



AQUA PRO-TECH LABORATORIES

*Certified Environmental Testing*

**ANALYTICAL RESULTS  
REDUCED DELIVERABLES FORMAT**

**APL PROJECT NUMBER: 11010298**

**Terms Environmental**

**Project: Vet Park**

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**NELAC** National Environmental Laboratory Accreditation Conference  
NJDEP #07010/ NYDOH #11634  
CTPH #0233/US ARMY

THIS REPORT  
CONTAINS 191  
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**Extractable Petroleum Hydrocarbons:**

*Gas Chromatography/Flame Ionization Detector*

USEPA SW-846 Test Methods for Evaluating Solid Waste Physical/Chemical Methods Update III, Method 8015B or

NJDEP Office of Quality Assurance Quantitation of Semi-Volatile Petroleum Products in Water, Soil and Sediment OQA-QAM-025, Revision 6.

**Metals:**

*Inductively-Coupled Plasma Atomic Emission Spectrometry*

Water Samples-USEPA Methods for the Analysis of Water and Wastes, Method 200.7

Soil Samples-USEPA Methods for Evaluating Solid Waste Physical/Chemical Methods Update III, Method 6010B.

**Mercury:**

*Cold Vapor Atomic Absorption Spectrometry*

Water Samples-USEPA Methods for the Analysis of Water and Wastes, Method 245.1

Soil Samples-USEPA SW-846 Test Methods for Evaluating Solid Waste Physical/Chemical Methods Update III, Method 7171A.

**Volatile Organic Compounds:**

*Purge and Trap Gas Chromatography/Mass Spectroscopy*

Drinking Water Samples-USEPA Methods for the Determination of Organic Compounds in Drinking Water, Method 524.2.

Water Samples-USEPA Methods for the Analysis of Water and Wastes, Method 624.

Soil Samples-USEPA SW-846 Test Methods for Evaluating Solid Waste Physical/Chemical Methods Update III, Method 8260B

**Semi-Volatile Organic Compounds:**

*Gas Chromatography/Mass Spectroscopy*

Water Samples-USEPA Methods for the Analysis of Water and Wastes, Method 625.

Soil Samples-USEPA SW-846 Test Methods for Evaluating Soil Waste Physical/Chemical Methods Update III, Method 8270C.

**Pesticides:**

*Gas Chromatography/Electron Capture Detector*

Water Samples-USEPA Methods for the Analysis of Water and Wastes, Method 608.

Soil Samples-USEPA SW-846 Test Methods for Evaluating Solid Waste Physical/Chemical Methods Update III, Method 8081A.

**Polychlorinated Biphenyls (PCBs):**

*Gas Chromatography/Electron Capture Detector.*

Water Samples-USEPA Methods for the Analysis of Water and Wastes, Method 608.

Soil Samples-USEPA SW-846 Test Methods for Evaluating Solid Waste Physical/Chemical Methods Update III, Method 8082

**General Chemistry Methods:**

Various general chemistry methods are taken from Standard

Methods for the Examination of Water and Wastewater, 19th Edition. Specific method citations can be found on the Analytical Results Summary page of this report listed under 'Method'.

**MDL:**

Method Detection Limit. The minimum reportable concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero. The value is calculated from the analysis of seven replicates of a spike sample. On analytical reports this value is corrected for percent moisture and any concentration or dilution factors.

**PQL:**

Practical Quantitation Limit. The Concentration of the lowest calibration standard that was included in the initial calibration of the instrument. On analytical reports this value is corrected for percent moisture and any concentration or dilution factors.

**Concentration (Conc) / Result:**

If the compound is detected, the measured concentration is reported. If this column is left blank, or contains a 'less than' (<) symbol, the compound was not detected.

**Tentatively Identified Compound (TIC):**

A TIC is a non-targeted compound, not included in the calibration, identified by a mass spectral library search.

**Qualifiers:**

**U:**

Indicates the compound was analyzed for but was not detected.

**J:**

Indicates an estimated value. All tentatively identified compounds (TICs) and results below the MDL receive this qualifier.

**B:**

Indicates the analyte was found in the method blank as well as the sample.

**E:**

Indicates that the concentration of the compound exceeds the calibration range of the instrument. The results of a diluted analysis will also be reported. The results of the dilution should be used for those compounds exceeding the calibration range in the undiluted analysis.

**N:**

Used when reporting a specific tentatively identified compound.

## ANALYTICAL RESULTS SUMMARY

**Client** TERMS ENVIRONMENTAL  
599 Springfield Ave

**APL Order ID Number** 11010298

**Contact** Berkeley Heights, NJ 07922  
Pete Lakatos

**Date Sampled** 01/11/2011 9:00

**Date Received** 01/11/2011 16:43

**Matrix** Soil

**Project**

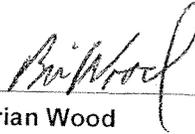
**Site** Vet Park

**Report Date** 01/24/2011 15:20

**Customer Service Rep.**

Sample Number/ Parameter	Method	Analysis Time	Analyst	Result	Units
11010298-001	Comp A				
Aluminum	SW 846 6010B	01/14/2011 12:33	MARKA	11600	mg/kg
Antimony	SW 846 6010B	01/14/2011 12:35	MARKA	<1.18	mg/kg
Arsenic	SW 846 6010B	01/14/2011 12:35	MARKA	8.20	mg/kg
Barium	SW 846 6010B	01/14/2011 12:35	MARKA	132	mg/kg
Beryllium	SW 846 6010B	01/14/2011 12:35	MARKA	<0.06	mg/kg
Cadmium	SW 846 6010B	01/14/2011 12:35	MARKA	0.38	mg/kg
Calcium	SW 846 6010B	01/14/2011 12:33	MARKA	8450	mg/kg
Chromium	SW 846 6010B	01/14/2011 12:35	MARKA	34.6	mg/Kg
Cobalt	SW 846 6010B	01/14/2011 12:35	MARKA	9.4	mg/kg
Copper	SW 846 6010B	01/14/2011 12:35	MARKA	114	mg/kg
Cyanide	SW 846 9010B	01/11/201 18:00	RSWAMY	27.7	mg/kg
Iron	SW 846 6010B	01/14/2011 12:33	MARKA	23800	mg/kg
Lead	SW 846 6010B	01/14/2011 12:35	MARKA	225	mg/kg
Magnesium	SW 846 6010B	01/14/2011 12:33	MARKA	6130	mg/kg
Manganese	SW 846 6010B	01/14/2011 12:35	MARKA	307	mg/kg
Mercury	SW 846 7471A	01/18/2011 14:00	ASTOICA	1.01	mg/kg
Nickel	SW 846 6010B	01/14/2011 12:35	MARKA	24.3	mg/kg
Percent Solids	Gravimetric	01/13/2011 13:15	MARKA	84.8	%
Potassium	SW 846 6010B	01/14/2011 12:33	MARKA	1910	mg/kg
Selenium	SW 846 6010B	01/14/2011 12:35	MARKA	<1.48	mg/kg
Silver	SW 846 6010B	01/14/2011 12:35	MARKA	<1.77	mg/Kg
Sodium	SW 846 6010B	01/14/2011 12:33	MARKA	278	mg/kg
Thallium	SW 846 6010B	01/14/2011 12:35	MARKA	<1.18	mg/kg
Vanadium	SW 846 6010B	01/14/2011 12:35	MARKA	50	mg/kg
Zinc	SW 846 6010B	01/14/2011 12:35	MARKA	151	mg/kg

SA: See attached report



**Brian Wood**  
Laboratory Director

QA



AQUA PRO-TECH LABORATORIES

CERTIFICATIONS

NJ DEP #07010/NY DOH #11634

CT #PH-0233

**ANALYTICAL RESULTS SUMMARY**

**Client** TERMS ENVIRONMENTAL  
599 Springfield Ave

**APL Order ID Number** 11010298

**Contact** Berkeley Heights, NJ 07922  
Pete Lakatos

**Date Sampled** 01/11/2011 9:00

**Date Received** 01/11/2011 16:43

**Matrix** Soil

**Project**

**Site** Vet Park

**Report Date** 01/27/2011 12:09

**Customer Service Rep.**

Sample Number/ Parameter	Method	Analysis Time	Analyst	Result	Units
11010298-001 Comp A					
PCBs	SW 846 8082		BOB	SA	
Pesticides	SW 846 8081A		BOB	SA	
Semivolatile Organics	SW 846 8270C		SUDIP	SA	
Volatile Organics	SW 846 8260B		OLGA	SA	

SA: See attached report

**Brian Wood**  
*Laboratory Director*

QA

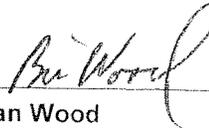
**ANALYTICAL RESULTS SUMMARY**

**Client** TERMS ENVIRONMENTAL  
 599 Springfield Ave  
 Berkeley Heights, NJ 07922  
**Contact** Pete Lakatos  
**Project**  
**Report Date** 01/24/2011 15:20

**APL Order ID Number** 11010298  
**Date Sampled** 01/11/2011 11:00  
**Date Received** 01/11/2011 16:43  
**Matrix** Soil  
**Site** Vet Park  
**Customer Service Rep.**

Sample Number/ Parameter	Method	Analysis Time	Analyst	Result	Units
11010298-002	Comp B				
Aluminum	SW 846 6010B	01/14/2011 12:30	MARKA	12600	mg/kg
Antimony	SW 846 6010B	01/14/2011 12:31	MARKA	<1.21	mg/kg
Arsenic	SW 846 6010B	01/14/2011 12:31	MARKA	5.43	mg/kg
Barium	SW 846 6010B	01/14/2011 12:31	MARKA	72.9	mg/kg
Beryllium	SW 846 6010B	01/14/2011 12:31	MARKA	<0.06	mg/kg
Cadmium	SW 846 6010B	01/14/2011 12:31	MARKA	0.21	mg/kg
Calcium	SW 846 6010B	01/14/2011 12:30	MARKA	3470	mg/kg
Chromium	SW 846 6010B	01/14/2011 12:31	MARKA	21.1	mg/Kg
Cobalt	SW 846 6010B	01/14/2011 12:31	MARKA	8.25	mg/kg
Copper	SW 846 6010B	01/14/2011 12:31	MARKA	30.5	mg/kg
Cyanide	SW 846 9010B	01/11/201 18:00	RSWAMY	<0.30	mg/Kg
Iron	SW 846 6010B	01/14/2011 12:30	MARKA	17800	mg/kg
Lead	SW 846 6010B	01/14/2011 12:31	MARKA	115	mg/kg
Magnesium	SW 846 6010B	01/14/2011 12:30	MARKA	3530	mg/kg
Manganese	SW 846 6010B	01/14/2011 12:31	MARKA	391	mg/kg
Mercury	SW 846 7471A	01/18/2011 14:00	ASTOICA	0.233	mg/kg
Nickel	SW 846 6010B	01/14/2011 12:31	MARKA	15.6	mg/kg
Percent Solids	Gravimetric	01/13/2011 13:15	MARKA	82.8	%
Potassium	SW 846 6010B	01/14/2011 12:30	MARKA	877	mg/kg
Selenium	SW 846 6010B	01/14/2011 12:31	MARKA	<1.51	mg/kg
Silver	SW 846 6010B	01/14/2011 12:31	MARKA	<1.81	mg/Kg
Sodium	SW 846 6010B	01/14/2011 12:30	MARKA	132	mg/kg
Thallium	SW 846 6010B	01/14/2011 12:31	MARKA	<1.21	mg/kg
Vanadium	SW 846 6010B	01/14/2011 12:31	MARKA	30	mg/kg
Zinc	SW 846 6010B	01/14/2011 12:31	MARKA	102	mg/kg

SA: See attached report



**Brian Wood**  
Laboratory Director

QA

**APL**

CERTIFICATIONS

AQUA PRO-TECH LABORATORIES

NJ DEP #07010/NY DOH #11634

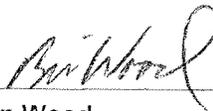
CT #PH-0233

**ANALYTICAL RESULTS SUMMARY**

<b>Client</b>	TERMS ENVIRONMENTAL 599 Springfield Ave	<b>APL Order ID Number</b>	11010298
	Berkeley Heights, NJ 07922	<b>Date Sampled</b>	01/11/2011 11:00
<b>Contact</b>	Pete Lakatos	<b>Date Received</b>	01/11/2011 16:43
		<b>Matrix</b>	Soil
<b>Project</b>		<b>Site</b>	Vet Park
<b>Report Date</b>	01/27/2011 12:09	<b>Customer Service Rep.</b>	

Sample Number/ Parameter	Method	Analysis Time	Analyst	Result	Units
11010298-002	Comp B				
PCBs	SW 846 8082		BOB	SA	
Pesticides	SW 846 8081A		BOB	SA	
Semivolatile Organics	SW 846 8270C		SUDIP	SA	
Volatile Organics	SW 846 8260B		OLGA	SA	

SA: See attached report



Brian Wood  
Laboratory Director

QA

AQUA PRO-TECH LABORATORIES  
CONFORMANCE/NON-CONFORMANCE SUMMARY

APL Sample ID Number: 11010298  
Parameter: Inorganics

1. Was the BLANK CONTAMINATED? NO  
*If YES, list the samples and concentrations in each blank.*  
\_\_\_\_\_  
\_\_\_\_\_

2. Were all QC CRITERIA regarding spikes and duplicates met? NO  
*The recoveries for the matrix spike/matrix spike duplicate and/or duplicate for several metals were outside of QC limits. However, the blank spike recoveries were within QC limits.*  
\_\_\_\_\_  
\_\_\_\_\_

3. Was the EXTRACTION/DIGESTION HOLDING TIME MET? YES  
*If NO, list the number of days exceeded for each sample.*  
\_\_\_\_\_  
\_\_\_\_\_

4. Was the ANALYSIS HOLDING TIME MET? YES  
*If NO, list the number of days exceeded for each sample.*  
\_\_\_\_\_  
\_\_\_\_\_

Additional Comments:  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Ravi Swamy  
Department Supervisor

1/19/2011  
Date

AQUA PRO-TECH LABORATORIES  
METALS QC SUMMARY

SOIL

TEST	Antimony	Arsenic	Beryllium	Cadmium	Chromium	Copper	Lead	Nickel	Selenium	Silver	Thallium	Zinc
MDL	1.00	0.40	0.05	0.10	0.50	0.50	0.50	0.25	1.25	1.50	1.00	1.50
Method Number	SV-348 6010B											
Analyst	Mark S											
<b>BLANK SPIKE</b>												
Blank Conc.	<1.00	<0.40	<0.05	<0.10	<0.50	<0.50	<0.50	<0.25	<1.25	<1.50	<1.00	<1.50
Blank Spike, True Value	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
Blank Spike, Obtained Value	21.4	23.3	24.2	23.5	23.5	23.5	24.7	23.2	23.6	24.1	24.5	23.3
% Recovery	102	80	97	93	94	102	99	93	94	96	98	93
QC Limits	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120
<b>SAMPLE DUPLICATE</b>												
Sample ID	11010298-001	11010298-001	11010298-001	11010298-001	11010298-001	11010298-001	11010298-001	11010298-001	11010298-001	11010298-001	11010298-001	11010298-001
Sample Conc.	<1.18	8.2	<0.06	0.38	34.6	114.0	225	24.3	<1.48	<1.77	<1.18	151
Sample Duplicate Conc.	<1.18	12	<0.06	0.94	43.6	114.0	205	26.4	<1.48	<1.77	<1.18	200
% RPD	NC	38	NC	85	23	43	16	27	NC	NC	NC	28
QC Limit	20	20	20	20	20	20	20	20	20	20	20	20
<b>MATRIX SPIKE</b>												
Sample ID	11010298-001	11010298-001	11010298-001	11010298-001	11010298-001	11010298-001	11010298-001	11010298-001	11010298-001	11010298-001	11010298-001	11010298-001
Sample Conc.	<0.91	8.20	<0.06	0.380	31.6	114.0	225	24.3	<1.48	<1.77	<1.18	151.0
Matrix Spike, True Value	26.4	26.4	26.4	26.4	26.4	26.4	26.4	26.4	26.4	26.4	26.4	26.4
Matrix Spike, Obtained Value	11.5	26.2	23.5	25.4	83.3	140	342	59.3	14.3	25.6	21.7	180
% Recovery	44	68	89	95	184	98	122	113	54	97	82	110
QC Limits	75-125	75-125	75-125	75-125	75-125	75-125	75-125	75-125	75-125	75-125	75-125	75-125
<b>MATRIX SPIKE DUPLICATE</b>												
Sample ID	11010298-001	11010298-001	11010298-001	11010298-001	11010298-001	11010298-001	11010298-001	11010298-001	11010298-001	11010298-001	11010298-001	11010298-001
Sample Conc.	<1.18	8.70	<0.06	0.380	34.6	114.0	225	24.3	<1.48	<1.77	<1.18	151.0
Matrix Spike Duplicate, True Value	26.4	26.4	26.4	26.4	26.4	26.4	26.4	26.4	26.4	26.4	26.4	26.4
Matrix Spike Duplicate, Obtained Value	11.8	29	26.1	25.7	83	1500	342	59.3	14.3	25.6	21.7	180
% Recovery	45	79	99	96	108	27977	122	121	54	97	82	110
QC Limits	75-125	75-125	75-125	75-125	75-125	75-125	75-125	75-125	75-125	75-125	75-125	75-125
<b>SERIAL DILUTION</b>												
Sample ID	11010298-002	11010298-002	11010298-002	11010298-002	11010298-002	11010298-002	11010298-002	11010298-002	11010298-002	11010298-002	11010298-002	11010298-002
Sample Conc. (1x)	<1.21	5.43	<0.06	0.207	21.1	30.5	115	15.6	<1.51	<1.81	<1.21	102
Sample Conc. (5x)	<8.04	5.02	<0.3	<0.6	22	39.2	150	17.9	<7.55	<9.05	<8.04	107
% RPD	NC	9	NC	NC	4	6	12	14	NC	NC	NC	5
QC Limit	10	10	10	10	10	10	10	10	10	10	10	10

Batch ID: 1946 Sample Weight: 1

NC - Not Calculable  
NA - Not Applicable  
\* - QC exceeded. See conformance

AQUA PRO-TECH LABORATORIES  
METALS QC DATA

TEST MDL	Aluminum	Calcium	Cobalt	Barium	Iron	Magnesium	Manganese	Potassium	Sodium	Vanadium
Method Number	5.00	50.0	0.40	1.25	2.50	50.0	0.50	200	100.	0.50
Analyst	SW-946 6010B									
Blank Conc.	<5.00	<50.0	<0.40	<1.25	<2.50	<50.0	<0.50	<200	<100	<0.50
Blank Spike, True Value	2525	2525	25.0	25.0	2525	2525	25.0	2525	2525	25.0
Blank Spike, Obtained Value	2320	2350	23.1	23.2	2400	2390	24.6	2220	2240	25.0
% Recovery	92	93	92	93	95	95	98	88	89	100
QC Limits	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120	80-120
<b>SAMPLE DUPLICATE</b>										
Sample ID	11010298-001	11010298-001	11010298-001	11010298-001	11010298-001	11010298-001	11010298-001	11010298-001	11010298-001	11010298-001
Sample Conc.	11600	8450	9.4	132	23800	6130	307	1910	278	47.4
Sample Duplicate Conc.	12200	8080	10.5	127	23800	5960	371	2180	230	48.8
% RPD	5	4	11	4	0	3	19	13	2	3
QC Limit	20	20	20	20	20	20	20	20	20	20
<b>MATRIX SPIKE</b>										
Sample ID	11010298-001	11010298-001	11010298-001	11010298-001	11010298-001	11010298-001	11010298-001	11010298-001	11010298-001	11010298-001
Sample Conc.	11600	8450	9.4	132	23800	6130	307	1910	278	47.4
Matrix Spike, True Value	2661	2661	26.4	26.4	2661	2661	26.4	2661	2661	26.4
Matrix Spike, Obtained Value	21800	12600	38.2	484	34000	15200	452	11500	2950	95.9
% Recovery	383	NA	109	1333	NA	NA	NA	NA	100	184
QC Limits	75-125	75-125	75-125	75-125	75-125	75-125	75-125	75-125	75-125	75-125
<b>MATRIX SPIKE DUPLICATE</b>										
Sample ID	11010298-001	11010298-001	11010298-001	11010298-001	11010298-001	11010298-001	11010298-001	11010298-001	11010298-001	11010298-001
Sample Conc.	11600	8450	9.4	132	23800	6130	307	1910	278	47.4
Matrix Spike Duplicate, True Value	2086	2661	25.2	26.4	2661	2661	26.4	2661	2661	26.4
Matrix Spike Duplicate, Obtained Value	16100	10400	34.2	148	27200	8830	394	4820	2830	74.4
% Recovery	216	NA	98	61	NA	NA	NA	NA	96	102
QC Limits	75-125	75-125	75-125	75-125	75-125	75-125	75-125	75-125	75-125	75-125
Matrix Spike Conc.	21800	12600	38.2	484	34000	15200	452	11500	2950	95.9
Matrix Spike Duplicate Conc.	16100	10400	34.2	148	27200	8830	394	4820	2830	74.4
% RPD	30	19	11	106	22	53	14	82	4	25
QC Limit	20	20	20	20	20	20	20	20	20	20
<b>SERIAL DILUTION</b>										
Sample ID	11010298-002	11010298-002	11010298-002	11010298-002	11010298-002	11010298-002	11010298-002	11010298-002	11010298-002	11010298-002
Sample Conc. (1x)	12600	3470	8.25	72.9	17800	3530	391	877	132	31.4
Sample Conc. (5x)	13400	3640	8.75	3	19300	3780	406	955	127	32
% RPD	6	5	6	3	8	7	4	5	4	2
QC Limit	10	10	10	10	10	10	10	10	10	10

Batch ID 1846 Sample Weight 1

NC - Not Calculable  
NA - Not Applicable  
\* - QC exceeded. See conformance

AQUA PRO-TECH LABORATORIES  
METALS QC SUMMARY

MERCURY - SOIL

<b>TEST</b>	Mercury	mg/kg
<b>MDL</b>	0.020	
<b>Method Number</b>	SW-846-7471	
<b>Analyst</b>	Angela S	
<b>BLANK SPIKE</b>		
Blank Conc.	<0.020	mg/kg
Blank Spike, True Value	0.417	mg/kg
Blank Spike, Obtained Value	0.411	mg/kg
% Recovery	98	
QC Limits	80-120	
<b>SAMPLE DUPLICATE</b>		
Sample ID	11010262-019	
Sample Conc.	0.034	mg/kg
Sample Duplicate Conc.	0.042	mg/kg
% RPD	21	*
QC Limit	20	
<b>MATRIX SPIKE</b>		
Sample ID	11010262-019	
Sample Conc.	0.034	mg/kg
Matrix Spike, True Value	0.462	mg/kg
Matrix Spike, Obtained Value	0.564	mg/kg
% Recovery	115	
QC Limits	75-125	
<b>MATRIX SPIKE DUPLICATE</b>		
Sample ID	11010262-019	
Sample Conc.	0.034	mg/kg
Matrix Spike Duplicate, True Value	0.462	mg/kg
Matrix Spike Duplicate, Obtained Value	0.531	mg/kg
% Recovery	108	
QC Limits	75-125	
Matrix Spike Conc.	0.564	mg/kg
Matrix Spike Duplicate Conc.	0.531	mg/kg
% RPD	6	
QC Limit	20	

Notes:

Batch 990

NC - Not Calculable, since at least one component is less than the MDL.

NA - Not Applicable, since the sample concentration is 4 or more times the spike concentration.

\* - QC limit has been exceeded. See conformance sheet for details.

# MDL SUMMARY FOR METALS (SOIL)

Metals Analyte	11010298-001	11010298-002
Percent Moisture	15.2	17.2
Sample Weight	1.00	1.00
Sample Weight (Hg)	0.69	0.86
Aluminum	5.9	6.04
Antimony	1.18	1.21
Arsenic	0.472	0.483
Barium	1.18	1.21
Beryllium	0.059	0.06
Cadmium	0.12	0.12
Calcium	59	60
Chromium	0.59	0.604
Cobalt	0.472	0.483
Copper	0.59	0.604
Iron	2.95	3.02
Lead	0.59	0.604
Magnesium	118	121
Manganese	0.59	0.604
Mercury	0.021	0.018
Nickel	0.295	0.302
Potassium	236	242
Selenium	1.47	1.51
Sodium	118	121
Silver	1.8	1.81
Thallium	1.180	1.210
Vanadium	0.590	0.600
Zinc	1.77	1.81
Percent Solids	84.8	82.8

Sample-specific minimum reporting limits in mg/Kg.

**AQUA PRO-TECH LABORATORIES  
INORGANICS QC**

**CYANIDE - SOIL**

<b>TEST</b>	<b>Total Cyanide</b>	
<b>MDL</b>	<b>0.25</b>	<i>mg/kg</i>
Method Number	SW-846 9010 B	
Analyst	J. Vaghela	
<b>BLANK SPIKE</b>		
Prep Blank Conc.	<0.25	<i>mg/kg</i>
Blank Spike, True Value	2.50	<i>mg/kg</i>
Blank Spike, Obtained Value	2.52	<i>mg/kg</i>
<b>% Recovery</b>	<b>101</b>	
<i>QC Limits</i>	80-120	
<b>SAMPLE DUPLICATE</b>		
Sample ID	11010165-014	<i>mg/kg</i>
Sample Conc.	<0.31	<i>mg/kg</i>
Sample Duplicate Conc.	<0.31	<i>mg/kg</i>
<b>% RPD</b>	<b>NC</b>	
<i>QC Limit</i>	30	
<b>MATRIX SPIKE</b>		
Sample ID	11010165-014	<i>mg/kg</i>
Sample Conc.	<0.31	<i>mg/kg</i>
Matrix Spike, True Value	3.10	<i>mg/kg</i>
Matrix Spike, Obtained Value	2.80	<i>mg/kg</i>
<b>% Recovery</b>	<b>90</b>	
<i>QC Limits</i>	70-130	
<b>MATRIX SPIKE DUPLICATE</b>		
Sample ID	11010165-014	<i>mg/kg</i>
Sample Conc.	<0.31	<i>mg/kg</i>
Matrix Spike Duplicate, True Value	3.10	<i>mg/kg</i>
Matrix Spike Duplicate, Obtained Value	2.86	<i>mg/kg</i>
<b>% Recovery</b>	<b>92</b>	
<i>QC Limits</i>	70-130	
Matrix Spike Conc.	2.80	<i>mg/kg</i>
Matrix Spike Duplicate Conc.	2.86	<i>mg/kg</i>
<b>% RPD</b>	<b>2</b>	
<i>QC Limit</i>	30	

**NOTES:**

**NC** Not Calculable, since at least one component is less than the MDL.

**NA** Not Applicable, since the sample conc. is four or more times the spike conc.

\* *QC limit has been exceeded. See conformance sheet for details.*

AQUA PRO-TECH LABORATORIES  
MOISTURE AND MDLs SUMMARY

Analyte : CYANIDE

Sample ID	% Solids	MDL	Units
11010298-001	84.8	0.29	mg/kg
11010298-002	82.8	0.30	mg/kg

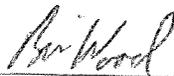
## **ANALYTICAL RESULTS PCBs & Pesticides in Soil**

NJDEP Reduced Deliverables Format

### **Terms Environmental Berkeley Heights, NJ**

### **Project: Vet Park**

Reviewed By:



Brian Wood, Laboratory Director



Date

PCBs

# SAMPLE LOCATION AND IDENTIFICATION

PCBs

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Client Sample Number	APL Sample Number	Matrix
Comp A	11010298-001	Soil
Comp B	11010298-002	Soil

# LABORATORY CHRONICLE

20

## PCBs IN SOIL

	Date	Performed By
Sample Collection	1/11/11	Client
Receipt / Refrigeration	1/11/11	Ponsi

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Sample Number:	Extraction Date:	Extraction Performed By:	GC Analysis Date:	Analysis Performed By:
11010298-001	1/24/11	Marchese	1/25/11	Lipala
11010298-002	1/24/11	Marchese	1/25/11	Lipala

**AQUA PRO-TECH LABORATORIES**  
Fairfield, NJ

**PCB ANALYTICAL REPORT**  
Method 8082 S

Client:	Terms Environmental	Lab Sample ID:	11010298-1
Project:	Vet Park	GC Run ID:	3B4138
Sample ID:	Comp. A	Extraction Date:	1/24/11
Date Sampled:	1/11/11	Sample Wt /Vol:	15 g
Matrix: (soil/water):	Soil	Final Volume (ml):	10
% Moisture:	15%		
Concentration Units:	µg/kg		

Compound	Result	MDL	PQL	Qualifier	Date Analyzed	Dilution Factor
Aroclor 1016	ND	8.35	77.8	U	1/25/11	1
Aroclor 1221	ND	10.5	77.8	U	1/25/11	1
Aroclor 1232	ND	12.4	77.8	U	1/25/11	1
Aroclor 1242	ND	5.72	77.8	U	1/25/11	1
Aroclor 1248	ND	3.95	77.8	U	1/25/11	1
Aroclor 1254	ND	8.81	77.8	U	1/25/11	1
Aroclor 1260	449	8.45	77.8		1/25/11	1

Qualifiers:

- U - compound not detected at the specified detection limit
- J - below PQL
- D - concentration taken from diluted analysis
- E - compound concentration exceeds calibration

**AQUA PRO-TECH LABORATORIES**  
Fairfield, NJ

**PCB ANALYTICAL REPORT**  
Method 8082 S

Client:	Terms Environmental	Lab Sample ID:	11010298-2
Project:	Vet Park	GC Run ID:	3B4139
Sample ID:	Comp. B	Extraction Date:	1/24/11
Date Sampled:	1/11/11	Sample Wt /Vol:	15 g
Matrix: (soil/water):	Soil	Final Volume (ml):	10
% Moisture:	17%		
Concentration Units:	µg/kg		

Compound	Result	MDL	PQL	Qualifier	Date Analyzed	Dilution Factor
Aroclor 1016	ND	8.55	79.7	U	1/25/11	1
Aroclor 1221	ND	10.8	79.7	U	1/25/11	1
Aroclor 1232	ND	12.7	79.7	U	1/25/11	1
Aroclor 1242	ND	5.86	79.7	U	1/25/11	1
Aroclor 1248	ND	4.04	79.7	U	1/25/11	1
Aroclor 1254	ND	9.02	79.7	U	1/25/11	1
Aroclor 1260	ND	8.65	79.7	U	1/25/11	1

## Qualifiers:

- U - compound not detected at the specified detection limit
- J - below PQL
- D - concentration taken from diluted analysis
- E - compound concentration exceeds calibration

Quantitation Report (QT Reviewed)

23

Signal #1 : G:\HPCHEM\GCECD3\DATA\012511\3B4138.D\ECD1A.CH Vial: 9  
 Signal #2 : G:\HPCHEM\GCECD3\DATA\012511\3B4138.D\ECD2B.CH  
 Acq On : 25 Jan 2011 5:28 pm Operator: RL  
 Sample : 11010298-1 Inst : GC/ECD-2  
 Misc : 2134 Multiplr: 1.00  
 IntFile Signal #1: events.e IntFile Signal #2: events2.e  
 Quant Time: Jan 26 11:58 2011 Quant Results File: 80820110.RES

Quant Method : G:\HPCHEM\G... \80820110.M (Chemstation Integrator)  
 Title : PCBs by EPA Method 8082  
 Last Update : Tue Jan 25 11:23:21 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 80820114.M

Volume Inj. : 2ul  
 Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II  
 Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
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System Monitoring Compounds

1) S TCMX	5.34	6.49	1593017	1032076	36.567	43.207
Spiked Amount	50.000	Range 18 - 129	Recovery =		73.13%	86.41%
2) S Decachlorobiphen	18.92	22.62f	2777045	1640533	50.322m	59.168m
Spiked Amount	50.000	Range 46 - 135	Recovery =		100.64%	118.34%

Target Compounds

Sum Aroclor-1016 (1)			0	0	N.D.	N.D.
Average Aroclor-1016 (1)					0.000	0.000

Sum Aroclor-1221 (1)			0	0	N.D.	N.D.
Average Aroclor-1221 (1)					0.000	0.000

Sum Aroclor-1232 (1)			0	0	N.D.	N.D.
Average Aroclor-1232 (1)					0.000	0.000

Sum Aroclor-1242 (1)			0	0	N.D.	N.D.
Average Aroclor-1242 (1)					0.000	0.000

Sum Aroclor-1248 (1)			0	0	N.D.	N.D.
Average Aroclor-1248 (1)					0.000	0.000

Sum Aroclor-1254 (1)			0	0	N.D.	N.D.
Average Aroclor-1254 (1)					0.000	0.000

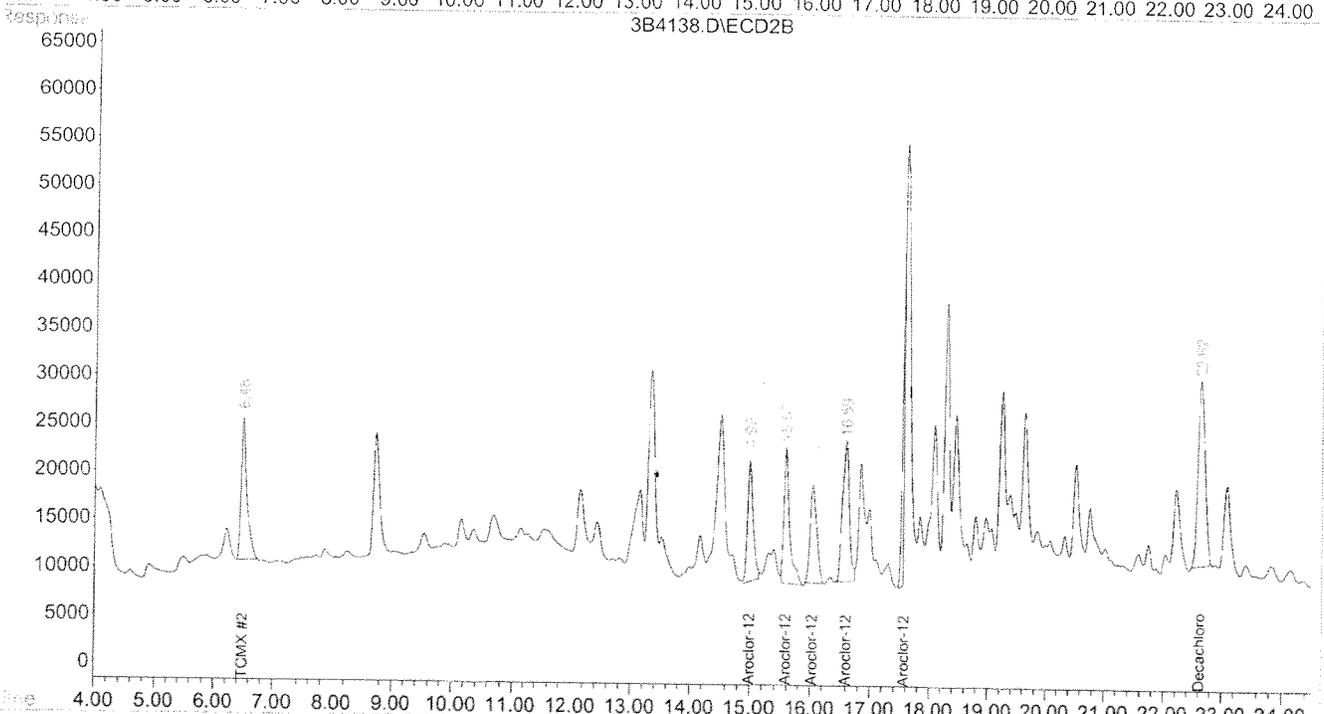
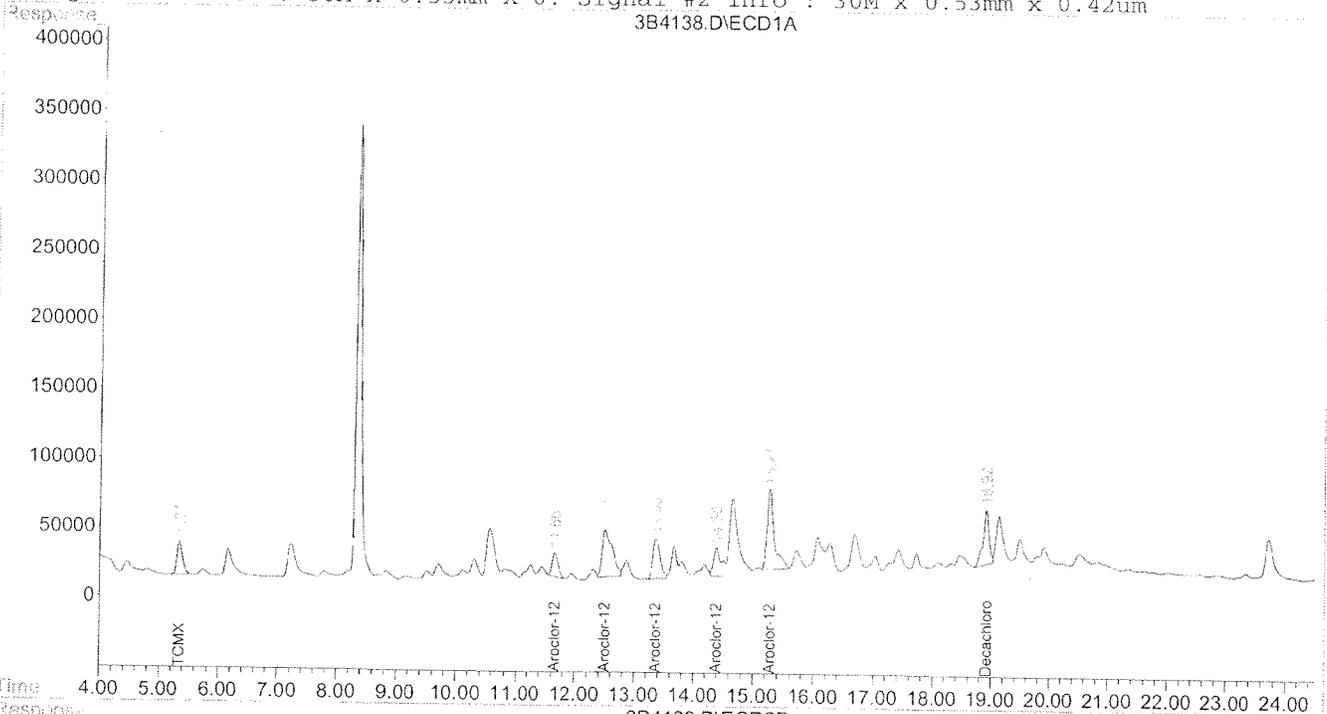
28) L9 Aroclor-1260 (1)	11.65f	14.99	1209540	826356	429.744m	496.235m
29) L9 Aroclor-1260 (2)	12.50f	15.57	4086416	966364	626.817m	490.801m
30) L9 Aroclor-1260 (3)	13.35f	16.03	2533980	780160	474.724m	476.288m
31) L9 Aroclor-1260 (4)	14.38f	16.59	1510372	1137098	613.444m	488.628m
32) L9 Aroclor-1260 (5)	15.27f	17.56f	4651300	772638	711.971m	625.154m
Sum Aroclor-1260 (1)			13991608	4482616	2856.699	2577.107
Average Aroclor-1260 (1)					571.340	515.421

Quantitation Report

Signal #1 : G:\HPCHEM\GCECD3\DATA\012511\3B4138.D\ECD1A.CH Vial: 9  
Signal #2 : G:\HPCHEM\GCECD3\DATA\012511\3B4138.D\ECD2B.CH  
Acq On : 25 Jan 2011 5:28 pm Operator: RL  
Sample : 11010298-1 Inst : GC/ECD-2  
Misc : 2134 Multiplr: 1.00  
IntFile Signal #1: events.e IntFile Signal #2: events2.e  
Quant Time: Jan 26 11:58 2011 Quant Results File: 80820110.RES

Quant Method : G:\HPCHEM\G...\80820110.M (Chemstation Integrator)  
Title : PCBs by EPA Method 8082  
Last Update : Tue Jan 25 11:23:21 2011  
Response via : Multiple Level Calibration  
DataAcq Meth : 80820114.M

Volume Inj. : 2ul  
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II  
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um  
3B4138.D\ECD1A



Quantitation Report (QT Reviewed)

25

Signal #1 : G:\HPCHEM\GCECD3\DATA\012511\3B4139.D\ECD1A.CH Vial: 10  
 Signal #2 : G:\HPCHEM\GCECD3\DATA\012511\3B4139.D\ECD2B.CH  
 Acq On : 25 Jan 2011 5:56 pm Operator: RL  
 Sample : 11010298-2 Inst : GC/ECD-2  
 Misc : 2134 Multiplr: 1.00  
 IntFile Signal #1: events.e IntFile Signal #2: events2.e  
 Quant Time: Jan 26 11:59 2011 Quant Results File: 80820110.RES

Quant Method : G:\HPCHEM\G... \80820110.M (Chemstation Integrator)  
 Title : PCBs by EPA Method 8082  
 Last Update : Tue Jan 25 11:23:21 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 80820114.M

Volume Inj. : 2ul  
 Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II  
 Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
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System Monitoring Compounds

1) S TCMX	5.34	6.49	1525965	1006773	35.028	42.148
Spiked Amount	50.000	Range 18 - 129	Recovery =		70.06%	84.30%
2) S Decachlorobiphen	18.93f	22.62f	3138174	1446316	56.866m	52.163
Spiked Amount	50.000	Range 46 - 135	Recovery =		113.73%	104.33%

Target Compounds

Sum Aroclor-1016 (1)			0	0	N.D.	N.D.
Average Aroclor-1016 (1)					0.000	0.000
Sum Aroclor-1221 (1)			0	0	N.D.	N.D.
Average Aroclor-1221 (1)					0.000	0.000
Sum Aroclor-1232 (1)			0	0	N.D.	N.D.
Average Aroclor-1232 (1)					0.000	0.000
Sum Aroclor-1242 (1)			0	0	N.D.	N.D.
Average Aroclor-1242 (1)					0.000	0.000
Sum Aroclor-1248 (1)			0	0	N.D.	N.D.
Average Aroclor-1248 (1)					0.000	0.000
Sum Aroclor-1254 (1)			0	0	N.D.	N.D.
Average Aroclor-1254 (1)					0.000	0.000
Sum Aroclor-1260 (1)			0	0	N.D.	N.D.
Average Aroclor-1260 (1)					0.000	0.000

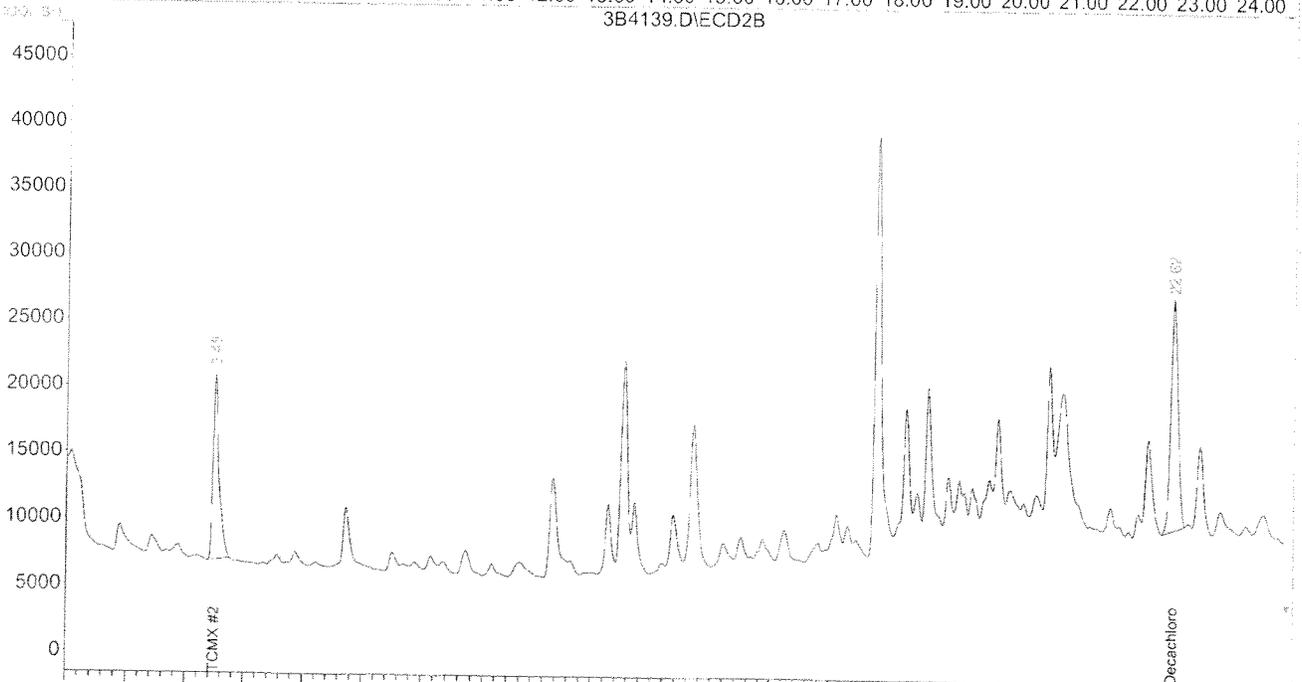
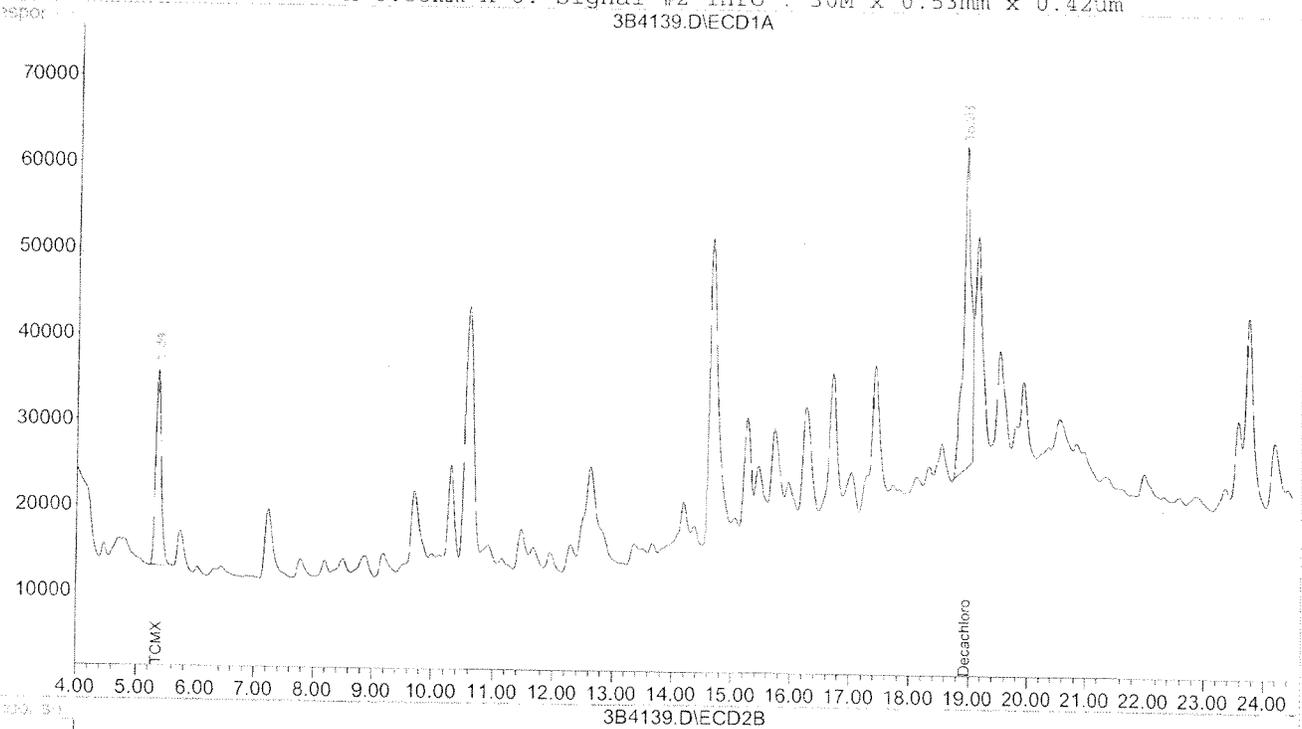
Quantitation Report

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Signal #1 : G:\HPCHEM\GCECD3\DATA\012511\3B4139.D\ECD1A.CH Vial: 10  
Signal #2 : G:\HPCHEM\GCECD3\DATA\012511\3B4139.D\ECD2B.CH  
Acq On : 25 Jan 2011 5:56 pm Operator: RL  
Sample : 11010298-2 Inst : GC/ECD-2  
Misc : 2134 Multiplr: 1.00  
IntFile Signal #1: events.e IntFile Signal #2: events2.e  
Quant Time: Jan 26 11:59 2011 Quant Results File: 80820110.RES

Quant Method : G:\HPCHEM\G...\80820110.M (Chemstation Integrator)  
Title : PCBs by EPA Method 8082  
Last Update : Tue Jan 25 11:23:21 2011  
Response via : Multiple Level Calibration  
DataAcq Meth : 80820114.M

Volume Inj. : 2ul  
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II  
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um



# CONFORMANCE / NON-CONFORMANCE SUMMARY

PCBs

	YES	NO*
Continuing Calibration Recovery Within QC Limits	✓	
Method Blank Interference Free	✓	
Surrogate Recoveries Within QC Limits	✓	
Matrix Spike / Spike Duplicate Recoveries Within QC Limits	✓	
Blank Spike Recoveries Within QC Limits	✓	
Retention Time Shifts Within QC Limits	✓	
Chain Of Custody Included in Report	✓	
Holding Times:		
Water – Extraction Within 7 Days of Sample Collection	NA	
Soil/Concrete - Extraction Within 14 Days of Sample Collection	✓	
Analysis Within 40 Days of Extraction	✓	

\*Comments:

Reviewed By: Robert Lipald Date 02/03/11  
 Robert Lipald GC Chemist



AQUA PRO-TECH Laboratories  
 QUALITY CONTROL REPORT  
 GC MATRIX SPIKE/MATRIX SPIKE DUPLICATE SUMMARY  
 POLYCHLORINATED BIPHENYLS

BATCH NUMBER: QGC2134  
 SPIKED SAMPLE: 11010323-14  
 METHOD: 8082  
 MATRIX: Soil  
 MOISTURE: 16.0%

	SAMPLE	MS	MSD
INITIAL WT/VOL:	15	15	15
FINAL VOL:	10	10	10
UNITS:	µg/kg		

Compound Name	Conc. Added	Sample Conc.	Matrix Spike		Spike Duplicate		QC	
			Conc.	%Rec	Conc.	%Rec	RPD	RPD
Aroclor-1016	397	U	326	82.1	325	81.9	40	0
Aroclor-1260	397	U	410	103	424	107	40	3

QC Limits:	Compound	Percent Recovery Limits
	Aroclor-1016	59 - 133
	Aroclor-1260	70 - 160

\* Values outside QC Limits

Signal #1 : G:\HPCHEM\GCECD3\DATA\012511\3B4135.D\ECD1A.CH Vial: 6  
 Signal #2 : G:\HPCHEM\GCECD3\DATA\012511\3B4135.D\ECD2B.CH  
 Acq On : 25 Jan 2011 4:03 pm Operator: RL  
 Sample : 11010323-14 Inst : GC/ECD-2  
 Misc : 2134 Multiplr: 1.00  
 IntFile Signal #1: events.e IntFile Signal #2: events2.e  
 Quant Time: Jan 26 11:54 2011 Quant Results File: 80820110.RES

Quant Method : G:\HPCHEM\G... \80820110.M (Chemstation Integrator)  
 Title : PCBs by EPA Method 8082  
 Last Update : Tue Jan 25 11:23:21 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 80820114.M

Volume Inj. : 2ul  
 Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II  
 Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
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System Monitoring Compounds

1) S TCMX	5.35	6.50	1689256	931434	38.776	38.994
Spiked Amount	50.000	Range 18 - 129	Recovery =		77.55%	77.99%
2) S Decachlorobiphen	18.94f	22.62f	2045677	979802	37.069	35.338
Spiked Amount	50.000	Range 46 - 135	Recovery =		74.14%	70.68%

Target Compounds

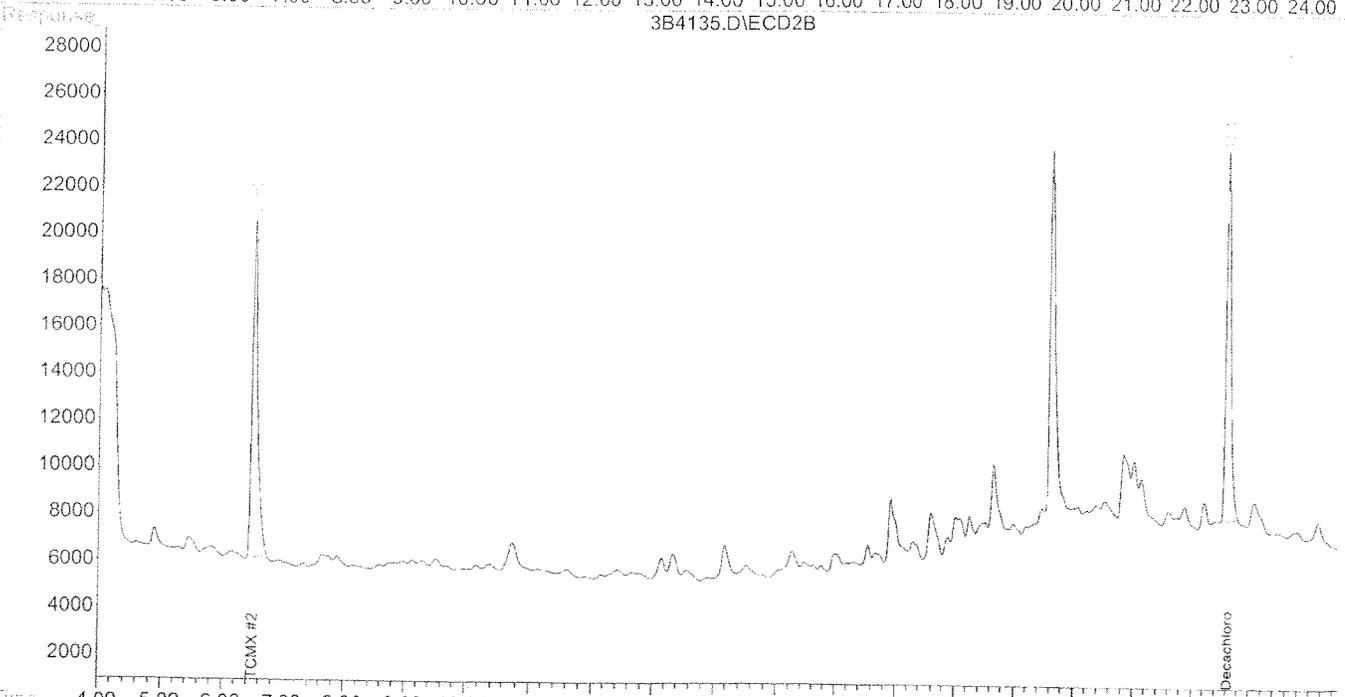
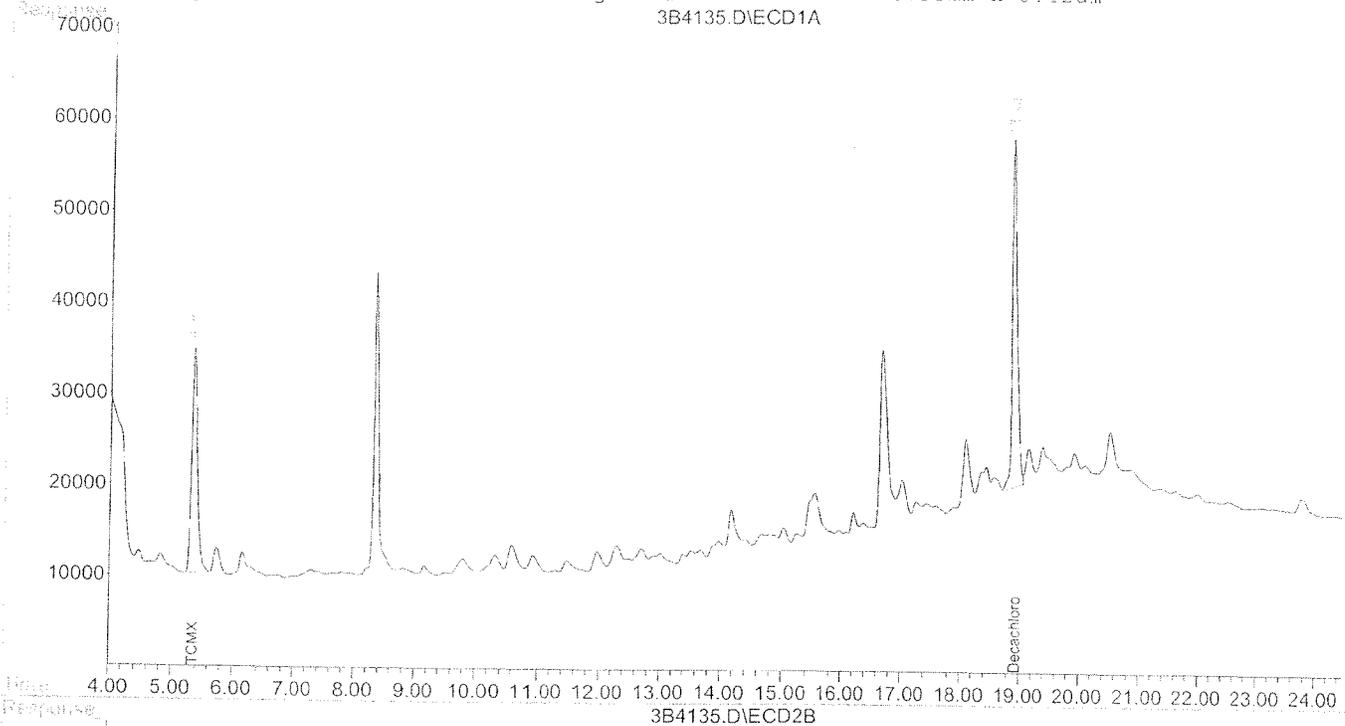
Sum Aroclor-1016 (1)			0	0	N.D.	N.D.
Average Aroclor-1016 (1)					0.000	0.000
Sum Aroclor-1221 (1)			0	0	N.D.	N.D.
Average Aroclor-1221 (1)					0.000	0.000
Sum Aroclor-1232 (1)			0	0	N.D.	N.D.
Average Aroclor-1232 (1)					0.000	0.000
Sum Aroclor-1242 (1)			0	0	N.D.	N.D.
Average Aroclor-1242 (1)					0.000	0.000
Sum Aroclor-1248 (1)			0	0	N.D.	N.D.
Average Aroclor-1248 (1)					0.000	0.000
Sum Aroclor-1254 (1)			0	0	N.D.	N.D.
Average Aroclor-1254 (1)					0.000	0.000
Sum Aroclor-1260 (1)			0	0	N.D.	N.D.
Average Aroclor-1260 (1)					0.000	0.000

Quantitation Report

Signal #1 : G:\HPCHEM\GCECD3\DATA\012511\3B4135.D\ECD1A.CH Vial: 6  
Signal #2 : G:\HPCHEM\GCECD3\DATA\012511\3B4135.D\ECD2B.CH  
Acq On : 25 Jan 2011 4:03 pm Operator: RL  
Sample : 11010323-14 Inst : GC/ECD-2  
Misc : 2134 Multiplr: 1.00  
IntFile Signal #1: events.e IntFile Signal #2: events2.e  
Quant Time: Jan 26 11:54 2011 Quant Results File: 80820110.RES

Quant Method : G:\HPCHEM\G... \80820110.M (Chemstation Integrator)  
Title : PCBs by EPA Method 8082  
Last Update : Tue Jan 25 11:23:21 2011  
Response via : Multiple Level Calibration  
DataAcq Meth : 80820114.M

Volume Inj. : 2ul  
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II  
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um  
3B4135.D\ECD1A



Signal #1 : G:\HPCHEM\GCECD3\DATA\020111\3B4203.D\ECD1A.CH Vial: 9  
 Signal #2 : G:\HPCHEM\GCECD3\DATA\020111\3B4203.D\ECD2B.CH  
 Acq On : 1 Feb 2011 1:51 pm Operator: RL  
 Sample : 11010323-14 MS Inst : GC/ECD-2  
 Misc : QG2134 Multiplr: 1.00  
 IntFile Signal #1: events.e IntFile Signal #2: events2.e  
 Quant Time: Feb 1 14:56 2011 Quant Results File: 80820110.RES

Quant Method : G:\HPCHEM\G... \80820110.M (Chemstation Integrator)  
 Title : PCBs by EPA Method 8082  
 Last Update : Tue Jan 25 11:23:21 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 80820114.M

Volume Inj. : 2ul  
 Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II  
 Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
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System Monitoring Compounds

1) S TCMX	5.35	6.50	1806935	889503	41.477	37.239
Spiked Amount	50.000	Range 18 - 129	Recovery =		82.95%	74.48%
2) S Decachlorobiphen	18.93f	22.61f	2360965	1148003	42.782	41.404
Spiked Amount	50.000	Range 46 - 135	Recovery =		85.56%	82.81%

Target Compounds

3) L3 Aroclor-1016 (1)	5.93	7.52	672848	259546	520.958m	379.448m#
4) L3 Aroclor-1016 (2)	6.57	8.46	807788	473220	372.766m	341.878m
5) L3 Aroclor-1016 (3)	6.96	9.05	597660	151556	349.934m	295.662m
6) L3 Aroclor-1016 (4)	7.50	9.56	2180392	935468	400.289m	369.155m
7) L3 Aroclor-1016 (5)	7.79	9.90	789992	362300	410.747m	356.785m
Sum Aroclor-1016 (1)			5048680	2182090	2054.693	1742.927
Average Aroclor-1016 (1)					410.939	348.585
Sum Aroclor-1221 (1)			0	0	N.D.	N.D.
Average Aroclor-1221 (1)					0.000	0.000
Sum Aroclor-1232 (1)			0	0	N.D.	N.D.
Average Aroclor-1232 (1)					0.000	0.000
Sum Aroclor-1242 (1)			0	0	N.D.	N.D.
Average Aroclor-1242 (1)					0.000	0.000
Sum Aroclor-1248 (1)			0	0	N.D.	N.D.
Average Aroclor-1248 (1)					0.000	0.000
Sum Aroclor-1254 (1)			0	0	N.D.	N.D.
Average Aroclor-1254 (1)					0.000	0.000
8) L9 Aroclor-1260 (1)	11.66f	14.99	1413123	724648	502.076	435.158m
9) L9 Aroclor-1260 (2)	12.50f	15.58	3179815	836611	487.753	424.902
0) L9 Aroclor-1260 (3)	13.36	16.04	2300061	719053	430.900	438.982
1) L9 Aroclor-1260 (4)	14.39f	16.59	1396568	985816	567.222m	423.620 #
2) L9 Aroclor-1260 (5)	15.28f	17.65	3873329	697874	592.887	564.662
Sum Aroclor-1260 (1)			12162896	3964002	2580.839	2287.324
Average Aroclor-1260 (1)					516.168	457.465

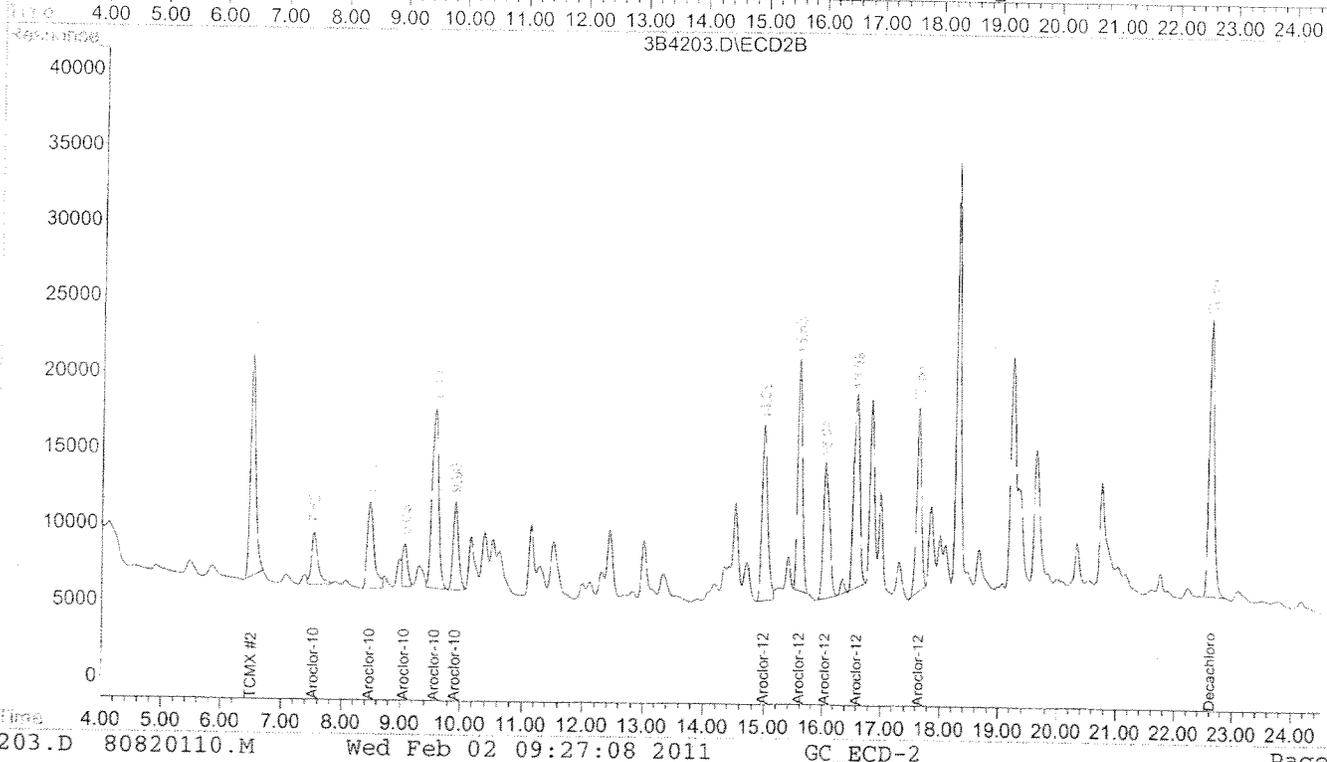
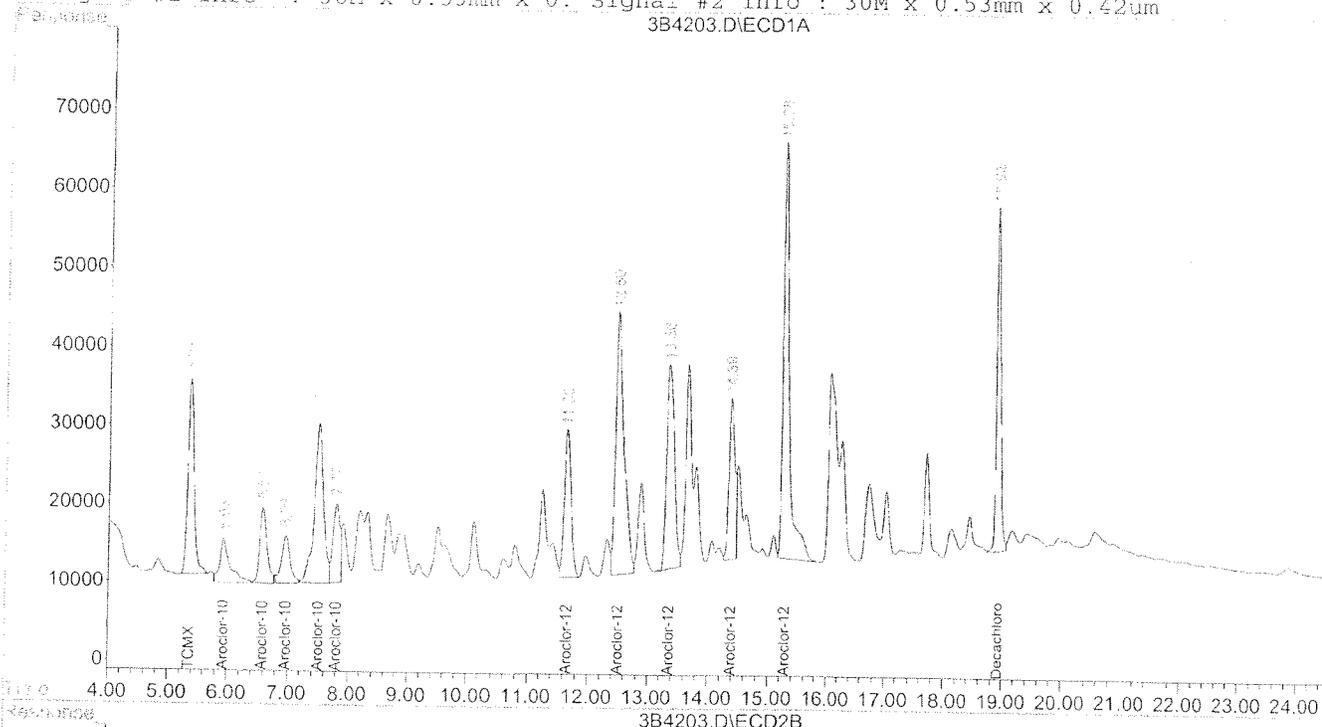
Quantitation Report

33

Signal #1 : G:\HPCHEM\GCECD3\DATA\020111\3B4203.D\ECD1A.CH Vial: 9  
Signal #2 : G:\HPCHEM\GCECD3\DATA\020111\3B4203.D\ECD2B.CH  
Acq On : 1 Feb 2011 1:51 pm Operator: RL  
Sample : 11010323-14 MS Inst : GC/ECD-2  
Misc : QG2134 Multiplr: 1.00  
IntFile Signal #1: events.e IntFile Signal #2: events2.e  
Quant Time: Feb 1 14:56 2011 Quant Results File: 80820110.RES

Quant Method : G:\HPCHEM\G... \80820110.M (Chemstation Integrator)  
Title : PCBs by EPA Method 8082  
Last Update : Tue Jan 25 11:23:21 2011  
Response via : Multiple Level Calibration  
DataAcq Meth : 80820114.M

Volume Inj. : 2ul  
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II  
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um  
3B4203.D\ECD1A



Signal #1 : G:\HPCHEM\GCECD3\DATA\020111\3B4204.D\ECD1A.CH Vial: 10  
 Signal #2 : G:\HPCHEM\GCECD3\DATA\020111\3B4204.D\ECD2B.CH  
 Acq On : 1 Feb 2011 2:20 pm Operator: RL  
 Sample : 11010323-14 MSD Inst : GC/ECD-2  
 Misc : QG2134 Multiplr: 1.00  
 IntFile Signal #1: events.e IntFile Signal #2: events2.e  
 Quant Time: Feb 1 14:58 2011 Quant Results File: 80820110.RES

Quant Method : G:\HPCHEM\G... \80820110.M (Chemstation Integrator)  
 Title : PCBs by EPA Method 8082  
 Last Update : Tue Jan 25 11:23:21 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 80820114.M

Volume Inj. : 2ul  
 Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II  
 Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
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System Monitoring Compounds

1) S TCMX	5.36	6.50	1891989	938465	43.429	39.288
Spiked Amount	50.000	Range 18 -	129	Recovery =	86.86%	78.58%
2) S Decachlorobiphen	18.93f	22.61f	2454115	1211561	44.470	43.697
Spiked Amount	50.000	Range 46 -	135	Recovery =	88.94%	87.39%

Target Compounds

3) L3 Aroclor-1016 (1)	5.93	7.52	643044	296926	497.882m	434.096m
4) L3 Aroclor-1016 (2)	6.58	8.46	784916	531986	362.211m	384.333m
5) L3 Aroclor-1016 (3)	6.96	9.05	599476	196064	350.997m	382.490m
6) L3 Aroclor-1016 (4)	7.50	9.56	2285578	992688	419.599m	391.735m
7) L3 Aroclor-1016 (5)	7.79	9.90	807306	370532	419.749m	364.891m
Sum Aroclor-1016 (1)			5120320	2388196	2050.439	1957.546
Average Aroclor-1016 (1)					410.088	391.509
Sum Aroclor-1221 (1)			0	0	N.D.	N.D.
Average Aroclor-1221 (1)					0.000	0.000
Sum Aroclor-1232 (1)			0	0	N.D.	N.D.
Average Aroclor-1232 (1)					0.000	0.000
Sum Aroclor-1242 (1)			0	0	N.D.	N.D.
Average Aroclor-1242 (1)					0.000	0.000
Sum Aroclor-1248 (1)			0	0	N.D.	N.D.
Average Aroclor-1248 (1)					0.000	0.000
Sum Aroclor-1254 (1)			0	0	N.D.	N.D.
Average Aroclor-1254 (1)					0.000	0.000
3) L9 Aroclor-1260 (1)	11.66f	14.99	1482205	718304	526.621	431.348m
4) L9 Aroclor-1260 (2)	12.50f	15.58	3344821	882030	513.063	447.969
5) L9 Aroclor-1260 (3)	13.36	16.04	2444177	761149	457.900	464.682
6) L9 Aroclor-1260 (4)	14.39f	16.59	1425060	1036764	578.794m	445.513m
7) L9 Aroclor-1260 (5)	15.28f	17.65	3871184	739480	592.559m	598.326
Sum Aroclor-1260 (1)			12567447	4137727	2668.937	2387.839
Average Aroclor-1260 (1)					533.787	477.568

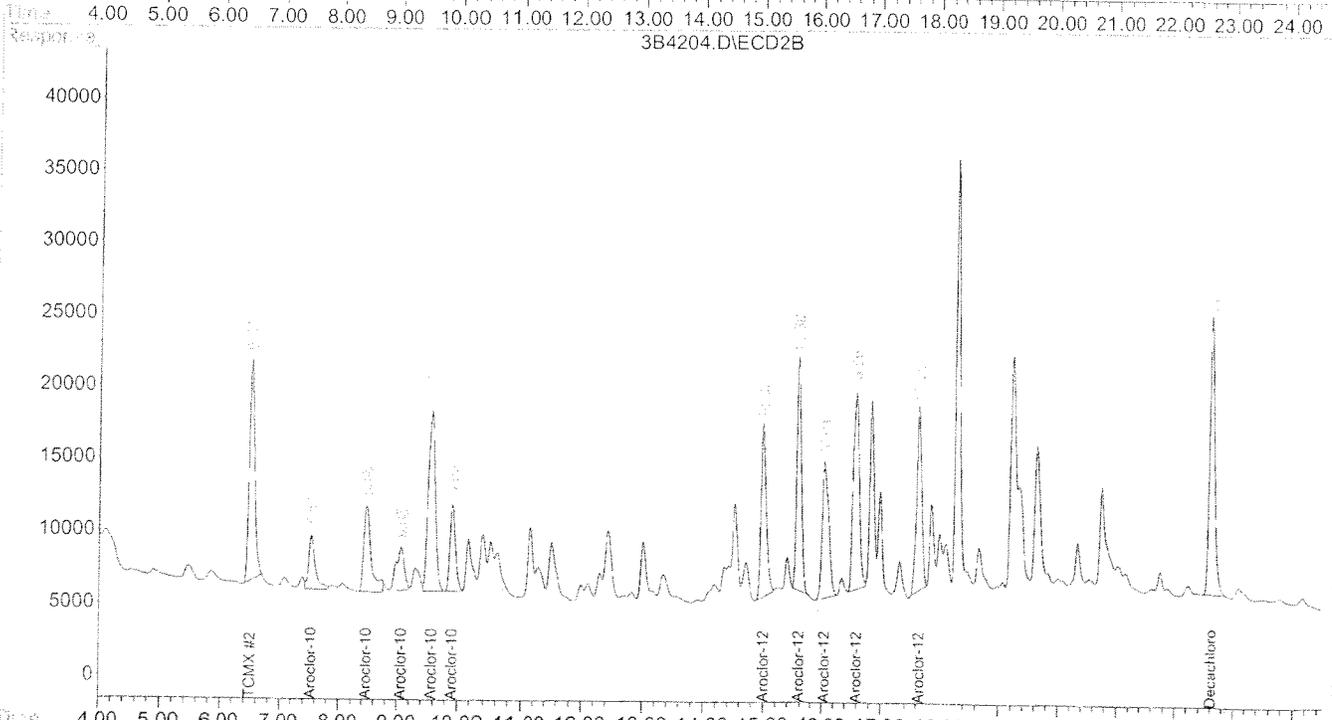
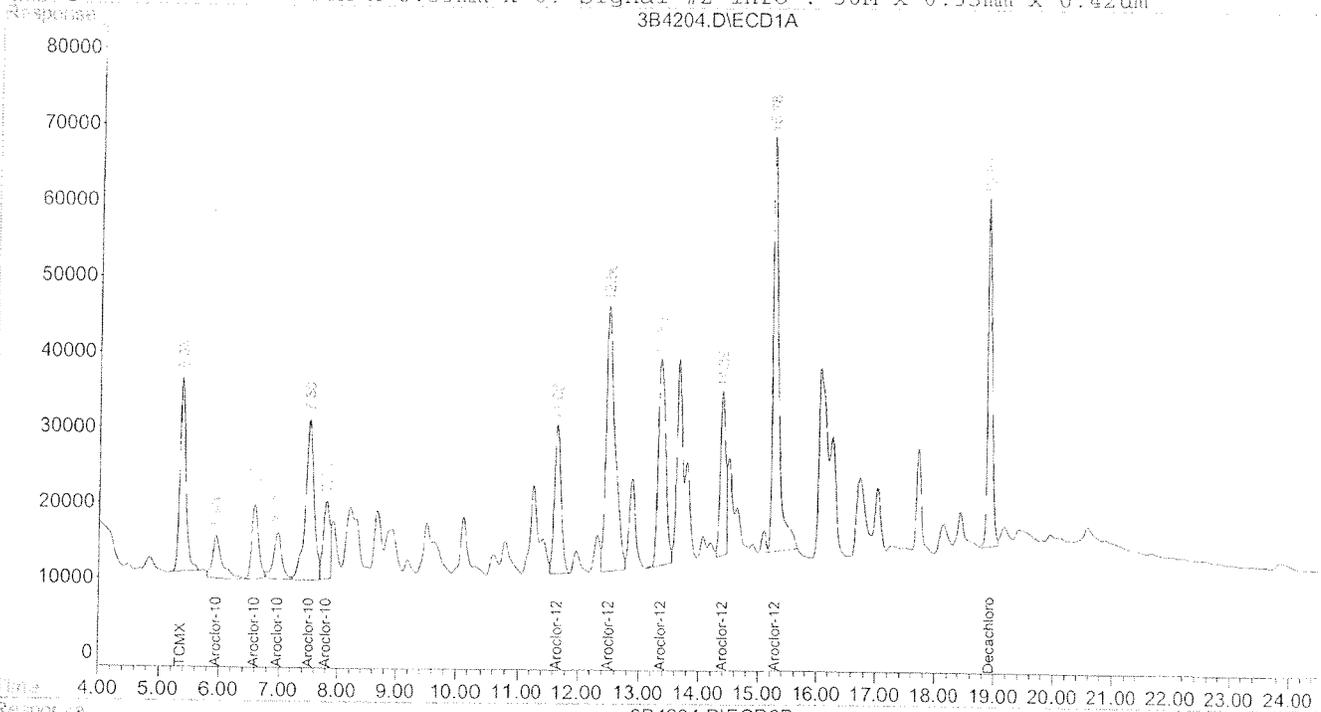
QUANTIFICATION REPORT

Signal #1 : G:\HPCHEM\GCECD3\DATA\020111\3B4204.D\ECD1A.CH Vial: 10  
Signal #2 : G:\HPCHEM\GCECD3\DATA\020111\3B4204.D\ECD2B.CH  
Acq On : 1 Feb 2011 2:20 pm Operator: RL  
Sample : 11010323-14 MSD Inst : GC/ECD-2  
Misc : QG2134 Multiplr: 1.00  
IntFile Signal #1: events.e IntFile Signal #2: events2.e  
Quant Time: Feb 1 14:58 2011 Quant Results File: 80820110.RES

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Quant Method : G:\HPCHEM\G... \80820110.M (Chemstation Integrator)  
Title : PCBs by EPA Method 8082  
Last Update : Tue Jan 25 11:23:21 2011  
Response via : Multiple Level Calibration  
DataAcq Meth : 80820114.M

Volume Inj. : 2ul  
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II  
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um  
3B4204.D\ECD1A



AQUA PRO-TECH Laboratories  
 QUALITY CONTROL REPORT  
 GC BLANK SPIKE SUMMARY  
 POLYCHLORINATED BIPHENYL

BATCH NUMBER: QGC2134

SPIKED SAMPLE: BLANK

METHOD: 8082

MATRIX: Soil

	SAMPLE	BS
INITIAL WT/VOL:	15	15
FINAL VOL:	10	10
UNITS:	µg/kg	

Compound Name	Conc. Added	Blank Conc.	Blank Spike	
			Conc.	%Rec
Aroclor-1016	333	U	303	91
Aroclor-1260	333	U	318	95.5

QC Limits:	Compound	Percent Recovery Limits
	Aroclor-1016	74 - 115
	Aroclor-1260	88 - 124

\* Values outside QC Limits

Signal #1 : G:\HPCHEM\GCECD3\DATA\012511\3B4141.D\ECD1A.CH Vial: 12  
 Signal #2 : G:\HPCHEM\GCECD3\DATA\012511\3B4141.D\ECD2B.CH  
 Acq On : 25 Jan 2011 6:53 pm Operator: RL  
 Sample : SPC 24 BS Inst : GC/ECD-2  
 Misc : 2134 Multiplr: 1.00  
 IntFile Signal #1: events.e IntFile Signal #2: events2.e  
 Quant Time: Jan 26 13:31 2011 Quant Results File: 80820110.RES

Quant Method : G:\HPCHEM\G... \80820110.M (Chemstation Integrator)  
 Title : PCBs by EPA Method 8082  
 Last Update : Wed Jan 26 12:39:20 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 80820114.M

Volume Inj. : 2ul  
 Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II  
 Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
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System Monitoring Compounds

1) S TCMX	5.34	6.48	1637410	1040704	41.869	49.145
Spiked Amount	50.000	Range 18 - 129	Recovery =		83.74%	98.29%
2) S Decachlorobiphen	18.93f	22.61f	1879580	946898	53.969	54.794
Spiked Amount	50.000	Range 46 - 135	Recovery =		107.94%	109.59%

Target Compounds

3) L3 Aroclor-1016 (1)	5.91	7.51	673084	316680	521.140m	462.976m
4) L3 Aroclor-1016 (2)	6.56	8.45	884760	539944	408.286m	390.083m
5) L3 Aroclor-1016 (3)	6.95f	9.04	817416	220746	478.602m	430.641m
6) L3 Aroclor-1016 (4)	7.48	9.55	2332572	1074382	428.227m	423.973m
7) L3 Aroclor-1016 (5)	7.78	9.90	833058	455054	433.139m	448.127m
Sum Aroclor-1016 (1)			5540890	2606806	2269.394	2155.799
verage Aroclor-1016 (1)					453.879	431.160
Sum Aroclor-1221 (1)			0	0	N.D.	N.D.
verage Aroclor-1221 (1)					0.000	0.000
Sum Aroclor-1232 (1)			0	0	N.D.	N.D.
verage Aroclor-1232 (1)					0.000	0.000
Sum Aroclor-1242 (1)			0	0	N.D.	N.D.
verage Aroclor-1242 (1)					0.000	0.000
Sum Aroclor-1248 (1)			0	0	N.D.	N.D.
verage Aroclor-1248 (1)					0.000	0.000
Sum Aroclor-1254 (1)			0	0	N.D.	N.D.
verage Aroclor-1254 (1)					0.000	0.000
8) L9 Aroclor-1260 (1)	11.65f	14.99	1409543	725424	500.804	435.624m
9) L9 Aroclor-1260 (2)	12.50f	15.58	2974171	846518	456.209	429.934
0) L9 Aroclor-1260 (3)	13.36	16.04	2268883	716612	425.059	437.492m
1) L9 Aroclor-1260 (4)	14.39f	16.59	1216366	997916	494.032m	428.820m
2) L9 Aroclor-1260 (5)	15.28	17.65	3304590	652254	505.831	527.750m
Sum Aroclor-1260 (1)			11173553	3938724	2381.936	2259.619
verage Aroclor-1260 (1)					476.387	451.924

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

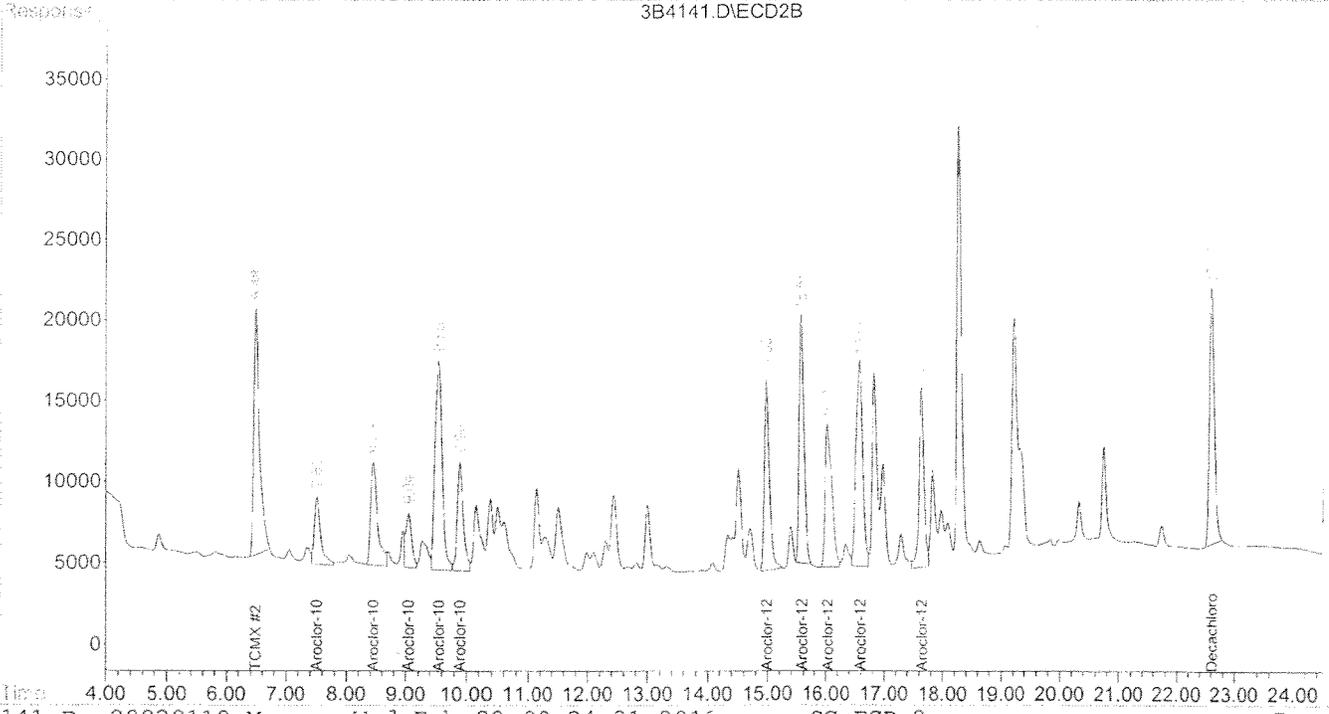
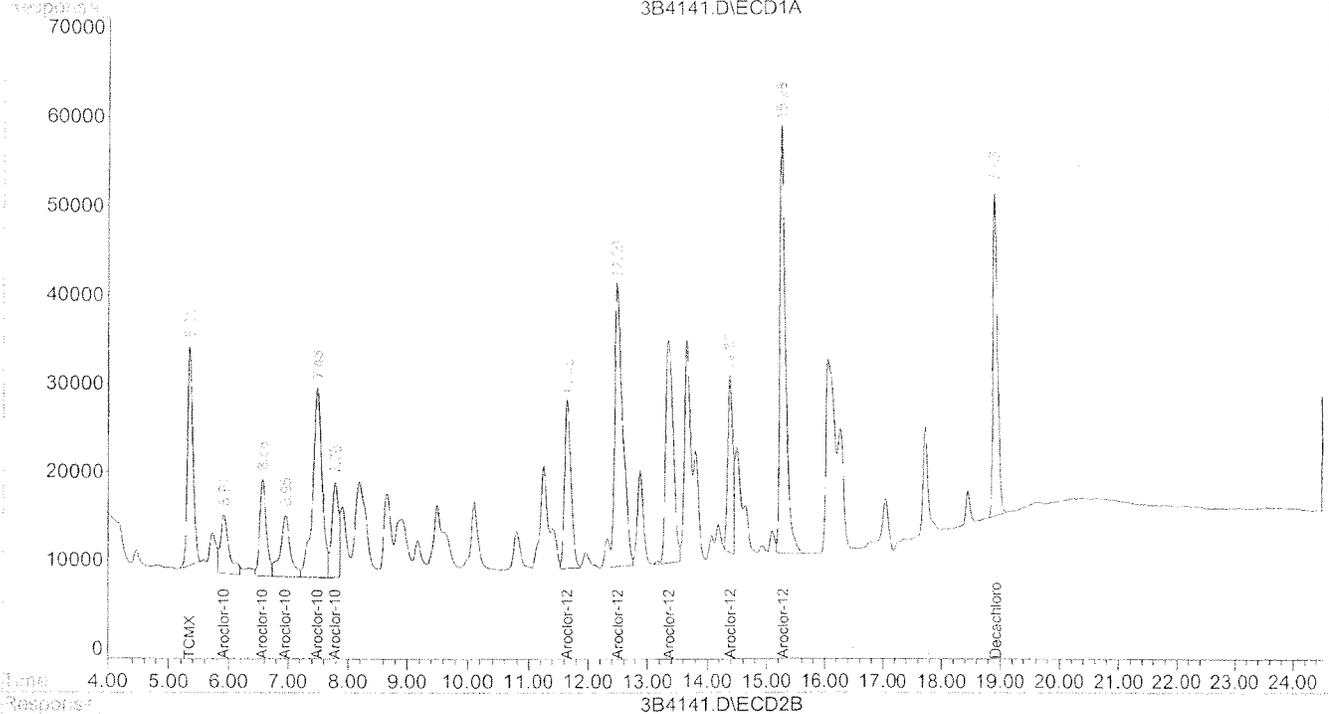
Quantitation Report

38

Signal #1 : G:\HPCHEM\GCECD3\DATA\012511\3B4141.D\ECD1A.CH Vial: 12  
Signal #2 : G:\HPCHEM\GCECD3\DATA\012511\3B4141.D\ECD2B.CH  
Acq On : 25 Jan 2011 6:53 pm Operator: RL  
Sample : SPC 24 BS Inst : GC/ECD-2  
Misc : 2134 Multiplr: 1.00  
IntFile Signal #1: events.e IntFile Signal #2: events2.e  
Quant Time: Jan 26 13:31 2011 Quant Results File: 80820110.RES

Quant Method : G:\HPCHEM\G...\80820110.M (Chemstation Integrator)  
Title : PCBs by EPA Method 8082  
Last Update : Wed Jan 26 12:39:20 2011  
Response via : Multiple Level Calibration  
DataAcq Meth : 80820114.M

Volume Inj. : 2ul  
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II  
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um  
3B4141.D\ECD1A



Signal #1 : G:\HPCHEM\GCECD3\DATA\012511\3B4140.D\ECD1A.CH Vial: 11  
 Signal #2 : G:\HPCHEM\GCECD3\DATA\012511\3B4140.D\ECD2B.CH  
 Acq On : 25 Jan 2011 6:25 pm Operator: RL  
 Sample : SPC 24 BLK Inst : GC/ECD-2  
 Misc : 2134 Multiplr: 1.00  
 IntFile Signal #1: events.e IntFile Signal #2: events2.e  
 Quant Time: Jan 26 13:29 2011 Quant Results File: 80820110.RES

Quant Method : G:\HPCHEM\G... \80820110.M (Chemstation Integrator)  
 Title : PCBs by EPA Method 8082  
 Last Update : Wed Jan 26 12:39:20 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 80820114.M

Volume Inj. : 2ul  
 Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II  
 Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
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System Monitoring Compounds

1) S TCMX	5.34	6.48	1662111	1072635	42.501	50.653
Spiked Amount	50.000	Range 18 - 129	Recovery =		85.00%	101.31%
2) S Decachlorobiphen	18.93f	22.61f	1838705	928861	52.795	53.750
Spiked Amount	50.000	Range 46 - 135	Recovery =		105.59%	107.50%

Target Compounds

Sum Aroclor-1016 (1)			0	0	N.D.	N.D.
Average Aroclor-1016 (1)					0.000	0.000
Sum Aroclor-1221 (1)			0	0	N.D.	N.D.
Average Aroclor-1221 (1)					0.000	0.000
Sum Aroclor-1232 (1)			0	0	N.D.	N.D.
Average Aroclor-1232 (1)					0.000	0.000
Sum Aroclor-1242 (1)			0	0	N.D.	N.D.
Average Aroclor-1242 (1)					0.000	0.000
Sum Aroclor-1248 (1)			0	0	N.D.	N.D.
Average Aroclor-1248 (1)					0.000	0.000
Sum Aroclor-1254 (1)			0	0	N.D.	N.D.
Average Aroclor-1254 (1)					0.000	0.000
Sum Aroclor-1260 (1)			0	0	N.D.	N.D.
Average Aroclor-1260 (1)					0.000	0.000

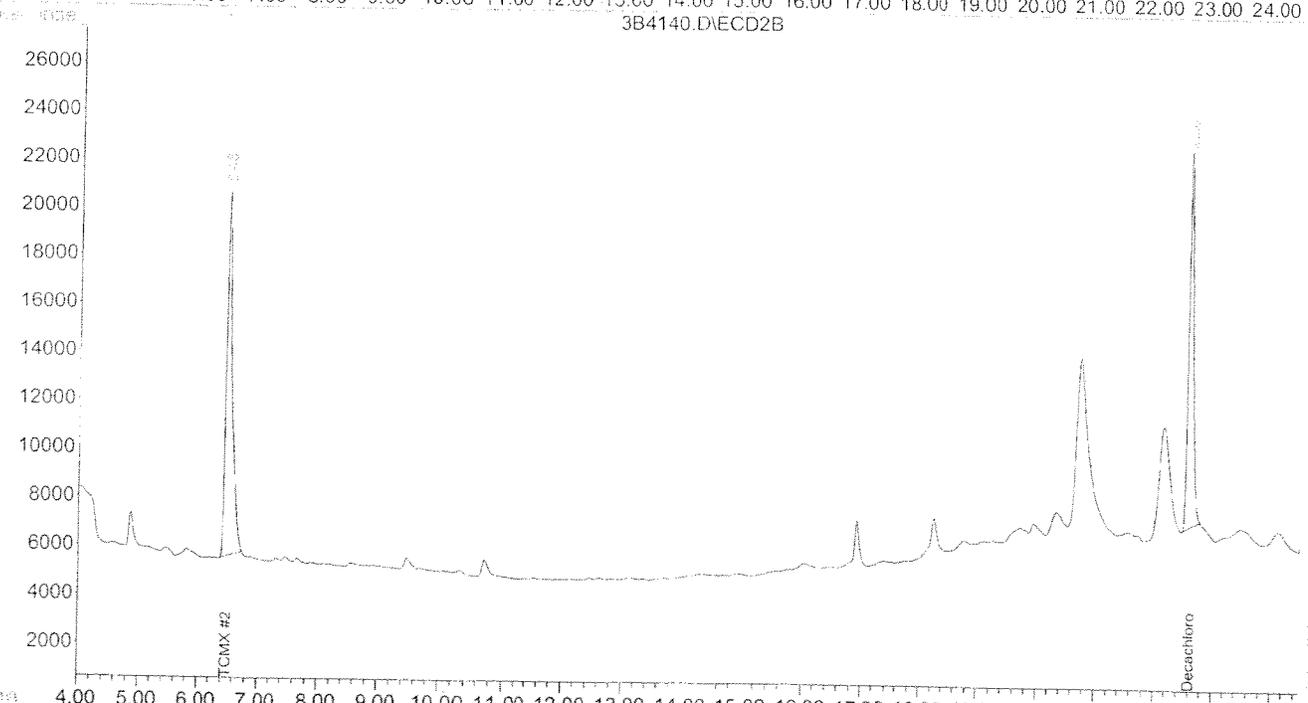
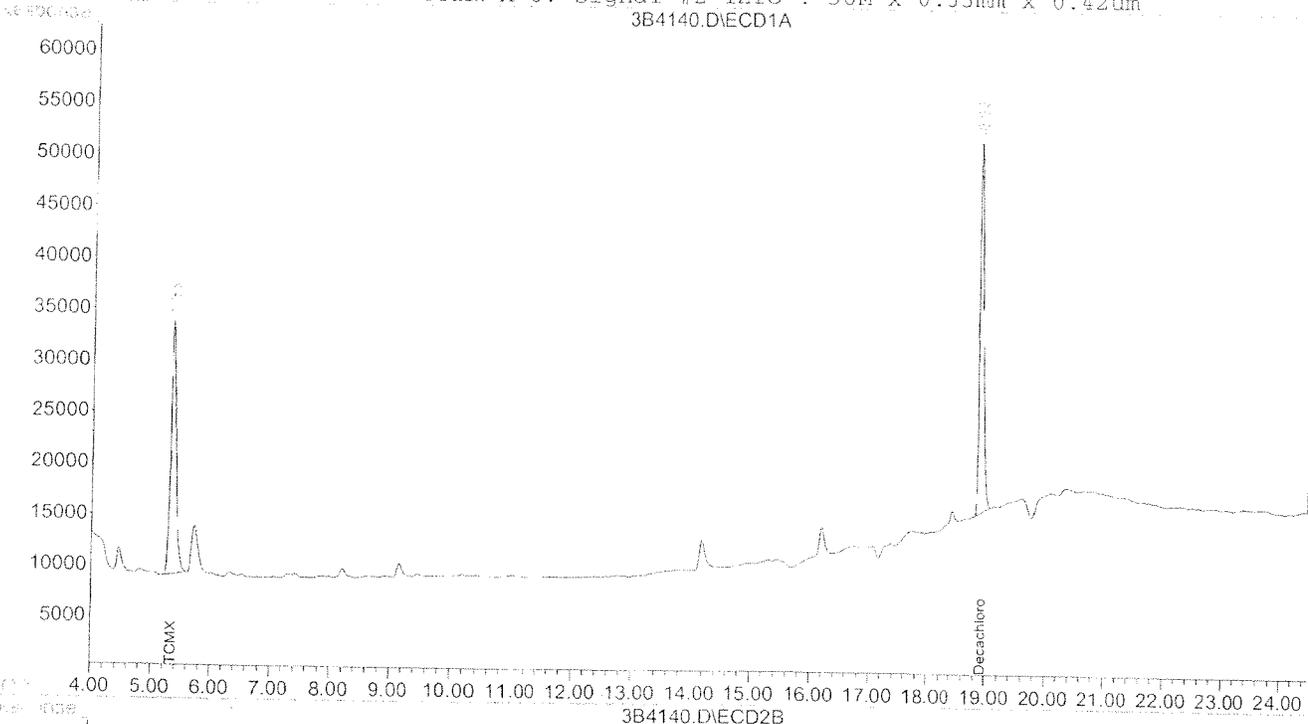
Quantitation Report

40

Signal #1 : G:\HPCHEM\GCECD3\DATA\012511\3B4140.D\ECD1A.CH Vial: 11  
Signal #2 : G:\HPCHEM\GCECD3\DATA\012511\3B4140.D\ECD2B.CH  
Acq On : 25 Jan 2011 6:25 pm Operator: RL  
Sample : SPC 24 BLK Inst : GC/ECD-2  
Misc : 2134 Multiplr: 1.00  
IntFile Signal #1: events.e IntFile Signal #2: events2.e  
Quant Time: Jan 26 13:29 2011 Quant Results File: 80820110.RES

Quant Method : G:\HPCHEM\G... \80820110.M (Chemstation Integrator)  
Title : PCBs by EPA Method 8082  
Last Update : Wed Jan 26 12:39:20 2011  
Response via : Multiple Level Calibration  
DataAcq Meth : 80820114.M

Volume Inj. : 2ul  
Signal #1 Phase : RTX-50 Signal #2 Phase: RTX-CLPesticides II  
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um  
3B4140.D\ECD1A



Response Factor Report GC/ECD-2

41

Method : G:\HPCHEM\GCECD3\METHODS\80820110.M (Chemstation Integrator)  
 Title : PCBs by EPA Method 8082  
 Last Update : Tue Jan 25 11:23:21 2011

Calibration Files

50 =3B3987.D 250 =3B3986.D 500 =3B3985.D  
 1000 =3B3999.D 2000 =3B3983.D

Compound	50	250	500	1000	2000	Avg	%RSD
1) S TCMX	3.838	4.520	4.358	4.609	4.457	4.356	E4 6.97
2) S Decachlorobiphenyl	5.785	6.051	5.614	5.382	4.761	5.519	E4 8.86
3) L3 Aroclor-1016 (1)	1.472	1.321	1.231	1.248	1.186	1.292	E3 8.67
4) L3 Aroclor-1016 (2)	2.403	2.295	2.074	2.147	1.916	2.167	E3 8.76
5) L3 Aroclor-1016 (3)	1.596	1.669	1.733	1.784	1.758	1.708	E3 4.44
6) L3 Aroclor-1016 (4)	5.868	5.717	5.600	5.388	4.663	5.447	E3 8.67
7) L3 Aroclor-1016 (5)	2.083	2.017	1.845	1.983	1.689	1.923	E3 8.16
8) L4 Aroclor-1221 (1)				4.022		4.022	E2 0.00
9) L4 Aroclor-1221 (2)				5.945		5.945	E2 0.00
10) L4 Aroclor-1221 (3)				1.957		1.957	E3 0.00
11) L5 Aroclor-1232 (1)				3.032		3.032	E2 0.00
12) L5 Aroclor-1232 (2)				1.308		1.308	E3 0.00
13) L5 Aroclor-1232 (3)				9.470		9.470	E2 0.00
14) L5 Aroclor-1232 (4)				8.679		8.679	E2 0.00
15) L6 Aroclor-1242 (1)				1.066		1.066	E3 0.00
16) L6 Aroclor-1242 (2)				1.498		1.498	E3 0.00
17) L6 Aroclor-1242 (3)				1.199		1.199	E3 0.00
18) L6 Aroclor-1242 (4)				3.824		3.824	E3 0.00
19) L6 Aroclor-1242 (5)				1.323		1.323	E3 0.00
20) L7 Aroclor-1248 (1)				2.441		2.441	E3 0.00
21) L7 Aroclor-1248 (2)				1.304		1.304	E3 0.00
22) L7 Aroclor-1248 (3)				3.478		3.478	E3 0.00
23) L7 Aroclor-1248 (4)				2.174		2.174	E3 0.00
24) L8 Aroclor-1254 (1)				3.542		3.542	E3 0.00
25) L8 Aroclor-1254 (2)				4.696		4.696	E3 0.00
26) L8 Aroclor-1254 (3)				3.191		3.191	E3 0.00
27) L8 Aroclor-1254 (4)				3.384		3.384	E3 0.00
28) L9 Aroclor-1260 (1)	2.906	3.095	2.710	2.890	2.473	2.815	E3 8.34
29) L9 Aroclor-1260 (2)	6.912	7.067	6.860	6.249	5.509	6.519	E3 9.89
30) L9 Aroclor-1260 (3)	5.217	5.728	5.664	5.315	4.764	5.338	E3 7.27
31) L9 Aroclor-1260 (4)	2.710	2.551	2.386	2.504	2.160	2.462	E3 8.32
32) L9 Aroclor-1260 (5)	6.319	6.774	6.805	6.128	6.639	6.533	E3 4.55

Signal #2 Calibration Files

50 =3B3987.D 250 =3B3986.D 500 =3B3985.D  
 1000 =3B3999.D 2000 =3B3983.D

Compound	50	250	500	1000	2000	Avg	%RSD
1) S TCMX	2.148	2.177	2.388	2.520	2.710	2.389	E4 9.90
2) S Decachlorobiphenyl	2.947	2.791	2.804	2.755	2.566	2.773	E4 4.93
3) L3 Aroclor-1016 (1)	6.770	7.195	7.506	6.259	6.471	6.840	E2 7.48
4) L3 Aroclor-1016 (2)	1.514	1.453	1.403	1.322	1.230	1.384	E3 8.05
5) L3 Aroclor-1016 (3)	5.850	5.321	5.021	4.816	4.621	5.126	E2 9.38
6) L3 Aroclor-1016 (4)	2.756	2.696	2.647	2.428	2.143	2.534	E3 9.91
7) L3 Aroclor-1016 (5)	1.059	1.092	1.034	0.985	0.907	1.015	E3 7.11
8) L4 Aroclor-1221 (1)				3.691		3.691	E2 0.00
9) L4 Aroclor-1221 (2)				2.190		2.190	E2 0.00
10) L4 Aroclor-1221 (3)				9.757		9.757	E2 0.00
11) L5 Aroclor-1232 (1)				1.848		1.848	E2 0.00
12) L5 Aroclor-1232 (2)				6.444		6.444	E2 0.00
13) L5 Aroclor-1232 (3)				5.608		5.608	E2 0.00
14) L5 Aroclor-1232 (4)				1.071		1.071	E3 0.00
15) L6 Aroclor-1242 (1)				5.050		5.050	E2 0.00
16) L6 Aroclor-1242 (2)				1.023		1.023	E3 0.00
17) L6 Aroclor-1242 (3)				3.723		3.723	E2 0.00
18) L6 Aroclor-1242 (4)				1.895		1.895	E3 0.00
19) L6 Aroclor-1242 (5)				7.520		7.520	E2 0.00
20) L7 Aroclor-1248 (1)				4.662		4.662	E2 0.00

(#) = Out of Range

Response Factor Report GC/ECD-2

42

Method : G:\HPCHEM\GCECD3\METHODS\80820110.M (Chemstation Integrator)  
 Title : PCBs by EPA Method 8082  
 Last Update : Tue Jan 25 11:23:21 2011

Calibration Files

50 =3B3987.D 250 =3B3986.D 500 =3B3985.D  
 1000 =3B3999.D 2000 =3B3983.D

Compound	50	250	500	1000	2000	Avg	%RSD
21) L7 Aroclor-1248 (2)				1.248		1.248 E3	0.00
22) L7 Aroclor-1248 (3)				4.879		4.879 E2	0.00
23) L7 Aroclor-1248 (4)				9.671		9.671 E2	0.00
24) L8 Aroclor-1254 (1)				6.332		6.332 E2	0.00
25) L8 Aroclor-1254 (2)				3.523		3.523 E2	0.00
26) L8 Aroclor-1254 (3)				1.242		1.242 E3	0.00
27) L8 Aroclor-1254 (4)				1.320		1.320 E3	0.00
28) L9 Aroclor-1260 (1)	1.848	1.802	1.601	1.606	1.469	1.665 E3	9.41
29) L9 Aroclor-1260 (2)	2.153	2.011	2.016	1.926	1.739	1.969 E3	7.71
30) L9 Aroclor-1260 (3)	1.782	1.733	1.637	1.568	1.470	1.638 E3	7.65
31) L9 Aroclor-1260 (4)	2.399	2.258	2.412	2.295	2.272	2.327 E3	3.12
32) L9 Aroclor-1260 (5)	1.344	1.291	1.189	1.213	1.142	1.236 E3	6.56

(#) = Out of Range

AQUA PRO-TECH Laboratories  
CONTINUING CALIBRATION REPORT  
POLYCHLORINATED BIPHENYLS

Instrument: GC/ECD-2  
Column: RTx-CLPesticides  
Primary Column

Data File: 3B4129.D

Compound	Actual Concentration	Cont Cal Factor	Initial Cal Factor	Measured Concentration	%D	Retention Time Window	Date	Time
TCMX	100	46188	43574	106	6.0	5.31 - 5.41	1/25/11	10:54
DCBP	100	46131	55180	84	16.4	18.85 - 19.05	1/25/11	10:54
Aroclor-1016 (1)	1000	1171	1292	907	9.4	5.86 - 6	1/25/11	10:54
Aroclor-1016 (2)	1000	1968	2167	908	9.2	6.52 - 6.66	1/25/11	10:54
Aroclor-1016 (3)	1000	1715	1708	1004	0.4	6.91 - 7.05	1/25/11	10:54
Aroclor-1016 (4)	1000	4946	5447	908	9.2	7.44 - 7.58	1/25/11	10:54
Aroclor-1016 (5)	1000	1669	1923	868	13.2	7.73 - 7.87	1/25/11	10:54
Avg-1016				919	8.3			
Aroclor-1260 (1)	1000	2746	2815	976	2.5	11.62 - 11.76	1/25/11	10:54
Aroclor-1260 (2)	1000	6162	6519	945	5.5	12.46 - 12.6	1/25/11	10:54
Aroclor-1260 (3)	1000	4827	5338	904	9.6	13.32 - 13.46	1/25/11	10:54
Aroclor-1260 (4)	1000	2702	2462	1097	9.7	14.35 - 14.49	1/25/11	10:54
Aroclor-1260 (5)	1000	7426	6533	1137	13.7	15.24 - 15.38	1/25/11	10:54
Avg-1260				1012	8.2			

Quantitation Report (QT Reviewed)

44

Signal #1 : G:\HPCHEM\GCECD3\DATA\012511\3B4129.D\ECD1A.CH Vial: 1  
 Signal #2 : G:\HPCHEM\GCECD3\DATA\012511\3B4129.D\ECD2B.CH  
 Acq On : 25 Jan 2011 10:54 am Operator: RL  
 Sample : AR1660 1000 ppb Inst : GC/ECD-2  
 Misc : Multiplr: 1.00  
 IntFile Signal #1: events.e IntFile Signal #2: events2.e  
 Quant Time: Jan 25 15:30 2011 Quant Results File: 80820110.RES

Quant Method : G:\HPCHEM\G...\80820110.M (Chemstation Integrator)  
 Title : PCBs by EPA Method 8082  
 Last Update : Tue Jan 25 11:23:21 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 80820114.M

Volume Inj. : 2ul  
 Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II  
 Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

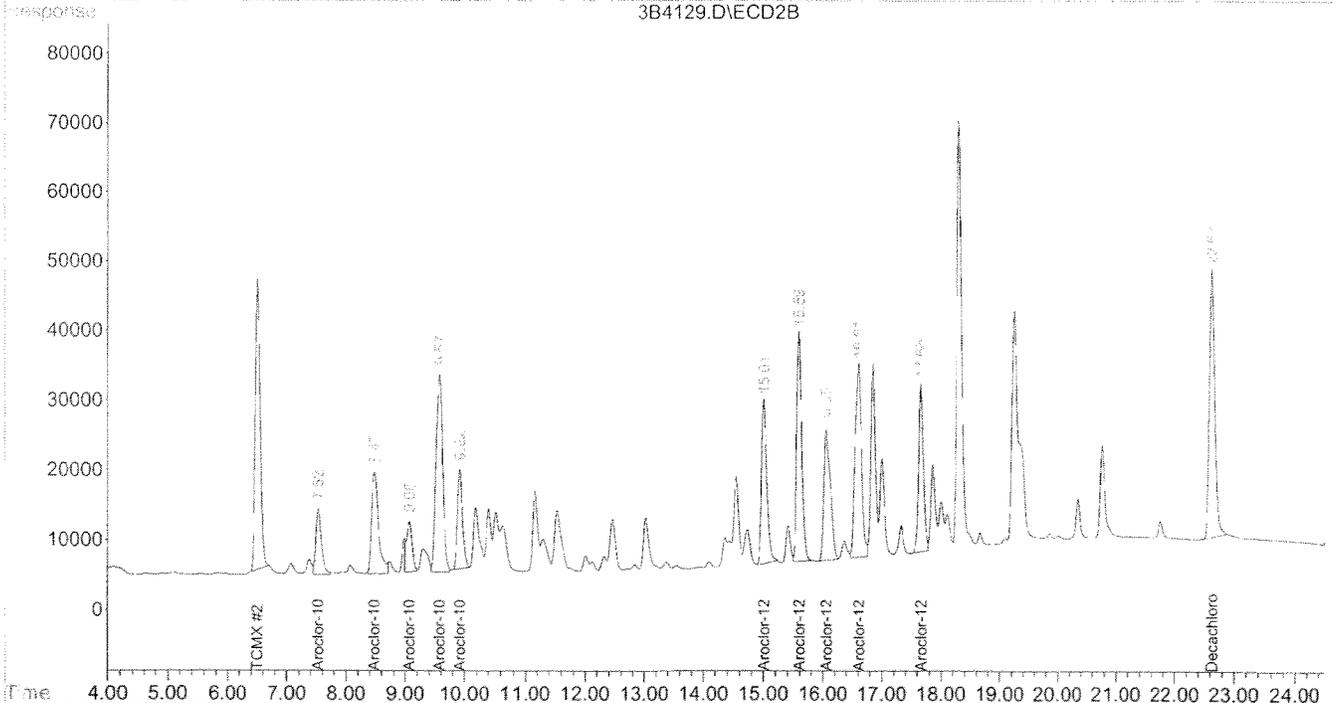
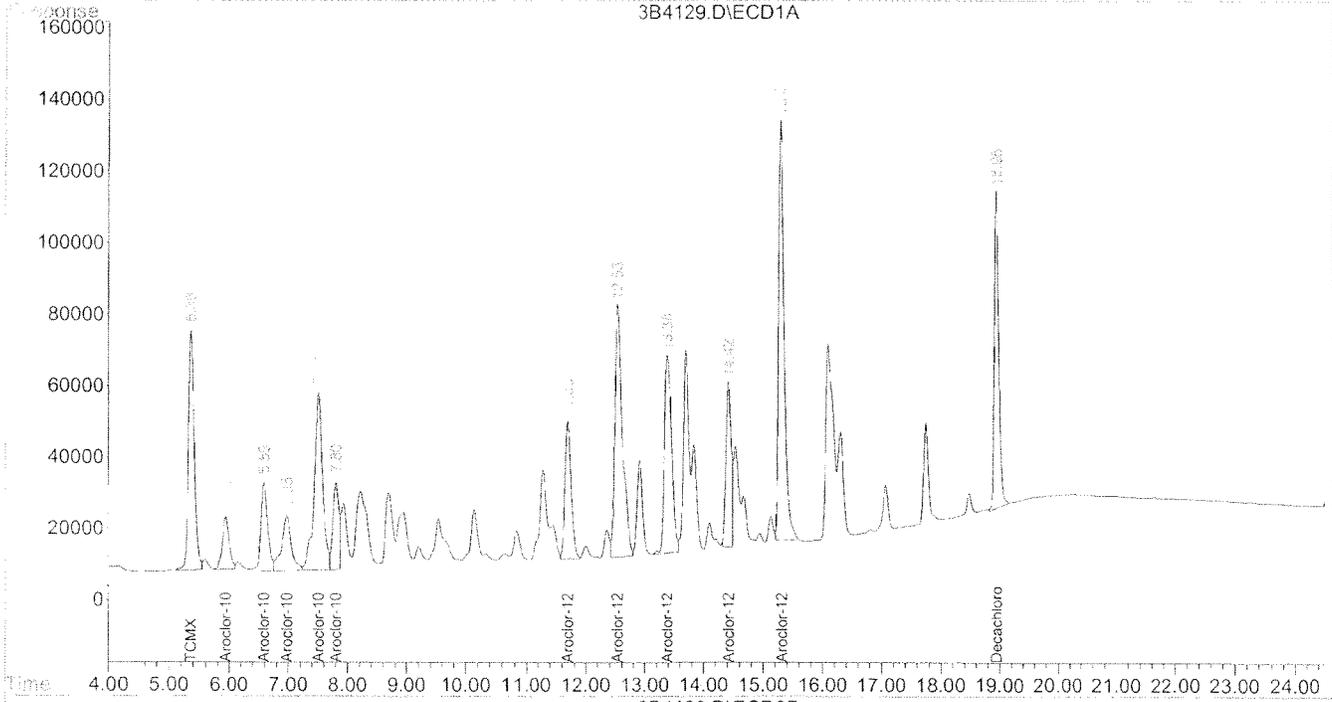
Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
-----						
System Monitoring Compounds						
1) S TCMX	5.36	6.50	4618841	2395296	106.023	100.278
Spiked Amount	50.000	Range 18 - 129	Recovery =		212.05%#	200.56%#
2) S Decachlorobiphen	18.95f	22.63f	4613052	2372261	83.592m	85.559
Spiked Amount	50.000	Range 46 - 135	Recovery =		167.18%#	171.12%#
Target Compounds						
3) L3 Aroclor-1016 (1)	5.93	7.52	1170761	617866	906.471	903.299m
4) L3 Aroclor-1016 (2)	6.59	8.47	1968162	1195368	908.238m	863.594m
5) L3 Aroclor-1016 (3)	6.98	9.06	1715220	475564	1004.272m	927.751m
6) L3 Aroclor-1016 (4)	7.51	9.57	4946056	2243198	908.025m	885.212m
7) L3 Aroclor-1016 (5)	7.80	9.92	1668842	864347	867.695m	851.189
Sum Aroclor-1016 (1)			11469041	5396343	4594.701	4431.046
Average Aroclor-1016 (1)					918.940	886.209
Sum Aroclor-1221 (1)			0	0	N.D.	N.D.
Average Aroclor-1221 (1)					0.000	0.000
Sum Aroclor-1232 (1)			0	0	N.D.	N.D.
Average Aroclor-1232 (1)					0.000	0.000
Sum Aroclor-1242 (1)			0	0	N.D.	N.D.
Average Aroclor-1242 (1)					0.000	0.000
Sum Aroclor-1248 (1)			0	0	N.D.	N.D.
Average Aroclor-1248 (1)					0.000	0.000
Sum Aroclor-1254 (1)			0	0	N.D.	N.D.
Average Aroclor-1254 (1)					0.000	0.000
28) L9 Aroclor-1260 (1)	11.69	15.01	2745635	1423826	975.511	855.021m
29) L9 Aroclor-1260 (2)	12.53	15.60	6161699	1883976	945.145	956.842
30) L9 Aroclor-1260 (3)	13.39	16.06	4827307	1444799	904.362	882.051
31) L9 Aroclor-1260 (4)	14.42	16.61	2701648	2141774	1097.286m	920.353
32) L9 Aroclor-1260 (5)	15.31	17.66	7425716	1289457	1136.648m	1043.321
Sum Aroclor-1260 (1)			23862005	8183831	5058.953	4657.588
Average Aroclor-1260 (1)					1011.791	931.518

Quantitation Report

Signal #1 : G:\HPCHEM\GCECD3\DATA\012511\3B4129.D\ECD1A.CH Vial: 1  
Signal #2 : G:\HPCHEM\GCECD3\DATA\012511\3B4129.D\ECD2B.CH  
Acq On : 25 Jan 2011 10:54 am Operator: RL  
Sample : AR1660 1000 ppb Inst : GC/ECD-2  
Misc : Multiplr: 1.00  
IntFile Signal #1: events.e IntFile Signal #2: events2.e  
Quant Time: Jan 25 15:30 2011 Quant Results File: 80820110.RES

Quant Method : G:\HPCHEM\G...\80820110.M (Chemstation Integrator)  
Title : PCBs by EPA Method 8082  
Last Update : Tue Jan 25 11:23:21 2011  
Response via : Multiple Level Calibration  
DataAcq Meth : 80820114.M

Volume Inj. : 2ul  
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II  
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um











PESTICIDES

# SAMPLE LOCATION AND IDENTIFICATION

## PESTICIDES

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Client Sample Number	APL Sample Number	Matrix
Comp A	11010298-001	Soil
Comp B	11010298-002	Soil

# LABORATORY CHRONICLE

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## PESTICIDES IN SOIL

	Date	Performed By
Sample Collection	1/11/11	Client
Receipt / Refrigeration	1/11/11	Ponsi

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Sample Number:	Extraction Date:	Extraction Performed By:	GC Analysis Date:	Analysis Performed By:
11010298-001	1/24/11	Marchese	1/25/11	Lipala
11010298-002	1/24/11	Marchese	1/25/11	Lipala

**AQUA PRO-TECH LABORATORIES**  
Fairfield, NJ

**PESTICIDE ANALYTICAL REPORT**  
Method 8081 S

Client:	Terms Environmental	Lab Sample ID:	11010298-1
Project:	Vet. Park	GC Run ID:	2T3751
Sample ID:	Comp. A	Extraction Date:	1/24/11
Date Sampled:	1/11/11	Sample Wt /Vol:	15 g
Matrix: (soil/water)	Soil	Final Volume (ml):	10
% Moisture:	15%		
Concentration Units:	µg/kg		

Compound	Result	MDL	PQL	Qualifier	Date Analyzed	Dilution Factor
alpha-BHC	ND	0.939	7.78	U	1/25/11	1
beta-BHC	ND	0.915	7.78	U	1/25/11	1
gamma-BHC (Lindane)	ND	0.727	7.78	U	1/25/11	1
delta-BHC	ND	0.705	7.78	U	1/25/11	1
Aldrin	ND	0.782	7.78	U	1/25/11	1
Heptachlor	ND	1.08	7.78	U	1/25/11	1
Heptachlor Epoxide	ND	1.18	7.78	U	1/25/11	1
Endosulfan I	ND	1.31	7.78	U	1/25/11	1
Endosulfan II	ND	0.881	7.78	U	1/25/11	1
4,4'-DDE	ND	0.83	7.78	U	1/25/11	1
4,4'-DDD	ND	0.526	7.78	U	1/25/11	1
4,4'-DDT	ND	0.903	7.78	U	1/25/11	1
Dieldrin	ND	0.948	7.78	U	1/25/11	1
Endrin	ND	0.911	7.78	U	1/25/11	1
Endrin Aldehyde	ND	1.95	7.78	U	1/25/11	1
Endrin Ketone	ND	0.846	7.78	U	1/25/11	1
Endosulfan Sulfate	ND	0.834	7.78	U	1/25/11	1
Methoxychlor	ND	1.06	7.78	U	1/25/11	1
Chlordane	ND	1.81	7.78	U	1/25/11	1
Toxaphene	ND	12.8	77.8	U	1/25/11	1

## Qualifiers:

- U - compound not detected at the specified quantitation limit
- J - below PQL
- D - concentration taken from diluted analysis
- E - compound concentration exceeds calibration

**AQUA PRO-TECH LABORATORIES**  
Fairfield, NJ

**PESTICIDE ANALYTICAL REPORT**  
Method 8081 S

<b>Client:</b>	Terms Environmental	<b>Lab Sample ID:</b>	11010298-2
<b>Project:</b>	Vet. Park	<b>GC Run ID:</b>	2T3752
<b>Sample ID:</b>	Comp. B	<b>Extraction Date:</b>	1/24/11
<b>Date Sampled:</b>	1/11/11	<b>Sample Wt /Vol:</b>	15 g
<b>Matrix: (soil/water)</b>	Soil	<b>Final Volume (ml):</b>	10
<b>% Moisture:</b>	17%		
<b>Concentration Units:</b>	µg/kg		

Compound	Result	MDL	PQL	Qualifier	Date Analyzed	Dilution Factor
alpha-BHC	ND	0.962	7.97	U	1/25/11	1
beta-BHC	ND	0.937	7.97	U	1/25/11	1
gamma-BHC (Lindane)	ND	0.745	7.97	U	1/25/11	1
delta-BHC	ND	0.722	7.97	U	1/25/11	1
Aldrin	ND	0.801	7.97	U	1/25/11	1
Heptachlor	ND	1.11	7.97	U	1/25/11	1
Heptachlor Epoxide	ND	1.21	7.97	U	1/25/11	1
Endosulfan I	ND	1.34	7.97	U	1/25/11	1
Endosulfan II	ND	0.902	7.97	U	1/25/11	1
4,4'-DDE	ND	0.85	7.97	U	1/25/11	1
4,4'-DDD	ND	0.539	7.97	U	1/25/11	1
4,4'-DDT	ND	0.925	7.97	U	1/25/11	1
Dieldrin	ND	0.971	7.97	U	1/25/11	1
Endrin	ND	0.933	7.97	U	1/25/11	1
Endrin Aldehyde	ND	2	7.97	U	1/25/11	1
Endrin Ketone	ND	0.866	7.97	U	1/25/11	1
Endosulfan Sulfate	ND	0.854	7.97	U	1/25/11	1
Methoxychlor	ND	1.09	7.97	U	1/25/11	1
Chlordane	ND	1.85	7.97	U	1/25/11	1
Toxaphene	ND	13.1	79.7	U	1/25/11	1

## Qualifiers:

- U - compound not detected at the specified quantitation limit
- J - below PQL
- D - concentration taken from diluted analysis
- E - compound concentration exceeds calibration

Quantitation Report (QT Reviewed)

55

Signal #1 : G:\HPCHEM\GCECD2\DATA\01252011\2T3751.D\ECD1A.CH Vial: 22  
 Signal #2 : G:\HPCHEM\GCECD2\DATA\01252011\2T3751.D\ECD2B.CH  
 Acq On : 25 Jan 2011 9:51 pm Operator: RL  
 Sample : 11010298-1 Inst : GC/ECD-1  
 Misc : 2134 Multiplr: 1.00  
 IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E  
 Quant Time: Jan 26 13:53 2011 Quant Results File: 80810105.RES

Quant Method : G:\HPCHEM\G...\80810105.M (Chemstation Integrator)  
 Title : Pesticides by EPA Method 8081  
 Last Update : Wed Jan 26 13:51:57 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 80811223.M

Volume Inj. : 2ul  
 Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II  
 Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
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System Monitoring Compounds

1) S TCMX	3.19	3.92	1409152	2149877	48.109	53.956
Spiked Amount	50.000					
					Recovery =	96.22% 107.91%
2) S Decachlorobiphen	15.67	18.84	1947793	2075104	59.602m	60.607m
Spiked Amount	50.000					
					Recovery =	119.20% 121.21%

Target Compounds

Sum Chlordane			0	0	N.D.	N.D.
Average Chlordane					0.000	0.000

Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000

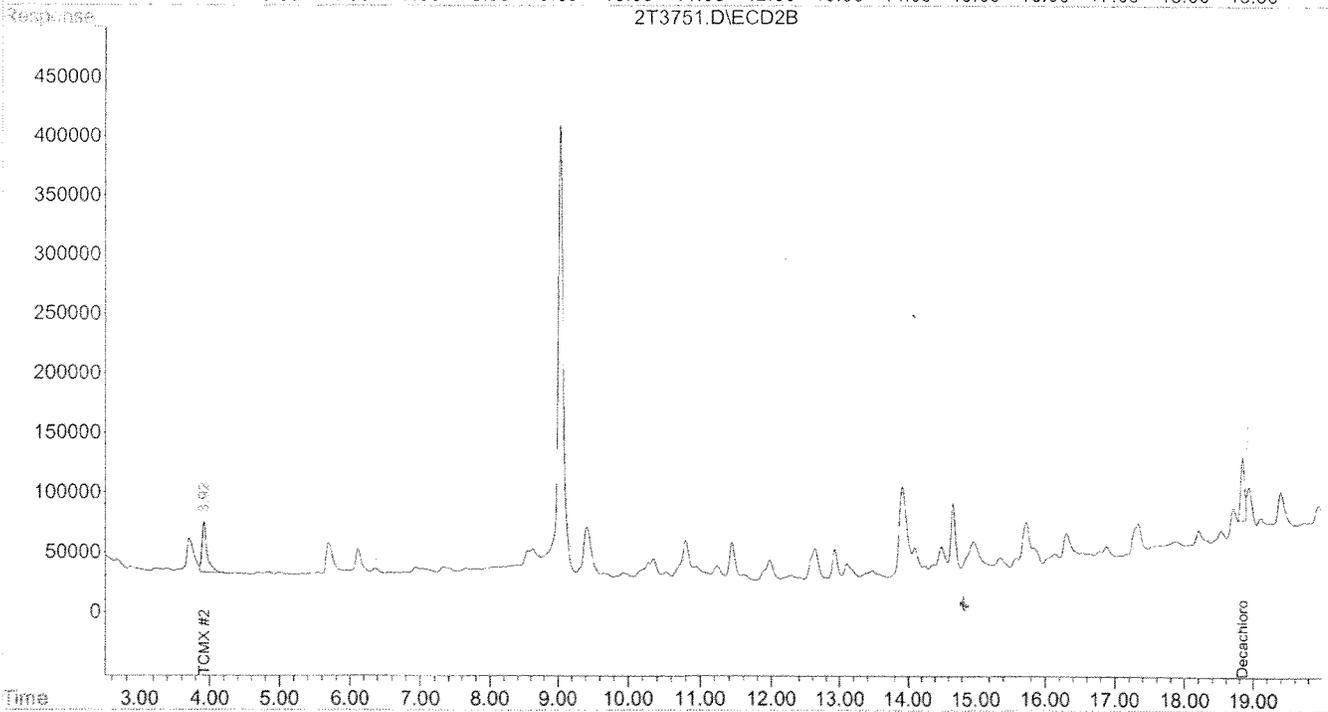
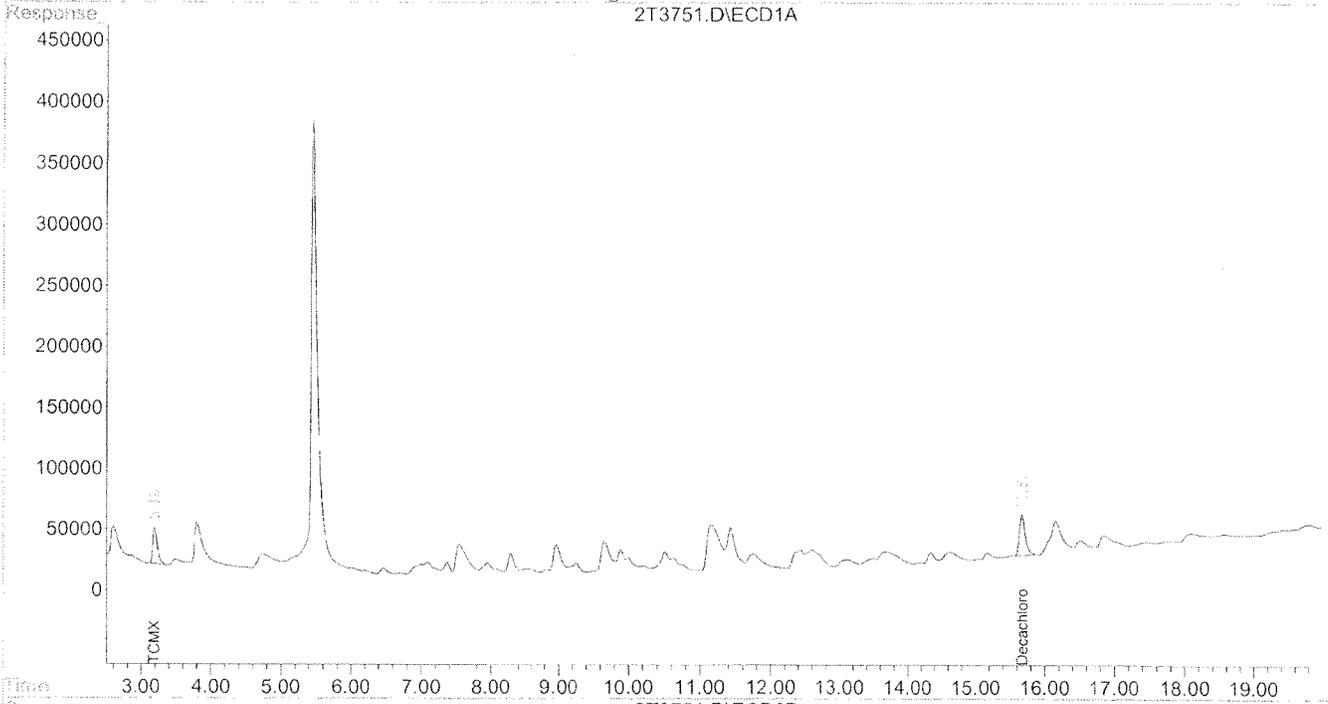
Quantitation Report

56

Signal #1 : G:\HPCHEM\GCECD2\DATA\01252011\2T3751.D\ECD1A.CH Vial: 22  
Signal #2 : G:\HPCHEM\GCECD2\DATA\01252011\2T3751.D\ECD2B.CH  
Acq On : 25 Jan 2011 9:51 pm Operator: RL  
Sample : 11010298-1 Inst : GC/ECD-1  
Misc : 2134 Multiplr: 1.00  
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E  
Quant Time: Jan 26 13:53 2011 Quant Results File: 80810105.RES

Quant Method : G:\HPCHEM\G...\80810105.M (Chemstation Integrator)  
Title : Pesticides by EPA Method 8081  
Last Update : Wed Jan 26 13:51:57 2011  
Response via : Multiple Level Calibration  
DataAcq Meth : 80811223.M

Volume Inj. : 2ul  
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II  
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um



Quantitation Report (QT Reviewed)

57

Signal #1 : G:\HPCHEM\GCECD2\DATA\01252011\2T3752.D\ECD1A.CH Vial: 23  
 Signal #2 : G:\HPCHEM\GCECD2\DATA\01252011\2T3752.D\ECD2B.CH  
 Acq On : 25 Jan 2011 10:17 pm Operator: RL  
 Sample : 11010298-2 Inst : GC/ECD-1  
 Misc : 2134 Multiplr: 1.00  
 IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E  
 Quant Time: Jan 26 13:57 2011 Quant Results File: 80810105.RES

Quant Method : G:\HPCHEM\G...\80810105.M (Chemstation Integrator)  
 Title : Pesticides by EPA Method 8081  
 Last Update : Wed Jan 26 13:51:57 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 80811223.M

Volume Inj. : 2ul  
 Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II  
 Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
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System Monitoring Compounds

1) S TCMX	3.19	3.92	1302708	1849843	44.475	46.426
Spiked Amount	50.000		Recovery	=	88.95%	92.85%
20) S Decachlorobiphen	15.68	18.84	1886858	2021237	57.738m	59.033m
Spiked Amount	50.000		Recovery	=	115.48%	118.07%

Target Compounds

Sum Chlordane			0	0	N.D.	N.D.
Average Chlordane					0.000	0.000
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000

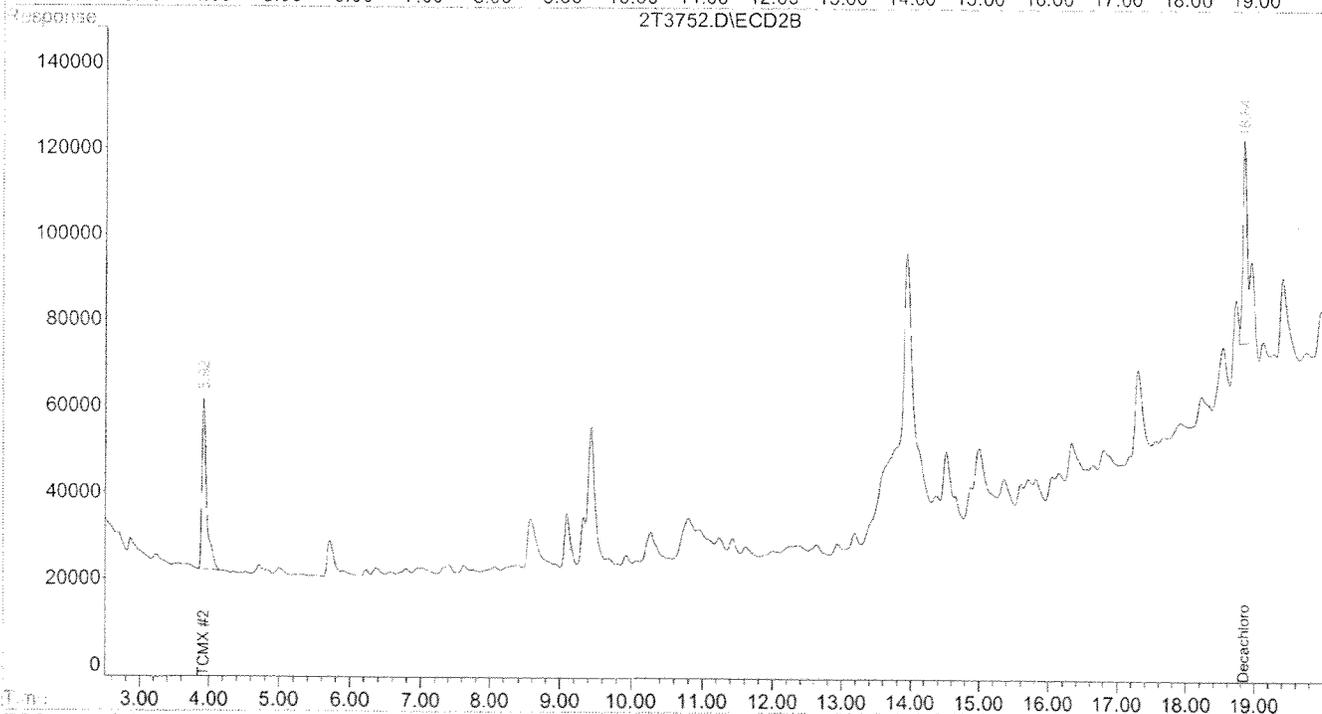
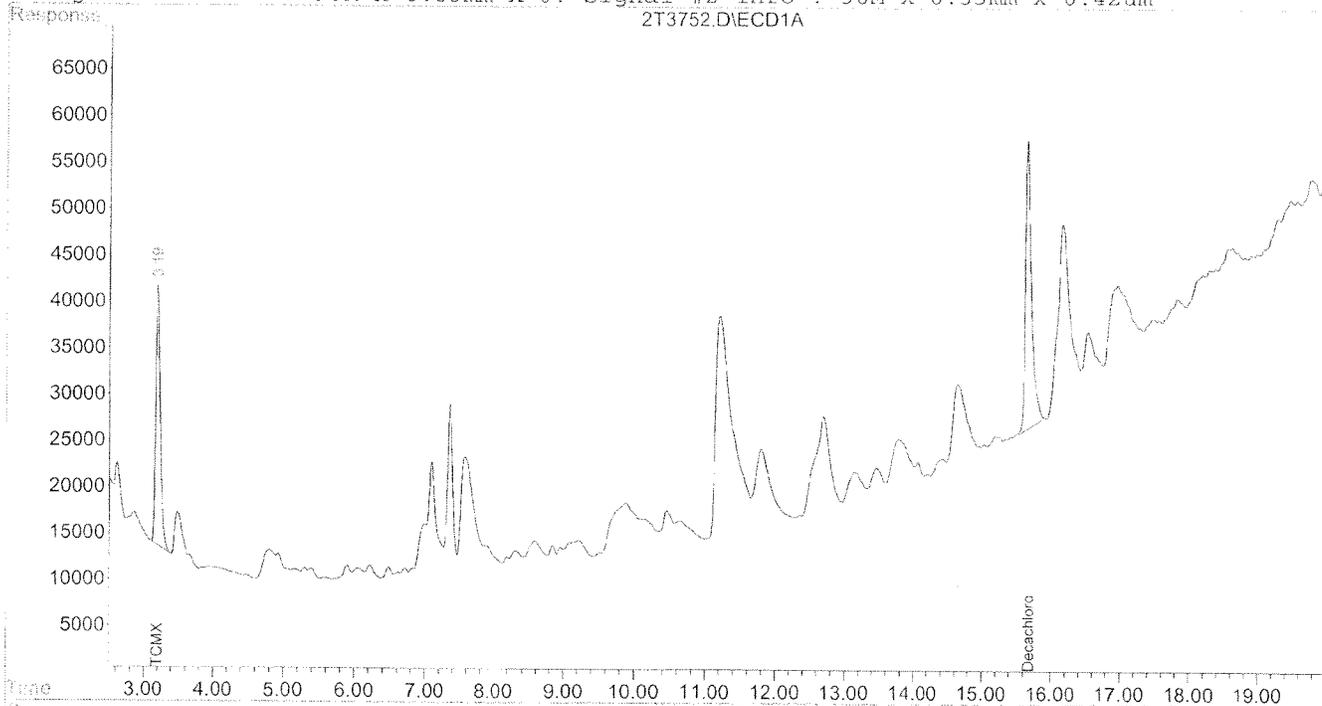
Quantitation Report

58

Signal #1 : G:\HPCHEM\GCECD2\DATA\01252011\2T3752.D\ECD1A.CH Vial: 23  
Signal #2 : G:\HPCHEM\GCECD2\DATA\01252011\2T3752.D\ECD2B.CH  
Acq On : 25 Jan 2011 10:17 pm Operator: RL  
Sample : 11010298-2 Inst : GC/ECD-1  
Misc : 2134 Multiplr: 1.00  
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E  
Quant Time: Jan 26 13:57 2011 Quant Results File: 80810105.RES

Quant Method : G:\HPCHEM\G...\80810105.M (Chemstation Integrator)  
Title : Pesticides by EPA Method 8081  
Last Update : Wed Jan 26 13:51:57 2011  
Response via : Multiple Level Calibration  
DataAcq Meth : 80811223.M

Volume Inj. : 2ul  
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II  
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um



# CONFORMANCE / NON-CONFORMANCE SUMMARY

## PESTICIDES

	YES	NO*
Continuing Calibration Recovery Within QC Limits	✓	
Method Blank Interference Free	✓	
Surrogate Recoveries Within QC Limits	✓	
Matrix Spike / Spike Duplicate Recoveries Within QC Limits	✓	
Blank Spike Recoveries Within QC Limits	✓	
Retention Time Shifts Within QC Limits	✓	
Chain Of Custody Included in Report	✓	
Holding Times:		
Water – Extraction Within 7 Days of Sample Collection	NA	
Soil/Concrete - Extraction Within 14 Days of Sample Collection	✓	
Analysis Within 40 Days of Extraction	✓	

\*Comments:

Reviewed By: Robert Lipala Date 02/03/11  
Robert Lipala-GC Chemist



AQUA PRO-TECH Laboratories  
 QUALITY CONTROL REPORT  
 GC SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE SUMMARY  
 CHLORINATED PESTICIDES

BATCH NUMBER: QGC2134  
 SPIKED SAMPLE: 11010323-14  
 METHOD: 8081A  
 MATRIX: Soil  
 MOISTURE: 16.0%

	SAMPLE	MS	MSD
INITIAL WT/VOL:	15	15	15
FINAL VOL:	10	10	10
UNITS:	µg/kg		

Compound Name	Conc. Added	Sample Conc.	Matrix Spike		Spike Duplicate		QC RPD	RPD
			Conc.	%Rec	Conc.	%Rec		
gamma-BHC	39.7	U	37.5	94.5	39.3	99	25	5
Heptachlor	39.7	U	33	83.1	33.6	84.6	25	2
Aldrin	39.7	U	42.2	106	46.7	118	25	11
Dieldrin	39.7	U	28	70.5	28.5	71.8	25	2
Endrin	39.7	U	33.9	85.4	35.7	89.9	25	5
4,4'-DDT	39.7	U	28	70.5	29.1	73.3	25	4

QC Limits:	Compound	Percent Recovery Limits
	gamma-BHC	60 - 140
	Heptachlor	60 - 140
	Aldrin	60 - 140
	Dieldrin	60 - 140
	Endrin	60 - 140
	4,4'-DDT	60 - 140

\* Values outside QC Limits

Signal #1 : G:\HPCHEM\GCECD2\DATA\01252011\2T3748.D\ECD1A.CH Vial: 19  
 Signal #2 : G:\HPCHEM\GCECD2\DATA\01252011\2T3748.D\ECD2B.CH  
 Acq On : 25 Jan 2011 8:32 pm Operator: RL  
 Sample : 11010323-14 Inst : GC/ECD-1  
 Misc : 2134 Multiplr: 1.00  
 IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E  
 Quant Time: Jan 26 14:21 2011 Quant Results File: 80810105.RES

Quant Method : G:\HPCHEM\G... \80810105.M (Chemstation Integrator)  
 Title : Pesticides by EPA Method 8081  
 Last Update : Wed Jan 26 13:51:57 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 80811223.M

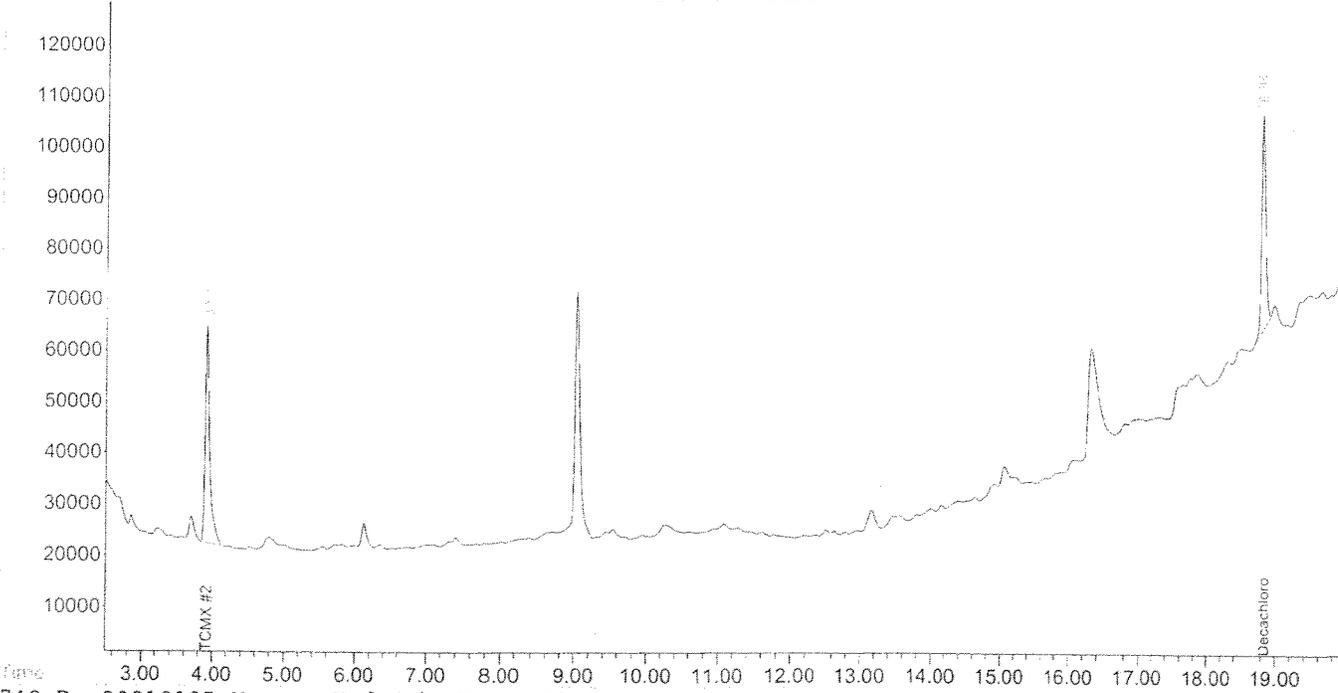
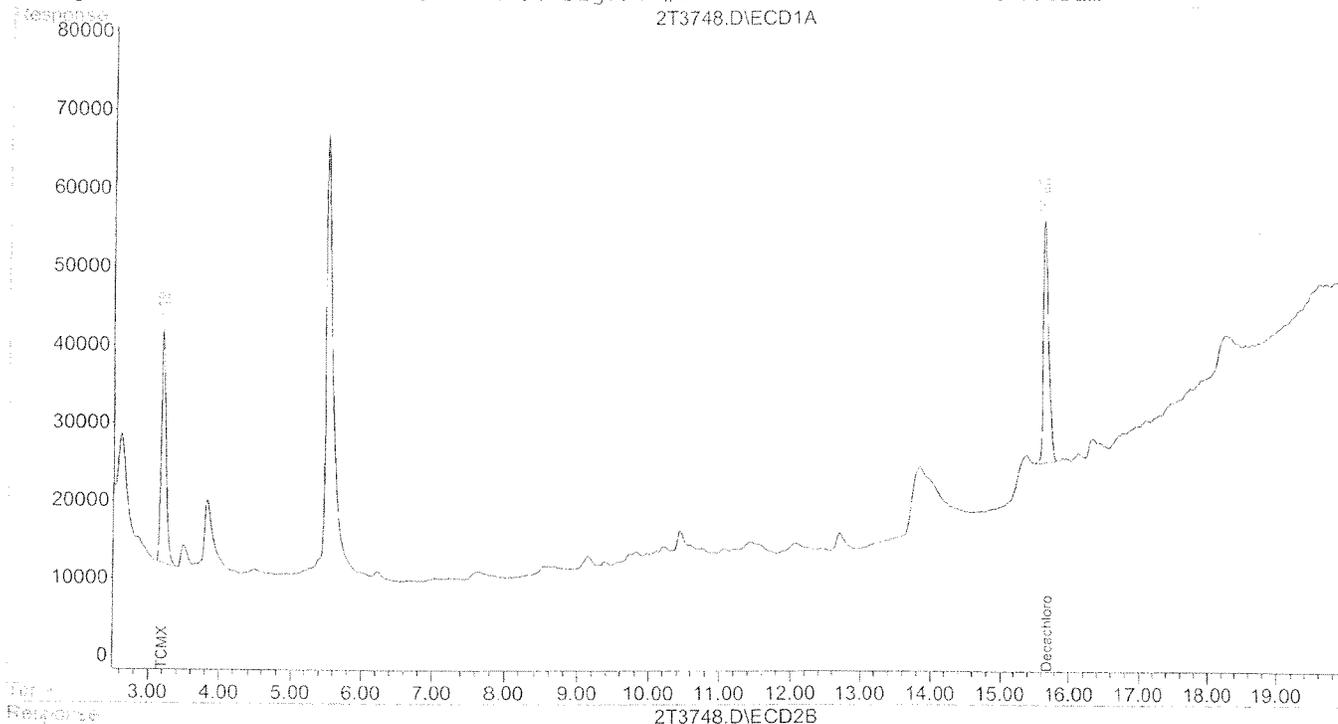
Volume Inj. : 2ul  
 Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II  
 Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
-----						
System Monitoring Compounds						
1) S TCMX	3.19	3.92	1393028	1873320	47.558	47.015
Spiked Amount	50.000		Recovery	=	95.12%	94.03%
0) S Decachlorobiphen	15.68	18.84	1681496	1805372	51.454	52.729m
Spiked Amount	50.000		Recovery	=	102.91%	105.46%
Target Compounds						
Sum Chlordane (gamma)			0	0	N.D.	N.D.
Average Chlordane (gamma)					0.000	0.000
Sum Toxaphene (1)			0	0	N.D.	N.D.
Average Toxaphene (1)					0.000	0.000

Signal #1 : G:\HPCHEM\GCECD2\DATA\01252011\2T3748.D\ECD1A.CH Vial: 19  
Signal #2 : G:\HPCHEM\GCECD2\DATA\01252011\2T3748.D\ECD2B.CH  
Acq On : 25 Jan 2011 8:32 pm Operator: RL  
Sample : 11010323-14 Inst : GC/ECD-1  
Misc : 2134 Multiplr: 1.00  
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E  
Quant Time: Jan 26 14:21 2011 Quant Results File: 80810105.RES

Quant Method : G:\HPCHEM\G...\80810105.M (Chemstation Integrator)  
Title : Pesticides by EPA Method 8081  
Last Update : Wed Jan 26 13:51:57 2011  
Response via : Multiple Level Calibration  
DataAcq Meth : 80811223.M

Volume Inj. : 2ul  
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II  
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um  
2T3748.D\ECD1A



Quantitation Report (QT Reviewed)

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Signal #1 : G:\HPCHEM\GCECD2\DATA\02012011\2T3774.D\ECD1A.CH Vial: 6  
 Signal #2 : G:\HPCHEM\GCECD2\DATA\02012011\2T3774.D\ECD2B.CH  
 Acq On : 1 Feb 2011 1:55 pm Operator: RL  
 Sample : 11010323-14 MS Inst : GC/ECD-1  
 Misc : QGC2134 Multiplr: 1.00  
 IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E  
 Quant Time: Feb 1 15:07 2011 Quant Results File: 80810105.RES

Quant Method : G:\HPCHEM\G...\80810105.M (Chemstation Integrator)  
 Title : Pesticides by EPA Method 8081  
 Last Update : Tue Feb 01 11:35:24 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 80811223.M

Volume Inj. : 2ul  
 Signal #1 Phase : RTX-50 Signal #2 Phase: RTX-CLPesticides II  
 Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
----------	------	------	--------	--------	-------	-------

System Monitoring Compounds

1) S TCMX	3.17	3.89	1148731	1565844	56.664m	55.439m
Spiked Amount	50.000		Recovery	=	113.33%	110.88%
0) S Decachlorobiphen	15.64	18.82	2012477	2046382	61.582m	59.768m
Spiked Amount	50.000		Recovery	=	123.16%	119.54%

Target Compounds

2) alpha-BHC	3.85	4.90	920140	1305463	49.928	43.119
3) M gamma-BHC (Linda)	4.31	5.59	895326	1418020	47.231	46.237
4) M Heptachlor	5.05	6.50	1402356	2267041	41.643	44.725
5) beta-BHC	4.52f	5.82	565066	840796	43.341	46.422
5) delta-BHC	4.82f	6.44	528408	723331	48.156	45.477
7) M Aldrin	5.58	7.23	1215643	1412125	53.173	43.809
8) Heptachlor epoxi	6.79	8.58	1074351	1522521	39.810	44.111
9) Endosulfan I	7.63	9.55	1507440	1616587	52.629m	51.529
0) 4,4'-DDE	7.62	9.90	880451	1378057	48.517m	42.079
1) M Dieldrin	8.17	10.25	802927	1289908	35.296m	44.841 #
2) M Endrin	8.70	11.09	820330	1120319	42.703	44.451
3) 4,4'-DDD	9.06	11.58	527019	933511	57.470	48.912
4) Endosulfan II	9.27	11.79	928923	1341912	39.287	43.764
5) M 4,4'-DDT	9.68	12.60	489065	633554	35.230m	28.442m
6) Endrin aldehyde	10.31	12.92	792215	1014706	39.722	37.387m
7) Endosulfan sulfa	11.52	13.82	751067	954720	44.396	42.253
8) Methoxychlor	11.08	14.85	434551	518974	21.569m	32.201 #
9) Endrin ketone	12.40	15.39	985324	1422805	42.622	46.324
Sum Chlordane			0	0	N.D.	N.D.
verage Chlordane					0.000	0.000
Sum Toxaphene			0	0	N.D.	N.D.
verage Toxaphene					0.000	0.000

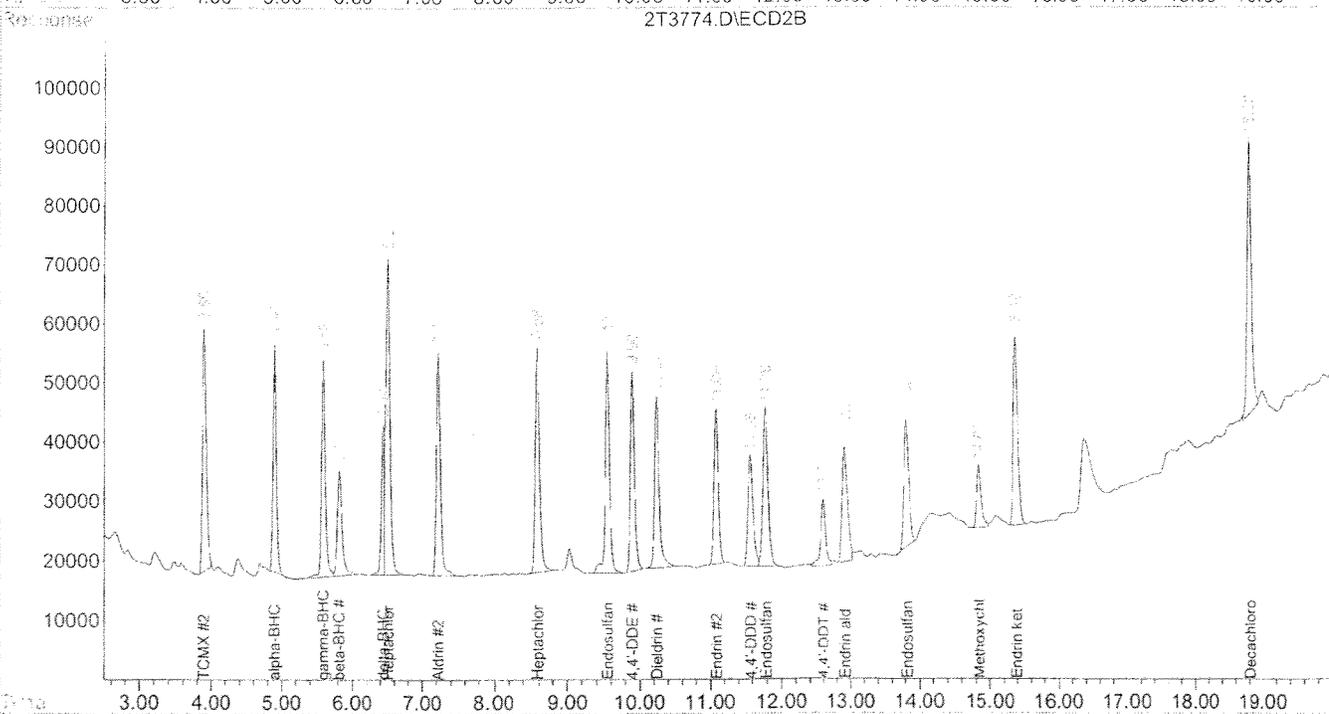
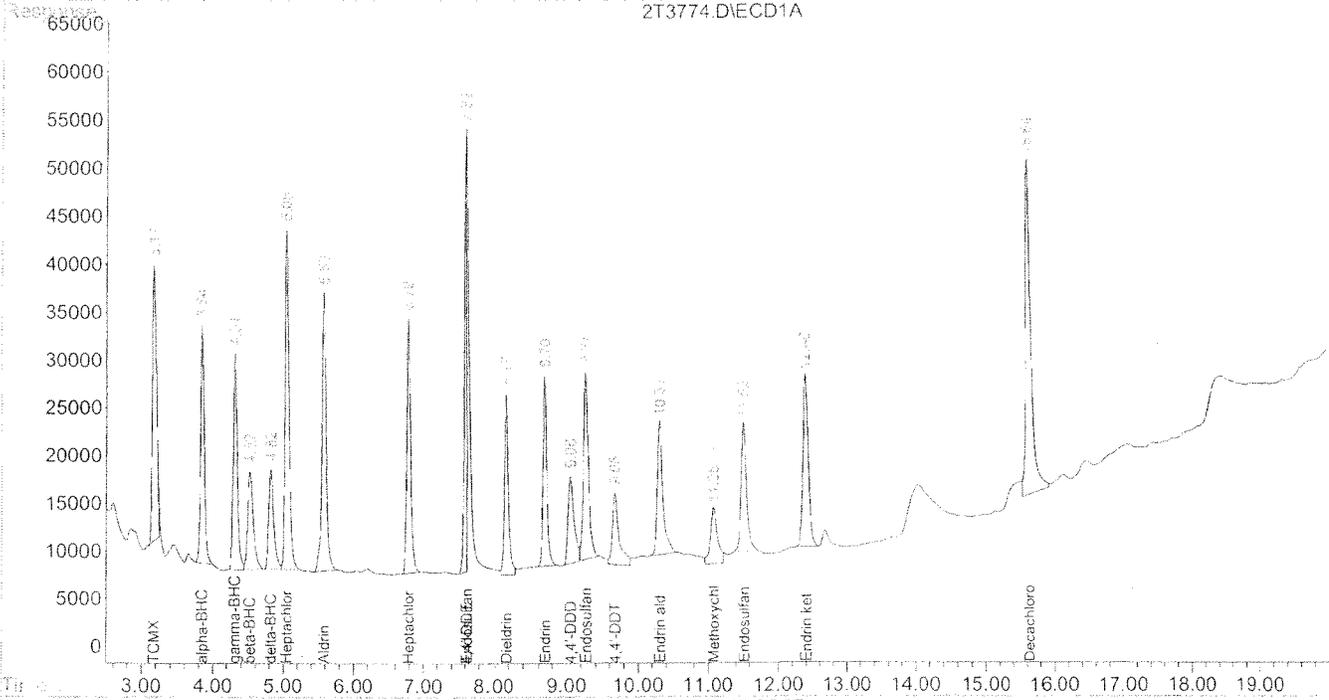
Quantitation Report

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Signal #1 : G:\HPCHEM\GCECD2\DATA\02012011\2T3774.D\ECD1A.CH Vial: 6  
Signal #2 : G:\HPCHEM\GCECD2\DATA\02012011\2T3774.D\ECD2B.CH  
Acq On : 1 Feb 2011 1:55 pm Operator: RL  
Sample : 11010323-14 MS Inst : GC/ECD-1  
Misc : QGC2134 Multiplr: 1.00  
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E  
Quant Time: Feb 1 15:07 2011 Quant Results File: 80810105.RES

Quant Method : G:\HPCHEM\G... \80810105.M (Chemstation Integrator)  
Title : Pesticides by EPA Method 8081  
Last Update : Tue Feb 01 11:35:24 2011  
Response via : Multiple Level Calibration  
DataAcq Meth : 80811223.M

Volume Inj. : 2ul  
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II  
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um



Signal #1 : G:\HPCHEM\GCECD2\DATA\02012011\2T3775.D\ECD1A.CH Vial: 7  
 Signal #2 : G:\HPCHEM\GCECD2\DATA\02012011\2T3775.D\ECD2B.CH  
 Acq On : 1 Feb 2011 2:22 pm Operator: RL  
 Sample : 11010323-14 MSD Inst : GC/ECD-1  
 Misc : QGC2134 Multiplr: 1.00  
 IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E  
 Quant Time: Feb 1 15:11 2011 Quant Results File: 80810105.RES

Quant Method : G:\HPCHEM\G...\80810105.M (Chemstation Integrator)  
 Title : Pesticides by EPA Method 8081  
 Last Update : Tue Feb 01 11:35:24 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 80811223.M

Volume Inj. : 2ul  
 Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II  
 Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
System Monitoring Compounds						
1) S TCMX	3.17	3.89	1149608	1552039	56.707m	54.950
Spiked Amount	50.000		Recovery	=	113.41%	109.90%
0) S Decachlorobiphen	15.64	18.81	1862925	2086146	57.006m	60.929m
Spiked Amount	50.000		Recovery	=	114.01%	121.86%
Target Compounds						
2) alpha-BHC	3.84	4.90	971495	1349442	52.715	44.571
3) M gamma-BHC (Linda)	4.31	5.59	938742	1488599	49.522	48.538
4) M Heptachlor	5.05	6.50	1425354	2259426	42.326	44.575m
5) beta-BHC	4.53f	5.82	606435	900213	46.514	49.703
6) delta-BHC	4.82f	6.44	554745	649536	50.557	40.837m
7) M Aldrin	5.58	7.23	1345423	1437875	58.850	44.607
8) Heptachlor epoxi	6.79	8.58	1129280	1581992	41.846	45.834
9) Endosulfan I	7.63	9.55	1689646	1677695	58.990m	53.477
0) 4,4'-DDE	7.62	9.90	893892	1419715	49.257m	43.351
1) M Dieldrin	8.17	10.24	816998	1342355	35.915m	46.664 #
2) M Endrin	8.70	11.09	863398	1149173	44.945	45.596
3) 4,4'-DDD	9.07	11.58	556389	990666	60.673	51.907
4) Endosulfan II	9.27	11.79	986440	1427093	41.719	46.543
5) M 4,4'-DDT	9.68	12.60	508382	638614	36.622m	28.670m
6) Endrin aldehyde	10.32	12.93	896766	1015908	44.964	37.431
7) Endosulfan sulfa	11.53	13.82	877599	1145676	51.875	50.705
8) Methoxychlor	11.09	14.85	431100	542110	21.398m	33.637 #
9) Endrin ketone	12.40f	15.39	1066909	1525114	46.151	49.655
Sum Chlordane			0	0	N.D.	N.D.
Average Chlordane					0.000	0.000
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000

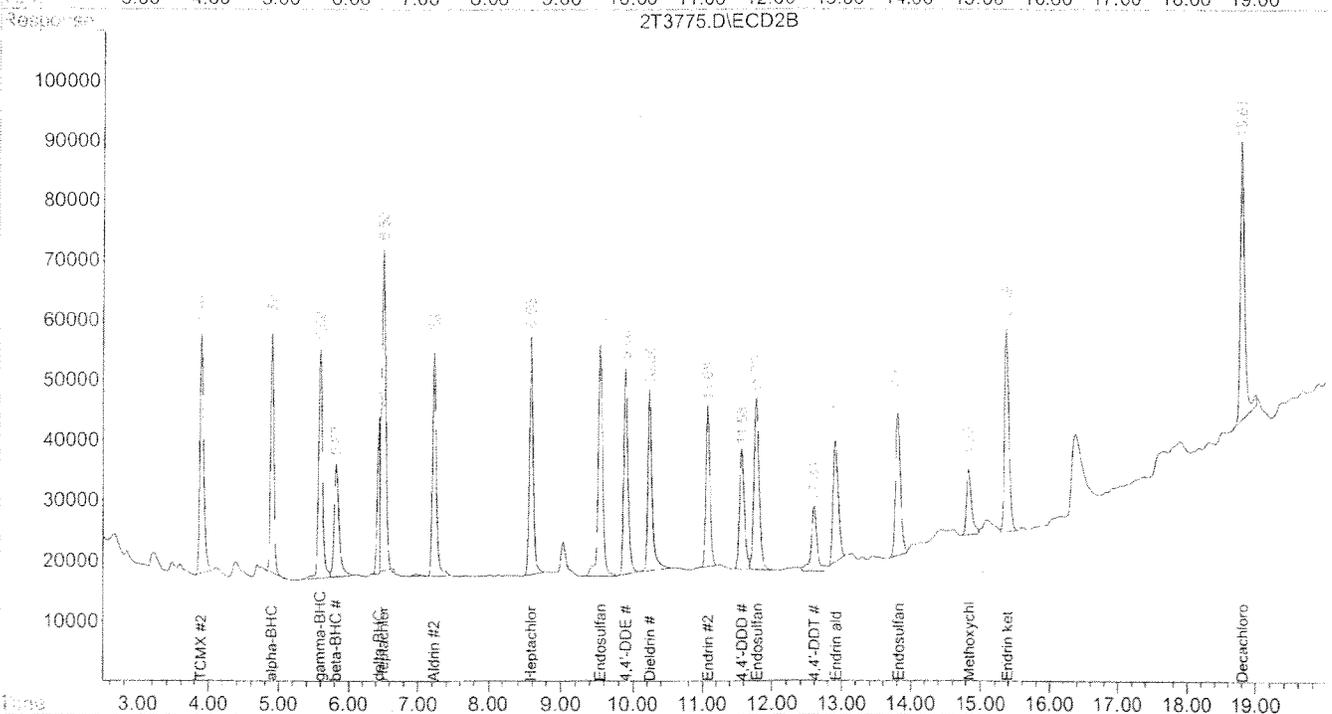
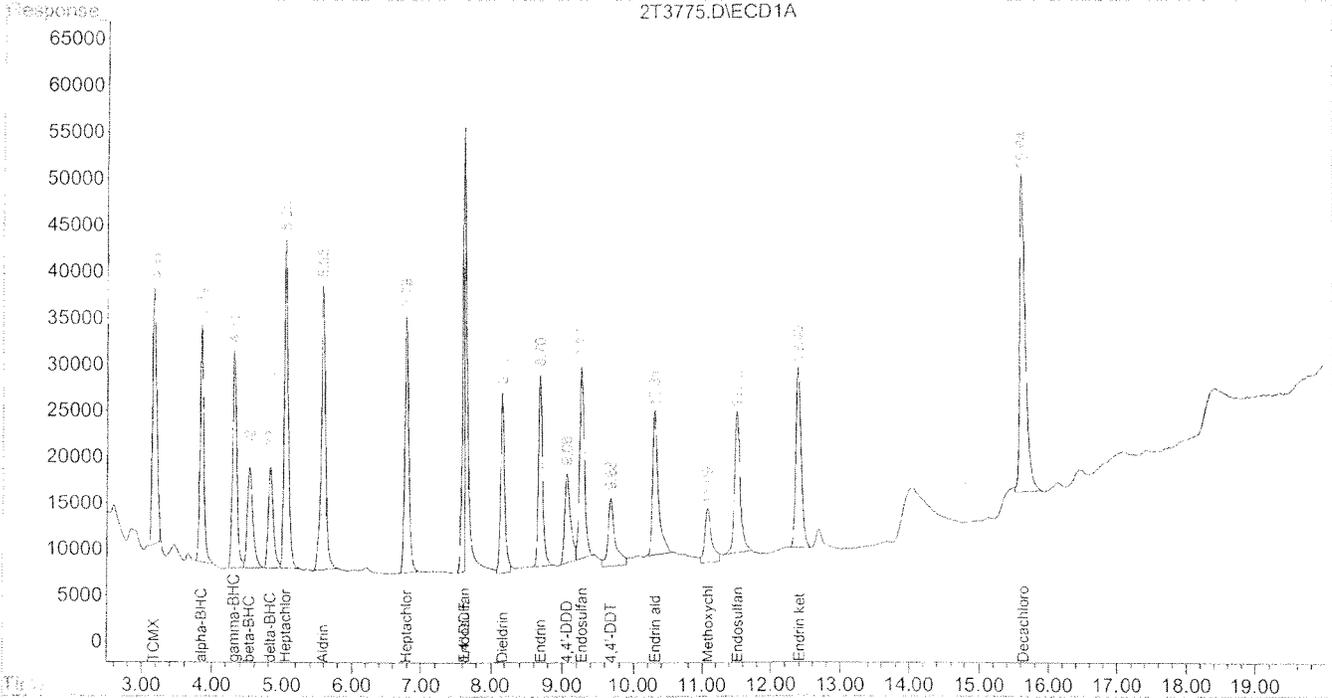
Quantitation Report

67

Signal #1 : G:\HPCHEM\GCECD2\DATA\02012011\2T3775.D\ECD1A.CH Vial: 7  
Signal #2 : G:\HPCHEM\GCECD2\DATA\02012011\2T3775.D\ECD2B.CH  
Acq On : 1 Feb 2011 2:22 pm Operator: RL  
Sample : 11010323-14 MSD Inst : GC/ECD-1  
Misc : QGC2134 Multiplr: 1.00  
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E  
Quant Time: Feb 1 15:11 2011 Quant Results File: 80810105.RES

Quant Method : G:\HPCHEM\G... \80810105.M (Chemstation Integrator)  
Title : Pesticides by EPA Method 8081  
Last Update : Tue Feb 01 11:35:24 2011  
Response via : Multiple Level Calibration  
DataAcq Meth : 80811223.M

Volume Inj. : 2ul  
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II  
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um



AQUA PRO-TECH Laboratories  
 QUALITY CONTROL REPORT  
 GC SEMIVOLATILE BLANK SPIKE SUMMARY  
 CHLORINATED PESTICIDES

BATCH NUMBER: QGC2134

SPIKED SAMPLE: BLANK

METHOD: 8081A

MATRIX: Soil

	SAMPLE	BS
INITIAL WT/VOL:	15	15
FINAL VOL:	10	10
UNITS:	µg/kg	

Compound Name	Conc. Added	Blank Conc.	Blank Spike		QC Limits	
			Conc.	%Rec		
alpha-BHC	33.3	0	35	105	56	- 141
gamm-BHC (Lindane)	33.3	0	33.7	101	67	- 125
Hepatchlor	33.3	0	30.3	91	48	- 144
beta-BHC	33.3	0	27.7	83.2	69	- 132
delta-BHC	33.3	0	34.1	102	45	- 169
Aldrin	33.3	0	30	90.1	38	- 198
Heptachlor epoxide	33.3	0	27.9	83.8	61	- 122
Endosulfan I	33.3	0	26.9	80.8	61	- 124
4,4'-DDE	33.3	0	29.3	88	71	- 142
Dieldrin	33.3	0	22.1	66.4	36	- 118
Endrin	33.3	0	30.1	90.4	63	- 131
4,4'-DDD	33.3	0	37.6	113	56	- 162
Endosulfan II	33.3	0	26.7	80.2	58	- 123
4,4'-DDT	33.3	0	32.8	98.5	79	- 165
Endrin aldehyde	33.3	0	30.6	91.9	26	- 215
Endosulfan sulfate	33.3	0	27	81.1	69	- 136
Methoxychlor	33.3	0	40.6	122	68	- 175
Endrin ketone	33.3	0	30.7	92.2	63	- 146

\* Values outside QC Limits

Quantitation Report (QT Reviewed)

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Signal #1 : G:\HPCHEM\GCECD2\DATA\01272011\2T3751.D\ECD1A.CH Vial: 4  
 Signal #2 : G:\HPCHEM\GCECD2\DATA\01272011\2T3751.D\ECD2B.CH  
 Acq On : 27 Jan 2011 2:28 pm Operator: RL  
 Sample : SPP 24 BS Inst : GC/ECD-1  
 Misc : QGC2134 Multiplr: 1.00  
 IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E  
 Quant Time: Jan 28 10:16 2011 Quant Results File: 80810105.RES

Quant Method : G:\HPCHEM\G... \80810105.M (Chemstation Integrator)  
 Title : Pesticides by EPA Method 8081  
 Last Update : Fri Jan 28 10:15:28 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 80811223.M

Volume Inj. : 2ul  
 Signal #1 Phase : RTX-50 Signal #2 Phase: RTX-CLPesticides II  
 Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
----------	------	------	--------	--------	-------	-------

System Monitoring Compounds

1) S TCMX	3.17f	3.89f	1165331	1597787	57.483m	56.570m
Spiked Amount	50.000		Recovery	=	114.97%	113.14%
2) S Decachlorobiphen	15.65f	18.82f	1430455	1585998	43.772	46.321m
Spiked Amount	50.000		Recovery	=	87.54%	92.64%

Target Compounds

3) M alpha-BHC	3.84f	4.90f	966619	1470138	52.450	48.558
4) M gamma-BHC (Linda)	4.31f	5.59f	956885	1456574	50.479	47.494
4) M Heptachlor	5.05f	6.51f	1531040	2192300	45.464	43.251
beta-BHC	4.50f	5.81f	540965	846662	41.492	46.746
delta-BHC	4.79f	6.43f	561311	844628	51.155	53.103
7) M Aldrin	5.59f	7.23f	1027396	1286140	44.939	39.900
8) Heptachlor epoxi	6.79f	8.59f	1130769	1290857	41.901	37.399
9) Endosulfan I	7.63f	9.56f	1155389	1228464	40.338m	39.158
4,4'-DDE	7.62f	9.90f	796606	1382683	43.896m	42.220m
1) M Dieldrin	8.17f	10.25f	754793	1140949	33.181	39.663
2) M Endrin	8.70	11.09f	867889	1221766	45.178	48.476
3) 4,4'-DDD	9.04f	11.58f	517667	829452	56.451m	43.460m
Endosulfan II	9.27f	11.79f	945521	1184814	39.989	38.641m
4,4'-DDT	9.67f	12.60f	682286	933356	49.149	41.902m
6) M Endrin aldehyde	10.31f	12.92f	914290	884187	45.843	32.578m#
7) Endosulfan sulfa	11.52f	13.83f	684299	1000505	40.449	44.280m
Methoxychlor	11.06f	14.85f	553819	820426	60.907m	50.905m
Endrin ketone	12.40f	15.39f	1063433	1388121	46.001	45.195
Sum Chlordane			0	0	N.D.	N.D.
verage Chlordane					0.000	0.000
Sum Toxaphene			0	0	N.D.	N.D.
verage Toxaphene					0.000	0.000

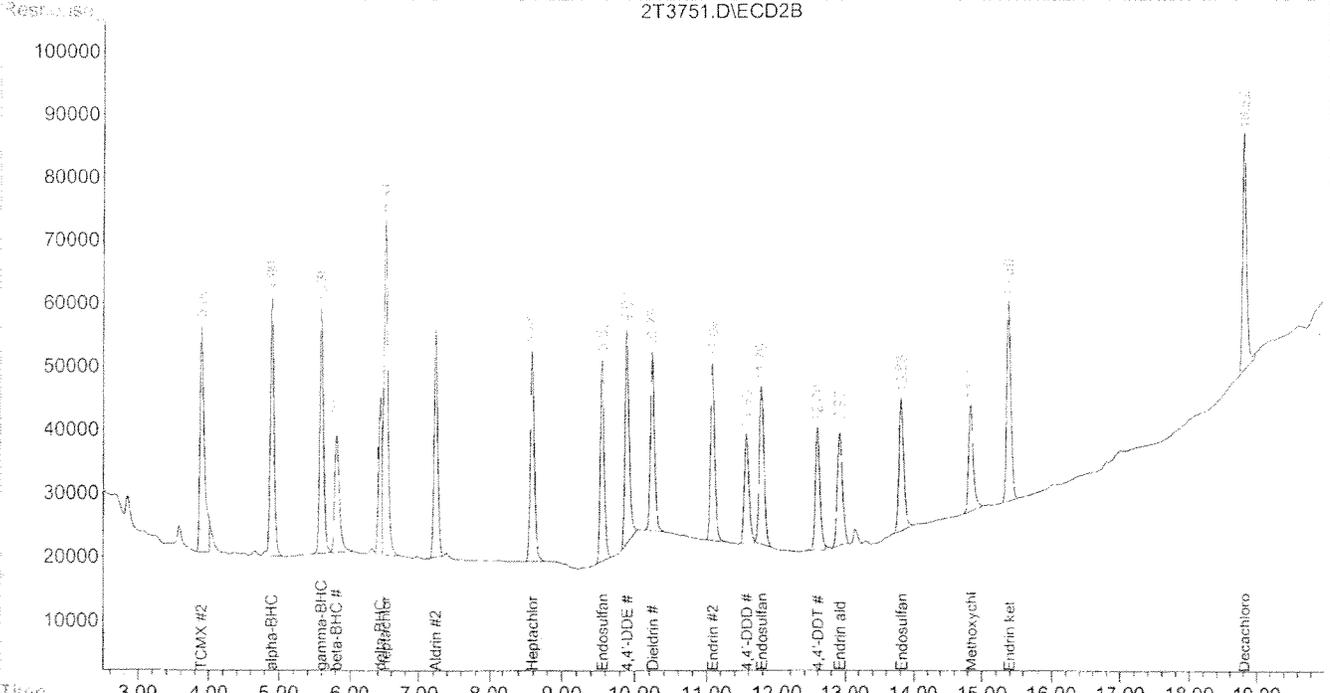
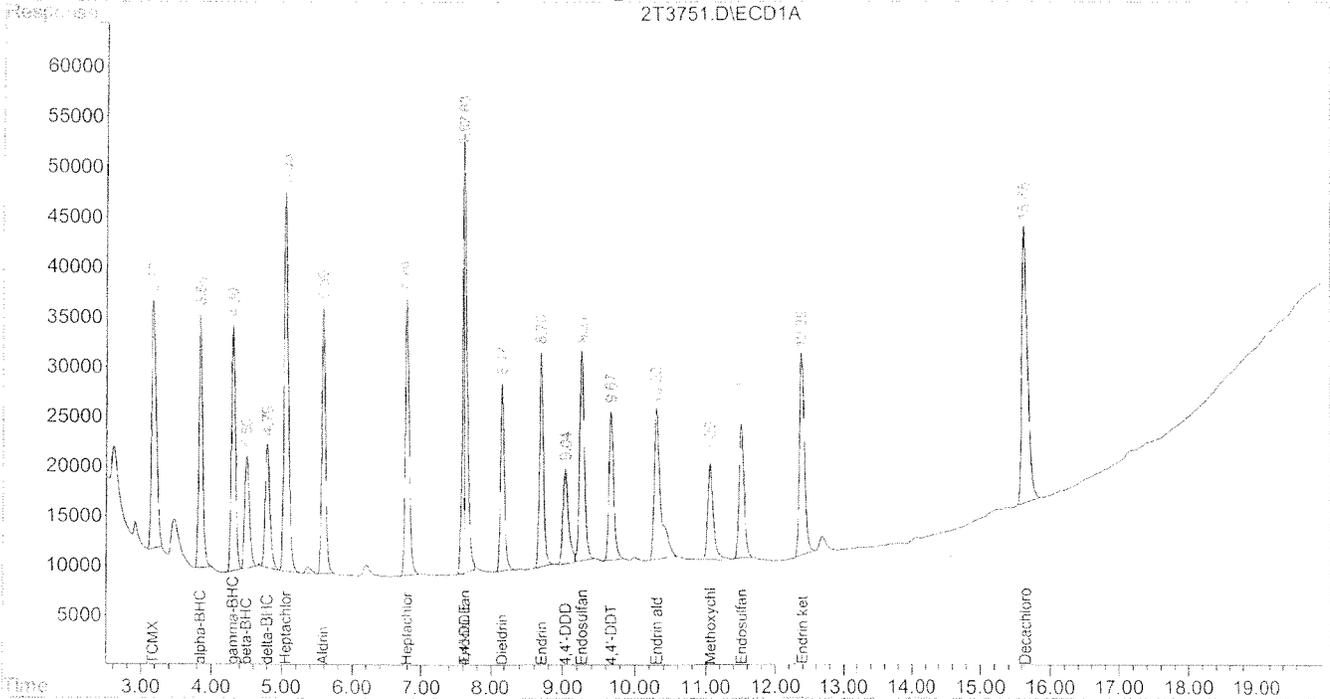
Quantitation report

70

Signal #1 : G:\HPCHEM\GCECD2\DATA\01272011\2T3751.D\ECD1A.CH Vial: 4  
Signal #2 : G:\HPCHEM\GCECD2\DATA\01272011\2T3751.D\ECD2B.CH  
Acq On : 27 Jan 2011 2:28 pm Operator: RL  
Sample : SPP 24 BS Inst : GC/ECD-1  
Misc : QGC2134 Multiplr: 1.00  
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E  
Quant Time: Jan 28 10:16 2011 Quant Results File: 80810105.RES

Quant Method : G:\HPCHEM\G... \80810105.M (Chemstation Integrator)  
Title : Pesticides by EPA Method 8081  
Last Update : Fri Jan 28 10:15:28 2011  
Response via : Multiple Level Calibration  
DataAcq Meth : 80811223.M

Volume Inj. : 2ul  
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II  
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um



Signal #1 : G:\HPCHEM\GCECD2\DATA\01272011\2T3750.D\ECD1A.CH Vial: 3  
 Signal #2 : G:\HPCHEM\GCECD2\DATA\01272011\2T3750.D\ECD2B.CH  
 Acq On : 27 Jan 2011 2:02 pm Operator: RL  
 Sample : SPP 24 BLK Inst : GC/ECD-1  
 Misc : QGC2134 Multiplr: 1.00  
 IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E  
 Quant Time: Jan 28 10:17 2011 Quant Results File: 80810105.RES

Quant Method : G:\HPCHEM\G... \80810105.M (Chemstation Integrator)  
 Title : Pesticides by EPA Method 8081  
 Last Update : Fri Jan 28 10:15:28 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 80811223.M

Volume Inj. : 2ul  
 Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II  
 Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
-----						
System Monitoring Compounds						
1) S TCMX	3.17f	3.89f	1171035	1591025	57.764m	56.331m
Spiked Amount	50.000		Recovery	=	115.53%	112.66%
0) S Decachlorobiphen	15.66	18.83f	1571375	1932628	48.084	56.445m
Spiked Amount	50.000		Recovery	=	96.17%	112.89%
Target Compounds						
Sum Chlordane			0	0	N.D.	N.D.
Average Chlordane					0.000	0.000
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000

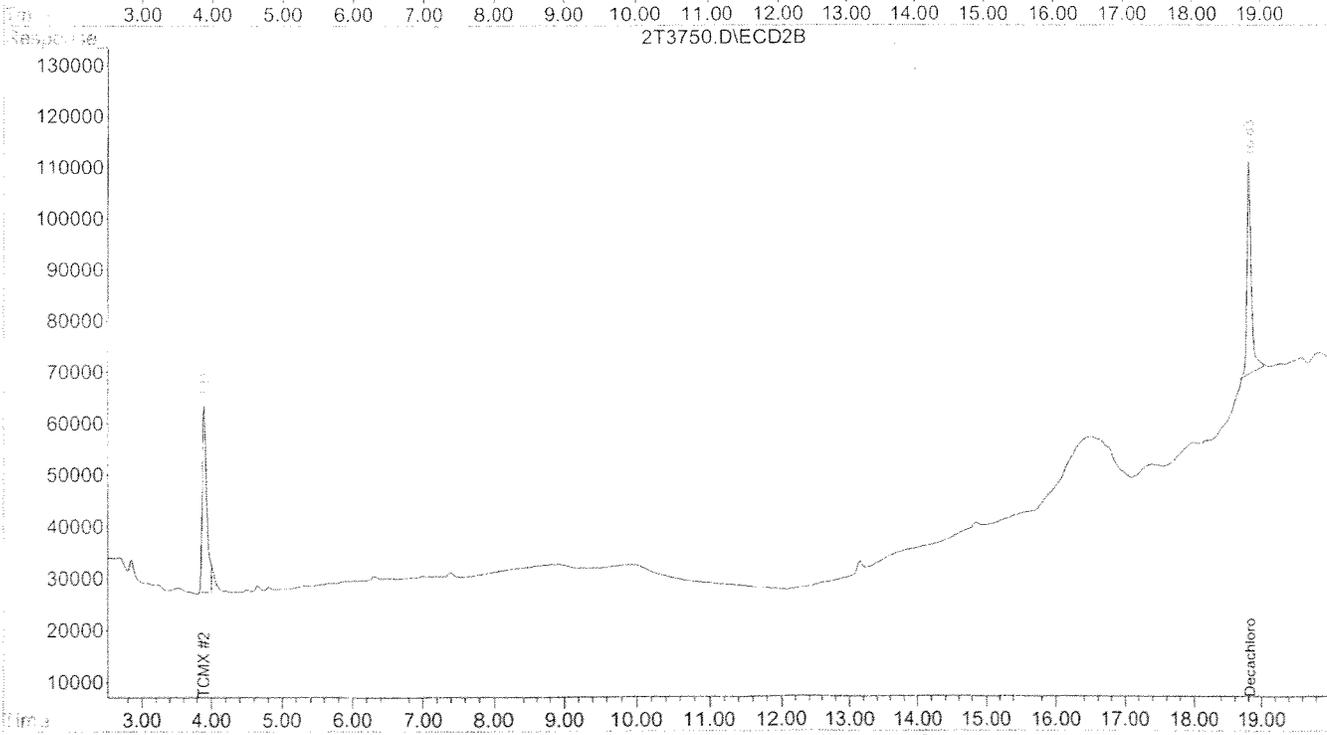
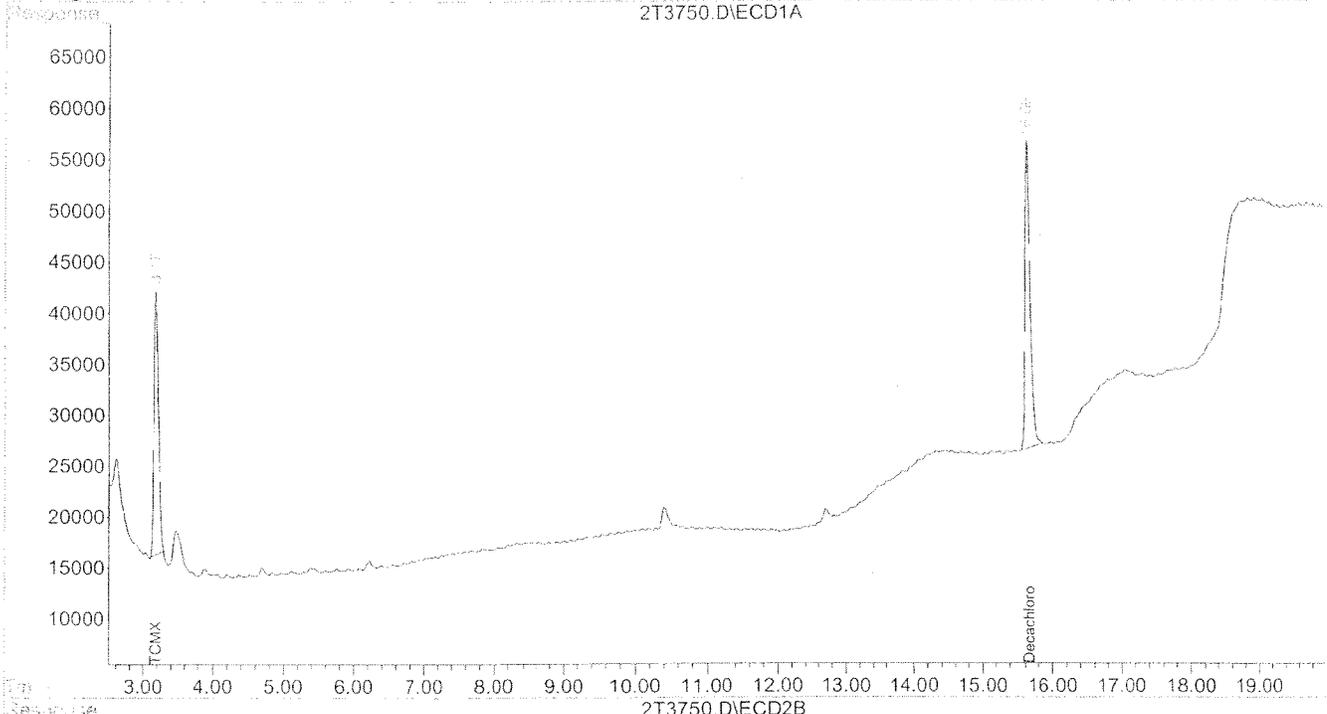
Quantitation report

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Signal #1 : G:\HPCHEM\GCECD2\DATA\01272011\2T3750.D\ECD1A.CH Vial: 3  
Signal #2 : G:\HPCHEM\GCECD2\DATA\01272011\2T3750.D\ECD2B.CH  
Acq On : 27 Jan 2011 2:02 pm Operator: RL  
Sample : SPP 24 BLK Inst : GC/ECD-1  
Misc : QGC2134 Multiplr: 1.00  
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E  
Quant Time: Jan 28 10:17 2011 Quant Results File: 80810105.RES

Quant Method : G:\HPCHEM\G... \80810105.M (Chemstation Integrator)  
Title : Pesticides by EPA Method 8081  
Last Update : Fri Jan 28 10:15:28 2011  
Response via : Multiple Level Calibration  
DataAcq Meth : 80811223.M

Volume Inj. : 2ul  
Signal #1 Phase : RTX-50 Signal #2 Phase: RTX-CLPesticides II  
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um



Response Factor Report GC/ECD-1

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Method : G:\HPCHEM\GCECD2\METHODS\80810105.M (Chemstation Integrator)  
 Title : Pesticides by EPA Method 8081  
 Last Update : Fri Jan 14 13:45:51 2011

Calibration Files

2 =2T3552.D 10 =2T3551.D 25 =2T3550.D  
 50 =2T3549.D 100 =2T3558.D

Compound	2	10	25	50	100	Avg		%RSD
1) S TCMX	2.062	1.837	1.914	2.234	2.089	2.027	E4	7.67
2) alpha-BHC	1.682	1.599	1.611	2.372	1.950	1.843	E4	17.80
3) M gamma-BHC (Lindane)	1.704	1.659	1.680	2.363	2.072	1.896	E4	16.45
4) M Heptachlor	3.246	3.221	3.165	3.666	3.540	3.368	E4	6.58
5) beta-BHC	1.446	1.289	1.063	1.368	1.352	1.304	E4	11.16
6) delta-BHC	1.199	1.055	0.883	1.280	1.069	1.097	E4	13.83
7) M Aldrin	2.114	2.003	2.085	2.643	2.586	2.286	E4	13.26
8) Heptachlor epoxide	2.745	2.344	2.607	2.950	2.847	2.699	E4	8.72
9) Endosulfan I	2.756	2.614	2.301	3.372	3.278	2.864	E4	15.82
10) 4,4'-DDE	1.715	2.122	1.523	1.640	2.073	1.815	E4	14.75
11) M Dieldrin	2.399	2.021	2.003	2.473	2.477	2.275	E4	10.62
12) M Endrin	1.909	1.654	1.755	2.160	2.128	1.921	E4	11.60
13) 4,4'-DDD	0.853	1.032	0.853	1.034	0.813	0.917	E4	11.68
14) Endosulfan II	2.400	2.144	2.158	2.477	2.643	2.364	E4	9.05
15) M 4,4'-DDT	1.602	1.238	1.129	1.511	1.461	1.388	E4	14.20
16) Endrin aldehyde	1.793	2.003	1.914	2.215	2.047	1.994	E4	7.88
17) Endosulfan sulfate	2.064	1.669	1.422	1.688	1.616	1.692	E4	13.79
18) Methoxychlor	1.504	1.835	2.181	2.445	2.108	2.015	E4	17.80
19) Endrin ketone	2.367	2.039	2.005	2.627	2.521	2.312	E4	12.14
20) S Decachlorobiphenyl	3.642	3.063	2.842	3.606	3.187	3.268	E4	10.64
21) L1 Chlordane (gamma)	2.911	2.724	2.966	3.259	3.084	2.989	E4	6.66
22) L1 Chlordane (alpha)	2.850	2.556	2.901	3.290	3.076	2.935	E4	9.29
23) L2 Toxaphene (1)	1.680		1.562		1.645	1.629	E4	3.71
24) L2 Toxaphene (2)						0.000	0	-1.00
25) L2 Toxaphene (3)						0.000	0	-1.00
26) L2 Toxaphene (4)						0.000	0	-1.00

Signal #2 Calibration Files

2 =2T3552.D 10 =2T3551.D 25 =2T3550.D  
 50 =2T3549.D 100 =2T3558.D

Compound	2	10	25	50	100	Avg		%RSD
1) S TCMX	2.915	2.836	2.816	2.947	2.607	2.824	E4	4.70
2) alpha-BHC	2.630	2.809	2.830	3.481	3.388	3.028	E4	12.58
3) M gamma-BHC (Lindane)	2.875	2.865	2.850	3.397	3.347	3.067	E4	9.11
4) M Heptachlor	5.524	4.871	4.857	5.261	4.832	5.069	E4	6.11
5) beta-BHC	1.834	1.678	1.743	1.947	1.855	1.811	E4	5.74
6) delta-BHC	1.317	1.599	1.420	1.854	1.763	1.591	E4	14.17
7) M Aldrin	2.988	3.003	3.155	3.563	3.408	3.223	E4	7.88
8) Heptachlor epoxide	3.304	3.413	3.418	3.699	3.424	3.452	E4	4.26
9) Endosulfan I	2.868	3.059	3.152	3.352	3.255	3.137	E4	5.93
10) 4,4'-DDE	3.178	3.155	3.305	3.395	3.342	3.275	E4	3.18
11) M Dieldrin	2.666	2.741	2.853	2.978	3.145	2.877	E4	6.62
12) M Endrin	2.231	2.458	2.436	2.821	2.655	2.520	E4	8.95
13) 4,4'-DDD	1.799	1.855	1.858	2.151	1.880	1.909	E4	7.28
14) Endosulfan II	2.740	3.034	3.063	3.368	3.125	3.066	E4	7.34
15) M 4,4'-DDT	2.198	2.187	2.043	2.418	2.291	2.227	E4	6.23
16) Endrin aldehyde	2.848	2.745	2.682	2.782	2.514	2.714	E4	4.69
17) Endosulfan sulfate	2.159	2.226	2.269	2.414	2.230	2.260	E4	4.21
18) Methoxychlor	1.855	1.567	1.523	1.588	1.524	1.612	E4	8.63
19) Endrin ketone	3.061	2.877	2.942	3.321	3.157	3.071	E4	5.75
20) S Decachlorobiphenyl	3.074	4.277	3.189	3.547	3.033	3.424	E4	15.13
21) L1 Chlordane (gamma)	3.365	3.587	3.612	3.861	3.584	3.602	E4	4.89
22) L1 Chlordane (alpha)	2.942	3.539	3.589	3.758	3.528	3.471	E4	8.92
23) L2 Toxaphene (1)	2.736		2.156		2.785	2.559	E4	13.67
24) L2 Toxaphene (2)						0.000	0	-1.00
25) L2 Toxaphene (3)						0.000	0	-1.00
26) L2 Toxaphene (4)						0.000	0	-1.00

(#) = Out of Range

AQUA PRO-TECH Laboratories  
CONTINUING CALIBRATION REPORT  
CHLORINATED PESTICIDES

Instrument: GC/ECD-2  
Column: RTx-CLPesticides  
Primary Column

Data File: 2T3730.D

Analyte Name	Actual Concentration	Initial Cal Factor	Cont Cal Factor	Measured Concentration	%D	Retention Time Window	Date	Time
TCMX	25	20271.1	24179.4	29.8	19.3	3.12 - 3.26	1/25/11	12:37
alpha-BHC	50	18427.9	22054.5	59.8	19.7	3.80 - 3.94	1/25/11	12:37
gamma-BHC (Lindane)	50	18955.5	22909.6	60.4	20.9	4.26 - 4.40	1/25/11	12:37
Heptachlor	50	33676.9	30403.5	45.1	9.7	5.01 - 5.15	1/25/11	12:37
beta-BHC	50	13038.4	14232.7	54.6	9.2	4.46 - 4.60	1/25/11	12:37
delta-BHC	50	10972.7	13768.6	62.7	25.5	4.75 - 4.89	1/25/11	12:37
Aldrin	50	22859.9	23952.6	52.4	4.8	5.55 - 5.69	1/25/11	12:37
Heptachlor Epoxide	50	26989.1	26039.1	48.2	3.5	6.78 - 6.88	1/25/11	12:37
Endosulfan I	50	28644.6	30449.2	53.2	6.3	7.61 - 7.71	1/25/11	12:37
4,4'-DDE	50	18146.1	16973.9	46.8	6.5	7.60 - 7.70	1/25/11	12:37
Dieldrin	50	22748.8	21706.9	47.7	4.6	8.16 - 8.26	1/25/11	12:37
Endrin	50	19211.3	21339.9	55.5	11.1	8.69 - 8.79	1/25/11	12:37
4,4'-DDD	50	9169.6	11959.0	65.2	30.4	9.03 - 9.13	1/25/11	12:37
Endosulfan II	50	23645.8	21683.2	45.9	8.3	9.26 - 9.36	1/25/11	12:37
4,4'-DDT	50	13882.0	15570.0	56.1	12.2	9.66 - 9.76	1/25/11	12:37
Endrin Aldehyde	50	19943.7	20131.2	50.5	0.9	10.30 - 10.40	1/25/11	12:37
Endosulfan Sulfate	50	16918.7	17047.3	50.4	0.8	11.52 - 11.62	1/25/11	12:37
methoxychlor	50	20146.3	17958.4	44.6	10.9	11.09 - 11.19	1/25/11	12:37
Endrin Ketone	50	23118.5	26114.6	56.5	13.0	12.40 - 12.50	1/25/11	12:37
DCBP	25	32673.2	32098.2	24.6	1.8	15.64 - 15.74	1/25/11	12:37
					%D	11 %		

\* Indicates %D outside of QC Limits,  $\pm 15\%$

Quantitation Report (QT Reviewed)

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Signal #1 : G:\HPCHEM\GCECD2\DATA\01252011\2T3730.D\ECD1A.CH Vial: 1  
 Signal #2 : G:\HPCHEM\GCECD2\DATA\01252011\2T3730.D\ECD2B.CH  
 Acq On : 25 Jan 2011 12:37 pm Operator: RL  
 Sample : Pest CCV 50 ppb Inst : GC/ECD-1  
 Misc : Multiplr: 1.00  
 IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E  
 Quant Time: Jan 26 14:47 2011 Quant Results File: 80810105.RES

Quant Method : G:\HPCHEM\G...\80810105.M (Chemstation Integrator)  
 Title : Pesticides by EPA Method 8081  
 Last Update : Fri Jan 14 13:45:51 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 80811223.M

Volume Inj. : 2ul  
 Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II  
 Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
System Monitoring Compounds						
1) S TCMX	3.19	3.91	604485	633811	29.818	22.440
Spiked Amount	50.000				Recovery =	44.88%
20) S Decachlorobiphen	15.69	18.85	802455	935549	24.555	27.324m
Spiked Amount	50.000				Recovery =	54.65%
Target Compounds						
2) alpha-BHC	3.87	4.92	1102727	1631907	59.836	53.901
3) M gamma-BHC (Linda	4.33	5.61	1145480	1868702	60.428	60.932
4) M Heptachlor	5.08	6.53	1520174	2010480	45.141	39.664
5) beta-BHC	4.53	5.83	711635	978663	54.583	54.034
6) delta-BHC	4.82	6.45	688428	1028097	62.740m	64.638
7) M Aldrin	5.62	7.26	1197628	1570780	52.385	48.731
8) Heptachlor epoxi	6.83f	8.61	1301953	1536240	48.244	44.509
9) Endosulfan I	7.66	9.58	1522461	1599899	53.154m	50.997m
10) 4,4'-DDE	7.65	9.93	848695	1725498	46.767m	52.688m
11) M Dieldrin	8.21f	10.28	1085345	1555784	47.712	54.084m
12) M Endrin	8.74	11.13	1066994	1289320	55.543	51.157
13) 4,4'-DDD	9.08	11.61	597950	1097215	65.205m	57.490
14) Endosulfan II	9.31f	11.83	1084161	1444747	45.852	47.118
15) M 4,4'-DDT	9.71	12.64	778501	1065683	56.080	47.842
16) Endrin aldehyde	10.35f	12.96	1006561	1150562	50.469	42.392
17) Endosulfan sulfa	11.57f	13.86	852365	1120854	50.383	49.606m
18) Methoxychlor	11.14f	14.88	897920	793936	44.569m	49.262
19) Endrin ketone	12.45f	15.42	1305732	1630198	56.482	53.076
21) L1 Chlordane (gamma	7.10f	9.09	1391704	1638972	46.564	45.504m
22) L1 Chlordane (alpha	7.38f	9.45	1421251	1683882	48.429	48.508m
Sum Chlordane			2812955	3322854	94.994	94.012
Average Chlordane					47.497	47.006
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000

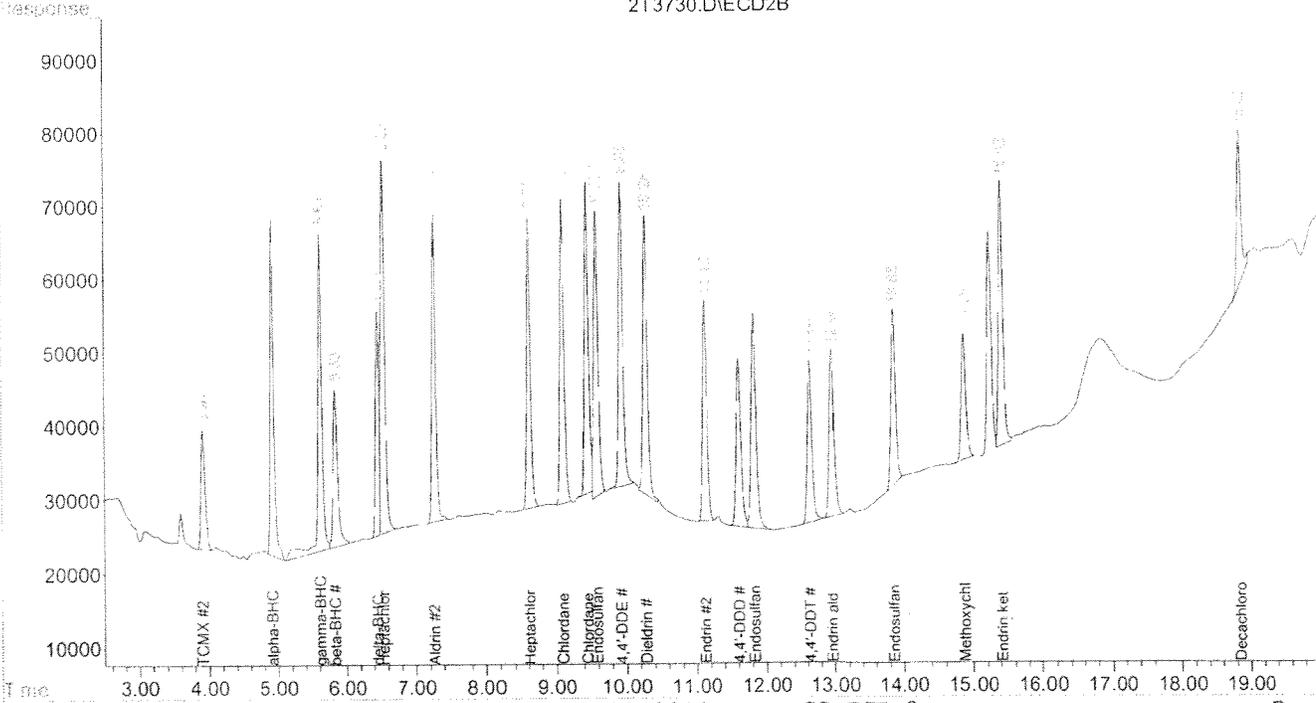
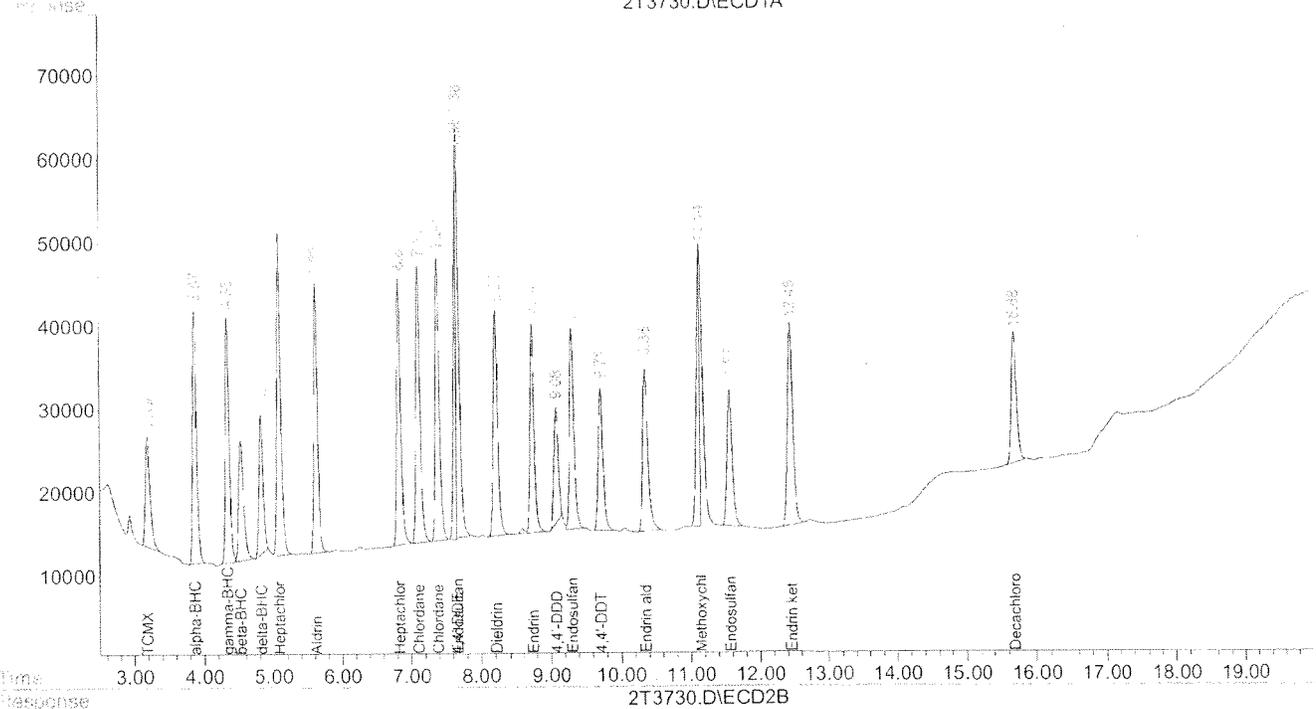
Quantitation Report

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Signal #1 : G:\HPCHEM\GCECD2\DATA\01252011\2T3730.D\ECD1A.CH Vial: 1  
 Signal #2 : G:\HPCHEM\GCECD2\DATA\01252011\2T3730.D\ECD2B.CH  
 Acq On : 25 Jan 2011 12:37 pm Operator: RL  
 Sample : Pest CCV 50 ppb Inst : GC/ECD-1  
 Misc : Multiplr: 1.00  
 IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E  
 Quant Time: Jan 26 14:47 2011 Quant Results File: 80810105.RES

Quant Method : G:\HPCHEM\G...\80810105.M (Chemstation Integrator)  
 Title : Pesticides by EPA Method 8081  
 Last Update : Fri Jan 14 13:45:51 2011  
 Response via : Multiple Level Calibration  
 DataAcq Meth : 80811223.M

Volume Inj. : 2ul  
 Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II  
 Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um  
 2T3730.D\ECD1A















**APL**

*Aqua Pro-Tech Laboratories*  
*Certified Environmental Testing*

**Analytical Results  
GC/MS VOLATILES AND  
SEMI-VOLATILES**

**TERMS ENVIRONMENTAL**  
Berkeley Heights, NJ

**Project: Vet Park**

Reviewed By: \_\_\_\_\_



Brian Wood, Laboratory Director

31-Jan-2011  
Date

1275 Bloomfield Ave., Bldg. 6, Fairfield, New Jersey, 07004  
(t)973.227.0422 (f)973.227.2813 (w)www.aquaprotechlabs.com  
NELAC National Environmental Laboratory Accreditation Conference  
NJDEP #07010/NYDOH #11634  
CTPHB #0233/US ARMY

Volatile Organics

by

GC/MS

Aqua Pro-Tech Laboratories  
Sample Location and Identification  
GC/MS VOLATILES

Client Sample Number	Aqua Pro-Tech Sample Number	Matrix
Comp A	11010298-001	Soil
Comp B	11010298-002	Soil

Aqua Pro-Tech Laboratories  
Laboratory Chronicle  
GC/MS VOLATILES

	Date Performed	Performed By
Receipt/Refrigeration:	1/11/11	KPONSI

Analysis	Date Analyzed	Analyzed By
11010298-001	01/21/2011	O. Deleanu
11010298-002	01/21/2011	O. Deleanu

Aqua Pro-Tech Laboratories  
EPA Method 8260 Analytical Report

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Client: TERMS ENVIRONMENTAL  
Project: Vet Park  
Matrix: Soil

Client Sample:

Comp A

Sample Weight: 5.0 Grams  
Level: Low  
% Moisture: 15.2%

Lab Sample ID: 11010298-001  
Lab File ID: 1V2268.D  
Date Collected: 11-Jan-11

Date Analyzed: 21-Jan-11  
Dilution Factor: 1

CAS No.	Compound	Conc ug/kg	Q	MDL	PQL
75-71-8	Dichlorodifluoromethane		U	1.31	5.9
74-87-3	Chloromethane		U	0.767	5.9
75-01-4	Vinyl Chloride		U	1.11	5.9
74-83-9	Bromomethane		U	2.02	5.9
75-00-3	Chloroethane		U	2.69	5.9
75-69-4	Trichlorofluoromethane		U	1.38	5.9
76-13-1	1,1,2-Trichloro-1,2,2 trifluoroethan		U	2.46	5.9
67-64-1	Acetone		U	3.38	11.8
75-35-4	1,1-Dichloroethene		U	1.59	5.9
79-20-9	Methyl Acetate		U	1.12	5.9
75-09-2	Methylene Chloride		U	0.967	5.9
75-15-0	Carbon Disulfide		U	0.814	5.9
1634-04-4	Methyl tert-Butyl Ether		U	1.03	5.9
156-60-5	trans-1,2-Dichloroethene		U	0.790	5.9
75-34-3	1,1-Dichloroethane		U	0.991	5.9
78-93-3	2-Butanone		U	2.42	11.8
156-59-2	cis-1,2-Dichloroethene		U	0.613	5.9
67-66-3	Chloroform		U	0.920	5.9
110-82-7	Cyclohexane		U	0.00	5.9
71-55-6	1,1,1-Trichloroethane		U	1.34	5.9
56-23-5	Carbon Tetrachloride		U	1.03	5.9
107-06-2	1,2-Dichloroethane		U	0.672	5.9
71-43-2	Benzene		U	0.649	5.9
79-01-6	Trichloroethene		U	0.967	5.9
108-87-2	Methylcyclohexane		U	1.20	5.9
78-87-5	1,2-Dichloropropane		U	0.932	5.9
75-27-4	Bromodichloromethane		U	0.908	5.9
108-10-1	4-Methyl-2-Pentanone		U	0.884	11.8
10061-01-5	cis-1,3-Dichloropropene		U	0.224	5.9
108-88-3	Toluene		U	0.425	5.9
10061-02-6	trans-1,3-Dichloropropene		U	0.519	5.9
79-00-5	1,1,2-Trichloroethane		U	0.802	5.9
591-78-6	2-Hexanone		U	1.30	11.8
127-18-4	Tetrachloroethene		U	0.790	5.9
124-48-1	Dibromochloromethane		U	0.802	5.9
106-93-4	1,2-Dibromoethane		U	0.448	5.9
108-90-7	Chlorobenzene		U	0.507	5.9
100-41-4	Ethylbenzene		U	0.472	5.9
1330-20-7	m+p-Xylenes		U	1.13	11.8

Qualifiers : U=Undetected, J=Estimated, B=Also Detected in Blank,  
E=Exceeded Calibration - Dilution Required, D=Result of Dilution

Aqua Pro-Tech Laboratories  
EPA Method 8260 Analytical Report

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Client: TERMS ENVIRONMENTAL  
Project: Vet Park  
Matrix: Soil

Client Sample:

Comp A
--------

Sample Weight 5.0 Grams  
Level: Low  
% Moisture: 15.2%

Lab Sample ID: 11010298-001  
Lab File ID: 1V2268.D  
Date Collected: 11-Jan-11

Date Analyzed: 21-Jan-11  
Dilution Factor: 1

CAS No.	Compound	Conc ug/kg	Q	MDL	PQL
95-47-6	o-Xylene		U	0.932	5.9
100-42-5	Styrene		U	0.743	5.9
98-82-8	Isopropylbenzene		U	0.613	5.9
75-25-2	Bromoform		U	2.11	5.9
79-34-5	1,1,2,2-Tetrachloroethane		U	1.67	5.9
541-73-1	1,3-Dichlorobenzene		U	0.979	5.9
106-46-7	1,4-Dichlorobenzene		U	1.00	5.9
95-50-1	1,2-Dichlorobenzene		U	0.849	5.9
96-12-8	1,2-Dibromo-3-chloropropane		U	5.32	11.8
120-82-1	1,2,4-Trichlorobenzene		U	1.16	5.9

Qualifiers : U=Undetected, J=Estimated, B=Also Detected in Blank,  
E=Exceeded Calibration - Dilution Required, D=Result of Dilution

Aqua Pro-Tech Laboratories  
EPA Method 8260 Analytical Report  
Tentatively Identified Compounds

Client: TERMS ENVIRONMENTAL  
Project: Vet Park  
Matrix: Soil

Client Sample:

Comp A

Sample Weight 5.0 Grams  
Level: Low  
% Moisture: 15.2%

Lab Sample ID: 11010298-001  
Lab File ID: 1V2268.D  
Date Collected: 11-Jan-11  
Date Analyzed: 21-Jan-11  
Dilution Factor: 1

CAS No.	Compound	Est. Conc.	Q	RT
---------	----------	------------	---	----

Number of TICs found: 0  
Total Est. Concentration: 0 ug/kg

Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\1\Data\01212011\1V2268.D  
 Acq On : 21 Jan 2011 3:14 pm  
 Sample : 11010298-001  
 Misc : soil 5.0g  
 MS Integration Params: RTEINT.P  
 Quant Time: Jan 25 12:15 2011

Vial: 9  
 Operator: omd  
 Inst : GC/MS-1  
 Multiplr: 1.00

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Quant Results File: 0104VO1.RES

Quant Method : G:\HPCHEM\1\METHODS\0104VO1.M (RTE Integrator)  
 Title : VOC's by EPA Method 8260  
 Last Update : Thu Jan 13 14:31:51 2011  
 Response via : Initial Calibration  
 DataAcq Meth : VOCRUN1

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	12.14	168	51911	50.00	ug/kg	0.08
33) 1,4-Difluorobenzene	13.01	114	114212	50.00	ug/kg	0.08
52) Chlorobenzene-d5	17.62	82	76020	50.00	ug/kg	0.09
74) 1,4-Dichlorobenzene-d4	21.55	152	54080	50.00	ug/kg	0.09

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
26) Dibromofluoromethane	11.52	113	138731	56.91	ug/kg	0.08
Spiked Amount	50.000	Range 59 - 147	Recovery	=	113.82%	
43) Toluene-d8	15.13	98	633205	49.85	ug/kg	0.08
Spiked Amount	50.000	Range 66 - 134	Recovery	=	99.70%	
62) 4-Bromofluorobenzene	19.57	95	261398	53.07	ug/kg	0.08
Spiked Amount	50.000	Range 64 - 125	Recovery	=	106.14%	

Target Compounds Qvalue

Quantitation Report

Data File : G:\HPChem\1\Data\01212011\1V2268.D  
Acq On : 21 Jan 2011 3:14 pm  
Sample : 11010298-001  
Misc : soil 5.0g  
MS Integration Params: RTEINT.P  
Quant Time: Jan 25 12:15 2011

Vial: 9  
Operator: omd  
Inst : GC/MS-1  
Multiplr: 1.00

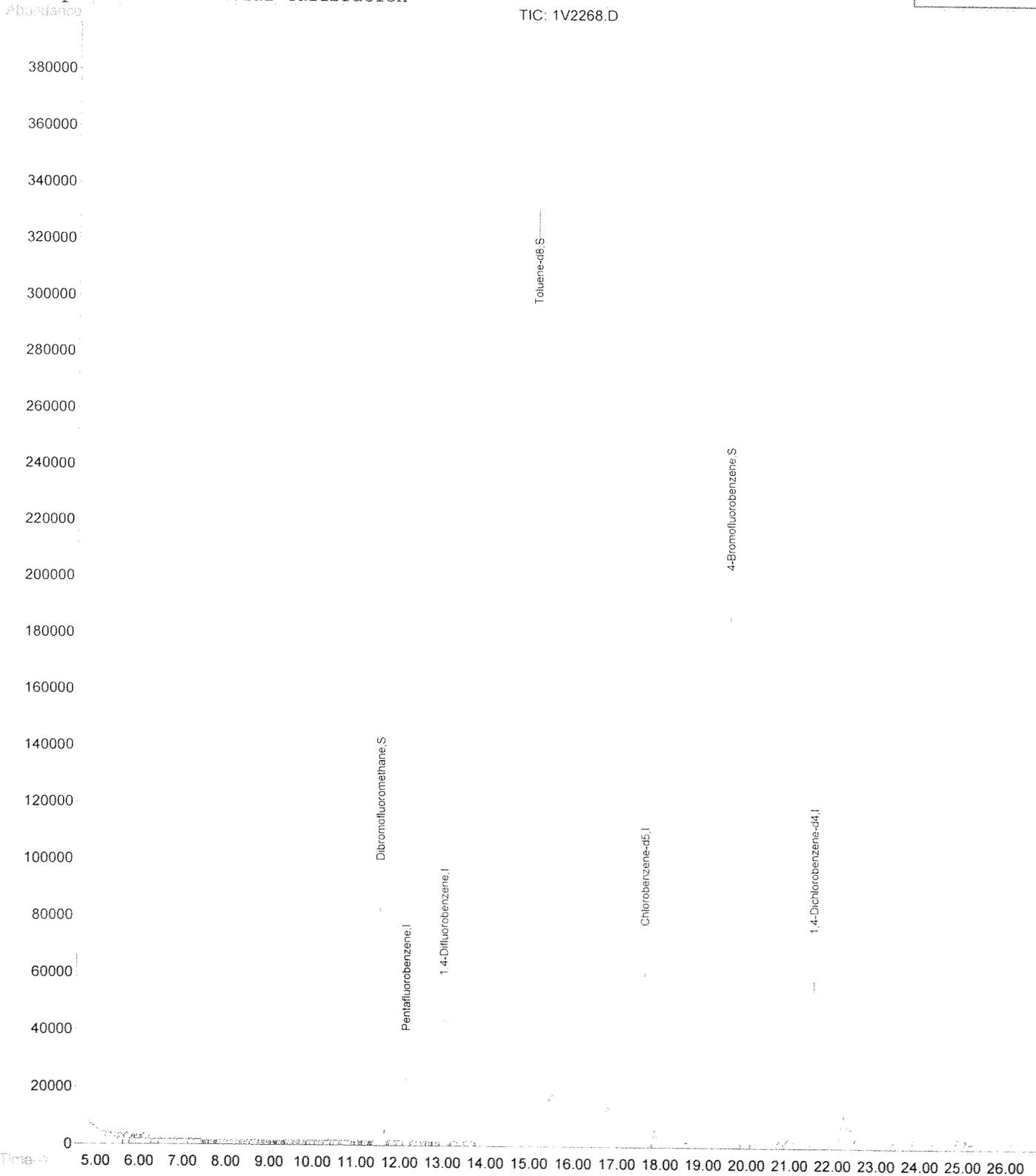
91

Quant Results File: 0104VO1.RES

Method : G:\HPChem\1\Methods\0104VO1.M (RTE Integrator)  
Title : VOC's by EPA Method 8260  
Last Update : Thu Jan 13 14:31:51 2011  
Response via : Initial Calibration

Approved:  
25-Jan-2011 12:42

OB



Aqua Pro-Tech Laboratories  
EPA Method 8260 Analytical Report

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Client: TERMS ENVIRONMENTAL  
Project: Vet Park  
Matrix: Soil

Client Sample:

Comp B

Sample Weight 5.0 Grams  
Level: Low  
% Moisture: 17.2%

Lab Sample ID: 11010298-002  
Lab File ID: 1V2269.D  
Date Collected: 11-Jan-11

Date Analyzed: 21-Jan-11  
Dilution Factor: 1

CAS No.	Compound	Conc ug/kg	Q	MDL	PQL
75-71-8	Dichlorodifluoromethane		U	1.34	6.04
74-87-3	Chloromethane		U	0.785	6.04
75-01-4	Vinyl Chloride		U	1.14	6.04
74-83-9	Bromomethane		U	2.07	6.04
75-00-3	Chloroethane		U	2.75	6.04
75-69-4	Trichlorofluoromethane		U	1.41	6.04
76-13-1	1,1,2-Trichloro-1,2,2 trifluoroethan		U	2.52	6.04
67-64-1	Acetone		U	3.47	12.1
75-35-4	1,1-Dichloroethene		U	1.63	6.04
79-20-9	Methyl Acetate		U	1.15	6.04
75-09-2	Methylene Chloride		U	0.990	6.04
75-15-0	Carbon Disulfide		U	0.833	6.04
1634-04-4	Methyl tert-Butyl Ether		U	1.05	6.04
156-60-5	trans-1,2-Dichloroethene		U	0.809	6.04
75-34-3	1,1-Dichloroethane		U	1.01	6.04
78-93-3	2-Butanone		U	2.48	12.1
156-59-2	cis-1,2-Dichloroethene		U	0.628	6.04
67-66-3	Chloroform		U	0.942	6.04
110-82-7	Cyclohexane		U	0.00	6.04
71-55-6	1,1,1-Trichloroethane		U	1.38	6.04
56-23-5	Carbon Tetrachloride		U	1.05	6.04
107-06-2	1,2-Dichloroethane		U	0.688	6.04
71-43-2	Benzene		U	0.664	6.04
79-01-6	Trichloroethene		U	0.990	6.04
108-87-2	Methylcyclohexane		U	1.23	6.04
78-87-5	1,2-Dichloropropane		U	0.954	6.04
75-27-4	Bromodichloromethane		U	0.930	6.04
108-10-1	4-Methyl-2-Pentanone		U	0.906	12.1
10061-01-5	cis-1,3-Dichloropropene		U	0.229	6.04
108-88-3	Toluene		U	0.435	6.04
10061-02-6	trans-1,3-Dichloropropene		U	0.531	6.04
79-00-5	1,1,2-Trichloroethane		U	0.821	6.04
591-78-6	2-Hexanone		U	1.33	12.1
127-18-4	Tetrachloroethene		U	0.809	6.04
124-48-1	Dibromochloromethane		U	0.821	6.04
106-93-4	1,2-Dibromoethane		U	0.459	6.04
108-90-7	Chlorobenzene		U	0.519	6.04
100-41-4	Ethylbenzene		U	0.483	6.04
1330-20-7	m+p-Xylenes		U	1.16	12.1

Qualifiers : U=Undetected, J=Estimated, B=Also Detected in Blank,  
E=Exceeded Calibration - Dilution Required, D=Result of Dilution

Aqua Pro-Tech Laboratories  
EPA Method 8260 Analytical Report

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Project: Vet Park  
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Comp B
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Date Analyzed: 21-Jan-11  
Dilution Factor: 1

CAS No.	Compound	Conc ug/kg	Q	MDL	PQL
95-47-6	o-Xylene		U	0.954	6.04
100-42-5	Styrene		U	0.761	6.04
98-82-8	Isopropylbenzene		U	0.628	6.04
75-25-2	Bromoform		U	2.16	6.04
79-34-5	1,1,2,2-Tetrachloroethane		U	1.71	6.04
541-73-1	1,3-Dichlorobenzene		U	1.00	6.04
106-46-7	1,4-Dichlorobenzene		U	1.03	6.04
95-50-1	1,2-Dichlorobenzene		U	0.870	6.04
96-12-8	1,2-Dibromo-3-chloropropane		U	5.45	12.1
120-82-1	1,2,4-Trichlorobenzene		U	1.18	6.04

Qualifiers : U=Undetected, J=Estimated, B=Also Detected in Blank,  
E=Exceeded Calibration - Dilution Required, D=Result of Dilution

Aqua Pro-Tech Laboratories  
EPA Method 8260 Analytical Report  
Tentatively Identified Compounds

Client: TERMS ENVIRONMENTAL  
Project: Vet Park  
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Client Sample:

Comp B
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Level: Low  
% Moisture: 17.2%

Lab Sample ID: 11010298-002  
Lab File ID: 1V2269.D  
Date Collected: 11-Jan-11  
Date Analyzed: 21-Jan-11  
Dilution Factor: 1

CAS No.	Compound	Est. Conc.	Q	RT
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Number of TICs found: 0  
Total Est. Concentration: 0 ug/kg

Quantitation Report (QT Reviewed)

Data File : G:\HPChem\1\Data\01042011\1V2084.D  
 Acq On : 5 Jan 2011 5:03 am  
 Sample : 11010028-001  
 Misc : soil 5.0g  
 MS Integration Params: RTEINT.P  
 Quant Time: Jan 7 15:07 2011

Vial: 21  
 Operator: omd  
 Inst : GC/MS-1  
 Multiplr: 1.00

100

Quant Results File: 0104VO1.RES

Quant Method : G:\HPCHEM\1\METHODS\0104VO1.M (RTE Integrator)  
 Title : VOC's by EPA Method 8260  
 Last Update : Wed Jan 05 10:43:50 2011  
 Response via : Initial Calibration  
 DataAcq Meth : VOCRUN1

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	12.11	168	73805	50.00	ug/kg	0.04
33) 1,4-Difluorobenzene	12.97	114	148982	50.00	ug/kg	0.02
52) Chlorobenzene-d5	17.57	82	112073	50.00	ug/kg	0.02
74) 1,4-Dichlorobenzene-d4	21.50	152	85739	50.00	ug/kg	0.02

System Monitoring Compounds

26) Dibromofluoromethane	11.48	113	190549	54.98	ug/kg	0.02
Spiked Amount	50.000	Range 59 - 147	Recovery	=	109.96%	
43) Toluene-d8	15.09	98	800085	48.28	ug/kg	0.02
Spiked Amount	50.000	Range 66 - 134	Recovery	=	96.56%	
62) 4-Bromofluorobenzene	19.54	95	351884	48.46	ug/kg	0.03
Spiked Amount	50.000	Range 64 - 125	Recovery	=	96.92%	

Target Compounds

						Qvalue
27) Cyclohexane	11.19	56	16664	12.30	ug/kg#	52
35) Methylcyclohexane	13.01	83	99600	61.42	ug/kg#	81
44) Toluene	15.17	91	51169	7.99	ug/kg	61
55) Ethylbenzene	17.57	91	342086	38.52	ug/kg	94
56) m+p-Xylenes	17.78	106	413871	132.86	ug/kg	75
57) o-Xylene	18.51	91	477863	72.45	ug/kg	89
59) Isopropylbenzene	18.98	105	188865	22.21	ug/kg#	84