. Date:	02-Apr-2014 21:32:21	ALS Bottle#:	88	Worklist Smp#:	87
Injection Vol:	1.0 ul	Dil. Factor:	10.0000		
Sample Info:	280-53458-A-32-A				
Operator ID:	JAX	Instrument ID:	SGC_P3b		
Method:	\\Denchrom\ChromData\SGC_P3b\20140401-21601.b\PCB_P3b.m				
Limit Group:	GCSV - 8082				
Last Update:	03-Apr-2014 09:29:30	Calib Date:	02-Apr-2014 03:13:50		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B037.D				
Column 1 :	CLP2 Pesticides Column 2 (0.32 mm)		Det: GC ECD2B		
Process Host:	XAWRK052				
First Level Reviewer: jacksonto		Date:	03-Apr-2014 08:19:29		

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
$ 14 Tetrachloro-m-xylene					
2.861	2.862	-0.001	23140036	1.43	
3 PCB-1221					
	3.165				
	3.292				
	3.348				
7 PCB-1232					
	3.166				
	3.346				
	4.196				
	4.340				
	4.870				
10 PCB-1242					
	3.347				
	4.193				
	4.340				
	4.867				
	5.007				
1 PCB-1016					
	3.738				
	4.195				
	4.342				
	4.868				
	5.008				

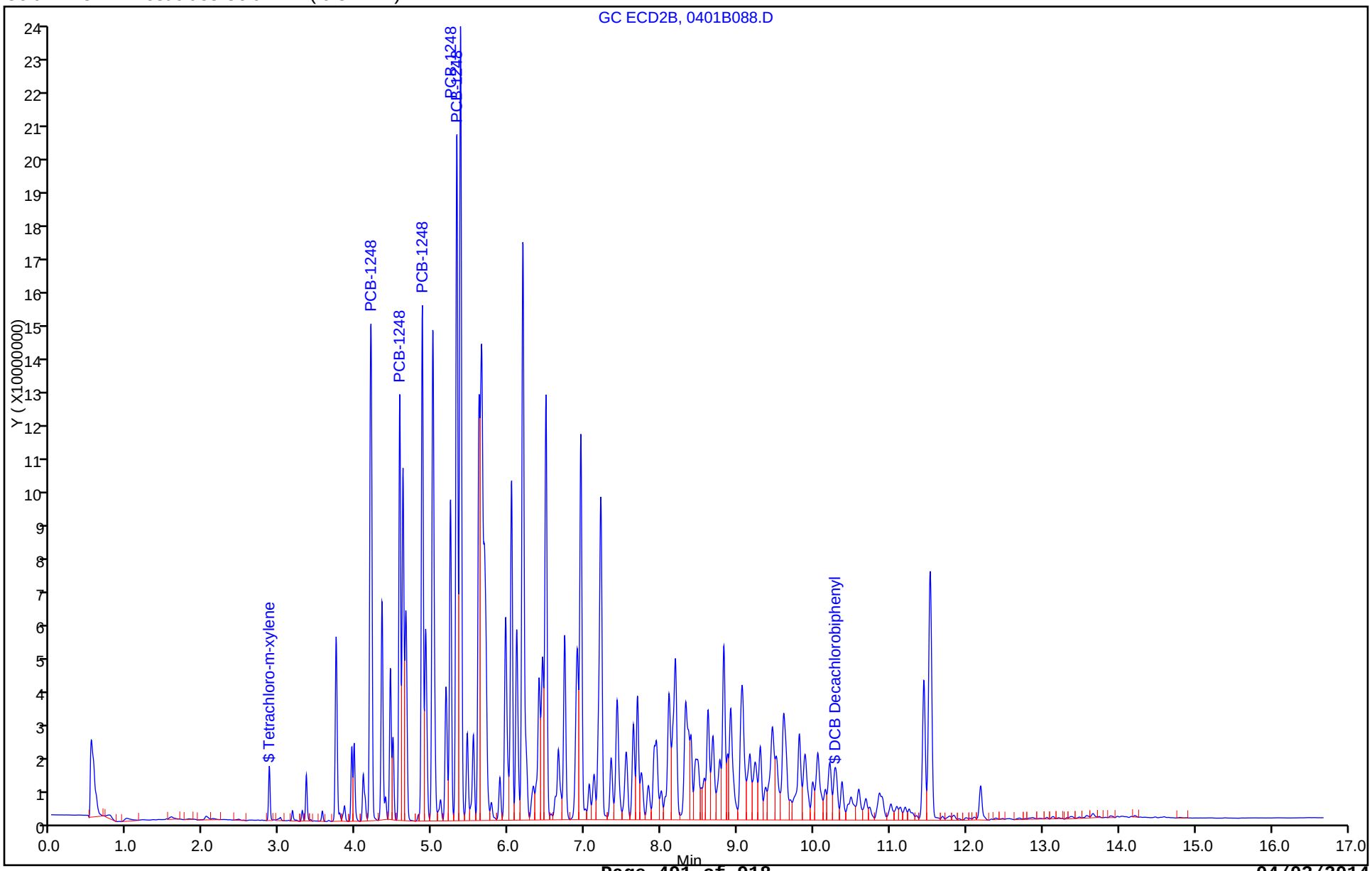
RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
4 PCB-1248					
4.195	4.194	0.001	304215490	617.8	
4.571	4.571	0.0	215285802	742.0	
4.868	4.868	0.0	274841545	712.5	
5.321	5.321	0.0	383215852	872.2	
5.368	5.371	-0.003	444804222	899.6	
	Average of Peak Amounts =			768.8	
9 PCB-1254					
	5.368				
	5.612				
	6.038				
	6.735				
	7.212				
12 PCB-1260					
	6.448				
	6.735				
	7.208				
	8.108				
	8.618				
5 PCB-1262					
	6.733				
	7.743				
	8.110				
	8.613				
	9.463				
13 PCB-1268					
	8.610				
	8.673				
	9.030				
	9.173				
	9.927				
$ 15 DCB Decachlorobiphenyl					
10.281	10.295	-0.014	56482484	4.61	
S 8 Polychlorinated biphenyls, Total					
				768.8	

Report Date: 03-Apr-2014 09:29:32 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B088.D				
Injection Date:	02-Apr-2014 21:32:21	Instrument ID:	SGC_P3b	Operator ID:	JAX
Lims ID:	280-53458-A-32-A	Lab Sample ID:	280-53458-32	Worklist Smp#:	87
Client ID:	SB-44-0				
Injection Vol:	1.0 ul	Dil. Factor:	10.0000	ALS Bottle#:	88
Method:	PCB_P3b	Limit Group:	GCSV - 8082		

Column: CLP2 Pesticides Column 2 (0.32 mm)



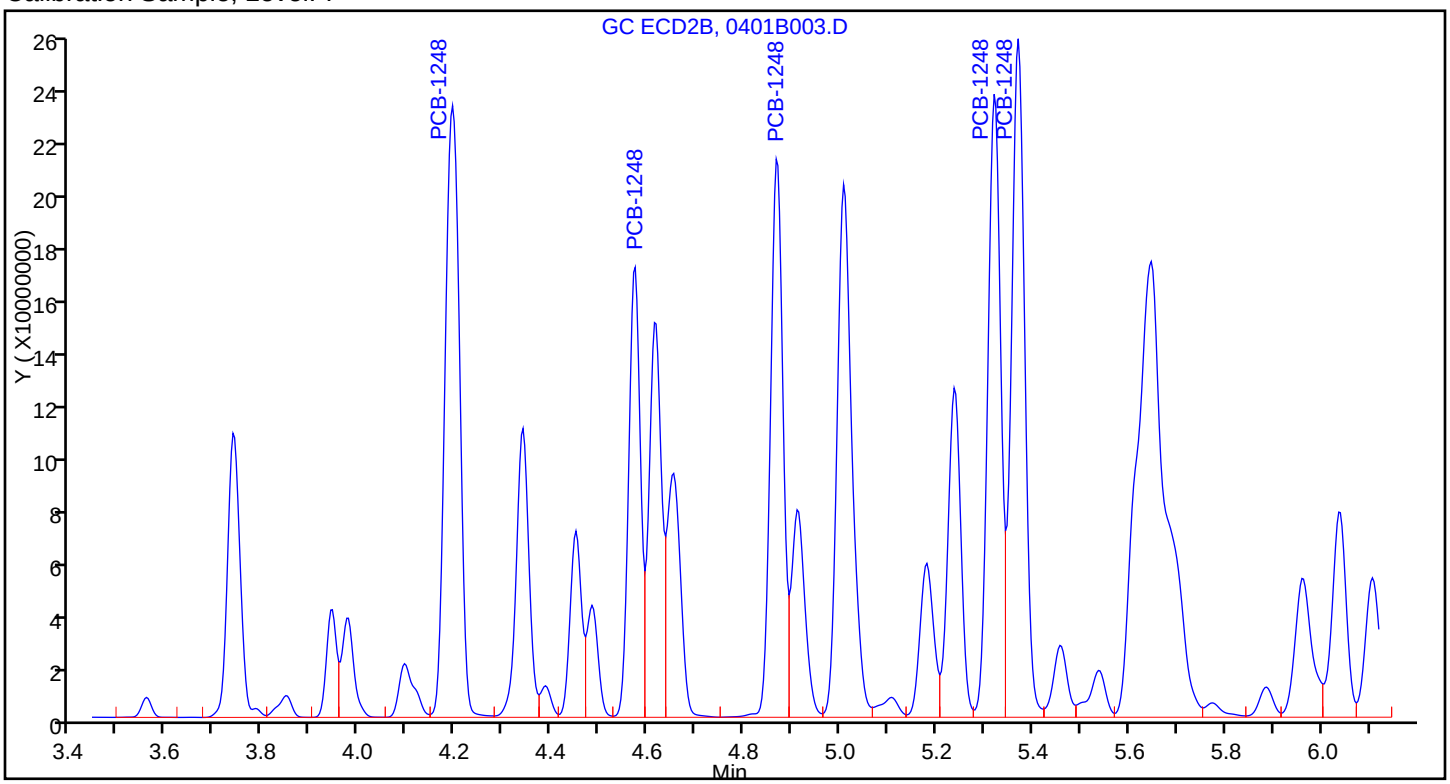
Report Date: 03-Apr-2014 09:29:32 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

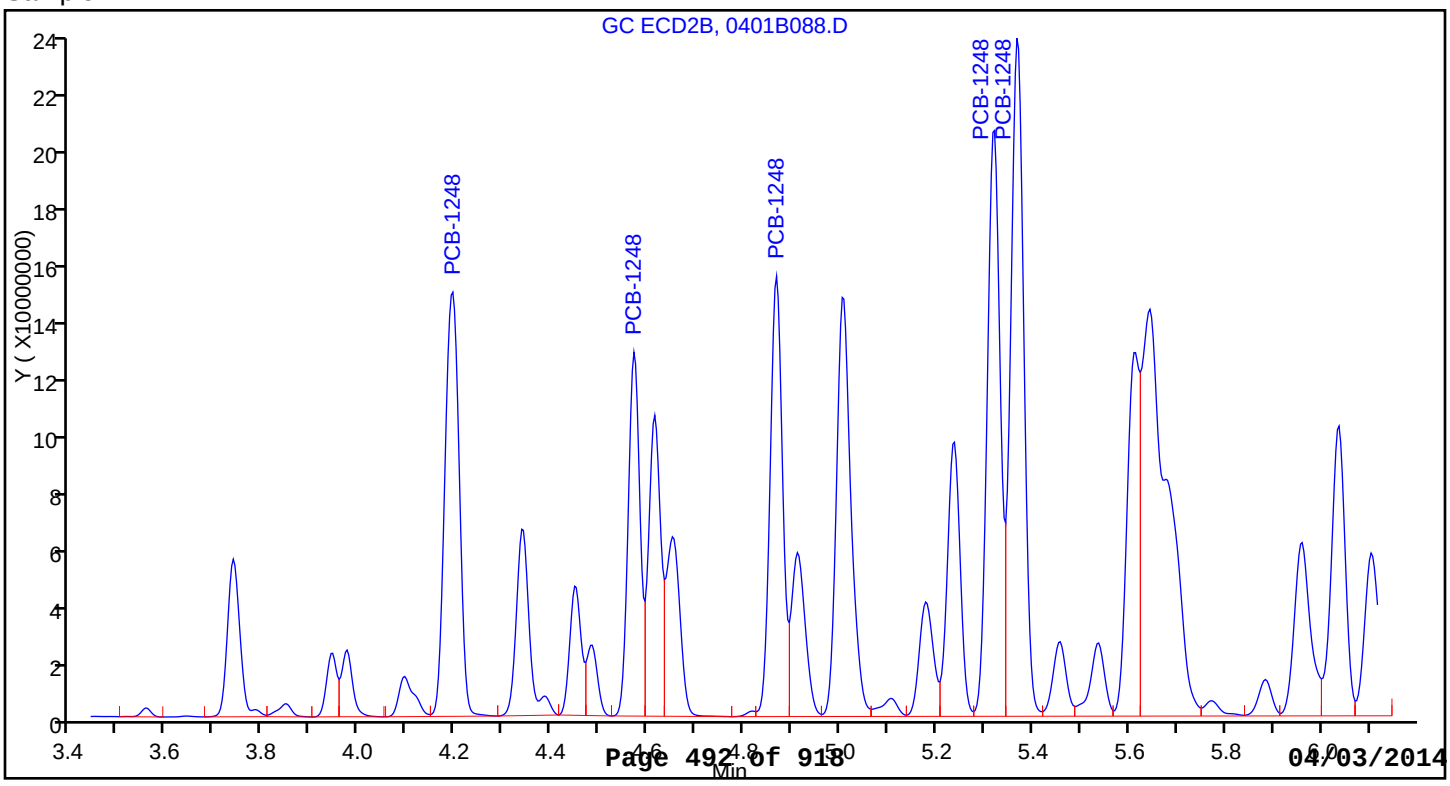
Data File:	\\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B088.D				
Injection Date:	02-Apr-2014 21:32:21	Instrument ID:	SGC_P3b		
Lims ID:	280-53458-A-32-A	Lab Sample ID:	280-53458-32		
Client ID:	SB-44-0				
Operator ID:	JAX	ALS Bottle#:	88	Worklist Smp#:	87
Injection Vol:	1.0 ul	Dil. Factor:	10.0000		
Method:	PCB_P3b	Limit Group:	GCSV - 8082		
Column:	CLP2 Pesticides Column 2 (0.32 mm)	Detector	GC ECD2B		

4 PCB-1248, CAS: 12672-29-6

Calibration Sample, Level: 7



Sample



FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-53458-1

SDG No.:

Client Sample ID: SB-45-0 | Lab Sample ID: 280-53458-33

Matrix: Solid | Lab File ID: 0401A089.D

Analysis Method: 8082A | Date Collected: 03/19/2014 13:05

Extraction Method: 3546 | Date Extracted: 03/27/2014 14:30

Sample wt/vol: 30.8(g) | Date Analyzed: 04/02/2014 21:32

Con. Extract Vol.: 10(mL) | Dilution Factor: 10000

Injection Volume: 1(uL) | GC Column: CLP1 ID: 0.32(mm)

% Moisture: 5.5 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 219270 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
11104-28-2	PCB-1221	ND		480000	160000
12674-11-2	PCB-1016	ND		340000	52000
11141-16-5	PCB-1232	ND		340000	53000
53469-21-9	PCB-1242	ND		340000	94000
12672-29-6	PCB-1248	1900000		340000	58000
11097-69-1	PCB-1254	ND		340000	57000
11096-82-5	PCB-1260	ND		340000	27000
37324-23-5	PCB-1262	ND		340000	120000
11100-14-4	PCB-1268	ND		340000	41000
1336-36-3	Polychlorinated biphenyls, Total	1900000		340000	27000

CAS NO.	SURROGATE	%REC	Q	LIMITS
877-09-8	Tetrachloro-m-xylene	0	D X	53-128
2051-24-3	DCB Decachlorobiphenyl	0	D X	59-130

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A089.D
Lims ID: 280-53458-A-33-A Lab Sample ID: 280-53458-33
Client ID: SB-45-0
Sample Type: Client
Inject. Date: 02-Apr-2014 21:32:21 ALS Bottle#: 89 Worklist Smp#: 88
Injection Vol: 1.0 ul Dil. Factor: 10000.0000
Sample Info: 280-53458-A-33-A
Operator ID: JAX Instrument ID: SGC_P3a

Method: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\PCB_P3a.m
Limit Group: GCSV - 8082
Last Update: 03-Apr-2014 08:32:47 Calib Date: 02-Apr-2014 02:52:35
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A037.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Process Host: XAWRK052

First Level Reviewer: jacksonto Date: 03-Apr-2014 06:59:30

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
$ 1 Tetrachloro-m-xylene					
2.845					
2 PCB-1221					
3.042					
3.179					
3.216					
3 PCB-1232					
3.214					
3.554					
4.018					
4.158					
4.608					
4 PCB-1248					
3.555	3.554	0.001	25443812	439.0	
4.012	4.014	-0.002	69914138	450.3	
4.609	4.611	-0.002	76880540	479.4	
5.309	5.311	-0.002	54784389	561.2	
5.849	5.851	-0.002	68770326	823.2	
	Average of Peak Amounts =			550.6	
5 PCB-1016					
3.555					
4.019					
4.159					
4.222					
4.609					

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags

6 PCB-1242
3.556
4.019
4.159
4.222
4.609

7 PCB-1254
5.049
5.366
5.852
6.209
6.822

10 PCB-1262
6.088
6.454
7.044
7.424
8.254

8 PCB-1260
6.089
6.819
7.312
7.749
8.132

12 PCB-1268
8.196
8.246
8.519
8.639
9.442

$ 13 DCB Decachlorobiphenyl
9.715

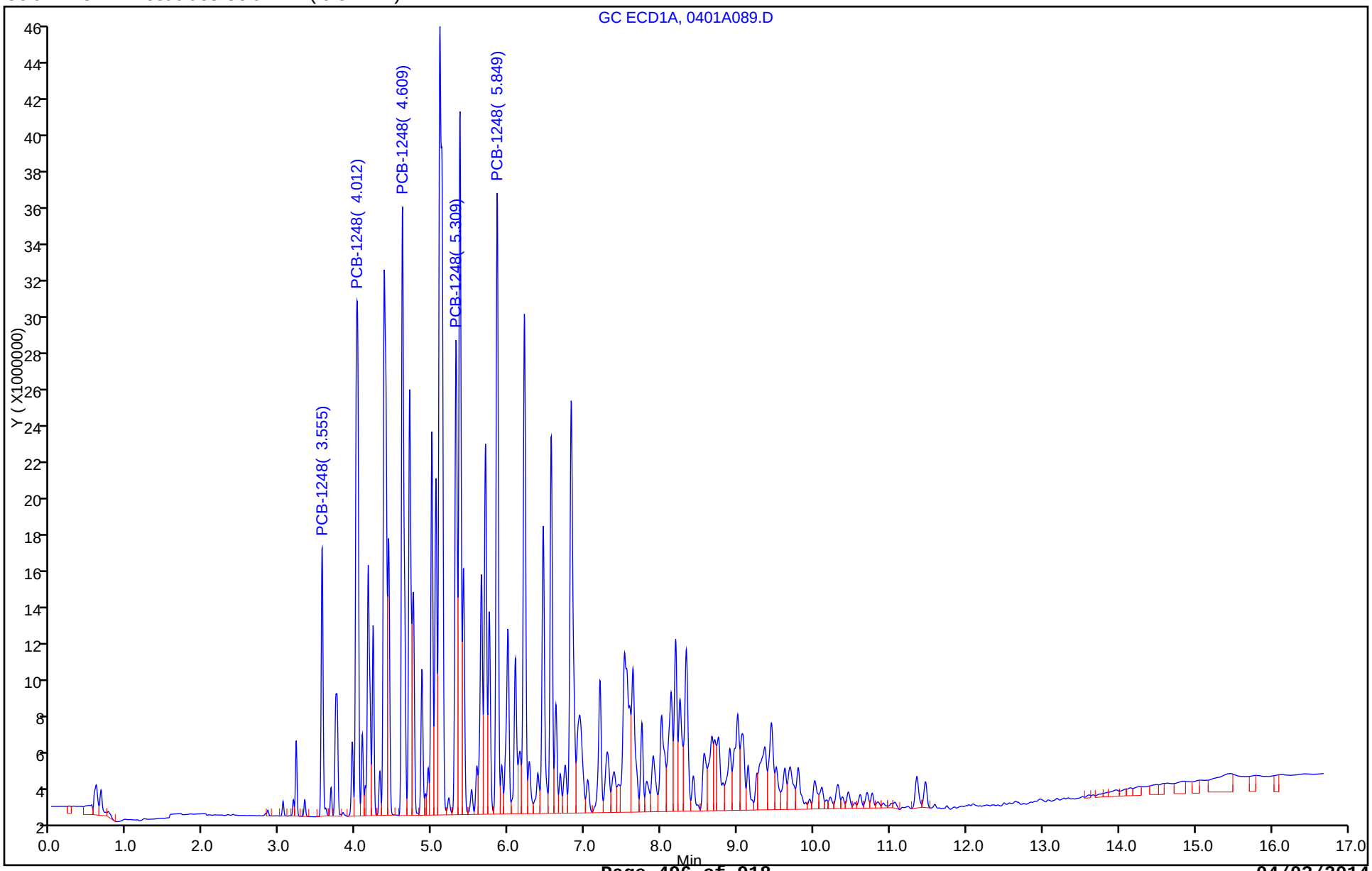
S 15 Polychlorinated biphenyls, Total
550.6

Report Date: 03-Apr-2014 08:32:50 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A089.D				
Injection Date:	02-Apr-2014 21:32:21	Instrument ID:	SGC_P3a	Operator ID:	JAX
Lims ID:	280-53458-A-33-A	Lab Sample ID:	280-53458-33	Worklist Smp#:	88
Client ID:	SB-45-0				
Injection Vol:	1.0 ul	Dil. Factor:	10000.0000	ALS Bottle#:	89
Method:	PCB_P3a	Limit Group:	GCSV - 8082		

Column: CLP1 Pesticides Column 1 (0.32 mm)



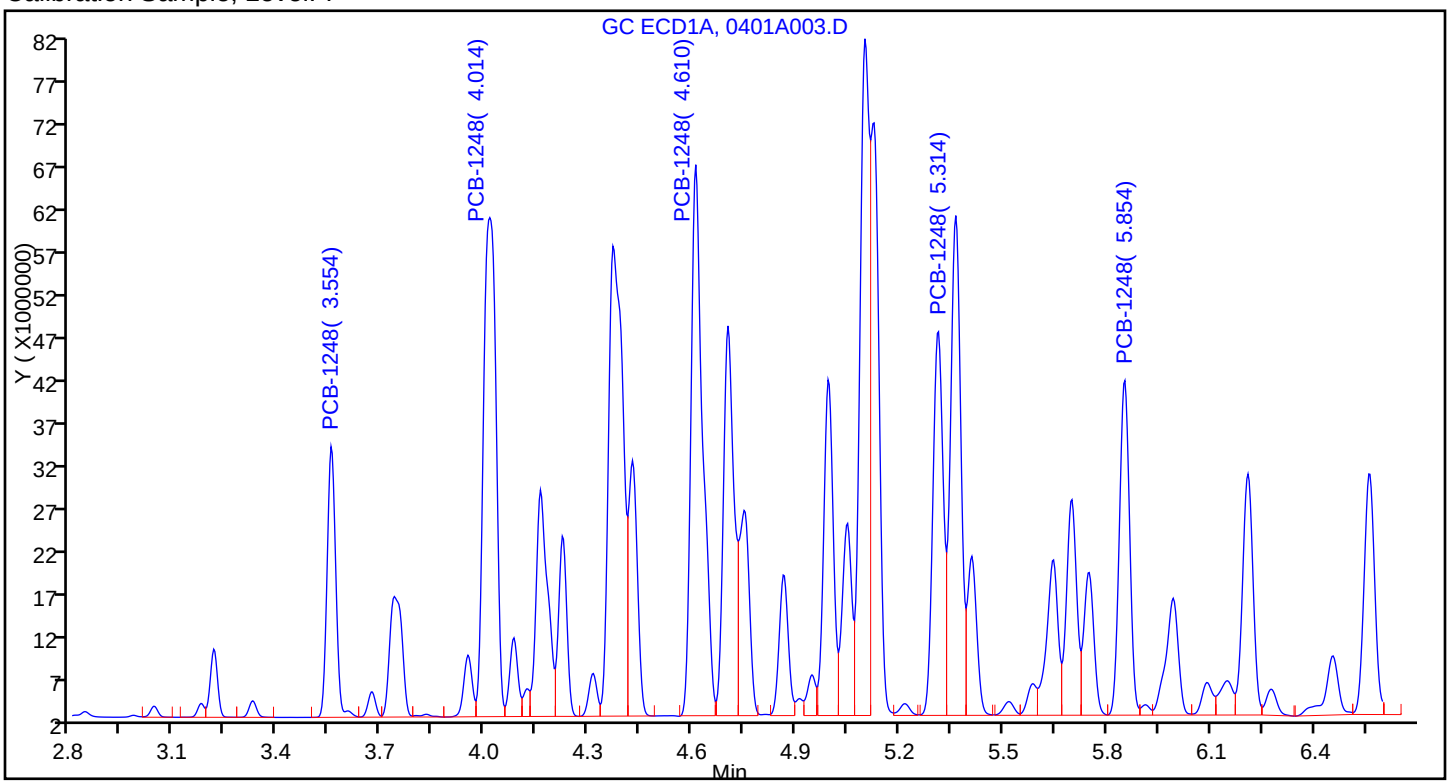
Report Date: 03-Apr-2014 08:32:50 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

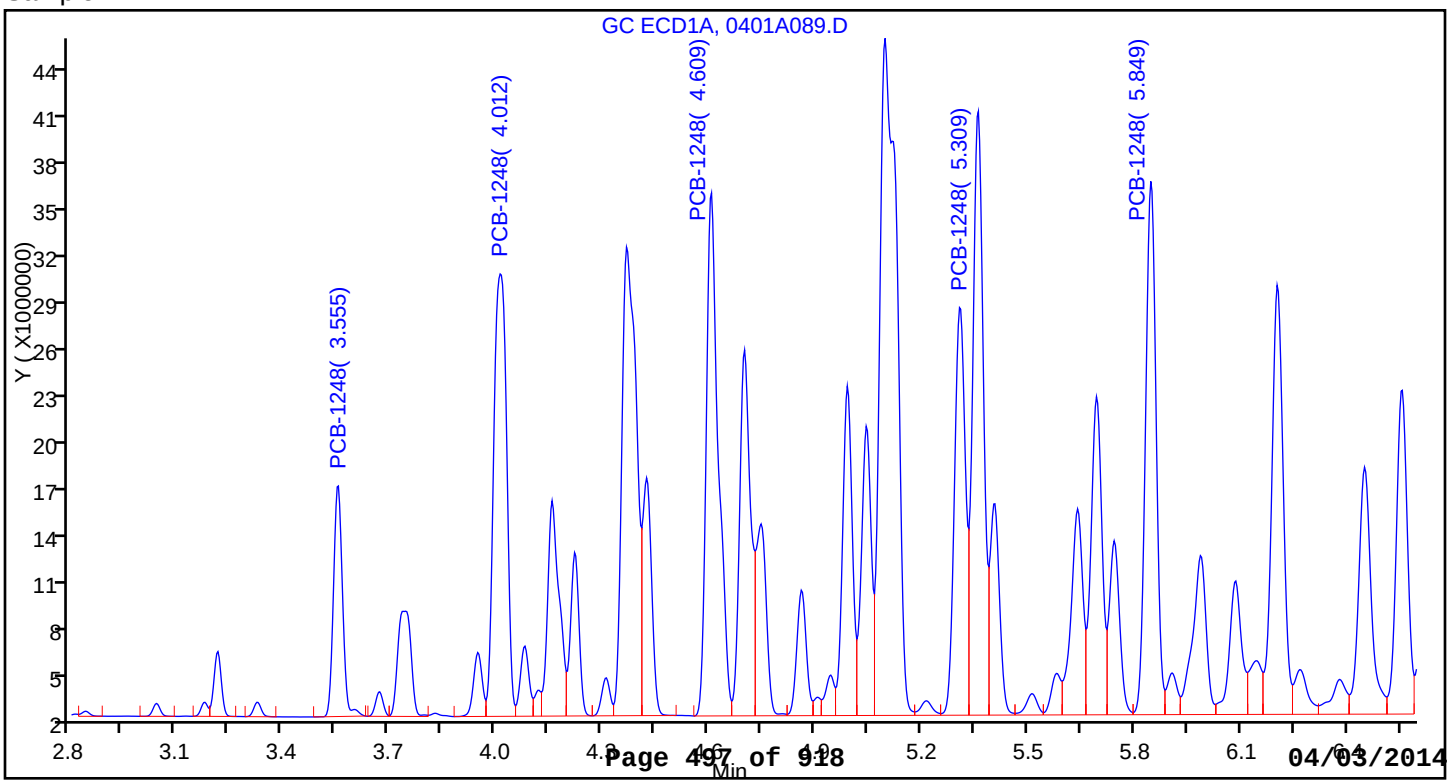
Data File:	\\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A089.D				
Injection Date:	02-Apr-2014 21:32:21	Instrument ID:	SGC_P3a		
Lims ID:	280-53458-A-33-A	Lab Sample ID:	280-53458-33		
Client ID:	SB-45-0				
Operator ID:	JAX	ALS Bottle#:	89	Worklist Smp#:	88
Injection Vol:	1.0 ul	Dil. Factor:	10000.0000		
Method:	PCB_P3a	Limit Group:	GCSV - 8082		
Column:	CLP1 Pesticides Column 1 (0.32 mm)	Detector	GC ECD1A		

4 PCB-1248, CAS: 12672-29-6

Calibration Sample, Level: 7



Sample



FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-53458-1

SDG No.:

Client Sample ID: SB-45-0 | Lab Sample ID: 280-53458-33

Matrix: Solid | Lab File ID: 0401B089.D

Analysis Method: 8082A | Date Collected: 03/19/2014 13:05

Extraction Method: 3546 | Date Extracted: 03/27/2014 14:30

Sample wt/vol: 30.8(g) | Date Analyzed: 04/02/2014 21:53

Con. Extract Vol.: 10(mL) | Dilution Factor: 10000

Injection Volume: 1(uL) | GC Column: CLP2 ID: 0.32(mm)

% Moisture: 5.5 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 219272 | Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
877-09-8	Tetrachloro-m-xylene	-12626	X D	53-128
2051-24-3	DCB Decachlorobiphenyl	82840	X D	59-130

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B089.D
Lims ID: 280-53458-A-33-A Lab Sample ID: 280-53458-33
Client ID: SB-45-0
Sample Type: Client
Inject. Date: 02-Apr-2014 21:53:40 ALS Bottle#: 89 Worklist Smp#: 88
Injection Vol: 1.0 ul Dil. Factor: 10000.0000
Sample Info: 280-53458-A-33-A
Operator ID: JAX Instrument ID: SGC_P3b

Method: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\PCB_P3b.m
Limit Group: GCSV - 8082
Last Update: 03-Apr-2014 09:29:30 Calib Date: 02-Apr-2014 03:13:50
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B037.D

Column 1 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK052

First Level Reviewer: jacksonto Date: 03-Apr-2014 08:19:42

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
$ 14 Tetrachloro-m-xylene					
3.005	2.862	0.143	2498866	-0.2525	
3 PCB-1221					
	3.165				
	3.292				
	3.348				
7 PCB-1232					
	3.166				
	3.346				
	4.196				
	4.340				
	4.870				
10 PCB-1242					
	3.347				
	4.193				
	4.340				
	4.867				
	5.007				
1 PCB-1016					
	3.738				
	4.195				
	4.342				
	4.868				
	5.008				

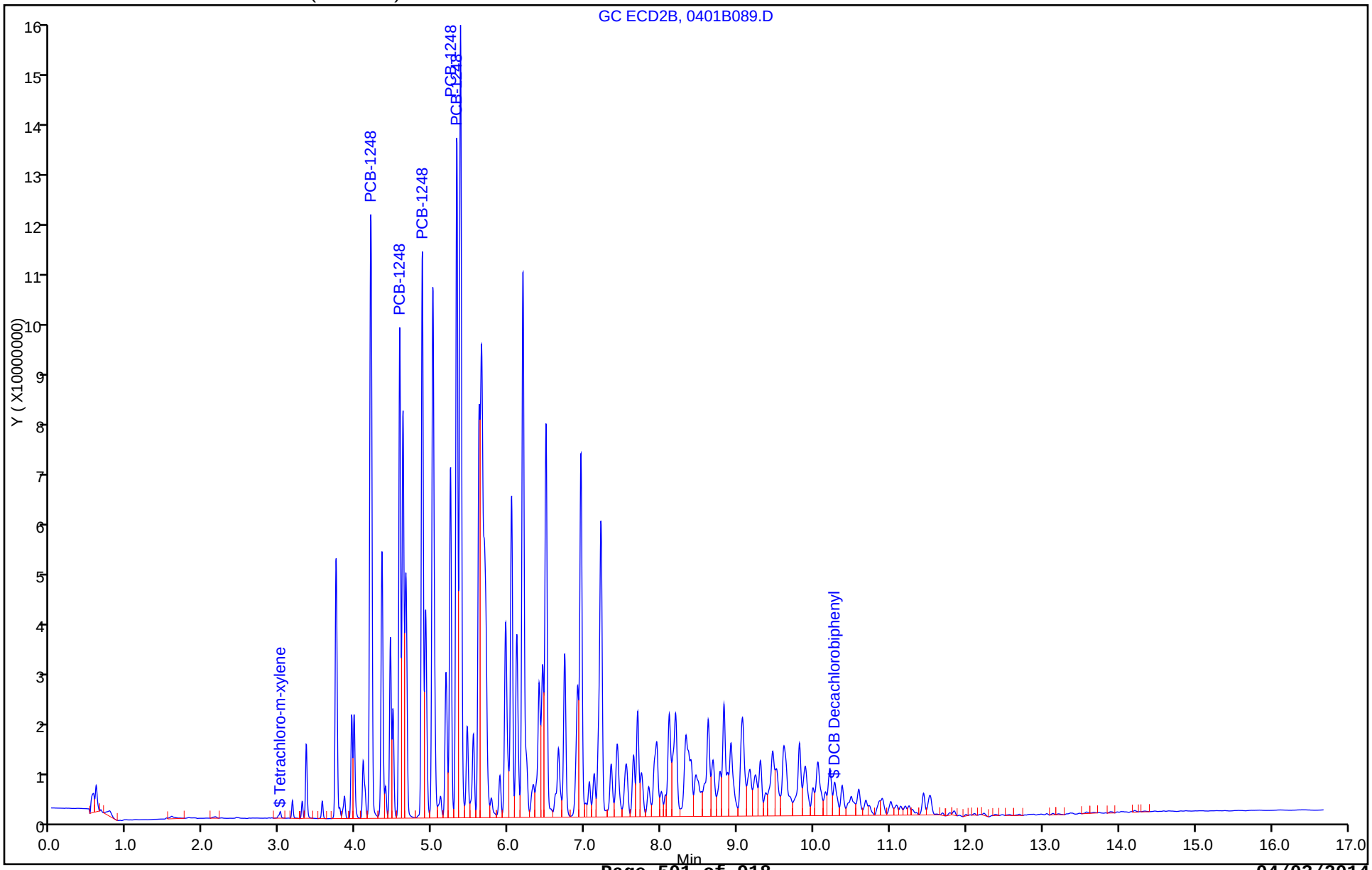
RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
4 PCB-1248					
4.192	4.194	-0.002	235289340	475.8	
4.572	4.571	0.001	159042963	545.5	
4.868	4.868	0.0	195317663	501.5	
5.318	5.321	-0.003	233016223	526.6	
5.368	5.371	-0.003	293803577	590.5	
	Average of Peak Amounts =			528.0	
9 PCB-1254					
	5.368				
	5.612				
	6.038				
	6.735				
	7.212				
12 PCB-1260					
	6.448				
	6.735				
	7.208				
	8.108				
	8.618				
5 PCB-1262					
	6.733				
	7.743				
	8.110				
	8.613				
	9.463				
13 PCB-1268					
	8.610				
	8.673				
	9.030				
	9.173				
	9.927				
$ 15 DCB Decachlorobiphenyl					
10.272	10.295	-0.023	21847430	1.66	
S 8 Polychlorinated biphenyls, Total					
				528.0	

Report Date: 03-Apr-2014 09:29:33 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B089.D				
Injection Date:	02-Apr-2014 21:53:40	Instrument ID:	SGC_P3b	Operator ID:	JAX
Lims ID:	280-53458-A-33-A	Lab Sample ID:	280-53458-33	Worklist Smp#:	88
Client ID:	SB-45-0				
Injection Vol:	1.0 ul	Dil. Factor:	10000.0000	ALS Bottle#:	89
Method:	PCB_P3b	Limit Group:	GCSV - 8082		

Column: CLP2 Pesticides Column 2 (0.32 mm)



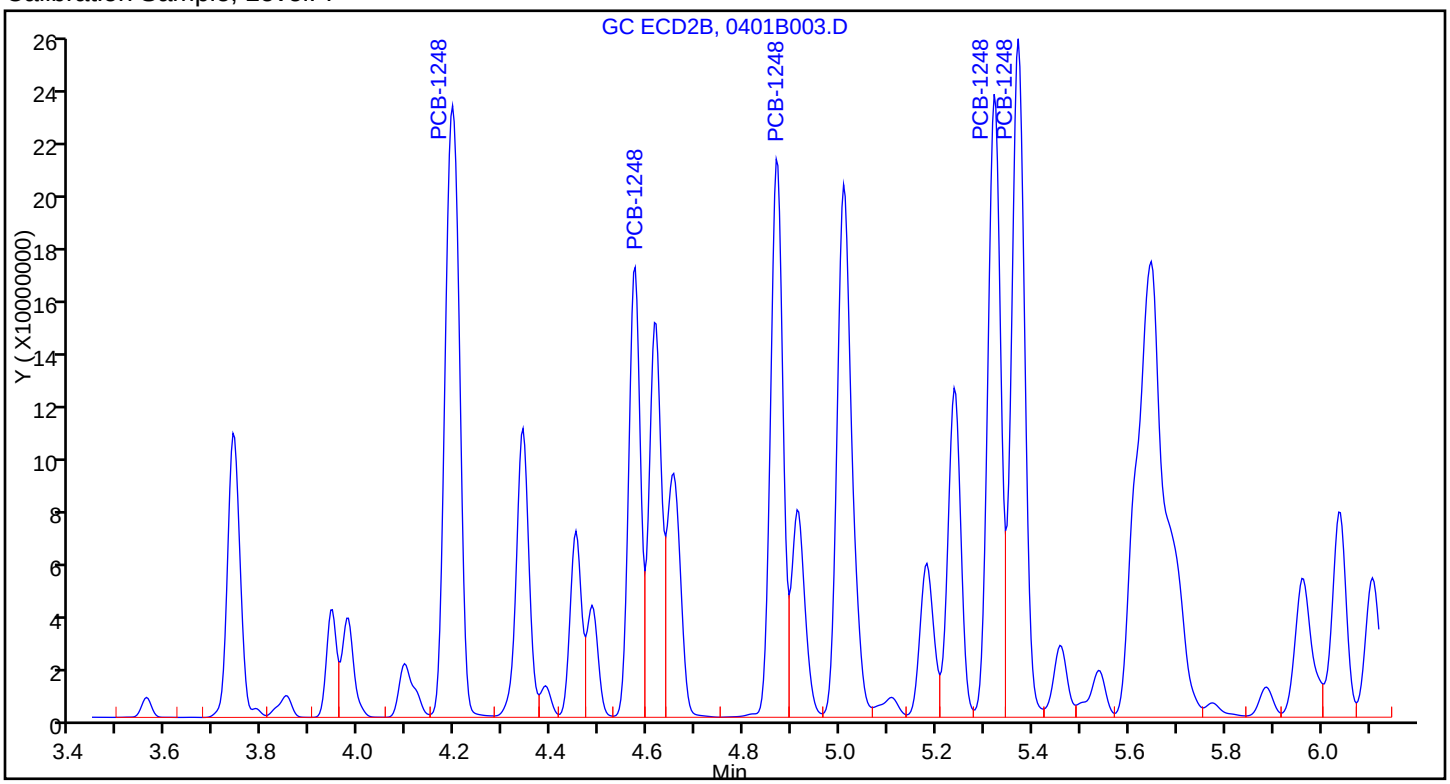
Report Date: 03-Apr-2014 09:29:33 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

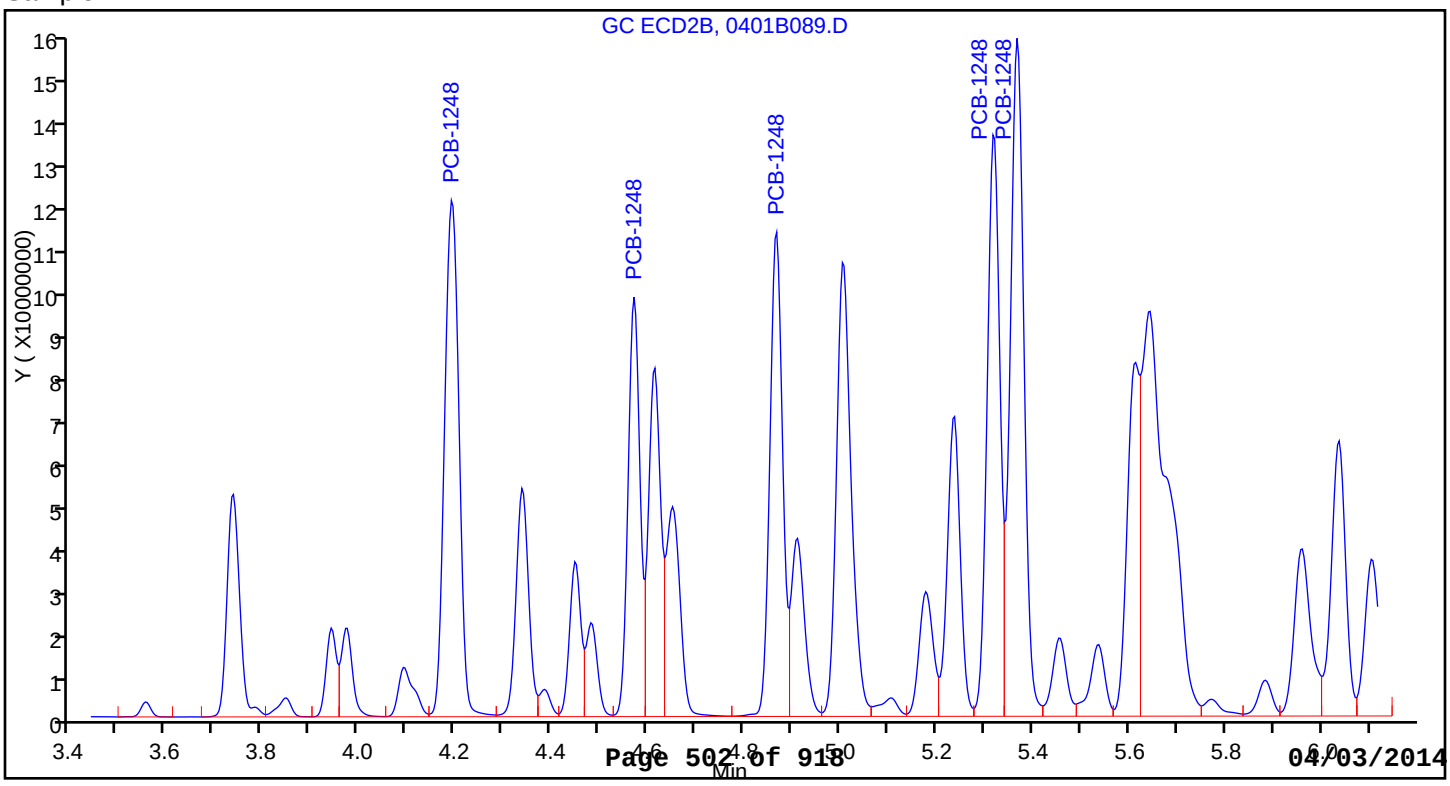
Data File:	\\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B089.D				
Injection Date:	02-Apr-2014 21:53:40	Instrument ID:	SGC_P3b		
Lims ID:	280-53458-A-33-A	Lab Sample ID:	280-53458-33		
Client ID:	SB-45-0				
Operator ID:	JAX	ALS Bottle#:	89	Worklist Smp#:	88
Injection Vol:	1.0 ul	Dil. Factor:	10000.0000		
Method:	PCB_P3b	Limit Group:	GCSV - 8082		
Column:	CLP2 Pesticides Column 2 (0.32 mm)	Detector	GC ECD2B		

4 PCB-1248, CAS: 12672-29-6

Calibration Sample, Level: 7



Sample



FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-53458-1

SDG No.:

Client Sample ID: SB-46-0 | Lab Sample ID: 280-53458-34

Matrix: Solid | Lab File ID: 0401A090.D

Analysis Method: 8082A | Date Collected: 03/19/2014 13:15

Extraction Method: 3546 | Date Extracted: 03/27/2014 14:30

Sample wt/vol: 30.2(g) | Date Analyzed: 04/02/2014 21:53

Con. Extract Vol.: 10(mL) | Dilution Factor: 500

Injection Volume: 1(uL) | GC Column: CLP1 ID: 0.32(mm)

% Moisture: 4.4 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 219270 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
11104-28-2	PCB-1221	ND		24000	8100
12674-11-2	PCB-1016	ND		17000	2600
11141-16-5	PCB-1232	ND		17000	2700
53469-21-9	PCB-1242	ND		17000	4700
12672-29-6	PCB-1248	77000		17000	2900
11097-69-1	PCB-1254	ND		17000	2900
11096-82-5	PCB-1260	ND		17000	1400
37324-23-5	PCB-1262	ND		17000	6000
11100-14-4	PCB-1268	ND		17000	2100
1336-36-3	Polychlorinated biphenyls, Total	77000		17000	1400

CAS NO.	SURROGATE	%REC	Q	LIMITS
877-09-8	Tetrachloro-m-xylene	0	D X	53-128
2051-24-3	DCB Decachlorobiphenyl	0	D X	59-130

TestAmerica Denver
Target Compound Quantitation Report

Data File:	\\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A090.D				
Lims ID:	280-53458-A-34-A	Lab Sample ID:	280-53458-34		
Client ID:	SB-46-0				
Sample Type:	Client				
Inject. Date:	02-Apr-2014 21:53:40	ALS Bottle#:	90	Worklist Smp#:	89
Injection Vol:	1.0 ul	Dil. Factor:	500.0000		
Sample Info:	280-53458-A-34-A				
Operator ID:	JAX	Instrument ID:	SGC_P3a		
Method:	\\Denchrom\ChromData\SGC_P3a\20140401-21600.b\PCB_P3a.m				
Limit Group:	GCSV - 8082				
Last Update:	03-Apr-2014 08:32:47	Calib Date:	02-Apr-2014 02:52:35		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A037.D				
Column 1 :	CLP1 Pesticides Column 1 (0.32 mm)		Det: GC ECD1A		
Process Host:	XAWRK052				
First Level Reviewer: jacksonto		Date:	03-Apr-2014 06:59:44		

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
$ 1 Tetrachloro-m-xylene					
2.845					
2 PCB-1221					
3.042					
3.179					
3.216					
3 PCB-1232					
3.214					
3.554					
4.018					
4.158					
4.608					
4 PCB-1248					
3.552	3.554	-0.002	10471915	174.8	
4.012	4.014	-0.002	42201967	267.8	
4.609	4.611	-0.002	60634566	375.7	
5.309	5.311	-0.002	51951675	531.7	
5.849	5.851	-0.002	73853255	885.1	
	Average of Peak Amounts =			447.0	
5 PCB-1016					
3.555					
4.019					
4.159					
4.222					
4.609					

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags

6 PCB-1242
3.556
4.019
4.159
4.222
4.609

7 PCB-1254
5.049
5.366
5.852
6.209
6.822

10 PCB-1262
6.088
6.454
7.044
7.424
8.254

8 PCB-1260
6.089
6.819
7.312
7.749
8.132

12 PCB-1268
8.196
8.246
8.519
8.639
9.442

$ 13 DCB Decachlorobiphenyl
9.715

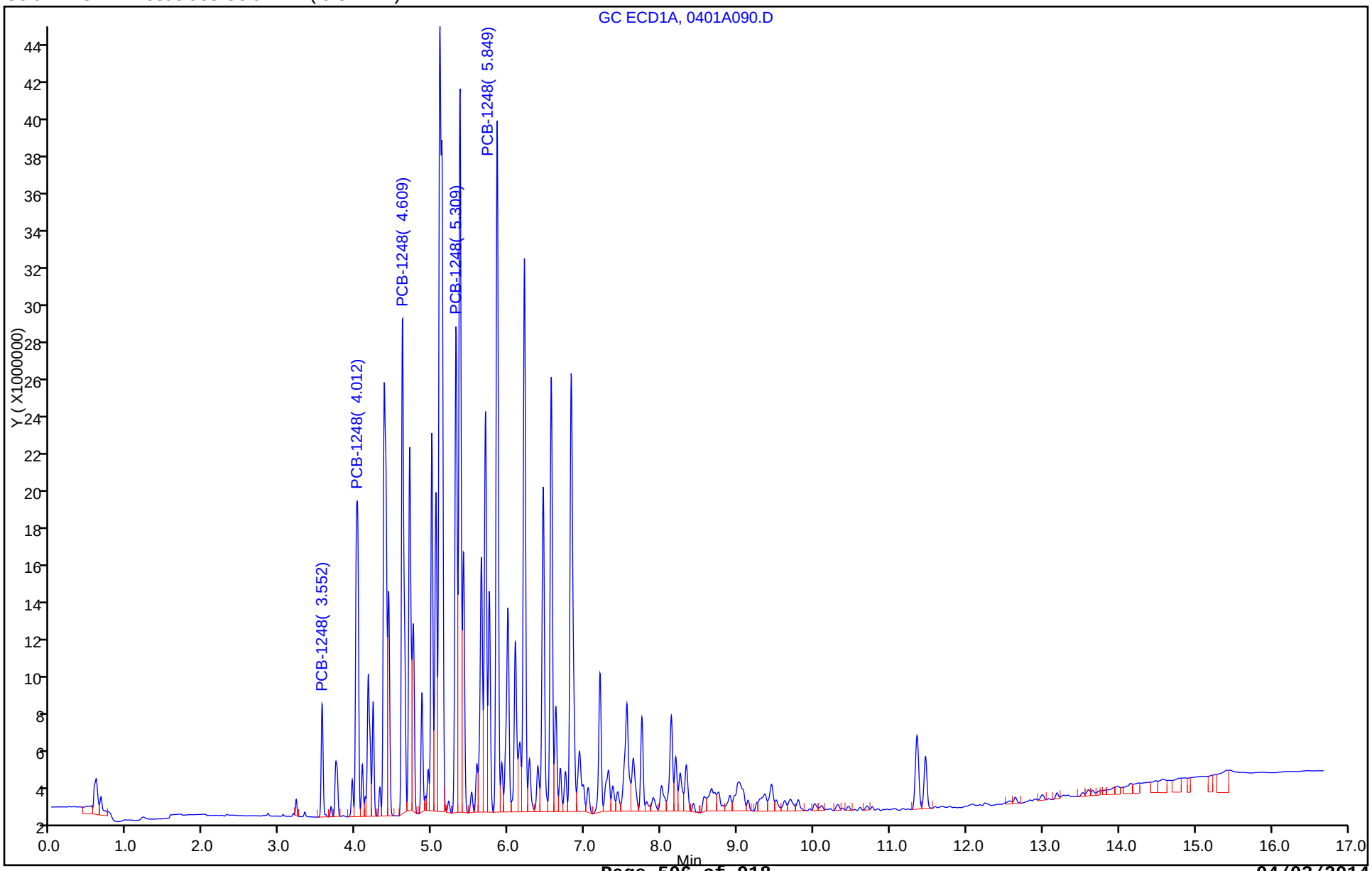
S 15 Polychlorinated biphenyls, Total
447.0

Report Date: 03-Apr-2014 08:32:50 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A090.D				
Injection Date:	02-Apr-2014 21:53:40	Instrument ID:	SGC_P3a	Operator ID:	JAX
Lims ID:	280-53458-A-34-A	Lab Sample ID:	280-53458-34	Worklist Smp#:	89
Client ID:	SB-46-0				
Injection Vol:	1.0 ul	Dil. Factor:	500.0000	ALS Bottle#:	90
Method:	PCB_P3a	Limit Group:	GCSV - 8082		

Column: CLP1 Pesticides Column 1 (0.32 mm)



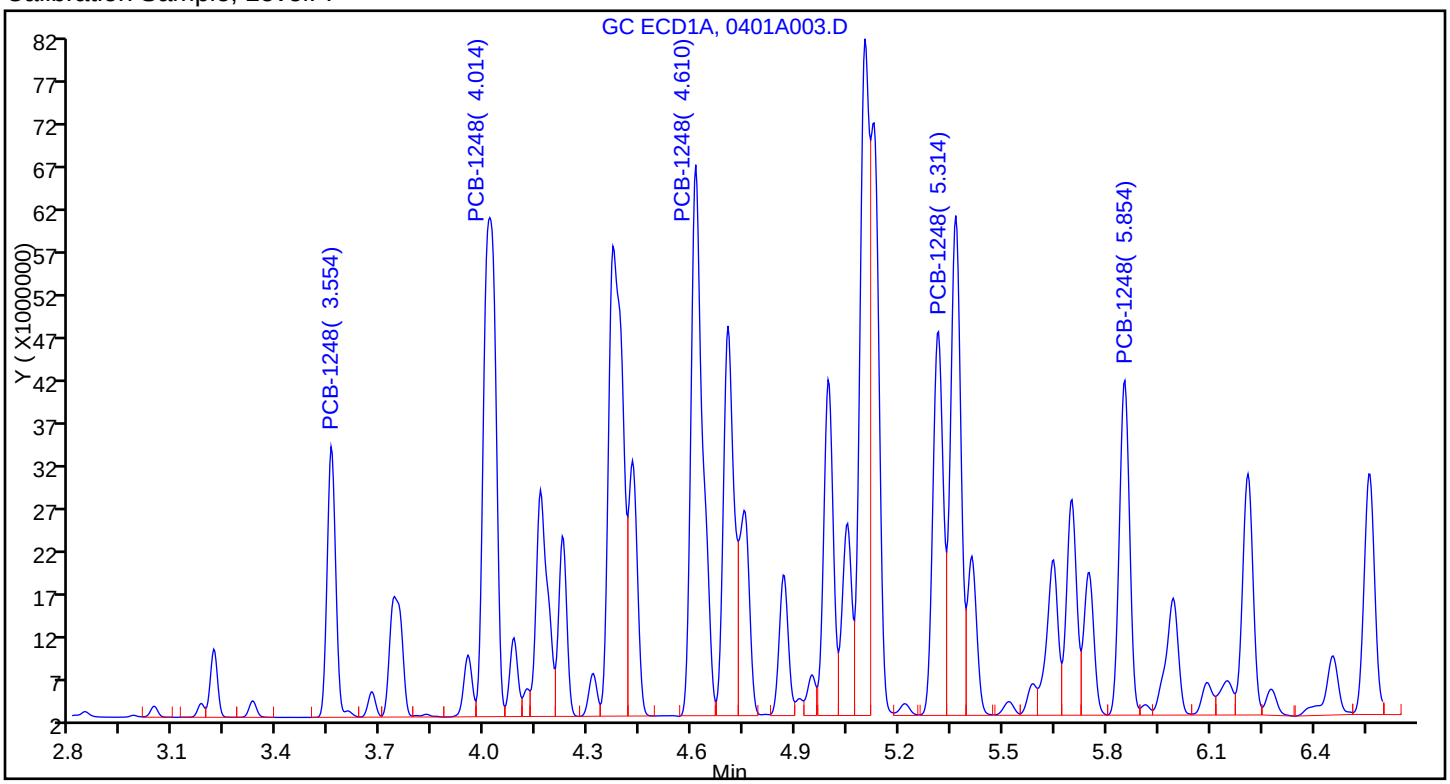
Report Date: 03-Apr-2014 08:32:50 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

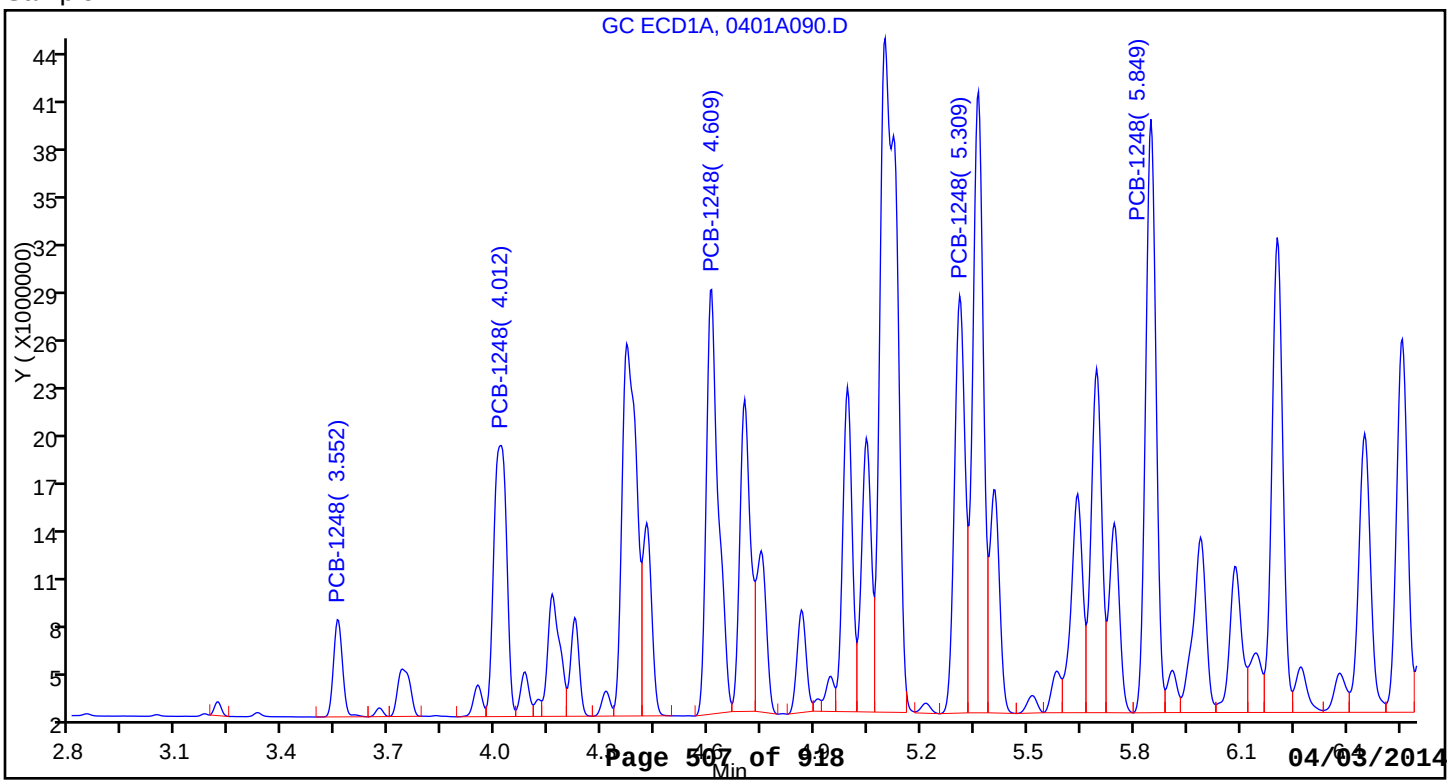
Data File:	\\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A090.D				
Injection Date:	02-Apr-2014 21:53:40	Instrument ID:	SGC_P3a		
Lims ID:	280-53458-A-34-A	Lab Sample ID:	280-53458-34		
Client ID:	SB-46-0				
Operator ID:	JAX	ALS Bottle#:	90	Worklist Smp#:	89
Injection Vol:	1.0 ul	Dil. Factor:	500.0000		
Method:	PCB_P3a	Limit Group:	GCSV - 8082		
Column:	CLP1 Pesticides Column 1 (0.32 mm)	Detector	GC ECD1A		

4 PCB-1248, CAS: 12672-29-6

Calibration Sample, Level: 7



Sample



FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-53458-1

SDG No.:

Client Sample ID: SB-46-0 | Lab Sample ID: 280-53458-34

Matrix: Solid | Lab File ID: 0401B090.D

Analysis Method: 8082A | Date Collected: 03/19/2014 13:15

Extraction Method: 3546 | Date Extracted: 03/27/2014 14:30

Sample wt/vol: 30.2(g) | Date Analyzed: 04/02/2014 22:15

Con. Extract Vol.: 10(mL) | Dilution Factor: 500

Injection Volume: 1(uL) | GC Column: CLP2 ID: 0.32(mm)

% Moisture: 4.4 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 219272 | Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
877-09-8	Tetrachloro-m-xylene	-1033	X D	53-128
2051-24-3	DCB Decachlorobiphenyl	654	X D	59-130

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B090.D
Lims ID: 280-53458-A-34-A Lab Sample ID: 280-53458-34
Client ID: SB-46-0
Sample Type: Client
Inject. Date: 02-Apr-2014 22:15:04 ALS Bottle#: 90 Worklist Smp#: 89
Injection Vol: 1.0 ul Dil. Factor: 500.0000
Sample Info: 280-53458-A-34-A
Operator ID: JAX Instrument ID: SGC_P3b

Method: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\PCB_P3b.m
Limit Group: GCSV - 8082
Last Update: 03-Apr-2014 09:29:30 Calib Date: 02-Apr-2014 03:13:50
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B037.D

Column 1 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK052

First Level Reviewer: jacksonto Date: 03-Apr-2014 08:20:02

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
$ 14 Tetrachloro-m-xylene					
2.861	2.862	-0.001	527973	-0.4133	
3 PCB-1221					
	3.165				
	3.292				
	3.348				
7 PCB-1232					
	3.166				
	3.346				
	4.196				
	4.340				
	4.870				
10 PCB-1242					
	3.347				
	4.193				
	4.340				
	4.867				
	5.007				
1 PCB-1016					
	3.738				
	4.195				
	4.342				
	4.868				
	5.008				

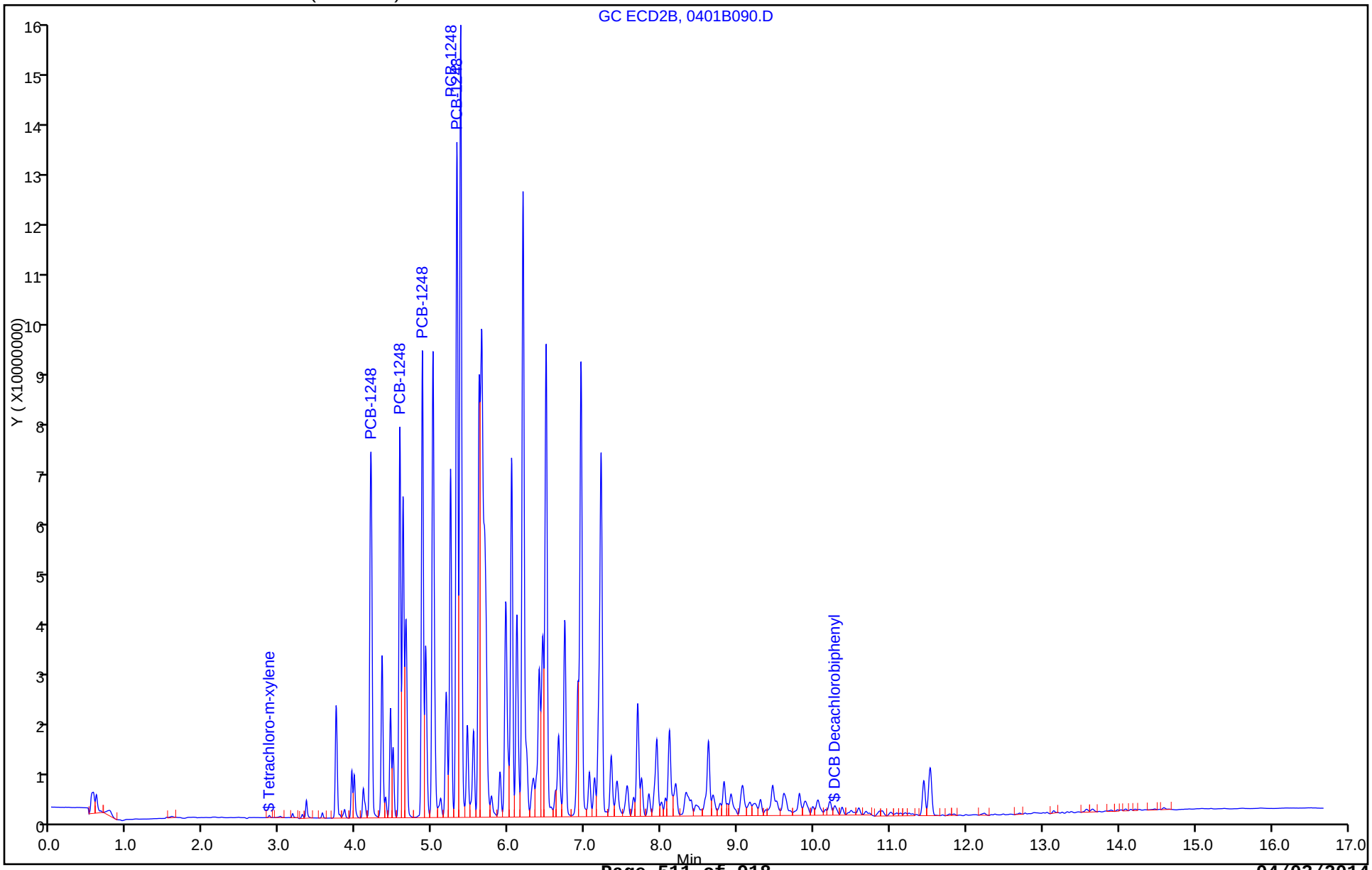
RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
4 PCB-1248					
4.194	4.194	0.0	142859528	285.3	
4.574	4.571	0.003	122680484	418.5	
4.868	4.868	0.0	155689798	396.4	
5.321	5.321	0.0	232719565	525.9	
5.371	5.371	0.0	286541388	575.7	
	Average of Peak Amounts =			440.4	
9 PCB-1254					
	5.368				
	5.612				
	6.038				
	6.735				
	7.212				
12 PCB-1260					
	6.448				
	6.735				
	7.208				
	8.108				
	8.618				
5 PCB-1262					
	6.733				
	7.743				
	8.110				
	8.613				
	9.463				
13 PCB-1268					
	8.610				
	8.673				
	9.030				
	9.173				
	9.927				
$ 15 DCB Decachlorobiphenyl					
10.274	10.295	-0.021	5487759	0.2616	
S 8 Polychlorinated biphenyls, Total					
				440.4	

Report Date: 03-Apr-2014 09:29:34 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B090.D				
Injection Date:	02-Apr-2014 22:15:04	Instrument ID:	SGC_P3b	Operator ID:	JAX
Lims ID:	280-53458-A-34-A	Lab Sample ID:	280-53458-34	Worklist Smp#:	89
Client ID:	SB-46-0				
Injection Vol:	1.0 ul	Dil. Factor:	500.0000	ALS Bottle#:	90
Method:	PCB_P3b	Limit Group:	GCSV - 8082		

Column: CLP2 Pesticides Column 2 (0.32 mm)



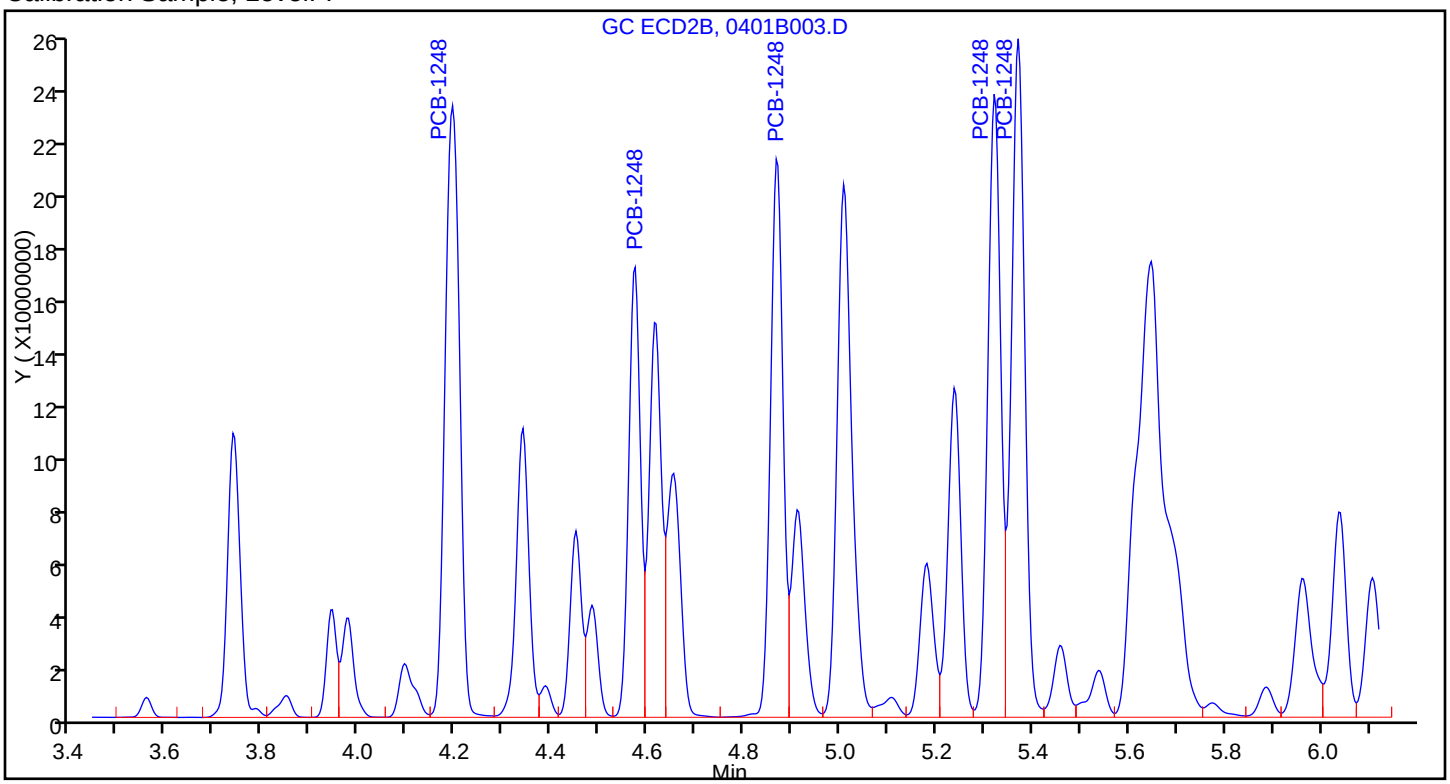
Report Date: 03-Apr-2014 09:29:34 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

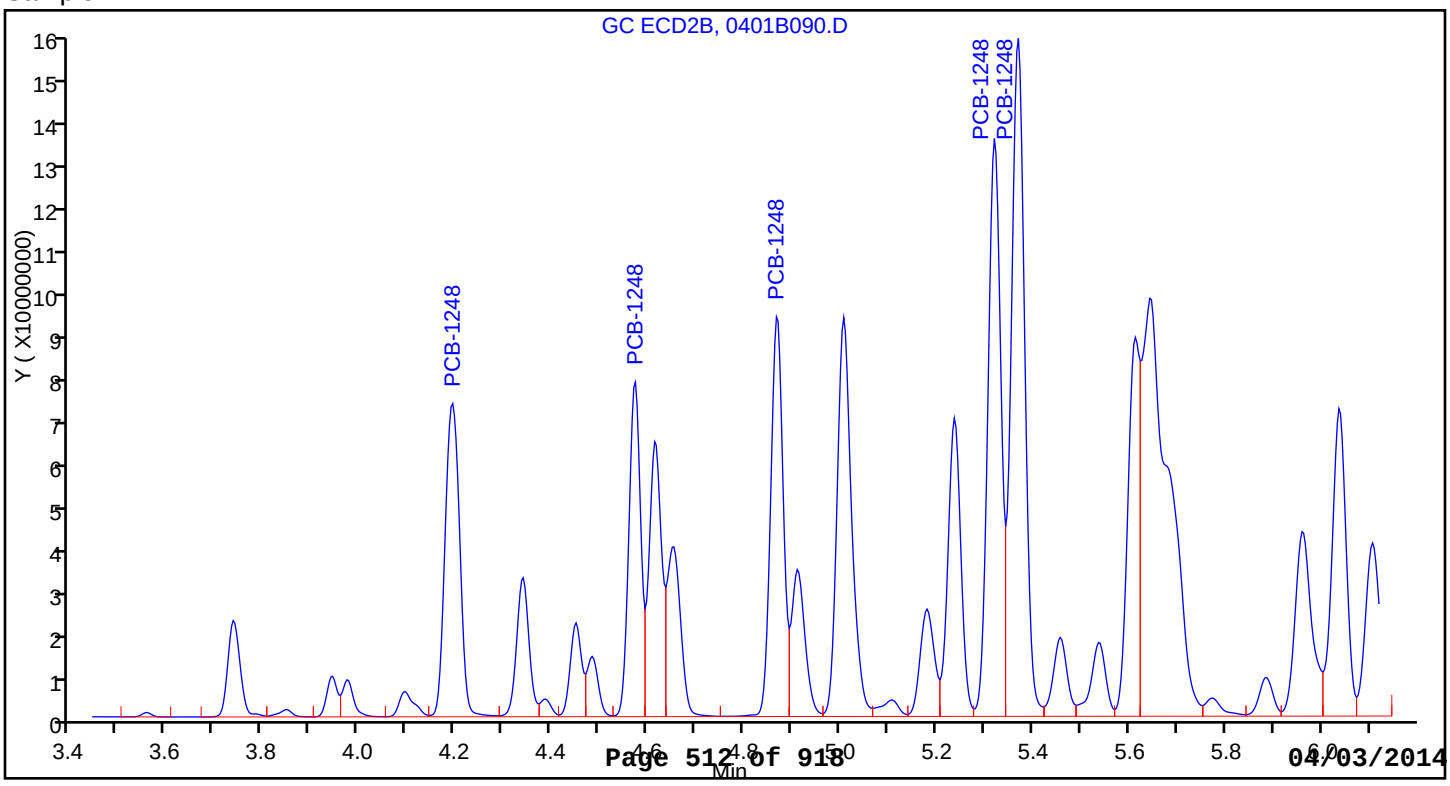
Data File:	\\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B090.D				
Injection Date:	02-Apr-2014 22:15:04	Instrument ID:	SGC_P3b		
Lims ID:	280-53458-A-34-A	Lab Sample ID:	280-53458-34		
Client ID:	SB-46-0				
Operator ID:	JAX	ALS Bottle#:	90	Worklist Smp#:	89
Injection Vol:	1.0 ul	Dil. Factor:	500.0000		
Method:	PCB_P3b	Limit Group:	GCSV - 8082		
Column:	CLP2 Pesticides Column 2 (0.32 mm)	Detector	GC ECD2B		

4 PCB-1248, CAS: 12672-29-6

Calibration Sample, Level: 7



Sample



FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-53458-1

SDG No.:

Client Sample ID: SB-47-0 | Lab Sample ID: 280-53458-35

Matrix: Solid | Lab File ID: 0401A091.D

Analysis Method: 8082A | Date Collected: 03/20/2014 08:30

Extraction Method: 3546 | Date Extracted: 03/27/2014 14:30

Sample wt/vol: 30.7(g) | Date Analyzed: 04/02/2014 22:15

Con. Extract Vol.: 10(mL) | Dilution Factor: 500

Injection Volume: 1(uL) | GC Column: CLP1 ID: 0.32(mm)

% Moisture: 7.0 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 219270 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
11104-28-2	PCB-1221	ND		25000	8200
12674-11-2	PCB-1016	ND		17000	2700
11141-16-5	PCB-1232	ND		17000	2700
53469-21-9	PCB-1242	ND		17000	4800
12672-29-6	PCB-1248	110000		17000	2900
11097-69-1	PCB-1254	ND		17000	2900
11096-82-5	PCB-1260	ND		17000	1400
37324-23-5	PCB-1262	ND		17000	6100
11100-14-4	PCB-1268	ND		17000	2100
1336-36-3	Polychlorinated biphenyls, Total	110000		17000	1400

CAS NO.	SURROGATE	%REC	Q	LIMITS
877-09-8	Tetrachloro-m-xylene	0	D X	53-128
2051-24-3	DCB Decachlorobiphenyl	0	D X	59-130

TestAmerica Denver
Target Compound Quantitation Report

Data File:	\\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A091.D				
Lims ID:	280-53458-A-35-A	Lab Sample ID:	280-53458-35		
Client ID:	SB-47-0				
Sample Type:	Client				
Inject. Date:	02-Apr-2014 22:15:04	ALS Bottle#:	91	Worklist Smp#:	90
Injection Vol:	1.0 ul	Dil. Factor:	500.0000		
Sample Info:	280-53458-A-35-A				
Operator ID:	JAX	Instrument ID:	SGC_P3a		
Method:	\\Denchrom\ChromData\SGC_P3a\20140401-21600.b\PCB_P3a.m				
Limit Group:	GCSV - 8082				
Last Update:	03-Apr-2014 08:32:47	Calib Date:	02-Apr-2014 02:52:35		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A037.D				
Column 1 :	CLP1 Pesticides Column 1 (0.32 mm)		Det: GC ECD1A		
Process Host:	XAWRK052				
First Level Reviewer: jacksonto		Date:	03-Apr-2014 07:00:10		

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
$ 1 Tetrachloro-m-xylene					
	2.845				
2 PCB-1221					
	3.042				
	3.179				
	3.216				
3 PCB-1232					
	3.214				
	3.554				
	4.018				
	4.158				
	4.608				
4 PCB-1248					
3.555	3.554	0.001	31193220	540.4	
4.022	4.014	0.008	87109663	563.6	
4.608	4.611	-0.003	114200271	717.8	
5.312	5.311	0.001	65457164	672.1	
0.0	5.851	-5.851	0	0	E
	Average of Peak Amounts =			623.5	
5 PCB-1016					
	3.555				
	4.019				
	4.159				
	4.222				
	4.609				

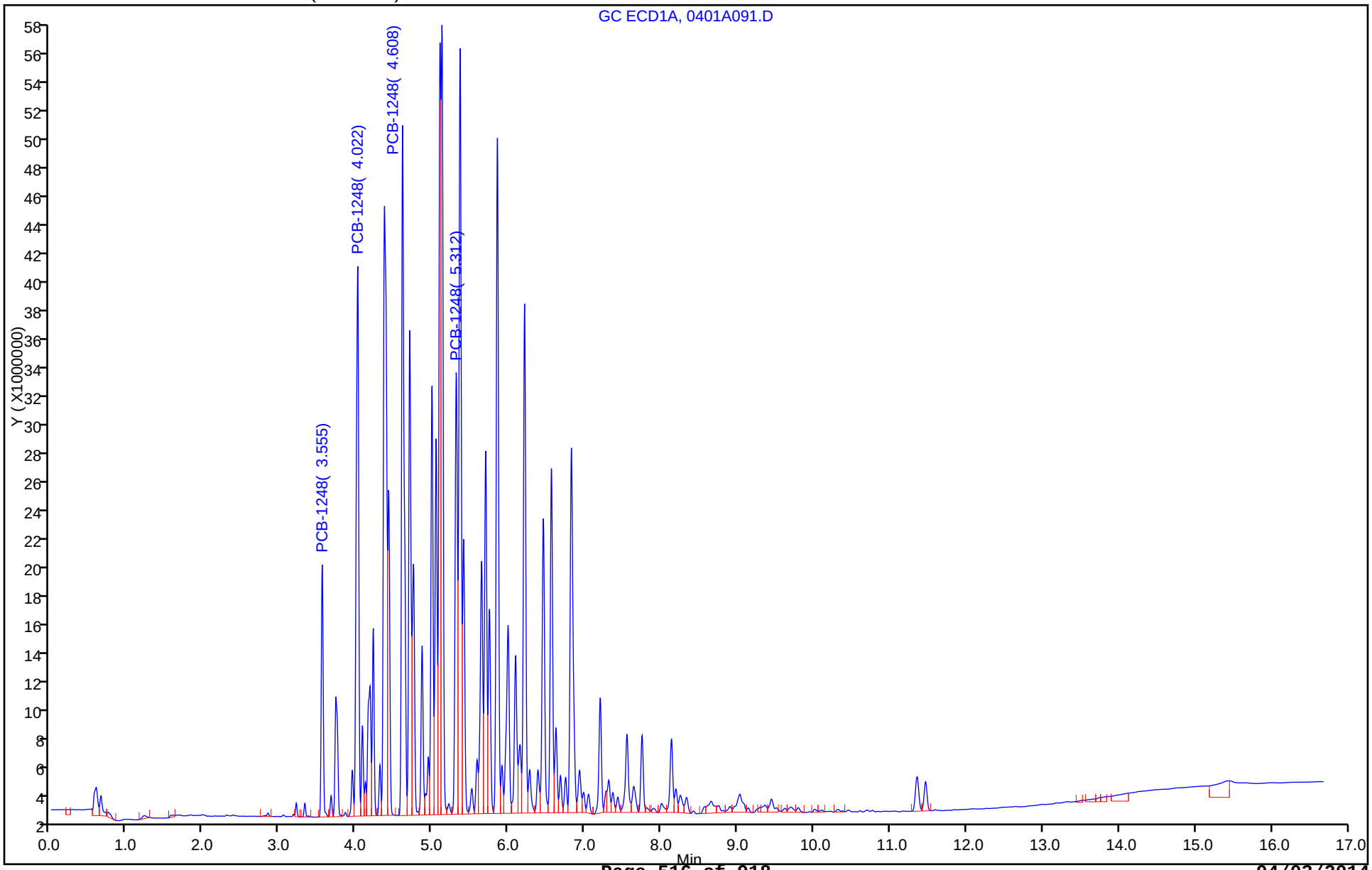
RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
6 PCB-1242					
3.556					
4.019					
4.159					
4.222					
4.609					
7 PCB-1254					
5.049					
5.366					
5.852					
6.209					
6.822					
10 PCB-1262					
6.088					
6.454					
7.044					
7.424					
8.254					
8 PCB-1260					
6.089					
6.819					
7.312					
7.749					
8.132					
12 PCB-1268					
8.196					
8.246					
8.519					
8.639					
9.442					
$ 13 DCB Decachlorobiphenyl					
9.715					
S 15 Polychlorinated biphenyls, Total					
			623.5		

Report Date: 03-Apr-2014 08:32:51 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A091.D				
Injection Date:	02-Apr-2014 22:15:04	Instrument ID:	SGC_P3a	Operator ID:	JAX
Lims ID:	280-53458-A-35-A	Lab Sample ID:	280-53458-35	Worklist Smp#:	90
Client ID:	SB-47-0				
Injection Vol:	1.0 ul	Dil. Factor:	500.0000	ALS Bottle#:	91
Method:	PCB_P3a	Limit Group:	GCSV - 8082		

Column: CLP1 Pesticides Column 1 (0.32 mm)



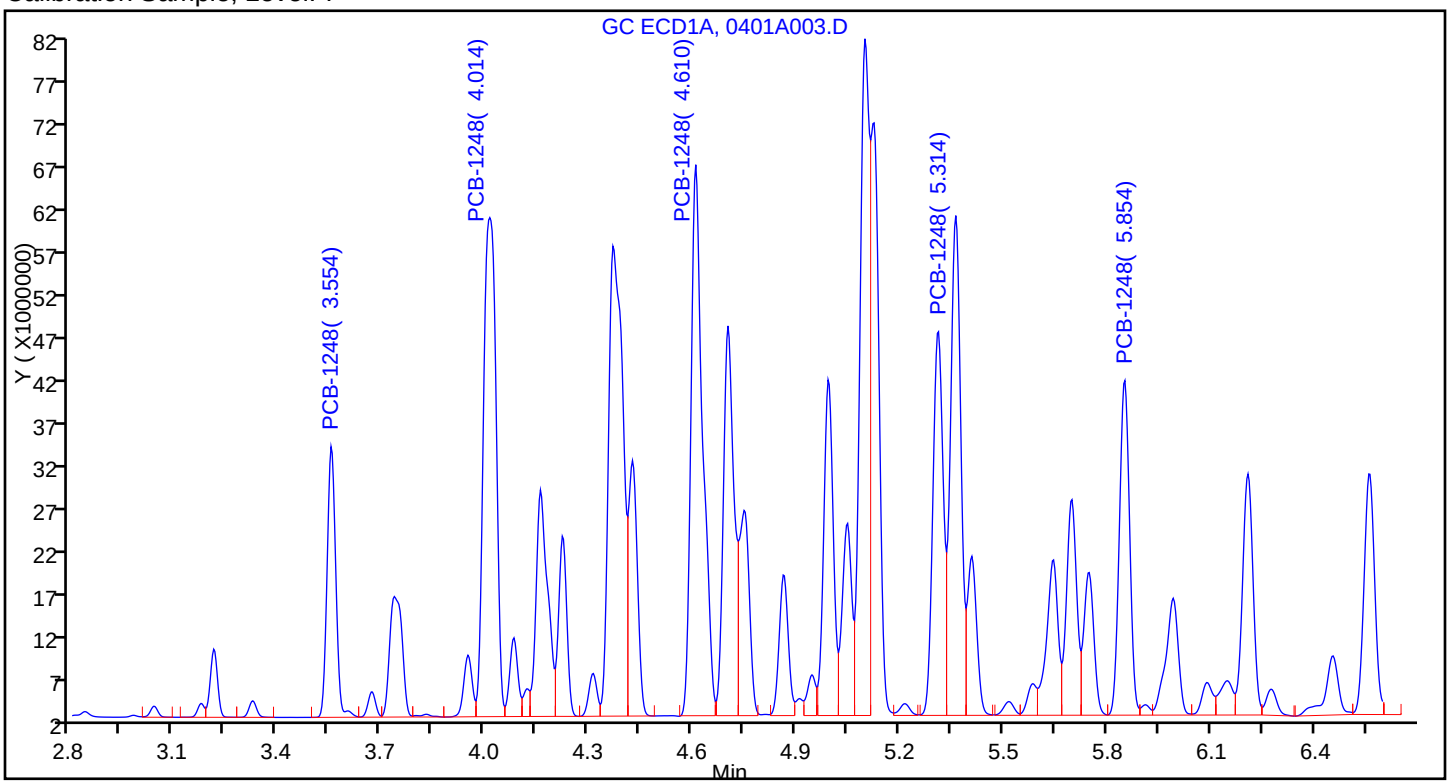
Report Date: 03-Apr-2014 08:32:51 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

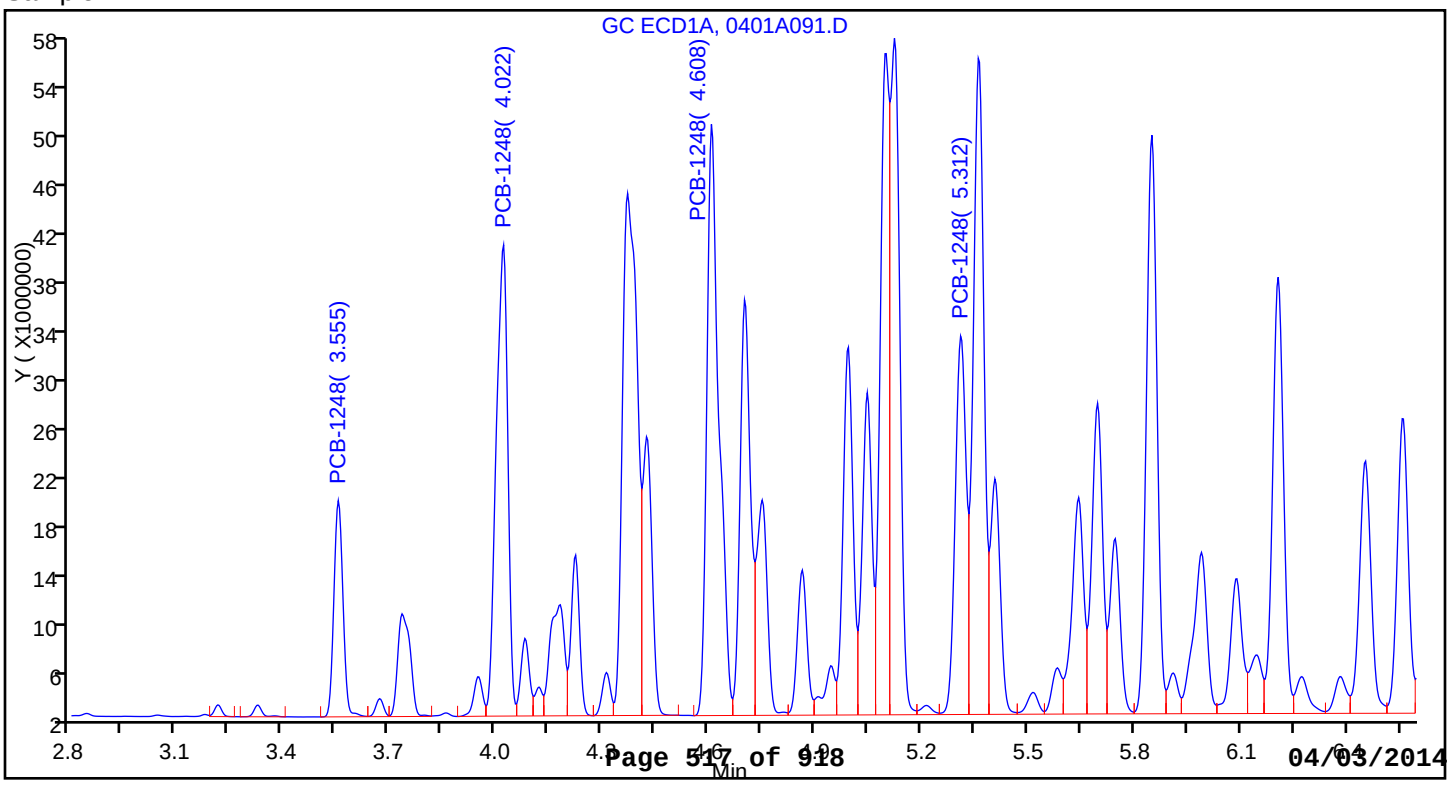
Data File:	\\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A091.D				
Injection Date:	02-Apr-2014 22:15:04	Instrument ID:	SGC_P3a		
Lims ID:	280-53458-A-35-A	Lab Sample ID:	280-53458-35		
Client ID:	SB-47-0				
Operator ID:	JAX	ALS Bottle#:	91	Worklist Smp#:	90
Injection Vol:	1.0 ul	Dil. Factor:	500.0000		
Method:	PCB_P3a	Limit Group:	GCSV - 8082		
Column:	CLP1 Pesticides Column 1 (0.32 mm)	Detector	GC ECD1A		

4 PCB-1248, CAS: 12672-29-6

Calibration Sample, Level: 7



Sample



FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-53458-1

SDG No.:

Client Sample ID: SB-47-0 | Lab Sample ID: 280-53458-35

Matrix: Solid | Lab File ID: 0401B091.D

Analysis Method: 8082A | Date Collected: 03/20/2014 08:30

Extraction Method: 3546 | Date Extracted: 03/27/2014 14:30

Sample wt/vol: 30.7(g) | Date Analyzed: 04/02/2014 22:36

Con. Extract Vol.: 10(mL) | Dilution Factor: 500

Injection Volume: 1(uL) | GC Column: CLP2 ID: 0.32(mm)

% Moisture: 7.0 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 219272 | Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
877-09-8	Tetrachloro-m-xylene	-960	*X D*	53-128
2051-24-3	DCB Decachlorobiphenyl	88	*D*	59-130

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B091.D
Lims ID: 280-53458-A-35-A Lab Sample ID: 280-53458-35
Client ID: SB-47-0
Sample Type: Client
Inject. Date: 02-Apr-2014 22:36:22 ALS Bottle#: 91 Worklist Smp#: 90
Injection Vol: 1.0 ul Dil. Factor: 500.0000
Sample Info: 280-53458-A-35-A
Operator ID: JAX Instrument ID: SGC_P3b

Method: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\PCB_P3b.m
Limit Group: GCSV - 8082
Last Update: 03-Apr-2014 09:29:30 Calib Date: 02-Apr-2014 03:13:50
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B037.D

Column 1 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK052

First Level Reviewer: jacksonto Date: 03-Apr-2014 08:20:22

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
$ 14 Tetrachloro-m-xylene					
2.860	2.862	-0.002	887890	-0.3840	
3 PCB-1221					
	3.165				
	3.292				
	3.348				
7 PCB-1232					
	3.166				
	3.346				
	4.196				
	4.340				
	4.870				
10 PCB-1242					
	3.347				
	4.193				
	4.340				
	4.867				
	5.007				
1 PCB-1016					
	3.738				
	4.195				
	4.342				
	4.868				
	5.008				

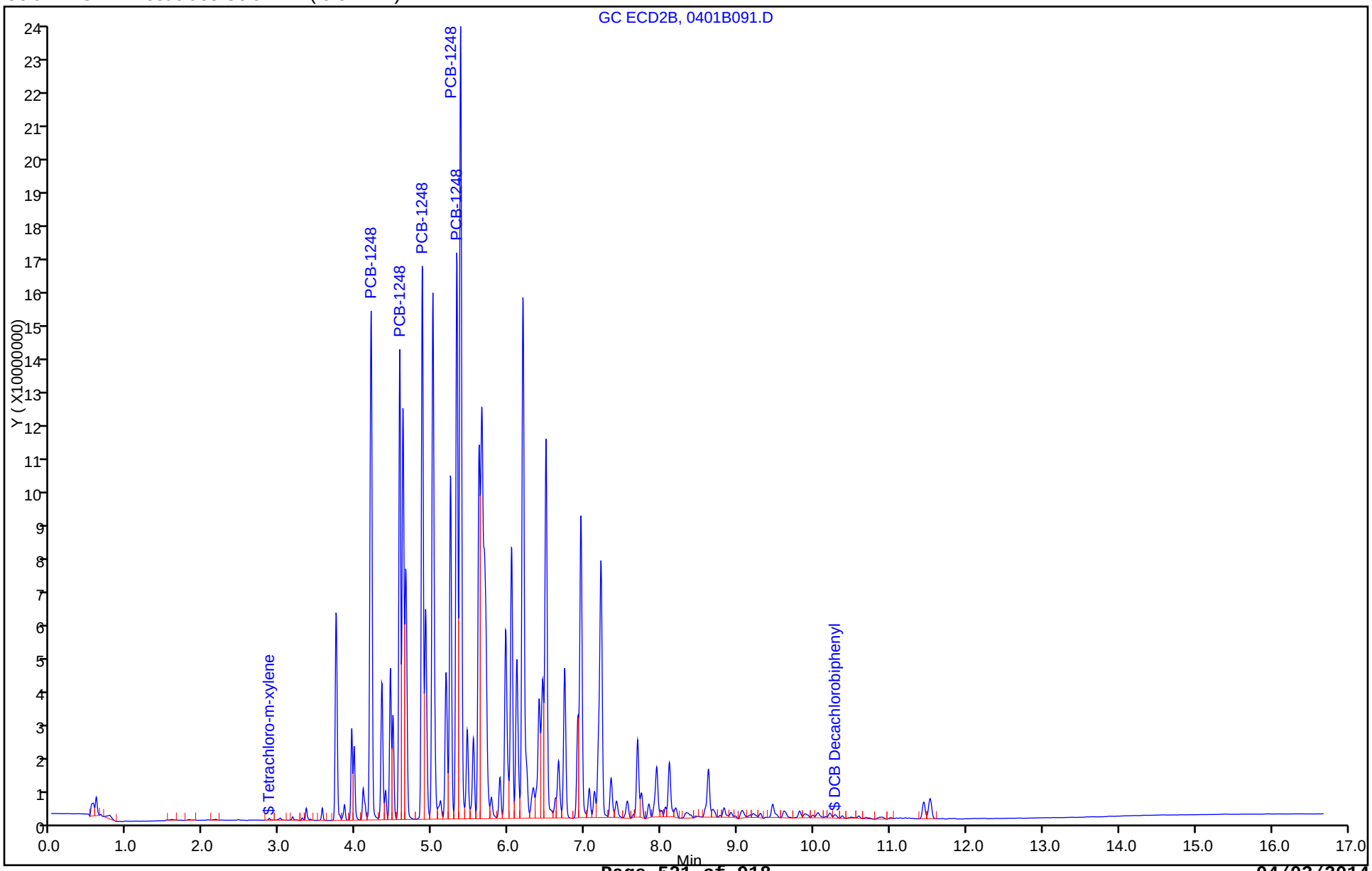
RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
4 PCB-1248					
4.196	4.194	0.002	295336793	599.5	
4.573	4.571	0.002	229296463	790.9	
4.866	4.868	-0.002	285734234	741.3	
5.320	5.321	-0.001	300872925	682.7	
5.370	5.371	-0.001	448943677	908.1	
	Average of Peak Amounts =			744.5	
9 PCB-1254					
	5.368				
	5.612				
	6.038				
	6.735				
	7.212				
12 PCB-1260					
	6.448				
	6.735				
	7.208				
	8.108				
	8.618				
5 PCB-1262					
	6.733				
	7.743				
	8.110				
	8.613				
	9.463				
13 PCB-1268					
	8.610				
	8.673				
	9.030				
	9.173				
	9.927				
$ 15 DCB Decachlorobiphenyl					
10.276	10.295	-0.019	2831142	0.0350	
S 8 Polychlorinated biphenyls, Total					
				744.5	

Report Date: 03-Apr-2014 09:29:34 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B091.D				
Injection Date:	02-Apr-2014 22:36:22	Instrument ID:	SGC_P3b	Operator ID:	JAX
Lims ID:	280-53458-A-35-A	Lab Sample ID:	280-53458-35	Worklist Smp#:	90
Client ID:	SB-47-0				
Injection Vol:	1.0 ul	Dil. Factor:	500.0000	ALS Bottle#:	91
Method:	PCB_P3b	Limit Group:	GCSV - 8082		

Column: CLP2 Pesticides Column 2 (0.32 mm)



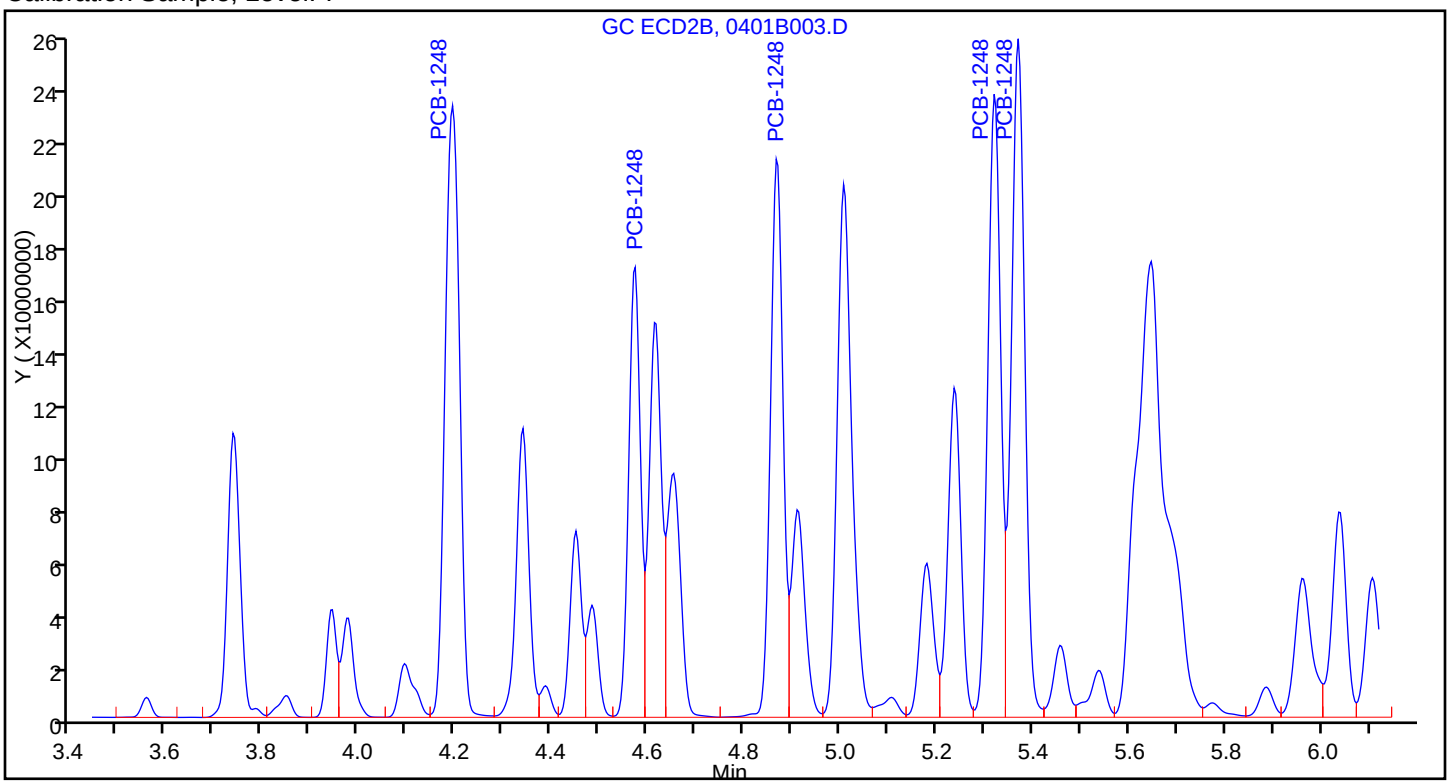
Report Date: 03-Apr-2014 09:29:34 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B091.D				
Injection Date:	02-Apr-2014 22:36:22	Instrument ID:	SGC_P3b		
Lims ID:	280-53458-A-35-A	Lab Sample ID:	280-53458-35		
Client ID:	SB-47-0				
Operator ID:	JAX	ALS Bottle#:	91	Worklist Smp#:	90
Injection Vol:	1.0 ul	Dil. Factor:	500.0000		
Method:	PCB_P3b	Limit Group:	GCSV - 8082		
Column:	CLP2 Pesticides Column 2 (0.32 mm)	Detector	GC ECD2B		

4 PCB-1248, CAS: 12672-29-6

Calibration Sample, Level: 7



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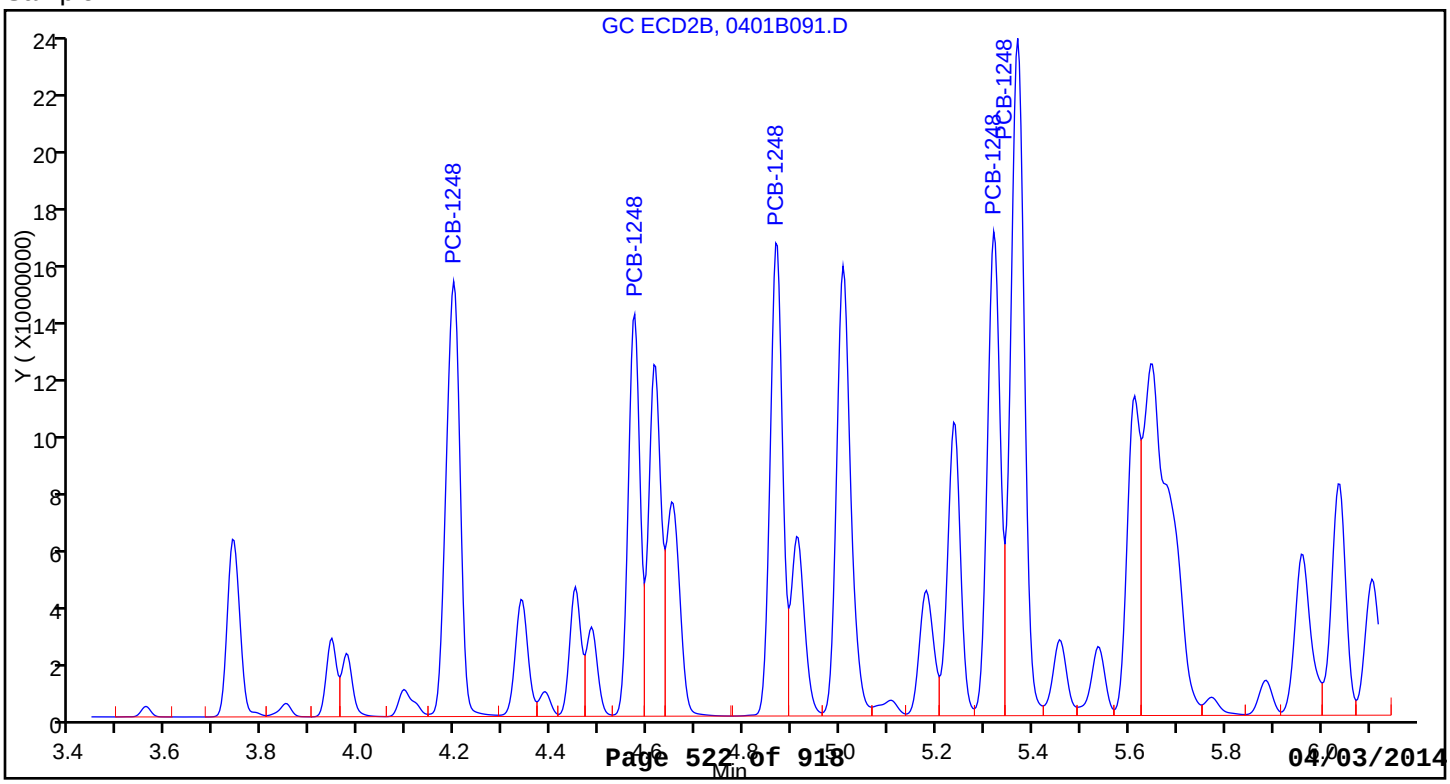


FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-53458-1

SDG No.:

Client Sample ID: SB-48-0 | Lab Sample ID: 280-53458-36

Matrix: Solid | Lab File ID: 0401A092.D

Analysis Method: 8082A | Date Collected: 03/20/2014 09:50

Extraction Method: 3546 | Date Extracted: 03/27/2014 14:30

Sample wt/vol: 31.1(g) | Date Analyzed: 04/02/2014 22:36

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: CLP1 ID: 0.32(mm)

% Moisture: 5.3 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 219270 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
11104-28-2	PCB-1221	ND		48	16
12674-11-2	PCB-1016	ND		34	5.2
11141-16-5	PCB-1232	ND		34	5.2
53469-21-9	PCB-1242	ND		34	9.3
12672-29-6	PCB-1248	150		34	5.7
11097-69-1	PCB-1254	ND		34	5.6
11096-82-5	PCB-1260	ND		34	2.7
37324-23-5	PCB-1262	ND		34	12
11100-14-4	PCB-1268	ND		34	4.0
1336-36-3	Polychlorinated biphenyls, Total	150		34	2.7

CAS NO.	SURROGATE	%REC	Q	LIMITS
877-09-8	Tetrachloro-m-xylene	89		53-128
2051-24-3	DCB Decachlorobiphenyl	68		59-130

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A092.D
Lims ID: 280-53458-A-36-A Lab Sample ID: 280-53458-36
Client ID: SB-48-0
Sample Type: Client
Inject. Date: 02-Apr-2014 22:36:22 ALS Bottle#: 92 Worklist Smp#: 91
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-53458-A-36-A
Operator ID: JAX Instrument ID: SGC_P3a

Method: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\PCB_P3a.m
Limit Group: GCSV - 8082
Last Update: 03-Apr-2014 08:32:47 Calib Date: 02-Apr-2014 02:52:35
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A037.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Process Host: XAWRK052

First Level Reviewer: jacksonto Date: 03-Apr-2014 07:00:38

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
$ 1 Tetrachloro-m-xylene					
2.847	2.845	0.002	64161018	17.9	
2 PCB-1221					
	3.042				
	3.179				
	3.216				
3 PCB-1232					
	3.214				
	3.554				
	4.018				
	4.158				
	4.608				
4 PCB-1248					
3.554	3.554	0.0	9738352	161.9	
4.020	4.014	0.006	40997844	259.9	
4.607	4.611	-0.004	104007328	652.7	
5.310	5.311	-0.001	73001569	750.5	
0.0	5.851	-5.851	0	0	E
	Average of Peak Amounts =			456.2	
5 PCB-1016					
	3.555				
	4.019				
	4.159				
	4.222				
	4.609				

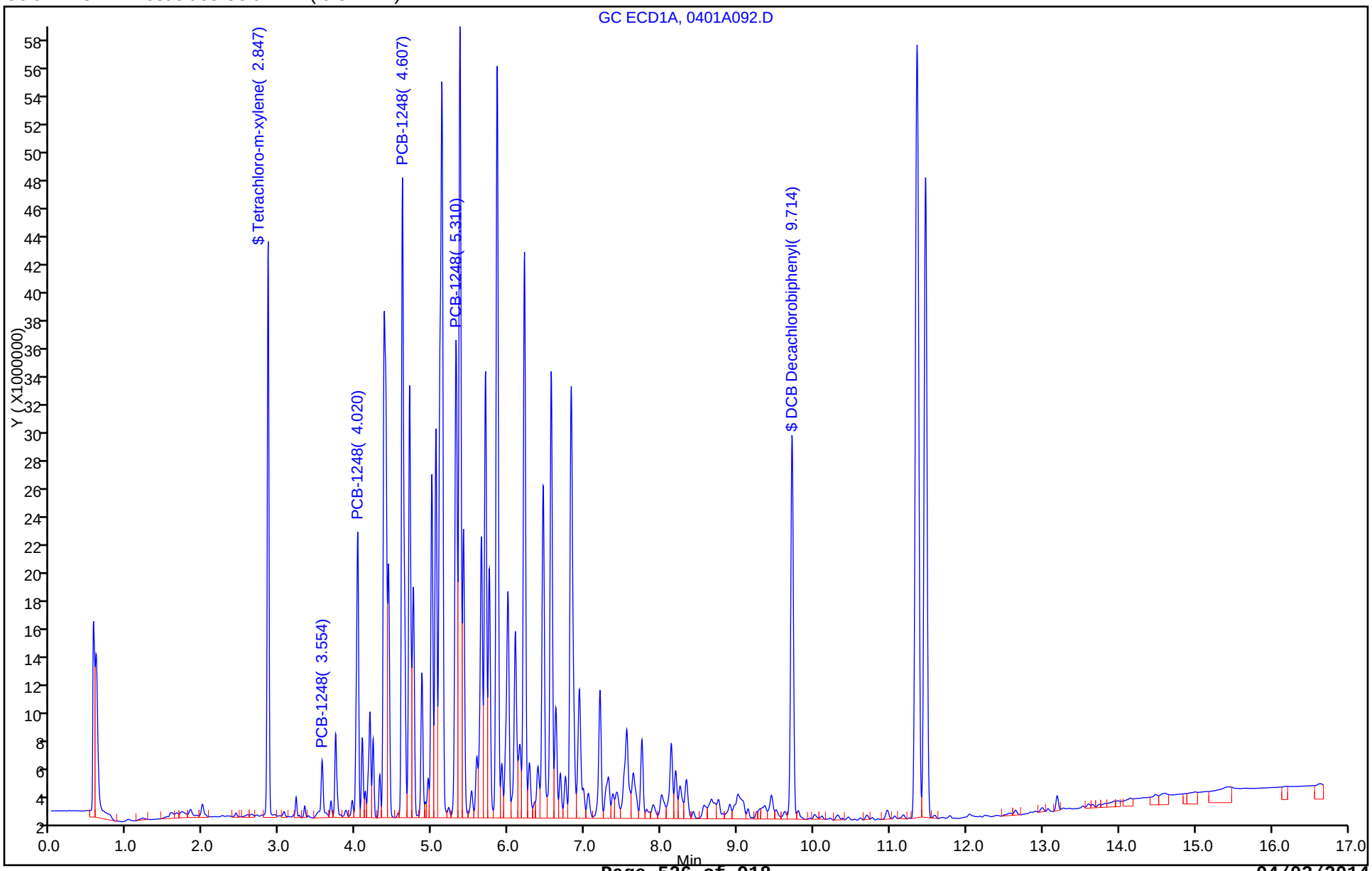
RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
6 PCB-1242					
3.556					
4.019					
4.159					
4.222					
4.609					
7 PCB-1254					
5.049					
5.366					
5.852					
6.209					
6.822					
10 PCB-1262					
6.088					
6.454					
7.044					
7.424					
8.254					
8 PCB-1260					
6.089					
6.819					
7.312					
7.749					
8.132					
12 PCB-1268					
8.196					
8.246					
8.519					
8.639					
9.442					
$ 13 DCB Decachlorobiphenyl					
9.714	9.715	-0.001	66114069	13.6	
S 15 Polychlorinated biphenyls, Total					
				456.2	

Report Date: 03-Apr-2014 08:32:51 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A092.D				
Injection Date:	02-Apr-2014 22:36:22	Instrument ID:	SGC_P3a	Operator ID:	JAX
Lims ID:	280-53458-A-36-A	Lab Sample ID:	280-53458-36	Worklist Smp#:	91
Client ID:	SB-48-0				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	92
Method:	PCB_P3a	Limit Group:	GCSV - 8082		

Column: CLP1 Pesticides Column 1 (0.32 mm)



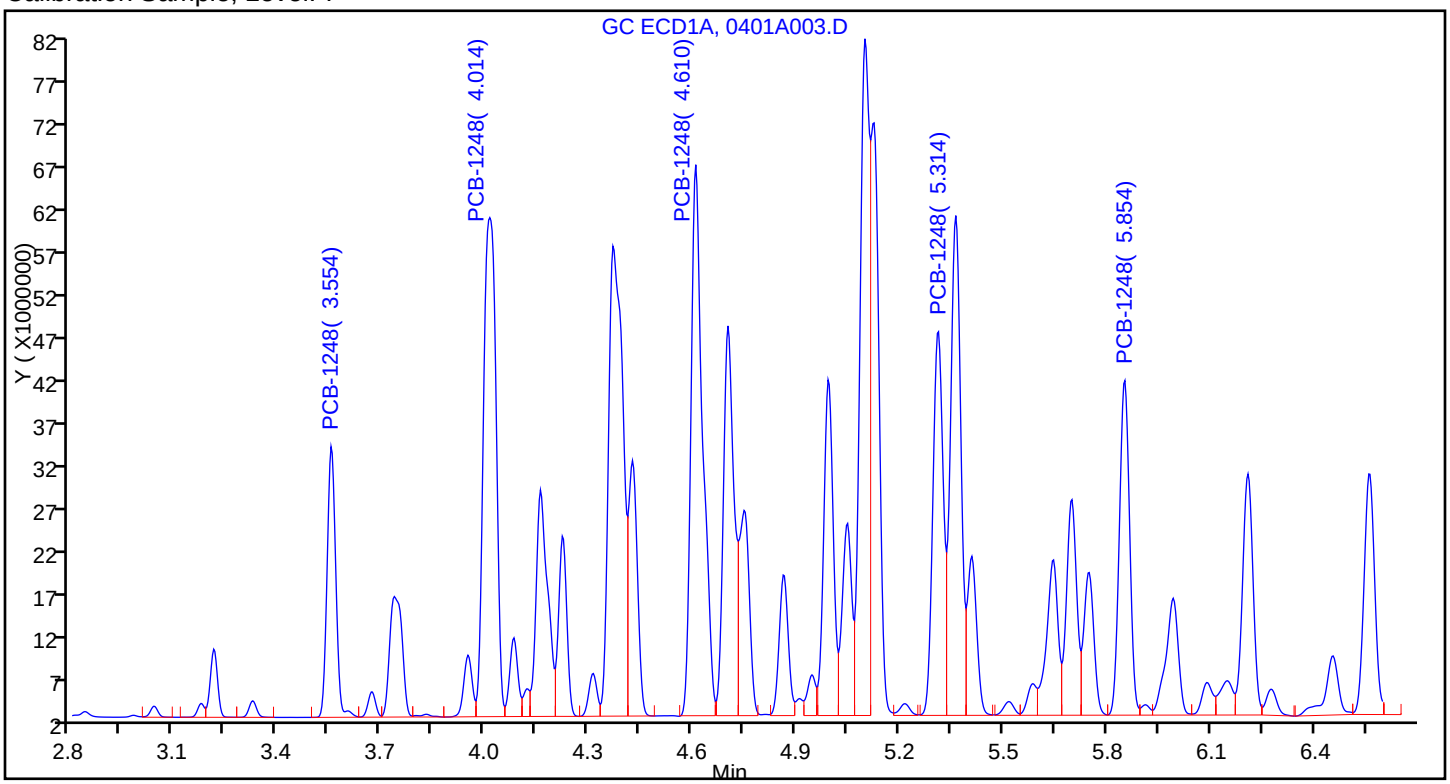
Report Date: 03-Apr-2014 08:32:52 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

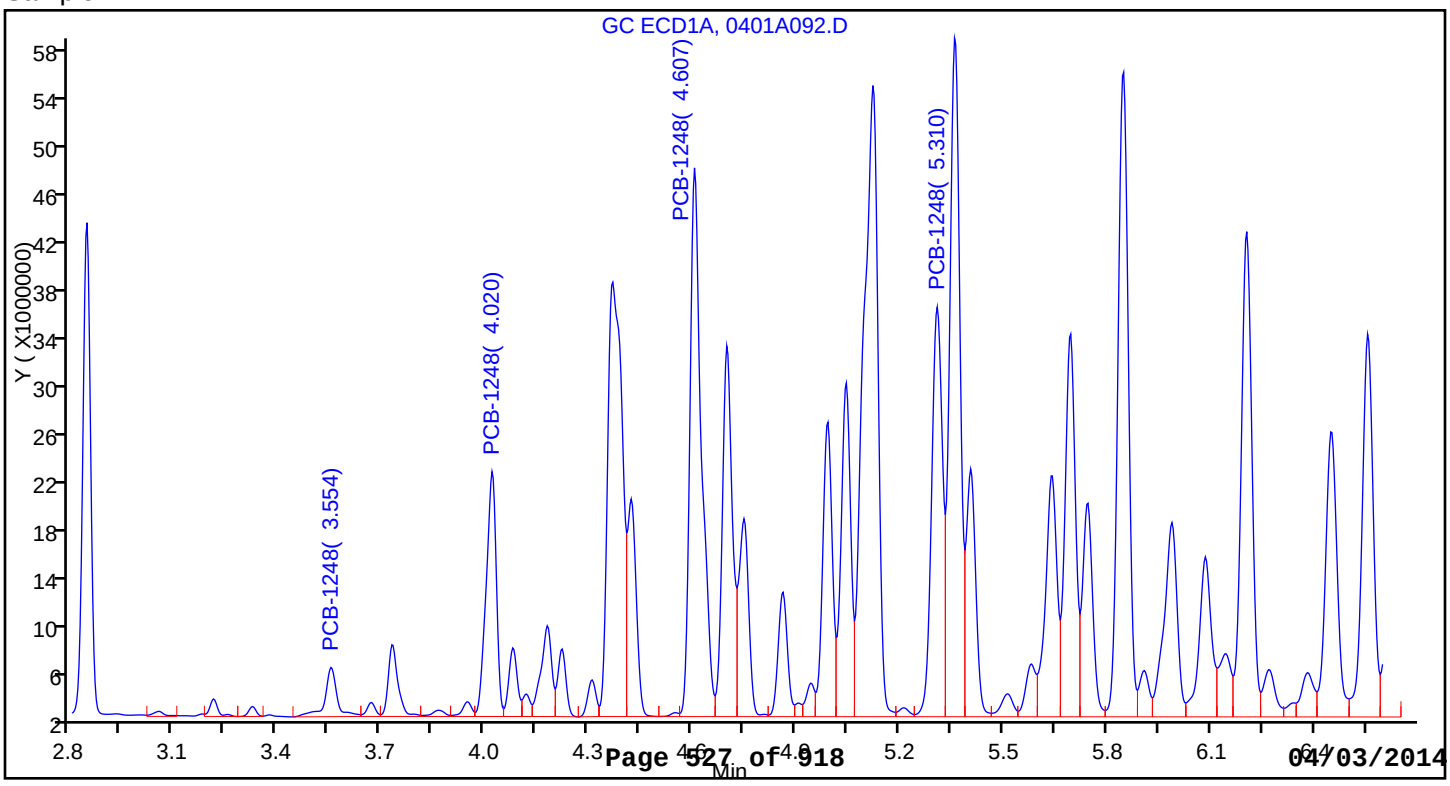
Data File:	\\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A092.D				
Injection Date:	02-Apr-2014 22:36:22	Instrument ID:	SGC_P3a		
Lims ID:	280-53458-A-36-A	Lab Sample ID:	280-53458-36		
Client ID:	SB-48-0				
Operator ID:	JAX	ALS Bottle#:	92	Worklist Smp#:	91
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	PCB_P3a	Limit Group:	GCSV - 8082		
Column:	CLP1 Pesticides Column 1 (0.32 mm)	Detector	GC ECD1A		

4 PCB-1248, CAS: 12672-29-6

Calibration Sample, Level: 7



Sample



FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-53458-1

SDG No.:

Client Sample ID: SB-48-0 | Lab Sample ID: 280-53458-36

Matrix: Solid | Lab File ID: 0401B092.D

Analysis Method: 8082A | Date Collected: 03/20/2014 09:50

Extraction Method: 3546 | Date Extracted: 03/27/2014 14:30

Sample wt/vol: 31.1(g) | Date Analyzed: 04/02/2014 22:57

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: CLP2 ID: 0.32(mm)

% Moisture: 5.3 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 219272 | Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
877-09-8	Tetrachloro-m-xylene	91		53-128
2051-24-3	DCB Decachlorobiphenyl	65		59-130

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B092.D
Lims ID: 280-53458-A-36-A Lab Sample ID: 280-53458-36
Client ID: SB-48-0
Sample Type: Client
Inject. Date: 02-Apr-2014 22:57:38 ALS Bottle#: 92 Worklist Smp#: 91
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-53458-A-36-A
Operator ID: JAX Instrument ID: SGC_P3b

Method: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\PCB_P3b.m
Limit Group: GCSV - 8082
Last Update: 03-Apr-2014 09:29:30 Calib Date: 02-Apr-2014 03:13:50
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B037.D

Column 1 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK052

First Level Reviewer: jacksonto Date: 03-Apr-2014 08:20:58

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
$ 14 Tetrachloro-m-xylene					
2.861	2.862	-0.001	229501946	18.3	
3 PCB-1221					
	3.165				
	3.292				
	3.348				
7 PCB-1232					
	3.166				
	3.346				
	4.196				
	4.340				
	4.870				
10 PCB-1242					
	3.347				
	4.193				
	4.340				
	4.867				
	5.007				
1 PCB-1016					
	3.738				
	4.195				
	4.342				
	4.868				
	5.008				

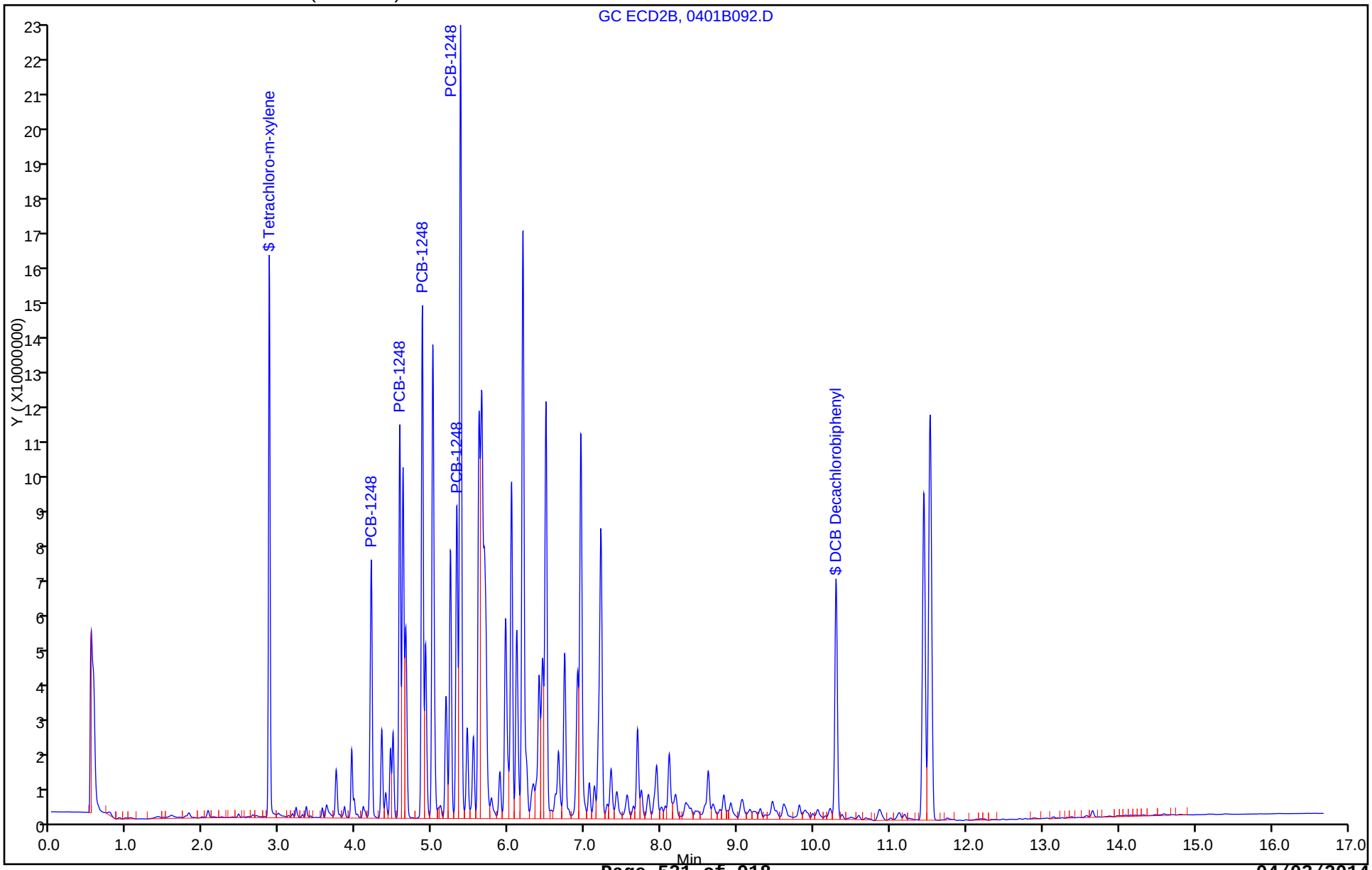
RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
4 PCB-1248					
4.198	4.194	0.004	135940701	271.1	
4.571	4.571	0.0	188930995	649.9	
4.868	4.868	0.0	258708923	669.7	
5.321	5.321	0.0	162962711	365.4	
5.368	5.371	-0.003	423761163	856.5	
	Average of Peak Amounts =			562.5	
9 PCB-1254					
	5.368				
	5.612				
	6.038				
	6.735				
	7.212				
12 PCB-1260					
	6.448				
	6.735				
	7.208				
	8.108				
	8.618				
5 PCB-1262					
	6.733				
	7.743				
	8.110				
	8.613				
	9.463				
13 PCB-1268					
	8.610				
	8.673				
	9.030				
	9.173				
	9.927				
$ 15 DCB Decachlorobiphenyl					
10.291	10.295	-0.004	154757093	13.0	
S 8 Polychlorinated biphenyls, Total					
				562.5	

Report Date: 03-Apr-2014 09:29:35 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B092.D				
Injection Date:	02-Apr-2014 22:57:38	Instrument ID:	SGC_P3b	Operator ID:	JAX
Lims ID:	280-53458-A-36-A	Lab Sample ID:	280-53458-36	Worklist Smp#:	91
Client ID:	SB-48-0				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	92
Method:	PCB_P3b	Limit Group:	GCSV - 8082		

Column: CLP2 Pesticides Column 2 (0.32 mm)



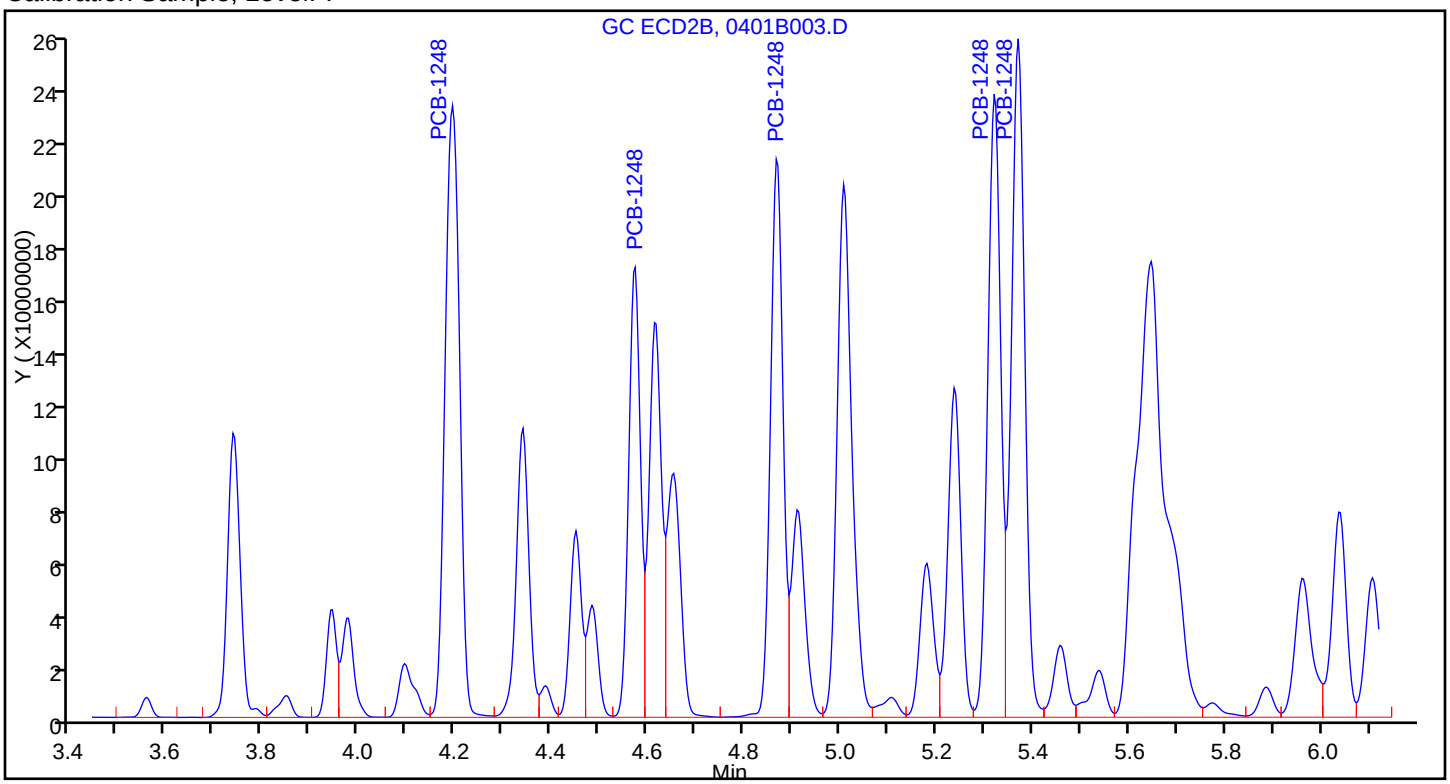
Report Date: 03-Apr-2014 09:29:35 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

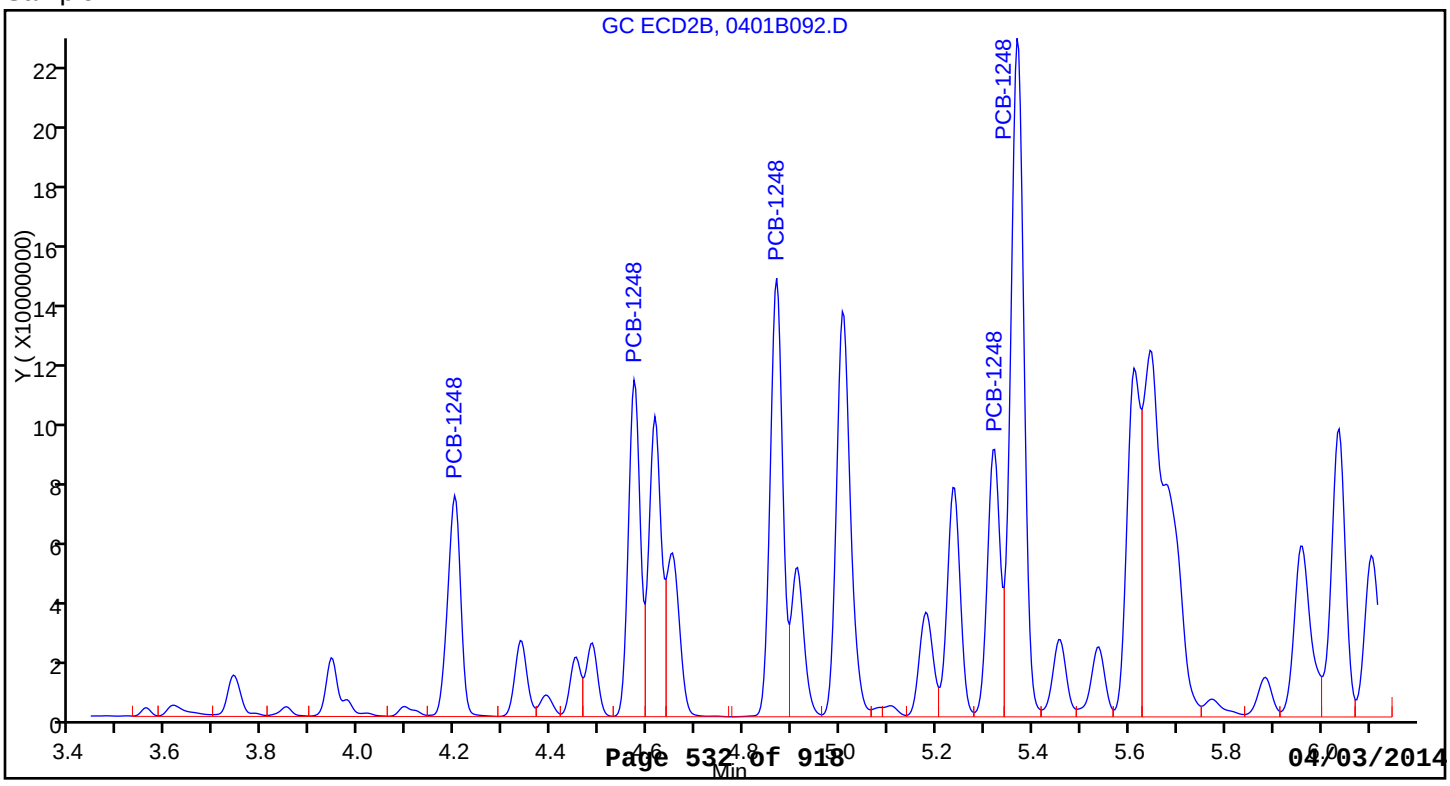
Data File:	\\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B092.D				
Injection Date:	02-Apr-2014 22:57:38	Instrument ID:	SGC_P3b		
Lims ID:	280-53458-A-36-A	Lab Sample ID:	280-53458-36		
Client ID:	SB-48-0				
Operator ID:	JAX	ALS Bottle#:	92	Worklist Smp#:	91
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	PCB_P3b	Limit Group:	GCSV - 8082		
Column:	CLP2 Pesticides Column 2 (0.32 mm)	Detector	GC ECD2B		

4 PCB-1248, CAS: 12672-29-6

Calibration Sample, Level: 7



Sample



FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-53458-1

SDG No.:

Client Sample ID: SB-49-0 | Lab Sample ID: 280-53458-37

Matrix: Solid | Lab File ID: 0401A093.D

Analysis Method: 8082A | Date Collected: 03/20/2014 09:40

Extraction Method: 3546 | Date Extracted: 03/27/2014 14:30

Sample wt/vol: 30.6(g) | Date Analyzed: 04/02/2014 22:57

Con. Extract Vol.: 10(mL) | Dilution Factor: 20

Injection Volume: 1(uL) | GC Column: CLP1 ID: 0.32(mm)

% Moisture: 5.5 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 219270 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
11104-28-2	PCB-1221	ND		980	320
12674-11-2	PCB-1016	ND		690	110
11141-16-5	PCB-1232	ND		690	110
53469-21-9	PCB-1242	ND		690	190
12672-29-6	PCB-1248	3500		690	120
11097-69-1	PCB-1254	ND		690	110
11096-82-5	PCB-1260	ND		690	55
37324-23-5	PCB-1262	ND		690	240
11100-14-4	PCB-1268	ND		690	82
1336-36-3	Polychlorinated biphenyls, Total	3500		690	55

CAS NO.	SURROGATE	%REC	Q	LIMITS
877-09-8	Tetrachloro-m-xylene	0	D X	53-128
2051-24-3	DCB Decachlorobiphenyl	0	D X	59-130

TestAmerica Denver
Target Compound Quantitation Report

Data File:	\\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A093.D				
Lims ID:	280-53458-A-37-A	Lab Sample ID:	280-53458-37		
Client ID:	SB-49-0				
Sample Type:	Client				
Inject. Date:	02-Apr-2014 22:57:38	ALS Bottle#:	93	Worklist Smp#:	92
Injection Vol:	1.0 ul	Dil. Factor:	20.0000		
Sample Info:	280-53458-A-37-A				
Operator ID:	JAX	Instrument ID:	SGC_P3a		
Method:	\\Denchrom\ChromData\SGC_P3a\20140401-21600.b\PCB_P3a.m				
Limit Group:	GCSV - 8082				
Last Update:	03-Apr-2014 08:32:47	Calib Date:	02-Apr-2014 02:52:35		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A037.D				
Column 1 :	CLP1 Pesticides Column 1 (0.32 mm)		Det: GC ECD1A		
Process Host:	XAWRK052				
First Level Reviewer: jacksonto		Date:	03-Apr-2014 07:01:10		

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
$ 1 Tetrachloro-m-xylene					
2.845					
2 PCB-1221					
3.042					
3.179					
3.216					
3 PCB-1232					
3.214					
3.554					
4.018					
4.158					
4.608					
4 PCB-1248					
3.555	3.554	0.001	15055278	255.7	
4.015	4.014	0.001	52642263	336.5	
4.609	4.611	-0.002	69211405	430.4	
5.309	5.311	-0.002	55369037	567.2	
5.849	5.851	-0.002	76472621	917.0	
	Average of Peak Amounts =			501.4	
5 PCB-1016					
3.555					
4.019					
4.159					
4.222					
4.609					

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags

6 PCB-1242
3.556
4.019
4.159
4.222
4.609

7 PCB-1254
5.049
5.366
5.852
6.209
6.822

10 PCB-1262
6.088
6.454
7.044
7.424
8.254

8 PCB-1260
6.089
6.819
7.312
7.749
8.132

12 PCB-1268
8.196
8.246
8.519
8.639
9.442

$ 13 DCB Decachlorobiphenyl
9.715

S 15 Polychlorinated biphenyls, Total

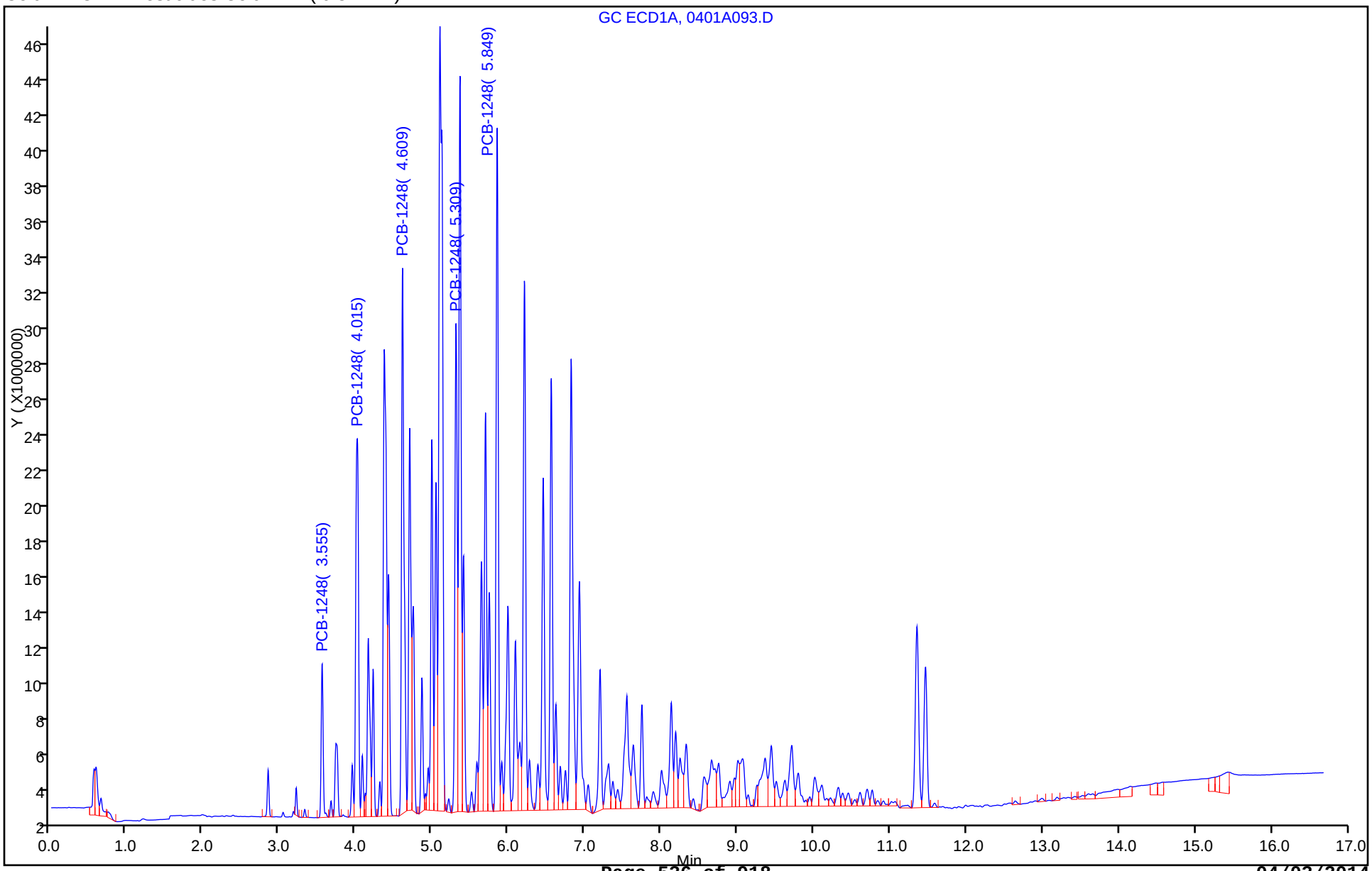
501.4

Report Date: 03-Apr-2014 08:32:52 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A093.D				
Injection Date:	02-Apr-2014 22:57:38	Instrument ID:	SGC_P3a	Operator ID:	JAX
Lims ID:	280-53458-A-37-A	Lab Sample ID:	280-53458-37	Worklist Smp#:	92
Client ID:	SB-49-0				
Injection Vol:	1.0 ul	Dil. Factor:	20.0000	ALS Bottle#:	93
Method:	PCB_P3a	Limit Group:	GCSV - 8082		

Column: CLP1 Pesticides Column 1 (0.32 mm)



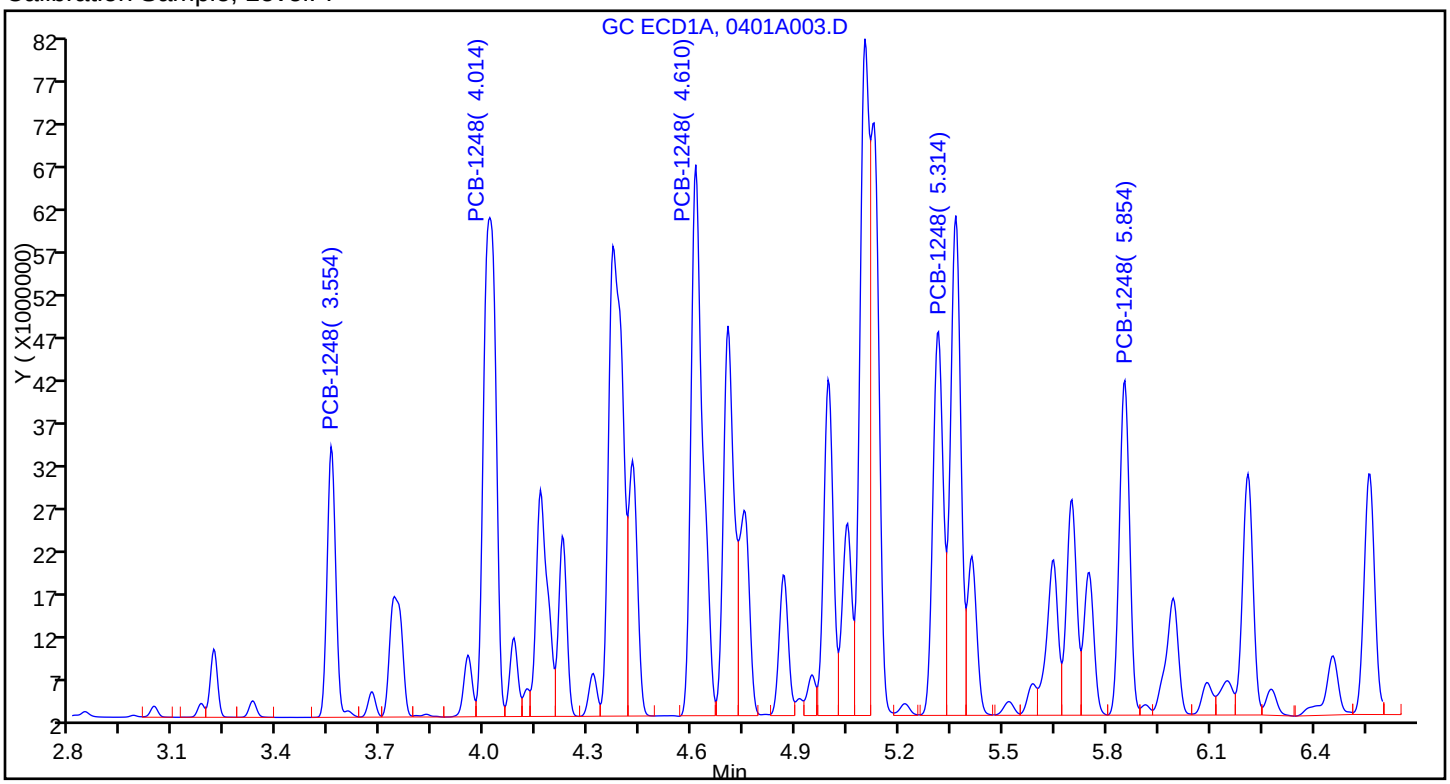
Report Date: 03-Apr-2014 08:32:52 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

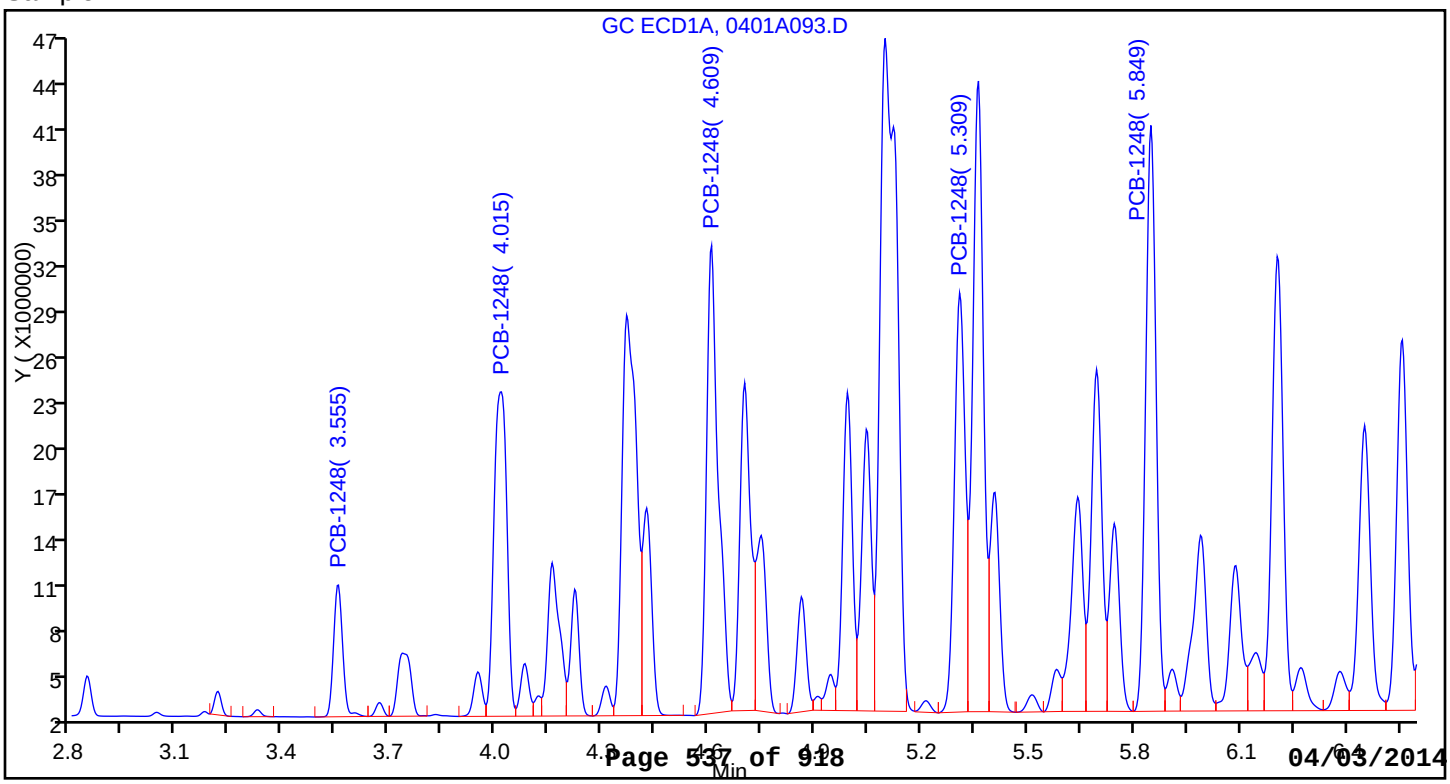
Data File:	\\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A093.D				
Injection Date:	02-Apr-2014 22:57:38	Instrument ID:	SGC_P3a		
Lims ID:	280-53458-A-37-A	Lab Sample ID:	280-53458-37		
Client ID:	SB-49-0				
Operator ID:	JAX	ALS Bottle#:	93	Worklist Smp#:	92
Injection Vol:	1.0 ul	Dil. Factor:	20.0000		
Method:	PCB_P3a	Limit Group:	GCSV - 8082		
Column:	CLP1 Pesticides Column 1 (0.32 mm)	Detector	GC ECD1A		

4 PCB-1248, CAS: 12672-29-6

Calibration Sample, Level: 7



Sample



FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-53458-1

SDG No.:

Client Sample ID: SB-49-0 | Lab Sample ID: 280-53458-37

Matrix: Solid | Lab File ID: 0401B093.D

Analysis Method: 8082A | Date Collected: 03/20/2014 09:40

Extraction Method: 3546 | Date Extracted: 03/27/2014 14:30

Sample wt/vol: 30.6(g) | Date Analyzed: 04/02/2014 23:19

Con. Extract Vol.: 10(mL) | Dilution Factor: 20

Injection Volume: 1(uL) | GC Column: CLP2 ID: 0.32(mm)

% Moisture: 5.5 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 219272 | Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
877-09-8	Tetrachloro-m-xylene	0	X D	53-128
2051-24-3	DCB Decachlorobiphenyl	0	X D	59-130

TestAmerica Denver
Target Compound Quantitation Report

Data File:	\\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B093.D				
Lims ID:	280-53458-A-37-A	Lab Sample ID:	280-53458-37		
Client ID:	SB-49-0				
Sample Type:	Client				
Inject. Date:	02-Apr-2014 23:19:02	ALS Bottle#:	93	Worklist Smp#:	92
Injection Vol:	1.0 ul	Dil. Factor:	20.0000		
Sample Info:	280-53458-A-37-A				
Operator ID:	JAX	Instrument ID:	SGC_P3b		
Method:	\\Denchrom\ChromData\SGC_P3b\20140401-21601.b\PCB_P3b.m				
Limit Group:	GCSV - 8082				
Last Update:	03-Apr-2014 09:29:30	Calib Date:	02-Apr-2014 03:13:50		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B037.D				
Column 1 :	CLP2 Pesticides Column 2 (0.32 mm)		Det: GC ECD2B		
Process Host:	XAWRK052				
First Level Reviewer: jacksonto		Date:	03-Apr-2014 08:23:47		

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
$ 14 Tetrachloro-m-xylene					
2.862					
3 PCB-1221					
3.165					
3.292					
3.348					
7 PCB-1232					
3.166					
3.346					
4.196					
4.340					
4.870					
10 PCB-1242					
3.347					
4.193					
4.340					
4.867					
5.007					
1 PCB-1016					
3.738					
4.195					
4.342					
4.868					
5.008					

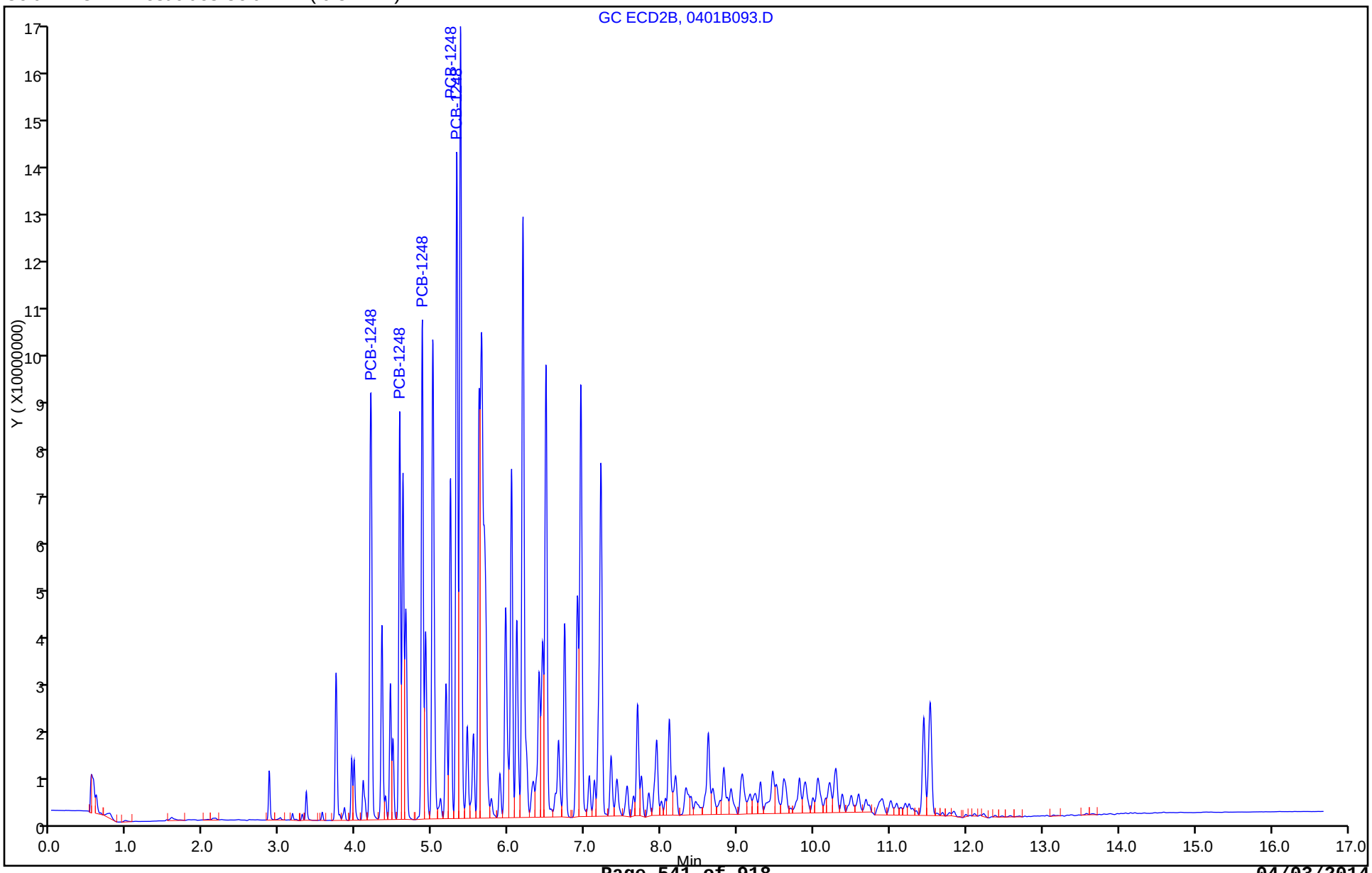
RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
4 PCB-1248					
4.194	4.194	0.0	178054763	357.8	
4.571	4.571	0.0	139604834	477.6	
4.868	4.868	0.0	179467633	459.5	
5.318	5.321	-0.003	250782686	567.5	
5.368	5.371	-0.003	301803046	606.9	
	Average of Peak Amounts =			493.9	
9 PCB-1254					
	5.368				
	5.612				
	6.038				
	6.735				
	7.212				
12 PCB-1260					
	6.448				
	6.735				
	7.208				
	8.108				
	8.618				
5 PCB-1262					
	6.733				
	7.743				
	8.110				
	8.613				
	9.463				
13 PCB-1268					
	8.610				
	8.673				
	9.030				
	9.173				
	9.927				
$ 15 DCB Decachlorobiphenyl					
	10.295				
S 8 Polychlorinated biphenyls, Total					
				493.9	

Report Date: 03-Apr-2014 09:29:36 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B093.D				
Injection Date:	02-Apr-2014 23:19:02	Instrument ID:	SGC_P3b	Operator ID:	JAX
Lims ID:	280-53458-A-37-A	Lab Sample ID:	280-53458-37	Worklist Smp#:	92
Client ID:	SB-49-0				
Injection Vol:	1.0 ul	Dil. Factor:	20.0000	ALS Bottle#:	93
Method:	PCB_P3b	Limit Group:	GCSV - 8082		

Column: CLP2 Pesticides Column 2 (0.32 mm)



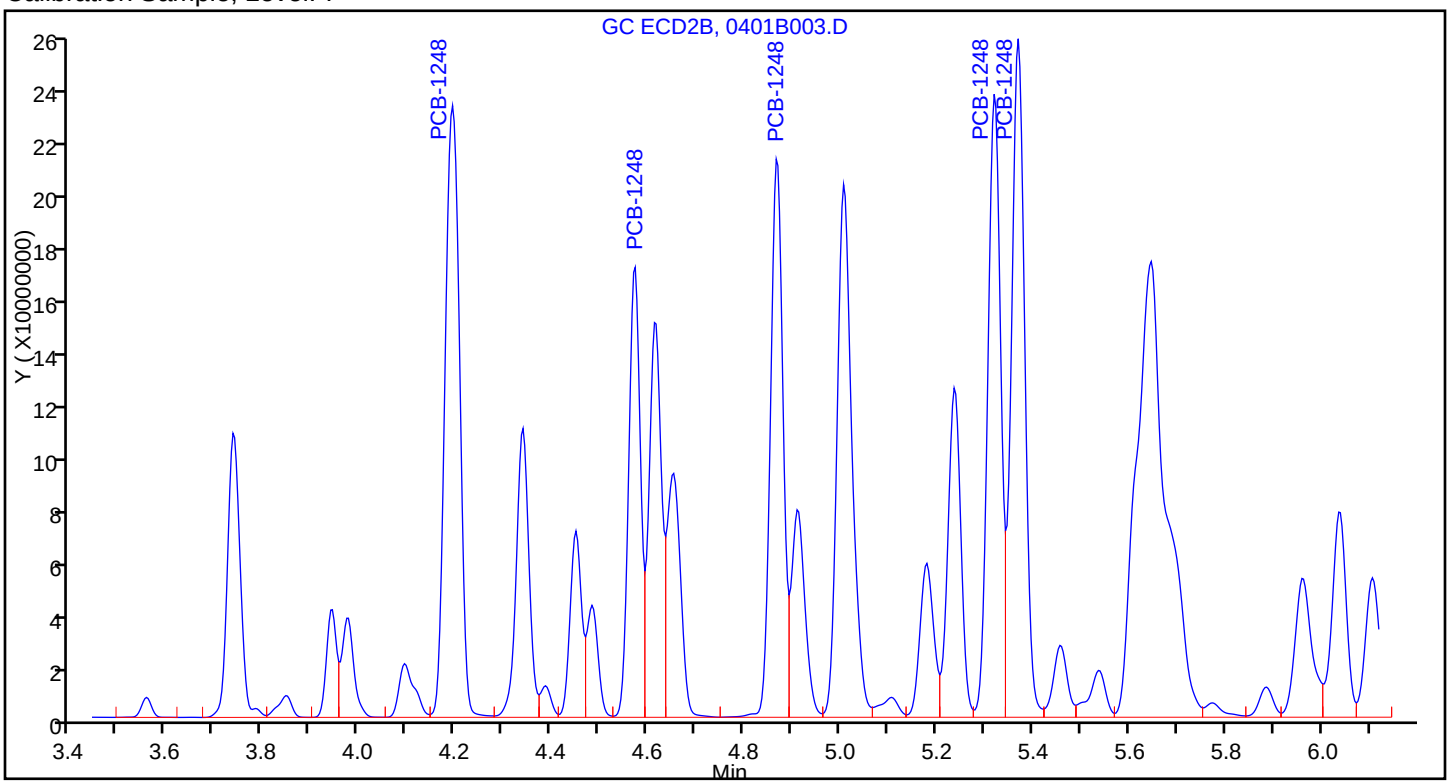
Report Date: 03-Apr-2014 09:29:36 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

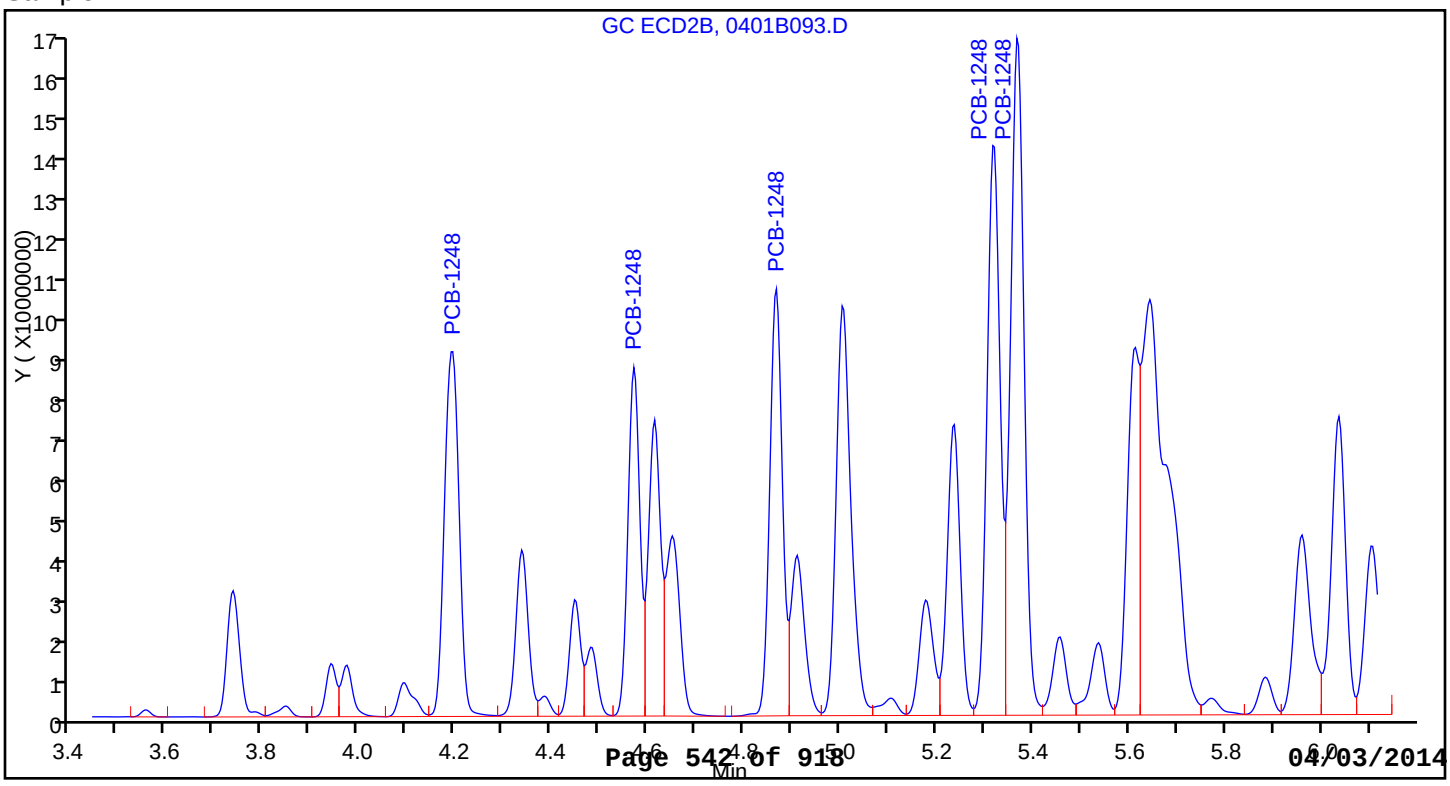
Data File:	\\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B093.D				
Injection Date:	02-Apr-2014 23:19:02	Instrument ID:	SGC_P3b		
Lims ID:	280-53458-A-37-A	Lab Sample ID:	280-53458-37		
Client ID:	SB-49-0				
Operator ID:	JAX	ALS Bottle#:	93	Worklist Smp#:	92
Injection Vol:	1.0 ul	Dil. Factor:	20.0000		
Method:	PCB_P3b	Limit Group:	GCSV - 8082		
Column:	CLP2 Pesticides Column 2 (0.32 mm)	Detector	GC ECD2B		

4 PCB-1248, CAS: 12672-29-6

Calibration Sample, Level: 7



Sample



FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-53458-1

SDG No.:

Client Sample ID: SB-50-0 | Lab Sample ID: 280-53458-38

Matrix: Solid | Lab File ID: 0401A094.D

Analysis Method: 8082A | Date Collected: 03/20/2014 11:36

Extraction Method: 3546 | Date Extracted: 03/27/2014 14:30

Sample wt/vol: 32.0(g) | Date Analyzed: 04/02/2014 23:19

Con. Extract Vol.: 10(mL) | Dilution Factor: 20000

Injection Volume: 1(uL) | GC Column: CLP1 ID: 0.32(mm)

% Moisture: 6.0 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 219270 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
11104-28-2	PCB-1221	ND		940000	310000
12674-11-2	PCB-1016	ND		660000	100000
11141-16-5	PCB-1232	ND		660000	100000
53469-21-9	PCB-1242	ND		660000	180000
12672-29-6	PCB-1248	3900000		660000	110000
11097-69-1	PCB-1254	ND		660000	110000
11096-82-5	PCB-1260	ND		660000	53000
37324-23-5	PCB-1262	ND		660000	230000
11100-14-4	PCB-1268	ND		660000	79000
1336-36-3	Polychlorinated biphenyls, Total	3900000		660000	53000

CAS NO.	SURROGATE	%REC	Q	LIMITS
877-09-8	Tetrachloro-m-xylene	0	D X	53-128
2051-24-3	DCB Decachlorobiphenyl	0	D X	59-130

TestAmerica Denver
Target Compound Quantitation Report

Data File:	\\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A094.D				
Lims ID:	280-53458-A-38-A	Lab Sample ID:	280-53458-38		
Client ID:	SB-50-0				
Sample Type:	Client				
Inject. Date:	02-Apr-2014 23:19:02	ALS Bottle#:	94	Worklist Smp#:	93
Injection Vol:	1.0 ul	Dil. Factor:	20000.0000		
Sample Info:	280-53458-A-38-A				
Operator ID:	JAX	Instrument ID:	SGC_P3a		
Method:	\\Denchrom\ChromData\SGC_P3a\20140401-21600.b\PCB_P3a.m				
Limit Group:	GCSV - 8082				
Last Update:	03-Apr-2014 08:32:47	Calib Date:	02-Apr-2014 02:52:35		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A037.D				
Column 1 :	CLP1 Pesticides Column 1 (0.32 mm)		Det: GC ECD1A		
Process Host:	XAWRK052				
First Level Reviewer: jacksonto		Date:	03-Apr-2014 07:01:22		

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
$ 1 Tetrachloro-m-xylene					
2.845					
2 PCB-1221					
3.042					
3.179					
3.216					
3 PCB-1232					
3.214					
3.554					
4.018					
4.158					
4.608					
4 PCB-1248					
3.555	3.554	0.001	23545366	405.5	
4.008	4.014	-0.006	68709190	442.4	
4.608	4.611	-0.003	85123076	532.1	
5.312	5.311	0.001	60963512	625.4	
5.848	5.851	-0.003	78555354	942.4	
	Average of Peak Amounts =			589.5	
5 PCB-1016					
3.555					
4.019					
4.159					
4.222					
4.609					

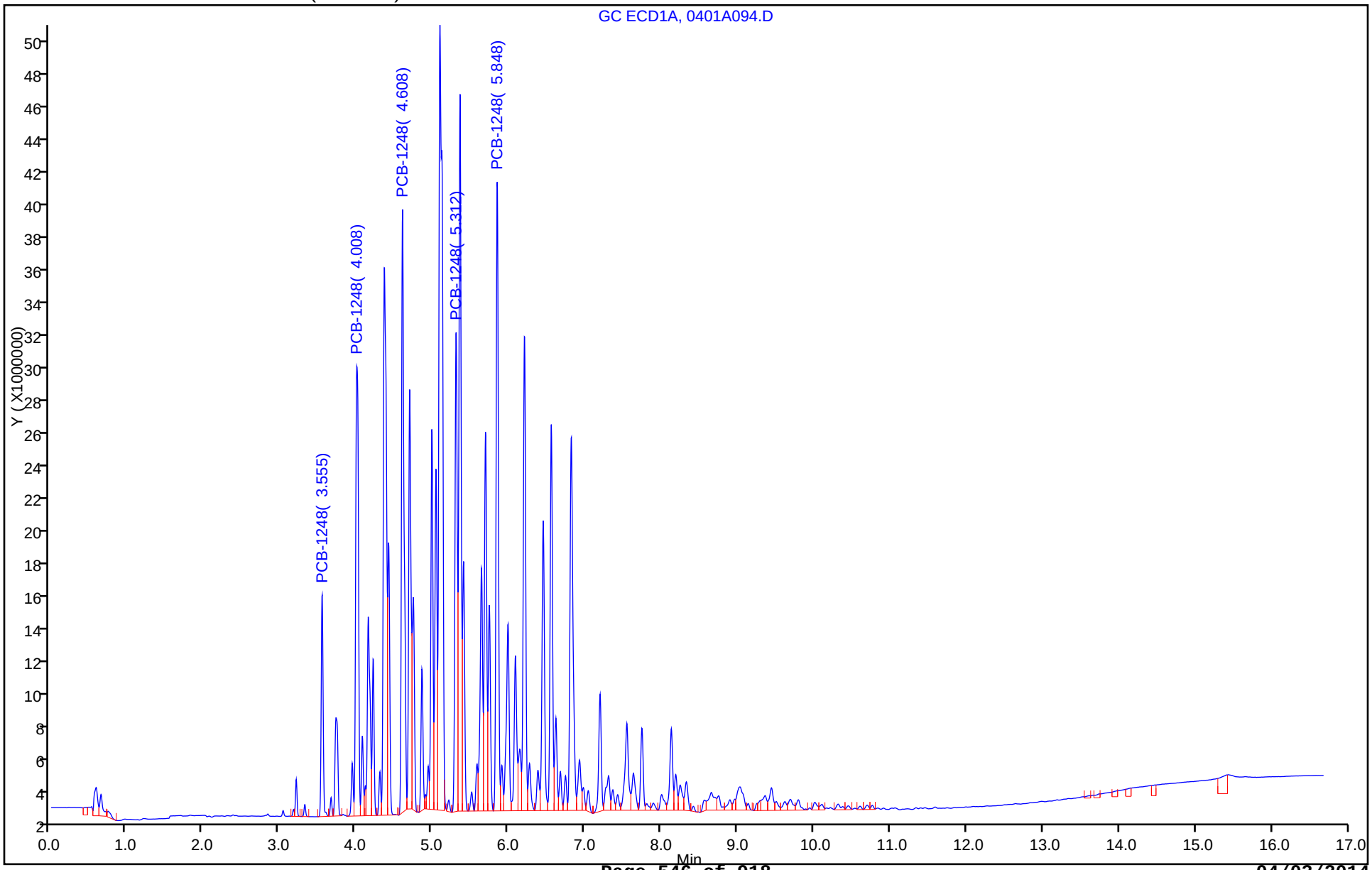
RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
6 PCB-1242					
3.556					
4.019					
4.159					
4.222					
4.609					
7 PCB-1254					
5.049					
5.366					
5.852					
6.209					
6.822					
10 PCB-1262					
6.088					
6.454					
7.044					
7.424					
8.254					
8 PCB-1260					
6.089					
6.819					
7.312					
7.749					
8.132					
12 PCB-1268					
8.196					
8.246					
8.519					
8.639					
9.442					
$ 13 DCB Decachlorobiphenyl					
9.715					
S 15 Polychlorinated biphenyls, Total					
			589.5		

Report Date: 03-Apr-2014 08:32:53 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A094.D				
Injection Date:	02-Apr-2014 23:19:02	Instrument ID:	SGC_P3a	Operator ID:	JAX
Lims ID:	280-53458-A-38-A	Lab Sample ID:	280-53458-38	Worklist Smp#:	93
Client ID:	SB-50-0				
Injection Vol:	1.0 ul	Dil. Factor:	20000.0000	ALS Bottle#:	94
Method:	PCB_P3a	Limit Group:	GCSV - 8082		

Column: CLP1 Pesticides Column 1 (0.32 mm)



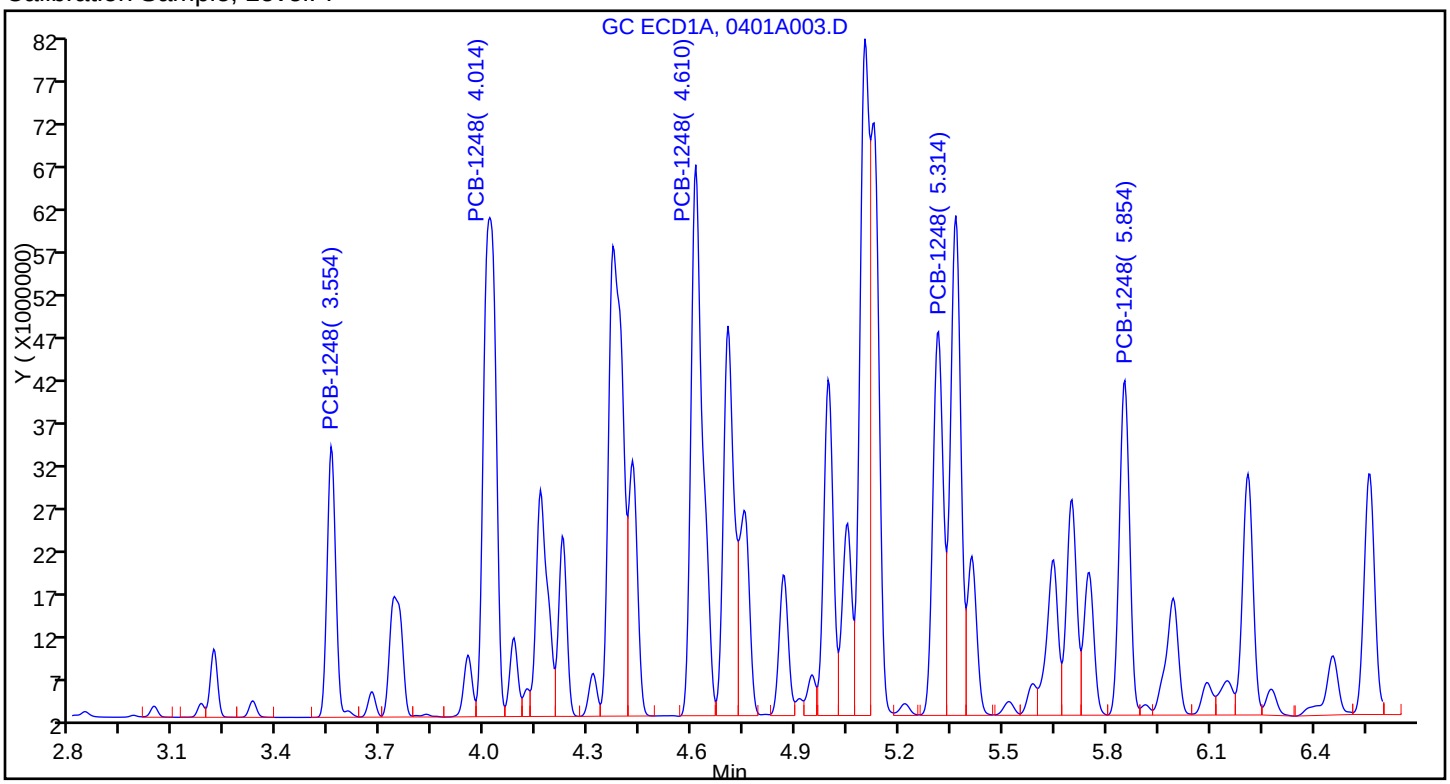
Report Date: 03-Apr-2014 08:32:53 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

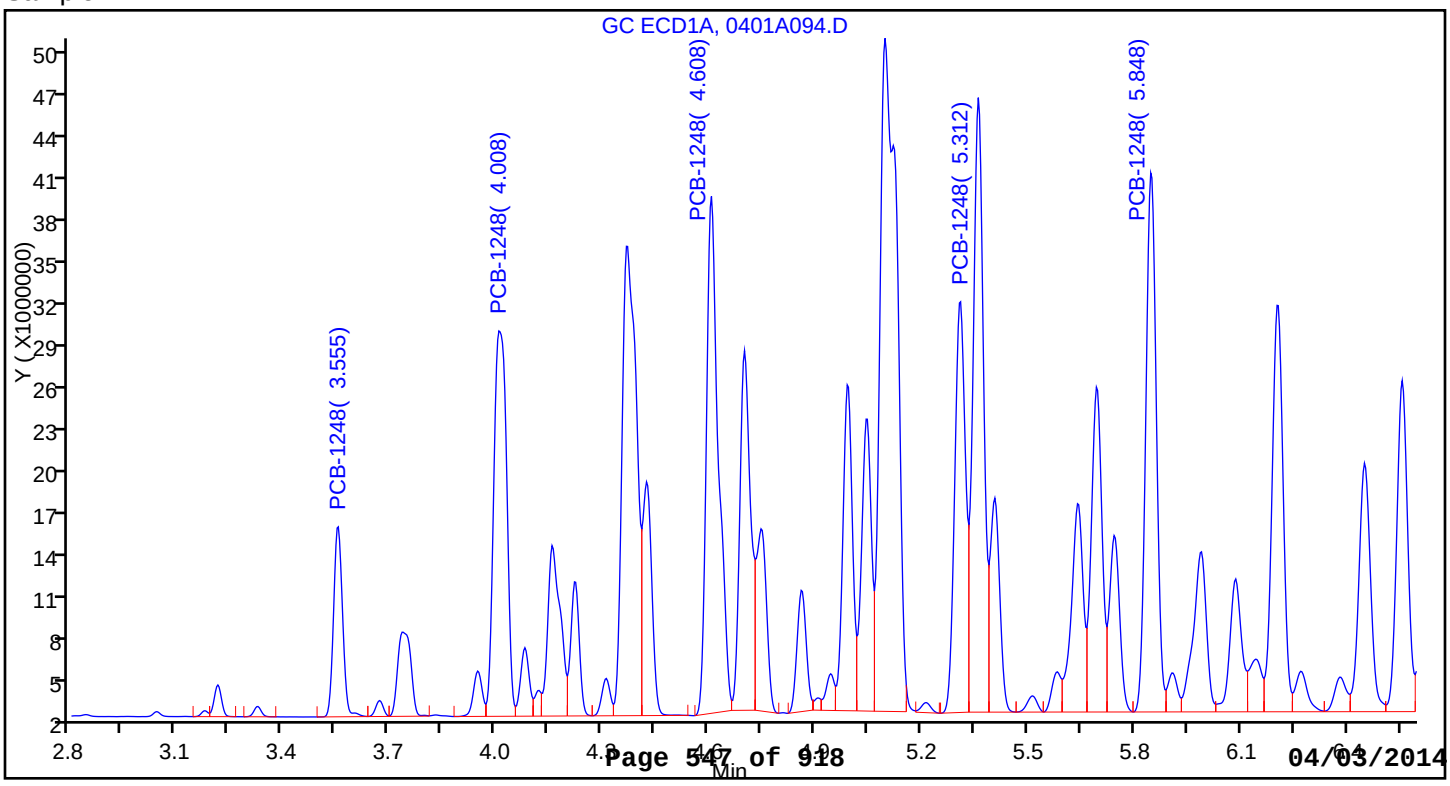
Data File:	\\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A094.D				
Injection Date:	02-Apr-2014 23:19:02	Instrument ID:	SGC_P3a		
Lims ID:	280-53458-A-38-A	Lab Sample ID:	280-53458-38		
Client ID:	SB-50-0				
Operator ID:	JAX	ALS Bottle#:	94	Worklist Smp#:	93
Injection Vol:	1.0 ul	Dil. Factor:	20000.0000		
Method:	PCB_P3a	Limit Group:	GCSV - 8082		
Column:	CLP1 Pesticides Column 1 (0.32 mm)	Detector	GC ECD1A		

4 PCB-1248, CAS: 12672-29-6

Calibration Sample, Level: 7



Sample



FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-53458-1

SDG No.:

Client Sample ID: SB-50-0 | Lab Sample ID: 280-53458-38

Matrix: Solid | Lab File ID: 0401B094.D

Analysis Method: 8082A | Date Collected: 03/20/2014 11:36

Extraction Method: 3546 | Date Extracted: 03/27/2014 14:30

Sample wt/vol: 32.0(g) | Date Analyzed: 04/02/2014 23:40

Con. Extract Vol.: 10(mL) | Dilution Factor: 20000

Injection Volume: 1(uL) | GC Column: CLP2 ID: 0.32(mm)

% Moisture: 6.0 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 219272 | Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
877-09-8	Tetrachloro-m-xylene	0	*X D*	53-128
2051-24-3	DCB Decachlorobiphenyl	0	*X D*	59-130

TestAmerica Denver
Target Compound Quantitation Report

Data File:	\\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B094.D				
Lims ID:	280-53458-A-38-A	Lab Sample ID:	280-53458-38		
Client ID:	SB-50-0				
Sample Type:	Client				
Inject. Date:	02-Apr-2014 23:40:22	ALS Bottle#:	94	Worklist Smp#:	93
Injection Vol:	1.0 ul	Dil. Factor:	20000.0000		
Sample Info:	280-53458-A-38-A				
Operator ID:	JAX	Instrument ID:	SGC_P3b		
Method:	\\Denchrom\ChromData\SGC_P3b\20140401-21601.b\PCB_P3b.m				
Limit Group:	GCSV - 8082				
Last Update:	03-Apr-2014 09:29:30	Calib Date:	02-Apr-2014 03:13:50		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B037.D				
Column 1 :	CLP2 Pesticides Column 2 (0.32 mm)		Det: GC ECD2B		
Process Host:	XAWRK052				
First Level Reviewer: jacksonto		Date:	03-Apr-2014 08:24:30		

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
$ 14 Tetrachloro-m-xylene					
2.862					
3 PCB-1221					
3.165					
3.292					
3.348					
7 PCB-1232					
3.166					
3.346					
4.196					
4.340					
4.870					
10 PCB-1242					
3.347					
4.193					
4.340					
4.867					
5.007					
1 PCB-1016					
3.738					
4.195					
4.342					
4.868					
5.008					

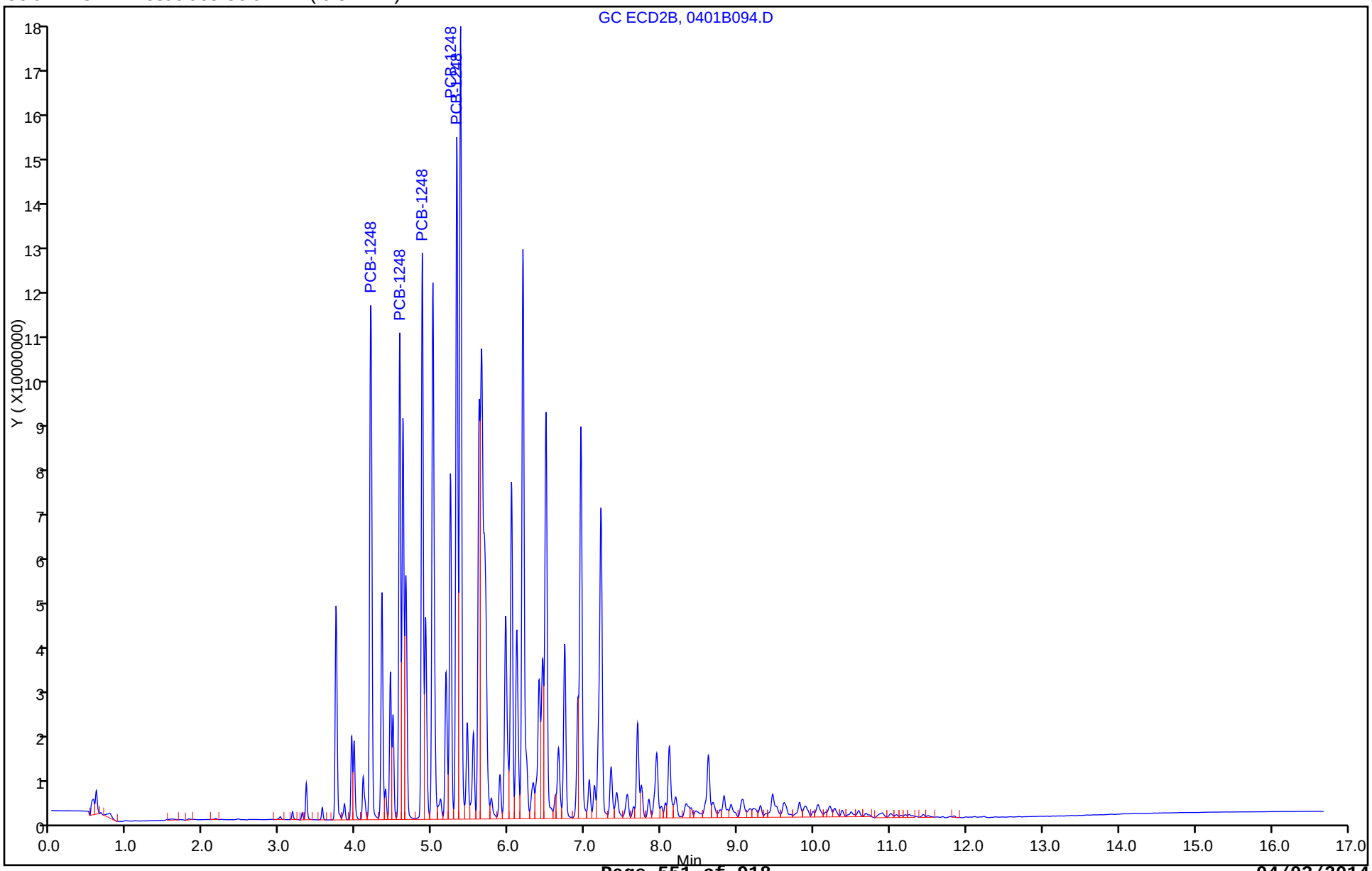
RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
4 PCB-1248					
4.193	4.194	-0.001	233649961	472.4	
4.573	4.571	0.002	180641426	621.0	
4.866	4.868	-0.002	221159541	570.1	
5.320	5.321	-0.001	274156595	621.3	
5.370	5.371	-0.001	337728825	680.4	
	Average of Peak Amounts =			593.0	
9 PCB-1254					
	5.368				
	5.612				
	6.038				
	6.735				
	7.212				
12 PCB-1260					
	6.448				
	6.735				
	7.208				
	8.108				
	8.618				
5 PCB-1262					
	6.733				
	7.743				
	8.110				
	8.613				
	9.463				
13 PCB-1268					
	8.610				
	8.673				
	9.030				
	9.173				
	9.927				
$ 15 DCB Decachlorobiphenyl					
	10.295				
S 8 Polychlorinated biphenyls, Total					
				593.0	

Report Date: 03-Apr-2014 09:29:36 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B094.D				
Injection Date:	02-Apr-2014 23:40:22	Instrument ID:	SGC_P3b	Operator ID:	JAX
Lims ID:	280-53458-A-38-A	Lab Sample ID:	280-53458-38	Worklist Smp#:	93
Client ID:	SB-50-0				
Injection Vol:	1.0 ul	Dil. Factor:	20000.0000	ALS Bottle#:	94
Method:	PCB_P3b	Limit Group:	GCSV - 8082		

Column: CLP2 Pesticides Column 2 (0.32 mm)



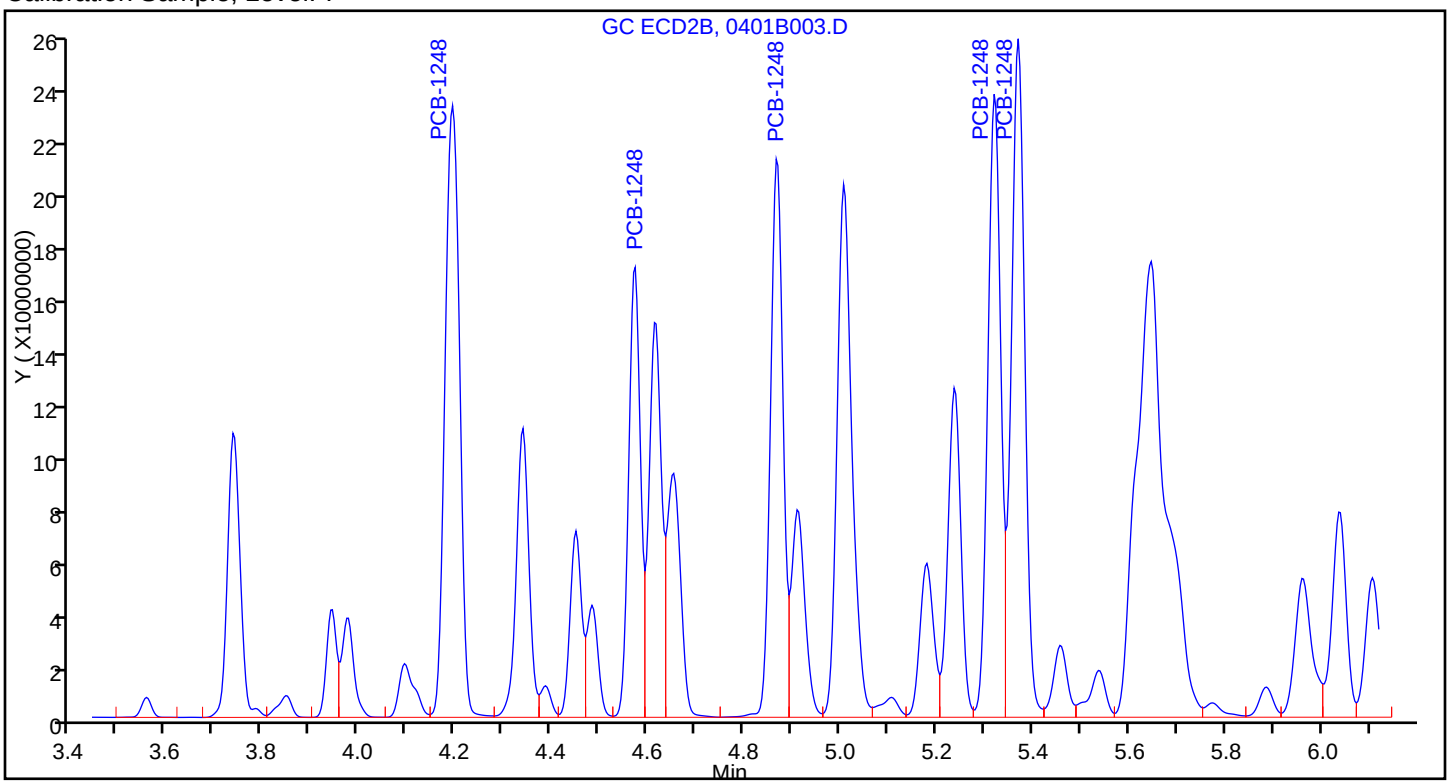
Report Date: 03-Apr-2014 09:29:36 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

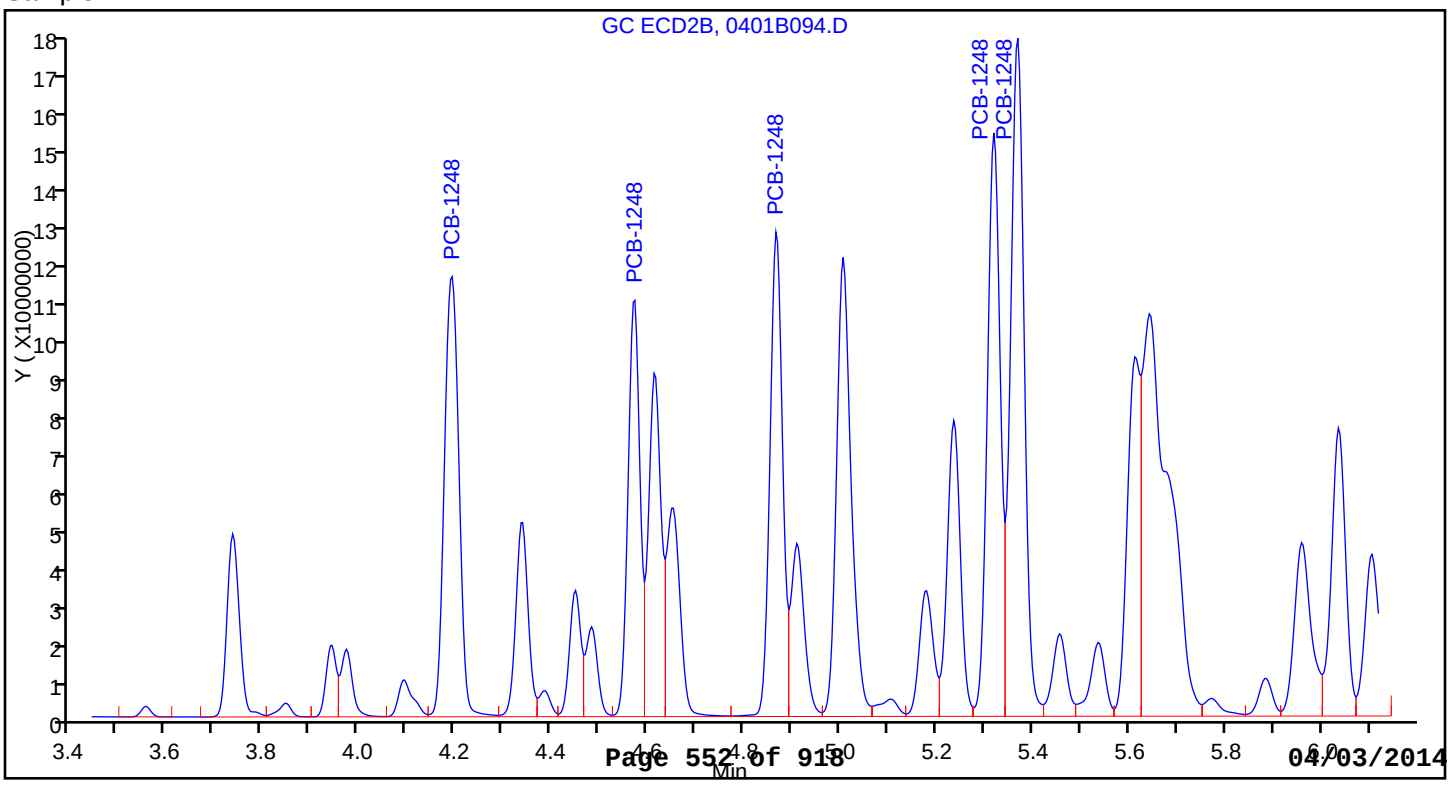
Data File:	\\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B094.D				
Injection Date:	02-Apr-2014 23:40:22	Instrument ID:	SGC_P3b		
Lims ID:	280-53458-A-38-A	Lab Sample ID:	280-53458-38		
Client ID:	SB-50-0				
Operator ID:	JAX	ALS Bottle#:	94	Worklist Smp#:	93
Injection Vol:	1.0 ul	Dil. Factor:	20000.0000		
Method:	PCB_P3b	Limit Group:	GCSV - 8082		
Column:	CLP2 Pesticides Column 2 (0.32 mm)	Detector	GC ECD2B		

4 PCB-1248, CAS: 12672-29-6

Calibration Sample, Level: 7



Sample



FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-53458-1

SDG No.:

Client Sample ID: SB-51-0 | Lab Sample ID: 280-53458-39

Matrix: Solid | Lab File ID: 0401A095.D

Analysis Method: 8082A | Date Collected: 03/20/2014 12:00

Extraction Method: 3546 | Date Extracted: 03/27/2014 14:30

Sample wt/vol: 32.1(g) | Date Analyzed: 04/02/2014 23:40

Con. Extract Vol.: 10(mL) | Dilution Factor: 100

Injection Volume: 1(uL) | GC Column: CLP1 ID: 0.32(mm)

% Moisture: 13.1 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 219270 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
11104-28-2	PCB-1221	ND		5100	1700
12674-11-2	PCB-1016	ND		3600	550
11141-16-5	PCB-1232	ND		3600	550
53469-21-9	PCB-1242	ND		3600	980
12672-29-6	PCB-1248	12000		3600	600
11097-69-1	PCB-1254	ND		3600	590
11096-82-5	PCB-1260	ND		3600	290
37324-23-5	PCB-1262	ND		3600	1200
11100-14-4	PCB-1268	ND		3600	420
1336-36-3	Polychlorinated biphenyls, Total	12000		3600	290

CAS NO.	SURROGATE	%REC	Q	LIMITS
877-09-8	Tetrachloro-m-xylene	0	D X	53-128
2051-24-3	DCB Decachlorobiphenyl	0	D X	59-130

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A095.D
Lims ID: 280-53458-A-39-A Lab Sample ID: 280-53458-39
Client ID: SB-51-0
Sample Type: Client
Inject. Date: 02-Apr-2014 23:40:22 ALS Bottle#: 95 Worklist Smp#: 94
Injection Vol: 1.0 ul Dil. Factor: 100.0000
Sample Info: 280-53458-A-39-A
Operator ID: JAX Instrument ID: SGC_P3a

Method: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\PCB_P3a.m
Limit Group: GCSV - 8082
Last Update: 03-Apr-2014 08:32:47 Calib Date: 02-Apr-2014 02:52:35
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A037.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Process Host: XAWRK052

First Level Reviewer: jacksonto Date: 03-Apr-2014 07:01:42

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
$ 1 Tetrachloro-m-xylene					
2.845					
2 PCB-1221					
3.042					
3.179					
3.216					
3 PCB-1232					
3.214					
3.554					
4.018					
4.158					
4.608					
4 PCB-1248					M
3.554	3.554	0.0	12152136	204.4	
4.017	4.014	0.003	37258953	235.2	
4.607	4.611	-0.004	53102026	327.6	M
5.310	5.311	-0.001	35775756	363.6	M
5.850	5.851	-0.001	45556316	540.6	M
	Average of Peak Amounts =			334.3	
5 PCB-1016					
3.555					
4.019					
4.159					
4.222					
4.609					

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
6 PCB-1242					
3.556					
4.019					
4.159					
4.222					
4.609					
7 PCB-1254					M
5.049					
5.366					
5.852					
6.209					
6.822					
10 PCB-1262					
6.088					
6.454					
7.044					
7.424					
8.254					
8 PCB-1260					
6.089					
6.819					
7.312					
7.749					
8.132					
12 PCB-1268					
8.196					
8.246					
8.519					
8.639					
9.442					
$ 13 DCB Decachlorobiphenyl					
9.715					
S 15 Polychlorinated biphenyls, Total					
				334.3	

QC Flag Legend

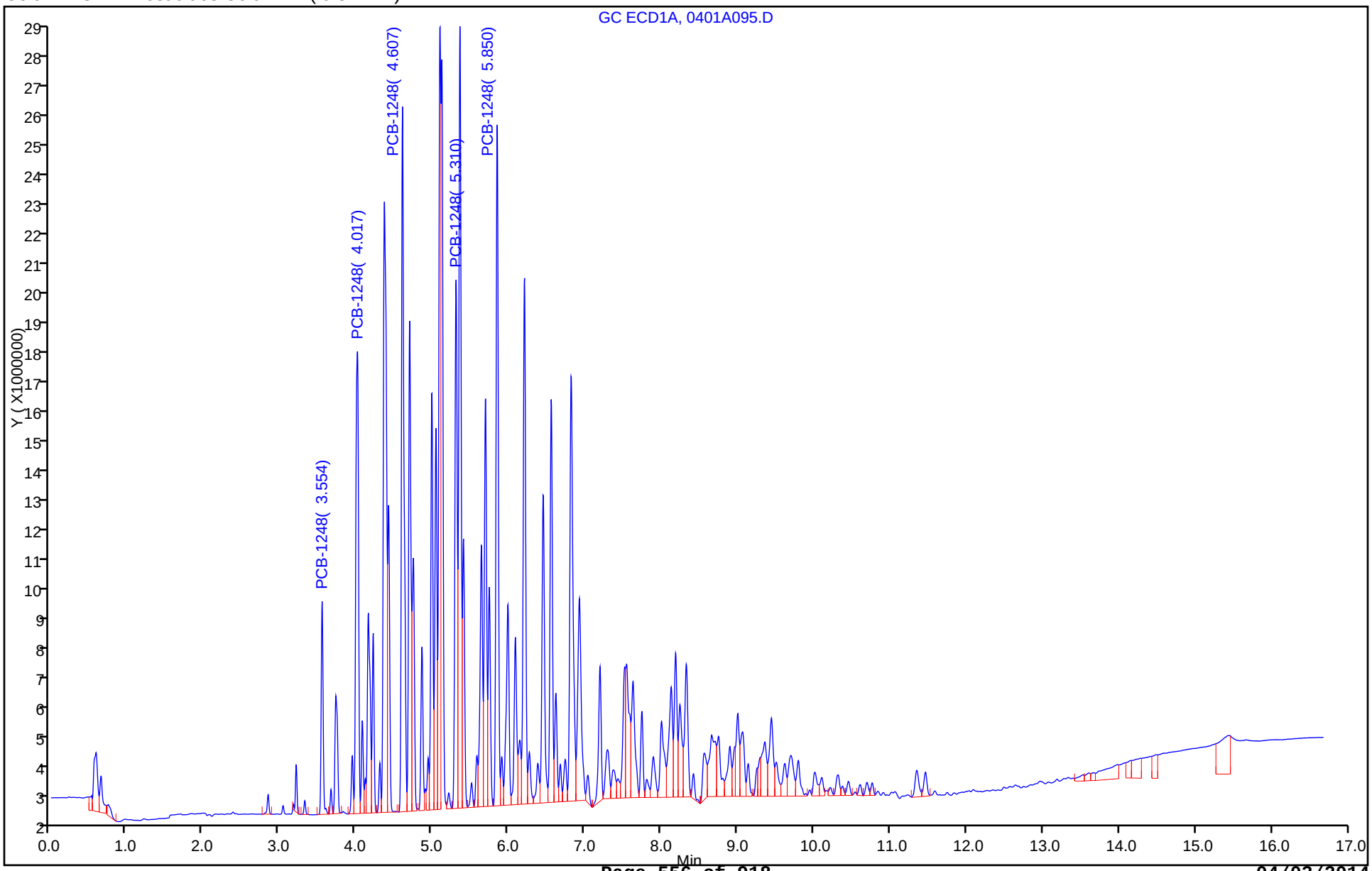
Review Flags
M - Manually Integrated

Report Date: 03-Apr-2014 08:32:53 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A095.D				
Injection Date:	02-Apr-2014 23:40:22	Instrument ID:	SGC_P3a	Operator ID:	JAX
Lims ID:	280-53458-A-39-A	Lab Sample ID:	280-53458-39	Worklist Smp#:	94
Client ID:	SB-51-0				
Injection Vol:	1.0 ul	Dil. Factor:	100.0000	ALS Bottle#:	95
Method:	PCB_P3a	Limit Group:	GCSV - 8082		

Column: CLP1 Pesticides Column 1 (0.32 mm)



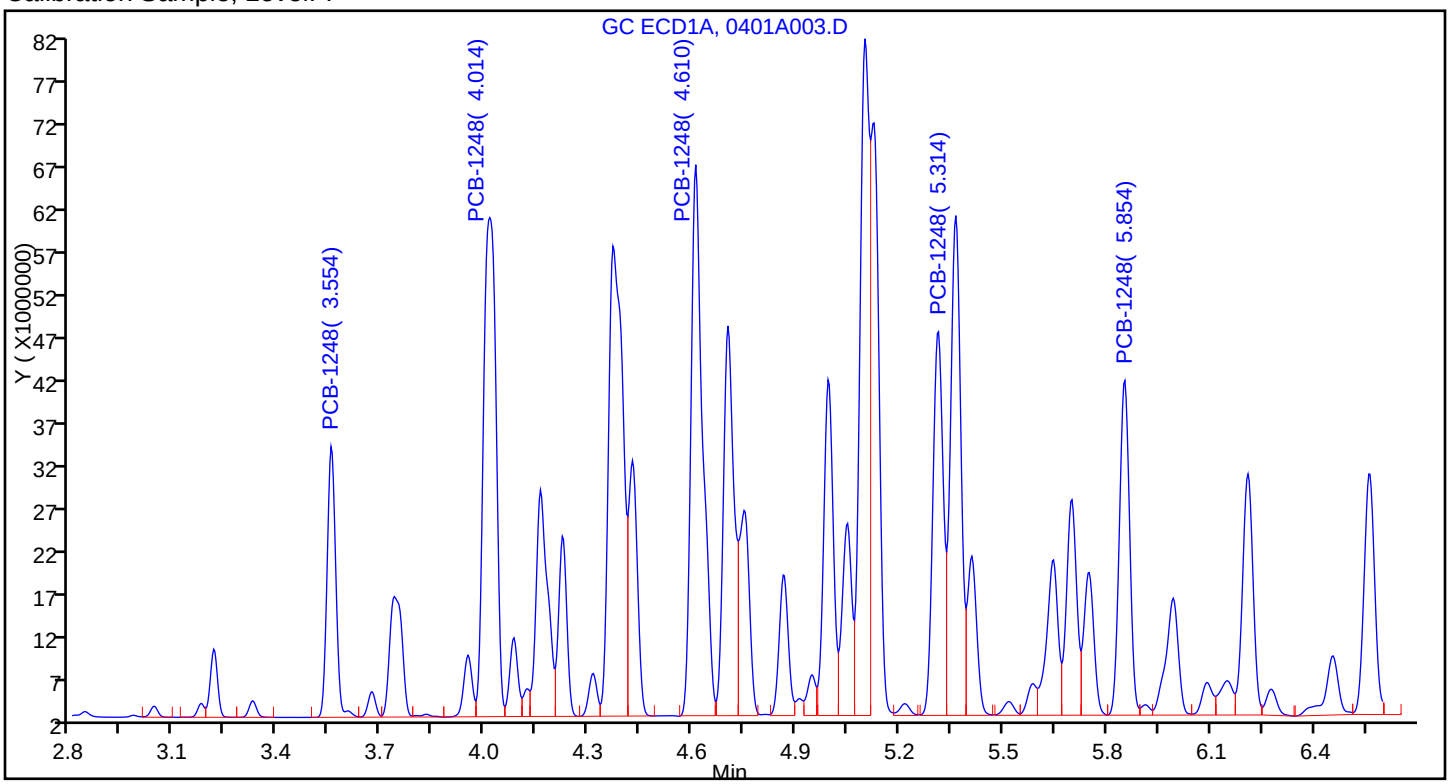
Report Date: 03-Apr-2014 08:32:53 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A095.D				
Injection Date:	02-Apr-2014 23:40:22	Instrument ID:	SGC_P3a		
Lims ID:	280-53458-A-39-A	Lab Sample ID:	280-53458-39		
Client ID:	SB-51-0				
Operator ID:	JAX	ALS Bottle#:	95	Worklist Smp#:	94
Injection Vol:	1.0 ul	Dil. Factor:	100.0000		
Method:	PCB_P3a	Limit Group:	GCSV - 8082		
Column:	CLP1 Pesticides Column 1 (0.32 mm)	Detector	GC ECD1A		

4 PCB-1248, CAS: 12672-29-6

Calibration Sample, Level: 7



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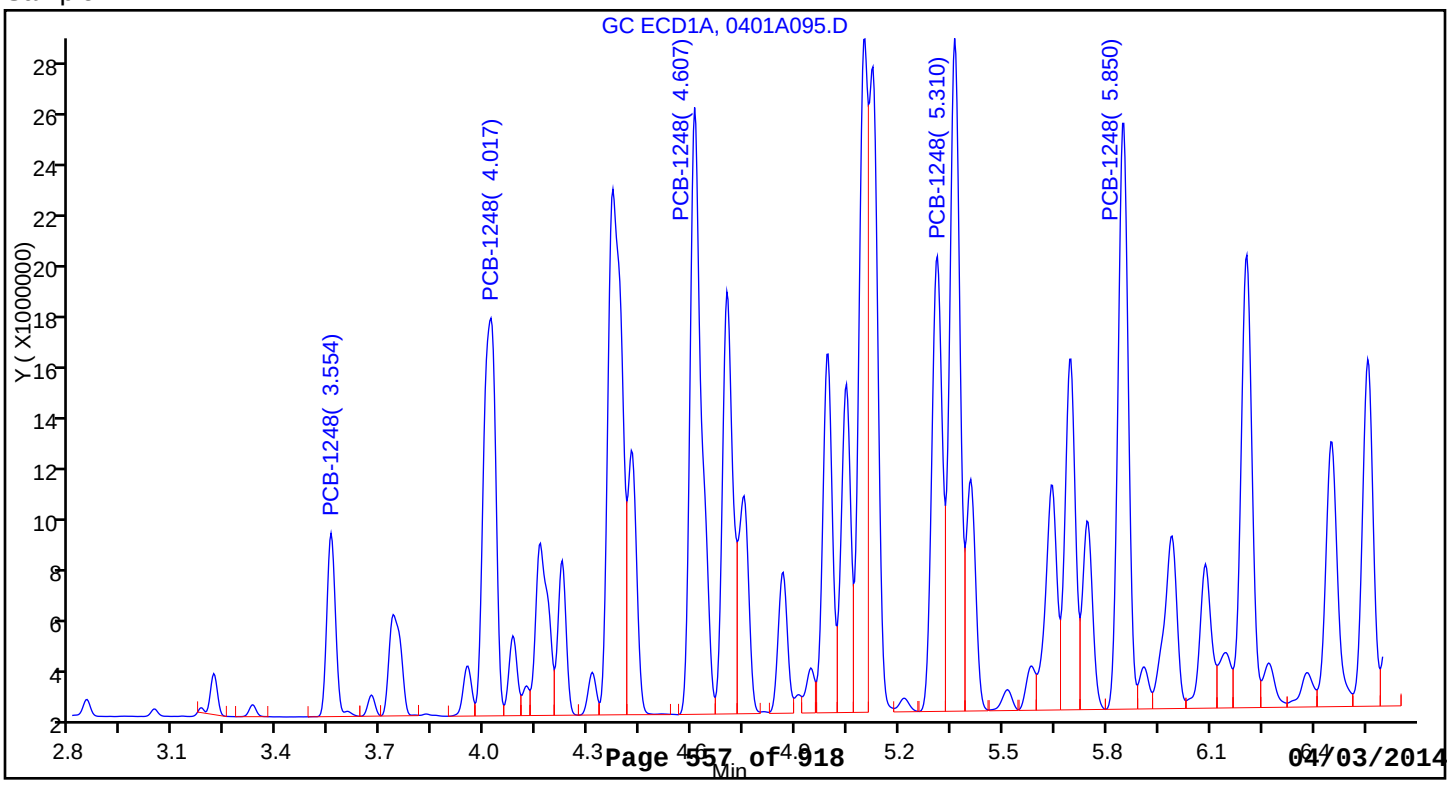
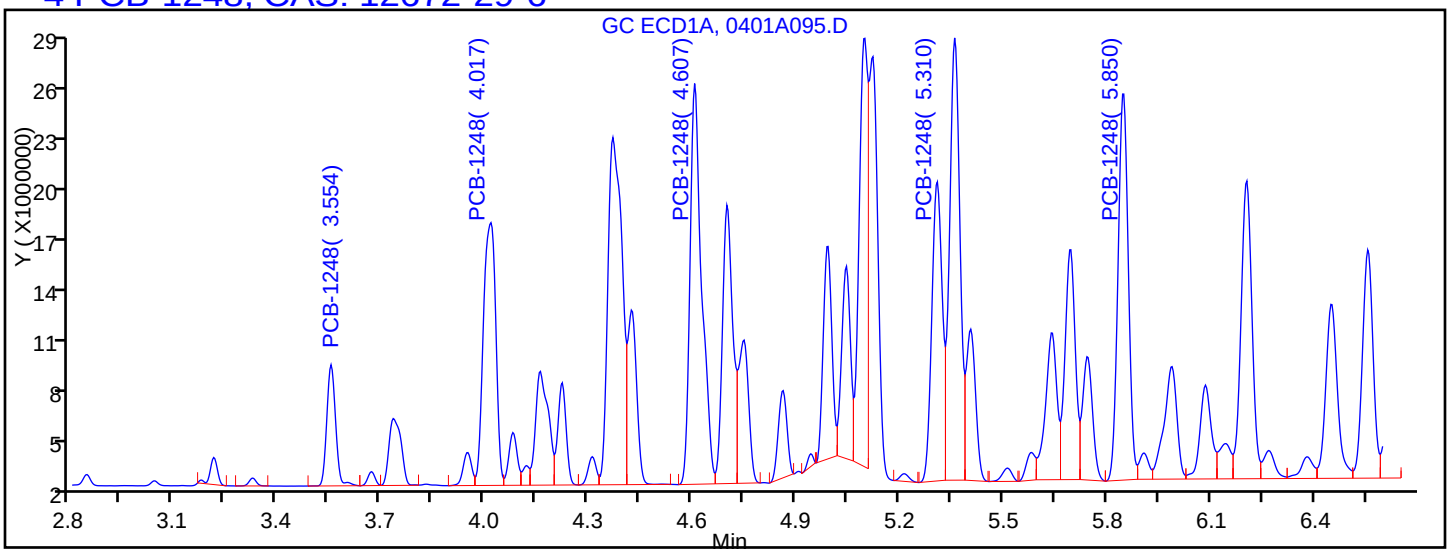


Report Date: 03-Apr-2014 08:32:53 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

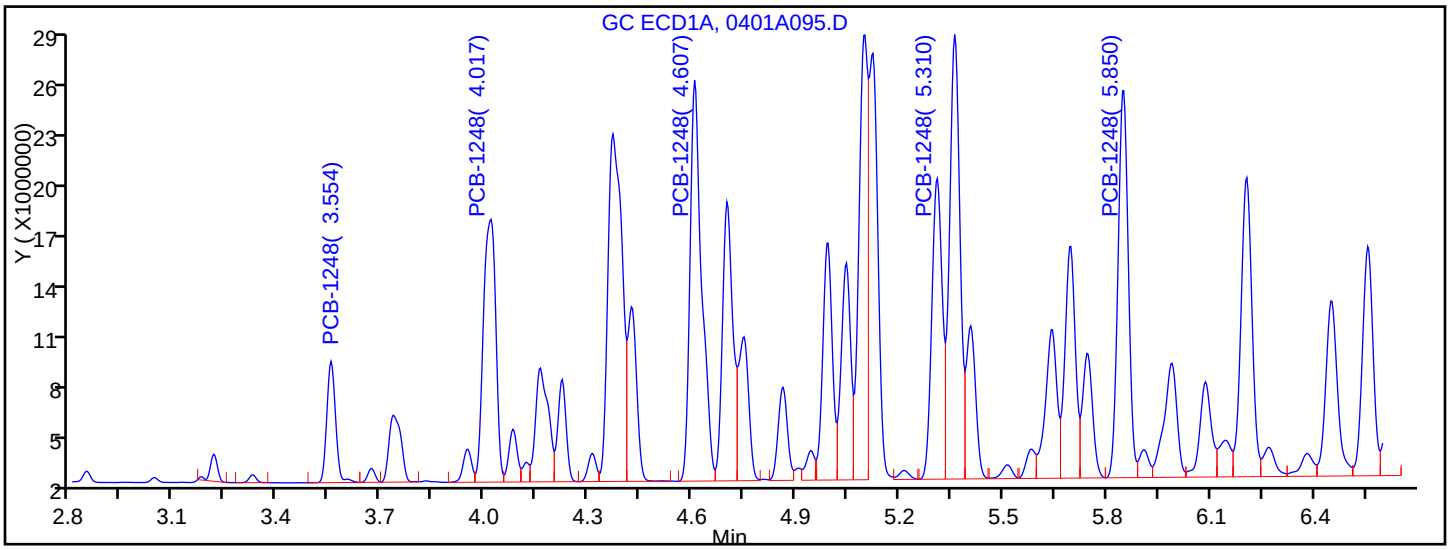
Data File:	\\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A095.D				
Injection Date:	02-Apr-2014 23:40:22	Instrument ID:	SGC_P3a		
Lims ID:	280-53458-A-39-A	Lab Sample ID:	280-53458-39		
Client ID:	SB-51-0				
Operator ID:	JAX	ALS Bottle#:	95	Worklist Smp#:	94
Injection Vol:	1.0 ul	Dil. Factor:	100.0000		
Method:	PCB_P3a	Limit Group:	GCSV - 8082		
Column:	CLP1 Pesticides Column 1 (0.32 mm)	Detector	GC ECD1A		

4 PCB-1248, CAS: 12672-29-6



Processing Integration Results

RT = 3.554	Response = 12152136	
RT = 4.017	Response = 37258953	
RT = 4.607	Response = 53044192	M
RT = 5.310	Response = 35479185	M
RT = 5.850	Response = 45303926	M



Manual Integration Results

RT = 3.554	Response = 12152136	
RT = 4.017	Response = 37258953	
RT = 4.607	Response = 53102026	M
RT = 5.310	Response = 35775756	M
RT = 5.850	Response = 45556316	M

Reviewer: jacksonto, 03-Apr-2014 07:02:03

Audit Action: Assigned New Baseline

Audit Reason: Baseline Smoothing

FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-53458-1

SDG No.:

Client Sample ID: SB-51-0 | Lab Sample ID: 280-53458-39

Matrix: Solid | Lab File ID: 0401B095.D

Analysis Method: 8082A | Date Collected: 03/20/2014 12:00

Extraction Method: 3546 | Date Extracted: 03/27/2014 14:30

Sample wt/vol: 32.1(g) | Date Analyzed: 04/03/2014 00:01

Con. Extract Vol.: 10(mL) | Dilution Factor: 100

Injection Volume: 1(uL) | GC Column: CLP2 ID: 0.32(mm)

% Moisture: 13.1 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 219272 | Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
877-09-8	Tetrachloro-m-xylene	0	X D	53-128
2051-24-3	DCB Decachlorobiphenyl	0	X D	59-130

TestAmerica Denver
Target Compound Quantitation Report

Data File:	\\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B095.D				
Lims ID:	280-53458-A-39-A	Lab Sample ID:	280-53458-39		
Client ID:	SB-51-0				
Sample Type:	Client				
Inject. Date:	03-Apr-2014 00:01:40	ALS Bottle#:	95	Worklist Smp#:	94
Injection Vol:	1.0 ul	Dil. Factor:	100.0000		
Sample Info:	280-53458-A-39-A				
Operator ID:	JAX	Instrument ID:	SGC_P3b		
Method:	\\Denchrom\ChromData\SGC_P3b\20140401-21601.b\PCB_P3b.m				
Limit Group:	GCSV - 8082				
Last Update:	03-Apr-2014 09:29:30	Calib Date:	02-Apr-2014 03:13:50		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B037.D				
Column 1 :	CLP2 Pesticides Column 2 (0.32 mm)		Det: GC ECD2B		
Process Host:	XAWRK052				
First Level Reviewer: jacksonto		Date:	03-Apr-2014 08:26:20		

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
$ 14 Tetrachloro-m-xylene					
2.862					
3 PCB-1221					
3.165					
3.292					
3.348					
7 PCB-1232					
3.166					
3.346					
4.196					
4.340					
4.870					
10 PCB-1242					
3.347					
4.193					
4.340					
4.867					
5.007					
1 PCB-1016					
3.738					
4.195					
4.342					
4.868					
5.008					

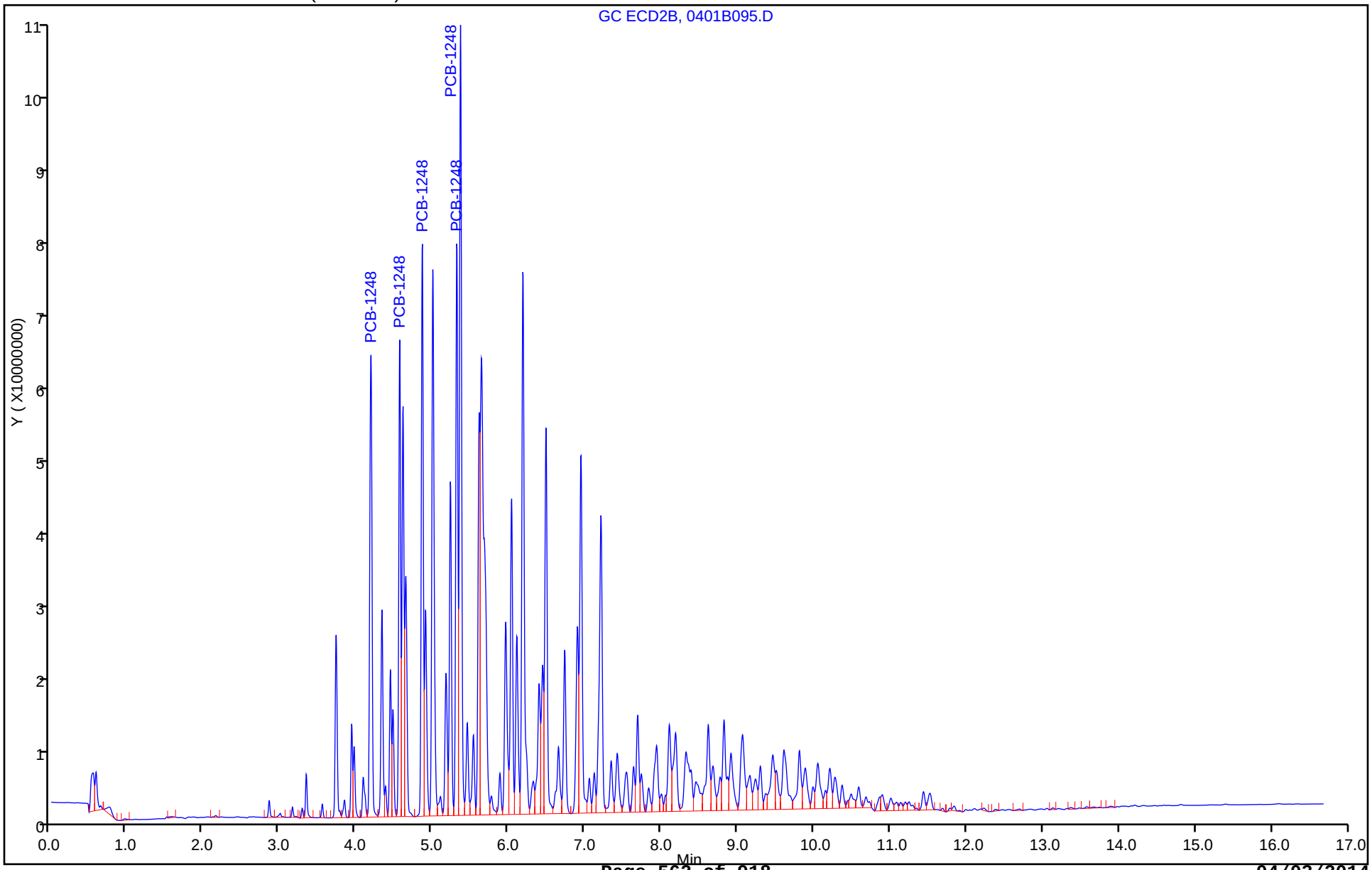
RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
4 PCB-1248					
4.195	4.194	0.001	125587153	249.7	
4.572	4.571	0.001	103780285	352.5	
4.868	4.868	0.0	133599630	337.8	
5.318	5.321	-0.003	137198144	306.1	
5.368	5.371	-0.003	201945076	402.5	
	Average of Peak Amounts =			329.7	
9 PCB-1254					
	5.368				
	5.612				
	6.038				
	6.735				
	7.212				
12 PCB-1260					
	6.448				
	6.735				
	7.208				
	8.108				
	8.618				
5 PCB-1262					
	6.733				
	7.743				
	8.110				
	8.613				
	9.463				
13 PCB-1268					
	8.610				
	8.673				
	9.030				
	9.173				
	9.927				
$ 15 DCB Decachlorobiphenyl					
	10.295				
S 8 Polychlorinated biphenyls, Total					
				329.7	

Report Date: 03-Apr-2014 09:29:37 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B095.D				
Injection Date:	03-Apr-2014 00:01:40	Instrument ID:	SGC_P3b	Operator ID:	JAX
Lims ID:	280-53458-A-39-A	Lab Sample ID:	280-53458-39	Worklist Smp#:	94
Client ID:	SB-51-0				
Injection Vol:	1.0 ul	Dil. Factor:	100.0000	ALS Bottle#:	95
Method:	PCB_P3b	Limit Group:	GCSV - 8082		

Column: CLP2 Pesticides Column 2 (0.32 mm)



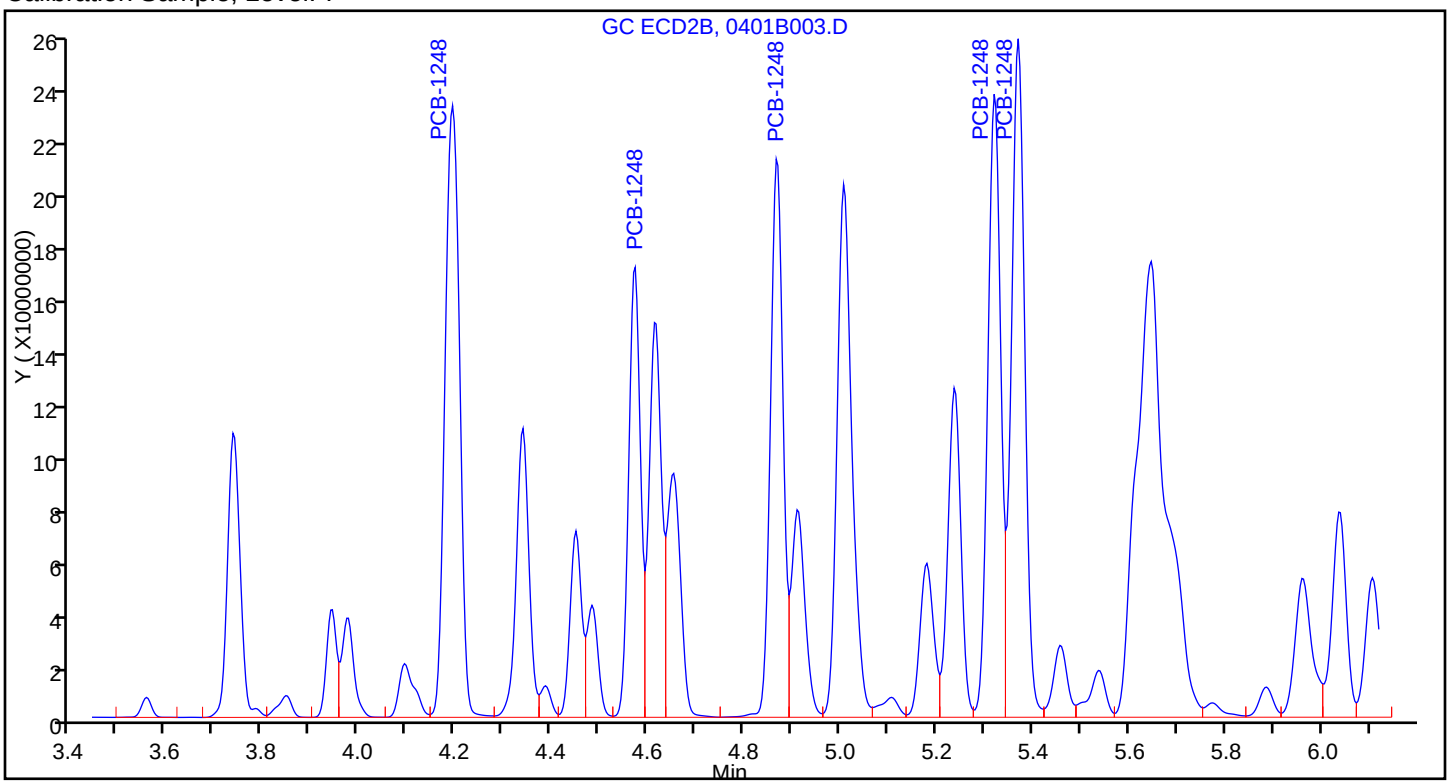
Report Date: 03-Apr-2014 09:29:37 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

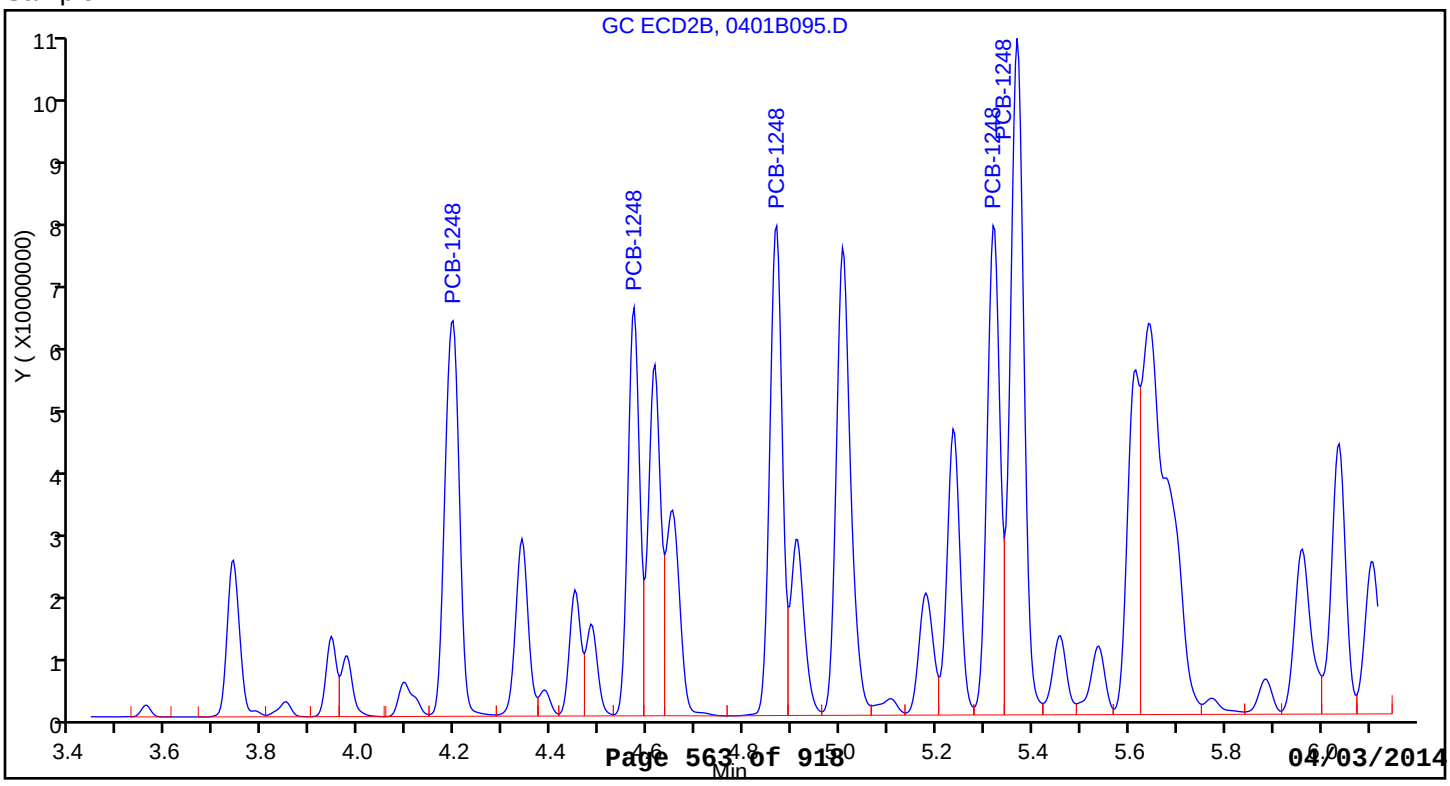
Data File:	\\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B095.D				
Injection Date:	03-Apr-2014 00:01:40	Instrument ID:	SGC_P3b		
Lims ID:	280-53458-A-39-A	Lab Sample ID:	280-53458-39		
Client ID:	SB-51-0				
Operator ID:	JAX	ALS Bottle#:	95	Worklist Smp#:	94
Injection Vol:	1.0 ul	Dil. Factor:	100.0000		
Method:	PCB_P3b	Limit Group:	GCSV - 8082		
Column:	CLP2 Pesticides Column 2 (0.32 mm)	Detector	GC ECD2B		

4 PCB-1248, CAS: 12672-29-6

Calibration Sample, Level: 7



Sample



FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-53458-1

SDG No.:

Client Sample ID: SB-52-0 | Lab Sample ID: 280-53458-40

Matrix: Solid | Lab File ID: 0401A096.D

Analysis Method: 8082A | Date Collected: 03/20/2014 12:35

Extraction Method: 3546 | Date Extracted: 03/27/2014 14:30

Sample wt/vol: 30.3(g) | Date Analyzed: 04/03/2014 00:01

Con. Extract Vol.: 10(mL) | Dilution Factor: 500

Injection Volume: 1(uL) | GC Column: CLP1 ID: 0.32(mm)

% Moisture: 6.1 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 219270 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
11104-28-2	PCB-1221	ND		25000	8200
12674-11-2	PCB-1016	ND		17000	2700
11141-16-5	PCB-1232	ND		17000	2700
53469-21-9	PCB-1242	ND		17000	4800
12672-29-6	PCB-1248	110000		17000	3000
11097-69-1	PCB-1254	ND		17000	2900
11096-82-5	PCB-1260	ND		17000	1400
37324-23-5	PCB-1262	ND		17000	6100
11100-14-4	PCB-1268	ND		17000	2100
1336-36-3	Polychlorinated biphenyls, Total	110000		17000	1400

CAS NO.	SURROGATE	%REC	Q	LIMITS
877-09-8	Tetrachloro-m-xylene	0	D X	53-128
2051-24-3	DCB Decachlorobiphenyl	0	D X	59-130

TestAmerica Denver
Target Compound Quantitation Report

Data File:	\\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A096.D				
Lims ID:	280-53458-A-40-A	Lab Sample ID:	280-53458-40		
Client ID:	SB-52-0				
Sample Type:	Client				
Inject. Date:	03-Apr-2014 00:01:40	ALS Bottle#:	96	Worklist Smp#:	95
Injection Vol:	1.0 ul	Dil. Factor:	500.0000		
Sample Info:	280-53458-A-40-A				
Operator ID:	JAX	Instrument ID:	SGC_P3a		
Method:	\\Denchrom\ChromData\SGC_P3a\20140401-21600.b\PCB_P3a.m				
Limit Group:	GCSV - 8082				
Last Update:	03-Apr-2014 08:32:47	Calib Date:	02-Apr-2014 02:52:35		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A037.D				
Column 1 :	CLP1 Pesticides Column 1 (0.32 mm)		Det: GC ECD1A		
Process Host:	XAWRK052				
First Level Reviewer: jacksonto		Date:	03-Apr-2014 07:02:23		

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
$ 1 Tetrachloro-m-xylene					
2.845					
2 PCB-1221					
3.042					
3.179					
3.216					
3 PCB-1232					
3.214					
3.554					
4.018					
4.158					
4.608					
4 PCB-1248					
3.552	3.554	-0.002	17624971	301.0	E
4.012	4.014	-0.002	61960558	397.9	
4.606	4.611	-0.005	83215544	519.9	
5.309	5.311	-0.002	68703823	705.8	
5.849	5.851	-0.002	96410662	1159.8	E
	Average of Peak Amounts =			616.9	
5 PCB-1016					
3.555					
4.019					
4.159					
4.222					
4.609					

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
6 PCB-1242					
3.556					
4.019					
4.159					
4.222					
4.609					
7 PCB-1254					
5.049					
5.366					
5.852					
6.209					
6.822					
10 PCB-1262					
6.088					
6.454					
7.044					
7.424					
8.254					
8 PCB-1260					
6.089					
6.819					
7.312					
7.749					
8.132					
12 PCB-1268					
8.196					
8.246					
8.519					
8.639					
9.442					
$ 13 DCB Decachlorobiphenyl					
9.715					
S 15 Polychlorinated biphenyls, Total					
				616.9	

QC Flag Legend

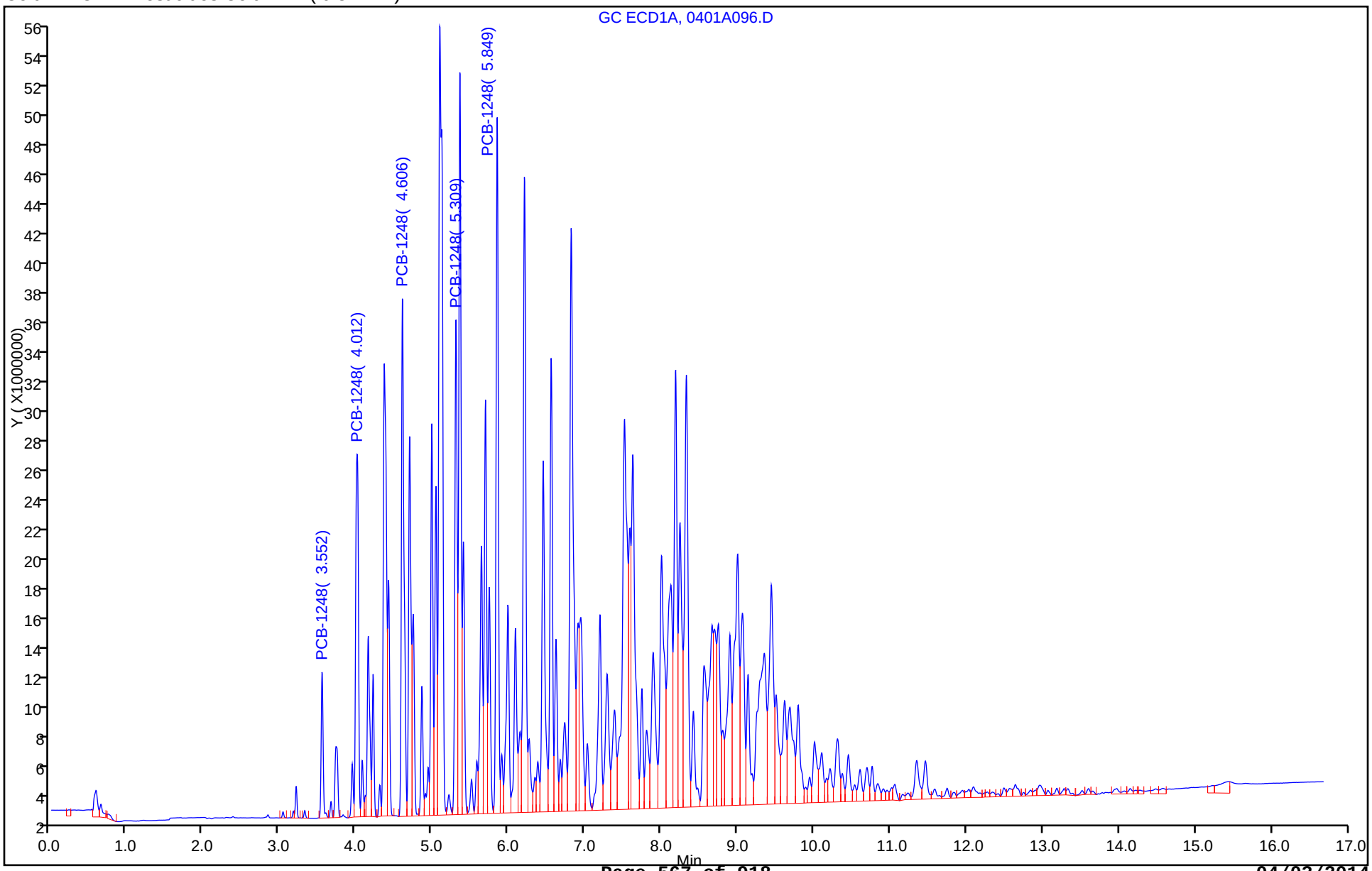
Processing Flags
E - Exceeded Maximum Amount

Report Date: 03-Apr-2014 08:32:55 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A096.D				
Injection Date:	03-Apr-2014 00:01:40	Instrument ID:	SGC_P3a	Operator ID:	JAX
Lims ID:	280-53458-A-40-A	Lab Sample ID:	280-53458-40	Worklist Smp#:	95
Client ID:	SB-52-0				
Injection Vol:	1.0 ul	Dil. Factor:	500.0000	ALS Bottle#:	96
Method:	PCB_P3a	Limit Group:	GCSV - 8082		

Column: CLP1 Pesticides Column 1 (0.32 mm)



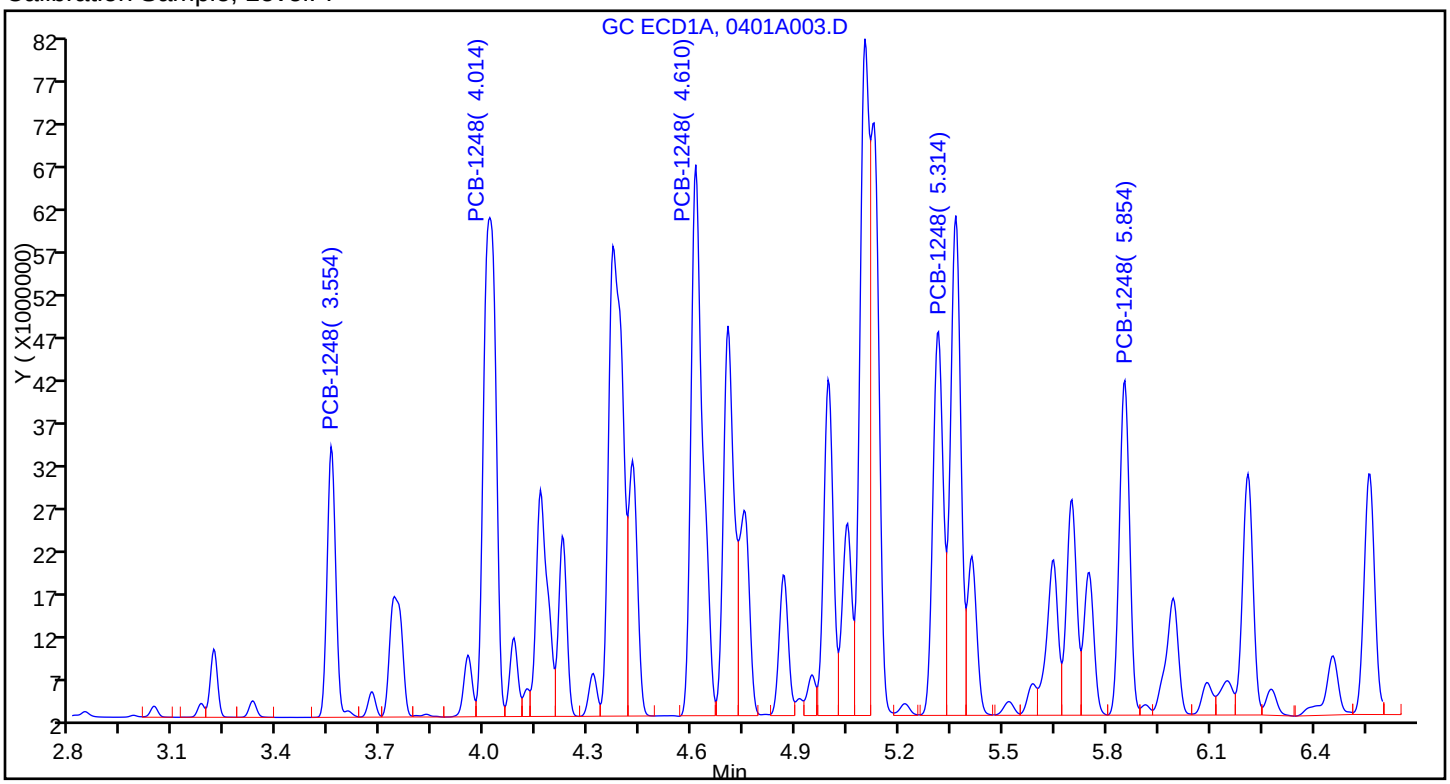
Report Date: 03-Apr-2014 08:32:55 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

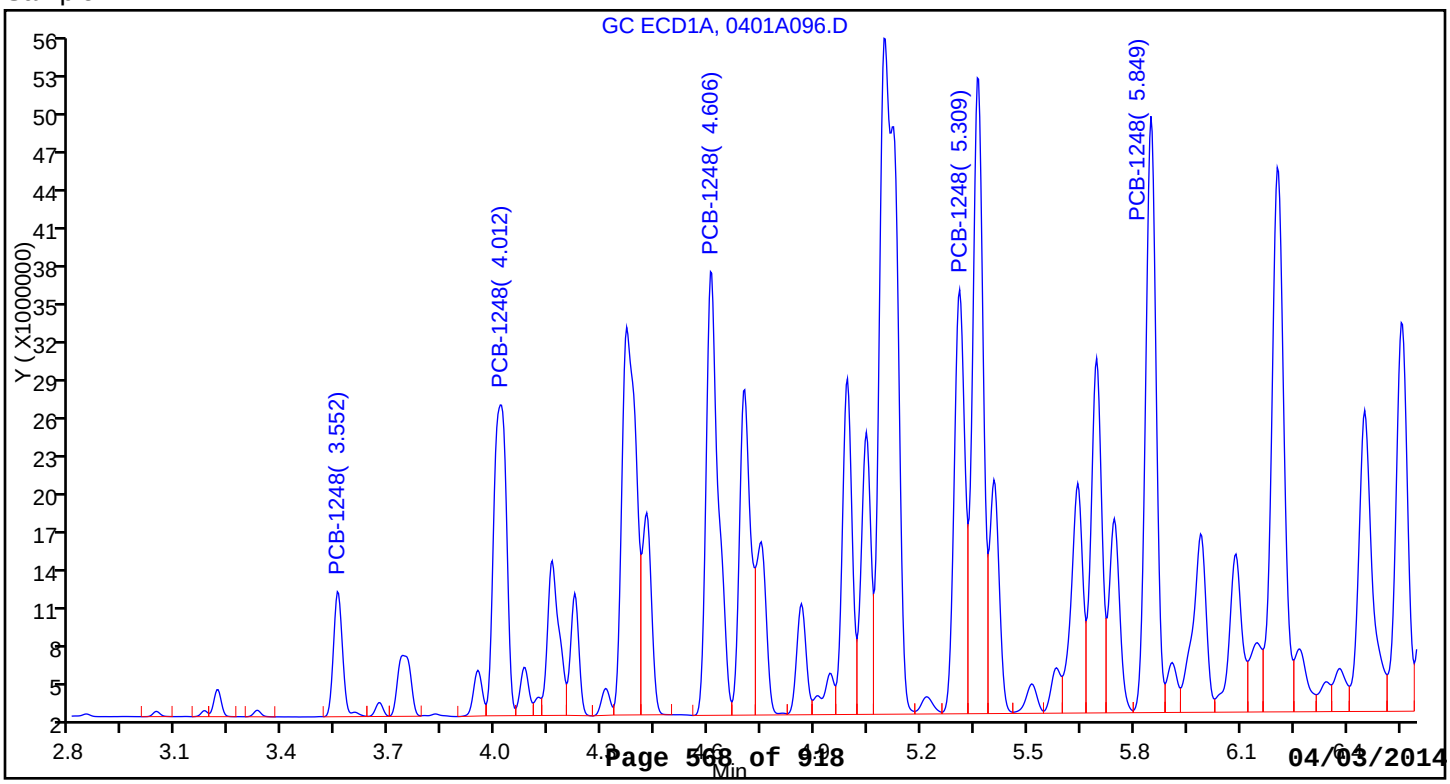
Data File:	\\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A096.D				
Injection Date:	03-Apr-2014 00:01:40	Instrument ID:	SGC_P3a		
Lims ID:	280-53458-A-40-A	Lab Sample ID:	280-53458-40		
Client ID:	SB-52-0				
Operator ID:	JAX	ALS Bottle#:	96	Worklist Smp#:	95
Injection Vol:	1.0 ul	Dil. Factor:	500.0000		
Method:	PCB_P3a	Limit Group:	GCSV - 8082		
Column:	CLP1 Pesticides Column 1 (0.32 mm)	Detector	GC ECD1A		

4 PCB-1248, CAS: 12672-29-6

Calibration Sample, Level: 7



Sample



FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-53458-1

SDG No.:

Client Sample ID: SB-52-0 | Lab Sample ID: 280-53458-40

Matrix: Solid | Lab File ID: 0401B096.D

Analysis Method: 8082A | Date Collected: 03/20/2014 12:35

Extraction Method: 3546 | Date Extracted: 03/27/2014 14:30

Sample wt/vol: 30.3(g) | Date Analyzed: 04/03/2014 00:23

Con. Extract Vol.: 10(mL) | Dilution Factor: 500

Injection Volume: 1(uL) | GC Column: CLP2 ID: 0.32(mm)

% Moisture: 6.1 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 219272 | Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
877-09-8	Tetrachloro-m-xylene	0	*X D*	53-128
2051-24-3	DCB Decachlorobiphenyl	0	*X D*	59-130

TestAmerica Denver
Target Compound Quantitation Report

Data File:	\\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B096.D				
Lims ID:	280-53458-A-40-A	Lab Sample ID:	280-53458-40		
Client ID:	SB-52-0				
Sample Type:	Client				
Inject. Date:	03-Apr-2014 00:23:04	ALS Bottle#:	96	Worklist Smp#:	95
Injection Vol:	1.0 ul	Dil. Factor:	500.0000		
Sample Info:	280-53458-A-40-A				
Operator ID:	JAX	Instrument ID:	SGC_P3b		
Method:	\\Denchrom\ChromData\SGC_P3b\20140401-21601.b\PCB_P3b.m				
Limit Group:	GCSV - 8082				
Last Update:	03-Apr-2014 09:29:30	Calib Date:	02-Apr-2014 03:13:50		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B037.D				
Column 1 :	CLP2 Pesticides Column 2 (0.32 mm)		Det: GC ECD2B		
Process Host:	XAWRK052				
First Level Reviewer: jacksonto		Date:	03-Apr-2014 08:26:50		

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
$ 14 Tetrachloro-m-xylene					
2.862					
3 PCB-1221					
3.165					
3.292					
3.348					
7 PCB-1232					
3.166					
3.346					
4.196					
4.340					
4.870					
10 PCB-1242					
3.347					
4.193					
4.340					
4.867					
5.007					
1 PCB-1016					
3.738					
4.195					
4.342					
4.868					
5.008					

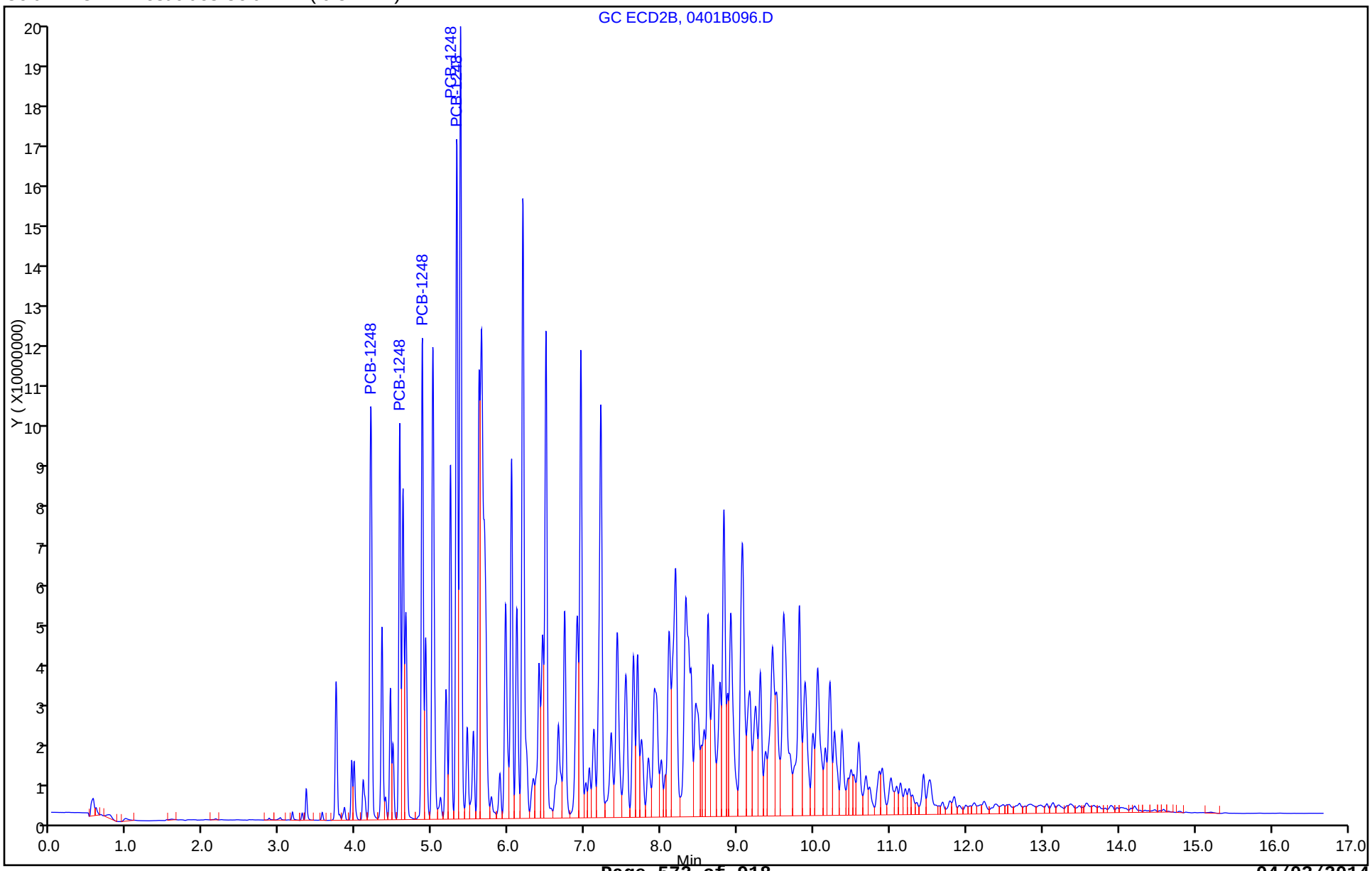
RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
4 PCB-1248					
4.192	4.194	-0.002	211678476	427.1	
4.572	4.571	0.001	167970475	576.7	
4.868	4.868	0.0	215386406	554.7	
5.318	5.321	-0.003	305477326	693.3	
5.368	5.371	-0.003	382117037	771.3	
	Average of Peak Amounts =			604.6	
9 PCB-1254					
	5.368				
	5.612				
	6.038				
	6.735				
	7.212				
12 PCB-1260					
	6.448				
	6.735				
	7.208				
	8.108				
	8.618				
5 PCB-1262					
	6.733				
	7.743				
	8.110				
	8.613				
	9.463				
13 PCB-1268					
	8.610				
	8.673				
	9.030				
	9.173				
	9.927				
$ 15 DCB Decachlorobiphenyl					
	10.295				
S 8 Polychlorinated biphenyls, Total					
				604.6	

Report Date: 03-Apr-2014 09:29:38 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B096.D				
Injection Date:	03-Apr-2014 00:23:04	Instrument ID:	SGC_P3b	Operator ID:	JAX
Lims ID:	280-53458-A-40-A	Lab Sample ID:	280-53458-40	Worklist Smp#:	95
Client ID:	SB-52-0				
Injection Vol:	1.0 ul	Dil. Factor:	500.0000	ALS Bottle#:	96
Method:	PCB_P3b	Limit Group:	GCSV - 8082		

Column: CLP2 Pesticides Column 2 (0.32 mm)



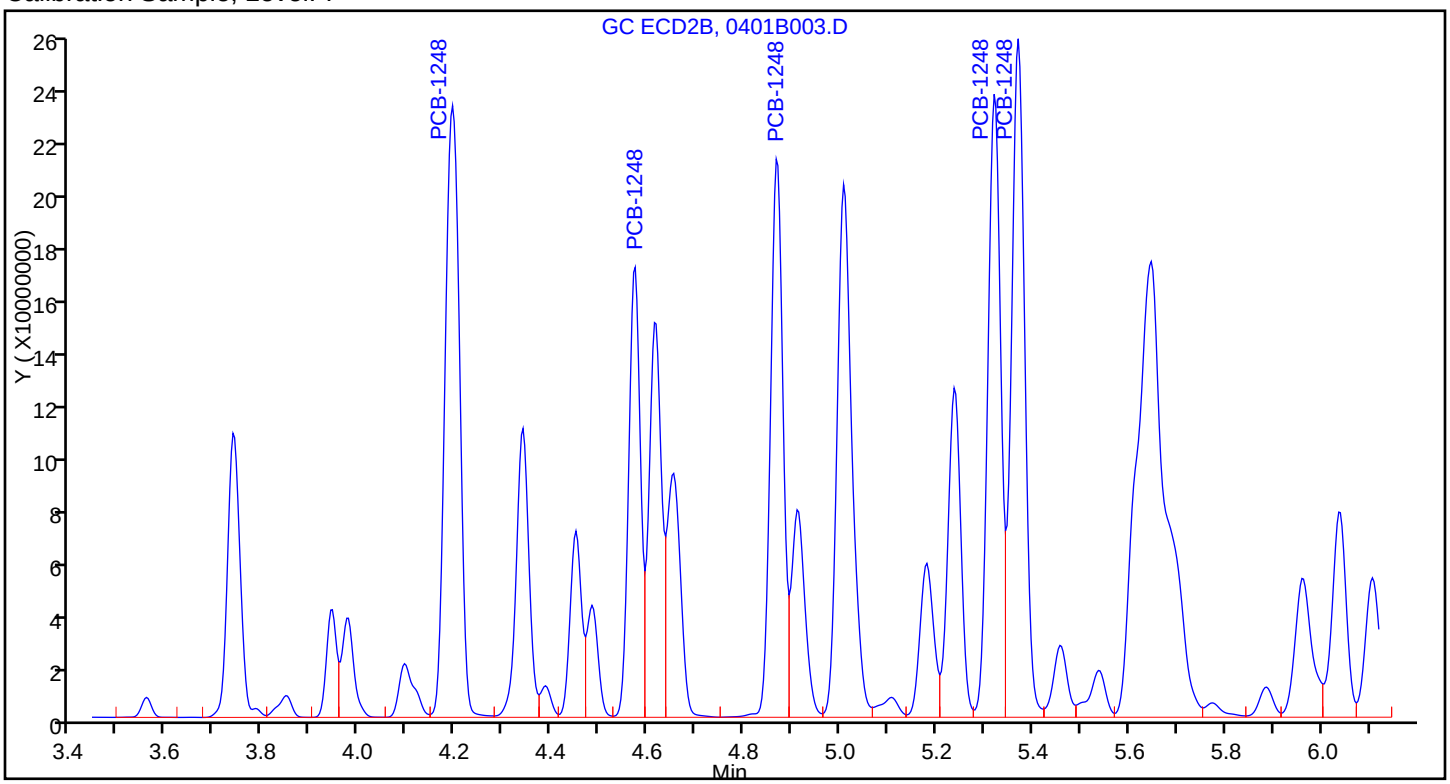
Report Date: 03-Apr-2014 09:29:38 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

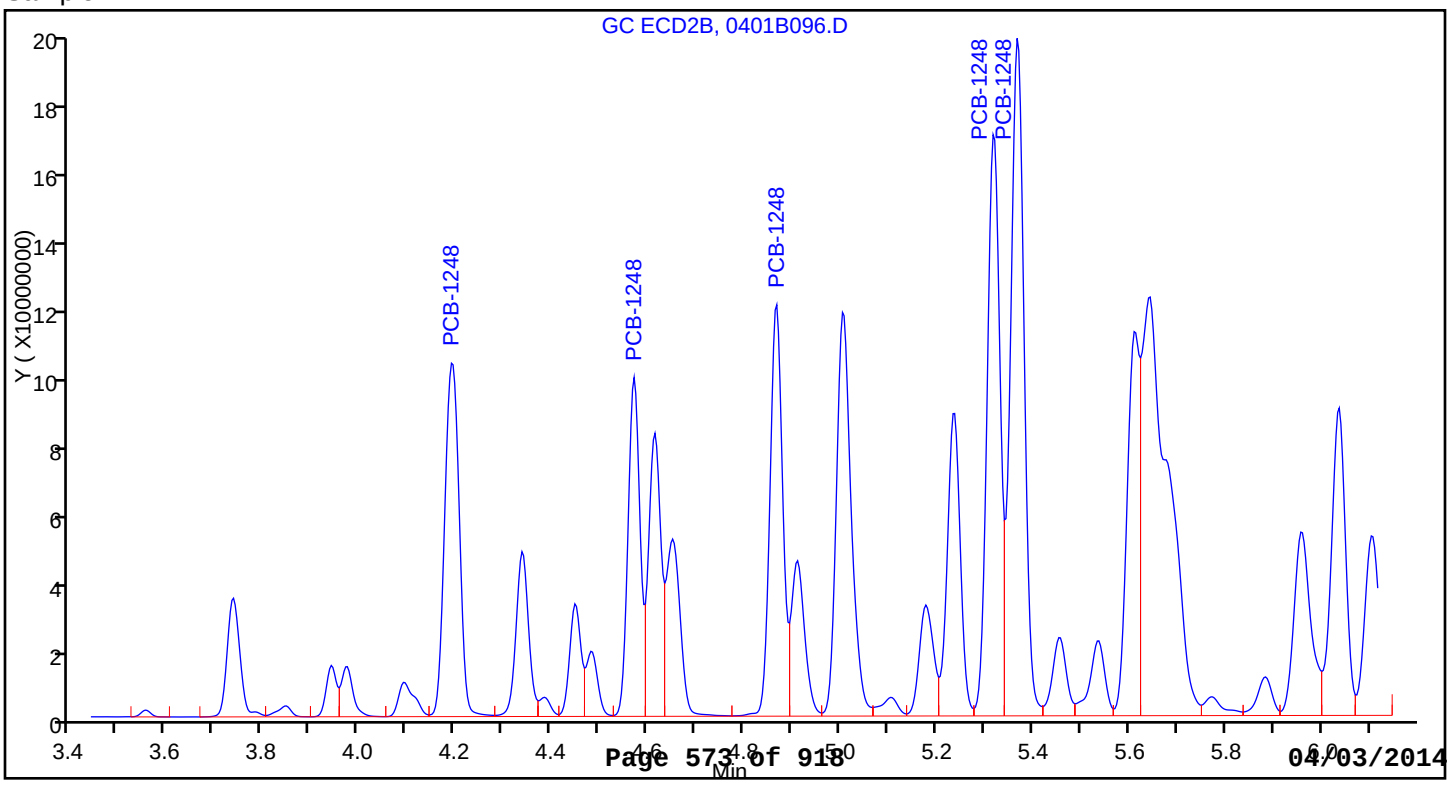
Data File:	\\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B096.D				
Injection Date:	03-Apr-2014 00:23:04	Instrument ID:	SGC_P3b		
Lims ID:	280-53458-A-40-A	Lab Sample ID:	280-53458-40		
Client ID:	SB-52-0				
Operator ID:	JAX	ALS Bottle#:	96	Worklist Smp#:	95
Injection Vol:	1.0 ul	Dil. Factor:	500.0000		
Method:	PCB_P3b	Limit Group:	GCSV - 8082		
Column:	CLP2 Pesticides Column 2 (0.32 mm)	Detector	GC ECD2B		

4 PCB-1248, CAS: 12672-29-6

Calibration Sample, Level: 7



Sample



FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-53458-1 Analy Batch No.: 219270

SDG No.:

Instrument ID: SGC_P3a GC Column: CLP1 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/01/2014 14:47 Calibration End Date: 04/01/2014 16:55 Calibration ID: 17668

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STDL11248 280-219270/9	0401A009.D
Level 2	STDL21248 280-219270/8	0401A008.D
Level 3	STDL31248 280-219270/7	0401A007.D
Level 4	STDL41248 280-219270/6	0401A006.D
Level 5	STDL51248 280-219270/5	0401A005.D
Level 6	STDL61248 280-219270/4	0401A004.D
Level 7	STDL71248 280-219270/3	0401A003.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	LVL 7				RT WINDOW	AVG RT
PCB-1248 Peak 1	3.554	3.555	3.555	3.555	3.554	3.555	3.554				3.304 - 3.804	3.555
PCB-1248 Peak 2	4.014	4.015	4.015	4.012	4.014	4.015	4.014				3.764 - 4.264	4.014
PCB-1248 Peak 3	4.607	4.608	4.608	4.608	4.611	4.611	4.610				4.361 - 4.861	4.609
PCB-1248 Peak 4	5.311	5.311	5.312	5.312	5.311	5.311	5.314				5.061 - 5.561	5.312
PCB-1248 Peak 5	5.851	5.851	5.852	5.852	5.851	5.851	5.854				5.601 - 6.101	5.852

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Denver Job No.: 280-53458-1 Analy Batch No.: 219270

SDG No.:

Instrument ID: SGC_P3a GC Column: CLP1 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/01/2014 14:47 Calibration End Date: 04/01/2014 16:55 Calibration ID: 17668

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STDL11248 280-219270/9	0401A009.D
Level 2	STDL21248 280-219270/8	0401A008.D
Level 3	STDL31248 280-219270/7	0401A007.D
Level 4	STDL41248 280-219270/6	0401A006.D
Level 5	STDL51248 280-219270/5	0401A005.D
Level 6	STDL61248 280-219270/4	0401A004.D
Level 7	STDL71248 280-219270/3	0401A003.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3 LVL 7	LVL 4		B	M1	M2								
PCB-1248 Peak 1	68898 56268	70099 59468	69071 55191	62005	Lin1	565248.129	56674.6778							0.9970		0.9900
PCB-1248 Peak 2	188683 151464	189269 159824	182431 147874	164223	Lin1	1544198.63	151829.457							0.9980		0.9900
PCB-1248 Peak 3	200745 156730	200447 165418	190593 151917	172400	Lin1	1815711.66	156574.476							0.9970		0.9900
PCB-1248 Peak 4	116570 95538	116368 102118	110346 93493	101227	Lin1	793688.380	96212.3751							0.9980		0.9900
PCB-1248 Peak 5	114857 81675	109187 87166	102396 80580	89760	Lin1	1158092.46	82128.9775							0.9970		0.9900

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Denver Job No.: 280-53458-1 Analy Batch No.: 219270

SDG No.:

Instrument ID: SGC_P3a GC Column: CLP1 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/01/2014 14:47 Calibration End Date: 04/01/2014 16:55 Calibration ID: 17668

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STDL11248 280-219270/9	0401A009.D
Level 2	STDL21248 280-219270/8	0401A008.D
Level 3	STDL31248 280-219270/7	0401A007.D
Level 4	STDL41248 280-219270/6	0401A006.D
Level 5	STDL51248 280-219270/5	0401A005.D
Level 6	STDL61248 280-219270/4	0401A004.D
Level 7	STDL71248 280-219270/3	0401A003.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
		LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
PCB-1248 Peak 1	Lin1	1722456 44601242	3504971 55190546	6907129	15501192	28133964	25.0 750	50.0 1000	100	250	500
PCB-1248 Peak 2	Lin1	4717083 119868175	9463447 147873588	18243113	41055825	75731957	25.0 750	50.0 1000	100	250	500
PCB-1248 Peak 3	Lin1	5018635 124063774	10022364 151917363	19059296	43100082	78365190	25.0 750	50.0 1000	100	250	500
PCB-1248 Peak 4	Lin1	2914252 76588521	5818392 93492602	11034564	25306755	47768836	25.0 750	50.0 1000	100	250	500
PCB-1248 Peak 5	Lin1	2871422 65374167	5459348 80579689	10239599	22440068	40837369	25.0 750	50.0 1000	100	250	500

Curve Type Legend:

Lin1 = Linear 1/conc

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A003.D
Lims ID: STDL71248
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 01-Apr-2014 14:47:18 ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL71248
Operator ID: JAX Instrument ID: SGC_P3a
Sublist: chrom-PCB_P3a*sub4

Method: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\PCB_P3a.m
Limit Group: GCSV - 8082
Last Update: 02-Apr-2014 07:43:56 Calib Date: 02-Apr-2014 02:52:35
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A037.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Process Host: XAWRK018

First Level Reviewer: jacksonto Date: 02-Apr-2014 07:34:11

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
4 PCB-1248					M
3.554	3.554	0.0	55190546	963.8	
4.014	4.014	0.0	147873588	963.8	
4.610	4.611	-0.001	151917363	958.7	M
5.314	5.311	0.003	93492602	963.5	M
5.854	5.851	0.003	80579689	967.0	M
	Average of Peak Amounts =			963.4	
S 15 Polychlorinated biphenyls, Total					
				963.4	

QC Flag Legend

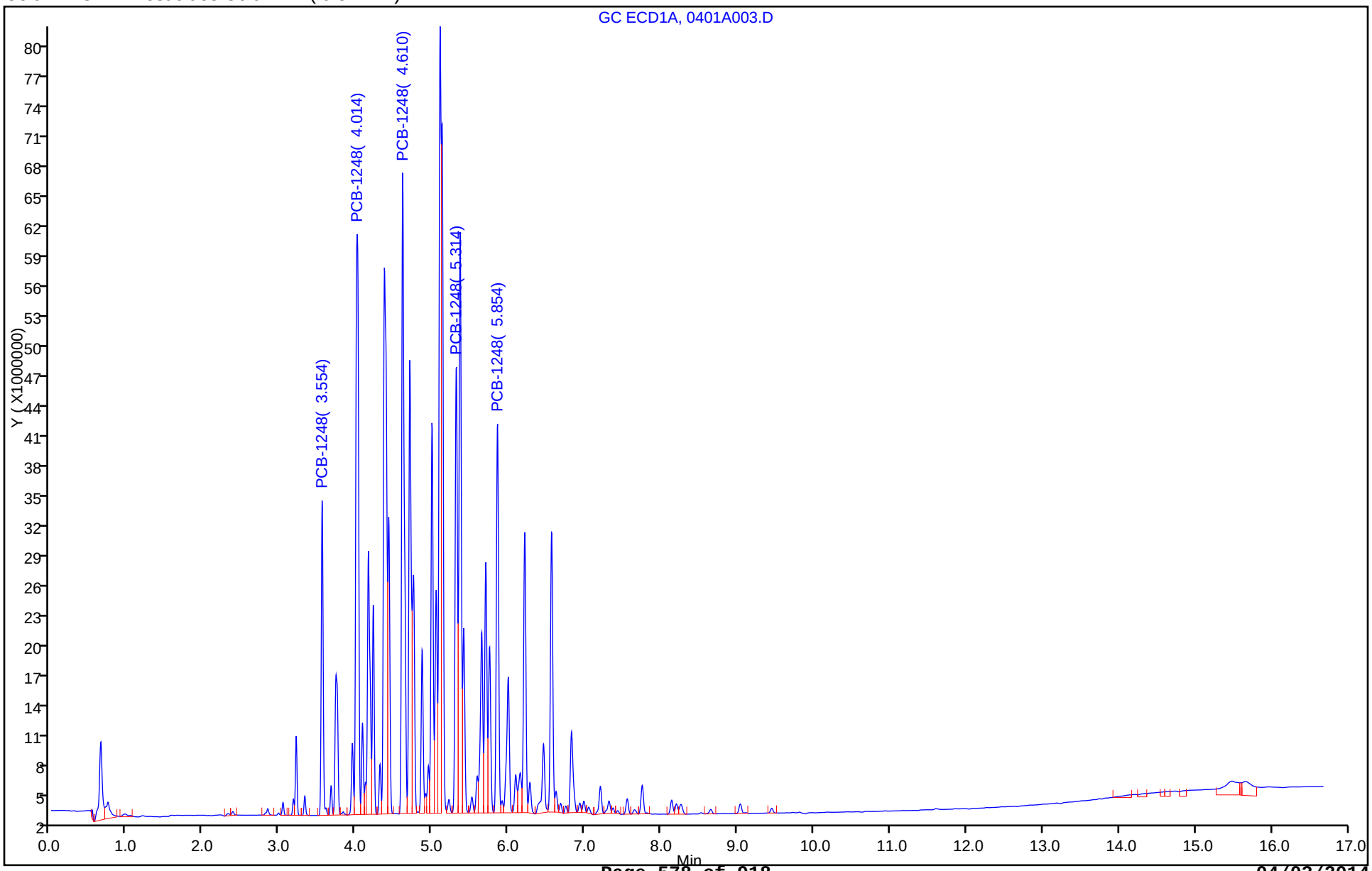
Review Flags
M - Manually Integrated

Report Date: 02-Apr-2014 07:43:56 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A003.D				
Injection Date:	01-Apr-2014 14:47:18	Instrument ID:	SGC_P3a	Operator ID:	JAX
Lims ID:	STDL71248			Worklist Smp#:	3
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	PCB_P3a	Limit Group:	GCSV - 8082		

Column: CLP1 Pesticides Column 1 (0.32 mm)

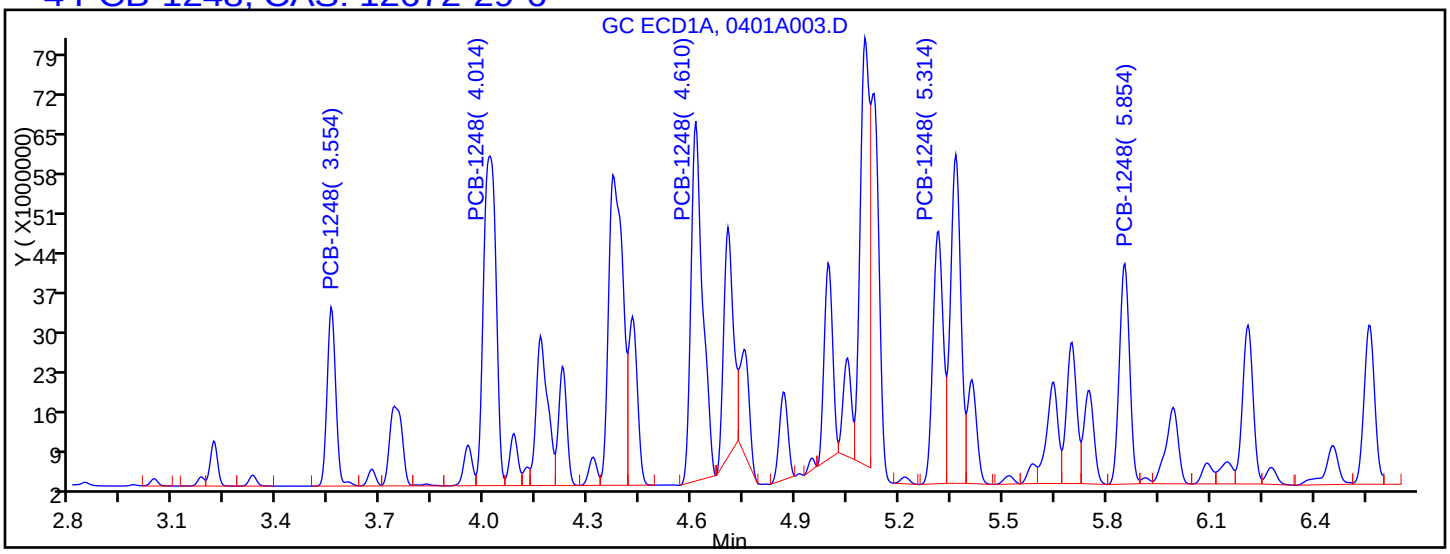


Report Date: 02-Apr-2014 07:43:56 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

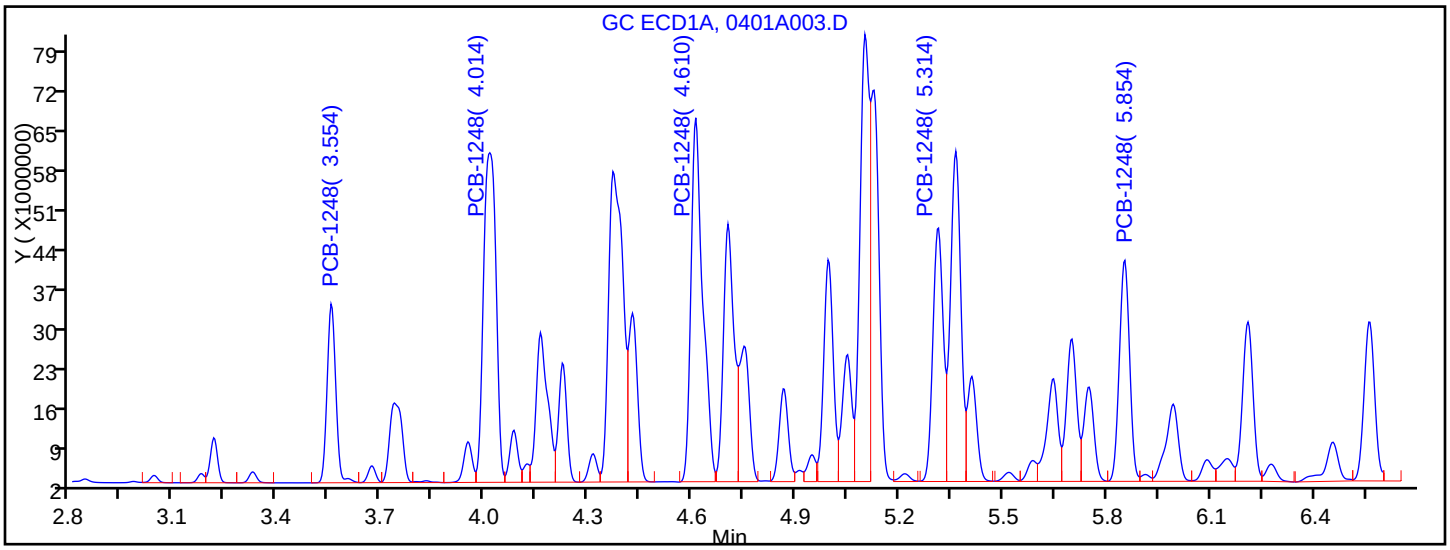
Data File: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A003.D
Injection Date: 01-Apr-2014 14:47:18 Instrument ID: SGC_P3a
Lims ID: STDL71248
Client ID:
Operator ID: JAX ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: PCB_P3a Limit Group: GCSV - 8082
Column: CLP1 Pesticides Column 1 (0.32 mm) Detector GC ECD1A

4 PCB-1248, CAS: 12672-29-6



Processing Integration Results

RT = 3.554	Response = 55190546	
RT = 4.014	Response = 147873588	
RT = 4.610	Response = 146990264	M
RT = 5.314	Response = 92743926	M
RT = 5.854	Response = 80079744	M



Manual Integration Results

RT = 3.554	Response = 55190546	
RT = 4.014	Response = 147873588	
RT = 4.610	Response = 151917363	M
RT = 5.314	Response = 93492602	M
RT = 5.854	Response = 80579689	M

Reviewer: jacksonto, 02-Apr-2014 07:34:11
Audit Action: Assigned New Baseline
Audit Reason: Baseline Smoothing

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A004.D
Lims ID: STDL61248
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 01-Apr-2014 15:08:44 ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL61248
Operator ID: JAX Instrument ID: SGC_P3a
Sublist: chrom-PCB_P3a*sub4

Method: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\PCB_P3a.m
Limit Group: GCSV - 8082
Last Update: 02-Apr-2014 07:43:57 Calib Date: 02-Apr-2014 02:52:35
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A037.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Process Host: XAWRK018

First Level Reviewer: jacksonto Date: 02-Apr-2014 07:34:23

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
4 PCB-1248					M
3.555	3.554	0.001	44601242	777.0	M
4.015	4.014	0.001	119868175	779.3	M
4.611	4.611	0.0	124063774	780.8	M
5.311	5.311	0.0	76588521	787.8	M
5.851	5.851	0.0	65374167	781.9	M
	Average of Peak Amounts =			781.4	
S 15 Polychlorinated biphenyls, Total					
				781.4	

QC Flag Legend

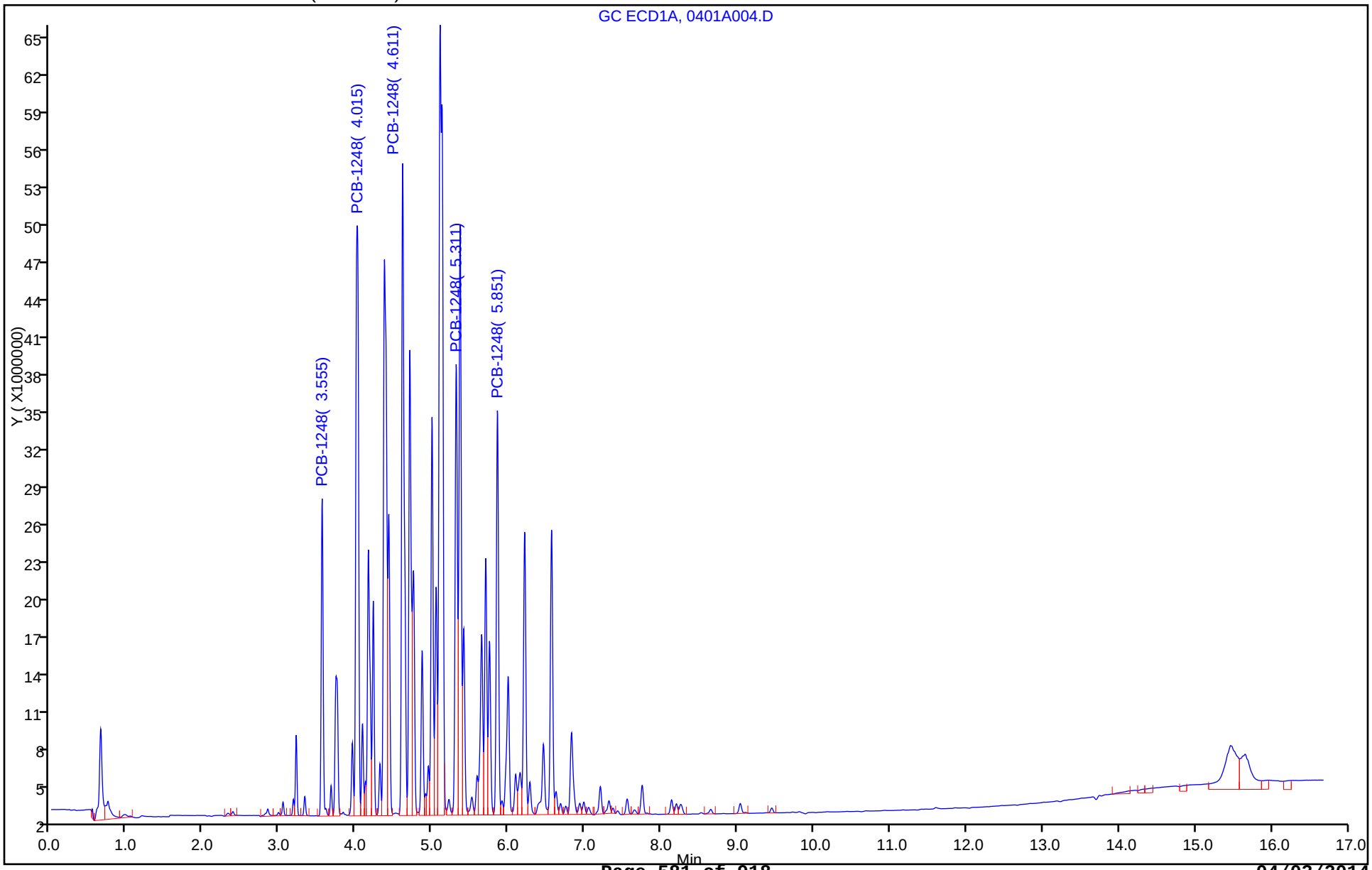
Review Flags
M - Manually Integrated

Report Date: 02-Apr-2014 07:43:58 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A004.D				
Injection Date:	01-Apr-2014 15:08:44	Instrument ID:	SGC_P3a	Operator ID:	JAX
Lims ID:	STDL61248			Worklist Smp#:	4
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	PCB_P3a	Limit Group:	GCSV - 8082		

Column: CLP1 Pesticides Column 1 (0.32 mm)

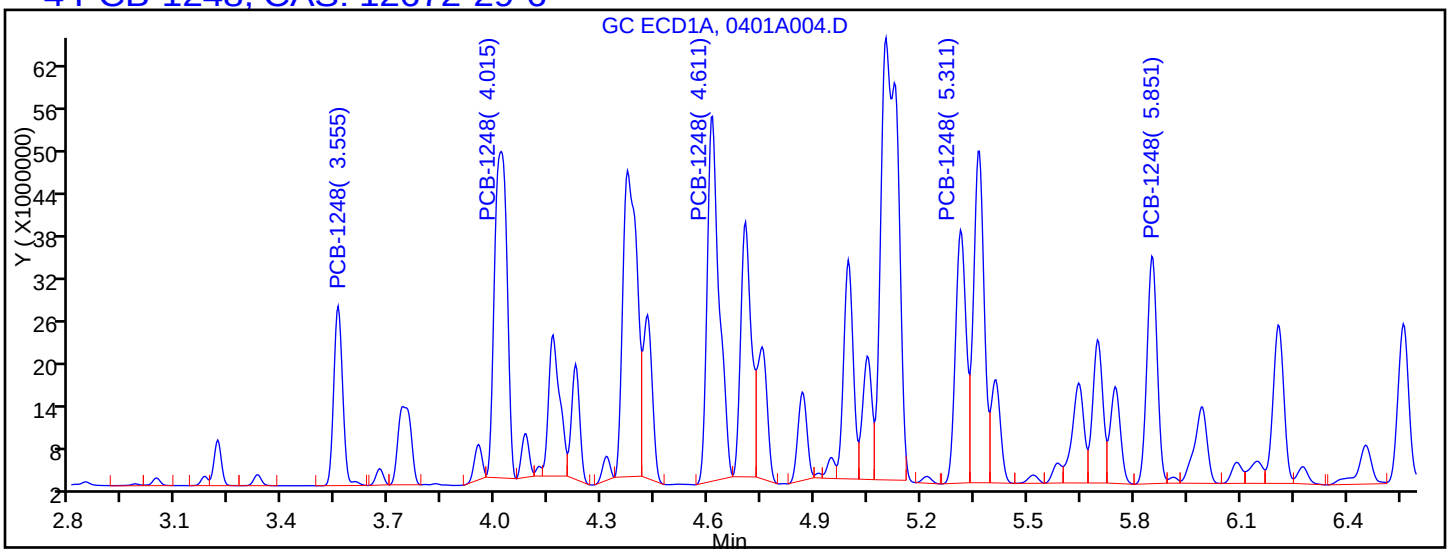


Report Date: 02-Apr-2014 07:43:58 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

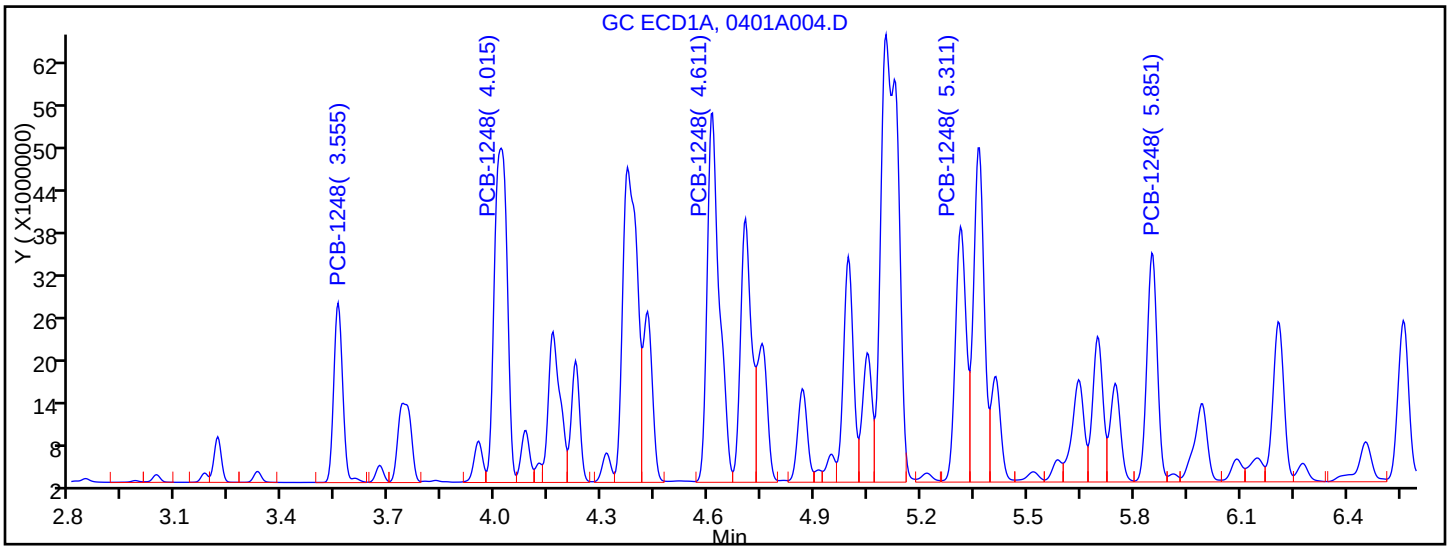
Data File: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A004.D
Injection Date: 01-Apr-2014 15:08:44 Instrument ID: SGC_P3a
Lims ID: STDL61248
Client ID:
Operator ID: JAX ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: PCB_P3a Limit Group: GCSV - 8082
Column: CLP1 Pesticides Column 1 (0.32 mm) Detector GC ECD1A

4 PCB-1248, CAS: 12672-29-6



Processing Integration Results

RT = 3.555	Response = 44220916	M
RT = 4.015	Response = 114145798	M
RT = 4.611	Response = 119848617	M
RT = 5.311	Response = 75189026	M
RT = 5.851	Response = 64194353	M



Manual Integration Results

RT = 3.555	Response = 44601242	M
RT = 4.015	Response = 119868175	M
RT = 4.611	Response = 124063774	M
RT = 5.311	Response = 76588521	M
RT = 5.851	Response = 65374167	M

Reviewer: jacksonto, 02-Apr-2014 07:34:23
Audit Action: Assigned New Baseline
Audit Reason: Baseline Smoothing

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A005.D
Lims ID: STDL51248
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 01-Apr-2014 15:30:05 ALS Bottle#: 5 Worklist Smp#: 5
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL51248
Operator ID: JAX Instrument ID: SGC_P3a
Sublist: chrom-PCB_P3a*sub4

Method: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\PCB_P3a.m
Limit Group: GCSV - 8082
Last Update: 02-Apr-2014 07:43:58 Calib Date: 02-Apr-2014 02:52:35
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A037.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Process Host: XAWRK018

First Level Reviewer: jacksonto Date: 02-Apr-2014 07:21:50

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
4 PCB-1248					M
3.554	3.554	0.0	28133964	486.4	M
4.014	4.014	0.0	75731957	488.6	M
4.611	4.611	0.0	78365190	488.9	M
5.311	5.311	0.0	47768836	488.2	M
5.851	5.851	0.0	40837369	483.1	M
	Average of Peak Amounts =			487.1	
S 15 Polychlorinated biphenyls, Total					
				487.1	

QC Flag Legend

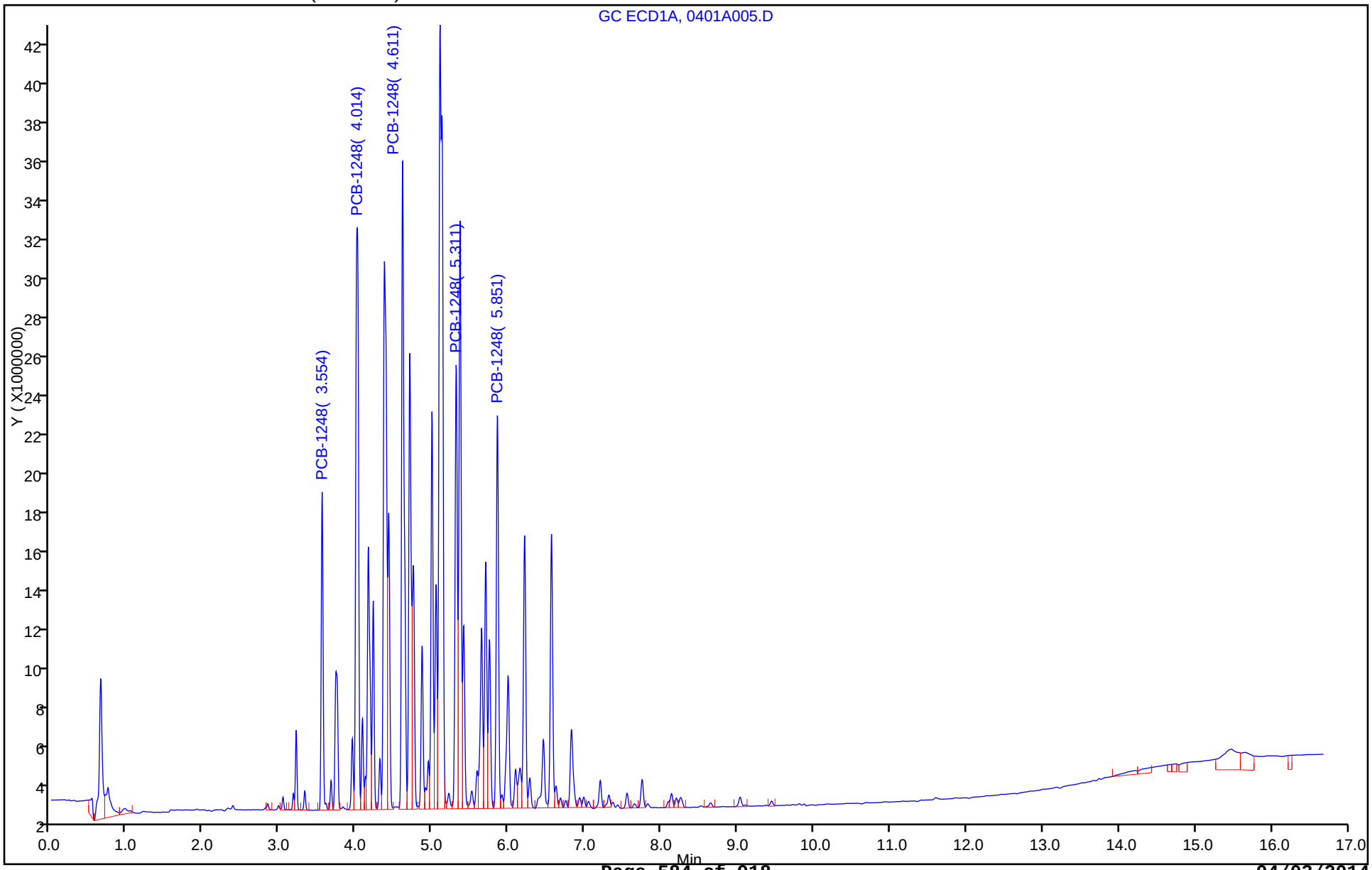
Review Flags
M - Manually Integrated

Report Date: 02-Apr-2014 07:43:58 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A005.D				
Injection Date:	01-Apr-2014 15:30:05	Instrument ID:	SGC_P3a	Operator ID:	JAX
Lims ID:	STDL51248			Worklist Smp#:	5
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	PCB_P3a	Limit Group:	GCSV - 8082		

Column: CLP1 Pesticides Column 1 (0.32 mm)

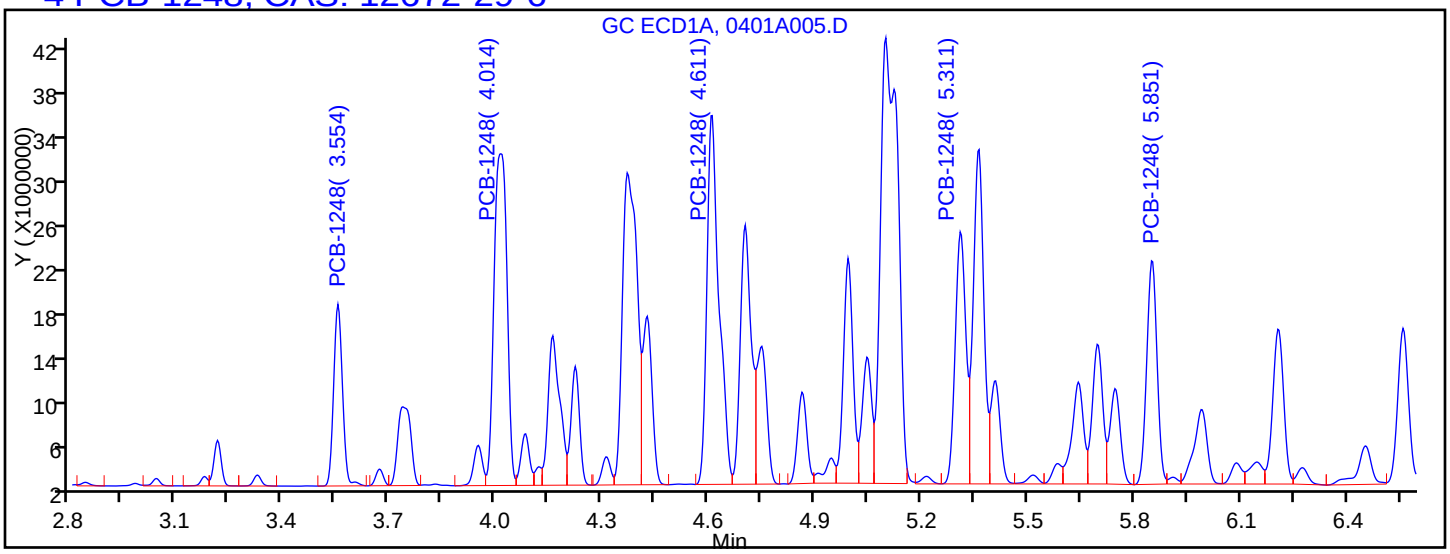


Report Date: 02-Apr-2014 07:43:59 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

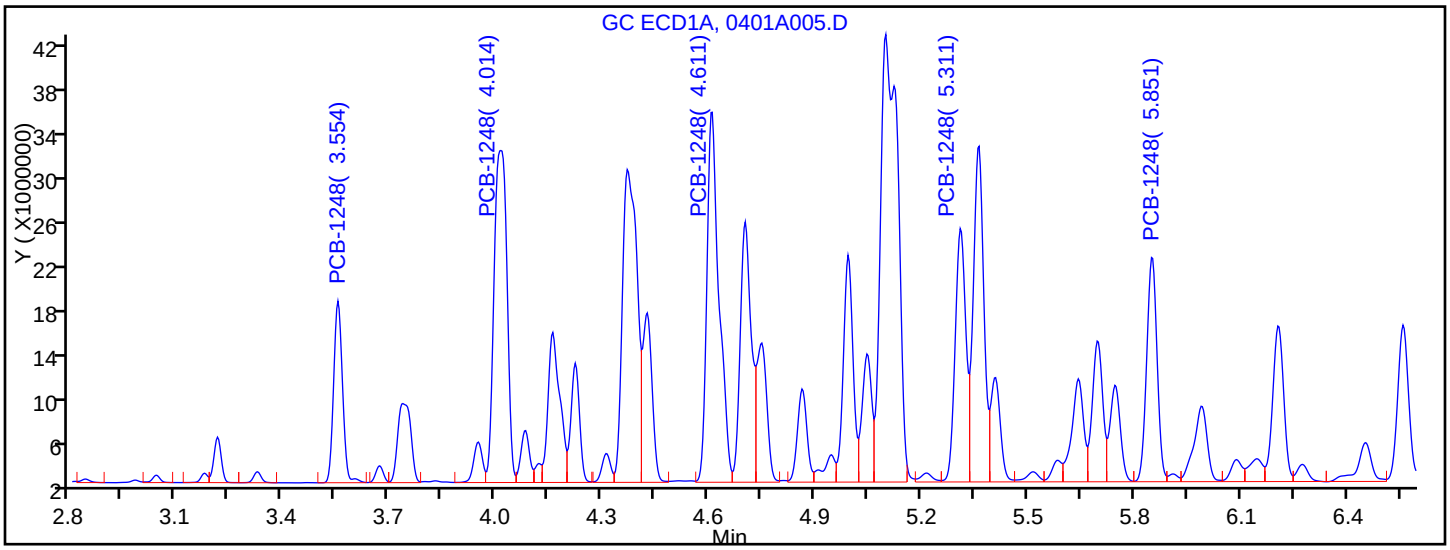
Data File: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A005.D
Injection Date: 01-Apr-2014 15:30:05 Instrument ID: SGC_P3a
Lims ID: STDL51248
Client ID:
Operator ID: JAX ALS Bottle#: 5 Worklist Smp#: 5
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: PCB_P3a Limit Group: GCSV - 8082
Column: CLP1 Pesticides Column 1 (0.32 mm) Detector GC ECD1A

4 PCB-1248, CAS: 12672-29-6



Processing Integration Results

RT = 3.554	Response = 28076822	M
RT = 4.014	Response = 75585232	M
RT = 4.611	Response = 77718455	M
RT = 5.311	Response = 47190191	M
RT = 5.851	Response = 40484468	M



Manual Integration Results

RT = 3.554	Response = 28133964	M
RT = 4.014	Response = 75731957	M
RT = 4.611	Response = 78365190	M
RT = 5.311	Response = 47768836	M
RT = 5.851	Response = 40837369	M

Reviewer: jacksonto, 02-Apr-2014 07:34:46
Audit Action: Assigned New Baseline
Audit Reason: Baseline Smoothing

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A006.D
Lims ID: STDL41248
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 01-Apr-2014 15:51:25 ALS Bottle#: 6 Worklist Smp#: 6
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL41248
Operator ID: JAX Instrument ID: SGC_P3a
Sublist: chrom-PCB_P3a*sub4

Method: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\PCB_P3a.m
Limit Group: GCSV - 8082
Last Update: 02-Apr-2014 07:43:59 Calib Date: 02-Apr-2014 02:52:35
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A037.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Process Host: XAWRK018

First Level Reviewer: jacksonto Date: 02-Apr-2014 07:35:03

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
4 PCB-1248					M
3.555	3.554	0.001	15501192	263.5	
4.012	4.014	-0.002	41055825	260.2	M
4.608	4.611	-0.003	43100082	263.7	M
5.312	5.311	0.001	25306755	254.8	M
5.852	5.851	0.001	22440068	259.1	M
	Average of Peak Amounts =			260.3	
S 15 Polychlorinated biphenyls, Total					
				260.3	

QC Flag Legend

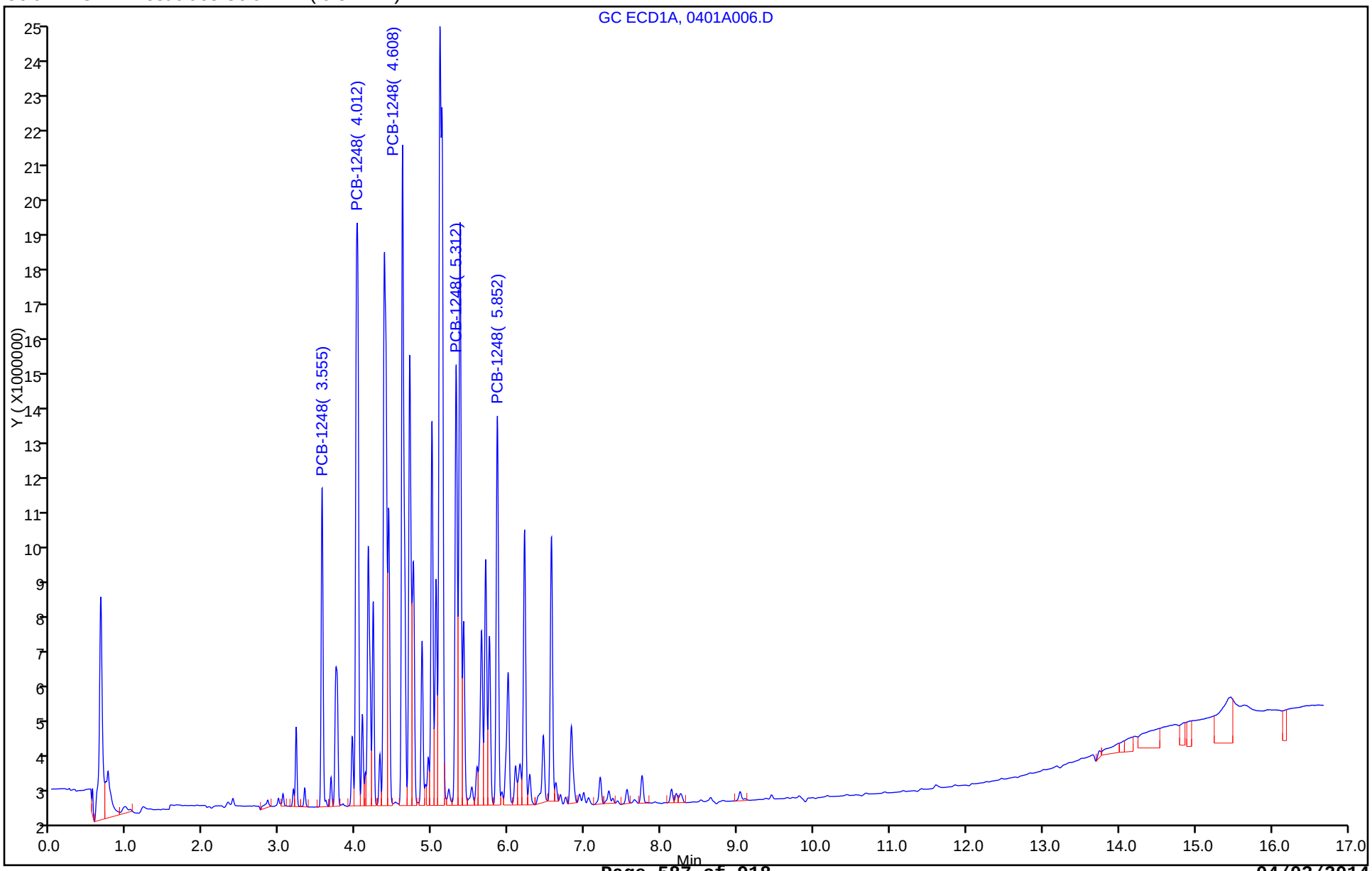
Review Flags
M - Manually Integrated

Report Date: 02-Apr-2014 07:44:00 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A006.D				
Injection Date:	01-Apr-2014 15:51:25	Instrument ID:	SGC_P3a	Operator ID:	JAX
Lims ID:	STDL41248			Worklist Smp#:	6
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	PCB_P3a	Limit Group:	GCSV - 8082		

Column: CLP1 Pesticides Column 1 (0.32 mm)

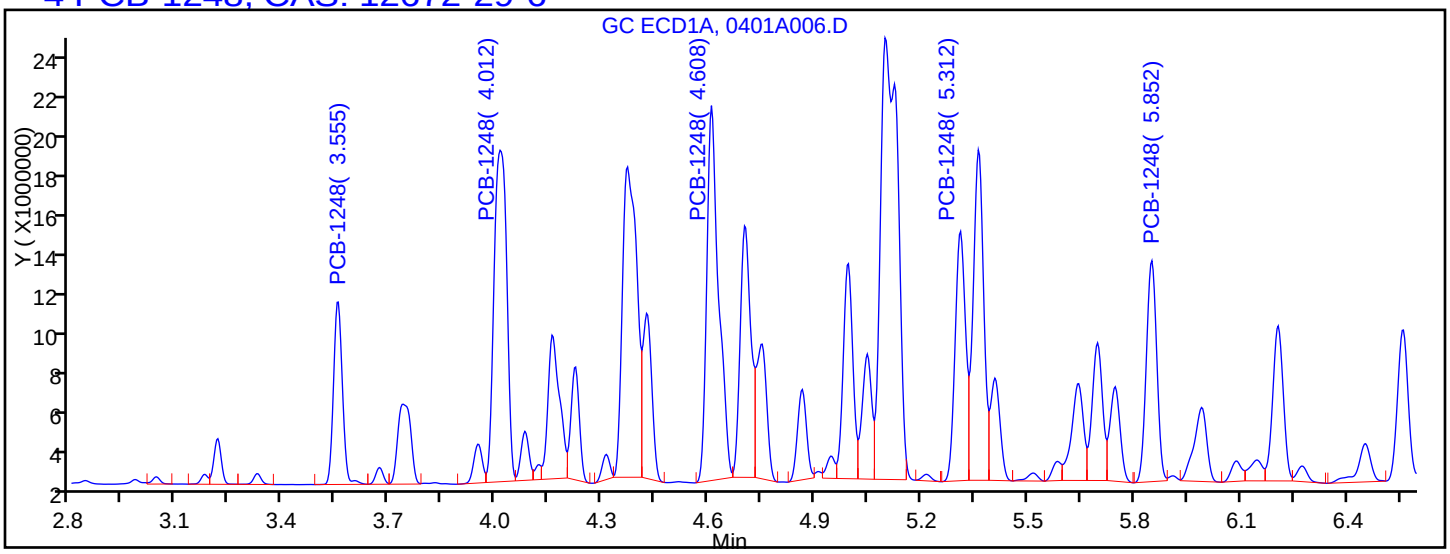


Report Date: 02-Apr-2014 07:44:00 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

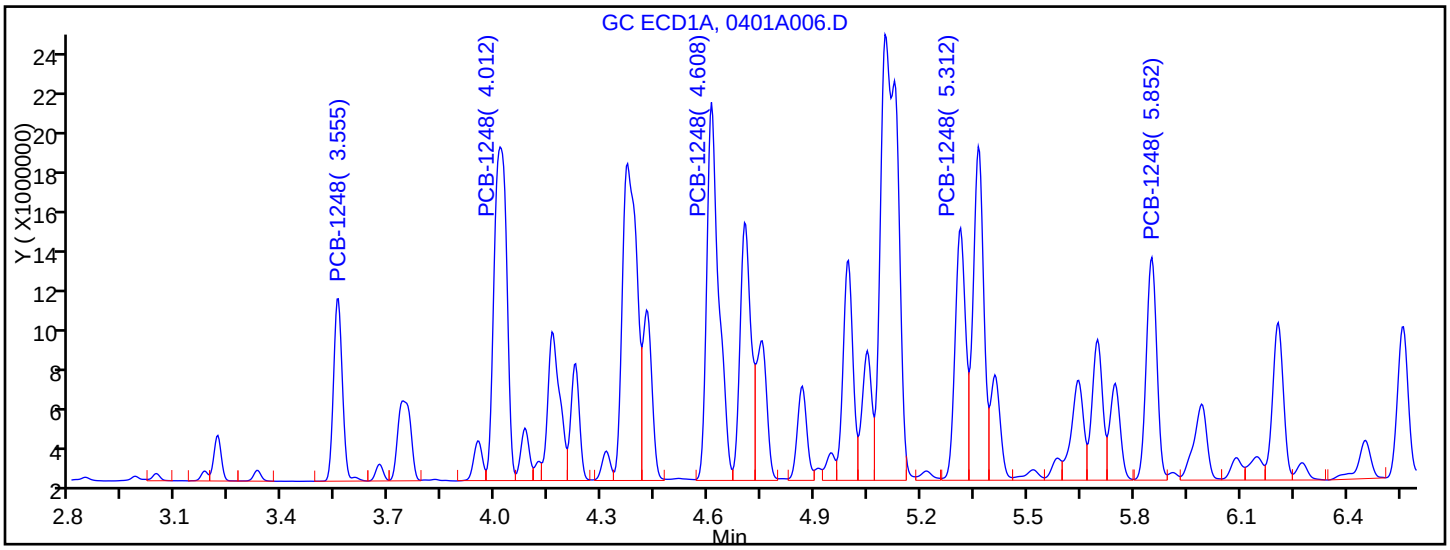
Data File: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A006.D
Injection Date: 01-Apr-2014 15:51:25 Instrument ID: SGC_P3a
Lims ID: STDL41248
Client ID:
Operator ID: JAX ALS Bottle#: 6 Worklist Smp#: 6
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: PCB_P3a Limit Group: GCSV - 8082
Column: CLP1 Pesticides Column 1 (0.32 mm) Detector GC ECD1A

4 PCB-1248, CAS: 12672-29-6



Processing Integration Results

RT = 3.555	Response = 15501192	
RT = 4.012	Response = 40534587	M
RT = 4.608	Response = 42007280	M
RT = 5.312	Response = 24728433	M
RT = 5.852	Response = 21971600	M



Manual Integration Results

RT = 3.555	Response = 15501192	
RT = 4.012	Response = 41055825	M
RT = 4.608	Response = 43100082	M
RT = 5.312	Response = 25306755	M
RT = 5.852	Response = 22440068	M

Reviewer: jacksonto, 02-Apr-2014 07:35:03
Audit Action: Assigned New Baseline
Audit Reason: Baseline Smoothing

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A007.D
Lims ID: STDL31248
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 01-Apr-2014 16:12:51 ALS Bottle#: 7 Worklist Smp#: 7
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL31248
Operator ID: JAX Instrument ID: SGC_P3a
Sublist: chrom-PCB_P3a*sub4

Method: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\PCB_P3a.m
Limit Group: GCSV - 8082
Last Update: 02-Apr-2014 07:44:01 Calib Date: 02-Apr-2014 02:52:35
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A037.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Process Host: XAWRK018

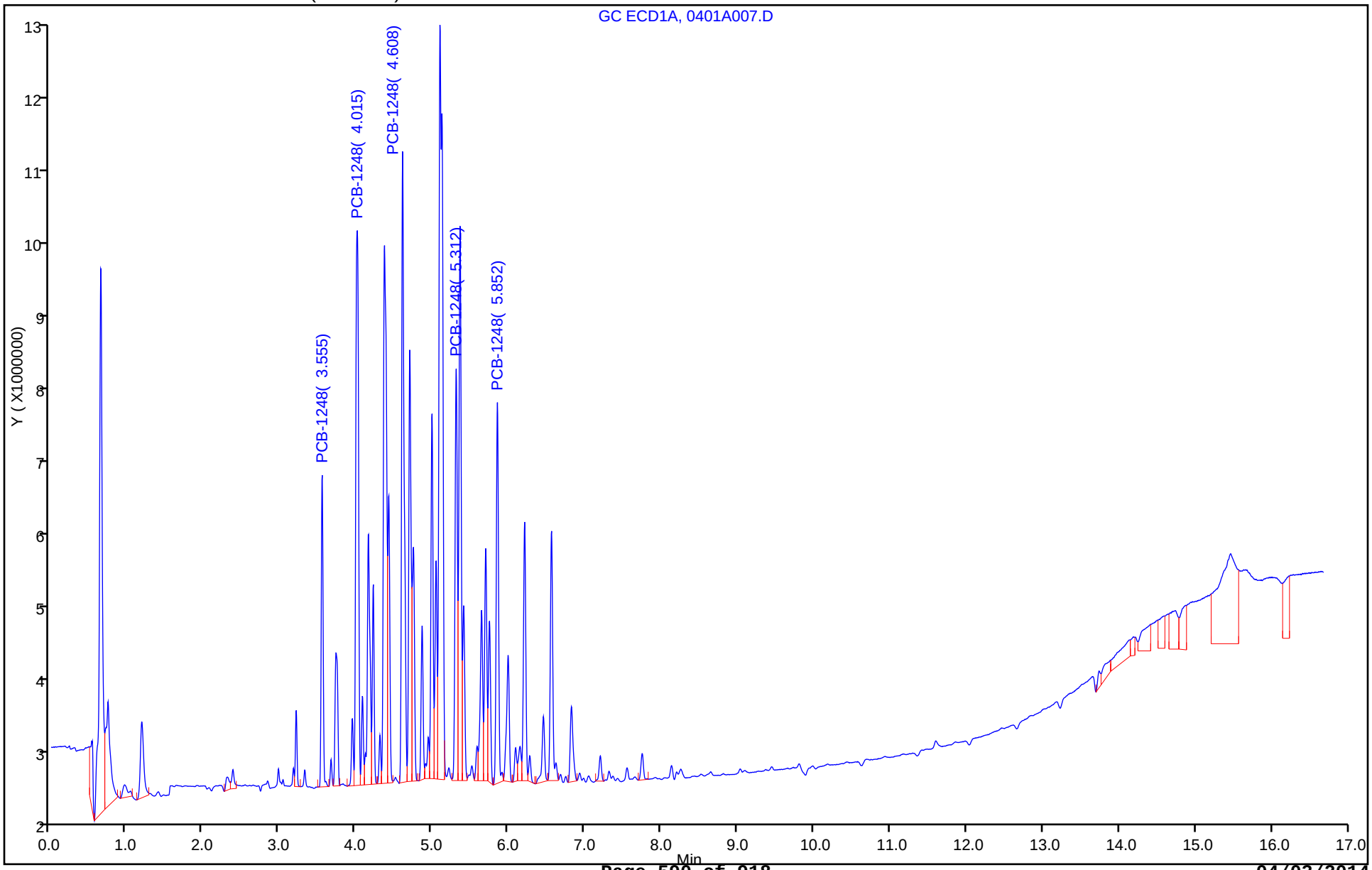
RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
4 PCB-1248					
3.555	3.554	0.001	6907129	111.9	
4.015	4.014	0.001	18243113	110.0	
4.608	4.611	-0.003	19059296	110.1	
5.312	5.311	0.001	11034564	106.4	
5.852	5.851	0.001	10239599	110.6	
	Average of Peak Amounts =			109.8	
S 15 Polychlorinated biphenyls, Total					
				109.8	

Report Date: 02-Apr-2014 07:44:02 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A007.D				
Injection Date:	01-Apr-2014 16:12:51	Instrument ID:	SGC_P3a	Operator ID:	JAX
Lims ID:	STDL31248			Worklist Smp#:	7
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	PCB_P3a	Limit Group:	GCSV - 8082		

Column: CLP1 Pesticides Column 1 (0.32 mm)



TestAmerica Denver
Target Compound Quantitation Report

Data File:	\\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A008.D				
Lims ID:	STDL21248				
Client ID:					
Sample Type:	IC	Calib Level:	2		
Inject. Date:	01-Apr-2014 16:34:10	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	STDL21248				
Operator ID:	JAX	Instrument ID:	SGC_P3a		
Sublist:	chrom-PCB_P3a*sub4				
Method:	\\Denchrom\ChromData\SGC_P3a\20140401-21600.b\PCB_P3a.m				
Limit Group:	GCSV - 8082				
Last Update:	02-Apr-2014 07:44:02	Calib Date:	02-Apr-2014 02:52:35		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A037.D				
Column 1 :	CLP1 Pesticides Column 1 (0.32 mm)		Det: GC ECD1A		
Process Host:	XAWRK018				

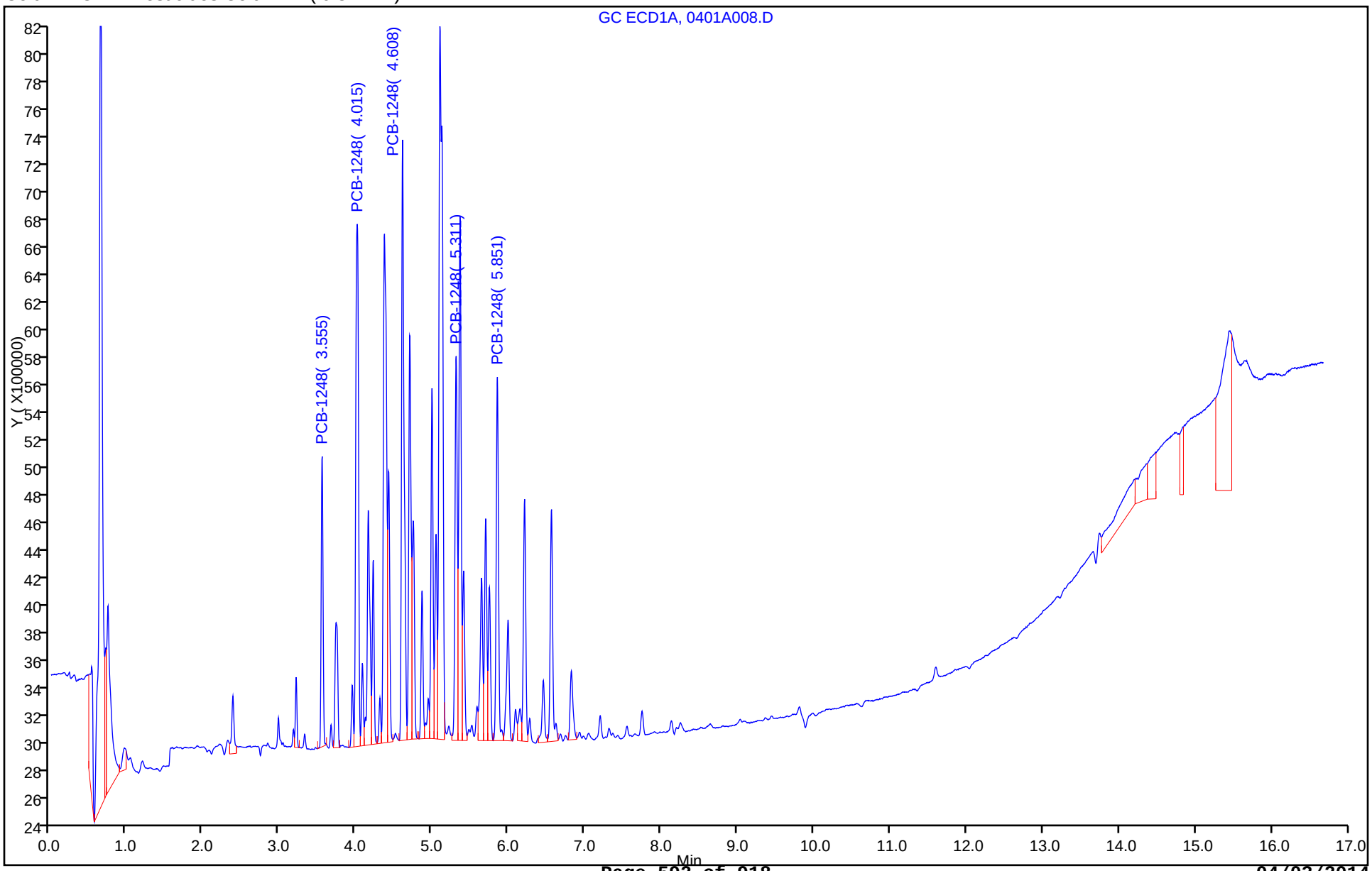
RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
4 PCB-1248					
3.555	3.554	0.001	3504971	51.9	
4.015	4.014	0.001	9463447	52.2	
4.608	4.611	-0.003	10022364	52.4	
5.311	5.311	0.0	5818392	52.2	
5.851	5.851	0.0	5459348	52.4	
	Average of Peak Amounts =			52.2	
S 15 Polychlorinated biphenyls, Total					
				52.2	

Report Date: 02-Apr-2014 07:44:03 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A008.D				
Injection Date:	01-Apr-2014 16:34:10	Instrument ID:	SGC_P3a	Operator ID:	JAX
Lims ID:	STDL21248			Worklist Smp#:	8
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	PCB_P3a	Limit Group:	GCSV - 8082		

Column: CLP1 Pesticides Column 1 (0.32 mm)



TestAmerica Denver
Target Compound Quantitation Report

Data File:	\\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A009.D				
Lims ID:	STDL11248				
Client ID:					
Sample Type:	IC	Calib Level:	1		
Inject. Date:	01-Apr-2014 16:55:30	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	STDL11248				
Operator ID:	JAX	Instrument ID:	SGC_P3a		
Sublist:	chrom-PCB_P3a*sub4				
Method:	\\Denchrom\ChromData\SGC_P3a\20140401-21600.b\PCB_P3a.m				
Limit Group:	GCSV - 8082				
Last Update:	02-Apr-2014 07:44:04	Calib Date:	02-Apr-2014 02:52:35		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A037.D				
Column 1 :	CLP1 Pesticides Column 1 (0.32 mm)		Det: GC ECD1A		
Process Host:	XAWRK018				

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
4 PCB-1248					
3.554	3.554	0.0	1722456	20.4	
4.014	4.014	0.0	4717083	20.9	
4.607	4.611	-0.004	5018635	20.5	
5.311	5.311	0.0	2914252	22.0	
5.851	5.851	0.0	2871422	20.9	
	Average of Peak Amounts =			20.9	
S 15 Polychlorinated biphenyls, Total					
				20.9	

Report Date: 02-Apr-2014 07:44:04 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A009.D

Injection Date: 01-Apr-2014 16:55:30 Instrument ID: SGC_P3a Operator ID: JAX

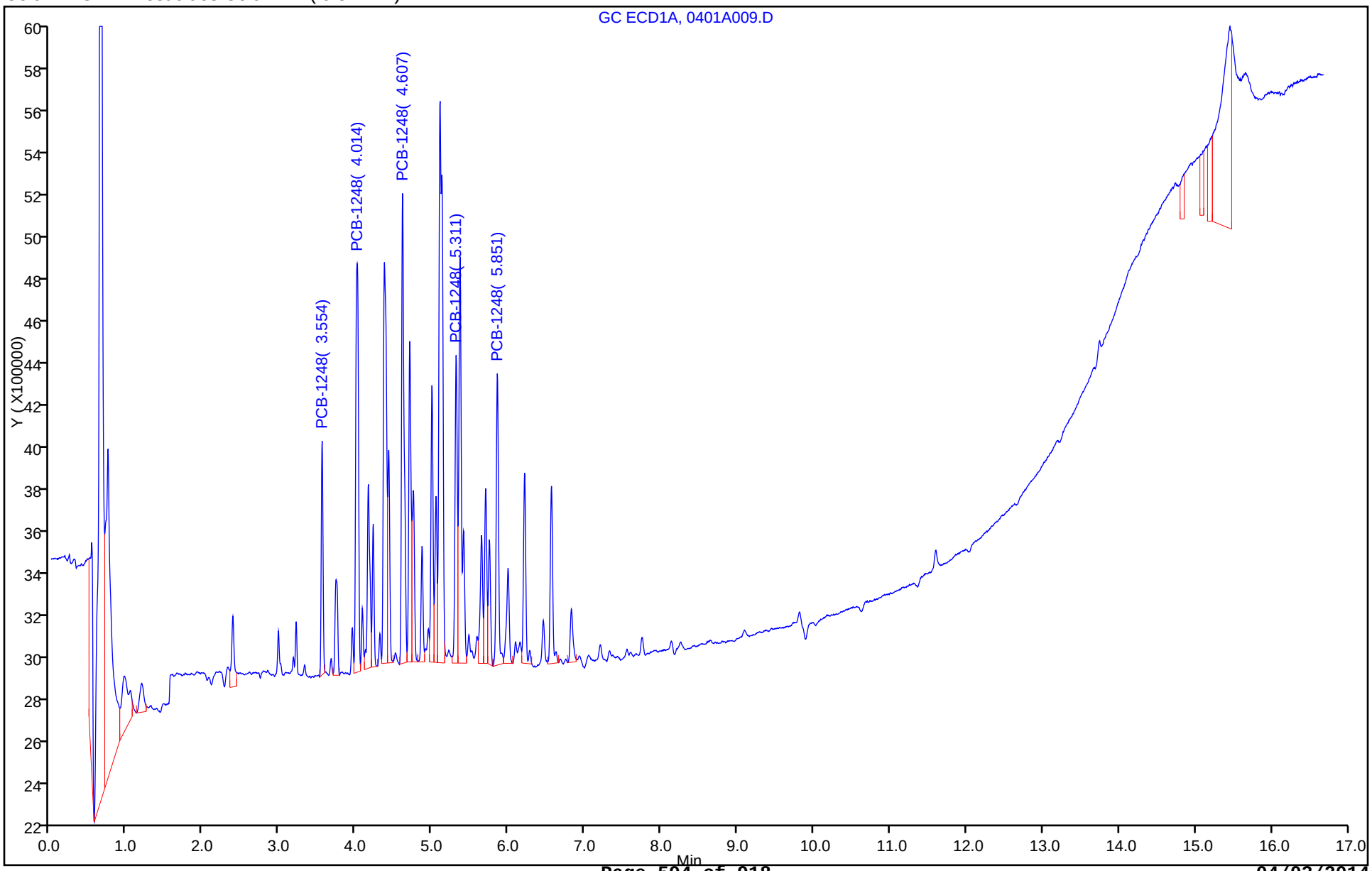
Lims ID: STDL11248 Worklist Smp#: 9

Client ID:

Injection Vol: 1.0 ul Dil. Factor: 1.0000 ALS Bottle#: 9

Method: PCB_P3a Limit Group: GCSV - 8082

Column: CLP1 Pesticides Column 1 (0.32 mm)



FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-53458-1 Analy Batch No.: 219270

SDG No.:

Instrument ID: SGC_P3a GC Column: CLP1 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/01/2014 17:16 Calibration End Date: 04/01/2014 19:25 Calibration ID: 17670

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STDL12154 280-219270/16	0401A016.D
Level 2	STDL22154 280-219270/15	0401A015.D
Level 3	STDL32154 280-219270/14	0401A014.D
Level 4	STDL42154 280-219270/13	0401A013.D
Level 5	STDL52154 280-219270/12	0401A012.D
Level 6	STDL62154 280-219270/11	0401A011.D
Level 7	STDL72154 280-219270/10	0401A010.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	LVL 7				RT WINDOW	AVG RT
PCB-1221 Peak 1	3.042	3.042	3.041	3.042	3.042	3.040	3.039				2.792 - 3.292	3.041
PCB-1221 Peak 2	3.179	3.179	3.178	3.179	3.179	3.177	3.176				2.929 - 3.429	3.178
PCB-1221 Peak 3	3.215	3.215	3.215	3.216	3.216	3.214	3.212				2.966 - 3.466	3.215
PCB-1254 Peak 1	5.049	5.049	5.048	5.049	5.049	5.047	5.049				4.799 - 5.299	5.049
PCB-1254 Peak 2	5.365	5.365	5.365	5.366	5.366	5.364	5.366				5.116 - 5.616	5.365
PCB-1254 Peak 3	5.852	5.852	5.851	5.852	5.852	5.850	5.852				5.602 - 6.102	5.852
PCB-1254 Peak 4	6.209	6.209	6.208	6.209	6.209	6.207	6.209				5.959 - 6.459	6.209
PCB-1254 Peak 5	6.822	6.822	6.821	6.822	6.822	6.820	6.822				6.572 - 7.072	6.822

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Denver Job No.: 280-53458-1 Analy Batch No.: 219270

SDG No.:

Instrument ID: SGC_P3a GC Column: CLP1 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/01/2014 17:16 Calibration End Date: 04/01/2014 19:25 Calibration ID: 17670

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STDL12154 280-219270/16	0401A016.D
Level 2	STDL22154 280-219270/15	0401A015.D
Level 3	STDL32154 280-219270/14	0401A014.D
Level 4	STDL42154 280-219270/13	0401A013.D
Level 5	STDL52154 280-219270/12	0401A012.D
Level 6	STDL62154 280-219270/11	0401A011.D
Level 7	STDL72154 280-219270/10	0401A010.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3 LVL 7	LVL 4		B	M1	M2								
PCB-1221 Peak 1	48007 35941	45344 37708	43008 35331	41847	Lin1	433119.595	36179.7940							0.9970		0.9900
PCB-1221 Peak 2	35313 24320	31334 24901	29853 24601	28982	Lin1	350803.898	24546.4720							0.9970		0.9900
PCB-1221 Peak 3	122947 85416	112143 89109	106260 83004	101335	Lin1	1325408.76	85198.3741							0.9960		0.9900
PCB-1254 Peak 1	190184 131285	167828 137909	159691 131277	153880	Lin1	1820034.30	132783.307							0.9970		0.9900
PCB-1254 Peak 2	265011 186129	237466 197362	226478 186275	218085	Lin1	2468245.57	189065.714							0.9970		0.9900
PCB-1254 Peak 3	360155 256577	324288 273223	310428 258841	301002	Lin1	3183999.50	262157.178							0.9970		0.9900
PCB-1254 Peak 4	278825 201160	253013 216621	242685 204172	236399	Lin1	2345129.17	207024.736							0.9970		0.9900
PCB-1254 Peak 5	379689 278090	343679 299164	331295 283417	325616	Lin1	2978831.46	286801.244							0.9980		0.9900

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Denver Job No.: 280-53458-1 Analy Batch No.: 219270

SDG No.:

Instrument ID: SGC_P3a GC Column: CLP1 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/01/2014 17:16 Calibration End Date: 04/01/2014 19:25 Calibration ID: 17670

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STDL12154 280-219270/16	0401A016.D
Level 2	STDL22154 280-219270/15	0401A015.D
Level 3	STDL32154 280-219270/14	0401A014.D
Level 4	STDL42154 280-219270/13	0401A013.D
Level 5	STDL52154 280-219270/12	0401A012.D
Level 6	STDL62154 280-219270/11	0401A011.D
Level 7	STDL72154 280-219270/10	0401A010.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
		LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
PCB-1221 Peak 1	Lin1	1200185 28281214	2267203 35331376	4300770	10461681	17970357	25.0 750	50.0 1000	100	250	500
PCB-1221 Peak 2	Lin1	882829 18676023	1566720 24601019	2985281	7245527	12160041	25.0 750	50.0 1000	100	250	500
PCB-1221 Peak 3	Lin1	3073675 66831476	5607136 83003618	10625970	25333679	42707958	25.0 750	50.0 1000	100	250	500
PCB-1254 Peak 1	Lin1	4754590 103431434	8391404 131276581	15969059	38470018	65642500	25.0 750	50.0 1000	100	250	500
PCB-1254 Peak 2	Lin1	6625271 148021151	11873320 186275238	22647762	54521372	93064389	25.0 750	50.0 1000	100	250	500
PCB-1254 Peak 3	Lin1	9003868 204917426	16214389 258841110	31042798	75250501	128288355	25.0 750	50.0 1000	100	250	500
PCB-1254 Peak 4	Lin1	6970632 162465878	12650660 204171649	24268463	59099713	100580079	25.0 750	50.0 1000	100	250	500
PCB-1254 Peak 5	Lin1	9492234 224373152	17183933 283417415	33129508	81403988	139044918	25.0 750	50.0 1000	100	250	500

Curve Type Legend:

Lin1 = Linear 1/conc

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A010.D
Lims ID: STDL72154
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 01-Apr-2014 17:16:56 ALS Bottle#: 10 Worklist Smp#: 10
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL72154
Operator ID: JAX Instrument ID: SGC_P3a
Sublist: chrom-PCB_P3a*sub5

Method: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\PCB_P3a.m
Limit Group: GCSV - 8082
Last Update: 02-Apr-2014 07:44:05 Calib Date: 02-Apr-2014 02:52:35
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A037.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Process Host: XAWRK018

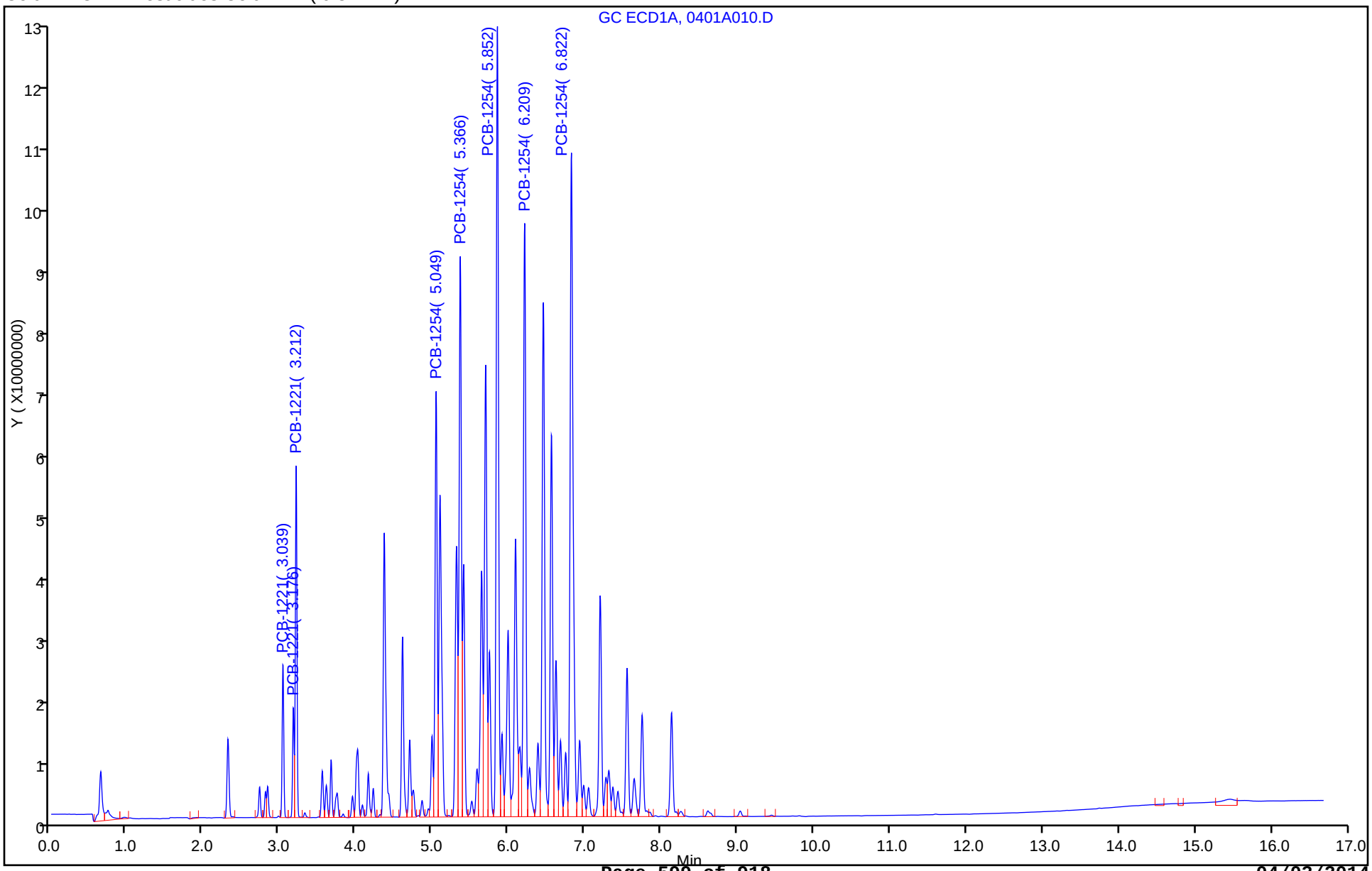
RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
2 PCB-1221					
3.039	3.042	-0.003	35331376	964.6	
3.176	3.179	-0.003	24601019	987.9	
3.212	3.216	-0.004	83003618	958.7	
	Average of Peak Amounts =			970.4	
7 PCB-1254					
5.049	5.049	0.0	131276581	974.9	
5.366	5.366	0.0	186275238	972.2	
5.852	5.852	0.0	258841110	975.2	
6.209	6.209	0.0	204171649	974.9	
6.822	6.822	0.0	283417415	977.8	
	Average of Peak Amounts =			975.0	
S 15 Polychlorinated biphenyls, Total					
				1945.4	

Report Date: 02-Apr-2014 07:44:05 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A010.D				
Injection Date:	01-Apr-2014 17:16:56	Instrument ID:	SGC_P3a	Operator ID:	JAX
Lims ID:	STDL72154			Worklist Smp#:	10
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	PCB_P3a	Limit Group:	GCSV - 8082		

Column: CLP1 Pesticides Column 1 (0.32 mm)



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A011.D
Lims ID: STDL62154
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 01-Apr-2014 17:38:15 ALS Bottle#: 11 Worklist Smp#: 11
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL62154
Operator ID: JAX Instrument ID: SGC_P3a
Sublist: chrom-PCB_P3a*sub5

Method: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\PCB_P3a.m
Limit Group: GCSV - 8082
Last Update: 02-Apr-2014 07:44:05 Calib Date: 02-Apr-2014 02:52:35
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A037.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Process Host: XAWRK018

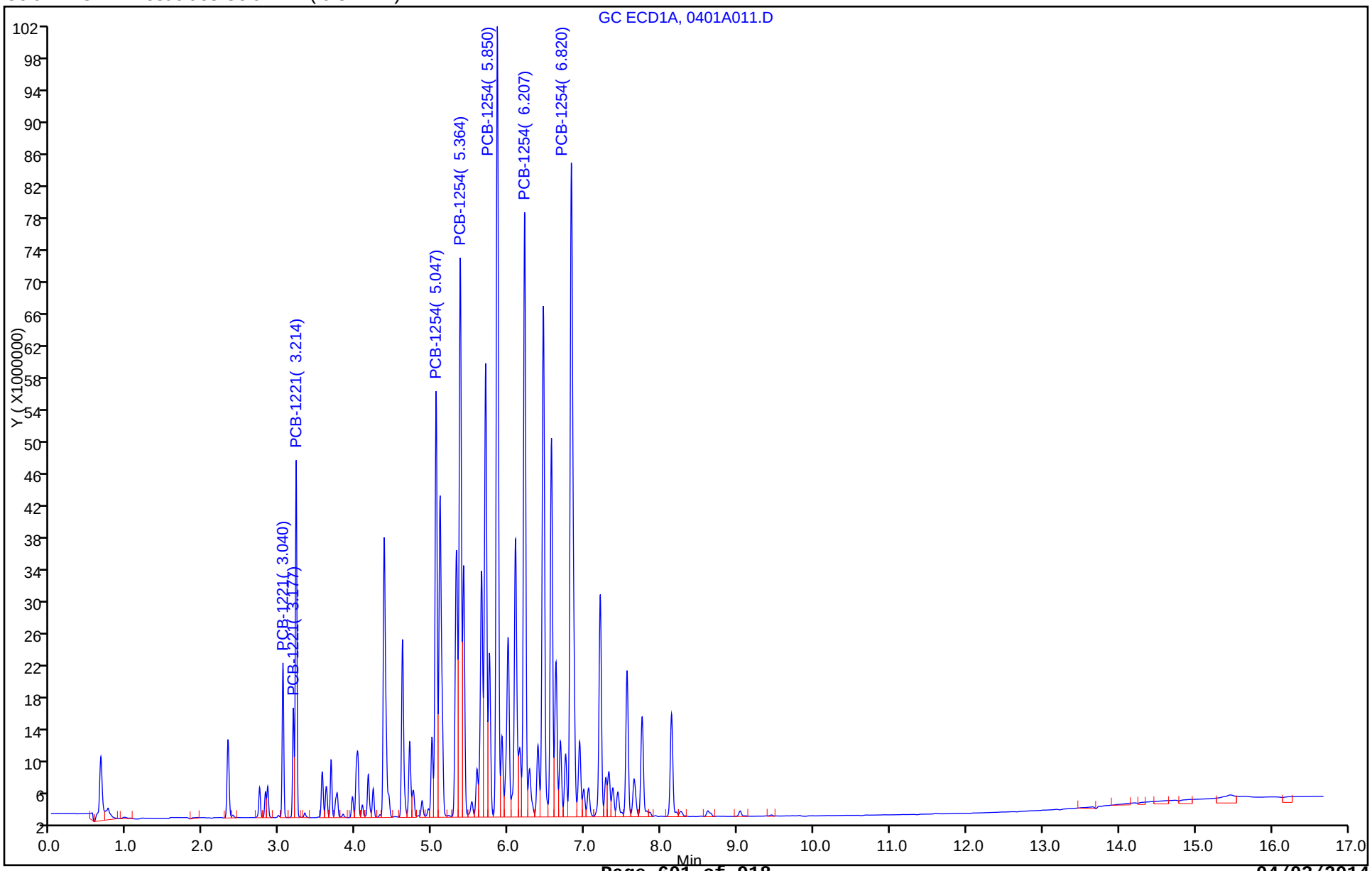
RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
2 PCB-1221					
3.040	3.042	-0.002	28281214	769.7	
3.177	3.179	-0.002	18676023	746.6	
3.214	3.216	-0.002	66831476	768.9	
	Average of Peak Amounts =			761.7	
7 PCB-1254					
5.047	5.049	-0.002	103431434	765.2	
5.364	5.366	-0.002	148021151	769.9	
5.850	5.852	-0.002	204917426	769.5	
6.207	6.209	-0.002	162465878	773.4	
6.820	6.822	-0.002	224373152	771.9	
	Average of Peak Amounts =			770.0	
S 15 Polychlorinated biphenyls, Total					
				1531.7	

Report Date: 02-Apr-2014 07:44:06 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A011.D				
Injection Date:	01-Apr-2014 17:38:15	Instrument ID:	SGC_P3a	Operator ID:	JAX
Lims ID:	STDL62154			Worklist Smp#:	11
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	PCB_P3a	Limit Group:	GCSV - 8082		

Column: CLP1 Pesticides Column 1 (0.32 mm)



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A012.D
Lims ID: STDL52154
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 01-Apr-2014 17:59:40 ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL52154
Operator ID: JAX Instrument ID: SGC_P3a
Sublist: chrom-PCB_P3a*sub5

Method: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\PCB_P3a.m
Limit Group: GCSV - 8082
Last Update: 02-Apr-2014 07:44:06 Calib Date: 02-Apr-2014 02:52:35
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A037.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Process Host: XAWRK018

First Level Reviewer: jacksonto Date: 02-Apr-2014 07:22:30

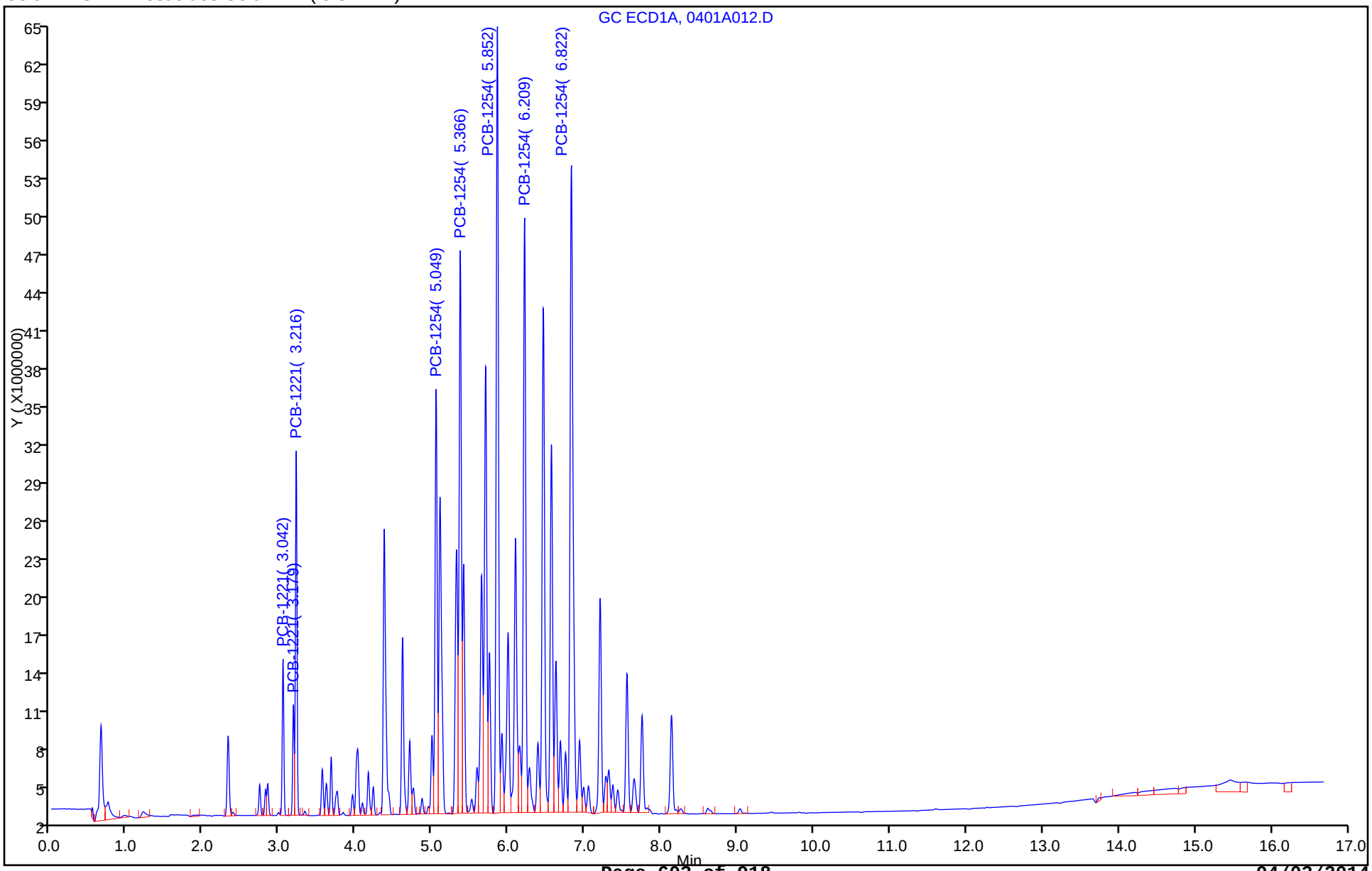
RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
2 PCB-1221					
3.042	3.042	0.0	17970357	484.7	
3.179	3.179	0.0	12160041	481.1	
3.216	3.216	0.0	42707958	485.7	
	Average of Peak Amounts =			483.8	
7 PCB-1254					
5.049	5.049	0.0	65642500	480.7	
5.366	5.366	0.0	93064389	479.2	
5.852	5.852	0.0	128288355	477.2	
6.209	6.209	0.0	100580079	474.5	
6.822	6.822	0.0	139044918	474.4	
	Average of Peak Amounts =			477.2	
S 15 Polychlorinated biphenyls, Total					
				961.0	

Report Date: 02-Apr-2014 07:44:07 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A012.D				
Injection Date:	01-Apr-2014 17:59:40	Instrument ID:	SGC_P3a	Operator ID:	JAX
Lims ID:	STDL52154			Worklist Smp#:	12
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	PCB_P3a	Limit Group:	GCSV - 8082		

Column: CLP1 Pesticides Column 1 (0.32 mm)



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A013.D
Lims ID: STDL42154
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 01-Apr-2014 18:21:03 ALS Bottle#: 13 Worklist Smp#: 13
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL42154
Operator ID: JAX Instrument ID: SGC_P3a
Sublist: chrom-PCB_P3a*sub5

Method: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\PCB_P3a.m
Limit Group: GCSV - 8082
Last Update: 02-Apr-2014 07:44:07 Calib Date: 02-Apr-2014 02:52:35
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A037.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Process Host: XAWRK018

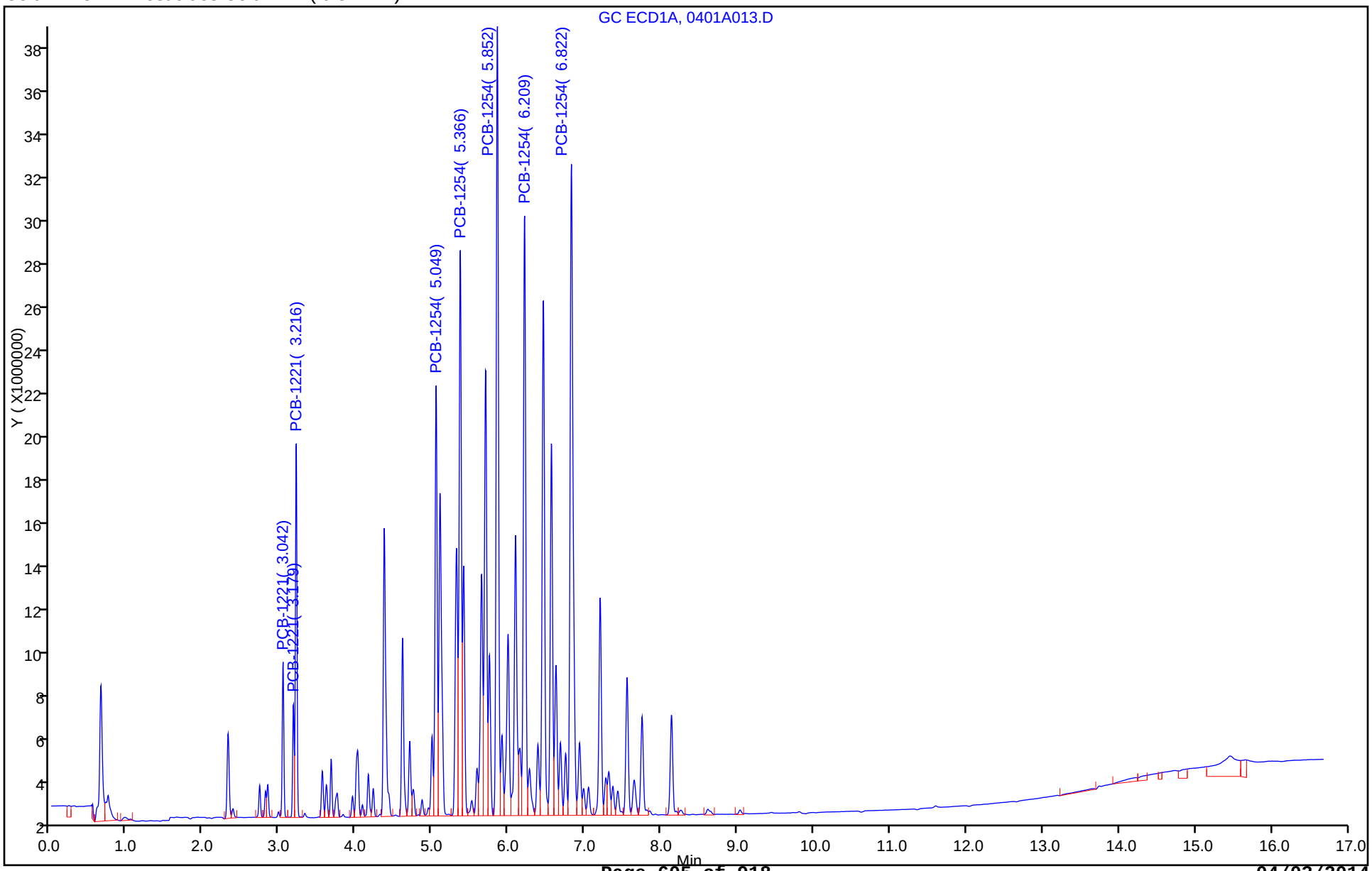
RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
2 PCB-1221					
3.042	3.042	0.0	10461681	277.2	
3.179	3.179	0.0	7245527	280.9	
3.216	3.216	0.0	25333679	281.8	
	Average of Peak Amounts =			280.0	
7 PCB-1254					
5.049	5.049	0.0	38470018	276.0	
5.366	5.366	0.0	54521372	275.3	
5.852	5.852	0.0	75250501	274.9	
6.209	6.209	0.0	59099713	274.1	
6.822	6.822	0.0	81403988	273.4	
	Average of Peak Amounts =			274.8	
S 15 Polychlorinated biphenyls, Total					
				554.7	

Report Date: 02-Apr-2014 07:44:08 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A013.D				
Injection Date:	01-Apr-2014 18:21:03	Instrument ID:	SGC_P3a	Operator ID:	JAX
Lims ID:	STDL42154			Worklist Smp#:	13
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	PCB_P3a	Limit Group:	GCSV - 8082		

Column: CLP1 Pesticides Column 1 (0.32 mm)



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A014.D
Lims ID: STDL32154
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 01-Apr-2014 18:42:21 ALS Bottle#: 14 Worklist Smp#: 14
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL32154
Operator ID: JAX Instrument ID: SGC_P3a
Sublist: chrom-PCB_P3a*sub5

Method: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\PCB_P3a.m
Limit Group: GCSV - 8082
Last Update: 02-Apr-2014 07:44:08 Calib Date: 02-Apr-2014 02:52:35
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A037.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Process Host: XAWRK018

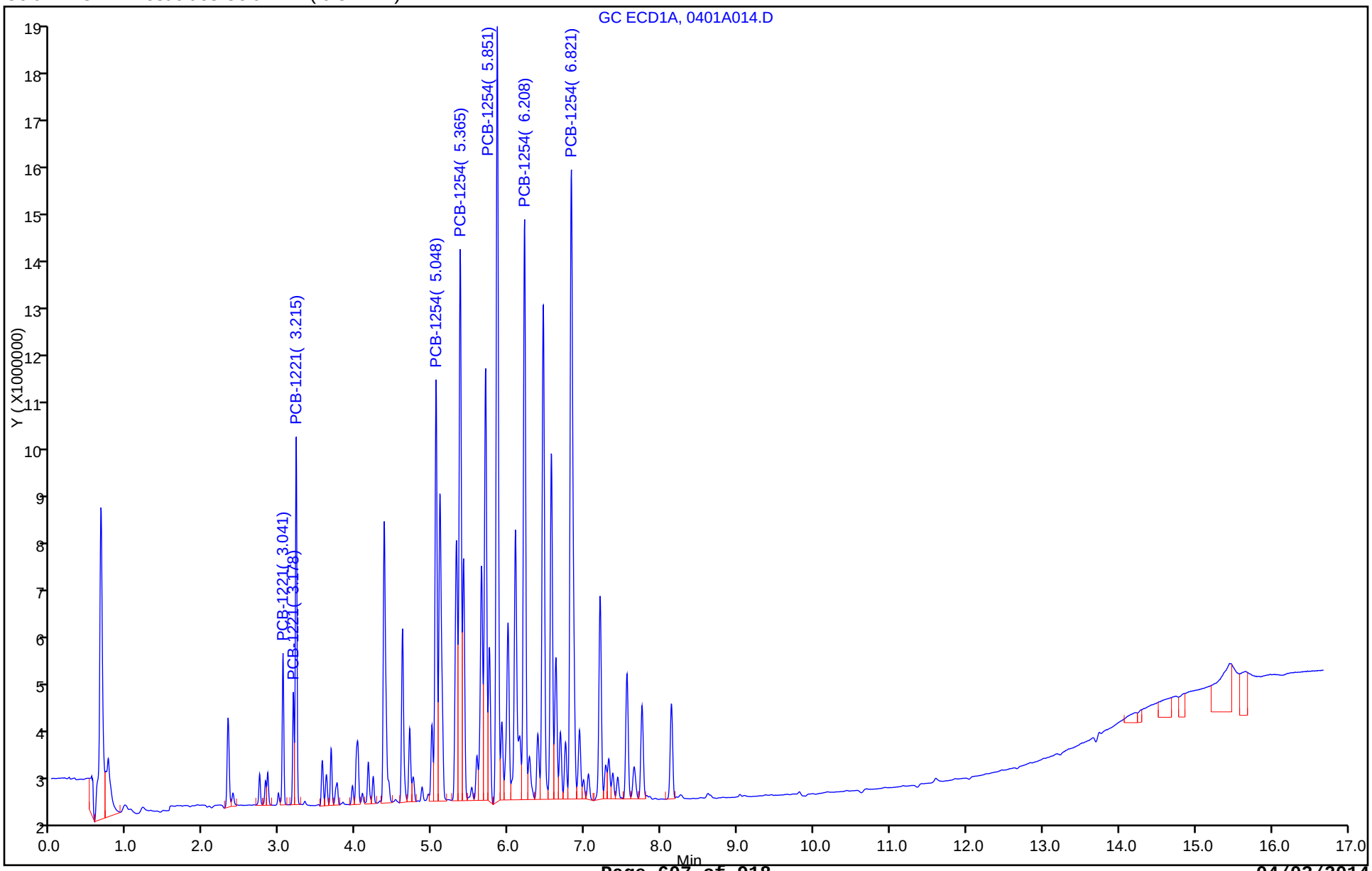
RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
2 PCB-1221					
3.041	3.042	-0.001	4300770	106.9	
3.178	3.179	-0.001	2985281	107.3	
3.215	3.216	-0.001	10625970	109.2	
	Average of Peak Amounts =			107.8	
7 PCB-1254					
5.048	5.049	-0.001	15969059	106.6	
5.365	5.366	-0.001	22647762	106.7	
5.851	5.852	-0.001	31042798	106.3	
6.208	6.209	-0.001	24268463	105.9	
6.821	6.822	-0.001	33129508	105.1	
	Average of Peak Amounts =			106.1	
S 15 Polychlorinated biphenyls, Total					
				213.9	

Report Date: 02-Apr-2014 07:44:09 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A014.D				
Injection Date:	01-Apr-2014 18:42:21	Instrument ID:	SGC_P3a	Operator ID:	JAX
Lims ID:	STDL32154			Worklist Smp#:	14
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	PCB_P3a	Limit Group:	GCSV - 8082		

Column: CLP1 Pesticides Column 1 (0.32 mm)



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A015.D
Lims ID: STDL22154
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 01-Apr-2014 19:03:45 ALS Bottle#: 15 Worklist Smp#: 15
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL22154
Operator ID: JAX Instrument ID: SGC_P3a
Sublist: chrom-PCB_P3a*sub5

Method: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\PCB_P3a.m
Limit Group: GCSV - 8082
Last Update: 02-Apr-2014 07:44:09 Calib Date: 02-Apr-2014 02:52:35
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A037.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Process Host: XAWRK018

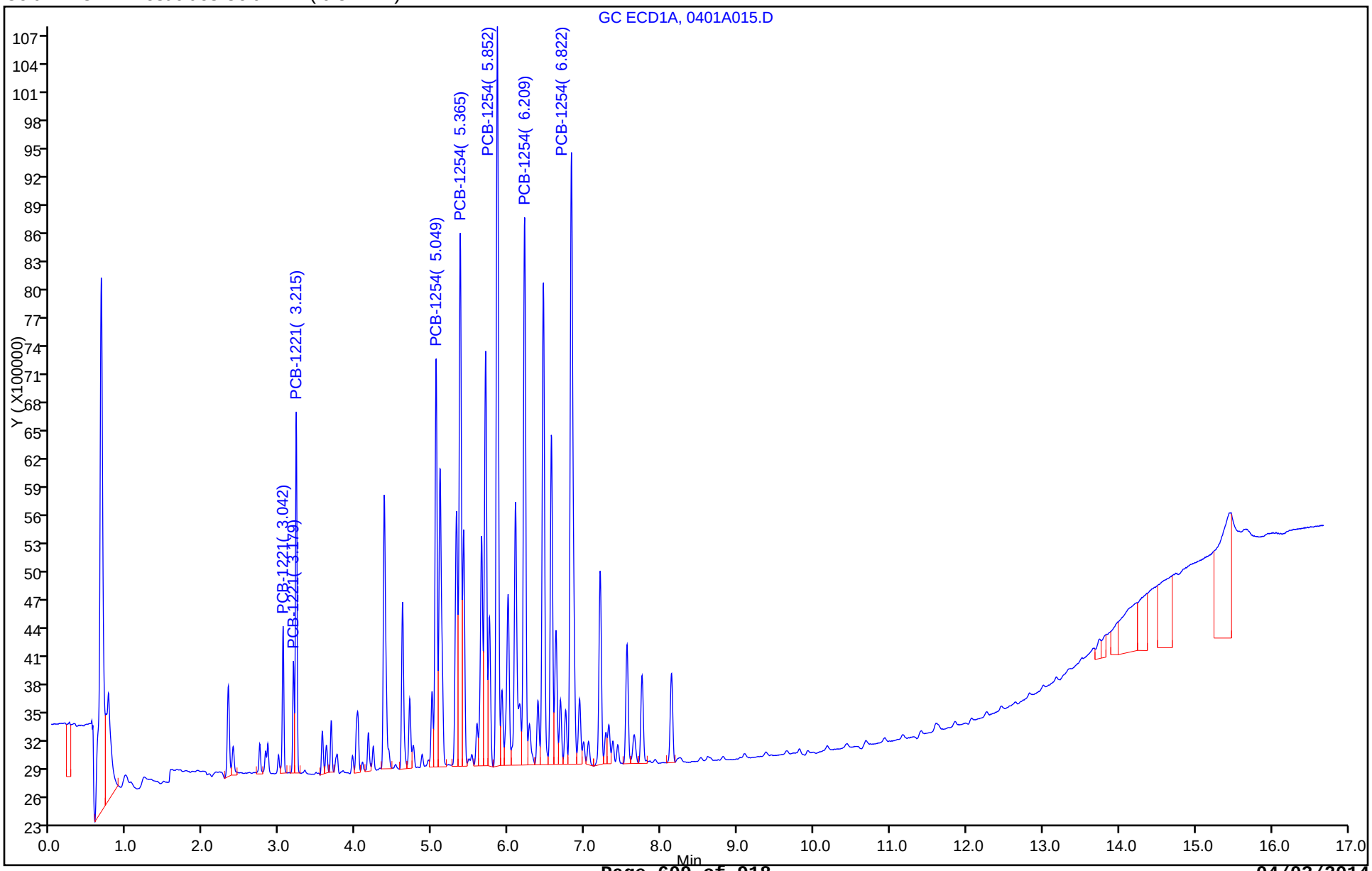
RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
2 PCB-1221					
3.042	3.042	0.0	2267203	50.7	
3.179	3.179	0.0	1566720	49.5	
3.215	3.216	-0.001	5607136	50.3	
	Average of Peak Amounts =			50.2	
7 PCB-1254					
5.049	5.049	0.0	8391404	49.5	
5.365	5.366	-0.001	11873320	49.7	
5.852	5.852	0.0	16214389	49.7	
6.209	6.209	0.0	12650660	49.8	
6.822	6.822	0.0	17183933	49.5	
	Average of Peak Amounts =			49.6	
S 15 Polychlorinated biphenyls, Total					
				99.8	

Report Date: 02-Apr-2014 07:44:10 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A015.D				
Injection Date:	01-Apr-2014 19:03:45	Instrument ID:	SGC_P3a	Operator ID:	JAX
Lims ID:	STDL22154			Worklist Smp#:	15
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	PCB_P3a	Limit Group:	GCSV - 8082		

Column: CLP1 Pesticides Column 1 (0.32 mm)



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A016.D
Lims ID: STDL12154
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 01-Apr-2014 19:25:08 ALS Bottle#: 16 Worklist Smp#: 16
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL12154
Operator ID: JAX Instrument ID: SGC_P3a
Sublist: chrom-PCB_P3a*sub5

Method: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\PCB_P3a.m
Limit Group: GCSV - 8082
Last Update: 02-Apr-2014 07:44:10 Calib Date: 02-Apr-2014 02:52:35
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A037.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Process Host: XAWRK018

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
2 PCB-1221					
3.042	3.042	0.0	1200185	21.2	
3.179	3.179	0.0	882829	21.7	
3.215	3.216	-0.001	3073675	20.5	
	Average of Peak Amounts =			21.1	
7 PCB-1254					
5.049	5.049	0.0	4754590	22.1	
5.365	5.366	-0.001	6625271	22.0	
5.852	5.852	0.0	9003868	22.2	
6.209	6.209	0.0	6970632	22.3	
6.822	6.822	0.0	9492234	22.7	
	Average of Peak Amounts =			22.3	
S 15 Polychlorinated biphenyls, Total					
				43.4	

Report Date: 02-Apr-2014 07:44:11 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A016.D

Injection Date: 01-Apr-2014 19:25:08 Instrument ID: SGC_P3a Operator ID: JAX

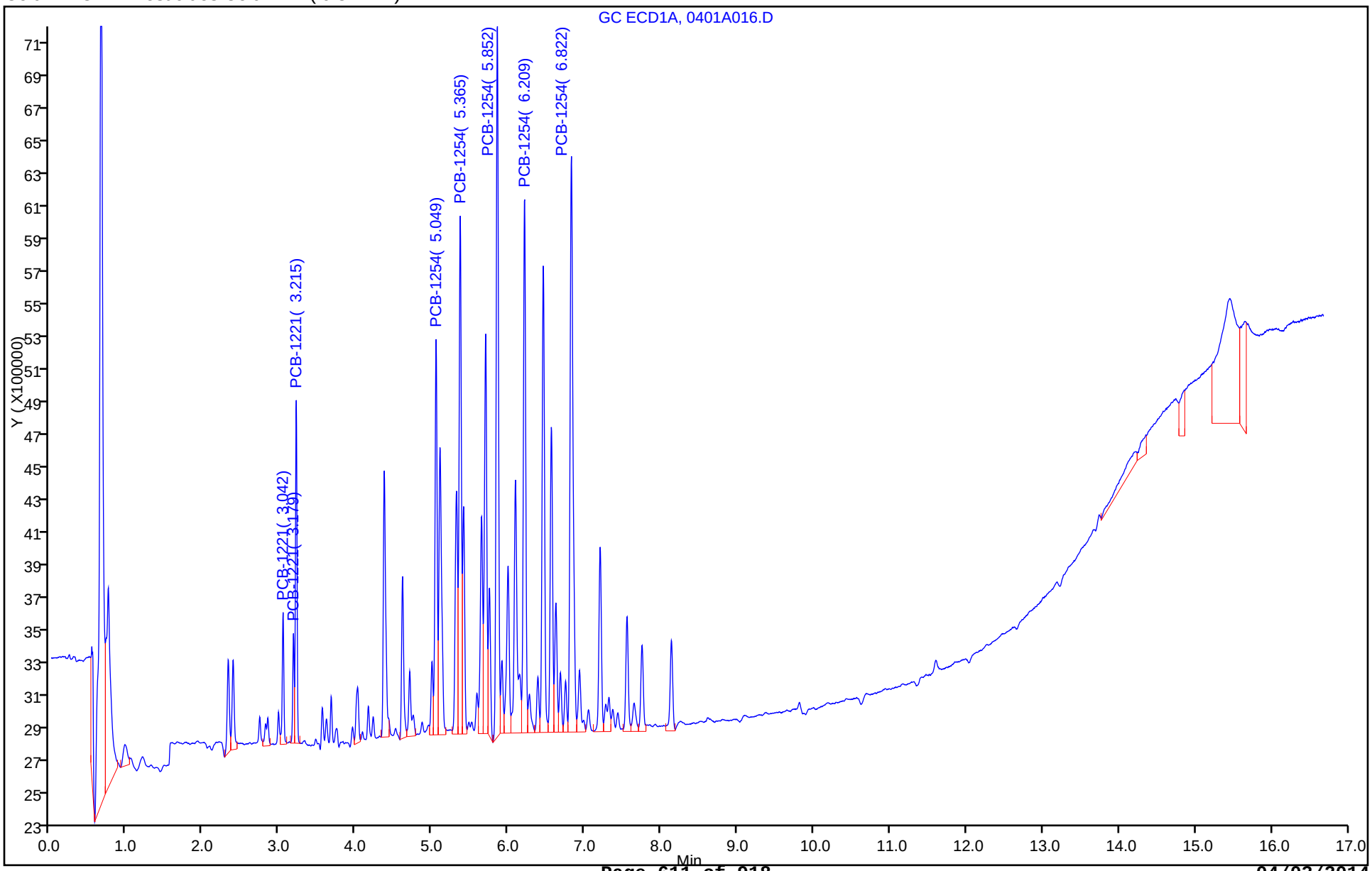
Lims ID: STDL12154 Worklist Smp#: 16

Client ID:

Injection Vol: 1.0 ul Dil. Factor: 1.0000 ALS Bottle#: 16

Method: PCB_P3a Limit Group: GCSV - 8082

Column: CLP1 Pesticides Column 1 (0.32 mm)



FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-53458-1 Analy Batch No.: 219270

SDG No.:

Instrument ID: SGC_P3a GC Column: CLP1 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/01/2014 19:46 Calibration End Date: 04/01/2014 21:54 Calibration ID: 17672

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STDL11660 280-219270/23	0401A023.D
Level 2	STDL21660 280-219270/22	0401A022.D
Level 3	STDL31660 280-219270/21	0401A021.D
Level 4	STDL41660 280-219270/20	0401A020.D
Level 5	STDL51660 280-219270/19	0401A019.D
Level 6	STDL61660 280-219270/18	0401A018.D
Level 7	STDL71660 280-219270/17	0401A017.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	LVL 7				RT WINDOW	AVG RT
PCB-1016 Peak 1	3.557	3.556	3.553	3.556	3.555	3.555	3.554				3.305 - 3.805	3.555
PCB-1016 Peak 2	4.020	4.020	4.017	4.019	4.019	4.018	4.020				3.769 - 4.269	4.019
PCB-1016 Peak 3	4.160	4.160	4.160	4.159	4.159	4.158	4.160				3.909 - 4.409	4.159
PCB-1016 Peak 4	4.223	4.223	4.223	4.222	4.222	4.222	4.224				3.972 - 4.472	4.223
PCB-1016 Peak 5	4.610	4.610	4.607	4.609	4.609	4.608	4.610				4.359 - 4.859	4.609
PCB-1260 Peak 1	6.090	6.090	6.087	6.089	6.089	6.088	6.087				5.839 - 6.339	6.089
PCB-1260 Peak 2	6.820	6.820	6.820	6.819	6.819	6.818	6.820				6.569 - 7.069	6.819
PCB-1260 Peak 3	7.313	7.310	7.310	7.312	7.312	7.312	7.310				7.062 - 7.562	7.311
PCB-1260 Peak 4	7.747	7.746	7.747	7.746	7.749	7.748	7.747				7.499 - 7.999	7.747
PCB-1260 Peak 5	8.133	8.133	8.133	8.132	8.132	8.132	8.134				7.882 - 8.382	8.133
Tetrachloro-m-xylene	2.847	2.846	2.847	2.846	2.845	2.845	2.847				2.595 - 3.095	2.846
DCB Decachlorobiphenyl	9.717	9.716	9.717	9.716	9.715	9.715	9.717				9.465 - 9.965	9.716

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Denver Job No.: 280-53458-1 Analy Batch No.: 219270

SDG No.:

Instrument ID: SGC_P3a GC Column: CLP1 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/01/2014 19:46 Calibration End Date: 04/01/2014 21:54 Calibration ID: 17672

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STDL11660 280-219270/23	0401A023.D
Level 2	STDL21660 280-219270/22	0401A022.D
Level 3	STDL31660 280-219270/21	0401A021.D
Level 4	STDL41660 280-219270/20	0401A020.D
Level 5	STDL51660 280-219270/19	0401A019.D
Level 6	STDL61660 280-219270/18	0401A018.D
Level 7	STDL71660 280-219270/17	0401A017.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3 LVL 7	LVL 4		B	M1	M2								
PCB-1016 Peak 1	175003 115368	160673 126833	146226 122822	135735	Lin1	1697023.90	121389.375							0.9970		0.9900
PCB-1016 Peak 2	352998 263300	325612 292020	311028 271040	307381	Lin1	2471195.46	275686.105							0.9970		0.9900
PCB-1016 Peak 3	152696 120437	139657 134291	140637 123815	139642	Lin1	826623.270	126631.873							0.9970		0.9900
PCB-1016 Peak 4	98211 74800	87814 84653	87982 79964	85802	Lin1	481442.039	80216.1251							0.9970		0.9900
PCB-1016 Peak 5	157927 122556	155086 137995	145754 129048	142373	Lin1	998956.804	130355.440							0.9970		0.9900
PCB-1260 Peak 1	257636 191832	266994 215032	236678 202350	222172	Lin1	2184292.17	203084.556							0.9970		0.9900
PCB-1260 Peak 2	464626 357137	465905 402423	425406 381021	413531	Lin1	3044016.26	381657.113							0.9970		0.9900
PCB-1260 Peak 3	231539 182651	239271 207510	220482 196184	213677	Lin1	1462134.48	196682.804							0.9970		0.9900
PCB-1260 Peak 4	549942 400767	514827 451279	468377 427389	464479	Lin1	3646278.79	427347.827							0.9970		0.9900
PCB-1260 Peak 5	314661 237077	305616 268649	275575 257190	274534	Lin1	1841951.93	255573.716							0.9970		0.9900
Tetrachloro-m-xylene	4467598 3316871	4485173 3722349	3934957 3417934	3900794	Lin1	1829046.33	3482881.46							0.9960		0.9900
DCB Decachlorobiphenyl	6085008 4390456	6031650 4949935	5235450 4703750	5027763	Lin1	2340474.23	4679609.80							0.9970		0.9900

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Denver Job No.: 280-53458-1 Analy Batch No.: 219270

SDG No.:

Instrument ID: SGC_P3a GC Column: CLP1 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/01/2014 19:46 Calibration End Date: 04/01/2014 21:54 Calibration ID: 17672

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STDL11660 280-219270/23	0401A023.D
Level 2	STDL21660 280-219270/22	0401A022.D
Level 3	STDL31660 280-219270/21	0401A021.D
Level 4	STDL41660 280-219270/20	0401A020.D
Level 5	STDL51660 280-219270/19	0401A019.D
Level 6	STDL61660 280-219270/18	0401A018.D
Level 7	STDL71660 280-219270/17	0401A017.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
		LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
PCB-1016 Peak 1	Lin1	4375066 95124679	8033627 122822120	14622593	33933854	57683807	25.0 750	50.0 1000	100	250	500
PCB-1016 Peak 2	Lin1	8824954 219015342	16280601 271039571	31102821	76845238	131650173	25.0 750	50.0 1000	100	250	500
PCB-1016 Peak 3	Lin1	3817406 100718338	6982833 123815324	14063687	34910493	60218543	25.0 750	50.0 1000	100	250	500
PCB-1016 Peak 4	Lin1	2455275 63489857	4390690 79963687	8798246	21450399	37400075	25.0 750	50.0 1000	100	250	500
PCB-1016 Peak 5	Lin1	3948165 103496618	7754319 129047762	14575433	35593364	61277838	25.0 750	50.0 1000	100	250	500
PCB-1260 Peak 1	Lin1	6440906 161274005	13349722 202349885	23667829	55543073	95915812	25.0 750	50.0 1000	100	250	500
PCB-1260 Peak 2	Lin1	11615638 301817196	23295236 381021136	42540572	103382741	178568373	25.0 750	50.0 1000	100	250	500
PCB-1260 Peak 3	Lin1	5788464 155632874	11963548 196183741	22048224	53419157	91325434	25.0 750	50.0 1000	100	250	500
PCB-1260 Peak 4	Lin1	13748541 338459502	25741338 427388822	46837686	116119772	200383729	25.0 750	50.0 1000	100	250	500
PCB-1260 Peak 5	Lin1	7866533 201486601	15280804 257189880	27557543	68633375	118538619	25.0 750	50.0 1000	100	250	500
Tetrachloro-m-xylene	Lin1	5584497 139588096	11212932 170896712	19674786	48759930	82921766	1.25 37.5	2.50 50.0	5.00	12.5	25.0
DCB Decachlorobiphenyl	Lin1	7606260 185622544	15079124 235187522	26177252	62847037	109761391	1.25 37.5	2.50 50.0	5.00	12.5	25.0

Curve Type Legend:
Lin1 = Linear 1/conc

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A017.D
Lims ID: STDL71660
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 01-Apr-2014 19:46:26 ALS Bottle#: 17 Worklist Smp#: 17
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL71660
Operator ID: JAX Instrument ID: SGC_P3a
Sublist: chrom-PCB_P3a*sub6

Method: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\PCB_P3a.m
Limit Group: GCSV - 8082
Last Update: 02-Apr-2014 07:44:11 Calib Date: 02-Apr-2014 02:52:35
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A037.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Process Host: XAWRK018

First Level Reviewer: jacksonto Date: 02-Apr-2014 07:35:37

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
$ 1 Tetrachloro-m-xylene					
2.847	2.845	0.002	170896712	48.5	
5 PCB-1016					
3.554	3.555	-0.001	122822120	997.8	
4.020	4.019	0.001	271039571	974.2	
4.160	4.159	0.001	123815324	971.2	
4.224	4.222	0.002	79963687	990.9	
4.610	4.609	0.001	129047762	982.3	
	Average of Peak Amounts =			983.3	
8 PCB-1260					M
6.087	6.089	-0.002	202349885	985.6	M
6.820	6.819	0.001	381021136	990.4	M
7.310	7.312	-0.002	196183741	990.0	M
7.747	7.749	-0.002	427388822	991.6	M
8.134	8.132	0.002	257189880	999.1	M
	Average of Peak Amounts =			991.3	
$ 13 DCB Decachlorobiphenyl					
9.717	9.715	0.002	235187522	49.8	
S 15 Polychlorinated biphenyls, Total					
				1974.6	

QC Flag Legend

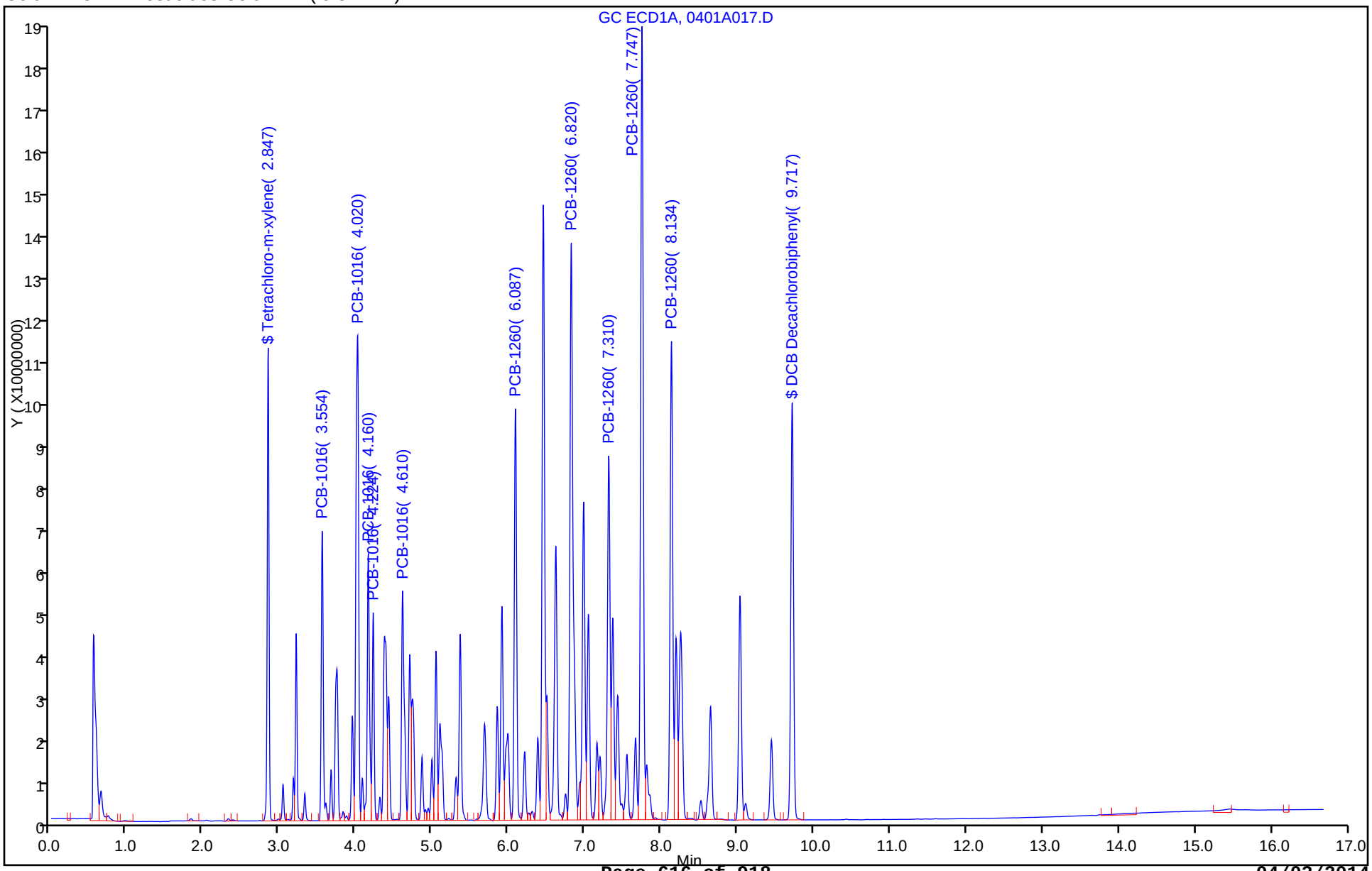
Review Flags
M - Manually Integrated

Report Date: 02-Apr-2014 07:44:12 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A017.D				
Injection Date:	01-Apr-2014 19:46:26	Instrument ID:	SGC_P3a	Operator ID:	JAX
Lims ID:	STDL71660			Worklist Smp#:	17
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	17
Method:	PCB_P3a	Limit Group:	GCSV - 8082		

Column: CLP1 Pesticides Column 1 (0.32 mm)

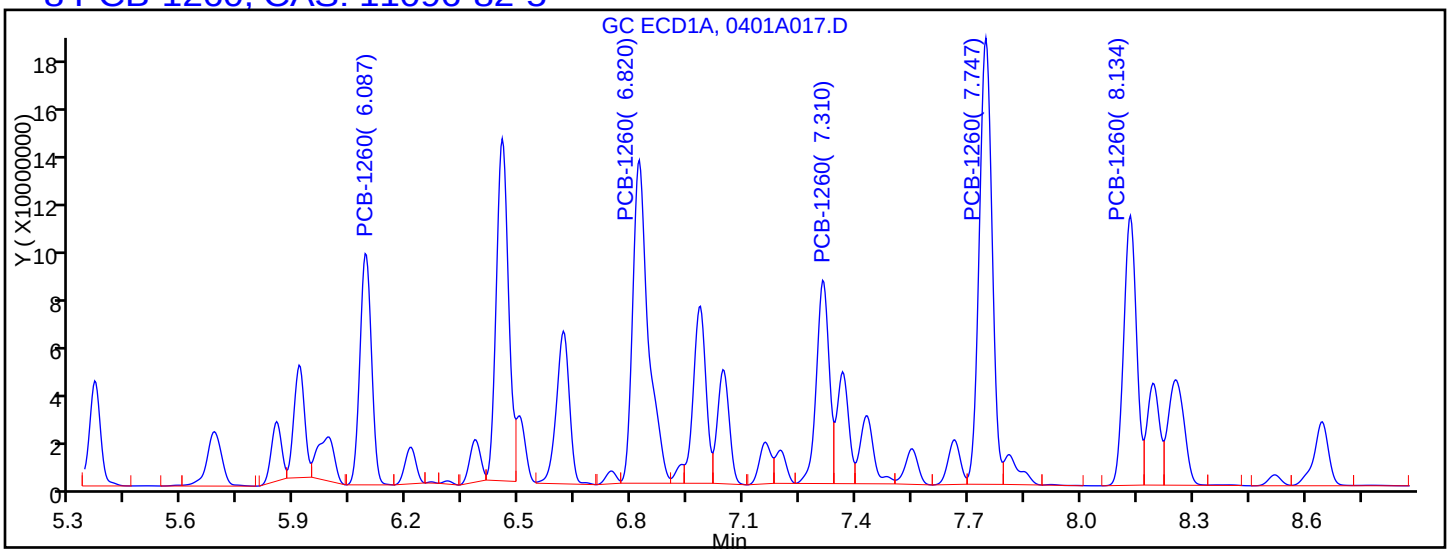


Report Date: 02-Apr-2014 07:44:12 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

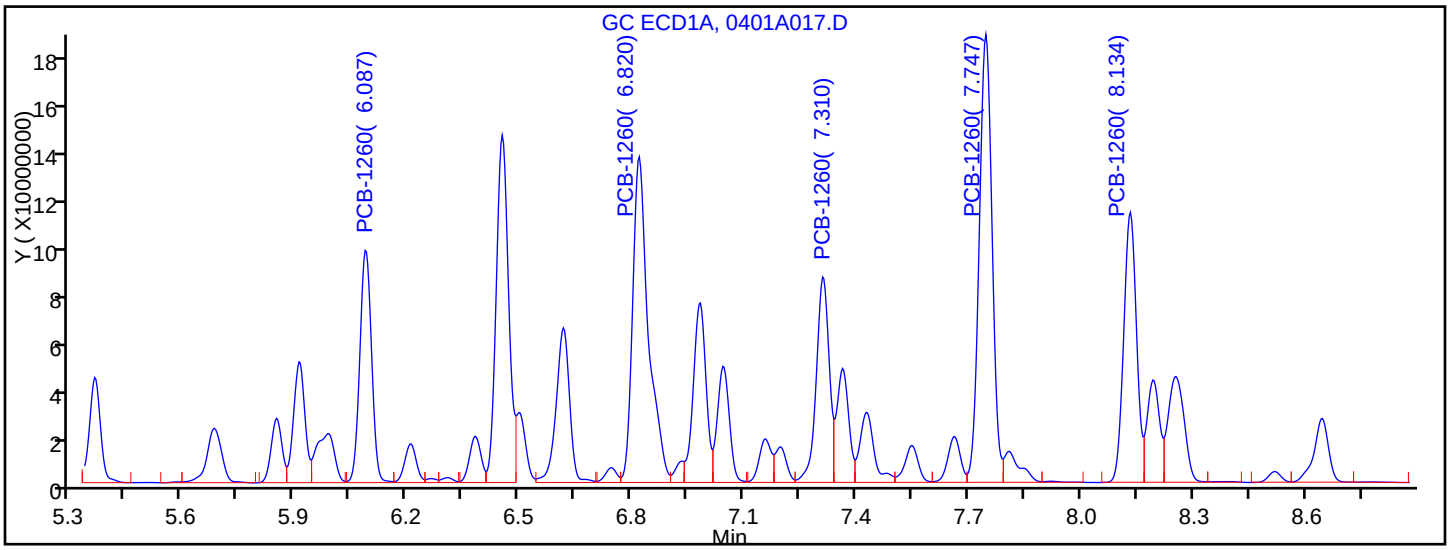
Data File: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A017.D
Injection Date: 01-Apr-2014 19:46:26 Instrument ID: SGC_P3a
Lims ID: STDL71660
Client ID:
Operator ID: JAX ALS Bottle#: 17 Worklist Smp#: 17
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: PCB_P3a Limit Group: GCSV - 8082
Column: CLP1 Pesticides Column 1 (0.32 mm) Detector GC ECD1A

8 PCB-1260, CAS: 11096-82-5



Processing Integration Results

RT = 6.087	Response = 199204359	M
RT = 6.820	Response = 372902512	M
RT = 7.310	Response = 190791625	M
RT = 7.747	Response = 424375977	M
RT = 8.134	Response = 256855983	M



Manual Integration Results

RT = 6.087	Response = 202349885	M
RT = 6.820	Response = 381021136	M
RT = 7.310	Response = 196183741	M
RT = 7.747	Response = 427388822	M
RT = 8.134	Response = 257189880	M

Reviewer: jacksonto, 02-Apr-2014 07:35:37
Audit Action: Assigned New Baseline
Audit Reason: Baseline Smoothing

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A018.D
Lims ID: STDL61660
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 01-Apr-2014 20:07:42 ALS Bottle#: 18 Worklist Smp#: 18
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL61660
Operator ID: JAX Instrument ID: SGC_P3a
Sublist: chrom-PCB_P3a*sub6

Method: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\PCB_P3a.m
Limit Group: GCSV - 8082
Last Update: 02-Apr-2014 07:44:12 Calib Date: 02-Apr-2014 02:52:35
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A037.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Process Host: XAWRK018

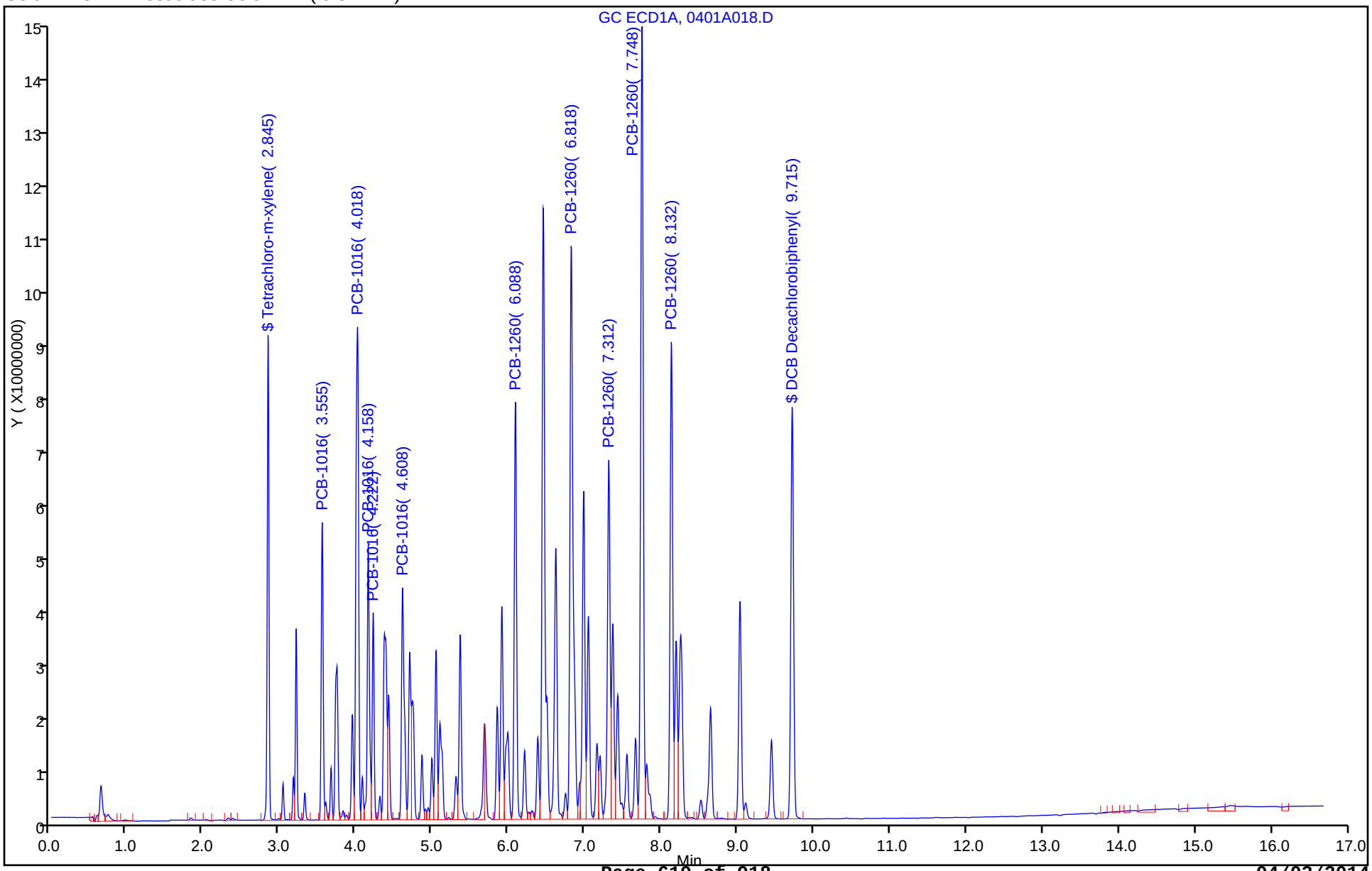
RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
$ 1 Tetrachloro-m-xylene					
2.845	2.845	0.0	139588096	39.6	
5 PCB-1016					
3.555	3.555	0.0	95124679	769.7	
4.018	4.019	-0.001	219015342	785.5	
4.158	4.159	-0.001	100718338	788.8	
4.222	4.222	0.0	63489857	785.5	
4.608	4.609	-0.001	103496618	786.3	
	Average of Peak Amounts =			783.1	
8 PCB-1260					
6.088	6.089	-0.001	161274005	783.4	
6.818	6.819	-0.001	301817196	782.8	
7.312	7.312	0.0	155632874	783.9	
7.748	7.749	-0.001	338459502	783.5	
8.132	8.132	0.0	201486601	781.2	
	Average of Peak Amounts =			782.9	
$ 13 DCB Decachlorobiphenyl					
9.715	9.715	0.0	185622544	39.2	
S 15 Polychlorinated biphenyls, Total					
				1566.1	

Report Date: 02-Apr-2014 07:44:13 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A018.D				
Injection Date:	01-Apr-2014 20:07:42	Instrument ID:	SGC_P3a	Operator ID:	JAX
Lims ID:	STDL61660			Worklist Smp#:	18
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	18
Method:	PCB_P3a	Limit Group:	GCSV - 8082		

Column: CLP1 Pesticides Column 1 (0.32 mm)



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A019.D
Lims ID: STDL51660
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 01-Apr-2014 20:29:03 ALS Bottle#: 19 Worklist Smp#: 19
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL51660
Operator ID: JAX Instrument ID: SGC_P3a
Sublist: chrom-PCB_P3a*sub6

Method: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\PCB_P3a.m
Limit Group: GCSV - 8082
Last Update: 02-Apr-2014 07:44:13 Calib Date: 02-Apr-2014 02:52:35
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A037.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Process Host: XAWRK018

First Level Reviewer: jacksonto Date: 02-Apr-2014 07:23:04

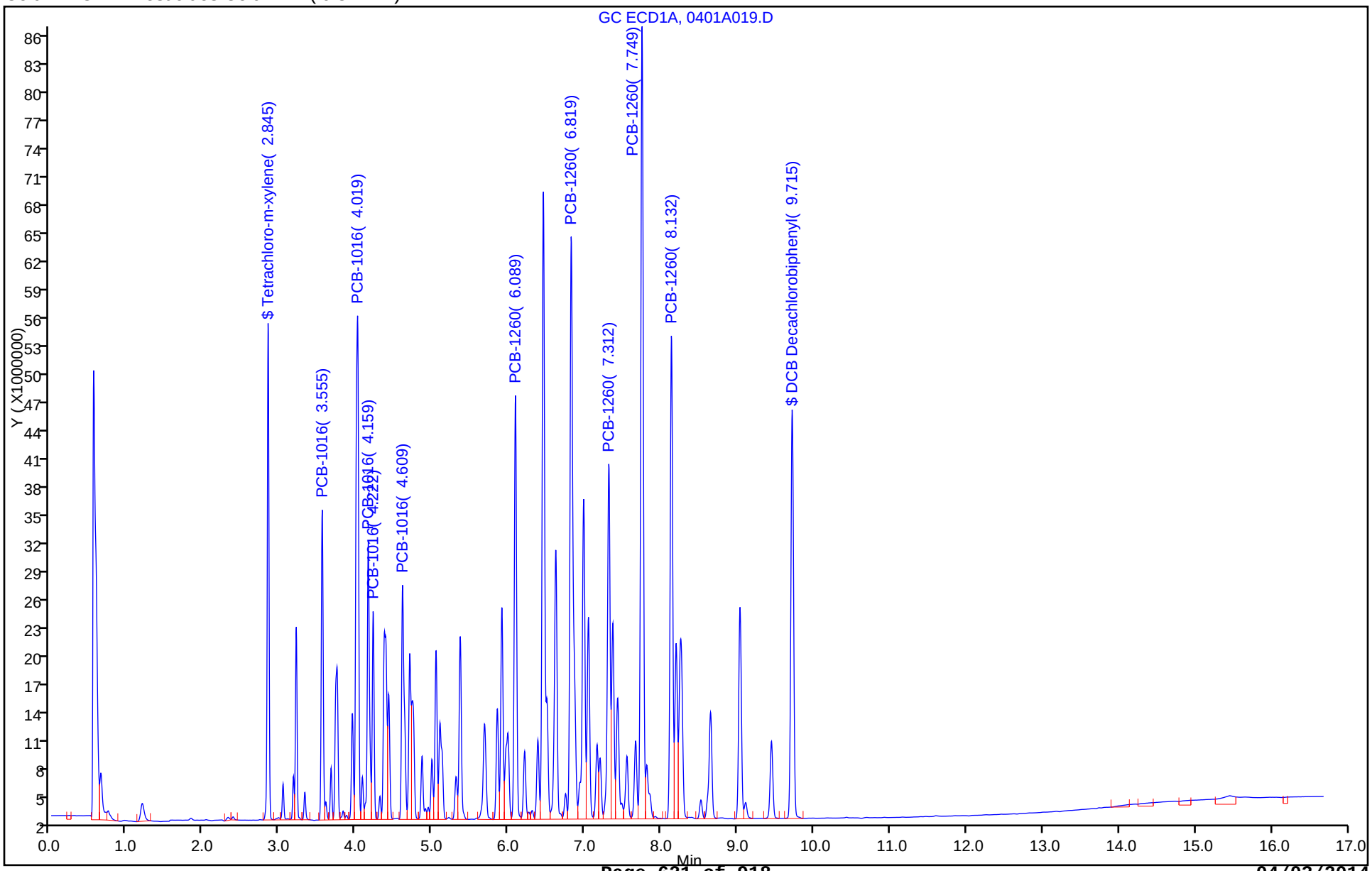
RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
$ 1 Tetrachloro-m-xylene					
2.845	2.845	0.0	82921766	23.3	
5 PCB-1016					
3.555	3.555	0.0	57683807	461.2	
4.019	4.019	0.0	131650173	468.6	
4.159	4.159	0.0	60218543	469.0	
4.222	4.222	0.0	37400075	460.2	
4.609	4.609	0.0	61277838	462.4	
	Average of Peak Amounts =			464.3	
8 PCB-1260					
6.089	6.089	0.0	95915812	461.5	
6.819	6.819	0.0	178568373	459.9	
7.312	7.312	0.0	91325434	456.9	
7.749	7.749	0.0	200383729	460.4	
8.132	8.132	0.0	118538619	456.6	
	Average of Peak Amounts =			459.1	
$ 13 DCB Decachlorobiphenyl					
9.715	9.715	0.0	109761391	23.0	
S 15 Polychlorinated biphenyls, Total					
				923.4	

Report Date: 02-Apr-2014 07:44:14 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A019.D				
Injection Date:	01-Apr-2014 20:29:03	Instrument ID:	SGC_P3a	Operator ID:	JAX
Lims ID:	STDL51660			Worklist Smp#:	19
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	19
Method:	PCB_P3a	Limit Group:	GCSV - 8082		

Column: CLP1 Pesticides Column 1 (0.32 mm)



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A020.D
Lims ID: STDL41660
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 01-Apr-2014 20:50:24 ALS Bottle#: 20 Worklist Smp#: 20
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL41660
Operator ID: JAX Instrument ID: SGC_P3a
Sublist: chrom-PCB_P3a*sub6

Method: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\PCB_P3a.m
Limit Group: GCSV - 8082
Last Update: 02-Apr-2014 07:44:14 Calib Date: 02-Apr-2014 02:52:35
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A037.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Process Host: XAWRK018

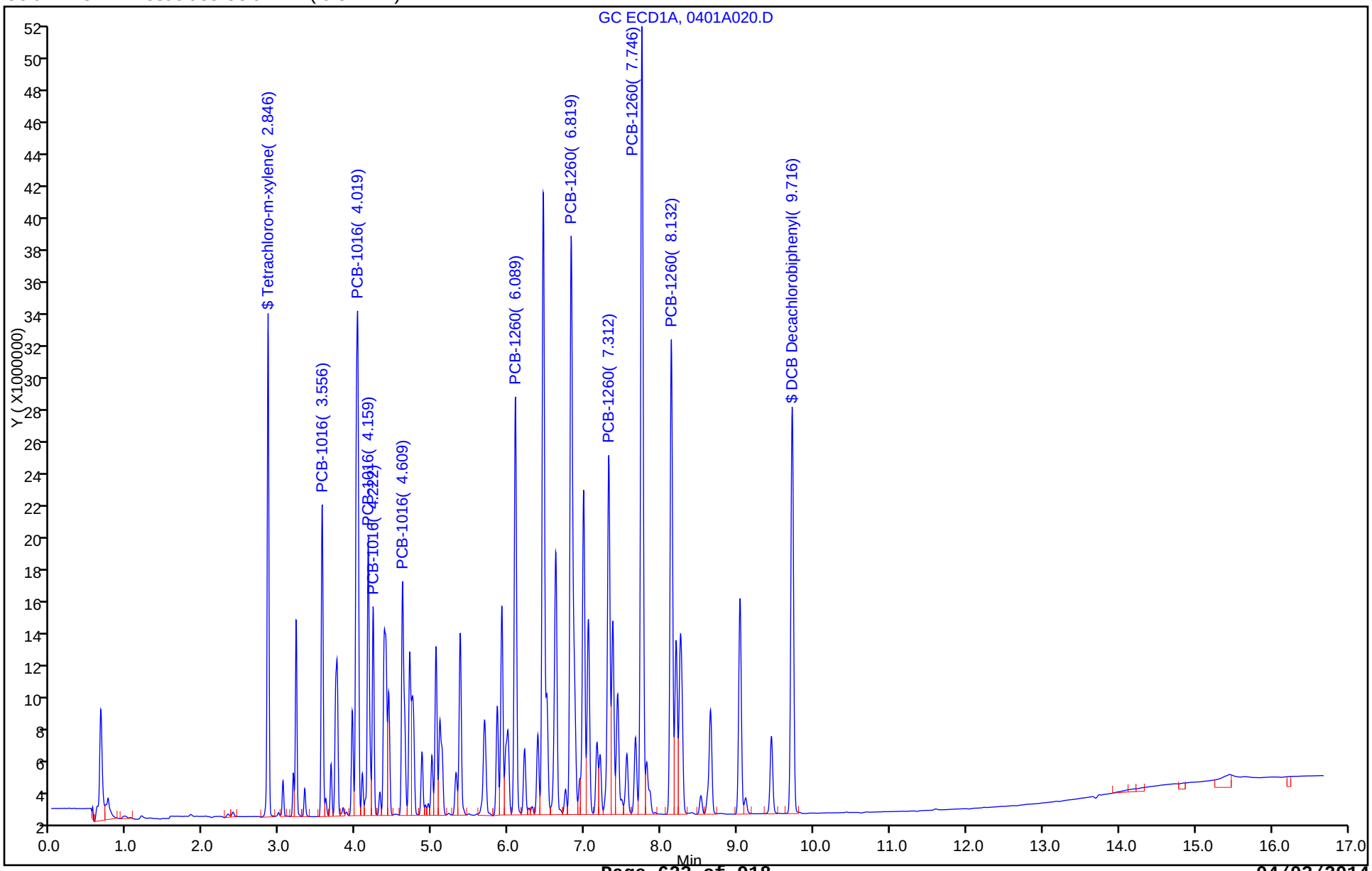
RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
$ 1 Tetrachloro-m-xylene					
2.846	2.845	0.001	48759930	13.5	
5 PCB-1016					
3.556	3.555	0.001	33933854	265.6	
4.019	4.019	0.0	76845238	269.8	
4.159	4.159	0.0	34910493	269.2	
4.222	4.222	0.0	21450399	261.4	
4.609	4.609	0.0	35593364	265.4	
	Average of Peak Amounts =			266.3	
8 PCB-1260					
6.089	6.089	0.0	55543073	262.7	
6.819	6.819	0.0	103382741	262.9	
7.312	7.312	0.0	53419157	264.2	
7.746	7.749	-0.003	116119772	263.2	
8.132	8.132	0.0	68633375	261.3	
	Average of Peak Amounts =			262.9	
$ 13 DCB Decachlorobiphenyl					
9.716	9.715	0.001	62847037	12.9	
S 15 Polychlorinated biphenyls, Total					
				529.1	

Report Date: 02-Apr-2014 07:44:14 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A020.D				
Injection Date:	01-Apr-2014 20:50:24	Instrument ID:	SGC_P3a	Operator ID:	JAX
Lims ID:	STDL41660			Worklist Smp#:	20
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	20
Method:	PCB_P3a	Limit Group:	GCSV - 8082		

Column: CLP1 Pesticides Column 1 (0.32 mm)



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A021.D
Lims ID: STDL31660
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 01-Apr-2014 21:11:42 ALS Bottle#: 21 Worklist Smp#: 21
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL31660
Operator ID: JAX Instrument ID: SGC_P3a
Sublist: chrom-PCB_P3a*sub6

Method: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\PCB_P3a.m
Limit Group: GCSV - 8082
Last Update: 02-Apr-2014 07:44:15 Calib Date: 02-Apr-2014 02:52:35
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A037.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Process Host: XAWRK018

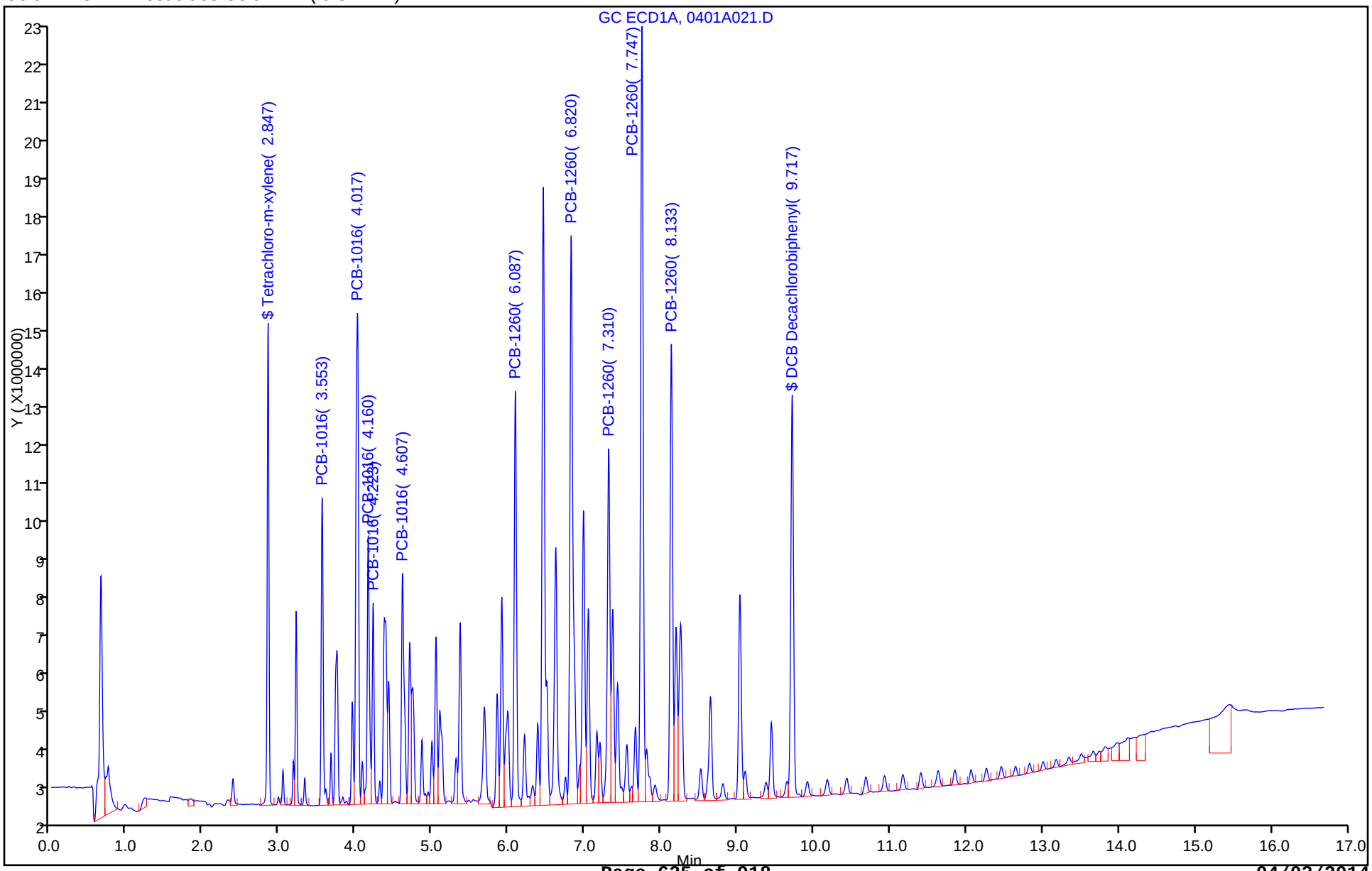
RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
$ 1 Tetrachloro-m-xylene					
2.847	2.845	0.002	19674786	5.12	
5 PCB-1016					
3.553	3.555	-0.002	14622593	106.5	
4.017	4.019	-0.002	31102821	103.9	
4.160	4.159	0.001	14063687	104.5	
4.223	4.222	0.001	8798246	103.7	
4.607	4.609	-0.002	14575433	104.1	
	Average of Peak Amounts =			104.5	
8 PCB-1260					
6.087	6.089	-0.002	23667829	105.8	
6.820	6.819	0.001	42540572	103.5	
7.310	7.312	-0.002	22048224	104.7	
7.747	7.749	-0.002	46837686	101.1	
8.133	8.132	0.001	27557543	100.6	
	Average of Peak Amounts =			103.1	
$ 13 DCB Decachlorobiphenyl					
9.717	9.715	0.002	26177252	5.09	
S 15 Polychlorinated biphenyls, Total					
				207.7	

Report Date: 02-Apr-2014 07:44:15 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A021.D				
Injection Date:	01-Apr-2014 21:11:42	Instrument ID:	SGC_P3a	Operator ID:	JAX
Lims ID:	STDL31660			Worklist Smp#:	21
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	21
Method:	PCB_P3a	Limit Group:	GCSV - 8082		

Column: CLP1 Pesticides Column 1 (0.32 mm)



TestAmerica Denver
Target Compound Quantitation Report

Data File:	\\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A022.D				
Lims ID:	STDL21660				
Client ID:					
Sample Type:	IC	Calib Level:	2		
Inject. Date:	01-Apr-2014 21:33:05	ALS Bottle#:	22	Worklist Smp#:	22
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	STDL21660				
Operator ID:	JAX	Instrument ID:	SGC_P3a		
Sublist:	chrom-PCB_P3a*sub6				
Method:	\\Denchrom\ChromData\SGC_P3a\20140401-21600.b\PCB_P3a.m				
Limit Group:	GCSV - 8082				
Last Update:	02-Apr-2014 07:44:16	Calib Date:	02-Apr-2014 02:52:35		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A037.D				
Column 1 :	CLP1 Pesticides Column 1 (0.32 mm)		Det: GC ECD1A		
Process Host:	XAWRK018				

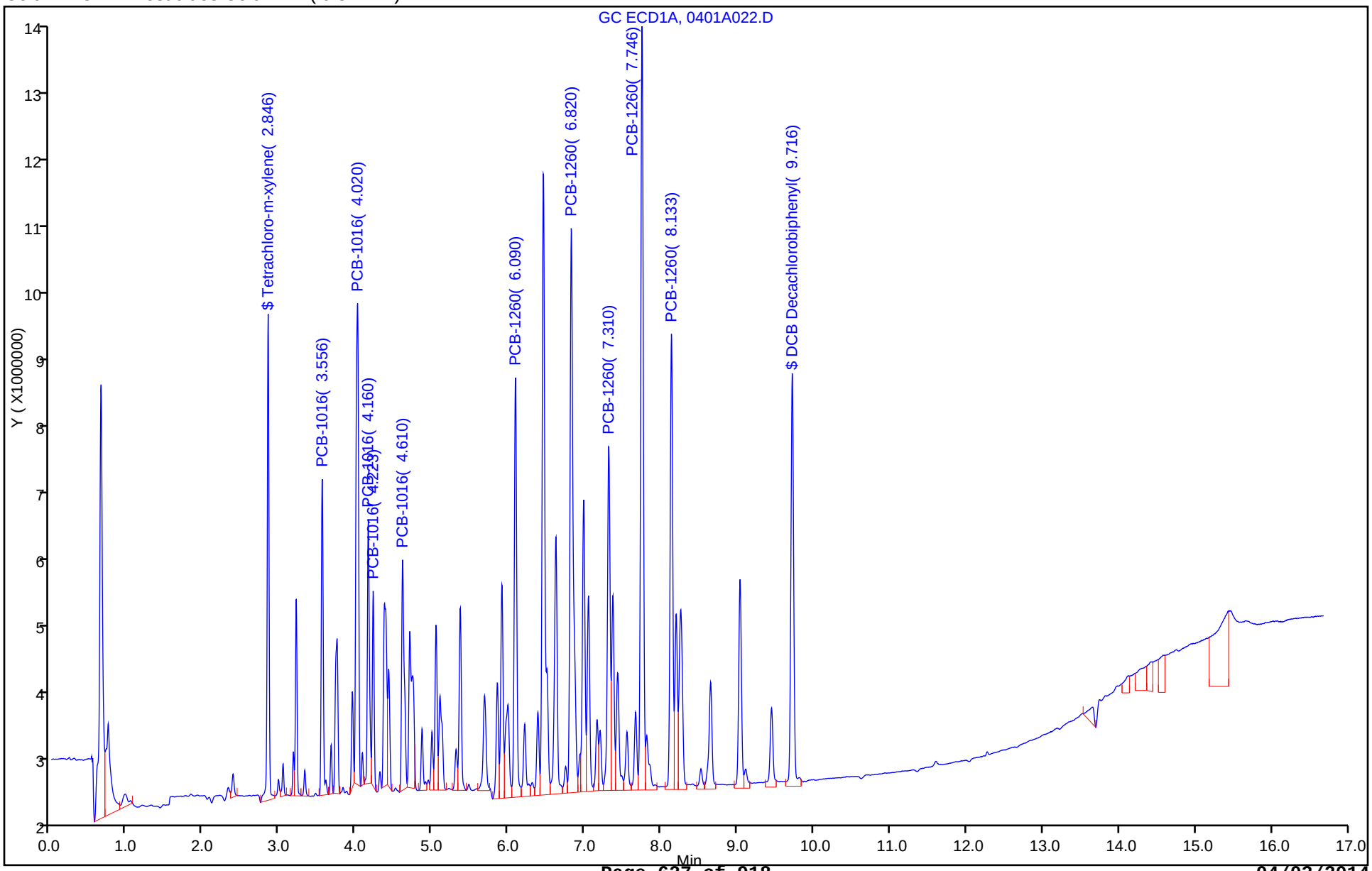
RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
$ 1 Tetrachloro-m-xylene					
2.846	2.845	0.001	11212932	2.69	
5 PCB-1016					
3.556	3.555	0.001	8033627	52.2	
4.020	4.019	0.001	16280601	50.1	
4.160	4.159	0.001	6982833	48.6	
4.223	4.222	0.001	4390690	48.7	
4.610	4.609	0.001	7754319	51.8	
	Average of Peak Amounts =			50.3	
8 PCB-1260					
6.090	6.089	0.001	13349722	55.0	
6.820	6.819	0.001	23295236	53.1	
7.310	7.312	-0.002	11963548	53.4	
7.746	7.749	-0.003	25741338	51.7	
8.133	8.132	0.001	15280804	52.6	
	Average of Peak Amounts =			53.1	
$ 13 DCB Decachlorobiphenyl					
9.716	9.715	0.001	15079124	2.72	
S 15 Polychlorinated biphenyls, Total					
				103.4	

Report Date: 02-Apr-2014 07:44:16 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A022.D				
Injection Date:	01-Apr-2014 21:33:05	Instrument ID:	SGC_P3a	Operator ID:	JAX
Lims ID:	STDL21660			Worklist Smp#:	22
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	22
Method:	PCB_P3a	Limit Group:	GCSV - 8082		

Column: CLP1 Pesticides Column 1 (0.32 mm)



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A023.D
Lims ID: STDL11660
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 01-Apr-2014 21:54:27 ALS Bottle#: 23 Worklist Smp#: 23
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL11660
Operator ID: JAX Instrument ID: SGC_P3a
Sublist: chrom-PCB_P3a*sub6

Method: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\PCB_P3a.m
Limit Group: GCSV - 8082
Last Update: 02-Apr-2014 07:44:16 Calib Date: 02-Apr-2014 02:52:35
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A037.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Process Host: XAWRK018

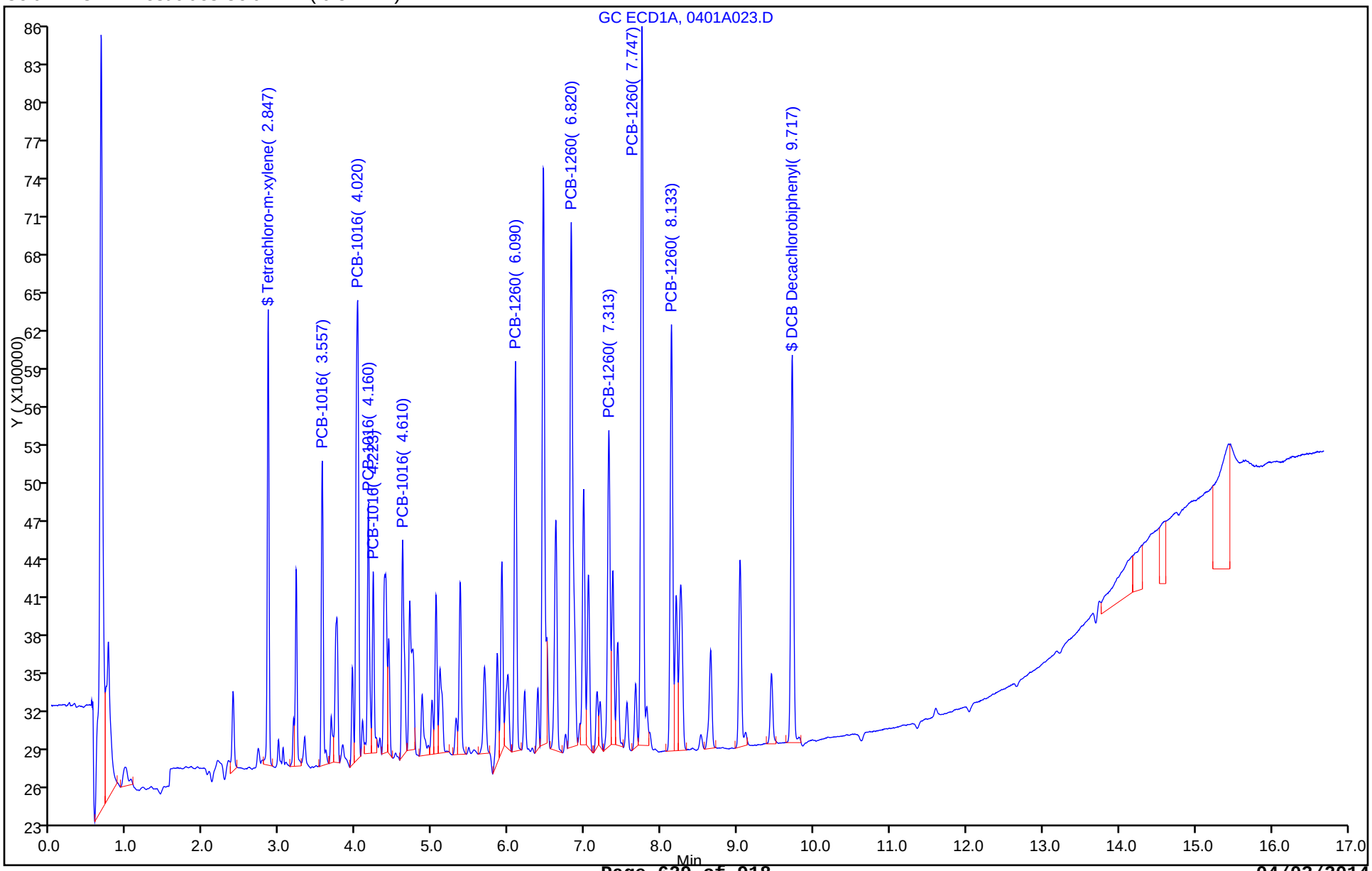
RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
$ 1 Tetrachloro-m-xylene					
2.847	2.845	0.002	5584497	1.08	
5 PCB-1016					
3.557	3.555	0.002	4375066	22.1	
4.020	4.019	0.001	8824954	23.0	
4.160	4.159	0.001	3817406	23.6	
4.223	4.222	0.001	2455275	24.6	
4.610	4.609	0.001	3948165	22.6	
	Average of Peak Amounts =			23.2	
8 PCB-1260					
6.090	6.089	0.001	6440906	21.0	
6.820	6.819	0.001	11615638	22.5	
7.313	7.312	0.001	5788464	22.0	
7.747	7.749	-0.002	13748541	23.6	
8.133	8.132	0.001	7866533	23.6	
	Average of Peak Amounts =			22.5	
$ 13 DCB Decachlorobiphenyl					
9.717	9.715	0.002	7606260	1.13	
S 15 Polychlorinated biphenyls, Total					
				45.7	

Report Date: 02-Apr-2014 07:44:17 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A023.D				
Injection Date:	01-Apr-2014 21:54:27	Instrument ID:	SGC_P3a	Operator ID:	JAX
Lims ID:	STDL11660			Worklist Smp#:	23
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	23
Method:	PCB_P3a	Limit Group:	GCSV - 8082		

Column: CLP1 Pesticides Column 1 (0.32 mm)



FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-53458-1 Analy Batch No.: 219270

SDG No.:

Instrument ID: SGC_P3a GC Column: CLP1 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/01/2014 22:15 Calibration End Date: 04/02/2014 00:23 Calibration ID: 17674

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STDL13262 280-219270/30	0401A030.D
Level 2	STDL23262 280-219270/29	0401A029.D
Level 3	STDL33262 280-219270/28	0401A028.D
Level 4	STDL43262 280-219270/27	0401A027.D
Level 5	STDL53262 280-219270/26	0401A026.D
Level 6	STDL63262 280-219270/25	0401A025.D
Level 7	STDL73262 280-219270/24	0401A024.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	LVL 7				RT WINDOW	AVG RT
PCB-1232 Peak 1	3.213	3.215	3.214	3.214	3.214	3.216	3.214				2.964 - 3.464	3.214
PCB-1232 Peak 2	3.553	3.555	3.554	3.554	3.554	3.556	3.554				3.304 - 3.804	3.554
PCB-1232 Peak 3	4.016	4.018	4.017	4.017	4.018	4.019	4.017				3.768 - 4.268	4.017
PCB-1232 Peak 4	4.159	4.158	4.157	4.157	4.158	4.159	4.157				3.908 - 4.408	4.158
PCB-1232 Peak 5	4.609	4.608	4.607	4.607	4.608	4.609	4.607				4.358 - 4.858	4.608
PCB-1262 Peak 1	6.086	6.088	6.087	6.087	6.088	6.089	6.087				5.838 - 6.338	6.087
PCB-1262 Peak 2	6.453	6.455	6.454	6.454	6.454	6.456	6.454				6.204 - 6.704	6.454
PCB-1262 Peak 3	7.043	7.045	7.044	7.044	7.044	7.046	7.044				6.794 - 7.294	7.044
PCB-1262 Peak 4	7.423	7.425	7.424	7.424	7.424	7.426	7.424				7.174 - 7.674	7.424
PCB-1262 Peak 5	8.253	8.255	8.254	8.254	8.254	8.252	8.254				8.004 - 8.504	8.254

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Denver Job No.: 280-53458-1 Analy Batch No.: 219270

SDG No.:

Instrument ID: SGC_P3a GC Column: CLP1 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/01/2014 22:15 Calibration End Date: 04/02/2014 00:23 Calibration ID: 17674

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STDL13262 280-219270/30	0401A030.D
Level 2	STDL23262 280-219270/29	0401A029.D
Level 3	STDL33262 280-219270/28	0401A028.D
Level 4	STDL43262 280-219270/27	0401A027.D
Level 5	STDL53262 280-219270/26	0401A026.D
Level 6	STDL63262 280-219270/25	0401A025.D
Level 7	STDL73262 280-219270/24	0401A024.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3 LVL 7	LVL 4		B	M1	M2								
PCB-1232 Peak 1	107502 75739	95493 76813	89865 71563	82635	Lin1	1089511.51	73466.3635							0.9980		0.9900
PCB-1232 Peak 2	94161 62672	77462 62414	72752 59478	66904	Lin1	943119.594	60280.5356							0.9990		0.9900
PCB-1232 Peak 3	184000 139325	167965 139904	158418 134023	148095	Lin1	1529407.82	135989.535							0.9990		0.9900
PCB-1232 Peak 4	81042 62850	76878 63479	71869 60598	66910	Lin1	671393.498	61576.0379							0.9990		0.9900
PCB-1232 Peak 5	77243 60081	73243 60354	68159 58247	63993	Lin1	624808.490	58910.9995							0.9990		0.9900
PCB-1262 Peak 1	217540 164531	198189 164459	189736 158494	174490	Lin1	1844154.00	160425.815							0.9990		0.9900
PCB-1262 Peak 2	303367 227491	277645 230197	260452 219143	241402	Lin1	2575041.70	222569.409							0.9990		0.9900
PCB-1262 Peak 3	156228 123651	142825 127559	141246 121809	130896	Lin1	1030137.17	123359.992							0.9990		0.9900
PCB-1262 Peak 4	86671 72719	80683 75137	83550 72106	77213	Lin1	469446.334	73043.7094							0.9990		0.9900
PCB-1262 Peak 5	324130 246675	299560 253359	282800 241925	263015	Lin1	2531363.43	244739.098							0.9990		0.9900

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Denver Job No.: 280-53458-1 Analy Batch No.: 219270

SDG No.:

Instrument ID: SGC_P3a GC Column: CLP1 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/01/2014 22:15 Calibration End Date: 04/02/2014 00:23 Calibration ID: 17674

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STDL13262 280-219270/30	0401A030.D
Level 2	STDL23262 280-219270/29	0401A029.D
Level 3	STDL33262 280-219270/28	0401A028.D
Level 4	STDL43262 280-219270/27	0401A027.D
Level 5	STDL53262 280-219270/26	0401A026.D
Level 6	STDL63262 280-219270/25	0401A025.D
Level 7	STDL73262 280-219270/24	0401A024.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
		LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
PCB-1232 Peak 1	Lin1	2687552 57609492	4774669 71562773	8986482	20658817	37869318	25.0 750	50.0 1000	100	250	500
PCB-1232 Peak 2	Lin1	2354013 46810560	3873110 59477645	7275150	16725961	31335831	25.0 750	50.0 1000	100	250	500
PCB-1232 Peak 3	Lin1	4599993 104928209	8398238 134023252	15841835	37023665	69662670	25.0 750	50.0 1000	100	250	500
PCB-1232 Peak 4	Lin1	2026060 47608906	3843912 60597669	7186867	16727376	31424866	25.0 750	50.0 1000	100	250	500
PCB-1232 Peak 5	Lin1	1931064 45265755	3662132 58246664	6815945	15998314	30040709	25.0 750	50.0 1000	100	250	500
PCB-1262 Peak 1	Lin1	5438499 123344166	9909449 158494261	18973613	43622463	82265683	25.0 750	50.0 1000	100	250	500
PCB-1262 Peak 2	Lin1	7584179 172647520	13882265 219143431	26045209	60350537	113745319	25.0 750	50.0 1000	100	250	500
PCB-1262 Peak 3	Lin1	3905712 95669113	7141244 121808675	14124581	32724066	61825547	25.0 750	50.0 1000	100	250	500
PCB-1262 Peak 4	Lin1	2166771 56353086	4034160 72106276	8354950	19303195	36359609	25.0 750	50.0 1000	100	250	500
PCB-1262 Peak 5	Lin1	8103261 190018891	14977978 241925163	28279967	65753862	123337508	25.0 750	50.0 1000	100	250	500

Curve Type Legend:

Lin1 = Linear 1/conc

TestAmerica Denver
Target Compound Quantitation Report

Data File:	\\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A024.D				
Lims ID:	STDL73262				
Client ID:					
Sample Type:	IC	Calib Level:	7		
Inject. Date:	01-Apr-2014 22:15:41	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	STDL73262				
Operator ID:	JAX	Instrument ID:	SGC_P3a		
Sublist:	chrom-PCB_P3a*sub7				
Method:	\\Denchrom\ChromData\SGC_P3a\20140401-21600.b\PCB_P3a.m				
Limit Group:	GCSV - 8082				
Last Update:	02-Apr-2014 07:44:17	Calib Date:	02-Apr-2014 02:52:35		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A037.D				
Column 1 :	CLP1 Pesticides Column 1 (0.32 mm)		Det: GC ECD1A		
Process Host:	XAWRK018				

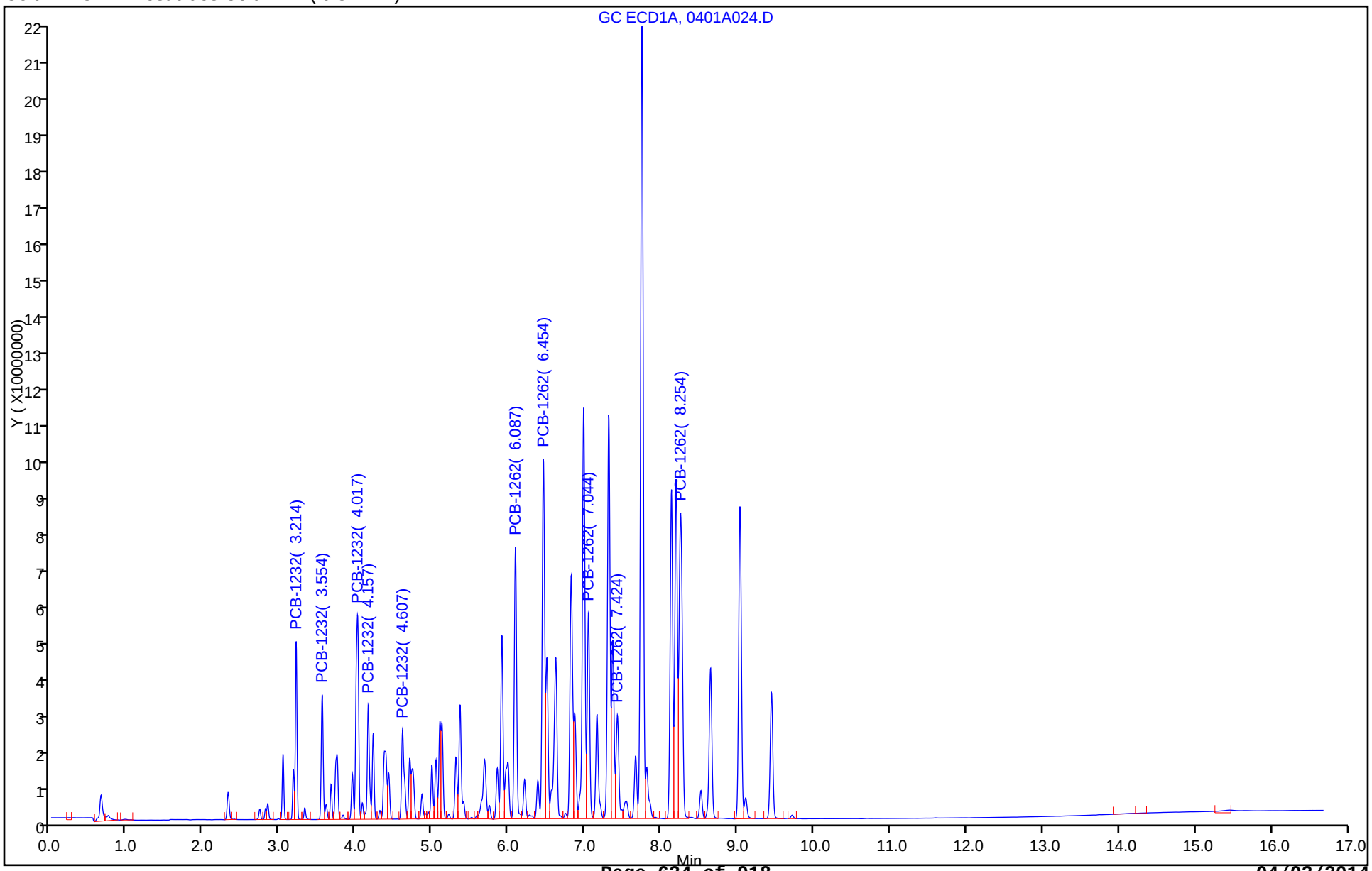
RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
3 PCB-1232					
3.214	3.214	0.0	71562773	959.3	
3.554	3.554	0.0	59477645	971.0	
4.017	4.018	-0.001	134023252	974.3	
4.157	4.158	-0.001	60597669	973.2	
4.607	4.608	-0.001	58246664	978.1	
	Average of Peak Amounts =			971.2	
10 PCB-1262					
6.087	6.088	-0.001	158494261	976.5	
6.454	6.454	0.0	219143431	973.0	
7.044	7.044	0.0	121808675	979.1	
7.424	7.424	0.0	72106276	980.7	
8.254	8.254	0.0	241925163	978.2	
	Average of Peak Amounts =			977.5	
S 15 Polychlorinated biphenyls, Total					
				1948.7	

Report Date: 02-Apr-2014 07:44:18 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A024.D				
Injection Date:	01-Apr-2014 22:15:41	Instrument ID:	SGC_P3a	Operator ID:	JAX
Lims ID:	STDL73262			Worklist Smp#:	24
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	24
Method:	PCB_P3a	Limit Group:	GCSV - 8082		

Column: CLP1 Pesticides Column 1 (0.32 mm)



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A025.D
Lims ID: STDL63262
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 01-Apr-2014 22:37:01 ALS Bottle#: 25 Worklist Smp#: 25
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL63262
Operator ID: JAX Instrument ID: SGC_P3a
Sublist: chrom-PCB_P3a*sub7

Method: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\PCB_P3a.m
Limit Group: GCSV - 8082
Last Update: 02-Apr-2014 07:44:18 Calib Date: 02-Apr-2014 02:52:35
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A037.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Process Host: XAWRK018

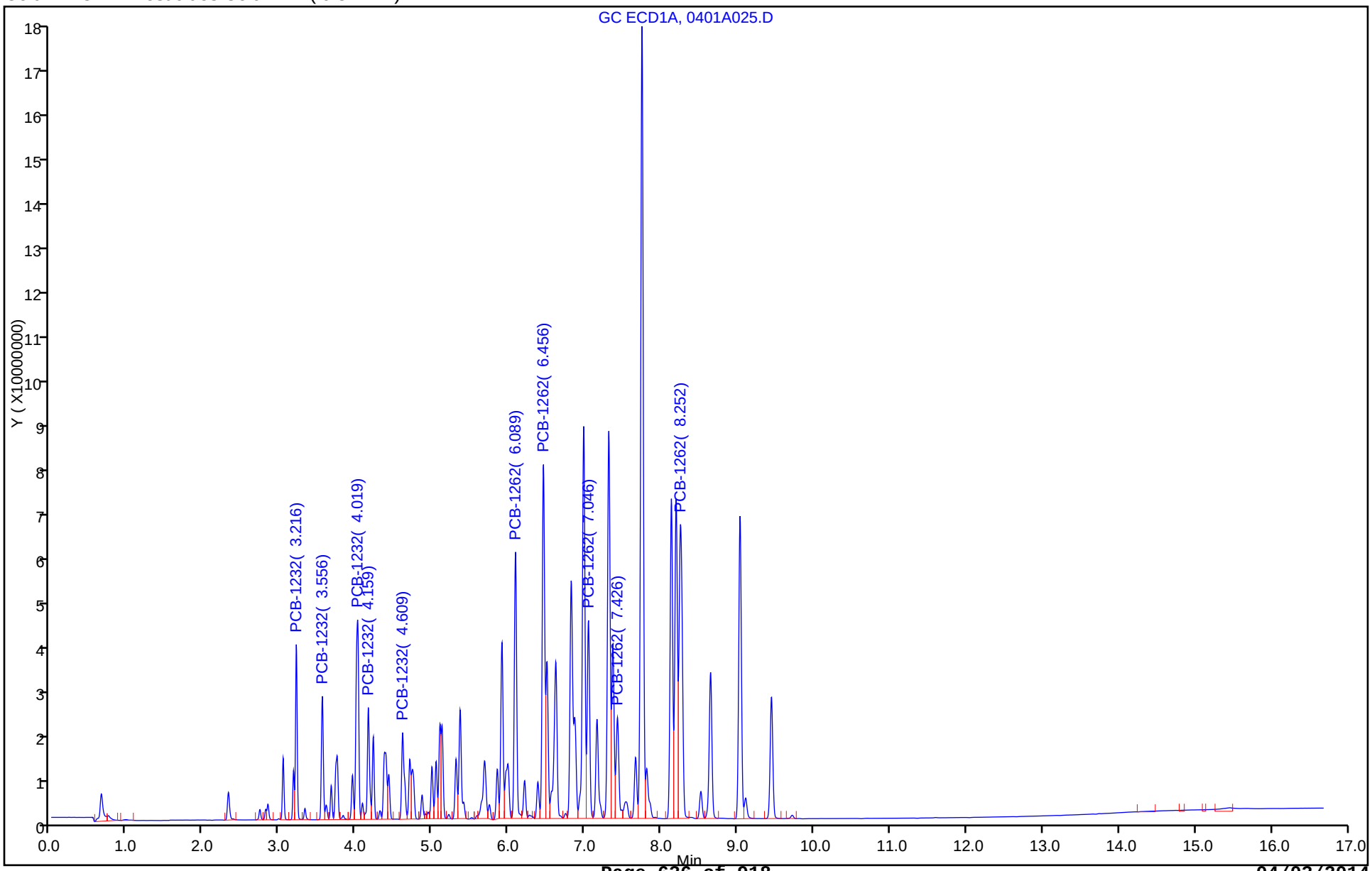
RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
3 PCB-1232					
3.216	3.214	0.002	57609492	769.3	
3.556	3.554	0.002	46810560	760.9	
4.019	4.018	0.001	104928209	760.3	
4.159	4.158	0.001	47608906	762.3	
4.609	4.608	0.001	45265755	757.8	
	Average of Peak Amounts =			762.1	
10 PCB-1262					
6.089	6.088	0.001	123344166	757.4	
6.456	6.454	0.002	172647520	764.1	
7.046	7.044	0.002	95669113	767.2	
7.426	7.424	0.002	56353086	765.1	
8.252	8.254	-0.002	190018891	766.1	
	Average of Peak Amounts =			764.0	
S 15 Polychlorinated biphenyls, Total					
				1526.1	

Report Date: 02-Apr-2014 07:44:19 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A025.D				
Injection Date:	01-Apr-2014 22:37:01	Instrument ID:	SGC_P3a	Operator ID:	JAX
Lims ID:	STDL63262			Worklist Smp#:	25
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	25
Method:	PCB_P3a	Limit Group:	GCSV - 8082		

Column: CLP1 Pesticides Column 1 (0.32 mm)



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A026.D
Lims ID: STDL53262
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 01-Apr-2014 22:58:15 ALS Bottle#: 26 Worklist Smp#: 26
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL53262
Operator ID: JAX Instrument ID: SGC_P3a
Sublist: chrom-PCB_P3a*sub7

Method: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\PCB_P3a.m
Limit Group: GCSV - 8082
Last Update: 02-Apr-2014 07:44:19 Calib Date: 02-Apr-2014 02:52:35
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A037.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Process Host: XAWRK018

First Level Reviewer: jacksonto Date: 02-Apr-2014 07:23:32

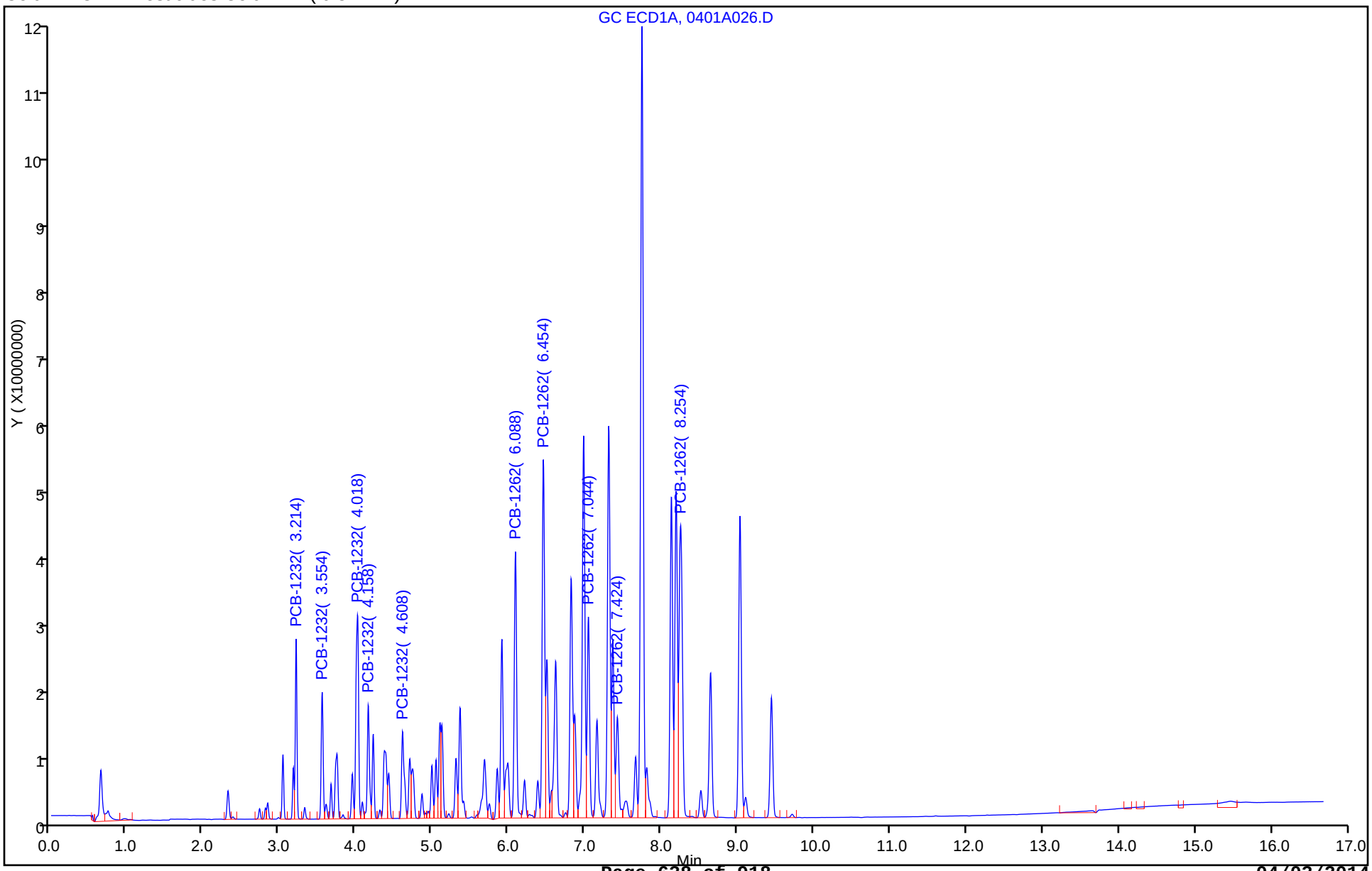
RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
3 PCB-1232					
3.214	3.214	0.0	37869318	500.6	
3.554	3.554	0.0	31335831	504.2	
4.018	4.018	0.0	69662670	501.0	
4.158	4.158	0.0	31424866	499.4	
4.608	4.608	0.0	30040709	499.3	
	Average of Peak Amounts =			500.9	
10 PCB-1262					
6.088	6.088	0.0	82265683	501.3	
6.454	6.454	0.0	113745319	499.5	
7.044	7.044	0.0	61825547	492.8	
7.424	7.424	0.0	36359609	491.4	
8.254	8.254	0.0	123337508	493.6	
	Average of Peak Amounts =			495.7	
S 15 Polychlorinated biphenyls, Total					
				996.6	

Report Date: 02-Apr-2014 07:44:20 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A026.D				
Injection Date:	01-Apr-2014 22:58:15	Instrument ID:	SGC_P3a	Operator ID:	JAX
Lims ID:	STDL53262			Worklist Smp#:	26
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	26
Method:	PCB_P3a	Limit Group:	GCSV - 8082		

Column: CLP1 Pesticides Column 1 (0.32 mm)



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A027.D
Lims ID: STDL43262
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 01-Apr-2014 23:19:30 ALS Bottle#: 27 Worklist Smp#: 27
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL43262
Operator ID: JAX Instrument ID: SGC_P3a
Sublist: chrom-PCB_P3a*sub7

Method: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\PCB_P3a.m
Limit Group: GCSV - 8082
Last Update: 02-Apr-2014 07:44:20 Calib Date: 02-Apr-2014 02:52:35
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A037.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Process Host: XAWRK018

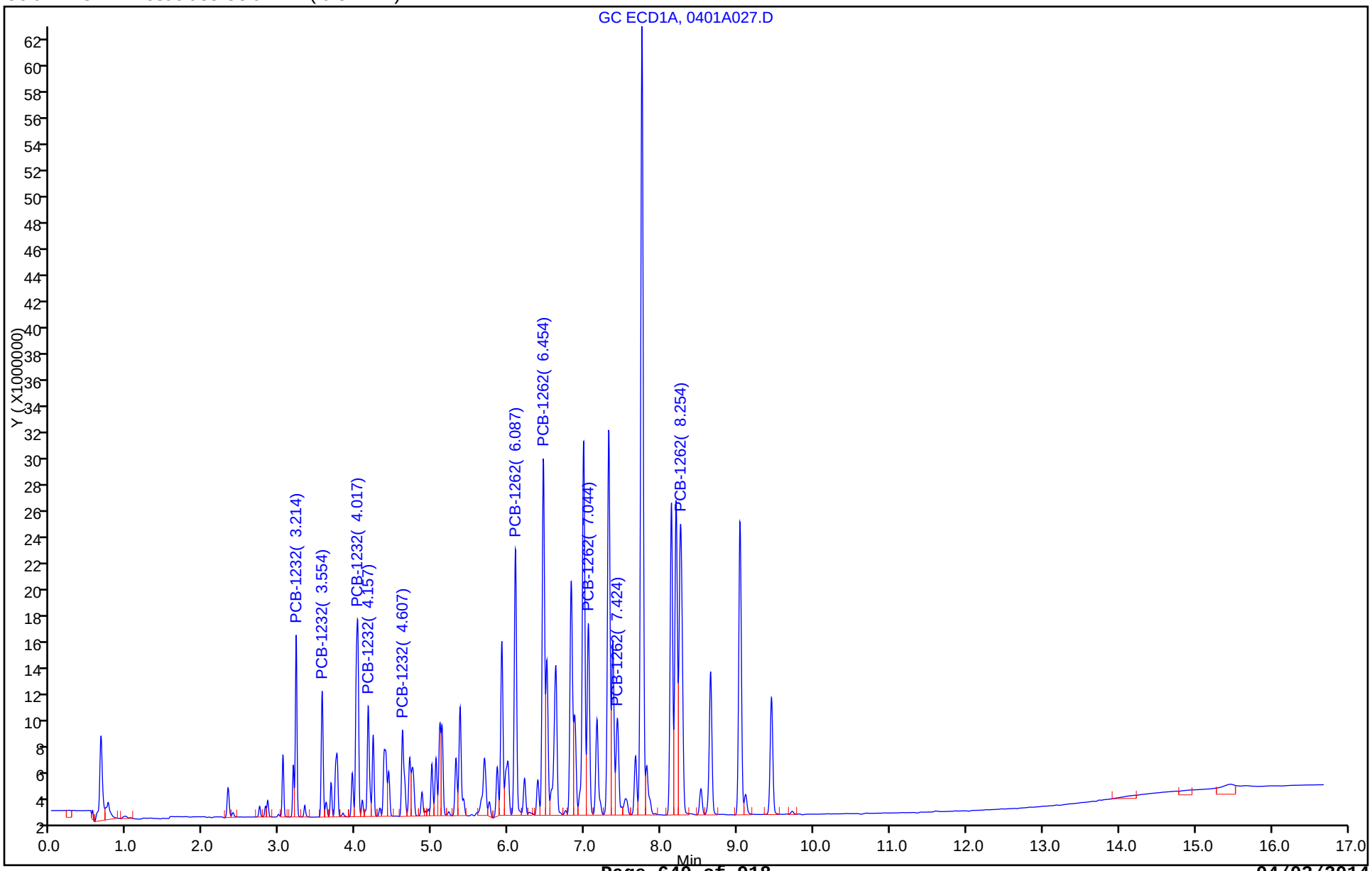
RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
3 PCB-1232					
3.214	3.214	0.0	20658817	266.4	
3.554	3.554	0.0	16725961	261.8	
4.017	4.018	-0.001	37023665	261.0	
4.157	4.158	-0.001	16727376	260.8	
4.607	4.608	-0.001	15998314	261.0	
	Average of Peak Amounts =			262.2	
10 PCB-1262					
6.087	6.088	-0.001	43622463	260.4	
6.454	6.454	0.0	60350537	259.6	
7.044	7.044	0.0	32724066	256.9	
7.424	7.424	0.0	19303195	257.8	
8.254	8.254	0.0	65753862	258.3	
	Average of Peak Amounts =			258.6	
S 15 Polychlorinated biphenyls, Total					
				520.8	

Report Date: 02-Apr-2014 07:44:21 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A027.D				
Injection Date:	01-Apr-2014 23:19:30	Instrument ID:	SGC_P3a	Operator ID:	JAX
Lims ID:	STDL43262			Worklist Smp#:	27
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	27
Method:	PCB_P3a	Limit Group:	GCSV - 8082		

Column: CLP1 Pesticides Column 1 (0.32 mm)



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A028.D
Lims ID: STDL33262
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 01-Apr-2014 23:40:52 ALS Bottle#: 28 Worklist Smp#: 28
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL33262
Operator ID: JAX Instrument ID: SGC_P3a
Sublist: chrom-PCB_P3a*sub7

Method: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\PCB_P3a.m
Limit Group: GCSV - 8082
Last Update: 02-Apr-2014 07:44:21 Calib Date: 02-Apr-2014 02:52:35
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A037.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Process Host: XAWRK018

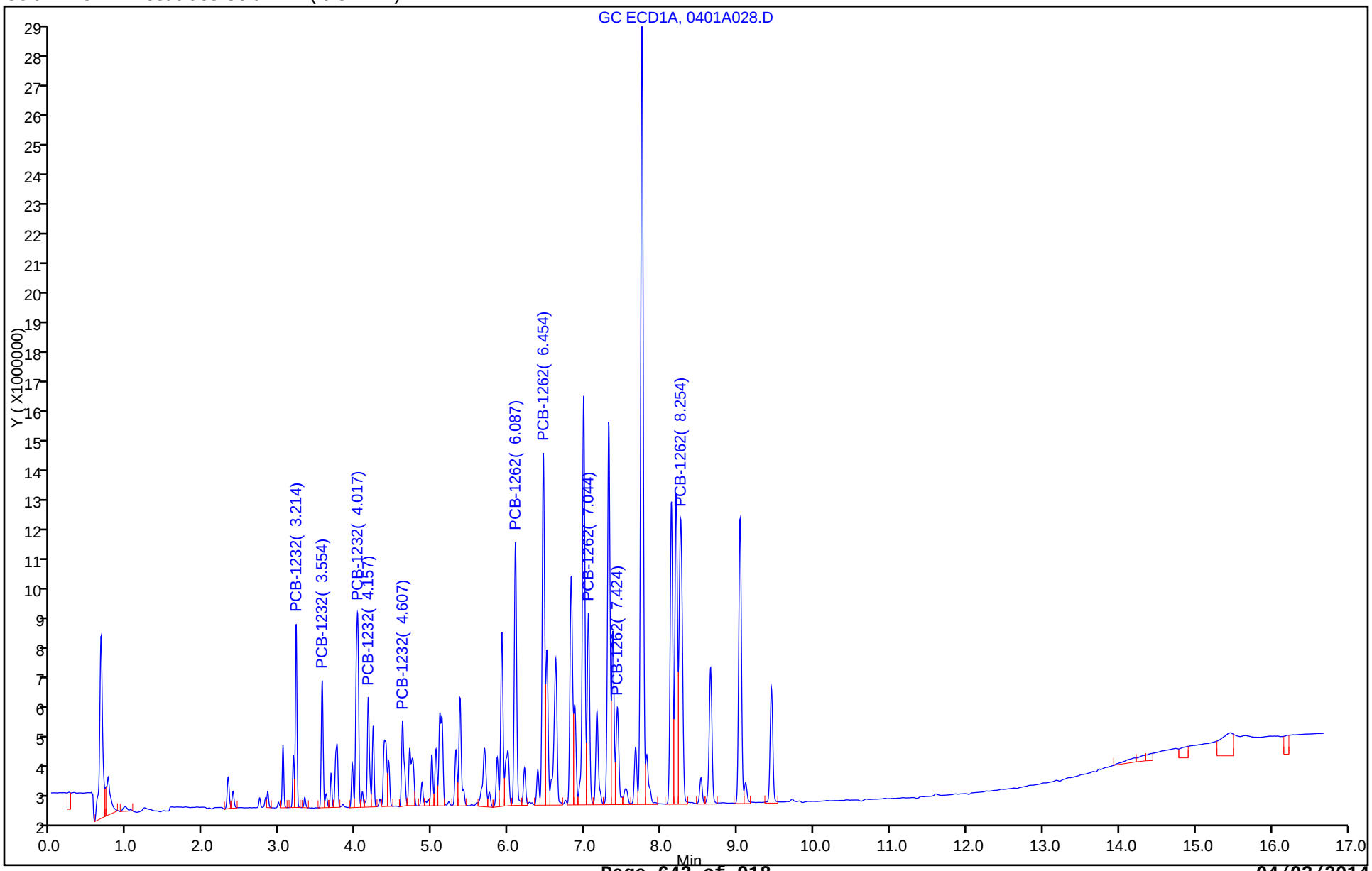
RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
3 PCB-1232					
3.214	3.214	0.0	8986482	107.5	
3.554	3.554	0.0	7275150	105.0	
4.017	4.018	-0.001	15841835	105.2	
4.157	4.158	-0.001	7186867	105.8	
4.607	4.608	-0.001	6815945	105.1	
	Average of Peak Amounts =			105.7	
10 PCB-1262					
6.087	6.088	-0.001	18973613	106.8	
6.454	6.454	0.0	26045209	105.5	
7.044	7.044	0.0	14124581	106.1	
7.424	7.424	0.0	8354950	108.0	
8.254	8.254	0.0	28279967	105.2	
	Average of Peak Amounts =			106.3	
S 15 Polychlorinated biphenyls, Total					
				212.0	

Report Date: 02-Apr-2014 07:44:22 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A028.D				
Injection Date:	01-Apr-2014 23:40:52	Instrument ID:	SGC_P3a	Operator ID:	JAX
Lims ID:	STDL33262			Worklist Smp#:	28
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	28
Method:	PCB_P3a	Limit Group:	GCSV - 8082		

Column: CLP1 Pesticides Column 1 (0.32 mm)



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A029.D
Lims ID: STDL23262
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 02-Apr-2014 00:02:11 ALS Bottle#: 29 Worklist Smp#: 29
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL23262
Operator ID: JAX Instrument ID: SGC_P3a
Sublist: chrom-PCB_P3a*sub7

Method: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\PCB_P3a.m
Limit Group: GCSV - 8082
Last Update: 02-Apr-2014 07:44:22 Calib Date: 02-Apr-2014 02:52:35
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A037.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Process Host: XAWRK018

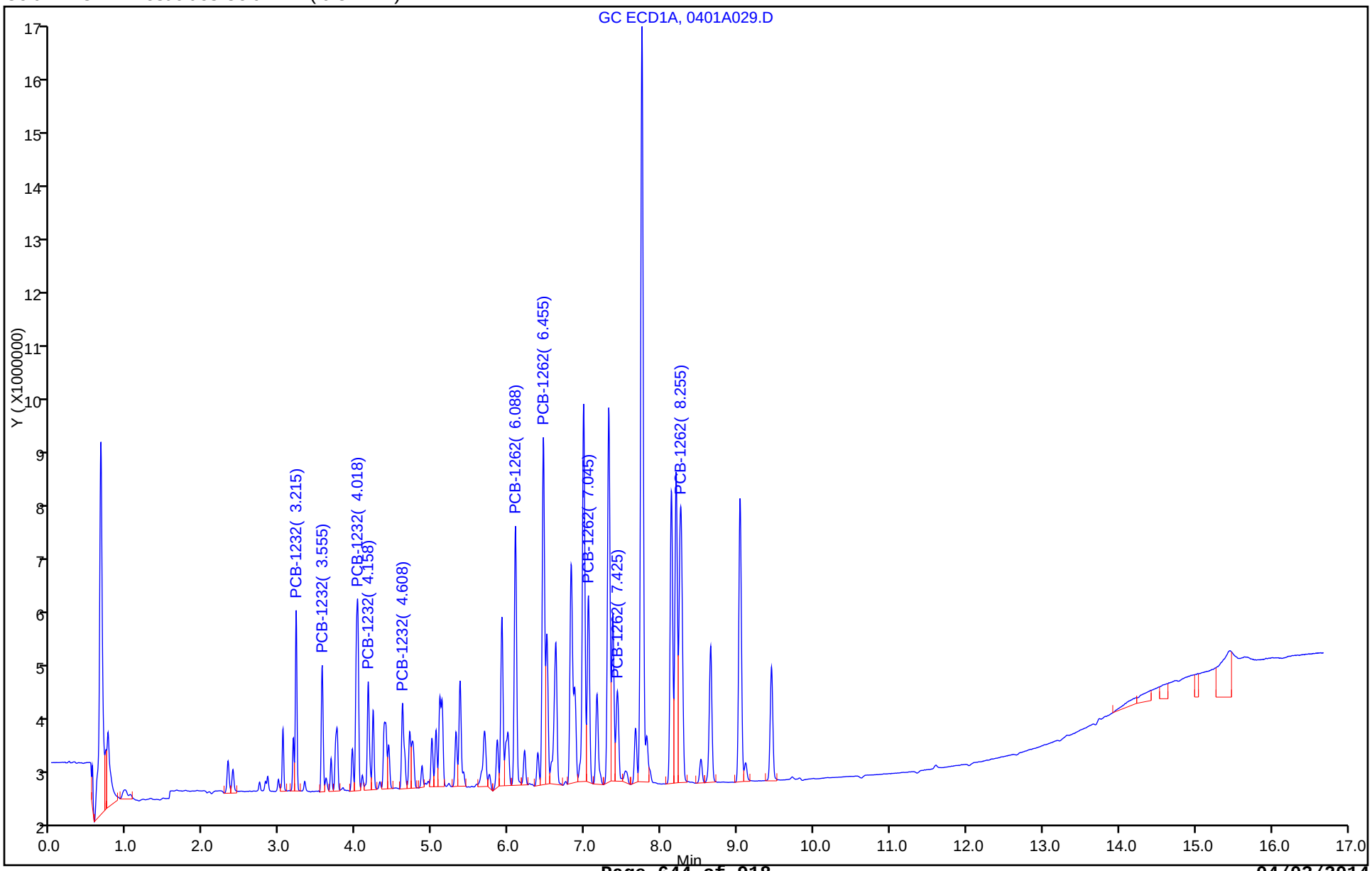
RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
3 PCB-1232					
3.215	3.214	0.001	4774669	50.2	
3.555	3.554	0.001	3873110	48.6	
4.018	4.018	0.0	8398238	50.5	
4.158	4.158	0.0	3843912	51.5	
4.608	4.608	0.0	3662132	51.6	
	Average of Peak Amounts =			50.5	
10 PCB-1262					
6.088	6.088	0.0	9909449	50.3	
6.455	6.454	0.001	13882265	50.8	
7.045	7.044	0.001	7141244	49.5	
7.425	7.424	0.001	4034160	48.8	
8.255	8.254	0.001	14977978	50.9	
	Average of Peak Amounts =			50.1	
S 15 Polychlorinated biphenyls, Total					
				100.5	

Report Date: 02-Apr-2014 07:44:22 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A029.D				
Injection Date:	02-Apr-2014 00:02:11	Instrument ID:	SGC_P3a	Operator ID:	JAX
Lims ID:	STDL23262			Worklist Smp#:	29
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	29
Method:	PCB_P3a	Limit Group:	GCSV - 8082		

Column: CLP1 Pesticides Column 1 (0.32 mm)



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A030.D
Lims ID: STDL13262
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 02-Apr-2014 00:23:24 ALS Bottle#: 30 Worklist Smp#: 30
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL13262
Operator ID: JAX Instrument ID: SGC_P3a
Sublist: chrom-PCB_P3a*sub7

Method: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\PCB_P3a.m
Limit Group: GCSV - 8082
Last Update: 02-Apr-2014 07:44:23 Calib Date: 02-Apr-2014 02:52:35
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A037.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Process Host: XAWRK018

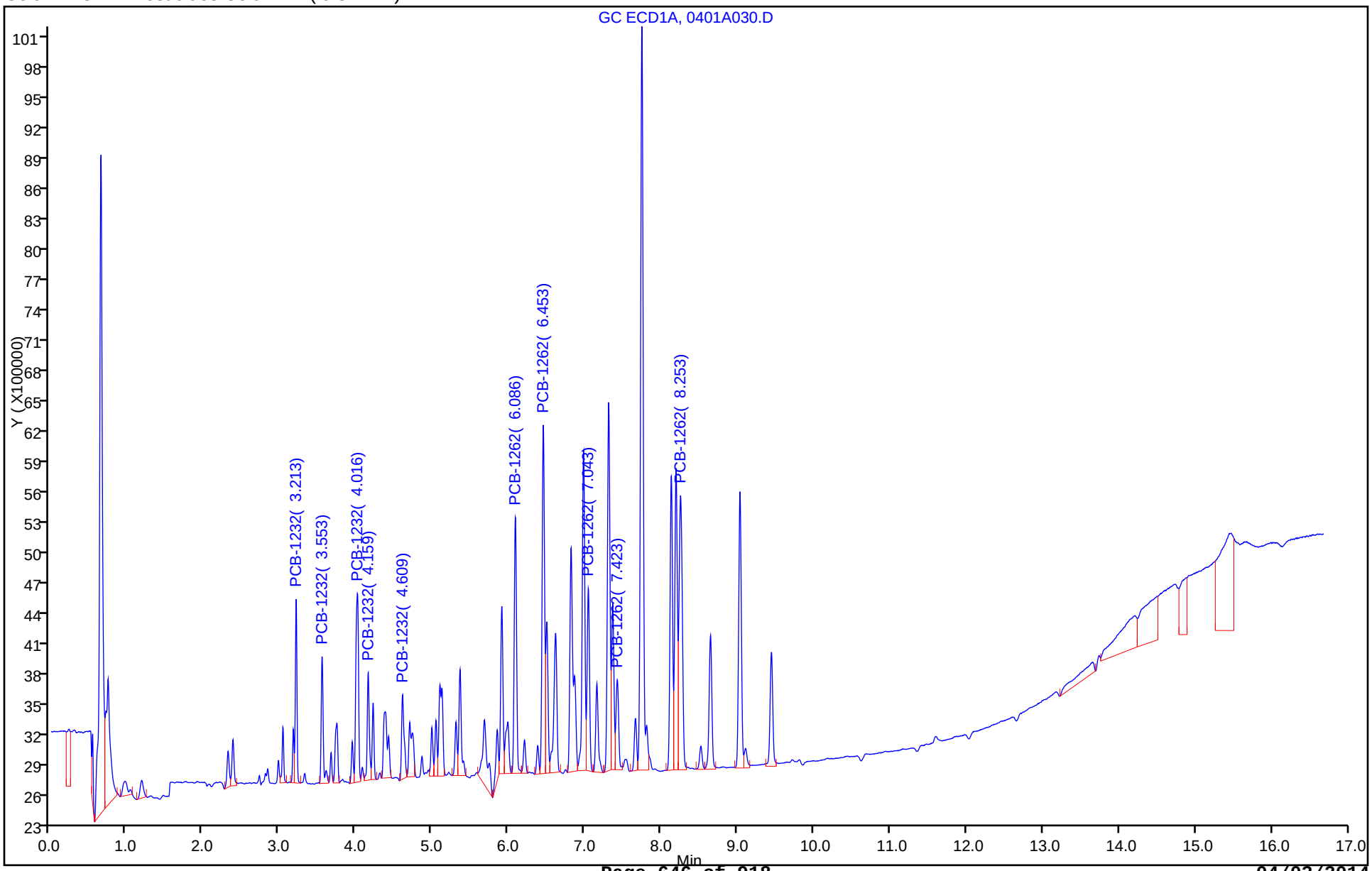
RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
3 PCB-1232					
3.213	3.214	-0.001	2687552	21.8	
3.553	3.554	-0.001	2354013	23.4	
4.016	4.018	-0.002	4599993	22.6	
4.159	4.158	0.001	2026060	22.0	
4.609	4.608	0.001	1931064	22.2	
	Average of Peak Amounts =			22.4	
10 PCB-1262					
6.086	6.088	-0.002	5438499	22.4	
6.453	6.454	-0.001	7584179	22.5	
7.043	7.044	-0.001	3905712	23.3	
7.423	7.424	-0.001	2166771	23.2	
8.253	8.254	-0.001	8103261	22.8	
	Average of Peak Amounts =			22.8	
S 15 Polychlorinated biphenyls, Total					
				45.2	

Report Date: 02-Apr-2014 07:44:23 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A030.D				
Injection Date:	02-Apr-2014 00:23:24	Instrument ID:	SGC_P3a	Operator ID:	JAX
Lims ID:	STDL13262			Worklist Smp#:	30
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	30
Method:	PCB_P3a	Limit Group:	GCSV - 8082		

Column: CLP1 Pesticides Column 1 (0.32 mm)



FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-53458-1 Analy Batch No.: 219270

SDG No.:

Instrument ID: SGC_P3a GC Column: CLP1 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/02/2014 00:44 Calibration End Date: 04/02/2014 02:52 Calibration ID: 17676

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STDL14268 280-219270/37	0401A037.D
Level 2	STDL24268 280-219270/36	0401A036.D
Level 3	STDL34268 280-219270/35	0401A035.D
Level 4	STDL44268 280-219270/34	0401A034.D
Level 5	STDL54268 280-219270/33	0401A033.D
Level 6	STDL64268 280-219270/32	0401A032.D
Level 7	STDL74268 280-219270/31	0401A031.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	LVL 7				RT WINDOW	AVG RT
PCB-1242 Peak 1	3.553	3.554	3.554	3.554	3.556	3.553	3.554				3.306 - 3.806	3.554
PCB-1242 Peak 2	4.017	4.018	4.018	4.017	4.019	4.016	4.018				3.769 - 4.269	4.018
PCB-1242 Peak 3	4.160	4.158	4.158	4.157	4.159	4.160	4.158				3.909 - 4.409	4.159
PCB-1242 Peak 4	4.223	4.221	4.224	4.221	4.222	4.223	4.224				3.972 - 4.472	4.223
PCB-1242 Peak 5	4.610	4.608	4.608	4.607	4.609	4.606	4.608				4.359 - 4.859	4.608
PCB-1268 Peak 1	8.193	8.194	8.194	8.194	8.196	8.196	8.194				7.946 - 8.446	8.194
PCB-1268 Peak 2	8.247	8.244	8.248	8.247	8.246	8.246	8.248				7.996 - 8.496	8.247
PCB-1268 Peak 3	8.520	8.518	8.518	8.521	8.519	8.520	8.518				8.269 - 8.769	8.519
PCB-1268 Peak 4	8.640	8.638	8.638	8.637	8.639	8.640	8.638				8.389 - 8.889	8.639
PCB-1268 Peak 5	9.443	9.444	9.444	9.444	9.442	9.443	9.444				9.192 - 9.692	9.443

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Denver Job No.: 280-53458-1 Analy Batch No.: 219270

SDG No.:

Instrument ID: SGC_P3a GC Column: CLP1 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/02/2014 00:44 Calibration End Date: 04/02/2014 02:52 Calibration ID: 17676

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STDL14268 280-219270/37	0401A037.D
Level 2	STDL24268 280-219270/36	0401A036.D
Level 3	STDL34268 280-219270/35	0401A035.D
Level 4	STDL44268 280-219270/34	0401A034.D
Level 5	STDL54268 280-219270/33	0401A033.D
Level 6	STDL64268 280-219270/32	0401A032.D
Level 7	STDL74268 280-219270/31	0401A031.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3 LVL 7	LVL 4		B	M1	M2								
PCB-1242 Peak 1	151568 104088	142993 95442	122473 102921	118474	Lin1	1781990.75	99766.9536							0.9960		0.9900
PCB-1242 Peak 2	317101 236275	299675 216841	258882 224104	252784	Lin1	3189658.70	222257.944							0.9980		0.9900
PCB-1242 Peak 3	142981 107034	138144 98483	118851 103260	115534	Lin1	1443496.08	101601.992							0.9980		0.9900
PCB-1242 Peak 4	88545 67976	83700 62505	72270 65005	71154	Lin1	786966.053	64215.5060							0.9980		0.9900
PCB-1242 Peak 5	148327 112178	142847 101792	123080 108091	119641	Lin1	1460890.25	105931.572							0.9970		0.9900
PCB-1268 Peak 1	742519 556530	722087 518012	631581 545005	595522	Lin1	7370137.19	533418.248							0.9980		0.9900
PCB-1268 Peak 2	771027 573960	712769 525677	615319 547996	605492	Lin1	7243424.27	540691.172							0.9980		0.9900
PCB-1268 Peak 3	652092 490096	617834 455936	535002 477479	525131	Lin1	6014676.01	468917.144							0.9980		0.9900
PCB-1268 Peak 4	205593 153945	190930 143099	167404 151337	163841	Lin1	1806703.91	147803.481							0.9980		0.9900
PCB-1268 Peak 5	1988316 1452231	1888639 1343881	1623388 1395776	1573371	Lin1	20730566.6	1377386.53							0.9980		0.9900

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Denver Job No.: 280-53458-1 Analy Batch No.: 219270

SDG No.:

Instrument ID: SGC_P3a GC Column: CLP1 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/02/2014 00:44 Calibration End Date: 04/02/2014 02:52 Calibration ID: 17676

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STDL14268 280-219270/37	0401A037.D
Level 2	STDL24268 280-219270/36	0401A036.D
Level 3	STDL34268 280-219270/35	0401A035.D
Level 4	STDL44268 280-219270/34	0401A034.D
Level 5	STDL54268 280-219270/33	0401A033.D
Level 6	STDL64268 280-219270/32	0401A032.D
Level 7	STDL74268 280-219270/31	0401A031.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
		LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
PCB-1242 Peak 1	Lin1	3789190 71581191	7149653 102920782	12247295	29618560	52043865	25.0 750	50.0 1000	100	250	500
PCB-1242 Peak 2	Lin1	7927527 162630672	14983764 224103726	25888169	63196014	118137739	25.0 750	50.0 1000	100	250	500
PCB-1242 Peak 3	Lin1	3574534 73862489	6907211 103259942	11885071	28883572	53516981	25.0 750	50.0 1000	100	250	500
PCB-1242 Peak 4	Lin1	2213635 46878634	4185004 65004685	7226971	17788436	33987876	25.0 750	50.0 1000	100	250	500
PCB-1242 Peak 5	Lin1	3708183 76344122	7142363 108091118	12308017	29910304	56089079	25.0 750	50.0 1000	100	250	500
PCB-1268 Peak 1	Lin1	18562982 388508719	36104325 545005434	63158101	148880437	278264775	25.0 750	50.0 1000	100	250	500
PCB-1268 Peak 2	Lin1	19275664 394258022	35638464 547995692	61531851	151373022	286980141	25.0 750	50.0 1000	100	250	500
PCB-1268 Peak 3	Lin1	16302297 341951817	30891709 477479308	53500156	131282667	245048138	25.0 750	50.0 1000	100	250	500
PCB-1268 Peak 4	Lin1	5139817 107324567	9546508 151337433	16740446	40960207	76972260	25.0 750	50.0 1000	100	250	500
PCB-1268 Peak 5	Lin1	49707890 1007910538	94431948 1395775760	162338768	393342661	726115379	25.0 750	50.0 1000	100	250	500

Curve Type Legend:

Lin1 = Linear 1/conc

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A031.D
Lims ID: STDL74268
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 02-Apr-2014 00:44:43 ALS Bottle#: 31 Worklist Smp#: 31
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL74268
Operator ID: JAX Instrument ID: SGC_P3a
Sublist: chrom-PCB_P3a*sub8

Method: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\PCB_P3a.m
Limit Group: GCSV - 8082
Last Update: 02-Apr-2014 07:44:23 Calib Date: 02-Apr-2014 02:52:35
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A037.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Process Host: XAWRK018

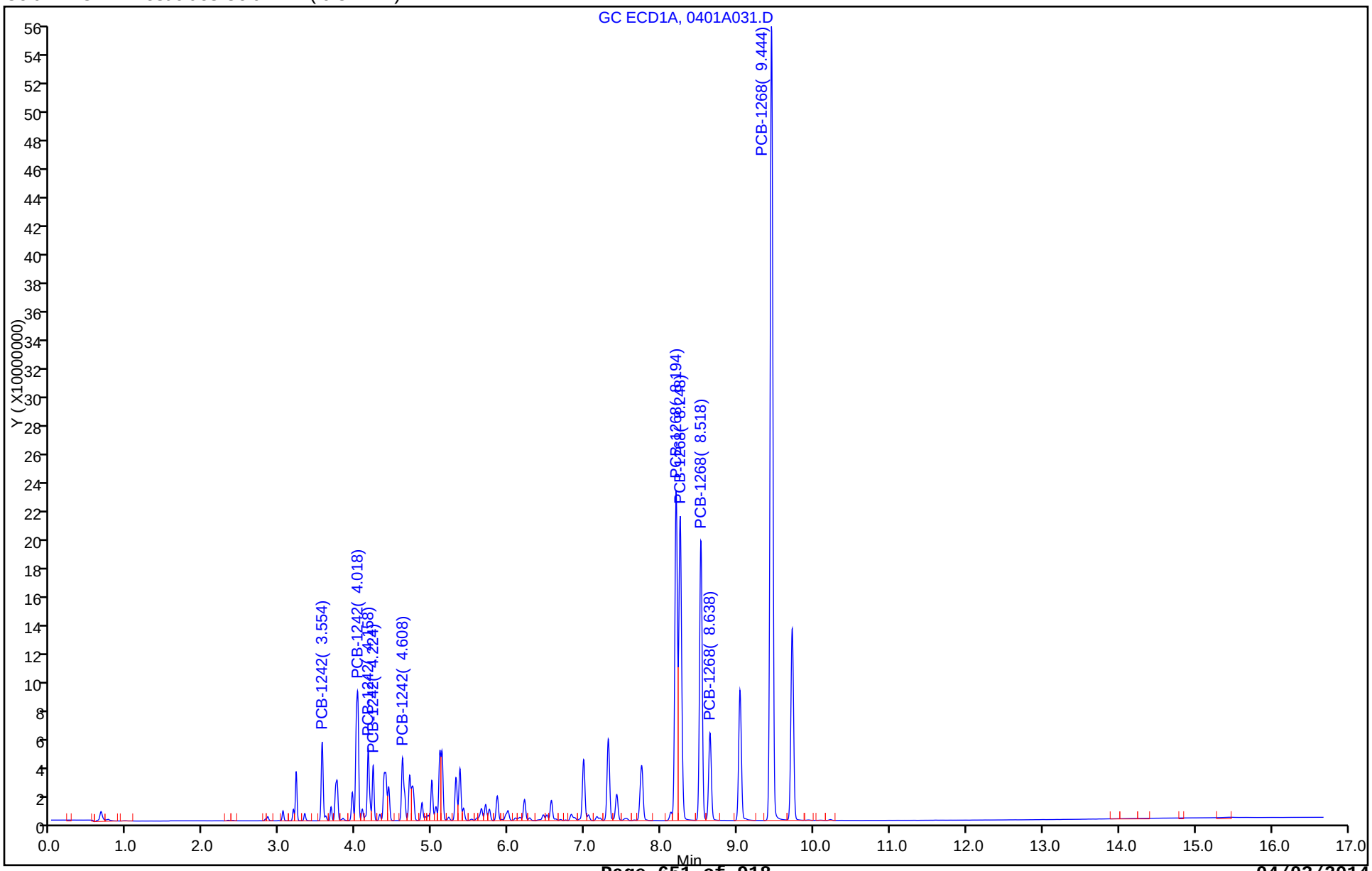
RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
6 PCB-1242					
3.554	3.556	-0.002	102920782	1013.8	
4.018	4.019	-0.001	224103726	994.0	
4.158	4.159	-0.001	103259942	1002.1	
4.224	4.222	0.002	65004685	1000.0	
4.608	4.609	-0.001	108091118	1006.6	
	Average of Peak Amounts =			1003.3	
12 PCB-1268					
8.194	8.196	-0.002	545005434	1007.9	
8.248	8.246	0.002	547995692	1000.1	
8.518	8.519	-0.001	477479308	1005.4	
8.638	8.639	-0.001	151337433	1011.7	
9.444	9.442	0.002	1395775760	998.3	
	Average of Peak Amounts =			1004.7	
S 15 Polychlorinated biphenyls, Total					
				2008.0	

Report Date: 02-Apr-2014 07:44:24 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A031.D				
Injection Date:	02-Apr-2014 00:44:43	Instrument ID:	SGC_P3a	Operator ID:	JAX
Lims ID:	STDL74268			Worklist Smp#:	31
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	31
Method:	PCB_P3a	Limit Group:	GCSV - 8082		

Column: CLP1 Pesticides Column 1 (0.32 mm)



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A032.D
Lims ID: STDL64268
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 02-Apr-2014 01:05:58 ALS Bottle#: 32 Worklist Smp#: 32
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL64268
Operator ID: JAX Instrument ID: SGC_P3a
Sublist: chrom-PCB_P3a*sub8

Method: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\PCB_P3a.m
Limit Group: GCSV - 8082
Last Update: 02-Apr-2014 07:44:24 Calib Date: 02-Apr-2014 02:52:35
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A037.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Process Host: XAWRK018

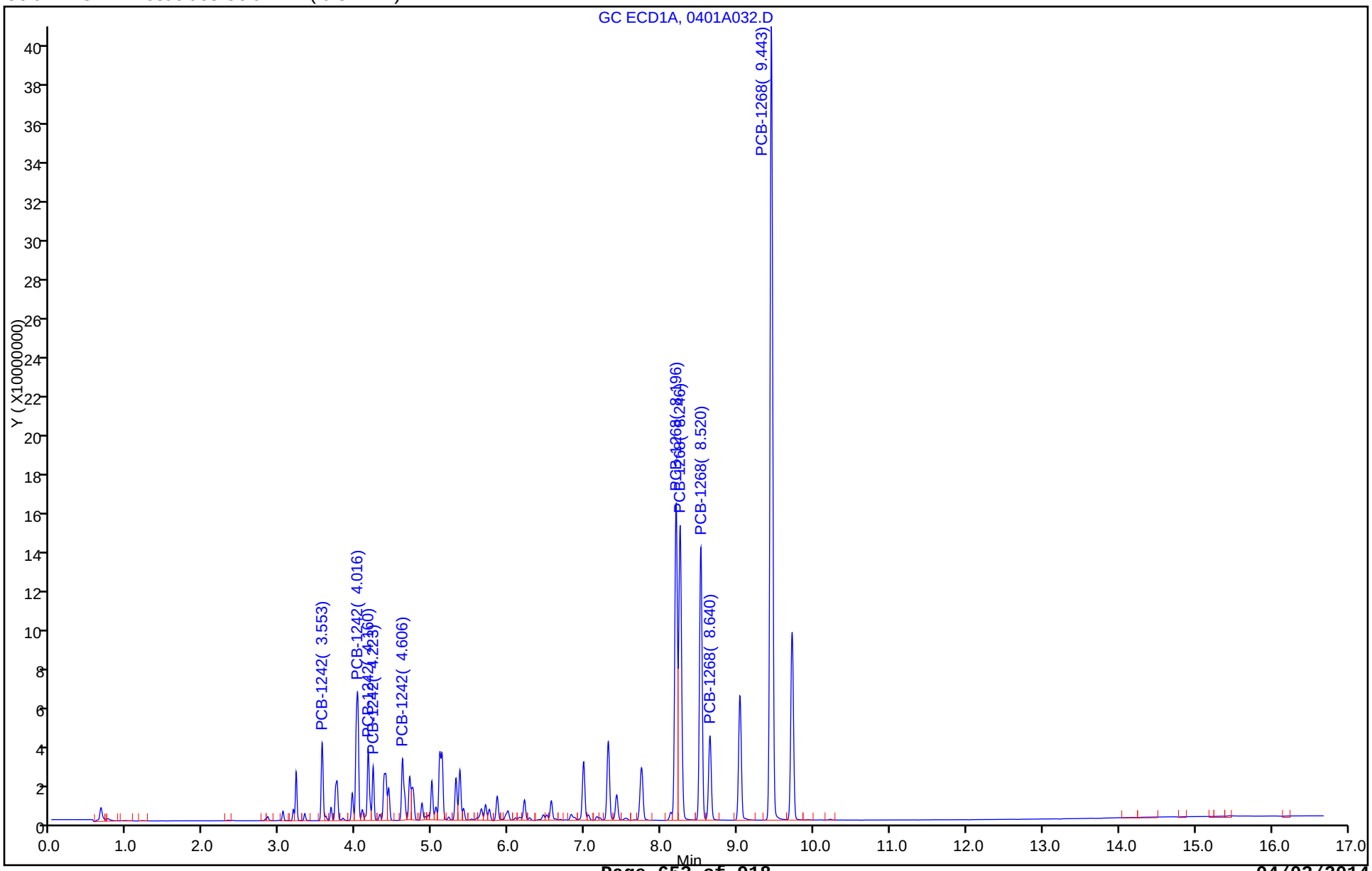
RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
6 PCB-1242					
3.553	3.556	-0.003	71581191	699.6	
4.016	4.019	-0.003	162630672	717.4	
4.160	4.159	0.001	73862489	712.8	
4.223	4.222	0.001	46878634	717.8	
4.606	4.609	-0.003	76344122	706.9	
	Average of Peak Amounts =			710.9	
12 PCB-1268					
8.196	8.196	0.0	388508719	714.5	
8.246	8.246	0.0	394258022	715.8	
8.520	8.519	0.001	341951817	716.4	
8.640	8.639	0.001	107324567	713.9	
9.443	9.442	0.001	1007910538	716.7	
	Average of Peak Amounts =			715.5	
S 15 Polychlorinated biphenyls, Total					
				1426.4	

Report Date: 02-Apr-2014 07:44:25 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A032.D				
Injection Date:	02-Apr-2014 01:05:58	Instrument ID:	SGC_P3a	Operator ID:	JAX
Lims ID:	STDL64268			Worklist Smp#:	32
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	32
Method:	PCB_P3a	Limit Group:	GCSV - 8082		

Column: CLP1 Pesticides Column 1 (0.32 mm)



TestAmerica Denver
Target Compound Quantitation Report

Data File:	\\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A033.D				
Lims ID:	STDL54268				
Client ID:					
Sample Type:	IC	Calib Level:	5		
Inject. Date:	02-Apr-2014 01:27:13	ALS Bottle#:	33	Worklist Smp#:	33
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	STDL54268				
Operator ID:	JAX	Instrument ID:	SGC_P3a		
Sublist:	chrom-PCB_P3a*sub8				
Method:	\\Denchrom\ChromData\SGC_P3a\20140401-21600.b\PCB_P3a.m				
Limit Group:	GCSV - 8082				
Last Update:	02-Apr-2014 07:44:25	Calib Date:	02-Apr-2014 02:52:35		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A037.D				
Column 1 :	CLP1 Pesticides Column 1 (0.32 mm)		Det: GC ECD1A		
Process Host:	XAWRK018				

First Level Reviewer: jacksonto Date: 02-Apr-2014 07:24:11

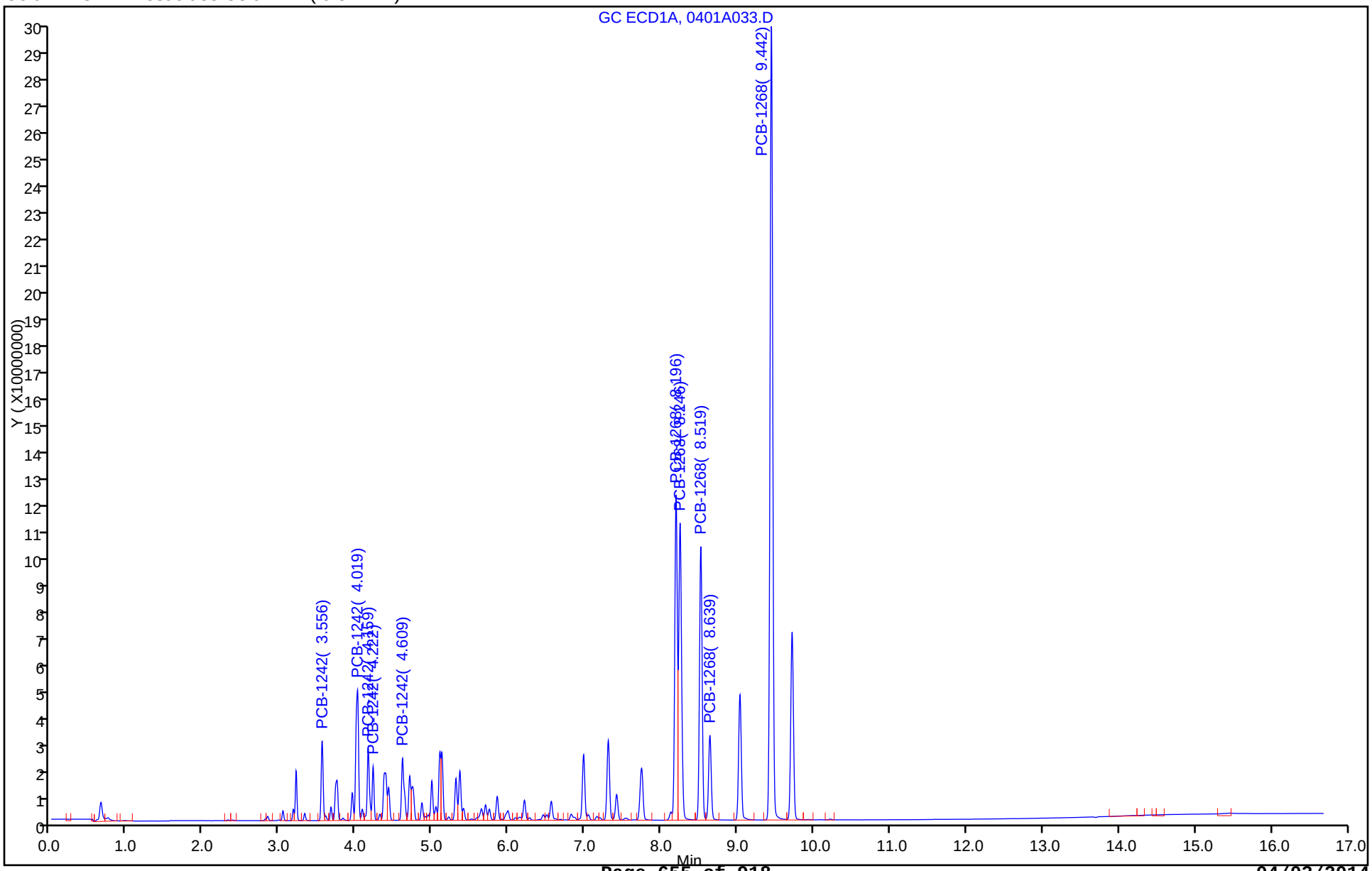
RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
6 PCB-1242					
3.556	3.556	0.0	52043865	503.8	
4.019	4.019	0.0	118137739	517.2	
4.159	4.159	0.0	53516981	512.5	
4.222	4.222	0.0	33987876	517.0	
4.609	4.609	0.0	56089079	515.7	
	Average of Peak Amounts =			513.2	
12 PCB-1268					
8.196	8.196	0.0	278264775	507.8	
8.246	8.246	0.0	286980141	517.4	
8.519	8.519	0.0	245048138	509.8	
8.639	8.639	0.0	76972260	508.6	
9.442	9.442	0.0	726115379	512.1	
	Average of Peak Amounts =			511.1	
S 15 Polychlorinated biphenyls, Total					
				1024.4	

Report Date: 02-Apr-2014 07:44:25 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A033.D				
Injection Date:	02-Apr-2014 01:27:13	Instrument ID:	SGC_P3a	Operator ID:	JAX
Lims ID:	STDL54268			Worklist Smp#:	33
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	33
Method:	PCB_P3a	Limit Group:	GCSV - 8082		

Column: CLP1 Pesticides Column 1 (0.32 mm)



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A034.D
Lims ID: STDL44268
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 02-Apr-2014 01:48:34 ALS Bottle#: 34 Worklist Smp#: 34
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL44268
Operator ID: JAX Instrument ID: SGC_P3a
Sublist: chrom-PCB_P3a*sub8

Method: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\PCB_P3a.m
Limit Group: GCSV - 8082
Last Update: 02-Apr-2014 07:44:26 Calib Date: 02-Apr-2014 02:52:35
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A037.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Process Host: XAWRK018

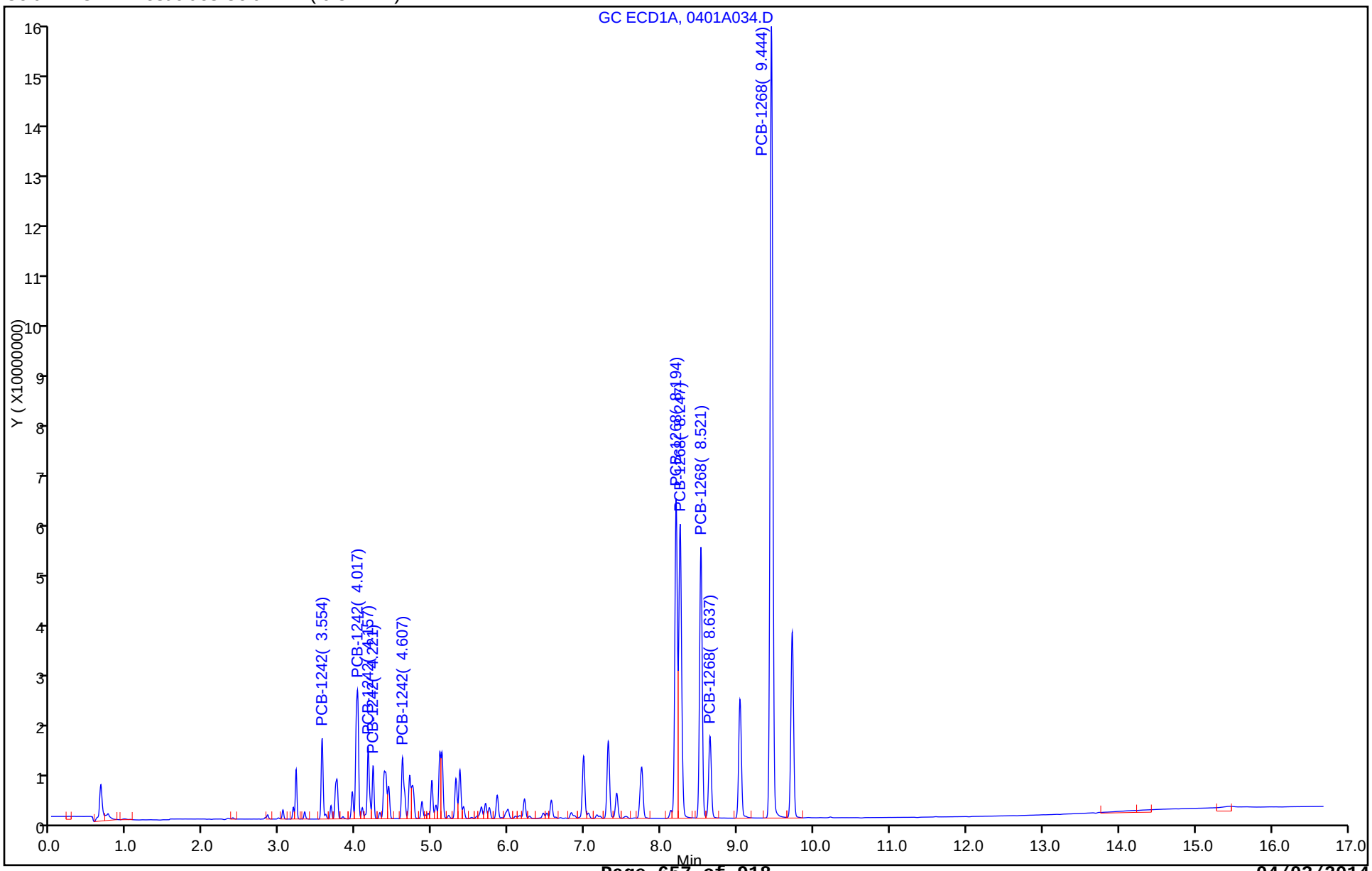
RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
6 PCB-1242					
3.554	3.556	-0.002	29618560	279.0	
4.017	4.019	-0.002	63196014	270.0	
4.157	4.159	-0.002	28883572	270.1	
4.221	4.222	-0.001	17788436	264.8	
4.607	4.609	-0.002	29910304	268.6	
	Average of Peak Amounts =			270.5	
12 PCB-1268					
8.194	8.196	-0.002	148880437	265.3	
8.247	8.246	0.001	151373022	266.6	
8.521	8.519	0.002	131282667	267.1	
8.637	8.639	-0.002	40960207	264.9	
9.444	9.442	0.002	393342661	270.5	
	Average of Peak Amounts =			266.9	
S 15 Polychlorinated biphenyls, Total					
				537.4	

Report Date: 02-Apr-2014 07:44:26 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A034.D				
Injection Date:	02-Apr-2014 01:48:34	Instrument ID:	SGC_P3a	Operator ID:	JAX
Lims ID:	STDL44268			Worklist Smp#:	34
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	34
Method:	PCB_P3a	Limit Group:	GCSV - 8082		

Column: CLP1 Pesticides Column 1 (0.32 mm)



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A035.D
Lims ID: STDL34268
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 02-Apr-2014 02:09:51 ALS Bottle#: 35 Worklist Smp#: 35
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL34268
Operator ID: JAX Instrument ID: SGC_P3a
Sublist: chrom-PCB_P3a*sub8

Method: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\PCB_P3a.m
Limit Group: GCSV - 8082
Last Update: 02-Apr-2014 07:44:27 Calib Date: 02-Apr-2014 02:52:35
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A037.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Process Host: XAWRK018

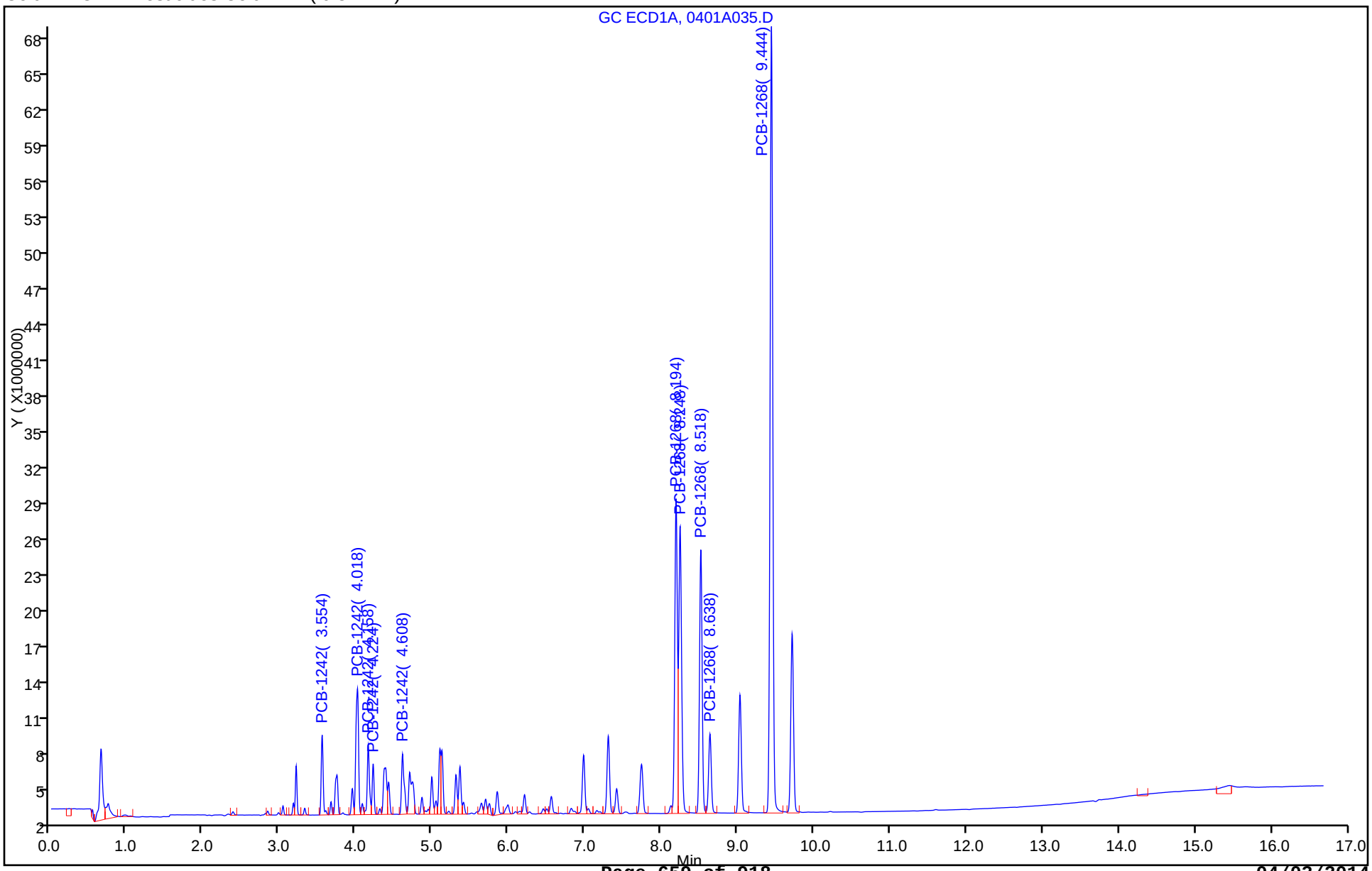
RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
6 PCB-1242					
3.554	3.556	-0.002	12247295	104.9	
4.018	4.019	-0.001	25888169	102.1	
4.158	4.159	-0.001	11885071	102.8	
4.224	4.222	0.002	7226971	100.3	
4.608	4.609	-0.001	12308017	102.4	
	Average of Peak Amounts =			102.5	
12 PCB-1268					
8.194	8.196	-0.002	63158101	104.6	
8.248	8.246	0.002	61531851	100.4	
8.518	8.519	-0.001	53500156	101.3	
8.638	8.639	-0.001	16740446	101.0	
9.444	9.442	0.002	162338768	102.8	
	Average of Peak Amounts =			102.0	
S 15 Polychlorinated biphenyls, Total					
				204.5	

Report Date: 02-Apr-2014 07:44:27 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A035.D				
Injection Date:	02-Apr-2014 02:09:51	Instrument ID:	SGC_P3a	Operator ID:	JAX
Lims ID:	STDL34268			Worklist Smp#:	35
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	35
Method:	PCB_P3a	Limit Group:	GCSV - 8082		

Column: CLP1 Pesticides Column 1 (0.32 mm)



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A036.D
Lims ID: STDL24268
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 02-Apr-2014 02:31:12 ALS Bottle#: 36 Worklist Smp#: 36
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL24268
Operator ID: JAX Instrument ID: SGC_P3a
Sublist: chrom-PCB_P3a*sub8

Method: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\PCB_P3a.m
Limit Group: GCSV - 8082
Last Update: 02-Apr-2014 07:44:28 Calib Date: 02-Apr-2014 02:52:35
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A037.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Process Host: XAWRK018

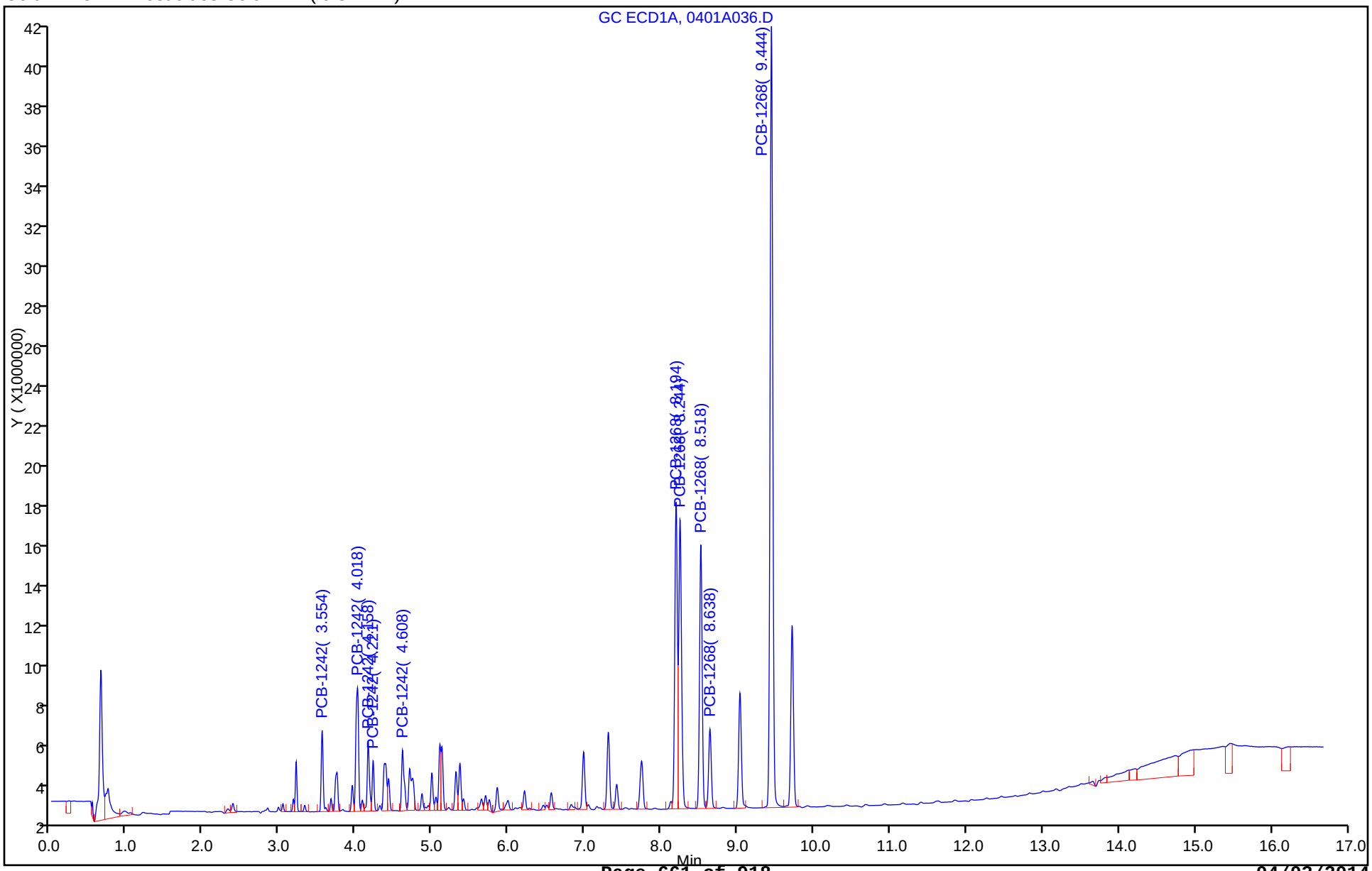
RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
6 PCB-1242					
3.554	3.556	-0.002	7149653	53.8	
4.018	4.019	-0.001	14983764	53.1	
4.158	4.159	-0.001	6907211	53.8	
4.221	4.222	-0.001	4185004	52.9	
4.608	4.609	-0.001	7142363	53.6	
	Average of Peak Amounts =			53.4	
12 PCB-1268					
8.194	8.196	-0.002	36104325	53.9	
8.244	8.246	-0.002	35638464	52.5	
8.518	8.519	-0.001	30891709	53.1	
8.638	8.639	-0.001	9546508	52.4	
9.444	9.442	0.002	94431948	53.5	
	Average of Peak Amounts =			53.1	
S 15 Polychlorinated biphenyls, Total					
				106.5	

Report Date: 02-Apr-2014 07:44:28 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A036.D				
Injection Date:	02-Apr-2014 02:31:12	Instrument ID:	SGC_P3a	Operator ID:	JAX
Lims ID:	STDL24268			Worklist Smp#:	36
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	36
Method:	PCB_P3a	Limit Group:	GCSV - 8082		

Column: CLP1 Pesticides Column 1 (0.32 mm)



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A037.D
Lims ID: STDL14268
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 02-Apr-2014 02:52:35 ALS Bottle#: 37 Worklist Smp#: 37
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL14268
Operator ID: JAX Instrument ID: SGC_P3a
Sublist: chrom-PCB_P3a*sub8

Method: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\PCB_P3a.m
Limit Group: GCSV - 8082
Last Update: 02-Apr-2014 07:44:29 Calib Date: 02-Apr-2014 02:52:35
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A037.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Process Host: XAWRK018

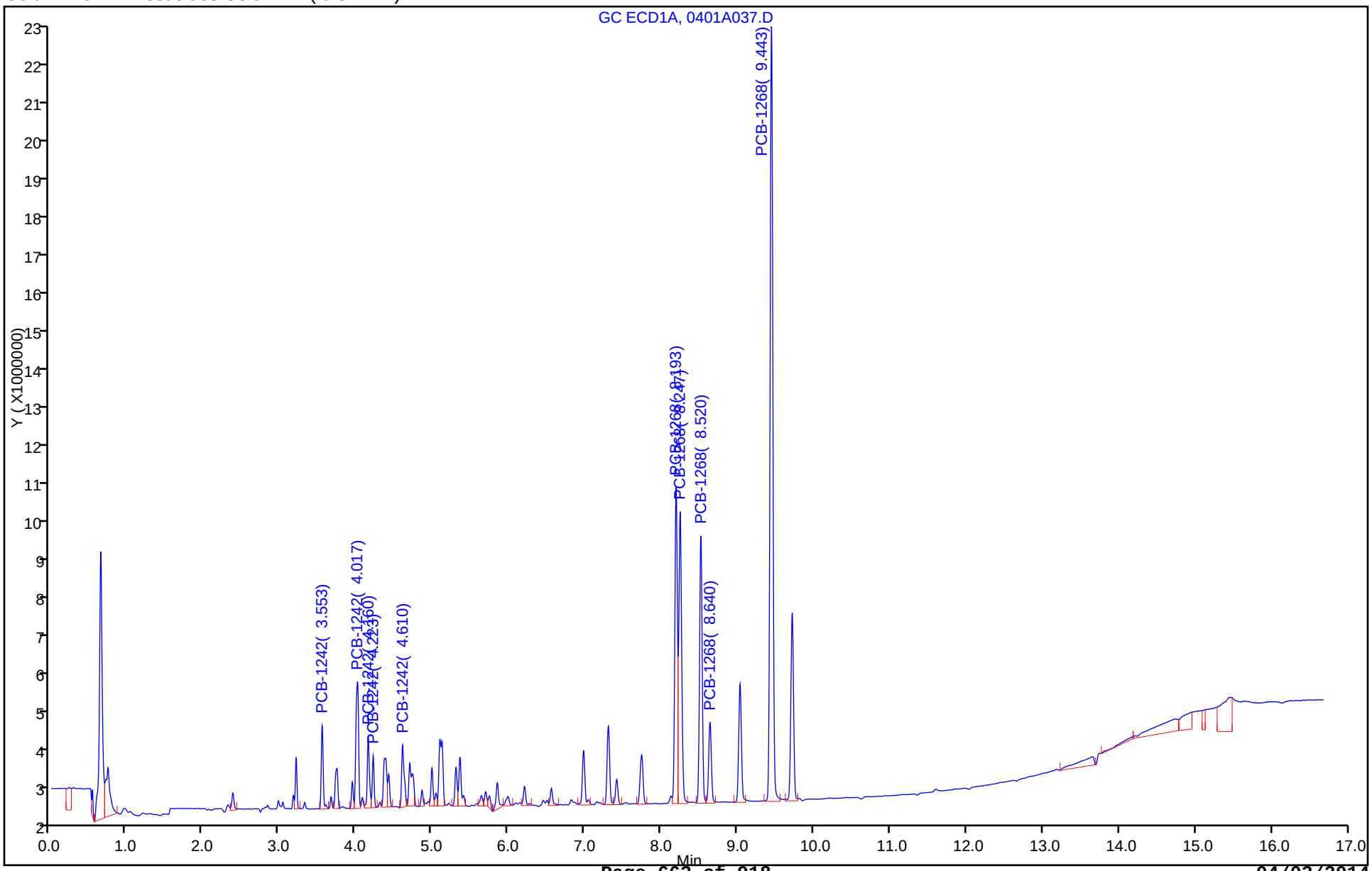
RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
6 PCB-1242					
3.553	3.556	-0.003	3789190	20.1	
4.017	4.019	-0.002	7927527	21.3	
4.160	4.159	0.001	3574534	21.0	
4.223	4.222	0.001	2213635	22.2	
4.610	4.609	0.001	3708183	21.2	
	Average of Peak Amounts =			21.2	
12 PCB-1268					
8.193	8.196	-0.003	18562982	21.0	
8.247	8.246	0.001	19275664	22.3	
8.520	8.519	0.001	16302297	21.9	
8.640	8.639	0.001	5139817	22.6	
9.443	9.442	0.001	49707890	21.0	
	Average of Peak Amounts =			21.8	
S 15 Polychlorinated biphenyls, Total					
				42.9	

Report Date: 02-Apr-2014 07:44:29 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A037.D				
Injection Date:	02-Apr-2014 02:52:35	Instrument ID:	SGC_P3a	Operator ID:	JAX
Lims ID:	STDL14268			Worklist Smp#:	37
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	37
Method:	PCB_P3a	Limit Group:	GCSV - 8082		

Column: CLP1 Pesticides Column 1 (0.32 mm)



FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-53458-1 Analy Batch No.: 219272

SDG No.:

Instrument ID: SGC_P3b GC Column: CLP2 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/01/2014 15:08 Calibration End Date: 04/01/2014 17:16 Calibration ID: 17680

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STDL11248 280-219272/9	0401B009.D
Level 2	STDL21248 280-219272/8	0401B008.D
Level 3	STDL31248 280-219272/7	0401B007.D
Level 4	STDL41248 280-219272/6	0401B006.D
Level 5	STDL51248 280-219272/5	0401B005.D
Level 6	STDL61248 280-219272/4	0401B004.D
Level 7	STDL71248 280-219272/3	0401B003.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	LVL 7				RT WINDOW	AVG RT
PCB-1248 Peak 1	4.195	4.193	4.194	4.194	4.194	4.193	4.194				3.944 - 4.444	4.194
PCB-1248 Peak 2	4.572	4.573	4.574	4.574	4.571	4.573	4.574				4.321 - 4.821	4.573
PCB-1248 Peak 3	4.868	4.870	4.867	4.868	4.868	4.870	4.867				4.618 - 5.118	4.868
PCB-1248 Peak 4	5.322	5.320	5.321	5.321	5.321	5.320	5.321				5.071 - 5.571	5.321
PCB-1248 Peak 5	5.372	5.370	5.371	5.371	5.371	5.370	5.371				5.121 - 5.621	5.371

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Denver Job No.: 280-53458-1 Analy Batch No.: 219272

SDG No.:

Instrument ID: SGC_P3b GC Column: CLP2 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/01/2014 15:08 Calibration End Date: 04/01/2014 17:16 Calibration ID: 17680

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STDL11248 280-219272/9	0401B009.D
Level 2	STDL21248 280-219272/8	0401B008.D
Level 3	STDL31248 280-219272/7	0401B007.D
Level 4	STDL41248 280-219272/6	0401B006.D
Level 5	STDL51248 280-219272/5	0401B005.D
Level 6	STDL61248 280-219272/4	0401B004.D
Level 7	STDL71248 280-219272/3	0401B003.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3 LVL 7	LVL 4		B	M1	M2								
PCB-1248 Peak 1	595958 481648	587596 507561	577306 477077	513492	Lin1	4382227.95	485337.478							0.9980		0.9900
PCB-1248 Peak 2	364350 287117	352321 297362	342362 283133	300701	Lin1	2847886.26	286322.938							0.9990		0.9900
PCB-1248 Peak 3	607552 380426	486904 395412	469751 375763	412670	Lin1	6248837.96	376997.867							0.9990		0.9900
PCB-1248 Peak 4	570053 427257	527890 462968	503702 427468	449449	Lin1	4170869.34	434581.285							0.9980		0.9900
PCB-1248 Peak 5	660780 485912	593222 506995	590614 487892	510797	Lin1	5317105.17	488529.206							0.9990		0.9900

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Denver Job No.: 280-53458-1 Analy Batch No.: 219272

SDG No.:

Instrument ID: SGC_P3b GC Column: CLP2 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/01/2014 15:08 Calibration End Date: 04/01/2014 17:16 Calibration ID: 17680

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STDL11248 280-219272/9	0401B009.D
Level 2	STDL21248 280-219272/8	0401B008.D
Level 3	STDL31248 280-219272/7	0401B007.D
Level 4	STDL41248 280-219272/6	0401B006.D
Level 5	STDL51248 280-219272/5	0401B005.D
Level 6	STDL61248 280-219272/4	0401B004.D
Level 7	STDL71248 280-219272/3	0401B003.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
		LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
PCB-1248 Peak 1	Lin1	14898947 380670386	29379815 477076624	57730564	128372942	240824072	25.0 750	50.0 1000	100	250	500
PCB-1248 Peak 2	Lin1	9108748 223021822	17616050 283132798	34236157	75175148	143558339	25.0 750	50.0 1000	100	250	500
PCB-1248 Peak 3	Lin1	15188801 296558677	24345178 375762706	46975101	103167548	190213148	25.0 750	50.0 1000	100	250	500
PCB-1248 Peak 4	Lin1	14251313 347226235	26394517 427467828	50370172	112362228	213628729	25.0 750	50.0 1000	100	250	500
PCB-1248 Peak 5	Lin1	16519488 380246396	29661097 487891701	59061369	127699173	242956139	25.0 750	50.0 1000	100	250	500

Curve Type Legend:

Lin1 = Linear 1/conc

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B003.D
Lims ID: STDL71248
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 01-Apr-2014 15:08:44 ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL71248
Operator ID: JAX Instrument ID: SGC_P3b
Sublist: chrom-PCB_P3b*sub1

Method: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\PCB_P3b.m
Limit Group: GCSV - 8082
Last Update: 02-Apr-2014 09:01:15 Calib Date: 02-Apr-2014 03:13:50
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B037.D

Column 1 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK001

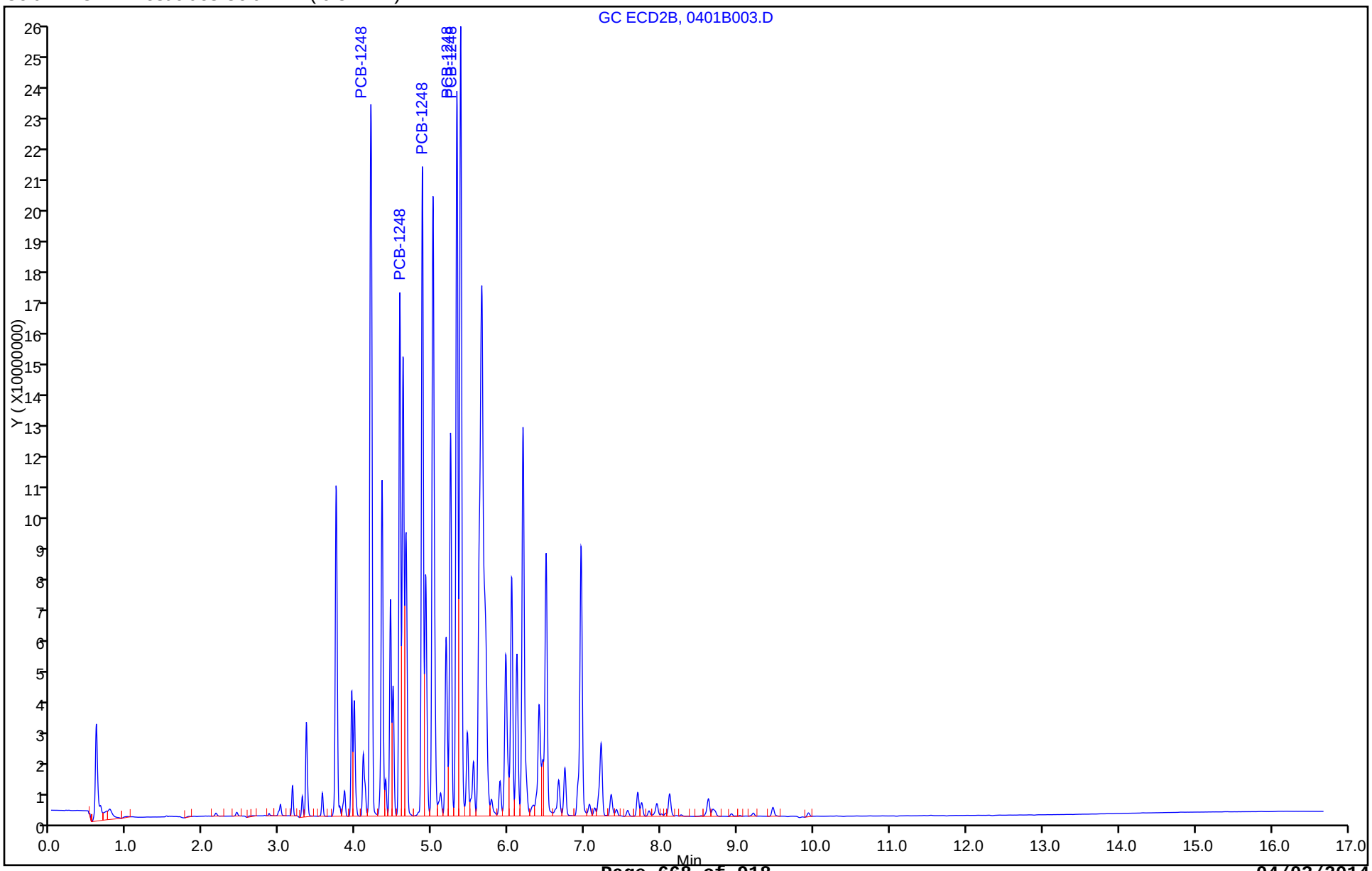
RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
4 PCB-1248					
4.194	4.194	0.0	477076624	973.9	
4.574	4.571	0.003	283132798	978.9	
4.867	4.868	-0.001	375762706	980.1	
5.321	5.321	0.0	427467828	974.0	
5.371	5.371	0.0	487891701	987.8	
	Average of Peak Amounts =			979.0	
S 8 Polychlorinated biphenyls, Total					
				979.0	

Report Date: 02-Apr-2014 09:01:16 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B003.D				
Injection Date:	01-Apr-2014 15:08:44	Instrument ID:	SGC_P3b	Operator ID:	JAX
Lims ID:	STDL71248			Worklist Smp#:	3
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	PCB_P3b	Limit Group:	GCSV - 8082		

Column: CLP2 Pesticides Column 2 (0.32 mm)



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B004.D
Lims ID: STDL61248
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 01-Apr-2014 15:30:05 ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL61248
Operator ID: JAX Instrument ID: SGC_P3b
Sublist: chrom-PCB_P3b*sub1

Method: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\PCB_P3b.m
Limit Group: GCSV - 8082
Last Update: 02-Apr-2014 09:01:16 Calib Date: 02-Apr-2014 03:13:50
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B037.D

Column 1 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK001

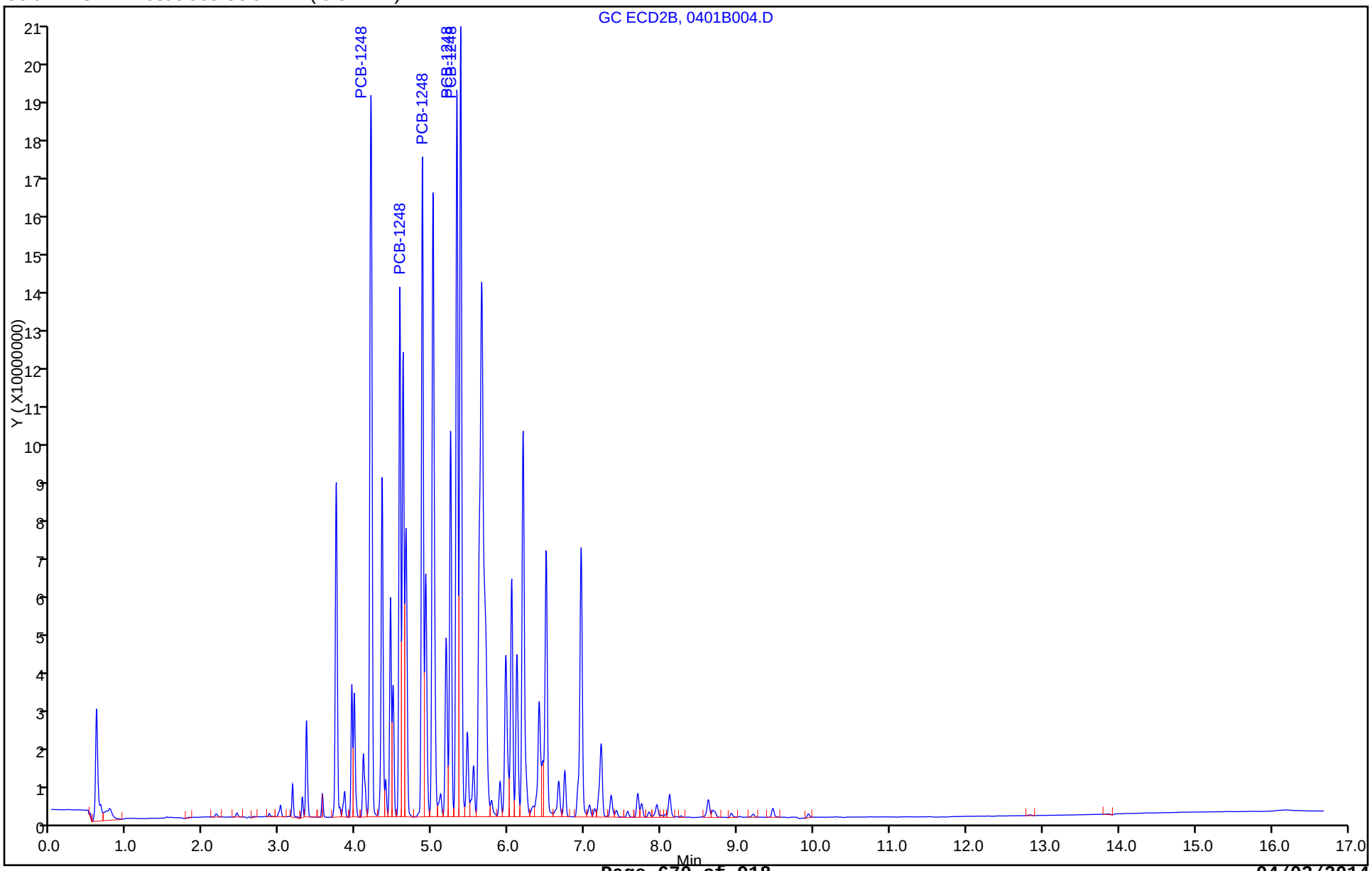
RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
4 PCB-1248					
4.193	4.194	-0.001	380670386	775.3	
4.573	4.571	0.002	223021822	769.0	
4.870	4.868	0.002	296558677	770.1	
5.320	5.321	-0.001	347226235	789.4	
5.370	5.371	-0.001	380246396	767.5	
	Average of Peak Amounts =			774.2	
S 8 Polychlorinated biphenyls, Total					
				774.2	

Report Date: 02-Apr-2014 09:01:17 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B004.D				
Injection Date:	01-Apr-2014 15:30:05	Instrument ID:	SGC_P3b	Operator ID:	JAX
Lims ID:	STDL61248			Worklist Smp#:	4
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	PCB_P3b	Limit Group:	GCSV - 8082		

Column: CLP2 Pesticides Column 2 (0.32 mm)



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B005.D
Lims ID: STDL51248
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 01-Apr-2014 15:51:25 ALS Bottle#: 5 Worklist Smp#: 5
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL51248
Operator ID: JAX Instrument ID: SGC_P3b
Sublist: chrom-PCB_P3b*sub1

Method: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\PCB_P3b.m
Limit Group: GCSV - 8082
Last Update: 02-Apr-2014 09:01:17 Calib Date: 02-Apr-2014 03:13:50
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B037.D

Column 1 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK001

First Level Reviewer: jacksonto Date: 02-Apr-2014 07:28:13

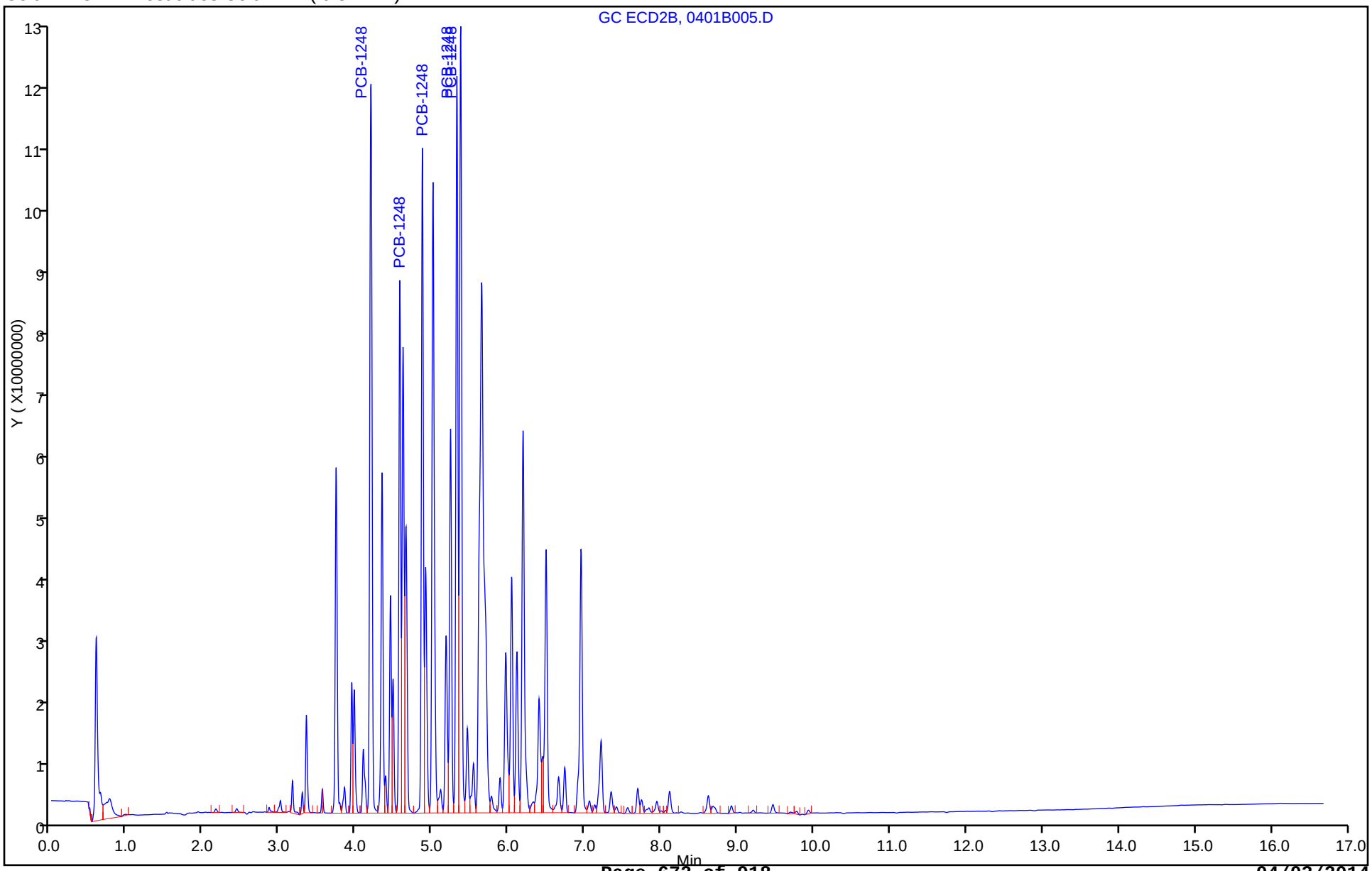
RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
4 PCB-1248					
4.194	4.194	0.0	240824072	487.2	
4.571	4.571	0.0	143558339	491.4	
4.868	4.868	0.0	190213148	488.0	
5.321	5.321	0.0	213628729	482.0	
5.371	5.371	0.0	242956139	486.4	
	Average of Peak Amounts =			487.0	
S 8 Polychlorinated biphenyls, Total					
				487.0	

Report Date: 02-Apr-2014 09:01:18 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B005.D				
Injection Date:	01-Apr-2014 15:51:25	Instrument ID:	SGC_P3b	Operator ID:	JAX
Lims ID:	STDL51248			Worklist Smp#:	5
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	PCB_P3b	Limit Group:	GCSV - 8082		

Column: CLP2 Pesticides Column 2 (0.32 mm)



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B006.D
Lims ID: STDL41248
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 01-Apr-2014 16:12:51 ALS Bottle#: 6 Worklist Smp#: 6
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL41248
Operator ID: JAX Instrument ID: SGC_P3b
Sublist: chrom-PCB_P3b*sub1

Method: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\PCB_P3b.m
Limit Group: GCSV - 8082
Last Update: 02-Apr-2014 09:01:19 Calib Date: 02-Apr-2014 03:13:50
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B037.D

Column 1 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK001

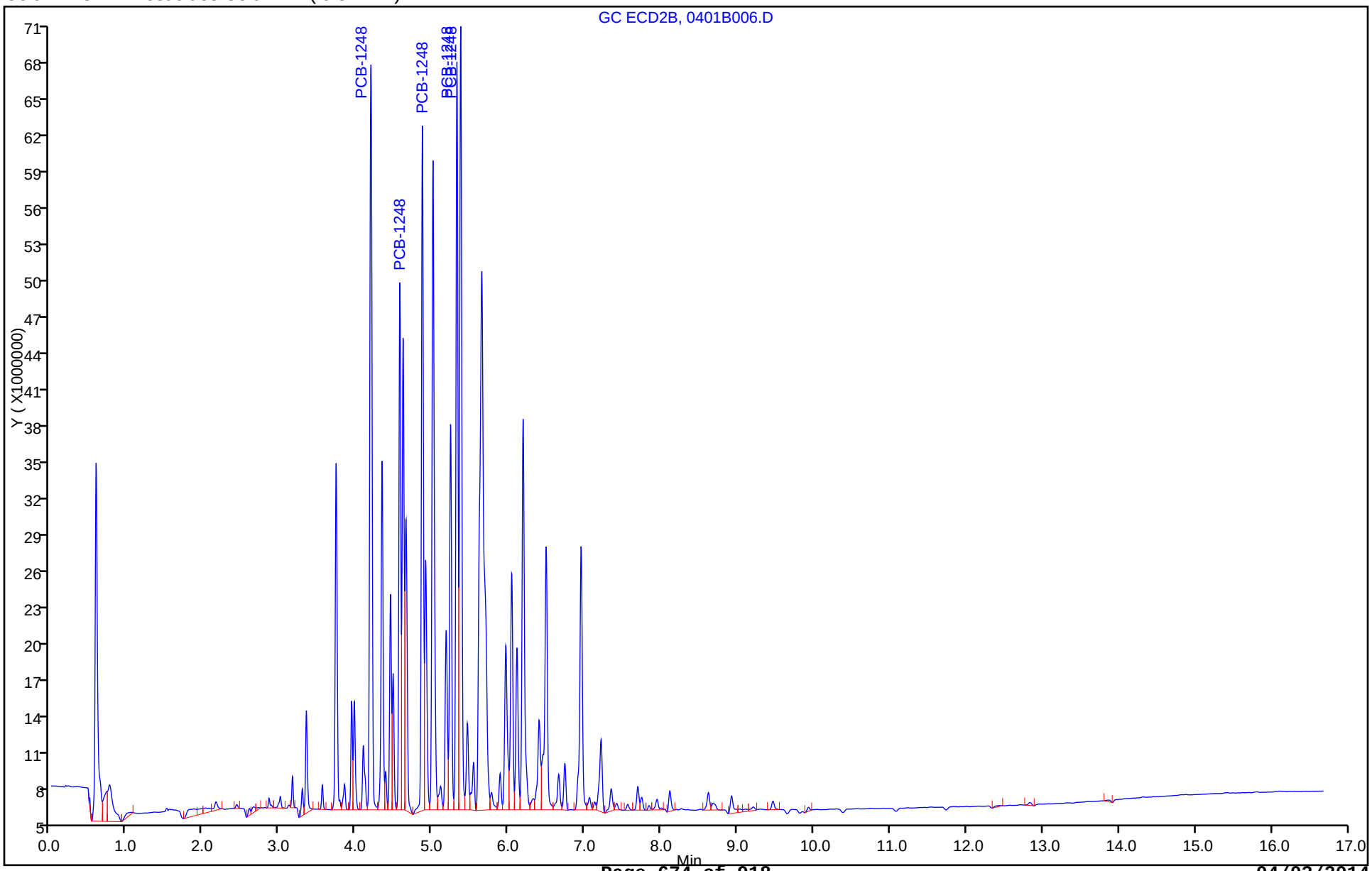
RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
4 PCB-1248					
4.194	4.194	0.0	128372942	255.5	
4.574	4.571	0.003	75175148	252.6	
4.868	4.868	0.0	103167548	257.1	
5.321	5.321	0.0	112362228	249.0	
5.371	5.371	0.0	127699173	250.5	
	Average of Peak Amounts =			252.9	
S 8 Polychlorinated biphenyls, Total					
				252.9	

Report Date: 02-Apr-2014 09:01:19 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B006.D				
Injection Date:	01-Apr-2014 16:12:51	Instrument ID:	SGC_P3b	Operator ID:	JAX
Lims ID:	STDL41248			Worklist Smp#:	6
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	PCB_P3b	Limit Group:	GCSV - 8082		

Column: CLP2 Pesticides Column 2 (0.32 mm)



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B007.D
Lims ID: STDL31248
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 01-Apr-2014 16:34:10 ALS Bottle#: 7 Worklist Smp#: 7
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL31248
Operator ID: JAX Instrument ID: SGC_P3b
Sublist: chrom-PCB_P3b*sub1

Method: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\PCB_P3b.m
Limit Group: GCSV - 8082
Last Update: 02-Apr-2014 09:01:20 Calib Date: 02-Apr-2014 03:13:50
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B037.D

Column 1 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK001

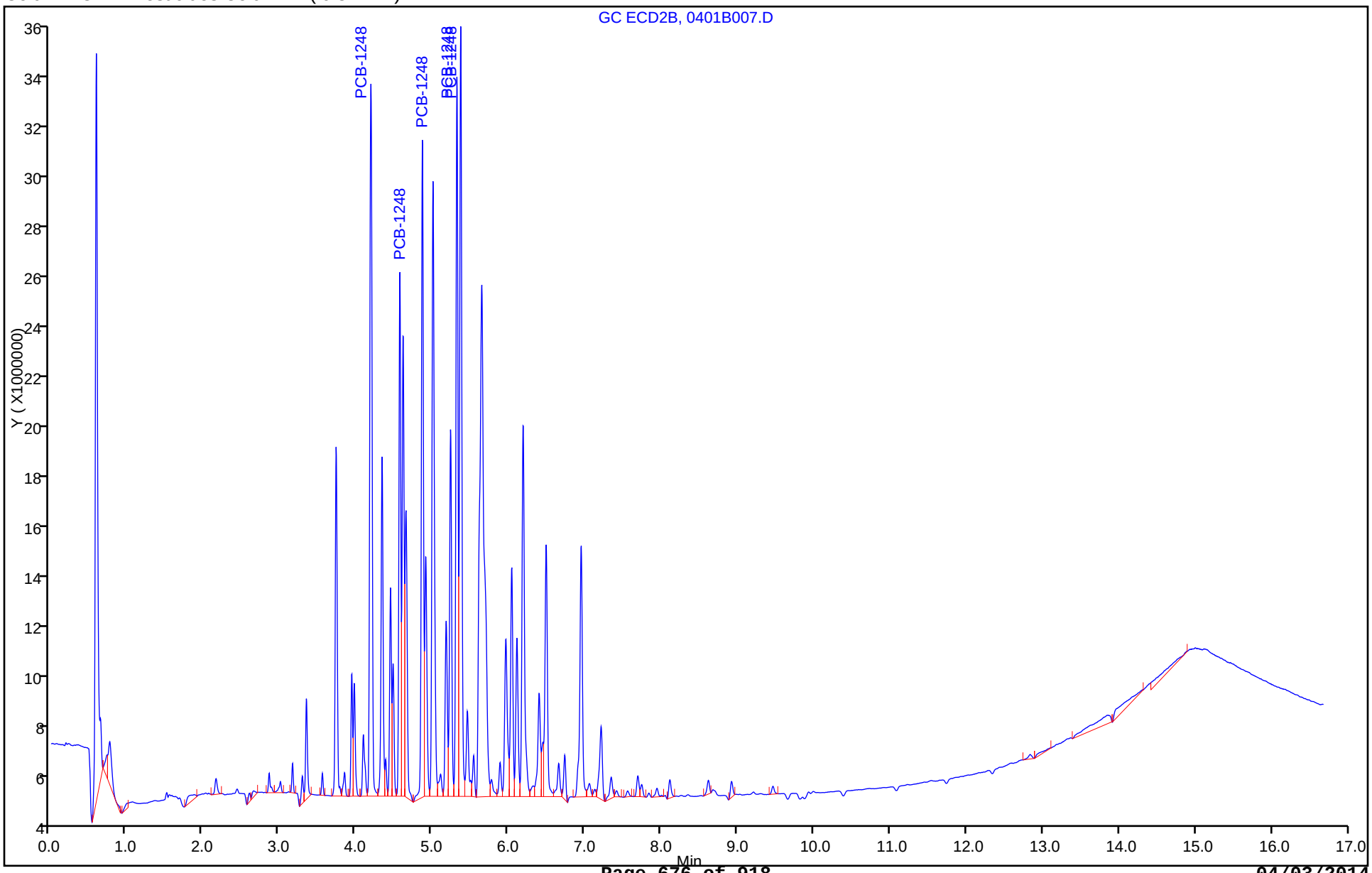
RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
4 PCB-1248					
4.194	4.194	0.0	57730564	109.9	
4.574	4.571	0.003	34236157	109.6	
4.867	4.868	-0.001	46975101	108.0	
5.321	5.321	0.0	50370172	106.3	
5.371	5.371	0.0	59061369	110.0	
	Average of Peak Amounts =			108.8	
S 8 Polychlorinated biphenyls, Total					
				108.8	

Report Date: 02-Apr-2014 09:01:20 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B007.D				
Injection Date:	01-Apr-2014 16:34:10	Instrument ID:	SGC_P3b	Operator ID:	JAX
Lims ID:	STDL31248			Worklist Smp#:	7
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	PCB_P3b	Limit Group:	GCSV - 8082		

Column: CLP2 Pesticides Column 2 (0.32 mm)



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B008.D
Lims ID: STDL21248
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 01-Apr-2014 16:55:30 ALS Bottle#: 8 Worklist Smp#: 8
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL21248
Operator ID: JAX Instrument ID: SGC_P3b
Sublist: chrom-PCB_P3b*sub1

Method: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\PCB_P3b.m
Limit Group: GCSV - 8082
Last Update: 02-Apr-2014 09:01:21 Calib Date: 02-Apr-2014 03:13:50
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B037.D

Column 1 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK001

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
4 PCB-1248					
4.193	4.194	-0.001	29379815	51.5	
4.573	4.571	0.002	17616050	51.6	
4.870	4.868	0.002	24345178	48.0	
5.320	5.321	-0.001	26394517	51.1	
5.370	5.371	-0.001	29661097	49.8	
	Average of Peak Amounts =			50.4	
S 8 Polychlorinated biphenyls, Total					
				50.4	

Report Date: 02-Apr-2014 09:01:21 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B008.D

Injection Date: 01-Apr-2014 16:55:30 Instrument ID: SGC_P3b Operator ID: JAX

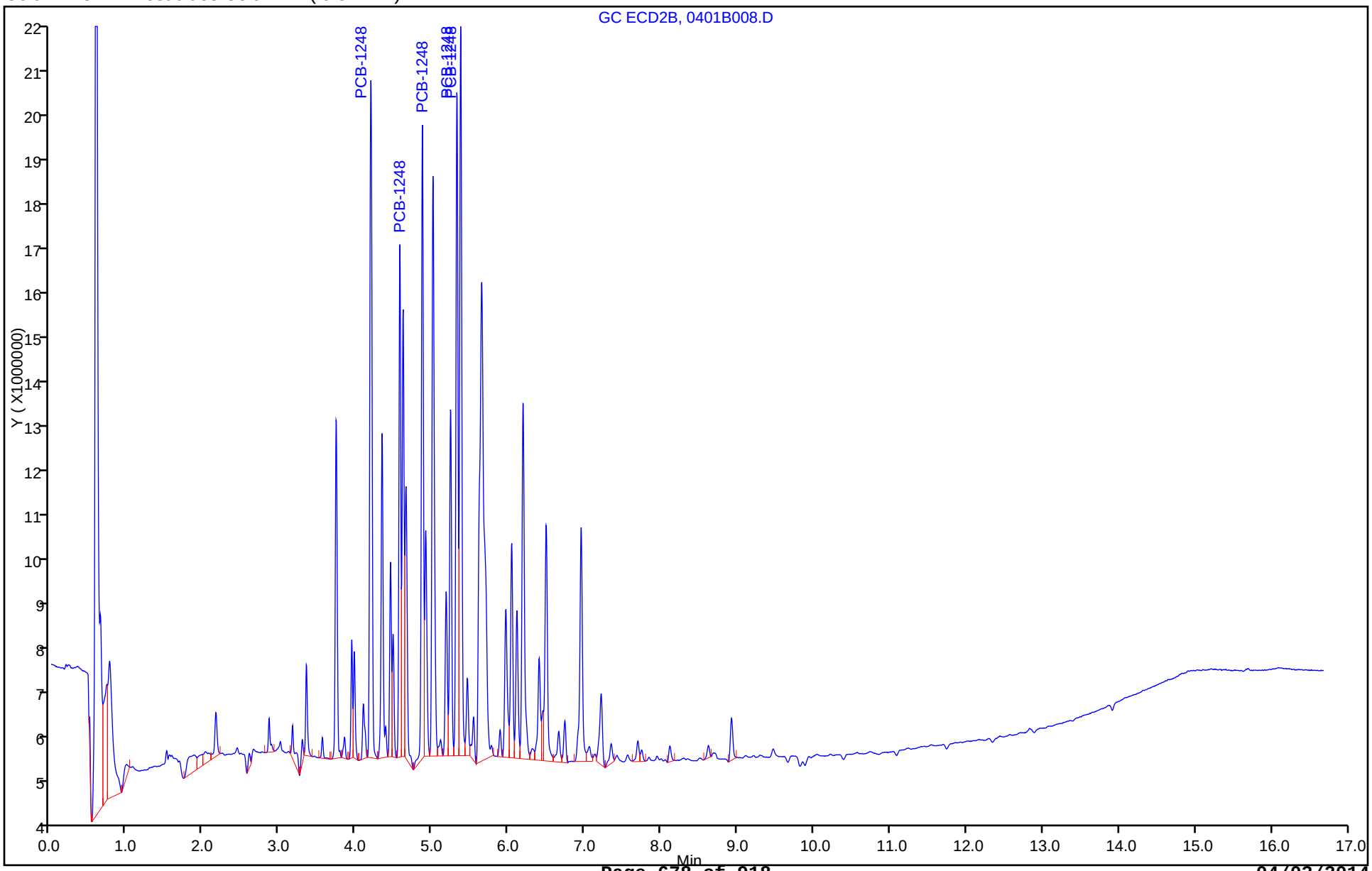
Lims ID: STDL21248 Worklist Smp#: 8

Client ID:

Injection Vol: 1.0 ul Dil. Factor: 1.0000 ALS Bottle#: 8

Method: PCB_P3b Limit Group: GCSV - 8082

Column: CLP2 Pesticides Column 2 (0.32 mm)



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B009.D
Lims ID: STDL11248
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 01-Apr-2014 17:16:56 ALS Bottle#: 9 Worklist Smp#: 9
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL11248
Operator ID: JAX Instrument ID: SGC_P3b
Sublist: chrom-PCB_P3b*sub1

Method: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\PCB_P3b.m
Limit Group: GCSV - 8082
Last Update: 02-Apr-2014 09:01:22 Calib Date: 02-Apr-2014 03:13:50
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B037.D

Column 1 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK001

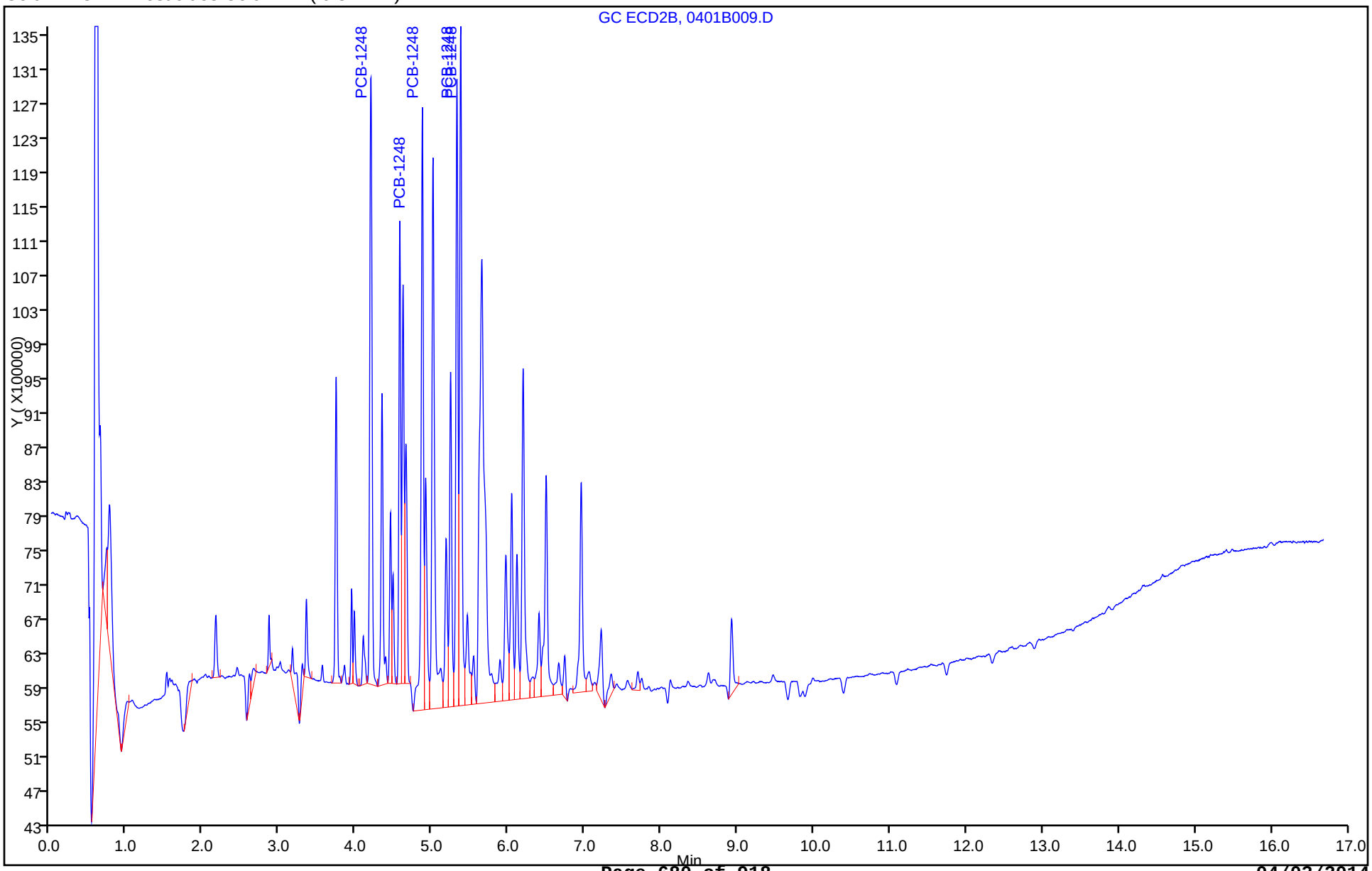
RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
4 PCB-1248					
4.195	4.194	0.001	14898947	21.7	
4.572	4.571	0.001	9108748	21.9	
4.868	4.868	0.0	15188801	23.7	
5.322	5.321	0.001	14251313	23.2	
5.372	5.371	0.001	16519488	22.9	
	Average of Peak Amounts =			22.7	
S 8 Polychlorinated biphenyls, Total					
				22.7	

Report Date: 02-Apr-2014 09:01:22 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B009.D				
Injection Date:	01-Apr-2014 17:16:56	Instrument ID:	SGC_P3b	Operator ID:	JAX
Lims ID:	STDL11248			Worklist Smp#:	9
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	PCB_P3b	Limit Group:	GCSV - 8082		

Column: CLP2 Pesticides Column 2 (0.32 mm)



FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-53458-1 Analy Batch No.: 219272

SDG No.:

Instrument ID: SGC_P3b GC Column: CLP2 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/01/2014 17:38 Calibration End Date: 04/01/2014 19:46 Calibration ID: 17682

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STDL12154 280-219272/16	0401B016.D
Level 2	STDL22154 280-219272/15	0401B015.D
Level 3	STDL32154 280-219272/14	0401B014.D
Level 4	STDL42154 280-219272/13	0401B013.D
Level 5	STDL52154 280-219272/12	0401B012.D
Level 6	STDL62154 280-219272/11	0401B011.D
Level 7	STDL72154 280-219272/10	0401B010.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	LVL 7				RT WINDOW	AVG RT
PCB-1221 Peak 1	3.166	3.165	3.165	3.164	3.165	3.165	3.163				2.915 - 3.415	3.165
PCB-1221 Peak 2	3.293	3.295	3.295	3.294	3.292	3.292	3.293				3.042 - 3.542	3.293
PCB-1221 Peak 3	3.346	3.348	3.348	3.347	3.348	3.348	3.346				3.098 - 3.598	3.347
PCB-1254 Peak 1	5.366	5.368	5.368	5.367	5.368	5.368	5.366				5.118 - 5.618	5.367
PCB-1254 Peak 2	5.613	5.611	5.611	5.611	5.612	5.612	5.613				5.362 - 5.862	5.612
PCB-1254 Peak 3	6.040	6.038	6.038	6.037	6.038	6.038	6.040				5.788 - 6.288	6.038
PCB-1254 Peak 4	6.733	6.735	6.735	6.734	6.735	6.735	6.736				6.485 - 6.985	6.735
PCB-1254 Peak 5	7.213	7.211	7.211	7.211	7.212	7.212	7.210				6.962 - 7.462	7.211

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Denver Job No.: 280-53458-1 Analy Batch No.: 219272

SDG No.:

Instrument ID: SGC_P3b GC Column: CLP2 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/01/2014 17:38 Calibration End Date: 04/01/2014 19:46 Calibration ID: 17682

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STDL12154 280-219272/16	0401B016.D
Level 2	STDL22154 280-219272/15	0401B015.D
Level 3	STDL32154 280-219272/14	0401B014.D
Level 4	STDL42154 280-219272/13	0401B013.D
Level 5	STDL52154 280-219272/12	0401B012.D
Level 6	STDL62154 280-219272/11	0401B011.D
Level 7	STDL72154 280-219272/10	0401B010.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3 LVL 7	LVL 4		B	M1	M2								
PCB-1221 Peak 1	217537 126006	156393 129389	151212 123055	149907	Lin1	2338455.04	124331.369							0.9970		0.9900
PCB-1221 Peak 2	124647 80823	118054 82529	105390 77998	95182	Lin1	1655323.26	79279.5354							0.9960		0.9900
PCB-1221 Peak 3	413613 280682	393380 287019	363307 273467	334280	Lin1	5120158.50	277809.847							0.9960		0.9900
PCB-1254 Peak 1	662505 462267	586090 472367	574447 468280	539603	Lin1	6413039.33	466171.891							0.9980		0.9900
PCB-1254 Peak 2	712683 500414	636401 520772	630568 503749	593768	Lin1	6997587.06	507172.843							0.9970		0.9900
PCB-1254 Peak 3	549383 418366	505304 440934	496112 422846	472304	Lin1	4083834.52	426478.329							0.9980		0.9900
PCB-1254 Peak 4	419215 306032	394647 316398	383144 333214	369811	Lin1	3463415.86	321594.377							0.9960		0.9900
PCB-1254 Peak 5	1018276 764244	922730 780165	923070 777078	883257	Lin1	8289590.41	774209.728							0.9980		0.9900

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Denver Job No.: 280-53458-1 Analy Batch No.: 219272

SDG No.:

Instrument ID: SGC_P3b GC Column: CLP2 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/01/2014 17:38 Calibration End Date: 04/01/2014 19:46 Calibration ID: 17682

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STDL12154 280-219272/16	0401B016.D
Level 2	STDL22154 280-219272/15	0401B015.D
Level 3	STDL32154 280-219272/14	0401B014.D
Level 4	STDL42154 280-219272/13	0401B013.D
Level 5	STDL52154 280-219272/12	0401B012.D
Level 6	STDL62154 280-219272/11	0401B011.D
Level 7	STDL72154 280-219272/10	0401B010.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
		LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
PCB-1221 Peak 1	Lin1	5438431 97041776	7819649 123054812	15121169	37476642	63003119	25.0 750	50.0 1000	100	250	500
PCB-1221 Peak 2	Lin1	3116186 61896869	5902697 77998166	10538989	23795458	40411655	25.0 750	50.0 1000	100	250	500
PCB-1221 Peak 3	Lin1	10340330 215264120	19668989 273467162	36330688	83569920	140341241	25.0 750	50.0 1000	100	250	500
PCB-1254 Peak 1	Lin1	16562615 354275090	29304502 468280239	57444716	134900658	231133265	25.0 750	50.0 1000	100	250	500
PCB-1254 Peak 2	Lin1	17817071 390578771	31820028 503748579	63056811	148442014	250207190	25.0 750	50.0 1000	100	250	500
PCB-1254 Peak 3	Lin1	13734566 330700817	25265214 422845558	49611163	118076018	209183036	25.0 750	50.0 1000	100	250	500
PCB-1254 Peak 4	Lin1	10480373 237298716	19732359 333214201	38314375	92452759	153016086	25.0 750	50.0 1000	100	250	500
PCB-1254 Peak 5	Lin1	25456893 585124042	46136485 777077549	92306984	220814371	382121831	25.0 750	50.0 1000	100	250	500

Curve Type Legend:

Lin1 = Linear 1/conc

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B010.D
Lims ID: STDL72154
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 01-Apr-2014 17:38:15 ALS Bottle#: 10 Worklist Smp#: 10
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL72154
Operator ID: JAX Instrument ID: SGC_P3b
Sublist: chrom-PCB_P3b*sub2

Method: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\PCB_P3b.m
Limit Group: GCSV - 8082
Last Update: 02-Apr-2014 09:01:23 Calib Date: 02-Apr-2014 03:13:50
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B037.D

Column 1 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK001

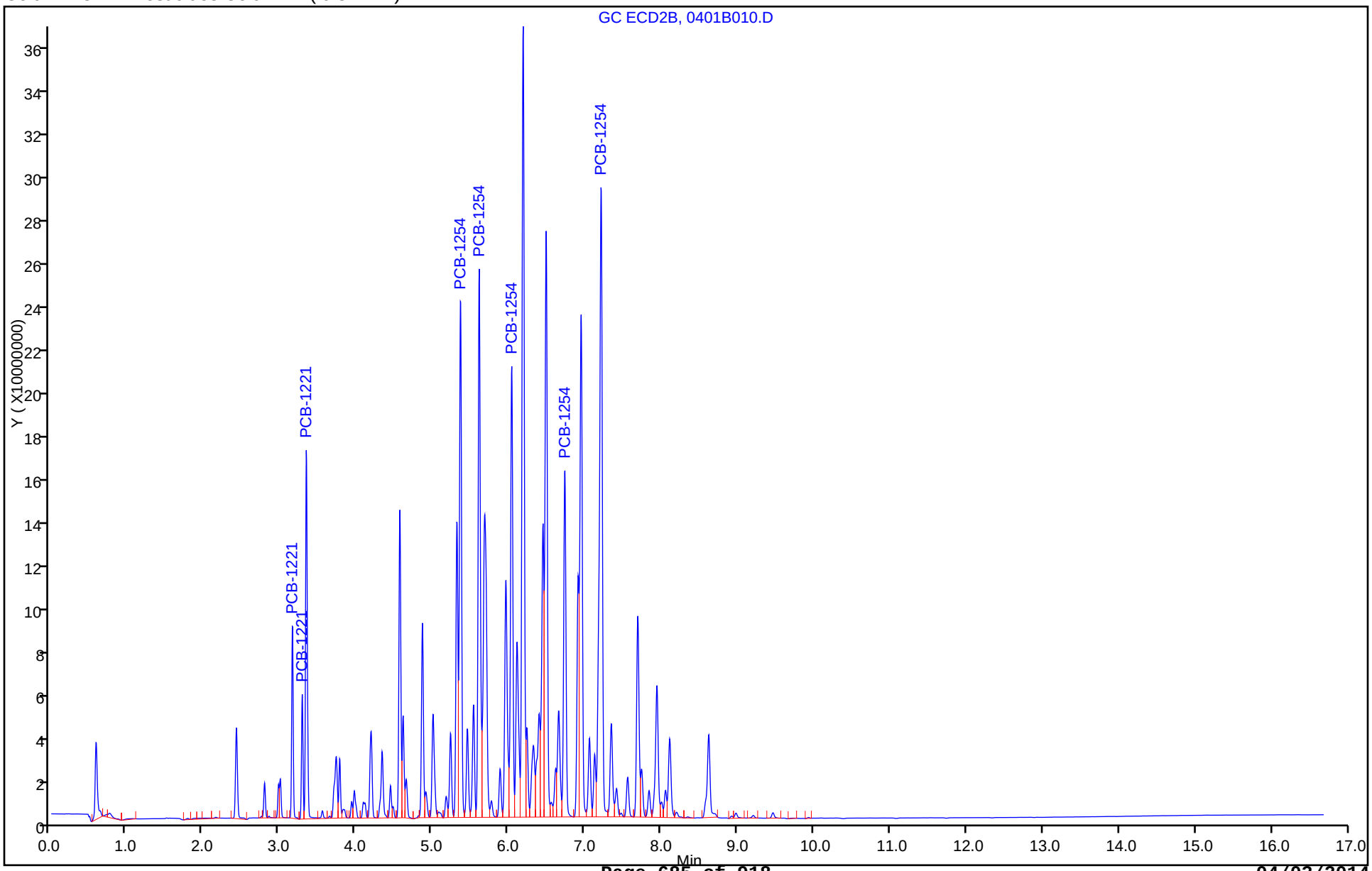
RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
3 PCB-1221					
3.163	3.165	-0.002	123054812	970.9	
3.293	3.292	0.001	77998166	963.0	
3.346	3.348	-0.002	273467162	965.9	
	Average of Peak Amounts =			966.6	
9 PCB-1254					
5.366	5.368	-0.002	468280239	990.8	
5.613	5.612	0.001	503748579	979.5	
6.040	6.038	0.002	422845558	981.9	
6.736	6.735	0.001	333214201	1025.4	
7.210	7.212	-0.002	777077549	993.0	
	Average of Peak Amounts =			994.1	
S 8 Polychlorinated biphenyls, Total					
				1960.7	

Report Date: 02-Apr-2014 09:01:24 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B010.D				
Injection Date:	01-Apr-2014 17:38:15	Instrument ID:	SGC_P3b	Operator ID:	JAX
Lims ID:	STDL72154			Worklist Smp#:	10
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	PCB_P3b	Limit Group:	GCSV - 8082		

Column: CLP2 Pesticides Column 2 (0.32 mm)



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B011.D
Lims ID: STDL62154
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 01-Apr-2014 17:59:40 ALS Bottle#: 11 Worklist Smp#: 11
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL62154
Operator ID: JAX Instrument ID: SGC_P3b
Sublist: chrom-PCB_P3b*sub2

Method: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\PCB_P3b.m
Limit Group: GCSV - 8082
Last Update: 02-Apr-2014 09:01:25 Calib Date: 02-Apr-2014 03:13:50
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B037.D

Column 1 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK001

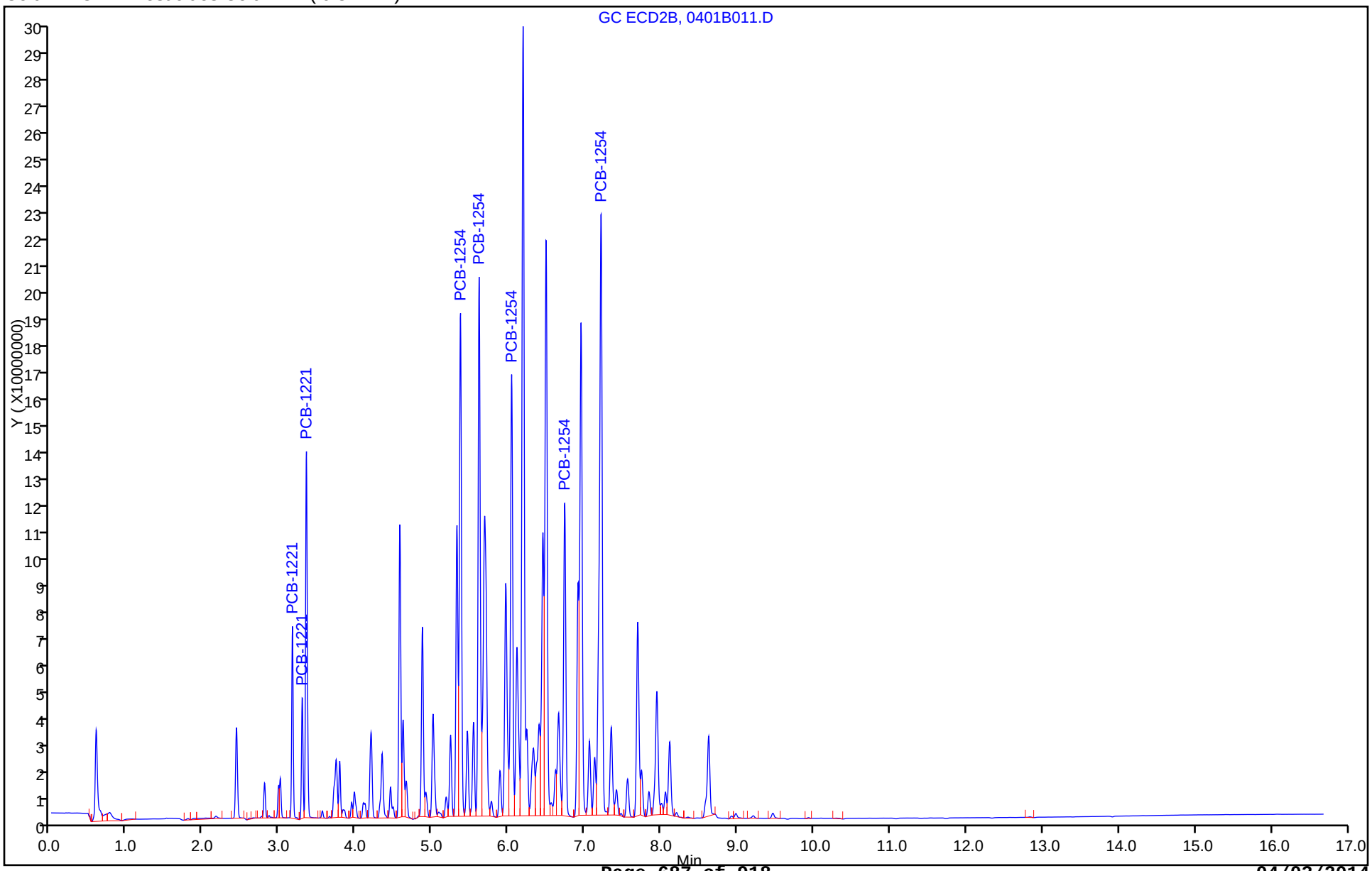
RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
3 PCB-1221					
3.165	3.165	0.0	97041776	761.7	
3.292	3.292	0.0	61896869	759.9	
3.348	3.348	0.0	215264120	756.4	
	Average of Peak Amounts =			759.3	
9 PCB-1254					
5.368	5.368	0.0	354275090	746.2	
5.612	5.612	0.0	390578771	756.3	
6.038	6.038	0.0	330700817	765.8	
6.735	6.735	0.0	237298716	727.1	
7.212	7.212	0.0	585124042	745.1	
	Average of Peak Amounts =			748.1	
S 8 Polychlorinated biphenyls, Total					
				1507.4	

Report Date: 02-Apr-2014 09:01:25 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B011.D				
Injection Date:	01-Apr-2014 17:59:40	Instrument ID:	SGC_P3b	Operator ID:	JAX
Lims ID:	STDL62154			Worklist Smp#:	11
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	PCB_P3b	Limit Group:	GCSV - 8082		

Column: CLP2 Pesticides Column 2 (0.32 mm)



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B012.D
Lims ID: STDL52154
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 01-Apr-2014 18:21:03 ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL52154
Operator ID: JAX Instrument ID: SGC_P3b
Sublist: chrom-PCB_P3b*sub2

Method: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\PCB_P3b.m
Limit Group: GCSV - 8082
Last Update: 02-Apr-2014 09:01:26 Calib Date: 02-Apr-2014 03:13:50
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B037.D

Column 1 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK001

First Level Reviewer: jacksonto Date: 02-Apr-2014 07:28:45

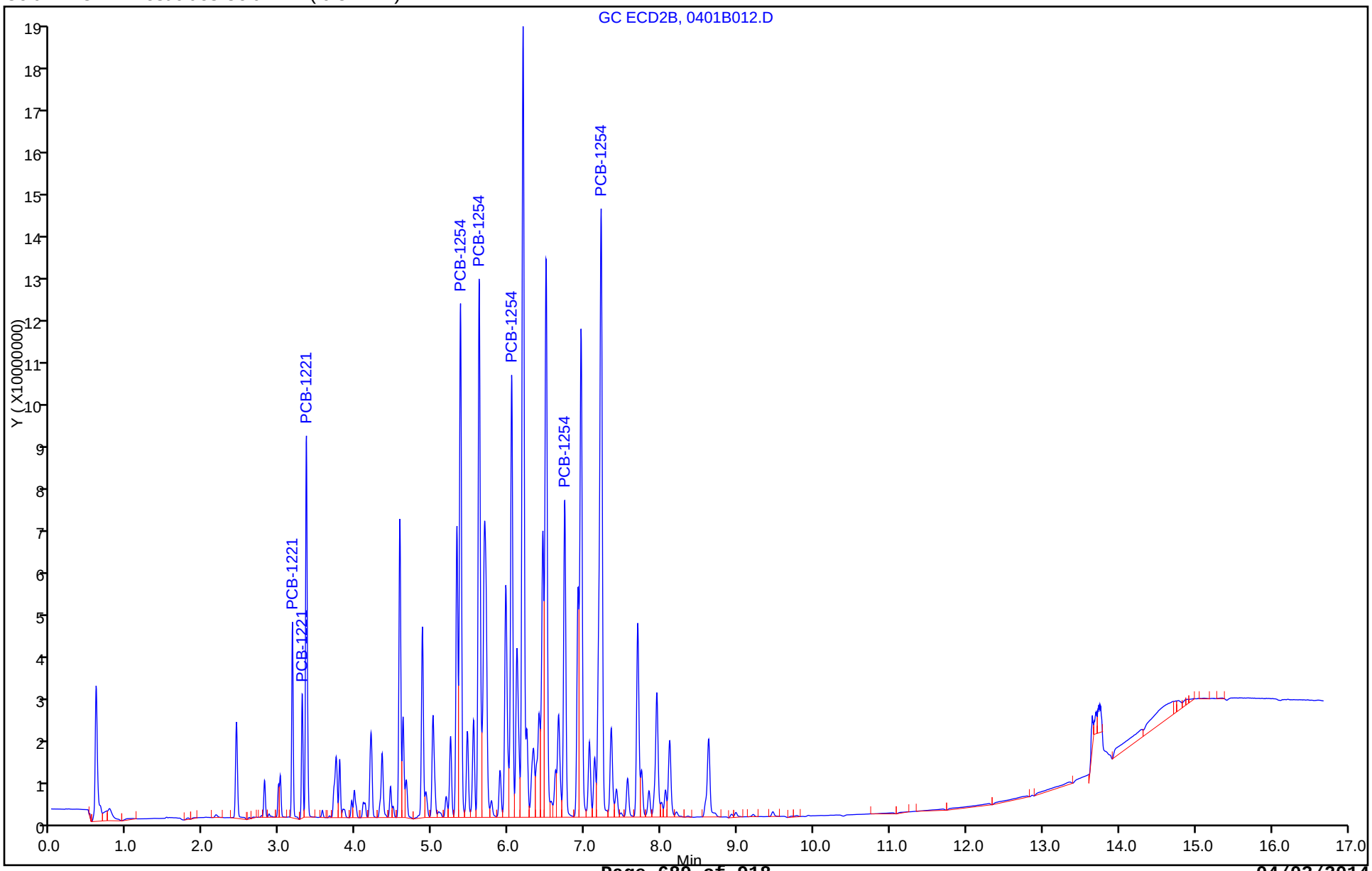
RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
3 PCB-1221					
3.165	3.165	0.0	63003119	487.9	
3.292	3.292	0.0	40411655	488.9	
3.348	3.348	0.0	140341241	486.7	
	Average of Peak Amounts =			487.8	
9 PCB-1254					
5.368	5.368	0.0	231133265	482.1	
5.612	5.612	0.0	250207190	479.5	
6.038	6.038	0.0	209183036	480.9	
6.735	6.735	0.0	153016086	465.0	
7.212	7.212	0.0	382121831	482.9	
	Average of Peak Amounts =			478.1	
S 8 Polychlorinated biphenyls, Total					
				965.9	

Report Date: 02-Apr-2014 09:01:26 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B012.D				
Injection Date:	01-Apr-2014 18:21:03	Instrument ID:	SGC_P3b	Operator ID:	JAX
Lims ID:	STDL52154			Worklist Smp#:	12
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	PCB_P3b	Limit Group:	GCSV - 8082		

Column: CLP2 Pesticides Column 2 (0.32 mm)



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B013.D
Lims ID: STDL42154
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 01-Apr-2014 18:42:21 ALS Bottle#: 13 Worklist Smp#: 13
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL42154
Operator ID: JAX Instrument ID: SGC_P3b
Sublist: chrom-PCB_P3b*sub2

Method: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\PCB_P3b.m
Limit Group: GCSV - 8082
Last Update: 02-Apr-2014 09:01:27 Calib Date: 02-Apr-2014 03:13:50
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B037.D

Column 1 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK001

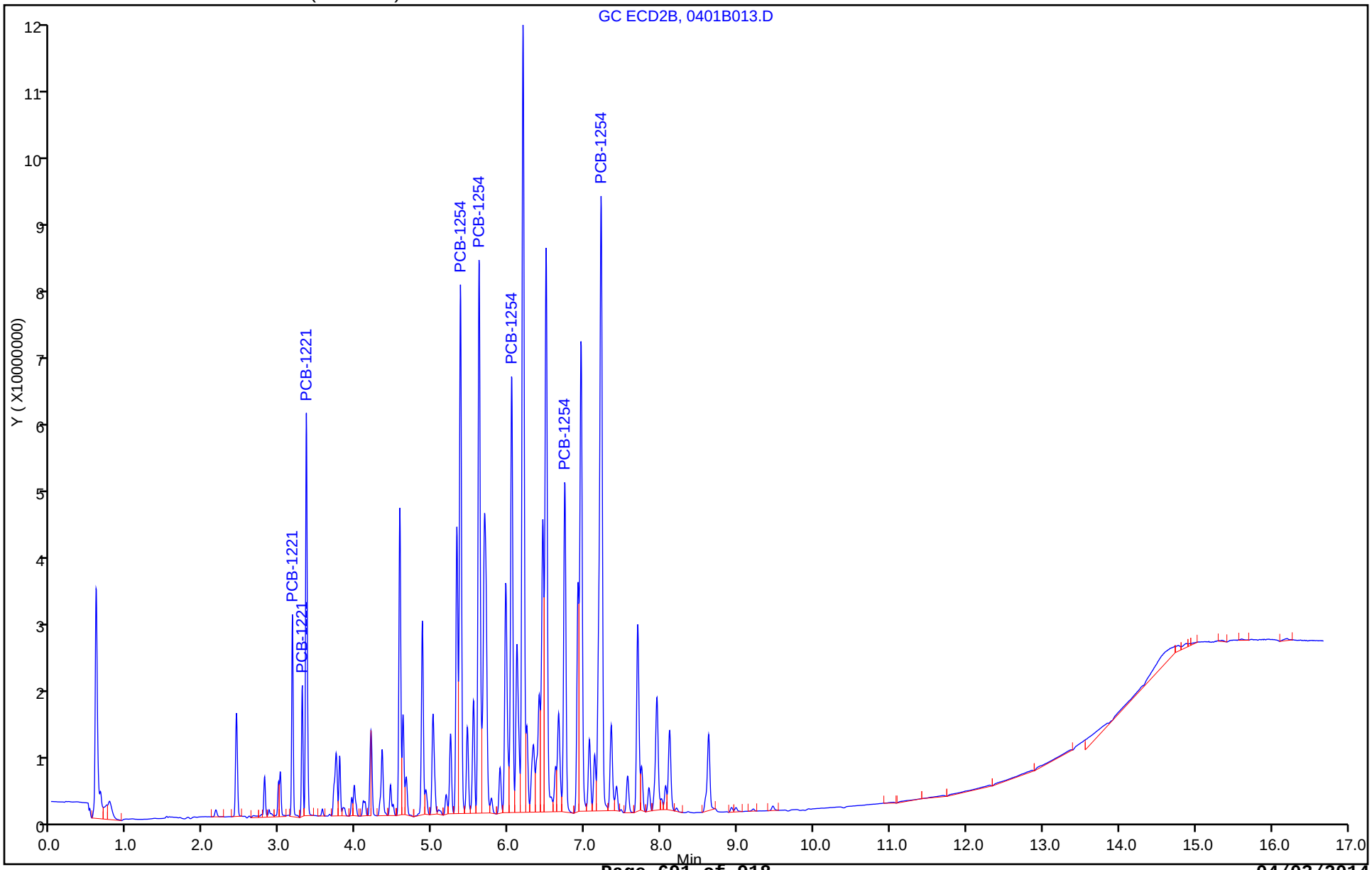
RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
3 PCB-1221					
3.164	3.165	-0.001	37476642	282.6	
3.294	3.292	0.002	23795458	279.3	
3.347	3.348	-0.001	83569920	282.4	
	Average of Peak Amounts =			281.4	
9 PCB-1254					
5.367	5.368	-0.001	134900658	275.6	
5.611	5.612	-0.001	148442014	278.9	
6.037	6.038	-0.001	118076018	267.3	
6.734	6.735	-0.001	92452759	276.7	
7.211	7.212	-0.001	220814371	274.5	
	Average of Peak Amounts =			274.6	
S 8 Polychlorinated biphenyls, Total					
				556.0	

Report Date: 02-Apr-2014 09:01:27 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B013.D				
Injection Date:	01-Apr-2014 18:42:21	Instrument ID:	SGC_P3b	Operator ID:	JAX
Lims ID:	STDL42154			Worklist Smp#:	13
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	PCB_P3b	Limit Group:	GCSV - 8082		

Column: CLP2 Pesticides Column 2 (0.32 mm)



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B014.D
Lims ID: STDL32154
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 01-Apr-2014 19:03:45 ALS Bottle#: 14 Worklist Smp#: 14
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL32154
Operator ID: JAX Instrument ID: SGC_P3b
Sublist: chrom-PCB_P3b*sub2

Method: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\PCB_P3b.m
Limit Group: GCSV - 8082
Last Update: 02-Apr-2014 09:01:28 Calib Date: 02-Apr-2014 03:13:50
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B037.D

Column 1 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK001

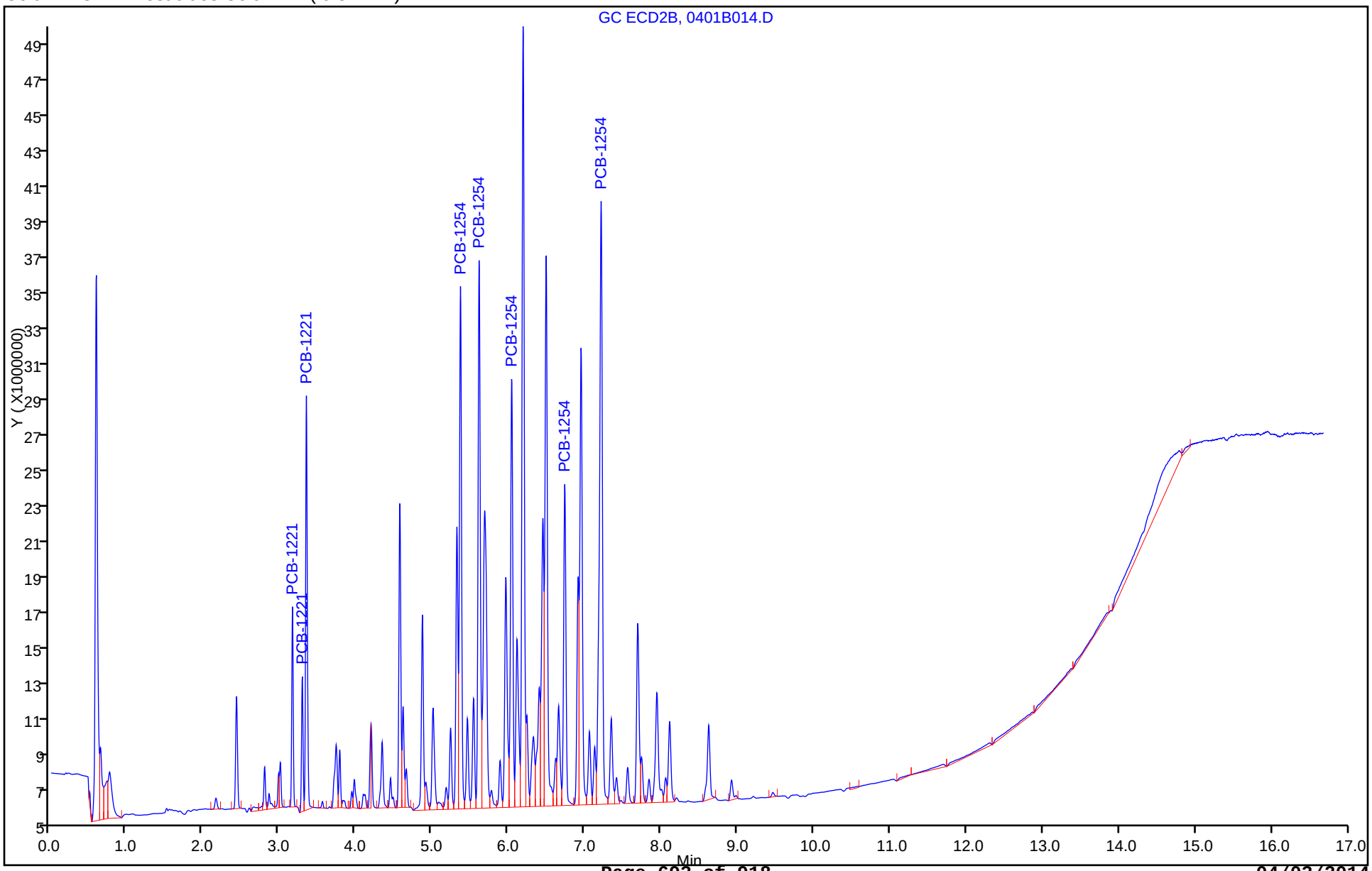
RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
3 PCB-1221					
3.165	3.165	0.0	15121169	102.8	
3.295	3.292	0.003	10538989	112.1	
3.348	3.348	0.0	36330688	112.3	
	Average of Peak Amounts =			109.1	
9 PCB-1254					
5.368	5.368	0.0	57444716	109.5	
5.611	5.612	-0.001	63056811	110.5	
6.038	6.038	0.0	49611163	106.8	
6.735	6.735	0.0	38314375	108.4	
7.211	7.212	-0.001	92306984	108.5	
	Average of Peak Amounts =			108.7	
S 8 Polychlorinated biphenyls, Total					
				217.8	

Report Date: 02-Apr-2014 09:01:28 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B014.D				
Injection Date:	01-Apr-2014 19:03:45	Instrument ID:	SGC_P3b	Operator ID:	JAX
Lims ID:	STDL32154			Worklist Smp#:	14
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	PCB_P3b	Limit Group:	GCSV - 8082		

Column: CLP2 Pesticides Column 2 (0.32 mm)



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B015.D
Lims ID: STDL22154
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 01-Apr-2014 19:25:08 ALS Bottle#: 15 Worklist Smp#: 15
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL22154
Operator ID: JAX Instrument ID: SGC_P3b
Sublist: chrom-PCB_P3b*sub2

Method: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\PCB_P3b.m
Limit Group: GCSV - 8082
Last Update: 02-Apr-2014 09:01:29 Calib Date: 02-Apr-2014 03:13:50
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B037.D

Column 1 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK001

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
3 PCB-1221					
3.165	3.165	0.0	7819649	44.1	
3.295	3.292	0.003	5902697	53.6	
3.348	3.348	0.0	19668989	52.4	
	Average of Peak Amounts =			50.0	
9 PCB-1254					
5.368	5.368	0.0	29304502	49.1	
5.611	5.612	-0.001	31820028	48.9	
6.038	6.038	0.0	25265214	49.7	
6.735	6.735	0.0	19732359	50.6	
7.211	7.212	-0.001	46136485	48.9	
	Average of Peak Amounts =			49.4	
S 8 Polychlorinated biphenyls, Total					
				99.4	

Report Date: 02-Apr-2014 09:01:29 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B015.D

Injection Date: 01-Apr-2014 19:25:08 Instrument ID: SGC_P3b Operator ID: JAX

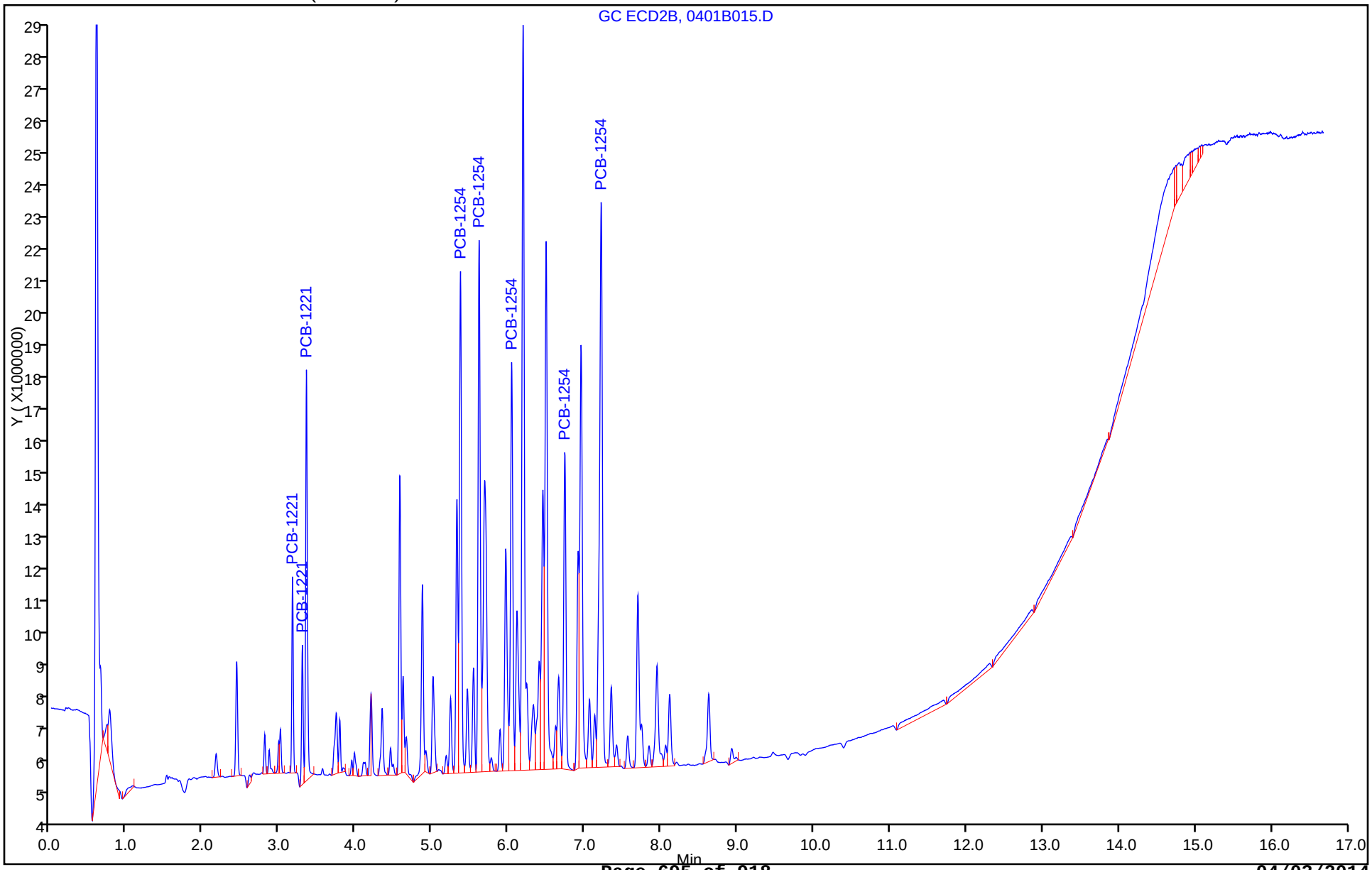
Lims ID: STDL22154 Worklist Smp#: 15

Client ID:

Injection Vol: 1.0 ul Dil. Factor: 1.0000 ALS Bottle#: 15

Method: PCB_P3b Limit Group: GCSV - 8082

Column: CLP2 Pesticides Column 2 (0.32 mm)



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B016.D
Lims ID: STDL12154
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 01-Apr-2014 19:46:26 ALS Bottle#: 16 Worklist Smp#: 16
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL12154
Operator ID: JAX Instrument ID: SGC_P3b
Sublist: chrom-PCB_P3b*sub2

Method: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\PCB_P3b.m
Limit Group: GCSV - 8082
Last Update: 02-Apr-2014 09:01:30 Calib Date: 02-Apr-2014 03:13:50
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B037.D

Column 1 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK001

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
3 PCB-1221					
3.166	3.165	0.001	5438431	24.9	
3.293	3.292	0.001	3116186	18.4	
3.346	3.348	-0.002	10340330	18.8	
	Average of Peak Amounts =			20.7	
9 PCB-1254					
5.366	5.368	-0.002	16562615	21.8	
5.613	5.612	0.001	17817071	21.3	
6.040	6.038	0.002	13734566	22.6	
6.733	6.735	-0.002	10480373	21.8	
7.213	7.212	0.001	25456893	22.2	
	Average of Peak Amounts =			21.9	
S 8 Polychlorinated biphenyls, Total					
				42.7	

Report Date: 02-Apr-2014 09:01:30 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B016.D

Injection Date: 01-Apr-2014 19:46:26 Instrument ID: SGC_P3b Operator ID: JAX

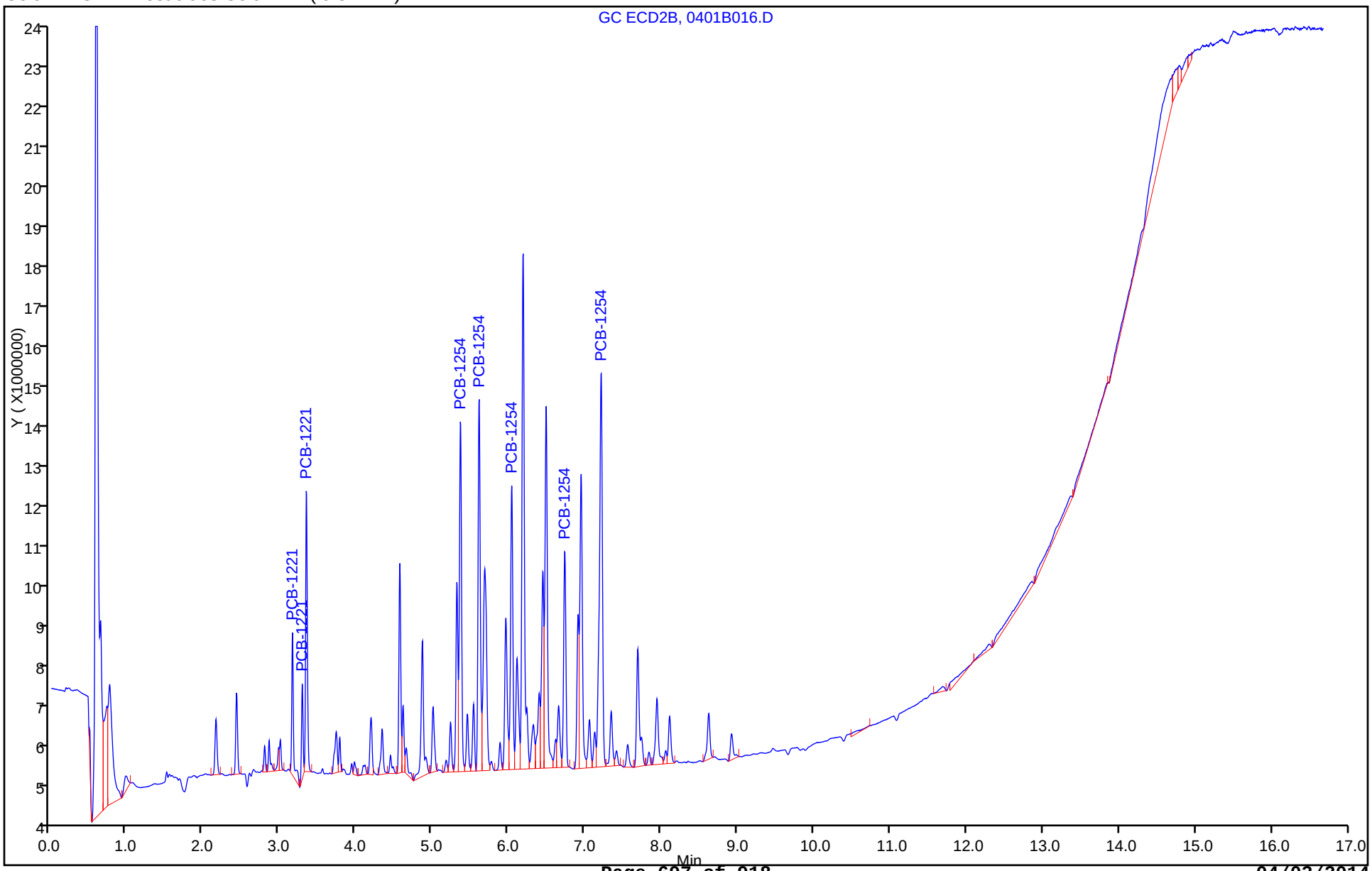
Lims ID: STDL12154 Worklist Smp#: 16

Client ID:

Injection Vol: 1.0 ul Dil. Factor: 1.0000 ALS Bottle#: 16

Method: PCB_P3b Limit Group: GCSV - 8082

Column: CLP2 Pesticides Column 2 (0.32 mm)



FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-53458-1 Analy Batch No.: 219272

SDG No.:

Instrument ID: SGC_P3b GC Column: CLP2 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/01/2014 20:07 Calibration End Date: 04/01/2014 22:15 Calibration ID: 17684

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STDL11660 280-219272/23	0401B023.D
Level 2	STDL21660 280-219272/22	0401B022.D
Level 3	STDL31660 280-219272/21	0401B021.D
Level 4	STDL41660 280-219272/20	0401B020.D
Level 5	STDL51660 280-219272/19	0401B019.D
Level 6	STDL61660 280-219272/18	0401B018.D
Level 7	STDL71660 280-219272/17	0401B017.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	LVL 7				RT WINDOW	AVG RT
PCB-1016 Peak 1	3.740	3.739	3.739	3.739	3.738	3.738	3.738				3.488 - 3.988	3.739
PCB-1016 Peak 2	4.197	4.196	4.196	4.196	4.195	4.195	4.194				3.945 - 4.445	4.196
PCB-1016 Peak 3	4.340	4.343	4.342	4.343	4.342	4.341	4.341				4.092 - 4.592	4.342
PCB-1016 Peak 4	4.867	4.869	4.869	4.869	4.868	4.868	4.868				4.618 - 5.118	4.868
PCB-1016 Peak 5	5.007	5.006	5.009	5.009	5.008	5.008	5.008				4.758 - 5.258	5.008
PCB-1260 Peak 1	6.447	6.449	6.449	6.446	6.448	6.448	6.448				6.198 - 6.698	6.448
PCB-1260 Peak 2	6.737	6.733	6.736	6.736	6.735	6.735	6.734				6.485 - 6.985	6.735
PCB-1260 Peak 3	7.210	7.209	7.209	7.209	7.208	7.208	7.211				6.958 - 7.458	7.209
PCB-1260 Peak 4	8.110	8.109	8.109	8.109	8.108	8.108	8.111				7.858 - 8.358	8.109
PCB-1260 Peak 5	8.617	8.619	8.619	8.616	8.618	8.618	8.618				8.368 - 8.868	8.618
Tetrachloro-m-xylene	2.863	2.863	2.862	2.863	2.862	2.861	2.861				2.612 - 3.112	2.862
DCB Decachlorobiphenyl	10.293	10.293	10.296	10.293	10.295	10.295	10.294				10.045 - 10.545	10.294

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Denver Job No.: 280-53458-1 Analy Batch No.: 219272

SDG No.:

Instrument ID: SGC_P3b GC Column: CLP2 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/01/2014 20:07 Calibration End Date: 04/01/2014 22:15 Calibration ID: 17684

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STDL11660 280-219272/23	0401B023.D
Level 2	STDL21660 280-219272/22	0401B022.D
Level 3	STDL31660 280-219272/21	0401B021.D
Level 4	STDL41660 280-219272/20	0401B020.D
Level 5	STDL51660 280-219272/19	0401B019.D
Level 6	STDL61660 280-219272/18	0401B018.D
Level 7	STDL71660 280-219272/17	0401B017.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3 LVL 7	LVL 4		B	M1	M2								
PCB-1016 Peak 1	617690 430501	577486 461812	519880 421524	508021	Lin1	6329470.17	434443.567							0.9960		0.9900
PCB-1016 Peak 2	1144536 857709	1085868 935855	995123 858679	987810	Lin1	8931317.48	880851.382							0.9970		0.9900
PCB-1016 Peak 3	529820 388989	494928 425701	450761 386138	447482	Lin1	4312206.97	398004.283							0.9970		0.9900
PCB-1016 Peak 4	459392 295648	407367 328057	345591 308412	341319	Lin1	4181672.21	308317.230							0.9980		0.9900
PCB-1016 Peak 5	489253 364173	461523 407113	418344 384441	420665	Lin1	3114774.29	385931.603							0.9970		0.9900
PCB-1260 Peak 1	793683 621048	748793 677421	713371 645838	696346	Lin1	4535926.95	648740.847							0.9980		0.9900
PCB-1260 Peak 2	865860 695125	833169 763789	732696 725248	782922	Lin1	3713135.94	729706.912							0.9980		0.9900
PCB-1260 Peak 3	1321008 1029573	1261233 1153175	1170523 1101322	1162226	Lin1	6476116.07	1098823.56							0.9980		0.9900
PCB-1260 Peak 4	1291908 1056772	1209529 1133792	1197602 1104495	1139413	Lin1	5561511.98	1099694.13							0.9990		0.9900
PCB-1260 Peak 5	1088837 853627	1048923 973022	961704 931293	959683	Lin1	4424356.70	924359.285							0.9970		0.9900
Tetrachloro-m-xylene	15974012 11725401	14825690 13069880	13479214 12058899	13424507	Lin1	5593794.36	12256284.6							0.9970		0.9900
DCB Decachlorobiphenyl	13796052 10680075	13229597 12344222	11933129 11913257	11974806	Lin1	2420337.74	11725610.8							0.9970		0.9900

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Denver Job No.: 280-53458-1 Analy Batch No.: 219272

SDG No.:

Instrument ID: SGC_P3b GC Column: CLP2 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/01/2014 20:07 Calibration End Date: 04/01/2014 22:15 Calibration ID: 17684

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STDL11660 280-219272/23	0401B023.D
Level 2	STDL21660 280-219272/22	0401B022.D
Level 3	STDL31660 280-219272/21	0401B021.D
Level 4	STDL41660 280-219272/20	0401B020.D
Level 5	STDL51660 280-219272/19	0401B019.D
Level 6	STDL61660 280-219272/18	0401B018.D
Level 7	STDL71660 280-219272/17	0401B017.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
		LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
PCB-1016 Peak 1	Lin1	15442258 346358748	28874275 421523889	51988014	127005327	215250321	25.0 750	50.0 1000	100	250	500
PCB-1016 Peak 2	Lin1	28613390 701891491	54293375 858679218	99512327	246952449	428854420	25.0 750	50.0 1000	100	250	500
PCB-1016 Peak 3	Lin1	13245497 319275890	24746424 386138197	45076122	111870506	194494270	25.0 750	50.0 1000	100	250	500
PCB-1016 Peak 4	Lin1	11484797 246042463	20368330 308411758	34559105	85329671	147824171	25.0 750	50.0 1000	100	250	500
PCB-1016 Peak 5	Lin1	12231322 305334831	23076173 384441204	41834365	105166223	182086341	25.0 750	50.0 1000	100	250	500
PCB-1260 Peak 1	Lin1	19842080 508065397	37439640 645838473	71337136	174086394	310524135	25.0 750	50.0 1000	100	250	500
PCB-1260 Peak 2	Lin1	21646502 572842006	41658472 725248257	73269629	195730570	347562504	25.0 750	50.0 1000	100	250	500
PCB-1260 Peak 3	Lin1	33025207 864881123	63061642 1101322305	117052258	290556622	514786681	25.0 750	50.0 1000	100	250	500
PCB-1260 Peak 4	Lin1	32297698 850343710	60476461 1104494997	119760160	284853312	528386050	25.0 750	50.0 1000	100	250	500
PCB-1260 Peak 5	Lin1	27220931 729766527	52446132 931293191	96170446	239920661	426813697	25.0 750	50.0 1000	100	250	500
Tetrachloro-m-xylene	Lin1	19967515 490120518	37064226 602944935	67396069	167806336	293135024	1.25 37.5	2.50 50.0	5.00	12.5	25.0
DCB Decachlorobiphenyl	Lin1	17245065 462908310	33073993 595662833	59665645	149685077	267001885	1.25 37.5	2.50 50.0	5.00	12.5	25.0

Curve Type Legend:
Lin1 = Linear 1/conc

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B017.D
Lims ID: STDL71660
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 01-Apr-2014 20:07:42 ALS Bottle#: 17 Worklist Smp#: 17
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL71660
Operator ID: JAX Instrument ID: SGC_P3b
Sublist: chrom-PCB_P3b*sub3

Method: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\PCB_P3b.m
Limit Group: GCSV - 8082
Last Update: 02-Apr-2014 09:01:31 Calib Date: 02-Apr-2014 03:13:50
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B037.D

Column 1 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK001

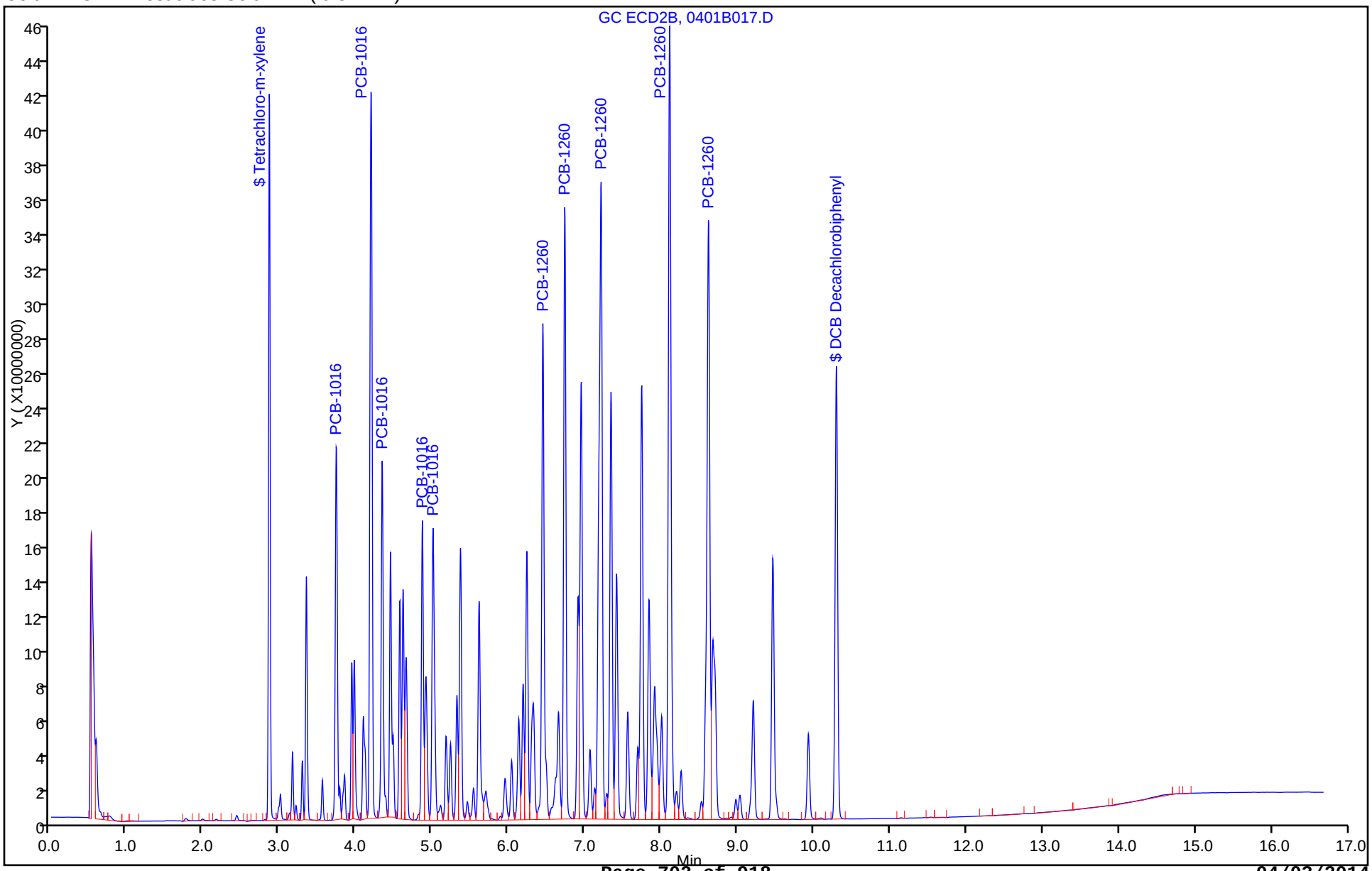
RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
$ 14 Tetrachloro-m-xylene					
2.861	2.862	-0.001	602944935	48.7	
1 PCB-1016					
3.738	3.738	0.0	421523889	955.7	
4.194	4.195	-0.001	858679218	964.7	
4.341	4.342	-0.001	386138197	959.4	
4.868	4.868	0.0	308411758	986.7	
5.008	5.008	0.0	384441204	988.1	
	Average of Peak Amounts =			970.9	
12 PCB-1260					
6.448	6.448	0.0	645838473	988.5	
6.734	6.735	-0.001	725248257	988.8	
7.211	7.208	0.003	1101322305	996.4	
8.111	8.108	0.003	1104494997	999.3	
8.618	8.618	0.0	931293191	1002.7	
	Average of Peak Amounts =			995.1	
$ 15 DCB Decachlorobiphenyl					
10.294	10.295	-0.001	595662833	50.6	
S 8 Polychlorinated biphenyls, Total					
				1966.1	

Report Date: 02-Apr-2014 09:01:31 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B017.D				
Injection Date:	01-Apr-2014 20:07:42	Instrument ID:	SGC_P3b	Operator ID:	JAX
Lims ID:	STDL71660			Worklist Smp#:	17
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	17
Method:	PCB_P3b	Limit Group:	GCSV - 8082		

Column: CLP2 Pesticides Column 2 (0.32 mm)



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B018.D
Lims ID: STDL61660
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 01-Apr-2014 20:29:02 ALS Bottle#: 18 Worklist Smp#: 18
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL61660
Operator ID: JAX Instrument ID: SGC_P3b
Sublist: chrom-PCB_P3b*sub3

Method: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\PCB_P3b.m
Limit Group: GCSV - 8082
Last Update: 02-Apr-2014 09:01:32 Calib Date: 02-Apr-2014 03:13:50
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B037.D

Column 1 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK001

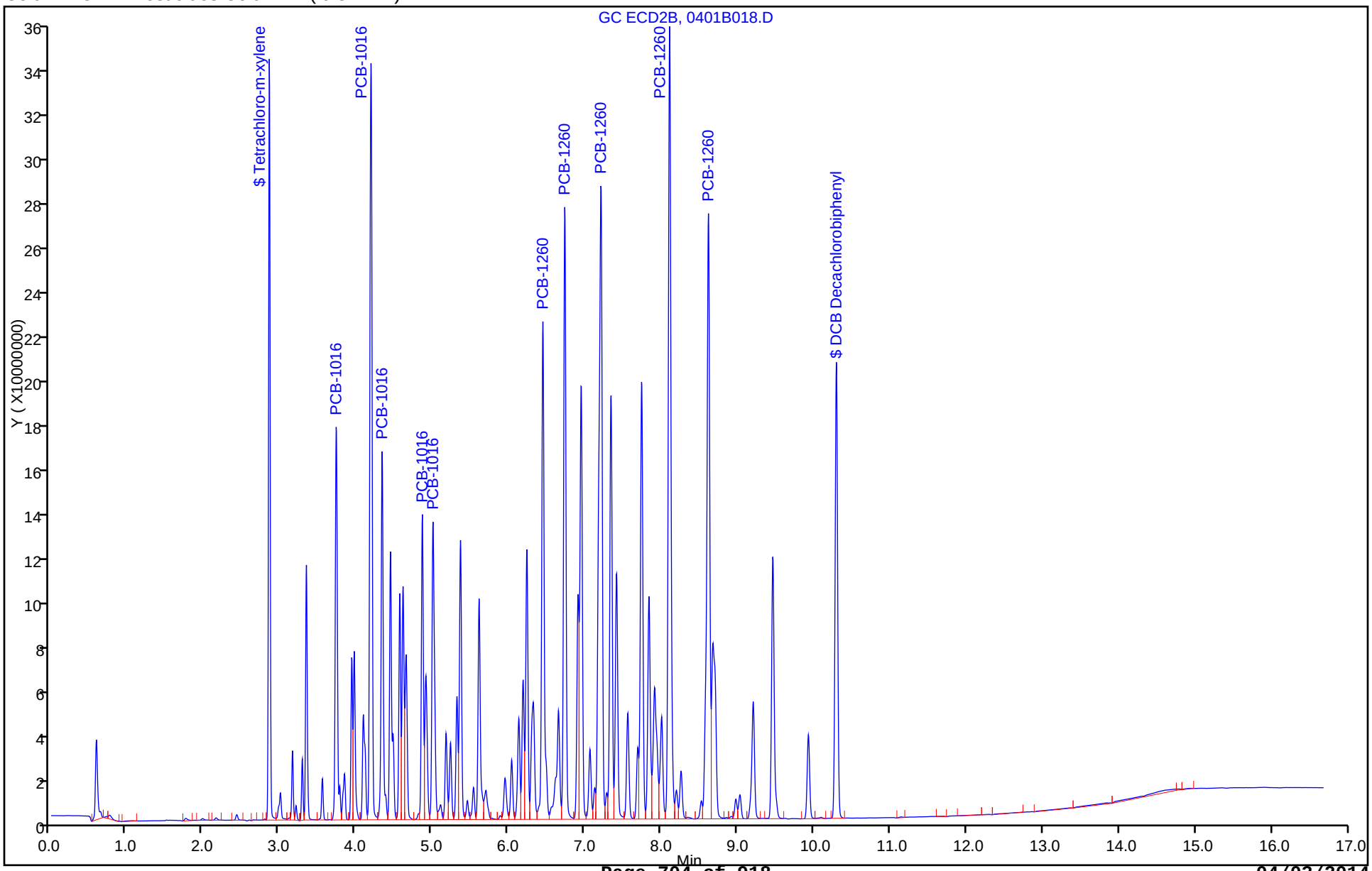
RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
$ 14 Tetrachloro-m-xylene					
2.861	2.862	-0.001	490120518	39.5	
1 PCB-1016					
3.738	3.738	0.0	346358748	782.7	
4.195	4.195	0.0	701891491	786.7	
4.341	4.342	-0.001	319275890	791.4	
4.868	4.868	0.0	246042463	784.5	
5.008	5.008	0.0	305334831	783.1	
	Average of Peak Amounts =			785.7	
12 PCB-1260					
6.448	6.448	0.0	508065397	776.2	
6.735	6.735	0.0	572842006	779.9	
7.208	7.208	0.0	864881123	781.2	
8.108	8.108	0.0	850343710	768.2	
8.618	8.618	0.0	729766527	784.7	
	Average of Peak Amounts =			778.0	
$ 15 DCB Decachlorobiphenyl					
10.295	10.295	0.0	462908310	39.3	
S 8 Polychlorinated biphenyls, Total					
				1563.7	

Report Date: 02-Apr-2014 09:01:33 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B018.D				
Injection Date:	01-Apr-2014 20:29:02	Instrument ID:	SGC_P3b	Operator ID:	JAX
Lims ID:	STDL61660			Worklist Smp#:	18
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	18
Method:	PCB_P3b	Limit Group:	GCSV - 8082		

Column: CLP2 Pesticides Column 2 (0.32 mm)



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B019.D
Lims ID: STDL51660
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 01-Apr-2014 20:50:24 ALS Bottle#: 19 Worklist Smp#: 19
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL51660
Operator ID: JAX Instrument ID: SGC_P3b
Sublist: chrom-PCB_P3b*sub3

Method: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\PCB_P3b.m
Limit Group: GCSV - 8082
Last Update: 02-Apr-2014 09:01:33 Calib Date: 02-Apr-2014 03:13:50
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B037.D

Column 1 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK001

First Level Reviewer: jacksonto Date: 02-Apr-2014 07:29:58

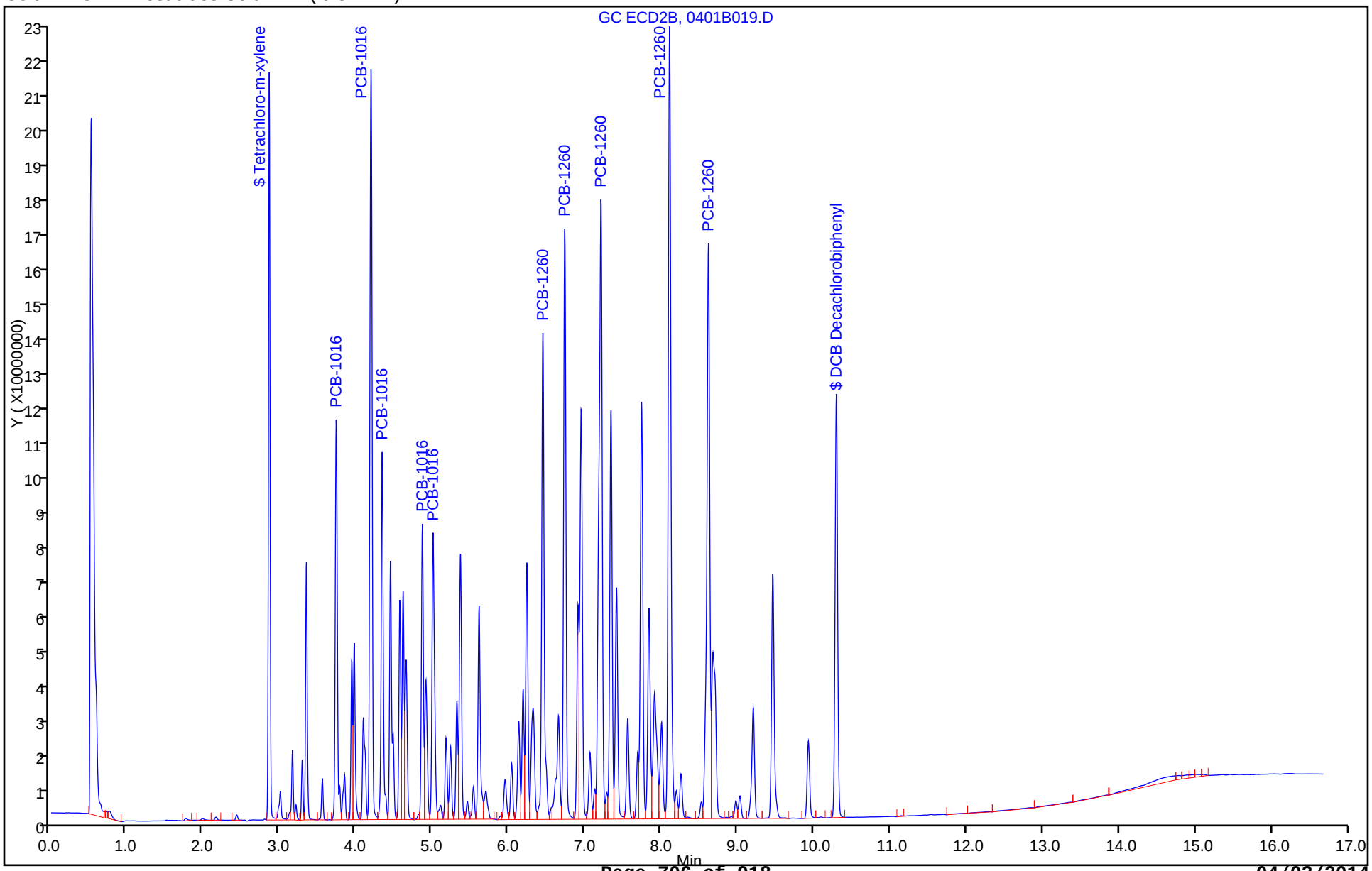
RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
$ 14 Tetrachloro-m-xylene					
2.862	2.862	0.0	293135024	23.5	
1 PCB-1016					
3.738	3.738	0.0	215250321	480.9	
4.195	4.195	0.0	428854420	476.7	
4.342	4.342	0.0	194494270	477.8	
4.868	4.868	0.0	147824171	465.9	
5.008	5.008	0.0	182086341	463.7	
	Average of Peak Amounts =			473.0	
12 PCB-1260					
6.448	6.448	0.0	310524135	471.7	
6.735	6.735	0.0	347562504	471.2	
7.208	7.208	0.0	514786681	462.6	
8.108	8.108	0.0	528386050	475.4	
8.618	8.618	0.0	426813697	457.0	
	Average of Peak Amounts =			467.6	
$ 15 DCB Decachlorobiphenyl					
10.295	10.295	0.0	267001885	22.6	
S 8 Polychlorinated biphenyls, Total					
				940.6	

Report Date: 02-Apr-2014 09:01:34 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B019.D				
Injection Date:	01-Apr-2014 20:50:24	Instrument ID:	SGC_P3b	Operator ID:	JAX
Lims ID:	STDL51660			Worklist Smp#:	19
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	19
Method:	PCB_P3b	Limit Group:	GCSV - 8082		

Column: CLP2 Pesticides Column 2 (0.32 mm)



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B020.D
Lims ID: STDL41660
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 01-Apr-2014 21:11:42 ALS Bottle#: 20 Worklist Smp#: 20
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL41660
Operator ID: JAX Instrument ID: SGC_P3b
Sublist: chrom-PCB_P3b*sub3

Method: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\PCB_P3b.m
Limit Group: GCSV - 8082
Last Update: 02-Apr-2014 09:01:34 Calib Date: 02-Apr-2014 03:13:50
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B037.D

Column 1 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK001

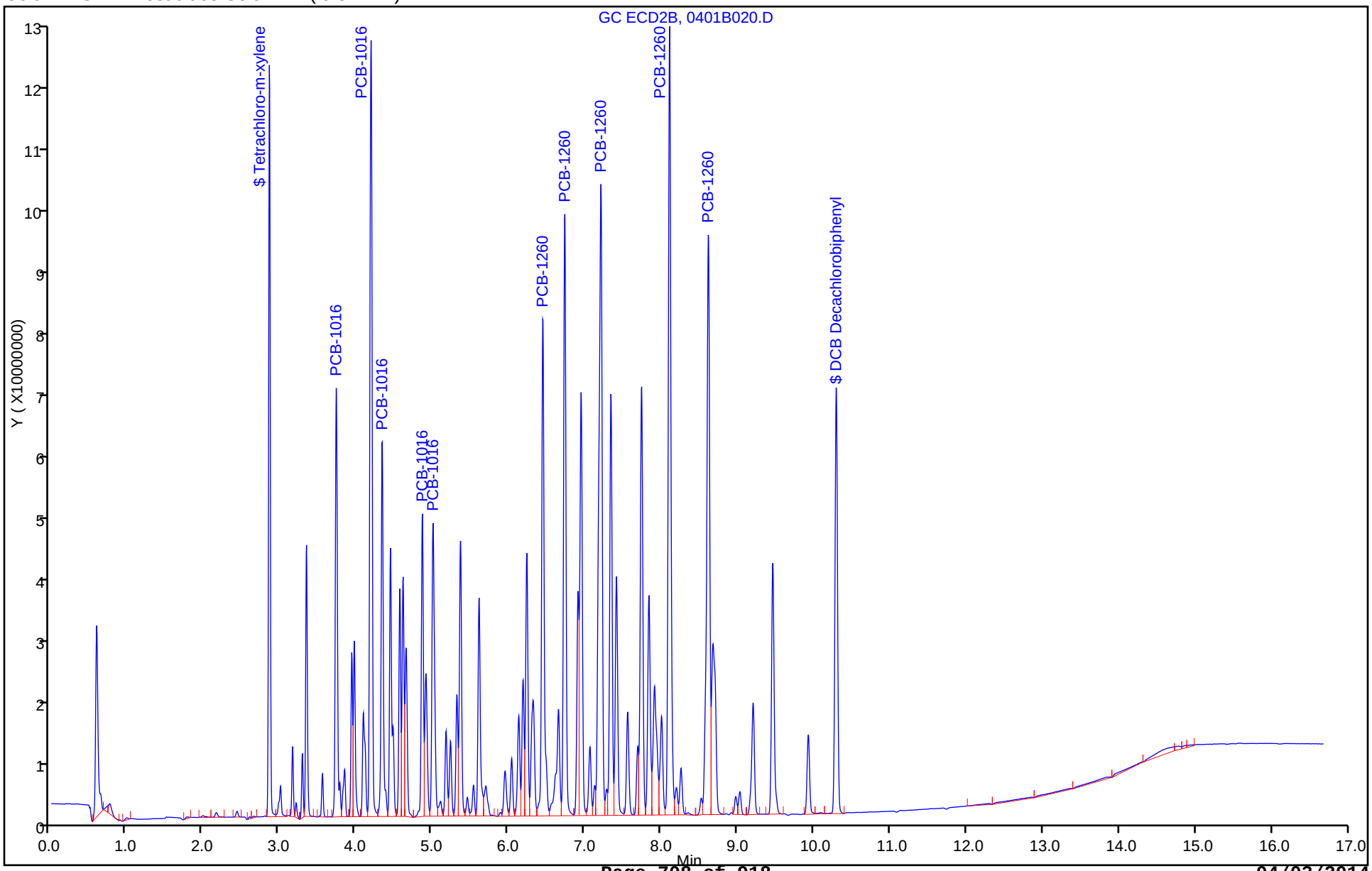
RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
$ 14 Tetrachloro-m-xylene					
2.863	2.862	0.001	167806336	13.2	
1 PCB-1016					
3.739	3.738	0.001	127005327	277.8	
4.196	4.195	0.001	246952449	270.2	
4.343	4.342	0.001	111870506	270.2	
4.869	4.868	0.001	85329671	263.2	
5.009	5.008	0.001	105166223	264.4	
	Average of Peak Amounts =			269.2	
12 PCB-1260					
6.446	6.448	-0.002	174086394	261.4	
6.736	6.735	0.001	195730570	263.1	
7.209	7.208	0.001	290556622	258.5	
8.109	8.108	0.001	284853312	254.0	
8.616	8.618	-0.002	239920661	254.8	
	Average of Peak Amounts =			258.4	
$ 15 DCB Decachlorobiphenyl					
10.293	10.295	-0.002	149685077	12.6	
S 8 Polychlorinated biphenyls, Total					
				527.5	

Report Date: 02-Apr-2014 09:01:35 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B020.D				
Injection Date:	01-Apr-2014 21:11:42	Instrument ID:	SGC_P3b	Operator ID:	JAX
Lims ID:	STDL41660			Worklist Smp#:	20
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	20
Method:	PCB_P3b	Limit Group:	GCSV - 8082		

Column: CLP2 Pesticides Column 2 (0.32 mm)



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B021.D
Lims ID: STDL31660
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 01-Apr-2014 21:33:05 ALS Bottle#: 21 Worklist Smp#: 21
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL31660
Operator ID: JAX Instrument ID: SGC_P3b
Sublist: chrom-PCB_P3b*sub3

Method: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\PCB_P3b.m
Limit Group: GCSV - 8082
Last Update: 02-Apr-2014 09:01:36 Calib Date: 02-Apr-2014 03:13:50
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B037.D

Column 1 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK001

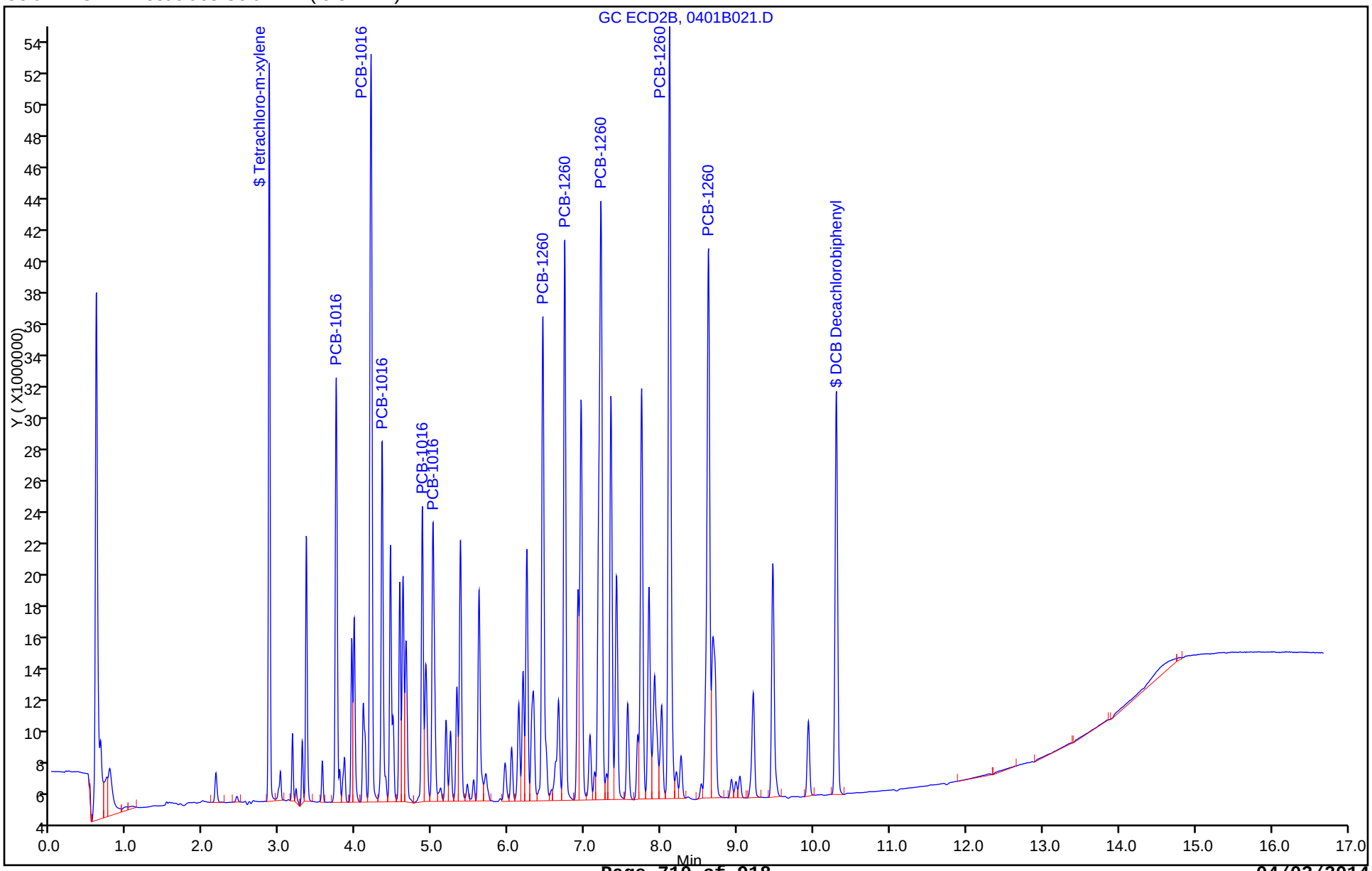
RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
$ 14 Tetrachloro-m-xylene					
2.862	2.862	0.0	67396069	5.04	
1 PCB-1016					
3.739	3.738	0.001	51988014	105.1	
4.196	4.195	0.001	99512327	102.8	
4.342	4.342	0.0	45076122	102.4	
4.869	4.868	0.001	34559105	98.5	
5.009	5.008	0.001	41834365	100.3	
	Average of Peak Amounts =			101.8	
12 PCB-1260					
6.449	6.448	0.001	71337136	103.0	
6.736	6.735	0.001	73269629	95.3	
7.209	7.208	0.001	117052258	100.6	
8.109	8.108	0.001	119760160	103.8	
8.619	8.618	0.001	96170446	99.3	
	Average of Peak Amounts =			100.4	
$ 15 DCB Decachlorobiphenyl					
10.296	10.295	0.001	59665645	4.88	
S 8 Polychlorinated biphenyls, Total					
				202.2	

Report Date: 02-Apr-2014 09:01:37 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B021.D				
Injection Date:	01-Apr-2014 21:33:05	Instrument ID:	SGC_P3b	Operator ID:	JAX
Lims ID:	STDL31660			Worklist Smp#:	21
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	21
Method:	PCB_P3b	Limit Group:	GCSV - 8082		

Column: CLP2 Pesticides Column 2 (0.32 mm)



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B022.D
Lims ID: STDL21660
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 01-Apr-2014 21:54:27 ALS Bottle#: 22 Worklist Smp#: 22
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL21660
Operator ID: JAX Instrument ID: SGC_P3b
Sublist: chrom-PCB_P3b*sub3

Method: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\PCB_P3b.m
Limit Group: GCSV - 8082
Last Update: 02-Apr-2014 09:01:37 Calib Date: 02-Apr-2014 03:13:50
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B037.D

Column 1 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK001

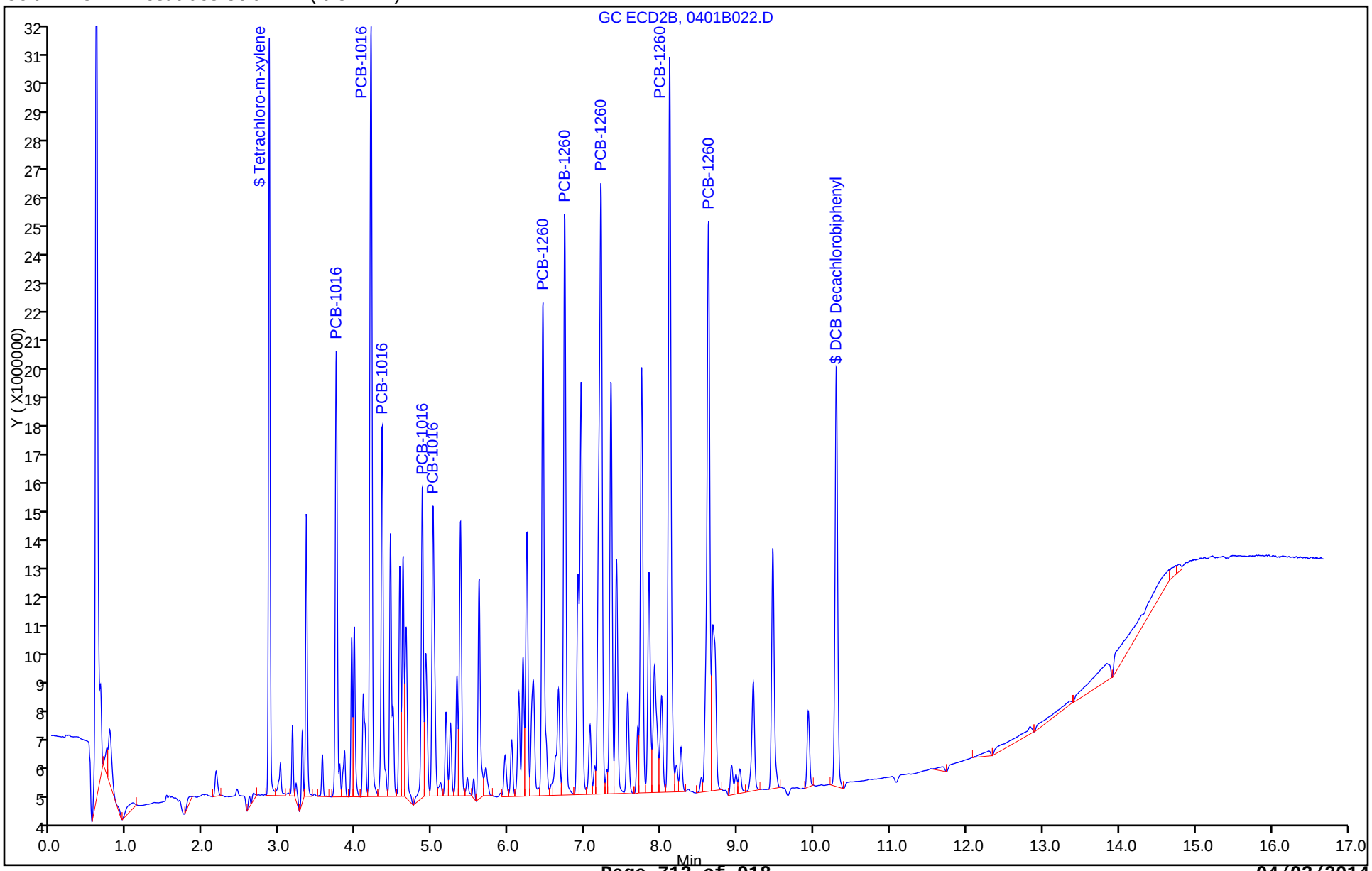
RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
$ 14 Tetrachloro-m-xylene					
2.863	2.862	0.001	37064226	2.57	
1 PCB-1016					
3.739	3.738	0.001	28874275	51.9	
4.196	4.195	0.001	54293375	51.5	
4.343	4.342	0.001	24746424	51.3	
4.869	4.868	0.001	20368330	52.5	
5.006	5.008	-0.002	23076173	51.7	
	Average of Peak Amounts =			51.8	
12 PCB-1260					
6.449	6.448	0.001	37439640	50.7	
6.733	6.735	-0.002	41658472	52.0	
7.209	7.208	0.001	63061642	51.5	
8.109	8.108	0.001	60476461	49.9	
8.619	8.618	0.001	52446132	52.0	
	Average of Peak Amounts =			51.2	
$ 15 DCB Decachlorobiphenyl					
10.293	10.295	-0.002	33073993	2.61	
S 8 Polychlorinated biphenyls, Total					
				103.0	

Report Date: 02-Apr-2014 09:01:38 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B022.D				
Injection Date:	01-Apr-2014 21:54:27	Instrument ID:	SGC_P3b	Operator ID:	JAX
Lims ID:	STDL21660			Worklist Smp#:	22
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	22
Method:	PCB_P3b	Limit Group:	GCSV - 8082		

Column: CLP2 Pesticides Column 2 (0.32 mm)



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B023.D
Lims ID: STDL11660
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 01-Apr-2014 22:15:41 ALS Bottle#: 23 Worklist Smp#: 23
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL11660
Operator ID: JAX Instrument ID: SGC_P3b
Sublist: chrom-PCB_P3b*sub3

Method: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\PCB_P3b.m
Limit Group: GCSV - 8082
Last Update: 02-Apr-2014 09:01:38 Calib Date: 02-Apr-2014 03:13:50
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B037.D

Column 1 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK001

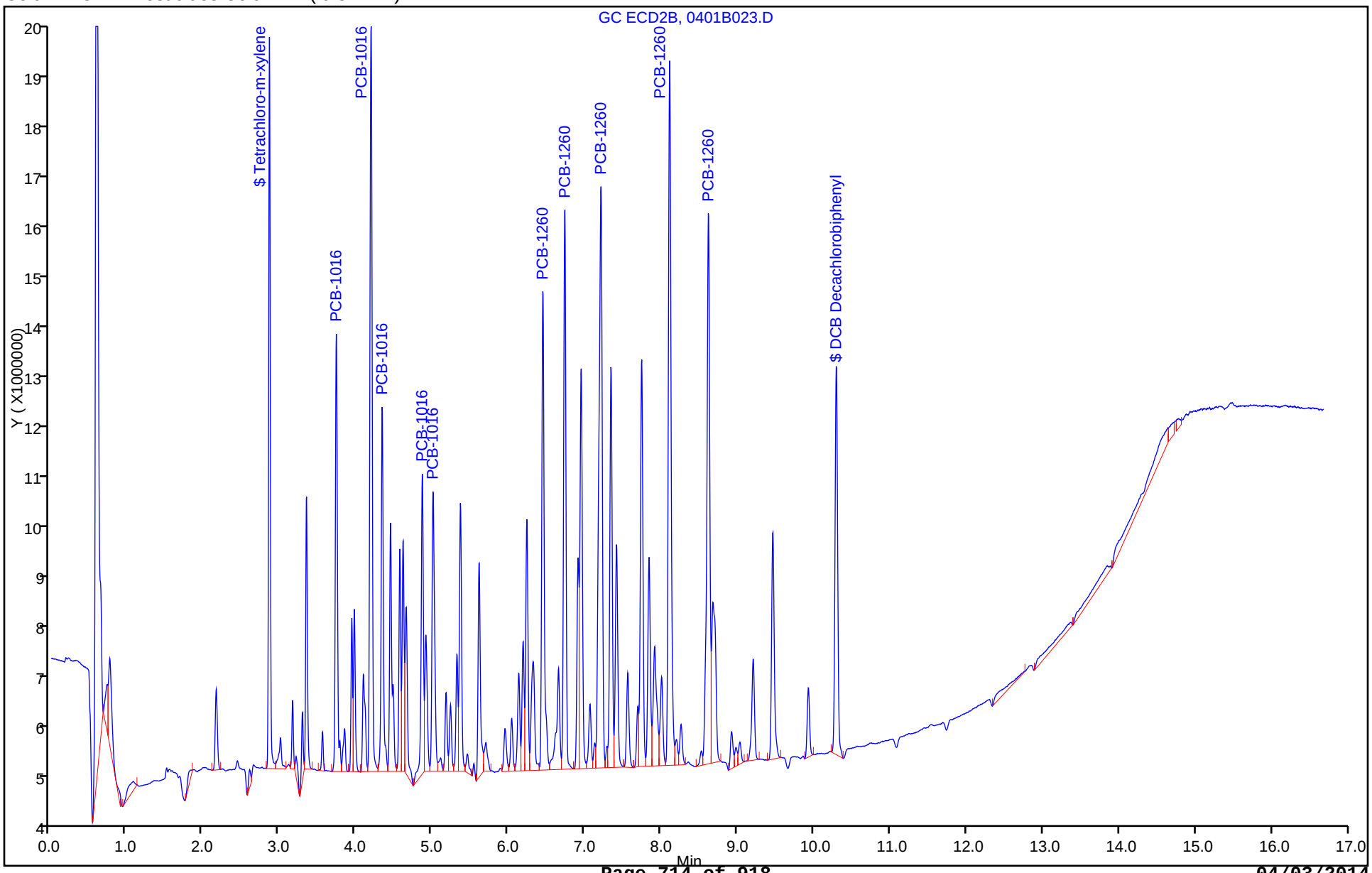
RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
$ 14 Tetrachloro-m-xylene					
2.863	2.862	0.001	19967515	1.17	
1 PCB-1016					
3.740	3.738	0.002	15442258	21.0	
4.197	4.195	0.002	28613390	22.3	
4.340	4.342	-0.002	13245497	22.4	
4.867	4.868	-0.001	11484797	23.7	
5.007	5.008	-0.001	12231322	23.6	
	Average of Peak Amounts =			22.6	
12 PCB-1260					
6.447	6.448	-0.001	19842080	23.6	
6.737	6.735	0.002	21646502	24.6	
7.210	7.208	0.002	33025207	24.2	
8.110	8.108	0.002	32297698	24.3	
8.617	8.618	-0.001	27220931	24.7	
	Average of Peak Amounts =			24.3	
$ 15 DCB Decachlorobiphenyl					
10.293	10.295	-0.002	17245065	1.26	
S 8 Polychlorinated biphenyls, Total					
				46.9	

Report Date: 02-Apr-2014 09:01:39 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B023.D				
Injection Date:	01-Apr-2014 22:15:41	Instrument ID:	SGC_P3b	Operator ID:	JAX
Lims ID:	STDL11660			Worklist Smp#:	23
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	23
Method:	PCB_P3b	Limit Group:	GCSV - 8082		

Column: CLP2 Pesticides Column 2 (0.32 mm)



FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-53458-1 Analy Batch No.: 219272

SDG No.:

Instrument ID: SGC_P3b GC Column: CLP2 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/01/2014 22:37 Calibration End Date: 04/02/2014 00:44 Calibration ID: 17686

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STDL13262 280-219272/30	0401B030.D
Level 2	STDL23262 280-219272/29	0401B029.D
Level 3	STDL33262 280-219272/28	0401B028.D
Level 4	STDL43262 280-219272/27	0401B027.D
Level 5	STDL53262 280-219272/26	0401B026.D
Level 6	STDL63262 280-219272/25	0401B025.D
Level 7	STDL73262 280-219272/24	0401B024.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	LVL 7				RT WINDOW	AVG RT
PCB-1232 Peak 1	3.164	3.165	3.164	3.163	3.166	3.164	3.165				2.916 - 3.416	3.164
PCB-1232 Peak 2	3.347	3.349	3.348	3.347	3.346	3.347	3.348				3.096 - 3.596	3.347
PCB-1232 Peak 3	4.194	4.195	4.194	4.193	4.196	4.194	4.195				3.946 - 4.446	4.194
PCB-1232 Peak 4	4.340	4.342	4.341	4.340	4.340	4.340	4.342				4.090 - 4.590	4.341
PCB-1232 Peak 5	4.867	4.869	4.868	4.867	4.870	4.867	4.868				4.620 - 5.120	4.868
PCB-1262 Peak 1	6.734	6.732	6.734	6.733	6.733	6.734	6.735				6.483 - 6.983	6.734
PCB-1262 Peak 2	7.744	7.742	7.741	7.743	7.743	7.740	7.742				7.493 - 7.993	7.742
PCB-1262 Peak 3	8.110	8.109	8.108	8.110	8.110	8.110	8.108				7.860 - 8.360	8.109
PCB-1262 Peak 4	8.614	8.615	8.614	8.613	8.613	8.614	8.615				8.363 - 8.863	8.614
PCB-1262 Peak 5	9.460	9.462	9.461	9.460	9.463	9.460	9.462				9.213 - 9.713	9.461

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Denver Job No.: 280-53458-1 Analy Batch No.: 219272

SDG No.:

Instrument ID: SGC_P3b GC Column: CLP2 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/01/2014 22:37 Calibration End Date: 04/02/2014 00:44 Calibration ID: 17686

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STDL13262 280-219272/30	0401B030.D
Level 2	STDL23262 280-219272/29	0401B029.D
Level 3	STDL33262 280-219272/28	0401B028.D
Level 4	STDL43262 280-219272/27	0401B027.D
Level 5	STDL53262 280-219272/26	0401B026.D
Level 6	STDL63262 280-219272/25	0401B025.D
Level 7	STDL73262 280-219272/24	0401B024.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3 LVL 7	LVL 4		B	M1	M2								
PCB-1232 Peak 1	159356 101110	117202 105534	113687 94640	110643	Lin1	1453071.75	98335.2870							0.9970		0.9900
PCB-1232 Peak 2	368675 262776	402214 268128	321416 243659	287468	Lin1	4961292.33	252242.962							0.9950		0.9900
PCB-1232 Peak 3	575431 450367	521051 468810	509298 436132	481042	Lin1	3960566.13	447412.481							0.9990		0.9900
PCB-1232 Peak 4	275113 215789	251992 226172	247381 209033	231906	Lin1	1945101.17	215002.805							0.9980		0.9900
PCB-1232 Peak 5	224289 143033	189244 151157	166168 138731	153493	Lin1	2265035.24	141241.057							0.9980		0.9900
PCB-1262 Peak 1	637669 533385	588000 560567	651734 548851	574557	Lin1	3255435.55	548536.144							0.9990		0.9900
PCB-1262 Peak 2	1003436 782790	911965 814251	885915 767045	831150	Lin1	6773553.17	780851.174							0.9990		0.9900
PCB-1262 Peak 3	1758440 1342225	1416974 1345459	1542361 1352944	1412506	Lin1	10090326.1	1340071.33							0.9990		0.9900
PCB-1262 Peak 4	1385348 1125192	1260291 1187842	1238053 1114140	1184840	Lin1	7032741.26	1134972.42							0.9990		0.9900
PCB-1262 Peak 5	746172 613553	686973 650361	669716 614629	648993	Lin1	3404209.17	623390.507							0.9990		0.9900

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Denver Job No.: 280-53458-1 Analy Batch No.: 219272

SDG No.:

Instrument ID: SGC_P3b GC Column: CLP2 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/01/2014 22:37 Calibration End Date: 04/02/2014 00:44 Calibration ID: 17686

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STDL13262 280-219272/30	0401B030.D
Level 2	STDL23262 280-219272/29	0401B029.D
Level 3	STDL33262 280-219272/28	0401B028.D
Level 4	STDL43262 280-219272/27	0401B027.D
Level 5	STDL53262 280-219272/26	0401B026.D
Level 6	STDL63262 280-219272/25	0401B025.D
Level 7	STDL73262 280-219272/24	0401B024.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
		LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
PCB-1232 Peak 1	Lin1	3983901 79150164	5860096 94639687	11368671	27660651	50555225	25.0 750	50.0 1000	100	250	500
PCB-1232 Peak 2	Lin1	9216875 201095867	20110691 243658892	32141581	71866914	131388150	25.0 750	50.0 1000	100	250	500
PCB-1232 Peak 3	Lin1	14385781 351607867	26052547 436132327	50929762	120260483	225183582	25.0 750	50.0 1000	100	250	500
PCB-1232 Peak 4	Lin1	6877835 169628924	12599607 209032815	24738067	57976521	107894442	25.0 750	50.0 1000	100	250	500
PCB-1232 Peak 5	Lin1	5607215 113367830	9462175 138731084	16616842	38373296	71516631	25.0 750	50.0 1000	100	250	500
PCB-1262 Peak 1	Lin1	15941717 420424970	29400015 548850537	65173438	143639244	266692313	25.0 750	50.0 1000	100	250	500
PCB-1262 Peak 2	Lin1	25085909 610688438	45598261 767045022	88591492	207787581	391395059	25.0 750	50.0 1000	100	250	500
PCB-1262 Peak 3	Lin1	43960997 1009094359	70848705 1352944286	154236065	353126384	671112288	25.0 750	50.0 1000	100	250	500
PCB-1262 Peak 4	Lin1	34633690 890881176	63014562 1114139767	123805285	296210058	562595875	25.0 750	50.0 1000	100	250	500
PCB-1262 Peak 5	Lin1	18654290 487771019	34348650 614628921	66971610	162248230	306776350	25.0 750	50.0 1000	100	250	500

Curve Type Legend:

Lin1 = Linear 1/conc

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B024.D
Lims ID: STDL73262
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 01-Apr-2014 22:37:01 ALS Bottle#: 24 Worklist Smp#: 24
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL73262
Operator ID: JAX Instrument ID: SGC_P3b
Sublist: chrom-PCB_P3b*sub4

Method: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\PCB_P3b.m
Limit Group: GCSV - 8082
Last Update: 02-Apr-2014 09:01:39 Calib Date: 02-Apr-2014 03:13:50
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B037.D

Column 1 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK001

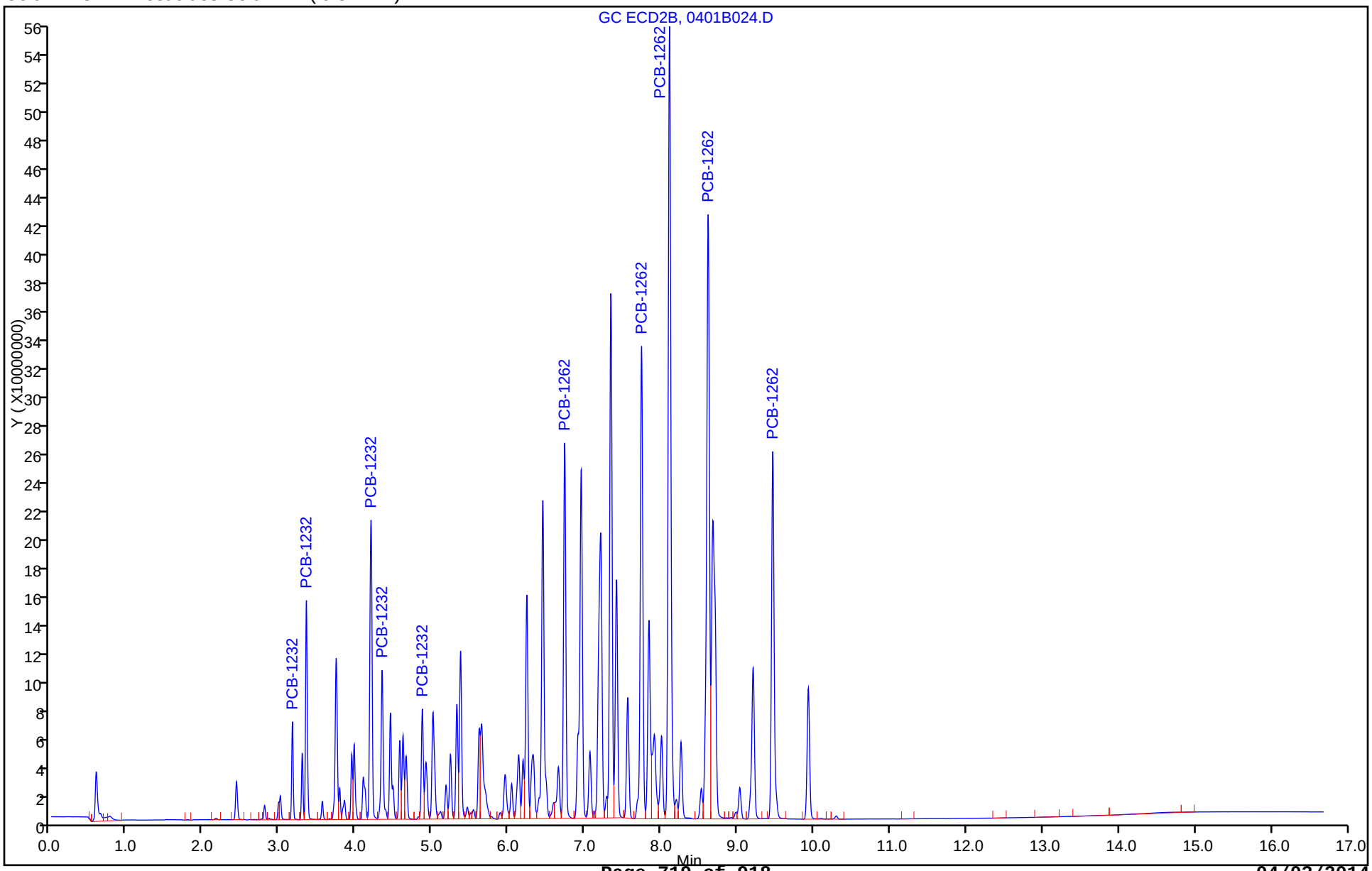
RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
7 PCB-1232					
3.165	3.166	-0.001	94639687	947.6	
3.348	3.346	0.002	243658892	946.3	
4.195	4.196	-0.001	436132327	965.9	
4.342	4.340	0.002	209032815	963.2	
4.868	4.870	-0.002	138731084	966.2	
	Average of Peak Amounts =			957.9	
5 PCB-1262					
6.735	6.733	0.002	548850537	994.6	
7.742	7.743	-0.001	767045022	973.6	
8.108	8.110	-0.002	1352944286	1002.1	
8.615	8.613	0.002	1114139767	975.4	
9.462	9.463	-0.001	614628921	980.5	
	Average of Peak Amounts =			985.3	
S 8 Polychlorinated biphenyls, Total					
				1943.1	

Report Date: 02-Apr-2014 09:01:40 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B024.D				
Injection Date:	01-Apr-2014 22:37:01	Instrument ID:	SGC_P3b	Operator ID:	JAX
Lims ID:	STDL73262			Worklist Smp#:	24
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	24
Method:	PCB_P3b	Limit Group:	GCSV - 8082		

Column: CLP2 Pesticides Column 2 (0.32 mm)



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B025.D
Lims ID: STDL63262
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 01-Apr-2014 22:58:15 ALS Bottle#: 25 Worklist Smp#: 25
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL63262
Operator ID: JAX Instrument ID: SGC_P3b
Sublist: chrom-PCB_P3b*sub4

Method: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\PCB_P3b.m
Limit Group: GCSV - 8082
Last Update: 02-Apr-2014 09:01:41 Calib Date: 02-Apr-2014 03:13:50
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B037.D

Column 1 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK001

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
7 PCB-1232					
3.164	3.166	-0.002	79150164	790.1	
3.347	3.346	0.001	201095867	777.6	
4.194	4.196	-0.002	351607867	777.0	
4.340	4.340	0.0	169628924	779.9	
4.867	4.870	-0.003	113367830	786.6	
	Average of Peak Amounts =			782.2	
5 PCB-1262					
6.734	6.733	0.001	420424970	760.5	
7.740	7.743	-0.003	610688438	773.4	
8.110	8.110	0.0	1009094359	745.5	
8.614	8.613	0.001	890881176	778.7	
9.460	9.463	-0.003	487771019	777.0	
	Average of Peak Amounts =			767.0	
S 8 Polychlorinated biphenyls, Total					
				1549.3	

Report Date: 02-Apr-2014 09:01:41 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B025.D

Injection Date: 01-Apr-2014 22:58:15 Instrument ID: SGC_P3b Operator ID: JAX

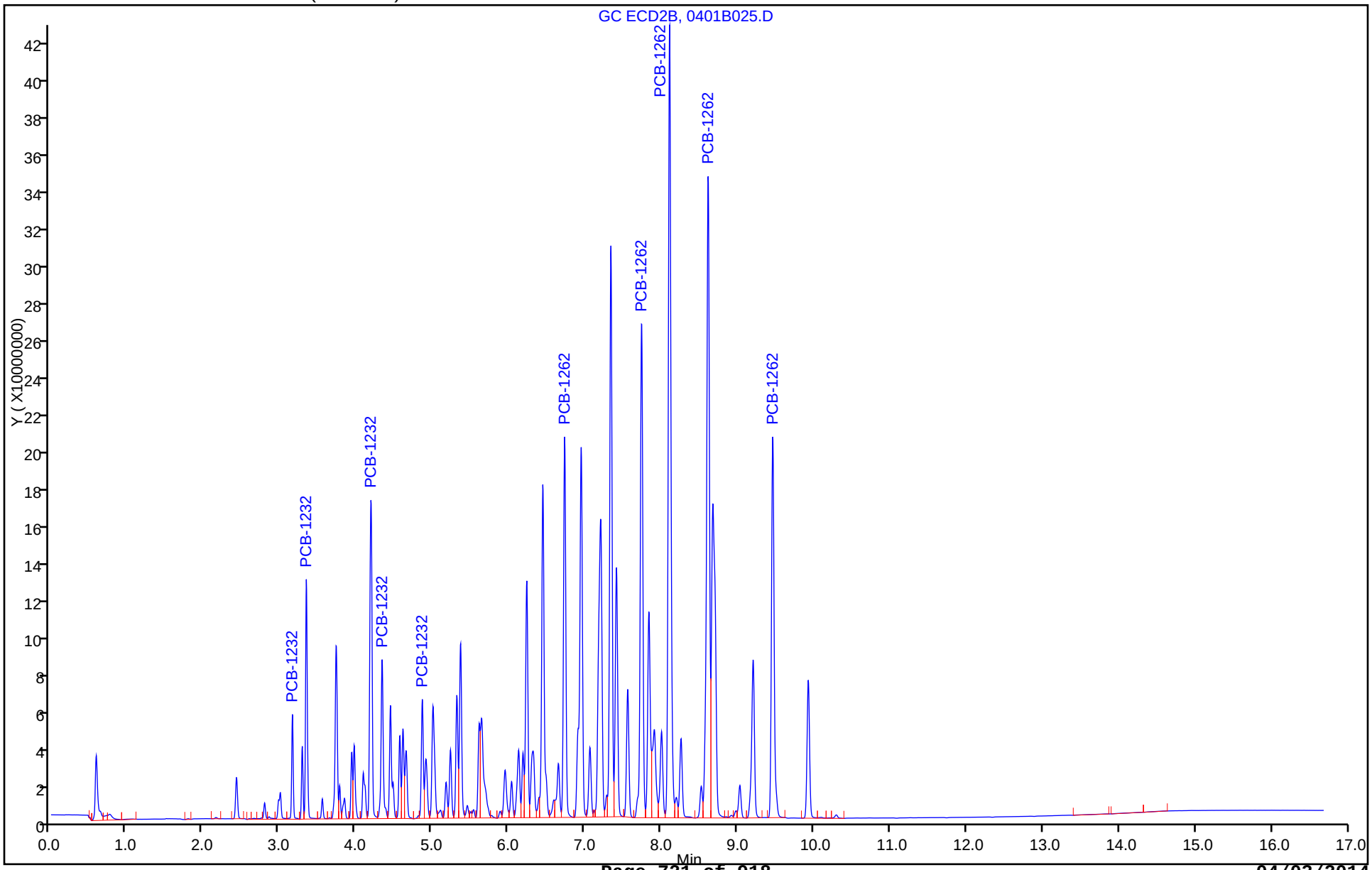
Lims ID: STDL63262 Worklist Smp#: 25

Client ID:

Injection Vol: 1.0 ul Dil. Factor: 1.0000 ALS Bottle#: 25

Method: PCB_P3b Limit Group: GCSV - 8082

Column: CLP2 Pesticides Column 2 (0.32 mm)



TestAmerica Denver
Target Compound Quantitation Report

Data File:	\\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B026.D				
Lims ID:	STDL53262				
Client ID:					
Sample Type:	IC	Calib Level:	5		
Inject. Date:	01-Apr-2014 23:19:30	ALS Bottle#:	26	Worklist Smp#:	26
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	STDL53262				
Operator ID:	JAX	Instrument ID:	SGC_P3b		
Sublist:	chrom-PCB_P3b*sub4				
Method:	\\Denchrom\ChromData\SGC_P3b\20140401-21601.b\PCB_P3b.m				
Limit Group:	GCSV - 8082				
Last Update:	02-Apr-2014 09:01:42	Calib Date:	02-Apr-2014 03:13:50		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B037.D				
Column 1 :	CLP2 Pesticides Column 2 (0.32 mm)		Det: GC ECD2B		
Process Host:	XAWRK001				

First Level Reviewer: jacksonto Date: 02-Apr-2014 07:30:38

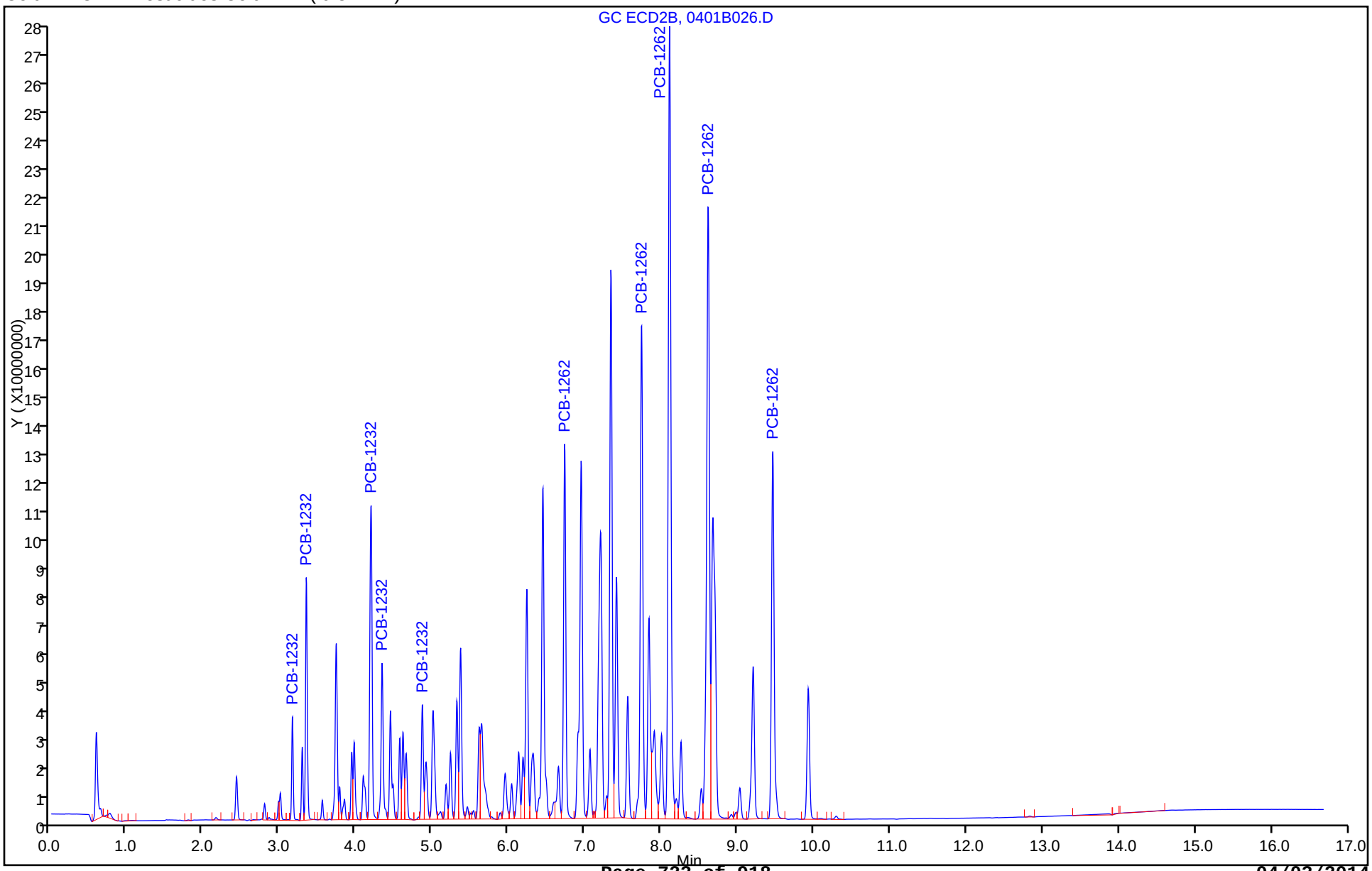
RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
7 PCB-1232					
3.166	3.166	0.0	50555225	499.3	
3.346	3.346	0.0	131388150	501.2	
4.196	4.196	0.0	225183582	494.4	
4.340	4.340	0.0	107894442	492.8	
4.870	4.870	0.0	71516631	490.3	
	Average of Peak Amounts =			495.6	
5 PCB-1262					
6.733	6.733	0.0	266692313	480.3	
7.743	7.743	0.0	391395059	492.6	
8.110	8.110	0.0	671112288	493.3	
8.613	8.613	0.0	562595875	489.5	
9.463	9.463	0.0	306776350	486.6	
	Average of Peak Amounts =			488.4	
S 8 Polychlorinated biphenyls, Total					
				984.1	

Report Date: 02-Apr-2014 09:01:42 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B026.D				
Injection Date:	01-Apr-2014 23:19:30	Instrument ID:	SGC_P3b	Operator ID:	JAX
Lims ID:	STDL53262			Worklist Smp#:	26
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	26
Method:	PCB_P3b	Limit Group:	GCSV - 8082		

Column: CLP2 Pesticides Column 2 (0.32 mm)



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B027.D
Lims ID: STDL43262
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 01-Apr-2014 23:40:53 ALS Bottle#: 27 Worklist Smp#: 27
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL43262
Operator ID: JAX Instrument ID: SGC_P3b
Sublist: chrom-PCB_P3b*sub4

Method: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\PCB_P3b.m
Limit Group: GCSV - 8082
Last Update: 02-Apr-2014 09:01:43 Calib Date: 02-Apr-2014 03:13:50
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B037.D

Column 1 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK001

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
7 PCB-1232					
3.163	3.166	-0.003	27660651	266.5	
3.347	3.346	0.001	71866914	265.2	
4.193	4.196	-0.003	120260483	259.9	
4.340	4.340	0.0	57976521	260.6	
4.867	4.870	-0.003	38373296	255.6	
	Average of Peak Amounts =			261.6	
5 PCB-1262					
6.733	6.733	0.0	143639244	255.9	
7.743	7.743	0.0	207787581	257.4	
8.110	8.110	0.0	353126384	256.0	
8.613	8.613	0.0	296210058	254.8	
9.460	9.463	-0.003	162248230	254.8	
	Average of Peak Amounts =			255.8	
S 8 Polychlorinated biphenyls, Total					
				517.4	

Report Date: 02-Apr-2014 09:01:43 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B027.D

Injection Date: 01-Apr-2014 23:40:53 Instrument ID: SGC_P3b Operator ID: JAX

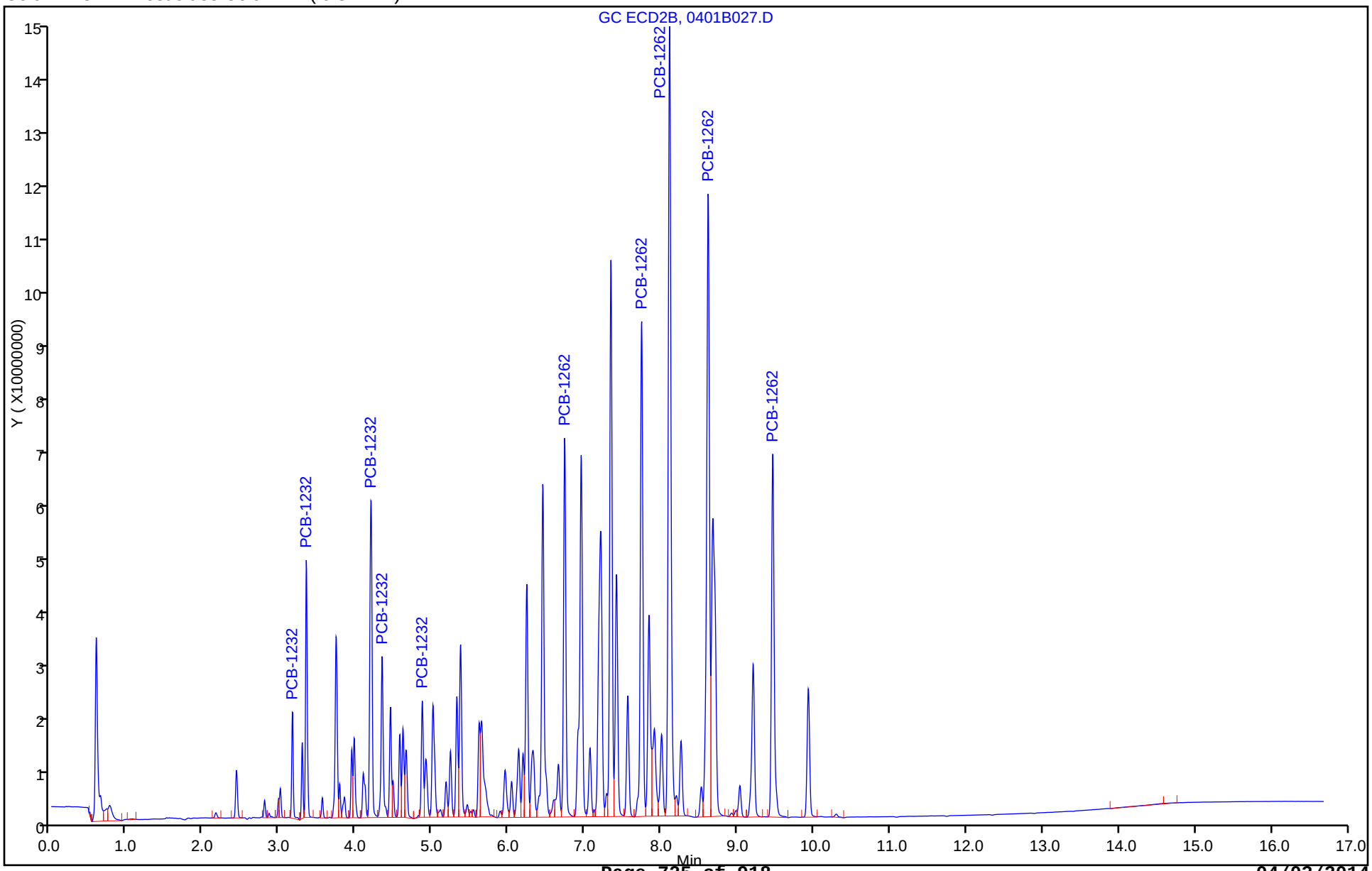
Lims ID: STDL43262 Worklist Smp#: 27

Client ID:

Injection Vol: 1.0 ul Dil. Factor: 1.0000 ALS Bottle#: 27

Method: PCB_P3b Limit Group: GCSV - 8082

Column: CLP2 Pesticides Column 2 (0.32 mm)



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B028.D
Lims ID: STDL33262
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 02-Apr-2014 00:02:11 ALS Bottle#: 28 Worklist Smp#: 28
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL33262
Operator ID: JAX Instrument ID: SGC_P3b
Sublist: chrom-PCB_P3b*sub4

Method: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\PCB_P3b.m
Limit Group: GCSV - 8082
Last Update: 02-Apr-2014 09:01:44 Calib Date: 02-Apr-2014 03:13:50
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B037.D

Column 1 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK001

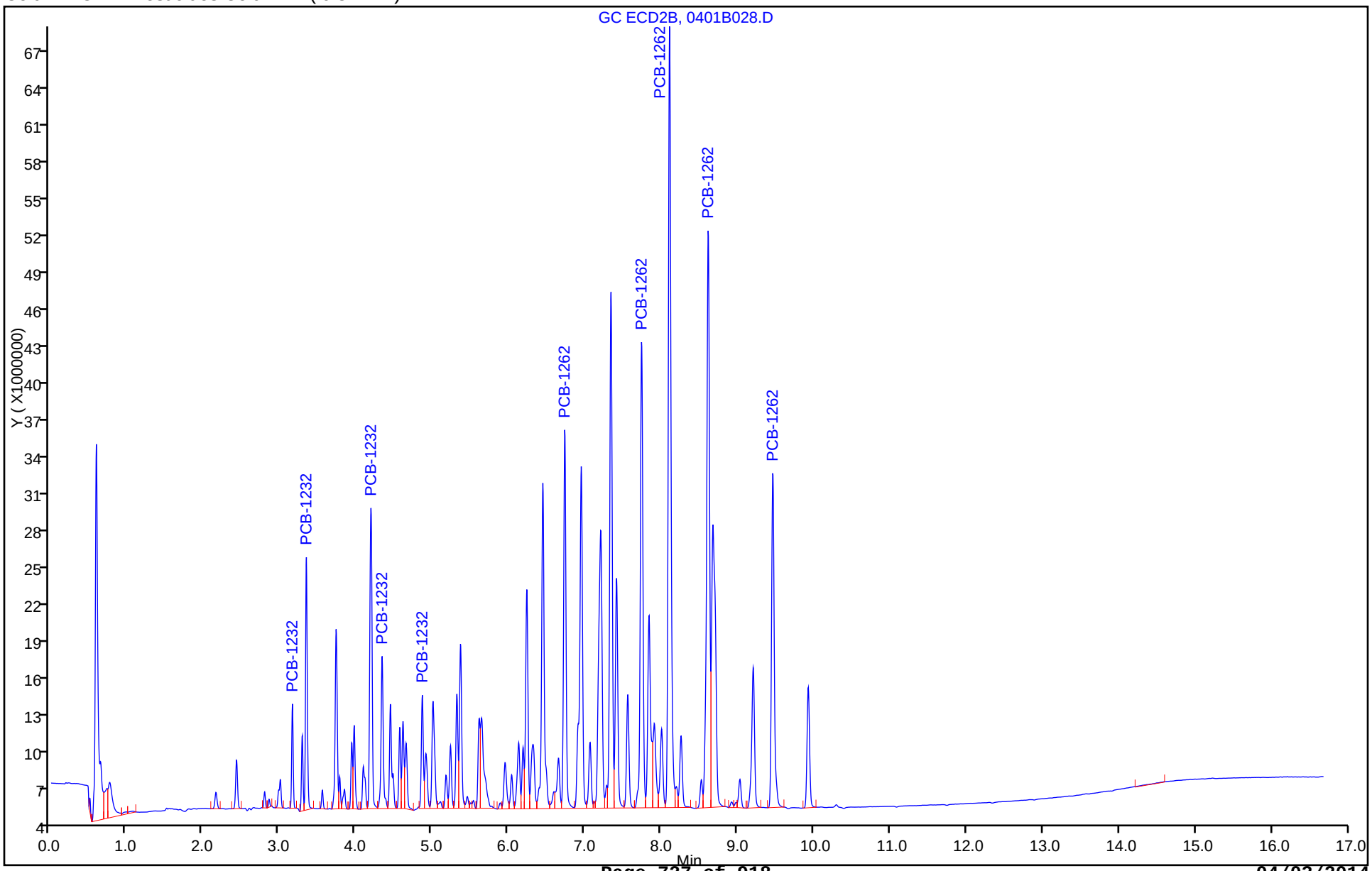
RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
7 PCB-1232					
3.164	3.166	-0.002	11368671	100.8	
3.348	3.346	0.002	32141581	107.8	
4.194	4.196	-0.002	50929762	105.0	
4.341	4.340	0.001	24738067	106.0	
4.868	4.870	-0.002	16616842	101.6	
	Average of Peak Amounts =			104.2	
5 PCB-1262					
6.734	6.733	0.001	65173438	112.9	
7.741	7.743	-0.002	88591492	104.8	
8.108	8.110	-0.002	154236065	107.6	
8.614	8.613	0.001	123805285	102.9	
9.461	9.463	-0.002	66971610	102.0	
	Average of Peak Amounts =			106.0	
S 8 Polychlorinated biphenyls, Total					
				210.3	

Report Date: 02-Apr-2014 09:01:45 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B028.D				
Injection Date:	02-Apr-2014 00:02:11	Instrument ID:	SGC_P3b	Operator ID:	JAX
Lims ID:	STDL33262			Worklist Smp#:	28
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	28
Method:	PCB_P3b	Limit Group:	GCSV - 8082		

Column: CLP2 Pesticides Column 2 (0.32 mm)



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B029.D
Lims ID: STDL23262
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 02-Apr-2014 00:23:24 ALS Bottle#: 29 Worklist Smp#: 29
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL23262
Operator ID: JAX Instrument ID: SGC_P3b
Sublist: chrom-PCB_P3b*sub4

Method: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\PCB_P3b.m
Limit Group: GCSV - 8082
Last Update: 02-Apr-2014 09:01:45 Calib Date: 02-Apr-2014 03:13:50
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B037.D

Column 1 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK001

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
7 PCB-1232					
3.165	3.166	-0.001	5860096	44.8	
3.349	3.346	0.003	20110691	60.1	
4.195	4.196	-0.001	26052547	49.4	
4.342	4.340	0.002	12599607	49.6	
4.869	4.870	-0.001	9462175	51.0	
	Average of Peak Amounts =			51.0	
5 PCB-1262					
6.732	6.733	-0.001	29400015	47.7	
7.742	7.743	-0.001	45598261	49.7	
8.109	8.110	-0.001	70848705	45.3	
8.615	8.613	0.002	63014562	49.3	
9.462	9.463	-0.001	34348650	49.6	
	Average of Peak Amounts =			48.3	
S 8 Polychlorinated biphenyls, Total					
				99.3	

Report Date: 02-Apr-2014 09:01:46 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B029.D

Injection Date: 02-Apr-2014 00:23:24 Instrument ID: SGC_P3b Operator ID: JAX

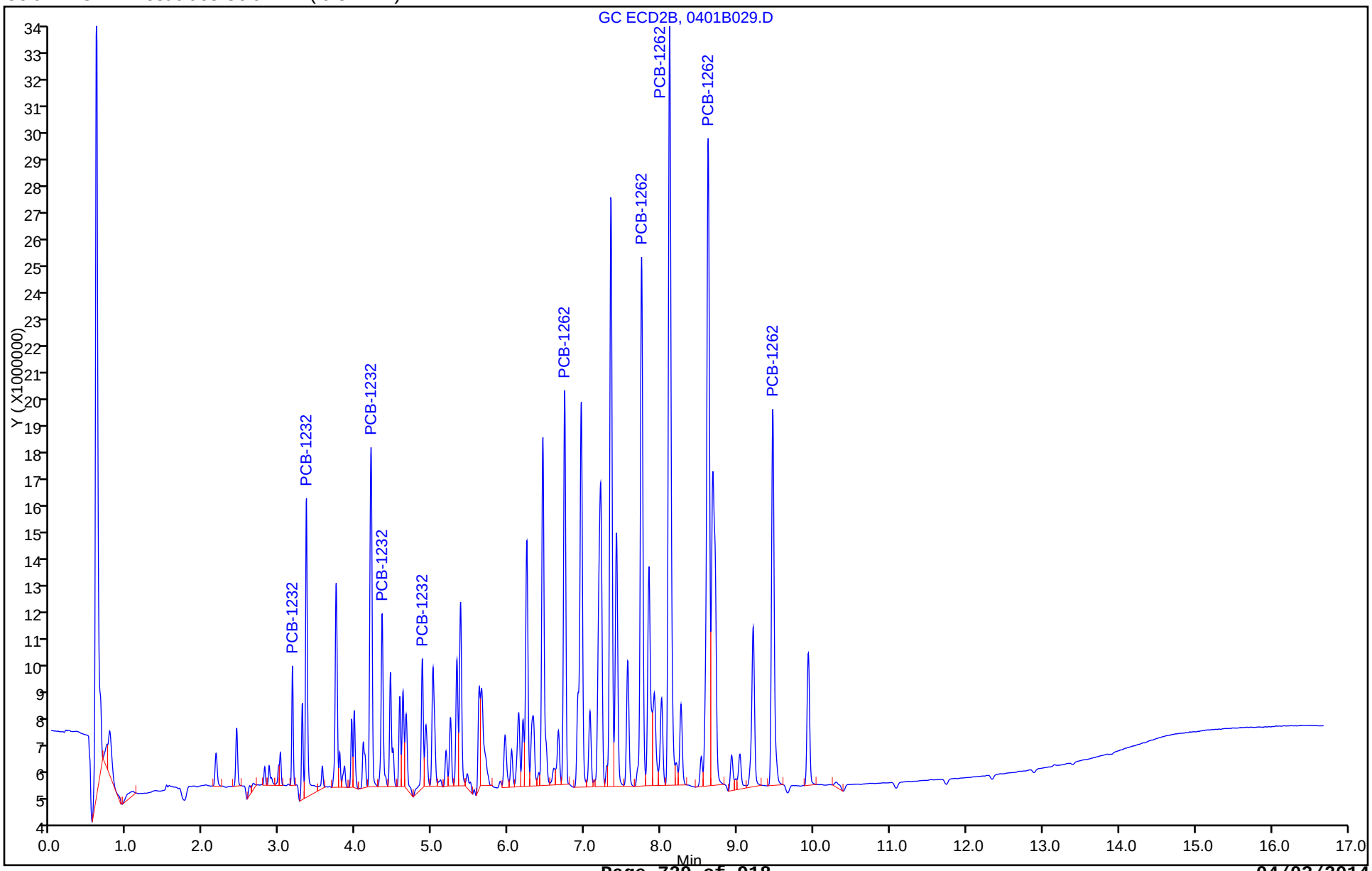
Lims ID: STDL23262 Worklist Smp#: 29

Client ID:

Injection Vol: 1.0 ul Dil. Factor: 1.0000 ALS Bottle#: 29

Method: PCB_P3b Limit Group: GCSV - 8082

Column: CLP2 Pesticides Column 2 (0.32 mm)



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B030.D
Lims ID: STDL13262
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 02-Apr-2014 00:44:43 ALS Bottle#: 30 Worklist Smp#: 30
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL13262
Operator ID: JAX Instrument ID: SGC_P3b
Sublist: chrom-PCB_P3b*sub4

Method: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\PCB_P3b.m
Limit Group: GCSV - 8082
Last Update: 02-Apr-2014 09:01:47 Calib Date: 02-Apr-2014 03:13:50
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B037.D

Column 1 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK001

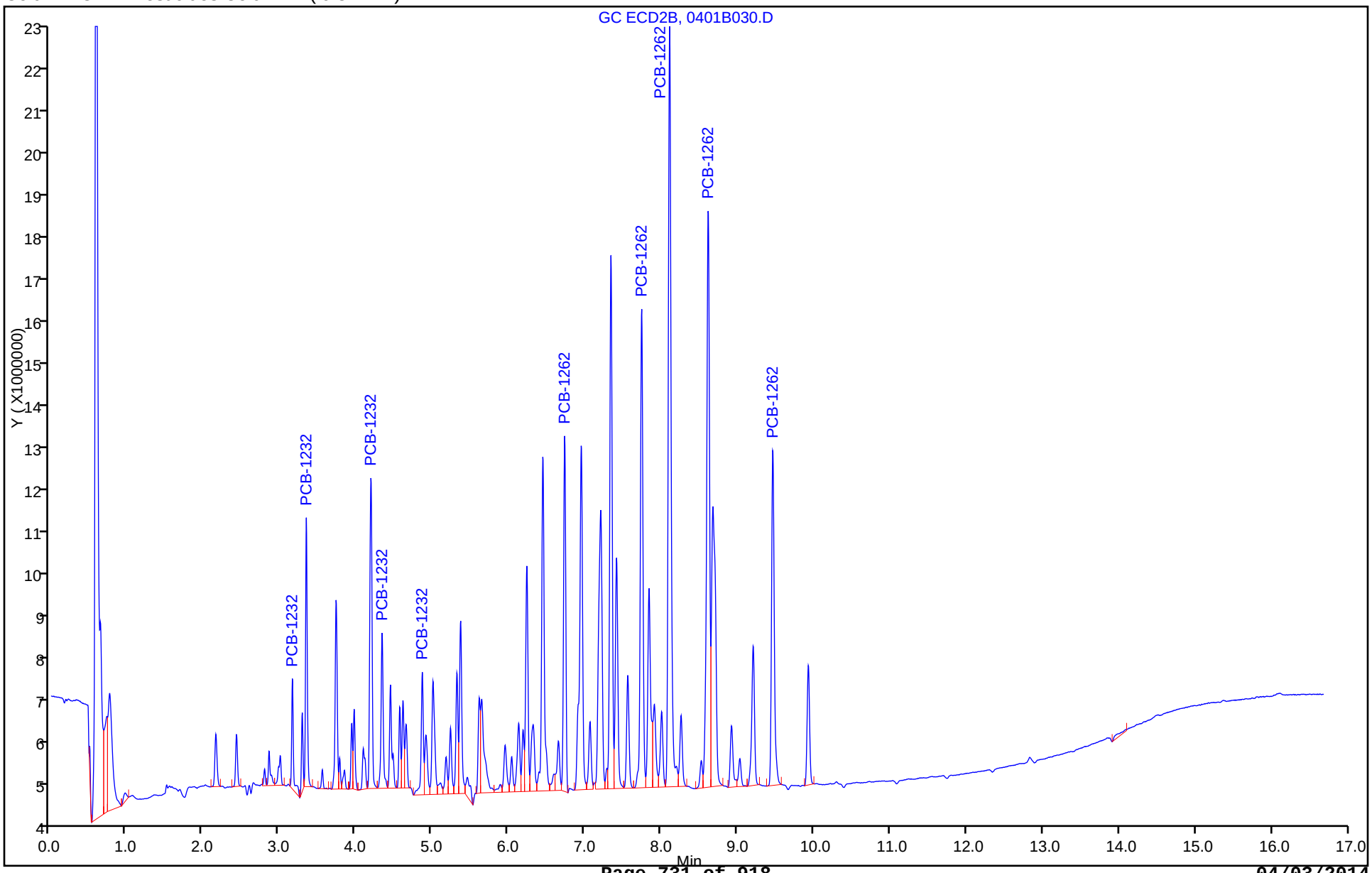
RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
7 PCB-1232					
3.164	3.166	-0.002	3983901	25.7	
3.347	3.346	0.001	9216875	16.9	
4.194	4.196	-0.002	14385781	23.3	
4.340	4.340	0.0	6877835	22.9	
4.867	4.870	-0.003	5607215	23.7	
	Average of Peak Amounts =			22.5	
5 PCB-1262					
6.734	6.733	0.001	15941717	23.1	
7.744	7.743	0.001	25085909	23.5	
8.110	8.110	0.0	43960997	25.3	
8.614	8.613	0.001	34633690	24.3	
9.460	9.463	-0.003	18654290	24.5	
	Average of Peak Amounts =			24.1	
S 8 Polychlorinated biphenyls, Total					
				46.6	

Report Date: 02-Apr-2014 09:01:47 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B030.D				
Injection Date:	02-Apr-2014 00:44:43	Instrument ID:	SGC_P3b	Operator ID:	JAX
Lims ID:	STDL13262			Worklist Smp#:	30
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	30
Method:	PCB_P3b	Limit Group:	GCSV - 8082		

Column: CLP2 Pesticides Column 2 (0.32 mm)



FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-53458-1 Analy Batch No.: 219272

SDG No.:

Instrument ID: SGC_P3b GC Column: CLP2 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/02/2014 01:05 Calibration End Date: 04/02/2014 03:13 Calibration ID: 17688

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STDL14268 280-219272/37	0401B037.D
Level 2	STDL24268 280-219272/36	0401B036.D
Level 3	STDL34268 280-219272/35	0401B035.D
Level 4	STDL44268 280-219272/34	0401B034.D
Level 5	STDL54268 280-219272/33	0401B033.D
Level 6	STDL64268 280-219272/32	0401B032.D
Level 7	STDL74268 280-219272/31	0401B031.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	LVL 7				RT WINDOW	AVG RT
PCB-1242 Peak 1	3.346	3.349	3.347	3.347	3.347	3.348	3.346				3.097 - 3.597	3.347
PCB-1242 Peak 2	4.193	4.196	4.194	4.194	4.193	4.195	4.192				3.943 - 4.443	4.194
PCB-1242 Peak 3	4.340	4.343	4.340	4.340	4.340	4.342	4.339				4.090 - 4.590	4.341
PCB-1242 Peak 4	4.866	4.869	4.867	4.867	4.867	4.868	4.866				4.617 - 5.117	4.867
PCB-1242 Peak 5	5.006	5.009	5.007	5.007	5.007	5.008	5.006				4.757 - 5.257	5.007
PCB-1268 Peak 1	8.613	8.613	8.610	8.610	8.610	8.612	8.609				8.360 - 8.860	8.611
PCB-1268 Peak 2	8.676	8.676	8.674	8.674	8.673	8.672	8.672				8.423 - 8.923	8.674
PCB-1268 Peak 3	9.030	9.029	9.030	9.030	9.030	9.028	9.029				8.780 - 9.280	9.029
PCB-1268 Peak 4	9.173	9.173	9.170	9.170	9.173	9.172	9.172				8.923 - 9.423	9.172
PCB-1268 Peak 5	9.926	9.929	9.927	9.927	9.927	9.925	9.929				9.677 - 10.177	9.927

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Denver Job No.: 280-53458-1 Analy Batch No.: 219272

SDG No.:

Instrument ID: SGC_P3b GC Column: CLP2 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/02/2014 01:05 Calibration End Date: 04/02/2014 03:13 Calibration ID: 17688

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STDL14268 280-219272/37	0401B037.D
Level 2	STDL24268 280-219272/36	0401B036.D
Level 3	STDL34268 280-219272/35	0401B035.D
Level 4	STDL44268 280-219272/34	0401B034.D
Level 5	STDL54268 280-219272/33	0401B033.D
Level 6	STDL64268 280-219272/32	0401B032.D
Level 7	STDL74268 280-219272/31	0401B031.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3 LVL 7	LVL 4		B	M1	M2								
PCB-1242 Peak 1	282017 193660	272370 180411	221970 181321	207848	Lin1	3490740.02	180879.329							0.9980		0.9900
PCB-1242 Peak 2	1004971 761311	937941 714864	820157 730010	801069	Lin1	8893563.40	724808.713							0.9990		0.9900
PCB-1242 Peak 3	492785 361447	459774 339367	399790 347278	382354	Lin1	4797260.76	343858.264							0.9990		0.9900
PCB-1242 Peak 4	384456 267098	341134 247809	290964 258871	279843	Lin1	3797800.24	253240.146							0.9990		0.9900
PCB-1242 Peak 5	449430 336762	421503 318410	367834 328955	353925	Lin1	3967531.76	323718.356							0.9990		0.9900
PCB-1268 Peak 1	2166452 1680564	2014024 1611782	1792411 1680096	1771877	Lin1	15413538.3	1644258.81							0.9990		0.9900
PCB-1268 Peak 2	2158733 1672302	2021954 1614217	1775353 1670362	1732984	Lin1	15239864.2	1636016.55							1.0000		0.9900
PCB-1268 Peak 3	1755111 1399127	1637908 1353263	1452336 1412932	1451238	Lin1	10320098.5	1379072.41							0.9990		0.9900
PCB-1268 Peak 4	562792 455970	536218 445592	476050 468727	473146	Lin1	2994413.40	454847.342							0.9990		0.9900
PCB-1268 Peak 5	4993201 3892643	4661430 3904456	4184245 4105828	4186869	Lin1	27621831.4	3966422.97							0.9990		0.9900

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Denver Job No.: 280-53458-1 Analy Batch No.: 219272

SDG No.:

Instrument ID: SGC_P3b GC Column: CLP2 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/02/2014 01:05 Calibration End Date: 04/02/2014 03:13 Calibration ID: 17688

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STDL14268 280-219272/37	0401B037.D
Level 2	STDL24268 280-219272/36	0401B036.D
Level 3	STDL34268 280-219272/35	0401B035.D
Level 4	STDL44268 280-219272/34	0401B034.D
Level 5	STDL54268 280-219272/33	0401B033.D
Level 6	STDL64268 280-219272/32	0401B032.D
Level 7	STDL74268 280-219272/31	0401B031.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
		LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
PCB-1242 Peak 1	Lin1	7050421 135308504	13618490 181321061	22196963	51962021	96829924	25.0 750	50.0 1000	100	250	500
PCB-1242 Peak 2	Lin1	25124285 536148149	46897042 730010242	82015656	200267231	380655645	25.0 750	50.0 1000	100	250	500
PCB-1242 Peak 3	Lin1	12319616 254525141	22988698 347277521	39979012	95588396	180723298	25.0 750	50.0 1000	100	250	500
PCB-1242 Peak 4	Lin1	9611406 185856398	17056701 258871297	29096430	69960733	133549027	25.0 750	50.0 1000	100	250	500
PCB-1242 Peak 5	Lin1	11235745 238807488	21075131 328955184	36783373	88481177	168381226	25.0 750	50.0 1000	100	250	500
PCB-1268 Peak 1	Lin1	54161308 1208836246	100701196 1680096106	179241097	442969131	840282004	25.0 750	50.0 1000	100	250	500
PCB-1268 Peak 2	Lin1	53968318 1210663052	101097679 1670361623	177535299	433246096	836151247	25.0 750	50.0 1000	100	250	500
PCB-1268 Peak 3	Lin1	43877763 1014947342	81895383 1412932336	145233590	362809553	699563426	25.0 750	50.0 1000	100	250	500
PCB-1268 Peak 4	Lin1	14069790 334193728	26810882 468726560	47605046	118286412	227985115	25.0 750	50.0 1000	100	250	500
PCB-1268 Peak 5	Lin1	124830014 2928341836	233071520 4105827923	418424495	1046717177	1946321304	25.0 750	50.0 1000	100	250	500

Curve Type Legend:
Lin1 = Linear 1/conc

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B031.D
Lims ID: STDL74268
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 02-Apr-2014 01:05:58 ALS Bottle#: 31 Worklist Smp#: 31
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL74268
Operator ID: JAX Instrument ID: SGC_P3b
Sublist: chrom-PCB_P3b*sub5

Method: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\PCB_P3b.m
Limit Group: GCSV - 8082
Last Update: 02-Apr-2014 09:01:48 Calib Date: 02-Apr-2014 03:13:50
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B037.D

Column 1 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK001

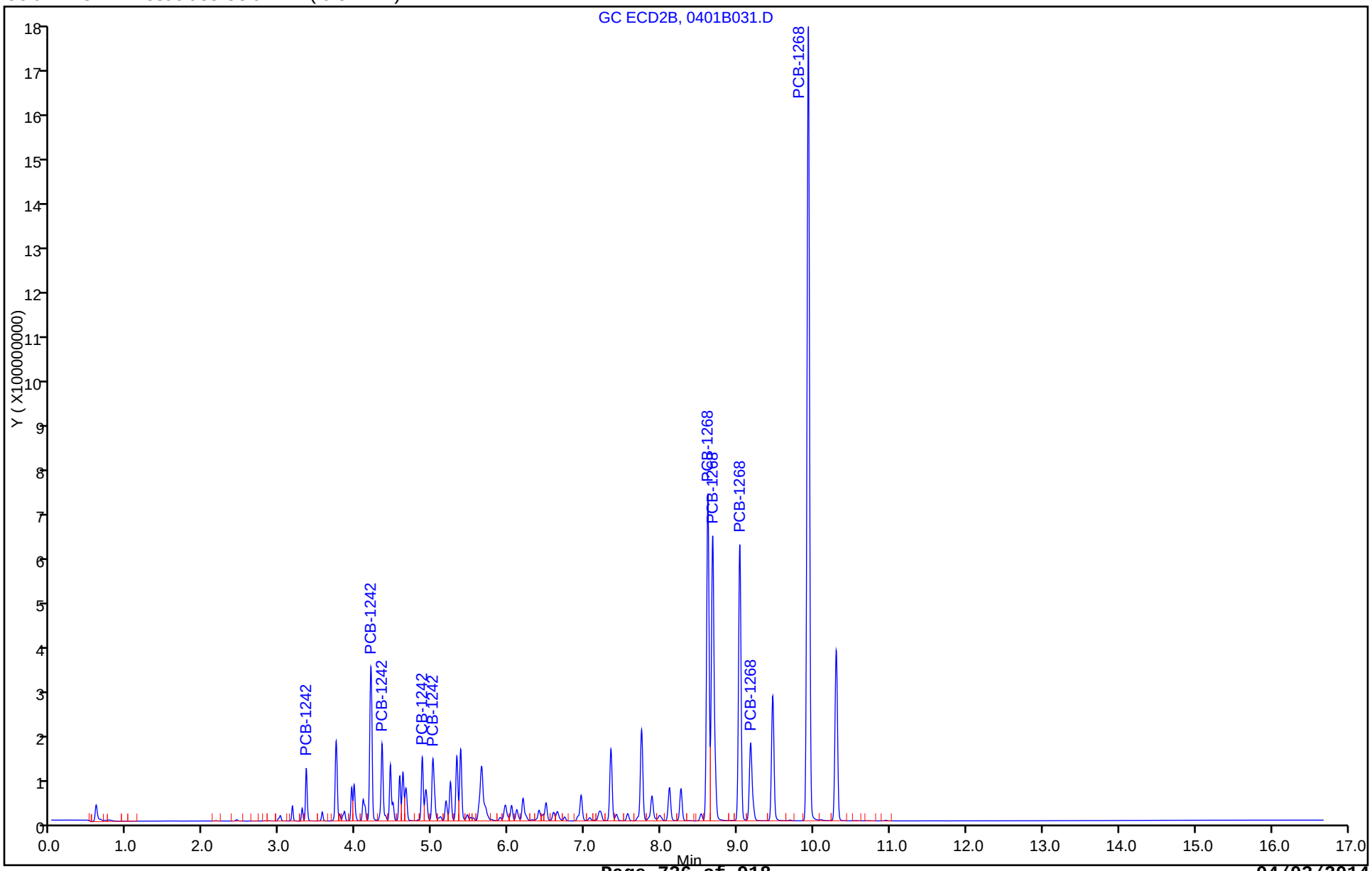
RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
10 PCB-1242					
3.346	3.347	-0.001	181321061	983.1	
4.192	4.193	-0.001	730010242	994.9	
4.339	4.340	-0.001	347277521	996.0	
4.866	4.867	-0.001	258871297	1007.2	
5.006	5.007	-0.001	328955184	1003.9	
	Average of Peak Amounts =			997.0	
13 PCB-1268					
8.609	8.610	-0.001	1680096106	1012.4	
8.672	8.673	-0.001	1670361623	1011.7	
9.029	9.030	-0.001	1412932336	1017.1	
9.172	9.173	-0.001	468726560	1023.9	
9.929	9.927	0.002	4105827923	1028.2	
	Average of Peak Amounts =			1018.7	
S 8 Polychlorinated biphenyls, Total					
				2015.7	

Report Date: 02-Apr-2014 09:01:49 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B031.D				
Injection Date:	02-Apr-2014 01:05:58	Instrument ID:	SGC_P3b	Operator ID:	JAX
Lims ID:	STDL74268			Worklist Smp#:	31
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	31
Method:	PCB_P3b	Limit Group:	GCSV - 8082		

Column: CLP2 Pesticides Column 2 (0.32 mm)



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B032.D
Lims ID: STDL64268
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 02-Apr-2014 01:27:13 ALS Bottle#: 32 Worklist Smp#: 32
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL64268
Operator ID: JAX Instrument ID: SGC_P3b
Sublist: chrom-PCB_P3b*sub5

Method: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\PCB_P3b.m
Limit Group: GCSV - 8082
Last Update: 02-Apr-2014 09:01:49 Calib Date: 02-Apr-2014 03:13:50
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B037.D

Column 1 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK001

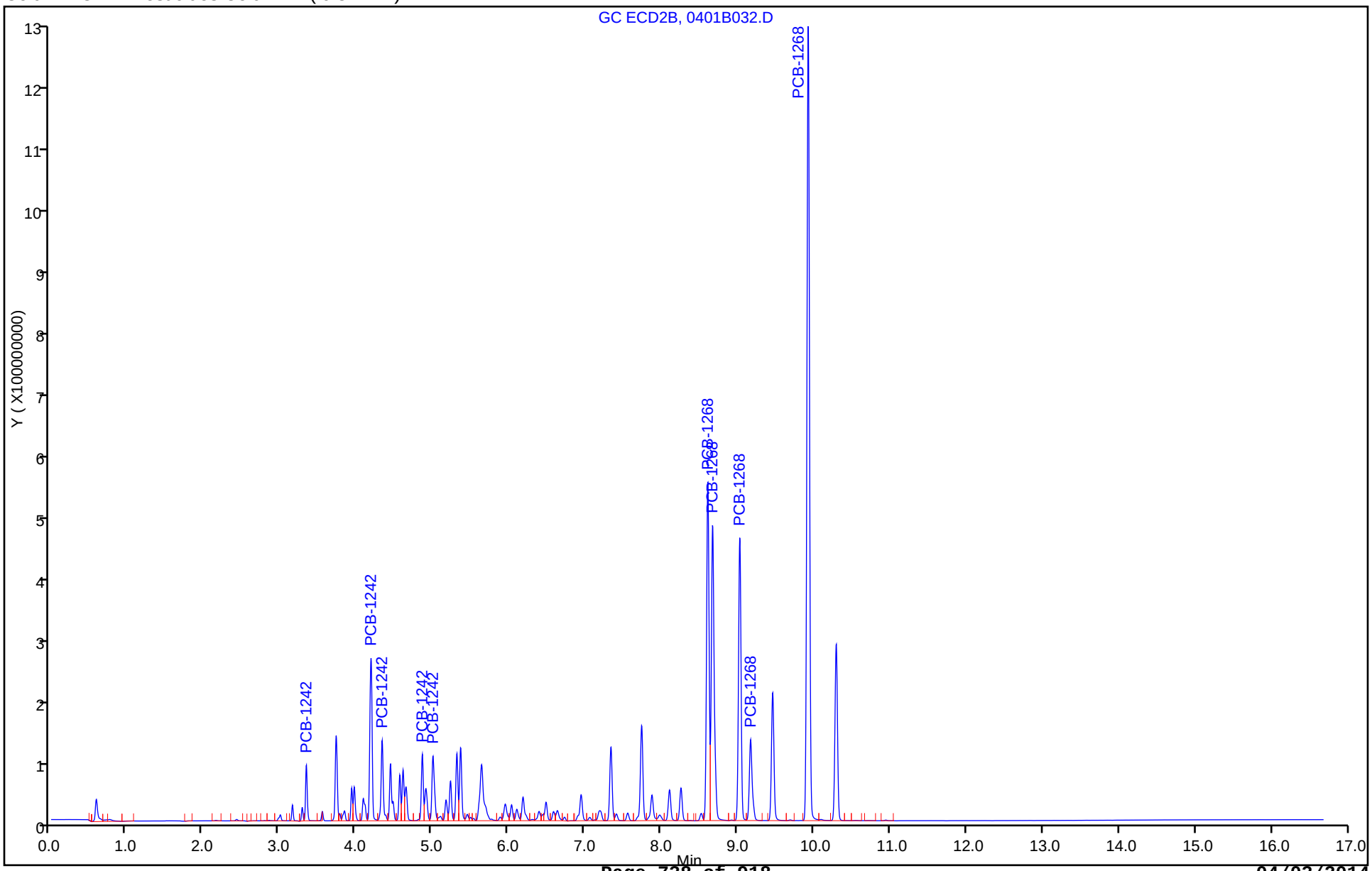
RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
10 PCB-1242					
3.348	3.347	0.001	135308504	728.8	
4.195	4.193	0.002	536148149	727.4	
4.342	4.340	0.002	254525141	726.3	
4.868	4.867	0.001	185856398	718.9	
5.008	5.007	0.001	238807488	725.4	
	Average of Peak Amounts =			725.4	
13 PCB-1268					
8.612	8.610	0.002	1208836246	725.8	
8.672	8.673	-0.001	1210663052	730.7	
9.028	9.030	-0.002	1014947342	728.5	
9.172	9.173	-0.001	334193728	728.2	
9.925	9.927	-0.002	2928341836	731.3	
	Average of Peak Amounts =			728.9	
S 8 Polychlorinated biphenyls, Total					
				1454.3	

Report Date: 02-Apr-2014 09:01:50 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B032.D				
Injection Date:	02-Apr-2014 01:27:13	Instrument ID:	SGC_P3b	Operator ID:	JAX
Lims ID:	STDL64268			Worklist Smp#:	32
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	32
Method:	PCB_P3b	Limit Group:	GCSV - 8082		

Column: CLP2 Pesticides Column 2 (0.32 mm)



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B033.D
Lims ID: STDL54268
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 02-Apr-2014 01:48:34 ALS Bottle#: 33 Worklist Smp#: 33
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL54268
Operator ID: JAX Instrument ID: SGC_P3b
Sublist: chrom-PCB_P3b*sub5

Method: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\PCB_P3b.m
Limit Group: GCSV - 8082
Last Update: 02-Apr-2014 09:01:50 Calib Date: 02-Apr-2014 03:13:50
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B037.D

Column 1 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK001

First Level Reviewer: jacksonto Date: 02-Apr-2014 07:31:14

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
10 PCB-1242					
3.347	3.347	0.0	96829924	516.0	
4.193	4.193	0.0	380655645	512.9	
4.340	4.340	0.0	180723298	511.6	
4.867	4.867	0.0	133549027	512.4	
5.007	5.007	0.0	168381226	507.9	
	Average of Peak Amounts =			512.2	
13 PCB-1268					
8.610	8.610	0.0	840282004	501.7	
8.673	8.673	0.0	836151247	501.8	
9.030	9.030	0.0	699563426	499.8	
9.173	9.173	0.0	227985115	494.7	
9.927	9.927	0.0	1946321304	483.7	
	Average of Peak Amounts =			496.3	
S 8 Polychlorinated biphenyls, Total					
				1008.5	

Report Date: 02-Apr-2014 09:01:51 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B033.D

Injection Date: 02-Apr-2014 01:48:34 Instrument ID: SGC_P3b Operator ID: JAX

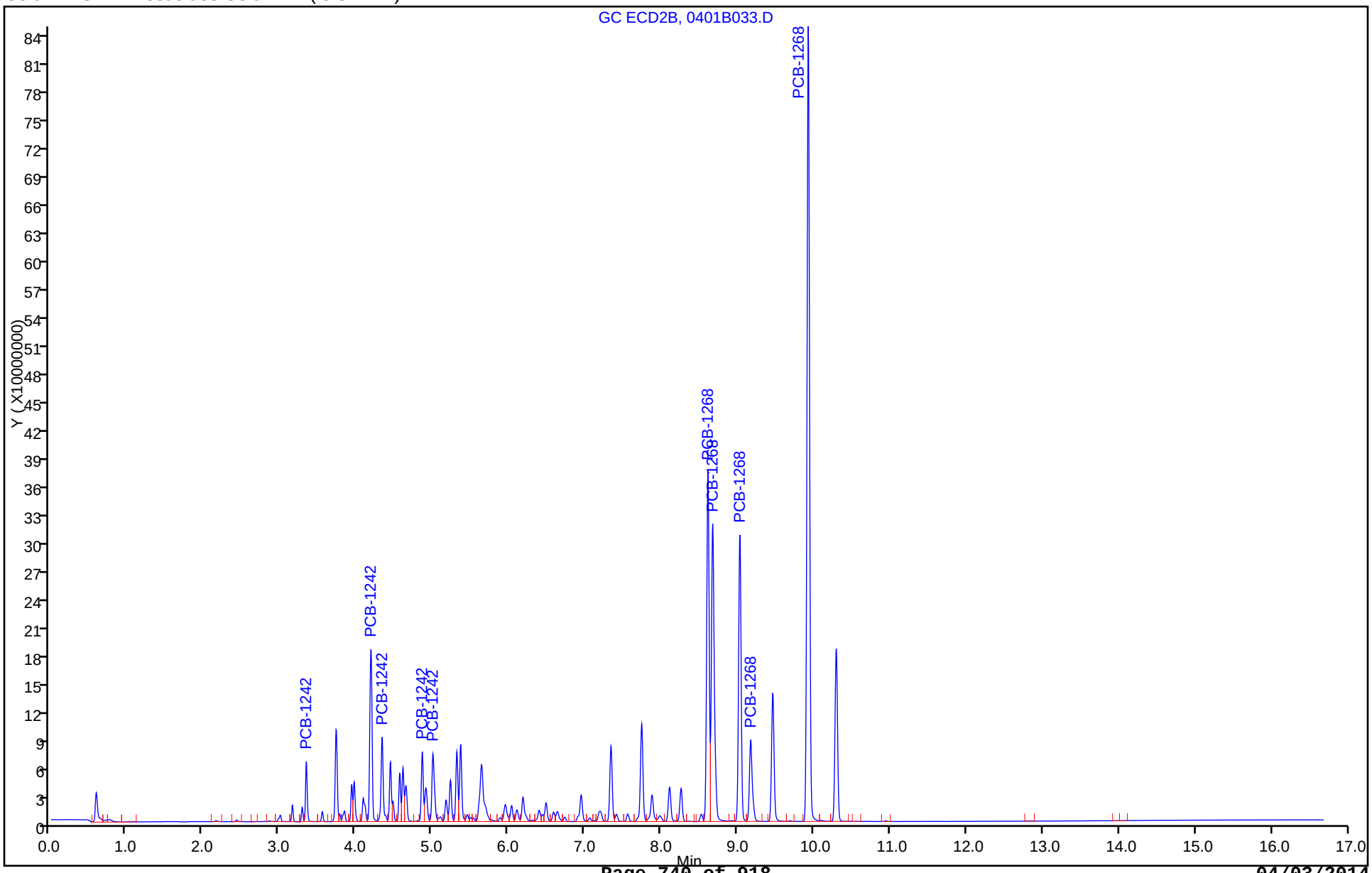
Lims ID: STDL54268 Worklist Smp#: 33

Client ID:

Injection Vol: 1.0 ul Dil. Factor: 1.0000 ALS Bottle#: 33

Method: PCB_P3b Limit Group: GCSV - 8082

Column: CLP2 Pesticides Column 2 (0.32 mm)



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B034.D
Lims ID: STDL44268
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 02-Apr-2014 02:09:51 ALS Bottle#: 34 Worklist Smp#: 34
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL44268
Operator ID: JAX Instrument ID: SGC_P3b
Sublist: chrom-PCB_P3b*sub5

Method: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\PCB_P3b.m
Limit Group: GCSV - 8082
Last Update: 02-Apr-2014 09:01:51 Calib Date: 02-Apr-2014 03:13:50
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B037.D

Column 1 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK001

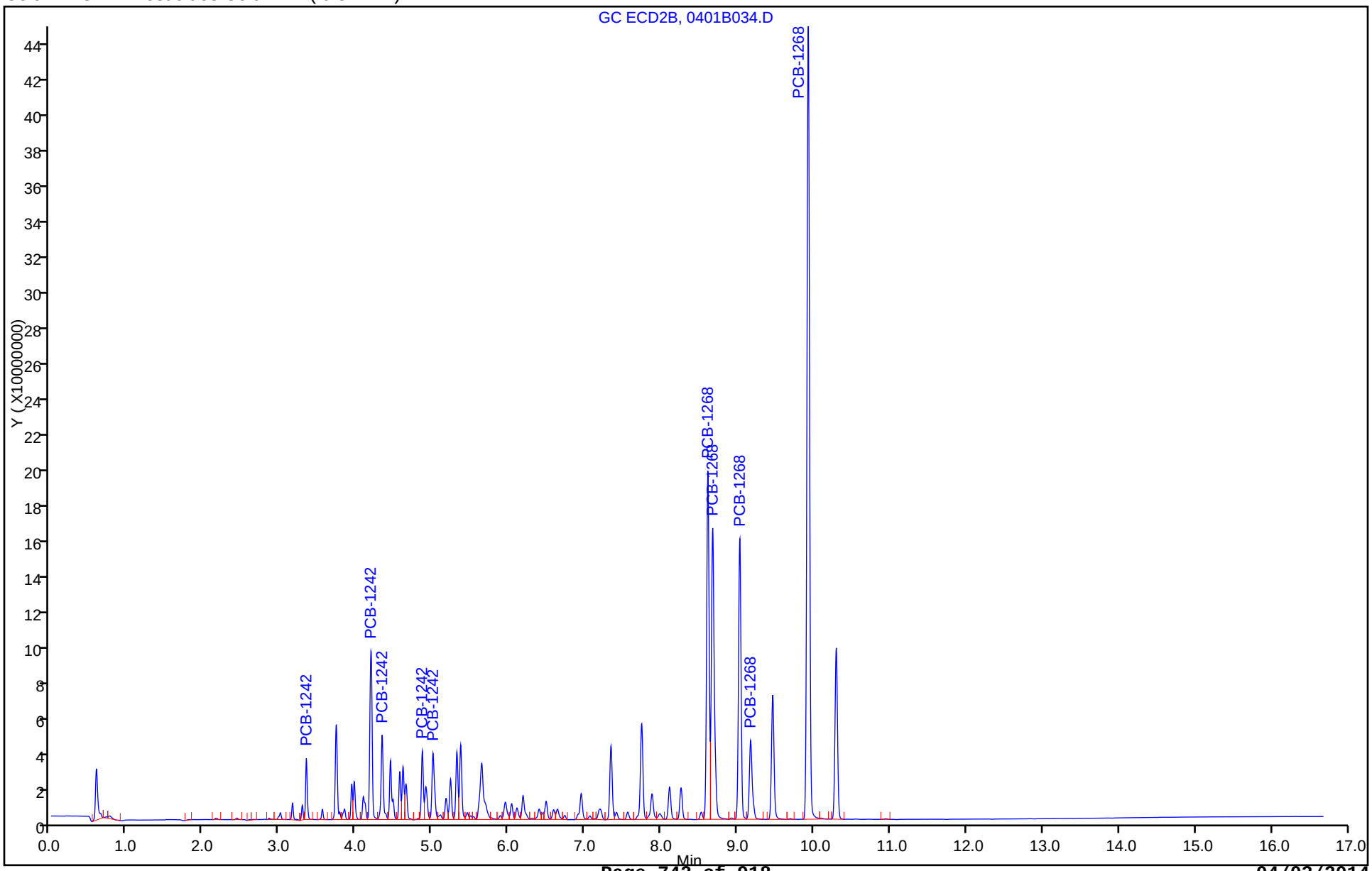
RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
10 PCB-1242					
3.347	3.347	0.0	51962021	268.0	
4.194	4.193	0.001	200267231	264.0	
4.340	4.340	0.0	95588396	264.0	
4.867	4.867	0.0	69960733	261.3	
5.007	5.007	0.0	88481177	261.1	
	Average of Peak Amounts =			263.7	
13 PCB-1268					
8.610	8.610	0.0	442969131	260.0	
8.674	8.673	0.001	433246096	255.5	
9.030	9.030	0.0	362809553	255.6	
9.170	9.173	-0.003	118286412	253.5	
9.927	9.927	0.0	1046717177	256.9	
	Average of Peak Amounts =			256.3	
S 8 Polychlorinated biphenyls, Total					
				520.0	

Report Date: 02-Apr-2014 09:01:52 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B034.D				
Injection Date:	02-Apr-2014 02:09:51	Instrument ID:	SGC_P3b	Operator ID:	JAX
Lims ID:	STDL44268			Worklist Smp#:	34
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	34
Method:	PCB_P3b	Limit Group:	GCSV - 8082		

Column: CLP2 Pesticides Column 2 (0.32 mm)



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B035.D
Lims ID: STDL34268
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 02-Apr-2014 02:31:12 ALS Bottle#: 35 Worklist Smp#: 35
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL34268
Operator ID: JAX Instrument ID: SGC_P3b
Sublist: chrom-PCB_P3b*sub5

Method: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\PCB_P3b.m
Limit Group: GCSV - 8082
Last Update: 02-Apr-2014 09:01:52 Calib Date: 02-Apr-2014 03:13:50
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B037.D

Column 1 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK001

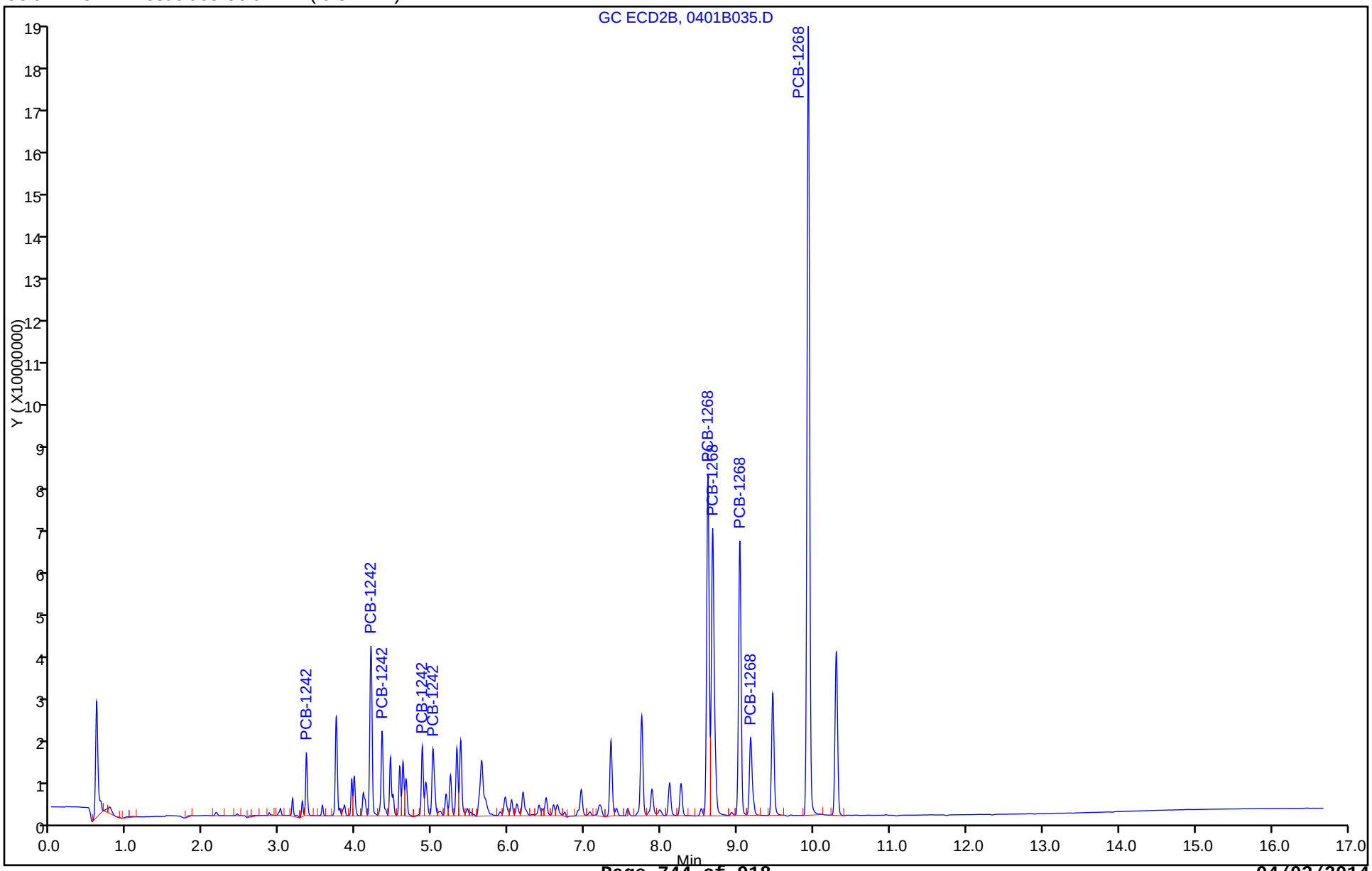
RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
10 PCB-1242					
3.347	3.347	0.0	22196963	103.4	
4.194	4.193	0.001	82015656	100.9	
4.340	4.340	0.0	39979012	102.3	
4.867	4.867	0.0	29096430	99.9	
5.007	5.007	0.0	36783373	101.4	
	Average of Peak Amounts =			101.6	
13 PCB-1268					
8.610	8.610	0.0	179241097	99.6	
8.674	8.673	0.001	177535299	99.2	
9.030	9.030	0.0	145233590	97.8	
9.170	9.173	-0.003	47605046	98.1	
9.927	9.927	0.0	418424495	98.5	
	Average of Peak Amounts =			98.7	
S 8 Polychlorinated biphenyls, Total					
				200.2	

Report Date: 02-Apr-2014 09:01:52 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B035.D				
Injection Date:	02-Apr-2014 02:31:12	Instrument ID:	SGC_P3b	Operator ID:	JAX
Lims ID:	STDL34268			Worklist Smp#:	35
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	35
Method:	PCB_P3b	Limit Group:	GCSV - 8082		

Column: CLP2 Pesticides Column 2 (0.32 mm)



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B036.D
Lims ID: STDL24268
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 02-Apr-2014 02:52:35 ALS Bottle#: 36 Worklist Smp#: 36
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL24268
Operator ID: JAX Instrument ID: SGC_P3b
Sublist: chrom-PCB_P3b*sub5

Method: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\PCB_P3b.m
Limit Group: GCSV - 8082
Last Update: 02-Apr-2014 09:01:53 Calib Date: 02-Apr-2014 03:13:50
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B037.D

Column 1 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK001

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
10 PCB-1242					
3.349	3.347	0.002	13618490	56.0	
4.196	4.193	0.003	46897042	52.4	
4.343	4.340	0.003	22988698	52.9	
4.869	4.867	0.002	17056701	52.4	
5.009	5.007	0.002	21075131	52.8	
	Average of Peak Amounts =			53.3	
13 PCB-1268					
8.613	8.610	0.003	100701196	51.9	
8.676	8.673	0.003	101097679	52.5	
9.029	9.030	-0.001	81895383	51.9	
9.173	9.173	0.0	26810882	52.4	
9.929	9.927	0.002	233071520	51.8	
	Average of Peak Amounts =			52.1	
S 8 Polychlorinated biphenyls, Total					
				105.4	

Report Date: 02-Apr-2014 09:01:53 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B036.D

Injection Date: 02-Apr-2014 02:52:35 Instrument ID: SGC_P3b Operator ID: JAX

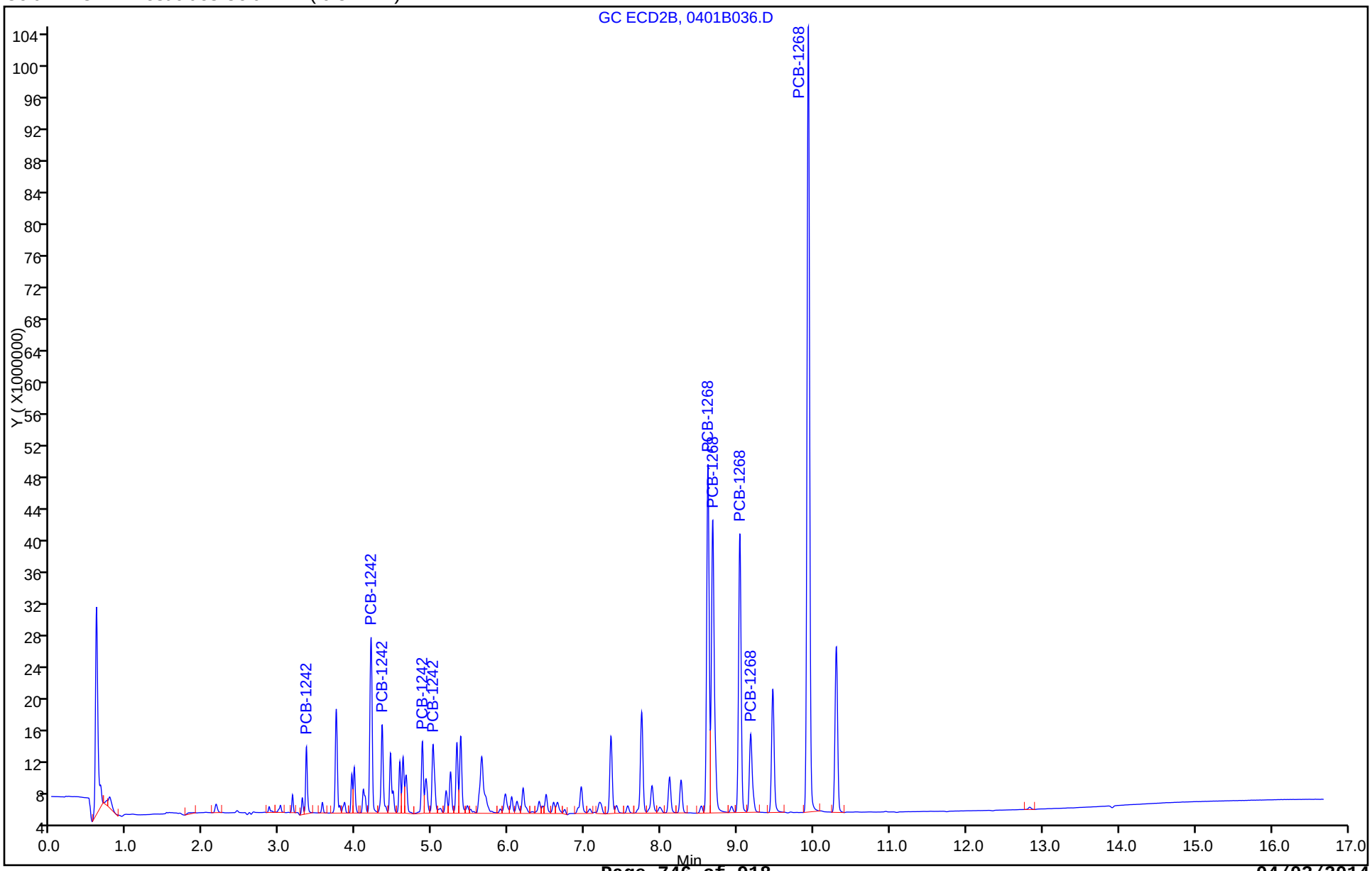
Lims ID: STDL24268 Worklist Smp#: 36

Client ID:

Injection Vol: 1.0 ul Dil. Factor: 1.0000 ALS Bottle#: 36

Method: PCB_P3b Limit Group: GCSV - 8082

Column: CLP2 Pesticides Column 2 (0.32 mm)



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B037.D
Lims ID: STDL14268
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 02-Apr-2014 03:13:50 ALS Bottle#: 37 Worklist Smp#: 37
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL14268
Operator ID: JAX Instrument ID: SGC_P3b
Sublist: chrom-PCB_P3b*sub5

Method: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\PCB_P3b.m
Limit Group: GCSV - 8082
Last Update: 02-Apr-2014 09:01:54 Calib Date: 02-Apr-2014 03:13:50
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B037.D

Column 1 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK001

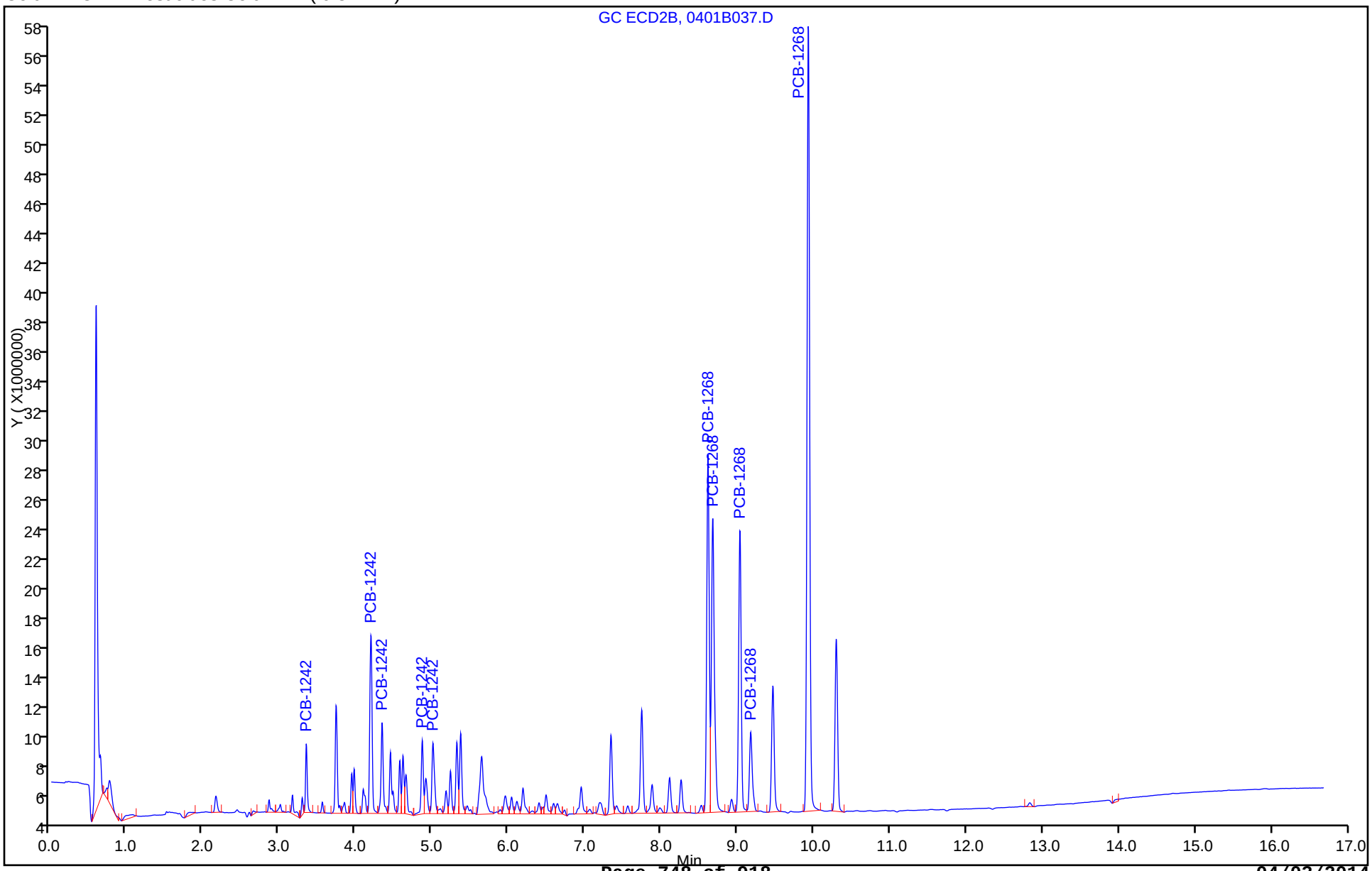
RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
10 PCB-1242					
3.346	3.347	-0.001	7050421	19.7	
4.193	4.193	0.0	25124285	22.4	
4.340	4.340	0.0	12319616	21.9	
4.866	4.867	-0.001	9611406	23.0	
5.006	5.007	-0.001	11235745	22.5	
	Average of Peak Amounts =			21.9	
13 PCB-1268					
8.613	8.610	0.003	54161308	23.6	
8.676	8.673	0.003	53968318	23.7	
9.030	9.030	0.0	43877763	24.3	
9.173	9.173	0.0	14069790	24.3	
9.926	9.927	-0.001	124830014	24.5	
	Average of Peak Amounts =			24.1	
S 8 Polychlorinated biphenyls, Total					
				46.0	

Report Date: 02-Apr-2014 09:01:54 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B037.D				
Injection Date:	02-Apr-2014 03:13:50	Instrument ID:	SGC_P3b	Operator ID:	JAX
Lims ID:	STDL14268			Worklist Smp#:	37
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	37
Method:	PCB_P3b	Limit Group:	GCSV - 8082		

Column: CLP2 Pesticides Column 2 (0.32 mm)



FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-53458-1

SDG No.:

Lab Sample ID: ICV 280-219270/38 Calibration Date: 04/02/2014 03:13

Instrument ID: SGC_P3a Calib Start Date: 04/01/2014 14:47

GC Column: CLP1 ID: 0.32(mm) Calib End Date: 04/01/2014 16:55

Lab File ID: 0401A038.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1248 Peak 1	Lin1		59935904		0.254	0.250	1.8	20.0
PCB-1248 Peak 2	Lin1		161514644		0.256	0.250	2.3	20.0
PCB-1248 Peak 3	Lin1		166310400		0.254	0.250	1.6	20.0
PCB-1248 Peak 4	Lin1		99792288		0.251	0.250	0.4	20.0
PCB-1248 Peak 5	Lin1		92337416		0.267	0.250	6.8	20.0

FORM VII
PCBS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-53458-1

SDG No.:

Lab Sample ID: ICV 280-219270/38 Calibration Date: 04/02/2014 03:13

Instrument ID: SGC_P3a Calib Start Date: 04/01/2014 14:47

GC Column: CLP1 ID: 0.32(mm) Calib End Date: 04/01/2014 16:55

Lab File ID: 0401A038.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1248 Peak 1	3.55	3.30	3.80
PCB-1248 Peak 2	4.01	3.76	4.26
PCB-1248 Peak 3	4.61	4.36	4.86
PCB-1248 Peak 4	5.31	5.06	5.56
PCB-1248 Peak 5	5.85	5.60	6.10

TestAmerica Denver
Target Compound Quantitation Report

Data File:	\\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A038.D				
Lims ID:	ICV				
Client ID:					
Sample Type:	ICV				
Inject. Date:	02-Apr-2014 03:13:50	ALS Bottle#:	38	Worklist Smp#:	38
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	ICV				
Operator ID:	JAX	Instrument ID:	SGC_P3a		
Sublist:					

Method:	\\Denchrom\ChromData\SGC_P3a\20140401-21600.b\PCB_P3a.m		
Limit Group:	GCSV - 8082		
Last Update:	02-Apr-2014 07:44:29	Calib Date:	02-Apr-2014 02:52:35
Integrator:	Falcon		
Quant Method:	External Standard	Quant By:	Initial Calibration
Last ICal File:	\\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A037.D		

Column 1 :	CLP1 Pesticides Column 1 (0.32 mm)	Det: GC ECD1A
Process Host:	XAWRK018	

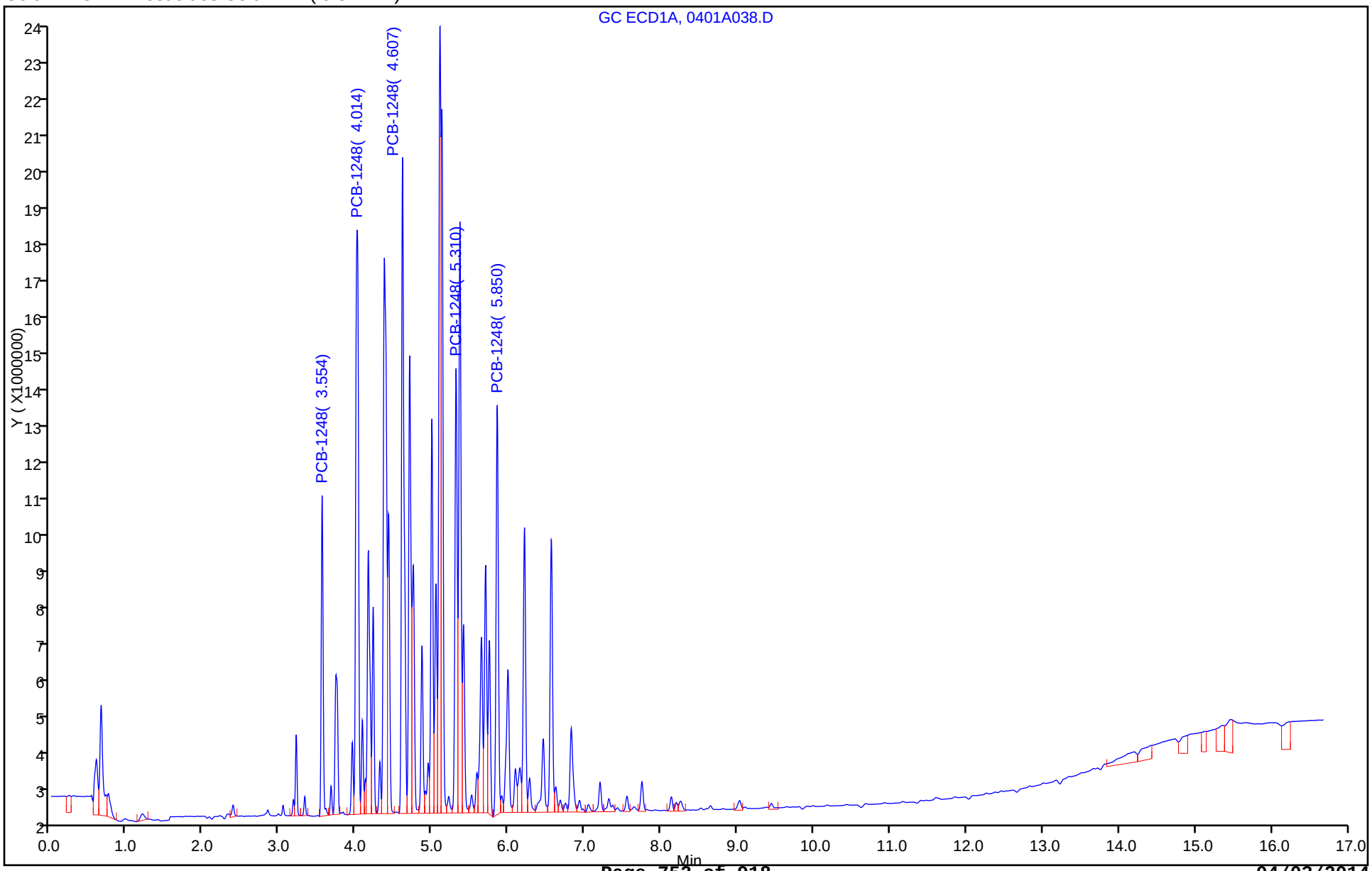
RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
4 PCB-1248					
3.554	3.554	0.0	14983976	254.4	
4.014	4.014	0.0	40378661	255.8	
4.607	4.611	-0.004	41577600	253.9	
5.310	5.311	-0.001	24948072	251.1	
5.850	5.851	-0.001	23084354	267.0	
	Average of Peak Amounts =			256.4	

Report Date: 02-Apr-2014 07:44:30 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A038.D				
Injection Date:	02-Apr-2014 03:13:50	Instrument ID:	SGC_P3a	Operator ID:	JAX
Lims ID:	ICV			Worklist Smp#:	38
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	38
Method:	PCB_P3a	Limit Group:	GCSV - 8082		

Column: CLP1 Pesticides Column 1 (0.32 mm)



FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-53458-1

SDG No.:

Lab Sample ID: ICV 280-219270/39 Calibration Date: 04/02/2014 03:35

Instrument ID: SGC_P3a Calib Start Date: 04/01/2014 17:16

GC Column: CLP1 ID: 0.32(mm) Calib End Date: 04/01/2014 19:25

Lab File ID: 0401A039.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1221 Peak 1	Lin1		35957848		0.236	0.250	-5.4	20.0
PCB-1221 Peak 2	Lin1		25474436		0.245	0.250	-1.9	20.0
PCB-1221 Peak 3	Lin1		90705264		0.251	0.250	0.2	20.0
PCB-1254 Peak 1	Lin1		139058560		0.248	0.250	-0.8	20.0
PCB-1254 Peak 2	Lin1		195571028		0.246	0.250	-1.8	20.0
PCB-1254 Peak 3	Lin1		269166060		0.245	0.250	-2.2	20.0
PCB-1254 Peak 4	Lin1		211828040		0.244	0.250	-2.2	20.0
PCB-1254 Peak 5	Lin1		293225764		0.245	0.250	-1.9	20.0

FORM VII
PCBS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-53458-1

SDG No.:

Lab Sample ID: ICV 280-219270/39 Calibration Date: 04/02/2014 03:35

Instrument ID: SGC_P3a Calib Start Date: 04/01/2014 17:16

GC Column: CLP1 ID: 0.32(mm) Calib End Date: 04/01/2014 19:25

Lab File ID: 0401A039.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1221 Peak 1	3.04	2.79	3.29
PCB-1221 Peak 2	3.18	2.93	3.43
PCB-1221 Peak 3	3.22	2.97	3.47
PCB-1254 Peak 1	5.05	4.80	5.30
PCB-1254 Peak 2	5.37	5.12	5.62
PCB-1254 Peak 3	5.85	5.60	6.10
PCB-1254 Peak 4	6.21	5.96	6.46
PCB-1254 Peak 5	6.82	6.57	7.07

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A039.D
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 02-Apr-2014 03:35:12 ALS Bottle#: 39 Worklist Smp#: 39
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: ICV
Operator ID: JAX Instrument ID: SGC_P3a
Sublist:

Method: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\PCB_P3a.m
Limit Group: GCSV - 8082
Last Update: 02-Apr-2014 07:44:29 Calib Date: 02-Apr-2014 02:52:35
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A037.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Process Host: XAWRK018

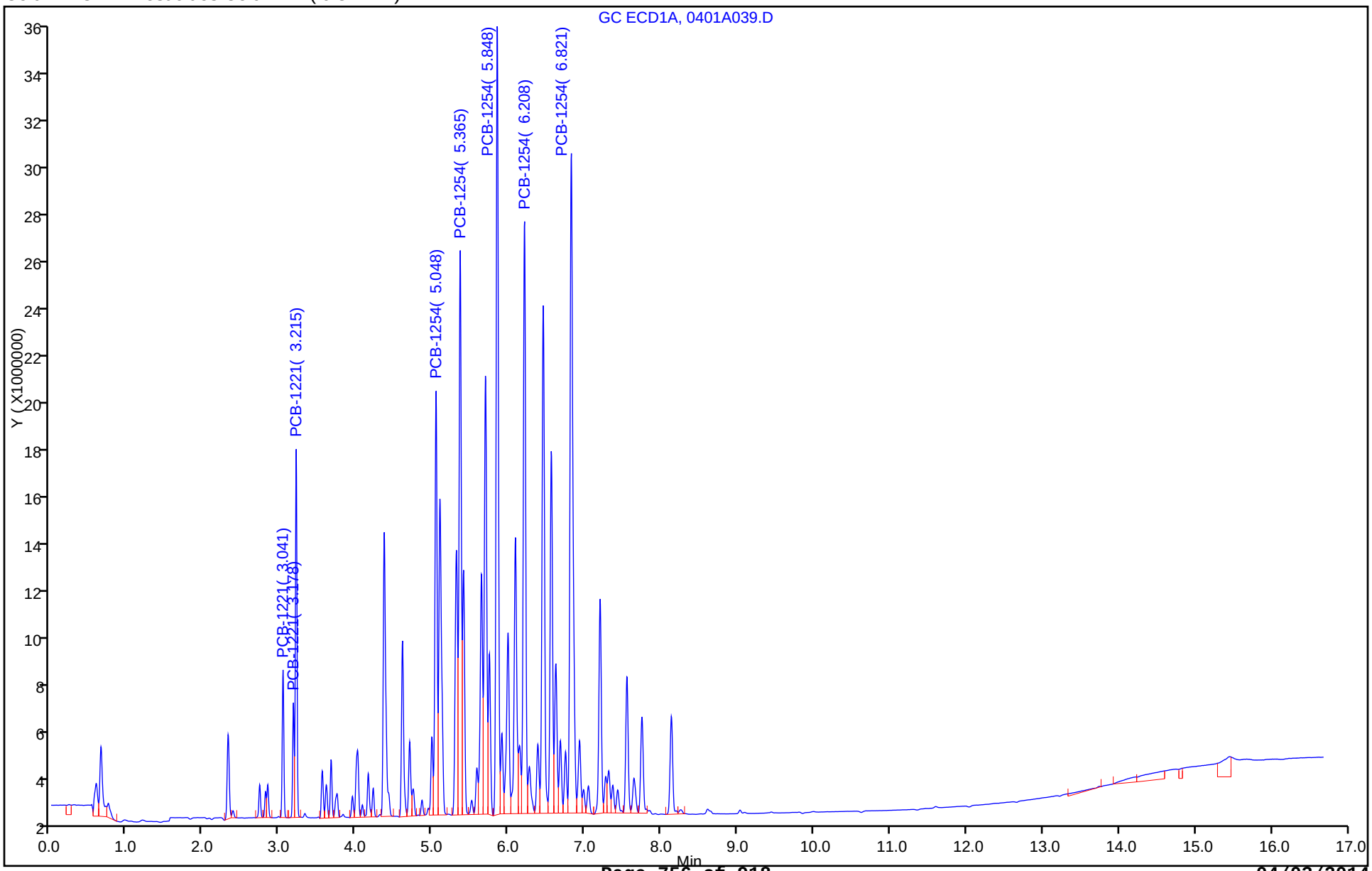
RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
2 PCB-1221					
3.041	3.042	-0.001	8989462	236.5	
3.178	3.179	-0.001	6368609	245.2	
3.215	3.216	-0.001	22676316	250.6	
	Average of Peak Amounts =			244.1	
7 PCB-1254					
5.048	5.049	-0.001	34764640	248.1	
5.365	5.366	-0.001	48892757	245.5	
5.848	5.852	-0.004	67291515	244.5	
6.208	6.209	-0.001	52957010	244.5	
6.821	6.822	-0.001	73306441	245.2	
	Average of Peak Amounts =			245.6	

Report Date: 02-Apr-2014 07:44:31 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A039.D				
Injection Date:	02-Apr-2014 03:35:12	Instrument ID:	SGC_P3a	Operator ID:	JAX
Lims ID:	ICV			Worklist Smp#:	39
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	39
Method:	PCB_P3a	Limit Group:	GCSV - 8082		

Column: CLP1 Pesticides Column 1 (0.32 mm)



FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-53458-1

SDG No.:

Lab Sample ID: ICV 280-219270/40 Calibration Date: 04/02/2014 03:56

Instrument ID: SGC_P3a Calib Start Date: 04/01/2014 19:46

GC Column: CLP1 ID: 0.32(mm) Calib End Date: 04/01/2014 21:54

Lab File ID: 0401A040.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1016 Peak 1	Lin1		128590436		0.251	0.250	0.3	20.0
PCB-1016 Peak 2	Lin1		293239448		0.257	0.250	2.8	20.0
PCB-1016 Peak 3	Lin1		132281476		0.255	0.250	1.9	20.0
PCB-1016 Peak 4	Lin1		84544568		0.257	0.250	3.0	20.0
PCB-1016 Peak 5	Lin1		134025988		0.249	0.250	-0.2	20.0
PCB-1260 Peak 1	Lin1		223724388		0.265	0.250	5.9	20.0
PCB-1260 Peak 2	Lin1		407214244		0.259	0.250	3.5	20.0
PCB-1260 Peak 3	Lin1		194514612		0.240	0.250	-4.1	20.0
PCB-1260 Peak 4	Lin1		438464140		0.248	0.250	-0.8	20.0
PCB-1260 Peak 5	Lin1		261725748		0.249	0.250	-0.5	20.0

FORM VII
PCBS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-53458-1

SDG No.:

Lab Sample ID: ICV 280-219270/40 Calibration Date: 04/02/2014 03:56

Instrument ID: SGC_P3a Calib Start Date: 04/01/2014 19:46

GC Column: CLP1 ID: 0.32(mm) Calib End Date: 04/01/2014 21:54

Lab File ID: 0401A040.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1016 Peak 1	3.55	3.31	3.81
PCB-1016 Peak 2	4.02	3.77	4.27
PCB-1016 Peak 3	4.16	3.91	4.41
PCB-1016 Peak 4	4.22	3.97	4.47
PCB-1016 Peak 5	4.61	4.36	4.86
PCB-1260 Peak 1	6.09	5.84	6.34
PCB-1260 Peak 2	6.82	6.57	7.07
PCB-1260 Peak 3	7.31	7.06	7.56
PCB-1260 Peak 4	7.75	7.50	8.00
PCB-1260 Peak 5	8.13	7.88	8.38

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A040.D
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 02-Apr-2014 03:56:30 ALS Bottle#: 40 Worklist Smp#: 40
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: ICV
Operator ID: JAX Instrument ID: SGC_P3a
Sublist:

Method: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\PCB_P3a.m
Limit Group: GCSV - 8082
Last Update: 02-Apr-2014 07:44:29 Calib Date: 02-Apr-2014 02:52:35
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A037.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Process Host: XAWRK018

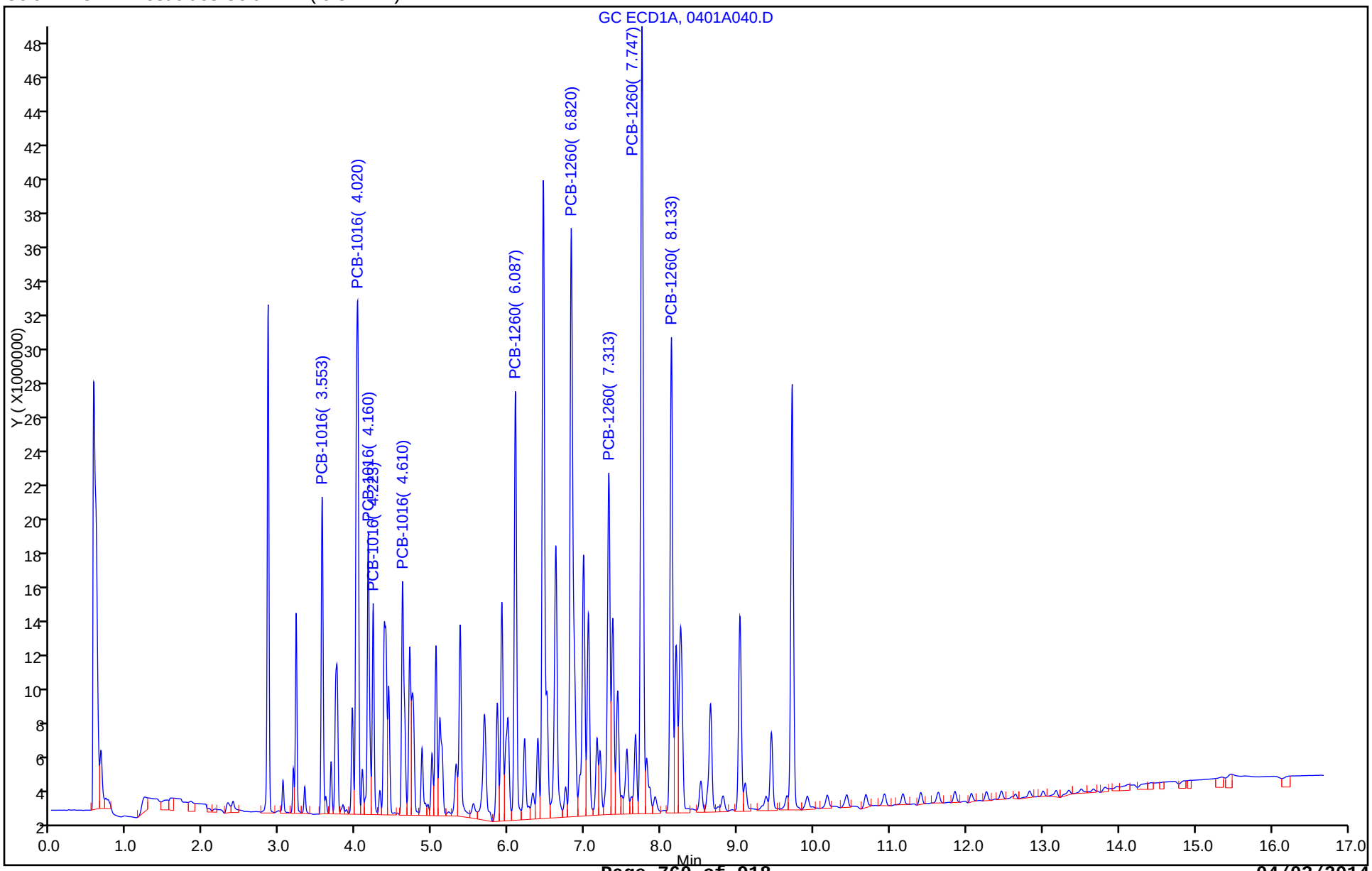
RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
5 PCB-1016					
3.553	3.555	-0.002	32147609	250.9	
4.020	4.019	0.001	73309862	257.0	
4.160	4.159	0.001	33070369	254.6	
4.223	4.222	0.001	21136142	257.5	
4.610	4.609	0.001	33506497	249.4	
	Average of Peak Amounts =			253.9	
8 PCB-1260					
6.087	6.089	-0.002	55931097	264.7	
6.820	6.819	0.001	101803561	258.8	
7.313	7.312	0.001	48628653	239.8	
7.747	7.749	-0.002	109616035	248.0	
8.133	8.132	0.001	65431437	248.8	
	Average of Peak Amounts =			252.0	

Report Date: 02-Apr-2014 07:44:33 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A040.D				
Injection Date:	02-Apr-2014 03:56:30	Instrument ID:	SGC_P3a	Operator ID:	JAX
Lims ID:	ICV			Worklist Smp#:	40
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	40
Method:	PCB_P3a	Limit Group:	GCSV - 8082		

Column: CLP1 Pesticides Column 1 (0.32 mm)



FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-53458-1

SDG No.:

Lab Sample ID: ICV 280-219270/41 Calibration Date: 04/02/2014 04:17

Instrument ID: SGC_P3a Calib Start Date: 04/01/2014 22:15

GC Column: CLP1 ID: 0.32(mm) Calib End Date: 04/02/2014 00:23

Lab File ID: 0401A041.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1232 Peak 1	Lin1		79873064		0.257	0.250	2.8	20.0
PCB-1232 Peak 2	Lin1		64406112		0.251	0.250	0.6	20.0
PCB-1232 Peak 3	Lin1		143890192		0.253	0.250	1.3	20.0
PCB-1232 Peak 4	Lin1		65405464		0.255	0.250	1.9	20.0
PCB-1232 Peak 5	Lin1		62620696		0.255	0.250	2.1	20.0
PCB-1262 Peak 1	Lin1		181828620		0.272	0.250	8.7	20.0
PCB-1262 Peak 2	Lin1		238547156		0.256	0.250	2.6	20.0
PCB-1262 Peak 3	Lin1		130509192		0.256	0.250	2.5	20.0
PCB-1262 Peak 4	Lin1		78957144		0.264	0.250	5.5	20.0
PCB-1262 Peak 5	Lin1		258993828		0.254	0.250	1.7	20.0

FORM VII
PCBS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-53458-1

SDG No.:

Lab Sample ID: ICV 280-219270/41 Calibration Date: 04/02/2014 04:17

Instrument ID: SGC_P3a Calib Start Date: 04/01/2014 22:15

GC Column: CLP1 ID: 0.32(mm) Calib End Date: 04/02/2014 00:23

Lab File ID: 0401A041.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1232 Peak 1	3.21	2.96	3.46
PCB-1232 Peak 2	3.55	3.30	3.80
PCB-1232 Peak 3	4.02	3.77	4.27
PCB-1232 Peak 4	4.16	3.91	4.41
PCB-1232 Peak 5	4.61	4.36	4.86
PCB-1262 Peak 1	6.09	5.84	6.34
PCB-1262 Peak 2	6.45	6.20	6.70
PCB-1262 Peak 3	7.04	6.79	7.29
PCB-1262 Peak 4	7.42	7.17	7.67
PCB-1262 Peak 5	8.25	8.00	8.50

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A041.D
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 02-Apr-2014 04:17:44 ALS Bottle#: 41 Worklist Smp#: 41
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: ICV
Operator ID: JAX Instrument ID: SGC_P3a
Sublist:

Method: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\PCB_P3a.m
Limit Group: GCSV - 8082
Last Update: 02-Apr-2014 07:44:29 Calib Date: 02-Apr-2014 02:52:35
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A037.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Process Host: XAWRK018

First Level Reviewer: jacksonto Date: 02-Apr-2014 07:36:43

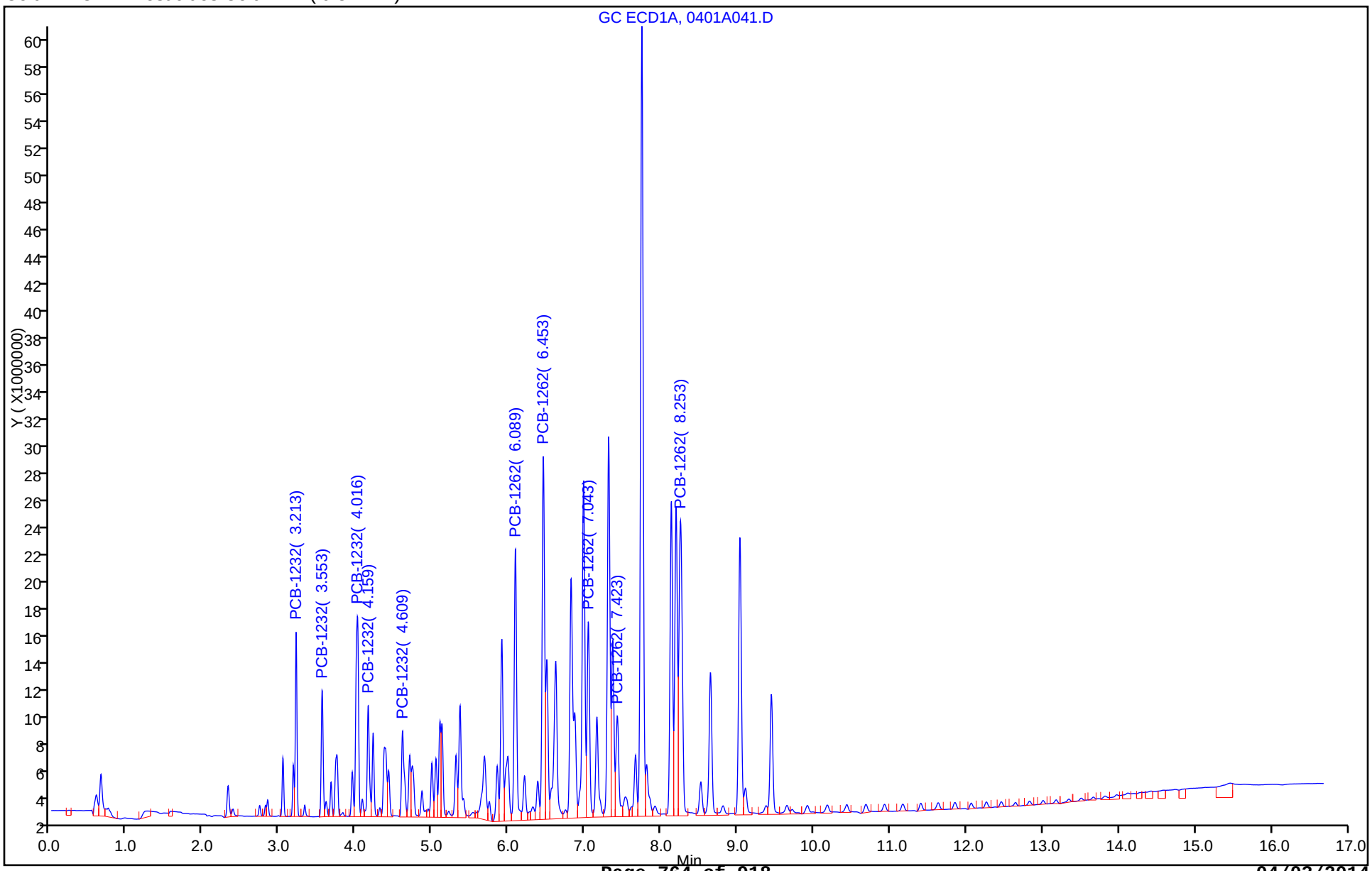
RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
3 PCB-1232					
3.213	3.214	-0.001	19968266	257.0	
3.553	3.554	-0.001	16101528	251.5	
4.016	4.018	-0.002	35972548	253.3	
4.159	4.158	0.001	16351366	254.6	
4.609	4.608	0.001	15655174	255.1	
	Average of Peak Amounts =			254.3	
10 PCB-1262					
6.089	6.088	0.001	45457155	271.9	
6.453	6.454	-0.001	59636789	256.4	
7.043	7.044	-0.001	32627298	256.1	
7.423	7.424	-0.001	19739286	263.8	
8.253	8.254	-0.001	64748457	254.2	
	Average of Peak Amounts =			260.5	

Report Date: 02-Apr-2014 07:44:33 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A041.D				
Injection Date:	02-Apr-2014 04:17:44	Instrument ID:	SGC_P3a	Operator ID:	JAX
Lims ID:	ICV			Worklist Smp#:	41
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	41
Method:	PCB_P3a	Limit Group:	GCSV - 8082		

Column: CLP1 Pesticides Column 1 (0.32 mm)



FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-53458-1

SDG No.:

Lab Sample ID: ICV 280-219270/42 Calibration Date: 04/02/2014 04:39

Instrument ID: SGC_P3a Calib Start Date: 04/02/2014 00:44

GC Column: CLP1 ID: 0.32(mm) Calib End Date: 04/02/2014 02:52

Lab File ID: 0401A042.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1242 Peak 1	Lin1		108734564		0.255	0.250	1.8	20.0
PCB-1242 Peak 2	Lin1		244726368		0.261	0.250	4.4	20.0
PCB-1242 Peak 3	Lin1		113272140		0.265	0.250	5.8	20.0
PCB-1242 Peak 4	Lin1		70304724		0.261	0.250	4.6	20.0
PCB-1242 Peak 5	Lin1		118354992		0.266	0.250	6.2	20.0
PCB-1268 Peak 1	Lin1		577500728			0.250	2.7	20.0
PCB-1268 Peak 2	Lin1		584332056			0.250	2.7	20.0
PCB-1268 Peak 3	Lin1		506737648			0.250	2.9	20.0
PCB-1268 Peak 4	Lin1		161062788			0.250	4.1	20.0
PCB-1268 Peak 5	Lin1		1514379696			0.250	3.9	20.0

FORM VII
PCBS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-53458-1

SDG No.:

Lab Sample ID: ICV 280-219270/42 Calibration Date: 04/02/2014 04:39

Instrument ID: SGC_P3a Calib Start Date: 04/02/2014 00:44

GC Column: CLP1 ID: 0.32(mm) Calib End Date: 04/02/2014 02:52

Lab File ID: 0401A042.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1242 Peak 1	3.55	3.31	3.81
PCB-1242 Peak 2	4.02	3.77	4.27
PCB-1242 Peak 3	4.16	3.91	4.41
PCB-1242 Peak 4	4.22	3.97	4.47
PCB-1242 Peak 5	4.61	4.36	4.86
PCB-1268 Peak 1	8.19	7.95	8.45
PCB-1268 Peak 2	8.25	8.00	8.50
PCB-1268 Peak 3	8.52	8.27	8.77
PCB-1268 Peak 4	8.64	8.39	8.89
PCB-1268 Peak 5	9.44	9.19	9.69

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A042.D
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 02-Apr-2014 04:39:08 ALS Bottle#: 42 Worklist Smp#: 42
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: ICV
Operator ID: JAX Instrument ID: SGC_P3a
Sublist:

Method: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\PCB_P3a.m
Limit Group: GCSV - 8082
Last Update: 02-Apr-2014 07:44:29 Calib Date: 02-Apr-2014 02:52:35
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A037.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Process Host: XAWRK018

First Level Reviewer: jacksonto Date: 02-Apr-2014 07:26:31

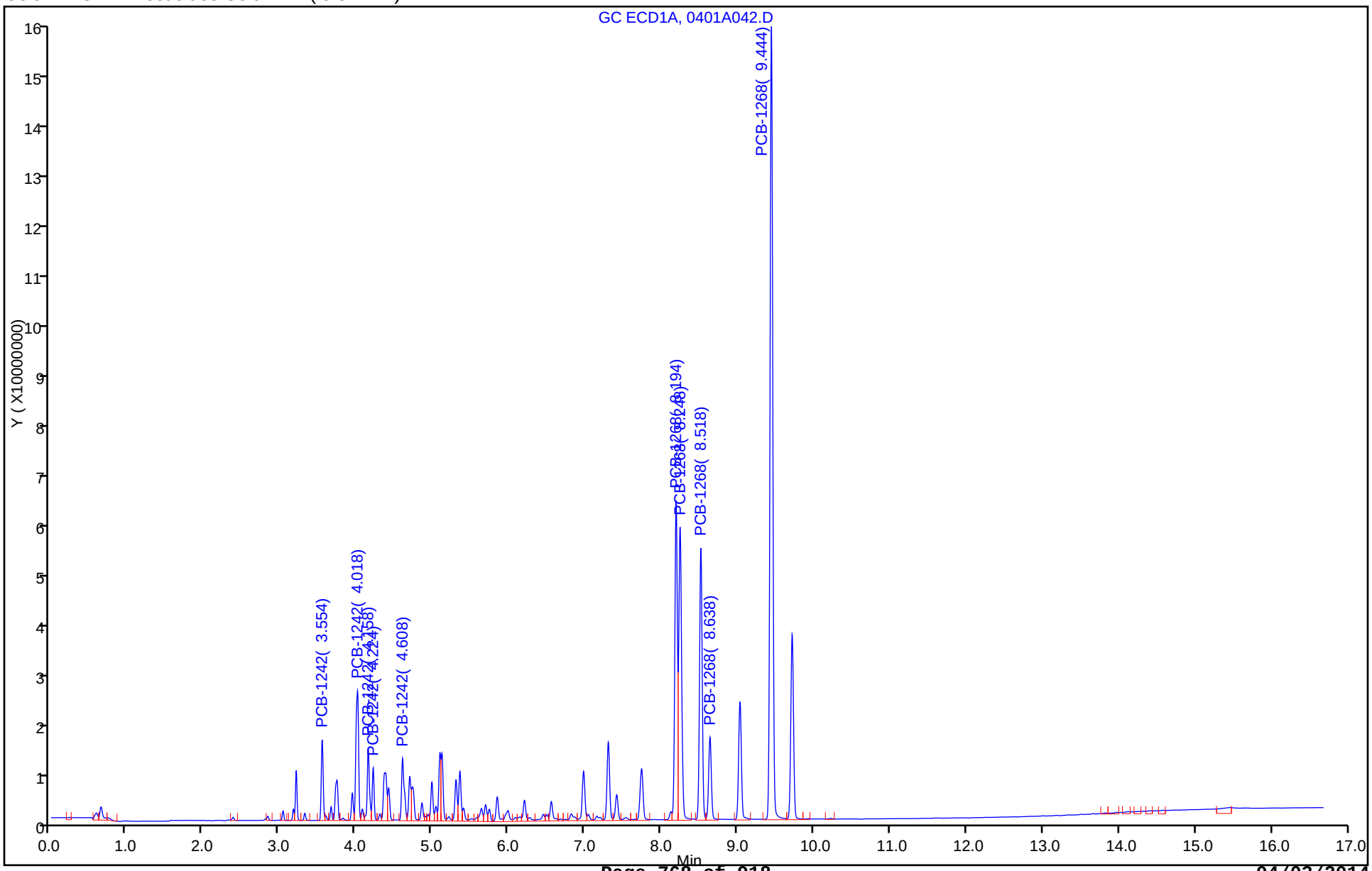
RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
6 PCB-1242					
3.554	3.556	-0.002	27183641	254.6	
4.018	4.019	-0.001	61181592	260.9	
4.158	4.159	-0.001	28318035	264.5	
4.224	4.222	0.002	17576181	261.5	
4.608	4.609	-0.001	29588748	265.5	
	Average of Peak Amounts =			261.4	
12 PCB-1268					
8.194	8.196	-0.002	144375182	256.8	
8.248	8.246	0.002	146083014	256.8	
8.518	8.519	-0.001	126684412	257.3	
8.638	8.639	-0.001	40265697	260.2	
9.444	9.442	0.002	378594924	259.8	
	Average of Peak Amounts =			258.2	

Report Date: 02-Apr-2014 07:44:35 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A042.D				
Injection Date:	02-Apr-2014 04:39:08	Instrument ID:	SGC_P3a	Operator ID:	JAX
Lims ID:	ICV			Worklist Smp#:	42
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	42
Method:	PCB_P3a	Limit Group:	GCSV - 8082		

Column: CLP1 Pesticides Column 1 (0.32 mm)



FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-53458-1

SDG No.:

Lab Sample ID: CCV 280-219270/58 Calibration Date: 04/02/2014 10:20

Instrument ID: SGC_P3a Calib Start Date: 04/01/2014 19:46

GC Column: CLP1 ID: 0.32(mm) Calib End Date: 04/01/2014 21:54

Lab File ID: 0401A058.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1016 Peak 1	Lin1		129744552		0.520	0.500	4.1	20.0
PCB-1016 Peak 2	Lin1		283185266		0.505	0.500	0.9	20.0
PCB-1016 Peak 3	Lin1		129237420		0.504	0.500	0.8	20.0
PCB-1016 Peak 4	Lin1		82125730		0.506	0.500	1.2	20.0
PCB-1016 Peak 5	Lin1		131637736		0.497	0.500	-0.5	20.0
PCB-1260 Peak 1	Lin1		208324584		0.502	0.500	0.4	20.0
PCB-1260 Peak 2	Lin1		385579966		0.497	0.500	-0.6	20.0
PCB-1260 Peak 3	Lin1		191724450		0.480	0.500	-4.0	20.0
PCB-1260 Peak 4	Lin1		427516424		0.492	0.500	-1.7	20.0
PCB-1260 Peak 5	Lin1		253372132		0.488	0.500	-2.3	20.0
Tetrachloro-m-xylene	Lin1		3557352080		0.0250	0.0250	0.0	20.0
DCB Decachlorobiphenyl	Lin1		4565229400		0.0239	0.0250	-4.4	20.0

FORM VII
PCBS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-53458-1

SDG No.:

Lab Sample ID: CCV 280-219270/58 Calibration Date: 04/02/2014 10:20

Instrument ID: SGC_P3a Calib Start Date: 04/01/2014 19:46

GC Column: CLP1 ID: 0.32(mm) Calib End Date: 04/01/2014 21:54

Lab File ID: 0401A058.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1016 Peak 1	3.55	3.31	3.81
PCB-1016 Peak 2	4.02	3.77	4.27
PCB-1016 Peak 3	4.16	3.91	4.41
PCB-1016 Peak 4	4.22	3.97	4.47
PCB-1016 Peak 5	4.61	4.36	4.86
PCB-1260 Peak 1	6.09	5.84	6.34
PCB-1260 Peak 2	6.82	6.57	7.07
PCB-1260 Peak 3	7.31	7.06	7.56
PCB-1260 Peak 4	7.75	7.50	8.00
PCB-1260 Peak 5	8.13	7.88	8.38
Tetrachloro-m-xylene	2.84	2.60	3.10
DCB Decachlorobiphenyl	9.72	9.47	9.97

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A058.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 02-Apr-2014 10:20:22 ALS Bottle#: 58 Worklist Smp#: 58
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: CCV
Operator ID: JAX Instrument ID: SGC_P3a
Sublist: chrom-PCB_P3a*sub6

Method: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\PCB_P3a.m
Limit Group: GCSV - 8082
Last Update: 03-Apr-2014 08:33:07 Calib Date: 02-Apr-2014 02:52:35
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A037.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Process Host: XAWRK052

First Level Reviewer: jacksonto Date: 02-Apr-2014 11:05:15

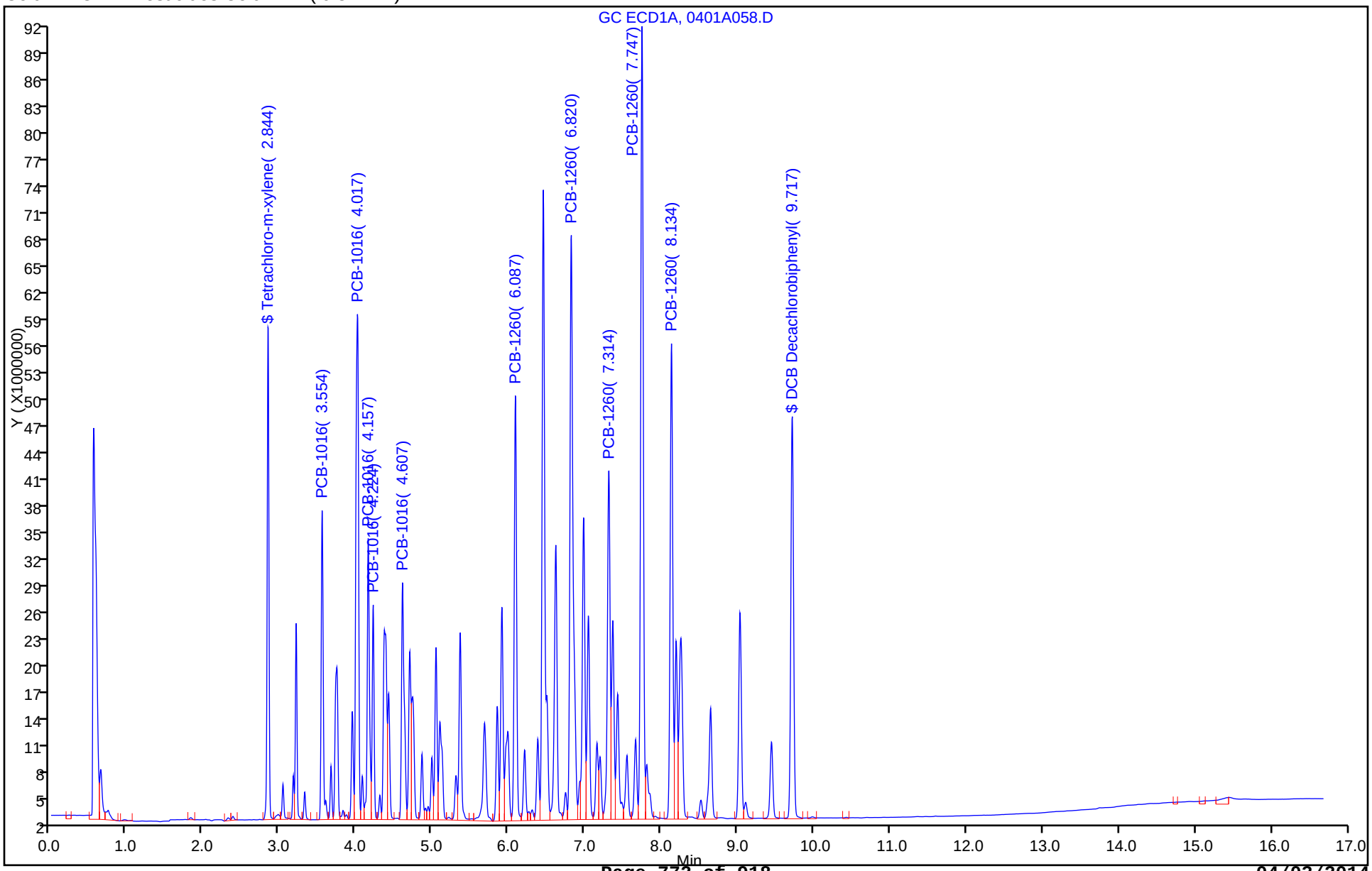
RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
$ 1 Tetrachloro-m-xylene					
2.844	2.845	-0.001	88933802	25.0	
5 PCB-1016					
3.554	3.555	-0.001	64872276	520.4	
4.017	4.019	-0.002	141592633	504.6	
4.157	4.159	-0.002	64618710	503.8	
4.224	4.222	0.002	41062865	505.9	
4.607	4.609	-0.002	65818868	497.3	
	Average of Peak Amounts =			506.4	
8 PCB-1260					
6.087	6.089	-0.002	104162292	502.1	
6.820	6.819	0.001	192789983	497.2	
7.314	7.312	0.002	95862225	480.0	
7.747	7.749	-0.002	213758212	491.7	
8.134	8.132	0.002	126686066	488.5	
	Average of Peak Amounts =			491.9	
$ 13 DCB Decachlorobiphenyl					
9.717	9.715	0.002	114130735	23.9	
S 15 Polychlorinated biphenyls, Total					
				998.3	

Report Date: 03-Apr-2014 08:33:07 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A058.D				
Injection Date:	02-Apr-2014 10:20:22	Instrument ID:	SGC_P3a	Operator ID:	JAX
Lims ID:	CCV			Worklist Smp#:	58
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	58
Method:	PCB_P3a	Limit Group:	GCSV - 8082		

Column: CLP1 Pesticides Column 1 (0.32 mm)



FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-53458-1

SDG No.:

Lab Sample ID: CCV 280-219270/70 Calibration Date: 04/02/2014 14:46

Instrument ID: SGC_P3a Calib Start Date: 04/01/2014 19:46

GC Column: CLP1 ID: 0.32(mm) Calib End Date: 04/01/2014 21:54

Lab File ID: 0401A070.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1016 Peak 1	Lin1		125452162		0.503	0.500	0.6	20.0
PCB-1016 Peak 2	Lin1		275762814		0.491	0.500	-1.8	20.0
PCB-1016 Peak 3	Lin1		124237718		0.484	0.500	-3.2	20.0
PCB-1016 Peak 4	Lin1		80407046		0.495	0.500	-1.0	20.0
PCB-1016 Peak 5	Lin1		128074052		0.484	0.500	-3.3	20.0
PCB-1260 Peak 1	Lin1		197070636		0.474	0.500	-5.1	20.0
PCB-1260 Peak 2	Lin1		362661998		0.467	0.500	-6.6	20.0
PCB-1260 Peak 3	Lin1		184035398		0.460	0.500	-7.9	20.0
PCB-1260 Peak 4	Lin1		392831666		0.451	0.500	-9.8	20.0
PCB-1260 Peak 5	Lin1		228835884		0.440	0.500	-11.9	20.0
Tetrachloro-m-xylene	Lin1		3452196960		0.0243	0.0250	-3.0	20.0
DCB Decachlorobiphenyl	Lin1		3935698600		0.0205	0.0250	-17.9	20.0

FORM VII
PCBS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-53458-1

SDG No.:

Lab Sample ID: CCV 280-219270/70 Calibration Date: 04/02/2014 14:46

Instrument ID: SGC_P3a Calib Start Date: 04/01/2014 19:46

GC Column: CLP1 ID: 0.32(mm) Calib End Date: 04/01/2014 21:54

Lab File ID: 0401A070.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1016 Peak 1	3.56	3.31	3.81
PCB-1016 Peak 2	4.02	3.77	4.27
PCB-1016 Peak 3	4.16	3.91	4.41
PCB-1016 Peak 4	4.22	3.97	4.47
PCB-1016 Peak 5	4.61	4.36	4.86
PCB-1260 Peak 1	6.09	5.84	6.34
PCB-1260 Peak 2	6.82	6.57	7.07
PCB-1260 Peak 3	7.31	7.06	7.56
PCB-1260 Peak 4	7.75	7.50	8.00
PCB-1260 Peak 5	8.13	7.88	8.38
Tetrachloro-m-xylene	2.85	2.60	3.10
DCB Decachlorobiphenyl	9.72	9.47	9.97

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A070.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 02-Apr-2014 14:46:19 ALS Bottle#: 70 Worklist Smp#: 70
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: CCV
Operator ID: JAX Instrument ID: SGC_P3a
Sublist: chrom-PCB_P3a*sub6

Method: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\PCB_P3a.m
Limit Group: GCSV - 8082
Last Update: 03-Apr-2014 08:32:55 Calib Date: 02-Apr-2014 02:52:35
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A037.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Process Host: XAWRK052

First Level Reviewer: jacksonto Date: 03-Apr-2014 06:46:10

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
$ 1 Tetrachloro-m-xylene					M
2.846	2.845	0.001	86304924	24.3	M
5 PCB-1016					M
3.556	3.555	0.001	62726081	502.8	M
4.019	4.019	0.0	137881407	491.2	M
4.159	4.159	0.0	62118859	484.0	M
4.223	4.222	0.001	40203523	495.2	M
4.609	4.609	0.0	64037026	483.6	M
	Average of Peak Amounts =			491.3	
8 PCB-1260					M
6.089	6.089	0.0	98535318	474.4	M
6.819	6.819	0.0	181330999	467.1	M
7.313	7.312	0.001	92017699	460.4	M
7.746	7.749	-0.003	196415833	451.1	M
8.133	8.132	0.001	114417942	440.5	M
	Average of Peak Amounts =			458.7	
$ 13 DCB Decachlorobiphenyl					
9.716	9.715	0.001	98392465	20.5	
S 15 Polychlorinated biphenyls, Total					
				950.1	

QC Flag Legend

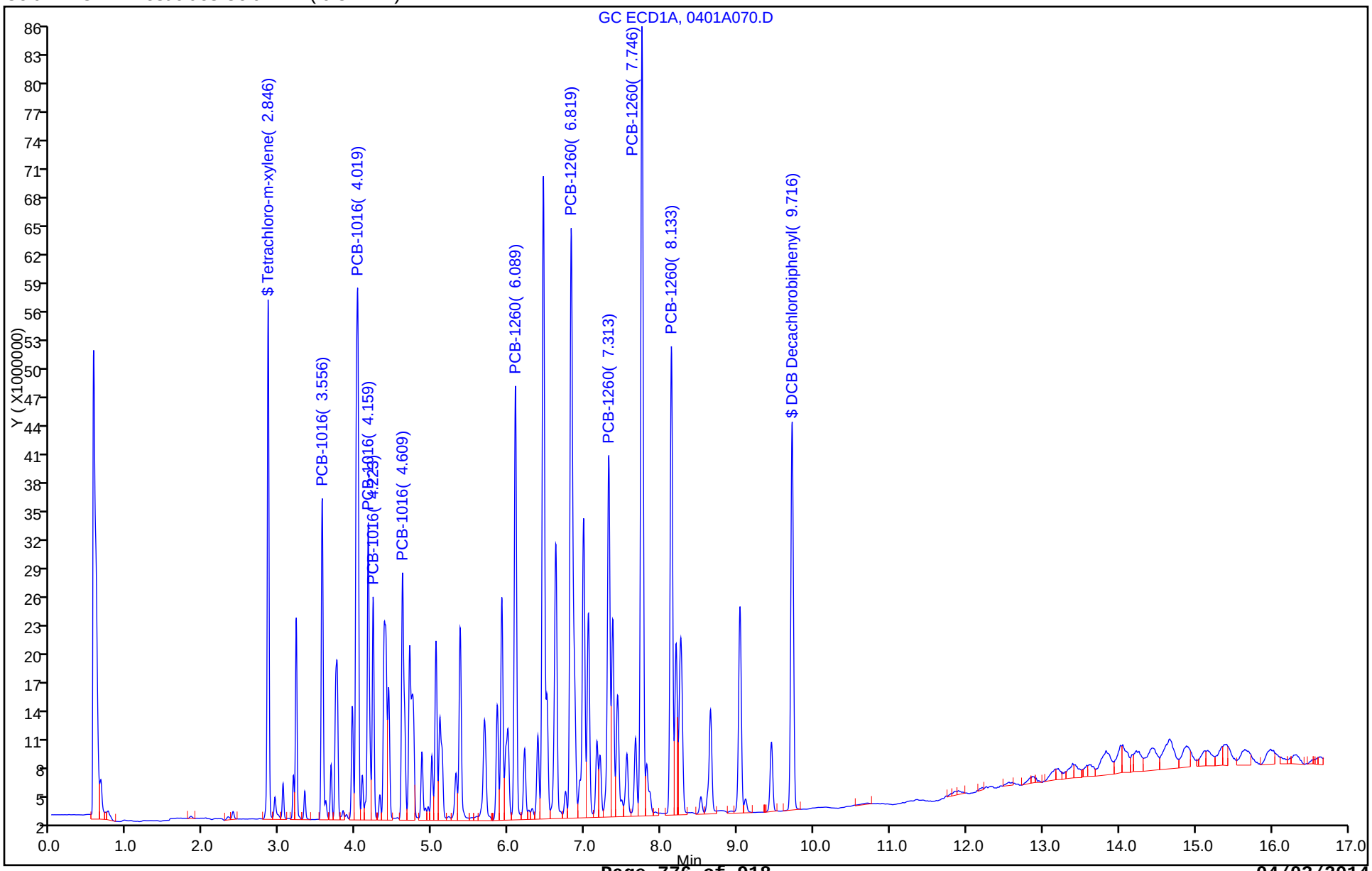
Review Flags
M - Manually Integrated

Report Date: 03-Apr-2014 08:32:56 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A070.D				
Injection Date:	02-Apr-2014 14:46:19	Instrument ID:	SGC_P3a	Operator ID:	JAX
Lims ID:	CCV			Worklist Smp#:	70
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	70
Method:	PCB_P3a	Limit Group:	GCSV - 8082		

Column: CLP1 Pesticides Column 1 (0.32 mm)



Manual Integration/User Assign Peak Report

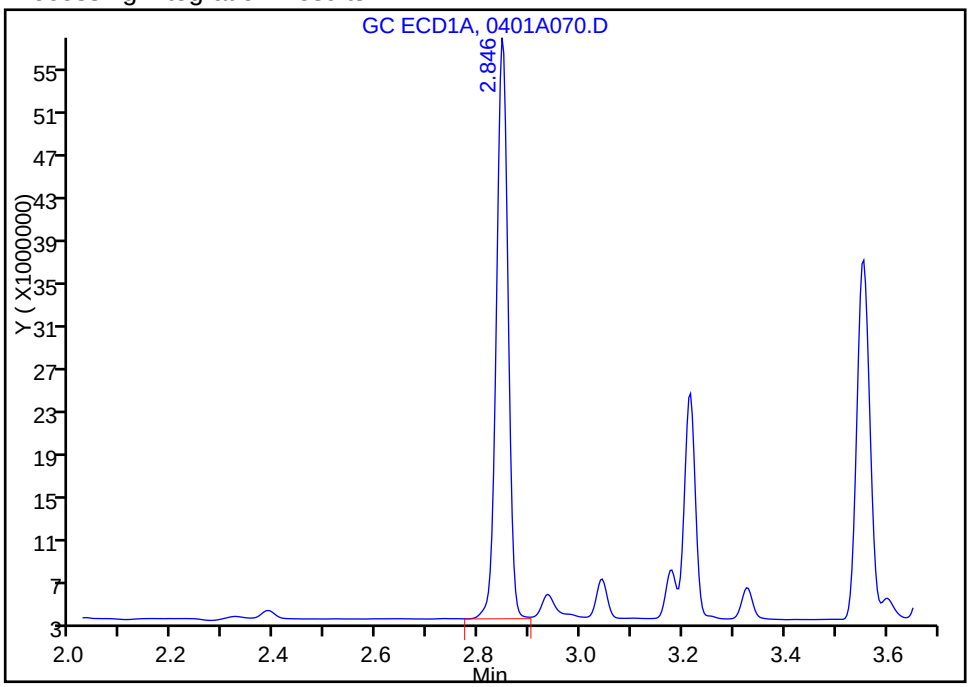
TestAmerica Denver

Data File:	\\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A070.D				
Injection Date:	02-Apr-2014 14:46:19	Instrument ID:	SGC_P3a		
Lims ID:	CCV				
Client ID:					
Operator ID:	JAX	ALS Bottle#:	70	Worklist Smp#:	70
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	PCB_P3a	Limit Group:	GCSV - 8082		
Column:	CLP1 Pesticides Column 1 (0.32 mm)	Detector	GC ECD1A		

$ 1 Tetrachloro-m-xylene, CAS: 877-09-8

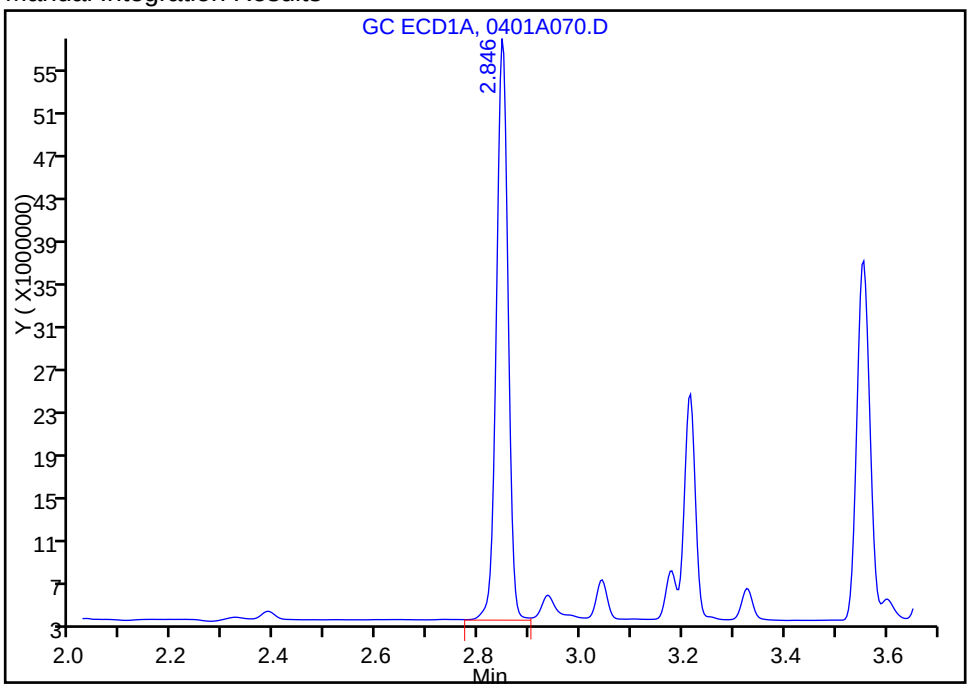
Processing Integration Results

RT: 2.85
Response: 85930992
Amount: 24.147232



Manual Integration Results

RT: 2.85
Response: 86304924
Amount: 24.254595



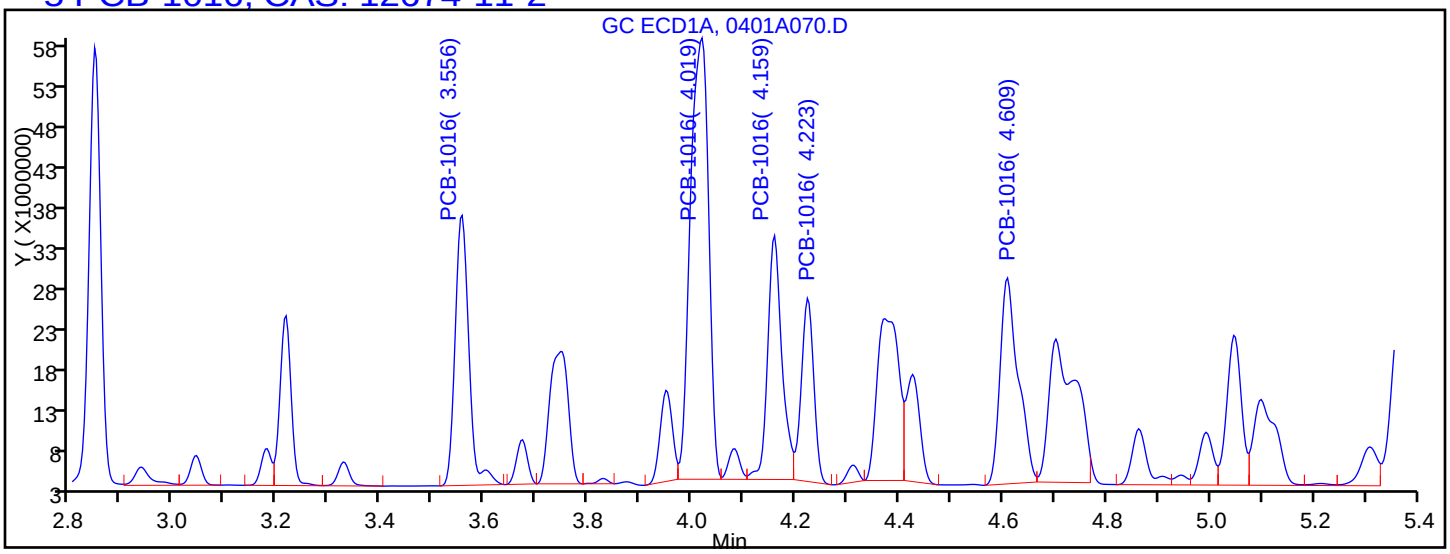
Reviewer: jacksonto, 03-Apr-2014 06:47:30
Audit Action: Assigned New Baseline
Audit Reason: Baseline Smoothing

Report Date: 03-Apr-2014 08:32:56 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

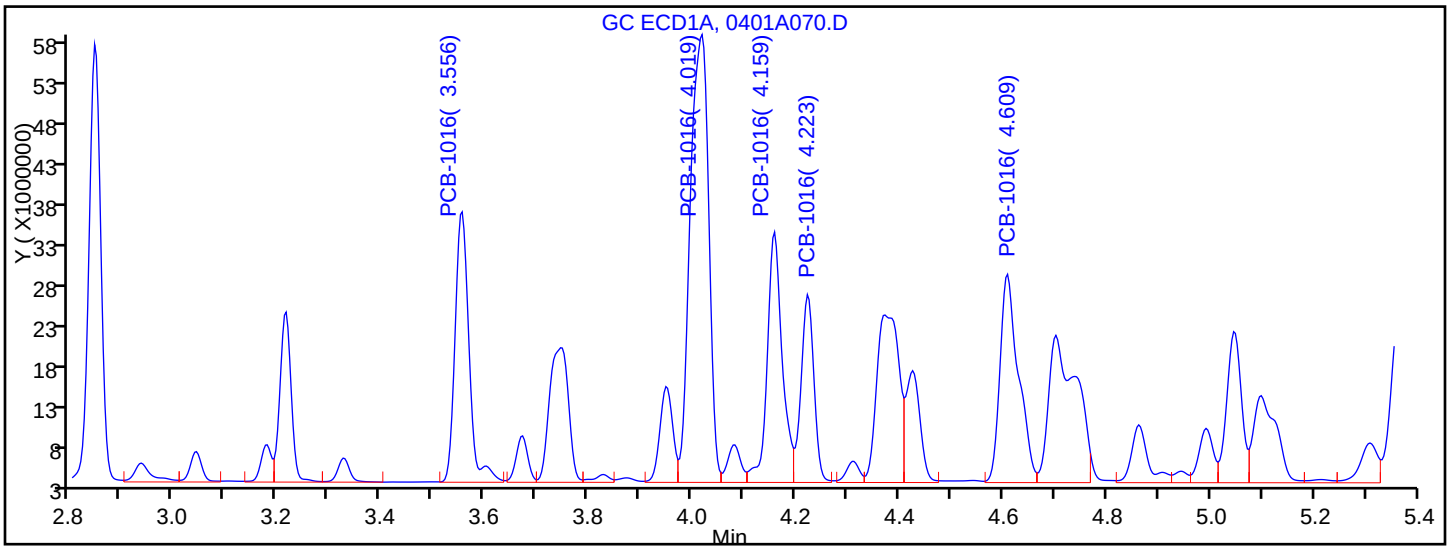
Data File: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A070.D
Injection Date: 02-Apr-2014 14:46:19 Instrument ID: SGC_P3a
Lims ID: CCV
Client ID:
Operator ID: JAX ALS Bottle#: 70 Worklist Smp#: 70
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: PCB_P3a Limit Group: GCSV - 8082
Column: CLP1 Pesticides Column 1 (0.32 mm) Detector GC ECD1A

5 PCB-1016, CAS: 12674-11-2



Processing Integration Results

RT = 3.556	Response = 61798880	M
RT = 4.019	Response = 133500527	M
RT = 4.159	Response = 57499653	M
RT = 4.223	Response = 37883621	M
RT = 4.609	Response = 61896061	M



Manual Integration Results

RT = 3.556	Response = 62726081	M
RT = 4.019	Response = 137881407	M
RT = 4.159	Response = 62118859	M
RT = 4.223	Response = 40203523	M
RT = 4.609	Response = 64037026	M

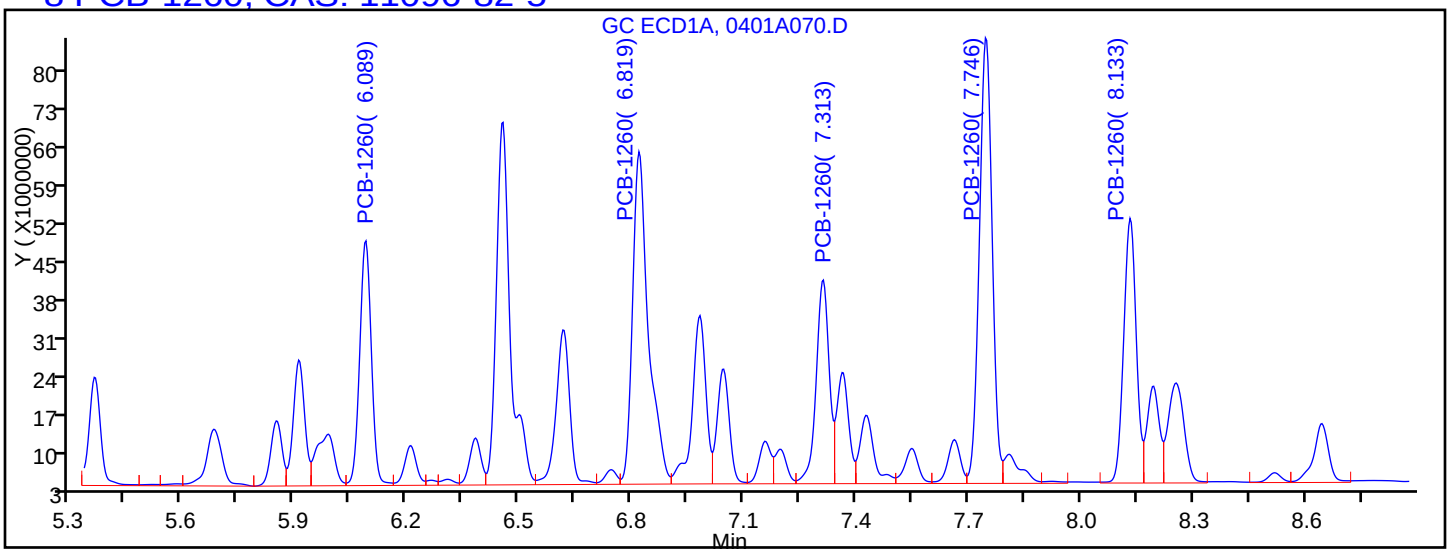
Reviewer: jacksonto, 03-Apr-2014 06:47:30
Audit Action: Assigned New Baseline
Audit Reason: Baseline Smoothing

Report Date: 03-Apr-2014 08:32:56 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

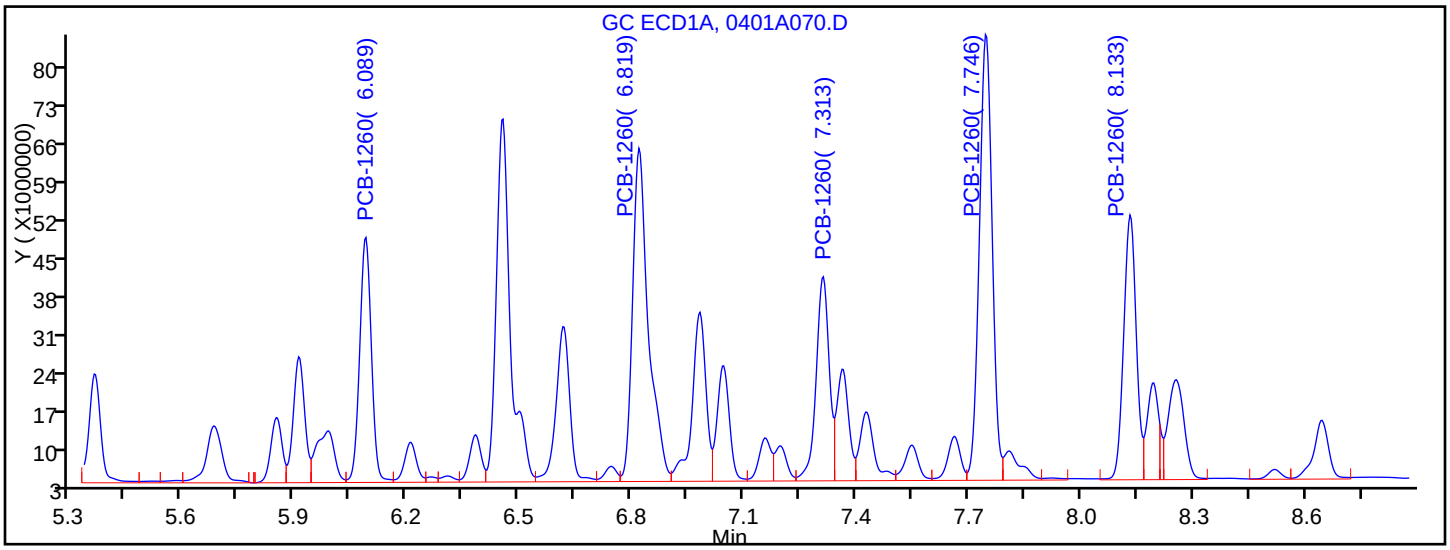
Data File: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A070.D
Injection Date: 02-Apr-2014 14:46:19 Instrument ID: SGC_P3a
Lims ID: CCV
Client ID:
Operator ID: JAX ALS Bottle#: 70 Worklist Smp#: 70
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: PCB_P3a Limit Group: GCSV - 8082
Column: CLP1 Pesticides Column 1 (0.32 mm) Detector GC ECD1A

8 PCB-1260, CAS: 11096-82-5



Processing Integration Results

RT = 6.089	Response = 98260433	M
RT = 6.819	Response = 180365527	M
RT = 7.313	Response = 91461286	M
RT = 7.746	Response = 196221988	M
RT = 8.133	Response = 114305424	M



Manual Integration Results

RT = 6.089	Response = 98535318	M
RT = 6.819	Response = 181330999	M
RT = 7.313	Response = 92017699	M
RT = 7.746	Response = 196415833	M
RT = 8.133	Response = 114417942	M

Reviewer: jacksonto, 03-Apr-2014 06:47:30
Audit Action: Assigned New Baseline
Audit Reason: Baseline Smoothing

FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-53458-1

SDG No.:

Lab Sample ID: CCV 280-219270/97 Calibration Date: 04/02/2014 20:28

Instrument ID: SGC_P3a Calib Start Date: 04/01/2014 19:46

GC Column: CLP1 ID: 0.32(mm) Calib End Date: 04/01/2014 21:54

Lab File ID: 0401A086.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1016 Peak 1	Lin1		117061670		0.468	0.500	-6.4	20.0
PCB-1016 Peak 2	Lin1		270966126		0.482	0.500	-3.5	20.0
PCB-1016 Peak 3	Lin1		121287004		0.472	0.500	-5.5	20.0
PCB-1016 Peak 4	Lin1		78098206		0.481	0.500	-3.8	20.0
PCB-1016 Peak 5	Lin1		125678574		0.474	0.500	-5.1	20.0
PCB-1260 Peak 1	Lin1		198454926		0.478	0.500	-4.4	20.0
PCB-1260 Peak 2	Lin1		368092700		0.474	0.500	-5.1	20.0
PCB-1260 Peak 3	Lin1		194653716		0.487	0.500	-2.5	20.0
PCB-1260 Peak 4	Lin1		411146764		0.473	0.500	-5.5	20.0
PCB-1260 Peak 5	Lin1		244674252		0.471	0.500	-5.7	20.0
Tetrachloro-m-xylene	Lin1		3379583520		0.0237	0.0250	-5.1	20.0
DCB Decachlorobiphenyl	Lin1		4391873480		0.0230	0.0250	-8.1	20.0

FORM VII
PCBS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-53458-1

SDG No.:

Lab Sample ID: CCV 280-219270/97 Calibration Date: 04/02/2014 20:28

Instrument ID: SGC_P3a Calib Start Date: 04/01/2014 19:46

GC Column: CLP1 ID: 0.32(mm) Calib End Date: 04/01/2014 21:54

Lab File ID: 0401A086.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1016 Peak 1	3.56	3.31	3.81
PCB-1016 Peak 2	4.02	3.77	4.27
PCB-1016 Peak 3	4.16	3.91	4.41
PCB-1016 Peak 4	4.22	3.97	4.47
PCB-1016 Peak 5	4.61	4.36	4.86
PCB-1260 Peak 1	6.09	5.84	6.34
PCB-1260 Peak 2	6.82	6.57	7.07
PCB-1260 Peak 3	7.31	7.06	7.56
PCB-1260 Peak 4	7.75	7.50	8.00
PCB-1260 Peak 5	8.13	7.88	8.38
Tetrachloro-m-xylene	2.85	2.60	3.10
DCB Decachlorobiphenyl	9.72	9.47	9.97

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A086.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 02-Apr-2014 20:28:14 ALS Bottle#: 86 Worklist Smp#: 97
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: CCV
Operator ID: JAX Instrument ID: SGC_P3a
Sublist: chrom-PCB_P3a*sub6

Method: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\PCB_P3a.m
Limit Group: GCSV - 8082
Last Update: 03-Apr-2014 08:58:28 Calib Date: 02-Apr-2014 02:52:35
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A037.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Process Host: XAWRK052

First Level Reviewer: jacksonto Date: 03-Apr-2014 06:58:12

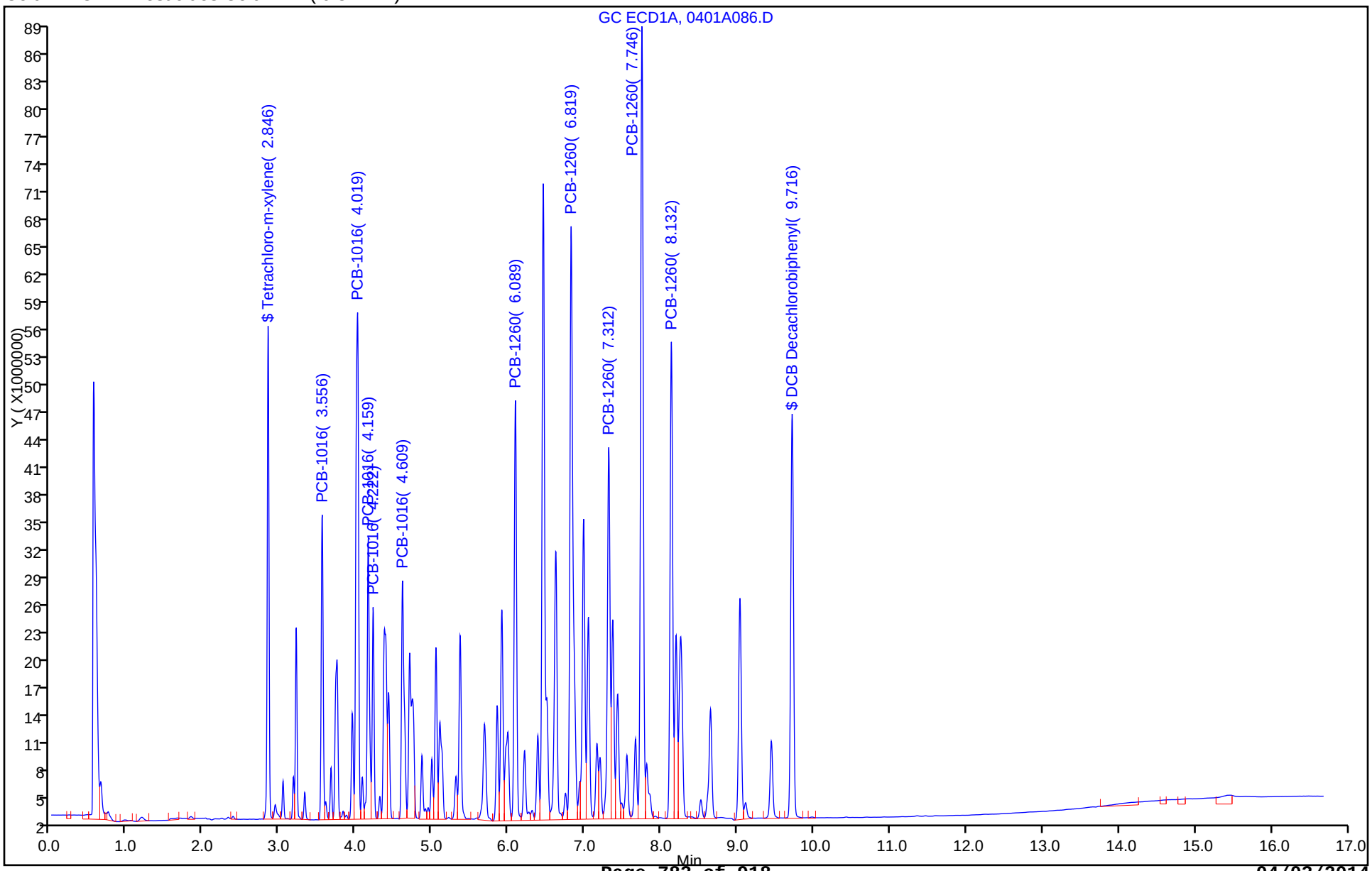
RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
$ 1 Tetrachloro-m-xylene					
2.846	2.845	0.001	84489588	23.7	
5 PCB-1016					
3.556	3.555	0.001	58530835	468.2	
4.019	4.019	0.0	135483063	482.5	
4.159	4.159	0.0	60643502	472.4	
4.222	4.222	0.0	39049103	480.8	
4.609	4.609	0.0	62839287	474.4	
	Average of Peak Amounts =			475.6	
8 PCB-1260					
6.089	6.089	0.0	99227463	477.8	
6.819	6.819	0.0	184046350	474.3	
7.312	7.312	0.0	97326858	487.4	
7.746	7.749	-0.003	205573382	472.5	
8.132	8.132	0.0	122337126	471.5	
	Average of Peak Amounts =			476.7	
$ 13 DCB Decachlorobiphenyl					
9.716	9.715	0.001	109796837	23.0	
S 15 Polychlorinated biphenyls, Total					
				952.3	

Report Date: 03-Apr-2014 08:58:28 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A086.D				
Injection Date:	02-Apr-2014 20:28:14	Instrument ID:	SGC_P3a	Operator ID:	JAX
Lims ID:	CCV			Worklist Smp#:	97
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	86
Method:	PCB_P3a	Limit Group:	GCSV - 8082		

Column: CLP1 Pesticides Column 1 (0.32 mm)



FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-53458-1

SDG No.:

Lab Sample ID: CCV 280-219270/99 Calibration Date: 04/03/2014 00:44

Instrument ID: SGC_P3a Calib Start Date: 04/01/2014 19:46

GC Column: CLP1 ID: 0.32(mm) Calib End Date: 04/01/2014 21:54

Lab File ID: 0401A098.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1016 Peak 1	Lin1		124757910		0.500	0.500	-0.0	20.0
PCB-1016 Peak 2	Lin1		272836182		0.486	0.500	-2.8	20.0
PCB-1016 Peak 3	Lin1		123091606		0.479	0.500	-4.1	20.0
PCB-1016 Peak 4	Lin1		79155798		0.487	0.500	-2.5	20.0
PCB-1016 Peak 5	Lin1		127403184		0.481	0.500	-3.8	20.0
PCB-1260 Peak 1	Lin1		202372918		0.487	0.500	-2.5	20.0
PCB-1260 Peak 2	Lin1		374638768		0.483	0.500	-3.4	20.0
PCB-1260 Peak 3	Lin1		190353694		0.476	0.500	-4.7	20.0
PCB-1260 Peak 4	Lin1		418667098		0.481	0.500	-3.7	20.0
PCB-1260 Peak 5	Lin1		246657752		0.475	0.500	-4.9	20.0
Tetrachloro-m-xylene	Lin1		3413484520		0.0240	0.0250	-4.1	20.0
DCB Decachlorobiphenyl	Lin1		4561297480		0.0239	0.0250	-4.5	20.0

FORM VII
PCBS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-53458-1

SDG No.:

Lab Sample ID: CCV 280-219270/99 Calibration Date: 04/03/2014 00:44

Instrument ID: SGC_P3a Calib Start Date: 04/01/2014 19:46

GC Column: CLP1 ID: 0.32(mm) Calib End Date: 04/01/2014 21:54

Lab File ID: 0401A098.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1016 Peak 1	3.56	3.31	3.81
PCB-1016 Peak 2	4.02	3.77	4.27
PCB-1016 Peak 3	4.16	3.91	4.41
PCB-1016 Peak 4	4.22	3.97	4.47
PCB-1016 Peak 5	4.61	4.36	4.86
PCB-1260 Peak 1	6.09	5.84	6.34
PCB-1260 Peak 2	6.82	6.57	7.07
PCB-1260 Peak 3	7.31	7.06	7.56
PCB-1260 Peak 4	7.75	7.50	8.00
PCB-1260 Peak 5	8.13	7.88	8.38
Tetrachloro-m-xylene	2.85	2.60	3.10
DCB Decachlorobiphenyl	9.71	9.47	9.97

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A098.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 03-Apr-2014 00:44:28 ALS Bottle#: 98 Worklist Smp#: 99
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: CCV
Operator ID: JAX Instrument ID: SGC_P3a
Sublist: chrom-PCB_P3a*sub6

Method: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\PCB_P3a.m
Limit Group: GCSV - 8082
Last Update: 03-Apr-2014 08:33:28 Calib Date: 02-Apr-2014 02:52:35
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A037.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Process Host: XAWRK052

First Level Reviewer: jacksonto Date: 03-Apr-2014 07:02:32

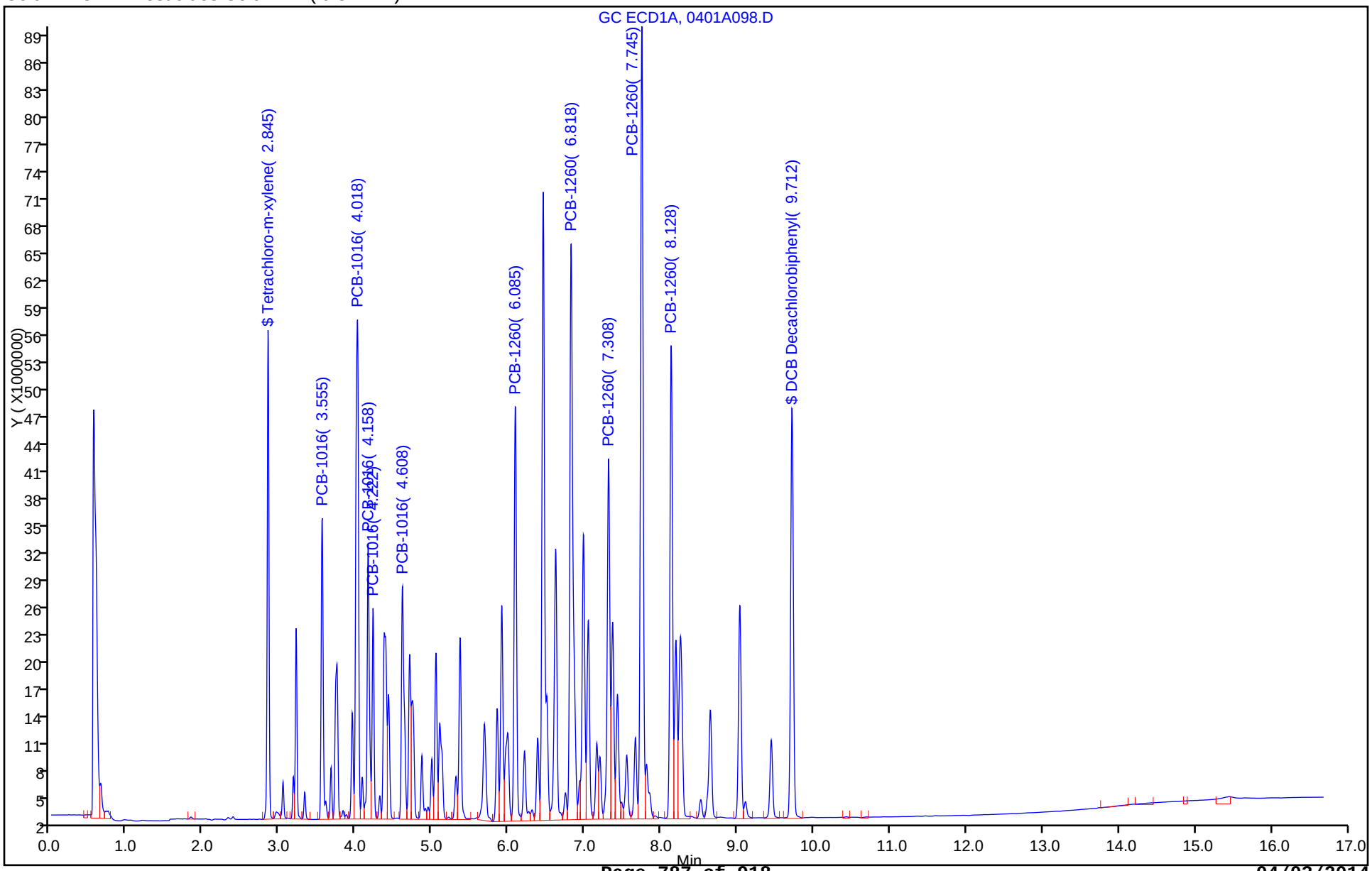
RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
$ 1 Tetrachloro-m-xylene					
2.845	2.845	0.0	85337113	24.0	
5 PCB-1016					
3.555	3.555	0.0	62378955	499.9	
4.018	4.019	-0.001	136418091	485.9	
4.158	4.159	-0.001	61545803	479.5	
4.222	4.222	0.0	39577899	487.4	
4.608	4.609	-0.001	63701592	481.0	
	Average of Peak Amounts =			486.7	
8 PCB-1260					
6.085	6.089	-0.004	101186459	487.5	
6.818	6.819	-0.001	187319384	482.8	
7.308	7.312	-0.004	95176847	476.5	
7.745	7.749	-0.004	209333549	481.3	
8.128	8.132	-0.004	123328876	475.3	
	Average of Peak Amounts =			480.7	
$ 13 DCB Decachlorobiphenyl					
9.712	9.715	-0.003	114032437	23.9	
S 15 Polychlorinated biphenyls, Total					
				967.4	

Report Date: 03-Apr-2014 08:33:28 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A098.D				
Injection Date:	03-Apr-2014 00:44:28	Instrument ID:	SGC_P3a	Operator ID:	JAX
Lims ID:	CCV			Worklist Smp#:	99
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	98
Method:	PCB_P3a	Limit Group:	GCSV - 8082		

Column: CLP1 Pesticides Column 1 (0.32 mm)



FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-53458-1

SDG No.:

Lab Sample ID: ICV 280-219272/38 Calibration Date: 04/02/2014 03:35

Instrument ID: SGC_P3b Calib Start Date: 04/01/2014 15:08

GC Column: CLP2 ID: 0.32(mm) Calib End Date: 04/01/2014 17:16

Lab File ID: 0401B038.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1248 Peak 1	Lin1		523367276		0.261	0.250	4.2	20.0
PCB-1248 Peak 2	Lin1		315435840		0.265	0.250	6.2	20.0
PCB-1248 Peak 3	Lin1		418076880		0.261	0.250	4.3	20.0
PCB-1248 Peak 4	Lin1		453792204		0.251	0.250	0.6	20.0
PCB-1248 Peak 5	Lin1		533895856		0.262	0.250	4.9	20.0

FORM VII
PCBS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-53458-1

SDG No.:

Lab Sample ID: ICV 280-219272/38 Calibration Date: 04/02/2014 03:35

Instrument ID: SGC_P3b Calib Start Date: 04/01/2014 15:08

GC Column: CLP2 ID: 0.32(mm) Calib End Date: 04/01/2014 17:16

Lab File ID: 0401B038.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1248 Peak 1	4.19	3.94	4.44
PCB-1248 Peak 2	4.57	4.32	4.82
PCB-1248 Peak 3	4.87	4.62	5.12
PCB-1248 Peak 4	5.32	5.07	5.57
PCB-1248 Peak 5	5.37	5.12	5.62

TestAmerica Denver
Target Compound Quantitation Report

Data File:	\\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B038.D				
Lims ID:	ICV				
Client ID:					
Sample Type:	ICV				
Inject. Date:	02-Apr-2014 03:35:12	ALS Bottle#:	38	Worklist Smp#:	38
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	ICV				
Operator ID:	JAX	Instrument ID:	SGC_P3b		
Sublist:					

Method:	\\Denchrom\ChromData\SGC_P3b\20140401-21601.b\PCB_P3b.m		
Limit Group:	GCSV - 8082		
Last Update:	02-Apr-2014 09:01:54	Calib Date:	02-Apr-2014 03:13:50
Integrator:	Falcon		
Quant Method:	External Standard	Quant By:	Initial Calibration
Last ICal File:	\\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B037.D		

Column 1 :	CLP2 Pesticides Column 2 (0.32 mm)	Det: GC ECD2B
Process Host:	XAWRK001	

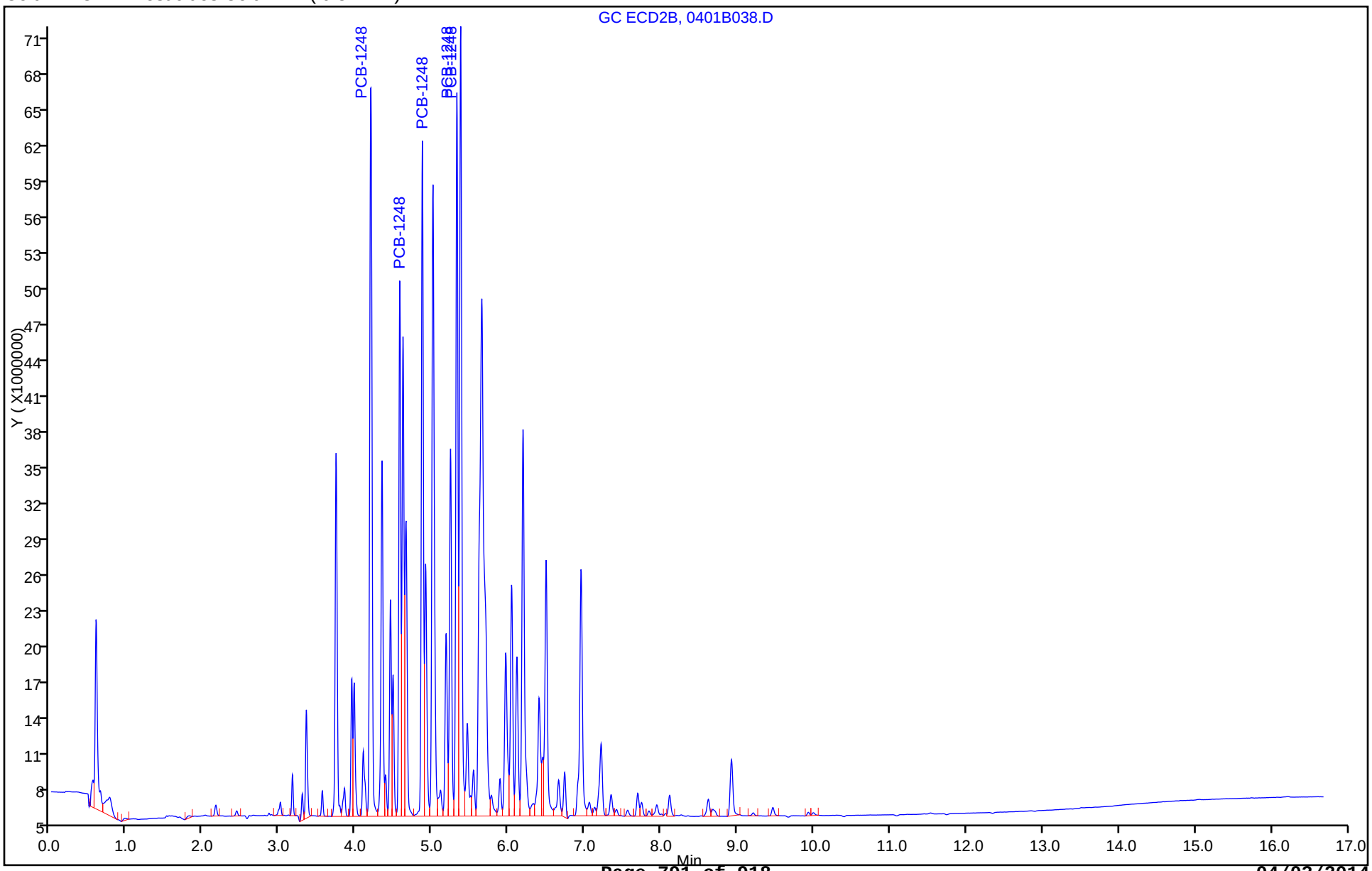
RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
4 PCB-1248					
4.194	4.194	0.0	130841819	260.6	
4.571	4.571	0.0	78858960	265.5	
4.867	4.868	-0.001	104519220	260.7	
5.321	5.321	0.0	113448051	251.5	
5.371	5.371	0.0	133473964	262.3	
	Average of Peak Amounts =			260.1	

Report Date: 02-Apr-2014 09:01:56 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B038.D				
Injection Date:	02-Apr-2014 03:35:12	Instrument ID:	SGC_P3b	Operator ID:	JAX
Lims ID:	ICV			Worklist Smp#:	38
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	38
Method:	PCB_P3b	Limit Group:	GCSV - 8082		

Column: CLP2 Pesticides Column 2 (0.32 mm)



FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-53458-1

SDG No.:

Lab Sample ID: ICV 280-219272/39 Calibration Date: 04/02/2014 03:56

Instrument ID: SGC_P3b Calib Start Date: 04/01/2014 17:38

GC Column: CLP2 ID: 0.32(mm) Calib End Date: 04/01/2014 19:46

Lab File ID: 0401B039.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1221 Peak 1	Lin1		140948212		0.265	0.250	5.8	20.0
PCB-1221 Peak 2	Lin1		88290076		0.258	0.250	3.0	20.0
PCB-1221 Peak 3	Lin1		310692272		0.261	0.250	4.5	20.0
PCB-1254 Peak 1	Lin1		515662940		0.263	0.250	5.1	20.0
PCB-1254 Peak 2	Lin1		552450320		0.259	0.250	3.4	20.0
PCB-1254 Peak 3	Lin1		442655196		0.250	0.250	-0.0	20.0
PCB-1254 Peak 4	Lin1		357104788		0.267	0.250	6.7	20.0
PCB-1254 Peak 5	Lin1		834723772		0.259	0.250	3.5	20.0

FORM VII
PCBS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-53458-1

SDG No.:

Lab Sample ID: ICV 280-219272/39 Calibration Date: 04/02/2014 03:56

Instrument ID: SGC_P3b Calib Start Date: 04/01/2014 17:38

GC Column: CLP2 ID: 0.32(mm) Calib End Date: 04/01/2014 19:46

Lab File ID: 0401B039.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1221 Peak 1	3.16	2.92	3.42
PCB-1221 Peak 2	3.29	3.04	3.54
PCB-1221 Peak 3	3.35	3.10	3.60
PCB-1254 Peak 1	5.37	5.12	5.62
PCB-1254 Peak 2	5.61	5.36	5.86
PCB-1254 Peak 3	6.04	5.79	6.29
PCB-1254 Peak 4	6.74	6.49	6.99
PCB-1254 Peak 5	7.21	6.96	7.46

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B039.D
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 02-Apr-2014 03:56:30 ALS Bottle#: 39 Worklist Smp#: 39
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: ICV
Operator ID: JAX Instrument ID: SGC_P3b
Sublist:

Method: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\PCB_P3b.m
Limit Group: GCSV - 8082
Last Update: 02-Apr-2014 09:01:54 Calib Date: 02-Apr-2014 03:13:50
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B037.D

Column 1 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK001

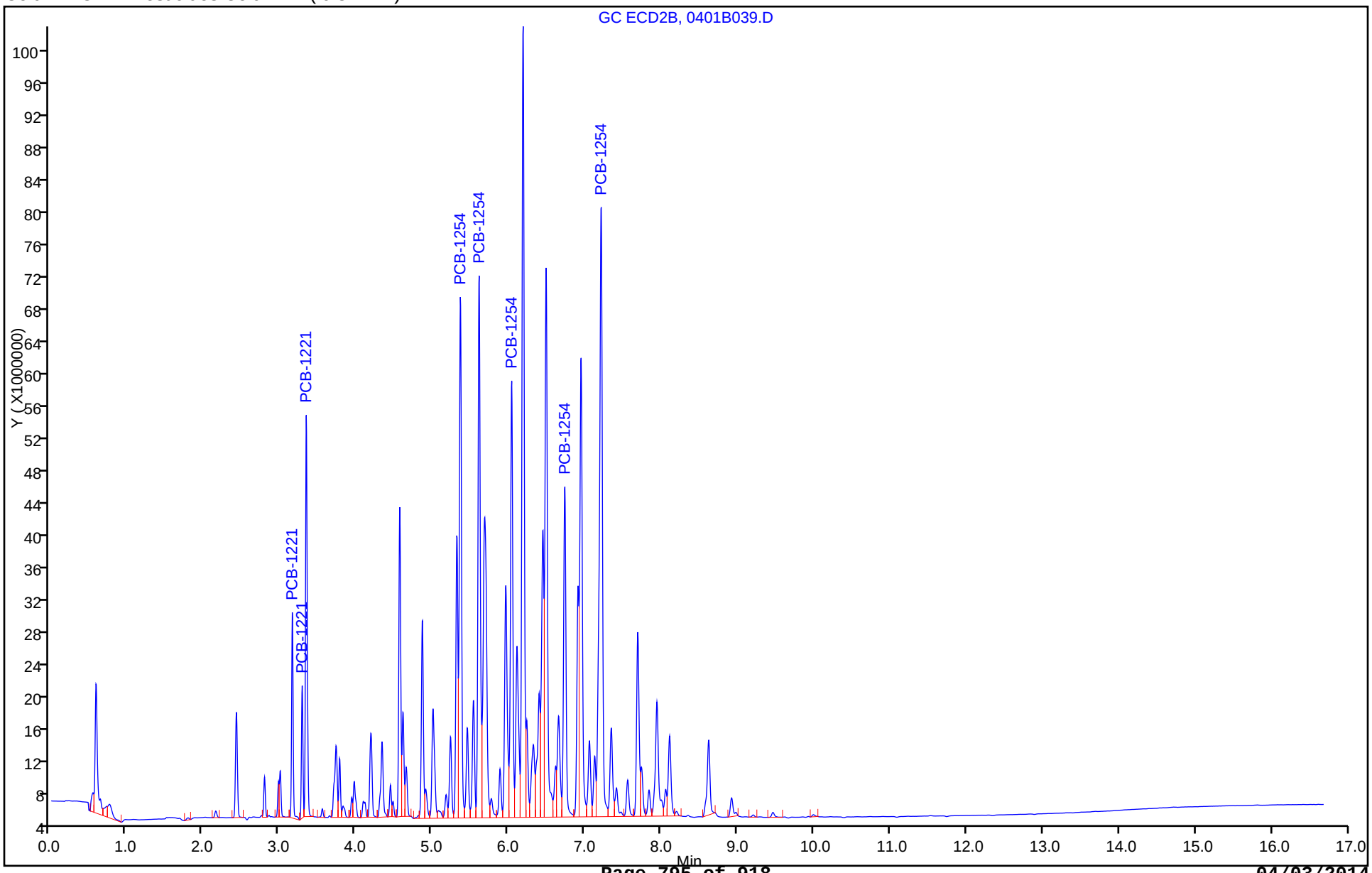
RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
3 PCB-1221					
3.163	3.165	-0.002	35237053	264.6	
3.293	3.292	0.001	22072519	257.5	
3.346	3.348	-0.002	77673068	261.2	
	Average of Peak Amounts =			261.1	
9 PCB-1254					
5.366	5.368	-0.002	128915735	262.8	
5.613	5.612	0.001	138112580	258.5	
6.039	6.038	0.001	110663799	249.9	
6.736	6.735	0.001	89276197	266.8	
7.213	7.212	0.001	208680943	258.8	
	Average of Peak Amounts =			259.4	

Report Date: 02-Apr-2014 09:01:58 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B039.D				
Injection Date:	02-Apr-2014 03:56:30	Instrument ID:	SGC_P3b	Operator ID:	JAX
Lims ID:	ICV			Worklist Smp#:	39
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	39
Method:	PCB_P3b	Limit Group:	GCSV - 8082		

Column: CLP2 Pesticides Column 2 (0.32 mm)



FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-53458-1

SDG No.:

Lab Sample ID: ICV 280-219272/40 Calibration Date: 04/02/2014 04:17

Instrument ID: SGC_P3b Calib Start Date: 04/01/2014 20:07

GC Column: CLP2 ID: 0.32(mm) Calib End Date: 04/01/2014 22:15

Lab File ID: 0401B040.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1016 Peak 1	Lin1		471532880		0.257	0.250	2.7	20.0
PCB-1016 Peak 2	Lin1		957080812		0.261	0.250	4.6	20.0
PCB-1016 Peak 3	Lin1		447517612		0.270	0.250	8.1	20.0
PCB-1016 Peak 4	Lin1		333293268		0.257	0.250	2.7	20.0
PCB-1016 Peak 5	Lin1		418126280		0.263	0.250	5.1	20.0
PCB-1260 Peak 1	Lin1		678821192		0.255	0.250	1.8	20.0
PCB-1260 Peak 2	Lin1		670608852		0.225	0.250	-10.1	20.0
PCB-1260 Peak 3	Lin1		1130861076		0.251	0.250	0.6	20.0
PCB-1260 Peak 4	Lin1		1111917688		0.248	0.250	-0.9	20.0
PCB-1260 Peak 5	Lin1		939486924		0.249	0.250	-0.3	20.0

FORM VII
PCBS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-53458-1

SDG No.:

Lab Sample ID: ICV 280-219272/40 Calibration Date: 04/02/2014 04:17

Instrument ID: SGC_P3b Calib Start Date: 04/01/2014 20:07

GC Column: CLP2 ID: 0.32(mm) Calib End Date: 04/01/2014 22:15

Lab File ID: 0401B040.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1016 Peak 1	3.74	3.49	3.99
PCB-1016 Peak 2	4.20	3.95	4.45
PCB-1016 Peak 3	4.34	4.09	4.59
PCB-1016 Peak 4	4.87	4.62	5.12
PCB-1016 Peak 5	5.01	4.76	5.26
PCB-1260 Peak 1	6.45	6.20	6.70
PCB-1260 Peak 2	6.73	6.49	6.99
PCB-1260 Peak 3	7.21	6.96	7.46
PCB-1260 Peak 4	8.11	7.86	8.36
PCB-1260 Peak 5	8.62	8.37	8.87

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B040.D
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 02-Apr-2014 04:17:44 ALS Bottle#: 40 Worklist Smp#: 40
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: ICV
Operator ID: JAX Instrument ID: SGC_P3b
Sublist:

Method: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\PCB_P3b.m
Limit Group: GCSV - 8082
Last Update: 02-Apr-2014 09:01:54 Calib Date: 02-Apr-2014 03:13:50
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B037.D

Column 1 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK001

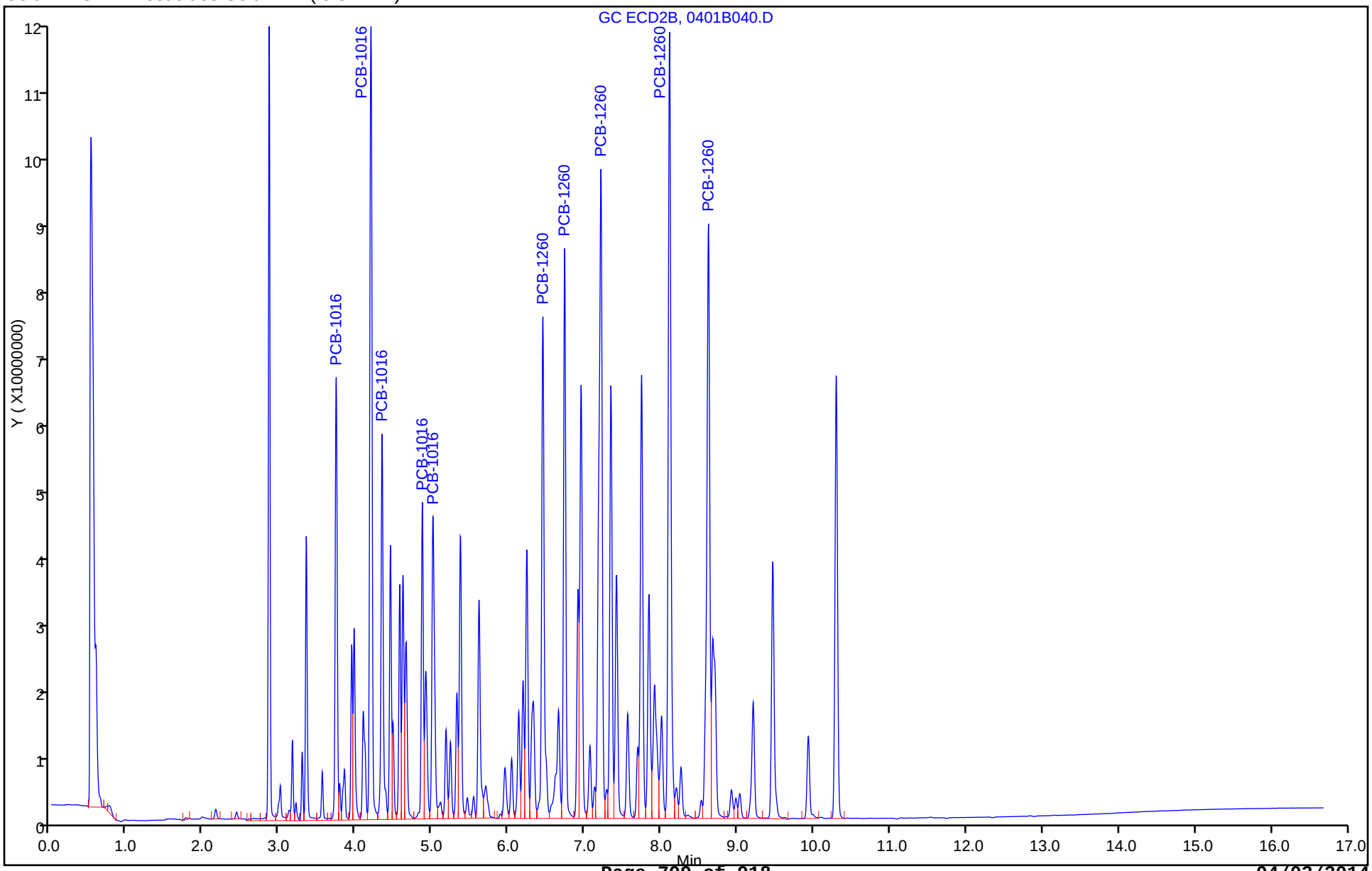
RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
1 PCB-1016					
3.739	3.738	0.001	117883220	256.8	
4.195	4.195	0.0	239270203	261.5	
4.339	4.342	-0.003	111879403	270.3	
4.869	4.868	0.001	83323317	256.7	
5.009	5.008	0.001	104531570	262.8	
	Average of Peak Amounts =			261.6	
12 PCB-1260					
6.449	6.448	0.001	169705298	254.6	
6.732	6.735	-0.003	167652213	224.7	
7.209	7.208	0.001	282715269	251.4	
8.109	8.108	0.001	277979422	247.7	
8.619	8.618	0.001	234871731	249.3	
	Average of Peak Amounts =			245.5	

Report Date: 02-Apr-2014 09:01:59 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B040.D				
Injection Date:	02-Apr-2014 04:17:44	Instrument ID:	SGC_P3b	Operator ID:	JAX
Lims ID:	ICV			Worklist Smp#:	40
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	40
Method:	PCB_P3b	Limit Group:	GCSV - 8082		

Column: CLP2 Pesticides Column 2 (0.32 mm)



FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-53458-1

SDG No.:

Lab Sample ID: ICV 280-219272/41 Calibration Date: 04/02/2014 04:39

Instrument ID: SGC_P3b Calib Start Date: 04/01/2014 22:37

GC Column: CLP2 ID: 0.32(mm) Calib End Date: 04/02/2014 00:44

Lab File ID: 0401B041.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1232 Peak 1	Lin1		114634748		0.277	0.250	10.7	20.0
PCB-1232 Peak 2	Lin1		298263452		0.276	0.250	10.4	20.0
PCB-1232 Peak 3	Lin1		466062580		0.252	0.250	0.6	20.0
PCB-1232 Peak 4	Lin1		235076808		0.264	0.250	5.7	20.0
PCB-1232 Peak 5	Lin1		150788812		0.251	0.250	0.3	20.0
PCB-1262 Peak 1	Lin1		500775572		0.222	0.250	-11.1	20.0
PCB-1262 Peak 2	Lin1		793972260		0.246	0.250	-1.8	20.0
PCB-1262 Peak 3	Lin1		1266647504		0.229	0.250	-8.5	20.0
PCB-1262 Peak 4	Lin1		1128662696		0.242	0.250	-3.0	20.0
PCB-1262 Peak 5	Lin1		609992644		0.239	0.250	-4.3	20.0

FORM VII
PCBS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-53458-1

SDG No.:

Lab Sample ID: ICV 280-219272/41 Calibration Date: 04/02/2014 04:39

Instrument ID: SGC_P3b Calib Start Date: 04/01/2014 22:37

GC Column: CLP2 ID: 0.32(mm) Calib End Date: 04/02/2014 00:44

Lab File ID: 0401B041.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1232 Peak 1	3.16	2.92	3.42
PCB-1232 Peak 2	3.35	3.10	3.60
PCB-1232 Peak 3	4.19	3.95	4.45
PCB-1232 Peak 4	4.34	4.09	4.59
PCB-1232 Peak 5	4.87	4.62	5.12
PCB-1262 Peak 1	6.73	6.48	6.98
PCB-1262 Peak 2	7.74	7.49	7.99
PCB-1262 Peak 3	8.11	7.86	8.36
PCB-1262 Peak 4	8.61	8.36	8.86
PCB-1262 Peak 5	9.46	9.21	9.71

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B041.D
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 02-Apr-2014 04:39:08 ALS Bottle#: 41 Worklist Smp#: 41
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: ICV
Operator ID: JAX Instrument ID: SGC_P3b
Sublist:

Method: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\PCB_P3b.m
Limit Group: GCSV - 8082
Last Update: 02-Apr-2014 09:01:54 Calib Date: 02-Apr-2014 03:13:50
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B037.D

Column 1 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK001

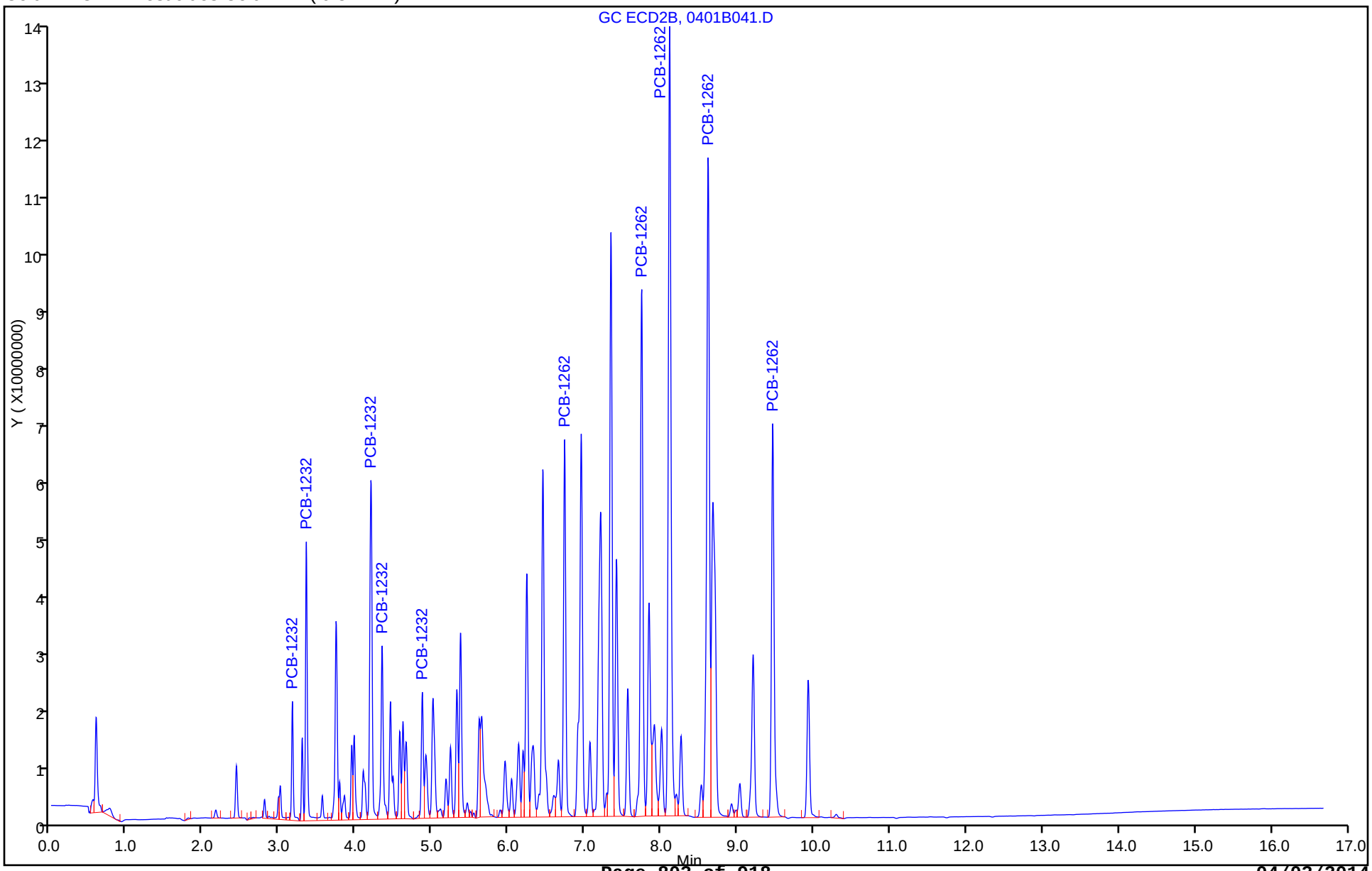
RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
7 PCB-1232					
3.164	3.166	-0.002	28658687	276.7	
3.347	3.346	0.001	74565863	275.9	
4.194	4.196	-0.002	116515645	251.6	
4.340	4.340	0.0	58769202	264.3	
4.867	4.870	-0.003	37697203	250.9	
	Average of Peak Amounts =			263.9	
5 PCB-1262					
6.734	6.733	0.001	125193893	222.3	
7.744	7.743	0.001	198493065	245.5	
8.110	8.110	0.0	316661876	228.8	
8.614	8.613	0.001	282165674	242.4	
9.460	9.463	-0.003	152498161	239.2	
	Average of Peak Amounts =			235.6	

Report Date: 02-Apr-2014 09:02:01 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B041.D				
Injection Date:	02-Apr-2014 04:39:08	Instrument ID:	SGC_P3b	Operator ID:	JAX
Lims ID:	ICV			Worklist Smp#:	41
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	41
Method:	PCB_P3b	Limit Group:	GCSV - 8082		

Column: CLP2 Pesticides Column 2 (0.32 mm)



FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-53458-1

SDG No.:

Lab Sample ID: ICV 280-219272/42 Calibration Date: 04/02/2014 05:00

Instrument ID: SGC_P3b Calib Start Date: 04/02/2014 01:05

GC Column: CLP2 ID: 0.32(mm) Calib End Date: 04/02/2014 03:13

Lab File ID: 0401B042.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1242 Peak 1	Lin1		206392940		0.266	0.250	6.4	20.0
PCB-1242 Peak 2	Lin1		778923980		0.256	0.250	2.6	20.0
PCB-1242 Peak 3	Lin1		379033336		0.262	0.250	4.6	20.0
PCB-1242 Peak 4	Lin1		274549576		0.256	0.250	2.4	20.0
PCB-1242 Peak 5	Lin1		352818816		0.260	0.250	4.1	20.0
PCB-1268 Peak 1	Lin1		1693747156			0.250	-0.7	20.0
PCB-1268 Peak 2	Lin1		1684808104			0.250	-0.7	20.0
PCB-1268 Peak 3	Lin1		1394934968			0.250	-1.8	20.0
PCB-1268 Peak 4	Lin1		454772196			0.250	-2.6	20.0
PCB-1268 Peak 5	Lin1		4039895988			0.250	-0.9	20.0

FORM VII
PCBS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-53458-1

SDG No.:

Lab Sample ID: ICV 280-219272/42 Calibration Date: 04/02/2014 05:00

Instrument ID: SGC_P3b Calib Start Date: 04/02/2014 01:05

GC Column: CLP2 ID: 0.32(mm) Calib End Date: 04/02/2014 03:13

Lab File ID: 0401B042.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1242 Peak 1	3.35	3.10	3.60
PCB-1242 Peak 2	4.19	3.94	4.44
PCB-1242 Peak 3	4.34	4.09	4.59
PCB-1242 Peak 4	4.87	4.62	5.12
PCB-1242 Peak 5	5.01	4.76	5.26
PCB-1268 Peak 1	8.61	8.36	8.86
PCB-1268 Peak 2	8.67	8.42	8.92
PCB-1268 Peak 3	9.03	8.78	9.28
PCB-1268 Peak 4	9.17	8.92	9.42
PCB-1268 Peak 5	9.93	9.68	10.18

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B042.D
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 02-Apr-2014 05:00:31 ALS Bottle#: 42 Worklist Smp#: 42
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: ICV
Operator ID: JAX Instrument ID: SGC_P3b
Sublist:

Method: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\PCB_P3b.m
Limit Group: GCSV - 8082
Last Update: 02-Apr-2014 09:01:54 Calib Date: 02-Apr-2014 03:13:50
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B037.D

Column 1 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK001

First Level Reviewer: jacksonto Date: 02-Apr-2014 07:33:38

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
10 PCB-1242					
3.346	3.347	-0.001	51598235	266.0	
4.193	4.193	0.0	194730995	256.4	
4.340	4.340	0.0	94758334	261.6	
4.866	4.867	-0.001	68637394	256.0	
5.006	5.007	-0.001	88204704	260.2	
	Average of Peak Amounts =			260.0	
13 PCB-1268					
8.610	8.610	0.0	423436789	248.2	
8.673	8.673	0.0	421202026	248.1	
9.030	9.030	0.0	348733742	245.4	
9.173	9.173	0.0	113693049	243.4	
9.926	9.927	-0.001	1009973997	247.7	
	Average of Peak Amounts =			246.5	

Report Date: 02-Apr-2014 09:02:03 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B042.D

Injection Date: 02-Apr-2014 05:00:31 Instrument ID: SGC_P3b Operator ID: JAX

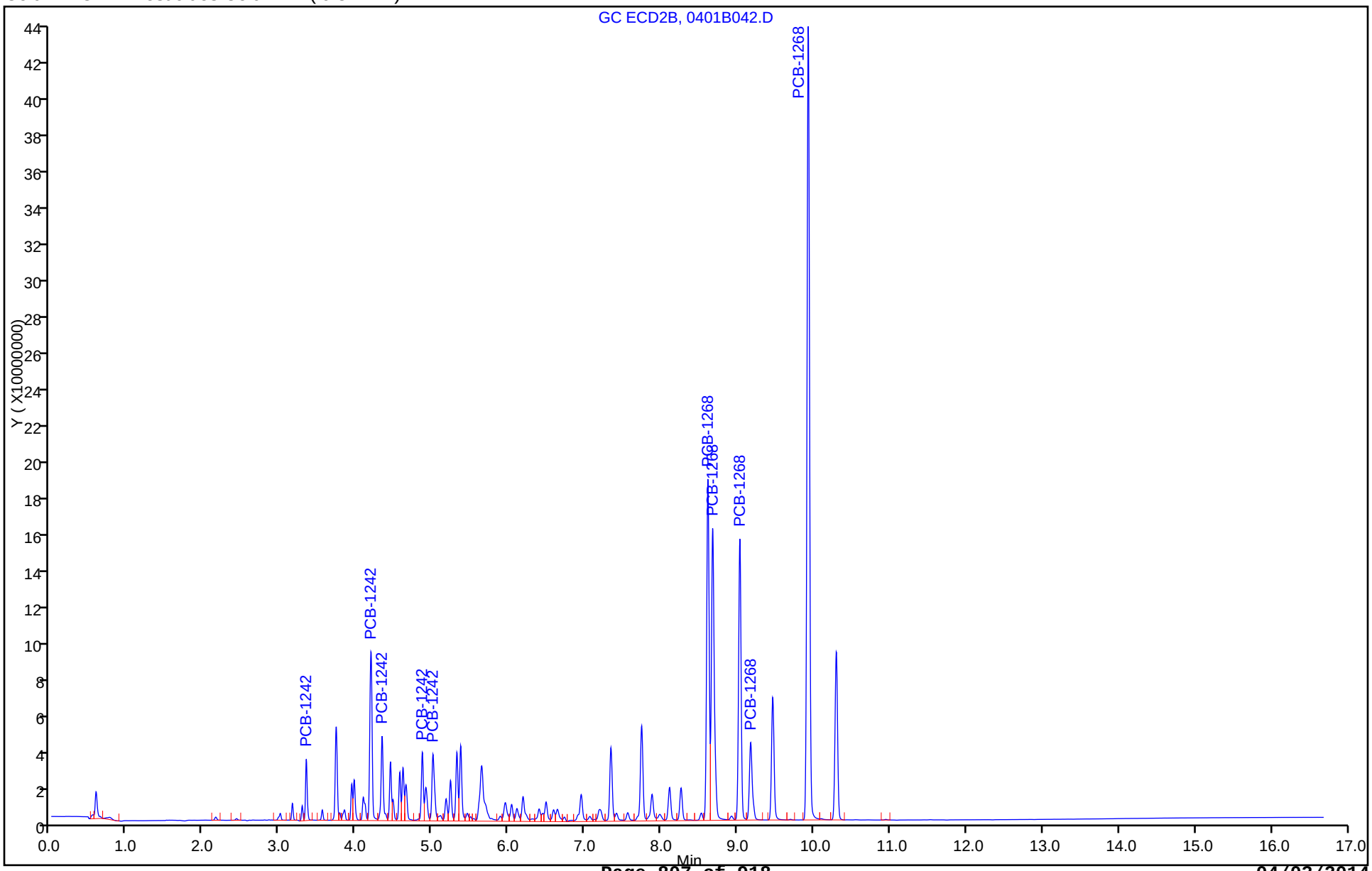
Lims ID: ICV Worklist Smp#: 42

Client ID:

Injection Vol: 1.0 ul Dil. Factor: 1.0000 ALS Bottle#: 42

Method: PCB_P3b Limit Group: GCSV - 8082

Column: CLP2 Pesticides Column 2 (0.32 mm)



FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-53458-1

SDG No.:

Lab Sample ID: CCV 280-219272/58 Calibration Date: 04/02/2014 10:41

Instrument ID: SGC_P3b Calib Start Date: 04/01/2014 20:07

GC Column: CLP2 ID: 0.32(mm) Calib End Date: 04/01/2014 22:15

Lab File ID: 0401B058.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1016 Peak 1	Lin1		459749148		0.515	0.500	2.9	20.0
PCB-1016 Peak 2	Lin1		951945422		0.530	0.500	6.0	20.0
PCB-1016 Peak 3	Lin1		418652910		0.515	0.500	3.0	20.0
PCB-1016 Peak 4	Lin1		316433950		0.500	0.500	-0.0	20.0
PCB-1016 Peak 5	Lin1		388336134		0.495	0.500	-1.0	20.0
PCB-1260 Peak 1	Lin1		642271454		0.488	0.500	-2.4	20.0
PCB-1260 Peak 2	Lin1		736825296		0.500	0.500	-0.0	20.0
PCB-1260 Peak 3	Lin1		1144207568		0.515	0.500	3.0	20.0
PCB-1260 Peak 4	Lin1		1114422604		0.502	0.500	0.3	20.0
PCB-1260 Peak 5	Lin1		955037336		0.512	0.500	2.4	20.0
Tetrachloro-m-xylene	Lin1		12699738040		0.0254	0.0250	1.8	20.0
DCB Decachlorobiphenyl	Lin1		11679051440		0.0247	0.0250	-1.2	20.0

FORM VII
PCBS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-53458-1

SDG No.:

Lab Sample ID: CCV 280-219272/58 Calibration Date: 04/02/2014 10:41

Instrument ID: SGC_P3b Calib Start Date: 04/01/2014 20:07

GC Column: CLP2 ID: 0.32(mm) Calib End Date: 04/01/2014 22:15

Lab File ID: 0401B058.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1016 Peak 1	3.74	3.49	3.99
PCB-1016 Peak 2	4.20	3.95	4.45
PCB-1016 Peak 3	4.34	4.09	4.59
PCB-1016 Peak 4	4.87	4.62	5.12
PCB-1016 Peak 5	5.01	4.76	5.26
PCB-1260 Peak 1	6.45	6.20	6.70
PCB-1260 Peak 2	6.74	6.49	6.99
PCB-1260 Peak 3	7.21	6.96	7.46
PCB-1260 Peak 4	8.11	7.86	8.36
PCB-1260 Peak 5	8.62	8.37	8.87
Tetrachloro-m-xylene	2.86	2.61	3.11
DCB Decachlorobiphenyl	10.29	10.05	10.55

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B058.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 02-Apr-2014 10:41:37 ALS Bottle#: 58 Worklist Smp#: 58
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: CCV
Operator ID: JAX Instrument ID: SGC_P3b
Sublist: chrom-PCB_P3b*sub3

Method: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\PCB_P3b.m
Limit Group: GCSV - 8082
Last Update: 03-Apr-2014 09:29:53 Calib Date: 02-Apr-2014 03:13:50
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B037.D

Column 1 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK052

First Level Reviewer: jacksonto Date: 03-Apr-2014 07:29:41

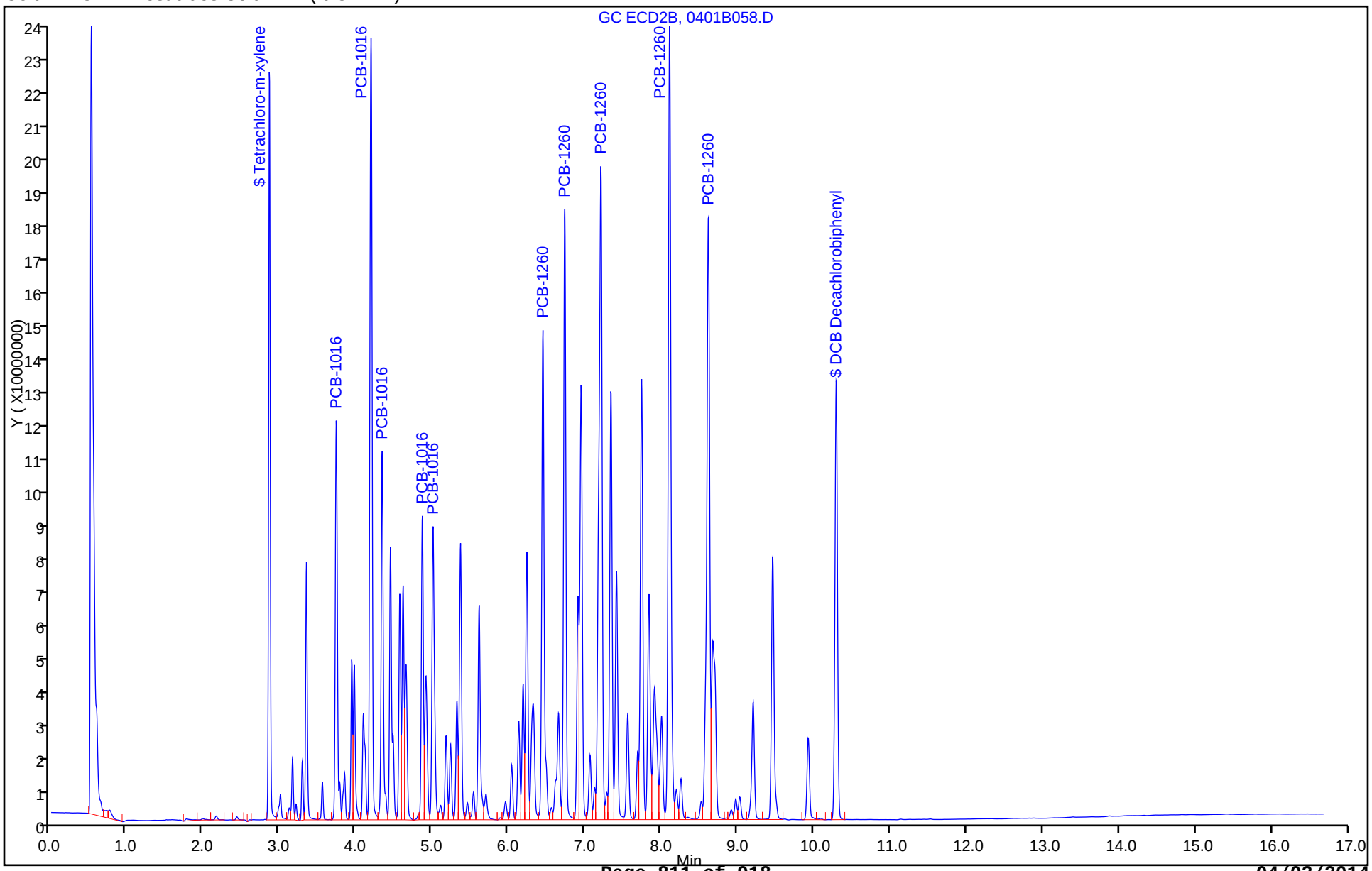
RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
$ 14 Tetrachloro-m-xylene					
2.862	2.862	0.0	317493451	25.4	
1 PCB-1016					
3.739	3.738	0.001	229874574	514.6	
4.195	4.195	0.0	475972711	530.2	
4.342	4.342	0.0	209326455	515.1	
4.869	4.868	0.001	158216975	499.6	
5.009	5.008	0.001	194168067	495.0	
	Average of Peak Amounts =			510.9	
12 PCB-1260					
6.449	6.448	0.001	321135727	488.0	
6.735	6.735	0.0	368412648	499.8	
7.209	7.208	0.001	572103784	514.8	
8.109	8.108	0.001	557211302	501.6	
8.619	8.618	0.001	477518668	511.8	
	Average of Peak Amounts =			503.2	
$ 15 DCB Decachlorobiphenyl					
10.292	10.295	-0.003	291976286	24.7	
S 8 Polychlorinated biphenyls, Total					
				1014.1	

Report Date: 03-Apr-2014 09:29:53 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B058.D				
Injection Date:	02-Apr-2014 10:41:37	Instrument ID:	SGC_P3b	Operator ID:	JAX
Lims ID:	CCV			Worklist Smp#:	58
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	58
Method:	PCB_P3b	Limit Group:	GCSV - 8082		

Column: CLP2 Pesticides Column 2 (0.32 mm)



FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-53458-1

SDG No.:

Lab Sample ID: CCV 280-219272/70 Calibration Date: 04/02/2014 15:07

Instrument ID: SGC_P3b Calib Start Date: 04/01/2014 20:07

GC Column: CLP2 ID: 0.32(mm) Calib End Date: 04/01/2014 22:15

Lab File ID: 0401B070.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1016 Peak 1	Lin1		423855024		0.473	0.500	-5.4	20.0
PCB-1016 Peak 2	Lin1		885221238		0.492	0.500	-1.5	20.0
PCB-1016 Peak 3	Lin1		383435858		0.471	0.500	-5.8	20.0
PCB-1016 Peak 4	Lin1		298526358		0.471	0.500	-5.9	20.0
PCB-1016 Peak 5	Lin1		353565284		0.450	0.500	-10.0	20.0
PCB-1260 Peak 1	Lin1		589807014		0.448	0.500	-10.5	20.0
PCB-1260 Peak 2	Lin1		652437020		0.442	0.500	-11.6	20.0
PCB-1260 Peak 3	Lin1		1023272404		0.460	0.500	-8.1	20.0
PCB-1260 Peak 4	Lin1		994654802		0.447	0.500	-10.6	20.0
PCB-1260 Peak 5	Lin1		800256464		0.428	0.500	-14.4	20.0
Tetrachloro-m-xylene	Lin1		11709902920		0.0234	0.0250	-6.3	20.0
DCB Decachlorobiphenyl	Lin1		9308327240		0.0196	0.0250	-21.4*	20.0

FORM VII
PCBS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-53458-1

SDG No.:

Lab Sample ID: CCV 280-219272/70 Calibration Date: 04/02/2014 15:07

Instrument ID: SGC_P3b Calib Start Date: 04/01/2014 20:07

GC Column: CLP2 ID: 0.32(mm) Calib End Date: 04/01/2014 22:15

Lab File ID: 0401B070.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1016 Peak 1	3.74	3.49	3.99
PCB-1016 Peak 2	4.19	3.95	4.45
PCB-1016 Peak 3	4.34	4.09	4.59
PCB-1016 Peak 4	4.87	4.62	5.12
PCB-1016 Peak 5	5.01	4.76	5.26
PCB-1260 Peak 1	6.45	6.20	6.70
PCB-1260 Peak 2	6.73	6.49	6.99
PCB-1260 Peak 3	7.21	6.96	7.46
PCB-1260 Peak 4	8.11	7.86	8.36
PCB-1260 Peak 5	8.62	8.37	8.87
Tetrachloro-m-xylene	2.86	2.61	3.11
DCB Decachlorobiphenyl	10.29	10.05	10.55

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B070.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 02-Apr-2014 15:07:36 ALS Bottle#: 70 Worklist Smp#: 70
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: CCV
Operator ID: JAX Instrument ID: SGC_P3b
Sublist: chrom-PCB_P3b*sub3

Method: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\PCB_P3b.m
Limit Group: GCSV - 8082
Last Update: 03-Apr-2014 09:29:39 Calib Date: 02-Apr-2014 03:13:50
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B037.D

Column 1 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK052

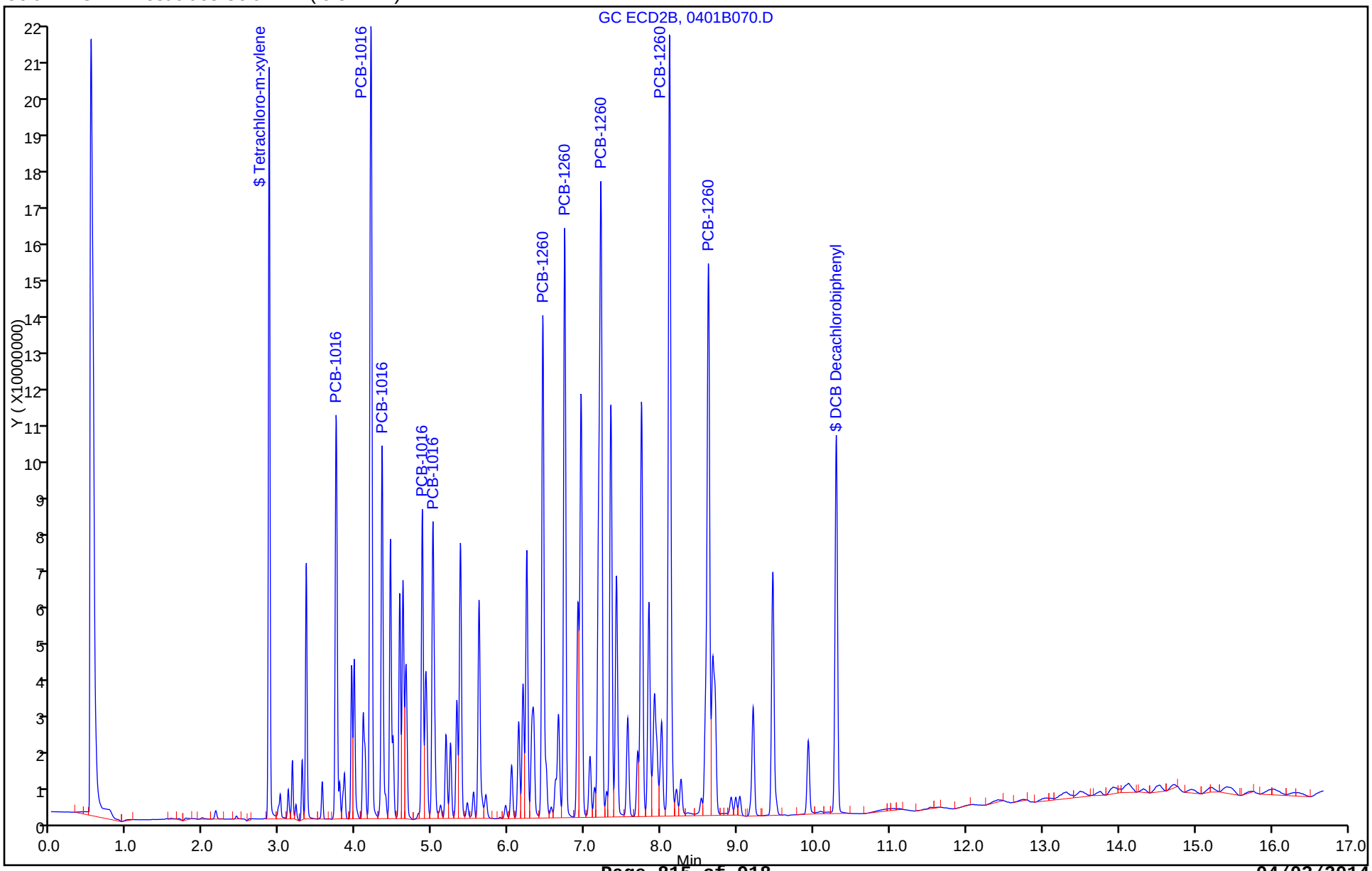
RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
$ 14 Tetrachloro-m-xylene					
2.861	2.862	-0.001	292747573	23.4	
1 PCB-1016					
3.737	3.738	-0.001	211927512	473.2	
4.194	4.195	-0.001	442610619	492.3	
4.341	4.342	-0.001	191717929	470.9	
4.867	4.868	-0.001	149263179	470.6	
5.007	5.008	-0.001	176782642	450.0	
	Average of Peak Amounts =			471.4	
12 PCB-1260					
6.447	6.448	-0.001	294903507	447.6	
6.734	6.735	-0.001	326218510	442.0	
7.207	7.208	-0.001	511636202	459.7	
8.107	8.108	-0.001	497327401	447.2	
8.617	8.618	-0.001	400128232	428.1	
	Average of Peak Amounts =			444.9	
$ 15 DCB Decachlorobiphenyl					
10.294	10.295	-0.001	232708181	19.6	
S 8 Polychlorinated biphenyls, Total					
				916.3	

Report Date: 03-Apr-2014 09:29:39 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B070.D				
Injection Date:	02-Apr-2014 15:07:36	Instrument ID:	SGC_P3b	Operator ID:	JAX
Lims ID:	CCV			Worklist Smp#:	70
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	70
Method:	PCB_P3b	Limit Group:	GCSV - 8082		

Column: CLP2 Pesticides Column 2 (0.32 mm)



FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-53458-1

SDG No.:

Lab Sample ID: CCV 280-219272/97 Calibration Date: 04/02/2014 20:49

Instrument ID: SGC_P3b Calib Start Date: 04/01/2014 20:07

GC Column: CLP2 ID: 0.32(mm) Calib End Date: 04/01/2014 22:15

Lab File ID: 0401B086.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1016 Peak 1	Lin1		438850270		0.491	0.500	-1.9	20.0
PCB-1016 Peak 2	Lin1		923210990		0.514	0.500	2.8	20.0
PCB-1016 Peak 3	Lin1		399222300		0.491	0.500	-1.9	20.0
PCB-1016 Peak 4	Lin1		305927168		0.483	0.500	-3.5	20.0
PCB-1016 Peak 5	Lin1		369491426		0.471	0.500	-5.9	20.0
PCB-1260 Peak 1	Lin1		647818378		0.492	0.500	-1.5	20.0
PCB-1260 Peak 2	Lin1		691449090		0.469	0.500	-6.3	20.0
PCB-1260 Peak 3	Lin1		1108994114		0.499	0.500	-0.3	20.0
PCB-1260 Peak 4	Lin1		1173708044		0.529	0.500	5.7	20.0
PCB-1260 Peak 5	Lin1		922523940		0.494	0.500	-1.2	20.0
Tetrachloro-m-xylene	Lin1		12332972320		0.0247	0.0250	-1.2	20.0
DCB Decachlorobiphenyl	Lin1		11446414120		0.0242	0.0250	-3.2	20.0

FORM VII
PCBS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-53458-1

SDG No.:

Lab Sample ID: CCV 280-219272/97 Calibration Date: 04/02/2014 20:49

Instrument ID: SGC_P3b Calib Start Date: 04/01/2014 20:07

GC Column: CLP2 ID: 0.32(mm) Calib End Date: 04/01/2014 22:15

Lab File ID: 0401B086.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1016 Peak 1	3.74	3.49	3.99
PCB-1016 Peak 2	4.20	3.95	4.45
PCB-1016 Peak 3	4.34	4.09	4.59
PCB-1016 Peak 4	4.87	4.62	5.12
PCB-1016 Peak 5	5.01	4.76	5.26
PCB-1260 Peak 1	6.45	6.20	6.70
PCB-1260 Peak 2	6.73	6.49	6.99
PCB-1260 Peak 3	7.21	6.96	7.46
PCB-1260 Peak 4	8.11	7.86	8.36
PCB-1260 Peak 5	8.62	8.37	8.87
Tetrachloro-m-xylene	2.86	2.61	3.11
DCB Decachlorobiphenyl	10.29	10.05	10.55

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B086.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 02-Apr-2014 20:49:30 ALS Bottle#: 86 Worklist Smp#: 97
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: CCV
Operator ID: JAX Instrument ID: SGC_P3b
Sublist: chrom-PCB_P3b*sub3

Method: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\PCB_P3b.m
Limit Group: GCSV - 8082
Last Update: 03-Apr-2014 09:29:30 Calib Date: 02-Apr-2014 03:13:50
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B037.D

Column 1 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK052

First Level Reviewer: jacksonto Date: 03-Apr-2014 08:18:50

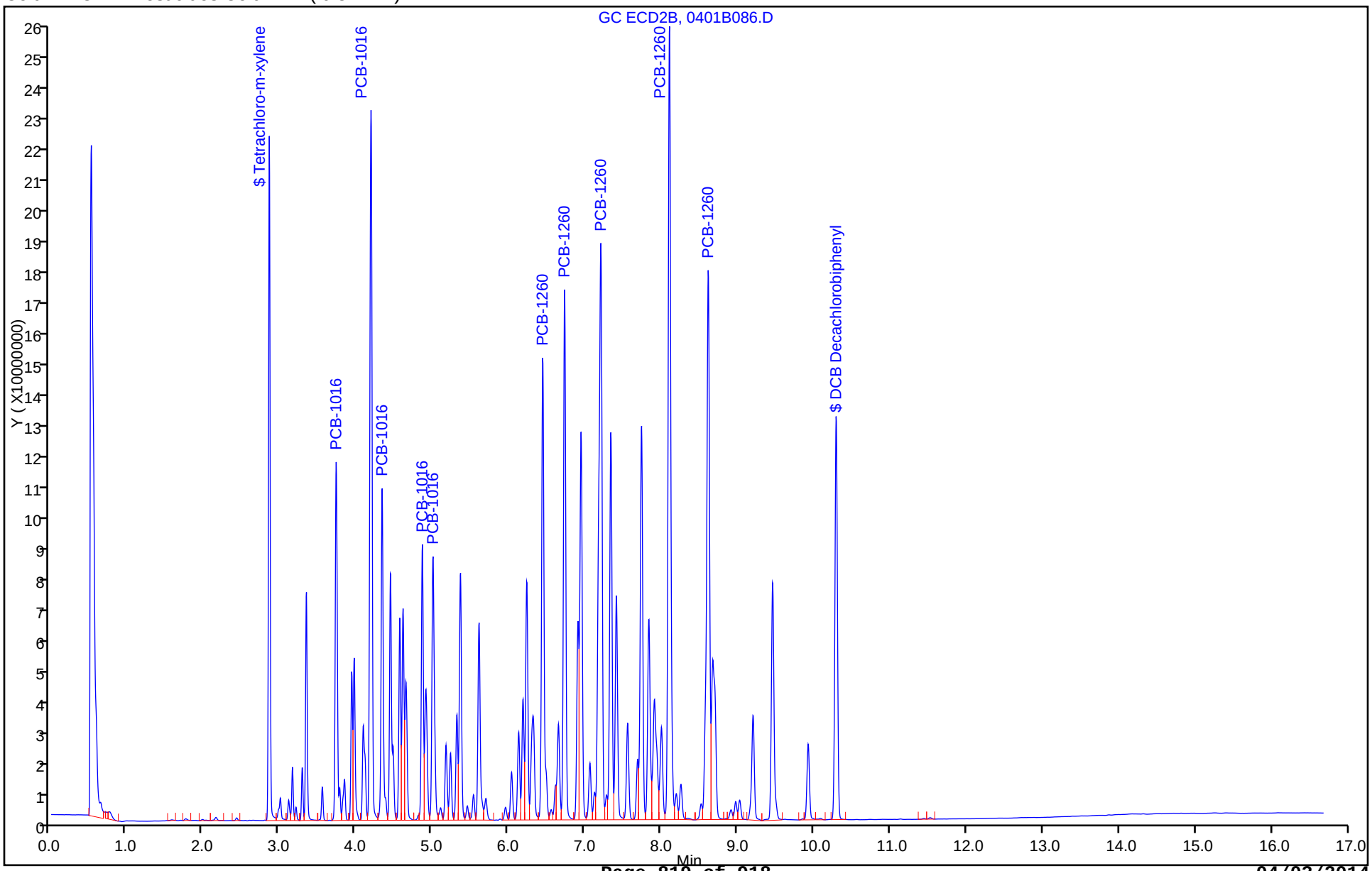
RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
$ 14 Tetrachloro-m-xylene					
2.862	2.862	0.0	308324308	24.7	
1 PCB-1016					
3.738	3.738	0.0	219425135	490.5	
4.195	4.195	0.0	461605495	513.9	
4.342	4.342	0.0	199611150	490.7	
4.868	4.868	0.0	152963584	482.6	
5.008	5.008	0.0	184745713	470.6	
	Average of Peak Amounts =			489.7	
12 PCB-1260					
6.445	6.448	-0.003	323909189	492.3	
6.732	6.735	-0.003	345724545	468.7	
7.208	7.208	0.0	554497057	498.7	
8.108	8.108	0.0	586854022	528.6	
8.615	8.618	-0.003	461261970	494.2	
	Average of Peak Amounts =			496.5	
$ 15 DCB Decachlorobiphenyl					
10.292	10.295	-0.003	286160353	24.2	
S 8 Polychlorinated biphenyls, Total					
				986.2	

Report Date: 03-Apr-2014 09:29:31 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B086.D				
Injection Date:	02-Apr-2014 20:49:30	Instrument ID:	SGC_P3b	Operator ID:	JAX
Lims ID:	CCV			Worklist Smp#:	97
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	86
Method:	PCB_P3b	Limit Group:	GCSV - 8082		

Column: CLP2 Pesticides Column 2 (0.32 mm)



FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-53458-1

SDG No.:

Lab Sample ID: CCV 280-219272/99 Calibration Date: 04/03/2014 01:05

Instrument ID: SGC_P3b Calib Start Date: 04/01/2014 20:07

GC Column: CLP2 ID: 0.32(mm) Calib End Date: 04/01/2014 22:15

Lab File ID: 0401B098.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1016 Peak 1	Lin1		441526044		0.494	0.500	-1.3	20.0
PCB-1016 Peak 2	Lin1		930574750		0.518	0.500	3.6	20.0
PCB-1016 Peak 3	Lin1		404830046		0.498	0.500	-0.5	20.0
PCB-1016 Peak 4	Lin1		312051442		0.492	0.500	-1.5	20.0
PCB-1016 Peak 5	Lin1		376434280		0.480	0.500	-4.1	20.0
PCB-1260 Peak 1	Lin1		638463922		0.485	0.500	-3.0	20.0
PCB-1260 Peak 2	Lin1		680536736		0.461	0.500	-7.8	20.0
PCB-1260 Peak 3	Lin1		1118874462		0.503	0.500	0.6	20.0
PCB-1260 Peak 4	Lin1		1102775490		0.496	0.500	-0.7	20.0
PCB-1260 Peak 5	Lin1		949823198		0.509	0.500	1.8	20.0
Tetrachloro-m-xylene	Lin1		12404843440		0.0248	0.0250	-0.6	20.0
DCB Decachlorobiphenyl	Lin1		11817144000		0.0250	0.0250	-0.0	20.0

FORM VII
PCBS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-53458-1

SDG No.:

Lab Sample ID: CCV 280-219272/99 Calibration Date: 04/03/2014 01:05

Instrument ID: SGC_P3b Calib Start Date: 04/01/2014 20:07

GC Column: CLP2 ID: 0.32(mm) Calib End Date: 04/01/2014 22:15

Lab File ID: 0401B098.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1016 Peak 1	3.74	3.49	3.99
PCB-1016 Peak 2	4.20	3.95	4.45
PCB-1016 Peak 3	4.34	4.09	4.59
PCB-1016 Peak 4	4.87	4.62	5.12
PCB-1016 Peak 5	5.01	4.76	5.26
PCB-1260 Peak 1	6.45	6.20	6.70
PCB-1260 Peak 2	6.73	6.49	6.99
PCB-1260 Peak 3	7.21	6.96	7.46
PCB-1260 Peak 4	8.11	7.86	8.36
PCB-1260 Peak 5	8.62	8.37	8.87
Tetrachloro-m-xylene	2.86	2.61	3.11
DCB Decachlorobiphenyl	10.29	10.05	10.55

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B098.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 03-Apr-2014 01:05:44 ALS Bottle#: 98 Worklist Smp#: 99
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: CCV
Operator ID: JAX Instrument ID: SGC_P3b
Sublist: chrom-PCB_P3b*sub3

Method: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\PCB_P3b.m
Limit Group: GCSV - 8082
Last Update: 03-Apr-2014 09:30:14 Calib Date: 02-Apr-2014 03:13:50
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B037.D

Column 1 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK052

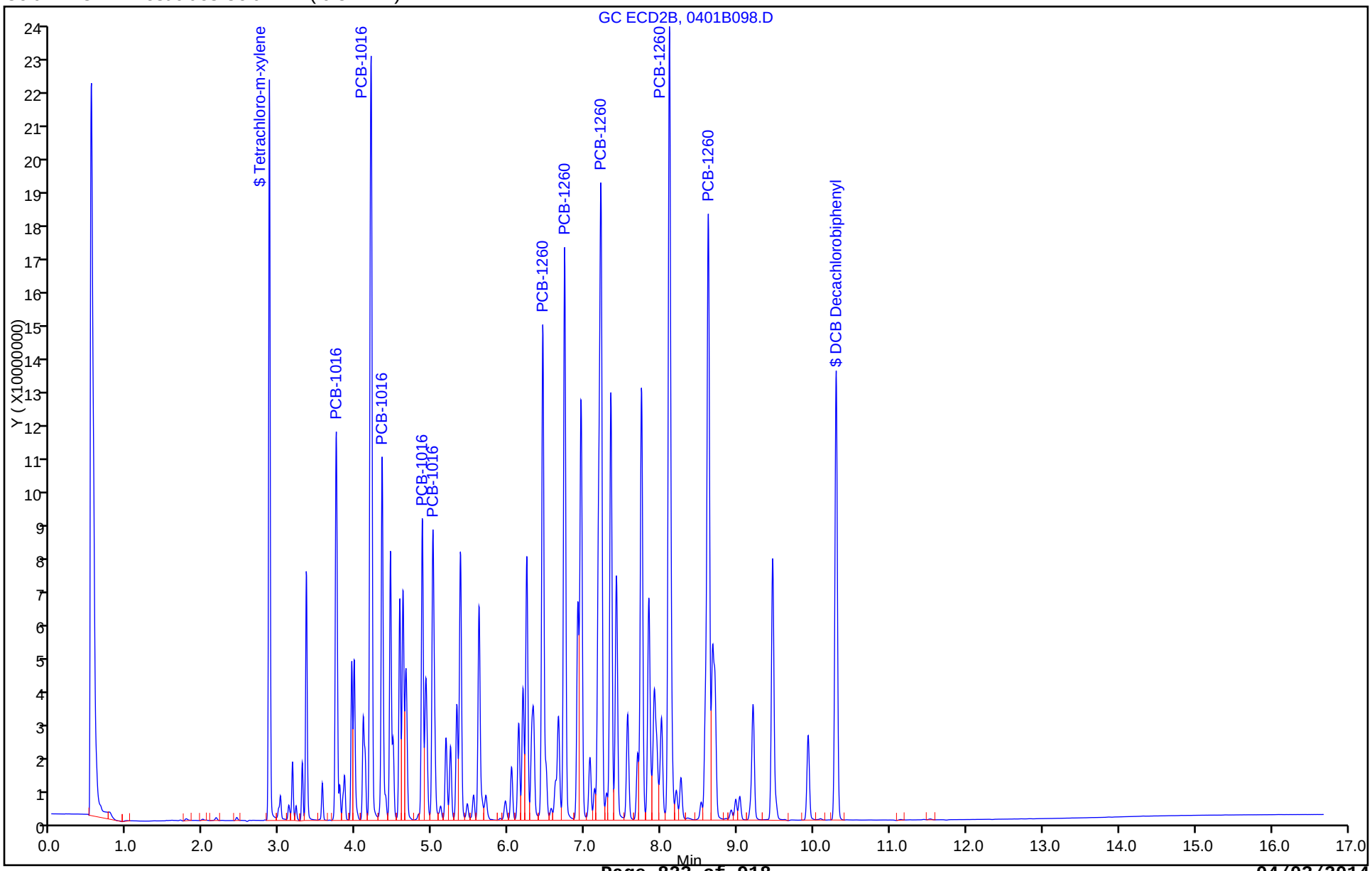
RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
$ 14 Tetrachloro-m-xylene					
2.863	2.862	0.001	310121086	24.8	
1 PCB-1016					
3.740	3.738	0.002	220763022	493.6	
4.196	4.195	0.001	465287375	518.1	
4.340	4.342	-0.002	202415023	497.7	
4.866	4.868	-0.002	156025721	492.5	
5.006	5.008	-0.002	188217140	479.6	
	Average of Peak Amounts =			496.3	
12 PCB-1260					
6.446	6.448	-0.002	319231961	485.1	
6.733	6.735	-0.002	340268368	461.2	
7.206	7.208	-0.002	559437231	503.2	
8.106	8.108	-0.002	551387745	496.3	
8.616	8.618	-0.002	474911599	509.0	
	Average of Peak Amounts =			491.0	
$ 15 DCB Decachlorobiphenyl					
10.293	10.295	-0.002	295428600	25.0	
S 8 Polychlorinated biphenyls, Total					
				987.3	

Report Date: 03-Apr-2014 09:30:14 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B098.D				
Injection Date:	03-Apr-2014 01:05:44	Instrument ID:	SGC_P3b	Operator ID:	JAX
Lims ID:	CCV			Worklist Smp#:	99
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	98
Method:	PCB_P3b	Limit Group:	GCSV - 8082		

Column: CLP2 Pesticides Column 2 (0.32 mm)



FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver
Job No.: 280-53458-1
SDG No.:
Client Sample ID:
Lab Sample ID: MB 280-218625/1-A
Matrix: Solid
Lab File ID: 0401A043.D
Analysis Method: 8082A
Date Collected:
Extraction Method: 3546
Date Extracted: 03/27/2014 11:25
Sample wt/vol: 30(g)
Date Analyzed: 04/02/2014 05:00
Con. Extract Vol.: 10(mL)
Dilution Factor: 1
Injection Volume: 1(uL)
GC Column: CLP1 ID: 0.32(mm)
% Moisture:
GPC Cleanup:(Y/N) N
Analysis Batch No.: 219270
Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
11104-28-2	PCB-1221	ND		47	16
12674-11-2	PCB-1016	ND		33	5.1
11141-16-5	PCB-1232	ND		33	5.1
53469-21-9	PCB-1242	ND		33	9.1
12672-29-6	PCB-1248	ND		33	5.6
11097-69-1	PCB-1254	ND		33	5.5
11096-82-5	PCB-1260	ND		33	2.7
37324-23-5	PCB-1262	ND		33	12
11100-14-4	PCB-1268	ND		33	4.0
1336-36-3	Polychlorinated biphenyls, Total	ND		33	2.7

CAS NO.	SURROGATE	%REC	Q	LIMITS
877-09-8	Tetrachloro-m-xylene	91		53-128
2051-24-3	DCB Decachlorobiphenyl	91		59-130

TestAmerica Denver
Target Compound Quantitation Report

Data File:	\\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A043.D				
Lims ID:	MB 280-218625/1-A				
Client ID:					
Sample Type:	MB				
Inject. Date:	02-Apr-2014 05:00:31	ALS Bottle#:	43	Worklist Smp#:	43
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	MB 280-218625/1-				
Operator ID:	JAX	Instrument ID:	SGC_P3a		
Method:	\\Denchrom\ChromData\SGC_P3a\20140401-21600.b\PCB_P3a.m				
Limit Group:	GCSV - 8082				
Last Update:	03-Apr-2014 08:33:07	Calib Date:	02-Apr-2014 02:52:35		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A037.D				
Column 1 :	CLP1 Pesticides Column 1 (0.32 mm)		Det: GC ECD1A		
Process Host:	XAWRK052				

First Level Reviewer: jacksonto Date: 02-Apr-2014 07:26:46

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
$ 1 Tetrachloro-m-xylene					
2.847	2.845	0.002	65077897	18.2	
2 PCB-1221					
	3.042				
	3.179				
	3.216				
3 PCB-1232					
	3.214				
	3.554				
	4.018				
	4.158				
	4.608				
4 PCB-1248					
	3.554				
	4.014				
	4.611				
	5.311				
	5.851				
5 PCB-1016					
	3.555				
	4.019				
	4.159				
	4.222				
	4.609				

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
6 PCB-1242					
3.556					
4.019					
4.159					
4.222					
4.609					
7 PCB-1254					
5.049					
5.366					
5.852					
6.209					
6.822					
10 PCB-1262					
6.088					
6.454					
7.044					
7.424					
8.254					
8 PCB-1260					
6.089					
6.819					
7.312					
7.749					
8.132					
9 PCB-5432					
6.455					
7.551					
7.748					
8.255					
8.645					
12 PCB-1268					
8.196					
8.246					
8.519					
8.639					
9.442					
11 PCB-5442					
8.255					
8.645					
9.445					
9.928					
9.998					
$ 13 DCB Decachlorobiphenyl					
9.717	9.715	0.002	87766419	18.3	
S 15 Polychlorinated biphenyls, Total					
20.000					

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
14 PCB-5460					
	0.0				
	0.0				
	0.0				
	13.459				
	13.969				

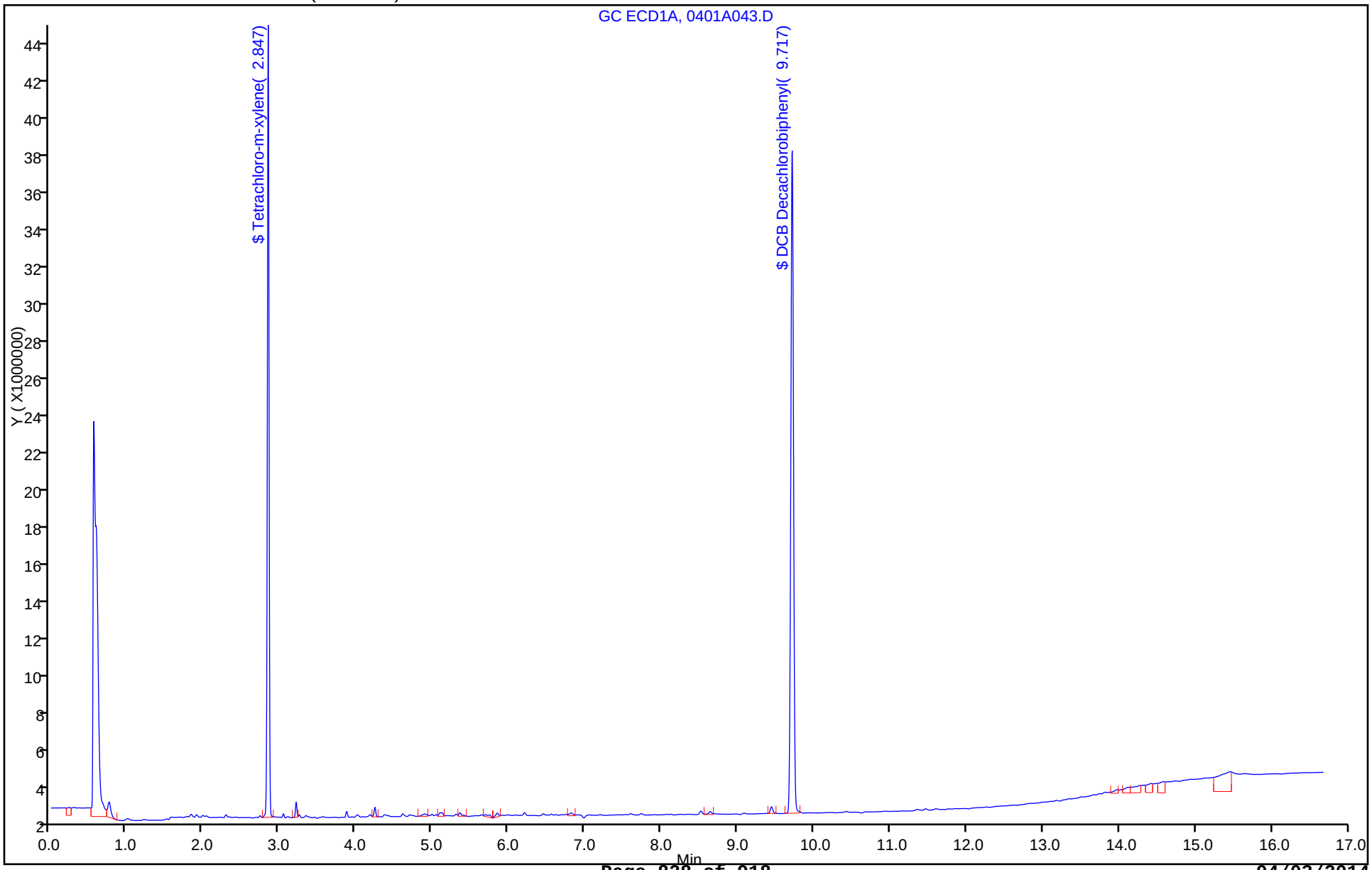
Report Date: 03-Apr-2014 08:33:16 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A043.D

Injection Date:	02-Apr-2014 05:00:31	Instrument ID:	SGC_P3a	Operator ID:	JAX
Lims ID:	MB 280-218625/1-A			Worklist Smp#:	43
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	43
Method:	PCB_P3a	Limit Group:	GCSV - 8082		

Column: CLP1 Pesticides Column 1 (0.32 mm)



FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-53458-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 280-218625/1-A

Matrix: Solid | Lab File ID: 0401B043.D

Analysis Method: 8082A | Date Collected:

Extraction Method: 3546 | Date Extracted: 03/27/2014 11:25

Sample wt/vol: 30(g) | Date Analyzed: 04/02/2014 05:21

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: CLP2 ID: 0.32(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 219272 | Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
877-09-8	Tetrachloro-m-xylene	93		53-128
2051-24-3	DCB Decachlorobiphenyl	88		59-130

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B043.D
Lims ID: MB 280-218625/1-A
Client ID:
Sample Type: MB
Inject. Date: 02-Apr-2014 05:21:45 ALS Bottle#: 43 Worklist Smp#: 43
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: MB 280-218625/1-
Operator ID: JAX Instrument ID: SGC_P3b

Method: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\PCB_P3b.m
Limit Group: GCSV - 8082
Last Update: 03-Apr-2014 09:29:53 Calib Date: 02-Apr-2014 03:13:50
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B037.D

Column 1 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK052

First Level Reviewer: jacksonto Date: 02-Apr-2014 07:40:11

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
$ 14 Tetrachloro-m-xylene					
2.864	2.862	0.002	234171666	18.6	
3 PCB-1221					
	3.165				
	3.292				
	3.348				
7 PCB-1232					
	3.166				
	3.346				
	4.196				
	4.340				
	4.870				
10 PCB-1242					
	3.347				
	4.193				
	4.340				
	4.867				
	5.007				
1 PCB-1016					
	3.738				
	4.195				
	4.342				
	4.868				
	5.008				

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
4 PCB-1248					
4.194					
4.571					
4.868					
5.321					
5.371					
9 PCB-1254					
5.368					
5.612					
6.038					
6.735					
7.212					
12 PCB-1260					
6.448					
6.735					
7.208					
8.108					
8.618					
5 PCB-1262					
6.733					
7.743					
8.110					
8.613					
9.463					
6 PCB-5432					
7.062					
7.696					
8.262					
9.036					
9.466					
13 PCB-1268					
8.610					
8.673					
9.030					
9.173					
9.927					
11 PCB-5442					
9.466					
9.932					
10.050					
10.107					
11.154					
$ 15 DCB Decachlorobiphenyl					
10.294	10.295	-0.001	209800819	17.7	

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags

2 PCB-5460
12.453
13.004
13.460
13.797
14.255

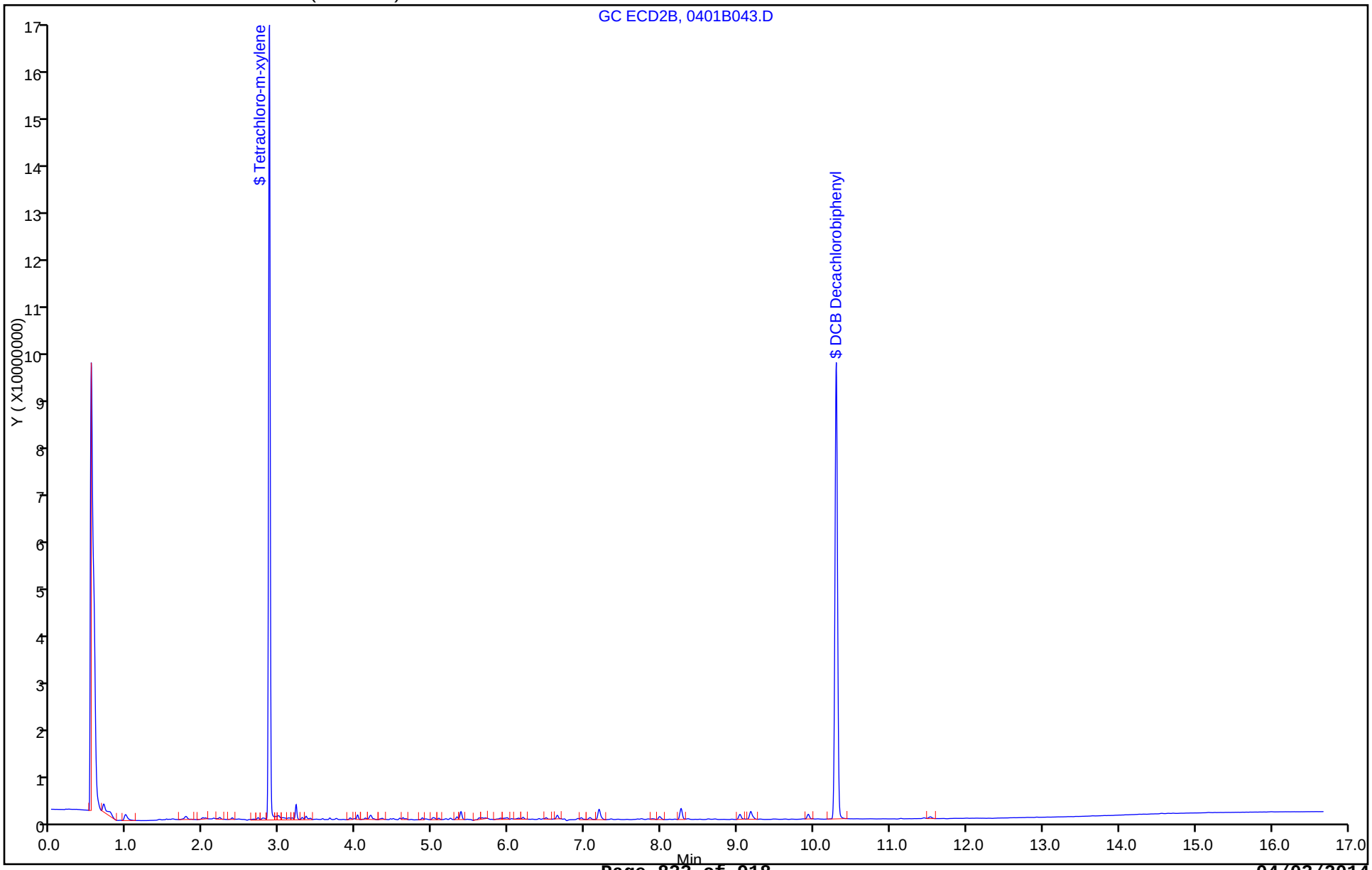
S 8 Polychlorinated biphenyls, Total
0.0

Report Date: 03-Apr-2014 09:30:01 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B043.D				
Injection Date:	02-Apr-2014 05:21:45	Instrument ID:	SGC_P3b	Operator ID:	JAX
Lims ID:	MB 280-218625/1-A			Worklist Smp#:	43
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	43
Method:	PCB_P3b	Limit Group:	GCSV - 8082		

Column: CLP2 Pesticides Column 2 (0.32 mm)



FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver
Job No.: 280-53458-1
SDG No.:
Client Sample ID:
Lab Sample ID: MB 280-218632/1-A
Matrix: Solid
Lab File ID: 0401A071.D
Analysis Method: 8082A
Date Collected:
Extraction Method: 3546
Date Extracted: 03/27/2014 14:30
Sample wt/vol: 30(g)
Date Analyzed: 04/02/2014 15:07
Con. Extract Vol.: 10(mL)
Dilution Factor: 1
Injection Volume: 1(uL)
GC Column: CLP1 ID: 0.32(mm)
% Moisture:
GPC Cleanup:(Y/N) N
Analysis Batch No.: 219270
Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
11104-28-2	PCB-1221	ND		47	16
12674-11-2	PCB-1016	ND		33	5.1
11141-16-5	PCB-1232	ND		33	5.1
53469-21-9	PCB-1242	ND		33	9.1
12672-29-6	PCB-1248	ND		33	5.6
11097-69-1	PCB-1254	ND		33	5.5
11096-82-5	PCB-1260	ND		33	2.7
37324-23-5	PCB-1262	ND		33	12
11100-14-4	PCB-1268	ND		33	4.0
1336-36-3	Polychlorinated biphenyls, Total	ND		33	2.7

CAS NO.	SURROGATE	%REC	Q	LIMITS
877-09-8	Tetrachloro-m-xylene	95		53-128
2051-24-3	DCB Decachlorobiphenyl	84		59-130

TestAmerica Denver
Target Compound Quantitation Report

Data File:	\\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A071.D				
Lims ID:	MB 280-218632/1-A				
Client ID:					
Sample Type:	MB				
Inject. Date:	02-Apr-2014 15:07:36	ALS Bottle#:	71	Worklist Smp#:	72
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	MB 280-218632/1-				
Operator ID:	JAX	Instrument ID:	SGC_P3a		
Method:	\\Denchrom\ChromData\SGC_P3a\20140401-21600.b\PCB_P3a.m				
Limit Group:	GCSV - 8082				
Last Update:	03-Apr-2014 08:32:55	Calib Date:	02-Apr-2014 02:52:35		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A037.D				
Column 1 :	CLP1 Pesticides Column 1 (0.32 mm)		Det: GC ECD1A		
Process Host:	XAWRK052				

First Level Reviewer: jacksonto Date: 03-Apr-2014 06:49:40

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
$ 1 Tetrachloro-m-xylene					
2.845	2.845	0.0	67667144	18.9	
2 PCB-1221					
	3.042				
	3.179				
	3.216				
3 PCB-1232					
	3.214				
	3.554				
	4.018				
	4.158				
	4.608				
4 PCB-1248					
	3.554				
	4.014				
	4.611				
	5.311				
	5.851				
5 PCB-1016					
	3.555				
	4.019				
	4.159				
	4.222				
	4.609				

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
6 PCB-1242					
3.556					
4.019					
4.159					
4.222					
4.609					
7 PCB-1254					
5.049					
5.366					
5.852					
6.209					
6.822					
10 PCB-1262					
6.088					
6.454					
7.044					
7.424					
8.254					
8 PCB-1260					
6.089					
6.819					
7.312					
7.749					
8.132					
9 PCB-5432					
6.455					
7.551					
7.748					
8.255					
8.645					
12 PCB-1268					
8.196					
8.246					
8.519					
8.639					
9.442					
11 PCB-5442					
8.255					
8.645					
9.445					
9.928					
9.998					
$ 13 DCB Decachlorobiphenyl					
9.715	9.715	0.0	80597039	16.7	
S 15 Polychlorinated biphenyls, Total					
20.000					

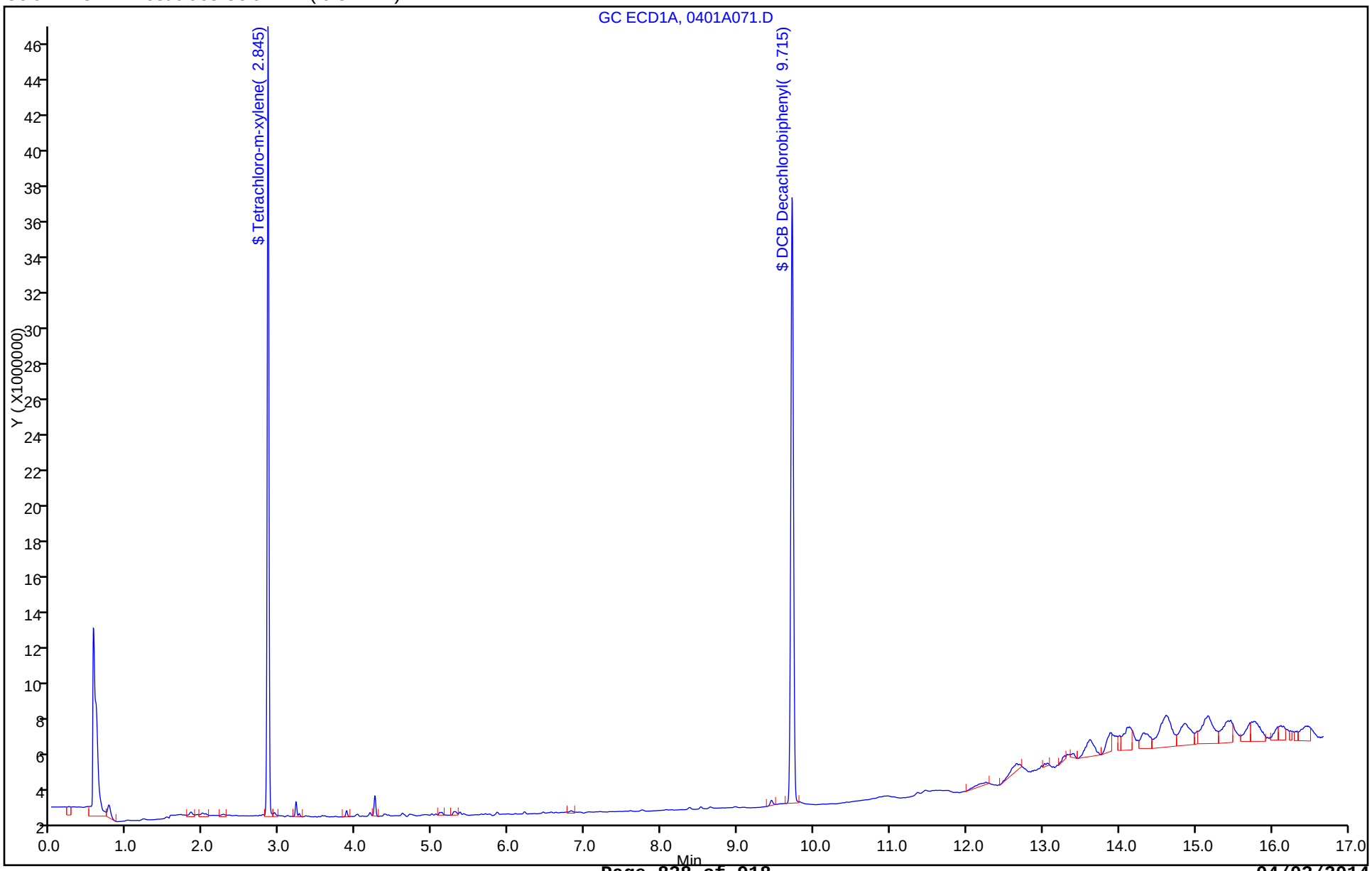
RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
14 PCB-5460					
	0.0				
	0.0				
	0.0				
	13.459				
	13.969				

Report Date: 03-Apr-2014 08:32:56 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A071.D				
Injection Date:	02-Apr-2014 15:07:36	Instrument ID:	SGC_P3a	Operator ID:	JAX
Lims ID:	MB 280-218632/1-A			Worklist Smp#:	72
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	71
Method:	PCB_P3a	Limit Group:	GCSV - 8082		

Column: CLP1 Pesticides Column 1 (0.32 mm)



FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver
Job No.: 280-53458-1
SDG No.:
Client Sample ID:
Lab Sample ID: MB 280-218632/1-A
Matrix: Solid
Lab File ID: 0401B071.D
Analysis Method: 8082A
Date Collected:
Extraction Method: 3546
Date Extracted: 03/27/2014 14:30
Sample wt/vol: 30(g)
Date Analyzed: 04/02/2014 15:28
Con. Extract Vol.: 10(mL)
Dilution Factor: 1
Injection Volume: 1(uL)
GC Column: CLP2 ID: 0.32(mm)
% Moisture:
GPC Cleanup:(Y/N) N
Analysis Batch No.: 219272
Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
877-09-8	Tetrachloro-m-xylene	96		53-128
2051-24-3	DCB Decachlorobiphenyl	88		59-130

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B071.D
Lims ID: MB 280-218632/1-A
Client ID:
Sample Type: MB
Inject. Date: 02-Apr-2014 15:28:55 ALS Bottle#: 71 Worklist Smp#: 72
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: MB 280-218632/1-
Operator ID: JAX Instrument ID: SGC_P3b

Method: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\PCB_P3b.m
Limit Group: GCSV - 8082
Last Update: 03-Apr-2014 09:29:39 Calib Date: 02-Apr-2014 03:13:50
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B037.D

Column 1 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK052

First Level Reviewer: jacksonto Date: 03-Apr-2014 08:16:30

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
$ 14 Tetrachloro-m-xylene					
2.862	2.862	0.0	241339994	19.2	
3 PCB-1221					
3.162	3.165	-0.003	901694	-11.6	
3.348	3.292	0.056	0	0	
3.342	3.348	-0.006	1103523	-14.5	
	Average of Peak Amounts =			-13.0	
7 PCB-1232					
3.162	3.166	-0.004	901694	-5.61	
3.342	3.346	-0.004	1103523	-15.3	
4.192	4.196	-0.004	1598189	-5.28	
4.342	4.340	0.002	513072	-6.66	
4.869	4.870	-0.001	798197	-10.4	
	Average of Peak Amounts =			-8.65	
10 PCB-1242					
3.342	3.347	-0.005	1103523	-13.2	
4.192	4.193	-0.001	1598189	-10.1	
4.342	4.340	0.002	513072	-12.5	
4.869	4.867	0.002	798197	-11.8	
5.009	5.007	0.002	935989	-9.36	
	Average of Peak Amounts =			-11.4	
1 PCB-1016					
3.919	3.738	0.181	845473	-12.6	
4.192	4.195	-0.003	1598189	-8.33	
4.342	4.342	0.0	513072	-9.55	
4.869	4.868	0.001	798197	-11.0	
5.009	5.008	0.001	935989	-5.65	
	Average of Peak Amounts =			-9.42	

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
4 PCB-1248					
4.192	4.194	-0.002	1598189	-5.74	
4.572	4.571	0.001	562377	-7.98	
4.869	4.868	0.001	798197	-14.5	
5.322	5.321	0.001	947008	-7.42	
5.372	5.371	0.001	6152189	1.71	
	Average of Peak Amounts =			-6.78	
9 PCB-1254					
5.372	5.368	0.004	6152189	-0.5596	
5.612	5.612	0.0	740376	-12.3	
6.189	6.038	0.151	964824	-7.31	
6.492	6.735	-0.243	976273	-7.73	
7.205	7.212	-0.007	1371569	-8.94	
	Average of Peak Amounts =			-7.38	
12 PCB-1260					
6.492	6.448	0.044	976273	-5.49	
0.0	6.735	-6.735	0	0	
7.205	7.208	-0.003	1371569	-4.65	
8.175	8.108	0.067	816482	-4.31	
0.0	8.618	-8.618	0	0	
	Average of Peak Amounts =			-4.82	
5 PCB-1262					
6.492	6.733	-0.241	976273	-4.15	
0.0	7.743	-7.743	0	0	
8.175	8.110	0.065	816482	-6.92	
0.0	8.613	-8.613	0	0	
0.0	9.463	-9.463	0	0	
	Average of Peak Amounts =			-5.54	
6 PCB-5432					
7.205	7.062	0.143	1371569	NC	
0.0	7.696	-7.696	0	NC	
8.262	8.262	0.0	514056	NC	
9.032	9.036	-0.004	1090064	NC	
0.0	9.466	-9.466	0	NC	
	Average of Peak Amounts =			0	
13 PCB-1268					
0.0	8.610	-8.610	0	0	
0.0	8.673	-8.673	0	0	
9.032	9.030	0.002	1090064	-6.69	
9.172	9.173	-0.001	1122195	-4.12	
9.925	9.927	-0.002	1806863	-6.51	
	Average of Peak Amounts =			-5.77	
11 PCB-5442					
0.0	9.466	-9.466	0	NC	
9.925	9.932	-0.007	1806863	NC	
0.0	10.050	-10.050	0	NC	
0.0	10.107	-10.107	0	NC	
11.002	11.154	-0.152	794091	NC	
	Average of Peak Amounts =			0	
$ 15 DCB Decachlorobiphenyl					
10.295	10.295	0.0	207945858	17.5	

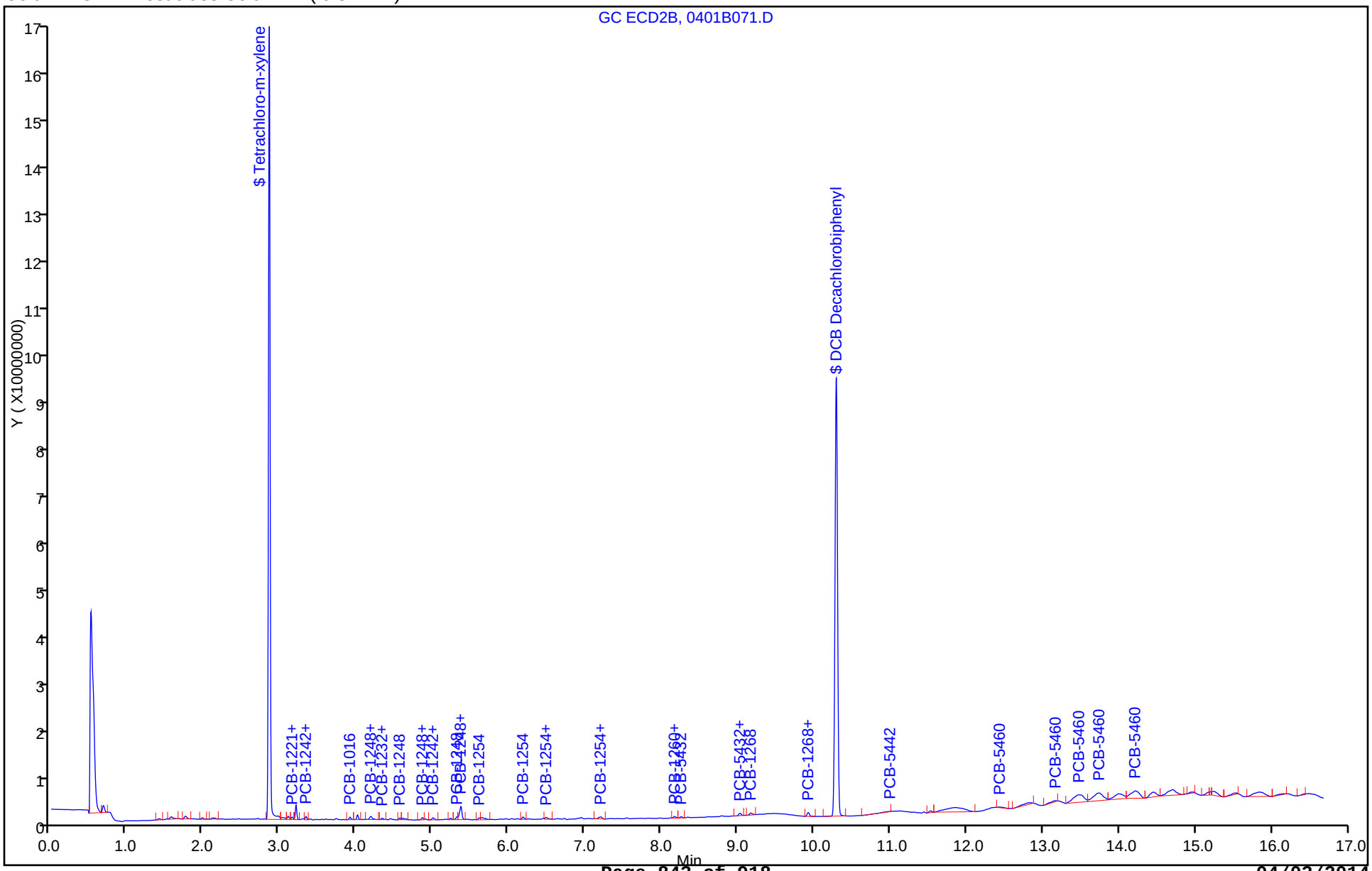
RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
2 PCB-5460					
12.439	12.453	-0.014	783320	NC	
13.169	13.004	0.165	1576630	NC	
13.475	13.460	0.015	14941161	NC	
13.742	13.797	-0.055	13984282	NC	
14.212	14.255	-0.043	12486841	NC	
	Average of Peak Amounts =			0	
S 8 Polychlorinated biphenyls, Total					
				-72.7	

Report Date: 03-Apr-2014 09:29:40 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B071.D				
Injection Date:	02-Apr-2014 15:28:55	Instrument ID:	SGC_P3b	Operator ID:	JAX
Lims ID:	MB 280-218632/1-A			Worklist Smp#:	72
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	71
Method:	PCB_P3b	Limit Group:	GCSV - 8082		

Column: CLP2 Pesticides Column 2 (0.32 mm)



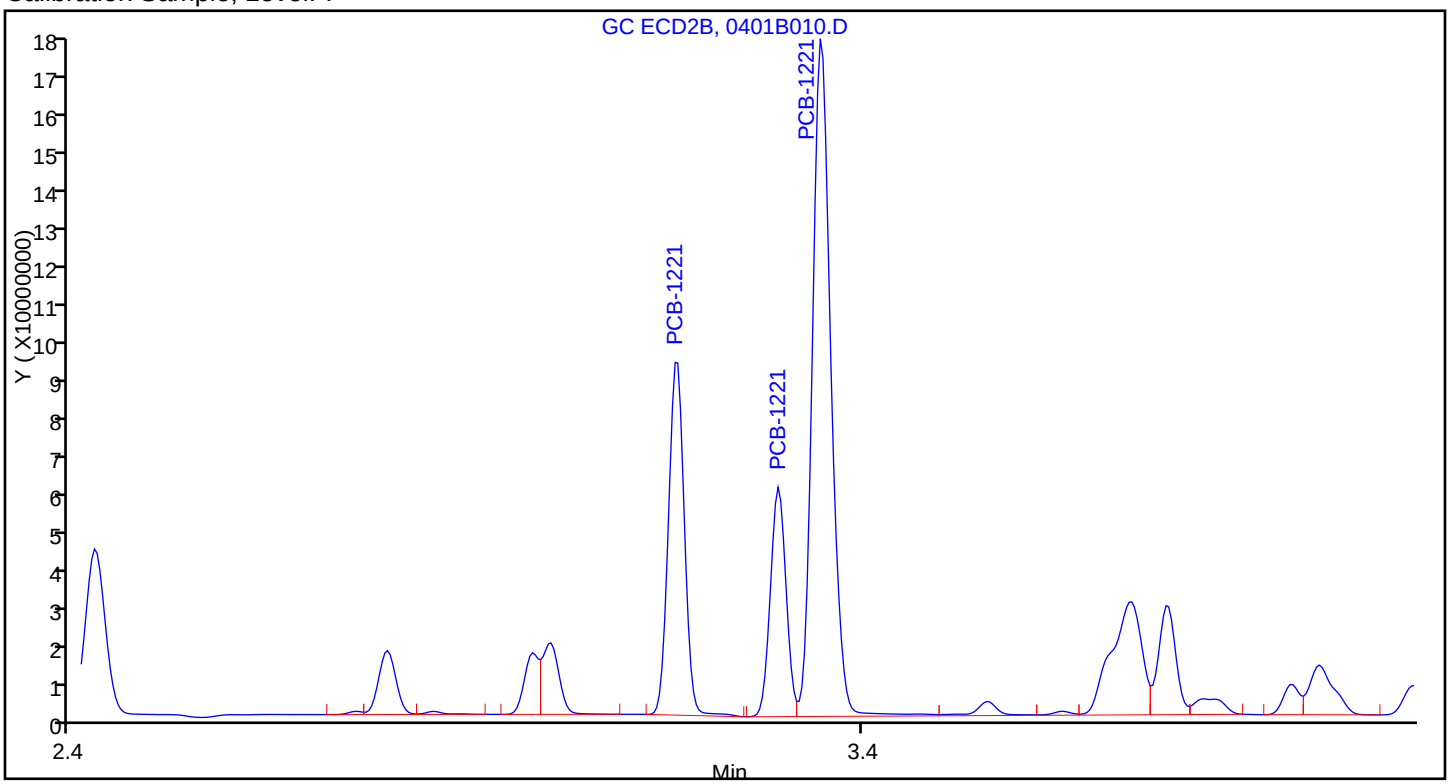
Report Date: 03-Apr-2014 09:29:41 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B071.D				
Injection Date:	02-Apr-2014 15:28:55	Instrument ID:	SGC_P3b		
Lims ID:	MB 280-218632/1-A				
Client ID:					
Operator ID:	JAX	ALS Bottle#:	71	Worklist Smp#:	72
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	PCB_P3b	Limit Group:	GCSV - 8082		
Column:	CLP2 Pesticides Column 2 (0.32 mm)	Detector	GC ECD2B		

3 PCB-1221, CAS: 11104-28-2

Calibration Sample, Level: 7



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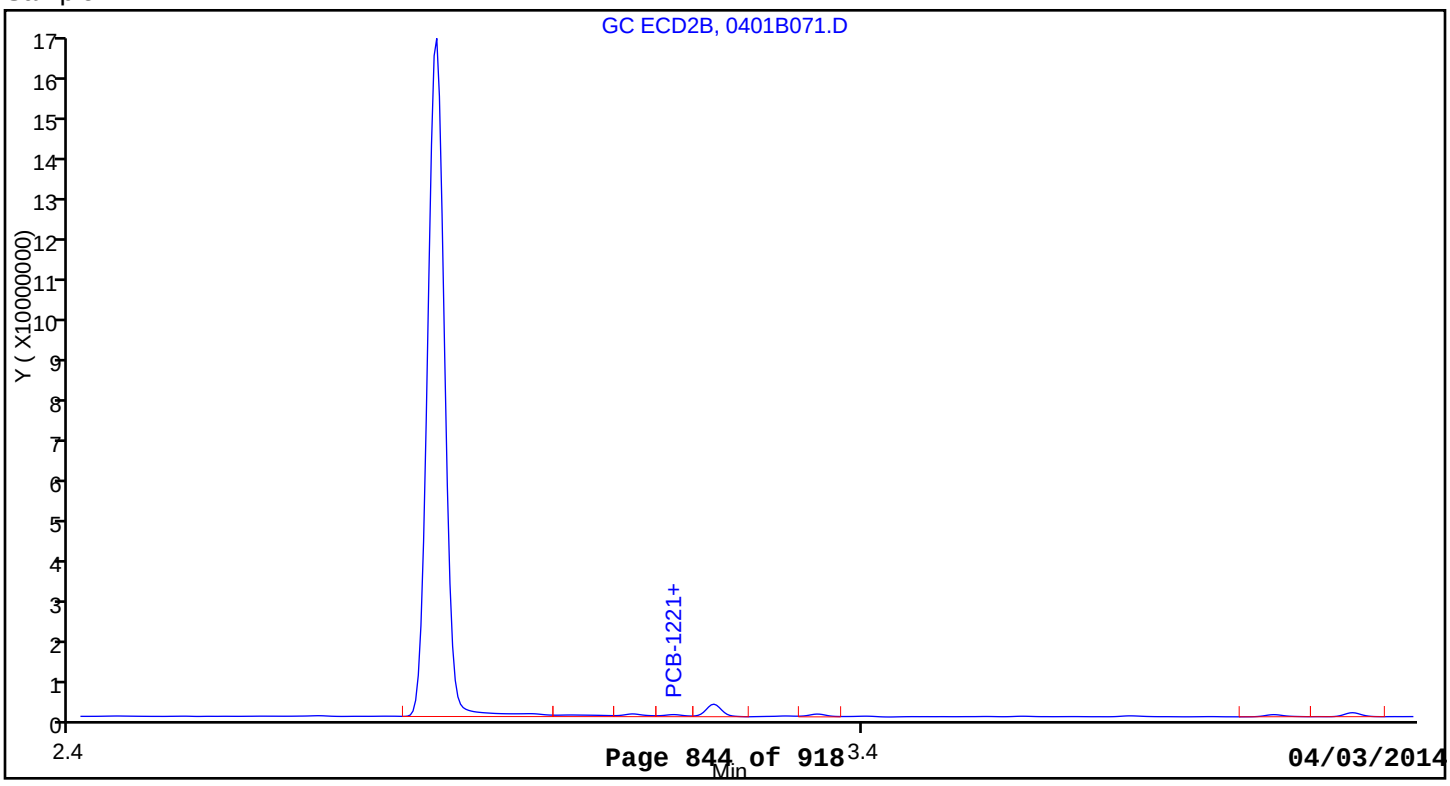


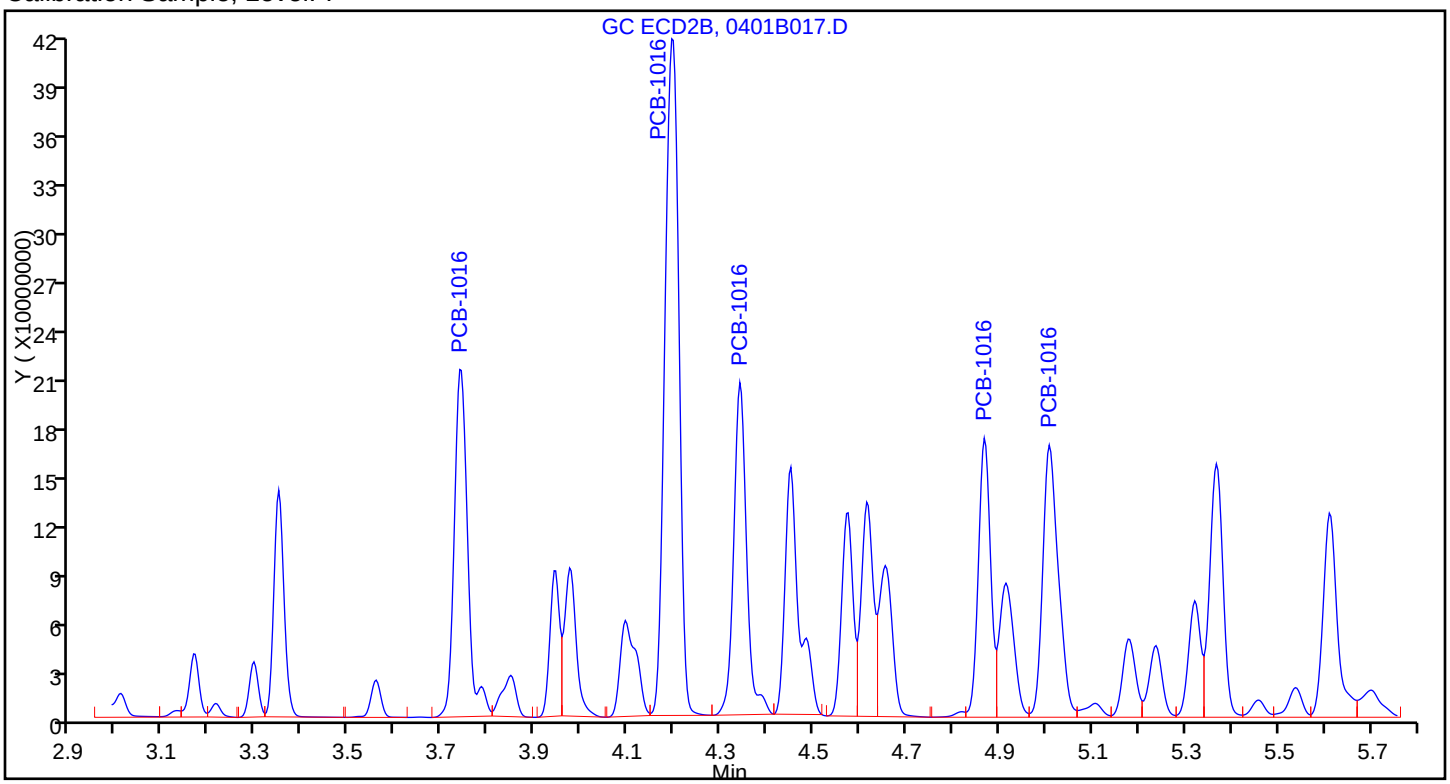
Report Date: 03-Apr-2014 09:29:42 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B071.D				
Injection Date:	02-Apr-2014 15:28:55	Instrument ID:	SGC_P3b		
Lims ID:	MB 280-218632/1-A				
Client ID:					
Operator ID:	JAX	ALS Bottle#:	71	Worklist Smp#:	72
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	PCB_P3b	Limit Group:	GCSV - 8082		
Column:	CLP2 Pesticides Column 2 (0.32 mm)	Detector	GC ECD2B		

1 PCB-1016, CAS: 12674-11-2

Calibration Sample, Level: 7



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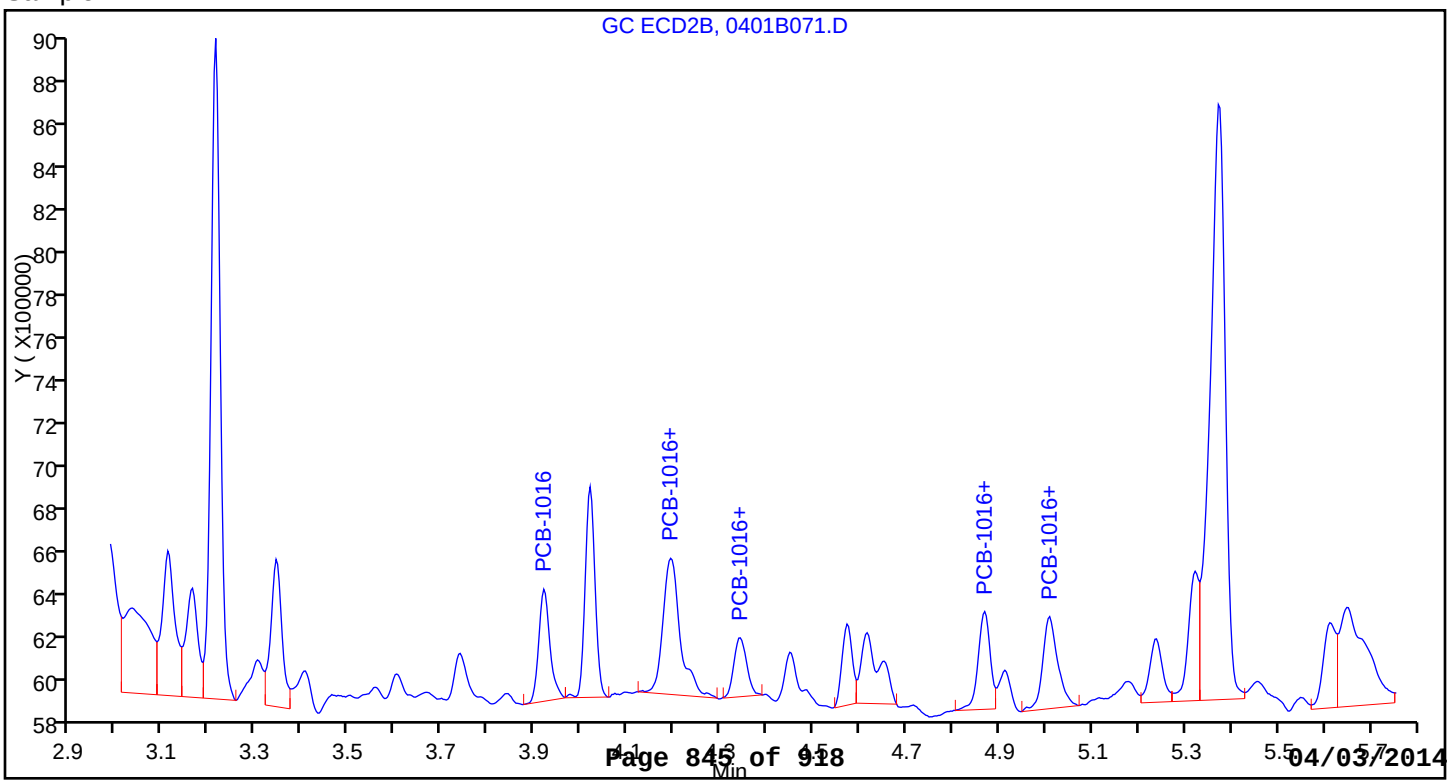


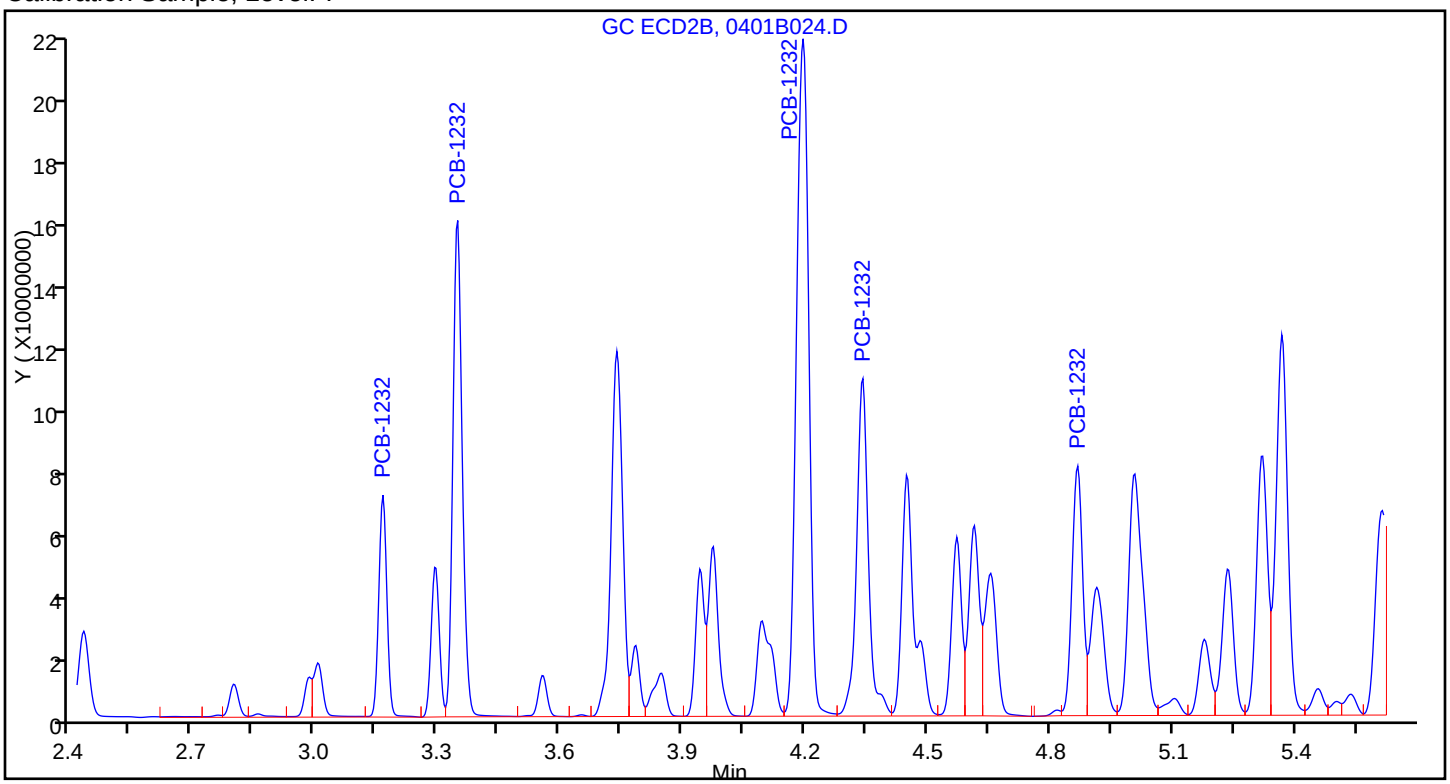
Report Date: 03-Apr-2014 09:29:41 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B071.D				
Injection Date:	02-Apr-2014 15:28:55	Instrument ID:	SGC_P3b		
Lims ID:	MB 280-218632/1-A				
Client ID:					
Operator ID:	JAX	ALS Bottle#:	71	Worklist Smp#:	72
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	PCB_P3b	Limit Group:	GCSV - 8082		
Column:	CLP2 Pesticides Column 2 (0.32 mm)	Detector	GC ECD2B		

7 PCB-1232, CAS: 11141-16-5

Calibration Sample, Level: 7



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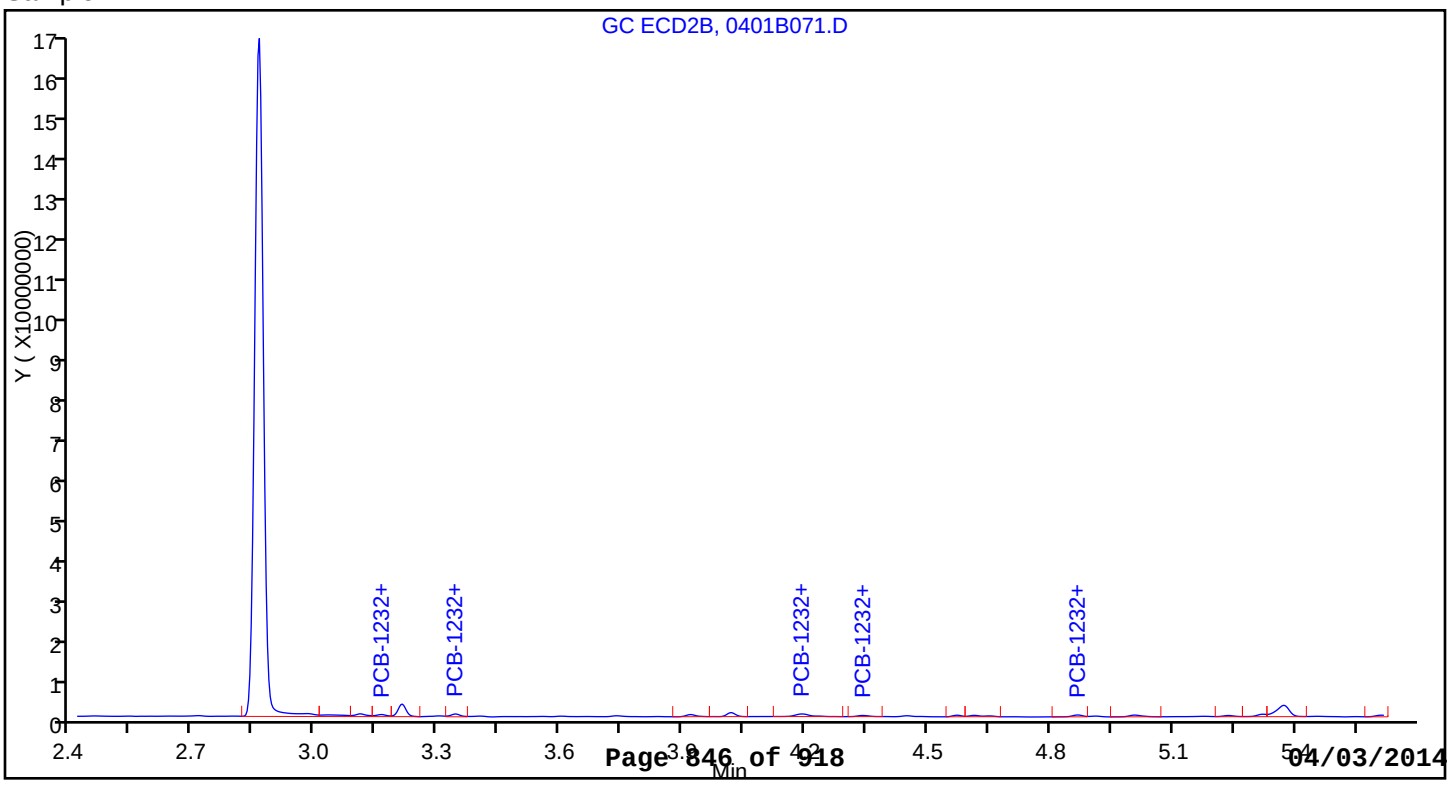


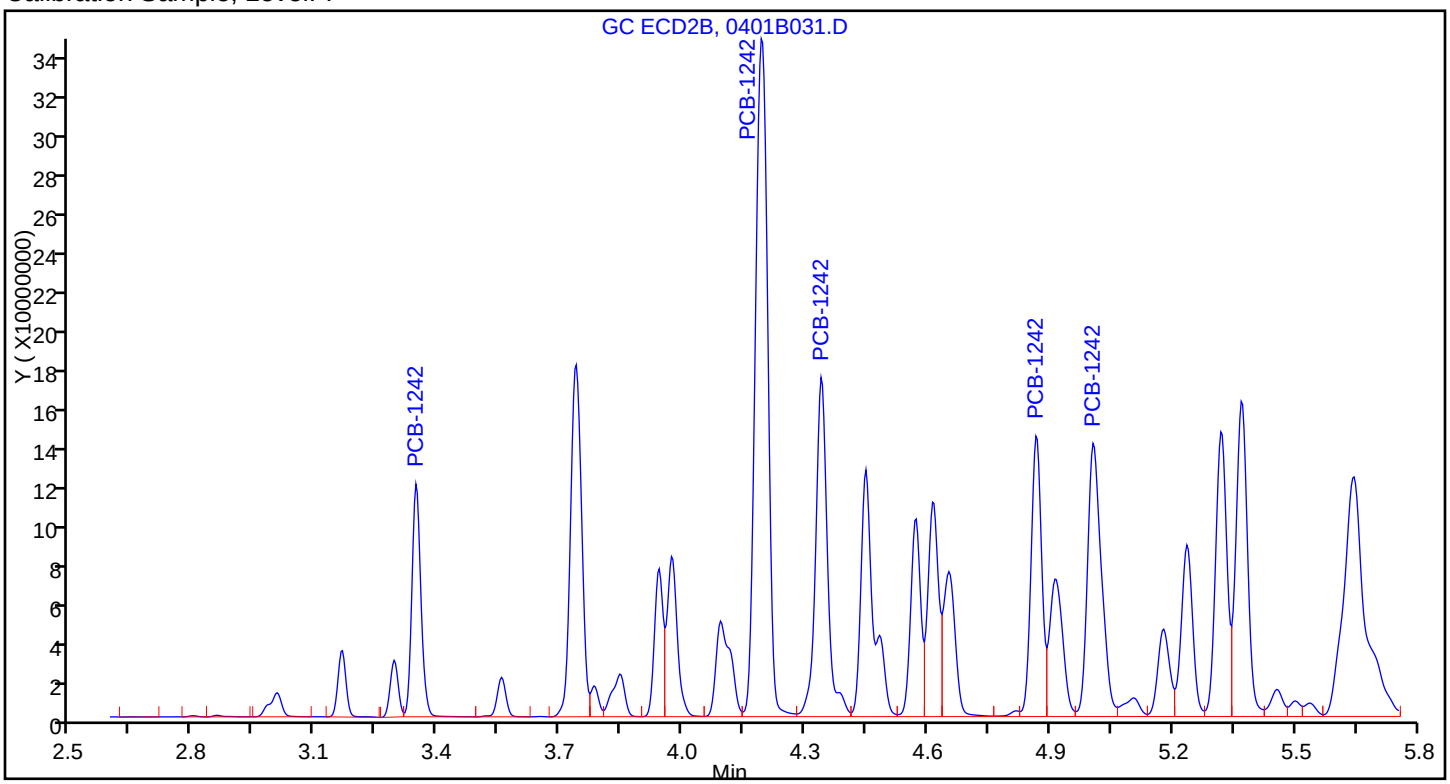
Report Date: 03-Apr-2014 09:29:41 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B071.D				
Injection Date:	02-Apr-2014 15:28:55	Instrument ID:	SGC_P3b		
Lims ID:	MB 280-218632/1-A				
Client ID:					
Operator ID:	JAX	ALS Bottle#:	71	Worklist Smp#:	72
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	PCB_P3b	Limit Group:	GCSV - 8082		
Column:	CLP2 Pesticides Column 2 (0.32 mm)	Detector	GC ECD2B		

10 PCB-1242, CAS: 53469-21-9

Calibration Sample, Level: 7



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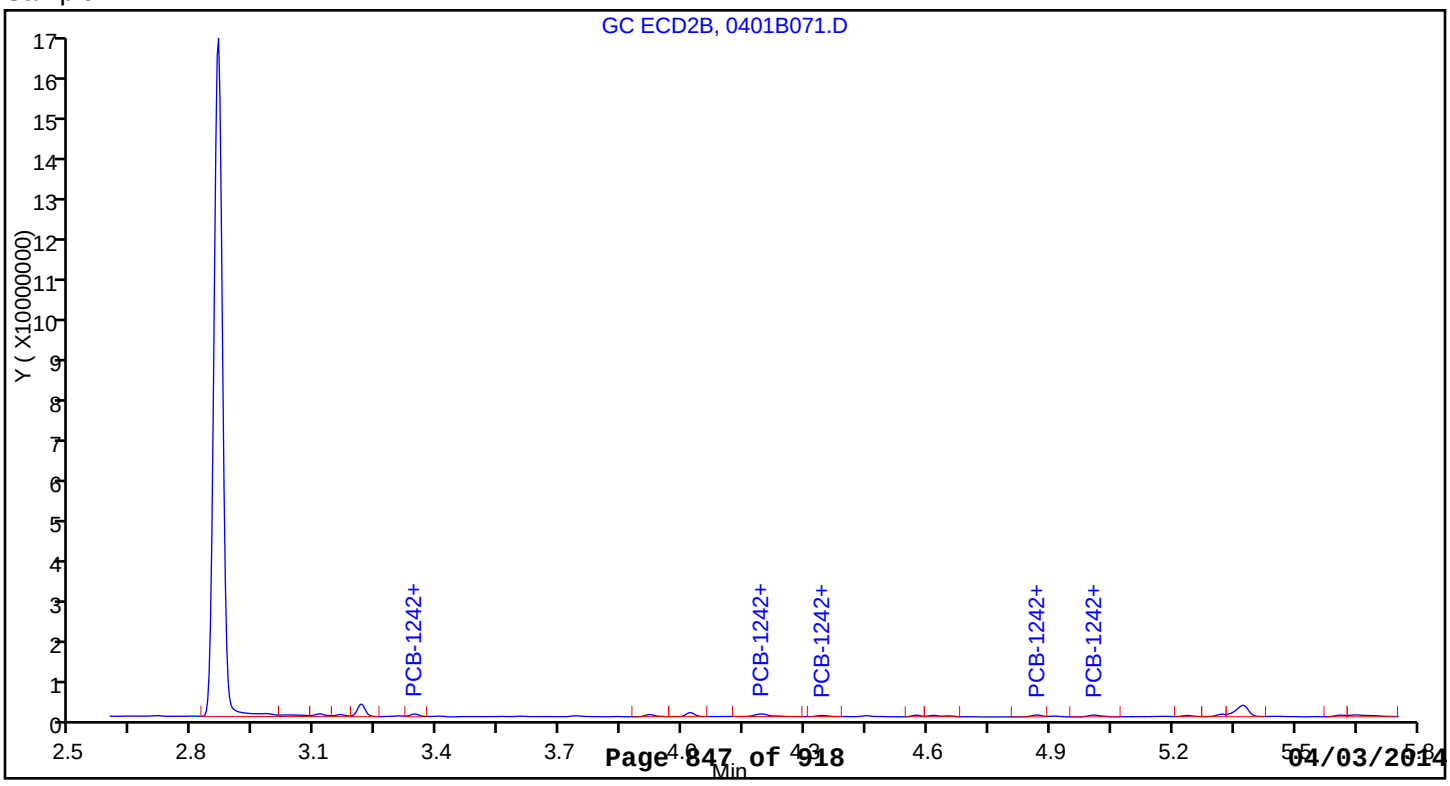


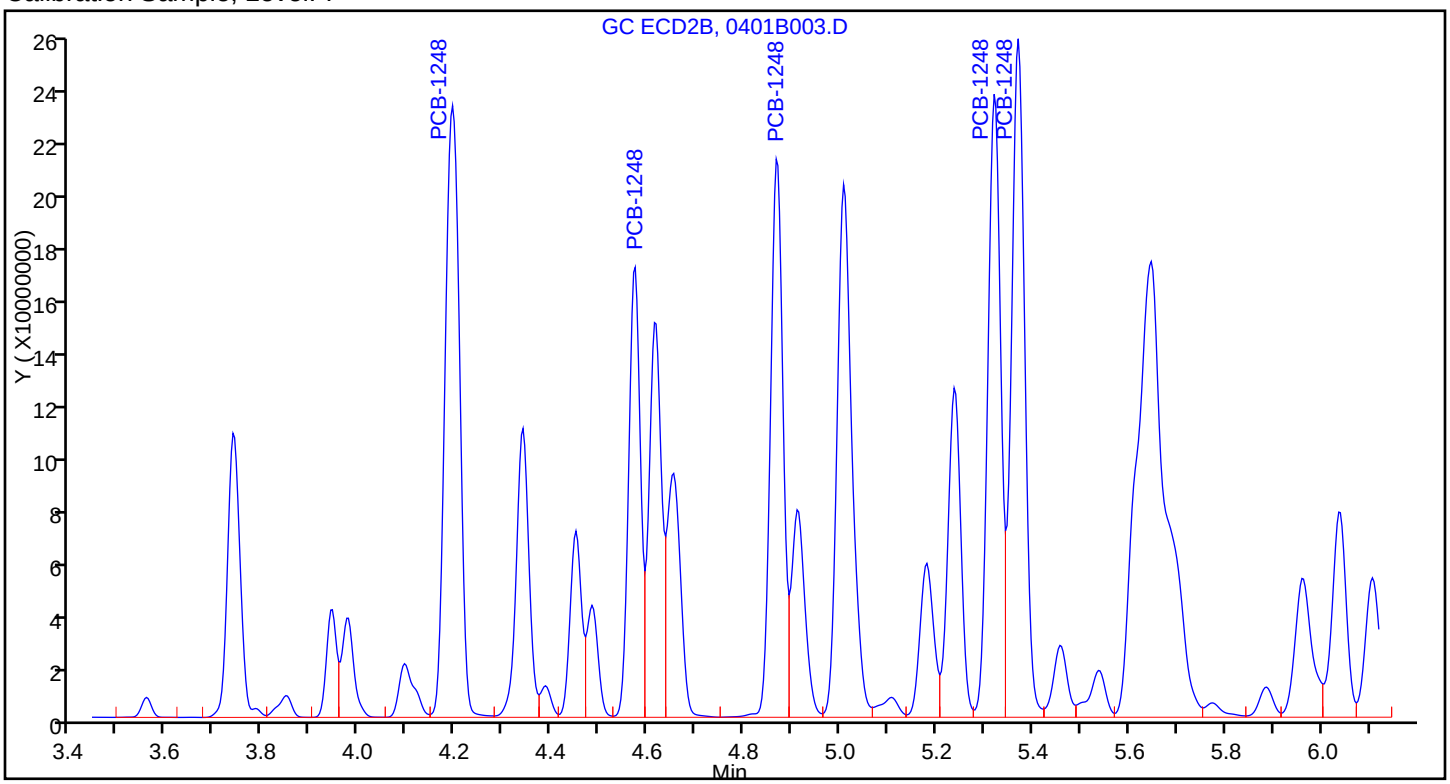
Report Date: 03-Apr-2014 09:29:42 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B071.D				
Injection Date:	02-Apr-2014 15:28:55	Instrument ID:	SGC_P3b		
Lims ID:	MB 280-218632/1-A				
Client ID:					
Operator ID:	JAX	ALS Bottle#:	71	Worklist Smp#:	72
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	PCB_P3b	Limit Group:	GCSV - 8082		
Column:	CLP2 Pesticides Column 2 (0.32 mm)	Detector	GC ECD2B		

4 PCB-1248, CAS: 12672-29-6

Calibration Sample, Level: 7



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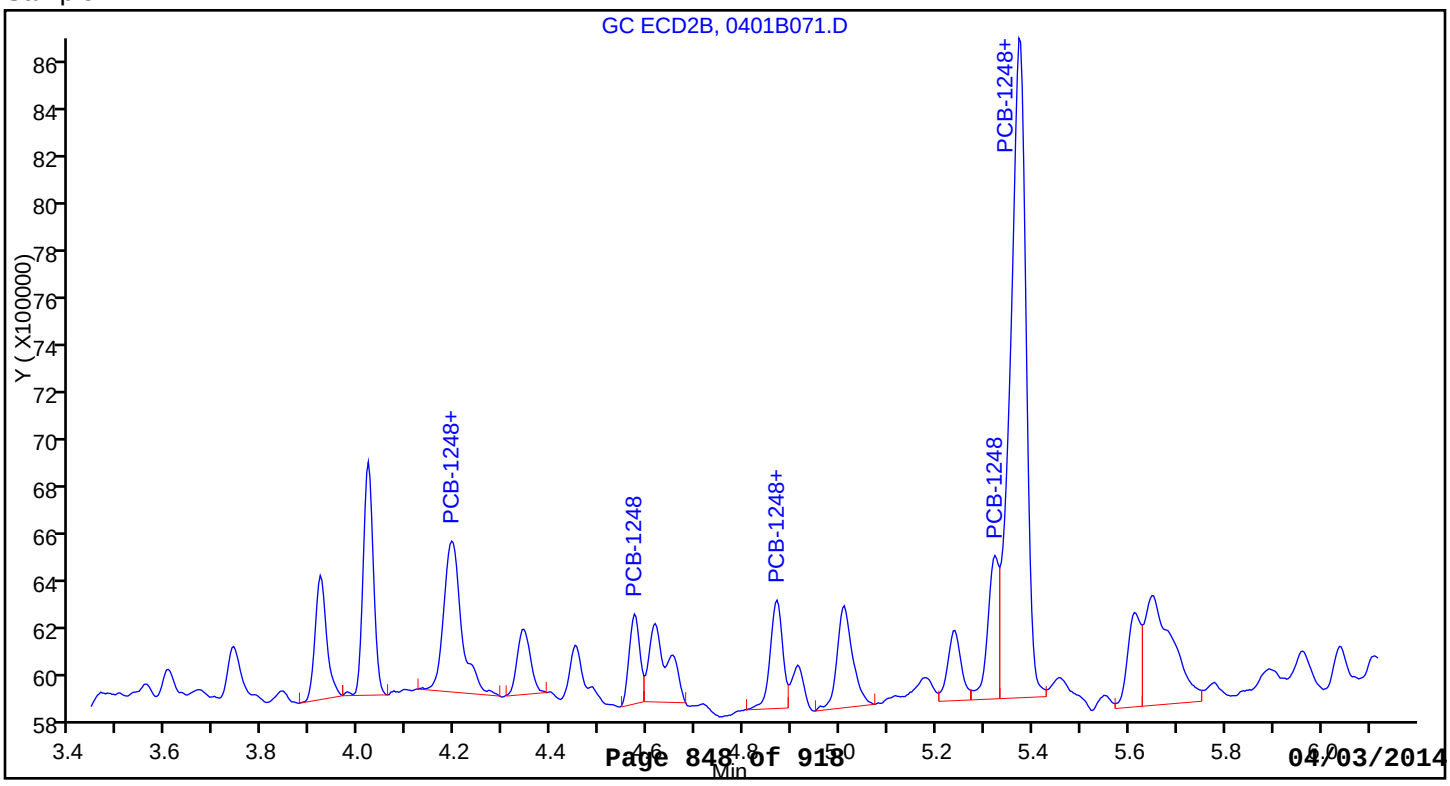


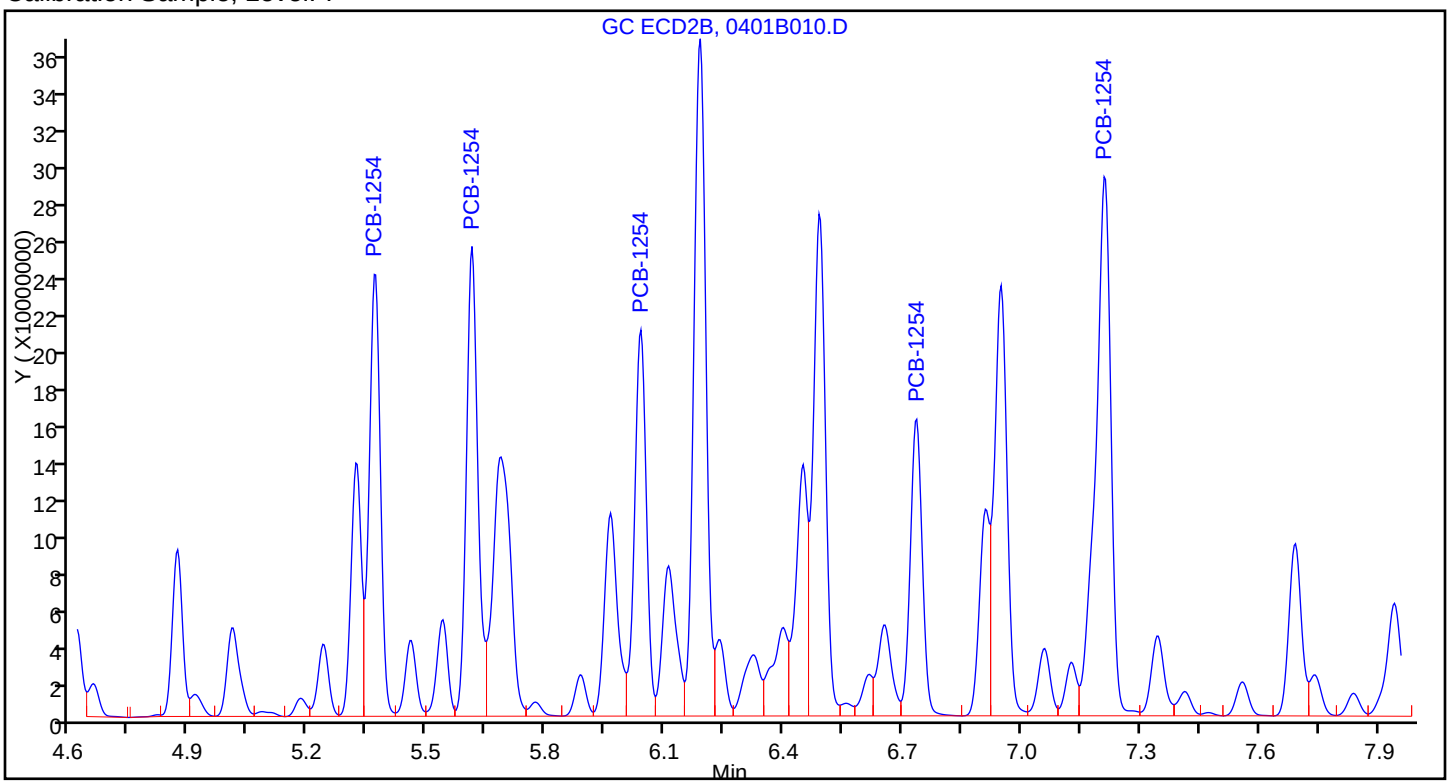
Report Date: 03-Apr-2014 09:29:42 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B071.D				
Injection Date:	02-Apr-2014 15:28:55	Instrument ID:	SGC_P3b		
Lims ID:	MB 280-218632/1-A				
Client ID:					
Operator ID:	JAX	ALS Bottle#:	71	Worklist Smp#:	72
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	PCB_P3b	Limit Group:	GCSV - 8082		
Column:	CLP2 Pesticides Column 2 (0.32 mm)	Detector	GC ECD2B		

9 PCB-1254, CAS: 11097-69-1

Calibration Sample, Level: 7



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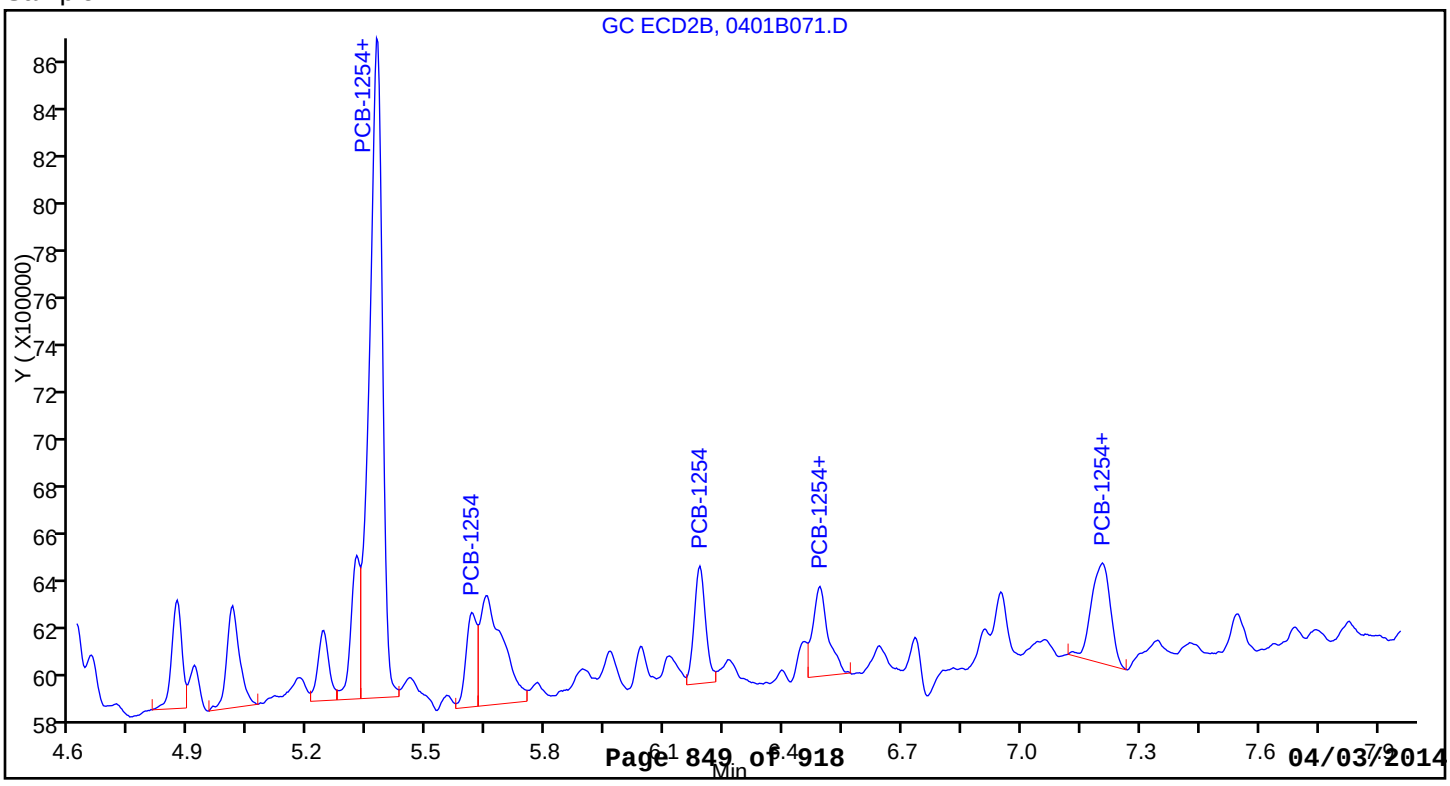


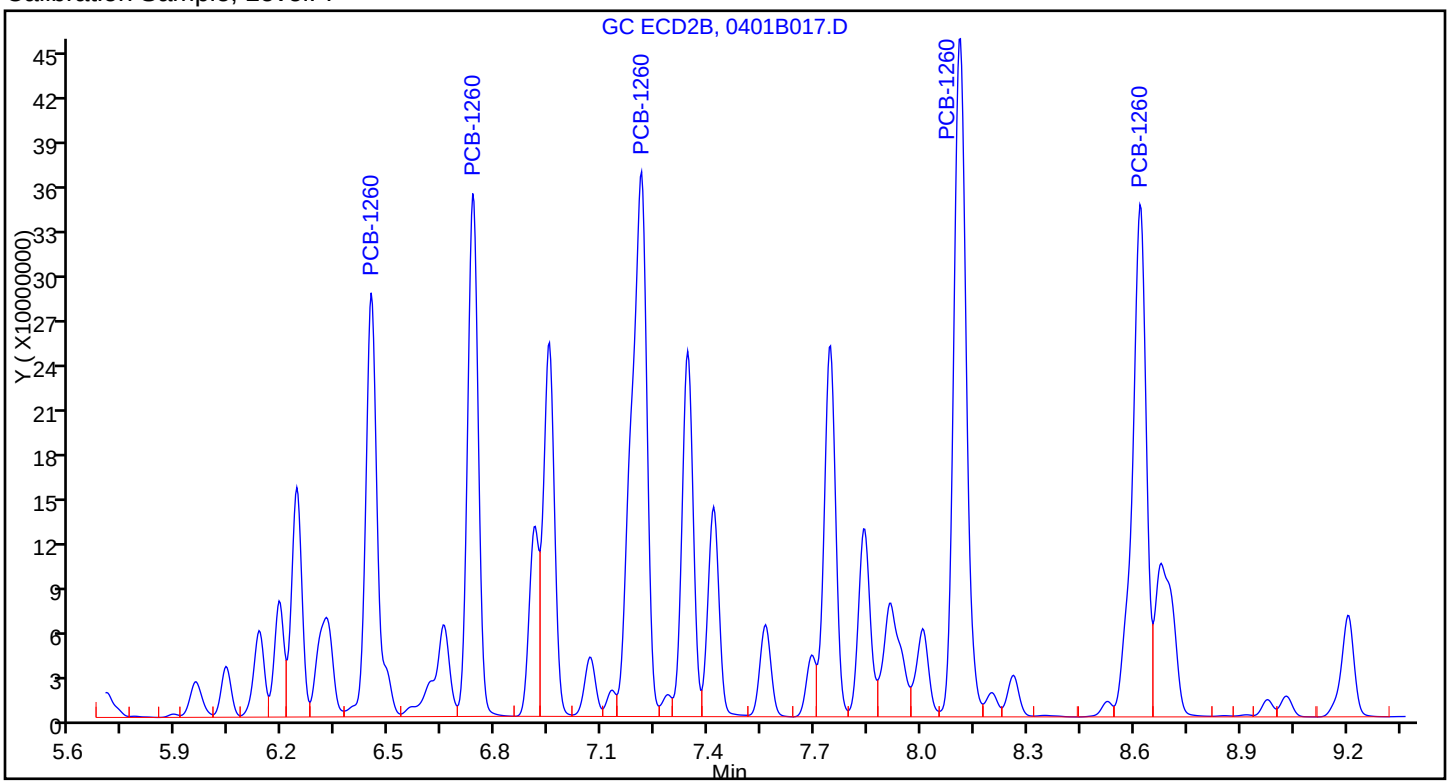
Report Date: 03-Apr-2014 09:29:42 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B071.D				
Injection Date:	02-Apr-2014 15:28:55	Instrument ID:	SGC_P3b		
Lims ID:	MB 280-218632/1-A				
Client ID:					
Operator ID:	JAX	ALS Bottle#:	71	Worklist Smp#:	72
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	PCB_P3b	Limit Group:	GCSV - 8082		
Column:	CLP2 Pesticides Column 2 (0.32 mm)	Detector	GC ECD2B		

12 PCB-1260, CAS: 11096-82-5

Calibration Sample, Level: 7



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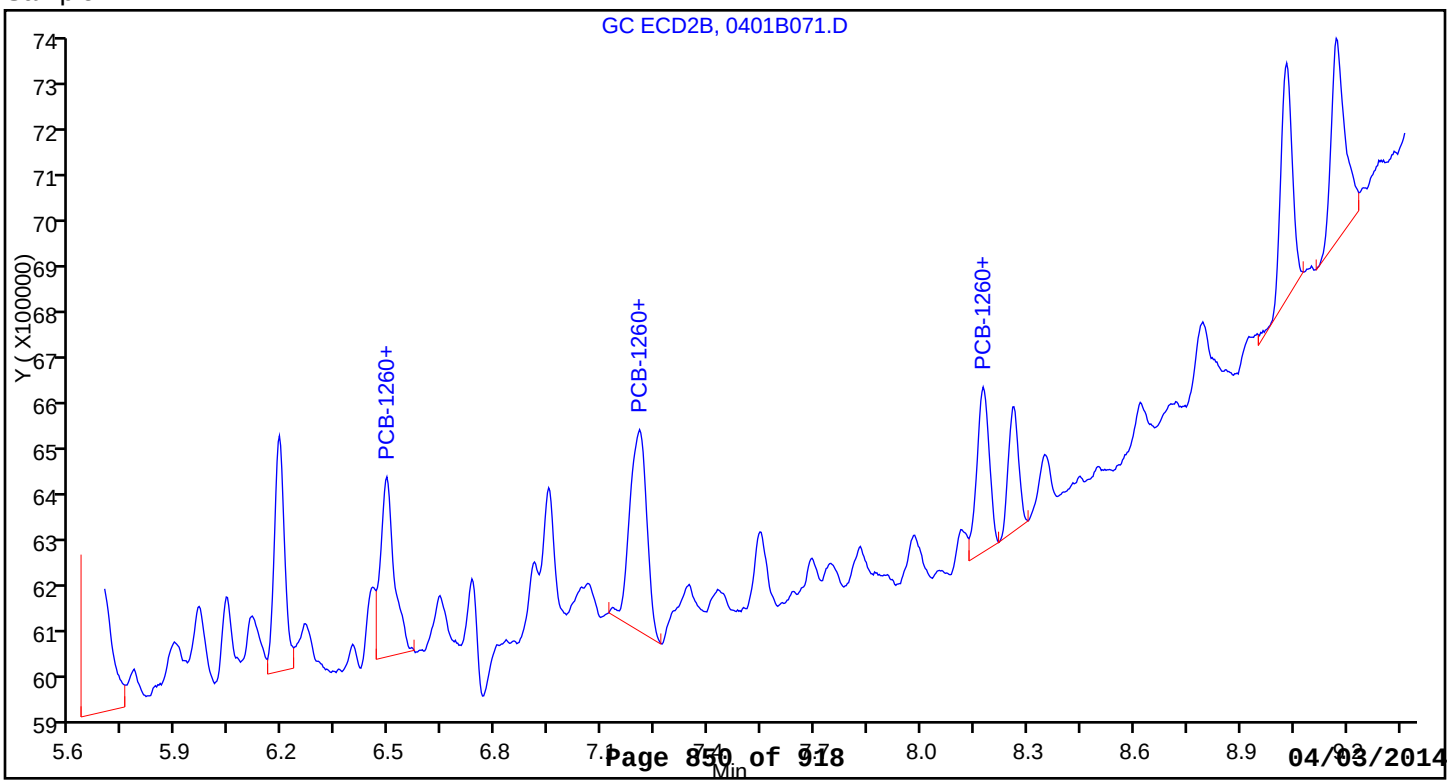


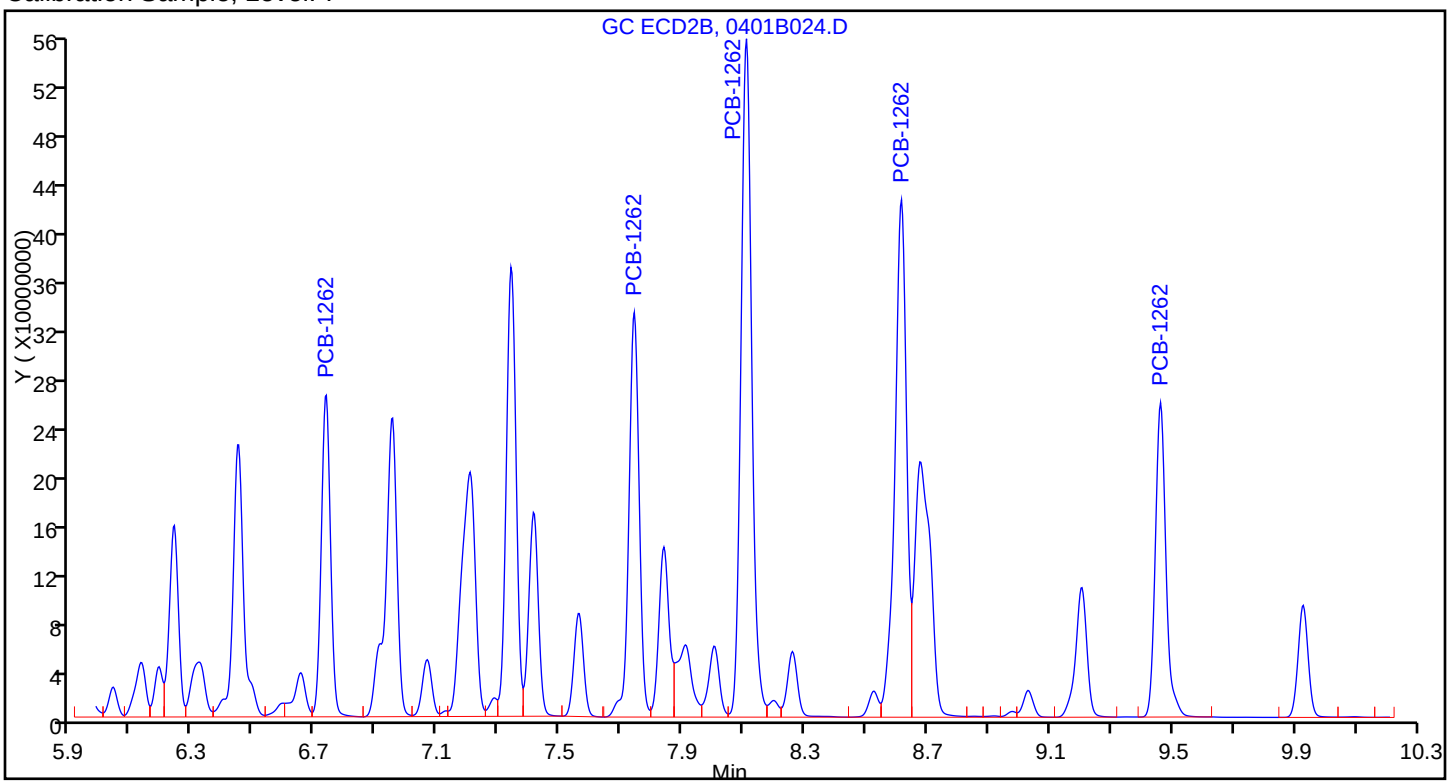
Report Date: 03-Apr-2014 09:29:42 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B071.D				
Injection Date:	02-Apr-2014 15:28:55	Instrument ID:	SGC_P3b		
Lims ID:	MB 280-218632/1-A				
Client ID:					
Operator ID:	JAX	ALS Bottle#:	71	Worklist Smp#:	72
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	PCB_P3b	Limit Group:	GCSV - 8082		
Column:	CLP2 Pesticides Column 2 (0.32 mm)	Detector	GC ECD2B		

5 PCB-1262, CAS: 37324-23-5

Calibration Sample, Level: 7



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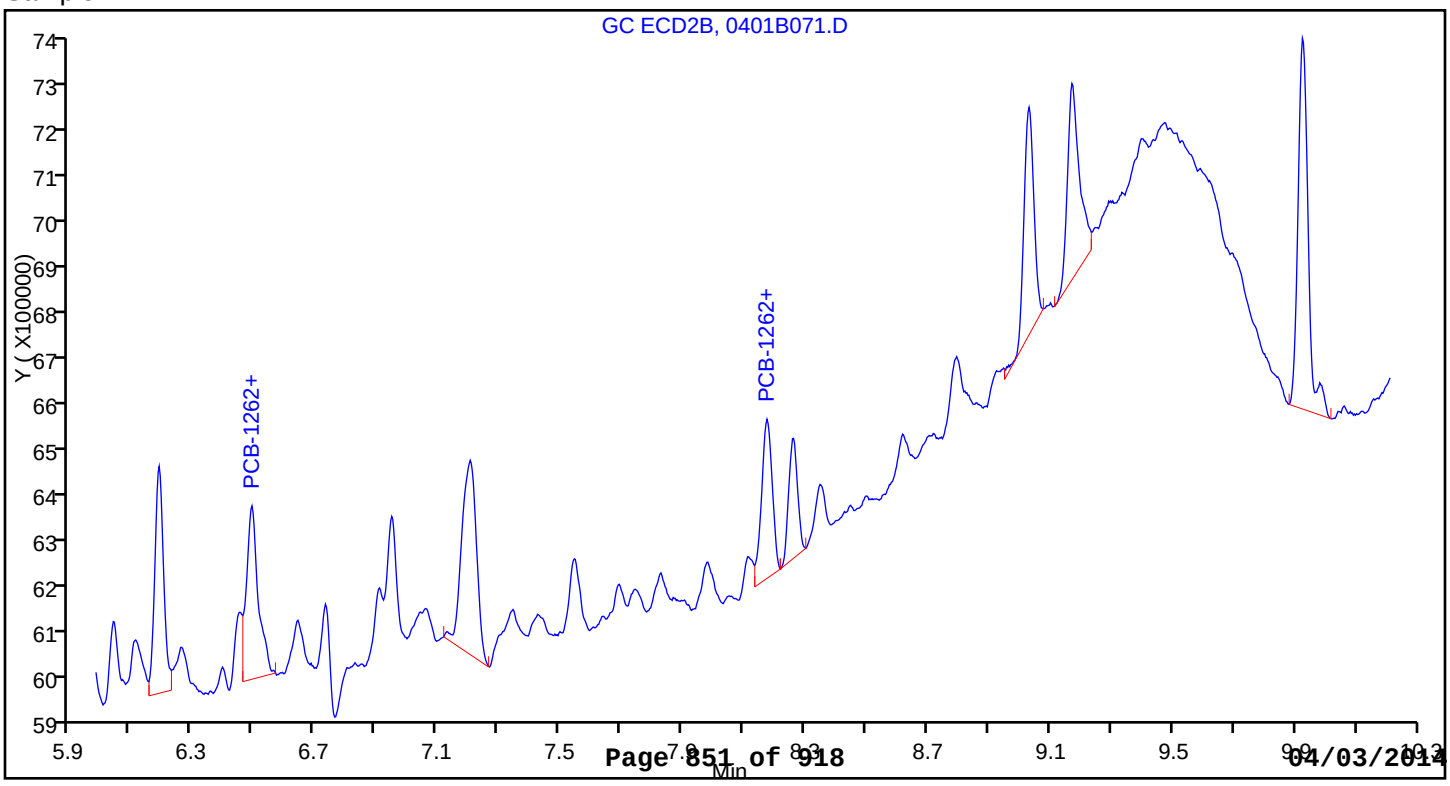


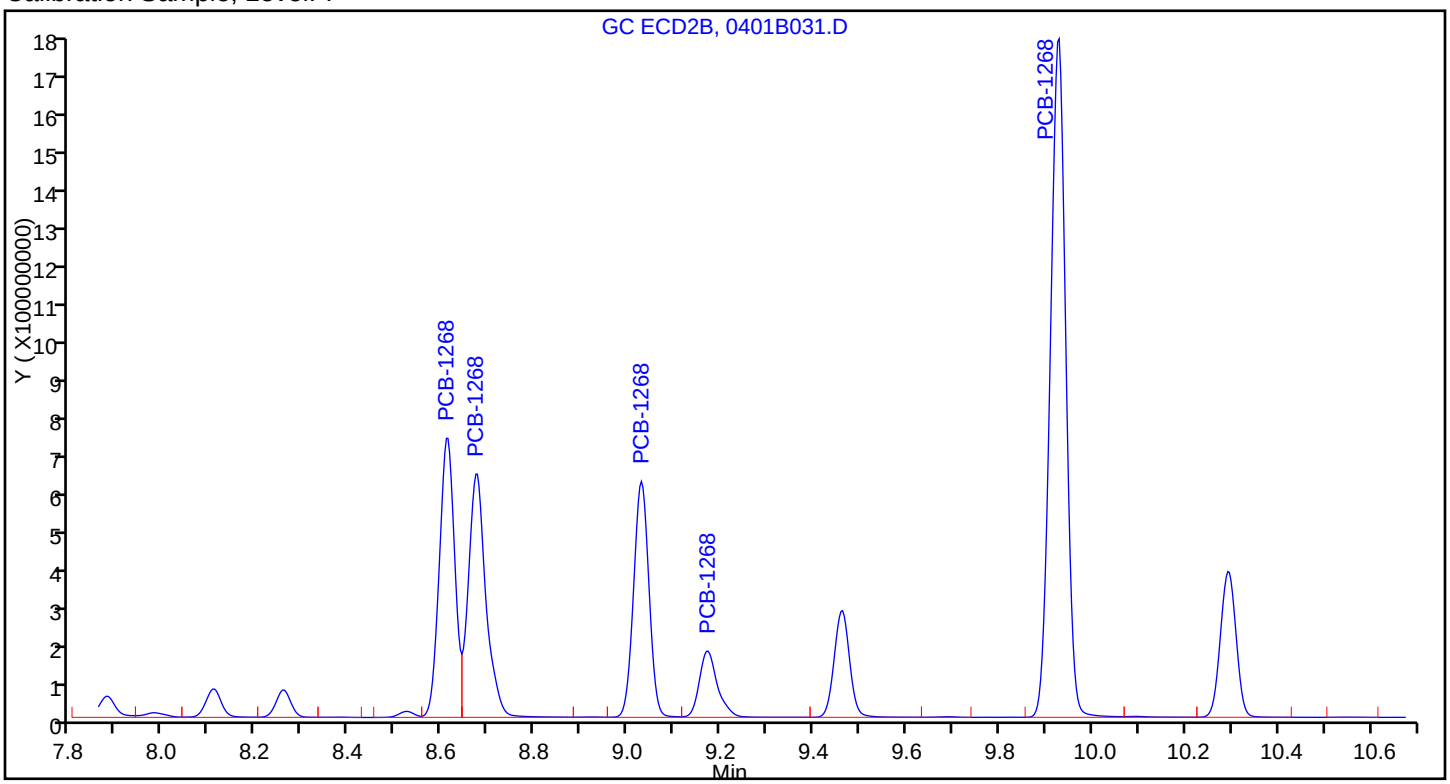
Report Date: 03-Apr-2014 09:29:42 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B071.D				
Injection Date:	02-Apr-2014 15:28:55	Instrument ID:	SGC_P3b		
Lims ID:	MB 280-218632/1-A				
Client ID:					
Operator ID:	JAX	ALS Bottle#:	71	Worklist Smp#:	72
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	PCB_P3b	Limit Group:	GCSV - 8082		
Column:	CLP2 Pesticides Column 2 (0.32 mm)	Detector	GC ECD2B		

13 PCB-1268, CAS: 11100-14-4

Calibration Sample, Level: 7



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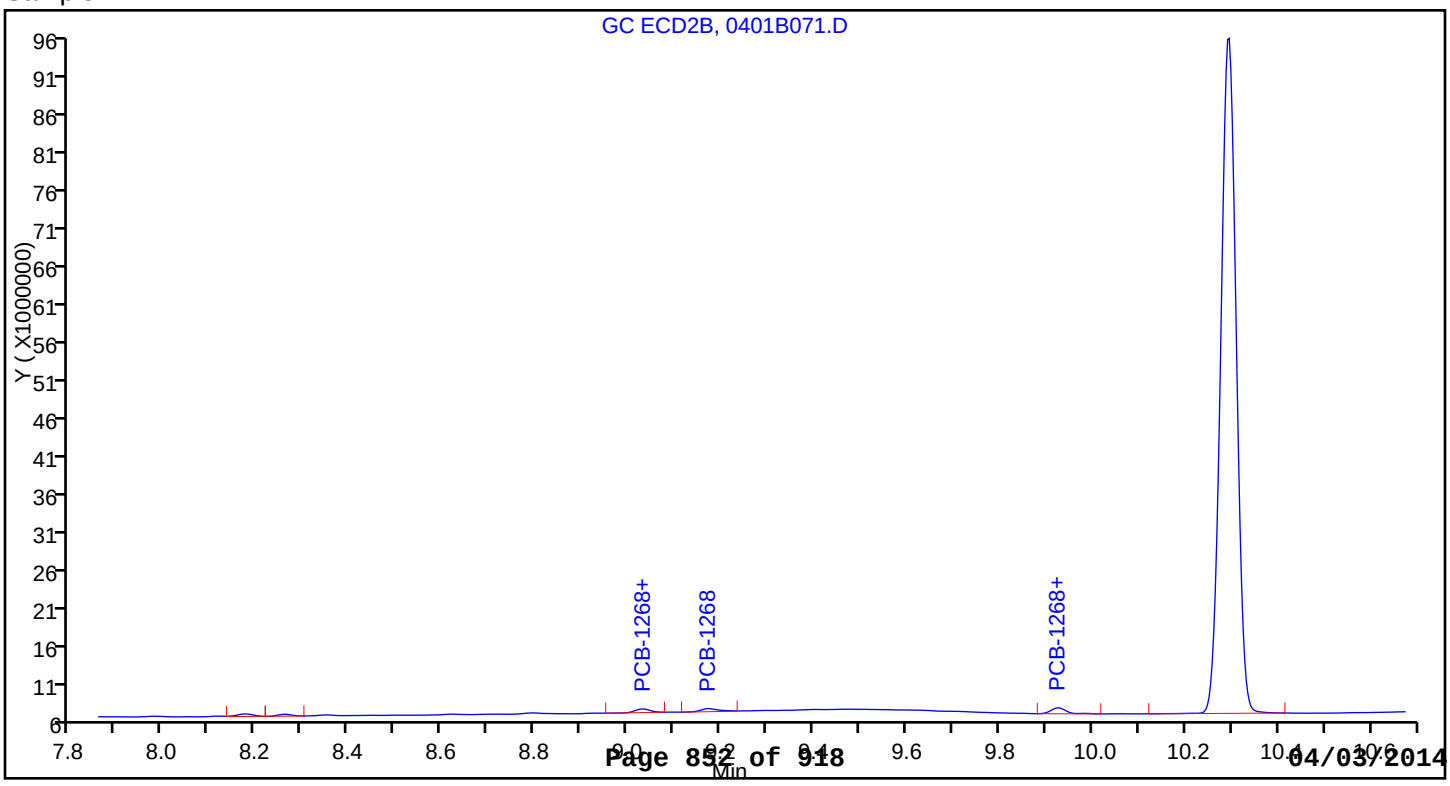


FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver
Job No.: 280-53458-1
SDG No.:
Client Sample ID:
Lab Sample ID: LCS 280-218625/2-A
Matrix: Solid
Lab File ID: 0401A044.D
Analysis Method: 8082A
Date Collected:
Extraction Method: 3546
Date Extracted: 03/27/2014 11:25
Sample wt/vol: 30(g)
Date Analyzed: 04/02/2014 05:21
Con. Extract Vol.: 10(mL)
Dilution Factor: 1
Injection Volume: 1(uL)
GC Column: CLP1 ID: 0.32(mm)
% Moisture:
GPC Cleanup:(Y/N) N
Analysis Batch No.: 219270
Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
12674-11-2	PCB-1016	64.3		33	5.1
11096-82-5	PCB-1260	63.7		33	2.7

CAS NO.	SURROGATE	%REC	Q	LIMITS
877-09-8	Tetrachloro-m-xylene	92		53-128
2051-24-3	DCB Decachlorobiphenyl	92		59-130

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A044.D
Lims ID: LCS 280-218625/2-A
Client ID:
Sample Type: LCS
Inject. Date: 02-Apr-2014 05:21:45 ALS Bottle#: 44 Worklist Smp#: 44
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: LCS 280-218625/2
Operator ID: JAX Instrument ID: SGC_P3a

Method: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\PCB_P3a.m
Limit Group: GCSV - 8082
Last Update: 03-Apr-2014 08:33:07 Calib Date: 02-Apr-2014 02:52:35
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A037.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Process Host: XAWRK052

First Level Reviewer: jacksonto Date: 02-Apr-2014 07:26:53

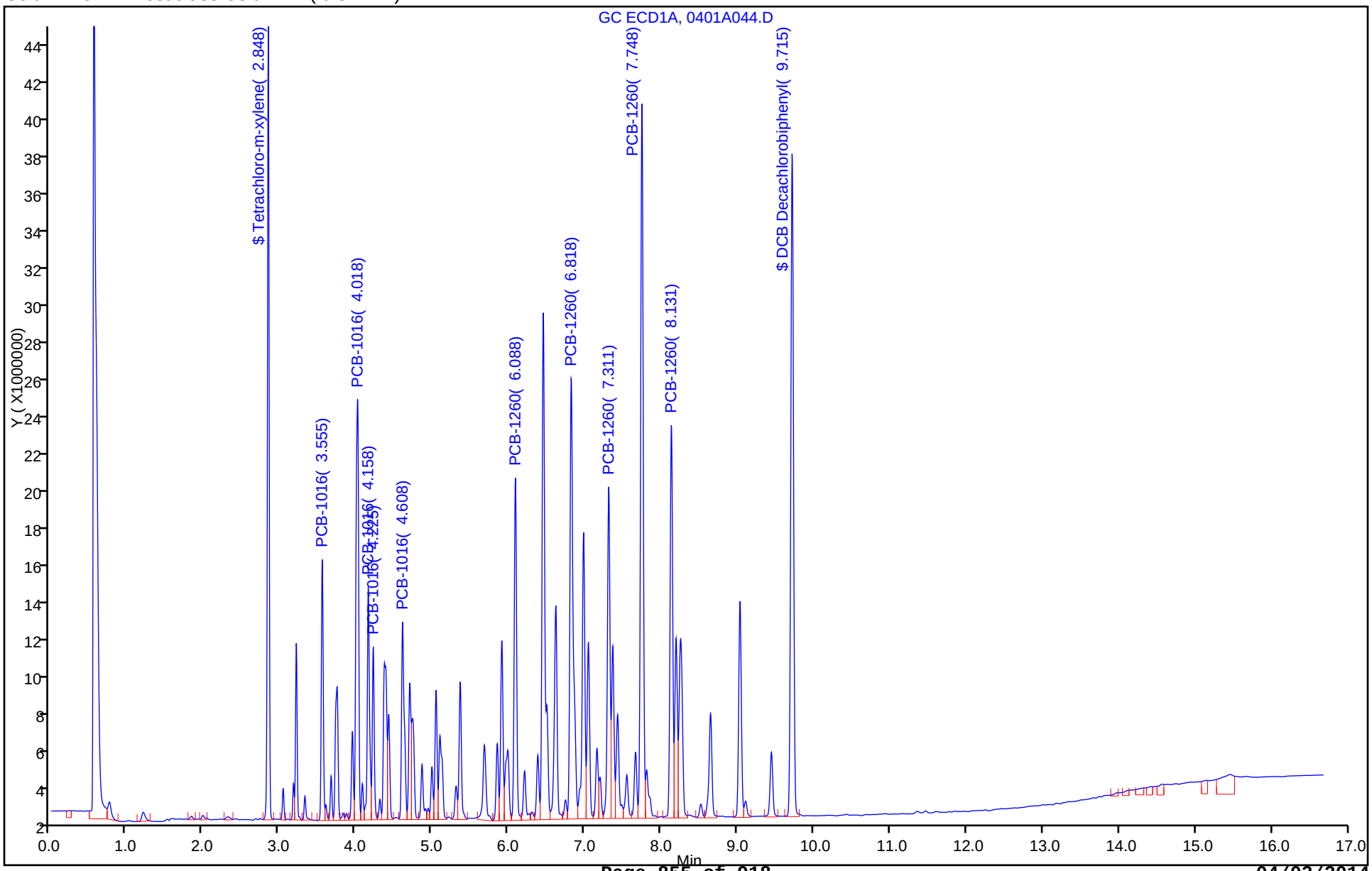
RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
$ 1 Tetrachloro-m-xylene					
2.848	2.845	0.003	65829758	18.4	
5 PCB-1016					
3.555	3.555	0.0	24740883	189.8	
4.018	4.019	-0.001	54892243	190.1	
4.158	4.159	-0.001	25382550	193.9	
4.225	4.222	0.003	16334585	197.6	
4.608	4.609	-0.001	26131200	192.8	
	Average of Peak Amounts =			192.9	
8 PCB-1260					
6.088	6.089	-0.001	40051639	186.5	
6.818	6.819	-0.001	69490342	174.1	
7.311	7.312	-0.001	41619709	204.2	
7.748	7.749	-0.001	90492132	203.2	
8.131	8.132	-0.001	49848273	187.8	
	Average of Peak Amounts =			191.2	
$ 13 DCB Decachlorobiphenyl					
9.715	9.715	0.0	88017292	18.3	

Report Date: 03-Apr-2014 08:33:16 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A044.D				
Injection Date:	02-Apr-2014 05:21:45	Instrument ID:	SGC_P3a	Operator ID:	JAX
Lims ID:	LCS 280-218625/2-A			Worklist Smp#:	44
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	44
Method:	PCB_P3a	Limit Group:	GCSV - 8082		

Column: CLP1 Pesticides Column 1 (0.32 mm)



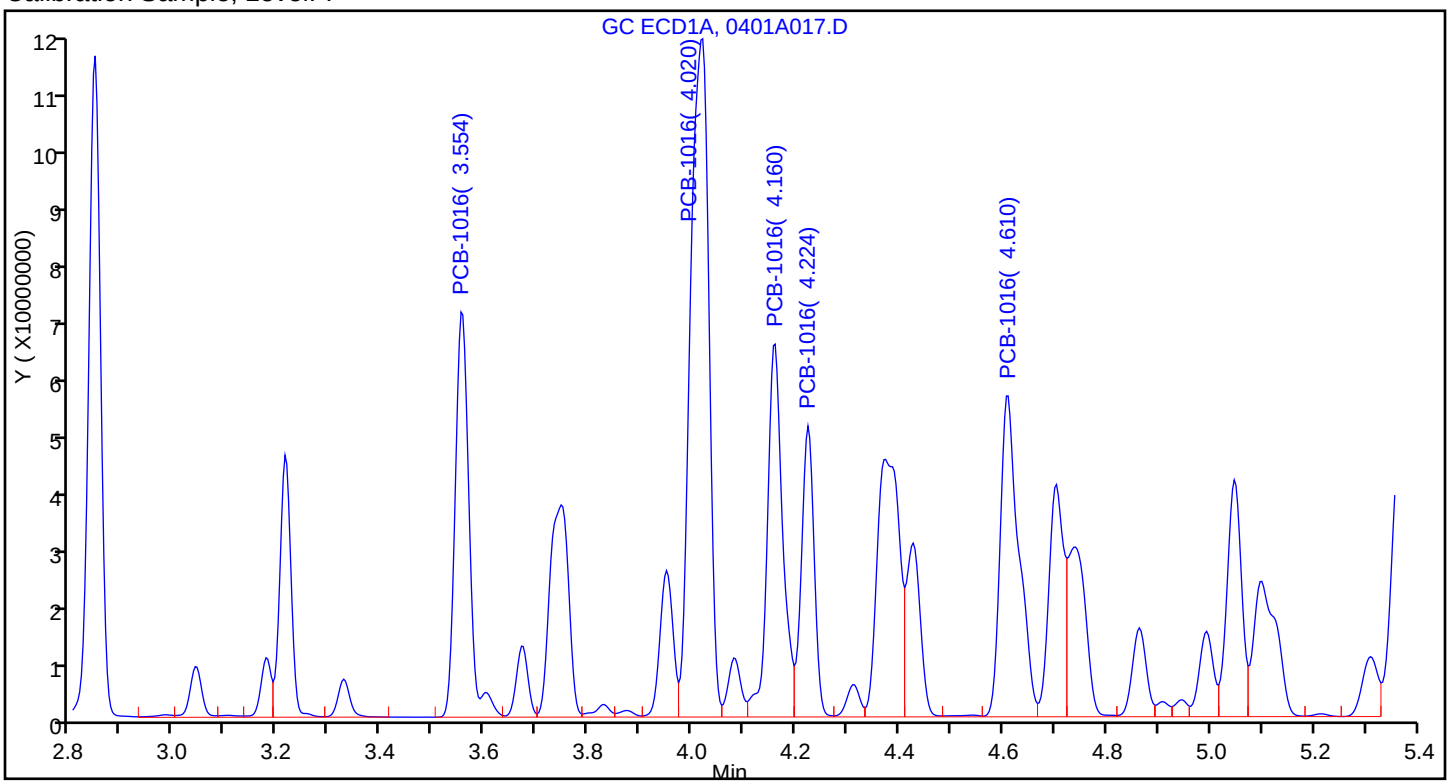
Report Date: 03-Apr-2014 08:33:16 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

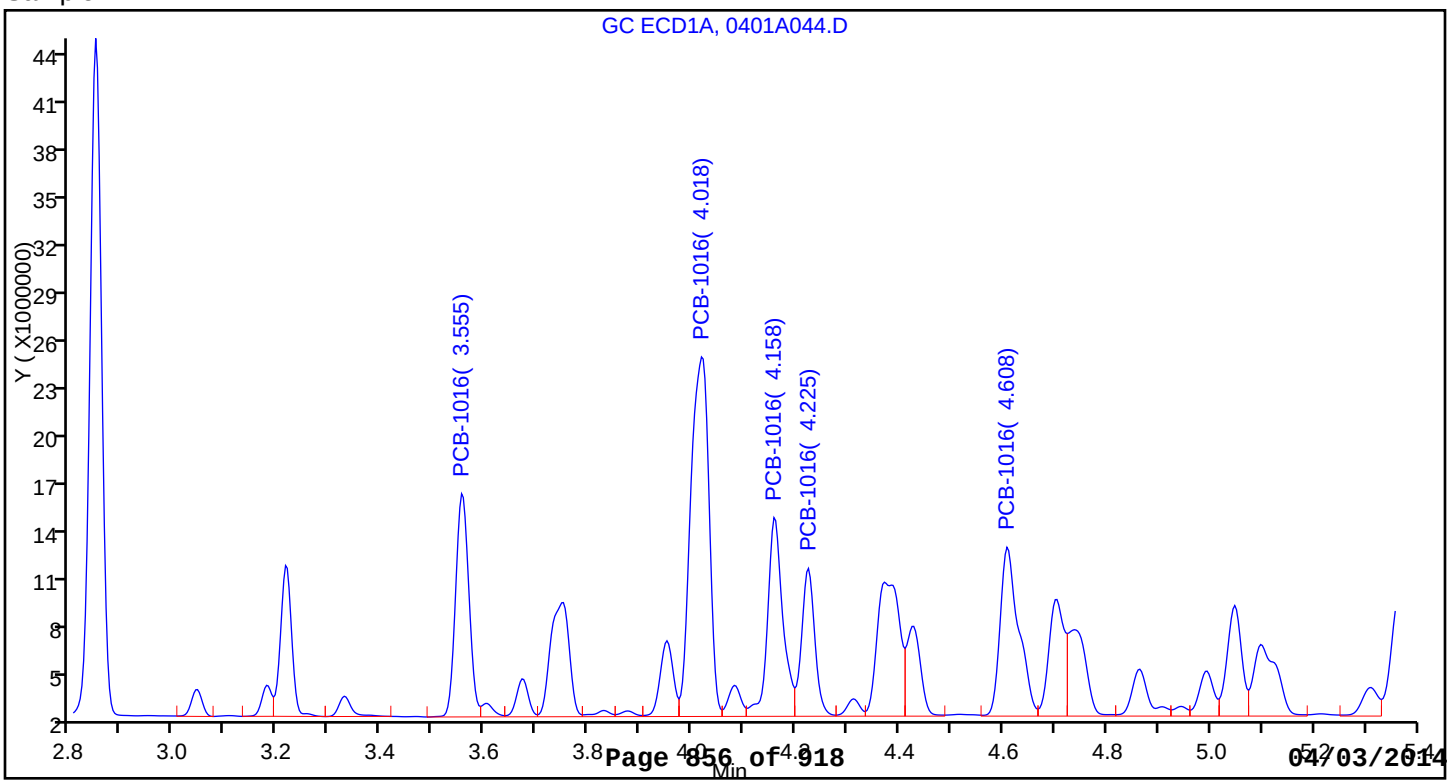
Data File:	\\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A044.D				
Injection Date:	02-Apr-2014 05:21:45	Instrument ID:	SGC_P3a		
Lims ID:	LCS 280-218625/2-A				
Client ID:					
Operator ID:	JAX	ALS Bottle#:	44	Worklist Smp#:	44
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	PCB_P3a	Limit Group:	GCSV - 8082		
Column:	CLP1 Pesticides Column 1 (0.32 mm)	Detector	GC ECD1A		

5 PCB-1016, CAS: 12674-11-2

Calibration Sample, Level: 7



Sample



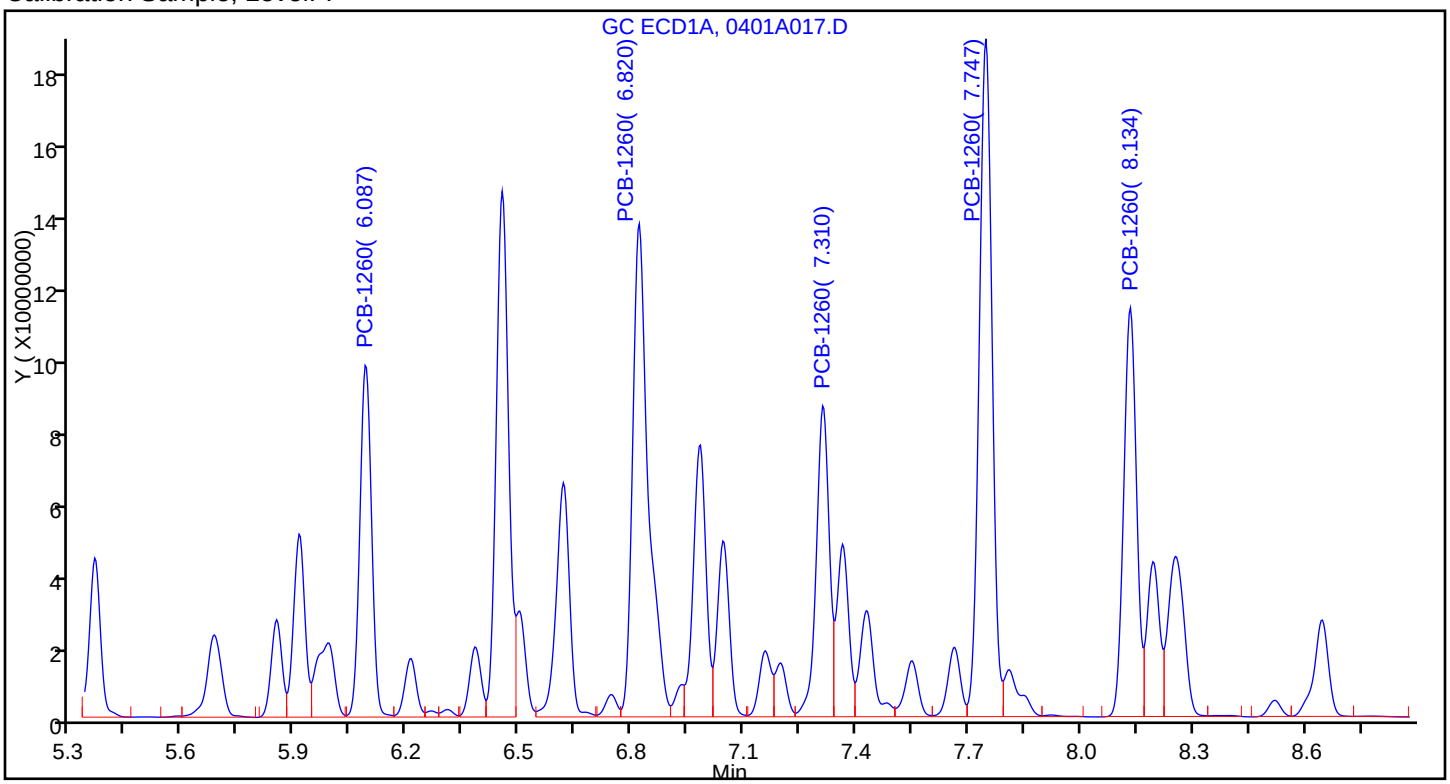
Report Date: 03-Apr-2014 08:33:16 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A044.D				
Injection Date:	02-Apr-2014 05:21:45	Instrument ID:	SGC_P3a		
Lims ID:	LCS 280-218625/2-A				
Client ID:					
Operator ID:	JAX	ALS Bottle#:	44	Worklist Smp#:	44
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	PCB_P3a	Limit Group:	GCSV - 8082		
Column:	CLP1 Pesticides Column 1 (0.32 mm)	Detector	GC ECD1A		

8 PCB-1260, CAS: 11096-82-5

Calibration Sample, Level: 7



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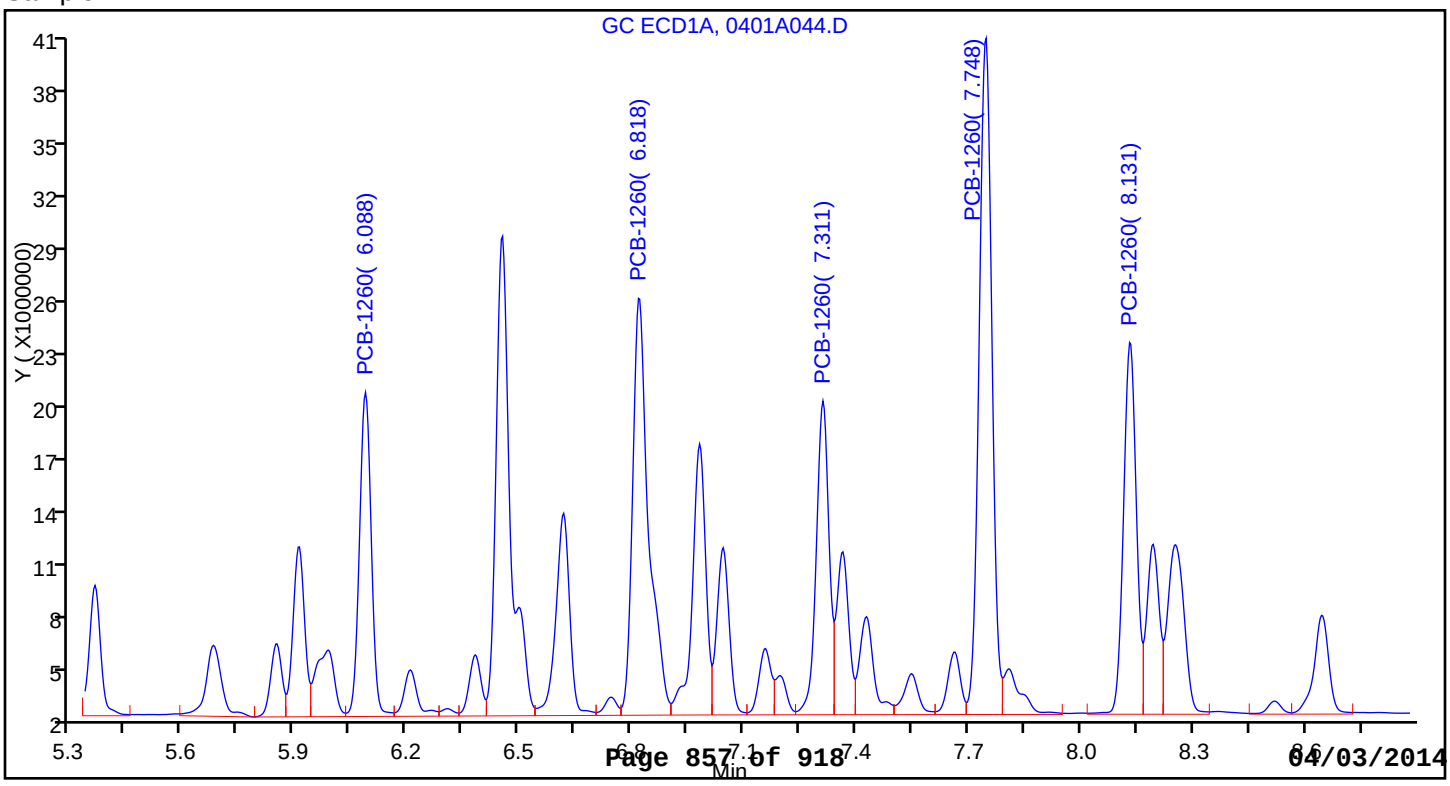


FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-53458-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 280-218625/2-A

Matrix: Solid | Lab File ID: 0401B044.D

Analysis Method: 8082A | Date Collected:

Extraction Method: 3546 | Date Extracted: 03/27/2014 11:25

Sample wt/vol: 30(g) | Date Analyzed: 04/02/2014 05:43

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: CLP2 ID: 0.32(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 219272 | Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
877-09-8	Tetrachloro-m-xylene	95		53-128
2051-24-3	DCB Decachlorobiphenyl	90		59-130

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B044.D
Lims ID: LCS 280-218625/2-A
Client ID:
Sample Type: LCS
Inject. Date: 02-Apr-2014 05:43:06 ALS Bottle#: 44 Worklist Smp#: 44
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: LCS 280-218625/2
Operator ID: JAX Instrument ID: SGC_P3b

Method: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\PCB_P3b.m
Limit Group: GCSV - 8082
Last Update: 03-Apr-2014 09:29:53 Calib Date: 02-Apr-2014 03:13:50
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B037.D

Column 1 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK052

First Level Reviewer: jacksonto Date: 02-Apr-2014 07:40:02

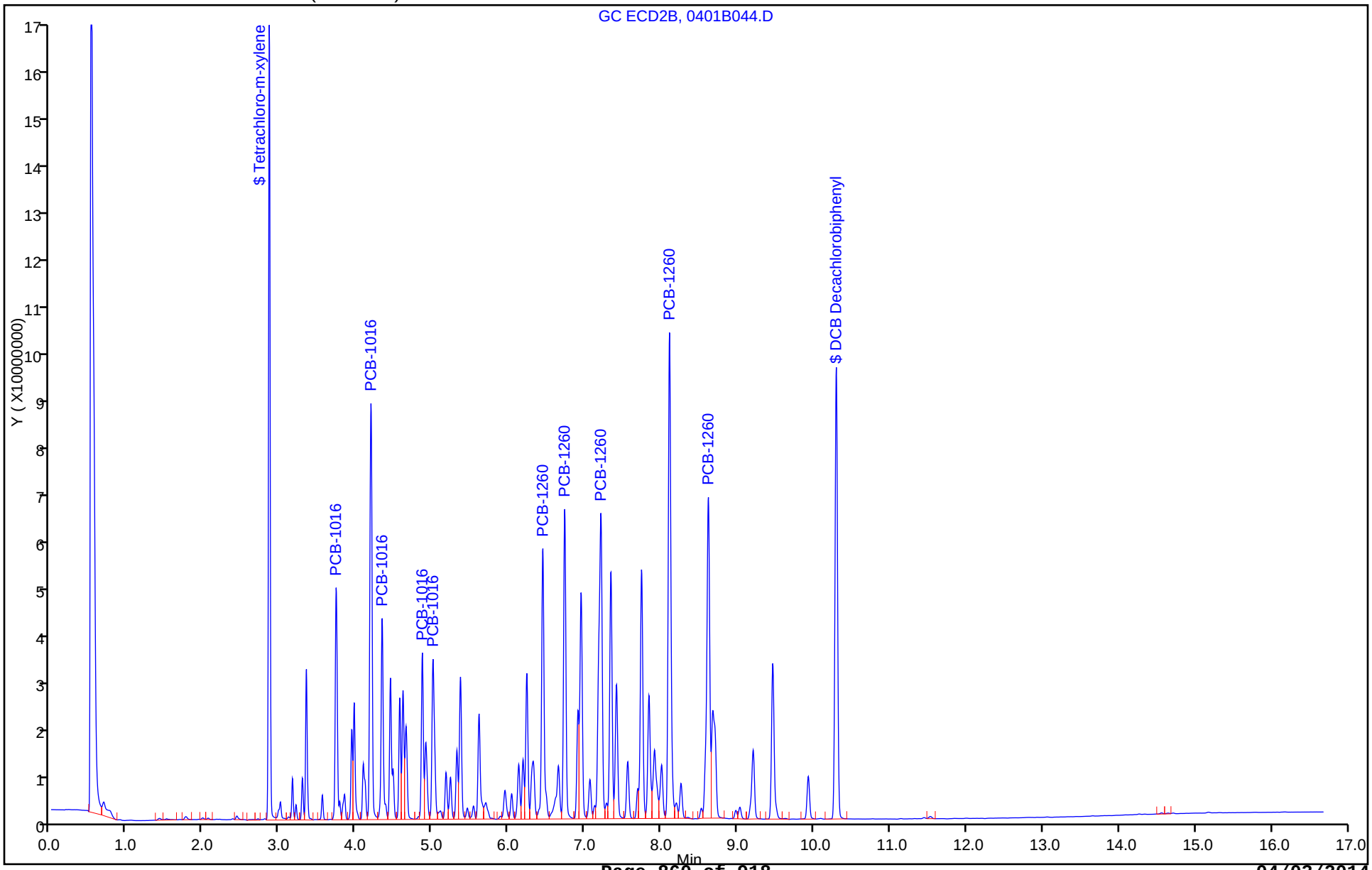
RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
$ 14 Tetrachloro-m-xylene					
2.861	2.862	-0.001	238784896	19.0	
1 PCB-1016					
3.738	3.738	0.0	93460557	200.6	
4.194	4.195	-0.001	178006837	191.9	
4.341	4.342	-0.001	82500184	196.5	
4.868	4.868	0.0	62059529	187.7	
5.008	5.008	0.0	78290673	194.8	
	Average of Peak Amounts =			194.3	
12 PCB-1260					
6.448	6.448	0.0	128486692	191.1	
6.734	6.735	-0.001	135369044	180.4	
7.208	7.208	0.0	196776973	173.2	
8.108	8.108	0.0	241303408	214.4	
8.618	8.618	0.0	181893472	192.0	
	Average of Peak Amounts =			190.2	
$ 15 DCB Decachlorobiphenyl					
10.294	10.295	-0.001	214292591	18.1	

Report Date: 03-Apr-2014 09:30:02 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B044.D				
Injection Date:	02-Apr-2014 05:43:06	Instrument ID:	SGC_P3b	Operator ID:	JAX
Lims ID:	LCS 280-218625/2-A			Worklist Smp#:	44
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	44
Method:	PCB_P3b	Limit Group:	GCSV - 8082		

Column: CLP2 Pesticides Column 2 (0.32 mm)



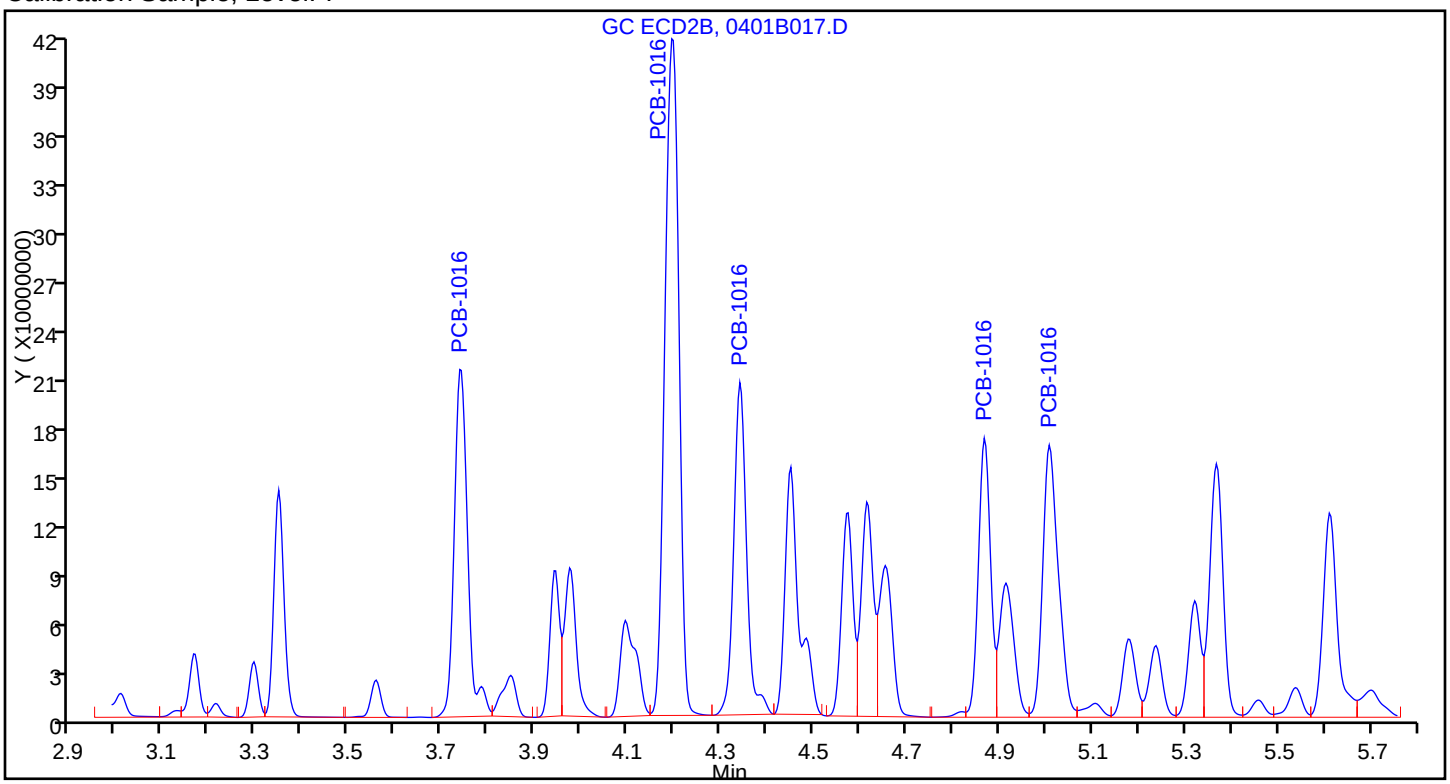
Report Date: 03-Apr-2014 09:30:02 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

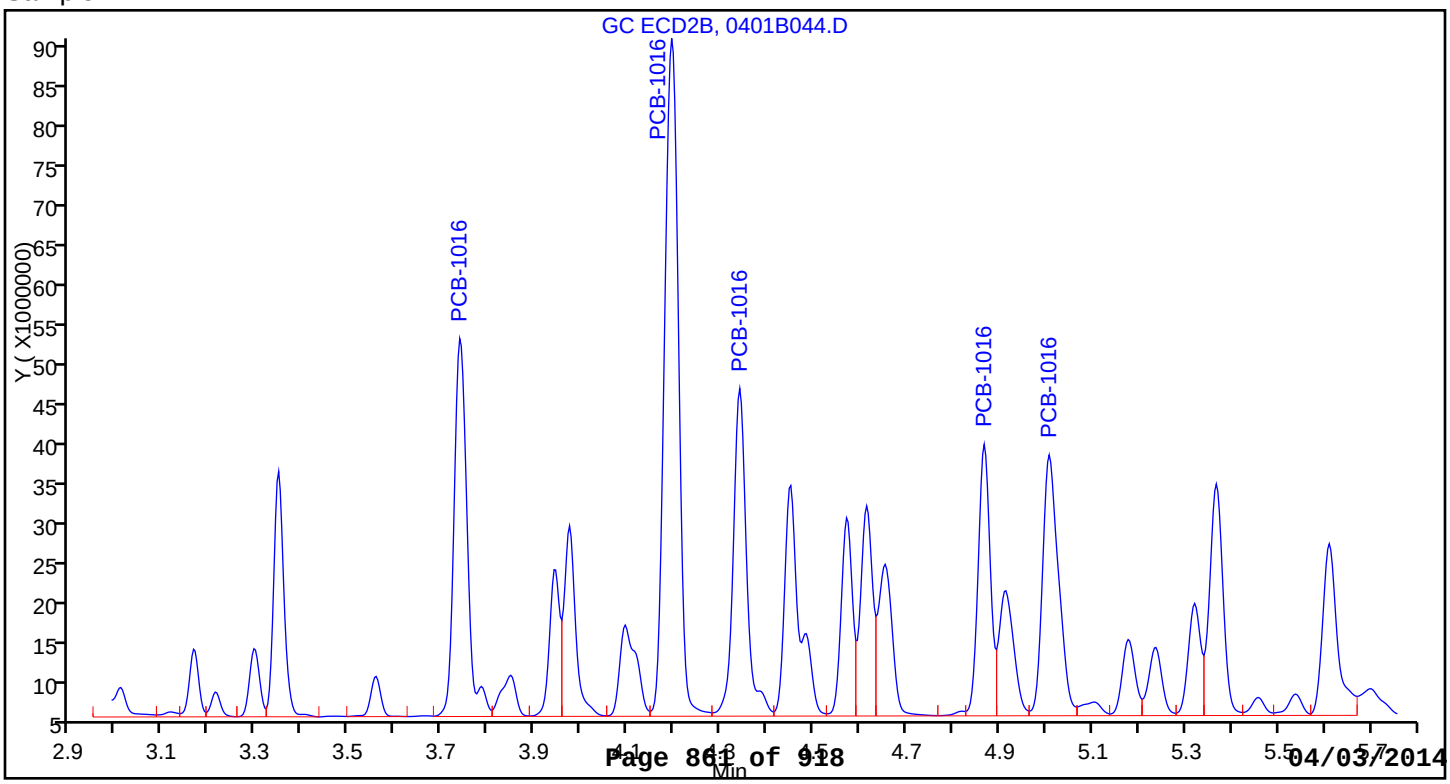
Data File:	\\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B044.D				
Injection Date:	02-Apr-2014 05:43:06	Instrument ID:	SGC_P3b		
Lims ID:	LCS 280-218625/2-A				
Client ID:					
Operator ID:	JAX	ALS Bottle#:	44	Worklist Smp#:	44
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	PCB_P3b	Limit Group:	GCSV - 8082		
Column:	CLP2 Pesticides Column 2 (0.32 mm)	Detector	GC ECD2B		

1 PCB-1016, CAS: 12674-11-2

Calibration Sample, Level: 7



Sample



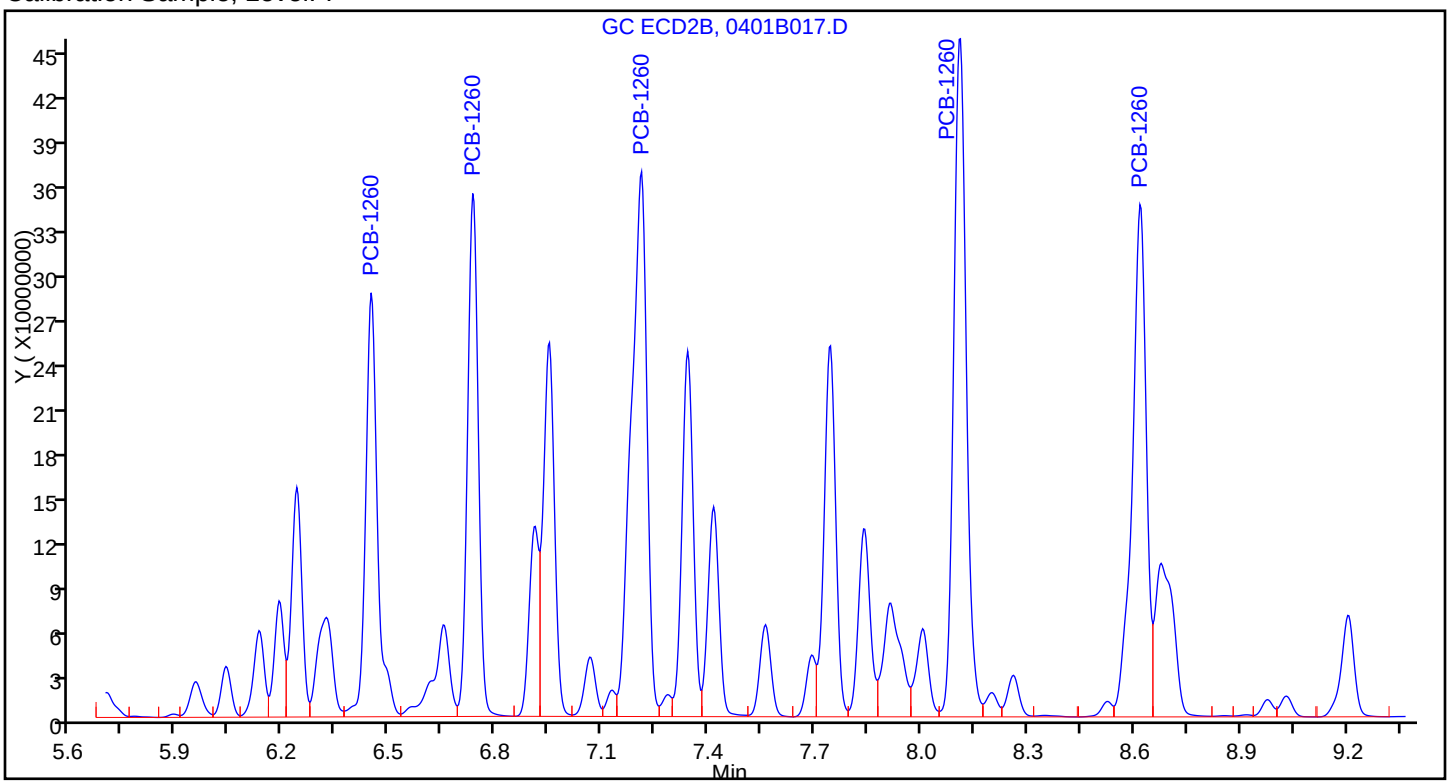
Report Date: 03-Apr-2014 09:30:02 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B044.D				
Injection Date:	02-Apr-2014 05:43:06	Instrument ID:	SGC_P3b		
Lims ID:	LCS 280-218625/2-A				
Client ID:					
Operator ID:	JAX	ALS Bottle#:	44	Worklist Smp#:	44
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	PCB_P3b	Limit Group:	GCSV - 8082		
Column:	CLP2 Pesticides Column 2 (0.32 mm)	Detector	GC ECD2B		

12 PCB-1260, CAS: 11096-82-5

Calibration Sample, Level: 7



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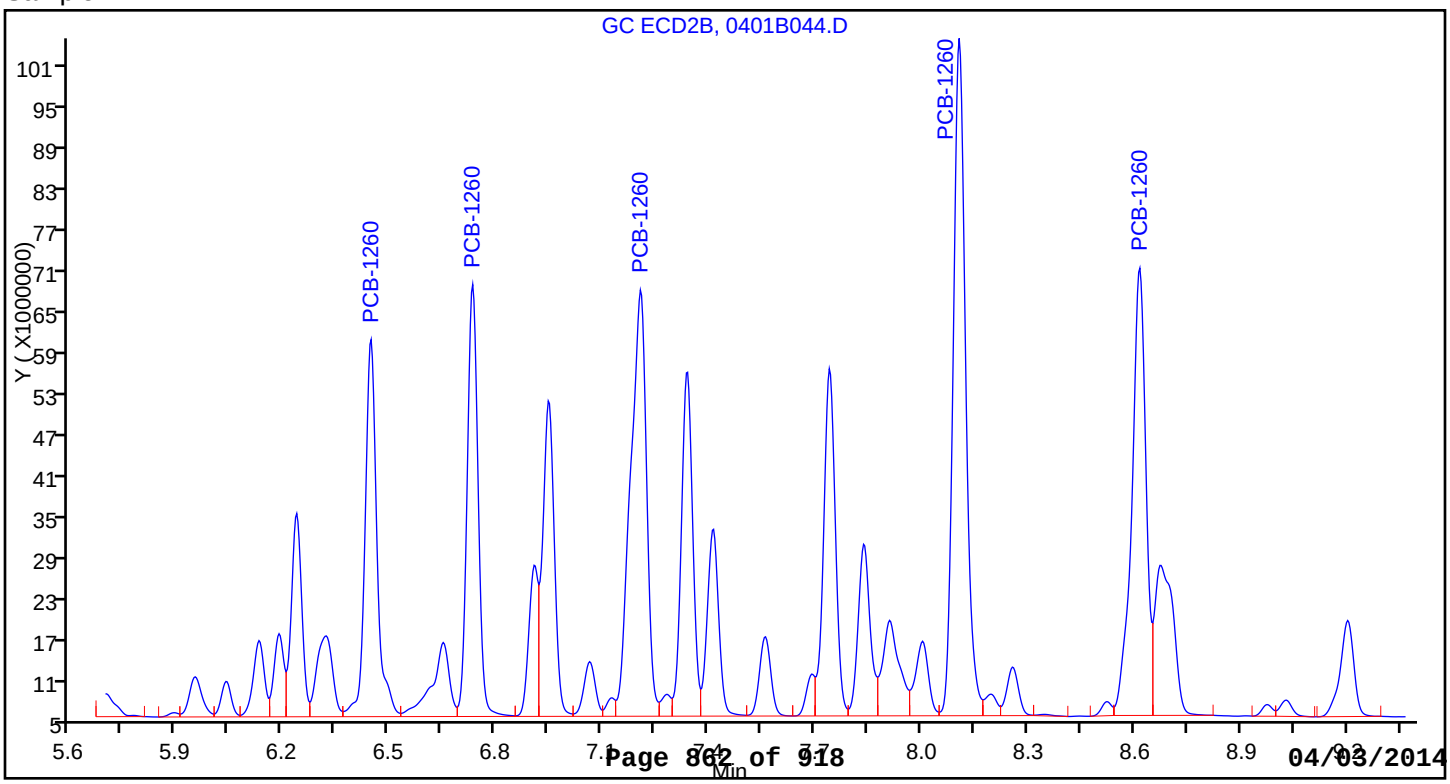


FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver
Job No.: 280-53458-1
SDG No.:
Client Sample ID:
Lab Sample ID: LCS 280-218632/2-A
Matrix: Solid
Lab File ID: 0401A072.D
Analysis Method: 8082A
Date Collected:
Extraction Method: 3546
Date Extracted: 03/27/2014 14:30
Sample wt/vol: 30(g)
Date Analyzed: 04/02/2014 15:28
Con. Extract Vol.: 10(mL)
Dilution Factor: 1
Injection Volume: 1(uL)
GC Column: CLP1 ID: 0.32(mm)
% Moisture:
GPC Cleanup:(Y/N) N
Analysis Batch No.: 219270
Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
12674-11-2	PCB-1016	62.9		33	5.1
11096-82-5	PCB-1260	57.5		33	2.7

CAS NO.	SURROGATE	%REC	Q	LIMITS
877-09-8	Tetrachloro-m-xylene	82		53-128
2051-24-3	DCB Decachlorobiphenyl	78		59-130

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A072.D
Lims ID: LCS 280-218632/2-A
Client ID:
Sample Type: LCS
Inject. Date: 02-Apr-2014 15:28:55 ALS Bottle#: 72 Worklist Smp#: 73
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: LCS 280-218632/2
Operator ID: JAX Instrument ID: SGC_P3a

Method: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\PCB_P3a.m
Limit Group: GCSV - 8082
Last Update: 03-Apr-2014 08:32:55 Calib Date: 02-Apr-2014 02:52:35
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A037.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Process Host: XAWRK052

First Level Reviewer: jacksonto Date: 03-Apr-2014 06:49:46

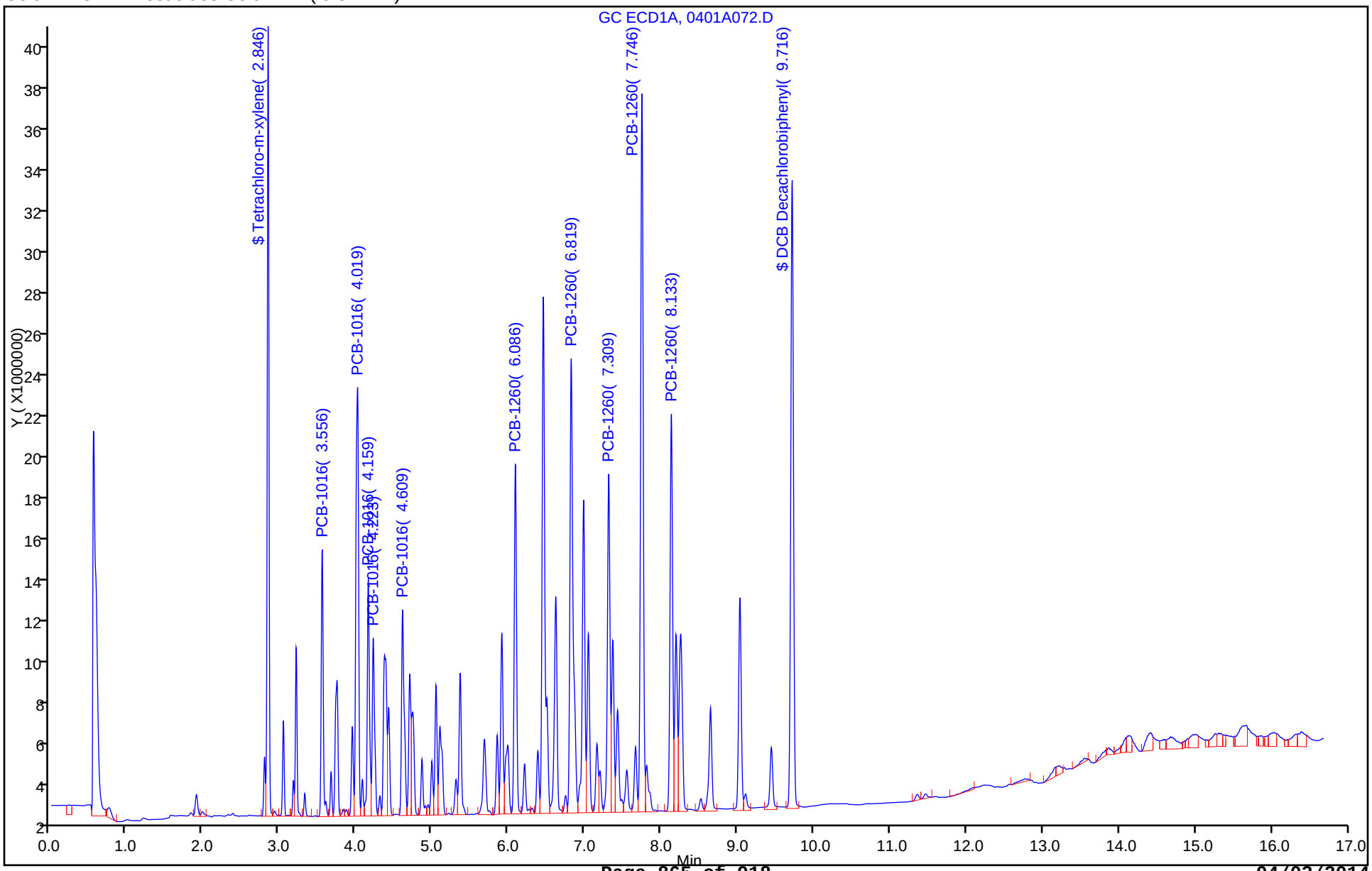
RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
$ 1 Tetrachloro-m-xylene					
2.846	2.845	0.001	59048503	16.4	
5 PCB-1016					
3.556	3.555	0.001	23917010	183.0	
4.019	4.019	0.0	51161642	176.6	
4.159	4.159	0.0	23236882	177.0	
4.223	4.222	0.001	18758181	227.8	
4.609	4.609	0.0	24249940	178.4	
	Average of Peak Amounts =			188.6	
8 PCB-1260					
6.086	6.089	-0.003	36123342	167.1	
6.819	6.819	0.0	63442615	158.3	
7.309	7.312	-0.003	38377851	187.7	
7.746	7.749	-0.003	82200591	183.8	
8.133	8.132	0.001	44304689	166.1	
	Average of Peak Amounts =			172.6	
$ 13 DCB Decachlorobiphenyl					
9.716	9.715	0.001	74998341	15.5	

Report Date: 03-Apr-2014 08:32:57 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A072.D				
Injection Date:	02-Apr-2014 15:28:55	Instrument ID:	SGC_P3a	Operator ID:	JAX
Lims ID:	LCS 280-218632/2-A			Worklist Smp#:	73
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	72
Method:	PCB_P3a	Limit Group:	GCSV - 8082		

Column: CLP1 Pesticides Column 1 (0.32 mm)



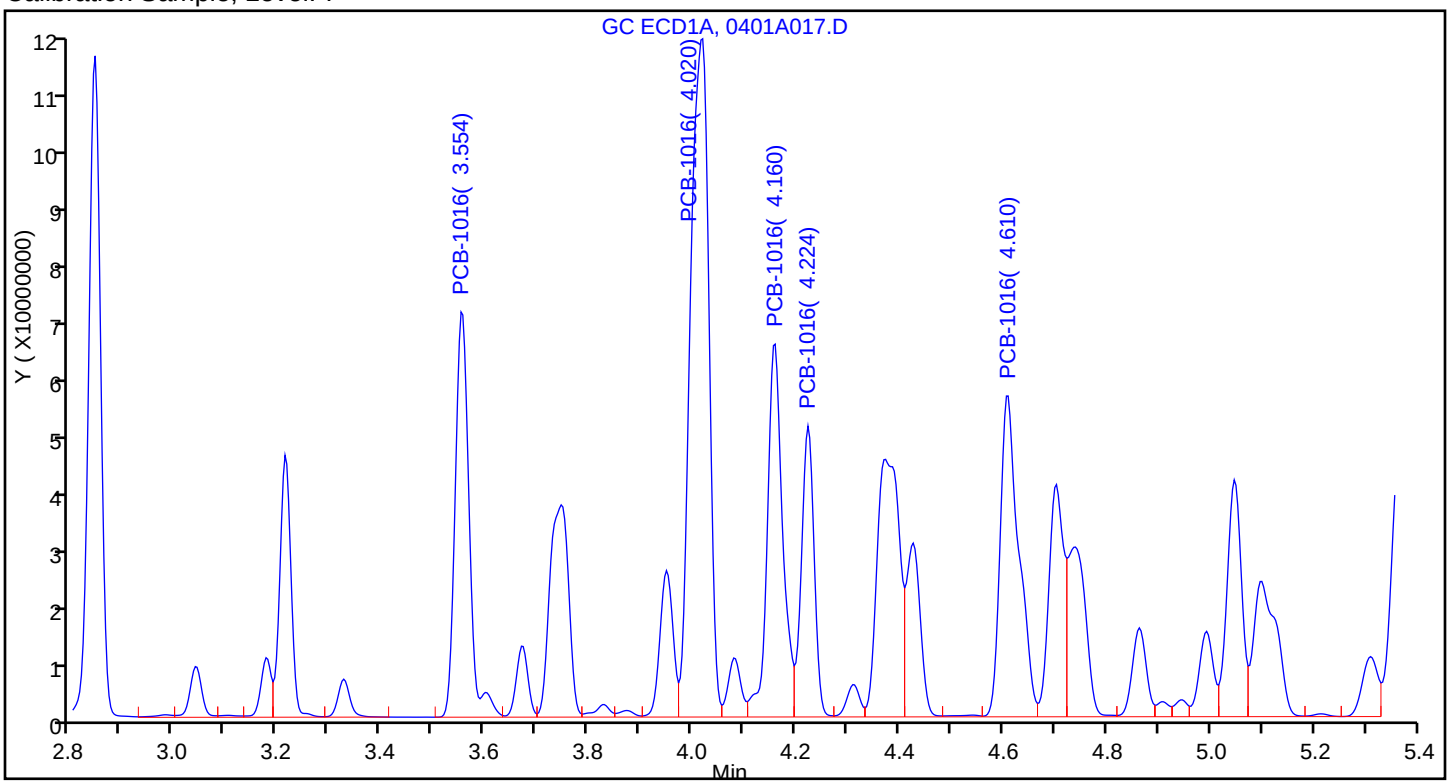
Report Date: 03-Apr-2014 08:32:57 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

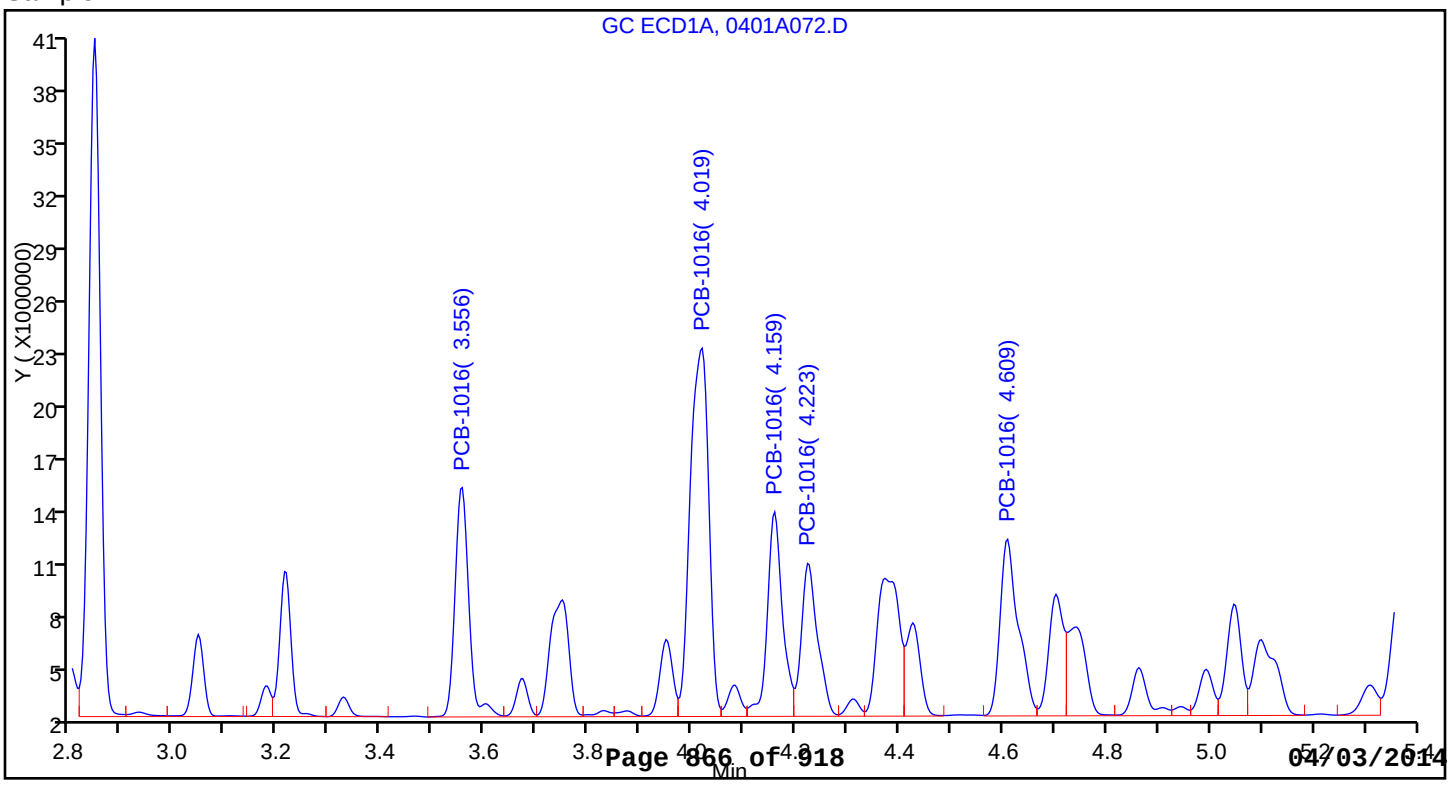
Data File:	\\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A072.D				
Injection Date:	02-Apr-2014 15:28:55	Instrument ID:	SGC_P3a		
Lims ID:	LCS 280-218632/2-A				
Client ID:					
Operator ID:	JAX	ALS Bottle#:	72	Worklist Smp#:	73
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	PCB_P3a	Limit Group:	GCSV - 8082		
Column:	CLP1 Pesticides Column 1 (0.32 mm)	Detector	GC ECD1A		

5 PCB-1016, CAS: 12674-11-2

Calibration Sample, Level: 7



Sample



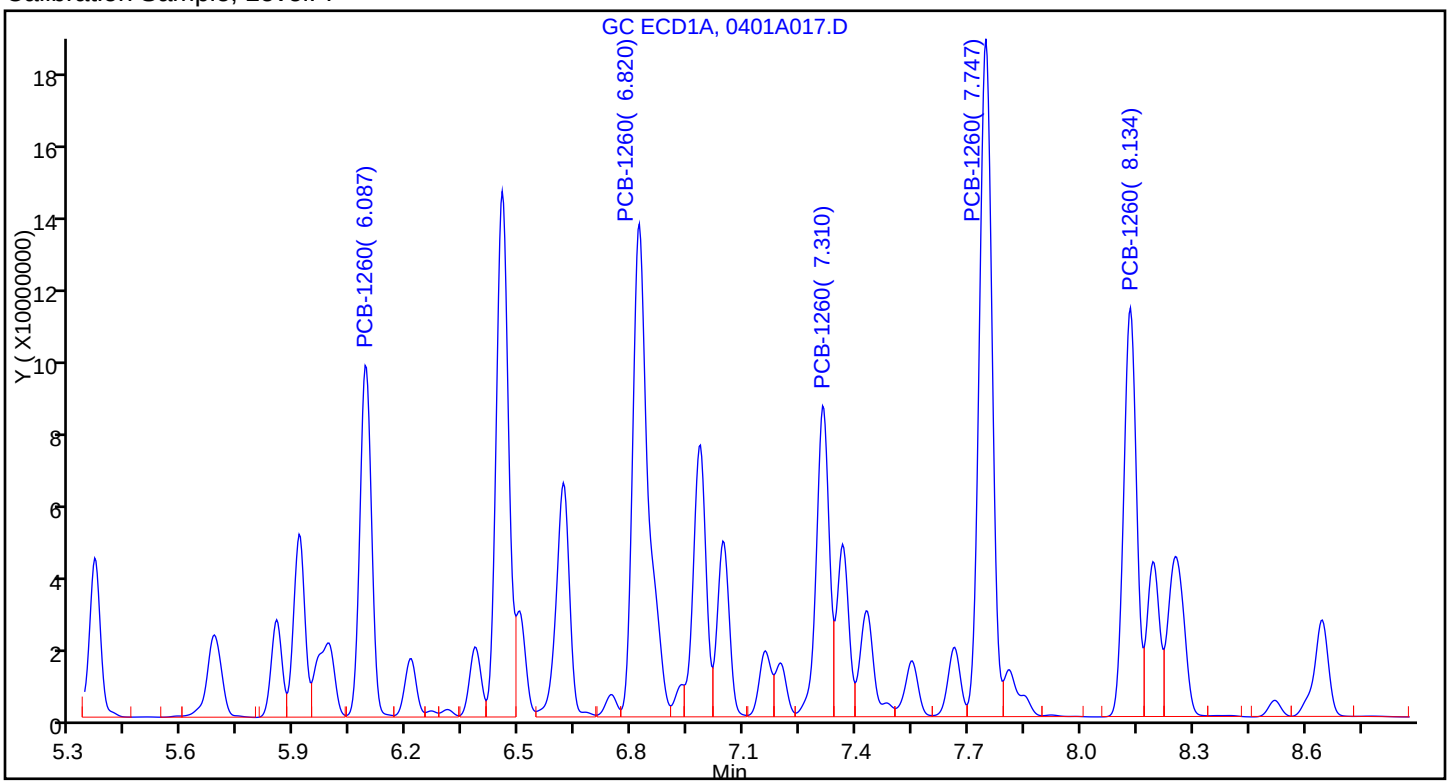
Report Date: 03-Apr-2014 08:32:57 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A072.D				
Injection Date:	02-Apr-2014 15:28:55	Instrument ID:	SGC_P3a		
Lims ID:	LCS 280-218632/2-A				
Client ID:					
Operator ID:	JAX	ALS Bottle#:	72	Worklist Smp#:	73
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	PCB_P3a	Limit Group:	GCSV - 8082		
Column:	CLP1 Pesticides Column 1 (0.32 mm)	Detector	GC ECD1A		

8 PCB-1260, CAS: 11096-82-5

Calibration Sample, Level: 7



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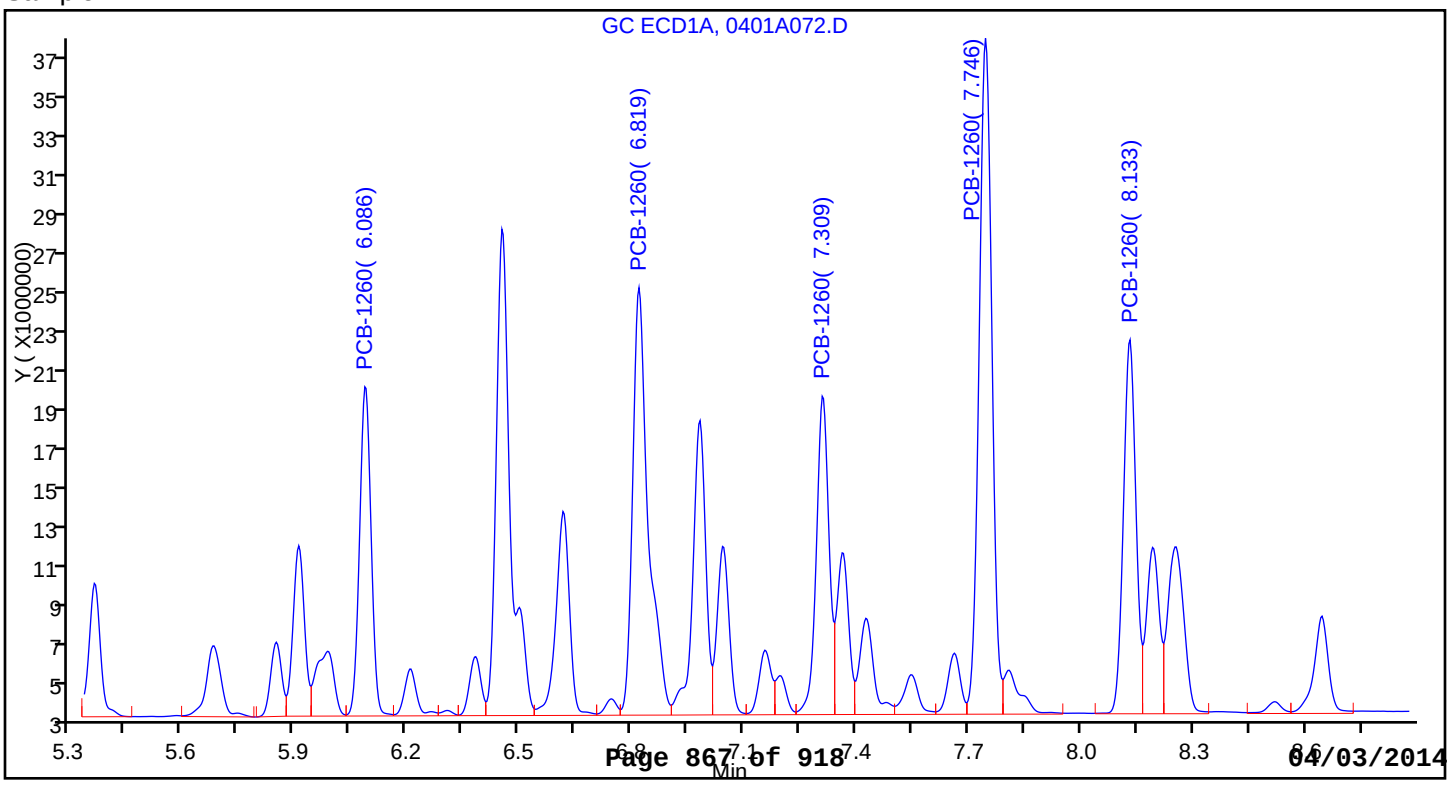


FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver
Job No.: 280-53458-1
SDG No.:
Client Sample ID:
Lab Sample ID: LCS 280-218632/2-A
Matrix: Solid
Lab File ID: 0401B072.D
Analysis Method: 8082A
Date Collected:
Extraction Method: 3546
Date Extracted: 03/27/2014 14:30
Sample wt/vol: 30(g)
Date Analyzed: 04/02/2014 15:50
Con. Extract Vol.: 10(mL)
Dilution Factor: 1
Injection Volume: 1(uL)
GC Column: CLP2 ID: 0.32(mm)
% Moisture:
GPC Cleanup:(Y/N) N
Analysis Batch No.: 219272
Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
877-09-8	Tetrachloro-m-xylene	85		53-128
2051-24-3	DCB Decachlorobiphenyl	78		59-130

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B072.D
Lims ID: LCS 280-218632/2-A
Client ID:
Sample Type: LCS
Inject. Date: 02-Apr-2014 15:50:22 ALS Bottle#: 72 Worklist Smp#: 73
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: LCS 280-218632/2
Operator ID: JAX Instrument ID: SGC_P3b

Method: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\PCB_P3b.m
Limit Group: GCSV - 8082
Last Update: 03-Apr-2014 09:29:39 Calib Date: 02-Apr-2014 03:13:50
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B037.D

Column 1 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK052

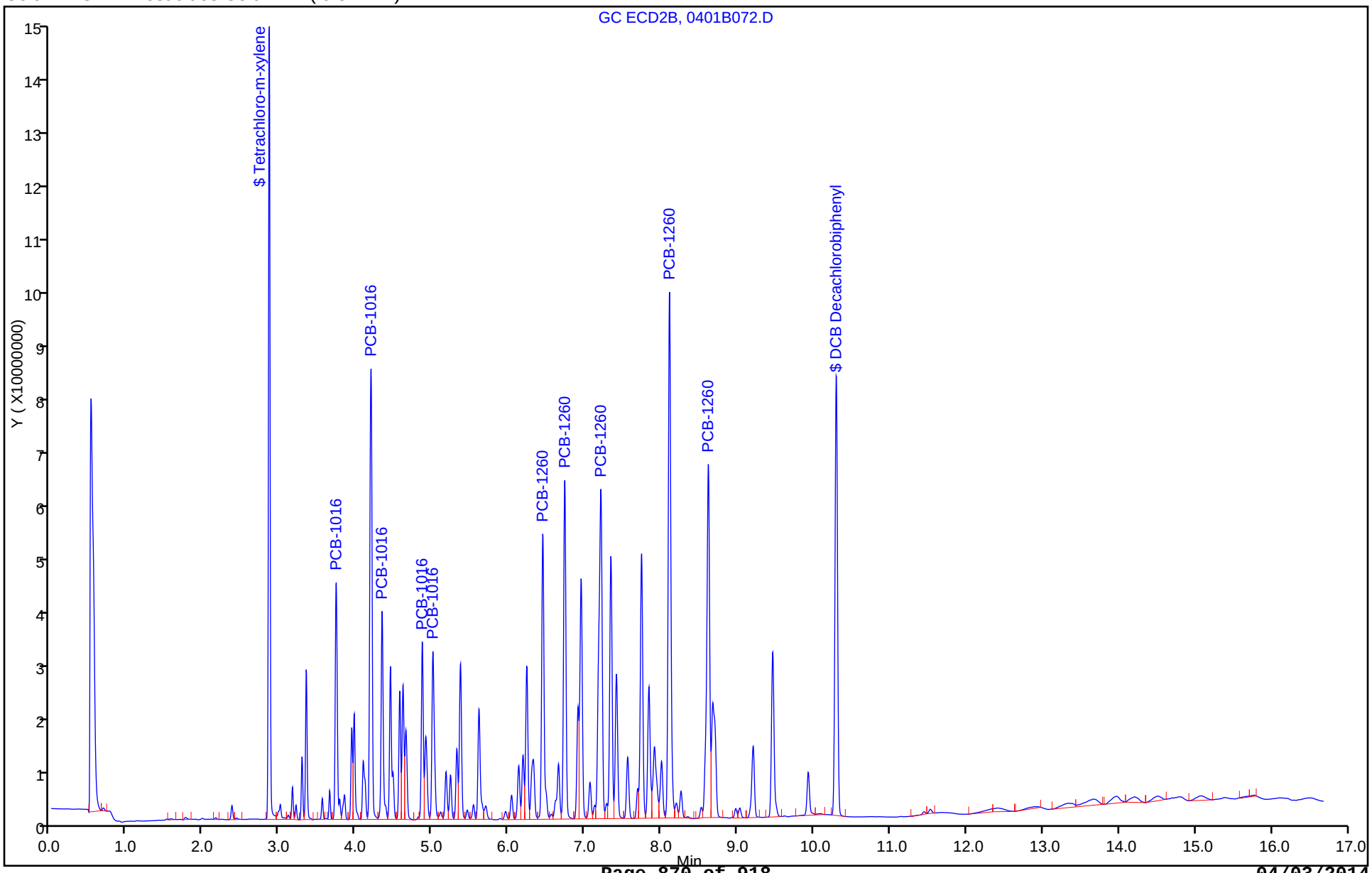
RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
$ 14 Tetrachloro-m-xylene					
2.862	2.862	0.0	212864296	16.9	
1 PCB-1016					
3.739	3.738	0.001	83801081	178.3	
4.196	4.195	0.001	172112222	185.3	
4.339	4.342	-0.003	73476183	173.8	
4.866	4.868	-0.002	57490430	172.9	
5.006	5.008	-0.002	68548836	169.5	
	Average of Peak Amounts =			176.0	
12 PCB-1260					
6.446	6.448	-0.002	115920450	171.7	
6.736	6.735	0.001	132418383	176.4	
7.209	7.208	0.001	185642697	163.1	
8.109	8.108	0.001	226722335	201.1	
8.616	8.618	-0.002	173479836	182.9	
	Average of Peak Amounts =			179.0	
$ 15 DCB Decachlorobiphenyl					
10.292	10.295	-0.003	186113893	15.7	

Report Date: 03-Apr-2014 09:29:43 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B072.D				
Injection Date:	02-Apr-2014 15:50:22	Instrument ID:	SGC_P3b	Operator ID:	JAX
Lims ID:	LCS 280-218632/2-A			Worklist Smp#:	73
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	72
Method:	PCB_P3b	Limit Group:	GCSV - 8082		

Column: CLP2 Pesticides Column 2 (0.32 mm)



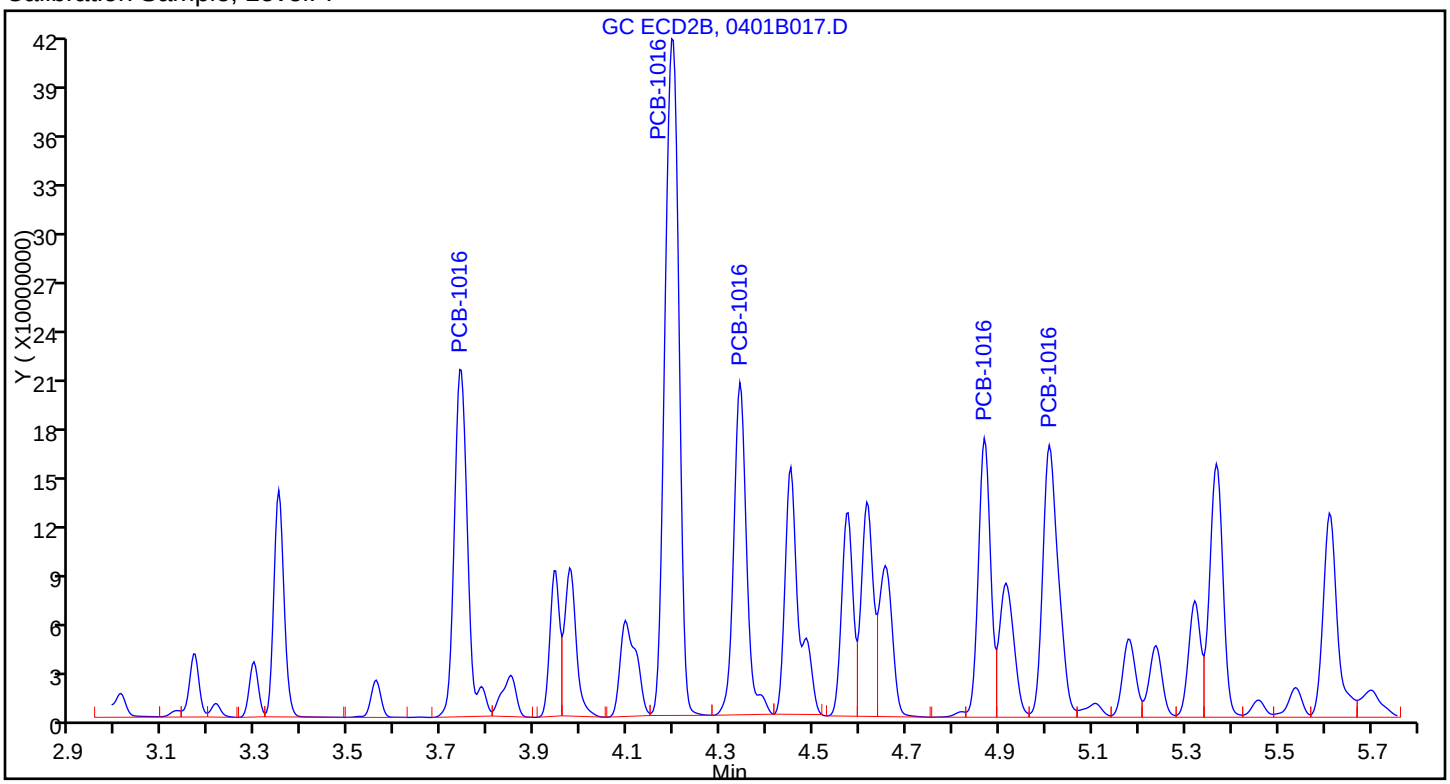
Report Date: 03-Apr-2014 09:29:43 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B072.D				
Injection Date:	02-Apr-2014 15:50:22	Instrument ID:	SGC_P3b		
Lims ID:	LCS 280-218632/2-A				
Client ID:					
Operator ID:	JAX	ALS Bottle#:	72	Worklist Smp#:	73
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	PCB_P3b	Limit Group:	GCSV - 8082		
Column:	CLP2 Pesticides Column 2 (0.32 mm)	Detector	GC ECD2B		

1 PCB-1016, CAS: 12674-11-2

Calibration Sample, Level: 7



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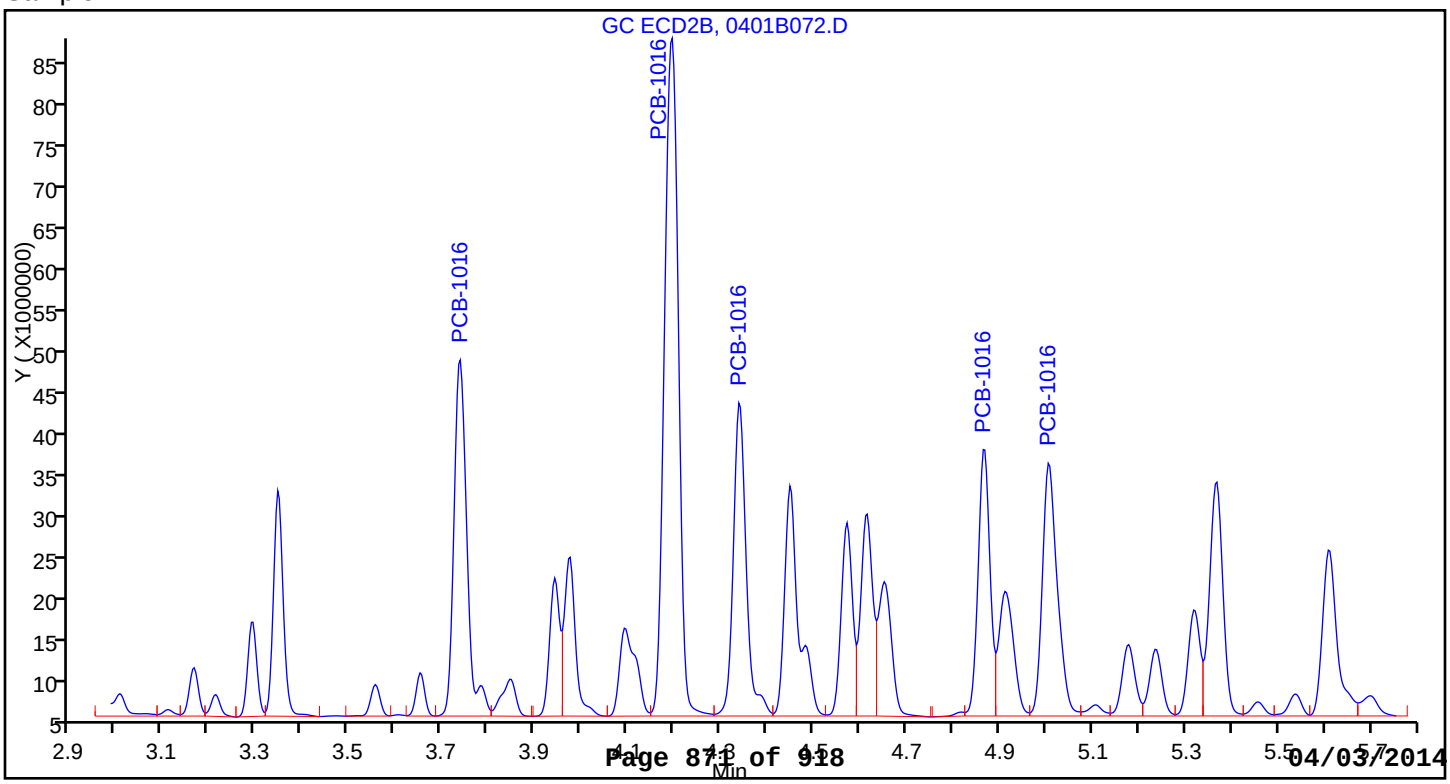


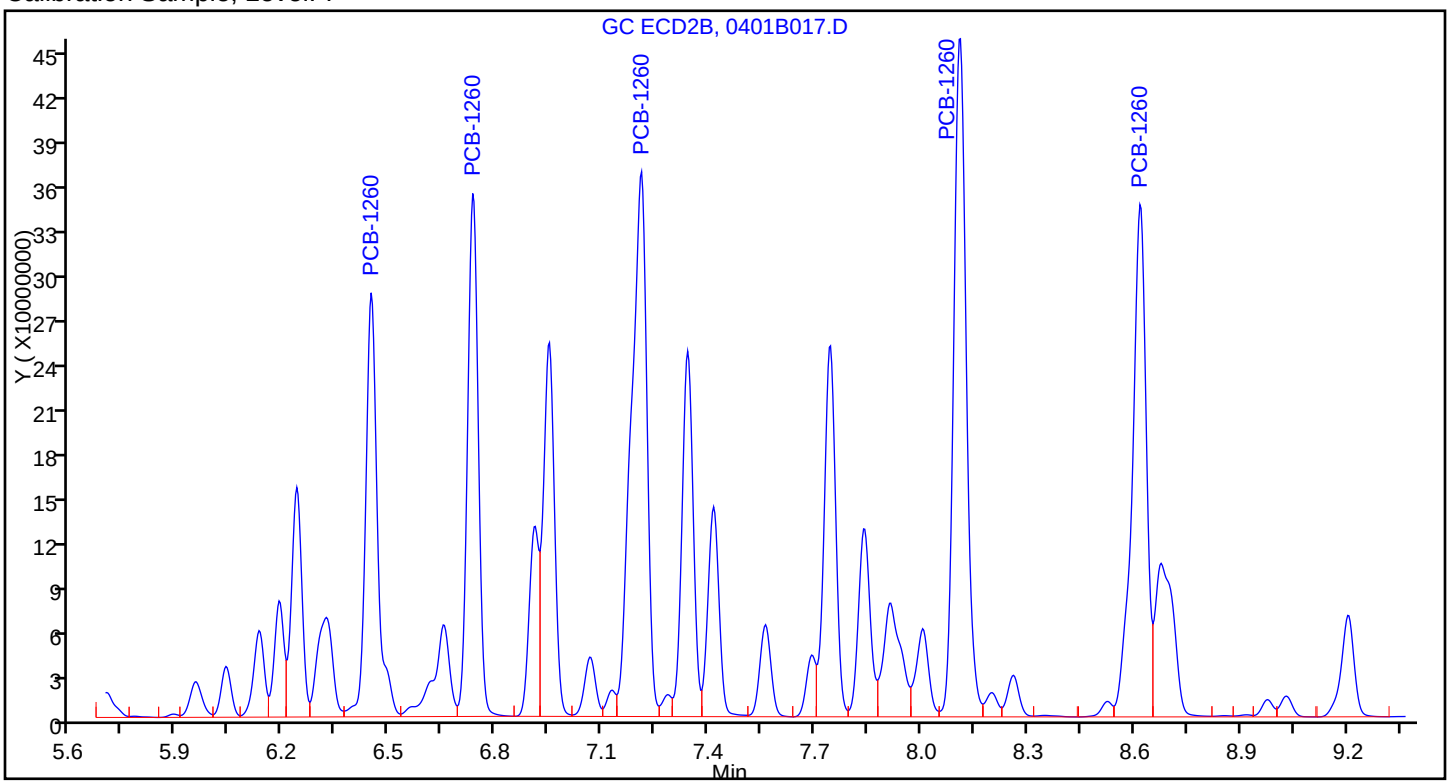
Report Date: 03-Apr-2014 09:29:43 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SGC_P3b\20140401-21601.b\0401B072.D				
Injection Date:	02-Apr-2014 15:50:22	Instrument ID:	SGC_P3b		
Lims ID:	LCS 280-218632/2-A				
Client ID:					
Operator ID:	JAX	ALS Bottle#:	72	Worklist Smp#:	73
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	PCB_P3b	Limit Group:	GCSV - 8082		
Column:	CLP2 Pesticides Column 2 (0.32 mm)	Detector	GC ECD2B		

12 PCB-1260, CAS: 11096-82-5

Calibration Sample, Level: 7



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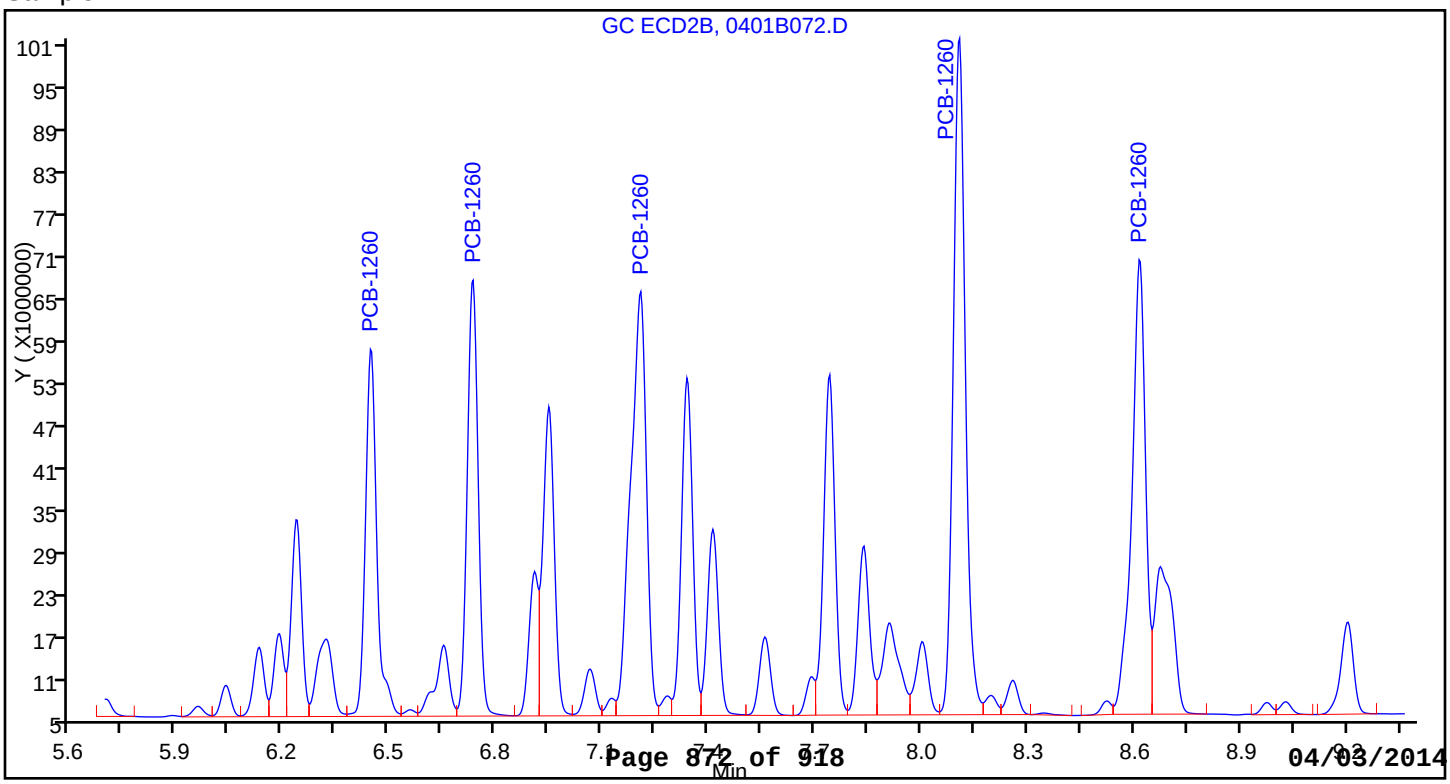


FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-53458-1

SDG No.:

Client Sample ID: SB-03-0 MS | Lab Sample ID: 280-53458-1 MS

Matrix: Solid | Lab File ID: 0401A046.D

Analysis Method: 8082A | Date Collected: 03/17/2014 11:45

Extraction Method: 3546 | Date Extracted: 03/27/2014 11:25

Sample wt/vol: 30.5(g) | Date Analyzed: 04/02/2014 06:04

Con. Extract Vol.: 10(mL) | Dilution Factor: 20

Injection Volume: 1(uL) | GC Column: CLP1 ID: 0.32(mm)

% Moisture: 5.1 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 219270 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
12674-11-2	PCB-1016	1730		680	110
11096-82-5	PCB-1260	734		680	55

CAS NO.	SURROGATE	%REC	Q	LIMITS
877-09-8	Tetrachloro-m-xylene	65	D	53-128
2051-24-3	DCB Decachlorobiphenyl	203	D X	59-130

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A046.D
Lims ID: 280-53458-A-1-B MS
Client ID:
Sample Type: MS
Inject. Date: 02-Apr-2014 06:04:27 ALS Bottle#: 46 Worklist Smp#: 46
Injection Vol: 1.0 ul Dil. Factor: 20.0000
Sample Info: 280-53458-A-1-B
Operator ID: JAX Instrument ID: SGC_P3a

Method: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\PCB_P3a.m
Limit Group: GCSV - 8082
Last Update: 03-Apr-2014 08:33:07 Calib Date: 02-Apr-2014 02:52:35
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A037.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Process Host: XAWRK052

First Level Reviewer: jacksonto Date: 02-Apr-2014 07:38:14

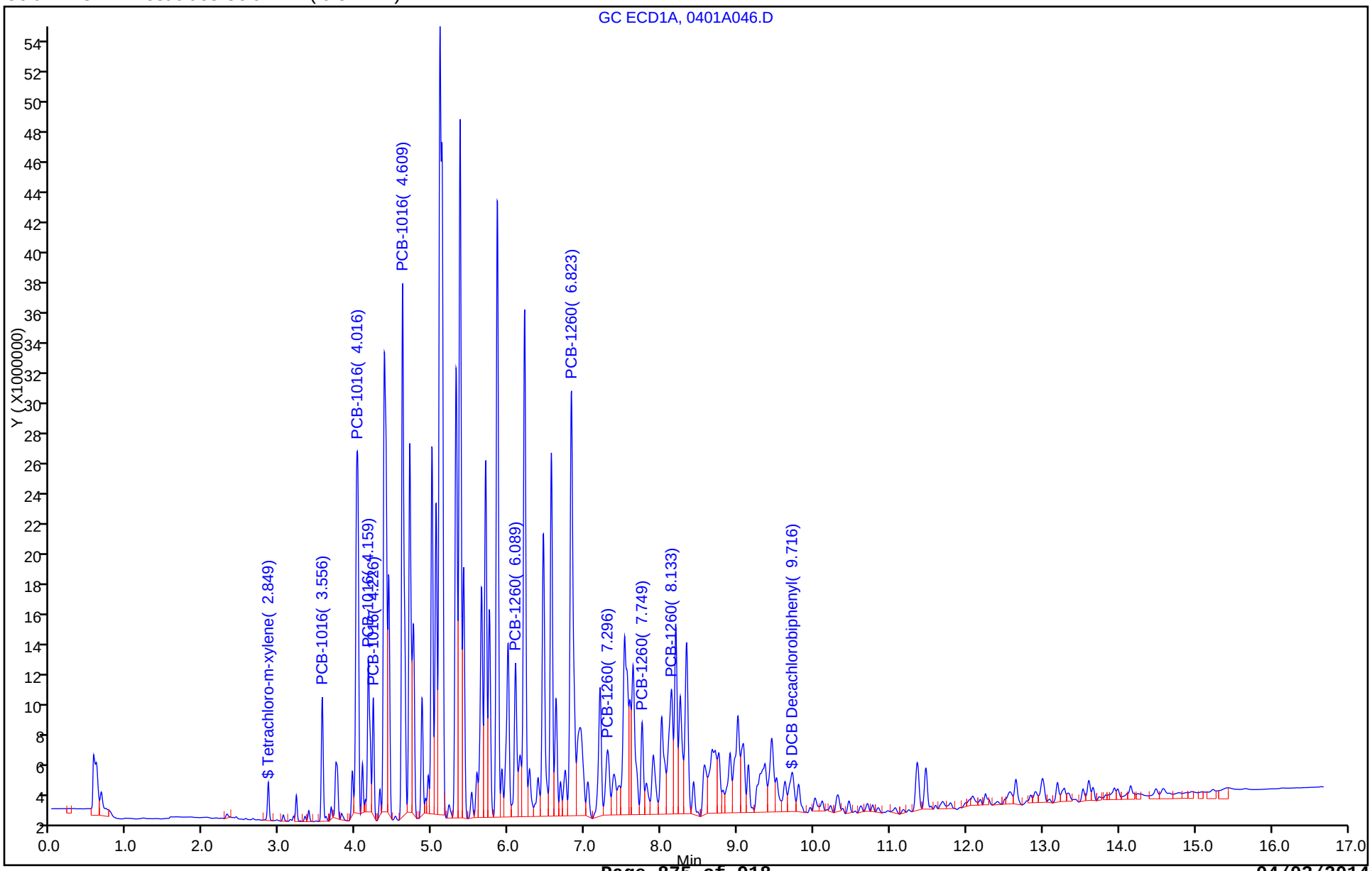
RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
$ 1 Tetrachloro-m-xylene					
2.849	2.845	0.004	4110027	0.6549	
5 PCB-1016					
3.556	3.555	0.001	14783780	107.8	
4.016	4.019	-0.003	60558177	210.7	
4.159	4.159	0.0	22890298	174.2	
4.226	4.222	0.004	12524611	150.1	
4.609	4.609	0.0	80540063	610.2	
	Average of Peak Amounts =			250.6	
8 PCB-1260					
6.089	6.089	0.0	24222703	108.5	
6.823	6.819	0.004	82659724	208.6	
7.296	7.312	-0.016	15476667	71.3	
7.749	7.749	0.0	14447687	25.3	
8.133	8.132	0.001	31741103	117.0	
	Average of Peak Amounts =			106.1	
$ 13 DCB Decachlorobiphenyl					
9.716	9.715	0.001	11817882	2.03	

Report Date: 03-Apr-2014 08:33:17 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A046.D				
Injection Date:	02-Apr-2014 06:04:27	Instrument ID:	SGC_P3a	Operator ID:	JAX
Lims ID:	280-53458-A-1-B MS			Worklist Smp#:	46
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	20.0000	ALS Bottle#:	46
Method:	PCB_P3a	Limit Group:	GCSV - 8082		

Column: CLP1 Pesticides Column 1 (0.32 mm)



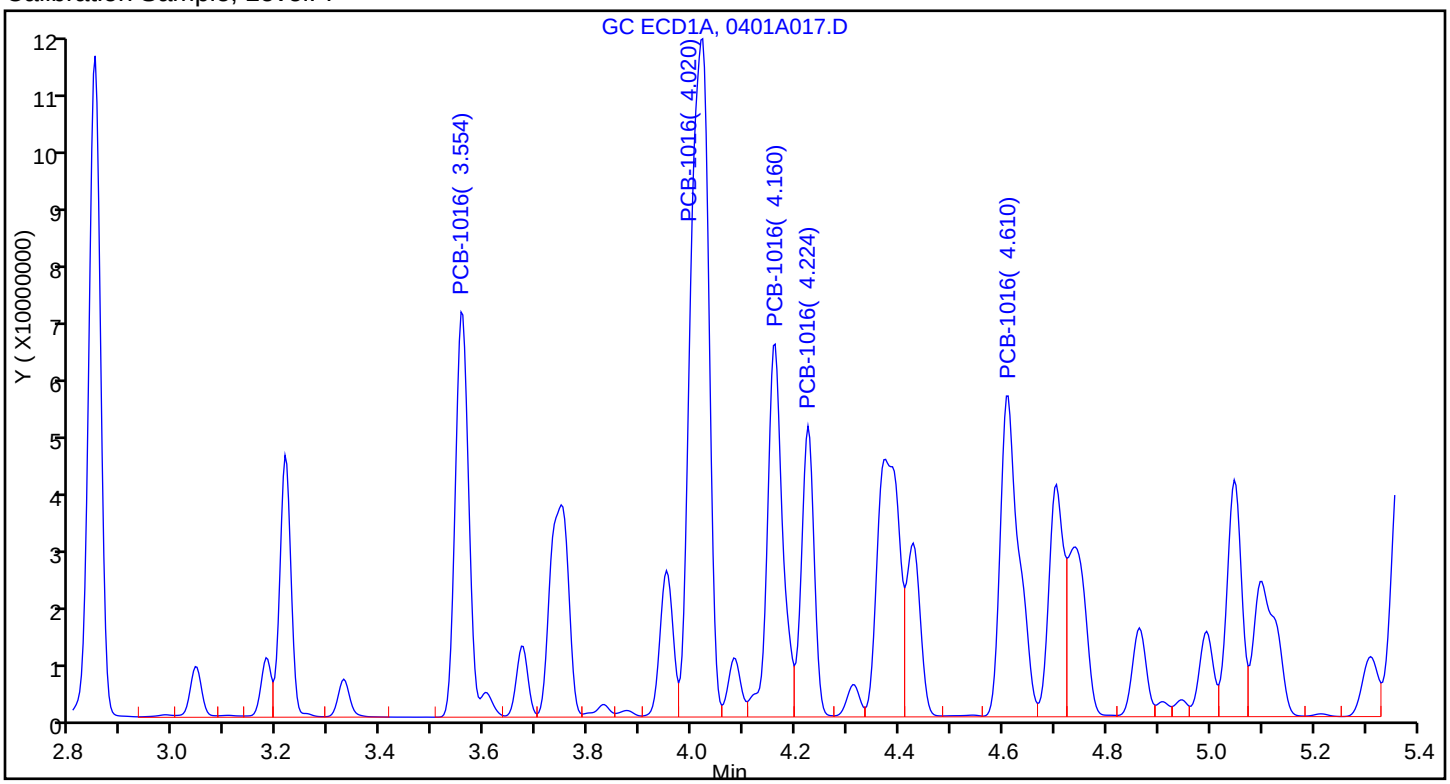
Report Date: 03-Apr-2014 08:33:18 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

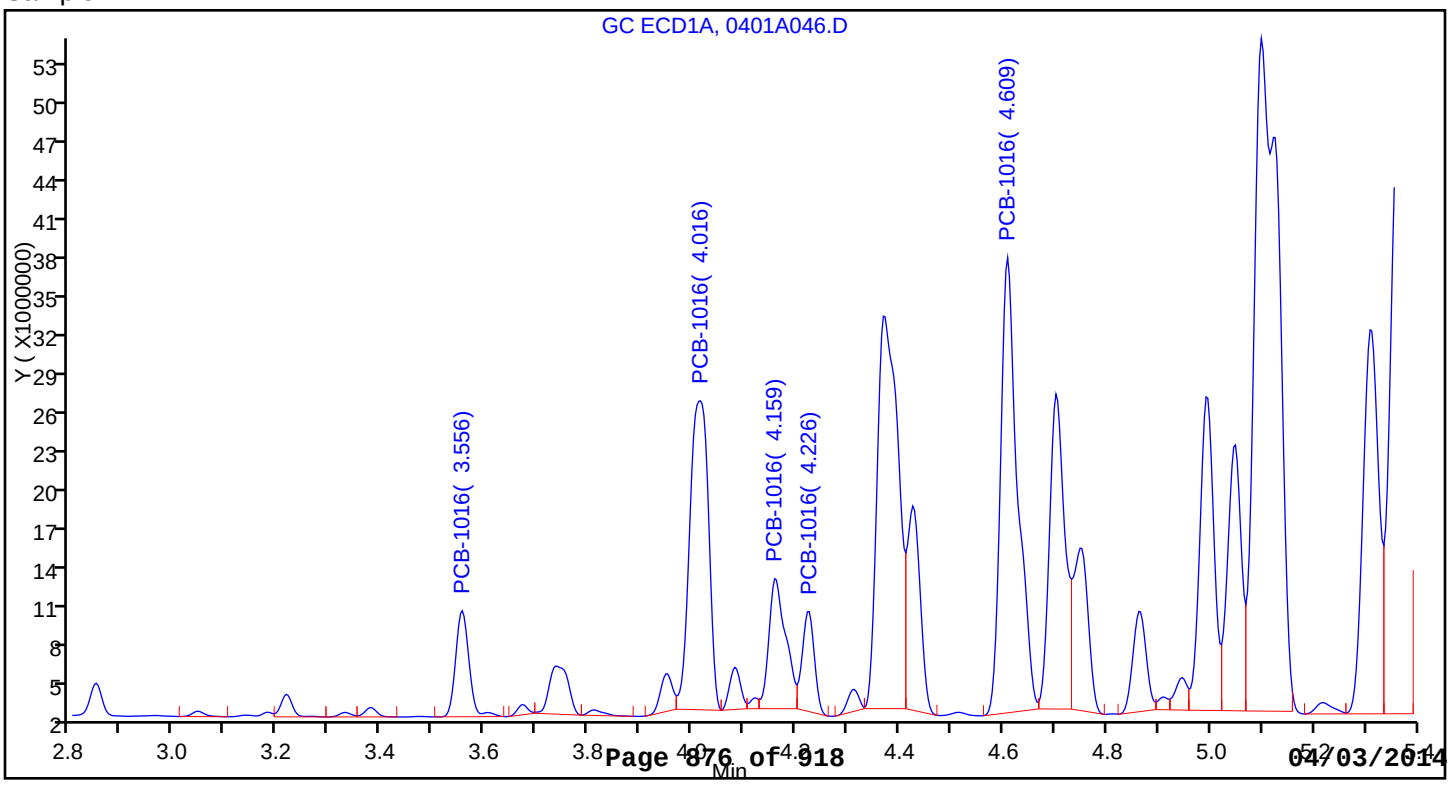
Data File:	\\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A046.D				
Injection Date:	02-Apr-2014 06:04:27	Instrument ID:	SGC_P3a		
Lims ID:	280-53458-A-1-B MS				
Client ID:					
Operator ID:	JAX	ALS Bottle#:	46	Worklist Smp#:	46
Injection Vol:	1.0 ul	Dil. Factor:	20.0000		
Method:	PCB_P3a	Limit Group:	GCSV - 8082		
Column:	CLP1 Pesticides Column 1 (0.32 mm)	Detector	GC ECD1A		

5 PCB-1016, CAS: 12674-11-2

Calibration Sample, Level: 7



Sample



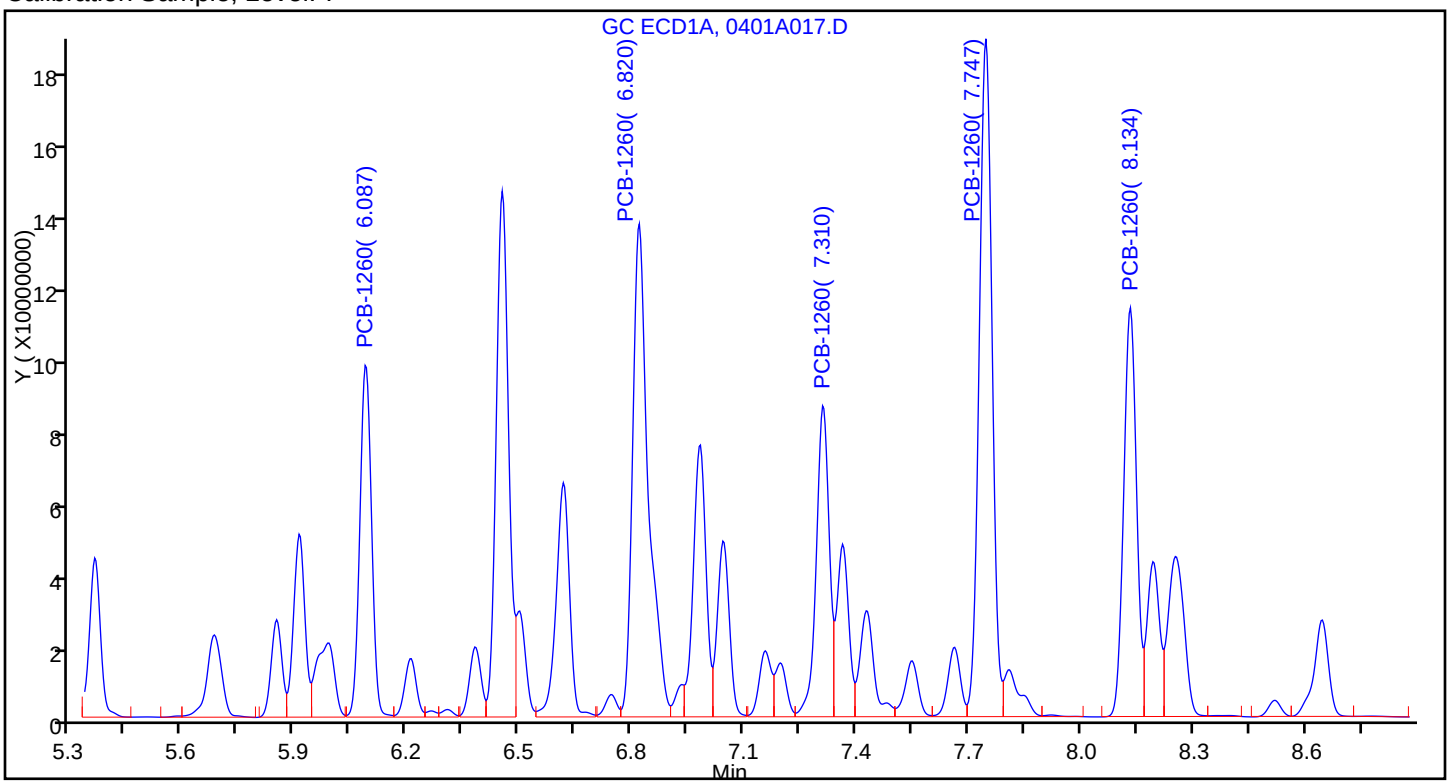
Report Date: 03-Apr-2014 08:33:18 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A046.D				
Injection Date:	02-Apr-2014 06:04:27	Instrument ID:	SGC_P3a		
Lims ID:	280-53458-A-1-B MS				
Client ID:					
Operator ID:	JAX	ALS Bottle#:	46	Worklist Smp#:	46
Injection Vol:	1.0 ul	Dil. Factor:	20.0000		
Method:	PCB_P3a	Limit Group:	GCSV - 8082		
Column:	CLP1 Pesticides Column 1 (0.32 mm)	Detector	GC ECD1A		

8 PCB-1260, CAS: 11096-82-5

Calibration Sample, Level: 7



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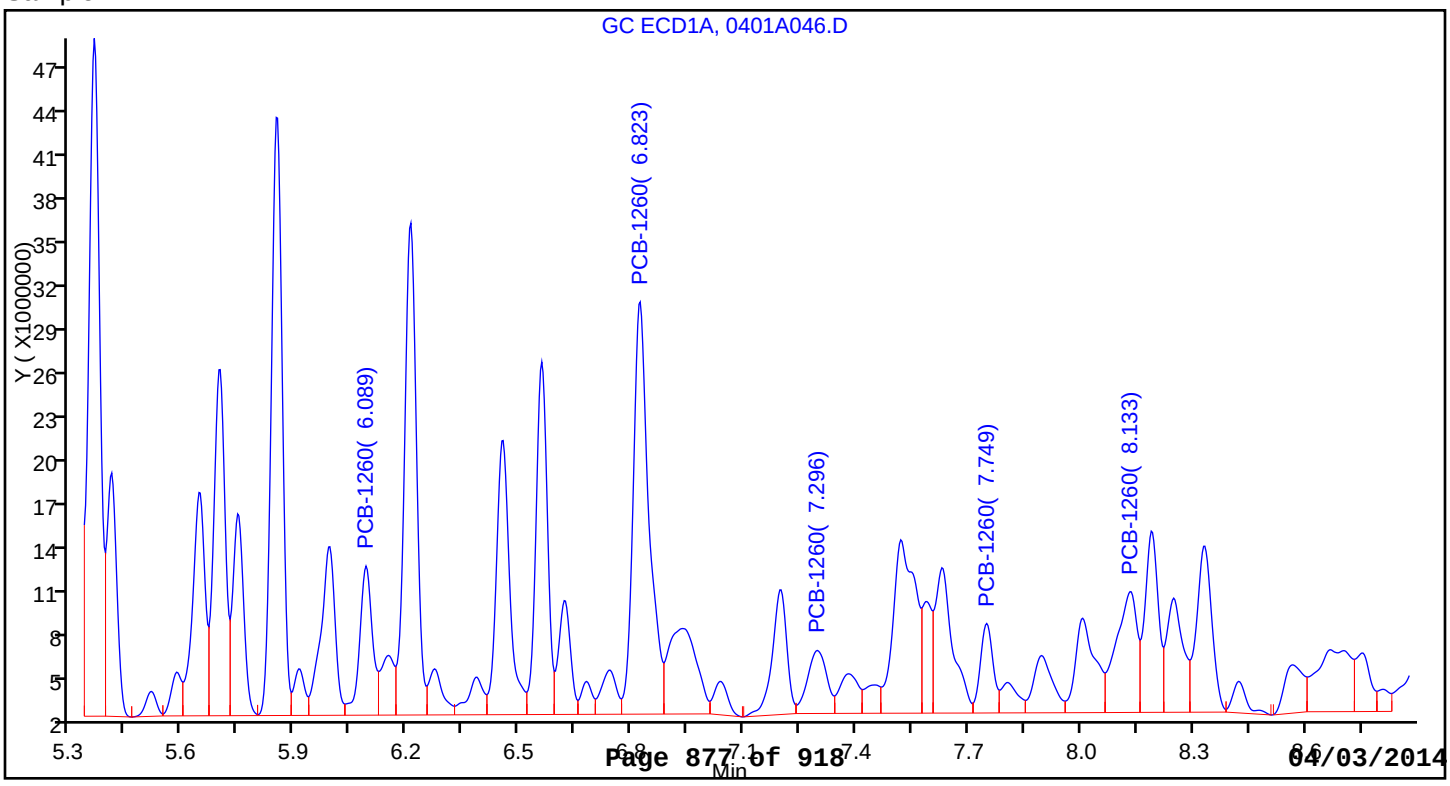


FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-53458-1

SDG No.:

Client Sample ID: SB-30-0 MS | Lab Sample ID: 280-53458-22 MS

Matrix: Solid | Lab File ID: 0401A075.D

Analysis Method: 8082A | Date Collected: 03/19/2014 12:15

Extraction Method: 3546 | Date Extracted: 03/27/2014 14:30

Sample wt/vol: 31.8(g) | Date Analyzed: 04/02/2014 16:33

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: CLP1 ID: 0.32(mm)

% Moisture: 2.4 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 219270 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
12674-11-2	PCB-1016	75.9		32	4.9
11096-82-5	PCB-1260	80.7		32	2.6

CAS NO.	SURROGATE	%REC	Q	LIMITS
877-09-8	Tetrachloro-m-xylene	78		53-128
2051-24-3	DCB Decachlorobiphenyl	49	X	59-130

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A075.D
Lims ID: 280-53458-A-22-B MS
Client ID:
Sample Type: MS
Inject. Date: 02-Apr-2014 16:33:07 ALS Bottle#: 75 Worklist Smp#: 76
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-53458-A-22-B
Operator ID: JAX Instrument ID: SGC_P3a

Method: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\PCB_P3a.m
Limit Group: GCSV - 8082
Last Update: 03-Apr-2014 08:32:55 Calib Date: 02-Apr-2014 02:52:35
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A037.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Process Host: XAWRK052

First Level Reviewer: jacksonto Date: 03-Apr-2014 06:53:30

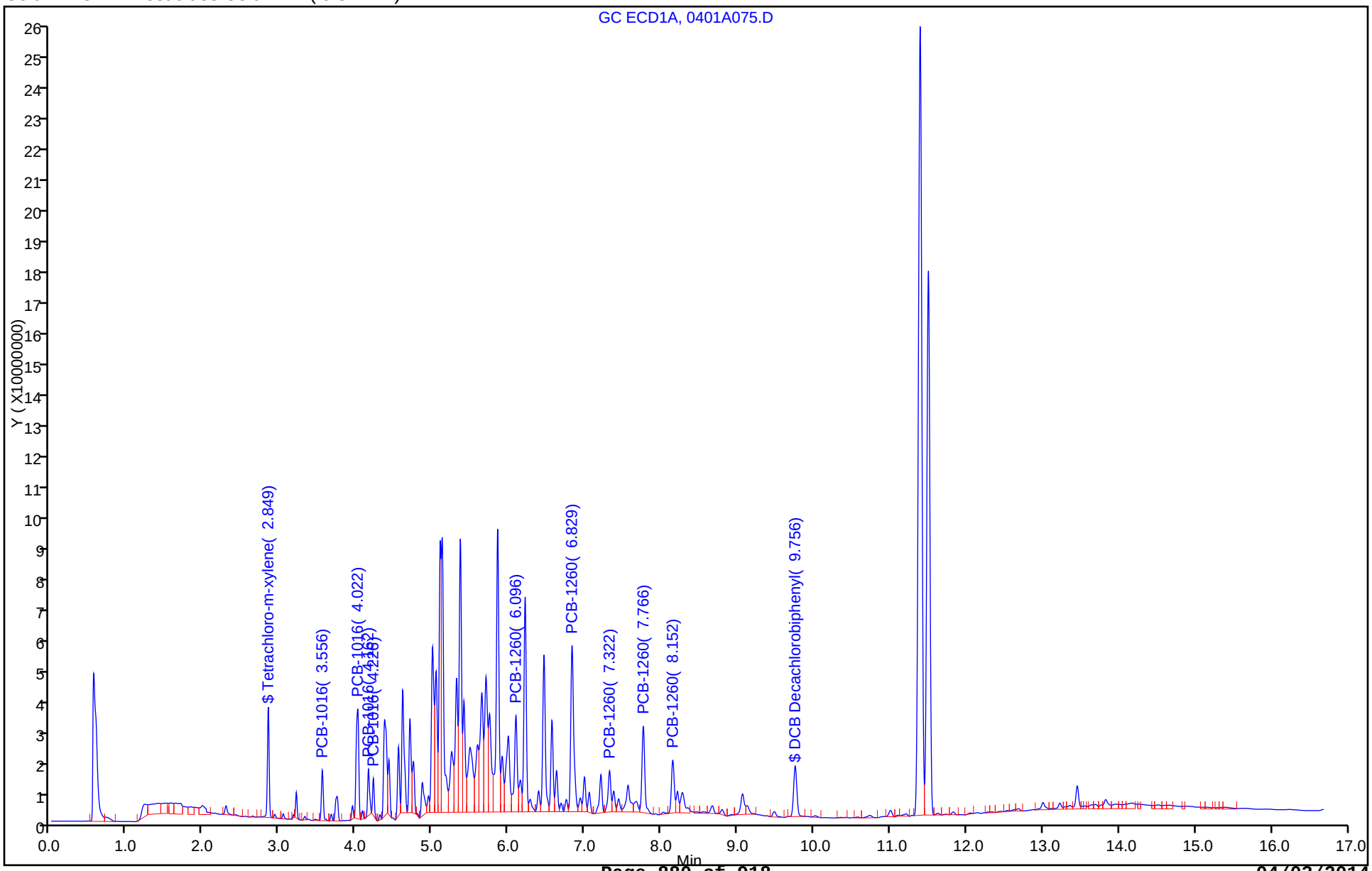
RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
$ 1 Tetrachloro-m-xylene					
2.849	2.845	0.004	56220613	15.6	
5 PCB-1016					
3.556	3.555	0.001	28542337	221.2	
4.022	4.019	0.003	84069244	296.0	
4.162	4.159	0.003	26741163	204.6	
4.226	4.222	0.004	18146869	220.2	
0.0	4.609	-4.609	0	0	
	Average of Peak Amounts =			235.5	
8 PCB-1260					
6.096	6.089	0.007	81399363	390.1	
6.829	6.819	0.010	146132696	374.9	
7.322	7.312	0.010	33353040	162.1	
7.766	7.749	0.017	71891138	159.7	
8.152	8.132	0.020	43930656	164.7	
	Average of Peak Amounts =			250.3	
$ 13 DCB Decachlorobiphenyl					
9.756	9.715	0.041	47949670	9.75	

Report Date: 03-Apr-2014 08:32:59 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A075.D				
Injection Date:	02-Apr-2014 16:33:07	Instrument ID:	SGC_P3a	Operator ID:	JAX
Lims ID:	280-53458-A-22-B MS			Worklist Smp#:	76
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	75
Method:	PCB_P3a	Limit Group:	GCSV - 8082		

Column: CLP1 Pesticides Column 1 (0.32 mm)



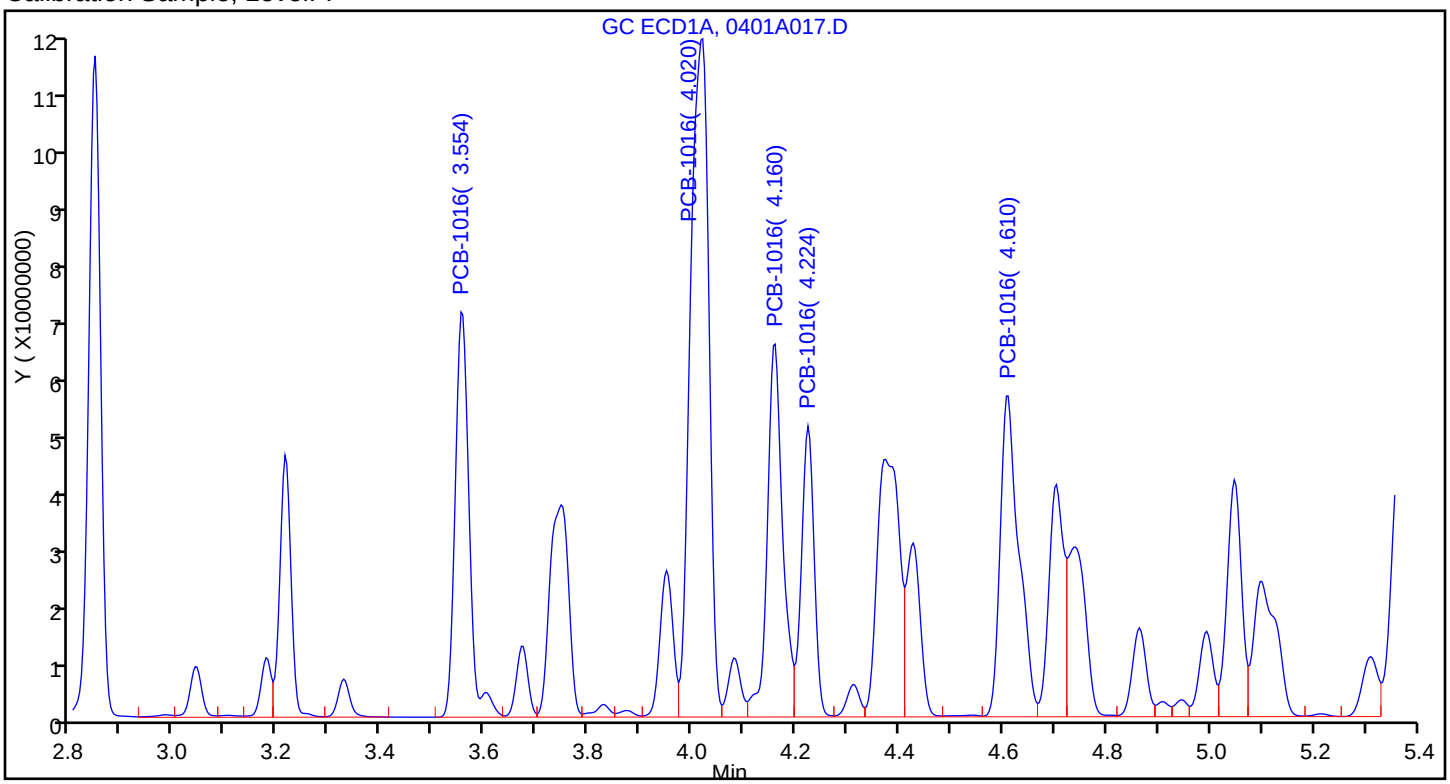
Report Date: 03-Apr-2014 08:32:59 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A075.D				
Injection Date:	02-Apr-2014 16:33:07	Instrument ID:	SGC_P3a		
Lims ID:	280-53458-A-22-B MS				
Client ID:					
Operator ID:	JAX	ALS Bottle#:	75	Worklist Smp#:	76
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	PCB_P3a	Limit Group:	GCSV - 8082		
Column:	CLP1 Pesticides Column 1 (0.32 mm)	Detector	GC ECD1A		

5 PCB-1016, CAS: 12674-11-2

Calibration Sample, Level: 7



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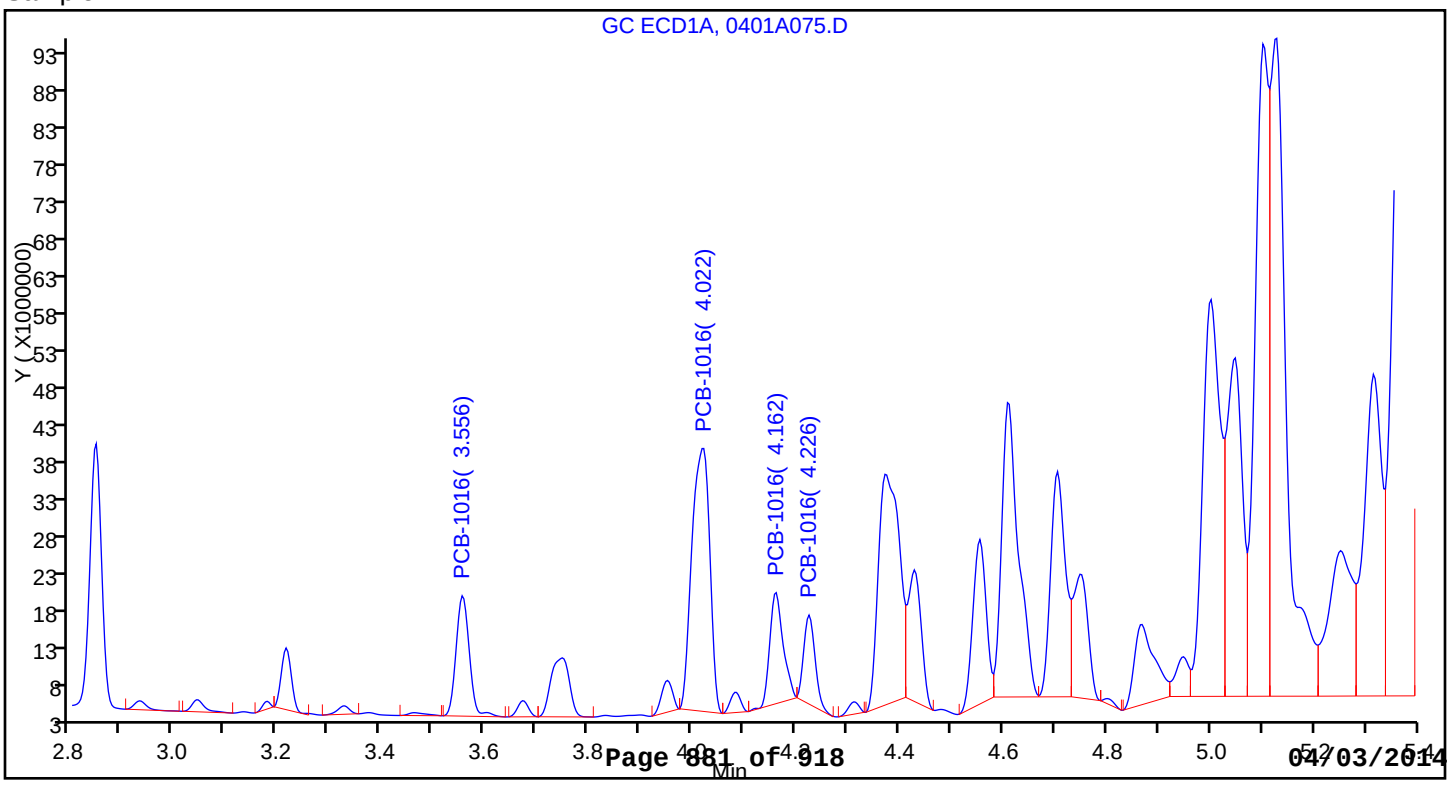


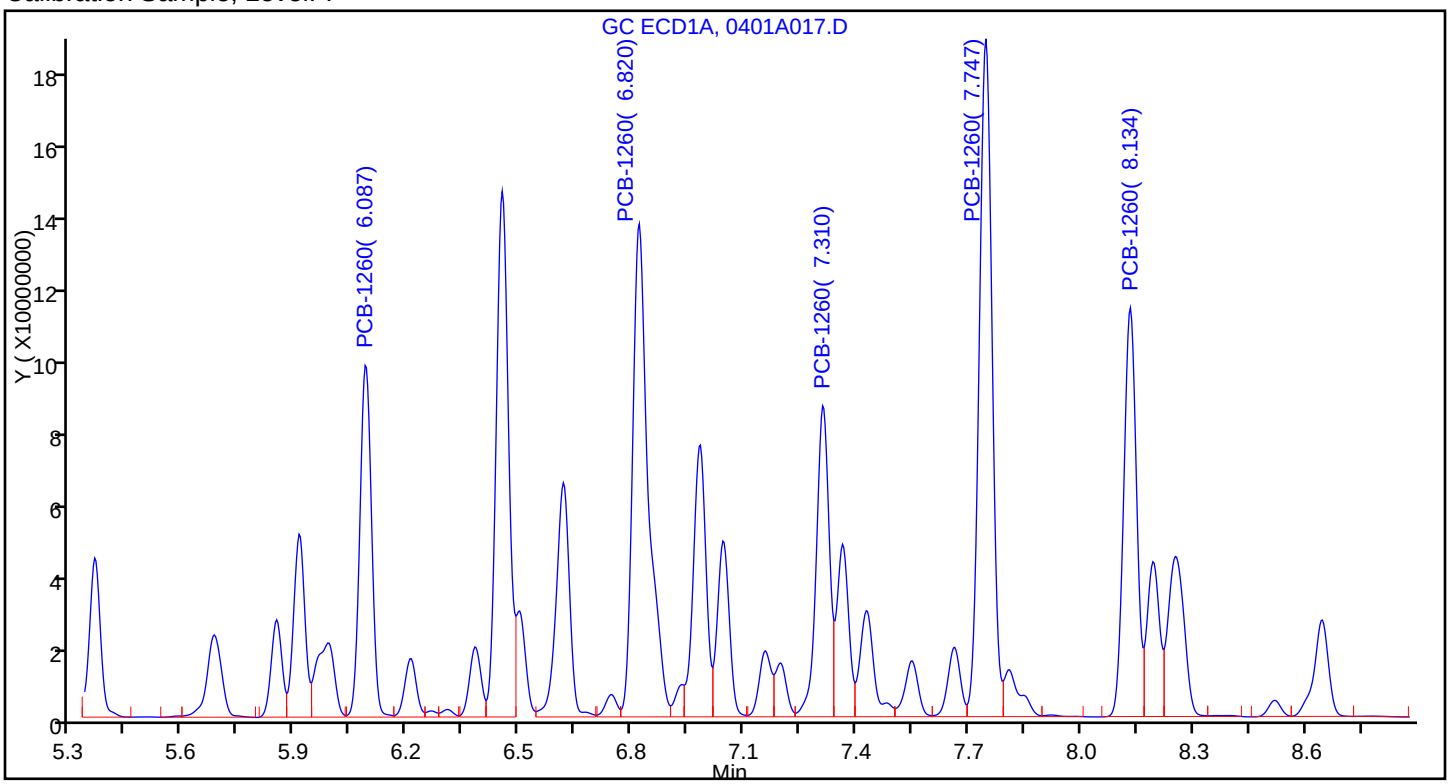
Report Date: 03-Apr-2014 08:32:59 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A075.D				
Injection Date:	02-Apr-2014 16:33:07	Instrument ID:	SGC_P3a		
Lims ID:	280-53458-A-22-B MS				
Client ID:					
Operator ID:	JAX	ALS Bottle#:	75	Worklist Smp#:	76
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	PCB_P3a	Limit Group:	GCSV - 8082		
Column:	CLP1 Pesticides Column 1 (0.32 mm)	Detector	GC ECD1A		

8 PCB-1260, CAS: 11096-82-5

Calibration Sample, Level: 7



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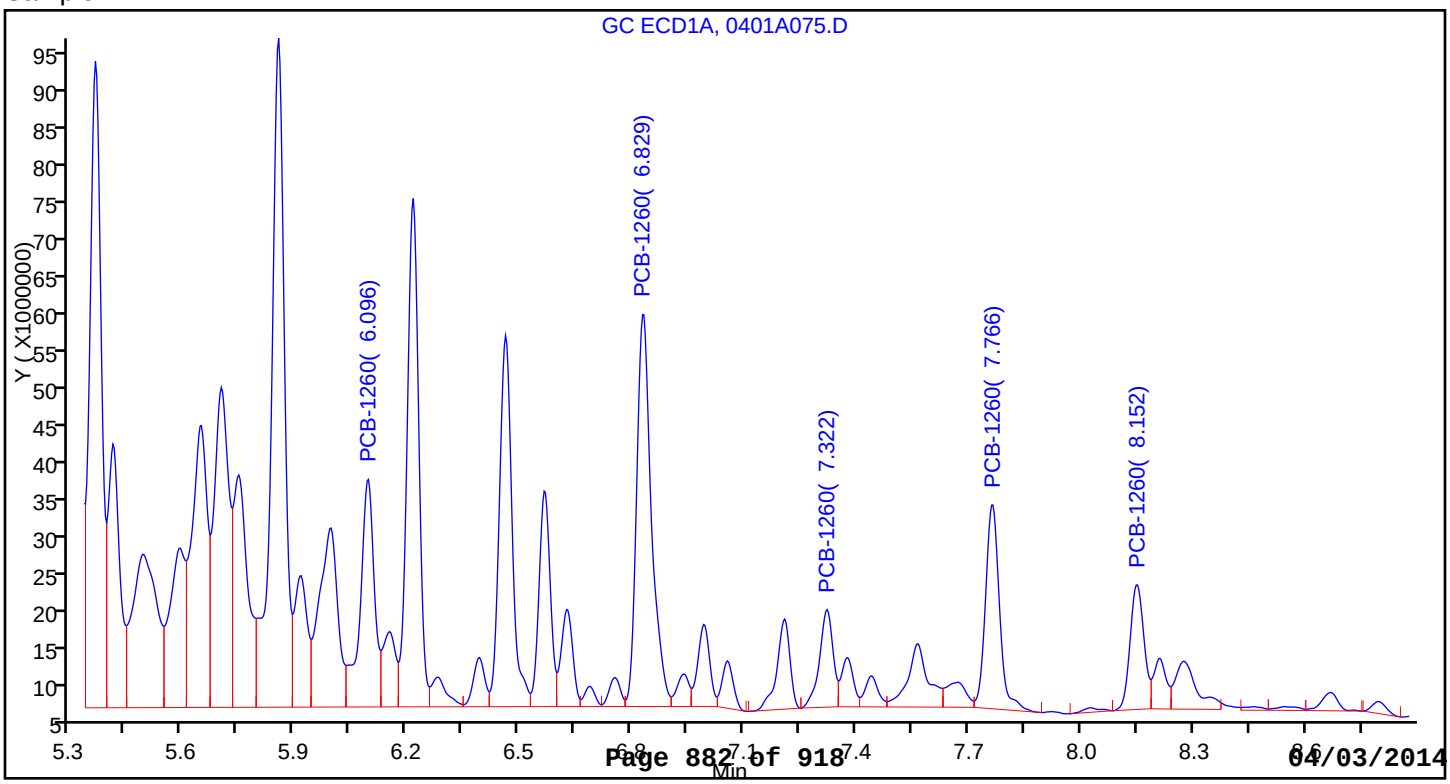


FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-53458-1

SDG No.:

Client Sample ID: SB-03-0 MSD | Lab Sample ID: 280-53458-1 MSD

Matrix: Solid | Lab File ID: 0401A047.D

Analysis Method: 8082A | Date Collected: 03/17/2014 11:45

Extraction Method: 3546 | Date Extracted: 03/27/2014 11:25

Sample wt/vol: 30.5(g) | Date Analyzed: 04/02/2014 06:25

Con. Extract Vol.: 10(mL) | Dilution Factor: 20

Injection Volume: 1(uL) | GC Column: CLP1 ID: 0.32(mm)

% Moisture: 5.1 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 219270 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
12674-11-2	PCB-1016	1760		680	110
11096-82-5	PCB-1260	749		680	55

CAS NO.	SURROGATE	%REC	Q	LIMITS
877-09-8	Tetrachloro-m-xylene	64	D	53-128
2051-24-3	DCB Decachlorobiphenyl	154	D X	59-130

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A047.D
Lims ID: 280-53458-A-1-C MSD
Client ID:
Sample Type: MSD
Inject. Date: 02-Apr-2014 06:25:43 ALS Bottle#: 47 Worklist Smp#: 47
Injection Vol: 1.0 ul Dil. Factor: 20.0000
Sample Info: 280-53458-A-1-C
Operator ID: JAX Instrument ID: SGC_P3a

Method: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\PCB_P3a.m
Limit Group: GCSV - 8082
Last Update: 03-Apr-2014 08:33:07 Calib Date: 02-Apr-2014 02:52:35
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A037.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Process Host: XAWRK052

First Level Reviewer: jacksonto Date: 02-Apr-2014 07:38:23

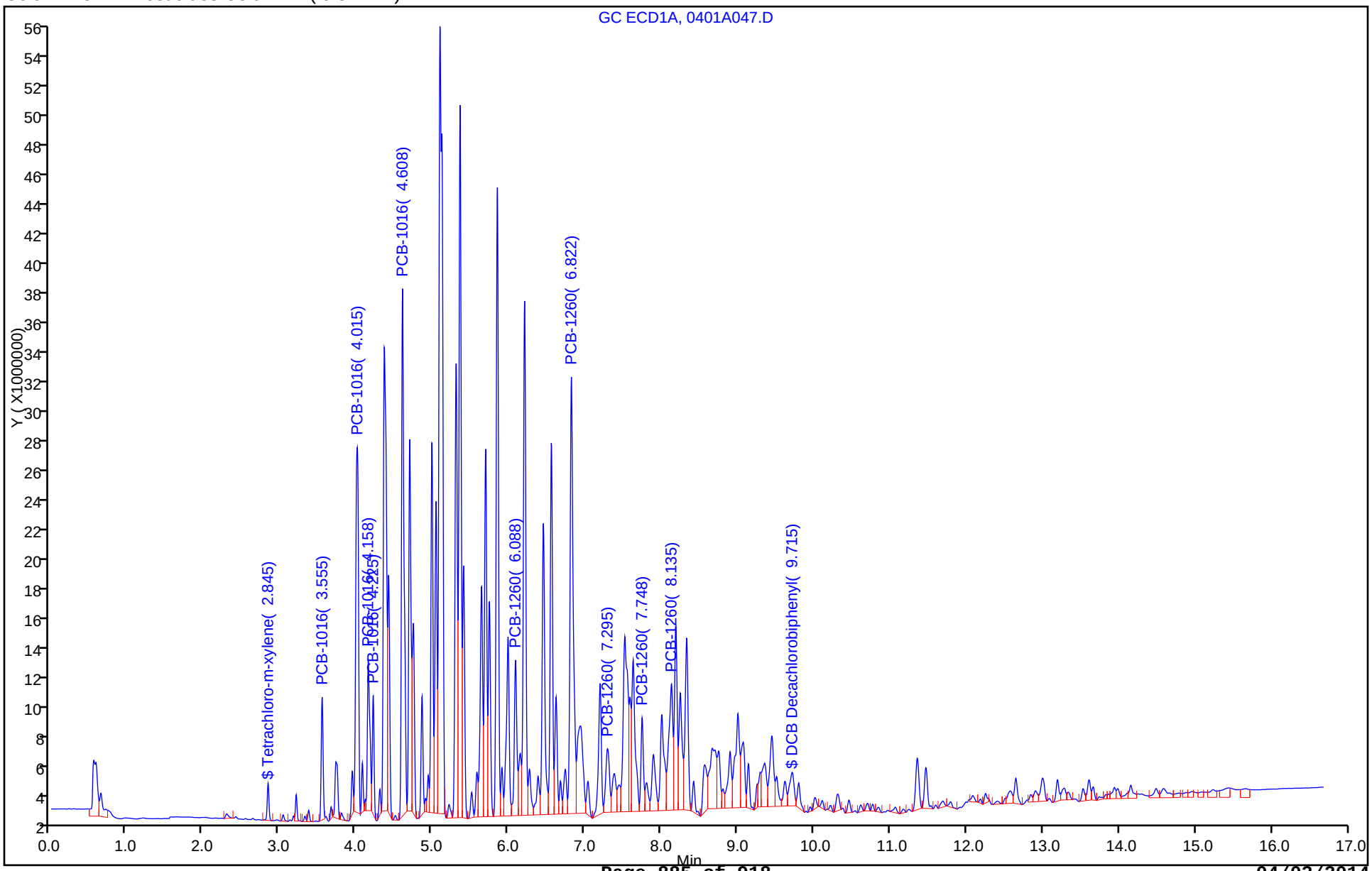
RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
$ 1 Tetrachloro-m-xylene					
2.845	2.845	0.0	4059843	0.6405	
5 PCB-1016					
3.555	3.555	0.0	14278776	103.6	
4.015	4.019	-0.004	62117268	216.4	
4.158	4.159	-0.001	23247356	177.1	
4.225	4.222	0.003	12827027	153.9	
4.608	4.609	-0.001	82518135	625.4	
	Average of Peak Amounts =			255.3	
8 PCB-1260					
6.088	6.089	-0.001	25101763	112.8	
6.822	6.819	0.003	85320491	215.6	
7.295	7.312	-0.017	14897314	68.3	
7.748	7.749	-0.001	14381092	25.1	
8.135	8.132	0.003	32505811	120.0	
	Average of Peak Amounts =			108.4	
$ 13 DCB Decachlorobiphenyl					
9.715	9.715	0.0	9536665	1.54	

Report Date: 03-Apr-2014 08:33:18 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A047.D				
Injection Date:	02-Apr-2014 06:25:43	Instrument ID:	SGC_P3a	Operator ID:	JAX
Lims ID:	280-53458-A-1-C MSD			Worklist Smp#:	47
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	20.0000	ALS Bottle#:	47
Method:	PCB_P3a	Limit Group:	GCSV - 8082		

Column: CLP1 Pesticides Column 1 (0.32 mm)



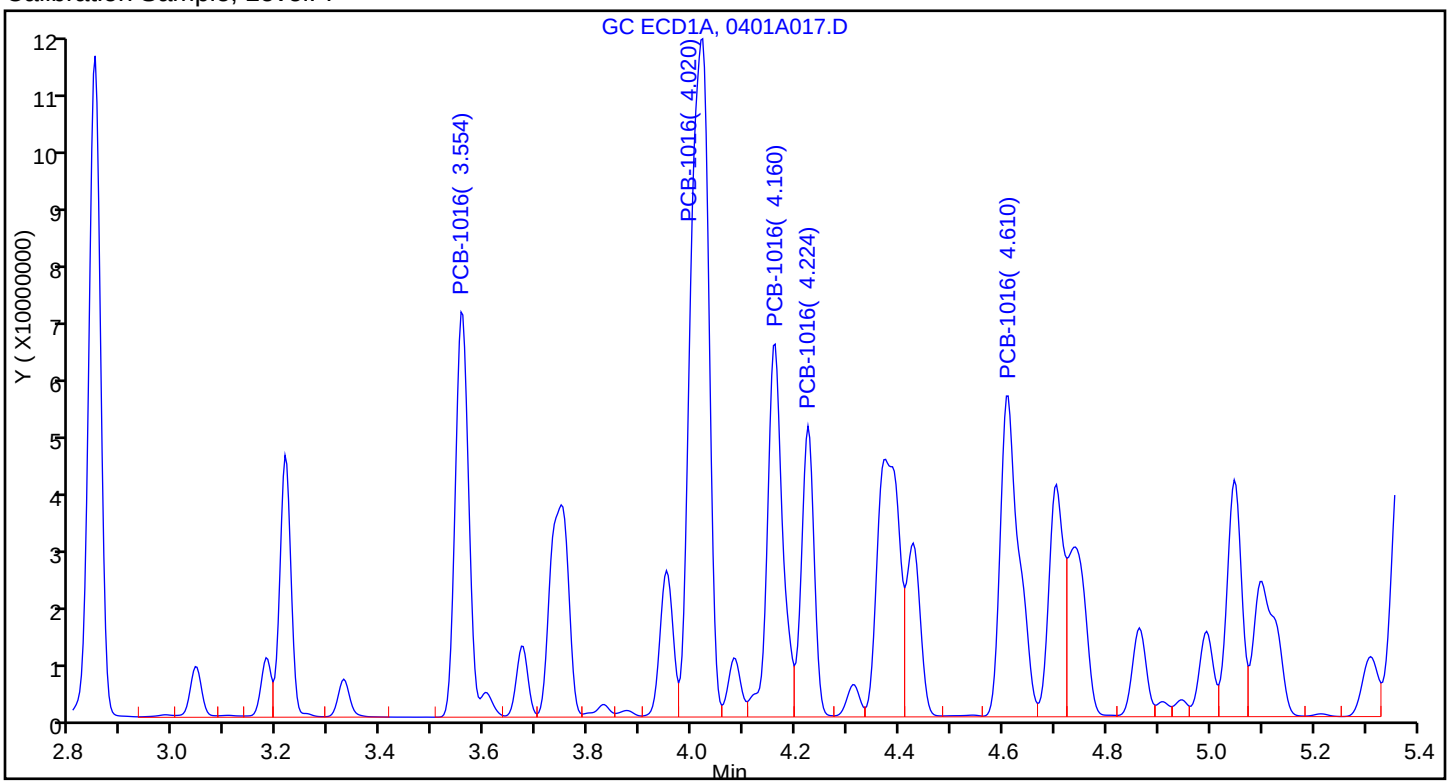
Report Date: 03-Apr-2014 08:33:18 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

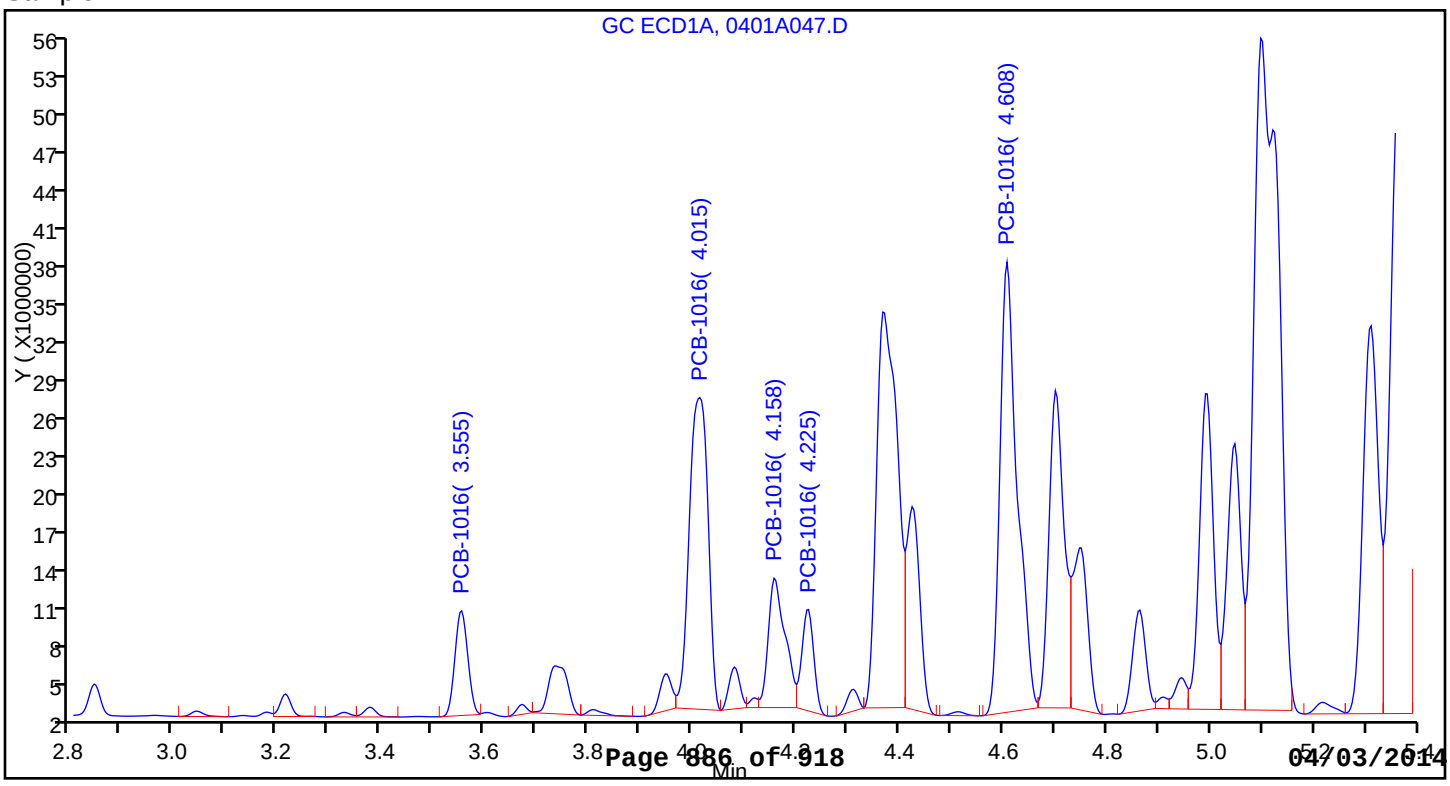
Data File:	\\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A047.D				
Injection Date:	02-Apr-2014 06:25:43	Instrument ID:	SGC_P3a		
Lims ID:	280-53458-A-1-C MSD				
Client ID:					
Operator ID:	JAX	ALS Bottle#:	47	Worklist Smp#:	47
Injection Vol:	1.0 ul	Dil. Factor:	20.0000		
Method:	PCB_P3a	Limit Group:	GCSV - 8082		
Column:	CLP1 Pesticides Column 1 (0.32 mm)	Detector	GC ECD1A		

5 PCB-1016, CAS: 12674-11-2

Calibration Sample, Level: 7



Sample



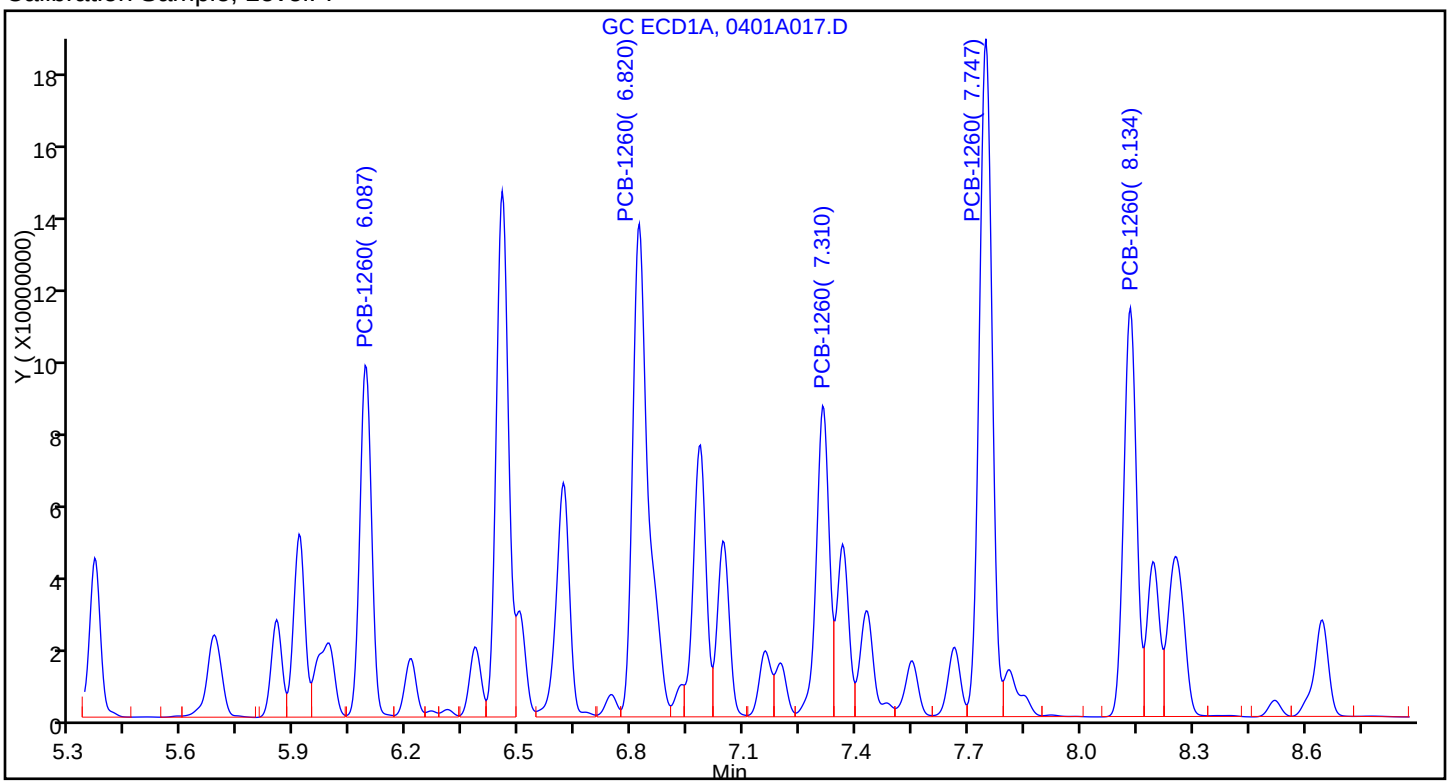
Report Date: 03-Apr-2014 08:33:18 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A047.D				
Injection Date:	02-Apr-2014 06:25:43	Instrument ID:	SGC_P3a		
Lims ID:	280-53458-A-1-C MSD				
Client ID:					
Operator ID:	JAX	ALS Bottle#:	47	Worklist Smp#:	47
Injection Vol:	1.0 ul	Dil. Factor:	20.0000		
Method:	PCB_P3a	Limit Group:	GCSV - 8082		
Column:	CLP1 Pesticides Column 1 (0.32 mm)	Detector	GC ECD1A		

8 PCB-1260, CAS: 11096-82-5

Calibration Sample, Level: 7



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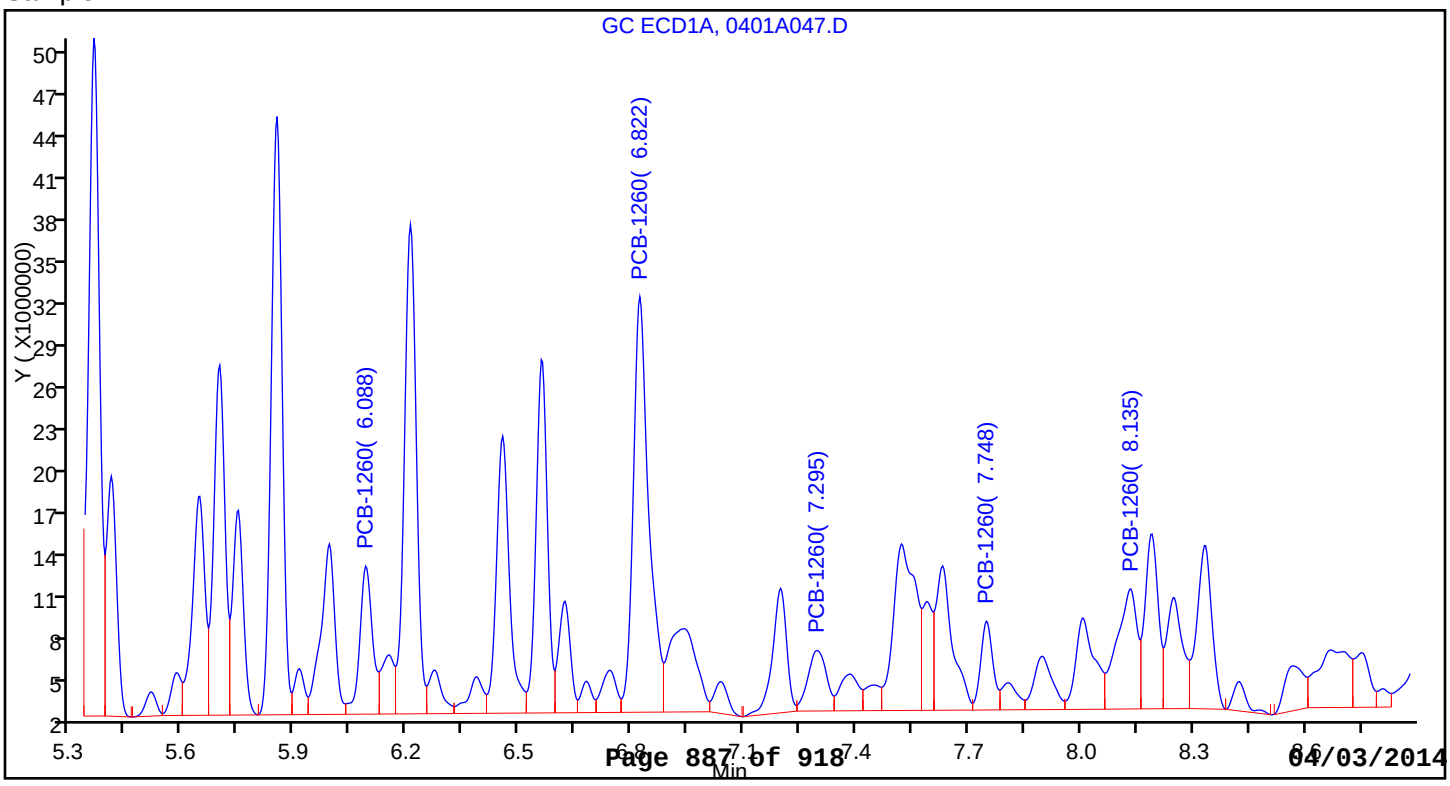


FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-53458-1

SDG No.:

Client Sample ID: SB-30-0 MSD | Lab Sample ID: 280-53458-22 MSD

Matrix: Solid | Lab File ID: 0401A076.D

Analysis Method: 8082A | Date Collected: 03/19/2014 12:15

Extraction Method: 3546 | Date Extracted: 03/27/2014 14:30

Sample wt/vol: 31.2(g) | Date Analyzed: 04/02/2014 16:54

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: CLP1 ID: 0.32(mm)

% Moisture: 2.4 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 219270 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
12674-11-2	PCB-1016	77.1		33	5.0
11096-82-5	PCB-1260	57.5		33	2.6

CAS NO.	SURROGATE	%REC	Q	LIMITS
877-09-8	Tetrachloro-m-xylene	88		53-128
2051-24-3	DCB Decachlorobiphenyl	54	X	59-130

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A076.D
Lims ID: 280-53458-A-22-C MSD
Client ID:
Sample Type: MSD
Inject. Date: 02-Apr-2014 16:54:32 ALS Bottle#: 76 Worklist Smp#: 77
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-53458-A-22-C
Operator ID: JAX Instrument ID: SGC_P3a

Method: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\PCB_P3a.m
Limit Group: GCSV - 8082
Last Update: 03-Apr-2014 08:32:55 Calib Date: 02-Apr-2014 02:52:35
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A037.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Process Host: XAWRK052

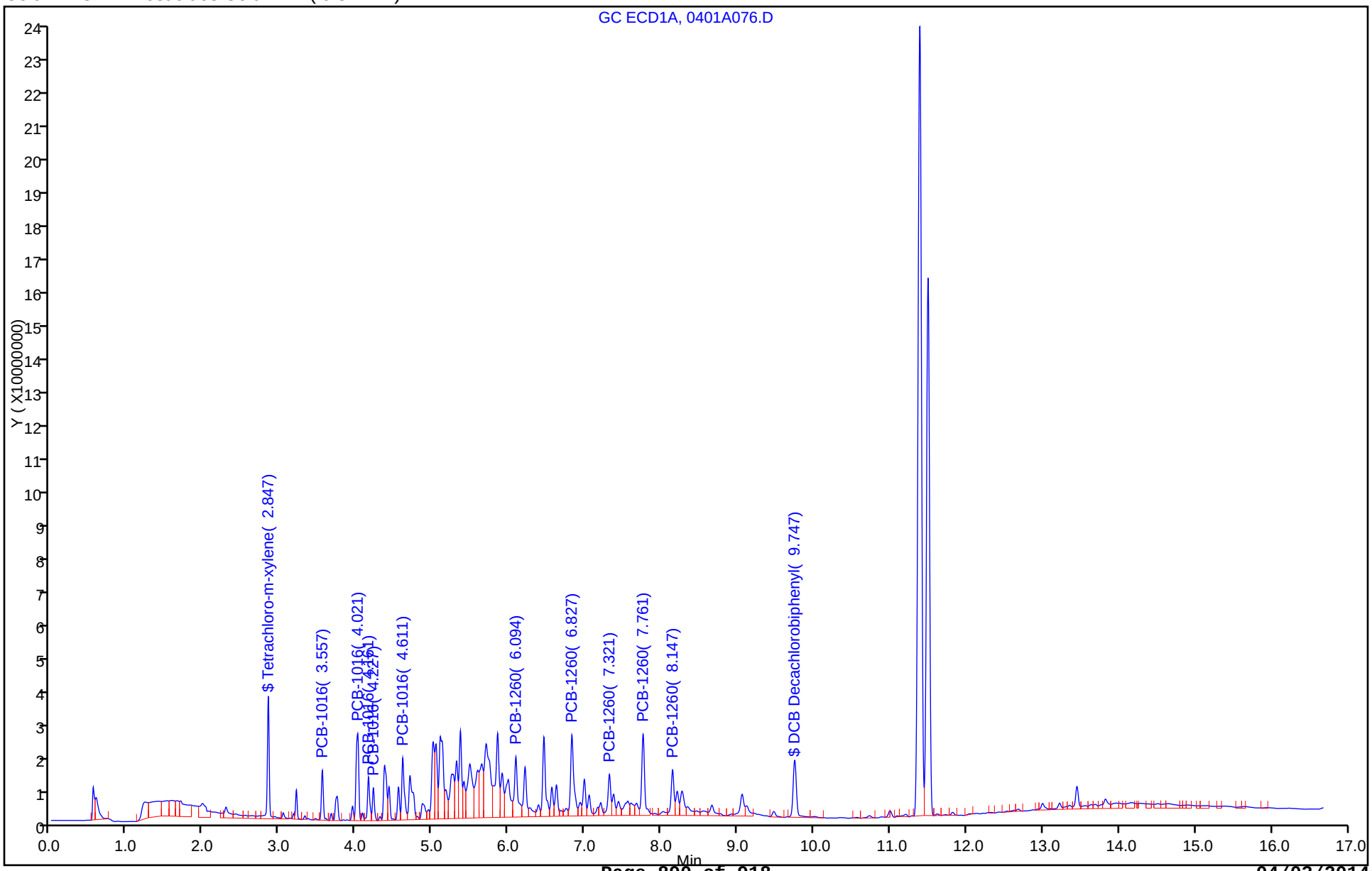
RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	On-Col Amt ng/ml	Flags
$ 1 Tetrachloro-m-xylene					
2.847	2.845	0.002	63176272	17.6	
5 PCB-1016					
3.557	3.555	0.002	26234302	202.1	
4.021	4.019	0.002	63158281	220.1	
4.161	4.159	0.002	26758169	204.8	
4.227	4.222	0.005	17803669	215.9	
4.611	4.609	0.002	44013244	330.0	
	Average of Peak Amounts =			234.6	
8 PCB-1260					
6.094	6.089	0.005	55957021	264.8	
6.827	6.819	0.008	72666076	182.4	
7.321	7.312	0.009	31754249	154.0	
7.761	7.749	0.012	64965850	143.5	
8.147	8.132	0.015	35296520	130.9	
	Average of Peak Amounts =			175.1	
$ 13 DCB Decachlorobiphenyl					
9.747	9.715	0.032	52844151	10.8	

Report Date: 03-Apr-2014 08:33:00 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

Data File:	\\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A076.D				
Injection Date:	02-Apr-2014 16:54:32	Instrument ID:	SGC_P3a	Operator ID:	JAX
Lims ID:	280-53458-A-22-C MSD			Worklist Smp#:	77
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	76
Method:	PCB_P3a	Limit Group:	GCSV - 8082		

Column: CLP1 Pesticides Column 1 (0.32 mm)



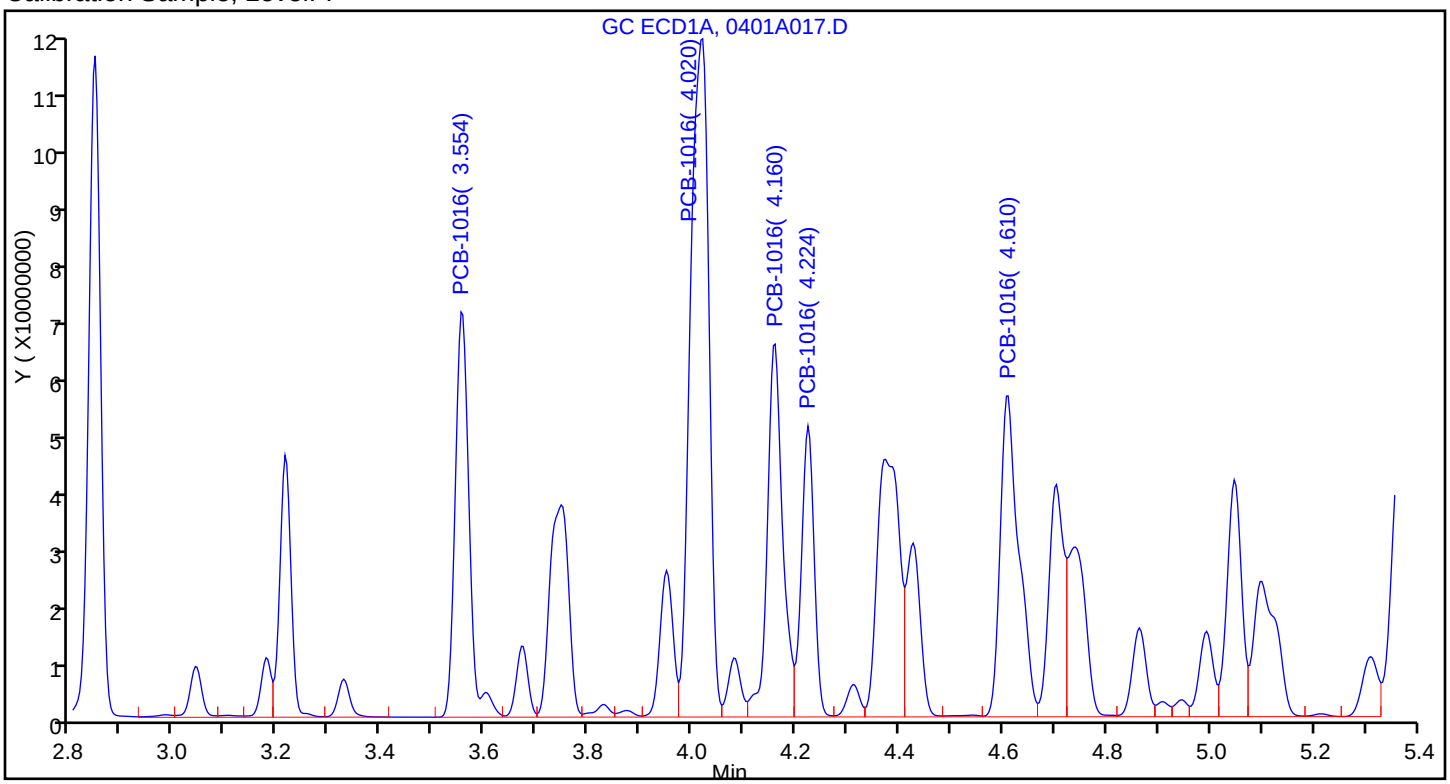
Report Date: 03-Apr-2014 08:33:00 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

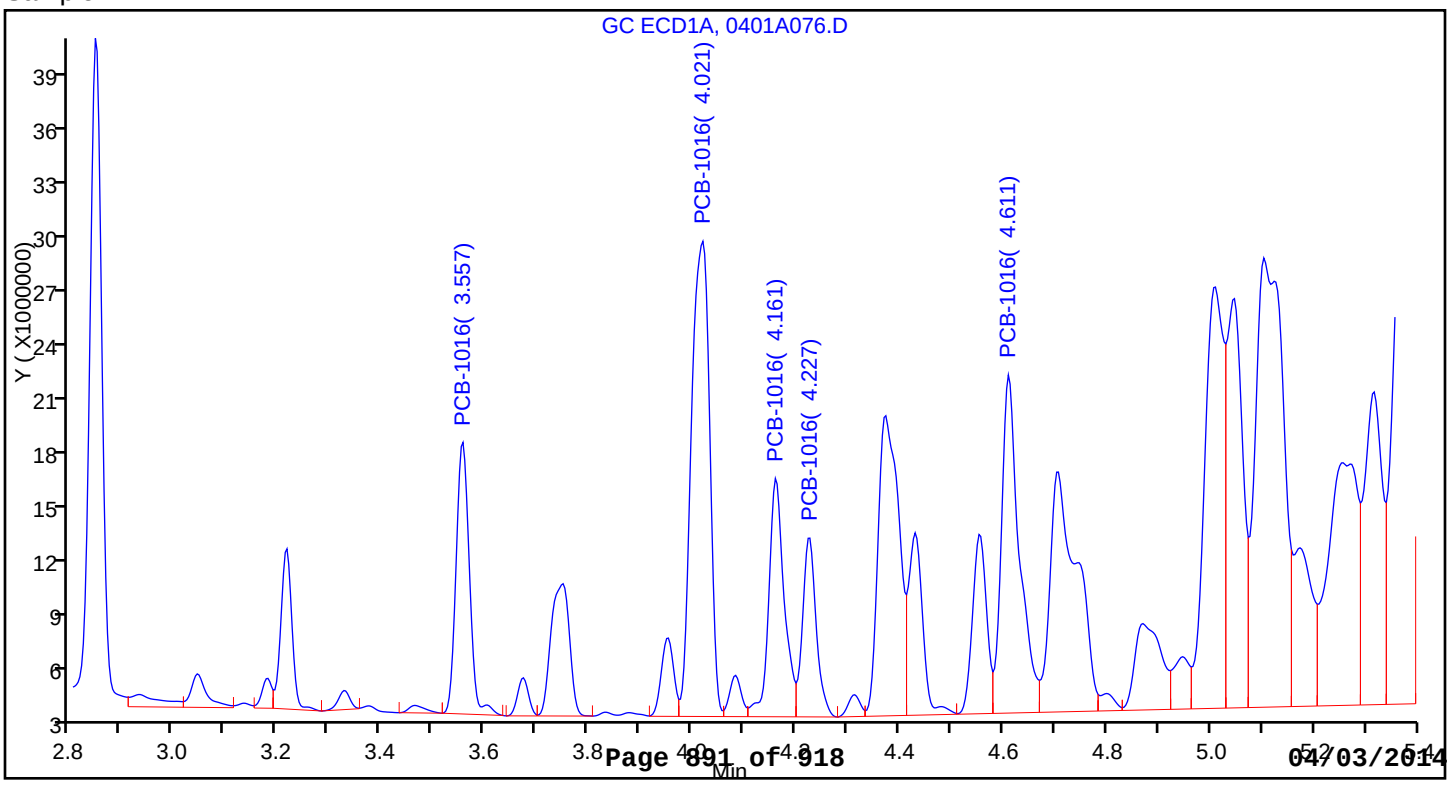
Data File:	\\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A076.D				
Injection Date:	02-Apr-2014 16:54:32	Instrument ID:	SGC_P3a		
Lims ID:	280-53458-A-22-C MSD				
Client ID:					
Operator ID:	JAX	ALS Bottle#:	76	Worklist Smp#:	77
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	PCB_P3a	Limit Group:	GCSV - 8082		
Column:	CLP1 Pesticides Column 1 (0.32 mm)	Detector	GC ECD1A		

5 PCB-1016, CAS: 12674-11-2

Calibration Sample, Level: 7



Sample



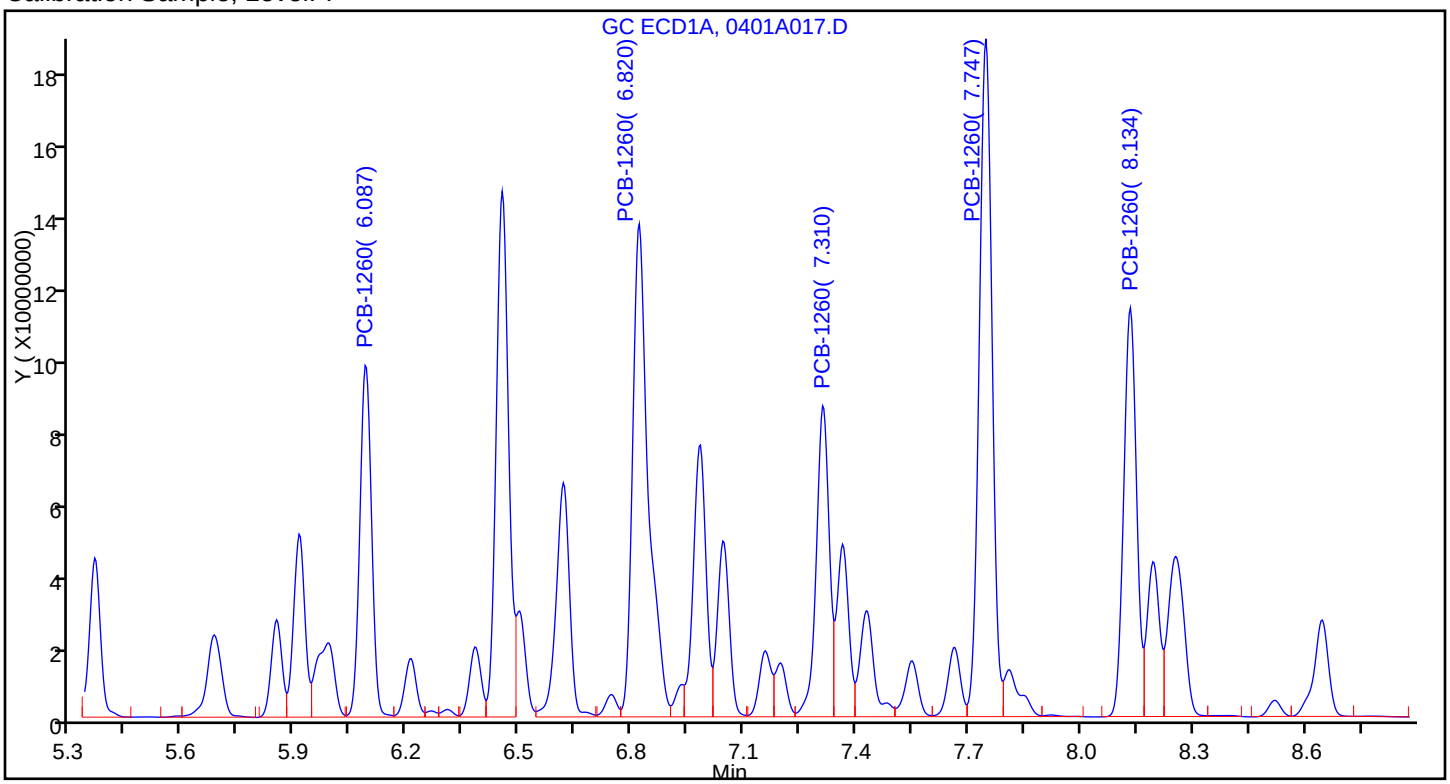
Report Date: 03-Apr-2014 08:33:00 Chrom Revision: 2.2 12-Mar-2014 11:19:24

TestAmerica Denver

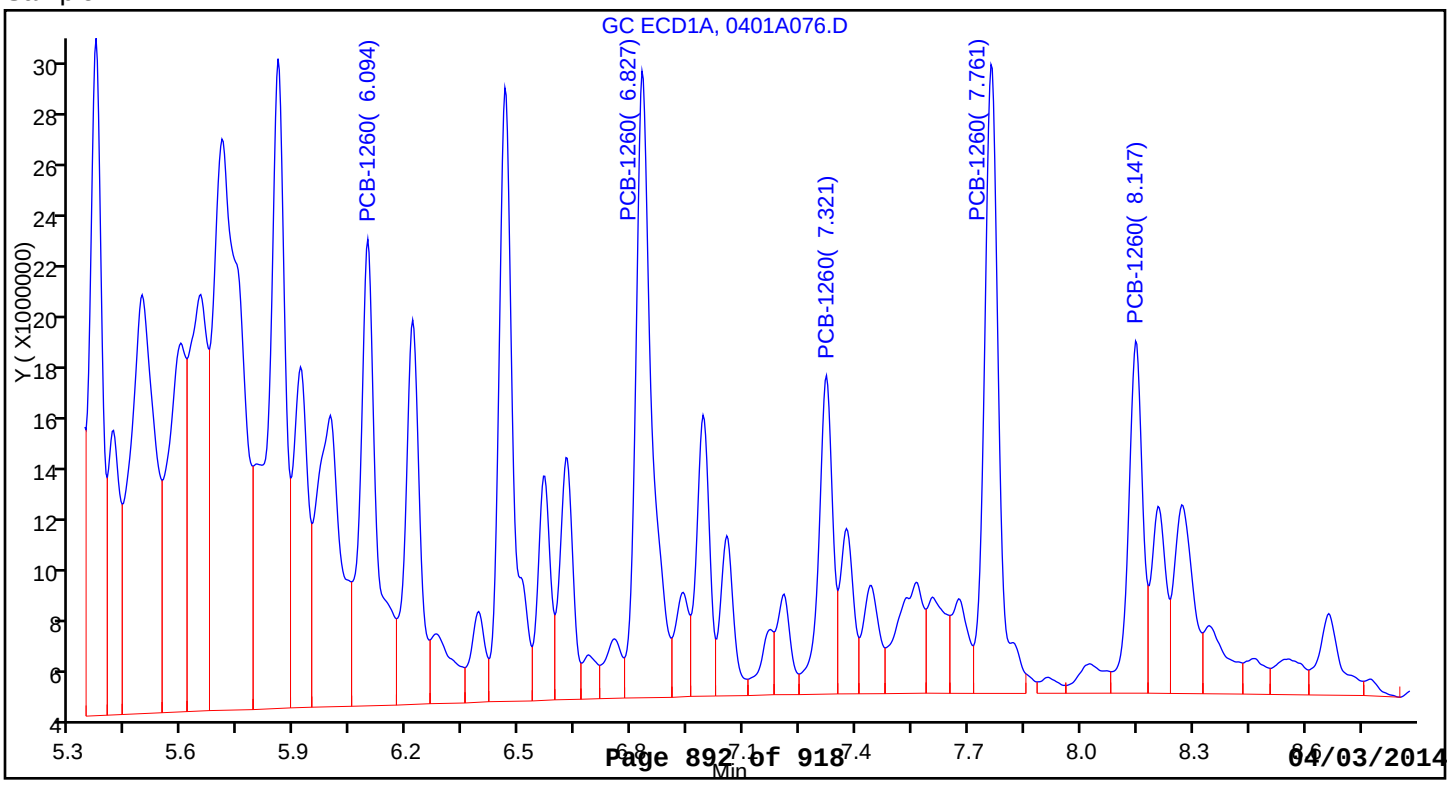
Data File:	\\Denchrom\ChromData\SGC_P3a\20140401-21600.b\0401A076.D				
Injection Date:	02-Apr-2014 16:54:32	Instrument ID:	SGC_P3a		
Lims ID:	280-53458-A-22-C MSD				
Client ID:					
Operator ID:	JAX	ALS Bottle#:	76	Worklist Smp#:	77
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	PCB_P3a	Limit Group:	GCSV - 8082		
Column:	CLP1 Pesticides Column 1 (0.32 mm)	Detector	GC ECD1A		

8 PCB-1260, CAS: 11096-82-5

Calibration Sample, Level: 7



Sample



PCBS ANALYSIS RUN LOG

Lab Name: TestAmerica Denver Job No.: 280-53458-1

SDG No.:

Instrument ID: SGC_P3a Start Date: 04/01/2014 14:47

Analysis Batch Number: 219270 End Date: 04/03/2014 00:44

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
STDL71248 280-219270/3 IC		04/01/2014 14:47	1	0401A003.D	CLP1 0.32(mm)
STDL61248 280-219270/4 IC		04/01/2014 15:08	1	0401A004.D	CLP1 0.32(mm)
STDL51248 280-219270/5 IC		04/01/2014 15:30	1	0401A005.D	CLP1 0.32(mm)
STDL41248 280-219270/6 IC		04/01/2014 15:51	1	0401A006.D	CLP1 0.32(mm)
STDL31248 280-219270/7 IC		04/01/2014 16:12	1	0401A007.D	CLP1 0.32(mm)
STDL21248 280-219270/8 IC		04/01/2014 16:34	1	0401A008.D	CLP1 0.32(mm)
STDL11248 280-219270/9 IC		04/01/2014 16:55	1	0401A009.D	CLP1 0.32(mm)
STDL72154 280-219270/10 IC		04/01/2014 17:16	1	0401A010.D	CLP1 0.32(mm)
STDL62154 280-219270/11 IC		04/01/2014 17:38	1	0401A011.D	CLP1 0.32(mm)
STDL52154 280-219270/12 IC		04/01/2014 17:59	1	0401A012.D	CLP1 0.32(mm)
STDL42154 280-219270/13 IC		04/01/2014 18:21	1	0401A013.D	CLP1 0.32(mm)
STDL32154 280-219270/14 IC		04/01/2014 18:42	1	0401A014.D	CLP1 0.32(mm)
STDL22154 280-219270/15 IC		04/01/2014 19:03	1	0401A015.D	CLP1 0.32(mm)
STDL12154 280-219270/16 IC		04/01/2014 19:25	1	0401A016.D	CLP1 0.32(mm)
STDL71660 280-219270/17 IC		04/01/2014 19:46	1	0401A017.D	CLP1 0.32(mm)
STDL61660 280-219270/18 IC		04/01/2014 20:07	1	0401A018.D	CLP1 0.32(mm)
STDL51660 280-219270/19 IC		04/01/2014 20:29	1	0401A019.D	CLP1 0.32(mm)
STDL41660 280-219270/20 IC		04/01/2014 20:50	1	0401A020.D	CLP1 0.32(mm)
STDL31660 280-219270/21 IC		04/01/2014 21:11	1	0401A021.D	CLP1 0.32(mm)
STDL21660 280-219270/22 IC		04/01/2014 21:33	1	0401A022.D	CLP1 0.32(mm)
STDL11660 280-219270/23 IC		04/01/2014 21:54	1	0401A023.D	CLP1 0.32(mm)
STDL73262 280-219270/24 IC		04/01/2014 22:15	1	0401A024.D	CLP1 0.32(mm)
STDL63262 280-219270/25 IC		04/01/2014 22:37	1	0401A025.D	CLP1 0.32(mm)
STDL53262 280-219270/26 IC		04/01/2014 22:58	1	0401A026.D	CLP1 0.32(mm)
STDL43262 280-219270/27 IC		04/01/2014 23:19	1	0401A027.D	CLP1 0.32(mm)
STDL33262 280-219270/28 IC		04/01/2014 23:40	1	0401A028.D	CLP1 0.32(mm)
STDL23262 280-219270/29 IC		04/02/2014 00:02	1	0401A029.D	CLP1 0.32(mm)
STDL13262 280-219270/30 IC		04/02/2014 00:23	1	0401A030.D	CLP1 0.32(mm)
STDL74268 280-219270/31 IC		04/02/2014 00:44	1	0401A031.D	CLP1 0.32(mm)
STDL64268 280-219270/32 IC		04/02/2014 01:05	1	0401A032.D	CLP1 0.32(mm)
STDL54268 280-219270/33 IC		04/02/2014 01:27	1	0401A033.D	CLP1 0.32(mm)

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PCBS ANALYSIS RUN LOG

Lab Name: TestAmerica Denver Job No.: 280-53458-1

SDG No.:

Instrument ID: SGC_P3a Start Date: 04/01/2014 14:47

Analysis Batch Number: 219270 End Date: 04/03/2014 00:44

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
STDL44268 280-219270/34 IC		04/02/2014 01:48	1	0401A034.D	CLP1 0.32(mm)
STDL34268 280-219270/35 IC		04/02/2014 02:09	1	0401A035.D	CLP1 0.32(mm)
STDL24268 280-219270/36 IC		04/02/2014 02:31	1	0401A036.D	CLP1 0.32(mm)
STDL14268 280-219270/37 IC		04/02/2014 02:52	1	0401A037.D	CLP1 0.32(mm)
ICV 280-219270/38		04/02/2014 03:13	1	0401A038.D	CLP1 0.32(mm)
ICV 280-219270/39		04/02/2014 03:35	1	0401A039.D	CLP1 0.32(mm)
ICV 280-219270/40		04/02/2014 03:56	1	0401A040.D	CLP1 0.32(mm)
ICV 280-219270/41		04/02/2014 04:17	1	0401A041.D	CLP1 0.32(mm)
ICV 280-219270/42		04/02/2014 04:39	1	0401A042.D	CLP1 0.32(mm)
MB 280-218625/1-A		04/02/2014 05:00	1	0401A043.D	CLP1 0.32(mm)
LCS 280-218625/2-A		04/02/2014 05:21	1	0401A044.D	CLP1 0.32(mm)
280-53458-1	SB-03-0	04/02/2014 05:43	20	0401A045.D	CLP1 0.32(mm)
280-53458-1 MS	SB-03-0 MS	04/02/2014 06:04	20	0401A046.D	CLP1 0.32(mm)
280-53458-1 MSD	SB-03-0 MSD	04/02/2014 06:25	20	0401A047.D	CLP1 0.32(mm)
280-53458-2	SB-05-0	04/02/2014 06:47	20	0401A048.D	CLP1 0.32(mm)
280-53458-3	SB-06-0	04/02/2014 07:08	4	0401A049.D	CLP1 0.32(mm)
280-53458-4	SB-11-0	04/02/2014 07:29	1	0401A050.D	CLP1 0.32(mm)
280-53458-5	SB-12-0	04/02/2014 07:50	1	0401A051.D	CLP1 0.32(mm)
280-53458-6	SB-13-0	04/02/2014 08:12	10	0401A052.D	CLP1 0.32(mm)
280-53458-7	SB-14-0	04/02/2014 08:33	100	0401A053.D	CLP1 0.32(mm)
280-53458-8	SB-15-0	04/02/2014 08:54	1	0401A054.D	CLP1 0.32(mm)
280-53458-9	SB-16-0	04/02/2014 09:16	1	0401A055.D	CLP1 0.32(mm)
280-53458-10	SB-17-0	04/02/2014 09:37	1	0401A056.D	CLP1 0.32(mm)
CCV 280-219270/58		04/02/2014 10:20	1	0401A058.D	CLP1 0.32(mm)
280-53458-11	SB-18-0	04/02/2014 10:41	4	0401A059.D	CLP1 0.32(mm)
280-53458-12	SB-20-0	04/02/2014 11:02	20	0401A060.D	CLP1 0.32(mm)
280-53458-13	SB-21-0	04/02/2014 11:24	1	0401A061.D	CLP1 0.32(mm)
280-53458-14	SB-22-0	04/02/2014 11:45	1	0401A062.D	CLP1 0.32(mm)
280-53458-15	SB-23-0	04/02/2014 12:16	1	0401A063.D	CLP1 0.32(mm)
280-53458-16	SB-24-0	04/02/2014 12:38	100	0401A064.D	CLP1 0.32(mm)
280-53458-17	SB-25-0	04/02/2014 12:59	1	0401A065.D	CLP1 0.32(mm)
280-53458-18	SB-26-0	04/02/2014 13:20	1000	0401A066.D	CLP1 0.32(mm)
280-53458-19	SB-27-0	04/02/2014 13:42	100	0401A067.D	CLP1 0.32(mm)
280-53458-20	SB-28-0	04/02/2014 14:03	1	0401A068.D	CLP1 0.32(mm)
CCV 280-219270/70		04/02/2014 14:46	1	0401A070.D	CLP1 0.32(mm)
MB 280-218632/1-A		04/02/2014 15:07	1	0401A071.D	CLP1 0.32(mm)
LCS 280-218632/2-A		04/02/2014 15:28	1	0401A072.D	CLP1 0.32(mm)
280-53458-21	SB-29-0	04/02/2014 15:50	5	0401A073.D	CLP1 0.32(mm)
280-53458-22	SB-30-0	04/02/2014 16:11	1	0401A074.D	CLP1 0.32(mm)
280-53458-22 MS	SB-30-0 MS	04/02/2014 16:33	1	0401A075.D	CLP1 0.32(mm)
280-53458-22 MSD	SB-30-0 MSD	04/02/2014 16:54	1	0401A076.D	CLP1 0.32(mm)
280-53458-23	SB-31-0	04/02/2014 17:15	10	0401A077.D	CLP1 0.32(mm)
280-53458-24	SB-32-0	04/02/2014 17:37	5	0401A078.D	CLP1 0.32(mm)

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PCBS ANALYSIS RUN LOG

Lab Name: TestAmerica Denver Job No.: 280-53458-1

SDG No.:

Instrument ID: SGC_P3a Start Date: 04/01/2014 14:47

Analysis Batch Number: 219270 End Date: 04/03/2014 00:44

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
280-53458-25	SB-33-0	04/02/2014 17:58	5	0401A079.D	CLP1 0.32(mm)
280-53458-26	SB-34-0	04/02/2014 18:20	20	0401A080.D	CLP1 0.32(mm)
280-53458-27	SB-35-0	04/02/2014 18:41	5	0401A081.D	CLP1 0.32(mm)
280-53458-28	SB-40-0	04/02/2014 19:02	20	0401A082.D	CLP1 0.32(mm)
280-53458-29	SB-41-0	04/02/2014 19:24	5	0401A083.D	CLP1 0.32(mm)
280-53458-30	SB-42-0	04/02/2014 19:45	10	0401A084.D	CLP1 0.32(mm)
CCV 280-219270/97		04/02/2014 20:28	1	0401A086.D	CLP1 0.32(mm)
280-53458-31	SB-43-0	04/02/2014 20:49	1000	0401A087.D	CLP1 0.32(mm)
280-53458-32	SB-44-0	04/02/2014 21:11	10	0401A088.D	CLP1 0.32(mm)
280-53458-33	SB-45-0	04/02/2014 21:32	10000	0401A089.D	CLP1 0.32(mm)
280-53458-34	SB-46-0	04/02/2014 21:53	500	0401A090.D	CLP1 0.32(mm)
280-53458-35	SB-47-0	04/02/2014 22:15	500	0401A091.D	CLP1 0.32(mm)
280-53458-36	SB-48-0	04/02/2014 22:36	1	0401A092.D	CLP1 0.32(mm)
280-53458-37	SB-49-0	04/02/2014 22:57	20	0401A093.D	CLP1 0.32(mm)
280-53458-38	SB-50-0	04/02/2014 23:19	20000	0401A094.D	CLP1 0.32(mm)
280-53458-39	SB-51-0	04/02/2014 23:40	100	0401A095.D	CLP1 0.32(mm)
280-53458-40	SB-52-0	04/03/2014 00:01	500	0401A096.D	CLP1 0.32(mm)
CCV 280-219270/99		04/03/2014 00:44	1	0401A098.D	CLP1 0.32(mm)

PCBS ANALYSIS RUN LOG

Lab Name: TestAmerica Denver Job No.: 280-53458-1

SDG No.:

Instrument ID: SGC_P3b Start Date: 04/01/2014 15:08

Analysis Batch Number: 219272 End Date: 04/03/2014 01:05

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
STDL71248 280-219272/3 IC		04/01/2014 15:08	1	0401B003.D	CLP2 0.32(mm)
STDL61248 280-219272/4 IC		04/01/2014 15:30	1	0401B004.D	CLP2 0.32(mm)
STDL51248 280-219272/5 IC		04/01/2014 15:51	1	0401B005.D	CLP2 0.32(mm)
STDL41248 280-219272/6 IC		04/01/2014 16:12	1	0401B006.D	CLP2 0.32(mm)
STDL31248 280-219272/7 IC		04/01/2014 16:34	1	0401B007.D	CLP2 0.32(mm)
STDL21248 280-219272/8 IC		04/01/2014 16:55	1	0401B008.D	CLP2 0.32(mm)
STDL11248 280-219272/9 IC		04/01/2014 17:16	1	0401B009.D	CLP2 0.32(mm)
STDL72154 280-219272/10 IC		04/01/2014 17:38	1	0401B010.D	CLP2 0.32(mm)
STDL62154 280-219272/11 IC		04/01/2014 17:59	1	0401B011.D	CLP2 0.32(mm)
STDL52154 280-219272/12 IC		04/01/2014 18:21	1	0401B012.D	CLP2 0.32(mm)
STDL42154 280-219272/13 IC		04/01/2014 18:42	1	0401B013.D	CLP2 0.32(mm)
STDL32154 280-219272/14 IC		04/01/2014 19:03	1	0401B014.D	CLP2 0.32(mm)
STDL22154 280-219272/15 IC		04/01/2014 19:25	1	0401B015.D	CLP2 0.32(mm)
STDL12154 280-219272/16 IC		04/01/2014 19:46	1	0401B016.D	CLP2 0.32(mm)
STDL71660 280-219272/17 IC		04/01/2014 20:07	1	0401B017.D	CLP2 0.32(mm)
STDL61660 280-219272/18 IC		04/01/2014 20:29	1	0401B018.D	CLP2 0.32(mm)
STDL51660 280-219272/19 IC		04/01/2014 20:50	1	0401B019.D	CLP2 0.32(mm)
STDL41660 280-219272/20 IC		04/01/2014 21:11	1	0401B020.D	CLP2 0.32(mm)
STDL31660 280-219272/21 IC		04/01/2014 21:33	1	0401B021.D	CLP2 0.32(mm)
STDL21660 280-219272/22 IC		04/01/2014 21:54	1	0401B022.D	CLP2 0.32(mm)
STDL11660 280-219272/23 IC		04/01/2014 22:15	1	0401B023.D	CLP2 0.32(mm)
STDL73262 280-219272/24 IC		04/01/2014 22:37	1	0401B024.D	CLP2 0.32(mm)
STDL63262 280-219272/25 IC		04/01/2014 22:58	1	0401B025.D	CLP2 0.32(mm)
STDL53262 280-219272/26 IC		04/01/2014 23:19	1	0401B026.D	CLP2 0.32(mm)
STDL43262 280-219272/27 IC		04/01/2014 23:40	1	0401B027.D	CLP2 0.32(mm)
STDL33262 280-219272/28 IC		04/02/2014 00:02	1	0401B028.D	CLP2 0.32(mm)
STDL23262 280-219272/29 IC		04/02/2014 00:23	1	0401B029.D	CLP2 0.32(mm)
STDL13262 280-219272/30 IC		04/02/2014 00:44	1	0401B030.D	CLP2 0.32(mm)
STDL74268 280-219272/31 IC		04/02/2014 01:05	1	0401B031.D	CLP2 0.32(mm)
STDL64268 280-219272/32 IC		04/02/2014 01:27	1	0401B032.D	CLP2 0.32(mm)
STDL54268 280-219272/33 IC		04/02/2014 01:48	1	0401B033.D	CLP2 0.32(mm)

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PCBS ANALYSIS RUN LOG

Lab Name: TestAmerica Denver Job No.: 280-53458-1

SDG No.:

Instrument ID: SGC_P3b Start Date: 04/01/2014 15:08

Analysis Batch Number: 219272 End Date: 04/03/2014 01:05

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
STDL44268 280-219272/34 IC		04/02/2014 02:09	1	0401B034.D	CLP2 0.32(mm)
STDL34268 280-219272/35 IC		04/02/2014 02:31	1	0401B035.D	CLP2 0.32(mm)
STDL24268 280-219272/36 IC		04/02/2014 02:52	1	0401B036.D	CLP2 0.32(mm)
STDL14268 280-219272/37 IC		04/02/2014 03:13	1	0401B037.D	CLP2 0.32(mm)
ICV 280-219272/38		04/02/2014 03:35	1	0401B038.D	CLP2 0.32(mm)
ICV 280-219272/39		04/02/2014 03:56	1	0401B039.D	CLP2 0.32(mm)
ICV 280-219272/40		04/02/2014 04:17	1	0401B040.D	CLP2 0.32(mm)
ICV 280-219272/41		04/02/2014 04:39	1	0401B041.D	CLP2 0.32(mm)
ICV 280-219272/42		04/02/2014 05:00	1	0401B042.D	CLP2 0.32(mm)
MB 280-218625/1-A		04/02/2014 05:21	1	0401B043.D	CLP2 0.32(mm)
LCS 280-218625/2-A		04/02/2014 05:43	1	0401B044.D	CLP2 0.32(mm)
280-53458-1	SB-03-0	04/02/2014 06:04	20	0401B045.D	CLP2 0.32(mm)
ZZZZZ		04/02/2014 06:25	20		CLP2 0.32(mm)
ZZZZZ		04/02/2014 06:47	20		CLP2 0.32(mm)
280-53458-2	SB-05-0	04/02/2014 07:08	20	0401B048.D	CLP2 0.32(mm)
280-53458-3	SB-06-0	04/02/2014 07:29	4	0401B049.D	CLP2 0.32(mm)
280-53458-4	SB-11-0	04/02/2014 07:50	1	0401B050.D	CLP2 0.32(mm)
280-53458-5	SB-12-0	04/02/2014 08:12	1	0401B051.D	CLP2 0.32(mm)
280-53458-6	SB-13-0	04/02/2014 08:33	10	0401B052.D	CLP2 0.32(mm)
280-53458-7	SB-14-0	04/02/2014 08:54	100	0401B053.D	CLP2 0.32(mm)
280-53458-8	SB-15-0	04/02/2014 09:16	1	0401B054.D	CLP2 0.32(mm)
280-53458-9	SB-16-0	04/02/2014 09:37	1	0401B055.D	CLP2 0.32(mm)
280-53458-10	SB-17-0	04/02/2014 09:59	1	0401B056.D	CLP2 0.32(mm)
CCV 280-219272/58		04/02/2014 10:41	1	0401B058.D	CLP2 0.32(mm)
280-53458-11	SB-18-0	04/02/2014 11:02	4	0401B059.D	CLP2 0.32(mm)
280-53458-12	SB-20-0	04/02/2014 11:24	20	0401B060.D	CLP2 0.32(mm)
280-53458-13	SB-21-0	04/02/2014 11:45	1	0401B061.D	CLP2 0.32(mm)
280-53458-14	SB-22-0	04/02/2014 12:16	1	0401B062.D	CLP2 0.32(mm)
280-53458-15	SB-23-0	04/02/2014 12:38	1	0401B063.D	CLP2 0.32(mm)
280-53458-16	SB-24-0	04/02/2014 12:59	100	0401B064.D	CLP2 0.32(mm)
280-53458-17	SB-25-0	04/02/2014 13:20	1	0401B065.D	CLP2 0.32(mm)
280-53458-18	SB-26-0	04/02/2014 13:42	1000	0401B066.D	CLP2 0.32(mm)
280-53458-19	SB-27-0	04/02/2014 14:03	100	0401B067.D	CLP2 0.32(mm)
280-53458-20	SB-28-0	04/02/2014 14:24	1	0401B068.D	CLP2 0.32(mm)
CCV 280-219272/70		04/02/2014 15:07	1	0401B070.D	CLP2 0.32(mm)
MB 280-218632/1-A		04/02/2014 15:28	1	0401B071.D	CLP2 0.32(mm)
LCS 280-218632/2-A		04/02/2014 15:50	1	0401B072.D	CLP2 0.32(mm)
280-53458-21	SB-29-0	04/02/2014 16:11	5	0401B073.D	CLP2 0.32(mm)
280-53458-22	SB-30-0	04/02/2014 16:33	1	0401B074.D	CLP2 0.32(mm)
ZZZZZ		04/02/2014 16:54	1		CLP2 0.32(mm)
ZZZZZ		04/02/2014 17:15	1		CLP2 0.32(mm)
280-53458-23	SB-31-0	04/02/2014 17:37	10	0401B077.D	CLP2 0.32(mm)
280-53458-24	SB-32-0	04/02/2014 17:58	5	0401B078.D	CLP2 0.32(mm)

8082A

PCBS ANALYSIS RUN LOG

Lab Name: TestAmerica Denver Job No.: 280-53458-1

SDG No.:

Instrument ID: SGC_P3b Start Date: 04/01/2014 15:08

Analysis Batch Number: 219272 End Date: 04/03/2014 01:05

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
280-53458-25	SB-33-0	04/02/2014 18:20	5	0401B079.D	CLP2 0.32(mm)
280-53458-26	SB-34-0	04/02/2014 18:41	20	0401B080.D	CLP2 0.32(mm)
280-53458-27	SB-35-0	04/02/2014 19:02	5	0401B081.D	CLP2 0.32(mm)
280-53458-28	SB-40-0	04/02/2014 19:24	20	0401B082.D	CLP2 0.32(mm)
280-53458-29	SB-41-0	04/02/2014 19:45	5	0401B083.D	CLP2 0.32(mm)
280-53458-30	SB-42-0	04/02/2014 20:06	10	0401B084.D	CLP2 0.32(mm)
CCV 280-219272/97		04/02/2014 20:49	1	0401B086.D	CLP2 0.32(mm)
280-53458-31	SB-43-0	04/02/2014 21:11	1000	0401B087.D	CLP2 0.32(mm)
280-53458-32	SB-44-0	04/02/2014 21:32	10	0401B088.D	CLP2 0.32(mm)
280-53458-33	SB-45-0	04/02/2014 21:53	10000	0401B089.D	CLP2 0.32(mm)
280-53458-34	SB-46-0	04/02/2014 22:15	500	0401B090.D	CLP2 0.32(mm)
280-53458-35	SB-47-0	04/02/2014 22:36	500	0401B091.D	CLP2 0.32(mm)
280-53458-36	SB-48-0	04/02/2014 22:57	1	0401B092.D	CLP2 0.32(mm)
280-53458-37	SB-49-0	04/02/2014 23:19	20	0401B093.D	CLP2 0.32(mm)
280-53458-38	SB-50-0	04/02/2014 23:40	20000	0401B094.D	CLP2 0.32(mm)
280-53458-39	SB-51-0	04/03/2014 00:01	100	0401B095.D	CLP2 0.32(mm)
280-53458-40	SB-52-0	04/03/2014 00:23	500	0401B096.D	CLP2 0.32(mm)
CCV 280-219272/99		04/03/2014 01:05	1	0401B098.D	CLP2 0.32(mm)

PCBS BATCH WORKSHEET

Lab Name: TestAmerica Denver Job No.: 280-53458-1

SDG No.:

Batch Number: 218625 Batch Start Date: 03/27/14 11:25 Batch Analyst: Frey, Alan C

Batch Method: 3546 Batch End Date: 03/27/14 18:35

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	8081/82 Surr 00063	8082 LCS 00035	AnalysisComment	
MB 280-218625/1		3546, 8082A		30 g	10 mL	1 mL			
LCS 280-218625/2		3546, 8082A		30 g	10 mL	1 mL	1 mL		
280-53458-A-1	SB-03-0	3546, 8082A	T	30.2 g	10 mL	1 mL			
280-53458-A-1 MS	SB-03-0	3546, 8082A	T	30.5 g	10 mL	1 mL	1 mL		
280-53458-A-1 MSD	SB-03-0	3546, 8082A	T	30.5 g	10 mL	1 mL	1 mL		
280-53458-A-2	SB-05-0	3546, 8082A	T	30.6 g	10 mL	1 mL			
280-53458-A-3	SB-06-0	3546, 8082A	T	12.6 g	10 mL	1 mL		2 tubes	
280-53458-A-4	SB-11-0	3546, 8082A	T	33.0 g	10 mL	1 mL			
280-53458-A-5	SB-12-0	3546, 8082A	T	30.0 g	10 mL	1 mL			
280-53458-A-6	SB-13-0	3546, 8082A	T	30.0 g	10 mL	1 mL			
280-53458-A-7	SB-14-0	3546, 8082A	T	32.6 g	10 mL	1 mL			
280-53458-A-8	SB-15-0	3546, 8082A	T	30.7 g	10 mL	1 mL			
280-53458-A-9	SB-16-0	3546, 8082A	T	30.0 g	10 mL	1 mL			
280-53458-A-10	SB-17-0	3546, 8082A	T	32.7 g	10 mL	1 mL			
280-53458-A-11	SB-18-0	3546, 8082A	T	31.6 g	10 mL	1 mL			
280-53458-A-12	SB-20-0	3546, 8082A	T	30.8 g	10 mL	1 mL			
280-53458-A-13	SB-21-0	3546, 8082A	T	30.7 g	10 mL	1 mL			
280-53458-A-14	SB-22-0	3546, 8082A	T	30.4 g	10 mL	1 mL			
280-53458-A-15	SB-23-0	3546, 8082A	T	30.1 g	10 mL	1 mL			
280-53458-A-16	SB-24-0	3546, 8082A	T	30.6 g	10 mL	1 mL			
280-53458-A-17	SB-25-0	3546, 8082A	T	30.8 g	10 mL	1 mL			
280-53458-A-18	SB-26-0	3546, 8082A	T	31.6 g	10 mL	1 mL			
280-53458-A-19	SB-27-0	3546, 8082A	T	30.1 g	10 mL	1 mL			
280-53458-A-20	SB-28-0	3546, 8082A	T	31.1 g	10 mL	1 mL			

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

PCBS BATCH WORKSHEET

Lab Name: TestAmerica Denver Job No.: 280-53458-1

SDG No.:

Batch Number: 218625 Batch Start Date: 03/27/14 11:25 Batch Analyst: Frey, Alan C

Batch Method: 3546 Batch End Date: 03/27/14 18:35

Batch Notes	
Balance ID	24350888
Batch Comment	filtered by: Frey, A PIP: OP-P1 [10.0]
Person's name who did the concentration	Curley, N
Exchange Solvent Lot #	Hexane_Cycl_00020
Exchange Solvent Name	Hexane (50mL)
Final Concentrator Volume	10 mL
MeCL2 Lot #	MeCl2_Cycl_00152/00153
MeCl2/Acetone Lot #	1:1AceMeCl2_00038
Microwave Start Time	03/27/14@1145
Microwave Stop Time	03/27/14@1330
Na2SO4 Lot Number	0000056965_00009
Ottawa Sand Lot #	2BI0314
Pipette ID	H
Person's name who did the prep	Frey A.
Solvent Name	baker
SOP Number	DV OP 0015/0007
Person who performed Spike	ACF
Person who witnessed spiking	Reviewer:BWJ
Water Bath ID	A
Water Bath Temperature	88C (obs 88C)

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

PCBS BATCH WORKSHEET

Lab Name: TestAmerica Denver Job No.: 280-53458-1

SDG No.:

Batch Number: 218632 Batch Start Date: 03/27/14 14:30 Batch Analyst: Frey, Alan C

Batch Method: 3546 Batch End Date: 03/27/14 20:30

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	8081/82 Surr 00063	8082 LCS 00035		
MB 280-218632/1		3546, 8082A		30 g	10 mL	1 mL			
LCS 280-218632/2		3546, 8082A		30 g	10 mL	1 mL	1 mL		
280-53458-A-21	SB-29-0	3546, 8082A	T	30.7 g	10 mL	1 mL			
280-53458-A-22	SB-30-0	3546, 8082A	T	30.0 g	10 mL	1 mL			
280-53458-A-22 MS	SB-30-0	3546, 8082A	T	31.8 g	10 mL	1 mL	1 mL		
280-53458-A-22 MSD	SB-30-0	3546, 8082A	T	31.2 g	10 mL	1 mL	1 mL		
280-53458-A-23	SB-31-0	3546, 8082A	T	31.1 g	10 mL	1 mL			
280-53458-A-24	SB-32-0	3546, 8082A	T	30.8 g	10 mL	1 mL			
280-53458-A-25	SB-33-0	3546, 8082A	T	30.4 g	10 mL	1 mL			
280-53458-A-26	SB-34-0	3546, 8082A	T	30.5 g	10 mL	1 mL			
280-53458-A-27	SB-35-0	3546, 8082A	T	30.2 g	10 mL	1 mL			
280-53458-A-28	SB-40-0	3546, 8082A	T	30.6 g	10 mL	1 mL			
280-53458-A-29	SB-41-0	3546, 8082A	T	30.9 g	10 mL	1 mL			
280-53458-A-30	SB-42-0	3546, 8082A	T	30.6 g	10 mL	1 mL			
280-53458-A-31	SB-43-0	3546, 8082A	T	32.2 g	10 mL	1 mL			
280-53458-A-32	SB-44-0	3546, 8082A	T	31.2 g	10 mL	1 mL			
280-53458-A-33	SB-45-0	3546, 8082A	T	30.8 g	10 mL	1 mL			
280-53458-A-34	SB-46-0	3546, 8082A	T	30.2 g	10 mL	1 mL			
280-53458-A-35	SB-47-0	3546, 8082A	T	30.7 g	10 mL	1 mL			
280-53458-A-36	SB-48-0	3546, 8082A	T	31.1 g	10 mL	1 mL			
280-53458-A-37	SB-49-0	3546, 8082A	T	30.6 g	10 mL	1 mL			
280-53458-A-38	SB-50-0	3546, 8082A	T	32.0 g	10 mL	1 mL			
280-53458-A-39	SB-51-0	3546, 8082A	T	32.1 g	10 mL	1 mL			
280-53458-A-40	SB-52-0	3546, 8082A	T	30.3 g	10 mL	1 mL			

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

PCBS BATCH WORKSHEET

Lab Name: TestAmerica Denver Job No.: 280-53458-1

SDG No.:

Batch Number: 218632 Batch Start Date: 03/27/14 14:30 Batch Analyst: Frey, Alan C

Batch Method: 3546 Batch End Date: 03/27/14 20:30

Batch Notes	
Balance ID	24350888
Batch Comment	filtered by: Frey, A PIP: OP-P1 [10.0]
Person's name who did the concentration	Curley, N
Exchange Solvent Lot #	Hexane_Cycl_00020
Exchange Solvent Name	Hexane (50mL)
Final Concentrator Volume	10 mL
MeCL2 Lot #	MeCl2_Cycl_00152/00153
MeCl2/Acetone Lot #	1:1AceMeCl2_00038
Microwave Start Time	03/27/14@1440
Microwave Stop Time	03/27/14@1555
Na2SO4 Lot Number	0000056965_00009
Ottawa Sand Lot #	2BI0314
Pipette ID	H
Person's name who did the prep	Frey A.
Solvent Name	baker
SOP Number	DV OP 0015/0007
Person who performed Spike	ACF
Person who witnessed spiking	Reviewer:SHO
Water Bath ID	A
Water Bath Temperature	88C (obs 88C)

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY

COVER PAGE
GENERAL CHEMISTRY

Lab Name: TestAmerica Denver Job Number: 280-53458-1

SDG No.:

Project: Moline St., CO, 41569671

Client Sample ID	Lab Sample ID
SB-03-0	280-53458-1
SB-05-0	280-53458-2
SB-11-0	280-53458-4
SB-12-0	280-53458-5
SB-13-0	280-53458-6
SB-14-0	280-53458-7
SB-15-0	280-53458-8
SB-16-0	280-53458-9
SB-17-0	280-53458-10
SB-18-0	280-53458-11
SB-20-0	280-53458-12
SB-21-0	280-53458-13
SB-22-0	280-53458-14
SB-23-0	280-53458-15
SB-24-0	280-53458-16
SB-25-0	280-53458-17
SB-26-0	280-53458-18
SB-27-0	280-53458-19
SB-28-0	280-53458-20
SB-29-0	280-53458-21
SB-30-0	280-53458-22
SB-31-0	280-53458-23
SB-32-0	280-53458-24
SB-33-0	280-53458-25
SB-34-0	280-53458-26
SB-35-0	280-53458-27
SB-40-0	280-53458-28
SB-41-0	280-53458-29
SB-42-0	280-53458-30
SB-43-0	280-53458-31
SB-44-0	280-53458-32
SB-45-0	280-53458-33
SB-46-0	280-53458-34
SB-47-0	280-53458-35
SB-48-0	280-53458-36
SB-49-0	280-53458-37
SB-50-0	280-53458-38
SB-51-0	280-53458-39
SB-52-0	280-53458-40

Comments:

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Denver Job Number: 280-53458-1

SDG Number:

Matrix: Solid Instrument ID: NOEQUIP

Method: Moisture RL Date: 11/01/2009 00:00

Analyte	Wavelength/ Mass	RL (%)	
Percent Moisture		0.1	

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Denver Job No.: 280-53458-1

SDG No.:

Instrument ID: NOEQUIP Analysis Method: Moisture

Start Date: 03/31/2014 18:10 End Date: 03/31/2014 18:10

Lab Sample Id	D/F	Type	Time	Analytes																							
				Moist																							
280-53458-23	1	T	18:10	X																							
280-53458-23 DU	1	T	18:10	X																							
280-53458-24	1	T	18:10	X																							
280-53458-25	1	T	18:10	X																							
280-53458-26	1	T	18:10	X																							
280-53458-27	1	T	18:10	X																							
280-53458-28	1	T	18:10	X																							
280-53458-29	1	T	18:10	X																							
280-53458-16	1	T	18:10	X																							
280-53458-17	1	T	18:10	X																							
280-53458-18	1	T	18:10	X																							
280-53458-30	1	T	18:10	X																							
280-53458-32	1	T	18:10	X																							
280-53458-31	1	T	18:10	X																							
280-53458-19	1	T	18:10	X																							
280-53458-20	1	T	18:10	X																							
280-53458-13	1	T	18:10	X																							
280-53458-38	1	T	18:10	X																							
280-53458-11	1	T	18:10	X																							
280-53458-36	1	T	18:10	X																							
280-53458-36 DU	1	T	18:10	X																							
280-53458-33	1	T	18:10	X																							
280-53458-37	1	T	18:10	X																							
280-53458-35	1	T	18:10	X																							
280-53458-34	1	T	18:10	X																							
280-53458-22	1	T	18:10	X																							
280-53458-21	1	T	18:10	X																							
280-53458-40	1	T	18:10	X																							
280-53458-39	1	T	18:10	X																							
280-53458-1	1	T	18:10	X																							
280-53458-7	1	T	18:10	X																							
280-53458-12	1	T	18:10	X																							
280-53458-8	1	T	18:10	X																							
280-53458-2	1	T	18:10	X																							

Prep Types:
T = Total/NA

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Denver Job No.: 280-53458-1

SDG No.:

Instrument ID: NOEQUIP Analysis Method: Moisture

Start Date: 03/31/2014 18:13 End Date: 03/31/2014 18:13

Lab Sample Id	D/F	Type	Time	Analytes																							
				Moist																							
280-53458-9	1	T	18:13	X																							
280-53458-9 DU	1	T	18:13	X																							
280-53458-4	1	T	18:13	X																							
280-53458-14	1	T	18:13	X																							
280-53458-15	1	T	18:13	X																							
280-53458-10	1	T	18:13	X																							
280-53458-6	1	T	18:13	X																							
280-53458-5	1	T	18:13	X																							
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Prep Types:
T = Total/NA

FORM XIII-IN

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Wet Chemistry Data Review Checklist For Gravimetric Methods

Test Name/Method #: percent moisture Analysis Date: 3 31 14

SOP #: WC 0023 Analyst: MB Instrument: BAL

Lot / Sample Numbers	Matrix	Prep Batch	Batch	Method	Special Inst
53413	solid	na	218737	moisture	Q4
53462	↓	↓	↓	↓	↓
53488	↓	↓	↓	↓	↓
53523	↓	↓	↓	↓	↓
53551	↓	↓	↓	↓	↓
MB 33114	↓	↓	↓	↓	↓

A. Balance, Oven, and DI Water QC Checks	Yes	No	N/A	2nd Level
1. Was the balance calibration verified before and after processing samples and noted in the "Balance Calibration Log" for the date(s) the samples were processed?	/			/
2. Was the oven temperature within method requirements and recorded in the "Oven Temperature" logbook for the date(s) the samples were processed?	/			/
3. Was the daily conductivity check of the deionized water recorded in the "Conductivity Logbook"?			/	/
B. Method Requirements				
1. If sample is visibly oily, was this noted on the benchsheet?			/	/
2. Was final residue weight within minimum/maximum requirements?			/	/
3. Were the initial and final drying dates and times recorded on the benchsheet and were all samples dried for at least one hour?	/			/
C. Sample Results				
1. TDS/Conductivity ratio or historical data checked?			/	/
2. For % Moisture, was the Final Dried Weight < the Initial Pan Weight or is the result greater than 100%?	/			/
3. Were sample analyses done within holding time?	/			/
4. Were special client requirements met?	/			/
5. Were data that were manually transcribed from instrument printouts into TALS verified 100% including significant figures and units?	/			/
6. Do the prep and analysis dates in TALS reflect the actual dates? Lots/Dates report checked?	/			/
7. STD/True Value information is updated and included?			/	/
8. Are raw data copies prepared, scanned, and uploaded?			/	/
D. Preparation/Matrix QC				
1. Method blank < RL or all reported samples > 10 X RL?			/	/
2. Method blank < ½ RL or NCM provided?			/	/
3. LCS/LCSD run for batch and within QC limits?			/	/
4. DUP run for batch and RPD < 20% for samples >5 X RL?	/			/

Analyst: MB Date: 3 31 14

Comments:

2nd Level Reviewer : Date: 3/31/14 MB 33114

Comments:

Revision 2.0
5/18/10
QA\Edit\FORMS\Data Review\Gravimetric Review Checklist

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Wet Chemistry Data Review Checklist For Gravimetric Methods

Test Name/Method #: percent moisture Analysis Date: 3 31 14

SOP #: WC 0023 Analyst: MB Instrument: BAL

Lot / Sample Numbers	Matrix	Prep Batch	Batch	Method	Special Inst
53413	solid	na	218737	moisture	Q4
53462	↓	↓	↓	↓	↓
53488	↓	↓	↓	↓	↓
53523	↓	↓	↓	↓	↓
53551	↓	↓	↓	↓	↓
MB 33114	↓	↓	↓	↓	↓

A. Balance, Oven, and DI Water QC Checks	Yes	No	N/A	2nd Level
1. Was the balance calibration verified before and after processing samples and noted in the "Balance Calibration Log" for the date(s) the samples were processed?	/			/
2. Was the oven temperature within method requirements and recorded in the "Oven Temperature" logbook for the date(s) the samples were processed?	/			/
3. Was the daily conductivity check of the deionized water recorded in the "Conductivity Logbook"?			/	/
B. Method Requirements				
1. If sample is visibly oily, was this noted on the benchsheet?			/	/
2. Was final residue weight within minimum/maximum requirements?			/	/
3. Were the initial and final drying dates and times recorded on the benchsheet and were all samples dried for at least one hour?	/			/
C. Sample Results				
1. TDS/Conductivity ratio or historical data checked?			/	/
2. For % Moisture, was the Final Dried Weight < the Initial Pan Weight or is the result greater than 100%?	/			/
3. Were sample analyses done within holding time?	/			/
4. Were special client requirements met?	/			/
5. Were data that were manually transcribed from instrument printouts into TALS verified 100% including significant figures and units?	/			/
6. Do the prep and analysis dates in TALS reflect the actual dates? Lots/Dates report checked?	/			/
7. STD/True Value information is updated and included?			/	/
8. Are raw data copies prepared, scanned, and uploaded?			/	/
D. Preparation/Matrix QC				
1. Method blank < RL or all reported samples > 10 X RL?			/	/
2. Method blank < ½ RL or NCM provided?			/	/
3. LCS/LCSD run for batch and within QC limits?			/	/
4. DUP run for batch and RPD < 20% for samples >5 X RL?	/			/

Analyst: MB Date: 3 31 14

Comments:

2nd Level Reviewer : [illegible] Date: 3/31/14 MB 33114

Comments:

Revision 2.0
5/18/10
QA\Edit\FORMS\Data Review\Gravimetric Review Checklis

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Denver Job No.: 280-53458-1

SDG No.:

Batch Number: 219132 Batch Start Date: 03/31/14 18:10 Batch Analyst: Bland, Morgan R

Batch Method: Moisture Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	DISH#	DishWeight	SampleMassWet	SampleMassDry		
280-53458-A-23	SB-31-0	Moisture	T	1	1.33 g	17.39 g	16.81 g		
280-53458-A-23 DU	SB-31-0	Moisture	T	2	1.34 g	17.78 g	17.15 g		
280-53458-A-24	SB-32-0	Moisture	T	3	1.31 g	17.64 g	16.94 g		
280-53458-A-25	SB-33-0	Moisture	T	4	1.32 g	17.17 g	16.44 g		
280-53458-A-26	SB-34-0	Moisture	T	5	1.32 g	17.25 g	16.38 g		
280-53458-A-27	SB-35-0	Moisture	T	6	1.32 g	17.65 g	16.38 g		
280-53458-A-28	SB-40-0	Moisture	T	7	1.32 g	17.98 g	17.27 g		
280-53458-A-29	SB-41-0	Moisture	T	8	1.31 g	17.06 g	16.54 g		
280-53458-A-16	SB-24-0	Moisture	T	9	1.32 g	17.90 g	17.01 g		
280-53458-A-17	SB-25-0	Moisture	T	10	1.31 g	17.41 g	16.74 g		
280-53458-A-18	SB-26-0	Moisture	T	11	1.31 g	17.20 g	16.74 g		
280-53458-A-30	SB-42-0	Moisture	T	12	1.32 g	17.59 g	16.57 g		
280-53458-A-32	SB-44-0	Moisture	T	13	1.31 g	17.39 g	16.58 g		
280-53458-A-31	SB-43-0	Moisture	T	14	1.34 g	17.31 g	16.63 g		
280-53458-A-19	SB-27-0	Moisture	T	15	1.32 g	17.40 g	16.98 g		
280-53458-A-20	SB-28-0	Moisture	T	16	1.31 g	17.25 g	16.88 g		
280-53458-A-13	SB-21-0	Moisture	T	17	1.29 g	17.02 g	16.14 g		
280-53458-A-38	SB-50-0	Moisture	T	18	1.30 g	17.35 g	16.39 g		
280-53458-A-11	SB-18-0	Moisture	T	19	1.29 g	17.65 g	17.13 g		
280-53458-A-36	SB-48-0	Moisture	T	20	1.30 g	17.36 g	16.51 g		
280-53458-A-36 DU	SB-48-0	Moisture	T	21	1.31 g	17.08 g	16.27 g		
280-53458-A-33	SB-45-0	Moisture	T	22	1.33 g	17.31 g	16.43 g		
280-53458-A-37	SB-49-0	Moisture	T	23	1.33 g	17.01 g	16.14 g		
280-53458-A-35	SB-47-0	Moisture	T	24	1.31 g	17.48 g	16.34 g		
280-53458-A-34	SB-46-0	Moisture	T	25	1.32 g	17.61 g	16.90 g		
280-53458-A-22	SB-30-0	Moisture	T	26	1.33 g	17.81 g	17.41 g		
280-53458-A-21	SB-29-0	Moisture	T	27	1.33 g	17.88 g	17.34 g		
280-53458-A-40	SB-52-0	Moisture	T	28	1.32 g	17.45 g	16.46 g		
280-53458-A-39	SB-51-0	Moisture	T	29	1.32 g	17.84 g	15.67 g		

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Denver Job No.: 280-53458-1

SDG No.:

Batch Number: 219132 Batch Start Date: 03/31/14 18:10 Batch Analyst: Bland, Morgan R

Batch Method: Moisture Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	DISH#	DishWeight	SampleMassWet	SampleMassDry		
280-53458-A-1	SB-03-0	Moisture	T	30	1.29 g	17.26 g	16.44 g		
280-53458-A-7	SB-14-0	Moisture	T	31	1.31 g	17.64 g	17.14 g		
280-53458-A-12	SB-20-0	Moisture	T	32	1.34 g	17.79 g	17.54 g		
280-53458-A-8	SB-15-0	Moisture	T	33	1.33 g	17.51 g	16.54 g		
280-53458-A-2	SB-05-0	Moisture	T	34	1.33 g	17.48 g	17.07 g		

Batch Notes	
Balance ID	H31422 No Unit
Date samples were placed in the oven	3/31/14
Oven Temp when samples are put in oven	105 Degrees C
Time samples were place in the oven	2025
Date samples were removed from oven	040113
Oven Temp when samples removed from oven	105 Degrees C
Time Samples were removed from oven	0700
Oven ID	F
ID number of the thermometer	244370
Uncorrected In Temperature	105 Celsius
Uncorrected Out Temperature	105 Celsius

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Denver Job No.: 280-53458-1

SDG No.:

Batch Number: 219133 Batch Start Date: 03/31/14 18:13 Batch Analyst: Bland, Morgan R

Batch Method: Moisture Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	DISH#	DishWeight	SampleMassWet	SampleMassDry		
280-53458-A-9	SB-16-0	Moisture	T	1	1.32 g	17.21 g	16.20 g		
280-53458-A-9 DU	SB-16-0	Moisture	T	2	1.33 g	17.77 g	16.89 g		
280-53458-A-4	SB-11-0	Moisture	T	3	1.32 g	17.24 g	16.64 g		
280-53458-A-14	SB-22-0	Moisture	T	4	1.31 g	17.57 g	17.02 g		
280-53458-A-15	SB-23-0	Moisture	T	5	1.34 g	17.53 g	16.62 g		
280-53458-A-10	SB-17-0	Moisture	T	6	1.32 g	17.48 g	16.80 g		
280-53458-A-6	SB-13-0	Moisture	T	7	1.31 g	17.31 g	16.75 g		
280-53458-A-5	SB-12-0	Moisture	T	8	1.32 g	17.71 g	17.09 g		

Batch Notes	
Balance ID	H31422 No Unit
Date samples were placed in the oven	3/31/14
Oven Temp when samples are put in oven	105 Degrees C
Time samples were place in the oven	2150
Date samples were removed from oven	04/01/14
Oven Temp when samples removed from oven	105 Degrees C
Time Samples were removed from oven	0700
Oven ID	F
ID number of the thermometer	244370
Uncorrected In Temperature	105 Celsius
Uncorrected Out Temperature	105 Celsius

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

Shipping and Receiving Documents

Chain of Custody R

280-53458 Chain of Custody

TAL-4124-280 (0508)

Sampler ID _____

Temperature on Receipt _____

Drinking Water? Yes ☐ No ☑

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Client	Project Manager	Date	Chain of Custody Number
URS Corporation	Sarah Lane	3/21/14	188305
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	
8181 E. Tufts Ave.	303-740-2680		Page 1 of 1

City	State	Zip Code	Site Contact	Lab Contact
Denver	CO	80237	Geoff Uhleman	Pat McEntee

Project Name and Location (State): Moline Street PCB site, Aurora, Colorado

Carrier/Waybill Number:

Contract/Purchase Order/Quote No.: 41569671

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Solid Wood	Concrete	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Analysis (Attach list if more space is needed): PCBs method 8082	Special Instructions/ Conditions of Receipt
SB-03-0	3/17/14	1145					X							X	Analyze whole core ✓
SB-05-0	3/17/14	1215					X							X	Analyze top 1"
SB-06-0	3/17/14	1230				X	X 3/24/14							X	Analyze top 1"
SB-11-0	3/17/14	1420					X							X	Analyze whole core ✓
SB-12-0	3/17/14	1437					X							X	Analyze top 1"
SB-13-0	3/17/14	1445					X							X	Analyze top 1"
SB-14-0	3/17/14	1440					X							X	Analyze top 4"
SB-15-0	3/17/14	1325					X							X	Analyze whole core ✓
SB-16-0	3/18/14	1455					X							X	Analyze whole core ✓
SB-17-0	3/18/14	1021					X							X	Analyze whole core ✓
SB-18-0	3/18/14	0830					X							X	Analyze top 2"
SB-20-0	3/18/14	0936					X							X	Analyze top 1"

Possible Hazard Identification: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal: ☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☒ Other 5 days

QC Requirements (Specify):

	Date	Time		Date	Time
1. Relinquished By	3/21/14	1230	1. Received By: Maynard Soto	3-21-14	1230
2. Relinquished By	3/25/14	9:10	2. Received By	3/25/14	910
3. Relinquished By	3/26/14	1415	3. Received By	3/26/14	14:15

Comments

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Chain of Custody Record

Sampler ID _____

Temperature on Receipt _____

Drinking Water? Yes ☐ No ☑

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TAL-4124-280 (0508)

Client	Project Manager	Date	Chain of Custody Number
URS Corporation	Sarah Lake	3/21/14	188307
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	JM 3/21/14
8181 E. Tufts Ave.	303-740-2680		Page ~~2~~ 1 of 1

City	State	Zip Code	Site Contact	Lab Contact
Denver	CO	80237	Geff Uhleman	Pat McEntee

Project Name and Location (State): Moline St PCB Site, Aurora Colorado

Carrier/Waybill Number:

Contract/Purchase Order/Quote No.: 41569671

Analysis (Attach list if more space is needed): PCBs Method 8082

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Concrete	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	PCBs Method 8082	Special Instructions/ Conditions of Receipt
SB-21-0	3/18/14	1510					X							X	Analyze whole core ✓
SB-22-0	3/18/14	0948					X							X	Analyze top 1"
SB-23-0	3/19/14	1035					X							X	Analyze top 2"
SB-24-0	3/20/14	1002					X							X	Analyze whole core ✓
SB-25-0	3/19/14	1030					X							X	Analyze 3 stained inches
SB-26-0	3/18/14	1250					X							X	Analyze top 2"
SB-27-0	3/18/14	1015					X							X	Analyze top 1"
SB-28-0	3/19/14	1515					X							X	Analyze top 1"
SB-29-0	3/19/14	1140					X							X	Analyze top 1"
SB-30-0	3/19/14	1215					X							X	Analyze whole core ✓
SB-31-0	3/18/14	1310					X							X	Analyze whole core ✓
SB-32-0	3/18/14	0910					X							X	Analyze top 1"

Possible Hazard Identification: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal: ☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☒ Other 5 days

QC Requirements (Specify):

	Date	Time		Date	Time
1. Relinquished By	3/21/14	1230	1. Received By: Cyra A Soto	3/21/14	1230
2. Relinquished By	3/25/14	9:10	2. Received By	3/25/14	910
3. Relinquished By	3/26/14	14:15	3. Received By	3/26/14	14:15

Comments

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Chain of Custody Record

Sampler ID _____

Temperature on Receipt 5.4 Yes +2 3/26/14

Drinking Water? Yes ☐ No ☑

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TAL-4124-280 (0508)

Client	Project Manager	Date	Chain of Custody Number
URS Corporation	Sarah Lave	3/21/14	188310
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	
8181 E. Tufts Ave.	303-740-3680		Page 1 of 2

City	State	Zip Code	Site Contact	Lab Contact
Denver	CO	80237	Geoff Ishleman	Pat McEntee

Project Name and Location (State): Moline St. PCB Site, Aurora Colorado

Carrier/Waybill Number:

Contract/Purchase Order/Quote No.: 41569671

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Concrete	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Analysis (Attach list if more space is needed): PCB method 8082	Special Instructions/ Conditions of Receipt
SB-33-0	3/19/14	1505					X							X	Analyze top 1"
SB-34-0	3/19/14	1130					X							X	Analyze top 1"
SB-35-0	3/19/14	0900					X							X	Analyze whole core ✓
SB-40-0	3/18/14	1450					X							X	Analyze top 1"
SB-41-0	3/19/14	1115					X							X	Analyze top 1"
SB-42-0	3/20/14	0902					X							X	Analyze top 2"
SB-43-0	3/20/14	0915					X							X	Analyze top 1" and bottom 1"
SB-44-0	3/20/14	0910					X							X	Analyze top 1"
SB-45-0	3/19/14	1305					X							X	Analyze top 2"
SB-46-0	3/19/14	1315					X							X	Analyze top 1"
SB-47-0	3/20/14	0830					X							X	Analyze whole core ✓
SB-48-0	3/20/14	0950					X							X	Analyze bottom 1"

Possible Hazard Identification: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal: ☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☒ Other 5 days

QC Requirements (Specify):

	Date	Time		Date	Time
1. Relinquished By	3/21/14	1230	1. Received By: Mayra A Soto	3/21/14	1230
2. Relinquished By	3/24/14	9:10	2. Received By	3/25/14	910
3. Relinquished By	3/25/14	1415	3. Received By	3/26/14	14:15

Comments

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Chain of Custody Record

Sampler ID _____

Temperature on Receipt _____

Drinking Water? Yes ☐ No ☑

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TAL-4124-280 (0508)

Client	Project Manager	Date	Chain of Custody Number
URS Corporation	Sarah Lane	3/21/14	188309
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	
8181 E. Tufts Ave.	303-740-2680		Page 2 of 2

City	State	Zip Code	Site Contact	Lab Contact
Denver	CO	80237	Geff Uhleman	Pat McEntee

Project Name and Location (State): Moline St. PCB Site, Aurora, Colorado

Carrier/Waybill Number:

Contract/Purchase Order/Quote No.: 41569671

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Concrete	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Analysis (Attach list if more space is needed): PCBs Methodology	Special Instructions/ Conditions of Receipt
SB-49-0	3/20/14	0940					X							X	Analyze top 1"
SB-50-0	3/20/14	1136					X							X	Analyze top 3"
SB-51-0	3/20/14	1200					X							X	Analyze bottom 2"
SB-52-0	3/20/14	1235					X							X	Analyze whole core

Possible Hazard Identification: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal: ☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☒ Other 5 days

QC Requirements (Specify):

Relinquished By	Date	Time	Received By	Date	Time
1. [signature]	3/21/14	1230	1. Maiya Soto	3/21/14	1230
2. [signature]	3/24/14	9:10	2. [signature]	3/25/14	910
3. [signature]	3/26/14	1415	3. [signature]	3/26/14	14:15

Comments

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Login Sample Receipt Checklist

Client: URS Corporation

Job Number: 280-53458-1

Login Number: 53458

List Source: TestAmerica Denver

List Number: 1

Creator: Dedio, Michael T

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	Field on COC is blank.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Appendix B – Removal Action Specifications and Construction Drawings are provided on CD only

SPECIFICATIONS AND REMOVAL ACTION DRAWINGS

FOR

MOLINE STREET PCB SITE REMOVAL ACTION

May 14, 2014 – **Issued for Bid**

URS

URS Corporation
8181 East Tufts Ave.
Denver, CO 80237
Project No. 41569671

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1.0 INTRODUCTION

1.1 General

These Specifications and Removal Action Drawings were prepared by URS Corporation (URS) on behalf of The Dow Chemical Company (TDCC). An Administrative Settlement Agreement and Order on Consent (Settlement Agreement) for the Moline Street PCB Site became effective on January 30, 2014 under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) (reference CERCLA Docket No. CERCLA-08-2014-0002).

The Work described herein covers the tasks and activities necessary to conduct contaminated material removal activities of the former magnesium extrusion facility located at 3555 Moline Street (Site) in Aurora, Colorado. The project includes removal and offsite disposal of soil and concrete containing elevated levels of polychlorinated biphenyls (PCBs). Maximum PCB concentrations in soil and concrete determined from URS investigations are 7900 mg/kg and 3900 mg/kg, respectively. The Removal Action Work shall be performed in accordance with these Specifications and the Removal Action Drawings and shall be documented in accordance with the quality control requirements listed herein. The work will be considered as having been completed upon review and written approval by URS.

Construction methods used shall produce Work satisfactory to URS for the services intended and shall be in accordance with standard construction industry practices.

The property and building where the work will be performed (i.e., the Site) are currently owned by Hi-Tec Plastics, Inc. (Hi-Tec). Hi-Tec's current operations take place in the building located directly north of the Site. Hi-Tec uses the concrete access pad south of their current operational building and north of the Site buildings where the Work will take place. Hi-Tec also uses the north and south gates located on the east site of the Site for access to the south side of Hi-Tec's operational building. Hi-Tec is currently using Buildings I and H, shown on the Removal Action Drawings, for storage. The stored materials are expected to be moved by Hi-Tec for the duration of the project so that Subcontractor may conduct the Work inside the buildings. Hi-Tec will continue their normal business operations in the area north of the Site throughout this project. They typically operate 24 hours per day, 7 days per week.

1.2 Symbols and Acronyms

Wherever used in the Specifications and Removal Action Drawings the following symbols and acronyms have meanings indicated which are applicable to both the singular and plural thereof:

‘	Angular Minute, or Foot
“	Angular Second, or Inch
AASHTO	American Association of State Highway and Transportation Officials
Accelerated Mortar-Bar Method	Alkali-Silica Reactivity of Combinations of Cementitious Materials and Aggregate
ACI	American Concrete Institute
ACM	Asbestos-Containing Material
ANSI	American National Standards Institute
AOS	Apparent Opening Size

APA	American Plywood Association
ASTM	American Society for Testing and Materials. Note the most recent version or revision of the cited ASTM standard(s) in these Specifications shall apply throughout.
BMP	Best Management Practice
C/O	Change Order
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	Code of Federal Regulations
CJ	Construction Joints
CRJ	Contraction Joints
CRSI	Concrete Reinforcing Steel Institute
CRZ	Contaminant Reduction Zone
CTJ	Control Joints
DOT	U.S. Department of Transportation
EH&S	Environmental, Health and Safety
EJ	Expansion Joints
EPA	U.S. Environmental Protection Agency
EZ	Exclusion Zone
gpm/ft^2	gallons per minute per square foot
HASP	Health and Safety Plan
HAZWOPER	Hazardous Waste Operations and Emergency Response
ICRI	International Concrete Repair Institute
IDW	Investigation Derived Waste
LOPC	Loss of Primary Containment
lbs	Pounds
MAX	Maximum
MIN	Minimum
mm	Millimeters
MOC	Management of Change
MUTCD	Manual on Uniform Traffic Control Devices
NSF	National Sanitation Foundation
OSHA	Occupational Health and Safety Administration
oz/yd^2	ounces per square yard
%	Percent
PCBs	polychlorinated biphenyls

psi	Pounds per Square Inch
QA	Quality Assurance
QC	Quality Control
RAOs	Remedial Action Objectives
Reclamation	U.S. Department of the Interior, Bureau of Reclamation
Schedule	Remedial Action activities schedule
SEO	Office of the State Engineer
Site	3555 Moline Street
SPCC	Spill Prevention, Control, and Countermeasure
SZ	Support Zone
T&M	Time and Materials
TDCC	The Dow Chemical Company
URS	URS Corporation
USACE	U.S. Army Corps of Engineers
US Sieve	U.S.A. Standard Test Sieve
U.V.	Ultraviolet

1.3 Definitions

Wherever used in the Specifications the following terms have meanings indicated which are applicable to both the singular and plural thereof:

Addenda – Written and/or graphic instruments issued prior to opening of Bids which clarify, correct or change the bidding documents.

Award of Contract – The written notice given by URS to the apparent successful bidder stating that URS will sign and deliver the Construction Contract.

Best Management Practices (BMP) – Methods or techniques found to be the most effective and practical means of achieving an objective while making the optimum use of resources.

Bid – The offer or proposal of the Subcontractor or bidder submitted on the prescribed schedule setting forth the prices for the Work to be performed in accordance with Construction Contract Documents.

Change Order (C/O) or Time and Materials (T&M) Work – A document issued by URS indicating a potential addition, deletion, revision, or clarification of the Work, issued on or after the effective date of the Construction Contract, requesting a price and/or time proposal from the Subcontractor. The change is not authorized until a Change Order is executed by both parties or the Subcontractor is directed otherwise, in writing by URS, to proceed. Requirements regarding the Change Order process are addressed in the Construction Contract.

Competent Person – A person having suitable or sufficient skill, knowledge, experience and expertise for some purpose or discipline.

Construction Contract/Contract – The written agreement with specific terms entered into between URS and the Subcontractor in which there is a promise to provide construction Work for valuable benefit.

Construction Contract Documents/Contract Documents – Shall include all Request for Proposal, Bid Schedule, Construction Contract, Specification, Construction Drawing, Addendum and Change Order Documents associated with the Moline Street PCB Site Removal Action Project issued by URS and agreed to in writing by URS and the Subcontractor.

Removal Action Drawings – The drawings which show the character and scope of the Work to be performed and which are referred to in the Construction Contract Documents.

Contamination Reduction Zone (CRZ) – The buffer zone between the exclusion and the clean zone.

Day – Day shall mean a calendar day of 24 hours. Working days shall mean week days excluding Saturday and Sunday or Holidays.

Decontamination – The removal of PCB waste material (e.g., PCB-containing soil) or hazardous substances from employees and equipment, to the extent necessary, to avoid the spread of contamination and adverse health effects.

Exclusion Zone (EZ) – A controlled area at a site where contamination occurs, that's a risk to human health or the environment.

Fabricator – A person or entity that transforms, shapes, assembles or fashions raw materials or manufactured materials/products into a different and/or useable form.

Hi-Tec – Hi-Tec, Inc. is the current Site owner.

Installer – A person or entity that possesses specific expertise and experience in performing a specialized trade or craft.

Investigation Derived Waste – Waste that is generated from investigating, examining, or otherwise disturbing a contaminated site, including but not limited to groundwater, surface water, soils, sediments, and any and all debris that comes in contact with contaminated materials.

Management of Change (MOC) – Management of Change is a structured approach to transitioning individuals, teams, organizations and/or Work processes from a current state to a desired (improved or revised) state.

Notice to Proceed – A written notice given by URS to the Subcontractor fixing the date on which the Contract time will commence to run and on which the Subcontractor shall start to perform the Subcontractor's obligations under the Contract.

PCB Waste Material – Material onsite that contains any concentration of PCBs to be disposed of in accordance with the Specifications.

Project Area/Project Site/Site – The project area, project site and/or site as cited in these Specifications shall mean those specific areas where Work activities authorized by the Contract and as shown on the Removal Action Drawings is to take place.

Project – The total and complete construction of the Work to be provided under the Construction Contract Documents.

Root Cause Analysis – Root cause analysis is a class of problem solving methods aimed at identifying the initiating cause of a causal chain of events which leads to an outcome or effect which will prevent the initiating cause from occurring again.

Shop Drawings – All drawings, diagrams, illustrations and other data which are specifically prepared by or for the Subcontractor to illustrate some portion of the Work and all illustrations,

brochures, performance charts, instructions, diagrams and other information prepared by the Subcontractor to illustrate material or equipment for some portion of the Work.

Specifications – Those portions of the Construction Contract Documents consisting of written technical descriptions of materials, equipment, construction systems, standards and workmanship as applied to the Work and certain applicable administrative details.

Subcontractor – The person or entity that enters into a Contract at a certain fixed price to furnish Work and is responsible for the overall conduct of such Work.

Support Zone (SZ) – Outer most or clean zone at a contaminated site, typically where decontamination support is staged.

TDCC – The Dow Chemical Company is the project owner and is the lead entity for coordinating the Moline Street PCB Site Removal Action.

URS – URS Corporation is the Contracting entity and shall administer the Moline Street PCB Site Removal Action Contract on TDCC's behalf.

URS Representative – The URS Representative is an employee assigned to be on the Site that will have the authority, on behalf of URS, to give acceptance and take action to the extent necessary for the orderly and expeditious execution of the Work.

Work – The entire completed construction required under the Construction Contract Documents. Work is the result of performance of services, furnishing labor, and furnishing and incorporating materials and equipment into the construction, all as required by the Construction Contract Documents.

1.4 References

The following documents are referenced in these Specifications or were used to develop Removal Action requirements:

- Administrative Settlement Agreement and Order on Consent for Removal Action, CERCLA Docket No. 08-2014-0002
- Guidance on Remedial Actions for Superfund Sites with PCB Contamination, EPA, Document 540/G-90/007, 1990.
- Stage II Investigation and Removal Action Work Plan – Moline Street PCB Site, URS Corporation, 2014.

1.5 Scope of Work

The scope of work for the Moline Street PCB Site Removal Action shall include:

- Preparing the Subcontractor's HASP for Subcontractor employees and lower-tier Subcontractor employees;
- Mobilizing Subcontractor's equipment, materials, Subcontractor's and URS's temporary facilities;
- Stormwater management and erosion and sediment control;
- Establishing traffic control;
- Identifying and shutting down utilities as needed;
- Abandoning existing groundwater monitoring wells;

- Establishing Exclusion, Contaminant Reduction, and Support Zones;
- Demolishing Building C, sizing the debris, and loading demolition debris for disposal;
- Expose a portion of double tee wall foundations with a foundation test pad;
- Removing PCB-contaminated dust and particulate matter from the interior walls, floors, ceilings, and other interior surfaces of Buildings B, C, D, E, F, G, H, and I;
- Hanging plastic sheets between buildings D and E and between Buildings E and F to prevent PCB-contaminated dust from demolition activities from migrating to other parts of the Site;
- Saw cutting and demolishing PCB-contaminated concrete, sizing the debris, and loading demolition debris for disposal;
- Excavating PCB-contaminated soil and loading PCB waste material for disposal;
- Decontaminating equipment as needed;
- Backfilling excavations with clean fill, compacting, and preparing subgrades for concrete slabs;
- Placing new concrete slabs to match existing grades;
- Final cleaning as needed;
- Restoring the Site and removing any excess fill materials from the site; and
- Demobilizing Subcontractor's equipment, materials, Subcontractor's and URS's temporary facilities.

1.6 Construction Schedule

The Subcontractor shall submit a construction activities schedule (schedule) with Subcontractor's Bid. The Subcontractor shall demonstrate the ability to complete the Work by no later than September 20, 2014, with a mobilization date beginning no later than July 7, 2014. URS will review and accept the schedule for use or request modifications during Bid evaluation. Any requested schedule changes or Subcontractor schedule changes to the construction schedule submitted with the Bid shall be resubmitted to URS at least one week prior to mobilization. The schedule shall address all removal action activities as a whole including start/finish dates for construction activities, equipment lists, anticipated work force hours per week, etc. If at any time during the construction contract the Subcontractor deems it necessary to deviate from the original construction schedule, the Subcontractor shall propose schedule modifications with justifications for acceptance by URS prior to implementation of the modified schedule. If URS determines that the modified schedule will delay or impede the overall removal action schedule for this facility, the Subcontractor shall revise the schedule to satisfy URS' requirements.

1.7 Weekly Coordination Meetings

The Subcontractor shall make weekly reports to URS documenting production progress and updating the construction schedule. The Subcontractor's onsite management staff shall lead weekly coordination meetings to discuss production, scheduling, safety and any other pertinent work-related issues, reports or documents. The Subcontractor shall be responsible for providing weekly meeting agendas that include, at a minimum, relevant safety topics, progress made during the reporting period and upcoming period, project issues and items of concerns,

overall schedule updates, and a two week look-ahead schedule prior to each meeting. The frequency of weekly meetings and report submittals may be increased as required by URS, until such time URS is satisfied with scheduling, production, documentation and/or safety performance. URS will record minutes of these meetings and will furnish one copy to the Subcontractor. The Subcontractor shall advise URS of any inaccuracies, discrepancies, objections or missing items in the minutes within two working days of receipt of the minutes.

1.8 Daily Submittals

In addition to the submittals to be provided with the Subcontractor's Bid, cited in Section 2.9 of these Specifications, the Subcontractor shall communicate and submit to URS on a daily basis a summary of the daily activities which shall include, but not be limited to, daily load counts for each type of material imported, exported, moved, stockpiled and/or placed; the amount and source of water used for construction and dust control; and equipment status updates and repair schedules. The Subcontractor shall submit copies of weight documentation for applicable construction materials brought onsite, including, but not limited to backfill material or concrete. The Subcontractor shall submit delivery and/or compliance documentation associated with all construction materials brought to the Site.

1.9 List of Removal Action Drawings

The Removal Action Drawings are included with these Specifications.

The following Removal Action Drawings are made a part of these Specifications:

Table 1-1 – List of Removal Action Drawings

Sheet Number	Sheet Title	Date	Revision
1	Cover Sheet	May 14, 2014	0
2	Existing Site Plan/General Notes	May 14, 2014	0
3	Concrete Thickness Map	May 14, 2014	0
4	Proposed Demolition and Staging Plan	May 14, 2014	0
5	Excavation Plan	May 14, 2014	0
6	Typical Excavation Section and Details	May 14, 2014	0
7	Restoration Plan	May 14, 2014	0
8	Structural Details	May 14, 2014	0

URS may revise the Removal Action Drawings during the Work performance. URS will notify the Subcontractor of Removal Action Drawing revisions and provide revised Drawings.

1.10 Discrepancies Between Contract Documents

In the case of any discrepancies between the Construction Contract, Specifications or Removal Action Drawings, the requirements of the Construction Contract shall supersede the Specifications. The requirements of the Specifications shall supersede the Removal Action Drawings. If clarifications are desired, the Subcontractor shall be responsible for promptly submitting written notice of discrepancy or request for clarification to URS, who will promptly make a determination, and indicate in writing a clarification or notice of Specification or Construction Drawing revision. Any Specification or Construction Drawing adjustment by the Subcontractor without such written determination shall be at the Subcontractor's risk and

expense. The Subcontractor shall keep onsite at all times a copy of the Specifications, Removal Action Drawings, clarifications, Change Orders and other information pertinent to the Work.

2.0 GENERAL REQUIREMENTS

2.1 Performance Requirements

2.1.1 Access

Access to the Site will be provided to the Subcontractor by Hi-Tec and TDCC. The Subcontractor shall provide and maintain safe access to Work areas for URS. The Subcontractor shall provide qualified onsite supervision at all times to ensure Work is accomplished in a safe and healthy manner.

2.1.2 Maintenance of Fugitive Dust

Project activities may create dust that potentially contains PCBs. The Subcontractor, at the Subcontractor's expense, shall control fugitive dust emissions by grading and watering in a manner accepted by URS. Chemical suppression agents will not be allowed. Runoff created as a result of fugitive dust control shall be contained by the Subcontractor as described in Specification Section 4.0.

2.1.3 Housekeeping and Cleanup

Housekeeping is considered a key element in maintaining a safe and healthy workplace. While work is in progress, the Subcontractor shall not allow waste material, trash, and/or rubbish to accumulate in or about the site. Trash, rubbish, etc., shall be disposed of at the Subcontractor's expense in accordance with applicable county, state, and federal regulations. The Subcontractor shall provide written verification that all waste materials resulting from the construction activities, including oil, equipment maintenance waste and trash, have been properly disposed. The Subcontractor's office and staging area facilities shall be maintained in a neat and orderly condition. Mobile office facilities shall be appropriately set, secured/tied down and leveled. Upon completion of the Work, all machinery, equipment, unused construction material and waste material shall be removed from the property.

2.1.4 Spills

The Subcontractor shall submit to URS, for review, a Spill Response Plan (SRP) in accordance with applicable U. S. Environmental Protection Agency (EPA) and state regulations within 10-days after issuance of the Notice to Proceed. The Subcontractor shall report all spills of any quantity to URS verbally and in writing, within 2 hours after they occur. Such written report notification shall include spill location, spilled material, date, time, personnel present, circumstances, proposed clean up method, proposed disposal site and time frame to complete the cleanup. Spills involving petroleum products shall be contained and disposed in accordance with federal, state, and local laws. Waste materials resulting from petroleum product spills shall be collected, handled, and disposed at the Subcontractor's expense. The Subcontractor shall be responsible to perform a Root Cause Analysis on all Loss of Primary Containment (LOPC) incidents.

2.1.5 Environmental Quality and Health Protection

These procedures are summarized as follows:

Storage, handling and disposal of hazardous materials, including flammable or combustible liquids, shall be in accordance with applicable county, state and federal regulations and the Subcontractor's Health and Safety Plan (HASP).

Petroleum products and other hazardous liquids shall be stored in an appropriately sized and lined facility approved and stamped by the Subcontractor's engineer and shall be in accordance with applicable local, county, state, and federal regulations and the Subcontractor's HASP and shall be part of the Subcontractor's SRP.

Construction activities shall be performed using methods that will prevent accidental spillage of petroleum hydrocarbons or hazardous or contaminated liquids from entering storm water including nearby drainage channels. The Subcontractor shall immediately report all spills no later than 2 hours after a spill of any quantity and type to URS and verbally and in writing as required in Section 2.1.4 – Spills of these Specifications.

During construction, care shall be taken by the Subcontractor to preserve the natural landscape, utilities, paved and unpaved surfaces, buildings, and other features, and prevent any unnecessary destruction, scarring or defacing of the existing surroundings in the vicinity of the work. Any cost incurred for the repair of damage caused by such unnecessary activities will be the responsibility of the Subcontractor.

Best Management Practices (BMPs) shall be used to prevent sediment from being transported offsite or to stormwater drains due to storm water runoff and tracking by vehicles exiting the Site. BMPs include, but are not limited to, such sediment control practices as interceptor dikes/ditches, filter fences, straw bales, temporary sediment basins, check dams or other methods provided in the Subcontractor's Stormwater Management and Erosion and Sediment Control Plan submittal and accepted by URS. Sediment has the potential to be impacted by PCBs and should be handled appropriately.

Reasonable and practical efforts shall be made to operate construction equipment in a manner that limits emissions of air contaminants. While equipment is being operated inside buildings, the building shall be well ventilated and the Subcontractor shall route exhaust outside of the building to prevent buildup of carbon monoxide gas. During construction, the URS Representative will monitor for carbon monoxide gas. If carbon monoxide gas is detected above acceptable levels, at the discretion of the URS Representative, Subcontractor shall immediately stop work and provide ventilation or further exhaust routing to remedy the problem at no cost to URS. Fugitive dust from excavations, construction activities, and other areas of heavy vehicle use shall be controlled by watering and/or dust suppression agents accepted by URS. If, during times of dry conditions and/or high wind, the release of fugitive dust becomes uncontrollable, URS may request that the Subcontractor temporarily suspend construction activities until dust releases can be controlled or weather conditions improve. If the Subcontractor identifies an unsafe condition, the Subcontractor shall have the authority to stop work and remedy and hazard. No compensation will be made to Subcontractor for the suspension of Work to comply with air quality requirements due to atmospheric conditions or excessive dust releases.

2.1.6 Health, Safety and Training

2.1.6.1 Health

This project is a removal action involving excavation and handling of PCB-contaminated soil and concrete prior to off-site disposal (off-site transportation and disposal contracted separately). Because soil and concrete at the Site contain PCB contamination above cleanup levels (at levels associated with potential human health exposure risks), Subcontractor shall make Subcontractor's personnel aware of the health risks presented at the Site as well as other Site risks. Subcontractor shall also make personnel aware of the safety risks associated with building demolition and removing contaminated soil beneath and adjacent to a building. These

Specifications, the Removal Action Drawings, and URS's HASP provide information regarding Site health and safety risks.

The removal action activities conducted at the Site have the potential to expose the environment, the public and, most especially, the Site workers to hazardous conditions and/or substances. The Subcontractor shall adhere to and meet all federal, state, county, local, and Site specific requirements, which establish procedures, personnel responsibilities and training necessary to protect the health and safety of all onsite personnel, the public and the environment. The potential hazards to Site workers associated with the planned removal activities include, but are not limited, to the following:

- Work in and around heavy equipment;
- Work in and around haul trucks/vehicle hazards;
- Excavation work, including work around open excavations;
- Exposure to organic chemical contaminants, including polychlorinated biphenyls (PCBs);
- Exposure to physical hazards and agents, i.e. heat and cold stress, noise, fugitive dust, fumes, silica, severe weather/lightning, etc.; and
- Exposure to biological agents, e.g., spiders, ticks, bees, ants, venomous snakes, poisonous plants, wild animals, etc.

This information is provided to make the Subcontractor aware of the hazards that may be associated with removal action activities. Additional hazards may be identified in the course of conducting the work.

The safe work practices contained in the Subcontractor's Health and Safety Plan shall be strictly adhered to at all times by the Subcontractor's workforce. The Subcontractor's workforce shall limit their operations to the designated Work areas. If access is needed to other areas of the Site, the Subcontractor will obtain permission from URS prior to entering such areas.

Training requirements for individuals engaged in the removal action activities at the Site shall be provided in the Subcontractor's HASP. However, all Subcontractor and lower-tier Subcontractor employees working at the Site shall complete a Site Specific safety training course provided by URS in addition to daily tailgate safety meetings and safety meetings or stand-downs conducted on an as-needed basis. Initial Site Specific training will be conducted as agreed upon by the Subcontractor and URS. Thereafter, Site Specific training will be conducted as needed but not more than once a week.

2.1.6.2 Subcontractor Safety and Health

The Subcontractor shall prepare a Site-specific HASP for the Subcontractor's employees and lower-tier Subcontractor's employees. The Subcontractor shall submit the HASP to URS at least 10 days prior to mobilization to the Site.

Excellence in Subcontractor Safety at URS' sites is paramount to all requirements set forth in these Specifications. This section identifies required elements for Safety and Health Programs of the Subcontractors and lower-tier Subcontractors working at URS' sites. These minimum requirements apply to all of the Subcontractor and lower-tier Subcontractor employees performing construction, maintenance service or administrative activities on the Work Site.

The Subcontractor's Safety and Health Program shall be in place prior to initiation of construction activities. The requirements of this section are paramount and a part of all work

activities performed at URS' sites. Non-compliance with the requirements of this section may result in URS ordering a shutdown of a work activity or all work activities at the Site until the deficiency is corrected. Any shutdown ordered as a result of non-compliance with the requirements of this section or deliberate deviation from the Subcontractor's HASP will be at the Subcontractor's expense and/or may result in termination of the Contract if URS determines conditions or circumstances warrant termination.

To be considered for bidding, Subcontractor must pass URS' Subcontractor safety evaluation, under URS Safety Management Standard 46. Lower-tier Subcontractors shall also pass URS' Subcontractor safety evaluation to be considered.

2.1.6.2.1 **Program Management**

The Subcontractor's Project Manager is responsible for ensuring that all lower tier Subcontractors are safety pre-qualified and approved by URS prior to onsite work by the lower tier Subcontractors.

The Subcontractor shall report all near misses and incidents, including injury, illness, spills of any amount, and damage to property to URS within 24 hours of the occurrence. Spills involving oil or chemicals shall be reported in accordance with Section 2.1.4 of these Specifications.

The Subcontractor shall provide a full-time safety professional onsite during performance of the Work. The duties of the safety professional shall be restricted specifically to managing the Subcontractor's Safety and Health Program and observing, from a safety aspect, work activities being performed at the Site. The Subcontractor's safety professional and designated supervisory representative, i.e., superintendent, foreman, etc., shall have the specific authority and (at a minimum) be required to:

- Ensure pre-job hazard analyses are completed prior to performance of new or modified jobs;
- Ensure safe job procedures exist for all routine operations onsite;
- Immediately halt any construction, maintenance, or work activity in which unsafe conditions exist or have the potential to exist;
- Ensure effective management of the Subcontractor's Safety and Health Program;
- Ensure equipment inspections are appropriately completed;
- Ensure applicable health and safety documentation is completed;
- Observe the work site and all work activities on a daily basis, i.e., earthwork operations, labor tasks, equipment maintenance tasks, etc.;
- Be actively involved (on daily basis) with the Site management planning of work activities;
- Approve, from a safety aspect, methodologies to be utilized in work activities including, but not limited to, haul routes, traffic patterns, working conditions, etc.;
- Provide personal contact to all Subcontractor's and Subcontractor's employees on a daily basis; and
- Interface with URS' EH&S and Site managers.

2.1.6.3 Training

At a minimum, all onsite Subcontractor and lower-tier Subcontractor onsite employees shall demonstrate that they have successfully completed training for the Occupational Health and Safety Administration (OSHA) 40-hour Hazardous Waste Operations and Emergency Response (HAZWOPER) certification and/or the 8-hour HAZWOPER annual refresher certification in accordance with 29 CFR, Part 1910.120 and Part 1926.65 prior to arriving onsite. The Subcontractor's and lower-tier Subcontractor's onsite employees shall also be certified by a nationally recognized program approved by URS for CPR and First Aid. Safety training information shall be submitted to URS in accordance with Specification Section 2.9.2.

2.2 URS Representative(s)

URS' Representative(s) will have the authority, on behalf of URS, to give acceptance and take action to for the safe execution of the Work. URS' Representative(s) shall not have the authority to amend or modify written contracts. In addition to duties and authorities specified in this section and elsewhere in the Contract, URS' Representative(s) shall have the authority to suspend Work whenever deemed such action is necessary to secure proper safe performance and quality of the Work. There will be no compensation to Subcontractor for suspended work due to improper safety and/or quality performance.

The Subcontractor shall coordinate all construction activities with the URS Representative(s) to avoid conflicts and unnecessary delays in construction.

2.3 Use of Hi-Tec's Property and Project Coordination

Space on Hi-Tec's property will be allotted to the Subcontractor for setting up office facilities, staging and storage of equipment, machinery and material, as shown on the Removal Action Drawings. The Subcontractor's personnel shall enter and leave the area through the entrance/exit designated by URS. The Subcontractor shall be responsible for establishing and maintaining all utilities for Subcontractor's and URS' office and staging areas including, but not limited to, electricity, potable water, wash water, telephone and sanitation facilities.

Hi-Tec's operations include frequent deliveries, vehicles entering and exiting the Site entrance, and various other operations that require use of the paved area north of the Site. The Subcontractor shall coordinate the Work with Hi-Tec's owner's Site operations.

2.4 Codes, Testing and Publications

The latest issue of the publication, standard, test method or permit listed below or elsewhere in these Specifications for material operations, forms a part of this Specification. The publications, standards, test methods and permits may be referred to in the text by their basic designation. In case of a conflict between the referenced publication or standard and this Specification, the more stringent requirements, as determined by the URS Representative, shall govern. All materials, equipment, excavation and placement of soils, machinery, methods and techniques, work regulations and safety controls shall comply with these Specifications, Section 1.4 – References of these Specifications and with applicable sections of the following standards:

- American Society for Testing Materials (ASTM);
- Occupational Health and Safety Administration (OSHA);
- Toxic Substances Control Act, PCB Spill Cleanup Policy, 52 FR 10688 April 2, 1987;

- Colorado Hazardous Waste Regulations, 6 CCR 1007-3, pursuant to CRS § 25-15-101 et seq.;
- Colorado Fugitive Dust Control Plan/Opacity Regulation No. 1, 5 CCR 1001-3. Pursuant to CRD 25-7-101 et seq.;
- Colorado Noise Abatement Statute, CRS § 25-12-101, et seq.;
- Colorado Water Well Construction Rules, 2 CCR 402-2, Rule 16 for monitoring well abandonment;
- Guidance on Remedial Actions for Superfund Sites with PCB Contamination, EPA, Document 540/G-90/007, 1990;
- Environmental Protection Agency (EPA) Spill Prevention Control and Countermeasures (SPCC) provision of 40 CFR, Part 112;
- Manual on Uniform Traffic Control Devices (MUTCD);
- Any and all other Publications and/or Regulatory Documents cited in these Specifications.

In all cases, the most recent version or revision of the codes, testing specifications and publications cited in the list above shall be used.

2.5 Construction Water

A source of uncontaminated construction water to be utilized for soil moisture conditioning and dust abatement will be provided onsite by Hi-Tec. The Subcontractor shall provide documentation that the water source is uncontaminated, such as water provided by local utility providers. URS must approve water sources. The Subcontractor is responsible for hauling water from the source to construction activities, as needed. Additionally, the Subcontractor shall meter and/or supply URS with load counts on water usage daily.

2.6 Surveys

URS has established horizontal and vertical control as noted on the Removal Action Drawings. All surveys shall be performed using this control by or under the control of a licensed Surveyor. The Subcontractor shall be responsible to verify the validity of survey control points used during construction prior to their use. Any discrepancies found shall be corrected by URS prior to placing the control point in service. Once a control point is placed in service, any work performed that is not in compliance due to discrepancies associated with this control point shall be corrected by the Subcontractor at no extra cost to URS. The Subcontractor shall bear the entire cost incurred by construction delays due to discrepancies found in a control point after it has been placed in service. Control points damaged or disturbed by the Subcontractor's activities shall be replaced at the expense of the Subcontractor. The Subcontractor shall provide all necessary construction surveys for performance of the Work based on data shown on the Removal Action Drawings. Construction survey layouts shall include establishment of centerlines, catch point slope stakes, offsets, grade control stakes and boundaries required to establish the various construction features. The Subcontractor shall also be responsible for the transfer of the lines and grades established for these features to the actual Work. Vertical survey data shall be accurate to 0.1 feet. Horizontal survey data shall be accurate to 0.01 feet.

The Subcontractor shall provide all survey information to URS in a format agreed to by the Subcontractor and URS prior to initiation of the survey Work, such as copied field books, cut/fill sheets, printouts, CAD files, etc., for review of construction surveys, quantity surveys, control

verification surveys, etc. The paper and electronic copies shall be provided to URS within 2 working days after completion and review by the Subcontractor.

As a minimum, the Subcontractor shall perform the following:

- Perform a topographical surface survey of existing conditions prior to initiating construction activities. Verification or updating may be made by comparing the existing topography to the existing conditions shown on the Removal Action Drawings;
- Survey elevation and horizontal extents of the existing top of concrete prior to any demolition activities;
- Survey elevation and horizontal extents of the top of subgrade after concrete removal to determine final neat-line quantities of concrete removed;
- Survey elevation and horizontal extents of the bottom of final excavations as requested by the URS Representative to determine the extents of excavations and final neat-line quantities of excavated material;
- Survey elevation and horizontal extents for the completed concrete subgrade (bottom of concrete/top of backfill) to determine final neat-line backfill quantities;
- Survey elevation and horizontal extents for the completed concrete surface (top of concrete) to determine final neat-line quantities of concrete placed, including horizontal locations of corners of placed concrete;
- Survey elevation and horizontal locations for various sampling locations as requested by the URS Representative;
- Miscellaneous quality control, verification and volume surveys; and
- Other surveys pertinent to completion of the Work or for Measurement and Payment.

The Subcontractor shall provide URS written notification two (2) working days prior to scheduling and/or performing verification surveys. Upon receipt of the quality control survey data from the Subcontractor, URS shall have two (2) working days to review and accept the survey data. The quality control survey data shall be reviewed and accepted by URS prior to continuing the next phase of excavation, backfilling, earth fill placement, placement of concrete and any other work requiring verification. URS shall be provided with and review a final quality control verification survey prior to Subcontractor demobilization. URS shall inform the Subcontractor, in writing, of the acceptance/non-acceptance of the work based on the quality control verification survey data. If URS determines from the applicable quality control verification survey data that the work is not in compliance with these Specifications, the respective work shall be brought into compliance with these Specifications and a new quality control verification survey shall be performed by the Subcontractor at no cost to URS.

Surveys for sampling locations, verification, quality control and quantity determinations shall be stamped by a Licensed Surveyor in the state of Colorado and acceptable to URS. All survey Work shall be performed under such Surveyor's supervision and control.

Surveys to determine quantities will be provided by the Subcontractor in coordination with URS. The quality control survey may be used to establish the quantity of materials removed/placed in accordance with the applicable neat-line bid item. Prior to initiating Work, the Subcontractor shall perform topographical surveys to establish a baseline surface for the Site. Interim pay estimated quantities may be made on load counts and/or quantity surveys conducted by the Subcontractor in coordination with URS. Load count factors shall be determined by field measurements for each type of material being placed and for each type of equipment used.

Final quantities will be determined by comparing the original (verified) topographic map/surveys with data and/or topographical maps from final surveys to neat-line limits. The Subcontractor shall provide copies of all survey Work to URS for review.

2.7 Quality Control/Quality Assurance

URS will perform Quality Control (QC) and Quality Assurance (QA) to evaluate if earthwork and related construction activities are conducted in general accordance with the Specifications. URS has the authority to reject work not meeting the requirements of the Specifications as well as recommend and/or require actions necessary to correct work not constructed in general accordance with the Specifications. QC testing will be performed to evaluate proper placement and compaction of required fill soils and sub-grade backfill. The Subcontractor shall remove surface material and render assistance as necessary to enable performance of the QC testing.

The Subcontractor shall conduct the necessary QC testing to verify that the specified quality parameters, gradations and consistency of imported off-site soil materials, processed sand, gravel and riprap materials and manufactured products are in accordance with the Specifications prior to such materials being delivered to the Site. All material testing conducted by the Subcontractor shall be submitted to URS for review and acceptance.

2.8 Existing Utilities

There are overhead and underground utilities present around and within the project area. The Subcontractor shall be responsible for taking the appropriate precautions to verify, locate, and protect all utilities, including, but not limited to, buried telephone lines, natural gas pipelines, high pressure natural gas pipelines, monitor wells, electrical, miscellaneous piping, etc., which may exist within the Work area prior to starting any construction segment. The Subcontractor shall provide written notification to URS when the utility locates have been completed. The Subcontractor is responsible for acquiring any right-of-ways necessary to cross over or work around utilities.

Subcontractor shall be responsible for repairs due to damage of utilities by the Subcontractor at no cost to URS.

2.9 Bid Proposal Submittals and Submittal Procedure

2.9.1 Submittals to be provided with the Bid

Because certain aspects of the project can be more readily defined by the Subcontractor's expertise, experience, and preference, proposals for provision of the following items are to be provided in the form of submittals with the Bid Proposal:

- Construction Schedule that demonstrates the Subcontractor's ability to complete the entire Work by September 20, 2014, and anticipated work force in hours per week;
- Proposed off-site material source(s);
- Removal Action Work Plan which addresses project approach; and
- A Storm Water Management and Erosion and Sediment Control Plan.

2.9.2 Submittal Procedures

Other technical and general submittals are addressed in specific Sections of these Specifications along with the required submittal time frame. Submittals shall be prepared in accordance with the Construction Contract and the following requirements:

- The Subcontractor shall provide to URS, electronic copies and two hard copies of all submittals;
- Technical and general submittals shall be numerically serialized by type, Technical Submittals with a "T" prefix (T-1, T-2 T-3, etc.) and General Submittals with a "G" prefix (G-1, G-2, G-3, etc.);
- URS will clearly label the technical and general submittals as follows and return to the Subcontractor after 5 working days or with reasonable promptness as provided in the Construction Contract:
    1. Accepted
    2. Accepted as noted
    3. Revise and Resubmit
    4. Rejected
    5. Information Only
- When submittals are returned marked with either "Revise and Resubmit" or "Rejected" the Subcontractor shall make such revisions and corrections as required and resubmit the submittal with the same submittal number followed by R-1 (Revision One). Example: T-5 – R-1;
- Acceptance of submittals by URS does not constitute acceptance of Work not in compliance with the Construction Contract Documents.

2.9.2.1 Technical Submittals

The Subcontractor shall prepare and submit a Technical Submittals Schedule within 5 days after Award of Contract and Notice to Proceed listing all technical submittals required. The Technical Submittals Schedule shall separate submittals by major Specification Sections. This schedule shall include anticipated submittal delivery dates based on the schedule, material delivery dates, and other pertinent data required such that the project schedule can be reasonably met by the Subcontractor.

2.9.2.2 Shop Drawings

Shop drawings shall establish the actual detail of all manufactured or fabricated items, indicate proper relation of adjoining Work, and incorporate minor changes of design or construction to suit actual field conditions. Shop Drawings shall be drawn to scale and shall be completely dimensioned. Sheet sizes of shop drawings shall be 8 ½ inches by 11 inches, 11 inches by 17 inches, or 22 inches by 34 inches. Shop drawings shall be submitted to URS in electronically reproducible form, together with two black line, blue line, or color prints. After URS completes the review of shop drawings, copies, as provide in the Construction Contract, will be returned to the Subcontractor indicating the acceptance status described in Section 2.9.2 – Submittal Procedures of these Specifications.

2.9.2.3 Product Data

Product data shall be marked to identify applicable products, models, options and other data. Manufacturer's standard data shall be supplemented to provide information unique to the Work. Where product data includes Certificates of Compliance, such Certificates shall clearly identify the applicable materials and reference the applicable Section of these Specifications. The Subcontractor shall submit Manufacturer's printed instructions for delivery, storage, shelf life, assembly, installation adjusting, and finishing.

2.9.2.4 Design Calculations and Design Drawings

Design calculations shall be submitted to URS for review with all pertinent data, assumptions, objectives, criteria, applicable codes, standards, and references. Each design calculation set shall bear page numbers, titles, revision numbers, date, and calculation number. Technical design calculations shall be prepared by or under the direct supervision of a Professional Engineer, who will stamp the calculation.

Design drawings shall meet the requirements of Section 2.9.2.2 – Shop Drawings, of these Specifications. Technical design drawings shall be prepared by or under the direct supervision of a Professional Engineer, who will stamp the drawings.

2.9.3 General Submittals

The Subcontractor shall prepare and submit a Schedule of General Submittals within 5 days after Award of Contract and Notice to Proceed listing all General Submittals required by these Specifications. General Submittals include construction and delivery schedules, progress payment invoices, forms, test data and reports describing the Subcontractor's Work plan(s), such submittals shall contain sufficient detail to provide the following:

- An indication to URS that the finished Work and/or materials will comply accurately with the Contract Documents;
- A basis for determining the progress and payment of the Work, and;
- A basis for evaluating the Subcontractor's internal planning activities.

Construction and delivery schedules shall be in a reproducible form and all of the same scale. Unless otherwise specified, the schedules shall be presented in graphic format using the Microsoft Project computer code or in a similar format acceptable to URS. The construction schedule shall be updated weekly and submitted to URS for review.

General submittals may contain drawings and/or sketches depicting the Subcontractor's proposed activities, techniques, or methodologies. Such drawings shall be submitted in general conformance with the requirements of Section 2.9.2.2 – Shop Drawings, of these Specifications.

2.10 Concurrent Work

URS, Hi-Tec, TDCC, or their Subcontractors may be engaged in work in the general areas covered by the Work under this Contract. It should be noted that Hi-Tec will provide the (exterior) resurfacing treatment for the prepared subgrade under dismantled Building C after the Subcontractor has prepared the (backfill) subgrade as shown on the Removal Action Drawings. Such personnel will have access to the areas and to all existing Site utilities. The Subcontractor shall cooperate and coordinate its work to appropriately utilize the available areas, roadways and facilities. Coordination shall be through the URS Representative.

The Subcontractor is made aware that there are several roadway, utility, train track, and other improvements expected to occur near the Site during the duration of the Contract. The Subcontractor shall coordinate their work with roadway improvements, utility projects, or any other improvement projects being conducted near the Site by adjacent property owners or local municipalities or utility companies. No additional allowance will be made for schedule delays that result from other improvement projects being conducted near the Site.

2.11 Punch List

Prior to completion of the Work, the Subcontractor shall request a written “punch list” from URS. URS will provide a punch list describing Contract items that are incomplete and reasons why the Work is incomplete. The Subcontractor shall make the Work items complete in accordance with the Construction Contract Documents prior to final acceptance.

2.12 Measurement and Payment

No separate measurement or payment will be made for development, administration, management or compliance with the General Requirements in Section 2.0. Compliance will be considered incidental to the Work.

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3.0 MOBILIZATION AND DEMOBILIZATION

3.1 General

This Specification section describes the requirements for Mobilization and Demobilization related items. Incidental work not mentioned elsewhere in the Contract Documents is to be included in this item. The Work shall be conducted in accordance with this Specification, Sections 2.1.3 – Housekeeping and Cleanup, 2.1.4 – Spills and 2.1.5 – Environmental Quality and Health Protection, of these Specifications, and appurtenant Removal Action Drawings.

A space at the Site will be provided for the Subcontractor's construction staging and equipment storage area, as shown on the Removal Action Drawings. The Subcontractor is responsible for the security of equipment, materials and instruments brought to the Site, and shall accept the liability for damage including, but not limited to, negligent damage, vandalism, theft, fire or loss of equipment during execution of project Work.

All products shall be stored in the Staging Area in such a manner that conforms to local, county, state and federal regulations. The Subcontractor shall be responsible for the disposal of used construction materials, PCB waste materials, used petroleum products, sewage and any other trash and discarded materials. The disposal of PCB waste materials generated by the Subcontractor's operations shall be in accordance with applicable federal, state, and county requirements.

All equipment operated on existing Site concrete surfaces shall be rubber tired or tracked to prevent damage to existing surfaces. Equipment with metal tracks or grousers may be permitted by URS if the surface or equipment is adequately padded and/or protected.

3.2 URS Trailer

The Subcontractor shall provide a temporary office trailer solely for URS personnel's use during the Work. At a minimum, the trailer should be 8'x20' with central air conditioning; plan tables, chairs, high-speed internet connections, and electrical outlets to accommodate at least 3 employees and computers; one printer; windows; and 8' ceiling height.

3.3 Measurement and Payment

Measurement of Mobilization/Demobilization will be made in accordance with the progress of the project as outlined in Table 3-1:

Table 3-1 – Measurement of Mobilization/Demobilization

Work Completed	Percent of Lump Sum Price for Mobilization/Demobilization
Mobilization of equipment to Site.	50%
Completion of 25% of the original contract price.	25%
Completion of Demobilization Activities.	25%

Note:
% = percent

The Lump Sum bid price for Mobilization/Demobilization shall include all costs associated with mobilization and demobilization of equipment, URS trailer, personnel, fuel, supplies and incidental items, including acquisition of necessary permits, adherence to all regulations described in this section and any and all related cost required to make the Work complete.

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4.0 DEWATERING, STORM WATER MANAGEMENT, AND EROSION AND SEDIMENT CONTROL

4.1 General

This Specification section describes the requirements for storm water management and erosion and sediment control related items. The Subcontractor shall be responsible for all storm water management and erosion and sediment control related to Work activities at and surrounding the Site during the course of the Contract.

4.2 Submittals

Submit the following in accordance with Section 2.9.2 – Submittal Procedures.

- The Subcontractor shall prepare and submit to URS within 10 days of award of the Contract, a Storm Water Management, Erosion, and Sediment Control Plan including drawings showing the location and proposed methods for controlling erosion consistent with the project requirements and the applicable federal, state and local laws and regulations. At a minimum the plan shall include phasing the erosion and sediment control methods to be consistent with the sequence of construction activities, typical details, manufacturer's information for materials and layouts for proposed erosion and sediment control methods.
- The Subcontractor shall submit manufacturer data for erosion control products to verify conformance with these Specifications.

4.3 Storm Water Management and Erosion and Sediment Control

4.3.1 General

This Specification section describes the requirements for furnishing all equipment, labor and materials and performing all construction operations in connection with temporary measures for the control of erosion, sedimentation and other pollutants during construction. The Work includes installation of these temporary measures, maintenance of the measures during the Contract period to ensure proper function and removal of temporary measures in coordination with installation of permanent erosion control measures. URS' acceptance of the Subcontractor's Storm Water Management and Sediment and Erosion Control Plan, shall not relieve the Subcontractor, in any way, from full responsibility for providing and maintaining adequate and effective Storm Water Management, Erosion, and Sediment Control during the term of the Contract.

The Subcontractor shall manage all storm water on the Site such that a PCB-contaminated water waste stream is not created. For this reason, stockpiling of PCB waste material or material that is otherwise to be removed from the Site is strongly discouraged. Storm water contaminated from spills, contact with PCB waste materials, stockpiles, trucks, or any other means shall be collected prior to travelling offsite and stored as investigation derived waste (IDW) for testing and disposal in accordance with Section 11.0 of the Specifications. Locations of IDW storage and temporary stockpiles shall be equipped with approved secondary containment measures. Excavations shall be covered during rain events to prevent storm water contact with contaminated soil. Care shall be taken not to saturate the interior or exterior excavated areas or allow water to pond to an extent that it cannot be absorbed by subsequent soil removal. The Subcontractor's Storm Water Management, Erosion, and Sediment Control

Plan shall address the proposed methods and/or controls required to prevent runoff contamination and collect and store contaminated water as IDW, should the need arise. The Subcontractor shall provide, implement and maintain all such controls necessary to meet the requirements of any pertinent federal, state, or local regulations, as it relates to the Contract Work, including erosion control measures installed in existing drainage channels leading from Work areas.

4.3.1.1 References

The latest issue of the specification, publication, standard or permit listed below for all materials and operations forms a part of this Specification. The publications are referred to in the text by the basic designation. In case of a conflict between the referenced publication or standard and this Specification, the more stringent requirements, as determined by URS shall govern.

Colorado Department of Transportation Erosion Control and Stormwater Quality Guide, As Revised.

4.3.2 Materials

Key measures that should be used at a minimum are described in the sections below.

4.3.2.1 Materials for Sediment Control

Materials for use as temporary or permanent measures to control erosion and sedimentation include straw bales, straw waddles, silt fences, brush barriers, temporary earthen dams, sediment traps, water bars, erosion control matting and other stabilization materials.

Silt fabric shall meet the criteria in Table 4.1 or other criteria as proposed in the Subcontractor's submittal and accepted by URS:

Table 4-1 – Silt Fence Fabric Specifications

Property	Test Method	Requirement
Mechanical Properties		
Tensile Strength (Grab)	ASTM D 4632	144/115 lbs. Min
Elongation	ASTM D 4632	49 % Min
Mullen Burst	ASTM D 3786	225 lbs. Min
Endurance Properties		
U.V. Resistance	ASTM D 4355	70% Min
Hydraulic Properties		
Apparent Opening Size (AOS)	ASTM D 4751	30 US Standard Sieve Max
Water Flow Rate	ASTM D 4491	20 gpm/ft^2 Min

Notes:
% = percent
ASTM = American Society for Testing and Materials
gpm/ft^2 = gallons per minute per square foot
lbs = pounds
Max = maximum
Min = minimum
US = United States
U.V. = ultraviolet

The most recent version or revision of the ASTM standards shall be used throughout.

4.3.3 Execution

Procedures for installation, maintenance and removal of temporary erosion control methods shall generally conform to the guidelines contained in the *Colorado Department of Transportation Erosion Control and Stormwater Quality Guide.* The specific practices and methods to be implemented depend on the Subcontractor's construction procedures, sequencing and general approach to the project.

The excavation and movement or placement of soil materials shall be sequenced and completed expeditiously so that only small areas will be unprotected from stormwater or construction water for short time periods.

Silt fences and straw bale filters (if utilized) should be used to trap sediment from areas of runoff. Sediment filters must be properly anchored and/or secured to prevent erosion beneath them. The Subcontractor shall inspect, clean and repair sediment traps as necessary after each storm event that causes sediment movement.

Silt fences (if utilized) shall be installed at the lower edge, downstream of the work area. The Subcontractor shall inspect and repair fences after each storm event that causes sediment movement or at least every one week. Sediment shall be removed when one-fourth of the height of the fence has been filled. Removed sediment shall be deposited in the common fill or as designated by URS.

All temporary erosion and sediment control measures shall be removed and disposed of or salvaged for reuse as permanent measures are being installed. Both operations shall be coordinated to prevent erosion or other damage to the finished grading. Trapped sediment or other disturbed soil areas shall be permanently stabilized to prevent further erosion and sedimentation.

4.4 Measurement and Payment

Measurement and payment for Storm Water Management, Erosion, and Sediment Control shall be made on a lump sum basis and shall include all costs associated with preparing a plan, furnishing products and materials, labor, tools, equipment (including pumps, appurtenances and pumping activities and maintenance as may be required), accessories, backup equipment, sediment removal, dewatering excavations, removal of temporary controls, installation of permanent erosion controls and any and all other associated costs required to make the Work complete. No additional allowance will be made for management of storm water, schedule disruptions, and/or damage repair work required due to upset conditions or extreme rainfall events.

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5.0 CONSTRUCTION WATER AND DUST CONTROL DURING CONSTRUCTION

5.1 General

This Specification section describes the requirements for Dust Control related items during the removal action. The Work shall be conducted in accordance with this Specification and appurtenant Removal Action Drawings.

5.2 Execution

Fugitive dust from construction activities will be controlled by vehicle speed, sprinkling water or accepted dust palliatives applied by the Subcontractor. If, during times of dry conditions and/or high wind, the release of fugitive dust becomes uncontrollable, URS may request that the Subcontractor temporarily suspend construction activities until dust releases can be controlled or atmospheric conditions improve. No compensation will be made to the Subcontractor for the suspension of Work to comply with air quality requirements due to atmospheric conditions or excessive dust releases.

The Subcontractor shall be responsible for providing adequate dust control measures, as necessary, seven (7) days a week, during the term of the Contract at the Site.

Uncontaminated water, i.e., city or tap water, shall be used for all construction activities and dust abatement. Uncontaminated construction water to be utilized for soil moisture conditioning and dust abatement will be made available by Hi-Tec Plastics, Inc**.** in accordance with Specification Section 2.5. Dust control shall consist of furnishing equipment, additives, accessories and incidentals, as well as providing proper and efficient application measures, wherever and as often as necessary, to reduce dust nuisance and prevent dust originating from construction activities, or from natural causes, on the Site. Dust control and construction water shall be applied by means of pressure-type distributing equipment, such as vehicles designed specifically for the application of water, pipelines equipped with effective spray systems, misting systems or hoses with nozzles, to provide uniform water application. Every effort shall be made to limit and carefully control the amount of water used to suppress dust within excavation areas. All equipment used for the application of water shall be water tight and shall be equipped with a positive means of shut-off. All equipment shall be in good operating condition for applying water on the project at all times. Additionally, the Subcontractor shall meter and/or supply URS with load counts for water usage daily or at an agreed upon frequency.

5.3 Measurement and Payment

Measurement and payment for construction water and dust control during construction shall be incidental to the construction activities. All costs associated with obtaining and applying construction water and dust control shall include furnishing and operating all materials, labor, tools, and equipment required to comply with this Specification.

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6.0 SITE PREPARATION

6.1 General

This Specification section describes the requirements for preparing the Site prior to any demolition, remediation, or excavation activities. Site preparation activities include installation of hanging plastic sheets for dust containment, abandonment of select existing wells, establishment of exclusion zones, and complete utility shutdown to the Site buildings.

6.2 Traffic Control

The Subcontractor shall be responsible for signage required at ingress and egress locations of the Site in accordance with Manual on Uniform Traffic Control Devices (MUTCD) standards and standard construction site practices. The Subcontractor shall be responsible for maintaining access to the Site for equipment, material deliveries, and other vehicles necessary to make the Work complete. Traffic control shall be coordinated with Hi-Tec in accordance with Section 2.3 of these Specifications. The proposed onsite and offsite haul route for earthwork materials described in Section 12.0 shall be submitted to URS for approval. Prior to mobilization, the Subcontractor shall submit a Traffic Control Plan showing, at a minimum, proposed access routes, signage, staging and laydown areas, trailer locations, and parking for URS approval.

6.3 Plastic Sheets for Dust Containment

Prior to demolition or excavation work, plastic sheets shall be installed between Building D and Building E, and between Building E and F to create a barrier to dust and particulate matter generated from demolition and excavation activities. Plastic sheets shall be installed such that subsequent removal of the plastic sheets does not cause damage to existing buildings. Dust or particulate matter that travels from the Work area to Building E shall be removed and the Building E area shall be cleaned to the extent practicable at no cost to URS or TDCC. Upon removal, the plastic sheet shall be considered IDW and disposed in accordance with Section 11.0.

6.4 Abandon Existing Shallow Groundwater Monitoring Wells

Prior to commencing demolition activities, groundwater monitoring wells identified within the demolition area shall be properly abandoned to seal off potential conduits to the subsurface in accordance with Rule 16 of the Colorado Water Well Construction Rules. Wells to be abandoned are shown on the Removal Action Drawings. Well construction details are described in Table 6-1.

Table 6-1 – Well Construction Details

	Well Diameter	Total Depth (bgs)	Screened Interval (bgs)	Static Water Level (bgs)
BH05	1 inch	22 feet	12-22 feet	~16 feet
BH06	1 inch	19.5 feet	9.5-19.5 feet	
SMW-05	1inch	20 feet	10-20 feet	

Notes:

bgs = below ground surface

The saturated portion of the screen interval shall be filled with clean, silica sand and the unsaturated portion of the screened interval and the entire solid casing shall be filled with hydrated bentonite to ground surface. Either bentonite-grout slurry or chips are acceptable; however, if chips are used, then the chips shall be wetted at regular lifts between 3 and 4 feet. Then the upper portion of the well casing and well vault shall be removed during demolition activities, and restored to approximately match surrounding conditions (e.g., soil, or concrete). The Well Abandonment Report (form GWS-09) will be prepared for each well and will submitted by URS.

6.5 Exclusion, Contaminant Reduction, and Support Zones

The Subcontractor shall accommodate air sampling activities by the URS Representative on an as-needed basis. The work zone areas shall be indicated in the Subcontractor's HASP and be clearly delineated in the field, and the locations of such work zones shall be reviewed during the daily tailgate meetings at the start of each day of work at the Site. Although the Site is not considered a hazardous waste site, certain precautions (such as the work zones described below) will be followed due to the presence of PCBs. Work zones shall be established to limit potential hazards to Site workers or visitors and to keep unauthorized employees or members of the public out of the work areas. Work zones are also used to clearly define areas where removal action activities are occurring. Work zones are described as follows:

- The Exclusion Zone (EZ) – the extent of this area shall be dictated by the active excavation areas and PCB waste material stockpile areas. This zone is where potentially PCB waste material contaminants and physical hazards to the workers shall be contained. Appropriate PPE, as described in the Subcontractor's HASP, is required in this area. The size of the EZ may be altered to accommodate Site conditions and to contain contaminants as requested by the URS Representative.
- The Contaminant Reduction Zone (CRZ) – a corridor leading from the EZ will be defined. The CRZ shall lead from the work area to a break area. All personnel decontamination activities shall occur in the CRZ (e.g., making sure no mud is tracked out on workers' boots). A waste container shall be placed at the end of the corridor between the CRZ and EZ so that contaminated disposable equipment can be placed inside and covered. Surface/soil contamination in this area shall be controlled using plastic sheeting. No one will be permitted into the CRZ or EZ unless he/she is in full compliance with the Subcontractor's HASP requirements.
- The Support Zone (SZ) – the outermost part of the Site shall be defined as the SZ for each field activity. Support equipment is located in this uncontaminated or clean area. Typical work clothes are appropriate within this zone. The location of this zone depends on factors such as accessibility, wind direction (upwind of work area), and resources such as roads, shelter, and utilities.

High-visibility barriers, cones, and/or tape/flagging shall be used to delineate the work zones. Barriers shall be set up to provide sufficient maneuvering space for personnel and equipment and to confine the contaminants to the EZ/CRZ. A short piece of barricade tape may be affixed to a secure upright fixture to monitor wind direction throughout the day. A 5-foot opening in the barricades at the support zone (upwind of the work area) will serve as the personnel entry and exit point.

6.6 Utility Shutdown

Prior to commencing demolition activities, Site utilities associated with the work area, buildings, or any utilities that may be encountered during the Removal Action shall be shut down and temporarily decommissioned for the duration of the Contract. The Subcontractor shall work with utility providers to coordinate proper shutdown of utilities included but not limited to natural gas, water, and electric. Standard lockout/tagout procedures shall be followed in accordance with the Subcontractor's HASP.

6.7 Measurement and Payment

Measurement and payment for Site Preparation shall be made on a lump sum basis and shall include all costs associated with activities including installation and maintenance of plastic sheets for dust containment, installation, operation and maintenance of required personnel decontamination areas, abandonment of select existing wells, establishment, operation and maintenance of exclusion, contamination reduction and support zones, and complete/verify utility shutdown to the Site buildings.

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7.0 REMOVE PCB-CONTAMINATED MATERIAL FROM BUILDING INTERIORS

7.1 General

This Specification describes the requirements for removing PCB contamination associated with dust particulates, stains, or other sources of PCB contamination from the buildings. For the purpose of this Specification Section, the term “building(s)” shall be defined as interior walls, floors, ceilings, structural members, permanent equipment and appurtenances, air ducts, or any other visible or non-visible surface with which interior air may come in contact. The Work shall be broken into phases such that Phase I consists of removing PCB-contaminated material from walls, ceilings, and other surfaces of Buildings B, C, D, and F in accordance with this Specification Section. Phase II Work shall consist of removing PCB-contaminated material from walls, ceilings, and other surfaces of Buildings E, G, H, and I in accordance with this Specification Section. To improve industrial hygiene for Site workers during other portions of the Work, Phase I shall commence after plastic sheeting is hung per Specification Section 6.2. Phase II may occur with any other portion of the Work provided that the Work may be completed safely and without schedule delays, e.g. Phase II may be completed during concrete demolition or excavation. Cleaning the buildings will require close coordination with URS. After construction is complete, Buildings B, D and F shall receive a final cleaning to remove construction dust and debris as well as any residual PCB contamination. Upon final cleaning, the URS representative will verify that the walls, ceilings, appurtenances, and floors of Buildings B, D, and F meet the cleanup objectives. If cleanup objectives are not met further cleaning will be required in discrete locations. Additional dust containing PCB material shall be removed by the Subcontractor to the levels specified in this Section of the Specifications as requested by the URS representative.

7.2 Execution

Prior to initiating Phase I or II of cleaning, the Subcontractor shall verify access to all portions of the buildings’ air ducts, ceilings, floors, walls, equipment, or any other portion of the Site to be cleaned. The Subcontractor shall examine HVAC air-distribution equipment, ducts, plenums, and system components. Existing service openings shall be identified for physical and mechanical entry and inspection. Portions of the Site that the Subcontractor deems not accessible for reasons of structural instability or that cannot be accessed for safety reasons shall not be cleaned. If the Subcontractor deems any portion of the air duct system inaccessible, Subcontractor shall notify the URS Representative prior to proceeding.

The Subcontractor shall remove visible surface contaminants and deposits using a vacuum with a HEPA filter, wiping, or any other mechanical means that will not create contaminated airborne particulates. The buildings shall be cleaned using source-removal mechanical cleaning methods designed to extract contaminants from building surfaces and to safely remove these contaminants from the facility. The use of water, chemicals, or any other liquids will not be allowed for cleaning the walls so as to prevent the potential of creating another PCB-contaminated waste stream. No cleaning method, or combination of methods, shall be used that could potentially damage any portion of the buildings. Damage to buildings shall be repaired and/or replaced by the Subcontractor at no cost to URS.

For particulate collection equipment, the Subcontractor shall include adequate filtration to contain debris removed. The equipment shall be located downwind and away from all air intakes and other points of entry into the buildings. HEPA filtration with 99.97% collection efficiency for particles sized 0.3 micrometer or larger shall be used. Debris removed shall be containerized and disposed of according to Specification Section 11.0.

The Subcontractor shall remove the visible surface contaminants such that "high contact" surfaces, i.e. walls, floors, or other areas in which human contact is likely during the serviceable life of the building, do not contain PCBs at a surface concentration above 10 micrograms per one hundred square centimeters (10 µg/100 cm^2) as determined by the confirmation wipe sampling performed by URS. The Subcontractor shall remove the visible surface contaminants such that "low contact" surfaces, i.e. ceilings, air ducts, or other areas in which human contact is not likely during the serviceable life of the building, do not contain PCBs at a surface concentration greater than 100 µg/ 100 cm^2 as determined by the confirmation wipe sampling performed by URS. The Subcontractor shall make surfaces available to the URS Representative for sampling at the request of the URS Representative.

7.3 Measurement and Payment

Payment for Removal of PCB-Contaminated Material from Building Interiors shall be made on a lump sum basis and shall include all costs associated with activities including labor, materials, equipment, removal of PCB-contaminated materials from Site buildings, containerizing contaminated materials removed, and any work required to comply with this specification and any and all incidental costs required to make the Work complete.

Measurement of Removal of PCB-Contaminated Material from Buildings will be made in accordance with the progress of the project as outlined in Table 7.1:

Table 7-1 – Measurement of Removal of PCB-Contaminated Material from Buildings

Work Completed	Percent of Lump Sum Price for Removal of PCB-Contaminated Material from Buildings
Completion of Phase I	25%
Completion of Phase II	65%
Completion of Construction Activities and Final Cleaning	10%

Notes:
% = percent
PCB = polychlorinated biphenyl

8.0 SELECTIVE DEMOLITION – SUPERSTRUCTURE BUILDINGS

8.1 General

This Section specifies the procedures for demolishing buildings and Site improvements including steel buildings and associated foundations. Requirements for protecting individuals, adjacent buildings, and remaining Site improvements during demolition operations are also addressed, along with maintaining means of egress and provisions for the continued occupancy of adjacent buildings.

8.2 Submittals

Submittals shall be made in accordance with Specification Section 2.9. The Subcontractor shall submit the following items:

- The Subcontractor shall submit within 10 days after award of the Contract, a detailed Superstructure Demolition Plan of the proposed methods of building demolition and include, at a minimum, proposed equipment and removal methods, measures proposed for protecting individuals, property, and adjacent buildings, noise control, dust control, locations of construction barriers, and any other environmental protection measures deemed necessary to safely complete the Work.

8.3 Execution

The Subcontractor shall disassemble Building C, including but not limited to wall panels, ceiling panels, structural members, utilities, miscellaneous debris/equipment and above-grade foundations. Utilities shall be capped and abandoned in accordance with standard construction practices. Cut off pipe or conduit a minimum of 24 inches below grade where feasible. Cap, valve, or plug and seal remaining portion of pipe or conduit after bypassing according to requirements of utility authorities having jurisdiction. If removal, relocation, or abandonment of utility services will affect adjacent buildings, then provide utilities that bypass Building C and that will permanently maintain continuity of service to other buildings.

The location of Building C is shown on the Removal Action Drawings. The building and any protruding portions of the building foundation shall be removed prior to any excavation or remediation activities occurring. Building demolition waste shall be sized and loaded for disposal in accordance with Specification Section 11.0. Building demolition waste must be expeditiously removed from the Site, i.e., long term stockpiling will not be accepted. The building shall be demolished and components sized for disposal to fit in a roll-off container, in accordance with Specification Section 11.0, by mechanical or torch cutting methods. Explosives or other destructive means of demolishing the building will not be allowed. The Subcontractor shall protect adjacent buildings. The Subcontractor may submit photographs prior to demolition showing existing conditions of adjoining construction and Site improvements, including finished surfaces, that might be misconstrued as damage caused by demolition operations. Damage to adjacent buildings or other Site features, including but not limited to walkways, loading docks, and building entries, shall be repaired by the Subcontractor at no cost to URS. The Subcontractor shall engage a “competent person” to perform an engineering survey of the condition of the building to determine whether removing any element might result in structural deficiency or unplanned collapse of any portion of structure or adjacent structures during building demolition operation. The Subcontractor shall provide and maintain interior and exterior shoring, bracing, or structural support to preserve stability and prevent unexpected movement or collapse of construction being demolished.

An asbestos building evaluation was conducted on February 24, 2014. Results indicate that Asbestos-Containing Material (ACM) is not present with investigation and demolition areas. However, URS does not warrant or guarantee that ACM is not present in Building C or other buildings on the Site. If materials suspected of containing ACM or other hazardous materials are encountered, the Subcontractor shall immediately stop work and immediately notify the URS Representative.

Refrigerant is not expected to be encountered; however, if refrigerant is encountered in any portion of the building, the Subcontractor shall remove the refrigerant and provide a statement of refrigerant recovery signed by a refrigerant recovery technician responsible for recovering the refrigerant, stating that all refrigerant that was present was recovered and that recovery was performed according to EPA regulations. Include the name address of technician and date the refrigerant was recovered.

Erect temporary protection, such as walks, fences, railings, canopies, and covered passageways, where required by local codes and regulations. At a minimum, the Subcontractor shall:

1. Protect adjacent buildings and facilities from damage due to demolition activities.
2. Protect existing Site improvements, appurtenances, and landscaping.
3. Provide temporary barricades and other protection required to prevent injury to people and damage to adjacent buildings and facilities.
4. Protect walls, windows, roofs, and other adjacent exterior construction that are to remain and that are exposed to building demolition operations.

The Subcontractor shall demolish Building C completely except for the common wall shared with Building D. Use methods required to complete the Work within limitations of governing regulations and as follows:

1. Do not use cutting torches until work area is cleared of flammable materials. Maintain portable fire-suppression devices during flame-cutting operations.
2. Maintain fire watch during and for at least 1 hour after flame cutting operations.
3. Maintain adequate ventilation when using cutting torches.
4. Locate building demolition equipment and remove debris and materials so as not to impose excessive loads on supporting walls, floors, or framing.
5. Mechanical shearing equipment (if used) shall be suitably sized to safely reduce the largest building components into manageable sizes for disposal. Care shall be taken when operating shear equipment to protect ground personnel and equipment operators from shrapnel and flying debris.

The Subcontractor shall proceed with demolition of structural framing members systematically, from high to lower level. Complete building demolition operations above each tier before disturbing supporting members on the next lower level. Abandon existing utilities and below-grade utility structures. Cut below-grade construction flush with grade. Adjacent structures shall be cleaned of dust, dirt, and debris caused by building demolition operations. Return adjacent areas to condition existing before building demolition operations began.

8.4 Measurement and Payment

Measurement and payment for Selective Demolition – Superstructure Buildings shall be made on a lump sum basis and shall include all costs associated with activities including labor, materials, equipment, building demolition, stockpiling, loading, debris removal, foundation demolition, utility demolition and abandonment, permanent utility bypasses and any work required to comply with this specification and any and all incidental costs required to make the Work complete.

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9.0 SELECTIVE DEMOLITION – INTERIOR SLAB ON GRADE

9.1 General

This Section specifies the procedures for demolishing concrete slabs that are contaminated with PCBs and other concrete demolition required by other sections of these Specifications. Requirements for protecting individuals, adjacent buildings, and remaining Site improvements during demolition operations are also addressed as are maintaining means of egress and provisions for the continued occupancy of adjacent buildings.

9.2 Submittals

Submittals shall be made in accordance with Specification Section 2.9.

The Subcontractor shall submit the following items:

- 10 days prior to beginning any of the Work in this Specification Section, the Subcontractor shall submit for URS review and approval a description of the proposed methods of concrete demolition and include, at a minimum, proposed equipment and removal methods, measures proposed for protecting individuals, property, and adjacent buildings, noise control, dust control, locations of construction barriers, and any other environmental protection measures deemed necessary to safely complete the Work.

9.3 Execution

9.3.1 Double Tee Wall Foundation Test Pad

Currently, the extent of the foundation below double tee walls is unknown to URS. Excavations adjacent to double tee walls were designed by URS based on assumptions about the existing wall foundation. Prior to other demolition or excavation activities occurring, URS must first verify assumptions regarding the existing foundation. In order to expose a portion of the double tee wall foundations for investigation by URS, the Subcontractor shall demolish, remove, and dispose of concrete slabs and excavated soil materials on each side of the wall equally to expose the top of the existing foundation. The Subcontractor is cautioned that the existing concrete floor slab(s) may or may not contain reinforcing steel. No reinforcement steel was encountered during investigation borings; however no warranty is provided that any or all areas designated for demolition do not contain reinforcement. Test pad soil excavation shall be conducted in accordance with Section 10.0 of these Specifications and concrete demolition shall be conducted in accordance with Section 8.0 of these Specifications. The top of the existing footing on both sides of the wall shall be exposed so that URS may determine the lateral extents of the footing on both sides. The test pad shall be excavated for 5-feet along the wall and 10 feet perpendicular to the wall on either side. The test pad shall be located in an area where two wall panels meet to determine if the foundation is a continuous strip footing or if there are discontinuities in the foundation between wall panels. The location of the test pad shall be along the wall as shown on the Removal Action Drawings and approved by the URS Representative. URS will review the excavation design assumptions and advise Subcontractor on how to proceed within 5 days of the test pad completion. During URS's review, the Subcontractor may begin any other portion of the Work except for demolition and excavation within 10 feet of double tee walls.

9.3.2 General Demolition

The Subcontractor shall demolish, remove, and dispose of concrete slabs as shown on the Removal Action Drawings and described in this Specification Section. Disposal of concrete materials shall be in accordance with Specification Section 11.0. In areas where soil will be excavated beneath concrete, the extents of concrete demolition will be contingent upon the required excavation extents described in Specification Section 10.0 and in accordance with excavation details in the Removal Action Drawings. Except in locations directly adjacent to walls, concrete shall be removed such that there is a 10 foot buffer zone of undisturbed soil/subgrade between the soil excavation extents and the sawcut line. Where Subcontractor sawcuts or otherwise demolishes concrete, the edges of the existing concrete shall be protected from chipping or spalling to provide a smooth, sound surface at the joint between existing and new concrete described in Specification Section 13.0. The edges shall be protected especially at points of ingress and egress to the excavation areas by an earthen ramp or other approved method. Sawcutting activities shall be conducted with a water cooled saw blade to minimize airborne contamination. Water from equipment shall be managed in accordance with Section 4.0 and Section 5.0 of these Specifications. Hydraulic Breaker or Jack Hammer-type equipment shall be used to break the removed concrete into manageable size so that concrete may be loaded. Selective demolition equipment shall be located and operated so as not to impose excessive loads on supporting or adjacent walls, floors, or framing. Openings to remain shall be temporarily covered. Demolished debris shall be immediately loaded and removed from the Site in accordance with Section 11.0. In general, no stockpiling of concrete debris will be allowed. In the event that demolished debris must be stockpiled onsite for unforeseen reasons, debris shall be stored such that contact with wind or water is minimized. No stockpiling of concrete material will be allowed without the URS Representative's approval. If stockpiling is approved, the Subcontractor shall provide primary and secondary containment for any PCB-contaminated materials that are stockpiled onsite.

Subcontractor shall make demolished concrete debris adjacent to the sawcut line available to the URS Representative for confirmation sampling. Subcontractor shall continue to increase the extents of the concrete demolition above and beyond those extents shown on the Removal Action Drawings or as required by other Sections of these Specifications until the URS Representative deems that the PCB-contaminated concrete has been removed.

Subcontractor shall verify that utilities have been disconnected and capped prior to beginning selective demolition operations. Existing conditions and sawcut extents shall be surveyed to determine the extent of selective demolition required. When unanticipated mechanical, electrical, or structural elements that conflict with intended function or design are encountered, the Subcontractor shall investigate and measure the nature and extent of conflict. A written report of such conflict shall be submitted to URS for review and resolution.

Selective demolition and debris-removal operations shall be conducted such that interference with roads, streets, walks, walkways, and other adjacent structures is minimized. Subcontractor shall provide temporary barricades and other protection required to prevent injury to people and damage to adjacent buildings and facilities to remain. Damage to adjacent buildings, foundations, utilities, or other portions of Site facilities shall be repaired and/or replaced by the Subcontractor at no expense to URS. Subcontractor shall clean adjacent structures and improvements of dust, dirt, and debris caused by selective demolition operations. Adjacent areas shall be returned to existing conditions before selective demolition began.

9.4 Measurement and Payment

Measurement for payment for the excavated materials will be made in cubic yards of materials excavated. The quantity for payment will be computed by the average end area or prismoidal methods, at the discretion of URS, based on surveys conducted by the Subcontractor before and after excavation as described in Specification Section 2.6. The unit price shall include costs associated with labor, equipment, sawcutting, mechanical sizing of debris, excavation, stockpiling, loading and onsite transportation, survey, and grade control activities required to comply with this specification and any and all incidental costs required to make the Work complete.

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10.0 EXCAVATION

10.1 General

This Specification section describes the requirements for excavation related removal of PCB-contaminated soils below grade and any other excavations required for completion of the Work.

10.2 Submittals

Submittals shall be in accordance with Section 2.9 of these specifications. The Subcontractor shall be responsible for the following submittal(s):

- At least 10 days prior to beginning any Work described in this Specification Section, the Subcontractor shall submit an excavation plan for URS review and approval that describes, at a minimum, proposed equipment to be used and proposed layback slopes and/or use temporary shoring methods including details and assumptions.

10.3 Execution

The anticipated excavation depth and extent are shown on the Removal Action Drawings. Excavation shall continue until sampling confirms that PCB concentrations are below 25 mg/kg between 0 and 1 foot bgs or below 100 mg/kg at depths greater than 1 foot, groundwater is reached, or until no longer deemed safe for personnel or building stability. The Subcontractor shall accommodate sampling activities conducted by the URS Representative to determine the concentrations within excavations. Additional safety measures (e.g., shoring, benching, and/or sloping) shall be implemented for excavation areas deeper than 4 feet per OSHA requirements.

The excavation extents are anticipated to be above the static water table (estimated to be between 13 and 16 feet below ground surface, based on measurements in nearby monitoring wells), and dewatering is not anticipated. Should precipitation collect in the excavation and come into contact with contaminated soil, the water will be removed from the excavation and stored as IDW for testing and proper disposal. If the Subcontractor stockpiles PCB waste material, the stockpile shall be limited to a minimal amount (< 10-cubic yards) and located within a vacant portion of the building out of the way of active excavation activities, to the extent practical. In general, stockpiling of contaminated materials is discouraged and will not be allowed without the approval of the URS Representative. Subcontractor shall provide primary and secondary containment for any PCB-contaminated materials that are stockpiled onsite.

Contaminated soil material shall be loaded directly into rolloff containers staged near the excavation areas. The methodology for conveying soil materials from the excavation site to the loadout point will be included in the Subcontractor's Work Plan submittal. The use of conveyor belts will not be allowed and the method chosen by the Subcontractor for conveyance must ensure that no contaminated material becomes airborne. The Subcontractor will coordinate with URS and Clean Harbors in the staging of containers and shall communicate and adjust excavation schedules to help ensure that a sufficient number of containers are onsite or can be scheduled for delivery and disposal. No additional claim for payment will be made by the Subcontractor for disruption in conveyance, loadout or disposal activities.

Although no existing as-built reference drawings are available, field observations indicate that the main building's walls are constructed from vertical load bearing concrete double-tees. The passive pressure of the subgrade (soil) on each side of the foundation footing at the bases of the double-tee walls shall be considered to be part of the primary load resisting system. Not more than three double-tee wall panels shall be exposed to open excavation at a single time

and approximately equal quantities of soil shall be removed from each side of the wall to prevent an unbalanced loading condition. The requirement for the number of double tee wall panels that may be exposed to open excavation at a single time may be reduced based on URS's examination of the foundation at the test pad described in Specification Section 9.3.1. Soils shall be excavated so that not more than a 2-foot differential in height is maintained from one side of the wall to the other. The extent of the excavation away from the face of the double-tee wall shall be greater than 3 feet and sloped, shored, or benched per OSHA requirements.

Excavation shall be conducted with adequately sized excavation equipment equipped with a "butter bar" or flat plate attached to the cutting teeth of the excavation bucket.

The initial excavation limits are shown on the Removal Action Drawings. Once the estimated extent of PCB-contaminated soils is excavated, soil samples for verification will be collected by the URS Representative to assess whether additional removal is necessary. Subcontractor shall provide survey coordinates for each sampling location as requested by the URS Representative in accordance with Specification Section 2.6. Verification sampling and analytical testing for PCBs activities may vary between 2 hours and 2 days for each sample. No additional compensation will be made to the Subcontractor for time or delays resulting from sampling and testing activities. The Subcontractor shall provide safe access to excavation areas and accommodate sampling activities conducted by the URS Representative to determine the concentrations within excavations. If additional excavation, horizontal or vertical, is deemed necessary based upon screening and analytical results, then the excavation, observation, and sampling process will continue until the confirmation sample results indicate the remedial goals and Remedial Action Objectives (RAOs) have been achieved or until safety and stability concerns prohibit excavation. The following RAO has been established for the Site:

- The goal of the removal action is to achieve a clean up level of 25 ppm at the surface and within the top twelve inches. Below the top twelve inches, the goal of the removal action is to achieve a clean up level of 100 ppm. All accessible contaminated soils and concrete at the Site will be replaced with clean soils and capped with concrete or asphalt.

Once the excavation objectives are achieved, as requested by the URS Representative, excavation activities shall be concluded and confirmation samples will be collected by the URS Representative from select locations along the excavation slopes and bottom to evaluate and confirm achievement of the remedial action objectives. Subgrades shall be approved by URS in writing. Sample locations and final excavation limits shall be surveyed by the Subcontractor per Specification Section 2.6. Subcontractor shall install safety signage, cones, tape, or other precautions around open excavation areas for the time between confirmation sample collection and determination that excavation can cease in the area. URS will expedite laboratory sample analysis, when possible. In general, provisions should be made to initiate backfill of all excavations as soon as possible after subgrade approval and survey measurements have been completed.

10.4 Measurement and Payment

Measurement for payment for the excavated materials will be made in cubic yards of materials excavated. The quantity for payment will be computed by the average end area or prismoidal methods, at the discretion of URS, based on surveys conducted by the Subcontractor before and after excavation as described in Specification Section 2.6. The unit price of materials shall include costs associated with labor, equipment, excavation, stockpiling, loading and onsite transportation, loadout staging coordination, subgrade preparation, survey, and grade control

activities required to comply with this specification and any and all incidental costs required to make the Work complete.

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11.0 WASTE DISPOSAL COORDINATION AND DECONTAMINATION

11.1 General

This Specification section describes requirements for the Subcontractor to coordinate with the waste disposal Subcontractor and requirements for decontamination of equipment.

11.2 Submittals

Submittals shall be in accordance with Section 2.9 of these Specifications. The Subcontractor shall submit the following:

- Within 10 days after the notice to proceed, Subcontractor shall submit a Decontamination Plan for URS approval that describes, at a minimum, the proposed location of decontamination activities, decontamination area arrangements and schematics, dry and wet weather decontamination procedures, maintenance activities, equipment to be used, and plans for decontamination area decommissioning.

11.3 Execution

PCB waste material generated from removal action activities and IDW will be hauled and disposed by Clean Harbors, Inc. (Clean Harbors). URS reserves the right to select another waste removal Subcontractor other than Clean Harbors at any time. Clean Harbors will send invoices directly to TDCC. Subcontractor shall coordinate their schedule with Clean Harbors to prevent delays in the project schedule. URS or TDCC will not be responsible for increased costs due to schedule delays that result from scheduling conflicts between the Subcontractor and Clean Harbors. URS will sign waste manifests as TDCC's agent in accordance with the Prime Contract between URS and TDCC, as necessary to dispose of waste materials. Clean Harbors will provide an onsite representative to coordinate the trucking scheduling. URS is anticipating that Clean Harbors will be able to provide trailers for disposal of building demolition debris discussed in Specification Section 8.0 and roll-off containers for demolition debris discussed in Specification Section 9.0 and excavated materials discussed in Specification Section 10.0. When the trailers/roll-offs are filled, the Clean Harbors representative will coordinate pickup of the filled trailer/roll-off for disposal and delivery of an empty trailer to the Site as needed. Clean Harbors will be responsible for moving, cleaning, storing, locking, securing, and placing empty and full trailers onsite for loading and temporary storage. Subcontractor shall immediately notify the URS Representative of faulty or otherwise damaged Clean Harbor property. If damage occurs to Clean Harbor equipment, trailers, trucks, or other property caused by the Subcontractor's activities and is not a direct result of faulty equipment, Subcontractor shall notify the URS Representative. Such damages shall be repaired and/or replaced by the Subcontractor at no cost to URS or Clean Harbors.

Excavated PCB waste material and demolished concrete shall be loaded by the Subcontractor into the lined roll-off bins or lined trucks provided by Clean Harbors. Stockpiled material shall be stored in a manner to eliminate the need for disposal trucks to enter the EZ, if applicable, thus eliminating the need to thoroughly decontaminate the haul trucks. Haul truck loading areas shall be routinely swept and cleaned to keep contaminated material off of truck tires. If excess residual soil is observed on a truck/trailer/rolloff, as determined by the URS Representative, the truck/trailer/rolloff shall be decontaminated before it leaves the Site. Decontamination shall consist of the removal of visible material from the outside surfaces of the disposal units. Decontamination shall be accomplished by dry decontamination methods consisting of

sweeping and collection of visible materials with brooms, whiskbrooms and dustpans or other suitable dry methods.

11.4 Decontamination

Clean Harbor and Subcontractor vehicles and equipment shall be decontaminated as needed by the Subcontractor in the CRZ in accordance with Section 6.5 of these Specifications. Trucks or equipment entering or leaving the site shall be inspected for signs of visible contamination at the request of the URS Representative. Tracking of sediment or other contaminated materials from wheels and tires shall be minimized to the maximum extent possible. Vehicle or equipment decontamination shall occur with the engine off and the emergency or hand break set. Decontamination shall include removal of visible dust, spilled material and sediments by dry methods only. Wet decontamination will not be allowed to prevent creation of another waste stream. Decontamination shall be performed on truck tires, wheel wells, mud flaps, the inside of fenders, tail gates, and any other portion of the vehicle or equipment where significant accumulations of dirt may be present. Decontamination materials shall be captured, stored, and disposed as PCB waste material in accordance with this Specification. A designated decontamination area shall in the CRZ shall be proposed by the Subcontractor and approved by URS. Subcontractor shall make equipment and vehicles available to the URS Representative for confirmation sampling of the decontaminated equipment as needed.

11.5 Measurement and Payment

Payment for Waste Disposal Coordination and Decontamination shall be on a lump sum basis. Costs for Waste Disposal Coordination and Decontamination shall include labor, equipment, and materials for the establishment and maintenance of truck loading areas, truck decontamination, loadout staging coordination, and any and all other activities required to make the Work complete.

12.0 Earthwork

Section includes backfilling and preparing subgrades for slabs-on-grade. In general, excavated areas shall be backfilled as soon as possible after URS has performed sampling that verifies that RAOs have been met and quantity surveys have been completed.

12.1 Definitions

Engineered Fill: imported soil material that meets or exceeds the requirements of Specification Section 12.3.1 to be used as backfill material.

Structures: Buildings, footings, foundations, retaining walls, slabs, tanks, curbs, mechanical and electrical appurtenances, or other man-made stationary features constructed above or below the ground surface.

Utilities: Onsite overhead and underground pipes, conduits, ducts, wires and cables, as well as underground services within buildings.

12.2 Submittals

- The Subcontractor shall submit a construction plan for earthwork at least fourteen (14) days in advance of the start of the activity covered in this Section. The plan must be approved by URS prior to any earthwork activities. The plan shall include the following, at a minimum:

1. Proposed soil sources, placement, compaction, and moisture control equipment, including equipment catalog with weight, dimensions, and operating data.
2. Proposed material stockpiling and staging plan describing handling and transport of off-site materials.
3. Proposed equipment and compaction methods to be used in various areas, e.g., adjacent to walls.

- The Subcontractor shall submit compaction results verifying compaction requirements including locations of samples to the URS Representative prior to beginning the next lift.
- Subcontractor shall submit soil test results prior to shipment of the material to Site in accordance with Specification Section 12.3.1.

12.3 Products

12.3.1 Soil Materials

Engineered fill soil material shall be obtained from an acceptable off-site source. The Subcontractor shall verify, by whatever means necessary (exploration borings and/or test pits and laboratory tests), that the proposed off-site soil material source contains an adequate quantity of uncontaminated material (free of volatiles, acid generating soils and/or hazardous organic and/or inorganic compounds) to complete the project. The material source shall consistently provide homogeneous material suitable for slab subgrade in conformance with these Specifications. Submittals for acceptance of Engineered Fill sources proposed for use by the Subcontractor shall include any boring logs and/or test pit logs, borrow area maps and supporting laboratory test data. The Subcontractor shall provide evidence of availability, right of access to private property including access by URS for sampling and testing, and its plan for

hauling the materials to the project site. Submittals for acceptance of sources of uncontaminated fill materials shall be provided to URS and URS' acceptance will be required before the soil material is used at the project site. The Subcontractor shall be responsible for obtaining all required permits and approvals for proposed borrow sources. The excavation and restoration of off-site borrow sources shall be the sole responsibility of the Subcontractor and shall conform to the requirements of the landowner or authority having jurisdiction over such areas. The Subcontractor shall indemnify and hold harmless URS from any and all disputes, claims and/or court proceedings which may arise from agreements, dealings, use, activities or operations conducted by the Subcontractor with landowners and/or third parties used as material sources. URS' acceptance of a proposed borrow site does not indicate that all material within that area meets the Specification requirements or that sufficient quantities of acceptable material exists, nor does acceptance relieve the Subcontractor from its responsibility to provide the specified materials in the quantities required.

The tests in the following table shall be performed by the Subcontractor on representative samples of each proposed select fill borrow material for URS' evaluation of the suitability of the material source. Test results shall be provided to URS for verification and acceptance prior to delivery. Results from tests that were conducted prior to the Subcontractor's bid will not be accepted by URS.

Table 12-1 – Select Fill Environmental Samples

Test	Test Method (Current Version)	Test Frequency
Classification	ASTM D 2487	Minimum 2 tests per source(1)
Grain size with – #200 Wash	ASTM D 422	
Moisture content	ASTM D 2216	
Atterberg limits	ASTM D 4318	
Laboratory Moisture-Density (Standard Proctor) (3)	ASTM D 698	Minimum 2 tests per material classification(2)
Volatile Organic Compounds	EPA 8260C	2 composite samples from 2 locations in borrow for each sample
Semi-Volatile Organic Compounds	EPA 8270D	2 composite samples from 2 locations in borrow for each sample
Metals (Arsenic, Barium, Chromium, Cadmium, Selenium, Lead and Silver)/Mercury	EPA 6020/7471	2 composite samples from 2 locations in borrow for each sample
Herbicides	EPA 8151	2 composite samples from 2 locations in borrow for each sample
Pesticides	EPA 8081	2 composite samples from 2 locations in borrow for each sample
PCBs	8082A	2 composite samples from 2 locations in borrow for each sample
Toxicity Characteristic Leaching Procedure (TCLP)	EPA 1311	Conducted congruently with EPA 8260C, 8270D, and EPA 6020/7471

Notes:

(1) Material classification tests, including grain size and Atterberg limits for Select Fill from off-site sources shall be conducted on samples from stockpiled material.

(2) Samples for Standard Proctor testing shall be obtained from material mixed and stockpiled onsite and selected after material classification testing to represent the variation in material types.

(3) If compacted fill consists of free draining granular materials where a moisture density relationship cannot be established in accordance with ASTM D 698 as approved by the URS Representative, test material in accordance with ASTM D 4253 and ASTM D 4254.

Engineered fill shall be Colorado Department of Transportation Class 6 Road Base with the gradation requirements in Table 12-2.

Table 12-2 – Engineered Fill Gradation

US Sieve Size	Percent Passing by Weight
3/4 "	100
No. 4	30 - 65
No. 8	25 - 55
No. 200*	3 - 12
Liquid Limit	30 MAX

Notes:
*Percent passing the No. 200 sieve determined by Wash Test (ASTM C 117). Fraction passing the No. 200 sieve shall not be greater than 2/3 of the fraction passing the No. 40 sieve.
" = inch
MAX = maximum
US Sieve = U.S.A. Standard Test Sieve

12.4 Execution

12.4.1 Preparation

Protect structures, utilities, sidewalks, pavements, and other facilities from damage caused by settlement, lateral movement, undermining, washout, and other hazards created by earth moving operations. Protect and maintain erosion and sedimentation controls during earth moving operations. Protect subgrades and foundation soils from freezing temperatures and frost. Remove temporary protection before placing subsequent materials.

12.4.2 Subgrade Inspection

Proof-roll subgrade with a "roller" to identify soft pockets and areas of excess yielding. Do not proof-roll wet or saturated subgrades.

Reconstruct subgrades damaged by freezing temperatures, frost, rain, accumulated water, or construction activities, as requested by the URS Representative, without additional compensation.

12.4.3 Storage of Soil Materials

Stockpile Engineered Fill soil materials without intermixing. Place, grade, and shape stockpiles to drain surface water. Cover to prevent windblown dust.

Stockpile soil materials away from edge of excavations. Do not store within drip line of trees or gutters.

12.4.4 Soil Moisture Control

Uniformly moisten or aerate subgrade and each subsequent fill or backfill soil layer before compaction to within 2 percent of optimum moisture content determined by ASTM D 698.

Do not place backfill or fill soil material on surfaces that are muddy, frozen, or contain frost or ice.

Remove and replace, or scarify and air dry, otherwise satisfactory soil material that exceeds optimum moisture content by 2 percent and is too wet to compact to specified dry unit weight.

12.4.5 Compaction of Engineered Fill

Place Engineered Fill soil materials in layers not more than 6 inches in loose depth for material compacted by heavy compaction equipment, and not more than 4 inches in loose depth for material compacted by hand-operated tampers.

Place Engineered Fill soil materials evenly on all sides of structures to required elevations, and uniformly along the full length of each structure.

12.4.5.1 Compaction

1. Compact Engineered Fill soil materials to not less than the 95 percent of maximum dry unit weight according to ASTM D 698 (for locations a minimum of 10 feet away from existing structural walls). At locations within 10 feet of existing structural walls, compact Engineered Fill soil materials to not less than 90 percent of maximum dry unit weight according to ASTM D 698.
2. Provide the proper size and type of compaction equipment and operate in a manner to attain the required compaction density.
3. Use compaction methods and equipment appropriate for the material being compacted and avoid transmitting damaging shocks to the installed and existing structures.
4. Compaction within at least 5-feet of foundations, walls, or other Site structures shall be completed with the utmost caution to prevent damage to foundations, walls, or any and all components of structures by vibration or other mechanical means. Such damages shall be repaired and/or replaced by the Contractor to the satisfaction of URS and TDCC at no cost to URS.

12.4.6 Grading

General: Uniformly grade areas to a smooth surface, free of irregular surface changes. Comply with compaction requirements and grade to cross sections, lines, and elevations indicated in the Drawings and Specifications.

Site Rough Grading: Slope grades to direct water away from buildings and to prevent ponding. Finish subgrades to required elevations within the following tolerances:

1. Turf or Unpaved Areas: Plus or minus 1 inch
2. Walks: Plus or minus 1 inch
3. Pavements: Plus or minus 1/2 inch

Grading inside Building Lines: Finish subgrade to a tolerance of 1/2 inch when tested with a 10-foot straightedge.

12.4.7 Field Quality Control

Testing Agency: Subcontractor shall engage a qualified geotechnical engineering testing agency to perform tests and inspections.

In place compaction tests shall be made. Unless modified elsewhere in these Specifications or on the Removal Action Drawings, the minimum test frequency for compaction shall be every 30 feet of length and minimum once per lift per excavation area.

Allow testing agency to inspect and test subgrades and each fill or backfill layer. Proceed with subsequent earth moving only after test results for previously completed work comply with this Specification Section as determined by the URS Representative.

When testing agency reports that subgrades, fills, or backfills have not achieved degree of compaction specified, scarify and moisten or aerate, or remove and replace soil materials to depth required; recompact and retest until specified compaction is obtained.

12.4.8 Protection

Protecting Graded Areas: Protect newly graded areas from traffic, freezing, and erosion. Keep free of trash and debris.

Repair and reestablish grades to specified tolerances where completed or partially completed surfaces become eroded, rutted, settled, or where they lose compaction due to subsequent construction operations or weather conditions.

Where settling occurs before Project correction period elapses, remove finished surfacing, backfill with additional soil material, compact, and reconstruct surfacing.

12.4.9 Disposal of Surplus and Waste Materials

Remove surplus satisfactory soil and waste materials, including unsatisfactory soil, trash, and debris, and legally dispose of them in accordance with Specification Section 11.0.

12.5 Measurement and Payment

Measurement for payment for the earthwork will be made in cubic yards of materials placed. The quantity for payment will be computed by the average end area or prismoidal methods, at the discretion of URS, based on surveys conducted by the Subcontractor before and after earthwork as described in Specification Section 2.6. The unit price of materials shall include costs associated with labor, equipment, materials, stockpiling, hauling, QC/QC testing, loading and onsite transportation, subgrade preparation, placement, compaction and moisture conditioning, survey, and grade control activities required to comply with this specification and any and all incidental costs required to make the Work complete.

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13.0 CONCRETE RESTORATION

13.1 General

This Specification Section describes requirements for concrete formwork, joints, reinforcement, materials, and repairs. The Subcontractor shall be responsible for concrete restoration where concrete has been removed, demolished, or otherwise damaged in areas interior to Buildings B, D, E, and F. The Subcontractor shall prepare the subgrade for concrete placement in areas exterior to Buildings B, D, E, F, G, H, and I in accordance with Specification Section 12.0. However, Hi-Tec will be responsible for the design, formwork, reinforcement, placement, finishing, and any other tasks associated with concrete restoration exterior to Buildings B, D, E, F, G, H, and I. Timing of subgrade preparation and concrete placement in areas exterior to Buildings B, D, E, F, G, H, and I will require close coordination between the Subcontractor, URS, Hi-Tec, and any of Hi-Tec's Subcontractors.

13.2 Concrete Formwork

This Work includes formwork for cast-in place concrete with shoring, bracing, and anchorage. The formwork shall include the openings for other work, form accessories, and form stripping.

13.2.1 References

ACI 117	Standard Specifications for Tolerances for Concrete Construction and Materials.
ACI 301	Specifications for Structural Concrete for Buildings
ACI 318	Building Code Requirements for Structural Concrete
ACI 347	Guide to Formwork for Concrete
ACI SP-4	Formwork for Concrete
APA PS 1	Construction and Industrial Plywood
NSF 61	Drinking Water System Components – Health Effects

13.2.2 Submittals

Submit the following in accordance with Section 2.9.2: Submittals.

13.2.2.1 Shop Drawings

Drawings and design computations for all formwork shall be submitted to URS for approval at least 30 days prior to the commencement of the Work.

Include type, size, quantity, and strength of all form materials, plan for jointing of facing panels, details affecting the appearance, and assumed design values and loading conditions.

13.2.2.2 Product Data

Manufacturer's literature for form materials, form accessories, prefabricated forms, and form coating materials shall be submitted to URS for approval at least 15 days prior to the commencement of the work.

13.2.3 Quality Assurance and Quality Control

Perform Work in accordance with ACI 301, ACI 318 and ACI 347. Tolerance shall be as necessary to provide completed concrete structure within the tolerance specified in ACI 117.

13.2.3.1 Quality Control:

Supply all labor, tools, equipment and materials to set forms so that resultant concrete conforms to required shapes, lines, and dimensions of the design, as well as the necessary code requirements. It is the Subcontractor's responsibility to design and build adequate forms and to leave them in-place until the forms can be safely removed. The Subcontractor is responsible for damage and injury caused by removing forms carelessly or before the concrete has gained sufficient strength.

Inspect erected formwork, shoring, and bracing to ensure that Work is in accordance with formwork design and that supports, fastenings, wedges, ties, and items are secure.

Monitor forms during concrete placement and correct deficiencies.

13.2.4 Products

13.2.4.1 Form Materials

Plywood: Concrete form plywood, exterior grade, mill-oiled and edge-sealed as specified herein and in accordance with APA PS-1. High-density overlaid, or provided with an equivalent smooth form liner as the minimum form material for surfaces indicated to receive smooth form finish or any rubbed finish.

Glass Fiber Fabric Reinforced Plastic Forms: Matched, tight fitting, stiffened to support weight of concrete without deflection detrimental to structural tolerances and appearance of finished concrete surface.

Lumber: Fir species; No. 2 grade or better; with grade stamp clearly visible.

Steel: Minimum 16 gauge sheet, well matched, tight fitting, stiffened to support weight of concrete without deflection detrimental to structural tolerances and appearance of finished surfaces.

13.2.4.2 Formwork Accessories

Form Ties: Removable snap-off type, galvanized metal, ¾-inch break back dimension, fixed length, cone type, neoprene rubber washer for water seal, free of defects that could leave holes larger than 1-1/4 inch in concrete surface.

Form Release Agent: Standard manufactured product specifically formulated for form release. Colorless material that will not stain concrete, absorb moisture, or impair natural bonding or color characteristics of coating intended for use on concrete. Provide NSF 61 certified product where in contact with potable water.

Corners: Chamfered, rigid plastic or wood strip, 3/4 x 3/4 inch size, maximum practical lengths.

Nails, Spikes, Lag Bolts, Through Bolts, Anchorages: Sized as required, of sufficient strength and character to maintain formwork in place while placing concrete.

Joint Filler: A dense, closed-cell, foam rubber approved by URS.

13.2.5 Execution

Construct formwork for cast-in place concrete with shoring, bracing, and anchorage to maintain stability. The formwork shall include the openings for other work, form accessories, and form stripping.

13.2.5.1 Inspection

Verify lines, levels and centers before proceeding with formwork. Ensure that dimensions agree with the Drawings.

13.2.5.2 Earth Forms

Hand trim sides and bottom of earth forms. Remove loose or softened soil prior to placing concrete.

13.2.5.3 Design

Design, engineering, and construction of formwork shall be the responsibility of the Subcontractor.

Design formwork for anticipated live and dead loads.

Comply with tolerances specified in Section 13.4: Cast-In-Place Concrete

Design as a complete system with consideration given to the effects of cementitious materials and mixture additives such as fly ash, cement type, plasticizers, accelerators, retarders, air entrainment, and others.

Monitor adequacy of formwork design and construction prior to and during concrete placement.

13.2.5.4 Erection - Formwork

Erect formwork, shoring, and bracing to achieve design requirements in accordance with requirements of ACI 301.

Provide bracing to ensure stability of formwork. Shore or strengthen formwork subject to overstressing by construction loads.

Arrange and assemble formwork to permit dismantling and stripping. Do not damage concrete during stripping. Permit removal of remaining principal shoring.

Align joints and make watertight to prevent leakage of mortar. Keep form joints to a minimum.

13.2.5.5 Application - Form Release Agent

Clean form surfaces of encrustations of mortar, grout, or other foreign material.

Apply form release agent on formwork in accordance with manufacturer's recommendations.

Apply prior to placement of reinforcing steel, anchoring devices and embedded items.

After form release agent is applied to form, the concrete shall be placed within 14 calendar days. If concrete is not placed within 14 calendar days, the forms shall be removed and form release agent reapplied at no cost to URS.

Do not apply form release agent where concrete surfaces are scheduled to receive special finishes which may be affected by the agent such as crystal forming waterproofing. Soak contact surfaces of untreated forms with clean water. Keep surfaces wet prior to placing concrete.

13.2.5.6 Inserts, Embedded Parts And Openings

Provide formed openings where required for items to be embedded in or pass through concrete work.

Locate and set in place items which will be cast directly into concrete.

Coordinate Work of other Sections in forming and placing openings, sleeves, bolts, anchors and other inserts.

Install accessories in accordance with manufacturer's instructions, straight, level, and plumb. Secure all embedded items before placing concrete. Ensure that items are not disturbed during concrete placement. Fill voids with readily removable material to prevent entry of concrete.

Provide blockouts for mechanical and electrical Work wherever necessary, even when not shown on the Drawings.

13.2.5.7 Form Cleaning

Clean and remove foreign matter within forms as erection proceeds.

Clean formed cavities of debris prior to placing concrete.

Flush with water or use compressed air to remove remaining foreign matter. Ensure that water and debris drain to exterior through clean-out ports.

During cold weather, remove ice and snow from within forms. Do not use de-icing salts. Do not use water to clean out forms, unless formwork and concrete construction proceed within heat enclosure. Use compressed air or other means to remove foreign matter.

13.2.5.8 Form Removal

Notify URS prior to removal of forms.

Remove forms in a manner, which will not damage concrete.

Do not wedge pry bars, hammers or tools against finish concrete surfaces scheduled for exposure to view.

Forms for slabs must not be removed prior to 24 hours unless otherwise approved by URS.

It shall be the Subcontractor’s responsibility to limit construction loads at all times to those which can be carried safely by the developed strength of the structure at time of loading, and by formwork and shoring in-place at time of loading.

Store removed forms in manner that surfaces to be in contact with fresh concrete will not be damaged. Discard damaged forms.

13.3 Concrete Joints

This section includes forming construction, expansion, contraction, and control joints in concrete structures, and tooling or chamfering exposed edges of concrete.

13.3.1 References

ASTM D 1751	Standard Specification for Preformed Expansion Joint Filler for Concrete Paving and Structural Construction (Nonextruding and Resilient Bituminous Types).
ASTM D 1752	Standard Specification for Preformed Sponge Rubber and Cork Expansion Joint Fillers for Concrete Paving and Structural Construction.
ACI 224.3R	Joints in Concrete Construction.
ACI 318-06	Building Code Requirements for Structural Concrete
ICRI 310.2-1997	Selecting and Specifying Concreter Surface Preparation for Sealing, Coatings, and Polymer Overlays

13.3.2 Submittals

The following submittals for concrete joints shall be made in accordance with Section 2.9.2 of these Specifications:

- 10 days prior to beginning any of the Work in this Specification Section, the Subcontractor shall submit product data for the proposed joint filler and elastomeric joint sealant including the name, manufacturer, and available manufacturer data for joint filler and sealant. URS reserves the right to require submission of manufacturer's test data and certification of compliance with specifications.
- 10 days prior to beginning any of the Work in this Specification Section, the Subcontractor shall provide a final Concrete Joint Plan showing final located of field joints based on actual demolition limits determined in the field.

13.3.3 Contractor Quality Control

Perform concrete work in accordance with ACI 318 and ACI 224.3R.

13.3.4 Definitions

Note that the following language regarding concrete joints takes precedence over the language in the referenced American Concrete Institute document entitled "Joints In Concrete Construction."

13.3.4.1 Construction Joints (CJ)

Construction joints are joints which are purposely placed in concrete to facilitate construction; to reduce initial shrinkage stresses and cracks; to allow time for the installation of embedded metalwork; or to allow for subsequent placing of other concrete.

Bond is required at construction joints regardless of whether or not reinforcement is continuous across the joint.

13.3.4.2 Contraction Joints (CRJ)

Contraction joints are joints placed in concrete to provide for volumetric shrinkage of a monolithic unit or movement between monolithic units.

Contraction joints are constructed so no bond exists between concrete surfaces forming the joint.

Except as provided for dowels, reinforcement is never continuous across a contraction joint.

13.3.4.3 Control Joints (CTJ)

Control joints are joints placed in concrete to provide for control of initial shrinkage stresses and cracks of monolithic units.

Control joints are constructed the same as contraction joints, with the exception that reinforcement is continuous across control joints.

13.3.4.4 Expansion Joints (EJ)

Expansion joints are joints provided to allow for expansion and contraction between two adjacent concrete members.

Joints are filled with sponge rubber joint filler.

Tooled Edges: Tool permanently exposed edges of slabs to a radius of ¼ inch.

13.3.5 Products

13.3.5.1 Sponge Rubber Joint Filler

Sponge rubber joint filler shall meet the requirements of ASTM D1752, Type I, except as specified. The load required to compress the test specimen to 50 percent of its thickness before testing shall not be less than 50 pounds per square inch (psi) or greater than 1500 psi.

The joint filler adhesive shall be a non-bituminous adhesive recommended by the filler manufacturer.

The premolded sponge rubber shall be fully compressible with a minimum recovery rate of 95 percent.

13.3.6 Execution

13.3.6.1 Concrete Joints

13.3.6.1.1 **Construction Joints**

Locate construction joints where shown on Removal Action Drawings or approved by URS in writing. Show proposed locations of construction joints on the placement Removal Action Drawings submitted under Section 13.4: Cast-In-Place Concrete. Relocation, addition, or elimination of construction joints is subject to approval by URS.

Locate horizontal joints in walls at the tops of footings or grade slabs. Place haunches at the same time as slabs.

Prepare construction joint surfaces for bonding by sandblasting, steel shot blasting, or other method approved by URS to thoroughly clean the surface. High pressure water jetting will not be allowed. Remove all laitance, loose or defective concrete, coatings, sand, curing compound, and other foreign material to expose coarse aggregate uniformly, free of laitance, loose aggregate, or damaged concrete. Roughen concrete to produce minimum roughness profile of 1/4 inch. Surface preparation shall be conducted in a manner sufficient to keep from undercutting the edges of the larger particles of aggregate.

Thoroughly moisten surfaces of construction joints to be covered with fresh concrete to surface saturated dry condition and remove standing water leaving the surface damp just before concrete placement.

13.3.6.1.2 **Contraction Joints**

Construct contraction joints so that there shall be no bond between the concrete surfaces forming the joint.

The joints shall be made by forming the concrete on one side of the joint and allowing it to set before concrete is placed on the other side of the joint. Coat the surface of the concrete first placed at the contraction joint with curing compound, or other approved bond breaker, before the concrete on the other side of the joint is placed. Protect reinforcement from application of curing compound so that reinforcement does not become coated with curing compound. The curing compound shall conform to the requirements of Section 13.4: Cast-In-Place Concrete.

13.3.6.1.3 **Control Joints**

Construct control joints using the same procedures as contraction joints. Coat the surface of the concrete first placed at the contraction joint with curing compound, or other approved bond breaker, before the concrete on the other side of the joint is placed. Protect reinforcement from application of curing compound so that reinforcement does not become coated with curing compound. The curing compound shall be as specified in Section 13.4: Cast-In-Place Concrete.

The language in these specifications regarding control joints takes precedence over the language in the referenced American Concrete Institute Document entitled “Joints in Concrete Construction”.

13.3.6.1.4 **Expansion Joints**

Expansion joints are joints provided to allow for expansion and contraction between two adjacent concrete members.

Structural reinforcement shall not be continuous across any expansion joint.

Expansion joint filler shall be installed between adjacent concrete members where an expansion joint is required in accordance with manufacturer's instructions.

The expansion joints shall be constructed by forming the concrete on one side of the joint and allowing it to set before concrete is placed on the other side of the joint. The surface of the concrete first placed at the joint shall be coated with curing compound before the joint filler is installed and the concrete on the other side of the joint is placed. The curing compound shall conform to the requirements of Section 13.4: Cast-In-Place Concrete.

13.4 Concrete Reinforcement

This Section includes reinforcing steel bars and accessories for cast-in-place concrete.

13.4.1 References

ASTM A 615	Standard Specification for Deformed and Plain Billet - Steel Bars for Concrete Reinforcement.
ACI 301	Standard Specifications for Structural Concrete for Buildings.
ACI SP-66	Detailing Manual
ACI 318	Building Code Requirements for Structural Concrete
CRSI	Practice Placing Reinforcing Bars
CRSI	Reinforcing Bar Detailing Manual

13.4.2 Submittals

Submit the following in accordance with Section 2.9.2: Submittals.

13.4.2.1 Reinforcement Placement Drawings

Subcontractor shall submit reinforcement placement drawings for approval at least 14 calendar days prior to fabrication. Indicate bar sizes; spacings; locations and quantities of reinforcing steel and wire fabric; bending and cutting schedules; and supporting and spacing devices. Show locations of splices. Conform with Construction Drawing structural notes and Reinforcing Bar Detailing Manual. Locate reinforcing splices not indicated on Drawings at points of minimum stress. Show locations of splices. Proposed reinforcing splices not indicated on the Removal Action Drawings will require written approval by URS.

13.4.2.2 Mill Test Reports

Submit certified copies of mill test reports of reinforcement material analyses.

Smooth dowel coating if applicable.

13.4.3 Delivery, Storage, and Handling

Store reinforcement of different sizes and shapes in separate piles or racks raised above the ground to avoid rusting.

Protect from contaminants such as grease, oil, and dirt.

Provide identification after bundles are broken and tags removed.

13.4.4 Products

13.4.4.1 Reinforcement

Reinforcing Steel and Foundation Anchors: ASTM A 615; billet steel deformed bars; uncoated finish; Grade 60.

13.4.4.2 Accessory Materials

Tie Wire: Minimum 16 gage annealed type.

Chairs, Bolsters, Bar Supports, and Spacers: Sized and shaped for strength and support of reinforcement during concrete placement conditions, in accordance with CRSI Manual of Standard Practice. Use of concrete block, rocks, or other items for reinforcement support will not be allowed.

13.4.4.3 Fabrication

Fabricate concrete reinforcing in accordance with ACI SP-66.

Reinforcing splices have been located on the Removal Action Drawings. Additional splices must be reviewed and approved in writing by URS.

Welding reinforcing bars is not permitted.

13.4.5 Execution

13.4.5.1 Installation

Before placing concrete, clean reinforcement of loose rust, loose mill scale, dirt, grease, and other substances, which would impair bond with concrete. Remove rust by vigorous rubbing with burlap cloth or wire brushing.

Accommodate formed openings.

Place, support, and secure reinforcement against displacement. Do not deviate from required position.

Place reinforcement in accordance with the Drawings, the Subcontractor's reinforcing steel placement submittals and CRSI Placing Reinforcing Bars.

See Drawings for structural notes, and for reinforcement cover requirements.

Splice reinforcing bars by lapping and securely wiring together. Splices at locations other than those indicated are subject to written approval by URS and shall conform, to the requirements of ACI 318. Do not use mechanical splices. Do not weld or tack weld reinforcing bars.

Place and secure embedded metalwork and conduit so as to not interfere with reinforcement installation.

Field bending of reinforcement is not allowed unless approved by URS in writing.

Place reinforcement with clear distance of 1-inch, minimum, between reinforcement and anchor bolts, form ties, or other embedded metalwork unless otherwise shown on Removal Action Drawings.

13.4.5.1.1 **Tolerances**

Maintain concrete cover over reinforcement within 1/2 inch of specified cover where specified cover is greater than 2-1/2 inches.

Maintain concrete cover over reinforcement within 1/4 inch of specified cover where specified cover is 2-1/2 inches or less.

Maintain spacing of reinforcing bars within 1 inch of required spacing.

13.4.5.2 Inspection

Notify URS at least 48-hours in advance of a requested concrete reinforcement inspection. Provide sufficient time in the schedule for URS to inspect the reinforcing steel prior to placement

of concrete. Concrete placed without inspection and approval by URS may be subject to rejection and removal at no additional cost to the Owner.

URS's inspection of steel reinforcing prior to concrete placement will not relieve the Subcontractor from responsibility to conform to the Removal Action Drawings and Specifications.

13.5 Cast in Place Concrete

This Section includes cast-in-place structural concrete for the Moline Street PCB Site Removal Action slab structures shown on the Removal Action Drawings.

13.5.1 References

ACI 117	Standard Tolerances for Concrete Construction and Materials (ACI 117) and Commentary (ACI 117R-06)
ACI 301	Specification for Structural Concrete.
ACI 302.1R	Guide for Concrete Floor and Slab Construction
ACI 304.2R	Placing Concrete by Pumping Methods.
ACI 305R	Hot Weather Concreting.
ACI 306R	Cold Weather Concreting.
ACI 308.1	Standard Specification for Curing Concrete.
ACI 309R	Guide for Consolidation of Concrete
ACI 309.2R	Identification and Control of Consolidation-Related Surface Defects in Formed Concrete
ACI 318	Building Code Requirements for Structural Concrete
ACI 360R	Design of Slabs on Ground
ASTM C 31	Standard Practice for Making and Curing Concrete Test Specimens in the Field
ASTM C 33	Standard Specifications for Concrete Aggregates.
ASTM C 39	Standard Test Method for Compressive Strength of Cylindrical Concrete Specimens
ASTM C 42	Standard Test Method for Obtaining and Testing Drilled Cores and Sawed Beams of Concrete
ASTM C 94	Standard Specifications for Ready-Mixed Concrete
ASTM C 114	Standard Test Methods for Chemical Analysis of Hydraulic Cements

ASTM C 138	Standard Test Method for Density (Unit Weight), Yield, and Air Content (Gravimetric) of Concrete
ASTM C 143	Standard Test Method for Slump of Hydraulic Cement Concrete
ASTM C 150	Standard Specifications for Portland Cement.
ASTM C 171	Standard Specification for Sheet Materials for Curing Concrete.
ASTM C 231	Standard Test Method for Air Content of Freshly Mixed Concrete by the Pressure Method
ASTM C 260	Standard Specification for Air Entraining Admixtures for Concrete.
ASTM C 309	Specification for Liquid Membrane-Forming Compounds for Curing Concrete.
ASTM C 494	Standard Specification for Chemical Admixtures for Concrete.
ASTM C 618	Standard Specification for Coal Fly Ash and Raw or Calcined Natural Pozzolan for Use in Concrete.
ASTM C 1017	Standard Specification for Chemical for Use in Producing Flowing Concrete
ASTM C 1064	Standard Test Method for Temperature of Freshly Mixed Hydraulic-Cement Concrete
ASTM C1260	Standard Test Method for Potential Alkali Reactivity of Aggregates (Mortar-Bar Method)
ASTM C1567	Standard Test Method for Determining the Potential Alkali-Silica Reactivity of Combinations of Cementitious Materials and Aggregate (Accelerated Mortar-Bar Method)
ASTM C 1602	Standard Specification for Mixing Water Used in the Production of Hydraulic Cement Concrete
AASHTO M182	Burlap Cloth Made from Jute or Kenaf.
ANSI/NSF 61	Drinking Water System Components–Health Effects

13.5.2 Submittals

Submit the following in accordance with Section 2.9.2: Submittals.

13.5.2.1 Material Approval Data

Mix Design: For each concrete mix design submit proposed mix designs in accordance with ACI 301 for review and approval.

Name and manufacturer of each cementitious material, aggregate source, admixture, and curing compound.

URS reserves the right to require submission of manufacturer's test data and certification of compliance with specification.

URS reserves the right to require submission of samples of concrete materials for testing before or during use in concrete.

13.5.2.2 Cementitious Materials Certifications and Test Reports

Manufacturer's certification and test reports for each lot from which shipments are drawn.

Certify materials were tested during production or transfer in accordance with specified reference specification.

Submittal of certification and test reports shall not relieve Subcontractor of responsibility for furnishing materials meeting specified requirement.

13.5.2.3 Concrete Placement Plan Drawings

Subcontractor shall submit drawings for each concrete placement. An individual concrete placement is defined as a portion of concrete Work placed in one continuous operation between specified lines or joints.

Show locations, dimensions, blockouts, openings, recesses, joint filler and finishes. Identify construction joints, control joints, contraction joints and expansion joints.

Show details of items embedded in or associated with placement except reinforcing steel.

Include a separate drawing showing placement sequence.

Place a title block with Subcontractor's name, contract title and number, placement identification, and identifying drawing number in lower right hand corner of each drawing.

List reference drawings from which details shown on placement drawing were obtained on each drawing.

Reference related steel reinforcement drawings associated with placement on each drawing.

Subcontractor shall submit a Concrete Placement Plan Schedule that contains, at a minimum, complete, detailed concrete placement schedule showing the Subcontractor's plan for placement of individual features, units, and other elements of concrete work.

Detail as necessary to show location, sequence, and date of concrete placements scheduled for each item of concrete work.

13.5.3 Quality Assurance and Quality Control

Include provisions for hot or cold weather concrete in Concrete Placement Plan.

Perform Work in accordance with provisions of all applicable ACI standards.

Obtain materials from same source throughout the Work.

13.5.3.1 Project Record Documents

Accurately record as-built concrete dimensions and tolerances and locations of embedded utilities and components on placement drawings.

13.5.3.2 Sequencing and Scheduling

Notify URS at least 48 hours prior to commencing concrete Work.

Allow URS to perform an immediate inspection of concrete surfaces upon removal of forms.

Notify URS upon discovery of any honeycombing, foreign-embedded items, and/or defective concrete.

13.5.4 Products

13.5.4.1 Concrete Materials

13.5.4.1.1 **Cementitious Materials**

Cement: ASTM C 150 Portland Cement, Type II:

- Meet equivalent alkalies requirements of ASTM C 150 – Table 2.
- Meet false-set requirement of ASTM C 150 – Table 4.
- Pozzolan: ASTM C 618, Class F, Except,
- Does not decrease sulfate resistance of concrete by use of pozzolan.
- Demonstrate pozzolan will have an “R” factor less than 2.5.
- R = (C-5)/F
- C: Calcium oxide content of pozzolan in percent determined in accordance with ASTM C 114.
- F: Ferric oxide content of pozzolan in percent determined in accordance with ASTM C 114.
- Pozzolan content shall be 20 percent plus or minus 5 percent by weight of the total cementitious materials.
- Pozzolan and cement shall be stored and batched separately.

13.5.4.1.2 **Aggregates**

Fine aggregate: ASTM C33

Coarse aggregate: ASTM C 33, Size No. 67

Fine and coarse aggregate shall not be of a carbonate-based rock. Coarse and fine aggregates shall not contain any materials that are deleteriously reactive with the alkalis in the cement in an amount sufficient to cause excessive expansion of mortar or concrete, in accordance with ASTM C1260 and ASTM C1567. The amount of coal and lignite in the fine aggregate shall be less than 0.5 percent.

13.5.4.1.3 **Water**

Water for concrete shall be clean and free from injurious amounts of oils, acids, alkalis, salts, organic materials, or other substances that may be deleterious to concrete or reinforcement in accordance with ASTM C 1602, including optional requirements of Table 2.

13.5.4.2 Admixtures

13.5.4.2.1 **Air Entraining Admixture**

Air Entraining Admixtures shall meet the requirements of ASTM C 260.

Use a neutralized vinsol resin formulation for air-entraining admixture used with ASTM C 494, Type F or G; and ASTM C 1017, Type I or II chemical admixtures.

13.5.4.2.2 **Other Admixtures**

Use only when approved and at no additional cost to the Owner. Conform to ASTM C 494:

13.5.4.2.3 **Accelerators**

Approval does not relax cold-weather placement requirements. Calcium chloride is prohibited.

Set-retarders or stabilizers: Approval does not relax hot-weather placement requirements.

Water reducers: Type A, D, E, F or G, to achieve workability without exceeding specified water/cement ratio and slump.

Mineral admixtures to be used or furnished under this Specification shall be certified to comply with this Specification by the supplier. Certification shall include test results on Specifications, source, and location.

13.5.4.3 Curing Materials

Water: ASTM C 1602, including optional requirements of Table 2.

Curing Compound: ASTM C 309

Polyethylene Film: ASTM C171.

13.5.4.4 Concrete Mix

Mix and deliver concrete in accordance with ASTM C 94.

Select proportions for normal weight concrete in accordance with ACI 301 and ACI 350.

Provide structural concrete to the following criteria:

- Compressive Strength (28 days): 4000 psi concrete for all structures.
- Acceptance Criteria: In accordance with ASTM C 94
- Slump: In accordance with ASTM C 143 - 3 inches ±1 inch at point of placement. For concrete with ASTM C 1017, Type I or II chemical admixtures, use slump appropriate for placing conditions, with a maximum slump of 8 inches. Test slump prior to addition of ASTM C 1017, Type I or II chemical admixtures to assure that slump prior to admixture addition meets the 3 inches ±1 inch requirement.
- Entrained Air: 4 percent to 6 percent at point of placement in accordance with ASTM C 231.
- Maximum water/cementitious material ratio: 0.45.

Use accelerating admixtures in cold weather only when approved by URS in writing. Use of admixtures will not relax cold weather placement requirements.

Use of calcium chloride is not permitted.

Use set retarding admixtures during hot weather only when approved by URS.

Use set-controlling admixtures to increase allowable concrete delivery and placement restrictions in accordance with applicable provisions of this Section only when pre-approved by URS.

Add other approved admixtures (water reducer/superplasticizer, etc.) in accordance with the manufacturer's recommendations.

Superplasticizer use is subject to URS approval. If a superplasticizer is permitted, the admixture shall be added to the concrete trucks at the Site and the manufacturer's recommendations for dosage, mixing, and use shall be followed.

A calibrated field dispenser shall be used. Records of dosage for each concrete truck shall be recorded by the Subcontractor and provided to URS.

Each truck shall be mixed after dosing with the minimum number of drum rotations in accordance with the requirements of ACI and the admixture manufacturer.

Field concrete tests (air content, temperature, and slump) shall be performed on each truck before and after adding the admixture.

Concrete mix shall meet all specified requirements. Failure to meeting any one specified requirement shall be sufficient cause for rejection.

13.5.4.5 Concrete Temperature

Concrete temperature at point of placement: 50 to 80 degrees F.

13.5.4.6 Concrete Consolidation Equipment

Consolidation equipment shall be flexible, electric or pneumatic-drive immersion-type vibrators with an operating speed of 7000 rpm when immersed in concrete.

13.5.5 Execution

13.5.5.1 Examination

Verify that joint locations conform to the approved placement drawings.

Verify requirements for concrete cover over reinforcement.

Verify that anchors, seats, plates, reinforcement, embeds, openings, and other items to be cast into concrete are accurately placed, positioned securely, and will not cause hardship in placing concrete.

Verify appropriate mix design for designated placement.

Subcontractor shall verify that no damage has occurred to foundation is required prior to any concrete being placed. Verify with URS that all surfaces on which concrete is to be placed has been inspected and is adequate for concrete placement.

13.5.5.2 Preparation

Remove standing water, ice, mud, and debris from foundation surfaces to be covered by concrete.

Prepare earth foundations free from frost or ice.

Thoroughly moisten surfaces of absorptive foundations to be covered with concrete so that moisture will not be drawn from fresh concrete.

Remove hardened concrete, wood chips, ice, and other debris from the interior of forms.

Place form release agent or wet forms just prior to placing concrete. Form release agent or any other deleterious material is not acceptable on concrete surfaces.

13.5.5.3 Placing Concrete

Place concrete in accordance with ACI 304, ACI 309 and ACI 318.

Notify URS a minimum of 48 hours prior to commencement of operations. The URS Representative shall inspect all surfaces on which concrete is to be placed.

No concrete shall be placed until all formwork, installation of items to be embedded, and preparation of surfaces involved in the placement have been approved by the URS Representative. Formwork and foundation surfaces on which cast-in-place concrete is placed shall be moistened and kept moist until overlying concrete is placed.

Place concrete in as nearly a continuous operation as practical and in a manner to produce a concrete mass with sufficient continuity and continuance so that it shall harden and act as a monolithic mass with no discontinuous joints or potential places of separation or weakness.

Concrete shall be placed in near horizontal layers; the depth of each layer shall not exceed 20 inches. Place mixture on prepared foundation or previously completed concrete materials with spreading equipment that prevents segregation and that produces layers of widths and thicknesses as necessary for compaction to the required dimensions. Place each successive layer as soon as practicable after the preceding layer is completed.

Ensure reinforcement, inserts, and embedded parts, are not disturbed during concrete placement.

Maintain records of concrete placement. Record date, location, quantity, air temperature, and test samples taken.

Deposit concrete as close as practicable to its final position. Concrete shall be placed by methods that do not cause segregation. Do not drop concrete more than 3 feet.

Do not re-temper concrete.

Provide sufficient concrete placing capacity and equipment to deliver and place concrete without undue delay; do not permit cold joints to occur. Discharge concrete into forms within 90 minutes following the first introduction of water and cement or cement and aggregates, whichever occurs first. If the air temperature is 85° F or higher, the time limit specified above shall be reduced to 60 minutes unless URS's approval has been obtained for means to maintain acceptable concrete quality without such time reduction.

Cast-in-place concrete shall not be placed during heavy rain (more than 0.3 inch per hour or 0.03 inch in 6 minutes as defined by the Weather Bureau Glossary of Meteorology). If unusual adverse weather such as heavy rain, severe cold, heavy snow, high wind, or other adverse weather occurs, or is forecast to occur during placement, an interruption in placing operations may be approved or directed. All placed concrete materials shall be fully compacted before stopping Work. Allow for construction schedule risk and added expense that could occur as a result of adverse weather. Weather delays shall not be cause to receive any additional compensation. Conform to ACI 306R for additional cold weather placement requirements.

Consolidate concrete in accordance with ACI 309. Do not place vibrator against reinforcing or forms or use vibrator to transport concrete within forms. Have one extra vibrator and one extra generator onsite at all times during placement of concrete to be used in the event of breakdown of primary equipment.

Do not use concrete which has been subjected to more than 250 total revolutions of any combination of mixing and agitating equipment following the first introduction of aggregates to the mixer.

Subcontractor may place concrete by pumping, at Subcontractor's option. Appropriate mix design provisions must be included in Subcontractor's approved concrete submittal before any concrete is placed by pumping methods. Concrete placement by pumping methods shall be performed in accordance with applicable provisions of ACI 304.2R.

Maintain concrete cover around reinforcement as indicated on the Removal Action Drawings and in accordance with ACI 350.

Place concrete continuously between predetermined construction, contraction, control and expansion joints. Do not break or interrupt successive pours such that cold joints occur.

Excessive honeycomb or embedded debris in concrete is not acceptable. Notify the URS Representative upon discovery of honeycombs or embedded debris.

Wait at least 3 days between adjacent placements of sections of structures with contraction joints.

13.5.5.4 Concrete Finishing

Finish all exposed concrete as follows:

All exterior slab surfaces shall be sloped a minimum of 1/8 inch in 1 foot or as indicated on Removal Action Drawings. All exterior slab surfaces shall have a troweled finish as defined in ACI 301.

All smooth, exposed, exterior vertical surfaces shall have a smooth form finish as defined in ACI 301 unless otherwise approved by URS.

All interior formed surfaces shall match the existing surface finish of the adjacent surface.

13.5.5.4.1 **Edges**

Chamfer edges of permanently exposed concrete, except slabs and top edges of walls, with a 45 degree bevel ¾ inch by ¾ inch unless otherwise shown on Removal Action Drawings.

Tool exposed edges of slabs and top edges of walls to a radius of ¼ inch unless shown otherwise on Removal Action Drawings.

All other exposed concrete surfaces on the project shall be as follows:

- Formed surfaces shall be smooth form surfaces as defined in ACI 301.
- All unformed surfaces shall have a floated finish as defined in ACI 301.
- Broomed Finish: Provide along top of slabs and at locations determined by URS.

First provide a monolithic finish as specified above, except immediately after steel troweling brush surface with a stiff bristle brush.

Brush in parallel strokes at right angles to the normal flow of traffic.

Tolerances for Concrete Construction:

Tolerances are defined as allowable variations from specified lines and grades, and dimensions and as the allowable magnitude of the surface irregularities. Allowable variations from specified lines, grades, and dimension shall be in accordance with ACI 301 and ACI 117.

13.5.5.5 Curing And Protection

Unless otherwise approved, cure fresh unformed concrete surfaces immediately, and formed surfaces following the removal of forms, for a minimum of 7 days, and as described in ACI 308.1 using an approved clear membrane compound.

Immediately after placement, protect concrete from premature drying, excessively hot or cold temperatures, and mechanical injury.

13.5.5.6 Field Quality Control

Furnish a batch ticket (delivery ticket) with each load of concrete. Concrete delivered without a batch ticket containing complete information as specified shall be rejected. Collect and complete the batch ticket at the placement site and deliver all batch tickets to the URS Representative on a daily basis. URS shall have access to the batch tickets at any time during the placement. The following information shall be provided on each batch ticket:

Supplier's name and date

Truck number

Project number and location

Concrete class designation and item number

Cubic yards batched

Time batched

Mix design number

Type, brand, and amount of each admixture

Type, brand, and amount of cement and pozzolan

Mass (weights) of fine and coarse aggregates

Moisture of fine and coarse aggregate

Gallons of batch water (including ice)

Add the following information to the batch ticket at the placement site:

Gallons of water added by truck operator plus quantity of concrete in the truck each time water is added

Number of revolutions of drum at mixing speed (for truck mixed concrete)

Discharge time

Location of batch in placement

Water cement ratio

The Subcontractor will be allowed to add water to the batched concrete once at the Site, based upon concrete supplier approval and direction and provided that the specified water to cement

ratio is not exceeded and the amount of water withheld at the batch plant is on the delivery ticket.

Maintain records of placed concrete items. Record truck number, date, start and stop times, location of placed concrete, quantity, air temperature, concrete placement temperature, slump, air content, admixture quantities, test samples collected and times, and cast test cylinder numbers.

Perform Work in accordance with ACI 301.

Maintain one copy of each document onsite.

Acquire cement from same source for all Work.

Acquire aggregate from same source for all Work.

Conform to ACI 305R when concreting during hot weather.

Conform to ACI 306R when concreting during cold weather.

Concrete to be placed directly on earth or bedrock will not be placed without written approval by URS that the earth or bedrock foundation has been prepared suitably for concrete placement.

Perform quality assurance inspection and testing using the Subcontractors approved independent testing firm. Provide access and samples as required by URS.

The Subcontractor's independent testing agency shall prepare, at a minimum, 5 concrete test cylinders for each 25 or less cubic yards, at least once each day of concrete placement, or at a higher frequency determined by URS.

Test cylinders shall be made in accordance with ASTM C 31 and tested in accordance with ASTM C 39.

Note on Record Drawings placement location represented by cylinders.

Test 2 cylinders from each set at 7 days, and 2 from each set at 28 days. Maintain the last cylinder from each set for testing in the event the 28-day tests fall below the required strength.

One additional test cylinder will be taken during cold weather concreting and cured on jobsite under the same conditions as the concrete it represents.

One slump test will be taken for each truck and for each set of test cylinders taken. Slump of concrete shall be determined at point of discharge from the mixer in accordance with ASTM C 143.

Air content (ASTM C 231), Unit Weight (ASTM C 138), and temperature (ASTM C 1064) shall be taken for each set of test cylinders taken.

13.5.5.7 Patching

Allow URS to inspect concrete surfaces immediately upon removal of forms.

Honeycombing or embedded debris in concrete is not acceptable. Notify URS upon discovery, and repair as determined by the URS Representative.

Patch imperfections as requested by URS and in accordance with Section 13.5: Concrete Repairs.

13.5.5.8 Defective Concrete

Defective Concrete: Concrete not conforming to required lines, levels, details, elevations, dimensions, tolerances or specified requirements.

Defective concrete will be determined by URS and repaired or replaced at no additional cost to the URS. Repair defective concrete as requested by URS and in accordance with Section 13.5 Concrete Repairs. Concrete repair shall be done only after consultation with URS regarding the repair method. URS shall be notified as to the time when repair shall be performed.

Repair of Hardened Concrete Not Within Specified Tolerances: Hardened concrete that is not within specified tolerances shall be repaired to bring it within those tolerances. Such repair shall be accomplished in a manner approved by URS. Prevention of Repeated Failure to Meet Tolerances: When concrete placements result in hardened concrete that does not meet specified tolerances, the Subcontractor shall, upon request, submit to URS an outline of all preventative actions, such as modifications to forms, modified procedure for setting screeds, and different finishing techniques, to be implemented by the Subcontractor to avoid repeated failures. URS reserves the right to delay concrete placements until the Subcontractor implements such preventative actions that are approved by URS.

Modify or replace concrete not conforming to required levels and lines, details, and elevations.

Repair or replace concrete not properly placed or not of the specified type.

13.5.5.9 Protection

Protect finished Work under provisions of ACI 301.

Immediately after placement, protect concrete from premature drying, excessively hot or cold temperatures, and mechanical damage. Protect curing concrete from freezing for a minimum of 7 days. Control rate of temperature drop per day (as required to prevent temperature cracking).

Maintain concrete with minimal moisture loss at relatively constant temperature for period necessary for hydration of cement and hardening of concrete.

Removal of formwork shall conform to requirements of Section 13.1: Concrete Formwork.

13.6 Concrete Repairs

This Section includes general provisions for preparing concrete surfaces and furnishing and placing concrete repair materials in damaged areas of new concrete when approved by URS.

Report all damage to the URS Representative promptly upon discovery.

Damage to newly-placed concrete is the Subcontractor's responsibility and shall be repaired or replaced as requested by URS at no additional cost to the Owner.

Since repair types in most cases cannot be accurately determined in advance, URS will assess damaged concrete and prescribe the method of repair and materials to be used. URS's written approval is required before starting any concrete repairs.

13.6.1 References

ACI 546R	Concrete Repair Guide
ASTM C31	Practice for making and curing concrete test specimens in the field.

ASTM C33	Specifications for Concrete Aggregates.
ASTM C150	Specification for Portland Cement.
ASTM C171	Specification for Sheet Materials for Curing Concrete
ASTM C309	Specification for Liquid Membrane Forming Compounds for Curing Concrete
ASTM C1107	Specification for Packaged Dry, Hydraulic-Cement Grout (Nonshrink)
AASHTO M182	Burlap Cloth Made from Jute or Kenaf
EM 1110-2-2002	Evaluation and Repair of Concrete Structures, U.S. Army Corps of Engineers, 30 June 1993.

U.S. Department of the Interior, Bureau of Reclamation (Reclamation)

Reclamation-97	Guide to Concrete Repair, 1997
M-47	Standard Specifications for Repair of Concrete, Reclamation, 1996.

Federal Supply Service, General Services Administration

FS K-P-146	Tarpaulins, Cotton Duck, FWWMR

13.6.2 Submittals

Submit the following in accordance with Section 2.9.2: Submittals.

13.6.2.1 Product Data

Indicate product standards, physical and chemical characteristics, technical specifications, limitations, placement instructions, maintenance instructions, and general recommendations regarding repair materials.

Manufacturer's certificates for products supplied or proposed.

13.6.2.2 Equipment Data

Submit data for equipment to be used for saw cutting, removing, and cleaning concrete.

13.6.2.3 Schedule and Plan of Repairs

Submit the proposed schedule and method of repairs. Include a description of the proposed equipment for mixing and applying concrete and other repair materials, the proposed mix design including all admixtures, the procedure for preparing the concrete surface prior to repair, and the method of repair.

13.6.2.4 Repair Record Documents

Accurately record locations of repairs, modifications, and type of repair.

13.6.3 Quality Assurance and Quality Control

13.6.3.1 Mockup

Provide sample placement of each type of typical patch. The location of the sample shall be as requested by the URS Representative.

Prepare sample of each type of patching procedure.

Sample of mockup may remain as part of the Work if satisfactory repair is attained, as requested by the URS Representative.

13.6.3.2 Delivery, Storage, and Handling

Deliver, store, protect and handle products to prevent damage to the products, and provide safety to the workers.

Comply with instructions for storage, shelf life limitations, and handling as specified by manufacturers.

13.6.4 Products

Repair materials shall be as selected by URS for a particular repair and may include some or all of the products and materials listed below.

13.6.4.1 Repair Materials

Manufactured Materials: Suitable for the particular repair and Site conditions as determined by URS.

Portland Cement: As specified in Section 13.4: Cast-in-Place Concrete.

Water: Potable, and as specified in Section 13.4: Cast-in-Place Concrete, for all types of repairs.

Aggregates: Conforming to ASTM C33.

Dry Pack Grout:

Two parts Type II cement, ASTM C-33 fine aggregate, and clean water, or

Pre-packaged standard ASTM C1107 Non-shrink grout.

Crack Repair: Submit proposed materials and instructions for Sikadur or equal system designed for concrete crack repair.

13.6.4.2 Accessory Materials

13.6.4.3 Curing Materials

Liquid membrane-forming type: ASTM C309, Type 1, Class A or B.

Curing paper, polyethylene film, or polyethylene-coated burlap complying with ASTM C171.

Absorptive burlap cloth made from Jute or Kenat, approximately 9 oz/yd^2 (ounces per square yard), complying with AASHTO M182, Class 3 or 4.

Tarpaulins: FS K-P-146.

13.6.5 Execution

URS will delineate the type of repair to be used and the extents of repair areas.

Prepare concrete surfaces and apply repair materials in accordance with this Section or manufacturer's instructions, whichever is stricter as determined by URS.

13.6.5.1 Preparation

13.6.5.1.1 **Removal**

Minimum depth of removal and repair is 1-inch.

Remove damaged, deteriorated, loosened, or unbonded portions of existing concrete by water blasting, bush hammering, jack hammering, chipping hammer, or other URS-approved equipment or methods that avoid or minimize micro-fracturing or other damaged concrete outside the defined area of repair. Remove damaged concrete to sound concrete surface.

Concrete removal processes involving the use of jack hammers in excess of 30 pounds, dry sandblasting, or scrabblers shall not be used without approval by URS.

Repair micro-fractured surfaces using contained shotblasting, wet sandblasting, or water blasting to remove any micro-fractured surfaces resulting from the initial removal process.

13.6.5.1.2 **Cleaning**

Clean repair surface after removal of concrete with pressure washer (3000 psi minimum) to remove loose particles and dirt. Remove any contamination, including oil, solvent, dirt accumulation, or foreign material by additional wet sandblasting and air-water jet cleanup.

Unless otherwise recommended by the repair material manufacturer, prepare the surfaces to receive repair materials as a construction joint in accordance with Section 13.2: Concrete Joints.

After the concrete has been prepared and cleaned, keep the surface in a clean, condition until the repair has been completed.

13.6.5.1.3 **Saw Cut Edges**

Unless otherwise requested by the URS Representative, saw cut perimeters of repair areas perpendicular to the concrete surface to a minimum depth of 1-inch. Feather-edge repairs to concrete will not be permitted. Core drill corners to prevent over-cutting.

13.6.5.1.4 **Reinforcing Steel**

Remove all loose scale, rust, corrosion byproducts, or concrete from exposed reinforcing steel. Reinforcing steel exposed for more than one-third of its perimeter circumference shall be completely exposed to provide 1-inch minimum clearance between the steel and the repair materials. Remove extensively damaged or deteriorated reinforcing steel and replaced with adhesive dowels as requested by the URS Representative.

13.6.5.2 Placing, Finishing, And Curing

Place repair materials to the full depth of repair and such that the repaired surface matches the original structure dimensions.

Prepare surfaces to receive repair materials by wetting to a surface saturated dry condition and remove standing water.

Finish and cure repair materials in accordance with the manufacturer's instructions and as recommended by the URS Representative.

13.6.5.3 Crack Repair

Place materials in accordance with the manufacturer's written instructions and as requested by the URS Representative.

13.7 Measurement and Payment

Measurement and payment for concrete repairs will be based on square feet of 8.5-inch thick concrete placed. The quantity for payment will be determined, at the discretion of URS, based on surveys conducted by the Subcontractor after concrete placement as described in Specification Section 2.6. The unit price of materials shall include costs associated with labor, equipment, materials, QA/QC testing, concrete, reinforcement materials and installation, joint materials, finishing, formwork, transportation, survey, repair and grade control activities required to comply with this specification and any and all incidental costs required to make the Work complete.

14.0 SITE RESTORATION

14.1 General

This Specification Section specifies requirements for cleaning the Site and general requirements for the Site condition prior to Subcontractor demobilization. Final cleaning is an essential part of the Subcontractor's requirements. However, final cleaning does not absolve the daily housekeeping requirements set forth in Specification Section 2.1.3.

14.2 Execution

The Subcontractor shall install a temporary door cover for the doorways between Building C and D prior to demobilization. The temporary door material shall be at least ¾-inch treated plywood with treated 2"x4" wood bracing and galvanized screws or other materials approved by URS.

The Subcontractor shall complete the following cleaning operations prior to demobilization and any request for certification of Substantial Completion:

1. Clean Site, concrete pads, and ground, in areas disturbed by construction activities, including landscape development areas, of rubbish, PCB waste material, litter, and other foreign substances.
2. Sweep paved areas broom clean. Remove petrochemical spills, stains, and other foreign deposits.
3. Rake grounds that are neither planted nor paved to a smooth, even-textured surface.
4. Remove tools, construction equipment, machinery, and surplus material from the Site.
5. Remove snow and ice to provide safe access to building as needed.
6. Remove plastic sheeting that divides buildings.
7. If necessary, clean exposed exterior and interior hard-surfaced finishes to a dirt-free condition, free of stains, films, and similar foreign substances deposited as a result of construction activities. Avoid disturbing natural weathering of exterior surfaces. Restore reflective surfaces to their original condition.
8. If necessary, remove debris and surface dust generated from construction activities from limited access spaces, including roofs, plenums, shafts, trenches, equipment vaults, manholes, and similar spaces as needed.
9. Sweep concrete floors broom clean in unoccupied spaces.
10. Leave project area clean and ready for occupancy.

The Subcontractor may use cleaning materials and agents recommended by manufacturer or fabricator of the surface to be cleaned. Do not use cleaning agents that are potentially hazardous to health or property or that might damage finished surfaces.

14.3 Measurement and Payment

Measurement and payment for Site Restoration shall be made on a lump sum basis and shall include all costs associated with labor, materials, and equipment associated with activities including door coverings, cleaning, sweeping, construction dust removal from surfaces, and any and all other activities required to make the Work complete.

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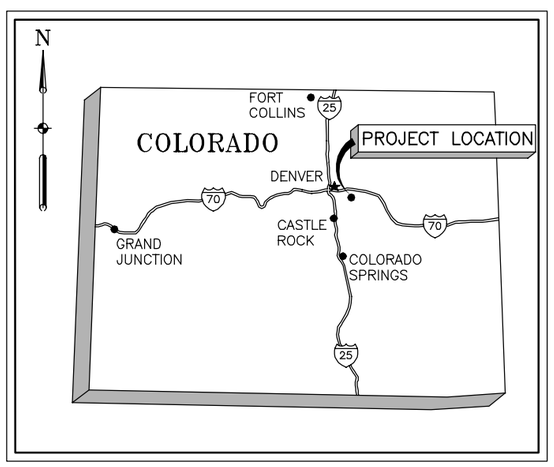
MOLINE STREET PCB SITE
REMOVAL ACTION

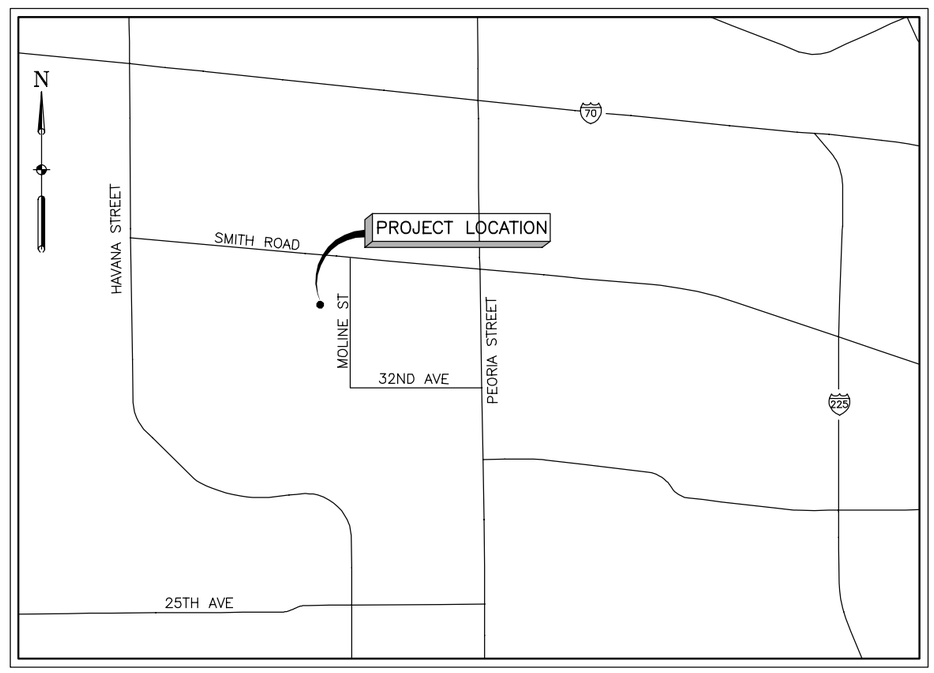
3555 MOLINE STREET
AURORA, CO 80010

PREPARED BY
URS CORPORATION
FOR
THE DOW CHEMICAL COMPANY

MAY 2014



STATE MAP
NOT TO SCALE



PROJECT LOCATION MAP
NOT TO SCALE

SHEET INDEX

1 COVER SHEET
2 EXISTING SITE PLAN/GENERAL NOTES
3 CONCRETE THICKNESS MAP
4 PROPOSED DEMOLITION AND STAGING PLAN
5 EXCAVATION PLAN
6 TYPICAL EXCAVATION SECTIONS AND DETAILS
7 RESTORATION PLAN
8 STRUCTURAL DETAILS

NOTES:

1. THESE REMOVAL ACTION DRAWINGS WERE PREPARED BY URS CORPORATION ON BEHALF OF THE DOW CHEMICAL COMPANY. AN ADMINISTRATIVE SETTLEMENT AGREEMENT AND ORDER ON CONSENT FOR THE MOLINE STREET PCB SITE BECAME EFFECTIVE ON JANUARY 30, 2014 UNDER THE COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION, AND LIABILITY ACT (CERCLA) (REFERENCE CERCLA DOCKET NO. CERCLA-08-2014-0002).
2. THESE REMOVAL ACTION DRAWINGS RELY ON COLOR CODED SYMBOLOGY AND LEGENDS. THESE PLANS SHOULD BE PRINTED IN COLOR.

Know what's below. Call before you dig.

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URS Corporation
8181 E Tufts Avenue
Denver, CO 80237
(303) 694-2770

MOLINE STREET PCB SITE REMOVAL ACTION

	DATE	BY
ISSUED FOR BIDDING	05/14/14	KM
ISSUED FOR CONSTRUCTION		

REVISIONS

NO.	DESCRIPTION	DATE
0	FOR BID	05/14/14

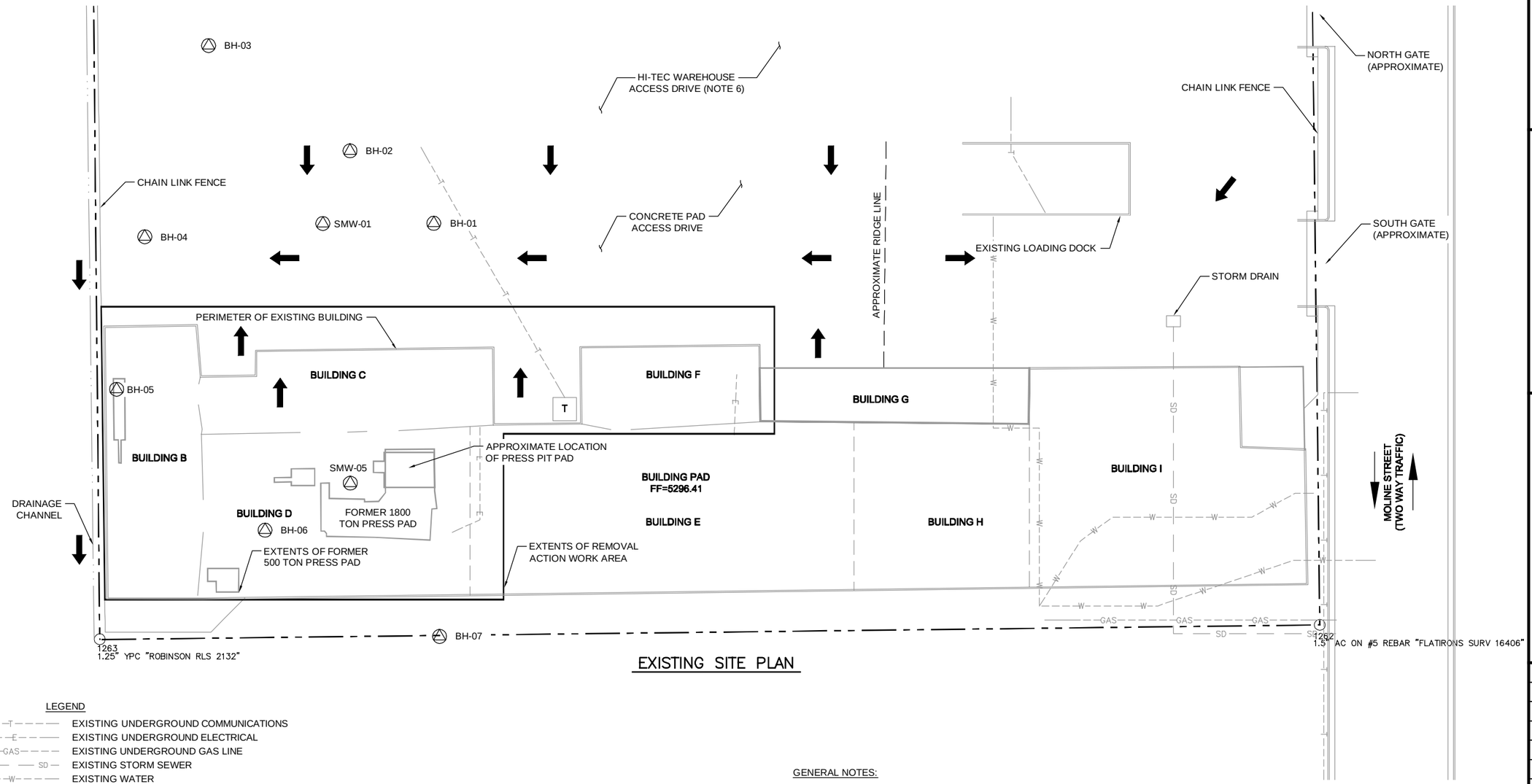
URS PROJECT NO:	41569671
DRAWN BY:	JMC
DESIGNED BY:	CJB
CHECKED BY:	KM
DATE CREATED:	05/2014
PLOT DATE:	5/12/2014 4:36 PM
ACAD VER:	2013

SHEET TITLE

COVER SHEET

1
SHEET 1 OF 8

URS DRAWING PATH: W:\Projects\41569671_Moline_Street\7.0_CAD_GIS\7.4 Plan Sheets\Moline Street_Cover Sheet.dwg



EXISTING SITE PLAN

LEGEND

- EXISTING UNDERGROUND COMMUNICATIONS
- EXISTING UNDERGROUND ELECTRICAL
- EXISTING UNDERGROUND GAS LINE
- EXISTING STORM SEWER
- EXISTING WATER
- EXISTING DRAINAGE CHANNEL
- EXISTING BUILDING OUTLINE
- EXISTING INTERIOR WALLS
- BUILDING PARTITION (NOTE 7)
- EXISTING CONCRETE PAD JOINTS
- EXTENTS OF REMOVAL ACTION WORK AREA
- PROPERTY BOUNDARY
- APPROXIMATE SURFACE WATER FLOW DIRECTION
- T — TELECOM ENCLOSURE
- EXISTING GROUNDWATER MONITORING WELL
- FF — FINISHED FLOOR ELEVATION (FT AMSL)
- EXISTING SURVEY CONTROL POINT

APPROXIMATE BUILDING INFORMATION

BUILDING	FLOOR AREA (sq.ft)	CEILING HEIGHT (ft)
B	3385	13.5
C	2933	11.0
D	5808	15.5
E	8503	12.5
F	1798	12.0
G	1962	9.0
H	3811	12.5
I	7212	16.5

SURVEY CONTROL TABLE

SURVEY POINT	NORTHING	EASTING	ELEVATION	CONTROL ID
1263	1704379.82	3180931.36	5294.56	ROBINSON RLS 2132
1262	1704385.09	3181372.68	5299.68	FLATIRON SURVEY 16406

GENERAL NOTES:

1. SURFACE WATER FLOW DIRECTION ARROWS ARE APPROXIMATE. SUBCONTRACTOR SHALL VERIFY FLOW DIRECTION SO THAT STORMWATER RUNOFF MAY BE MANAGED IN ACCORDANCE WITH THE SPECIFICATIONS.
2. ALL DRAWING SURVEY COORDINATES ARE COLORADO STATE PLANE (NAD 83).
3. UTILITIES ARE SHOWN IN THE APPROXIMATE LOCATIONS. ACTUAL LOCATIONS MAY VARY FROM THOSE SHOWN. SUBCONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING EXACT LOCATION, ORIENTATION, DEPTH, AND SIZE OF SUCH UTILITIES PRIOR TO COMMENCING WORK IN THOSE AREAS.
4. LOCATIONS USED FOR STORING CONSTRUCTION EQUIPMENT, MATERIALS, AND STOCKPILES, OF ANY TYPE, ARE TO BE APPROVED BY URS.
5. TRAFFIC CONTROL SHALL BE THE RESPONSIBILITY OF THE SUBCONTRACTOR AND SHALL MEET ALL THE REQUIREMENTS OF THE SPECIFICATIONS.
6. SUBCONTRACTOR SHALL COORDINATE ONSITE TRAFFIC CONTROL WITH HI-TEC IN ACCORDANCE WITH THE SPECIFICATIONS.
7. BUILDING PARTITION LINES ARE SHOWN ON THIS DRAWING AND ON THE LEGEND TO SEPARATE BUILDING LOCATIONS. THESE LINES DO NOT REPRESENT WALLS OR PHYSICAL PARTITIONS.
8. BUILDING CEILING HEIGHTS ARE APPROXIMATE AND SHALL BE VERIFIED BY THE SUBCONTRACTOR.

N

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SCALE IN FEET

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MOLINE STREET PCB SITE REMOVAL ACTION

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SHEET TITLE

EXISTING SITE PLAN/ GENERAL NOTES

2

SHEET 2 OF 8

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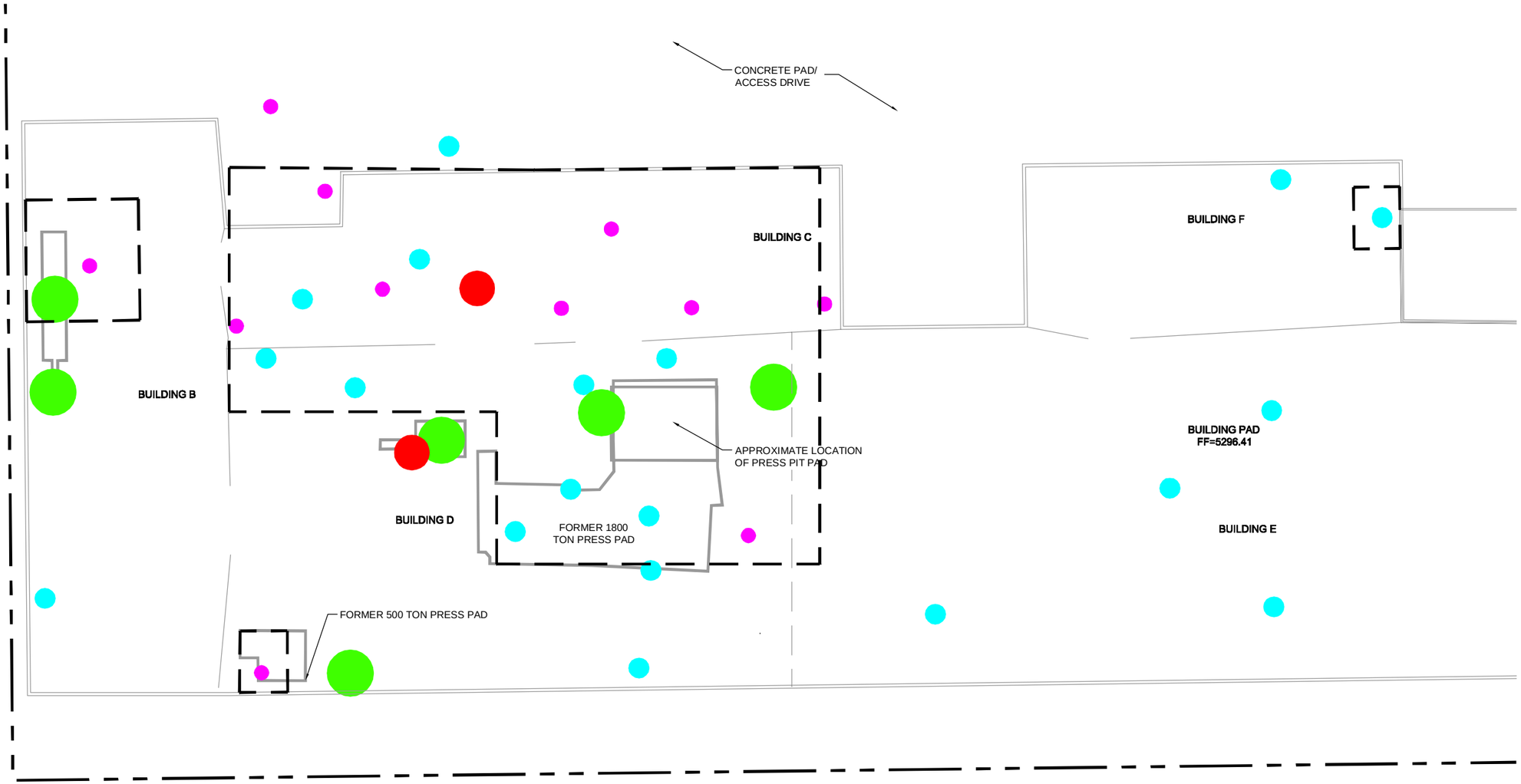

CONCRETE THICKNESS MAP

CONCRETE THICKNESS (INCHES)

- 2-4"
- 5-8"
- 12-24"
- >24"

LEGEND

- EXISTING BUILDING OUTLINE
- EXISTING INTERIOR WALLS
- BUILDING PARTITIONS
- CONCRETE JOINTS
- PROPERTY BOUNDARY
- SAWCUT LINE
- FF — FINISHED FLOOR (FT AMSL)

GENERAL NOTES:

1. CONCRETE THICKNESS BASED ON BORING LOGS FROM URS INVESTIGATION IN 2014.
2. BUILDING DESIGN OR AS-BUILT DRAWINGS ARE NOT AVAILABLE. THE CONCRETE THICKNESS IS POTENTIALLY VARIABLE THROUGHOUT THE BUILDINGS.

N

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SHEET TITLE

CONCRETE THICKNESS MAP

3

SHEET 3 OF 8

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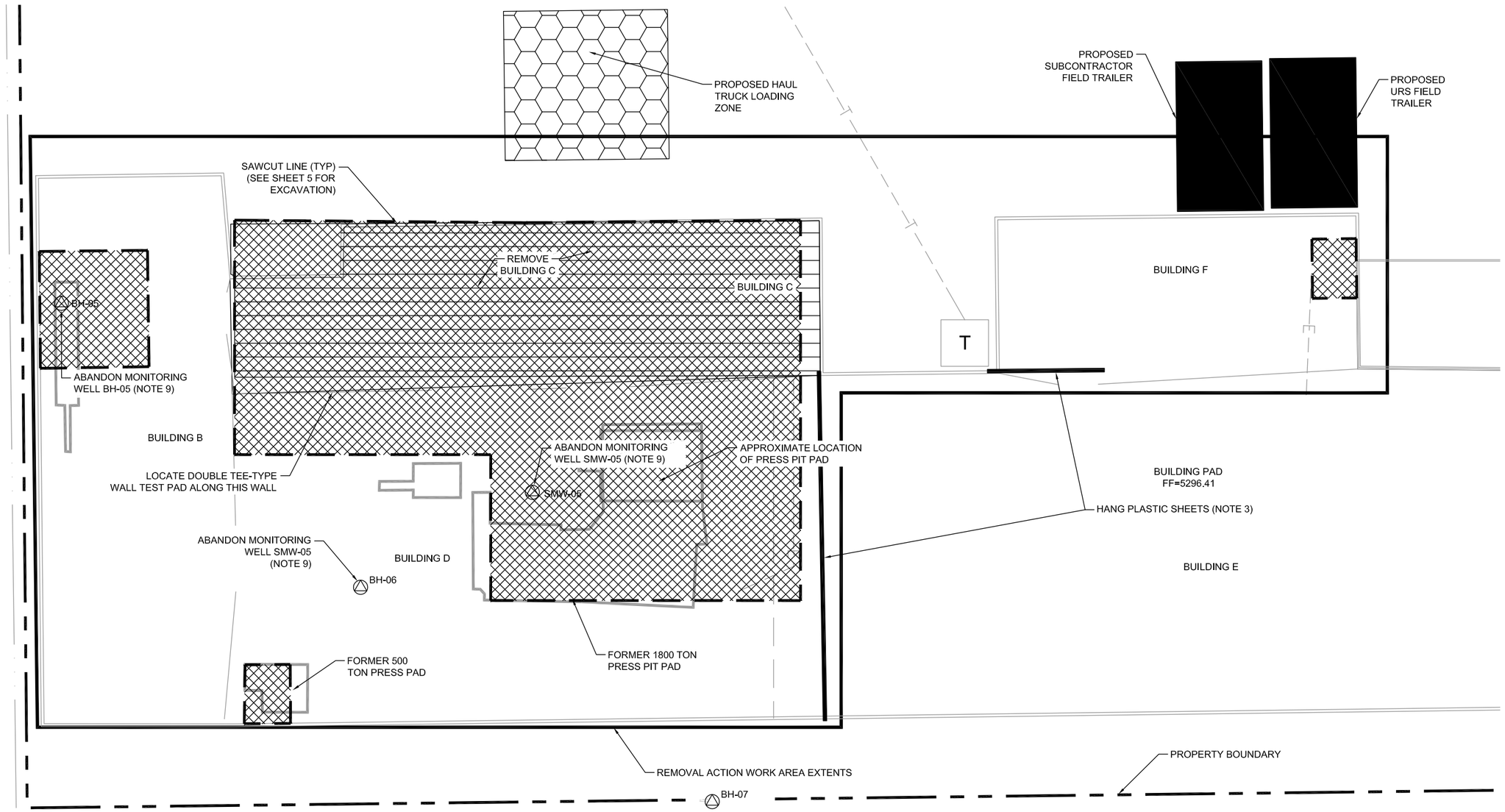

DEMOLITION PLAN AND STAGING PLAN

LEGEND

- EXISTING DRAINAGE CHANNEL
- EXISTING COMMUNICATIONS
- EXISTING ELECTRICAL
- EXISTING GAS LINE
- EXISTING STORM SEWER
- EXISTING WATER
- EXISTING BUILDING OUTLINE
- PROPERTY BOUNDARY
- CONCRETE JOINTS
- EXTENTS OF CONSTRUCTION
- SAWCUT LINE
- BUILDING REMOVAL (NOTE 4)
- CONCRETE REMOVAL (NOTE 5)
- TRUCK LOADING ZONE
- EXISTING GROUNDWATER MONITORING WELL
- EXISTING TELECOM ENCLOSURE

GENERAL NOTES:

1. TRUCK LOADING ZONES, TRAILER LOCATIONS, AND OTHER STAGING AREAS MAY VARY. SUBCONTRACTOR SHALL SUBMIT PROPOSED LOCATION WITH TRAFFIC CONTROL PLAN IN ACCORDANCE WITH SPECIFICATION SECTIONS 2.9 AND 6.2.
2. SUBCONTRACTOR SHALL SUBMIT PLAN OF EXCLUSION ZONE, CONTAMINANT REDUCTION ZONE, AND SUPPORT ZONE IN ACCORDANCE WITH SPECIFICATION SECTION 6.0 AND 11.0.
3. PLASTIC SHEET SHALL BE HUNG IN ACCORDANCE WITH SPECIFICATION SECTION 6.3.
4. BUILDING REMOVAL SHALL BE IN ACCORDANCE WITH SPECIFICATION SECTION 8.0.
5. CONCRETE REMOVAL SHALL BE IN ACCORDANCE WITH SPECIFICATION SECTION 9.0.
6. SOIL AND CONCRETE MAY BE CONTAMINATED WITH PCB'S. SUBCONTRACTOR SHALL REFERENCE SPECIFICATION SECTION 2.1 FOR SAFETY CONCERNS AND PERFORMANCE REQUIREMENTS.
7. SUBCONTRACTOR QUALITY ASSURANCE AND QUALITY CONTROL TESTING SHALL BE IN ACCORDANCE WITH SPECIFICATION SECTION 2.7 AND AS DESCRIBED ELSEWHERE IN THE SPECIFICATIONS.
8. DUST CONTROL SHALL BE CONDUCTED IN ACCORDANCE WITH SPECIFICATION SECTIONS 2.1.2 AND 5.0.
9. EXISTING GROUNDWATER MONITORING WELLS SHALL BE ABANDONED IN ACCORDANCE WITH SPECIFICATION SECTION 6.4.

N

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MOLINE STREET PCB SITE REMOVAL ACTION

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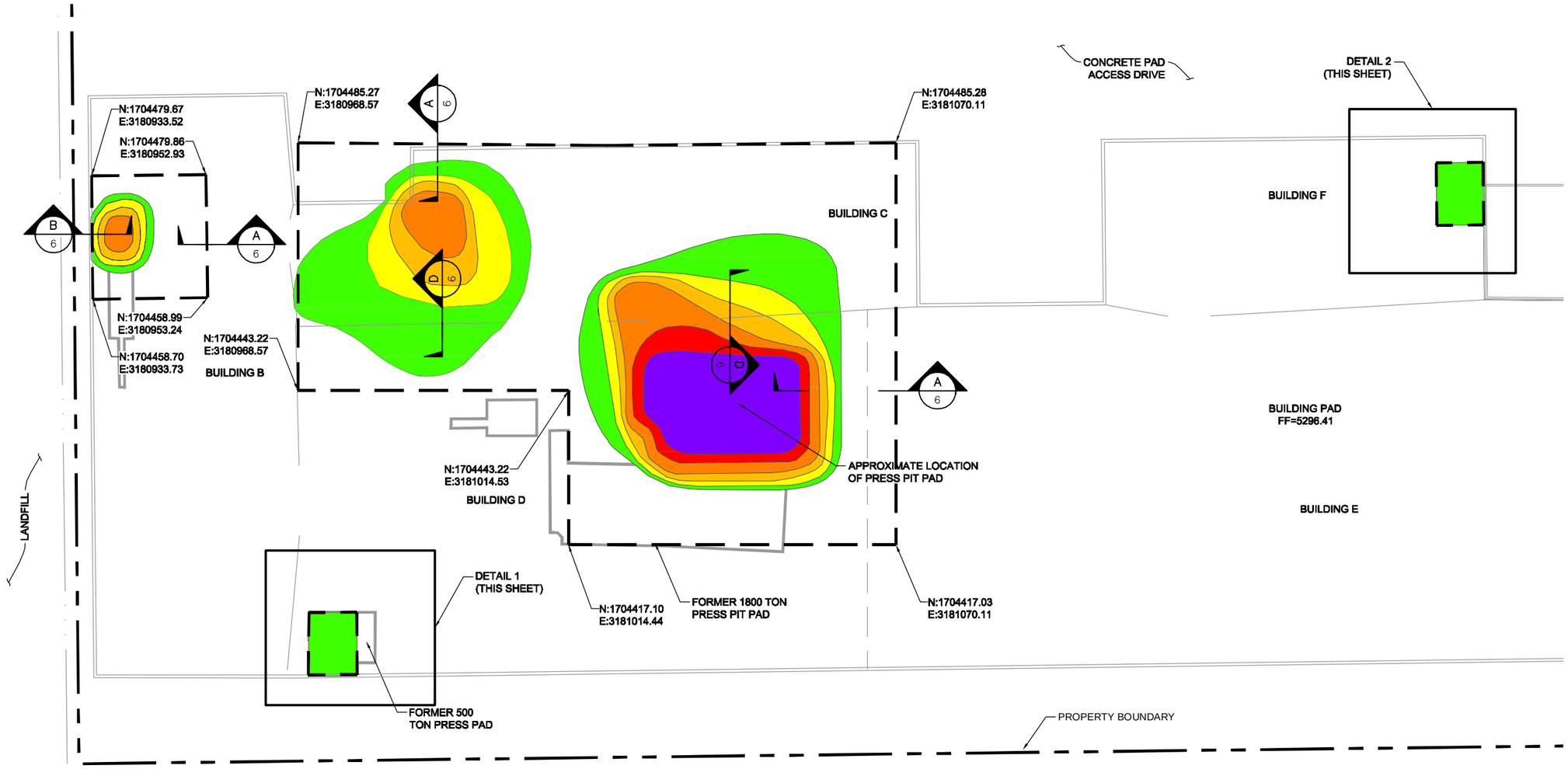
SHEET TITLE

PROPOSED DEMOLITION AND STAGING PLAN

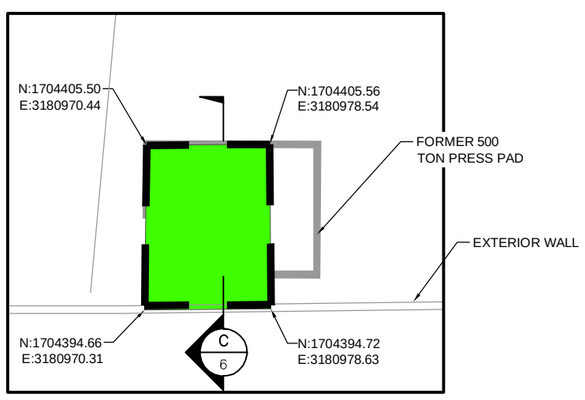
4

SHEET 4 OF 8

URS DRAWING PATH: W:\Projects\41569671_Moline_Street\7.0_CAD_GIS\7.4 Plan Sheets\Moline Street_Plan Sheets.dwg

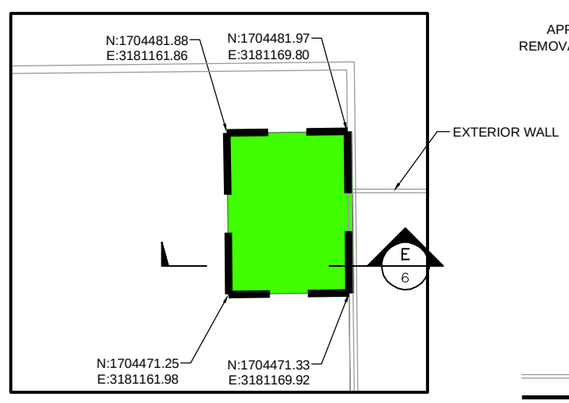


EXCAVATION PLAN



EXCAVATION DETAIL 1

SCALE: 1"=5'



EXCAVATION DETAIL 2

SCALE: 1"=5'

APPROXIMATE EXTENT OF IMPACTED SOIL REMOVAL DEPTHS (FT BELOW TOP OF CONCRETE)

1
2
3
4
5
6

LEGEND

EXISTING BUILDING OUTLINE
PROPERTY BOUNDARY
SAWCUT LINE

N:
E:
NORTHING/EASTING OF SAWCUT LOCATIONS

NOTES:

1. THESE PLANS RELY ON COLOR CODED SYMBOLOGY AND LEGENDS. THESE PLANS SHOULD BE PRINTED IN COLOR.
2. COORDINATES ARE COLORADO STATE PLANE (NAD83).
3. SUBCONTRACTOR SHALL EXCAVATE SOILS IN ACCORDANCE WITH SPECIFICATION SECTION 10.0.
4. SUBCONTRACTOR SHALL IDENTIFY AND PROTECT ALL WALL FOOTINGS.
5. SOIL AND CONCRETE MAY BE CONTAMINATED WITH PCB'S. SUBCONTRACTOR SHALL REFERENCE SPECIFICATION SECTION 2.1 FOR SAFETY CONCERNS AND PERFORMANCE REQUIREMENTS.
6. SUBCONTRACTOR QUALITY ASSURANCE AND QUALITY CONTROL TESTING SHALL BE IN ACCORDANCE WITH SPECIFICATION SECTION 2.7 AND AS DESCRIBED ELSEWHERE IN THE SPECIFICATIONS.
7. CONCRETE SHALL BE SAWCUT IN ACCORDANCE WITH SPECIFICATION SECTION 9.0.

N

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MOLINE STREET PCB SITE REMOVAL ACTION

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SHEET TITLE

EXCAVATION PLAN

5

SHEET 5 OF 8

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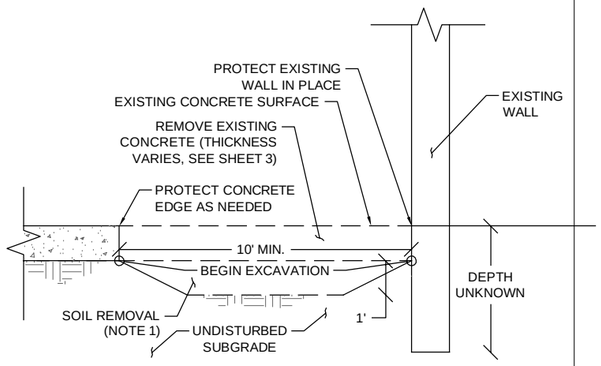
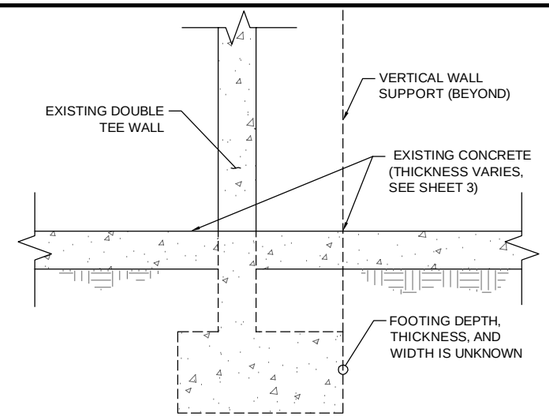


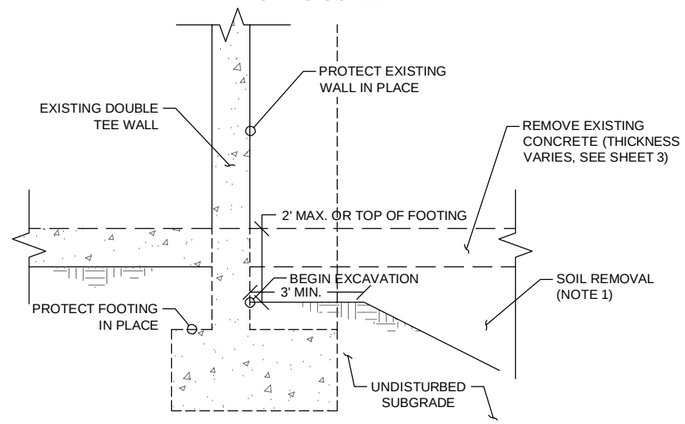
E/5 EXCAVATION SECTION THROUGH EAST WALL OF BUILDING F
NOT TO SCALE

NOTES:

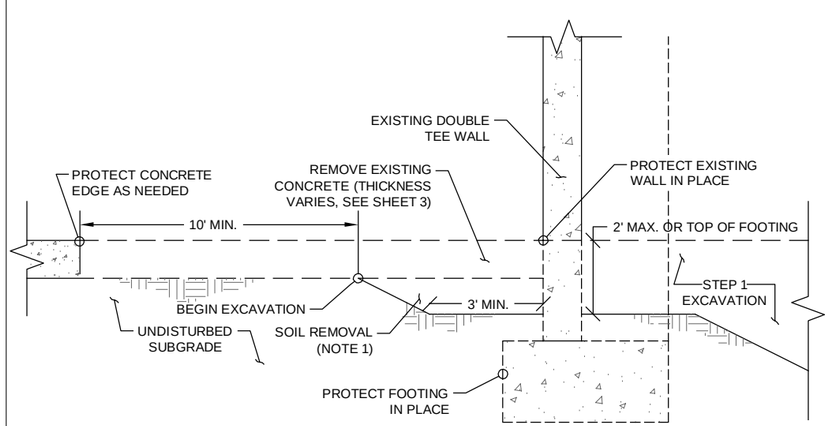
1. VERTICAL AND HORIZONTAL EXTENTS OF EXCAVATION AND/OR CONCRETE REMOVAL MAY VARY. INITIAL EXCAVATION CONTOURS ARE SHOWN ON SHEET 5 - EXCAVATION PLAN. FINAL EXTENTS OF EXCAVATION SHALL BE APPROVED BY THE URS REPRESENTATIVE PER SPECIFICATION SECTION 10.0.
2. STEP 1 AND STEP 2 EXCAVATION SEQUENCE SHALL BE REPEATED UNTIL CONTAMINATED MATERIALS ARE REMOVED IN ACCORDANCE WITH THE SPECIFICATIONS OR UNTIL THE TOP OF FOOTING OR BOTTOM OF WALL IS EXPOSED.
3. NO MORE THAN 3 DOUBLE TEE WALL PANELS SHALL BE EXPOSED IN AN OPEN EXCAVATION AT ANY TIME IN ACCORDANCE WITH SPECIFICATION SECTION 10.0.
4. LAYBACK SLOPES AND/OR TEMPORARY SHORING METHODS SHALL BE DETERMINED BY THE SUBCONTRACTOR AND SUBMITTED WITH THE SUBCONTRACTOR'S EXCAVATION PLAN IN ACCORDANCE WITH SPECIFICATION SECTION 10.0.



EXISTING
NOT TO SCALE

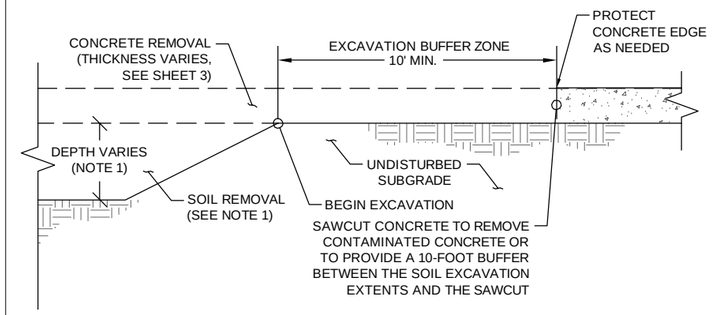


STEP 1 - REMOVE CONTAMINATED MATERIAL TO 2 FEET MAX. OR TO TOP OF FOOTING (NOTE 2)
NOT TO SCALE

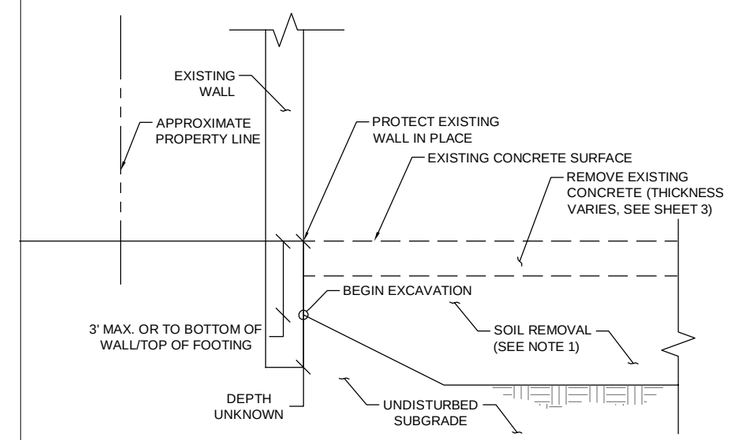


STEP 2 - RELIEVE LATERAL EARTH PRESSURE ON OPPOSITE SIDE OF WALL FROM CONTAMINANT EXCAVATION (NOTE 2)
NOT TO SCALE

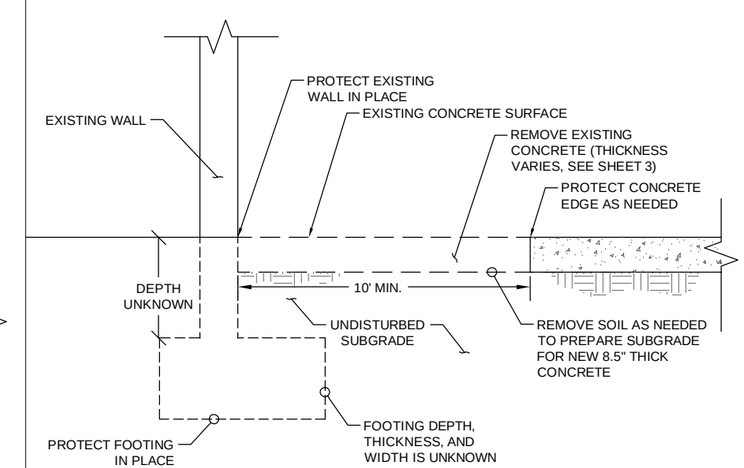
D/5 EXCAVATION SECTION THROUGH INTERIOR DOUBLE TEE - TYPE WALLS
NOT TO SCALE



A/5 TYPICAL EXCAVATION SECTION THROUGH CONCRETE SLABS
NOT TO SCALE



B/5 EXCAVATION SECTION THROUGH WEST WALL OF BUILDING B
NOT TO SCALE



C/5 EXCAVATION SECTION THROUGH SOUTH WALL OF BUILDING D
NOT TO SCALE

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MOLINE STREET PCB SITE REMOVAL ACTION

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SHEET TITLE

TYPICAL EXCAVATION SECTIONS AND DETAILS

6
SHEET 6 OF 8

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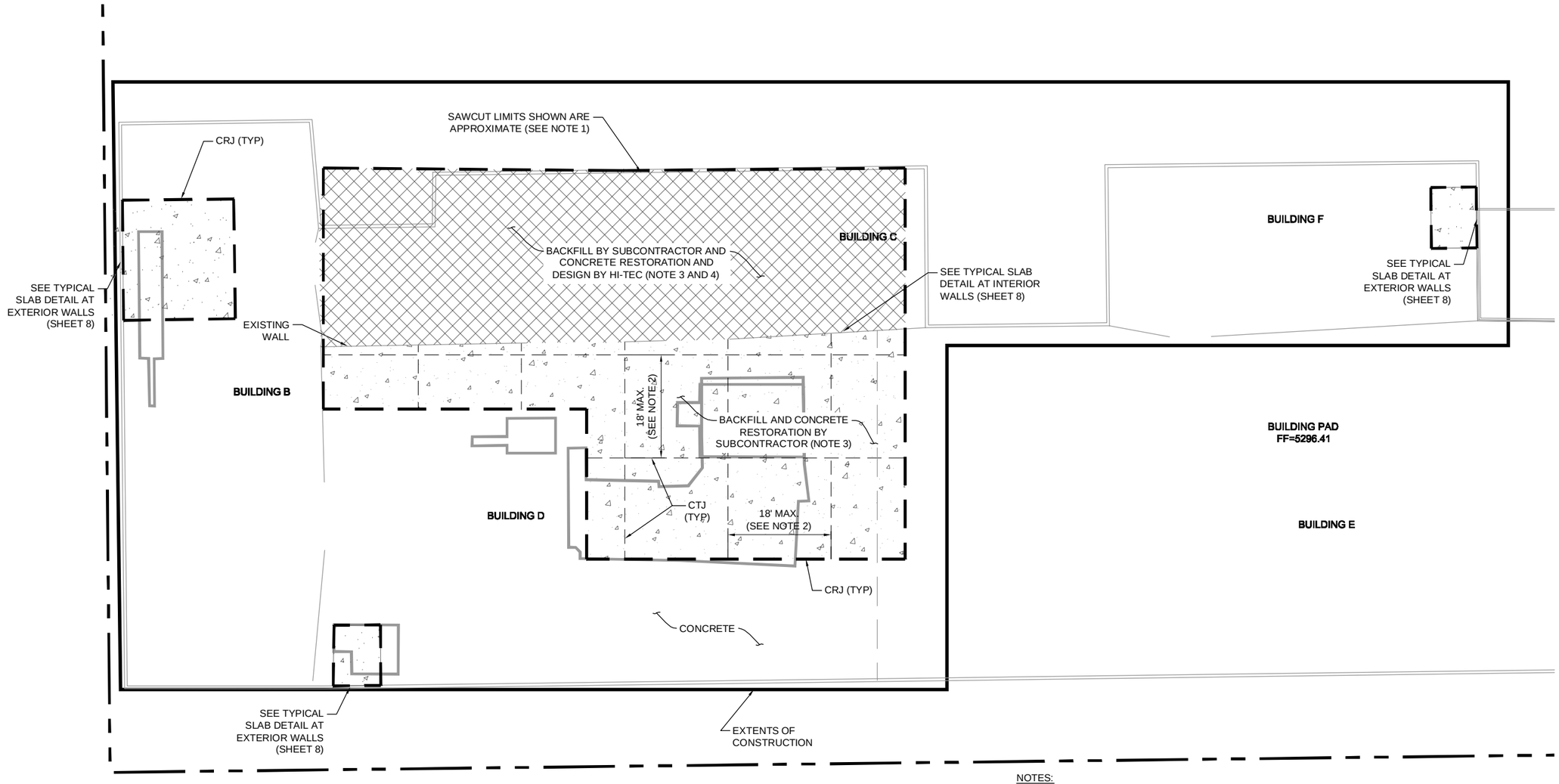

CONCRETE RESTORATION PLAN

LEGEND

- EXISTING BUILDING OUTLINE
- EXTENTS OF REMOVAL ACTION WORK AREA
- SAWCUT LINE
- TYPICAL JOINT SPACING
- BACKFILL AND CONCRETE RESTORATION BY SUBCONTRACTOR (NOTE 3)
- BACKFILL BY SUBCONTRACTOR AND CONCRETE RESTORATION BY HI-TEC (NOTE 3 AND 4)
- CTJ — CONTROL JOINT
- CRJ — CONTRACTION JOINT

NOTES:

1. SAW CUT LINES AND EXTENTS OF CONCRETE RESTORATION WERE DEVELOPED FROM THE EXCAVATION PLAN. EXTENTS MAY VARY PER THE SPECIFICATIONS.
2. CONCRETE JOINT LOCATIONS SHOWN FOR NEW CONCRETE ARE APPROXIMATE. FINAL LOCATIONS SHALL BE DETERMINED BASED ON ACTUAL DEMOLITION LIMITS DETERMINED IN THE FIELD. FINAL CONCRETE JOINT PLAN SHALL BE SUBMITTED TO URS IN ACCORDANCE WITH SPECIFICATION SECTION 13.0.
3. SUBCONTRACTOR SHALL BE RESPONSIBLE FOR BACKFILL, COMPACTION, AND GRADE PREPARATION IN ALL DISTURBED AREAS IN ACCORDANCE WITH SPECIFICATION SECTION 12..0. SUBCONTRACTOR SHALL BE RESPONSIBLE FOR CONCRETE RESTORATION IN ACCORDANCE WITH SPECIFICATION SECTION 13.0 IN AREAS NOTED.
4. HI-TEC WILL BE RESPONSIBLE FOR CONCRETE PLACEMENT, FORMING, REINFORCEMENT, AND FINISHING IN AREAS EXTERIOR TO BUILDINGS B, D, E, F, G, H, AND , I IN ACCORDANCE WITH SPECIFICATION SECTIONS 12.0 AND 13.0.
5. SOIL AND CONCRETE MAY BE CONTAMINATED WITH PCB'S. SUBCONTRACTOR SHALL REFERENCE SPECIFICATION SECTION 2.1 FOR SAFETY CONCERNS AND PERFORMANCE REQUIREMENTS.
6. SUBCONTRACTOR QUALITY ASSURANCE AND QUALITY CONTROL TESTING SHALL BE IN ACCORDANCE WITH SPECIFICATION SECTION 2.7 AND AS DESCRIBED ELSEWHERE IN THE SPECIFICATIONS.

N

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MOLINE STREET PCB SITE REMOVAL ACTION

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RESTORATION PLAN

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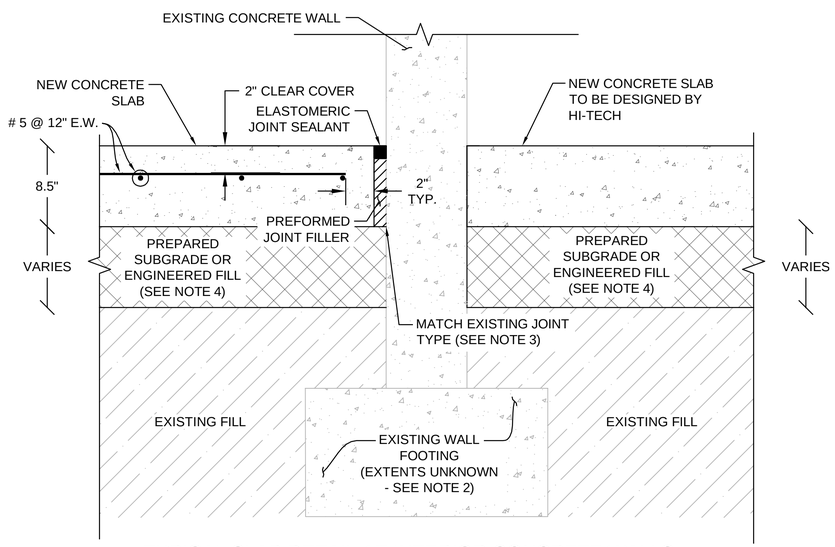
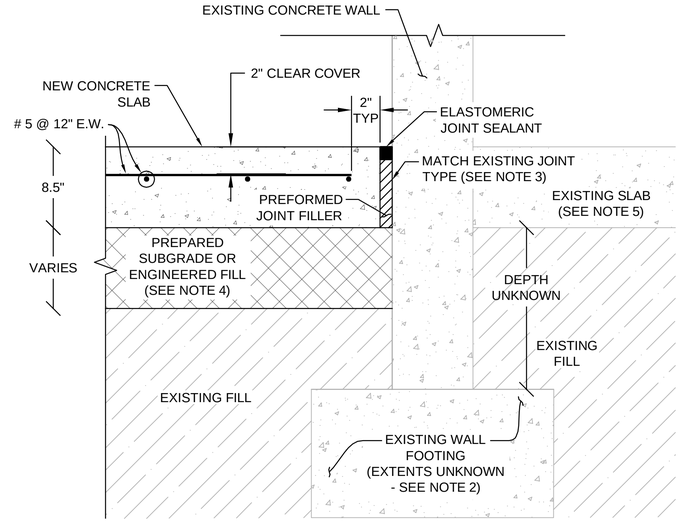


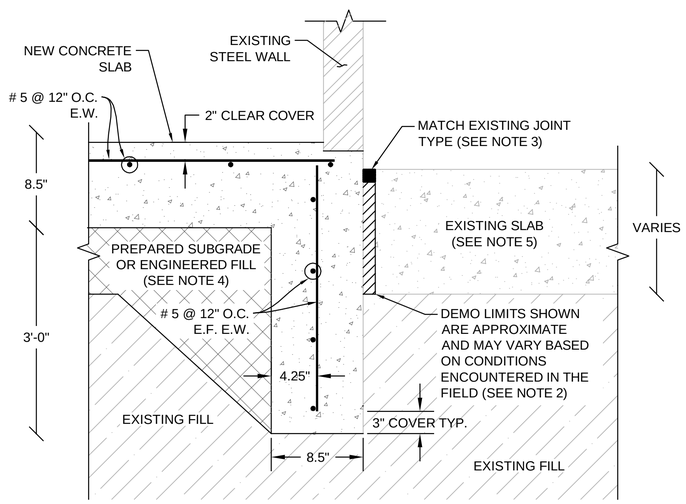
TYPICAL SLAB DETAIL AT INTERIOR CONCRETE WALLS

NOT TO SCALE



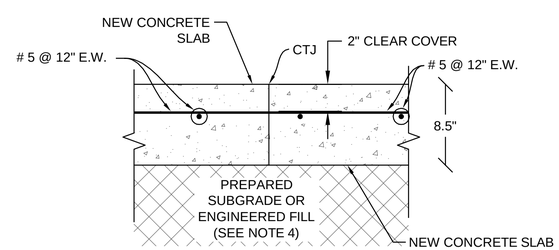
TYPICAL SLAB DETAIL AT EXTERIOR CONCRETE WALLS

NOT TO SCALE



TYPICAL SLAB DETAIL AT EXTERIOR STEEL WALLS

NOT TO SCALE

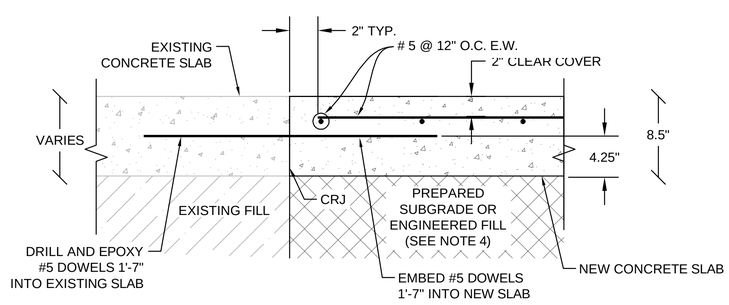


TYPICAL CTJ DETAIL AT NEW ADJACENT SLAB PLACEMENT

NOT TO SCALE

LEGEND

CTJ	CONTROL JOINT
CRJ	CONTRACTION JOINT
O.C.	ON CENTER
E.F.	EACH FACE
E.W.	EACH WAY



TYPICAL CRJ SLAB DETAIL AT SAW CUT LOCATIONS

NOT TO SCALE

PLAIN DOWELS:
PLAIN DOWELS ACROSS CONTRACTION JOINTS SHALL BE SMOOTH BARS UNIFORMLY COATED WITH A FILM OF OIL BEFORE CONCRETE PLACEMENT. VISCOSITY OF THE OIL SHALL HAVE A SAE RATING OF NOT LESS THAN 250.

ACCESSORIES:
BAR SUPPORTS, SPACERS, AND OTHER ACCESSORIES ARE NOT SHOWN ON THE DRAWINGS. THE RECOMMENDATIONS OF THE ACI DETAILING MANUAL OR OTHER APPROVED SUPPORTING SYSTEM MAY BE USED.

REFERENCE CODE:
UNLESS OTHERWISE SHOWN FOLLOW THE RECOMMENDATIONS ESTABLISHED BY THE AMERICAN CONCRETE INSTITUTE'S "DETAILING MANUAL."

NOTES TO DETAILERS:
SPLICE LENGTHS SHOWN IN THE TABLES ON THIS DRAWING ARE FOR CLASS B SPLICES IN ACCORDANCE WITH ACI 318-2008. SPLICES OR DEVELOPMENT LENGTHS OTHER THAN THOSE SHOWN IN THE TABLES MUST BE DETAILED ON THE REINFORCEMENT DESIGN DRAWINGS.

SPLICES:
THE MINIMUM LENGTH OF LAP FOR SPLICING PARALLEL BARS SHALL BE GIVEN IN THE APPLICABLE TABLE (TABLE 1). SPLICES SHALL BE STAGGERED TO GIVE 12 INCHES CLEAR BETWEEN ENDS OF ADJACENT SPLICES. BARS SPLICED BY NONCONTACT LAP SPLICES SHALL NOT BE SPACED TRANSVERSELY FARTHER APART THAN ONE-FIFTH THE REQUIRED LAP SPLICE LENGTH, NOR 6 IN. WHEN REINFORCING BARS OF DIFFERENT SIZE ARE TO BE SPLICED, THE LENGTHS OF LAP SHALL BE GOVERNED BY THE SMALLER DIAMETER BAR. SPLICES ARE TO BE MADE SO THAT THE REQUIRED CLEAR DISTANCES TO FACE OF CONCRETE CONCRETE WILL BE MAINTAINED.

PLACING:
REINFORCEMENT MAY BE ADJUSTED LATERALLY TO MAINTAIN A CLEAR DISTANCE OF AT LEAST 1" BETWEEN THE REINFORCEMENT AND FORM TIES, CONDUITS AND OTHER EMBEDDED MATERIALS.

SPACING:
THE FIRST AND LAST BARS IN SLABS ARE TO START AND END AT THE MAXIMUM OF ONE HALF OF THE ADJACENT BAR SPACING.

TABLE 1

f_c=4,000 psi | f_c=60,000 psi

BAR SIZE #	MINIMUM CLEAR BAR SPACING (INCHES)	EMBEDMENT LENGTH, L_e		CLASS B SPLICE LENGTH	
		OTHER BARS (INCHES)	TOP BAR* (INCHES)	OTHER BARS (INCHES)	TOP BAR* (INCHES)
3	3	12	12	16	16
4	3	12	15	16	20
5	4	15	19	20	25
6	5	18	23	24	30
7	5	25	33	33	43
8	6	29	37	38	48
9	7	36	46	47	60
10	8	44	57	58	74
11	9	53	68	69	88

* TOP BARS ARE HORIZONTAL BARS IN BEAMS AND SLABS SO PLACED THAT MORE THAN 12" OF CONCRETE IS CAST IN THE MEMBER BELOW THE BAR.

NOTES:

1. THE LENGTHS SHOWN IN TABLE 1 ARE BASED ON THE PROVISIONS OF ACI 318, 2008 SECTIONS 12.2.3 AND 12.15.1 ASSUMING UNCOATED REINFORCEMENT, NORMAL WEIGHT CONCRETE, CONCRETE COVER CONSISTENT WITH THE REQUIREMENTS OF THIS DRAWING, AND A MINIMUM CLEAR BAR SPACING OF 2 D . CONDITIONS THAT ARE DIFFERENT FROM THOSE ASSUMED REQUIRE LONGER LAP LENGTHS CONSISTENT WITH ACI 318.
2. THE LOCATION AND EXTENTS OF STRUCTURAL FOOTINGS BENEATH EXISTING WALLS IS UNKNOWN. SUBCONTRACTOR TO NOTIFY URS OF ANY STRUCTURAL FOOTINGS ENCOUNTERED DURING DEMOLITION. ALL STRUCTURAL FOOTINGS ENCOUNTERED DURING CONSTRUCTION SHALL BE PROTECTED IN PLACE.
3. EXISTING SLAB/WALL JOINT TYPES ARE UNKNOWN. EXPANSION JOINTS HAVE BEEN ASSUMED BUT NEW JOINTS AT WALL LOCATIONS MUST MATCH EXISTING TYPE AS DETERMINED DURING DEMOLITION AND EXCAVATION ACTIVITIES. NEW JOINTS SHALL BE CONSTRUCTED IN ACCORDANCE WITH SPECIFICATION SECTION 13.0.
4. SEE SPECIFICATION SECTIONS 10.0 AND 12.0 FOR INFORMATION REGARDING EXCAVATION AND PREPARATION OF SUBGRADE OR PLACEMENT OF ENGINEERED FILL.
5. EXISTING SLAB NOT CONTINUOUS AT ALL EXTERIOR STEEL WALL LOCATIONS. NEW SLAB TO BE CONSTRUCTED AS SHOWN AND CONCRETE PLACED AGAINST EXISTING FILL AT LOCATIONS WHERE EXISTING SLAB IS NOT PRESENT.

ISSUED FOR BID

URS
URS Corporation
8181 E Tufts Avenue
Denver, CO 80237
(303) 694-2770

MOLINE STREET PCB SITE REMOVAL ACTION

	DATE	BY
ISSUED FOR BIDDING	05/14/14	KM
ISSUED FOR CONSTRUCTION		

REVISIONS

NO.	DESCRIPTION	DATE
0	FOR BID	05/14/14

URS PROJECT NO:	41569671
DRAWN BY:	JMC
DESIGNED BY:	CJB
CHECKED BY:	SJ
DATE CREATED:	04/2014
PLOT DATE:	5/14/2014 7:35 AM
ACAD VER:	2013

SHEET TITLE

STRUCTURAL DETAILS

8

SHEET 8 OF 8

URS DRAWING PATH: W:\Projects\41569671_Moline_Street\7.0_CAD_GIS\7.4 Plan Sheets\Moline Street_Structural Details.dwg

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LIST OF ACRONYMS

ACM	asbestos containing material
ARAR	Applicable or Relevant and Appropriate Requirement
CDPHE	Colorado Department of Public Health and Environment
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	Code of Federal Regulations
CHWR	Colorado Hazardous Waste Regulations
Clean Harbors	Clean Harbors Environmental Services Inc.
EPA	United States Environmental Protection Agency
Hi-Tec	Hi-Tec Plastics, Inc.
IDW	investigation derived waste
OSC	On-Scene Coordinator
PCB	polychlorinated biphenyl
PPE	personal protection equipment
RCRA	Resource Conservation and Recovery Act
Site	Moline Street PCB Site
SWPPP	Storm Water Pollution Prevention Plan
TCLP	Toxicity Characteristic Leaching Procedure
TDCC	The Dow Chemical Company
TSCA	Toxic Substances Control Act
URS	URS Corporation
VOC	volatile organic compound
yd^3	cubic yards

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corner of the intersection of Smith Road and Moline Street (Figure 1). The Site covers approximately 1.8 acres and includes a building with an address of 3555 Moline Street, as shown in Figure 2.

The property and building where the removal action work will be performed (i.e., the Site) are currently owned by Hi-Tec Plastics, Inc. (Hi-Tec). Hi-Tec's current operations take place in the building located directly north of the Site. Hi-Tec uses the concrete access pad south of their current operational building and north of the Site buildings where the work will take place. Hi-Tec also uses the north and south gates located on the east site of the Site for access to the south side of Hi-Tec's operational building. Hi-Tec will continue their normal business operations in the area north of the Site throughout this project. They typically operate 24 hours per day, 7 days per week.

3.0 WASTE STREAMS AND CHARACTERIZATION

This section describes the types of waste streams and associated waste characterization for the Site removal action.

3.1 Waste Streams

Solid and liquid waste streams will be generated during the removal action. The majority of the waste will consist of PCB-contaminated soil along with PCB-impacted concrete and other building demolition debris. Smaller amounts of other investigation-derived waste (IDW), including soil, liquid, disposable sampling equipment, and personal protective equipment (PPE) will also require disposal. An asbestos building inspection was conducted during the Stage I field investigation and asbestos containing materials (ACM) were not identified in the building to be demolished.

The following table shows the waste streams and approximate quantities:

	Investigation (Stage I[1])		Removal Action (Stage II[2])	
	Waste Type	**Approximate Quantity**	**Waste Type**	**Approximate Quantity**
Solid	Concrete	<1 cubic yard	Concrete	490 tons
	Soil	<1 cubic yard	Soil	260 tons
	Disposable sampling equipment (acetate sleeves)	<1 cubic yard	Building Debris	50 cubic yards
	PPE (e.g. Tyvek, nitrile gloves)		Disposable sampling equipment (e.g. soil scoops)	<1 cubic yard
			PPE (e.g. Tyvek, nitrile gloves)	<1 cubic yard
Liquid	Decontamination Water	30 gallons	Decontamination Water	To Be Determined
	Small amount of organic waste[3] from field test kit use	2 gallons	Water pumped out of excavation[4]	To Be Determined
			Collected stormwater[5]	To Be Determined

Notes:

[1]Stage I investigation activities were conducted in March 2014.

[2]Stage II removal action activities will be conducted in the summer of 2014.

[3]Organic waste from field test kit use includes: sulfuric acid, nickel nitrate in water, potassium nitrate in water, sodium dispersed in oil, naphthalene in diglyme solution, butly diglyme in water. MSDS states disposal as organic waste in accordance with applicable federal, state, and local environmental regulations.

[4]It is anticipated that precipitation will be kept out of excavation; however, if needed, water will be removed from excavation and managed with other liquid waste.

[5]TDCC anticipates that stormwater will not contact PCB-containing material; however, if needed, captured stormwater will be managed with other liquid waste.

3.2 Waste Characterization

URS collected waste characterization soil samples during the Stage I field investigation from the areas identified as likely having the highest PCB concentrations. The waste characterization soil samples from the Stage I field investigation were analyzed for PCBs, and Toxicity Characteristic Leaching Procedure (TCLP) for Resource Conservation and Recovery Act (RCRA) 8 Metals (arsenic, barium, chromium, cadmium, mercury, selenium, lead, silver), and volatile organic compounds (VOCs).

Based on the Stage I field investigation data, the impacted soil will be classified as PCB-contaminated but non-hazardous. Attachment A includes the TCLP analytical results. Waste characterization for the Stage I and II concrete and building debris material will not be conducted because this waste material will be conservatively disposed of at the same facility as the soil. If additional waste characterization samples are requested by Clean Harbors, URS will collect them during the removal action and results will be reviewed by URS and Clean Harbors as soon as possible to update waste profiles, as necessary.

Liquid waste from the investigation or removal action will be incinerated due to the possible presence of PCBs in the liquid. Because incineration is the most conservative approach for liquid waste disposal, waste characterization samples for the liquid are not necessary.

4.0 APPLICABLE GUIDANCE AND REGULATIONS

URS and TDCC reviewed and considered several waste management policies, guidance documents, and regulatory requirements while preparing this Transportation and Disposal Plan. IDW and waste material generated during the Site activities will be managed in accordance with United States Environmental Protection Agency (EPA) guidance and Colorado regulations as outlined in this plan. Regulations found in Title 40 of the *Code of Federal Regulations* (CFR) Part 260 through Part 272 and EPA guidance (EPA 1991) require that IDW management comply with applicable or relevant and appropriate requirements (ARARs) to the extent practicable considering the urgency and scope of the action. IDW that is transported off site must comply with RCRA and Colorado Hazardous Waste Regulations (CHWR) off-site disposal policy. For the purposes of this Transportation and Disposal Plan, IDW and waste material from the removal action will be combined and disposed of together. Below are the guidance documents and regulatory requirements for the waste material transportation and disposal:

- Resource Conservation Recovery Act (RCRA)
- Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)

- Toxic Substance Control Act (TSCA) (PCB Spill Cleanup Policy and Disposal of PCBs)
- State of Colorado Hazardous Waste Regulations (CHWR)
- *Management of Investigation-Derived Wastes During Site Inspections* (U.S. Environmental Protection Agency [EPA], 1991)
- *Guide to Management of Investigation-Derived Wastes* (EPA 1992)
- State of Colorado's *Interim Final Policy and Guidance on Management of Investigation Derived Waste (IDW) at RCRA Facilities* (State of Colorado Department of Public Health and Environment [CDPHE] 1993).
- U.S. Department of Transportation regulations
- Colorado Department of Transportation regulations
- Utah Department of Transportation regulations

5.0 ON-SITE WASTE HANDLING

URS' demolition/excavation subcontractor (Subcontractor) will conduct building demolition, cut and remove impacted concrete, excavate impacted soil, and directly load these materials into lined roll-offs, trucks, or stage the material in temporary stockpiles. If soil is staged in stockpiles, it will be managed according to the Best Management Practices contained in the project Storm Water Pollution Prevention Plan (SWPPP), which the Subcontractor will prepare.

Solid waste, such as disposable sampling equipment or PPE, will be bagged and placed in the roll-off for disposal with the building debris, concrete, or soil.

Liquid waste will be stored in labeled drums inside the building until it can be removed by Clean Harbors for incineration.

General trash (any trash that has not come in contact with PCB materials) will be bagged and disposed of in a municipal waste dumpster.

5.1 Loading Procedures

The impacted soil, concrete, building debris, and solid waste that will be transported by Clean Harbors for disposal will be loaded into either lined roll-offs or lined trucks. Liquid waste drums will be loaded into enclosed trucks (e.g., box trucks). Dust generation will be controlled by spraying loads with water during loading as necessary, limiting the dumping height, and slowly dumping each excavator bucket load. When the trucks or roll-offs have reached their safely allowed maximum capacity as determined by the Clean Harbors on-site coordinator, the material will be covered with a tarp and secured for transportation. Before the trucks leave the Site, Clean Harbors' personnel will inspect the trucks and containers for potential safety hazards.

A small amount of excavated material may fall on the ground during loading. Therefore, the truck loading and staging area surface will be swept. Swept material will be disposed in the same manner as the excavated material.

Trucks will be inspected and cleaned, prior to leaving the Site, of mud or other materials that may need to be removed prior to the trucks entering a public road. Manifests will be completed

(as described in the following section) on site after the waste material has been loaded into the truck.

5.2 Waste Manifests

A waste manifest will be used to track the waste material transport from the point of generation to the point of ultimate disposal. Prior to transporting the waste material off-site, a URS representative (acting as TDCC's agent) will sign each waste manifest. The waste hauler will then sign the manifest and provide one signed copy to the URS representative. URS will maintain a copy of this interim waste manifest for each truckload until the fully signed waste manifest is obtained. The waste manifest must be signed by the receiving facility and returned to URS/TDCC to document proper disposal. The manifest document is to include the following information:

- Name and address of waste generator
- Name and address of waste transporter
- Name and address of disposal facility
- Description of the waste
- Quantity of the waste shipped

5.4 Description of Transport

Waste material will be transported by Clean Harbors. Clean Harbors will be responsible for providing an on-site waste coordinator to work with URS and URS' Subcontractor for roll-off and/or truck loading and removal. The roll-off size and actual truck size and type may vary depending on truck availability at the time of waste material transportation. Trucks will be inspected prior to loading by URS for obvious safety issues and every driver will perform and record daily safety inspections in accordance with Clean Harbors' Policies (included as Attachment B).

The waste material will be transported to an appropriate facility permitted in accordance with 40 CFR 270 and in accordance with ARARs. Disposal facility selection will be confirmed by Clean Harbors based on the ability to accept waste and the availability of transportation at the time of the removal action.

During waste material transport to the disposal facility, dust control measures will be employed to reduce the potential to generate particulates by covering the roll-offs or truck beds securely with tarps. The tarps must be tight-fitting covers and securely fastened prior to leaving the Site. In the event a tarp rips or comes loose during transit, the truck will stop at a safe location and the tarp will be repaired or replaced. Once the tarp repair or replacement and inspection are complete, the truck will proceed on its designated transport route to the disposal facility.

Each truck will be properly placarded and issued a waste manifest that must be signed by the receiving facility and returned to URS/TDCC to document proper disposal. The loaded trucks will comply with federal, state, and local transportation requirements. Weighing loads on a certified scale will be Clean Harbor's responsibility. Disposal quantities shall be based on the difference of weight measurements between the full and empty container. All weights shall be

recorded on the manifest. Waste manifests are usually available on Clean Harbor's website within 48 hours after the receiving facility has accepted the waste.

5.5 Transport Routes

Figure 3 shows the proposed haul routes from the Site to the Grassy Mountain Landfill in Utah for solid waste.

The facility address is listed below:

- Clean Harbors Grassy Mountain Landfill Facility located approximately 3 miles east and 7 miles north of Knolls at Exit 41 off I-80 in Grantsville, Utah (zip code of 84029) with an EPA ID number of UTD991301748.

Liquid waste is planned to be transported by drum to the Aragonite Incineration Facility, Dugway, Utah, operated by Clean Harbors. Figure 4 shows the proposed haul route from the Site to the Aragonite Incineration Facility in Utah. The facility address is listed below:

- Clean Harbors Aragonite Incineration Facility located at 11600 North Aptus Road, Dugway, Utah (zip code of 84022) with an EPA ID number of UTD981552177.

6.0 REQUIRED NOTIFICATIONS BEFORE TRANSPORT

Before any off-site shipment of waste material from the site for disposal that exceeds a total volume of 10 cubic yards (yd^3), TDCC will provide written notification of the shipment to EPA's On-Scene Coordinator (OSC) and to the appropriate state environmental official in the receiving state.

The written notification will include the following additional information:

- The name and location of the facility to which the Waste Material are to be shipped
- The type and quantity of the Waste Material to be shipped
- The expected schedule for the shipment of the Waste Material
- The method of transportation

TDCC will notify the same official in the receiving state of major changes in the shipment plan, such as a decision to ship the waste material to another facility within the same state, or to a facility in another state.

Although hazardous waste shipping is not anticipated at this time, if it becomes necessary, TDCC will notify EPA in accordance with the Settlement Agreement. TDCC will notify EPA before shipping any hazardous substances, pollutants, or contaminants from the Site to an off-site location, and TDCC will obtain EPA's certification that the proposed receiving facility is operating in compliance with the requirements of CERCLA Section 121(d)(3), 42 U.S.C. § 9621(d)(3), and 40 C.F.R. § 300.440. TDCC will only send hazardous substances, pollutants, or contaminants from the Site to an off-site facility that complies with the requirements of the statutory provision and regulation cited in the preceding sentence.

7.0 TRANSPORTATION PLAN

Clean Harbors will transport and dispose of the impacted soil, concrete and building debris, solid waste, and liquid waste. The Clean Harbors policies are included as Attachment B. The Clean Harbors Transportation Plan contains the following sections and is available from Clean Harbors but not included in this document due to size.

- Section I: In-Transit Emergency Response Procedures
- Section II: Clean Harbors Transportation Telephone Numbers
- Section III: Special State (U.S.) and Province (Canadian) Requirements
- Section IV: Department of Transportation Regulations
- Section V: Driver's Hours of Service Regulations (49 CFR 395)
- Section VI: Clean Harbors Truck-to-Truck Locations
- Section VII: Treatment Storage Disposal Facility Requirements
- Section VIII: Identifying a Hazardous Waste
- Section IX: Hazardous Waste Manifest and Land Ban Restrictions
- Section X: Special Manifests
- Section XI: Clean Harbors Policies
- Section XII: Forms
- Section XIII: Glossary of Acronyms and Commonly Used Terms

8.0 RECORD KEEPING

The following information will be recorded and tracked by the URS representative for each load of waste material transported off-Site.

- Date and time;
- Approximate weight/volume of waste material;
- Information on waste material type; and
- Vehicle identification.

The following transportation documents must be carried with the driver when transporting the waste:

- Waste manifest or proper shipping document identifying the shipment;
- Maps and complete instructions describing the route to be traveled; and
- Special instructions, including emergency procedures and transporter contacts.

The following relevant documentation will be retained in accordance with the requirements of the Settlement Agreement and will be included in the Removal Action Completion Report:

- Copy of TDCC notification to EPA of transport of waste materials >10 cubic yards

- Listing and quantities and types of materials removed off-Site or handled on-Site;
- Discussion of removal and disposal options for those materials;
- Listing of ultimate destination(s) of those materials;
- A presentation of the analytical results of all sampling and analyses performed;
- Other relevant documentation generated during the removal action (e.g. manifests).

9.0 REFERENCES

CDPHE. 1993 (November). *Interim Final Policy and Guidance on Management of Investigation Derived Waste (IDW) at RCRA Facilities.*

CDPHE. 2013. (July). *Colorado Hazardous Waste Regulations*. 6 CCR 1007-3.

EPA. 1991 (May). *Management of Investigation-Derived Wastes During Site Inspections.* Office of Research and Development. EPA/540/G-91/009.

EPA. 1992 (April). *Guide to Management of Investigation-Derived Wastes*. Office of Emergency and Remedial Response Hazardous Site Control Division. OSWER Publication Number 9345.3-03FS.

URS Corporation. 2014. Removal Action Work Plan, Moline Street PCB Site, Aurora, Colorado. May 23.

EXPLANATION

Property Boundary

Map Projection:
State Plane Feet, Colorado Central Zone, NAD83.
Basemap Source:
National Geographic Society, i-cubed (2013)

0 2,000 Feet

1 inch = 2,000 feet

N W E S

URS

Figure 1 LOCATION MAP

MOLINE STREET PCB SITE
AURORA, COLORADO

PROJECT NO.	DRAWING NO.	DATE
41569671	Fig1_Site_Location.mxd	2/26/14