Post-Construction Groundwater Monitoring Report (Round 5 through Round 8)

Skagit County Port Site
(Taxiway F Skagit County Regional Airport)
Burlington, Washington
Consent Decree No. 11-2-01536-2
Facility ID No. 6757634
Cleanup Site ID No. 1671

for
Washington State Department of Ecology
***on Behalf of* Port of Skagit County**

July 23, 2015

GeoEngineers
Earth Science + Technology

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July 23, 2015

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INTRODUCTION

This document present the results of four quarterly post-construction compliance groundwater monitoring events (Rounds 5 through 8) that were completed for the Skagit County Port (Taxiway F Skagit County Regional Airport) Site (herein referred to as "Site"). The Site is located generally within the western portion of the Skagit Regional Airport, east of Taxiway F in Burlington, Washington (Figure 1). Pursuant to Washington State Department of Ecology (Ecology) Consent Decree No. 11-2-01536-2 (Consent Decree; Ecology, 2011), the Cleanup Action Plan (CAP; GeoEngineers, 2011a) and Engineering Design Report (EDR; GeoEngineers, 2011b), the Port of Skagit County (Port) is monitoring for indicator hazardous substances in groundwater to evaluate the effectiveness of the 2011 cleanup action that was completed to remove pesticide and herbicide contaminated soil from the Site (Figure 2). The Facility Site Identification Number is 67457634 and the Cleanup Site Identification Number is 1671.

In accordance with the Compliance Monitoring Plan (CMP, GeoEngineers, 2011c), four initial post-construction rounds (Rounds 1 through 4) of groundwater monitoring were completed by the Port between December 2012 and September 2013. Based on a review of the chemical analytical data for these monitoring events, Ecology determined that compliance with the groundwater cleanup objectives was not achieved and that four additional rounds of quarterly monitoring were merited to further evaluate post-construction groundwater conditions. This report has been prepared to document the results of the additional groundwater monitoring activities for the Site. Post-construction groundwater monitoring activities for the June 2014, October 2014, December 2014 and March 2015 sampling events (Rounds 5 through 8) are summarized in the following sections. Environmental data summarized in this report and for previous groundwater monitoring events (Round 1 through Round 4) are available in Ecology's Environmental Information Management (EIM) system under Study ID - FS67457634 and Study Name – Skagit County Port (Taxiway F Skagit County Regional Airport) Burlington, Washington.

GROUNDWATER MONITORING PROGRAM

Performance Criteria

In accordance with the CMP, the Site is considered to be in compliance when contaminant concentrations for indicator hazardous substances for groundwater established by the CAP including dinoseb, bentazon, 2,4-D, 2-methyl-4-chlorophenoxy-acetic acid (MCPA), aldrin, dieldrin, heptachlor, and heptachlor epoxide are less than site-specific cleanup levels at the point of compliance for four consecutive monitoring events. For groundwater, the point of compliance is located throughout the Site from the uppermost level of the saturated zone extending vertically to the lowermost depth which could potentially be affected by Site contaminants. Previous investigation results indicated that the deep groundwater zone beneath the Site has not been affected by the contamination in shallow soils and perched groundwater. Accordingly, monitoring of the deep groundwater zone is not required as part of the cleanup action.

As stated in the Cleanup Action Plan for the Site, if one or more of the hazardous indicator substances are detected at concentrations exceeding the Site cleanup levels, additional compliance groundwater monitoring may be necessary to further evaluate post-construction groundwater conditions. If additional compliance groundwater monitoring is necessary, sampling frequency and groundwater hazardous indicator substances will be determined based on discussions between the Port and Ecology and implemented at the approval of Ecology.

Monitoring Activities

As required by Ecology following the completion of four initial quarterly groundwater monitoring events (Rounds 1 through 4) and review of the data, the Port continued monitoring on wells MW-9 through MW-12 on a quarterly basis to further evaluate post-construction groundwater conditions at the Site. The network of post-construction groundwater monitoring wells is shown relative to the cleanup action area on Figure 2. Specific activities that were completed as part of the groundwater monitoring included:

- Measuring depth to groundwater at monitoring well locations MW-9 through MW-12 prior to groundwater sample collection.
- Collecting groundwater samples from monitoring wells MW-9 through MW-12 using low-flow/ low-turbidity sampling techniques using a peristaltic pump and disposable polyethylene tubing.
- Placing groundwater samples in laboratory prepared jars for chemical analysis of indicator hazardous substances not meeting the performance criteria during the initial quarterly monitoring events (Rounds 1 through 4), which included chlorinated pesticides (aldrin, dieldrin, heptachlor and heptachlor) and chlorinated herbicides (dinoseb and MCPA).
- Storing purge water generated by the sampling activities in sealed and labeled 55-gallon drums at the Site pending characterization for disposal.
- Comparing the chemical analytical results to the site-specific cleanup levels established by the CAP.

Field procedures for groundwater monitoring activities are presented in Appendix A. Monitoring well completion logs for MW-9 through MW-12 are presented in Appendix B. The monitoring events and results are summarized below.

Monitoring Events

Monitoring wells MW-9 through MW-12 were sampled on a quarterly basis between June 2014 and March 2015 to further evaluate post-construction groundwater conditions at the Site. Groundwater samples were obtained during the following monitoring events:

ROUND 5 GROUNDWATER MONITORING EVENT – COMPLETED ON JUNE 30, 2013

- Round 6 Groundwater Monitoring Event – Completed on October 9, 2014
- Round 7 Groundwater Monitoring Event – Completed December 18, 2014
- Round 8 Groundwater Monitoring Event – Completed March 19, 2015

Observed groundwater conditions and chemical analytical results for Rounds 5 through 8 are discussed in the following below.

Monitoring Results

Groundwater Conditions

Depth to groundwater was measured from the top of the well casing in monitoring wells MW-9 through MW-12 prior to sampling during each post-construction groundwater monitoring event. Measured groundwater elevations for each monitoring event are summarized in Table 1 and shown relative to the Site

on Figures 3 through 6. Based on the measured groundwater elevations and previous groundwater investigations (GeoEngineers, 2009), the inferred predominant groundwater flow direction is from the taxiway to the southeast toward the wetland area.

During each post-construction groundwater monitoring event, monitoring wells MW-9 through MW-12 were purged a rate not exceeding 0.5 liters per minute using low-flow sampling techniques until the water quality parameters (i.e., electrical conductivity, dissolved oxygen, pH, total dissolved solids, turbidity, and temperature) stabilized to within 10 percent on three consecutive readings or until the well was purged dry. In the event that the well became dry during purging, groundwater was allowed to recharge and a water sample obtained.

Water quality parameters measured during each sampling event (Rounds 5 through 8) at the time of sample collection are summarized in Table 2, with one exception. Groundwater was not observed in monitoring well MW-9 during the Round 6 Monitoring Event. As a result, a water sample was not collected from this location during this monitoring event.

Chemical Analytical Results

Groundwater samples collected during the quarterly groundwater monitoring events (Rounds 5 through 8) were submitted to OnSite Environmental, Inc. of Redmond, Washington (OnSite), for chemical analysis of the chlorinated pesticides and herbicides including aldrin, dieldrin, heptachlor, heptachlor epoxide, dinoseb and MCPA using US Environmental Protection Agency (EPA) method 8081A GC/ECD, consistent with the initial four rounds of monitoring. Indicator hazardous substances either were not detected or were detected at concentrations less than site-specific groundwater cleanup levels in each of the wells sampled with the following exceptions:

- **Round 5 Monitoring Event:** MCPA exceeded the site-specific groundwater cleanup level in monitoring wells MW-9 through MW-11. In addition, dinoseb exceeded the site-specific groundwater cleanup level in monitoring well MW-10.
- **Round 6 Monitoring Event:** MCPA and dinoseb exceeded the site-specific groundwater cleanup level in monitoring well MW-10. In addition, dinoseb slightly exceeded the site-specific groundwater cleanup level in a duplicate sample obtained from monitoring well MW-12. However, the detected concentration of dinoseb in the parent sample obtained from this location was less than the site-specific groundwater cleanup level.
- **Round 7 Monitoring Event:** MCPA exceeded the site-specific groundwater cleanup level in monitoring wells MW-9 through MW-11.
- **Round 8 Monitoring Event:** MCPA exceeded the site-specific groundwater cleanup level in monitoring wells MW-10 and MW-11. In addition, dinoseb exceeded the site-specific groundwater cleanup level in monitoring well MW-12.

Post-construction groundwater analytical results are summarized in Table 3. Copies of laboratory reports for each monitoring event are presented in Appendix B. Laboratory data presented in Appendix C were subjected to an EPA level 2A validation and were determined to be acceptable for its intended use as qualified. Data validation reports are presented in Appendix D. The validated analytical data has been uploaded to Ecology's Environmental Information Management (EIM) database.

CONCLUSIONS

Cleanup actions completed by the Port in 2011 resulted in the removal and off-site disposal of 6,612 tons of soil containing pesticide and herbicide contamination resulting from historical Site use. Confirmation of the contaminated soil removal completeness was verified by soil sampling and analysis at the final limits of excavation. Following the completion of the cleanup construction, four initial quarterly groundwater monitoring events were completed by the Port to evaluate the effectiveness of the cleanup action. Because the performance criteria for groundwater was not achieved for all indicator hazardous substances, four additional quarterly rounds of post-construction groundwater monitoring were completed by the Port.

During each of the four additional rounds of post-construction groundwater monitoring (Rounds 5 through 8), chlorinated pesticides (aldrin, dieldrin, heptachlor, and heptachlor epoxide) either were not detected or were detected at concentrations less than site-specific groundwater cleanup levels and have therefore, achieved the groundwater performance criterial for the Site. In addition, because concentrations of dinoseb have not exceeded the site-specific groundwater cleanup level at MW-9 and MW-11, the performance criteria for dinoseb at these two locations have been achieved as well. Although the performance criteria for MCPA has not been achieved at MW-9 through MW-11, concentrations of MCPA during each monitoring event (Round 1 through Round 8) are less than the site-specific groundwater cleanup level in monitoring well MW-12 located downgradient of these wells suggesting that the mobility of this contaminant is limited and is localized around the asphalt driveway (Figure 2).

Currently, the performance criteria for dinoseb and MCPA has not yet been achieved for all sampling locations at the Site. As a result, further monitoring for these contaminates is merited. Review of the contaminant concentrations over the eight rounds of monitoring do not indicate significant seasonable effects. The concentration trend for dinoseb and MCPA over-time is not clear and therefore, a longer monitoring period could help to evaluate contaminant attenuation at the Site.

Further Compliance Groundwater Monitoring

To further evaluate the post-construction condition at the Site, Ecology is requiring that additional groundwater monitoring be completed at the Site in MW-9 through MW-12. Based on the results of the existing eight monitoring events, additional monitoring will include the following:

- Analysis of dinoseb at MW-10 and MW-12; and
- Analysis of MCPA at MW-9, MW-10, MW-11 and MW-12.

The additional monitoring will be completed on a semi-annual basis during March and December over a five year period to provide a longer-term trend that can inform evaluation of the post-construction compliance at the Site. Continued groundwater monitoring at the Site can be carried out under the existing Ecology-approved Compliance Monitoring Plan. Timing of the semi-annual sampling events will be consistent with the previous events completed to provide continuity with the existing data and ensure that adequate groundwater is available for sampling.

LIMITATIONS

We have prepared this Post-Construction Groundwater Compliance Monitoring Report for use by the Port of Skagit County, their authorized agents and regulatory agencies for the Taxiway F Site located in Burlington, Washington. No other party may rely on the product of our services unless we agree in advance and in writing to such reliance.

Within the limitations of scope, schedule and budget, our services have been executed in accordance with generally accepted environmental science practices in this area at the time this report was prepared. No warranty or other conditions, express or implied, should be understood.

Any electronic form, facsimile or hard copy of the original document (email, text, table, and/or figure), if provided, and any attachments are only a copy of the original document. The original document is stored by GeoEngineers, Inc. and will serve as the official document of record.

REFERENCES

GeoEngineers, Inc., "Final Work Plan, Remedial Investigation/Feasibility Study, Taxiway F Site, Skagit Regional Airport, Ecology Agreed Order No. 6158." GEI File No. 5364-013-00, dated July 31, 2009.

GeoEngineers, Inc. (2011a), "Draft Cleanup Action Plan, Taxiway F Site, Skagit Regional Airport." GEI File No. 5364-013-03, dated February 28, 2011.

GeoEngineers, Inc. (2011b), "Engineering Design Report, Taxiway F Site, Skagit Regional Airport, Burlington, Washington." GEI File No. 5364-013-03, dated July 15, 2011.

GeoEngineers, Inc. (2011c), "Compliance Monitoring Plan, Taxiway F Site, Skagit Regional Airport, Ecology Agreed Order No. 6158." GEI File No. 5364-013-02, dated January 10, 2011.

GeoEngineers, Inc., "Post-Construction Compliance Groundwater Monitoring Report, Round 1 through Round 4, Taxiway F Site, Skagit Regional Airport, Ecology Agreed Order No. 6158." GEI File No. 5364-013-05, dated March 5, 2014.

Washington State Department of Ecology (Ecology, 2011), Consent Decree 11-2-01536-2. State of Washington Department of Ecology v. Port of Skagit County, a municipal corporation. Filed August 1, 2011.

Washington State Department of Ecology (Ecology), "Minimum Standards for Construction and Maintenance of Wells", Chapter 173-160 WAC, update November 2006.

TABLES

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Table 1

Summary of Post-Construction Groundwater Monitoring Elevation Data

Skagit County Port (Taxiway F Skagit County Regional Airport)

Burlington, Washington

Groundwater Monitoring Well[1]	Quarterly Groundwater Monitoring Event	Date Measured	Top of Casing Elevation[2] (feet)	Depth to Water from Top of Casing (feet)	Groundwater Elevation[2] (feet)
MW-9	Round 1	12/19/2012	122.42	0.91	121.51
	Round 2	3/26/2013		2.5	119.92
	Round 3	6/26/2013		2.11	120.31
	Round 4	9/26/2013		4.4	118.02
	Round 5	6/30/2014		4.33	118.09
	Round 6	10/9/2014		Dry	
	Round 7	12/18/2014		1.25	121.17
	Round 8	3/19/2015		0.98	121.44
MW-10	Round 1	12/19/2012	120.76	1.15	119.61
	Round 2	3/26/2013		1.5	119.26
	Round 3	6/26/2013		1.66	119.1
	Round 4	9/26/2013		0.92	119.84
	Round 5	6/30/2014		2.11	118.65
	Round 6	10/9/2014		3.79	116.97
	Round 7	12/18/2014		1.12	119.64
	Round 8	3/19/2015		1.18	119.58
MW-11	Round 1	12/19/2012	120.88	1.91	118.97
	Round 2	3/26/2013		0.7	120.18
	Round 3	6/26/2013		2.03	118.85
	Round 4	9/26/2013		0.93	119.95
	Round 5	6/30/2014		3.68	117.2
	Round 6	10/9/2014		4.08	116.8
	Round 7	12/18/2014		0.5	120.38
	Round 8	3/19/2015		1.82	119.06
MW-12	Round 1	12/19/2012	120.97	3.38	117.59
	Round 2	3/26/2013		3.55	117.42
	Round 3	6/26/2013		3.56	117.41
	Round 4	9/26/2013		3.41	117.56
	Round 5	6/30/2014		3.79	117.18
	Round 6	10/9/2014		4.15	116.82
	Round 7	12/18/2014		3.07	117.9
	Round 8	3/19/2015		4.82	116.15

Notes:

[1] Monitoiring well locations and grounwater elevation data are shown on Figure 2.

[2] Elevation is referenced to Mean Lower Low Water (MLLW).

Table 2

Summary of Post-Construction Groundwater Monitoring Field Parameters

Skagit County Port (Taxiway F Skagit County Regional Airport)

Burlington, Washington

Groundwater Monitoring Well[1]	Quarterly Groundwater Monitoring Event	Date Measured	pH	Cond. (S/m)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Total Dissolved Solids (g/L)	Oxidation Reduction Potential (m/V)
MW-9	Round 1	12/19/2012	6.12	0.32	14.8	5.24	7.8	2	114
	Round 2[2]	3/26/2013	--	--	--	--	--	--	--
	Round 3	6/26/2013	6.24	2.16	11.2	12.01	17.5	1.39	188
	Round 4[2]	9/26/2013	--	--	--	--	--	--	--
	Round 5	6/30/2014	6.5	1.275	10.5	18.0	20.55	4.9	18.1
	Round 6	10/9/2014	Dry	Dry	Dry	Dry	Dry	Dry	Dry
	Round 7	12/18/2014	6.79	1.65	29.1	6.9	9.7	1.06	90
	Round 8	3/19/2014	6.69	1.378	4.3	3.9	10.1	0.89	-41.8
MW-10	Round 1	12/19/2012	6.10	0.51	26.5	5.41	9.0	3.2	130
	Round 2	3/26/2013	6.16	4.85	113	12.7	12.03	--	-18
	Round 3	6/26/2013	6.32	4.77	18.1	10.44	18.4	3.05	133
	Round 4[2]	9/26/2013	--	--	--	--	--	--	--
	Round 5	6/30/2014	6.43	2.136	10.3	19.8	17.29	7.7	130.1
	Round 6	10/9/2014	6.88	2.31	5.8	6.4	15.21	1.52	253.7
	Round 7	12/18/2014	5.9	1.07	39.3	8.3	10.47	0.687	124
	Round 8	3/19/2014	6.71	1.23	11.1	4.4	10.2	0.8	108.9
MW-11	Round 1	12/19/2012	5.92	0.21	23.7	4.29	8.0	1.3	140
	Round 2	3/26/2013	5.63	1.53	150	8.99	10.42	--	9
	Round 3	6/26/2013	7.0	1.51	24.0	8.64	16.99	0.957	167
	Round 4[2]	9/26/2013	--	--	--	--	--	--	--
	Round 5	6/30/2014	5.94	1.212	3.08	13.3	16.76	25.9	85.5
	Round 6	10/9/2014	6.86	1.19	3.41	15.4	7.73	7.735	165.5
	Round 7	12/18/2014	6.3	0.576	20.8	10.1	9.84	0.375	134
	Round 8	3/19/2014	6.86	0.905	18.1	8.6	9.7	0.59	121.4

Groundwater Monitoring Well[1]	Quarterly Groundwater Monitoring Event	Date Measured	pH	Cond. (S/m)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Total Dissolved Solids (g/L)	Oxidation Reduction Potential (m/V)
MW-12	Round 1	12/19/2012	7.45	0.15	156.0	6.81	6.8	1	21
	Round 2	3/26/2013	8.45	0.98	120	12.3	11.7	--	-139
	Round 3	6/26/2013	6.33	1.62	15.9	12.98	17.99	1.03	205
	Round 4[2]	9/26/2013	--	--	--	--	--	--	--
	Round 5	6/30/2014	6.26	2.194	9.08	3.2	16.69	8.9	103.2
	Round 6	10/9/2014	6.8	1.89	7.14	1.5	15.7	12.28	22.8
	Round 7	12/18/2014	6.1	1.84	23.8	9.8	9.16	1.18	122
	Round 8	3/19/2014	6.67	1.927	9.1	3.9	10.6	1.25	169.7

Notes:

[1] Monitoiring well locations are shown on Figure 2.

[2] Water quality parameters were not measured due to the limited water volume present and slow revovery rate observed.

-- = not measured

Table 3

Summary of Post-Construction Groundwater Monitoring Chemical Analytical Data

Skagit County Port (Taxiway F Skagit County Regional Airport)

Burlington, Washington

Groundwater Monitoring Well[1]	Quarterly Groundwater Monitoring Event	Sample Date	Total Chlorinated Pesticides[2] (µg/L)				Chlorinated Herbicides[3] (µg/L)	
			Heptachlor	Aldrin	Heptachlor Epoxide	Dieldrin	MCPA	Dinoseb
MW-9	Round 1	12/19/2012	0.0048 UJ	0.0048 UJ	0.0048 UJ	0.0048 UJ	4.4 UJ	0.39 J
	Round 2	3/26/2013	0.0047 U	0.020 NJ	0.0047 U	0.0047 U	**71**	0.64
	Round 3	6/26/2013	0.060 U	0.060 U	0.060 U	0.060 U	0.080 UJ	0.080 UJ
	Round 4	9/26/2013	0.010 U	**0.056**	0.010 U	0.010 U	**24 NJ**	0.051 U
	Round 5	6/30/2014	0.0047 U	0.0047 U	0.0047 U	0.0047 U	**44 J**	0.045
	Round 6	10/9/2014	--[4]	--[4]	--[4]	--[4]	--[4]	--[4]
	Round 7	12/18/2014	0.0047 U	0.0047 U	0.0047 U	0.0047 U	**13**	0.044 U
	Round 8	3/19/2015	0.0047 U	0.0047 U	0.0047 U	0.0047 NJ	6.6	0.044 U
MW-10	Round 1	12/19/2012	0.0047 UJ	0.0047 UJ	0.0047 UJ	0.0088 J	4.4 U	**140 J**
	Round 2	3/26/2013	0.0048 U	0.0048 U	0.0048 U	0.039 NJ	**360**	**160**
	Round 3	6/26/2013	0.060 U	0.060 U	0.060 U	0.060 U	0.40 U	**260**
	Round 4	9/26/2013	0.0047 U	0.0047 U	0.0047 U	0.0047 U	6.7 U	**34**
	Round 5	6/30/2014	0.0048 U	0.0048 U	0.0048 U	0.0048 U	**110 J**	**120**
	Round 6	10/9/2014	0.0047 U	0.0047 U	0.0047 U	0.0047 U	**80 NJ**	**150**
	Round 7	12/18/2014	0.0048 U	0.0048 U	0.0048 U	0.0048 U	**14**	2.1
	Round 8	3/19/2015	0.0047 U	0.0047 U	0.0047 U	0.0047 U	**75**	3.4
MW-11	Round 1	12/19/2012	0.0048 U	0.0048 U	0.011 NJ	0.014 NJ	4.4 U	1.1 J
	Round 2	3/26/2013	0.0048 U	0.0048 U	**0.28 NJ**	0.0048 U	**420**	1.6
	Round 3	6/26/2013	0.060 U	0.060 U	0.060 U	0.060 U	0.40 U	3.7
	Round 4	9/26/2013	0.0048 U	0.0048 U	0.0048 U	0.0048 U	6.7 U	1.1
	Round 5	6/30/2014	0.0047 U	0.0047 U	0.0047 U	0.0047 U	**67 J**	0.75
	Round 6	10/9/2014	0.0047 U	0.0047 U	0.0047 U	0.0047 U	6.6 U	0.73
	Round 7	12/18/2014	0.0047 U	0.0047 U	0.0047 U	0.0047 U	**270**	0.55
	Round 8	3/19/2015	0.0047 U	0.0047 U	0.0047 U	0.0047 U	**210**	0.3
Site-Specific Cleanup Level[5]			0.05	0.05	0.05	0.05	8	7

Groundwater Monitoring Well[1]	Quarterly Groundwater Monitoring Event	Sample Date	Total Chlorinated Pesticides[2] (µg/L)				Chlorinated Herbicides[3] (µg/L)	
			Heptachlor	Aldrin	Heptachlor Epoxide	Dieldrin	MCPA	Dinoseb
MW-12	Round 1	12/19/2012	0.0048 UJ	0.022 J	0.0048 UJ	0.029 J	4.4 U	**14**
	Round 2	3/26/2013	0.0048 U	0.011	0.0048 U	0.0048 U	4.8 U	4.0 J
	Round 3	6/26/2013	0.060 U	0.060 U	0.060 U	0.060 U	0.56	**38**
	Round 4	9/26/2013	0.0047 U	0.0047 U	0.0047 U	0.0047 U	6.7 U	1.4 J
	Round 5	6/30/2014	0.0047 U	0.0047 U	0.0047 U	0.0047 U	6.6 U	2.2
	Round 6	10/9/2014	0.0047 UJ	0.0047 UJ	0.0047 UJ	0.0047 UJ	6.6 U	2.3 J
	Round 7	12/18/2014	0.0048 U	0.0048 U	0.0048 U	0.0048 U	6.7 U	2.1
	Round 8	3/19/2015	0.0047 U	0.0047 U	0.0047 U	0.0047 U	7.4 J	**19 J**
MW-12 (Duplicate)	Round 1	12/19/2012	0.0047 UJ	0.0078 J	0.0047 UJ	0.0047 UJ	4.4 U	**11**
	Round 2	3/26/2013	0.0048 U	0.011	0.0048 U	0.0048 U	4.7 U	2.4 J
	Round 3	6/26/2013	0.060 U	0.060 U	0.060 U	0.060 U	0.59	**44**
	Round 4	9/26/2013	0.0048 U	0.0048 U	0.0048 U	0.0048 U	6.7 U	2.3 J
	Round 5	6/30/2014	0.0047 U	0.0047 U	0.0047 U	0.0047 U	6.6 U	2.6
	Round 6	10/9/2014	0.0047 UJ	0.0047 UJ	0.0047 UJ	0.0047 UJ	6.6 U	**8.9 J**
	Round 7	12/18/2014	0.0048 UJ	0.0048 UJ	0.0048 UJ	0.0048 UJ	6.7 U	1.5
	Round 8	3/19/2015	0.0047 U	0.0047 U	0.0047 U	0.0047 U	6.6 U	**7.6 J**
Site-Specific Cleanup Level[5]			0.05	0.05	0.05	0.05	8	7

Notes:

[1] Groundwater monitoring well locations are shown on Figure 2.

[2] Chlorinated Pesticides analyzed using EPA 8081B.

[3] Chlorinated Herbicides analyzed using EPA 8151A.

[4] Well purged dry during sampling and did not recover.

[5] Site-specific groundwater cleanup level is referenced from Table 2 of the Taxiway F Site Cleanup Action Plan (CAP; GeoEngineers, Ecology, 2011).

J = The analyte was positively identified and the associated numerical value is the approximate concentration (due either to the quality of the data generated because certain quality control criteria were not met, or the concentration of the analyte was below the CRQL).

NJ = The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.

U = The analyte not detected at level above practical quantitation limit (PQL).

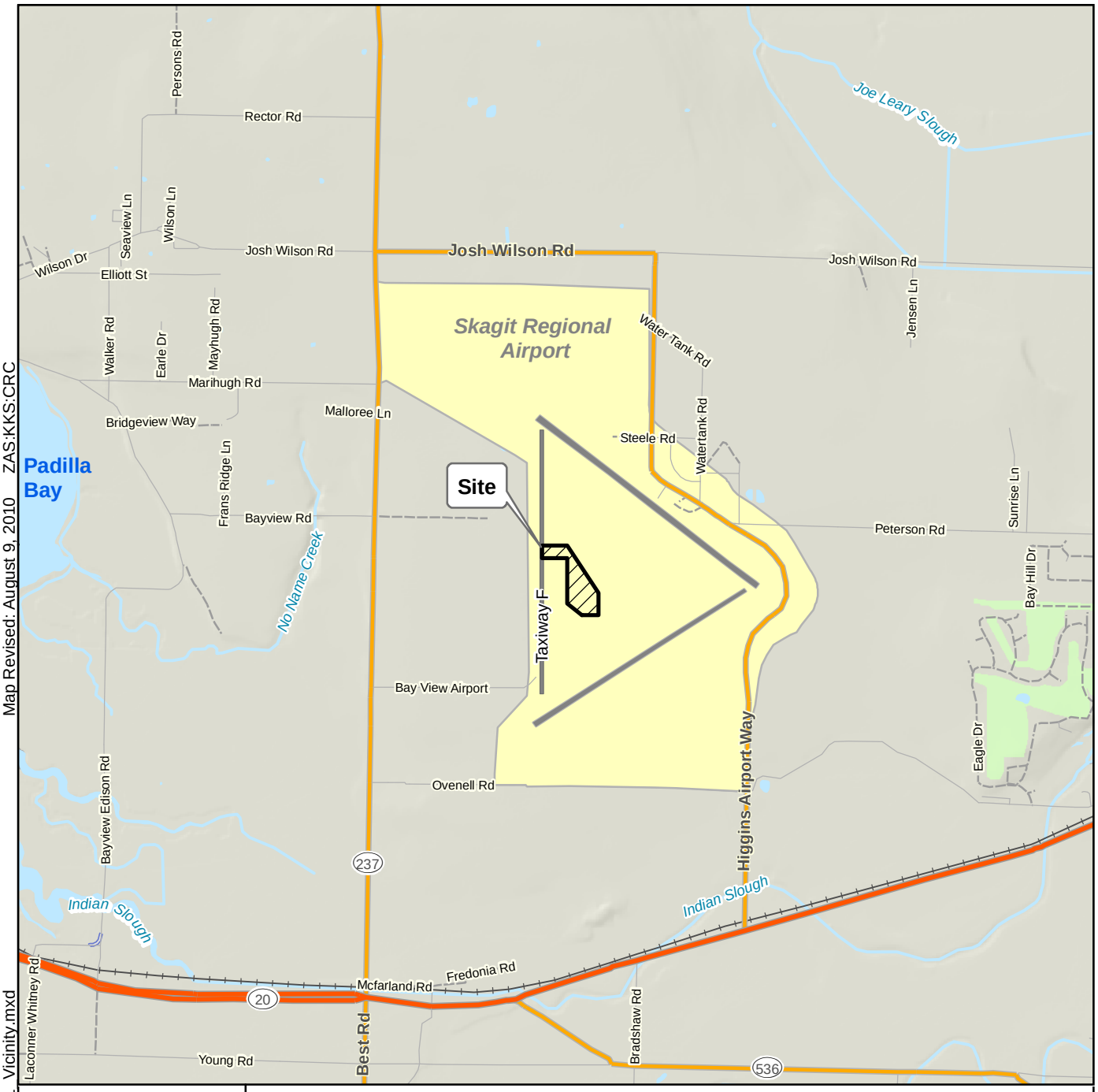
Blue shading indicates the laboratory reporting limit exceeded the site-specific cleanup level.

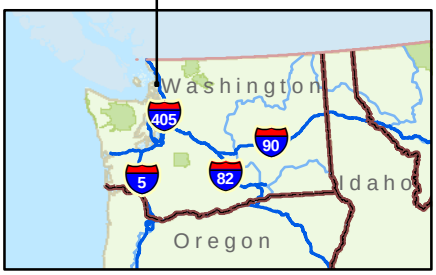
Green shading indicates analyte detected at a concentration exceeding the site-specific cleanup level.

Chemical analyses performed by OnSite Environmental Inc. of Redmond, Washington.

FIGURES

GeoEngineers





N
W E
S

3,000 0 3,000
Feet

Notes:
1. The locations of all features shown are approximate.
2. This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document. GeoEngineers, Inc. can not guarantee the accuracy and content of electronic files. The master file is stored by GeoEngineers, Inc. and will serve as the official record of this communication.
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Data Sources: ESRI Data & Maps, Street Maps 2005

Transverse Mercator, Zone 10 N North, North American Datum 1983
North arrow oriented to grid north

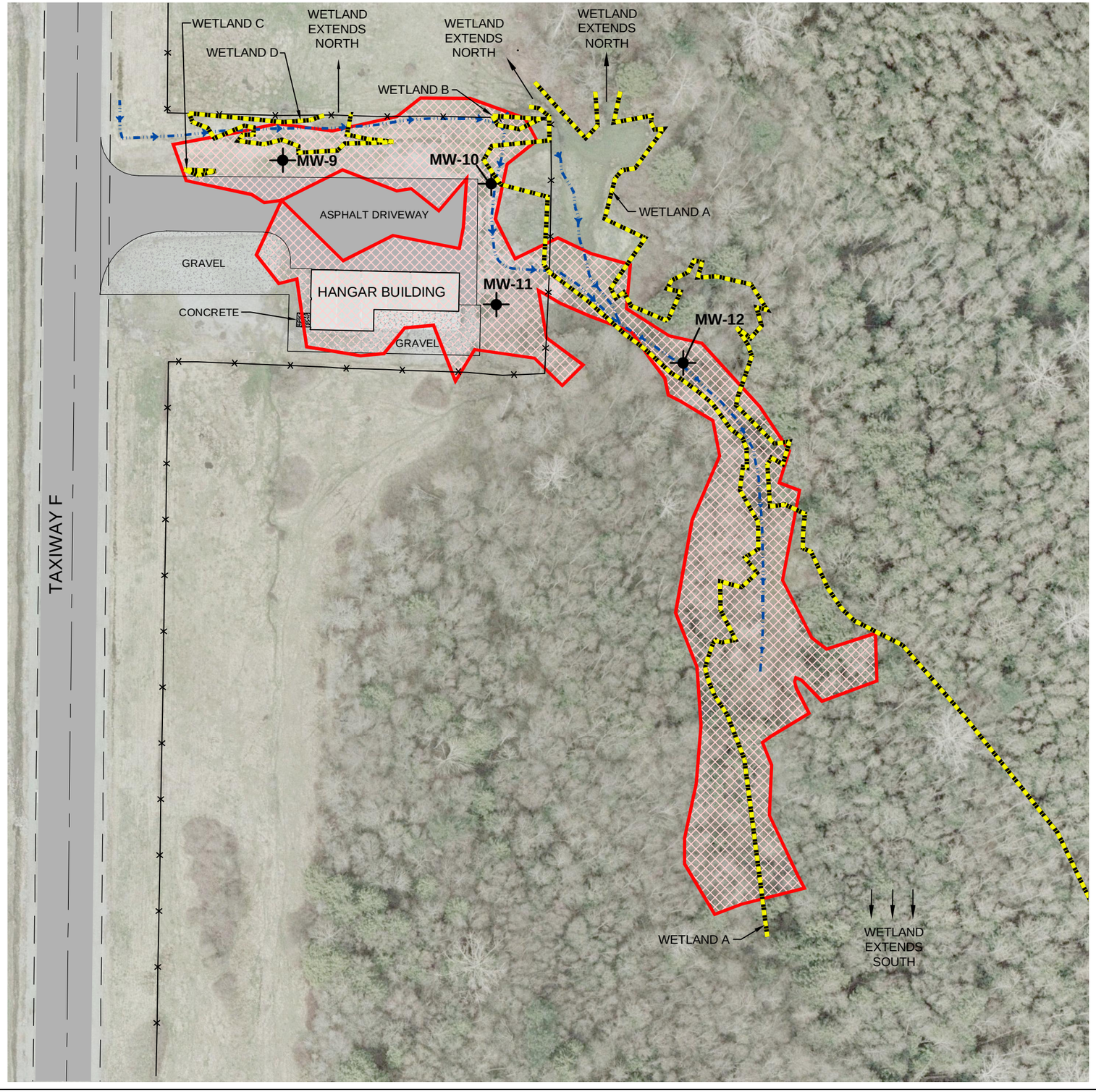
Vicinity Map

Taxiway F Site
Burlington, Washington

GeoEngineers

Figure 1

Office: SEA Path: P:\536401\GIS\536401302 FIG-1 Vicinity.mxd Map Revised: August 9, 2010 ZAS:KKS:CRC



Legend

- Wetland Boundary (Based on Hart Crowser 2007 Survey)
- Cleanup Action Area
- Post-Construction Groundwater Monitoring Well
- Fence Line
- Drainage Channel (Approximate Rainwater Runoff Flow Direction)

N
W E
S

100 0 100
Feet

Notes

1. The locations of all features shown are approximate.
2. This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document. GeoEngineers, Inc. can not guarantee the accuracy and content of electronic files. The master file is stored by GeoEngineers, Inc. and will serve as the official record of this communication.

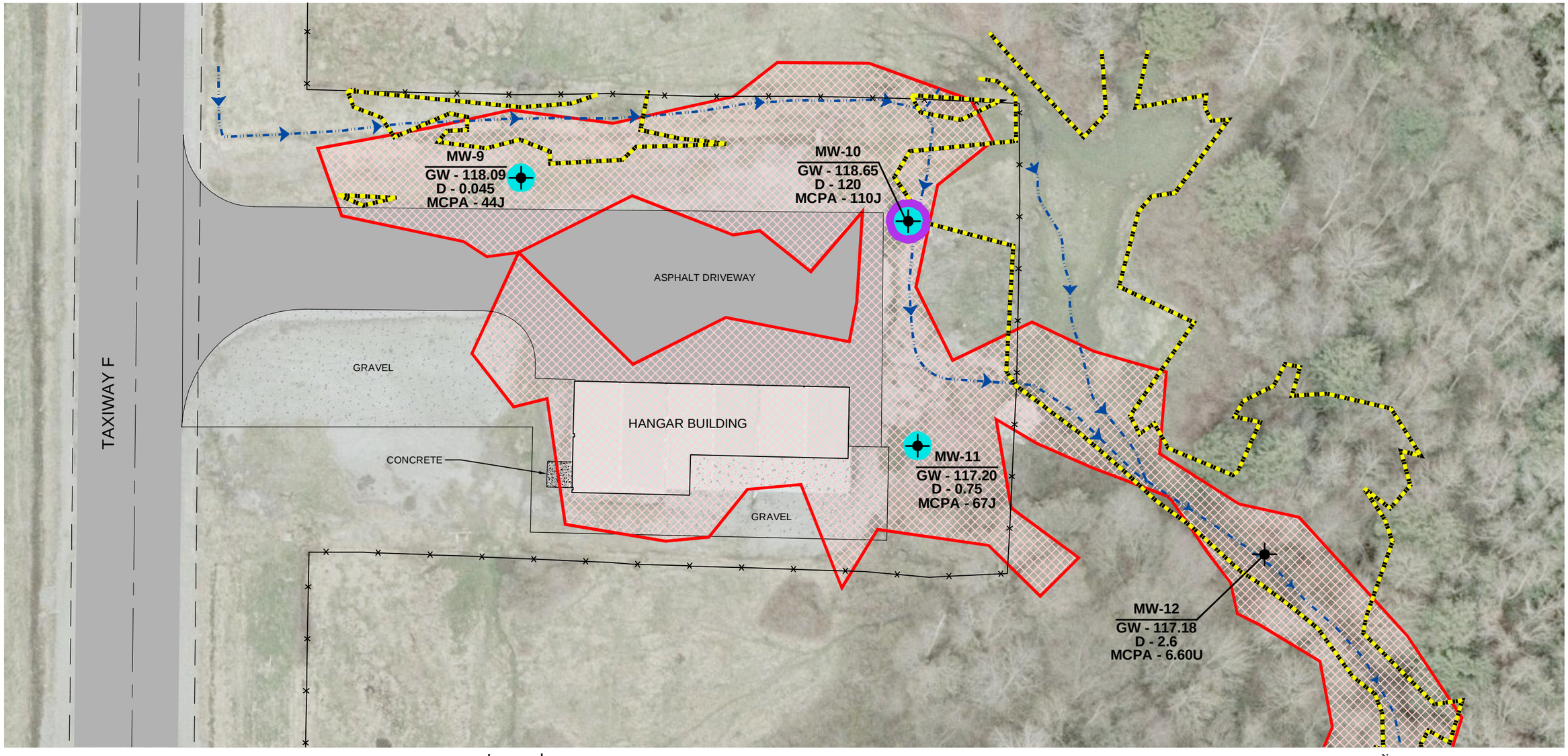
Site Plan

Taxiway F Site
Burlington, Washington

GeoEngineers

Figure 2

P:\5\536401\08\CAD\536401308 Fig2 Site Plan.dwg\TAB:layout modified by tmichaud on Apr 14, 2015 - 9:17



Legend

- Wetland Boundary (Based on Hart Crowser 2007 Survey)
- Cleanup Action Area
- MW-9 / GW - 118.09 / D - 0.045 / MCPA - 44J — Post-Construction Groundwater Monitoring Well; Groundwater Elevation (Feet MLLW); Dinoseb Concentration (µg/L); MCPA Concentration (µg/L)
- Fence Line
- Drainage Channel (Approximate Rainwater Runoff Flow Direction)

MLLW	Mean Lower Low Water
µg/L	Micrograms per Liter
J	Estimated Result
U	Not Detected Above the Reporting Limit

- Dinoseb Concentration Exceeds Groundwater Cleanup Level of 7 µg/L (Pesticide/Herbicide Results Summarized in Table 3)
- MCPA Concentration Exceeds Groundwater Cleanup Level of 8 µg/L (Pesticide/Herbicide Results Summarized in Table 3)

N / W / E / S

50 0 50
Feet

Notes

1. The locations of all features shown are approximate.
2. This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document. GeoEngineers, Inc. can not guarantee the accuracy and content of electronic files. The master file is stored by GeoEngineers, Inc. and will serve as the official record of this communication.

Groundwater Elevations
June 2014 (Round 5) Monitoring Event

Taxiway F Site
Burlington, Washington

GeoEngineers

Figure 3

TAXIWAY F

ASPHALT DRIVEWAY

GRAVEL

HANGAR BUILDING

CONCRETE

GRAVEL

MW-9
GW - DRY
D - N/A
MCPA - N/A

MW-10
GW - 116.97
D - 150
MCPA - 80

MW-11
GW - 116.80
D - 0.73
MCPA - 6.6U

MW-12
GW - 116.82
D - 8.95
MCPA - 6.6U

Legend

- Wetland Boundary (Based on Hart Crowser 2007 Survey)
- Cleanup Action Area
- **MW-9 / GW - DRY / D - N/A / MCPA - N/A** — Post-Construction Groundwater Monitoring Well; Groundwater Elevation (Feet MLLW); Dinoseb Concentration (µg/L); MCPA Concentration (µg/L)
- Fence Line
- Drainage Channel (Approximate Rainwater Runoff Flow Direction)

MLLW	Mean Lower Low Water
µg/L	Micrograms per Liter
J	Estimated Result
U	Not Detected Above the Reporting Limit

- Dinoseb Concentration Exceeds Groundwater Cleanup Level of 7 µg/L (Pesticide/Herbicide Results Summarized in Table 3)
- MCPA Concentration Exceeds Groundwater Cleanup Level of 8 µg/L (Pesticide/Herbicide Results Summarized in Table 3)

N W E S

50 0 50
Feet

Notes

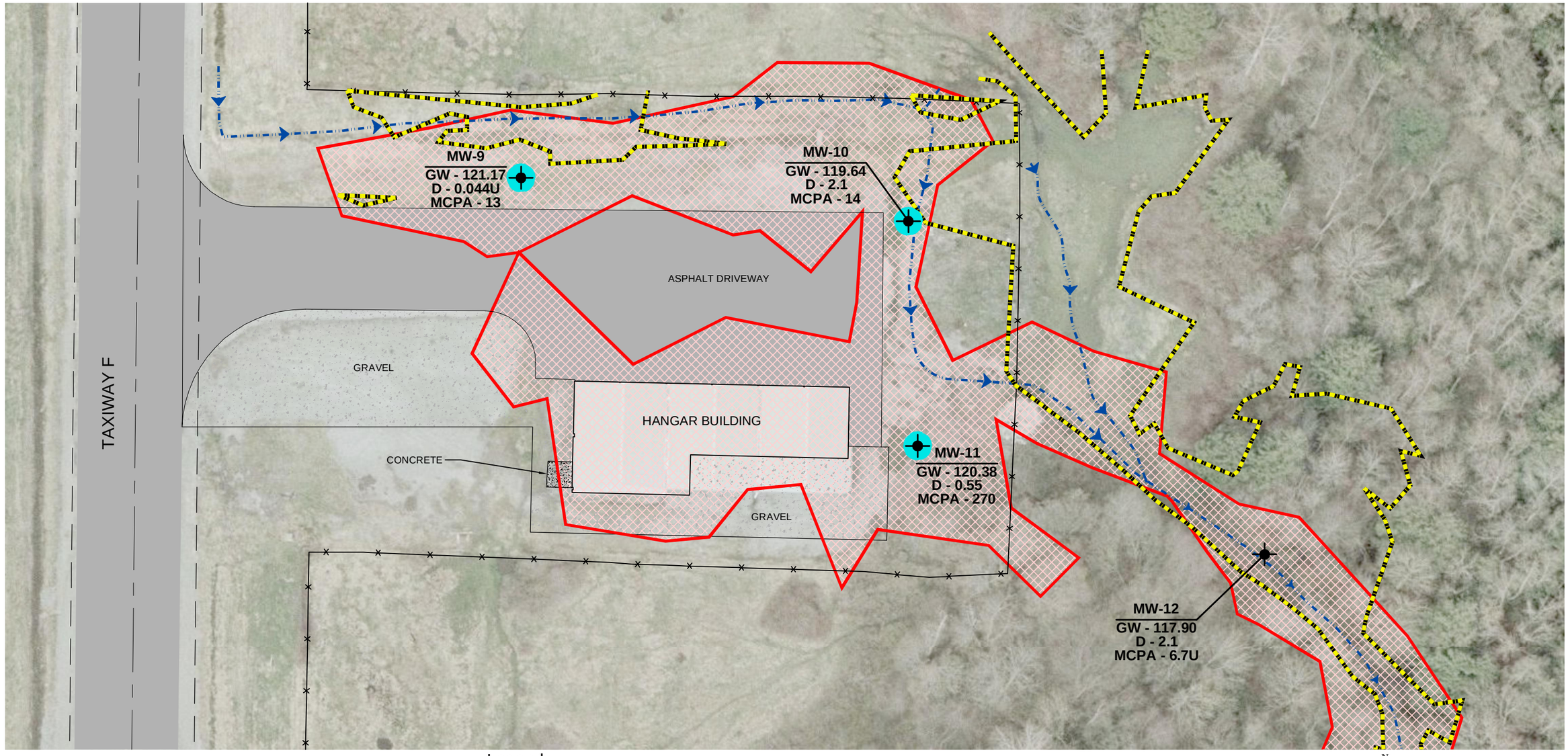
1. The locations of all features shown are approximate.
2. This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document. GeoEngineers, Inc. can not guarantee the accuracy and content of electronic files. The master file is stored by GeoEngineers, Inc. and will serve as the official record of this communication.

Groundwater Elevations
October 2014 (Round 6) Monitoring Event

Taxiway F Site
Burlington, Washington

GeoEngineers

Figure 4



Legend

- Wetland Boundary (Based on Hart Crowser 2007 Survey)
- Cleanup Action Area
- MW-9 / GW - 121.17 / D - 0.044U / MCPA - 13 — Post-Construction Groundwater Monitoring Well; Groundwater Elevation (Feet MLLW); Dinoseb Concentration (µg/L); MCPA Concentration (µg/L)
- Fence Line
- Drainage Channel (Approximate Rainwater Runoff Flow Direction)

MLLW — Mean Lower Low Water
µg/L — Micrograms per Liter
J — Estimated Result
U — Not Detected Above the Reporting Limit
MCPA Concentration Exceeds Groundwater Cleanup Level of 8 µg/L (Pesticide/Herbicide Results Summarized in Table 3)

N W E S

50 0 50
Feet

Notes

1. The locations of all features shown are approximate.
2. This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document. GeoEngineers, Inc. can not guarantee the accuracy and content of electronic files. The master file is stored by GeoEngineers, Inc. and will serve as the official record of this communication.

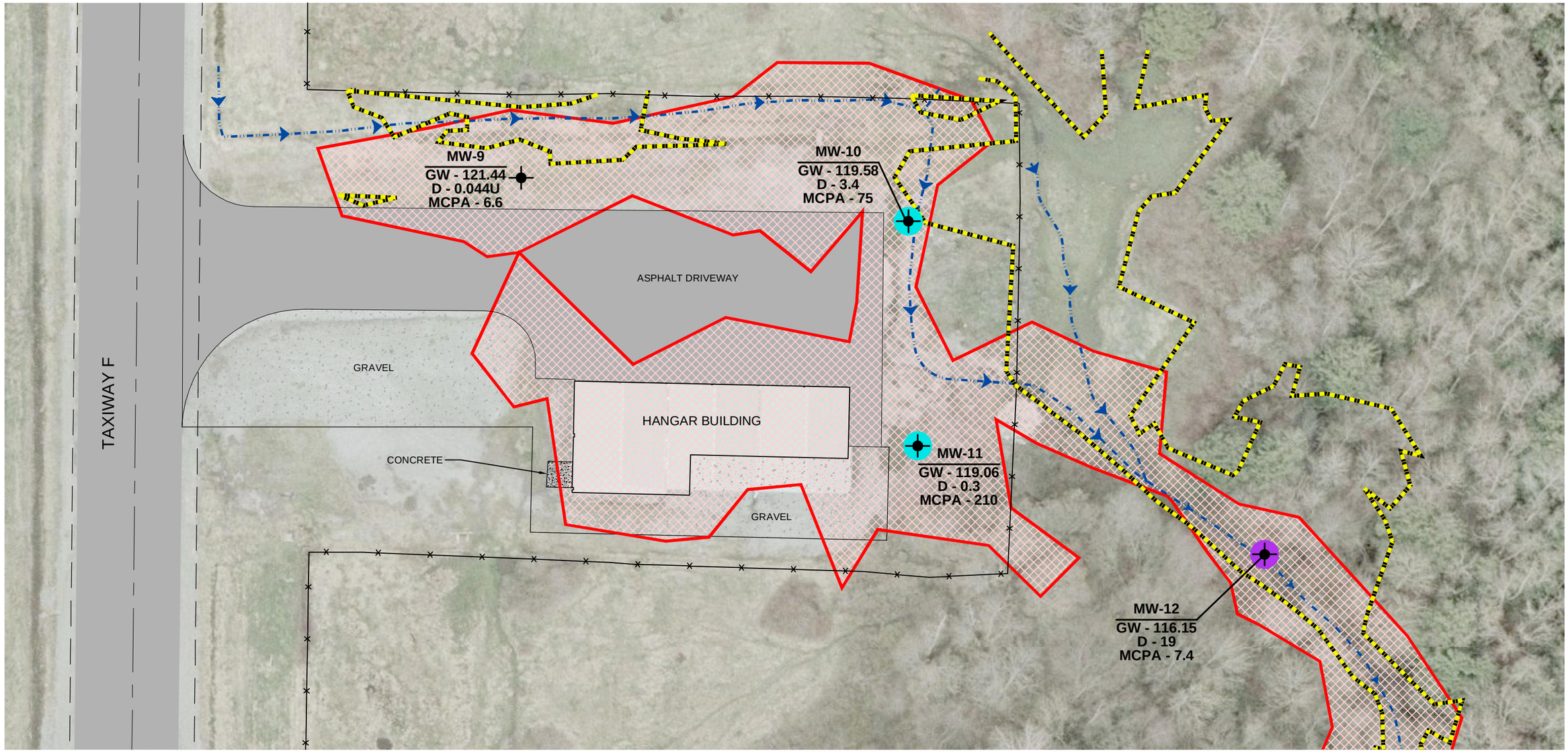
Groundwater Elevations
December 2014 (Round 7) Monitoring Event

Taxiway F Site
Burlington, Washington

GeoEngineers

Figure 5

P:\5\536401308\CAD\536401308 Fig 5 GW Monitoring Dec 2014.dwg\TAB:layout modified by tmichaud on Apr 15, 2015 - 14:30



Legend

- Wetland Boundary (Based on Hart Crowser 2007 Survey)
- Cleanup Action Area
- MW-9 / GW -121.44 / D - 0.044U / MCPA - 6.6 — Post-Construction Groundwater Monitoring Well; Groundwater Elevation (Feet MLLW); Dinoseb Concentration (µg/L); MCPA Concentration (µg/L)
- Fence Line
- Drainage Channel (Approximate Rainwater Runoff Flow Direction)

MLLW	Mean Lower Low Water
µg/L	Micrograms per Liter
J	Estimated Result
U	Not Detected Above the Reporting Limit

- Dinoseb Concentration Exceeds Groundwater Cleanup Level of 7 µg/L (Pesticide/Herbicide Results Summarized in Table 3)
- MCPA Concentration Exceeds Groundwater Cleanup Level of 8 µg/L (Pesticide/Herbicide Results Summarized in Table 3)

N W E S

50 0 50
Feet

Notes

1. The locations of all features shown are approximate.
2. This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document. GeoEngineers, Inc. can not guarantee the accuracy and content of electronic files. The master file is stored by GeoEngineers, Inc. and will serve as the official record of this communication.

Groundwater Elevations
March 2015 (Round 8) Monitoring Event

Taxiway F Site
Burlington, Washington

GeoEngineers

Figure 6

P:\5\536401\308\CAD\536401308 Fig 6 GW Monitoring March 2015.dwg\TAB:layout modified by tmichaud on Apr 15, 2015 - 14:27

APPENDICES

GeoEngineers

APPENDIX A
Field Procedures

APPENDIX A
FIELD PROCEDURES

General

Monitoring wells MW-9 through MW-12 were installed at the Taxiway F Site (Site) in November 2013 by a Washington State licensed driller in accordance with the Minimum Standards for Construction and Maintenance of Wells (Chapter 173-160 Washington Administrative Code [WAC]). Installation of the monitoring wells was observed by a GeoEngineers representative, who maintained detailed logs of the materials and depths encountered at each location. Monitoring wells were completed using a limited access, track mounted hollow-stem auger rig or similar equipment. Well construction and development details for MW-9 through MW-12 are presented in the Rounds 1 through 4 Post-Construction Compliance Groundwater Monitoring Report (GeoEngineers, 2013). Copies of the well completion logs are presented in Appendix B.

Depth to Groundwater Measurements

The depth to groundwater was measured relative to the top of the well casings using an electric water level indicator (e-tape). Water level measurement equipment was washed in a Liqui-Nox® solution, followed by a distilled water rinse prior to use in the well. Groundwater elevations were calculated by subtracting the depth to water from the casing rim elevation. Top of casing elevations were surveyed by GeoEngineers using a laser level, which has an accuracy of 0.01 feet.

The vertical datum for the Site will be derived from running levels to the US Engineers Office Survey Marker Disk set in concrete 79 feet north of the projected centerline of the hanger access ramp (National Geodetic Survey designation – P Pot TXY 3 [PID – TR0222]; North American Vertical Datum [NAVD 88] – Elevation 123.97 feet).

Groundwater Sample Collection and Handling

Groundwater samples were obtained from monitoring wells using a peristaltic pump and dedicated polyethylene tubing. Groundwater was pumped at 0.5 liter per minute or less using a peristaltic pump through tubing placed within the screened interval. A Horiba U-22 water quality measuring system (with flow-through cell) or equivalent was used to monitor the following water quality parameters during purging:

- Electrical conductivity (EC),
- Dissolved oxygen (DO),
- Acidity (pH),
- Total dissolved solids (TDS),
- Turbidity,
- Oxygen reduction potential (ORP), and
- Temperature (˚C)

Groundwater samples were obtained once ambient groundwater conditions were reached. Groundwater conditions were considered ambient once the measured parameters varied by less than 10 percent on three consecutive measurements taken approximately 3 to 5 minutes apart. In the event that the well became dry during purging, groundwater was allowed to recharge and a water sample obtained. The stabilized field measurements at the time of sampling are summarized in Table 2.

Groundwater samples obtained were transferred to laboratory-prepared sample jars. Sample containers were filled to minimize headspace. The samples were placed in a cooler with ice pending transport to the analytical laboratory. Chain-of-custody procedures were followed in transporting the samples to the laboratory.

Investigative Wastes

Decontamination rinse and purge water generated during each monitoring event are stored on Site in sealed and labeled 55-gallon drums located within the Hangar Building (Figure 2).

Incidental waste generated during sampling activities includes items such as gloves, plastic sheeting, sample tubing, paper towels and other discarded field supplies. These materials are considered *de minimis* (Ecology, 2006) and were disposed of in a local trash receptacle or county disposal facility.

APPENDIX B
Monitoring Well Construction Logs

SOIL CLASSIFICATION CHART

MAJOR DIVISIONS			SYMBOLS GRAPH	SYMBOLS LETTER	TYPICAL DESCRIPTIONS
COARSE GRAINED SOILS	GRAVEL AND GRAVELLY SOILS	CLEAN GRAVELS (LITTLE OR NO FINES)		GW	WELL-GRADED GRAVELS, GRAVEL - SAND MIXTURES
				GP	POORLY-GRADED GRAVELS, GRAVEL - SAND MIXTURES
	MORE THAN 50% OF COARSE FRACTION RETAINED ON NO. 4 SIEVE	GRAVELS WITH FINES (APPRECIABLE AMOUNT OF FINES)		GM	SILTY GRAVELS, GRAVEL - SAND - SILT MIXTURES
				GC	CLAYEY GRAVELS, GRAVEL - SAND - CLAY MIXTURES
MORE THAN 50% RETAINED ON NO. 200 SIEVE	SAND AND SANDY SOILS	CLEAN SANDS (LITTLE OR NO FINES)		SW	WELL-GRADED SANDS, GRAVELLY SANDS
				SP	POORLY-GRADED SANDS, GRAVELLY SAND
	MORE THAN 50% OF COARSE FRACTION PASSING NO. 4 SIEVE	SANDS WITH FINES (APPRECIABLE AMOUNT OF FINES)		SM	SILTY SANDS, SAND - SILT MIXTURES
				SC	CLAYEY SANDS, SAND - CLAY MIXTURES
FINE GRAINED SOILS	SILTS AND CLAYS	LIQUID LIMIT LESS THAN 50		ML	INORGANIC SILTS, ROCK FLOUR, CLAYEY SILTS WITH SLIGHT PLASTICITY
				CL	INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, GRAVELLY CLAYS, SANDY CLAYS, SILTY CLAYS, LEAN CLAYS
				OL	ORGANIC SILTS AND ORGANIC SILTY CLAYS OF LOW PLASTICITY
MORE THAN 50% PASSING NO. 200 SIEVE	SILTS AND CLAYS	LIQUID LIMIT GREATER THAN 50		MH	INORGANIC SILTS, MICACEOUS OR DIATOMACEOUS SILTY SOILS
				CH	INORGANIC CLAYS OF HIGH PLASTICITY
				OH	ORGANIC CLAYS AND SILTS OF MEDIUM TO HIGH PLASTICITY
HIGHLY ORGANIC SOILS				PT	PEAT, HUMUS, SWAMP SOILS WITH HIGH ORGANIC CONTENTS

NOTE: Multiple symbols are used to indicate borderline or dual soil classifications

ADDITIONAL MATERIAL SYMBOLS

SYMBOLS GRAPH	SYMBOLS LETTER	TYPICAL DESCRIPTIONS
	AC	Asphalt Concrete
	CC	Cement Concrete
	CR	Crushed Rock/ Quarry Spalls
	TS	Topsoil/ Forest Duff/Sod

Groundwater Contact

Measured groundwater level in exploration, well, or piezometer

Measured free product in well or piezometer

Graphic Log Contact

Distinct contact between soil strata or geologic units

Approximate location of soil strata change within a geologic soil unit

Material Description Contact

Distinct contact between soil strata or geologic units

Approximate location of soil strata change within a geologic soil unit

Sampler Symbol Descriptions

2.4-inch I.D. split barrel

Standard Penetration Test (SPT)

Shelby tube

Piston

Direct-Push

Bulk or grab

Blowcount is recorded for driven samplers as the number of blows required to advance sampler 12 inches (or distance noted). See exploration log for hammer weight and drop.

A "P" indicates sampler pushed using the weight of the drill rig.

Laboratory / Field Tests

%F	Percent fines
AL	Atterberg limits
CA	Chemical analysis
CP	Laboratory compaction test
CS	Consolidation test
DS	Direct shear
HA	Hydrometer analysis
MC	Moisture content
MD	Moisture content and dry density
OC	Organic content
PM	Permeability or hydraulic conductivity
PI	Plasticity index
PP	Pocket penetrometer
PPM	Parts per million
SA	Sieve analysis
TX	Triaxial compression
UC	Unconfined compression
VS	Vane shear

Sheen Classification

NS	No Visible Sheen
SS	Slight Sheen
MS	Moderate Sheen
HS	Heavy Sheen
NT	Not Tested

NOTE: The reader must refer to the discussion in the report text and the logs of explorations for a proper understanding of subsurface conditions. Descriptions on the logs apply only at the specific exploration locations and at the time the explorations were made; they are not warranted to be representative of subsurface conditions at other locations or times.

KEY TO EXPLORATION LOGS

GeoEngineers

FIGURE B-1

Drilled Start	End	Total Depth (ft)	Logged By / Checked By	Driller	Drilling Method
11/29/2013	11/29/2013	5		Cascade Drilling	Hollow Stem Auger

Hammer Data	N/A	Drilling Equipment	CME-75
Surface Elevation (ft) Vertical Datum	122.75	Top of Casing Elevation (ft)	
Easting (X)	1253174.211	Horizontal Datum	
Northing (Y)	540505.081		

DOE Well I.D.: BHS 644
A 2 (in) well was installed on 11/29/2013 to a depth of 5 (ft).

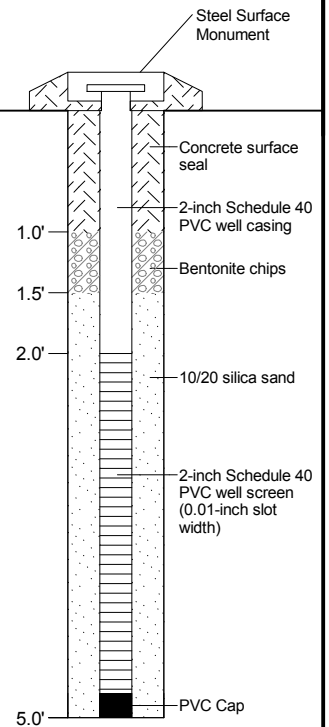
Groundwater Date Measured	Depth to Water (ft)	Elevation (ft)

Notes: Auger Data: 4¼" internal diameter, 8¼" outer diameter

Elevation (feet)	Depth (feet)	Interval Recovered (in)	Blows/foot	Collected Sample	Sample Name	Water Level	Graphic Log	Group Classification	MATERIAL DESCRIPTION	Sheen	Headspace Vapor (ppm)
120	0							SM	Dark brown silty fine to medium sand (wet) (topsoil)	NS	
								ML	Gray silt with occasional gravel (moist) (native)		
										NS	
	5									NS	

Note: No soil samples were obtained during monitoring well installation. Soil description and field screen data noted are of soil cuttings.

WELL LOG



Note: Please see Figure A-1 for explanation of symbols

Log of Monitoring Well GEI-MW-9

GeoEngineers

Project:	Taxiway F Remedial Investigation
Project Location:	Burlington, Washington
Project Number:	5364-013-05

Figure B-2
Sheet 1 of 1

Drilled Start	End	Total Depth (ft)	Logged By / Checked By	Driller	Drilling Method
11/29/2013	11/29/2013	5		Cascade Drilling	Hollow Stem Auger

Hammer Data	N/A	Drilling Equipment	CME-75
Surface Elevation (ft) Vertical Datum	121.09	Top of Casing Elevation (ft)	
Easting (X) / Northing (Y)	1253364.35 / 540483.81	Horizontal Datum	

DOE Well I.D.: BHS 645
A 2 (in) well was installed on 11/29/2013 to a depth of 5 (ft).

Groundwater

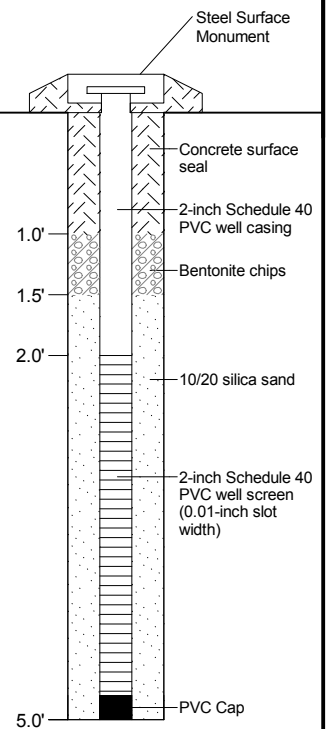
Date Measured	Depth to Water (ft)	Elevation (ft)

Notes: Auger Data: 4¼" internal diameter, 8¼" outer diameter

Depth (feet)	Elevation (feet)	Interval Recovered (in)	Blows/foot	Collected Sample	Sample Name	Water Level	Graphic Log	Group Classification	MATERIAL DESCRIPTION	Sheen	Headspace Vapor (ppm)
0								SM	Dark brown silty fine to medium sand (wet) (topsoil)		
	120							ML	Brown silt with occasional gravel (moist) (native)	NS	
										NS	
5										NS	

Note: No soil samples were obtained during monitoring well installation. Soil description and field screen data noted are of soil cuttings.

WELL LOG



Note: Please see Figure A-1 for explanation of symbols

Log of Monitoring Well GEI-MW-10

GeoEngineers

Project:	Taxiway F Remedial Investigation
Project Location:	Burlington, Washington
Project Number:	5364-013-05

Figure B-3
Sheet 1 of 1

Drilled Start	End	Total Depth (ft)	Logged By / Checked By	Driller	Drilling Method
11/29/2013	11/29/2013	5		Cascade Drilling	Hollow Stem Auger

Hammer Data	N/A	Drilling Equipment	CME-75
Surface Elevation (ft) Vertical Datum	121.21	Top of Casing Elevation (ft)	
Easting (X) / Northing (Y)	1253538.99 / 540320.38	Horizontal Datum	

DOE Well I.D.: BHS 646
A 2 (in) well was installed on 11/29/2013 to a depth of 5 (ft).

Groundwater

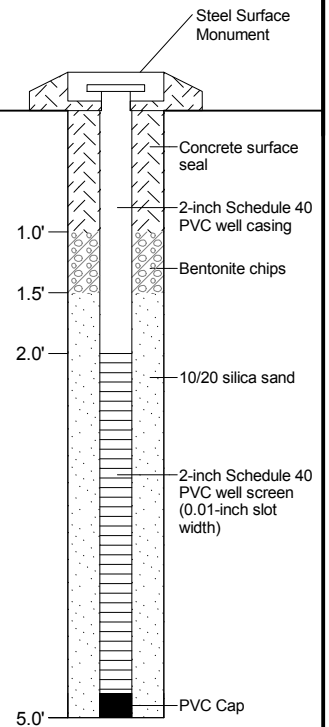
Date Measured	Depth to Water (ft)	Elevation (ft)

Notes: Auger Data: 4¼" internal diameter, 8¼" outer diameter

Depth (feet)	Interval Recovered (in)	Blows/foot	Collected Sample	Sample Name	Water Level	Graphic Log	Group Classification	MATERIAL DESCRIPTION	Sheen	Headspace Vapor (ppm)
0							SM	Dark brown silty fine to medium sand (wet) (topsoil)		
							ML	Brown silt with occasional gravel (moist) (native)	NS	
									NS	
5									NS	

Note: No soil samples were obtained during monitoring well installation. Soil description and field screen data noted are of soil cuttings.

WELL LOG



Note: Please see Figure A-1 for explanation of symbols

Log of Monitoring Well GEI-MW-11

GeoEngineers

Project:	Taxiway F Remedial Investigation
Project Location:	Burlington, Washington
Project Number:	5364-013-05

Figure B-4
Sheet 1 of 1

Drilled Start	End	Total Depth (ft)	Logged By / Checked By	Driller	Drilling Method
11/29/2013	11/29/2013	5		Cascade Drilling	Hollow Stem Auger

Hammer Data	N/A	Drilling Equipment	CME-75
Surface Elevation (ft) Vertical Datum	117.87	Top of Casing Elevation (ft)	
Easting (X)	1253369.05	Horizontal Datum	
Northing (Y)	540373.43		

DOE Well I.D.: BHS 647
A 2 (in) well was installed on 11/29/2013 to a depth of 5 (ft).

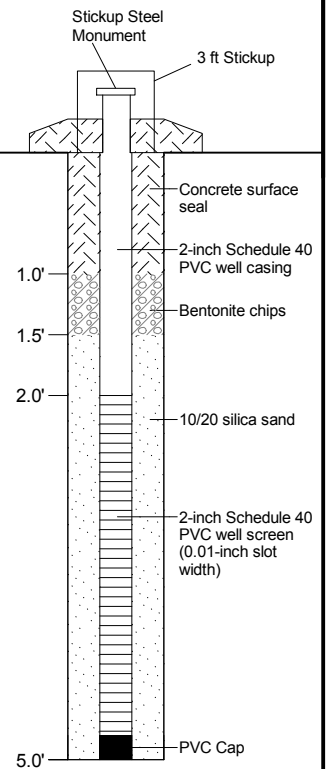
Groundwater Date Measured	Depth to Water (ft)	Elevation (ft)

Notes: Auger Data: 4¼" internal diameter, 8¼" outer diameter

Elevation (feet)	Depth (feet)	Interval Recovered (in)	Blows/foot	Collected Sample	Sample Name	Water Level	Graphic Log	Group Classification	MATERIAL DESCRIPTION	Sheen	Headspace Vapor (ppm)
	0							SM	Dark brown silty fine to medium sand (wet) (topsoil)	NS	
								ML	Brown silt with occasional gravel (moist) (native)		
115										NS	
	5									NS	

Note: No soil samples were obtained during monitoring well installation. Soil description and field screen data noted are of soil cuttings.

WELL LOG



Note: Please see Figure A-1 for explanation of symbols

Log of Monitoring Well GEI-MW-12

GeoEngineers

Project:	Taxiway F Remedial Investigation
Project Location:	Burlington, Washington
Project Number:	5364-013-05

Figure B-5
Sheet 1 of 1

APPENDIX C
Chemical Analytical Data

OnSite Environmental Inc.
14648 NE 95th Street, Redmond, WA 98052 • (425) 883-3881

July 14, 2014

Robert Trahan
GeoEngineers, Inc.
600 Stewart, Suite 1700
Seattle, WA 98101-1233

Re: Analytical Data for Project 5364-013-08
Laboratory Reference No. 1406-261

Dear Robert:

Enclosed are the analytical results and associated quality control data for samples submitted on June 30, 2014.

The standard policy of OnSite Environmental, Inc. is to store your samples for 30 days from the date of receipt. If you require longer storage, please contact the laboratory.

We appreciate the opportunity to be of service to you on this project. If you have any questions concerning the data, or need additional information, please feel free to call me.

Sincerely,

David Baumeister
Project Manager

Enclosures

Date of Report: July 14, 2014
Samples Submitted: June 30, 2014
Laboratory Reference: 1406-261
Project: 5364-013-08

Case Narrative

Samples were collected on June 30, 2014 and received by the laboratory on June 30, 2014. They were maintained at the laboratory at a temperature of 2°C to 6°C.

General QA/QC issues associated with the analytical data enclosed in this laboratory report will be indicated with a reference to a comment or explanation on the Data Qualifier page. More complex and involved QA/QC issues will be discussed in detail below.

Date of Report: July 14, 2014
Samples Submitted: June 30, 2014
Laboratory Reference: 1406-261
Project: 5364-013-08

ANALYTICAL REPORT FOR SAMPLES

Client ID	Laboratory ID	Matrix	Date Sampled	Date Received	Notes
GEI-MW-9	06-261-01	Water	6-30-14	6-30-14	
GEI-MW-10	06-261-02	Water	6-30-14	6-30-14	
GEI-MW-11	06-261-03	Water	6-30-14	6-30-14	
GEI-MW-12	06-261-04	Water	6-30-14	6-30-14	
GEI-MW-12-DUP	06-261-05	Water	6-30-14	6-30-14	

Date of Report: July 14, 2014
Samples Submitted: June 30, 2014
Laboratory Reference: 1406-261
Project: 5364-013-08

ORGANOCHLORINE PESTICIDES EPA 8081B

Matrix: Water
Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**GEI-MW-9**					
Laboratory ID:	06-261-01					
Heptachlor	**ND**	0.0047	EPA 8081B	7-3-14	7-9-14	Z
Aldrin	**ND**	0.0047	EPA 8081B	7-3-14	7-9-14	Z
Heptachlor Epoxide	**ND**	0.0047	EPA 8081B	7-3-14	7-9-14	Z
Dieldrin	**ND**	0.0047	EPA 8081B	7-3-14	7-9-14	Z
Surrogate:	*Percent Recovery*	*Control Limits*				
TCMX	*55*	*39-93*				
DCB	*74*	*31-108*				
Client ID:	**GEI-MW-10**					
Laboratory ID:	06-261-02					
Heptachlor	**ND**	0.0048	EPA 8081B	7-3-14	7-9-14	Z
Aldrin	**ND**	0.0048	EPA 8081B	7-3-14	7-9-14	Z
Heptachlor Epoxide	**ND**	0.0048	EPA 8081B	7-3-14	7-9-14	Z
Dieldrin	**ND**	0.0048	EPA 8081B	7-3-14	7-9-14	Z
Surrogate:	*Percent Recovery*	*Control Limits*				
TCMX	*107*	*39-93*				
DCB	*72*	*31-108*				
Client ID:	**GEI-MW-11**					
Laboratory ID:	06-261-03					
Heptachlor	**ND**	0.0047	EPA 8081B	7-3-14	7-9-14	Z
Aldrin	**ND**	0.0047	EPA 8081B	7-3-14	7-9-14	Z
Heptachlor Epoxide	**ND**	0.0047	EPA 8081B	7-3-14	7-9-14	Z
Dieldrin	**ND**	0.0047	EPA 8081B	7-3-14	7-9-14	Z
Surrogate:	*Percent Recovery*	*Control Limits*				
TCMX	*40*	*39-93*				
DCB	*31*	*31-108*				

Date of Report: July 14, 2014
Samples Submitted: June 30, 2014
Laboratory Reference: 1406-261
Project: 5364-013-08

ORGANOCHLORINE PESTICIDES EPA 8081B

Matrix: Water
Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**GEI-MW-12**					
Laboratory ID:	06-261-04					
Heptachlor	**ND**	0.0047	EPA 8081B	7-3-14	7-9-14	Z
Aldrin	**ND**	0.0047	EPA 8081B	7-3-14	7-9-14	Z
Heptachlor Epoxide	**ND**	0.0047	EPA 8081B	7-3-14	7-9-14	Z
Dieldrin	**ND**	0.0047	EPA 8081B	7-3-14	7-9-14	Z
Surrogate:	*Percent Recovery*	*Control Limits*				
TCMX	*58*	*39-93*				
DCB	*84*	*31-108*				
Client ID:	**GEI-MW-12-DUP**					
Laboratory ID:	06-261-05					
Heptachlor	**ND**	0.0047	EPA 8081B	7-3-14	7-9-14	Z
Aldrin	**ND**	0.0047	EPA 8081B	7-3-14	7-9-14	Z
Heptachlor Epoxide	**ND**	0.0047	EPA 8081B	7-3-14	7-9-14	Z
Dieldrin	**ND**	0.0047	EPA 8081B	7-3-14	7-9-14	Z
Surrogate:	*Percent Recovery*	*Control Limits*				
TCMX	*63*	*39-93*				
DCB	*86*	*31-108*				

Date of Report: July 14, 2014
Samples Submitted: June 30, 2014
Laboratory Reference: 1406-261
Project: 5364-013-08

CHLORINATED ACID HERBICIDES EPA 8151A

Matrix: Water
Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**GEI-MW-9**					
Laboratory ID:	06-261-01					
MCPA	**44**	6.7	EPA 8151A	7-2-14	7-3-14	P
Dinoseb	**ND**	0.045	EPA 8151A	7-2-14	7-3-14	
Surrogate:	*Percent Recovery*	*Control Limits*				
DCAA	*84*	*30-96*				
Client ID:	**GEI-MW-10**					
Laboratory ID:	06-261-02					
MCPA	**110**	6.6	EPA 8151A	7-2-14	7-3-14	P
Dinoseb	**120**	44	EPA 8151A	7-2-14	7-11-14	
Surrogate:	*Percent Recovery*	*Control Limits*				
DCAA	*46*	*30-96*				
Client ID:	**GEI-MW-11**					
Laboratory ID:	06-261-03					
MCPA	**67**	7.0	EPA 8151A	7-2-14	7-3-14	P
Dinoseb	**0.75**	0.047	EPA 8151A	7-2-14	7-3-14	
Surrogate:	*Percent Recovery*	*Control Limits*				
DCAA	*49*	*30-96*				
Client ID:	**GEI-MW-12**					
Laboratory ID:	06-261-04					
MCPA	**ND**	6.6	EPA 8151A	7-2-14	7-3-14	
Dinoseb	**2.2**	0.045	EPA 8151A	7-2-14	7-3-14	
Surrogate:	*Percent Recovery*	*Control Limits*				
DCAA	*43*	*30-96*				
Client ID:	**GEI-MW-12-DUP**					
Laboratory ID:	06-261-05					
MCPA	**ND**	6.6	EPA 8151A	7-2-14	7-3-14	
Dinoseb	**2.6**	0.045	EPA 8151A	7-2-14	7-3-14	
Surrogate:	*Percent Recovery*	*Control Limits*				
DCAA	*35*	*30-96*				

Date of Report: July 14, 2014
Samples Submitted: June 30, 2014
Laboratory Reference: 1406-261
Project: 5364-013-08

ORGANOCHLORINE PESTICIDES EPA 8081B QUALITY CONTROL

Matrix: Water
Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0703W1					
Heptachlor	**ND**	0.0050	EPA 8081B	7-3-14	7-9-14	Z
Aldrin	**ND**	0.0050	EPA 8081B	7-3-14	7-9-14	Z
Heptachlor Epoxide	**ND**	0.0050	EPA 8081B	7-3-14	7-9-14	Z
Dieldrin	**ND**	0.0050	EPA 8081B	7-3-14	7-9-14	Z
Surrogate:	*Percent Recovery*	*Control Limits*				
TCMX	*63*	*39-93*				
DCB	*80*	*31-108*				

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
SPIKE BLANKS											
Laboratory ID:	SB0703W1										
	SB	SBD	SB	SBD		SB	SBD				
Heptachlor	**0.0902**	**0.0911**	0.100	0.100	N/A	**90**	**91**	50-124	1	15	
Dieldrin	**0.101**	**0.0995**	0.100	0.100	N/A	**101**	**99**	48-128	1	15	
Surrogate:											
TCMX						*86*	*83*	*39-93*			
DCB						*99*	*95*	*31-108*			

Date of Report: July 14, 2014
Samples Submitted: June 30, 2014
Laboratory Reference: 1406-261
Project: 5364-013-08

CHLORINATED ACID HERBICIDES EPA 8151A QUALITY CONTROL

Matrix: Water
Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0702W1					
MCPA	**ND**	7.0	EPA 8151A	7-2-14	7-3-14	
Dinoseb	**ND**	0.047	EPA 8151A	7-2-14	7-3-14	
Surrogate:	*Percent Recovery*	*Control Limits*				
DCAA	*46*	*30-96*				

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
SPIKE BLANKS											
Laboratory ID:	SB0702W1										
	SB	SBD	SB	SBD		SB	SBD				
Dinoseb	**0.656**	**0.605**	1.00	1.00	N/A	**66**	**60**	26-120	8	16	
Surrogate:											
DCAA						*68*	*76*	*30-96*			

OnSite Environmental Inc.

Data Qualifiers and Abbreviations

A - Due to a high sample concentration, the amount spiked is insufficient for meaningful MS/MSD recovery data.

B - The analyte indicated was also found in the blank sample.

C - The duplicate RPD is outside control limits due to high result variability when analyte concentrations are within five times the quantitation limit.

E - The value reported exceeds the quantitation range and is an estimate.

F - Surrogate recovery data is not available due to the high concentration of coeluting target compounds.

H - The analyte indicated is a common laboratory solvent and may have been introduced during sample preparation, and be impacting the sample result.

I - Compound recovery is outside of the control limits.

J - The value reported was below the practical quantitation limit. The value is an estimate.

K - Sample duplicate RPD is outside control limits due to sample inhomogeneity. The sample was re-extracted and re-analyzed with similar results.

L - The RPD is outside of the control limits.

M - Hydrocarbons in the gasoline range are impacting the diesel range result.

M1 - Hydrocarbons in the gasoline range (toluene-napthalene) are present in the sample.

N - Hydrocarbons in the lube oil range are impacting the diesel range result.

N1 - Hydrocarbons in diesel range are impacting lube oil range results.

O - Hydrocarbons indicative of heavier fuels are present in the sample and are impacting the gasoline result.

P - The RPD of the detected concentrations between the two columns is greater than 40.

Q - Surrogate recovery is outside of the control limits.

S - Surrogate recovery data is not available due to the necessary dilution of the sample.

T - The sample chromatogram is not similar to a typical _____.

U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

U1 - The practical quantitation limit is elevated due to interferences present in the sample.

V - Matrix Spike/Matrix Spike Duplicate recoveries are outside control limits due to matrix effects.

W - Matrix Spike/Matrix Spike Duplicate RPD are outside control limits due to matrix effects.

X - Sample extract treated with a mercury cleanup procedure.

X1- Sample extract treated with a Sulfuric acid/Silica gel cleanup procedure.

Y - The calibration verification for this analyte exceeded the 20% drift specified in method 8260C, and therefore the reported result should be considered an estimate. The overall performance of the calibration verification standard met the acceptance criteria of the method.

Z - Sample extract treated with a Florisil Cleanup procedure.

ND - Not Detected at PQL
PQL - Practical Quantitation Limit
RPD - Relative Percent Difference

Chain of Custody

OnSite Environmental Inc.
Analytical Laboratory Testing Services
14648 NE 95th Street • Redmond, WA 98052
Phone: (425) 883-3881 • www.onsite-env.com

10

Company: GEOENGINEERS
Project Number: 5364-013-08
Project Name: TAXIWAY F
Project Manager: ROBERT TRAHAN
Sampled by: NATHAN SOLOMON

Turnaround Request (in working days)

(Check One)

- ☐ Same Day
- ☐ 1 Day
- ☐ 2 Days
- ☐ 3 Days
- ☒ Standard (7 Days) (TPH analysis 5 Days)
- ☐ _____ (other)

Laboratory Number: 06-261

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers	NWTPH-HCID	NWTPH-Gx/BTEX	NWTPH-Gx	NWTPH-Dx	Volatiles 8260C	Halogenated Volatiles 8260C	Semivolatiles 8270D/SIM (with low-level PAHs)	PAHs 8270D/SIM (low-level)	PCBs 8082A	Organochlorine Pesticides 8081B *	Organophosphorus Pesticides 8270D/SIM	Chlorinated Acid Herbicides 8151A *	Total RCRA Metals	Total MTCA Metals	TCLP Metals	HEM (oil and grease) 1664A	% Moisture
1	GEI-MW-9	6.30.14	0945	LIQUID	2	X									X		X					
2	GEI-MW-10		0920		4										X		X					
3	GEI-MW-11		0845		3										X		X					
4	GEI-MW-12		1045		4										X		X					
5	GEI-MW-12-DUP		1050		4										X		X					

	Signature	Company	Date	Time
Relinquished		GEI	6.30.14	16:40
Received		GEI	6/30/14	1640
Relinquished				
Received				
Relinquished				
Received				

Comments/Special Instructions

(X) Added 7/2/14. DB (STA)

* heptachlor, Aldrin, heptachlor expoxide, dieldrin, mcPA, Dmscb.

Reviewed/Date

Reviewed/Date

Chromatograms with final report ☐

Data Package: Standard ☐ Level III ☒ Level IV ☐

Electronic Data Deliverables (EDDs) ☒ _____

Sample/Cooler Receipt and Acceptance Checklist

Client: GES

Client Project Name/Number: 5364-013-08

OnSite Project Number: 06-261

Initiated by: MM

Date Initiated: 6/30/14

1.0 Cooler Verification

1.1 Were there custody seals on the outside of the cooler?	Yes	No	N/A	1 2 3 4
1.2 Were the custody seals intact?	Yes	No	N/A	1 2 3 4
1.3 Were the custody seals signed and dated by last custodian?	Yes	No	N/A	1 2 3 4
1.4 Were the samples delivered on ice or blue ice?	Yes	No		1 2 3 4
1.5 Were samples received between 0-6 degrees Celsius?	Yes	No	Temperature: 2.6	
1.6 Have shipping bills (if any) been attached to the back of this form?	Yes	N/A		
1.7 How were the samples delivered?	Client	Courier	UPS/FedEx	OSE Pickup Other

2.0 Chain of Custody Verification

2.1 Was a Chain of Custody submitted with the samples?	Yes	No		1 2 3 4
2.2 Was the COC legible and written in permanent ink?	Yes	No		1 2 3 4
2.3 Have samples been relinquished and accepted by each custodian?	Yes	No		1 2 3 4
2.4 Did the sample labels (ID, date, time, preservative) agree with COC?	Yes	No		1 2 3 4
2.5 Were all of the samples listed on the COC submitted?	Yes	No		1 2 3 4
2.6 Were any of the samples submitted omitted from the COC?	Yes	No		1 2 3 4

3.0 Sample Verification

3.1 Were any sample containers broken or compromised?	Yes	No		1 2 3 4
3.2 Were any sample labels missing or illegible?	Yes	No		1 2 3 4
3.3 Have the correct containers been used for each analysis requested?	Yes	No		1 2 3 4
3.4 Have the samples been correctly preserved?	Yes	No	N/A	1 2 3 4
3.5 Are volatiles samples free from headspace and bubbles greater than 6mm?	Yes	No	N/A	1 2 3 4
3.6 Is there sufficient sample submitted to perform requested analyses?	Yes	No		1 2 3 4
3.7 Have any holding times already expired or will expire in 24 hours?	Yes	No		1 2 3 4
3.8 Was method 5035A used?	Yes	No	N/A	1 2 3 4
3.9 If 5035A was used, which sampling option was used (#1, 2, or 3).	#		N/A	1 2 3 4

Explain any discrepancies:

2.5) Sample 1) GEI-MW-9 only 2 sample containers submitted

2.6) Sample 3) GEI-MW-11 extra container submitted

1 - Discuss issue in Case Narrative

2 - Process Sample As-is

3 - Client contacted to discuss problem

4 - Sample cannot be analyzed or client does not wish to proceed

RAW DATA

- Organochlorine Pesticides by EPA 8081B Data
- Chlorinated Acid Herbicides EPA 8151A Data

Organochlorine Pesticides by EPA 8081A Data

Evaluate Continuing Calibration Report

Signal #1 : D:\HPCHEM\1\DATA\G140704\0704004.D\ECD1A.CH Vial: 4
Signal #2 : D:\HPCHEM\1\DATA\G140704\0704004.D\ECD2B.CH
Acq On : 4 Jul 2014 10:59 Operator:
Sample : PEST LOW LEVEL 0704-1 (PS3-89-01) Inst : George
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Method : D:\HPCHEM\1\METHODS\P140328.M (Chemstation Integrator)
Title : Pestcides
Last Update : Mon Jun 30 15:06:57 2014
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.01min
Max. RRF Dev : 16% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(Min)
1	S	Tetrachloro-m-xylene	10.000	9.727	2.7	87	0.00
6	A	Heptachlor	10.000	10.206	-2.1	93	0.00
7	A	Aldrin	10.000	10.395	-3.9	97	0.00
8	A	Heptachlor epoxide	10.000	10.052	-0.5	94	0.00
13	A	Dieldrin	10.000	9.871	1.3	95	0.00
22	S	Decachlorobiphenyl	10.000	7.973	20.3#	90	0.00

Signal #2

1	S	Tetrachloro-m-xylene	10.000	11.003	-10.0	101	0.00
6	A	Heptachlor	10.000	9.746	2.5	98	0.00
7	A	Aldrin	10.000	10.233	-2.3	102	0.00
8	A	Heptachlor epoxide	10.000	9.807	1.9	95	0.00
13	A	Dieldrin	10.000	9.759	2.4	100	0.00
22	S	Decachlorobiphenyl	10.000	7.258	27.4#	85	0.00

Evaluate Continuing Calibration Report

Signal #1 : D:\HPCHEM\1\DATA\G140704\0704005.D\ECD1A.CH Vial: 5
Signal #2 : D:\HPCHEM\1\DATA\G140704\0704005.D\ECD2B.CH
Acq On : 4 Jul 2014 11:13 Operator:
Sample : PEST MID LEVEL 0704-1 (PS3-89-02) Inst : George
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Method : D:\HPCHEM\1\METHODS\P140328.M (Chemstation Integrator)
Title : Pestcides
Last Update : Mon Jun 30 15:06:57 2014
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.01min
Max. RRF Dev : 16% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(Min)
1	S	Tetrachloro-m-xylene	100.000	81.732	18.3#	91	0.00
6	A	Heptachlor	100.000	85.138	14.9	95	0.00
7	A	Aldrin	100.000	95.677	4.3	99	0.00
8	A	Heptachlor epoxide	100.000	86.902	13.1	97	0.00
13	A	Dieldrin	100.000	92.540	7.5	97	0.00
22	S	Decachlorobiphenyl	100.000	95.528	4.5	95	0.00
Signal #2							
1	S	Tetrachloro-m-xylene	100.000	100.930	-0.9	103	0.00
6	A	Heptachlor	100.000	104.949	-4.9	102	0.00
7	A	Aldrin	100.000	111.358	-11.4	105	0.00
8	A	Heptachlor epoxide	100.000	99.715	0.3	102	0.00
13	A	Dieldrin	100.000	108.233	-8.2	104	0.00
22	S	Decachlorobiphenyl	100.000	97.164	2.8	96	0.00

Evaluate Continuing Calibration Report

Signal #1 : D:\HPCHEM\1\DATA\G140704\0704006.D\ECD1A.CH Vial: 6
Signal #2 : D:\HPCHEM\1\DATA\G140704\0704006.D\ECD2B.CH
Acq On : 4 Jul 2014 11:26 Operator:
Sample : PEST HIGH LEVEL 0704-1 (PS3-89-03) Inst : George
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Method : D:\HPCHEM\1\METHODS\P140328.M (Chemstation Integrator)
Title : Pestcides
Last Update : Mon Jun 30 15:06:57 2014
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.01min
Max. RRF Dev : 16% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(Min)
1	S	Tetrachloro-m-xylene	200.000	159.112	20.4#	96	0.00
6	A	Heptachlor	200.000	163.973	18.0#	100	0.00
7	A	Aldrin	200.000	186.501	6.7	104	0.00
8	A	Heptachlor epoxide	200.000	169.730	15.1	101	0.00
13	A	Dieldrin	200.000	184.497	7.8	103	0.00
22	S	Decachlorobiphenyl	200.000	195.158	2.4	103	0.00
Signal #2							
1	S	Tetrachloro-m-xylene	200.000	197.961	1.0	108	0.00
6	A	Heptachlor	200.000	213.557	-6.8	108	0.00
7	A	Aldrin	200.000	222.447	-11.2	109	0.00
8	A	Heptachlor epoxide	200.000	200.869	-0.4	107	0.00
13	A	Dieldrin	200.000	219.014	-9.5	108	0.00
22	S	Decachlorobiphenyl	200.000	200.570	-0.3	107	0.00

Evaluate Continuing Calibration Report

Signal #1 : D:\HPCHEM\1\DATA\G140704\0704014.D\ECD1A.CH Vial: 14
Signal #2 : D:\HPCHEM\1\DATA\G140704\0704014.D\ECD2B.CH
Acq On : 4 Jul 2014 13:12 Operator:
Sample : PEST MID LEVEL 0704-2 (PS3-89-02) Inst : George
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Method : D:\HPCHEM\1\METHODS\P140328.M (Chemstation Integrator)
Title : Pestcides
Last Update : Mon Jun 30 15:06:57 2014
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.01min
Max. RRF Dev : 16% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(Min)
1	S	Tetrachloro-m-xylene	100.000	82.269	17.7#	92	0.00
6	A	Heptachlor	100.000	88.285	11.7	99	0.00
7	A	Aldrin	100.000	97.729	2.3	101	0.00
8	A	Heptachlor epoxide	100.000	89.017	11.0	99	0.00
13	A	Dieldrin	100.000	95.230	4.8	100	0.00
22	S	Decachlorobiphenyl	100.000	99.214	0.8	99	0.00
Signal #2							
1	S	Tetrachloro-m-xylene	100.000	102.459	-2.5	104	0.00
6	A	Heptachlor	100.000	109.572	-9.6	106	0.00
7	A	Aldrin	100.000	113.042	-13.0	107	0.00
8	A	Heptachlor epoxide	100.000	102.549	-2.5	105	0.00
13	A	Dieldrin	100.000	110.279	-10.3	106	0.00
22	S	Decachlorobiphenyl	100.000	101.456	-1.5	100	0.00

Evaluate Continuing Calibration Report

Signal #1 : D:\HPCHEM\1\DATA\G140709\0709004.D\ECD1A.CH Vial: 4
Signal #2 : D:\HPCHEM\1\DATA\G140709\0709004.D\ECD2B.CH
Acq On : 9 Jul 2014 8:42 Operator:
Sample : PEST MID 0709-1 (PS3-89-02) Inst : George
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Method : D:\HPCHEM\1\METHODS\P140328.M (Chemstation Integrator)
Title : Pestcides
Last Update : Mon Jun 30 15:06:57 2014
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.01min
Max. RRF Dev : 16% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Dev	Area%	Dev(Min)
1 S	Tetrachloro-m-xylene	100.000	79.346	20.7#	88	0.00
6 A	Heptachlor	100.000	84.435	15.6	95	0.00
7 A	Aldrin	100.000	94.838	5.2	98	0.00
8 A	Heptachlor epoxide	100.000	86.780	13.2	97	0.00
13 A	Dieldrin	100.000	92.223	7.8	97	0.00
22 S	Decachlorobiphenyl	100.000	95.501	4.5	95	0.00
Signal #2						
1 S	Tetrachloro-m-xylene	100.000	96.430	3.6	98	0.00
6 A	Heptachlor	100.000	103.185	-3.2	100	0.00
7 A	Aldrin	100.000	108.434	-8.4	102	0.00
8 A	Heptachlor epoxide	100.000	97.740	2.3	100	0.00
13 A	Dieldrin	100.000	104.584	-4.6	100	0.00
22 S	Decachlorobiphenyl	100.000	95.978	4.0	95	0.00

Evaluate Continuing Calibration Report

Signal #1 : D:\HPCHEM\1\DATA\G140709\0709015.D\ECD1A.CH Vial: 15
Signal #2 : D:\HPCHEM\1\DATA\G140709\0709015.D\ECD2B.CH
Acq On : 9 Jul 2014 11:12 Operator:
Sample : PEST MID 0709-2 (PS3-89-02) Inst : George
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Method : D:\HPCHEM\1\METHODS\P140328.M (Chemstation Integrator)
Title : Pestcides
Last Update : Mon Jun 30 15:06:57 2014
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.01min
Max. RRF Dev : 16% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(Min)
1	S	Tetrachloro-m-xylene	100.000	82.406	17.6#	92	0.00
6	A	Heptachlor	100.000	88.081	11.9	99	0.00
7	A	Aldrin	100.000	96.847	3.2	100	0.00
8	A	Heptachlor epoxide	100.000	88.832	11.2	99	0.00
13	A	Dieldrin	100.000	95.058	4.9	100	0.00
22	S	Decachlorobiphenyl	100.000	99.286	0.7	99	0.00

Signal #2

1	S	Tetrachloro-m-xylene	100.000	102.827	-2.8	105	0.00
6	A	Heptachlor	100.000	109.066	-9.1	106	0.00
7	A	Aldrin	100.000	111.183	-11.2	105	0.00
8	A	Heptachlor epoxide	100.000	101.140	-1.1	104	0.00
13	A	Dieldrin	100.000	108.642	-8.6	104	0.00
22	S	Decachlorobiphenyl	100.000	100.716	-0.7	100	0.00

Quantitation Report (QT Reviewed)

Signal #1 : D:\HPCHEM\1\DATA\G140709\0709008.D\ECD1A.CH Vial: 8
Signal #2 : D:\HPCHEM\1\DATA\G140709\0709008.D\ECD2B.CH
Acq On : 9 Jul 2014 9:39 Operator:
Sample : 06-261-01 +Florisil C.U. Inst : George
Misc : Multiplr: 1.00
Sample Amount: 0.00

IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Quant Time: Jul 11 14:18 2014 Quant Results File: P140328.RES

Quant Method : D:\HPCHEM\1\METHODS\P140328.M (Chemstation Integrator)
Title : Pestcides
Last Update : Mon Jun 30 15:06:57 2014
Response via : Initial Calibration
DataAcq Meth : P140328.M

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
1) S	Tetrachloro-m-xy	2.89	3.06	76008	50859	48.834m	54.500m
	Spiked Amount 100.000			Recovery	=	48.83%	54.50%
22) S	Decachlorobiphen	7.29	7.86	76367	55384	72.187m	74.256m
	Spiked Amount 100.000			Recovery	=	72.19%	74.26%
	Target Compounds						
2) A	alpha-BHC	3.41	3.64	35633	2439	17.490m	2.012m#
3) A	gamma-BHC	0.00	3.97	0	14899	N.D.	13.083m#
4) A	beta-BHC	0.00	4.04f	0	11266	N.D.	18.462m#
5) A	delta-BHC	0.00	4.29f	0	27126	N.D.	24.343m#
6) A	Heptachlor	0.00	0.00	0	0	N.D.	N.D.
7) A	Aldrin	4.36	0.00	7707	0	4.566m	N.D. #
8) A	Heptachlor epoxi	4.84f	0.00	2221	0	1.392m	N.D. #
9) A	gamma-Chlordane	0.00	5.21f	0	155207	N.D.	150.389 #
10) A	alpha-Chlordane	0.00	5.37f	0	539405	N.D.	540.417 #
11) A	4,4'-DDE	5.13	0.00	624711	0	431.332	N.D. #
12) A	Endosulfan I	0.00	5.37f	0	539405	N.D.	539.268 #
13) A	Dieldrin	0.00	0.00	0	0	N.D.	N.D.
14) A	Endrin	5.52	5.83	30215	52008	22.760m	63.842m#
15) A	4,4'-DDD	0.00	5.91	0	68846	N.D.	97.249m#
16) A	Endosulfan II	5.68	5.99	97115	49209	73.649m	57.845m
17) A	4,4'-DDT	5.80	6.16	52301	1080	41.185m	1.341m#
18) A	Endrin aldehyde	6.00	6.25	19489	5699	18.862m	8.202m#
19) A	Methoxychlor	0.00	0.00	0	0	N.D.	N.D.
20) A	Endosulfan sulfa	6.31f	6.44	856720	76118	762.686m	101.849m#
21) A	Endrin ketone	6.54	6.83f	6664	9440	4.486m	10.019m#
23) L8	Toxaphene{1}	5.61f	5.91	56826	155732	3584.832	10563.979 #
24) L8	Toxaphene{2}	5.80f	6.08	95194	78891	2565.840	3146.110
25) L8	Toxaphene{3}	0.00	6.16f	0	77415	N.D.	2168.867 #
26) L8	Toxaphene{4}	6.09f	0.00	55086	0	1866.666	N.D. #
27) L8	Toxaphene{5}	6.31f	0.00	892594	0	27901.602	N.D. #
	Sum Toxaphene			1099700	312039	35918.939	15878.957
	Average Toxaphene					8979.735	5292.986
28) L9	Tech Chlordane{1	4.21	0.00	280860	0	2665.020	N.D. #
29) L9	Tech Chlordane{2	4.84	5.37f	48016	539405	1332.690	4652.287 #
30) L9	Tech Chlordane{3	5.09f	5.37f	44340	539405	264.973	7297.431 #
31) L9	Tech Chlordane{4	5.13	5.37	624711	539405	3034.317	5091.626 #
32) L9	Tech Chlordane{5	5.80	5.99	95194	123954	1848.868	8385.942 #
	Sum Tech Chlordane			1093120	1742169	9145.867	25427.287
	Average Tech Chlordane					1829.173	6356.822

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

Quantitation Report (QT Reviewed)

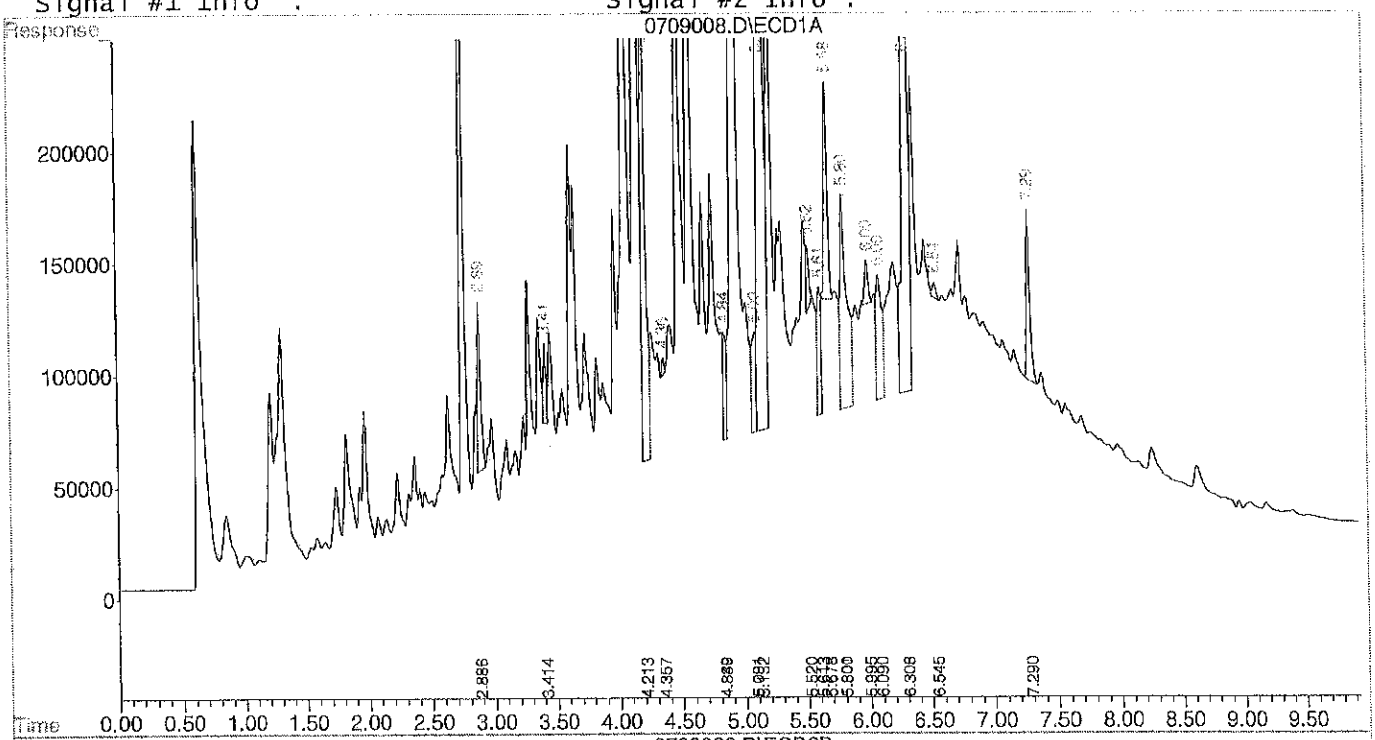
Signal #1 : D:\HPCHEM\1\DATA\G140709\0709008.D\ECD1A.CH Vial: 8
Signal #2 : D:\HPCHEM\1\DATA\G140709\0709008.D\ECD2B.CH
Acq On : 9 Jul 2014 9:39 Operator:
Sample : 06-261-01 +Florisil C.U. Inst : George
Misc : Multiplr: 1.00
Sample Amount: 0.00

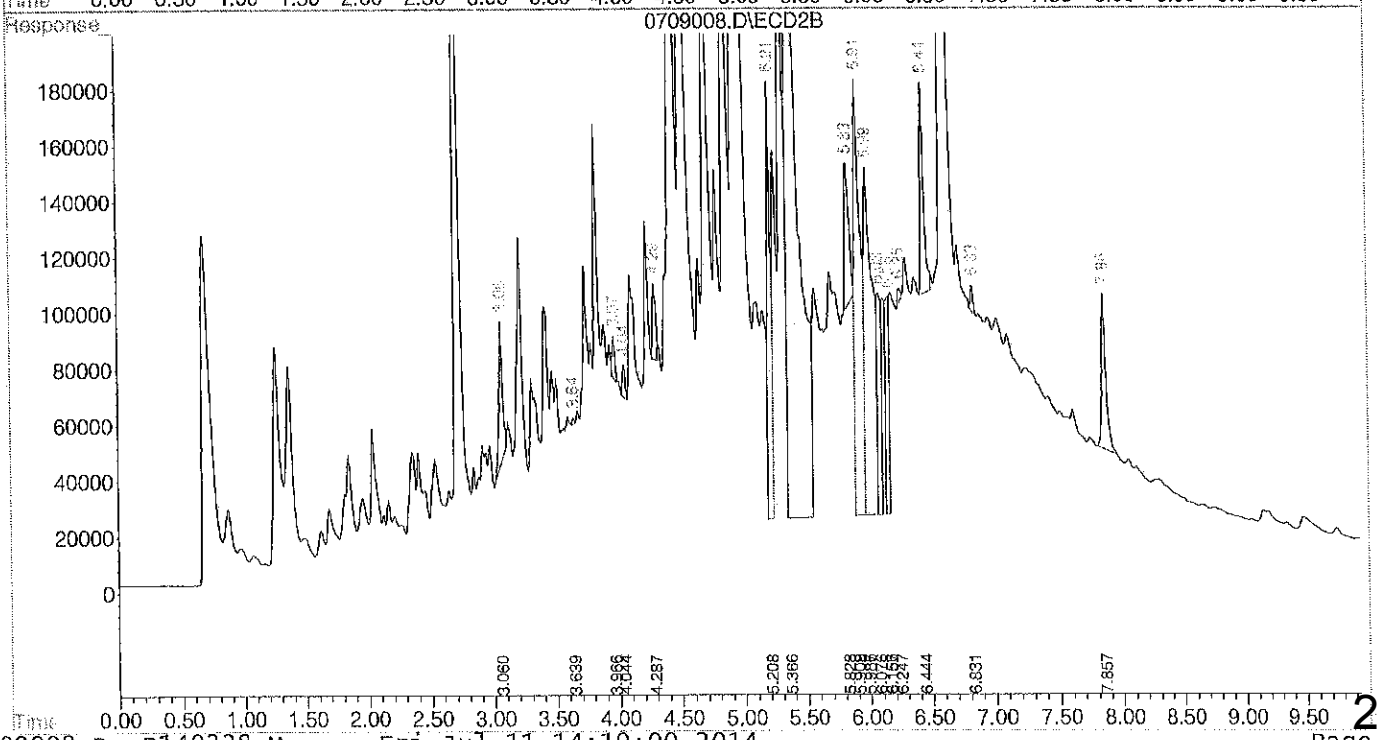
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Quant Time: Jul 11 14:18 2014 Quant Results File: P140328.RES

Quant Method : D:\HPCHEM\1\METHODS\P140328.M (Chemstation Integrator)
Title : Pestcides
Last Update : Mon Jun 30 15:06:57 2014
Response via : Multiple Level Calibration
DataAcq Meth : P140328.M

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Signal #1 : D:\HPCHEM\1\DATA\G140709\0709009.D\ECD1A.CH Vial: 9
Signal #2 : D:\HPCHEM\1\DATA\G140709\0709009.D\ECD2B.CH
Acq On : 9 Jul 2014 9:52 Operator:
Sample : 06-261-02 +Florisil C.U. Inst : George
Misc : Multiplr: 1.00
Sample Amount: 0.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Quant Time: Jul 11 14:28 2014 Quant Results File: P140328.RES

Quant Method : D:\HPCHEM\1\METHODS\P140328.M (Chemstation Integrator)
Title : Pestcides
Last Update : Mon Jun 30 15:06:57 2014
Response via : Initial Calibration
DataAcq Meth : P140328.M

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

KMS 7-11-14

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb	
	System Monitoring Compounds							
1) S	Tetrachloro-m-xy	2.88	3.05	200622	99543	128.896m	106.670m	
	Spiked Amount 100.000			Recovery	=	128.90%	106.67%	
22) S	Decachlorobiphen	7.29	7.86	72561	54004	68.340m	72.278m	
	Spiked Amount 100.000			Recovery	=	68.34%	72.28%	
	Target Compounds							
2) A	alpha-BHC	0.00	3.62f	0	181321	N.D.	149.545 #	
3) A	gamma-BHC	0.00	3.97	0	347423	N.D.	305.074 #	
4) A	beta-BHC	3.79f	0.00	61604	0	61.944	N.D. #	P
5) A	delta-BHC	3.94	4.29f	24669	239338	13.547m	214.778m#	
6) A	Heptachlor	0.00	0.00	0	0	N.D.	N.D.	
7) A	Aldrin	4.37	0.00	636061	0	376.863	N.D. #	
8) A	Heptachlor epoxi	0.00	0.00	0	0	N.D.	N.D.	
9) A	gamma-Chlordane	0.00	5.23	0	15660	N.D.	15.174m#	
10) A	alpha-Chlordane	5.07f	5.37f	7550	354044	4.846	354.708 #	
11) A	4,4'-DDE	5.13	0.00	378329	0	261.218	N.D. #	
12) A	Endosulfan I	0.00	5.37	0	354044	N.D.	353.954 #	
13) A	Dieldrin	0.00	0.00	0	0	N.D.	N.D.	
14) A	Endrin	0.00	5.82f	0	4605	N.D.	5.653m#	
15) A	4,4'-DDD	0.00	5.91	0	2325007	N.D.	3284.209 #	P
16) A	Endosulfan II	5.68	6.01f	31041	98723	23.540m	116.049m#	
17) A	4,4'-DDT	5.80f	6.16f	5039	6850	3.968m	8.504m#	
18) A	Endrin aldehyde	0.00	6.26f	0	7605	N.D.	10.944m#	
19) A	Methoxychlor	6.15	6.66	38099	65332	55.222m	138.296m#	P
20) A	Endosulfan sulfa	6.33	6.45	63043	17770	56.123m	23.776m#	P
21) A	Endrin ketone	6.52	6.83f	6346	15734	4.226m	16.699m#	
23) L8	Toxaphene{1}	5.65f	5.91	103726	2325007	6543.554	157715.119 #	
24) L8	Toxaphene{2}	5.80f	6.08	27849	101401	750.645	4043.790 #	
25) L8	Toxaphene{3}	0.00	6.16f	0	77296	N.D.	2165.536 #	
26) L8	Toxaphene{4}	0.00	0.00	0	0	N.D.	N.D.	
27) L8	Toxaphene{5}	6.33	0.00	93062	0	2909.010	N.D. #	
	Sum Toxaphene			224637	2503705	10203.210	163924.444	
	Average Toxaphene					3401.070	54641.481	
28) L9	Tech Chlordane{1	4.20f	0.00	2418208	0	22945.881	N.D. #	
29) L9	Tech Chlordane{2	4.82f	5.37f	956595	354044	26550.421	3053.576 #	
30) L9	Tech Chlordane{3	5.07f	5.37	7550	354044	45.121	4789.742 #	
31) L9	Tech Chlordane{4	5.13	5.37	378329	354044	1837.603	3341.940 #	
32) L9	Tech Chlordane{5	5.80	6.01	27849	190638	540.893	12897.373 #	
	Sum Tech Chlordane			3788532	1252770	51919.918	24082.631	
	Average Tech Chlordane					10383.984	6020.658	

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

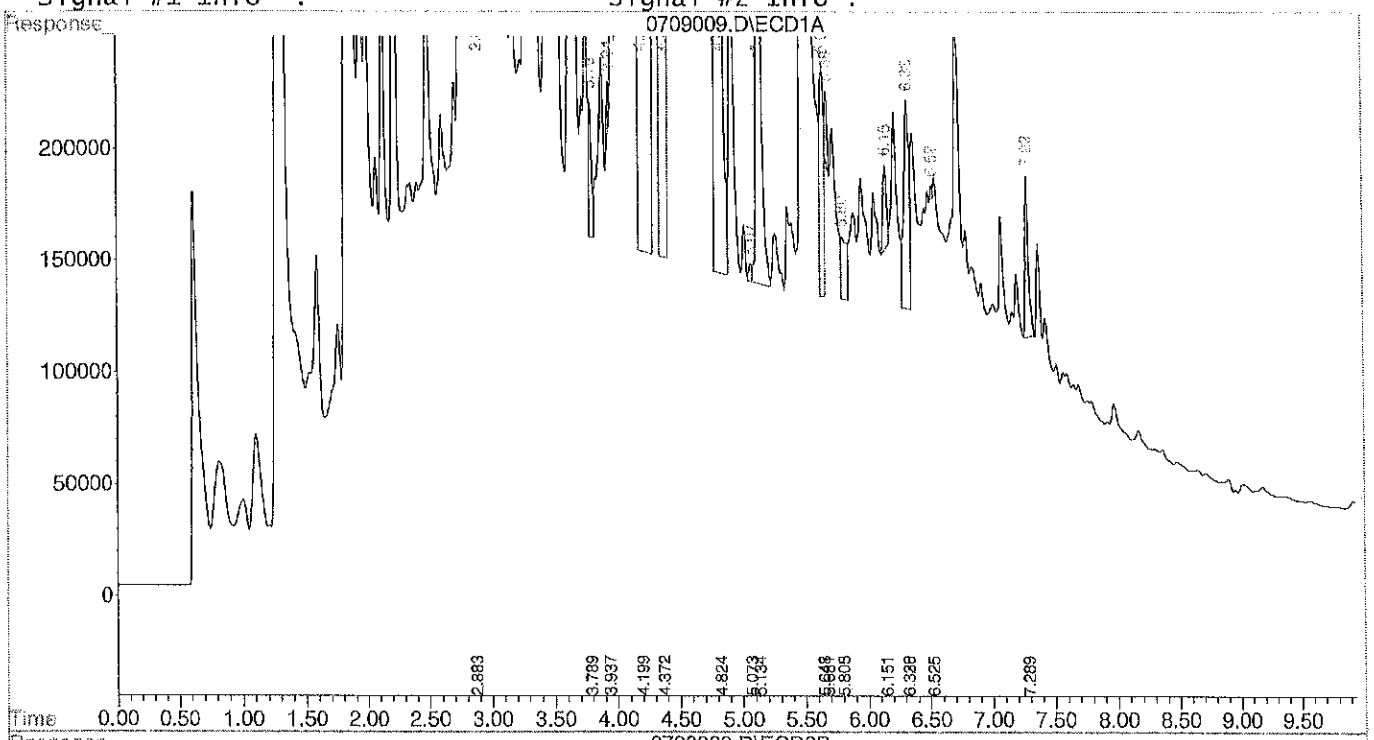
Quantitation Report (QT Reviewed)

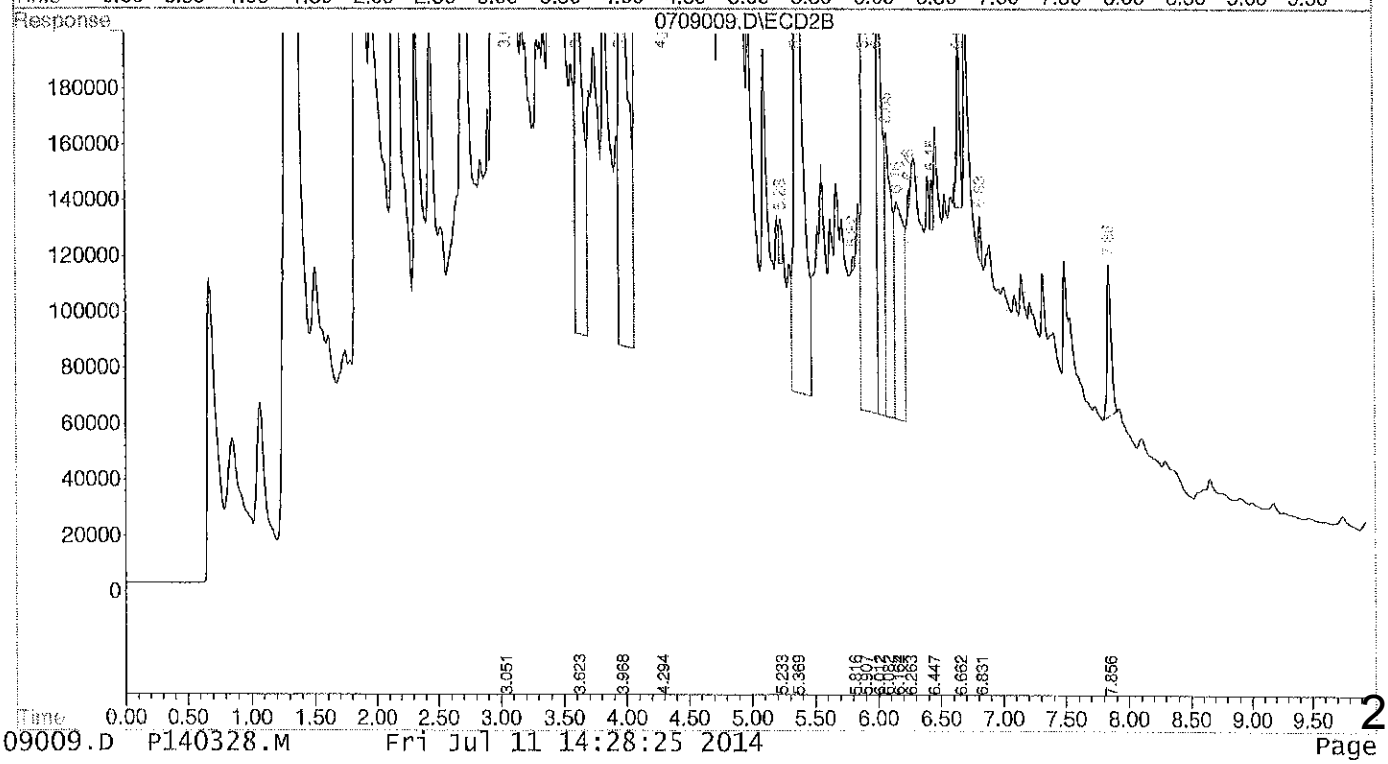
Signal #1 : D:\HPCHEM\1\DATA\G140709\0709009.D\ECD1A.CH Vial: 9
Signal #2 : D:\HPCHEM\1\DATA\G140709\0709009.D\ECD2B.CH
Acq On : 9 Jul 2014 9:52 Operator:
Sample : 06-261-02 +Florisil C.U. Inst : George
Misc : Multiplr: 1.00
Sample Amount: 0.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Quant Time: Jul 11 14:28 2014 Quant Results File: P140328.RES

Quant Method : D:\HPCHEM\1\METHODS\P140328.M (Chemstation Integrator)
Title : Pestcides
Last Update : Mon Jun 30 15:06:57 2014
Response via : Multiple Level Calibration
DataAcq Meth : P140328.M

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Signal #1 : D:\HPCHEM\1\DATA\G140709\0709010.D\ECD1A.CH Vial: 10
Signal #2 : D:\HPCHEM\1\DATA\G140709\0709010.D\ECD2B.CH
Acq On : 9 Jul 2014 10:05 Operator:
Sample : 06-261-03 +Florisil C.U. Inst : George
Misc : Multiplr: 1.00
Sample Amount: 0.00

IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Quant Time: Jul 11 14:48 2014 Quant Results File: P140328.RES

Quant Method : D:\HPCHEM\1\METHODS\P140328.M (Chemstation Integrator)
Title : Pestcides
Last Update : Mon Jun 30 15:06:57 2014
Response via : Initial Calibration
DataAcq Meth : P140328.M

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
1) S	Tetrachloro-m-xy	2.89	3.06	62089	20300	39.891m	21.754m#
	Spiked Amount 100.000			Recovery	=	39.89%	21.75%
22) S	Decachlorobiphen	7.29	7.86	31872	24897	27.209	30.571m
	Spiked Amount 100.000			Recovery	=	27.21%	30.57%
	Target Compounds						
2) A	alpha-BHC	3.42	0.00	61727	0	30.298	N.D. #
3) A	gamma-BHC	0.00	3.97	0	8730	N.D.	7.666m#
4) A	beta-BHC	3.76f	4.05	22590	11403	22.715m	18.687m
5) A	delta-BHC	3.94f	0.00	67545	0	37.094	N.D. #
6) A	Heptachlor	0.00	0.00	0	0	N.D.	N.D.
7) A	Aldrin	0.00	0.00	0	0	N.D.	N.D.
8) A	Heptachlor epoxi	4.86	5.06f	12858	1004	8.057m	1.002m#
9) A	gamma-Chlordane	4.95	5.23	592211	3578	365.008	3.467m#
10) A	alpha-Chlordane	0.00	5.37f	0	163228	N.D.	163.535 #
11) A	4,4'-DDE	5.13	0.00	210076	0	145.047	N.D. #
12) A	Endosulfan I	0.00	5.37	0	163228	N.D.	163.187 #
13) A	Dieldrin	0.00	5.62f	0	26562	N.D.	28.549 #
14) A	Endrin	0.00	0.00	0	0	N.D.	N.D.
15) A	4,4'-DDD	0.00	5.91	0	38101	N.D.	53.820 #
16) A	Endosulfan II	5.68	5.99	43250	27485	32.800m	32.308m
17) A	4,4'-DDT	5.81f	0.00	1587	0	1.250m	N.D. #
18) A	Endrin aldehyde	5.99	6.23	46398	26130	44.906m	37.603m
19) A	Methoxychlor	6.13f	6.66	10855	5195	15.733m	10.996m#
20) A	Endosulfan sulfa	6.32	6.44	162706	25352	144.847m	33.922m#
21) A	Endrin ketone	6.56f	6.83f	1301	15286	0.107m	16.223m#
23) L8	Toxaphene{1}	0.00	5.91	0	38101	N.D.	2584.580 #
24) L8	Toxaphene{2}	0.00	6.09f	0	47574	N.D.	1897.209 #
25) L8	Toxaphene{3}	0.00	0.00	0	0	N.D.	N.D.
26) L8	Toxaphene{4}	6.10f	0.00	13496	0	457.321	N.D. #
27) L8	Toxaphene{5}	6.32	0.00	180601	0	5645.401	N.D. #
	Sum Toxaphene			194097	85675	6102.722	4481.789
	Average Toxaphene					3051.361	2240.894
28) L9	Tech Chlordane{1	4.19f	0.00	1469178	0	13940.733	N.D. #
29) L9	Tech Chlordane{2	4.86	5.37f	17832	163228	494.934	1407.820 #
30) L9	Tech Chlordane{3	0.00	5.37	0	163228	N.D.	2208.261 #
31) L9	Tech Chlordane{4	5.13	5.37	210076	163228	1020.371	1540.767 #
32) L9	Tech Chlordane{5	5.81f	5.99	8289	42831	160.996	2897.671 #
	Sum Tech Chlordane			1705376	532516	15617.034	8054.519
	Average Tech Chlordane					3904.258	2013.630

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

Quantitation Report (QT Reviewed)

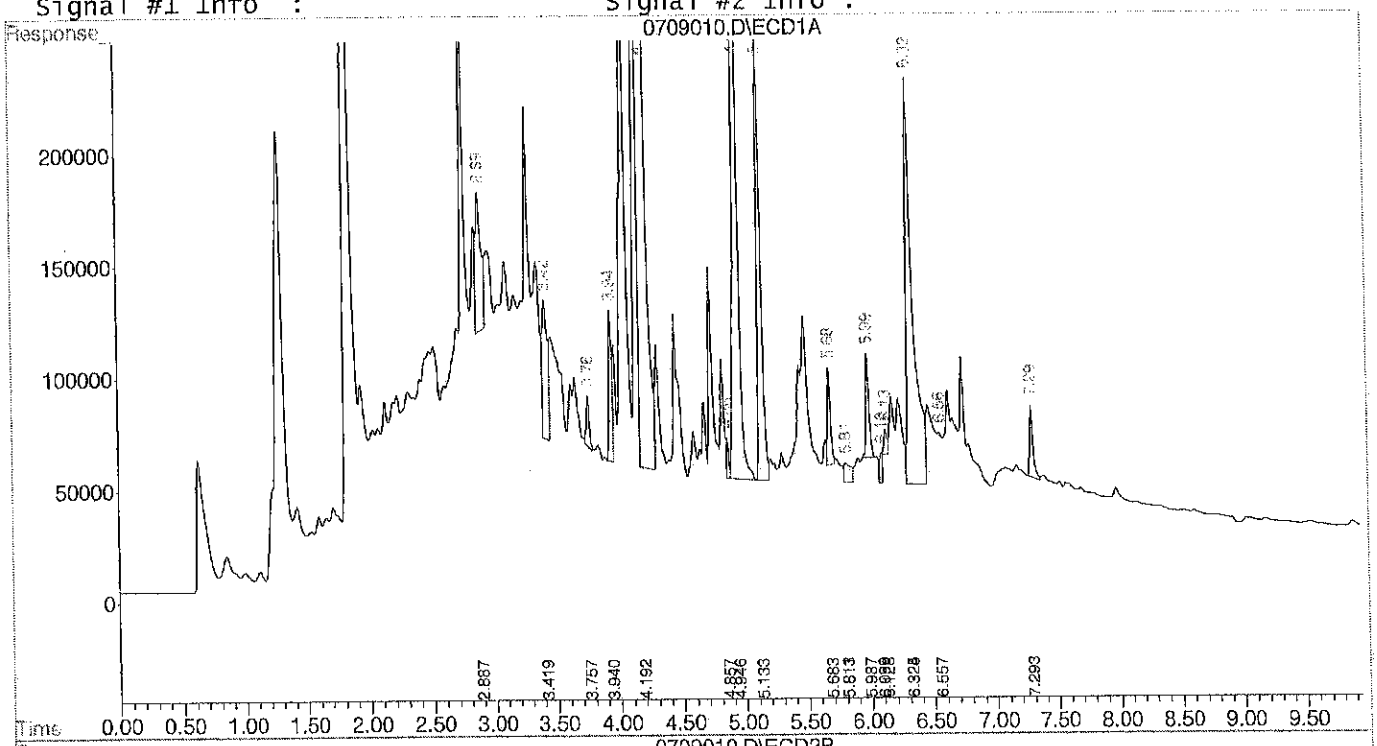
Signal #1 : D:\HPCHEM\1\DATA\G140709\0709010.D\ECD1A.CH Vial: 10
Signal #2 : D:\HPCHEM\1\DATA\G140709\0709010.D\ECD2B.CH
Acq On : 9 Jul 2014 10:05 Operator:
Sample : 06-261-03 +Florisil C.U. Inst : George
Misc : Multiplr: 1.00
Sample Amount: 0.00

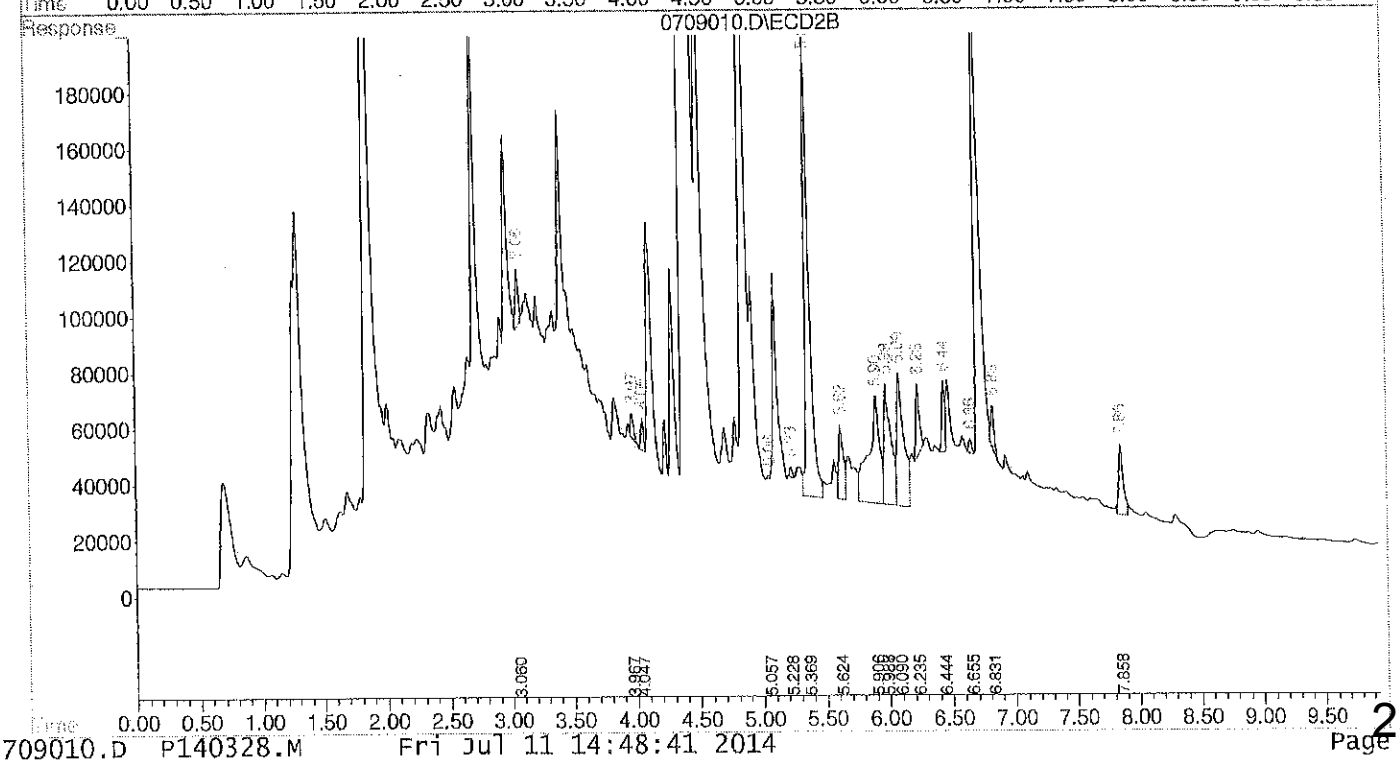
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Quant Time: Jul 11 14:48 2014 Quant Results File: P140328.RES

Quant Method : D:\HPCHEM\1\METHODS\P140328.M (Chemstation Integrator)
Title : Pestcides
Last Update : Mon Jun 30 15:06:57 2014
Response via : Multiple Level Calibration
DataAcq Meth : P140328.M

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Signal #1 : D:\HPCHEM\1\DATA\G140709\0709011.D\ECD1A.CH Vial: 11
Signal #2 : D:\HPCHEM\1\DATA\G140709\0709011.D\ECD2B.CH
Acq On : 9 Jul 2014 10:19 Operator:
Sample : 06-261-04 +Florisil C.U. Inst : George
Misc : Multiplr: 1.00
Sample Amount: 0.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Quant Time: Jul 11 14:54 2014 Quant Results File: P140328.RES

Quant Method : D:\HPCHEM\1\METHODS\P140328.M (Chemstation Integrator)
Title : Pestcides
Last Update : Mon Jun 30 15:06:57 2014
Response via : Initial Calibration
DataAcq Meth : P140328.M

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

KMS 7-11-14

Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
System Monitoring Compounds						
1) S Tetrachloro-m-xy	2.89	3.06	83884	54159	53.894m	58.037m
Spiked Amount 100.000			Recovery	=	53.89%	58.04%
22) S Decachlorobiphen	7.29	7.86	88237	62184	84.187m	84.000m
Spiked Amount 100.000			Recovery	=	84.19%	84.00%
Target Compounds						
2) A alpha-BHC	0.00	3.63f	0	10891	N.D.	8.983m#
3) A gamma-BHC	0.00	3.99f	0	30267	N.D.	26.577m#
4) A beta-BHC	0.00	4.04f	0	22089	N.D.	36.198m#
5) A delta-BHC	3.94f	0.00	104035	0	57.132m	N.D. #
6) A Heptachlor	0.00	4.37f	0	51221	N.D.	40.340m#
7) A Aldrin	4.36	0.00	20224	0	11.983m	N.D. #
8) A Heptachlor epoxi	0.00	0.00	0	0	N.D.	N.D.
9) A gamma-Chlordane	0.00	5.24f	0	4346	N.D.	4.211m#
10) A alpha-Chlordane	0.00	5.33	0	863	N.D.	0.865m#
11) A 4,4'-DDE	5.13	5.48	127639	3512	88.128m	3.898m#
12) A Endosulfan I	5.15	5.38	146055	139756	95.555m	139.720m#
13) A Dieldrin	0.00	0.00	0	0	N.D.	N.D.
14) A Endrin	0.00	5.83	0	5337	N.D.	6.551m#
15) A 4,4'-DDD	5.58	5.90	5471	40617	4.722m	57.374m#
16) A Endosulfan II	5.68	5.98	21015	9747	15.937m	11.457m#
17) A 4,4'-DDT	5.78	6.15	1495	603	1.177m	0.748m#
18) A Endrin aldehyde	5.99	6.26f	12018	26766	11.631m	38.518m#
19) A Methoxychlor	6.16	6.65	3905	4751	5.661m	10.058m#
20) A Endosulfan sulfa	6.32	6.44	38556	31882	34.324m	42.660m
21) A Endrin ketone	6.53	6.83f	2696	4131	1.246m	4.384m#
23) L8 Toxaphene{1}	0.00	5.91	0	108227	N.D.	7341.483 #
24) L8 Toxaphene{2}	5.78	6.06f	23555	79789	634.912	3181.899 #
25) L8 Toxaphene{3}	0.00	6.15	0	67303	N.D.	1885.557 #
26) L8 Toxaphene{4}	6.10f	0.00	85073	0	2882.791	N.D. #
27) L8 Toxaphene{5}	6.32	0.00	70010	0	2188.427	N.D. #
Sum Toxaphene			178638	255318	5706.129	12408.939
Average Toxaphene					1902.043	4136.313
28) L9 Tech Chlordane{1	4.25f	4.84f	33653	348103	319.327	8387.141 #
29) L9 Tech Chlordane{2	4.80f	5.33	283017	56119	7855.167	484.015 #
30) L9 Tech Chlordane{3	5.08f	5.38	32353	196028	193.340	2652.001 #
31) L9 Tech Chlordane{4	5.13	5.38	156956	196028	762.360	1850.377 #
32) L9 Tech Chlordane{5	5.78	5.99	23555	80351	457.499	5436.055 #
Sum Tech Chlordane			529534	876630	9587.692	18809.590
Average Tech Chlordane					1917.538	3761.918

KMS 7-11-14

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

Quantitation Report (QT Reviewed)

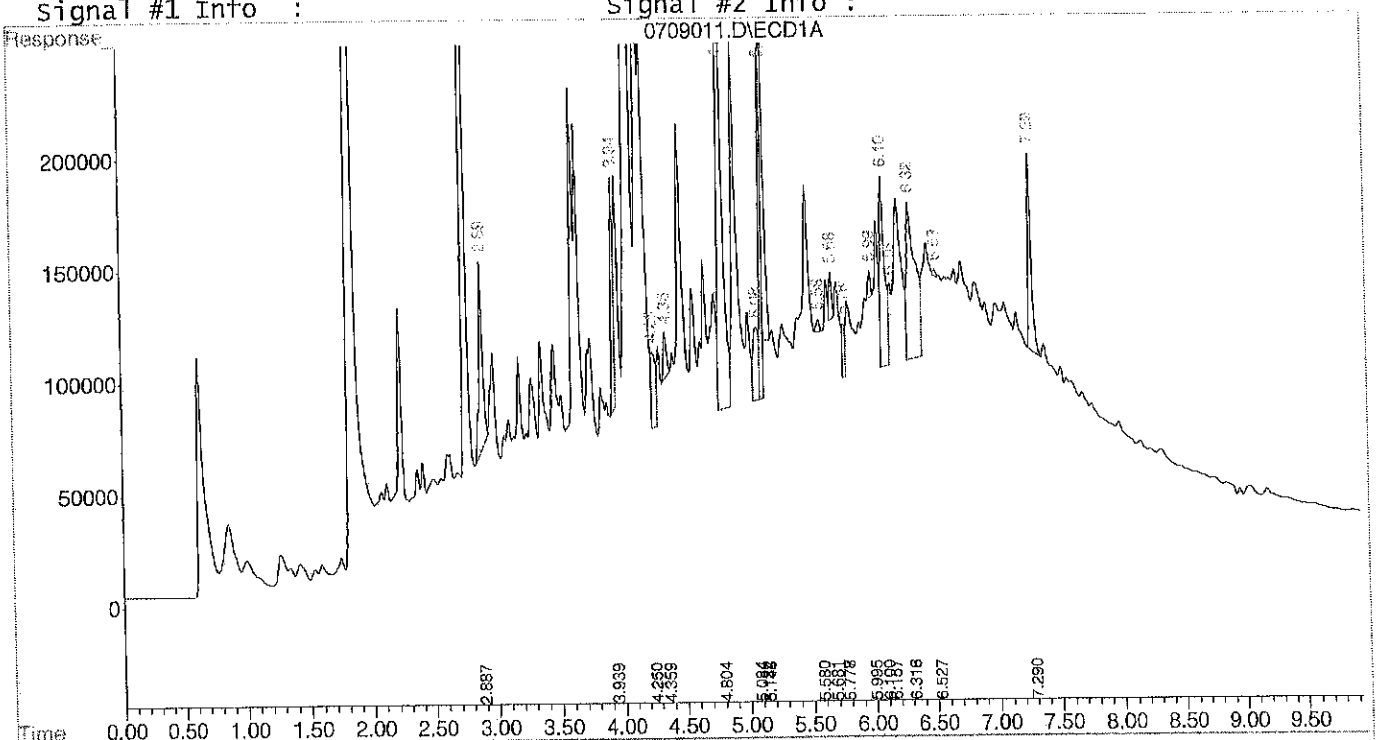
Signal #1 : D:\HPCHEM\1\DATA\G140709\0709011.D\ECD1A.CH Vial: 11
Signal #2 : D:\HPCHEM\1\DATA\G140709\0709011.D\ECD2B.CH
Acq On : 9 Jul 2014 10:19 Operator:
Sample : 06-261-04 +Florisil C.U. Inst : George
Misc : Multiplr: 1.00
Sample Amount: 0.00

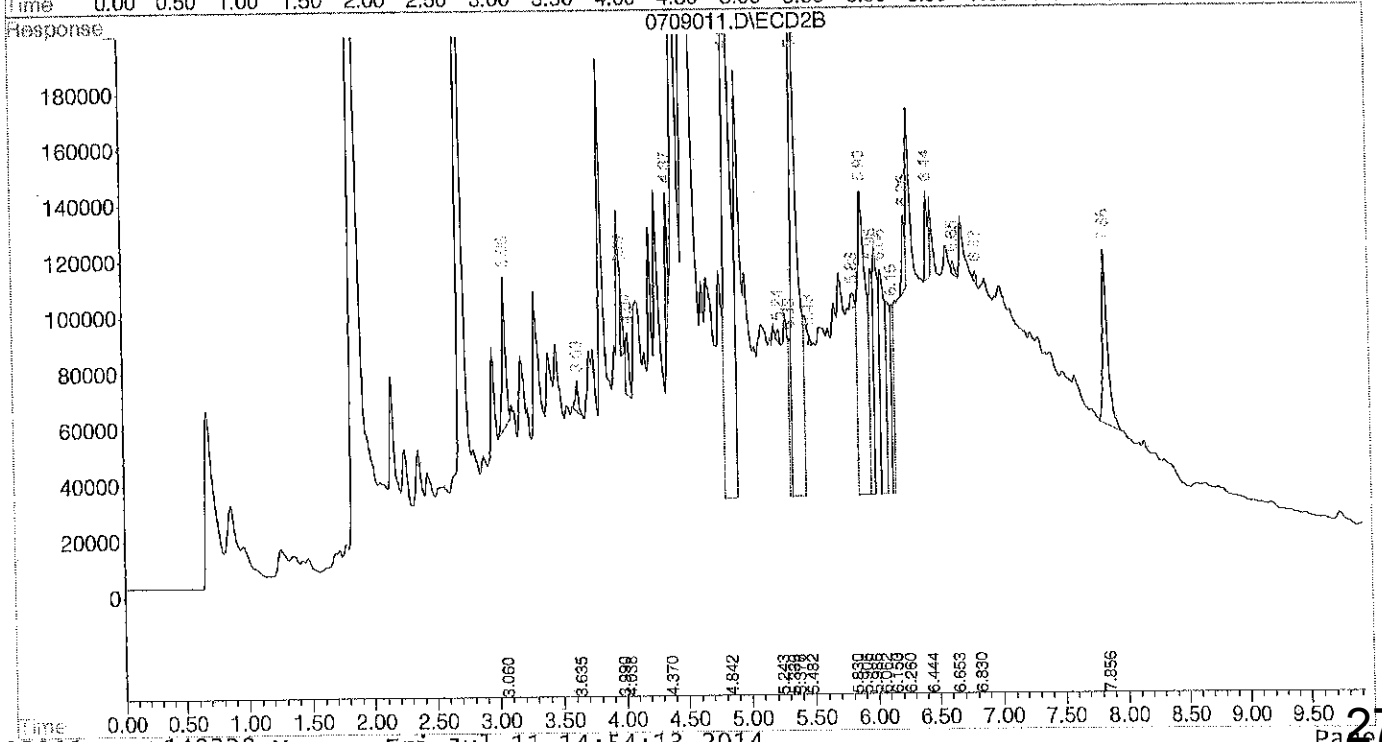
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Quant Time: Jul 11 14:54 2014 Quant Results File: P140328.RES

Quant Method : D:\HPCHEM\1\METHODS\P140328.M (Chemstation Integrator)
Title : Pestcides
Last Update : Mon Jun 30 15:06:57 2014
Response via : Multiple Level Calibration
DataAcq Meth : P140328.M

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Signal #1 : D:\HPCHEM\1\DATA\G140709\0709012.D\ECD1A.CH Vial: 12
Signal #2 : D:\HPCHEM\1\DATA\G140709\0709012.D\ECD2B.CH
Acq On : 9 Jul 2014 10:32 Operator:
Sample : 06-261-05 +Florisil C.U. Inst : George
Misc : Multiplr: 1.00
Sample Amount: 0.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Quant Time: Jul 11 15:01 2014 Quant Results File: P140328.RES

Quant Method : D:\HPCHEM\1\METHODS\P140328.M (Chemstation Integrator)
Title : Pestcides
Last Update : Mon Jun 30 15:06:57 2014
Response via : Initial Calibration
DataAcq Meth : P140328.M

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
1) S	Tetrachloro-m-xy	2.89	3.06	84392	58797	54.220m	63.007m
	Spiked Amount 100.000			Recovery	=	54.22%	63.01%
22) S	Decachlorobiphen	7.29	7.86	86890	63820	82.825m	86.344m
	Spiked Amount 100.000			Recovery	=	82.83%	86.34%
	Target Compounds						
2) A	alpha-BHC	0.00	3.64f	0	47273	N.D.	38.988 #
3) A	gamma-BHC	0.00	3.97	0	98944	N.D.	86.883 #
4) A	beta-BHC	0.00	0.00	0	0	N.D.	N.D.
5) A	delta-BHC	3.94f	0.00	165086	0	90.660	N.D. #
6) A	Heptachlor	0.00	4.37f	0	108344	N.D.	85.329 #
7) A	Aldrin	4.36	0.00	49876	0	29.551	N.D. #
8) A	Heptachlor epoxi	0.00	0.00	0	0	N.D.	N.D.
9) A	gamma-Chlordane	0.00	5.24f	0	3644	N.D.	3.531m#
10) A	alpha-Chlordane	0.00	5.33	0	1398	N.D.	1.400m#
11) A	4,4'-DDE	0.00	5.48	0	3344	N.D.	3.712m#
12) A	Endosulfan I	5.15	5.38	183641	172776	120.145m	172.732m#
13) A	Dieldrin	0.00	5.59	0	4068	N.D.	4.373m#
14) A	Endrin	0.00	5.83	0	7827	N.D.	9.608m#
15) A	4,4'-DDD	5.58	5.91	6638	31509	5.729m	44.508m#
16) A	Endosulfan II	5.68	5.98	29731	17793	22.547m	20.915m
17) A	4,4'-DDT	5.77	6.15	1832	587	1.442m	0.729m#
18) A	Endrin aldehyde	5.99	6.26f	13849	30953	13.403m	44.544m#
19) A	Methoxychlor	6.16	6.65	4043	4298	5.860m	9.097m#
20) A	Endosulfan sulfa	6.32	6.44	50113	42722	44.613m	57.163m#
21) A	Endrin ketone	6.53	6.83f	809	5250	N.D. m	5.572m
23) L8	Toxaphene{1}	0.00	5.91	0	104850	N.D.	7112.425 #
24) L8	Toxaphene{2}	5.78	6.06f	30168	92001	813.145	3668.915 #
25) L8	Toxaphene{3}	0.00	6.15	0	76180	N.D.	2134.275 #
26) L8	Toxaphene{4}	6.10f	0.00	100370	0	3401.166	N.D. #
27) L8	Toxaphene{5}	6.32	0.00	87950	0	2749.233	N.D. #
	Sum Toxaphene			218488	273031	6963.545	12915.615
	Average Toxaphene					2321.182	4305.205
28) L9	Tech Chlordane{1	4.25f	4.84f	39118	362587	371.182	8736.097 #
29) L9	Tech Chlordane{2	0.00	5.33	0	64435	N.D.	555.739 #
30) L9	Tech Chlordane{3	5.09f	5.38	37889	235577	226.424	3187.043 #
31) L9	Tech Chlordane{4	5.15f	5.38	214972	235577	1044.152	2223.691 #
32) L9	Tech Chlordane{5	5.78	5.99	30168	95654	585.928	6471.365 #
	Sum Tech Chlordane			322147	993830	2227.686	21173.934
	Average Tech Chlordane					556.921	4234.787

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

Quantitation Report (QT Reviewed)

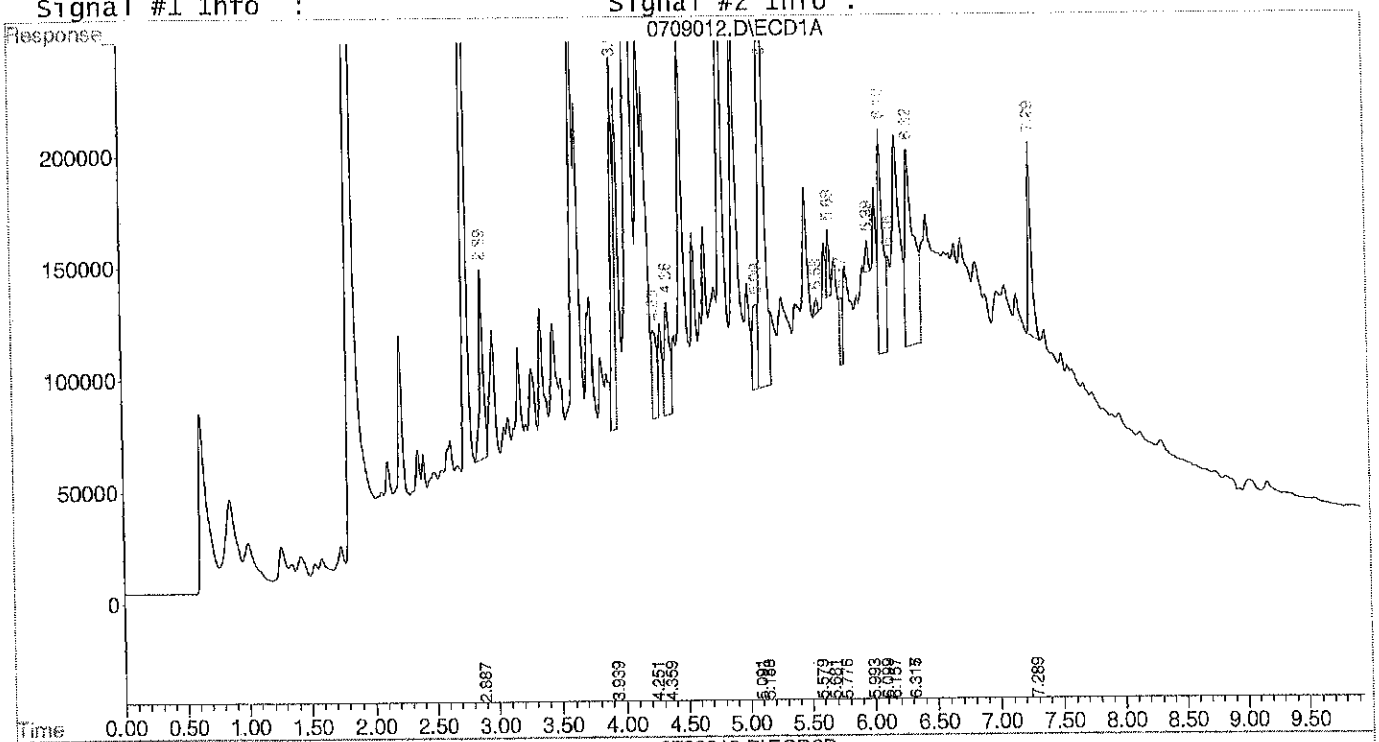
Signal #1 : D:\HPCHEM\1\DATA\G140709\0709012.D\ECD1A.CH Vial: 12
Signal #2 : D:\HPCHEM\1\DATA\G140709\0709012.D\ECD2B.CH
Acq On : 9 Jul 2014 10:32 Operator:
Sample : 06-261-05 +Florisil C.U. Inst : George
Misc : Multiplr: 1.00
Sample Amount: 0.00

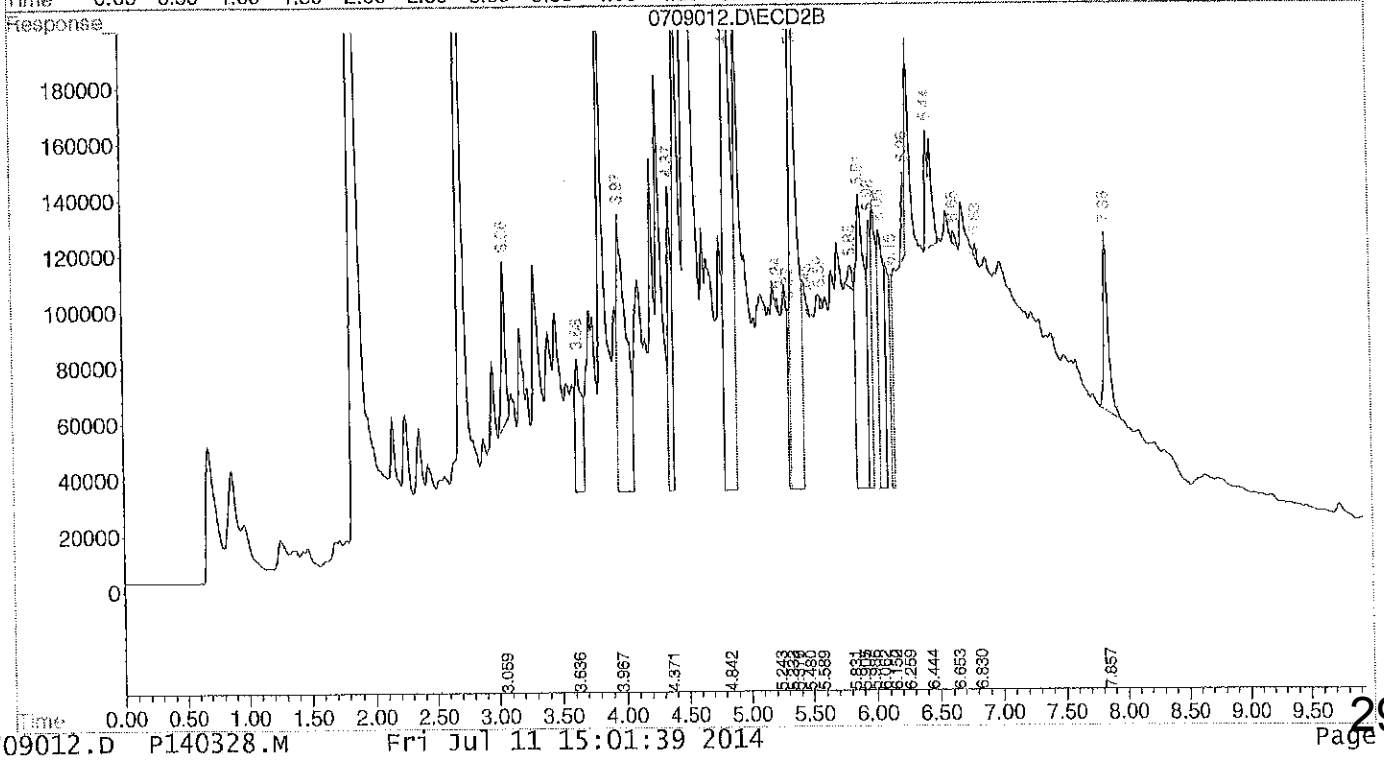
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Quant Time: Jul 11 15:01 2014 Quant Results File: P140328.RES

Quant Method : D:\HPCHEM\1\METHODS\P140328.M (Chemstation Integrator)
Title : Pestcides
Last Update : Mon Jun 30 15:06:57 2014
Response via : Multiple Level Calibration
DataAcq Meth : P140328.M

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (Not Reviewed)

Signal #1 : D:\HPCHEM\1\DATA\G140704\0704007.D\ECD1A.CH Vial: 7
Signal #2 : D:\HPCHEM\1\DATA\G140704\0704007.D\ECD2B.CH
Acq On : 4 Jul 2014 11:40 Operator:
Sample : MB0703W1 Inst : George
Misc : Multiplr: 1.00
Sample Amount: 0.00

IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Quant Time: Jul 4 11:50 2014 Quant Results File: P140328.RES

Quant Method : D:\HPCHEM\1\METHODS\P140328.M (Chemstation Integrator)
Title : Pestcides
Last Update : Mon Jun 30 15:06:57 2014
Response via : Initial Calibration
DataAcq Meth : P140328.M

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
1) S	Tetrachloro-m-xy	2.89	3.07	105001	76774	67.461	82.271
	Spiked Amount 100.000			Recovery	=	67.46%	82.27%
22) S	Decachlorobiphen	7.30	7.86	97271	70333	93.319	95.676
	Spiked Amount 100.000			Recovery	=	93.32%	95.68%
	Target Compounds						
2) A	alpha-BHC	0.00	0.00	0	0	N.D.	N.D.
3) A	gamma-BHC	0.00	3.95f	0	701	N.D.	0.615 #
4) A	beta-BHC	3.76f	0.00	1722	0	1.732	N.D. #
5) A	delta-BHC	0.00	0.00	0	0	N.D.	N.D.
6) A	Heptachlor	4.12	4.34	1352	1762	0.694	1.388 #
7) A	Aldrin	0.00	4.61	0	192	N.D.	0.186 #
8) A	Heptachlor epoxi	0.00	5.06f	0	5852	N.D.	5.844 #
9) A	gamma-Chlordane	0.00	5.21	0	14190	N.D.	13.749 #
10) A	alpha-Chlordane	0.00	5.37f	0	498	N.D.	0.499 #
11) A	4,4'-DDE	5.14	0.00	482	0	0.333	N.D. #
12) A	Endosulfan I	5.14f	5.37	482	498	0.316	0.498 #
13) A	Dieldrin	0.00	5.59	0	628	N.D.	0.675 #
14) A	Endrin	0.00	5.83	0	261	N.D.	0.321 #
15) A	4,4'-DDD	0.00	0.00	0	0	N.D.	N.D.
16) A	Endosulfan II	5.66f	0.00	349	0	0.265	N.D. #
17) A	4,4'-DDT	0.00	6.13f	0	446	N.D.	0.554 #
18) A	Endrin aldehyde	0.00	6.26	0	2507	N.D.	3.607 #
19) A	Methoxychlor	0.00	0.00	0	0	N.D.	N.D.
20) A	Endosulfan sulfa	0.00	6.45	0	310	N.D.	0.414 #
21) A	Endrin ketone	0.00	6.86	0	914	N.D.	0.970 #
23) L8	Toxaphene{1}	0.00	0.00	0	0	N.D.	N.D.
24) L8	Toxaphene{2}	0.00	6.07	0	349	N.D.	13.904 #
25) L8	Toxaphene{3}	0.00	6.13f	0	446	N.D.	12.493 #
26) L8	Toxaphene{4}	0.00	0.00	0	0	N.D.	N.D.
27) L8	Toxaphene{5}	0.00	6.77f	0	785	N.D.	35.115 #
	Sum Toxaphene			0	1580	N.D.	61.512
	Average Toxaphene					0.000	20.504
28) L9	Tech Chlordane{1	4.22	4.80	29619	451	281.048	10.876 #
29) L9	Tech Chlordane{2	0.00	5.37f	0	498	N.D.	4.294 #
30) L9	Tech Chlordane{3	5.10f	5.37	260	498	1.557	6.735 #
31) L9	Tech Chlordane{4	5.14	5.37	482	498	2.343	4.699 #
32) L9	Tech Chlordane{5	5.82f	5.94f	68	369	1.314	24.936 #
	Sum Tech Chlordane			30429	2313	286.261	51.540
	Average Tech Chlordane					71.565	10.308

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

Quantitation Report (Not Reviewed)

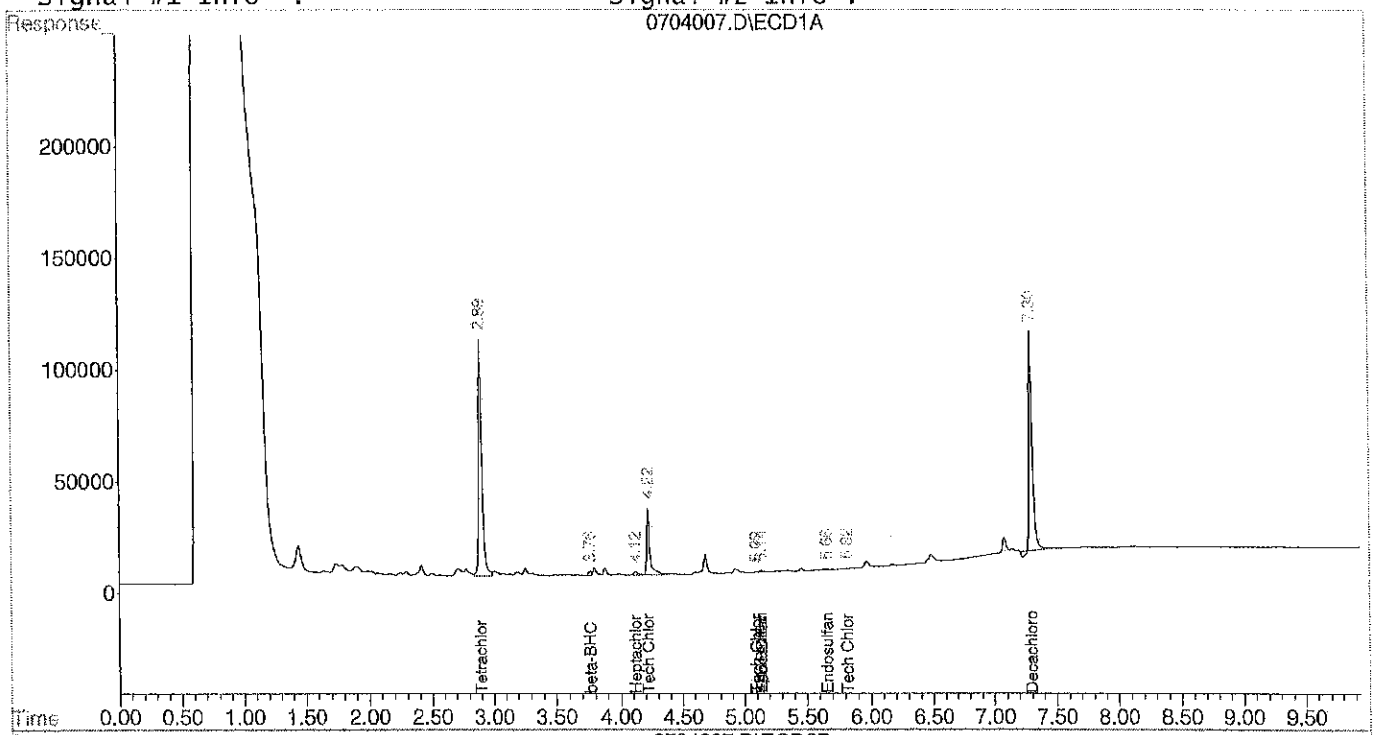
Signal #1 : D:\HPCHEM\1\DATA\G140704\0704007.D\ECD1A.CH Vial: 7
Signal #2 : D:\HPCHEM\1\DATA\G140704\0704007.D\ECD2B.CH
Acq On : 4 Jul 2014 11:40 Operator:
Sample : MB0703W1 Inst : George
Misc : Multiplr: 1.00
Sample Amount: 0.00

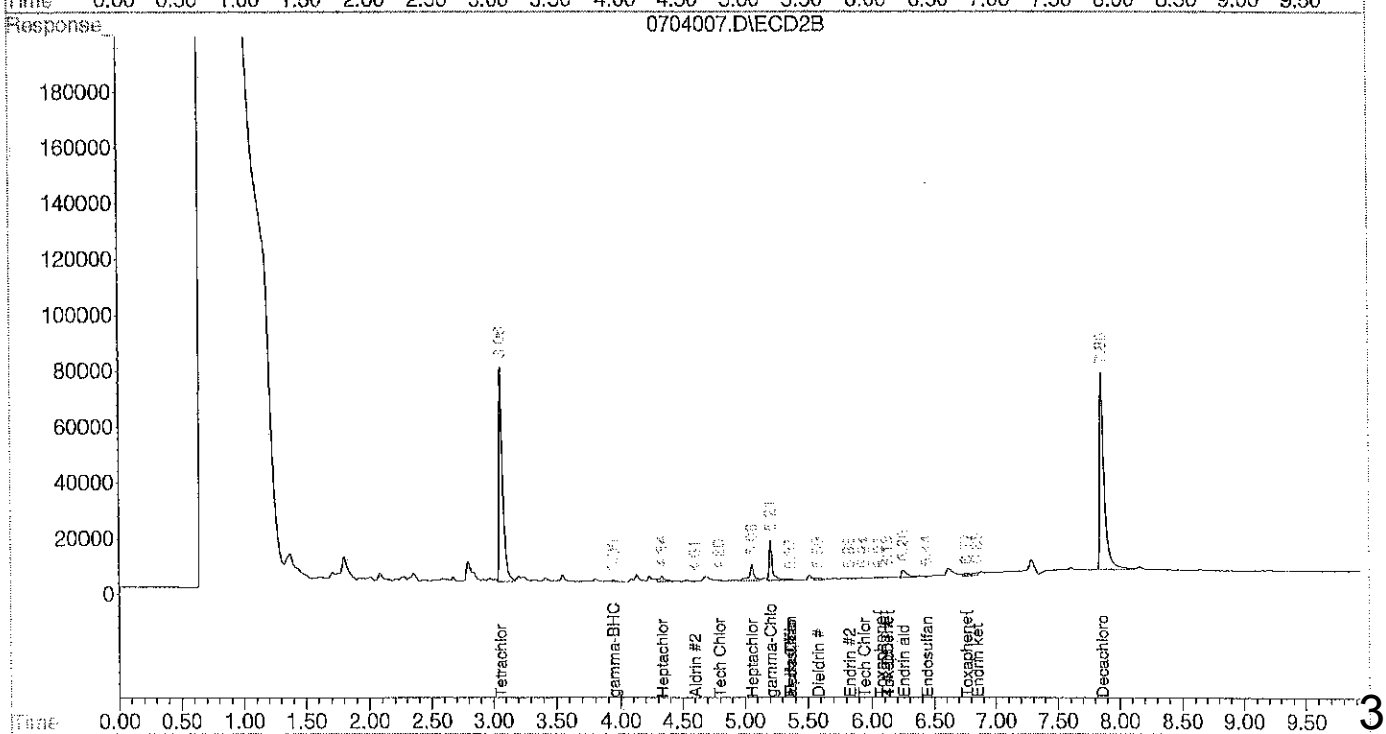
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Quant Time: Jul 4 11:50 2014 Quant Results File: P140328.RES

Quant Method : D:\HPCHEM\1\METHODS\P140328.M (Chemstation Integrator)
Title : Pestcides
Last Update : Mon Jun 30 15:06:57 2014
Response via : Multiple Level Calibration
DataAcq Meth : P140328.M

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (Not Reviewed)

Signal #1 : D:\HPCHEM\1\DATA\G140709\0709005.D\ECD1A.CH Vial: 5
Signal #2 : D:\HPCHEM\1\DATA\G140709\0709005.D\ECD2B.CH
Acq On : 9 Jul 2014 8:59 Operator:
Sample : MB0703W1 + Florisil Inst : George
Misc : Multiplr: 1.00
Sample Amount: 0.00

IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Quant Time: Jul 9 9:09 2014 Quant Results File: P140328.RES

Quant Method : D:\HPCHEM\1\METHODS\P140328.M (Chemstation Integrator)
Title : Pestcides
Last Update : Mon Jun 30 15:06:57 2014
Response via : Initial Calibration
DataAcq Meth : P140328.M

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
1) S	Tetrachloro-m-xy	2.89	3.06	75548	59253	48.538	63.495 #
	Spiked Amount 100.000			Recovery	=	48.54%	63.50%
22) S	Decachlorobiphen	7.30	7.86	79652	59437	75.508	80.063
	Spiked Amount 100.000			Recovery	=	75.51%	80.06%
	Target Compounds						
2) A	alpha-BHC	0.00	3.67f	0	11206	N.D.	9.242 #
3) A	gamma-BHC	0.00	0.00	0	0	N.D.	N.D.
4) A	beta-BHC	3.76f	0.00	2600	0	2.615	N.D. #
5) A	delta-BHC	3.94f	4.31	2931	4181	1.610	3.752 #
6) A	Heptachlor	4.11	0.00	12033	0	6.178	N.D. #
7) A	Aldrin	0.00	0.00	0	0	N.D.	N.D.
8) A	Heptachlor epoxi	0.00	5.06f	0	4945	N.D.	4.938 #
9) A	gamma-Chlordane	0.00	5.21	0	9994	N.D.	9.684 #
10) A	alpha-Chlordane	0.00	5.32f	0	347	N.D.	0.348 #
11) A	4,4'-DDE	0.00	0.00	0	0	N.D.	N.D.
12) A	Endosulfan I	5.16	5.40f	1173	1434	0.768	1.434 #
13) A	Dieldrin	0.00	5.58f	0	411	N.D.	0.441 #
14) A	Endrin	5.51	5.82f	2040	2252	1.537	2.765 #
15) A	4,4'-DDD	0.00	0.00	0	0	N.D.	N.D.
16) A	Endosulfan II	5.70	5.99	924	49	0.701	0.057 #
17) A	4,4'-DDT	0.00	6.13f	0	1209	N.D.	1.501 #
18) A	Endrin aldehyde	0.00	6.26	0	3009	N.D.	4.331 #
19) A	Methoxychlor	0.00	0.00	0	0	N.D.	N.D.
20) A	Endosulfan sulfa	0.00	0.00	0	0	N.D.	N.D.
21) A	Endrin ketone	0.00	0.00	0	0	N.D.	N.D.
23) L8	Toxaphene{1}	5.64f	0.00	4059	0	256.051	N.D. #
24) L8	Toxaphene{2}	0.00	6.09f	0	1038	N.D.	41.380 #
25) L8	Toxaphene{3}	5.88	6.13f	1236	1209	34.425	33.868
26) L8	Toxaphene{4}	0.00	0.00	0	0	N.D.	N.D.
27) L8	Toxaphene{5}	0.00	0.00	0	0	N.D.	N.D.
	Sum Toxaphene			5295	2247	290.476	75.248
	Average Toxaphene					145.238	37.624
28) L9	Tech Chlordane{1	4.22	4.81	22521	1419	213.700	34.180 #
29) L9	Tech Chlordane{2	4.83f	5.32f	533	347	14.785	2.992 #
30) L9	Tech Chlordane{3	5.09f	5.40f	971	1434	5.801	19.399 #
31) L9	Tech Chlordane{4	5.16f	5.40	1173	1434	5.698	13.535 #
32) L9	Tech Chlordane{5	5.75f	5.99	1407	49	27.325	3.282 #
	Sum Tech Chlordane			26605	4682	267.310	73.387
	Average Tech Chlordane					53.462	14.677

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

Quantitation Report (Not Reviewed)

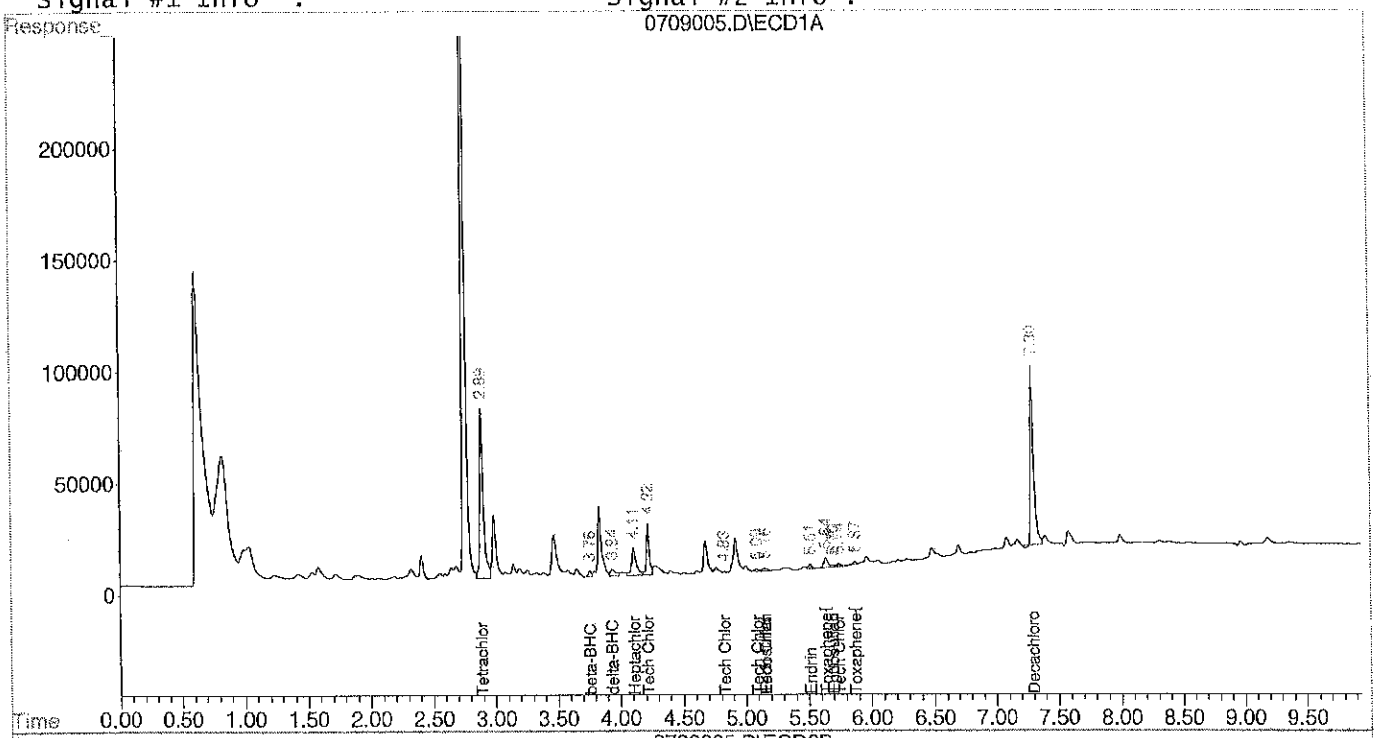
Signal #1 : D:\HPCHEM\1\DATA\G140709\0709005.D\ECD1A.CH Vial: 5
Signal #2 : D:\HPCHEM\1\DATA\G140709\0709005.D\ECD2B.CH
Acq On : 9 Jul 2014 8:59 Operator:
Sample : MB0703W1 Inst : George
Misc : Multiplr: 1.00
Sample Amount: 0.00

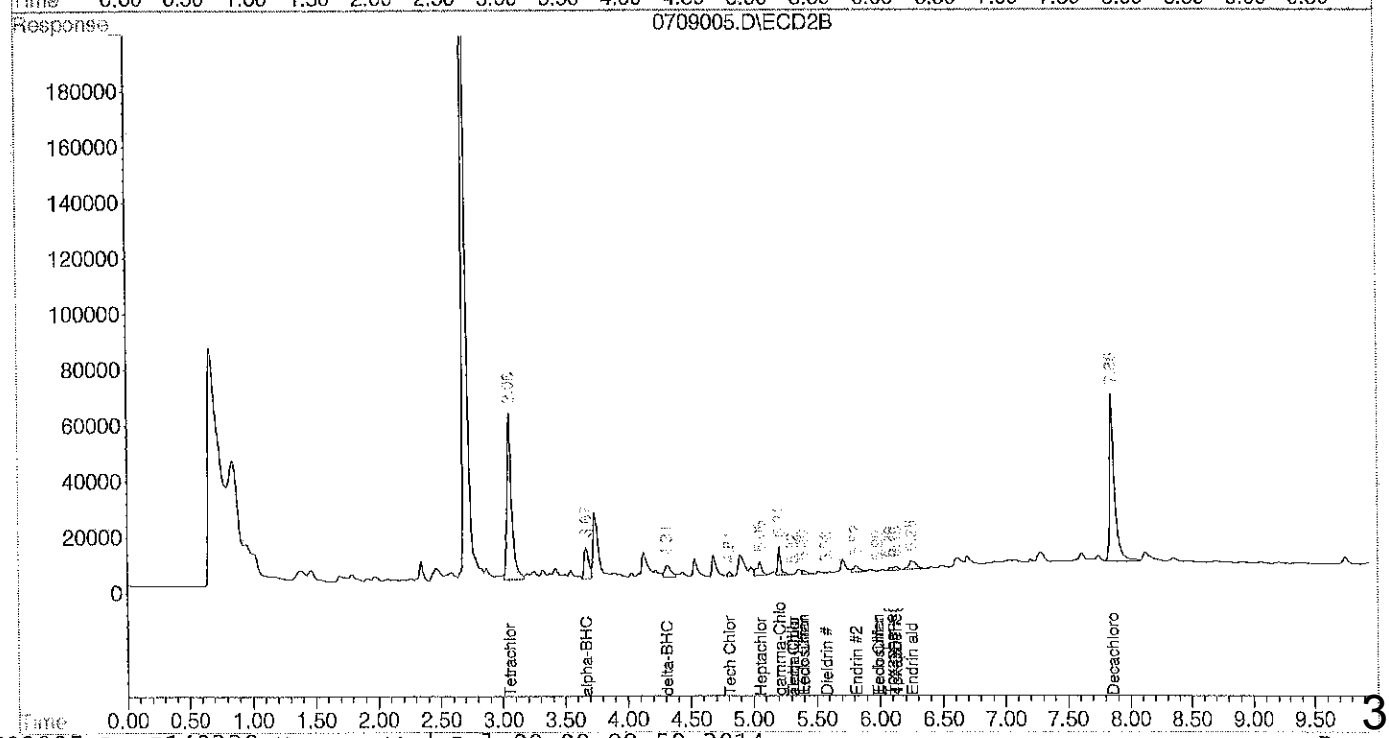
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Quant Time: Jul 9 9:09 2014 Quant Results File: P140328.RES

Quant Method : D:\HPCHEM\1\METHODS\P140328.M (Chemstation Integrator)
Title : Pestcides
Last Update : Mon Jun 30 15:06:57 2014
Response via : Multiple Level Calibration
DataAcq Meth : P140328.M

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (Not Reviewed)

Signal #1 : D:\HPCHEM\1\DATA\G140704\0704008.D\ECD1A.CH Vial: 8
Signal #2 : D:\HPCHEM\1\DATA\G140704\0704008.D\ECD2B.CH
Acq On : 4 Jul 2014 11:53 Operator:
Sample : SB0703W1 Inst : George
Misc : Multiplr: 1.00
Sample Amount: 0.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Quant Time: Jul 4 12:03 2014 Quant Results File: P140328.RES

Quant Method : D:\HPCHEM\1\METHODS\P140328.M (Chemstation Integrator)
Title : Pestcides
Last Update : Mon Jun 30 15:06:57 2014
Response via : Initial Calibration
DataAcq Meth : P140328.M

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb	
	System Monitoring Compounds							
1) S	Tetrachloro-m-xy	2.89	3.07	110431	80682	70.950	86.459	
	Spiked Amount 100.000			Recovery =		70.95%	86.46%	
22) S	Decachlorobiphen	7.30	7.86	101195	72602	97.285	98.928	
	Spiked Amount 100.000			Recovery =		97.28%	98.93%	
	Target Compounds							
2) A	alpha-BHC	3.41	3.65	169466	124014	83.181	102.281	
3) A	gamma-BHC	3.70	3.98	158168	114168	82.092	100.252	
4) A	beta-BHC	3.78	4.06	75562	54117	75.980	88.685	
5) A	delta-BHC	3.93	4.31	131039	92562	71.963	83.064	
6) A	Heptachlor	4.11	4.35	152005	114570	78.036	90.232	
7) A	Aldrin	4.37	4.62	139857	100399	82.865	97.167	
8) A	Heptachlor epoxi	4.85	5.08	131608	93827	82.463	93.694	
9) A	gamma-Chlordane	4.95	5.23	132146	103888	81.448	100.664	
10) A	alpha-Chlordane	5.06	5.34	125853	91966	80.767	92.139	
11) A	4,4'-DDE	5.12	5.47	125056	90499	86.345	100.462	
12) A	Endosulfan I	5.16	5.38	133903	97074	87.604	97.049	
13) A	Dieldrin	5.35	5.60	131867	94313	87.982	101.368	
14) A	Endrin	5.52	5.83	121590	84914	91.589	104.235	
15) A	4,4'-DDD	5.57	5.91	100744	73538	86.949	103.876	
16) A	Endosulfan II	5.69	5.99	111081	79218	84.240	93.120	
17) A	4,4'-DDT	5.78	6.15	112495	81598	88.584	101.302	
18) A	Endrin aldehyde	6.00	6.25	85631	64652	82.878	93.040	
19) A	Methoxychlor	6.15	6.66	58693	44541	85.073	94.284	
20) A	Endosulfan sulfa	6.32	6.45	96482	70403	85.892	94.202	
21) A	Endrin ketone	6.53	6.86	120642	85139	97.562	90.358	
23) L8	Toxaphene{1}	0.00	5.91	0	73538	N.D.	4988.362	#
24) L8	Toxaphene{2}	5.78	0.00	112495	0	3032.167	N.D.	#
25) L8	Toxaphene{3}	0.00	6.15	0	81598	N.D.	2286.048	#
26) L8	Toxaphene{4}	0.00	0.00	0	0	N.D.	N.D.	
27) L8	Toxaphene{5}	6.32	0.00	96482	0	3015.939	N.D.	#
	Sum Toxaphene			208977	155135	6048.106	7274.410	
	Average Toxaphene					3024.053	3637.205	
28) L9	Tech Chlordane{1	4.22	4.80	54247	335	514.741	8.069	#
29) L9	Tech Chlordane{2	4.85	5.34	131608	91966	3652.797	793.193	#
30) L9	Tech Chlordane{3	5.06	5.38	125853	97074	752.094	1313.276	#
31) L9	Tech Chlordane{4	5.12	5.38	125056	97074	607.419	916.311	#
32) L9	Tech Chlordane{5	5.78	5.99	112495	79218	2184.889	5359.363	#
	Sum Tech Chlordane			549259	365666	7711.939	8390.212	
	Average Tech Chlordane					1542.388	1678.042	

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

Quantitation Report (Not Reviewed)

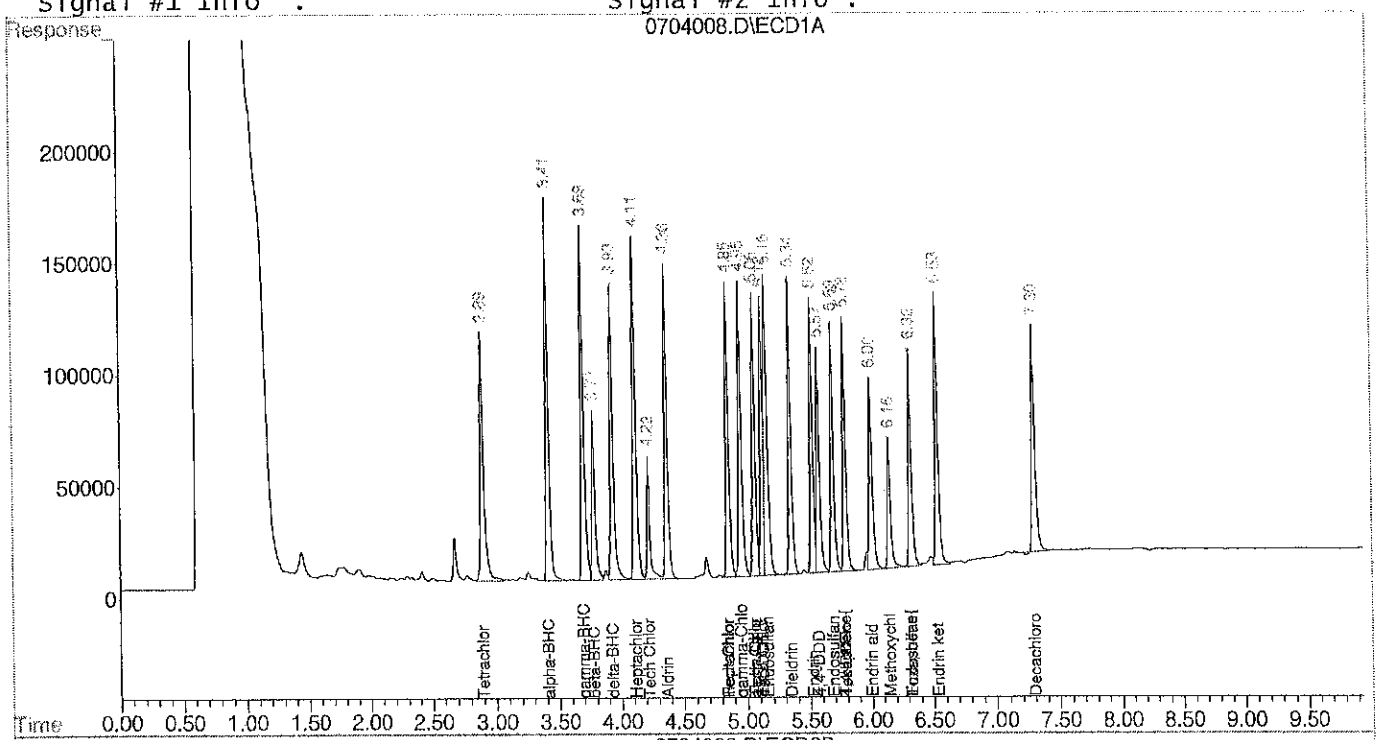
Signal #1 : D:\HPCHEM\1\DATA\G140704\0704008.D\ECD1A.CH Vial: 8
Signal #2 : D:\HPCHEM\1\DATA\G140704\0704008.D\ECD2B.CH
Acq On : 4 Jul 2014 11:53 Operator:
Sample : SB0703W1 Inst : George
Misc : Multiplr: 1.00
Sample Amount: 0.00

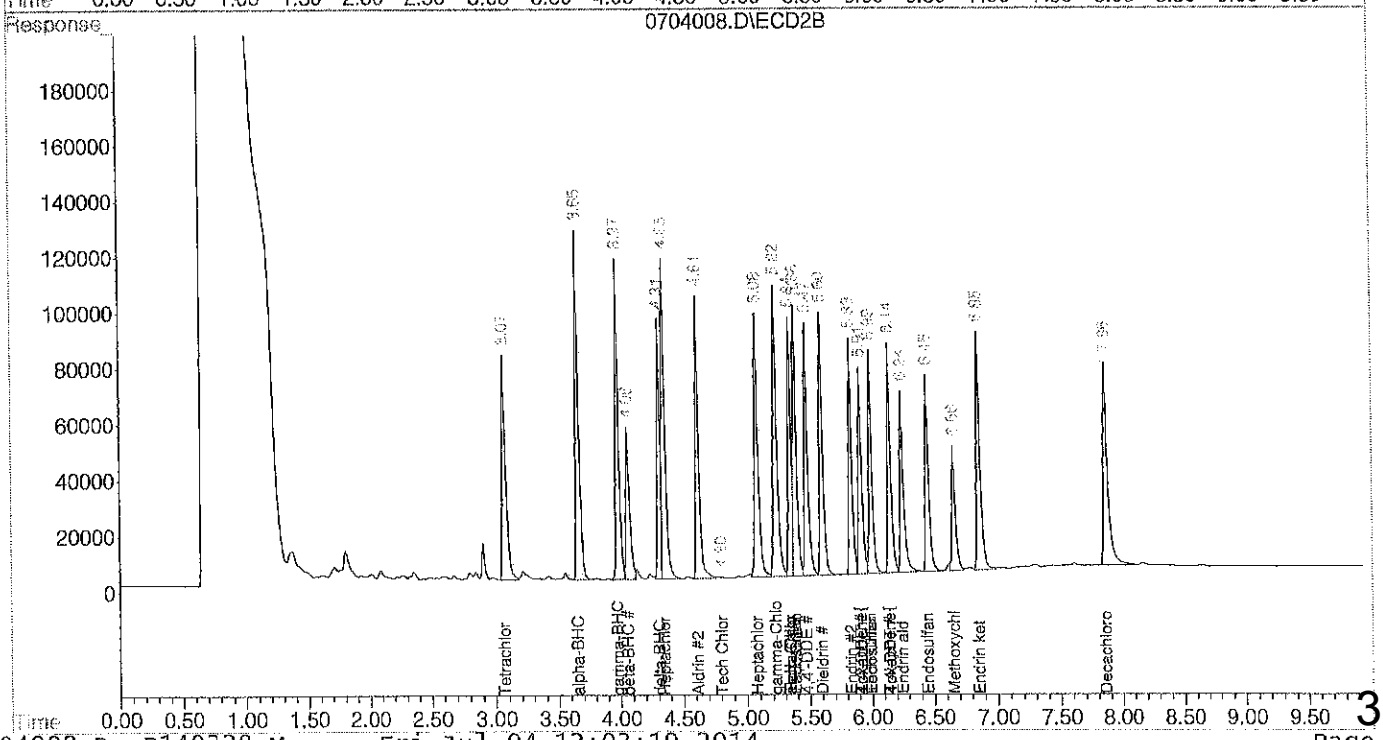
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Quant Time: Jul 4 12:03 2014 Quant Results File: P140328.RES

Quant Method : D:\HPCHEM\1\METHODS\P140328.M (Chemstation Integrator)
Title : Pestcides
Last Update : Mon Jun 30 15:06:57 2014
Response via : Multiple Level Calibration
DataAcq Meth : P140328.M

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (Not Reviewed)

Signal #1 : D:\HPCHEM\1\DATA\G140704\0704009.D\ECD1A.CH Vial: 9
Signal #2 : D:\HPCHEM\1\DATA\G140704\0704009.D\ECD2B.CH
Acq On : 4 Jul 2014 12:06 Operator:
Sample : SB0703W1 DUP Inst : George
Misc : Multiplr: 1.00
Sample Amount: 0.00

IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Quant Time: Jul 4 12:16 2014 Quant Results File: P140328.RES

Quant Method : D:\HPCHEM\1\METHODS\P140328.M (Chemstation Integrator)
Title : Pestcides
Last Update : Mon Jun 30 15:06:57 2014
Response via : Initial Calibration
DataAcq Meth : P140328.M

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb	
	System Monitoring Compounds							
1)	S Tetrachloro-m-xy	2.89	3.07	105095	77057	67.521	82.575	
	Spiked Amount 100.000			Recovery	=	67.52%	82.58%	
22)	S Decachlorobiphen	7.30	7.86	98256	70031	94.314	95.244	
	Spiked Amount 100.000			Recovery	=	94.31%	95.24%	
	Target Compounds							
2)	A alpha-BHC	3.41	3.66	168715	122541	82.812	101.066	
3)	A gamma-BHC	3.70	3.98	155494	113706	80.704	99.846	
4)	A beta-BHC	3.78	4.06	74731	53742	75.144	88.070	
5)	A delta-BHC	3.93	4.31	129965	94432	71.373	84.741	
6)	A Heptachlor	4.11	4.35	149536	115719	76.768	91.137	
7)	A Aldrin	4.37	4.61	139785	98877	82.822	95.695	
8)	A Heptachlor epoxi	4.85	5.08	129754	93047	81.301	92.915	
9)	A gamma-Chlordane	4.95	5.23	131173	98027	80.848	94.984	
10)	A alpha-Chlordane	5.06	5.34	124540	90874	79.925	91.045	
11)	A 4,4'-DDE	5.12	5.47	125562	89719	86.694	99.596	
12)	A Endosulfan I	5.16	5.38	134095	98641	87.730	98.616	
13)	A Dieldrin	5.34	5.60	129669	92546	86.516	99.469	
14)	A Endrin	5.52	5.83	120303	83561	90.619	102.575	
15)	A 4,4'-DDD	5.57	5.91	99597	71481	85.959	100.972	
16)	A Endosulfan II	5.69	5.99	108253	77903	82.096	91.575	
17)	A 4,4'-DDT	5.78	6.15	110195	79769	86.774	99.031	
18)	A Endrin aldehyde	6.00	6.25	83789	63042	81.096	90.723	
19)	A Methoxychlor	6.15	6.66	57723	43672	83.666	92.446	
20)	A Endosulfan sulfa	6.32	6.45	94392	69126	84.032	92.492	
21)	A Endrin ketone	6.53	6.86	117377	83178	94.895	88.277	
23)	L8 Toxaphene{1}	0.00	5.91	0	71481	N.D.	4848.884	#
24)	L8 Toxaphene{2}	5.78	0.00	110195	0	2970.199	N.D.	#
25)	L8 Toxaphene{3}	0.00	6.15	0	79769	N.D.	2234.803	#
26)	L8 Toxaphene{4}	0.00	0.00	0	0	N.D.	N.D.	
27)	L8 Toxaphene{5}	6.32	0.00	94392	0	2950.601	N.D.	#
	Sum Toxaphene			204588	151250	5920.801	7083.686	
	Average Toxaphene					2960.400	3541.843	
28)	L9 Tech Chlordane{1	4.22	4.80	31845	282	302.168	6.788	#
29)	L9 Tech Chlordane{2	4.85	5.34	129754	90874	3601.333	783.775	#
30)	L9 Tech Chlordane{3	5.06	5.38	124540	98641	744.245	1334.486	#
31)	L9 Tech Chlordane{4	5.12	5.38	125562	98641	609.873	931.109	#
32)	L9 Tech Chlordane{5	5.78	5.99	110195	77903	2140.237	5270.456	#
	Sum Tech Chlordane			521895	366342	7397.856	8326.614	
	Average Tech Chlordane					1479.571	1665.323	

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

Quantitation Report (Not Reviewed)

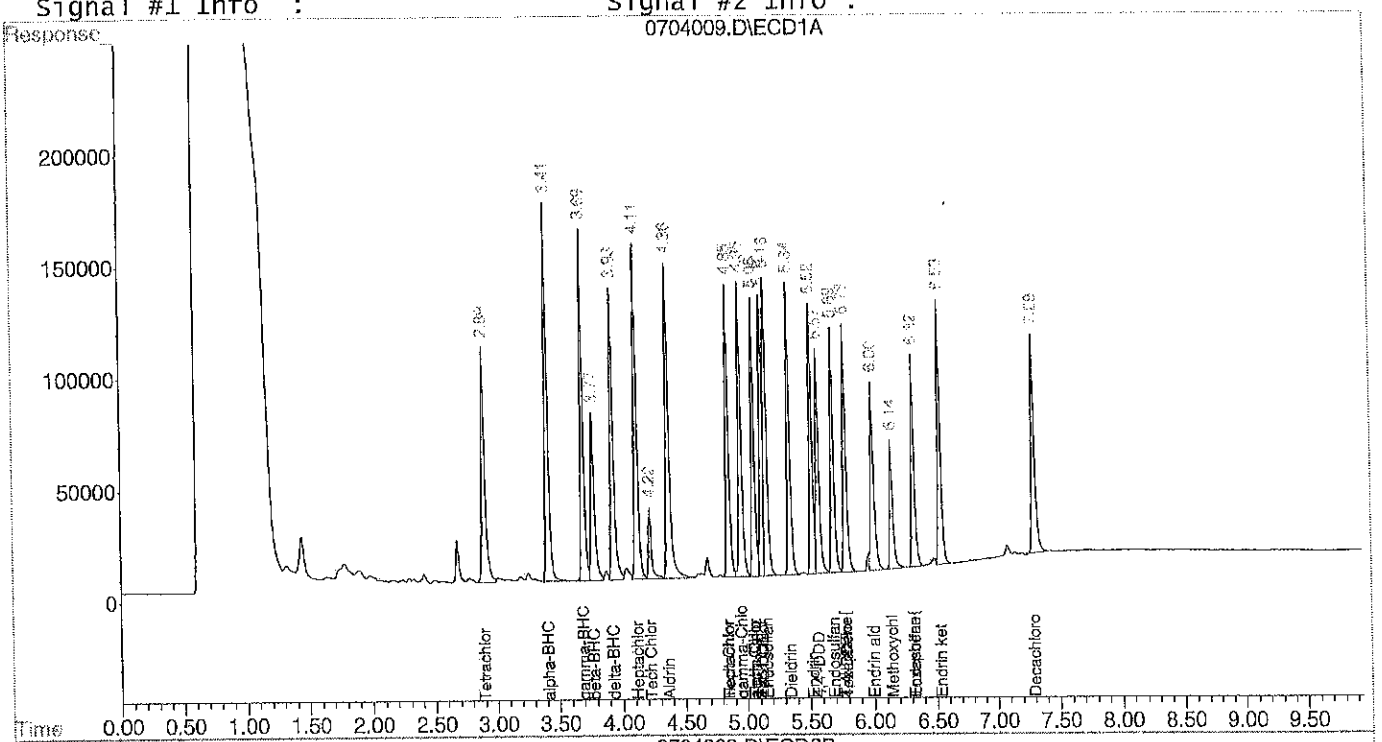
Signal #1 : D:\HPCHEM\1\DATA\G140704\0704009.D\ECD1A.CH Vial: 9
Signal #2 : D:\HPCHEM\1\DATA\G140704\0704009.D\ECD2B.CH
Acq On : 4 Jul 2014 12:06 Operator:
Sample : SB0703W1 DUP Inst : George
Misc : Multiplr: 1.00
Sample Amount: 0.00

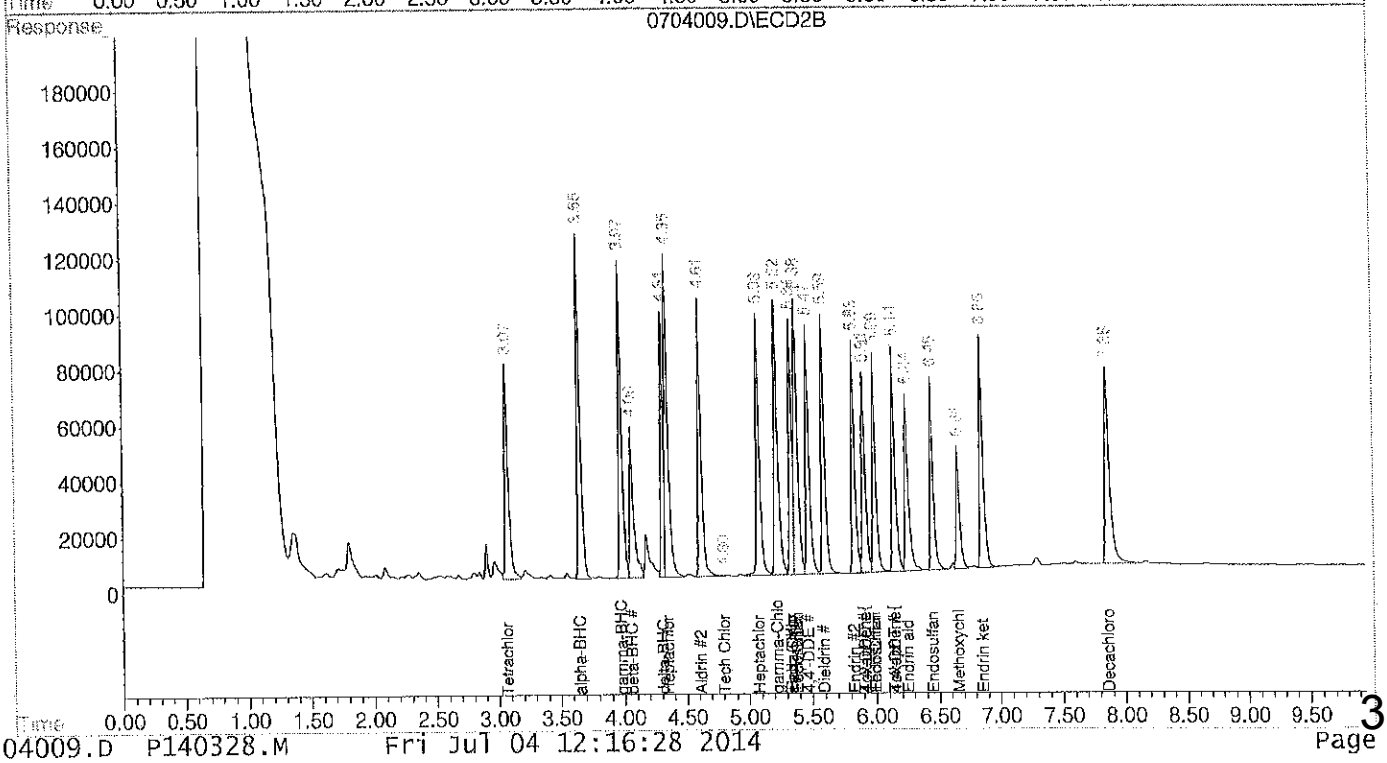
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Quant Time: Jul 4 12:16 2014 Quant Results File: P140328.RES

Quant Method : D:\HPCHEM\1\METHODS\P140328.M (Chemstation Integrator)
Title : Pestcides
Last Update : Mon Jun 30 15:06:57 2014
Response via : Multiple Level Calibration
DataAcq Meth : P140328.M

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (Not Reviewed)

Signal #1 : D:\HPCHEM\1\DATA\G140704\0704003.D\ECD1A.CH Vial: 3
Signal #2 : D:\HPCHEM\1\DATA\G140704\0704003.D\ECD2B.CH
Acq On : 4 Jul 2014 10:46 Operator:
Sample : PEST EVAL 0704-1 (PS3-85-06) Inst : George
Misc : Multiplr: 1.00
Sample Amount: 0.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Quant Time: Jul 4 10:56 2014 Quant Results File: P140328.RES

Quant Method : D:\HPCHEM\1\METHODS\P140328.M (Chemstation Integrator)
Title : Pestcides
Last Update : Mon Jun 30 15:06:57 2014
Response via : Initial Calibration
DataAcq Meth : P140328.M

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

% Breakdown

	1	2
DDT	3.1%	3.5%
Endrin	2.3%	3.5%

Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
System Monitoring Compounds						
1) S Tetrachloro-m-xy	0.00	0.00	0	0	N.D.	N.D.
Spiked Amount 100.000			Recovery	=	0.00%	0.00%
22) S Decachlorobiphen	0.00	0.00	0	0	N.D.	N.D.
Spiked Amount 100.000			Recovery	=	0.00%	0.00%
Target Compounds						
2) A alpha-BHC	0.00	3.66	0	119	N.D.	0.098 #
3) A gamma-BHC	0.00	0.00	0	0	N.D.	N.D.
4) A beta-BHC	0.00	0.00	0	0	N.D.	N.D.
5) A delta-BHC	0.00	0.00	0	0	N.D.	N.D.
6) A Heptachlor	0.00	4.34	0	95	N.D.	0.075 #
7) A Aldrin	0.00	0.00	0	0	N.D.	N.D.
8) A Heptachlor epoxi	0.00	0.00	0	0	N.D.	N.D.
9) A gamma-Chlordane	0.00	5.21	0	917	N.D.	0.888 #
10) A alpha-Chlordane	0.00	5.33	0	529	N.D.	0.530 #
11) A 4,4'-DDE	5.13	5.47	3626	3019	2.504	3.352 #
12) A Endosulfan I	0.00	0.00	0	0	N.D.	N.D.
13) A Dieldrin	5.35	5.60	201	216	0.134	0.233 #
14) A Endrin	5.52	5.83	129578	88774	97.606	108.974
15) A 4,4'-DDD	0.00	0.00	0	0	N.D.	N.D.
16) A Endosulfan II	5.71f	0.00	118	0	0.089	N.D. #
17) A 4,4'-DDT	5.79	6.15	114392	83653	90.079	103.854
18) A Endrin aldehyde	6.00	6.25	810	1187	0.784	1.708 #
19) A Methoxychlor	0.00	0.00	0	0	N.D.	N.D.
20) A Endosulfan sulfa	0.00	6.45	0	1176	N.D.	1.573 #
21) A Endrin ketone	6.54	6.86	2219	2036	0.856	2.160 #
23) L8 Toxaphene{1}	0.00	0.00	0	0	N.D.	N.D.
24) L8 Toxaphene{2}	5.79	6.07	114392	600	3083.314	23.919 #
25) L8 Toxaphene{3}	0.00	6.15	0	83653	N.D.	2343.633 #
26) L8 Toxaphene{4}	0.00	0.00	0	0	N.D.	N.D.
27) L8 Toxaphene{5}	0.00	0.00	0	0	N.D.	N.D.
Sum Toxaphene			114392	84253	3083.314	2367.552
Average Toxaphene					3083.314	1183.776
28) L9 Tech Chlordane{1	4.22	0.00	1352	0	12.828	N.D. #
29) L9 Tech Chlordane{2	0.00	5.33	0	529	N.D.	4.558 #
30) L9 Tech Chlordane{3	0.00	0.00	0	0	N.D.	N.D.
31) L9 Tech Chlordane{4	5.13	0.00	3626	0	17.612	N.D. #
32) L9 Tech Chlordane{5	5.79	0.00	114392	0	2221.744	N.D. #
Sum Tech Chlordane			119370	529	2252.185	4.558
Average Tech Chlordane					750.728	4.558

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

Quantitation Report (Not Reviewed)

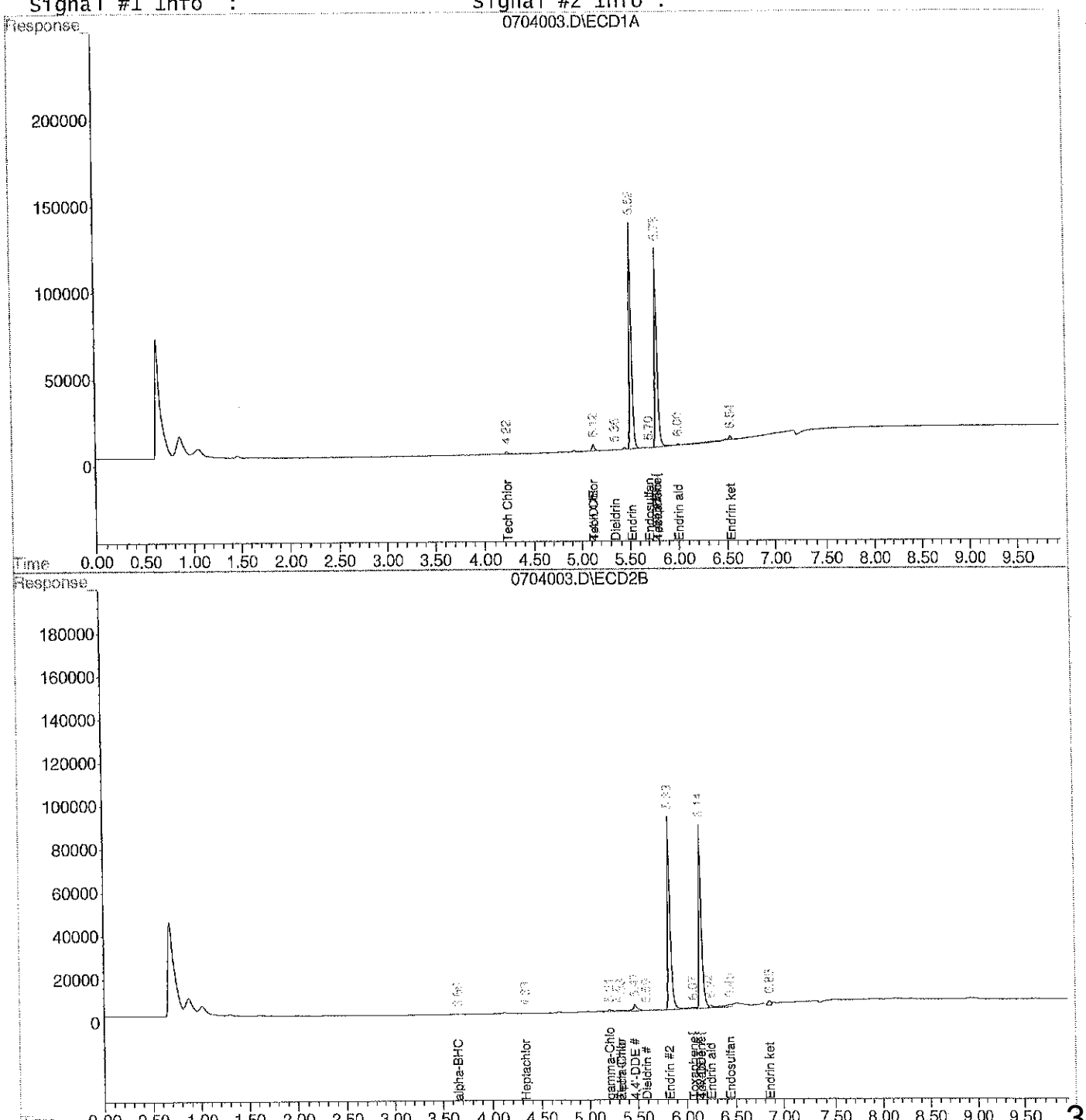
Signal #1 : D:\HPCHEM\1\DATA\G140704\0704003.D\ECD1A.CH Vial: 3
Signal #2 : D:\HPCHEM\1\DATA\G140704\0704003.D\ECD2B.CH
Acq On : 4 Jul 2014 10:46 Operator:
Sample : PEST EVAL 0704-1 (PS3-85-06) Inst : George
Misc : Multiplr: 1.00
Sample Amount: 0.00

IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Quant Time: Jul 4 10:56 2014 Quant Results File: P140328.RES

Quant Method : D:\HPCHEM\1\METHODS\P140328.M (Chemstation Integrator)
Title : Pestcides
Last Update : Mon Jun 30 15:06:57 2014
Response via : Multiple Level Calibration
DataAcq Meth : P140328.M

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Quantitation Report (Not Reviewed)

Signal #1 : D:\HPCHEM\1\DATA\G140709\0709003.D\ECD1A.CH Vial: 3
Signal #2 : D:\HPCHEM\1\DATA\G140709\0709003.D\ECD2B.CH
Acq On : 9 Jul 2014 8:27 Operator:
Sample : PEST EVAL 0709-1 (PS3-85-06) Inst : George
Misc : Multiplr: 1.00
Sample Amount: 0.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Quant Time: Jul 9 8:37 2014 Quant Results File: P140328.RES

Quant Method : D:\HPCHEM\1\METHODS\P140328.M (Chemstation Integrator)
Title : Pestcides
Last Update : Mon Jun 30 15:06:57 2014
Response via : Initial Calibration
DataAcq Meth : P140328.M

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
System Monitoring Compounds						
1) S Tetrachloro-m-xy	0.00	0.00	0	0	N.D.	N.D.
Spiked Amount 100.000			Recovery	=	0.00%	0.00%
22) S Decachlorobiphen	0.00	7.86	0	232	N.D.	N.D.
Spiked Amount 100.000			Recovery	=	0.00%	0.00%
Target Compounds						
2) A alpha-BHC	0.00	3.63f	0	90	N.D.	0.074 #
3) A gamma-BHC	0.00	0.00	0	0	N.D.	N.D.
4) A beta-BHC	0.00	0.00	0	0	N.D.	N.D.
5) A delta-BHC	0.00	0.00	0	0	N.D.	N.D.
6) A Heptachlor	0.00	0.00	0	0	N.D.	N.D.
7) A Aldrin	0.00	0.00	0	0	N.D.	N.D.
8) A Heptachlor epoxi	0.00	0.00	0	0	N.D.	N.D.
9) A gamma-Chlordane	0.00	5.21f	0	932	N.D.	0.903 #
10) A alpha-Chlordane	0.00	0.00	0	0	N.D.	N.D.
11) A 4,4'-DDE	5.12	5.47	3731	2320	2.576	2.576
12) A Endosulfan I	0.00	5.38	0	51	N.D.	0.051 #
13) A Dieldrin	5.34	5.60	188	114	0.126	0.122
14) A Endrin	5.52	5.83	121707	83261	91.677	102.206
15) A 4,4'-DDD	0.00	0.00	0	0	N.D.	N.D.
16) A Endosulfan II	0.00	0.00	0	0	N.D.	N.D.
17) A 4,4'-DDT	5.78	6.14	113326	80833	89.239	100.352
18) A Endrin aldehyde	6.00	6.24	3288	2544	3.183	3.661
19) A Methoxychlor	0.00	0.00	0	0	N.D.	N.D.
20) A Endosulfan sulfa	0.00	0.00	0	0	N.D.	N.D.
21) A Endrin ketone	6.53	6.85	4944	3823	3.082	4.058 #
23) L8 Toxaphene{1}	5.64f	0.00	249	0	15.718	N.D. #
24) L8 Toxaphene{2}	5.78	0.00	113326	0	3054.578	N.D. #
25) L8 Toxaphene{3}	0.00	6.14	0	80833	N.D.	2264.614 #
26) L8 Toxaphene{4}	0.00	6.34	0	242	N.D.	10.388 #
27) L8 Toxaphene{5}	0.00	6.75	0	833	N.D.	37.264 #
Sum Toxaphene			113575	81908	3070.296	2312.266
Average Toxaphene					1535.148	770.755
28) L9 Tech Chlordane{1	4.22	0.00	2230	0	21.158	N.D. #
29) L9 Tech Chlordane{2	0.00	0.00	0	0	N.D.	N.D.
30) L9 Tech Chlordane{3	0.00	5.38	0	51	N.D.	0.688 #
31) L9 Tech Chlordane{4	5.12	5.38	3731	51	18.121	0.480 #
32) L9 Tech Chlordane{5	5.78	6.02f	113326	189	2201.038	12.778 #
Sum Tech Chlordane			119287	291	2240.317	13.947
Average Tech Chlordane					746.772	4.649

% Breakdown

	1	2
DDT	3.2%	2.8%
Endrin	6.3%	7.1%

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

Quantitation Report (Not Reviewed)

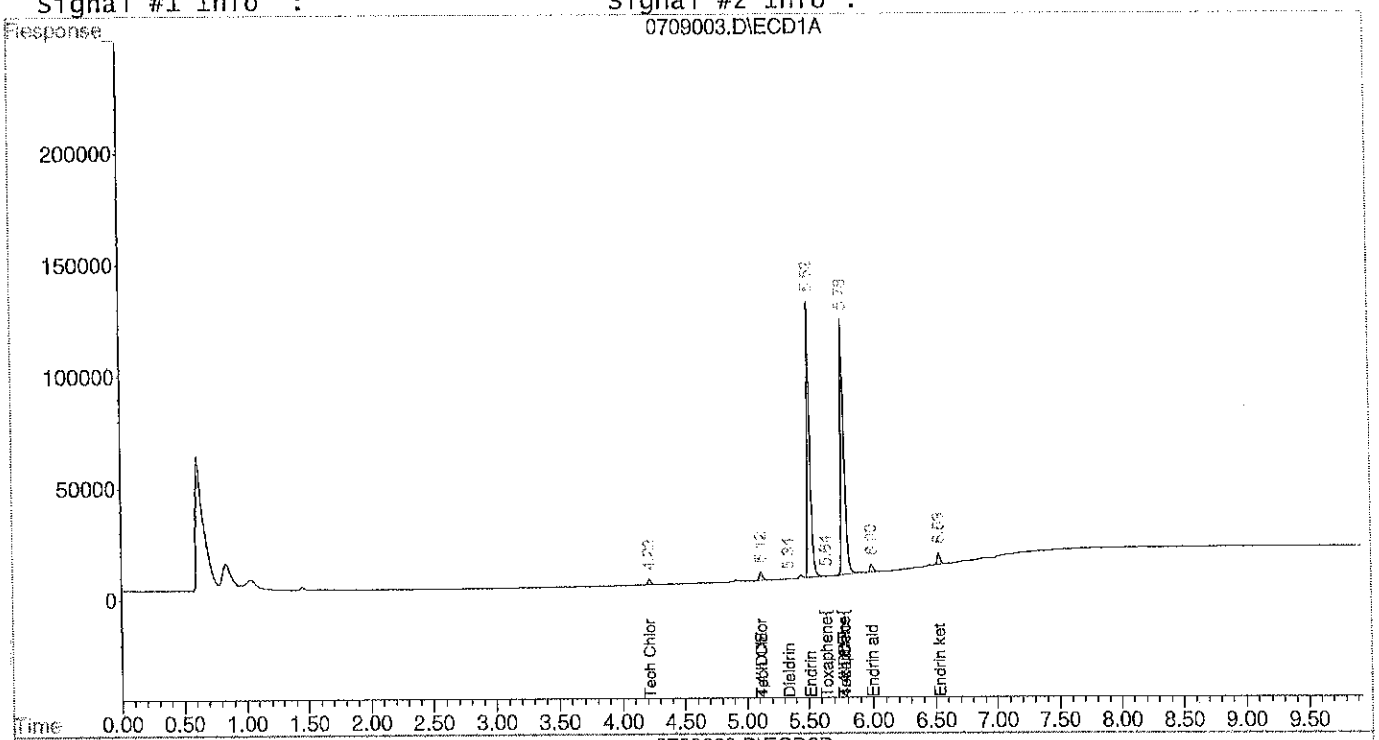
Signal #1 : D:\HPCHEM\1\DATA\G140709\0709003.D\ECD1A.CH Vial: 3
Signal #2 : D:\HPCHEM\1\DATA\G140709\0709003.D\ECD2B.CH
Acq On : 9 Jul 2014 8:27 Operator:
Sample : PEST EVAL 0709-1 (PS3-85-06) Inst : George
Misc : Multiplr: 1.00
Sample Amount: 0.00

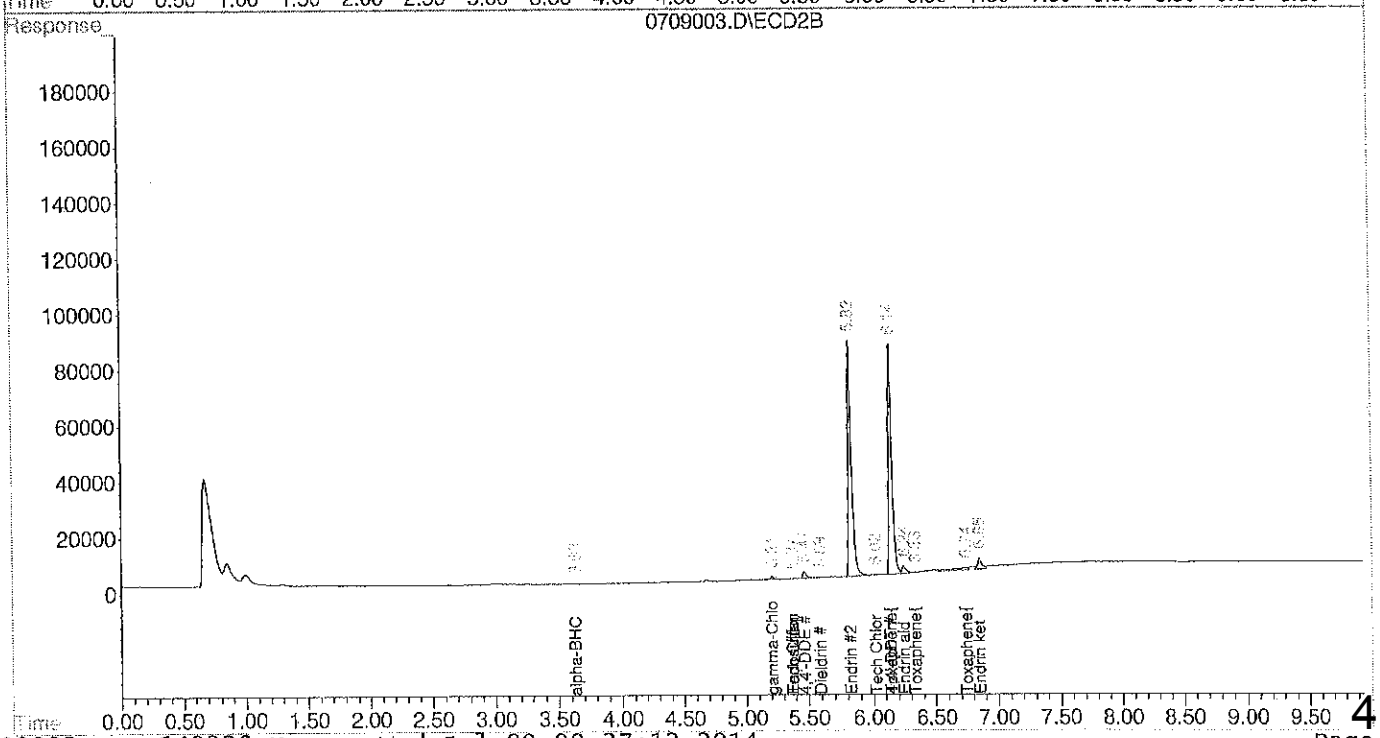
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Quant Time: Jul 9 8:37 2014 Quant Results File: P140328.RES

Quant Method : D:\HPCHEM\1\METHODS\P140328.M (Chemstation Integrator)
Title : Pestcides
Last Update : Mon Jun 30 15:06:57 2014
Response via : Multiple Level Calibration
DataAcq Meth : P140328.M

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (Not Reviewed)

Signal #1 : D:\HPCHEM\1\DATA\G140704\0704004.D\ECD1A.CH Vial: 4
Signal #2 : D:\HPCHEM\1\DATA\G140704\0704004.D\ECD2B.CH
Acq On : 4 Jul 2014 10:59 Operator:
Sample : PEST LOW LEVEL 0704-1 (PS3-89-01) Inst : George
Misc : Multiplr: 1.00
Sample Amount: 0.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Quant Time: Jul 4 11:09 2014 Quant Results File: P140328.RES

Quant Method : D:\HPCHEM\1\METHODS\P140328.M (Chemstation Integrator)
Title : Pestcides
Last Update : Mon Jun 30 15:06:57 2014
Response via : Initial Calibration
DataAcq Meth : P140328.M

KMS 7-1-14

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

		Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb	
		System Monitoring Compounds							
1)	S	Tetrachloro-m-xy	2.90	3.07	15140	10268	9.727	11.003	
		Spiked Amount 100.000			Recovery =		9.73%	11.00%	
22)	S	Decachlorobiphen	7.30	7.87	12844	8627	7.973 +20	7.258 +27	
		Spiked Amount 100.000			Recovery =		7.97%	7.26%	
		Target Compounds							
2)	A	alpha-BHC	3.41	3.66	20455	12938	10.040	10.671	
3)	A	gamma-BHC	3.70	3.98	19443	12274	10.091	10.778	
4)	A	beta-BHC	3.78	4.06	9575	6419	9.628	10.519	
5)	A	delta-BHC	3.93	4.31	16670	11356	9.155	10.191	
6)	A	Heptachlor	4.12	4.35	19880	12375	10.206	9.746	
7)	A	Aldrin	4.37	4.62	17545	10573	10.395	10.233	
8)	A	Heptachlor epoxi	4.85	5.08	16043	9821	10.052	9.807	
9)	A	gamma-Chlordane	4.95	5.23	16317	10459	10.057	10.134	
10)	A	alpha-Chlordane	5.06	5.34	16004	10342	10.271	10.361	
11)	A	4,4'-DDE	5.13	5.47	12823	8692	8.853	9.649	
12)	A	Endosulfan I	5.16	5.38	16001	9668	10.468	9.666	
13)	A	Dieldrin	5.35	5.60	14795	9080	9.871	9.759	
14)	A	Endrin	5.52	5.83	13406	8021	10.098	9.846	
15)	A	4,4'-DDD	5.58	5.91	9470	6473	8.174 +18	9.143	
16)	A	Endosulfan II	5.69	5.99	12936	8214	9.810	9.655	
17)	A	4,4'-DDT	5.79	6.15	11909	7941	9.378	9.858	
18)	A	Endrin aldehyde	6.00	6.25	10089	6869	9.764	9.885	
19)	A	Methoxychlor	6.15	6.66	6331	4607	9.176	9.753	
20)	A	Endosulfan sulfa	6.32	6.45	11201	7543	9.972	10.093	
21)	A	Endrin ketone	6.54	6.86	14556	9356	10.931	9.929	
23)	L8	Toxaphene{1}	0.00	5.91	0	6473	N.D.	439.064	#
24)	L8	Toxaphene{2}	5.79	0.00	11909	0	320.987	N.D.	#
25)	L8	Toxaphene{3}	0.00	6.15	0	7941	N.D.	222.467	#
26)	L8	Toxaphene{4}	0.00	6.34	0	75	N.D.	3.220	#
27)	L8	Toxaphene{5}	6.32	0.00	11201	0	350.131	N.D.	#
		Sum Toxaphene			23110	14488	671.118	664.752	
		Average Toxaphene					335.559	221.584	
28)	L9	Tech Chlordane{1	4.22	0.00	361	0	3.423	N.D.	#
29)	L9	Tech Chlordane{2	4.85	5.34	16043	10342	445.276	89.194	#
30)	L9	Tech Chlordane{3	5.06	5.38	16004	9668	95.640	130.799	#
31)	L9	Tech Chlordane{4	5.13	5.38	12823	9668	62.281	91.262	#
32)	L9	Tech Chlordane{5	5.79	5.99	11909	8214	231.294	555.687	#
		Sum Tech Chlordane			57139	37892	837.913	866.942	
		Average Tech Chlordane					167.583	216.736	

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

Quantitation Report (Not Reviewed)

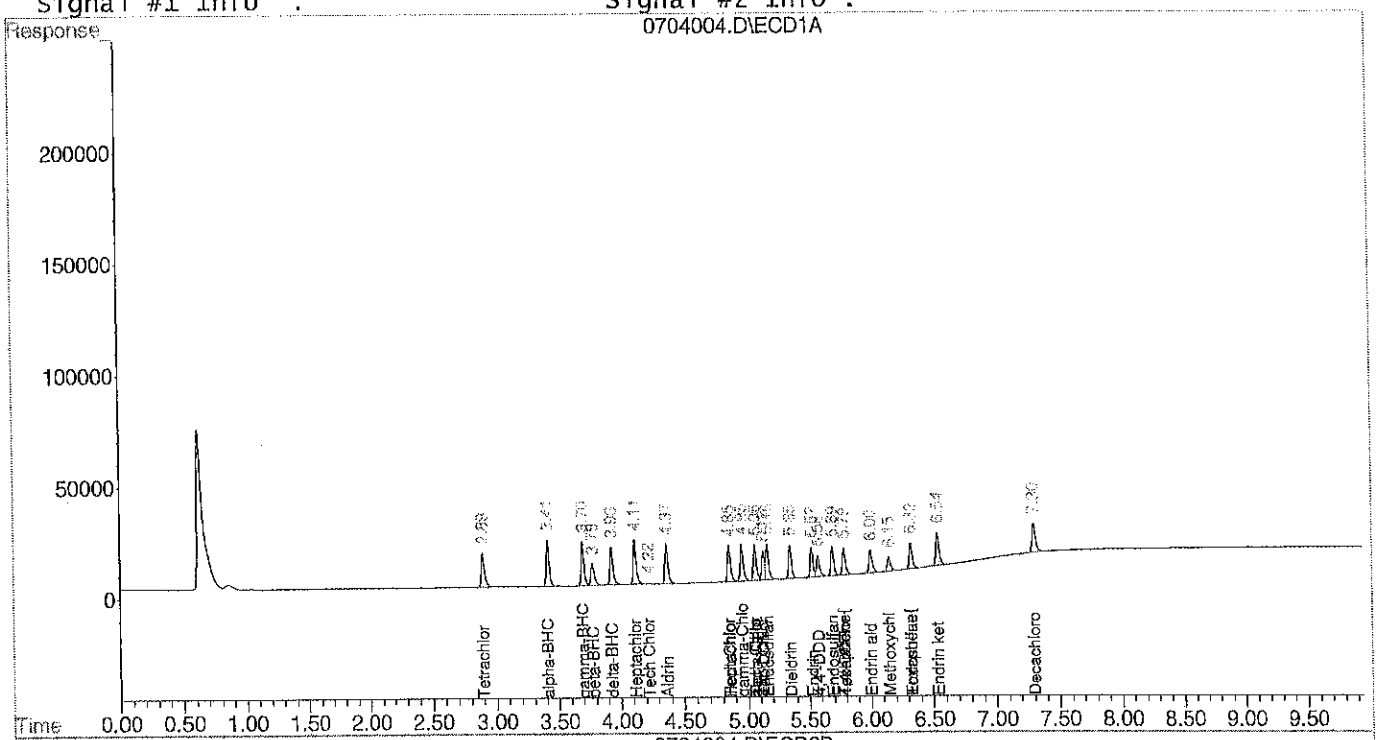
Signal #1 : D:\HPCHEM\1\DATA\G140704\0704004.D\ECD1A.CH Vial: 4
Signal #2 : D:\HPCHEM\1\DATA\G140704\0704004.D\ECD2B.CH
Acq On : 4 Jul 2014 10:59 Operator:
Sample : PEST LOW LEVEL 0704-1 (PS3-89-01) Inst : George
Misc : Multiplr: 1.00
Sample Amount: 0.00

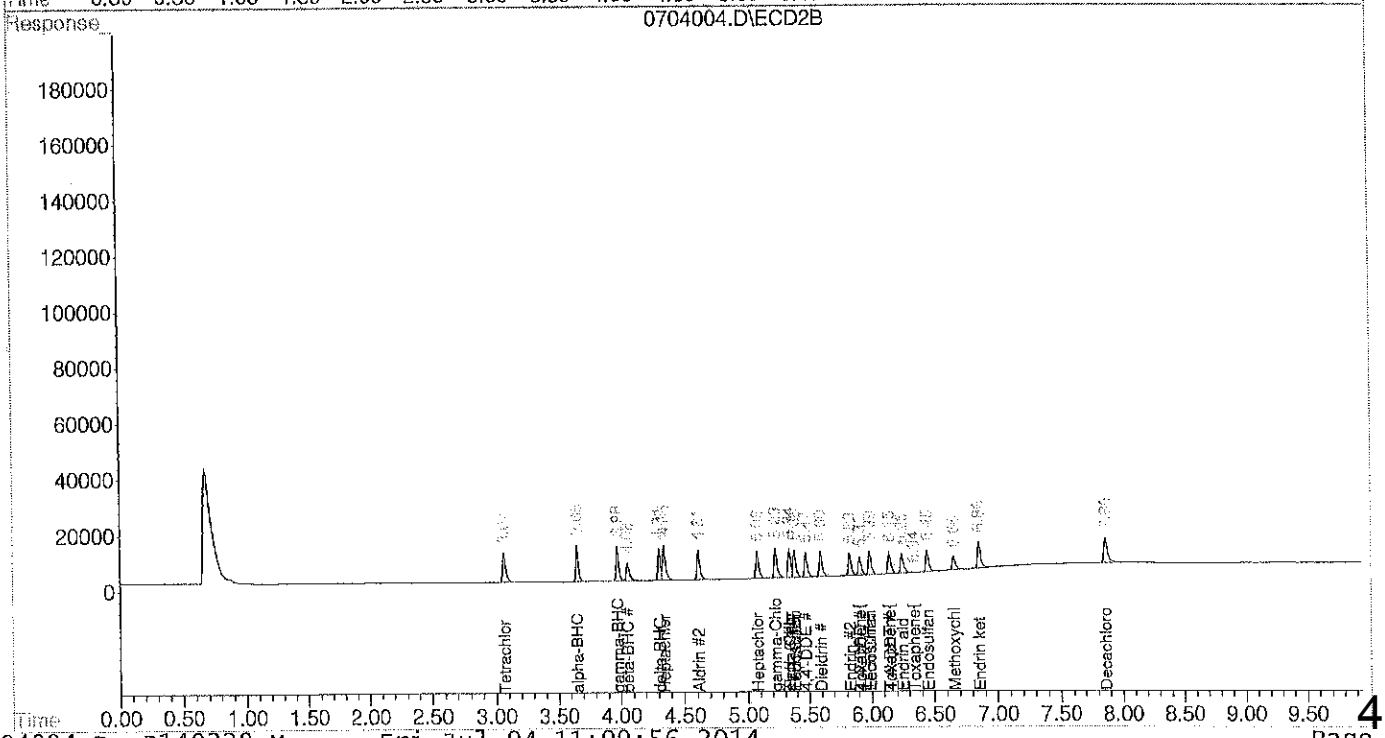
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Quant Time: Jul 4 11:09 2014 Quant Results File: P140328.RES

Quant Method : D:\HPCHEM\1\METHODS\P140328.M (Chemstation Integrator)
Title : Pestcides
Last Update : Mon Jun 30 15:06:57 2014
Response via : Multiple Level Calibration
DataAcq Meth : P140328.M

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (Not Reviewed)

Signal #1 : D:\HPCHEM\1\DATA\G140704\0704005.D\ECD1A.CH Vial: 5
Signal #2 : D:\HPCHEM\1\DATA\G140704\0704005.D\ECD2B.CH
Acq On : 4 Jul 2014 11:13 Operator:
Sample : PEST MID LEVEL 0704-1 (PS3-89-02) Inst : George
Misc : Multiplr: 1.00
Sample Amount: 0.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Quant Time: Jul 4 11:23 2014 Quant Results File: P140328.RES

Quant Method : D:\HPCHEM\1\METHODS\P140328.M (Chemstation Integrator)
Title : Pestcides
Last Update : Mon Jun 30 15:06:57 2014
Response via : Initial Calibration
DataAcq Meth : P140328.M

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

KMS 7-1-14

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb	
	System Monitoring Compounds							
1) S	Tetrachloro-m-xy	2.89	3.06	127213	94186	81.732 +18	100.930	
	Spiked Amount 100.000			Recovery =		81.73%	100.93%	
22) S	Decachlorobiphen	7.30	7.86	99456	71371	95.528	97.164	
	Spiked Amount 100.000			Recovery =		95.53%	97.16%	
	Target Compounds							
2) A	alpha-BHC	3.41	3.65	193988	143034	95.217	117.967 -18	
3) A	gamma-BHC	3.70	3.98	176962	128952	91.847	113.233	
4) A	beta-BHC	3.78	4.06	82257	60443	82.712 +17	99.051	
5) A	delta-BHC	3.93	4.31	167090	125929	91.760	113.007	
6) A	Heptachlor	4.11	4.35	165840	133256	85.138	104.949	
7) A	Aldrin	4.37	4.61	161482	115061	95.677	111.358	
8) A	Heptachlor epoxi	4.85	5.08	138692	99857	86.902	99.715	
9) A	gamma-Chlordane	4.95	5.23	144321	103790	88.952	100.568	
10) A	alpha-Chlordane	5.06	5.34	138115	99539	88.636	99.726	
11) A	4,4'-DDE	5.12	5.47	125679	96625	86.775	107.262	
12) A	Endosulfan I	5.16	5.38	144087	103385	94.267	103.358	
13) A	Dieldrin	5.35	5.60	138698	100701	92.540	108.233	
14) A	Endrin	5.52	5.83	124583	85649	93.843	105.138	
15) A	4,4'-DDD	5.57	5.91	100455	75956	86.699	107.292	
16) A	Endosulfan II	5.69	5.99	116239	83053	88.152	97.628	
17) A	4,4'-DDT	5.79	6.15	114097	83514	89.846	103.680	
18) A	Endrin aldehyde	6.00	6.25	88113	65276	85.281	93.937	
19) A	Methoxychlor	6.15	6.66	55945	42906	81.090 +19	90.824	
20) A	Endosulfan sulfa	6.32	6.45	102382	76141	91.145	101.879	
21) A	Endrin ketone	6.54	6.86	124722	88421	100.894	93.842	
23) L8	Toxaphene{1}	0.00	5.91	0	75956	N.D.	5152.400	#
24) L8	Toxaphene{2}	5.79	0.00	114097	0	3075.364	N.D.	#
25) L8	Toxaphene{3}	0.00	6.15	0	83514	N.D.	2339.719	#
26) L8	Toxaphene{4}	0.00	6.34	0	978	N.D.	42.029	#
27) L8	Toxaphene{5}	6.32	6.75	102382	150	3200.361	6.715	#
	Sum Toxaphene			216479	160597	6275.725	7540.863	
	Average Toxaphene					3137.862	1885.216	
28) L9	Tech Chlordane{1	4.22	0.00	1119	0	10.620	N.D.	#
29) L9	Tech Chlordane{2	4.85	5.34	138692	99539	3849.415	858.507	#
30) L9	Tech Chlordane{3	5.06	5.38	138115	103385	825.369	1398.655	#
31) L9	Tech Chlordane{4	5.12	5.38	125679	103385	610.442	975.882	#
32) L9	Tech Chlordane{5	5.79	5.99	114097	83053	2216.015	5618.815	#
	Sum Tech Chlordane			517702	389360	7511.861	8851.859	
	Average Tech Chlordane					1502.372	2212.965	

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

Quantitation Report (Not Reviewed)

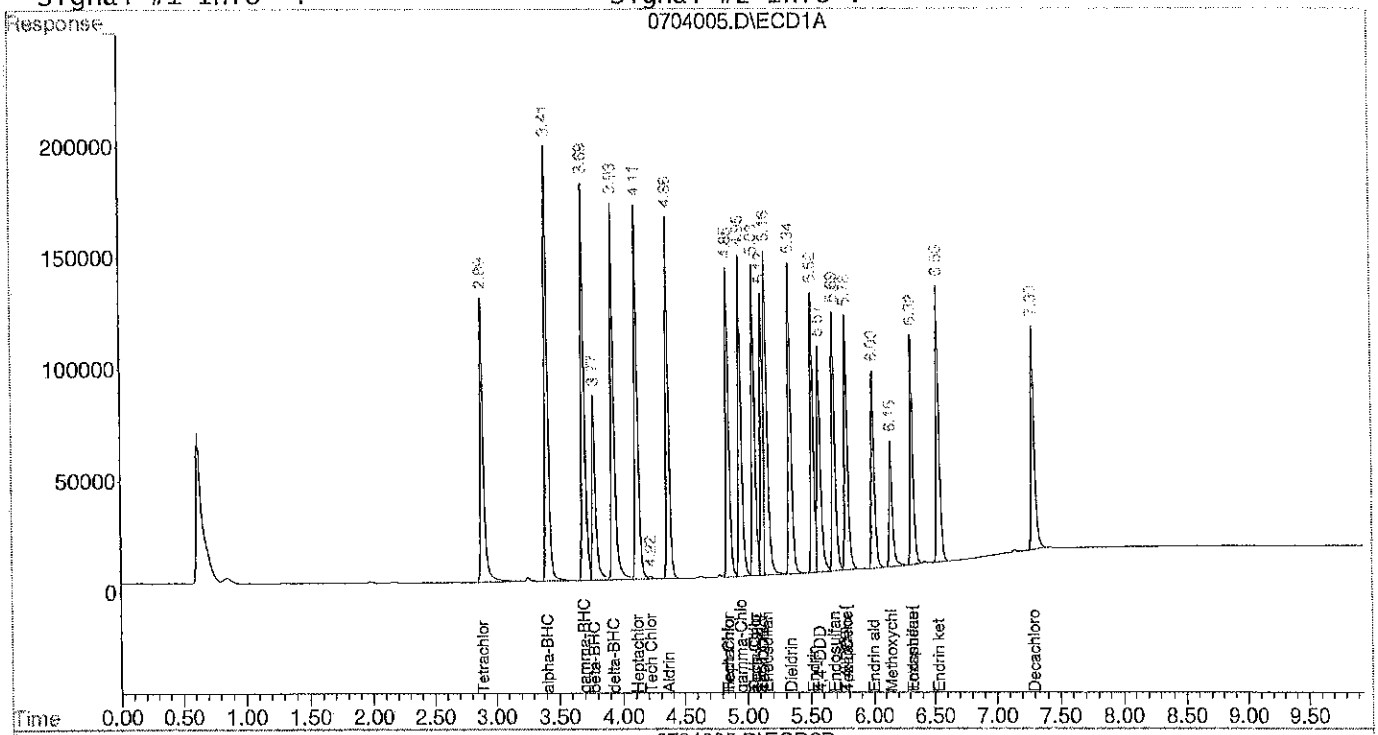
Signal #1 : D:\HPCHEM\1\DATA\G140704\0704005.D\ECD1A.CH Vial: 5
Signal #2 : D:\HPCHEM\1\DATA\G140704\0704005.D\ECD2B.CH
Acq On : 4 Jul 2014 11:13 Operator:
Sample : PEST MID LEVEL 0704-1 (PS3-89-02) Inst : George
Misc : Multiplr: 1.00
Sample Amount: 0.00

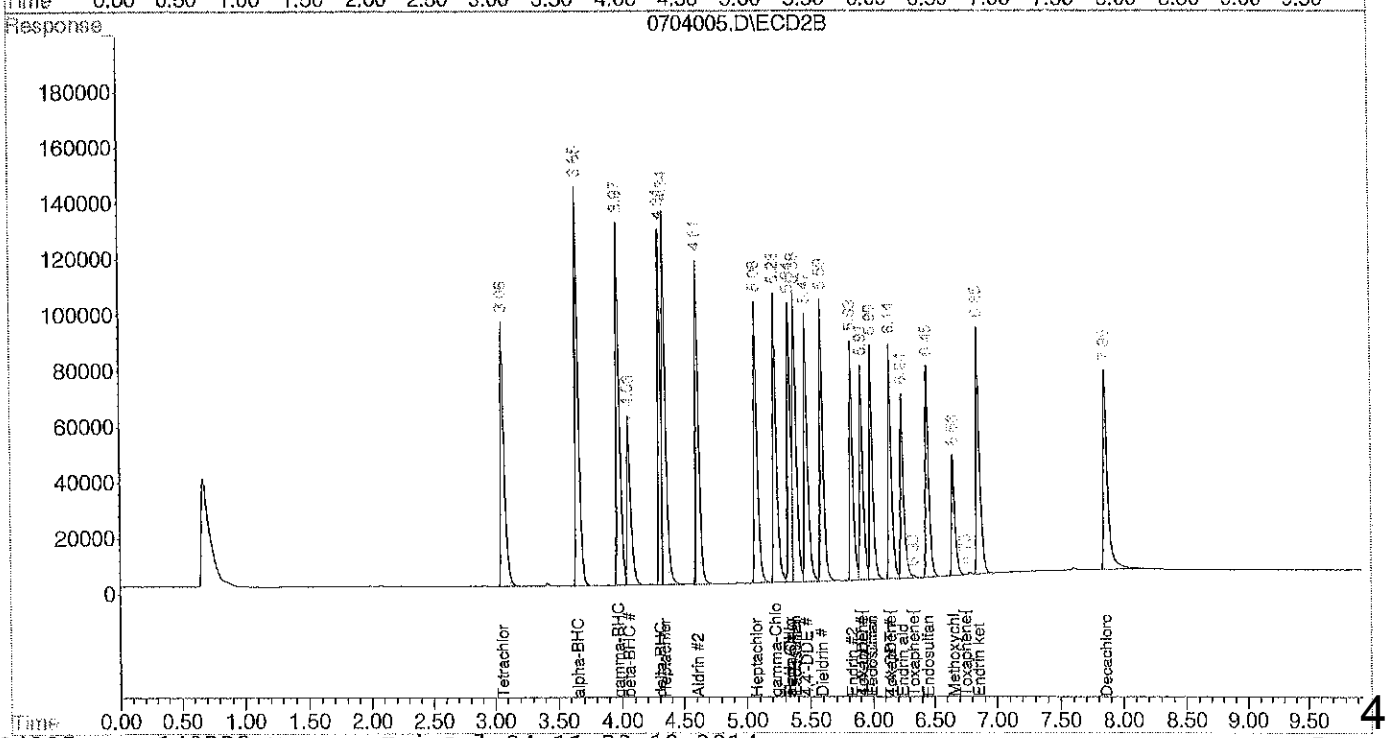
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Quant Time: Jul 4 11:23 2014 Quant Results File: P140328.RES

Quant Method : D:\HPCHEM\1\METHODS\P140328.M (Chemstation Integrator)
Title : Pestcides
Last Update : Mon Jun 30 15:06:57 2014
Response via : Multiple Level Calibration
DataAcq Meth : P140328.M

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (Not Reviewed)

Signal #1 : D:\HPCHEM\1\DATA\G140704\0704006.D\ECD1A.CH Vial: 6
Signal #2 : D:\HPCHEM\1\DATA\G140704\0704006.D\ECD2B.CH
Acq On : 4 Jul 2014 11:26 Operator:
Sample : PEST HIGH LEVEL 0704-1 (PS3-89-03) Inst : George
Misc : Multiplr: 1.00
Sample Amount: 0.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Quant Time: Jul 4 11:36 2014 Quant Results File: P140328.RES

Quant Method : D:\HPCHEM\1\METHODS\P140328.M (Chemstation Integrator)
Title : Pestcides
Last Update : Mon Jun 30 15:06:57 2014
Response via : Initial Calibration
DataAcq Meth : P140328.M

KMS 7-11-14

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
1)	S Tetrachloro-m-xy	2.89	3.06	247652	184733	159.112	197.961
	Spiked Amount 100.000			Recovery	=	159.11%	197.96%
22)	S Decachlorobiphen	7.30	7.86	198015	143537	195.158	200.570
	Spiked Amount 100.000			Recovery	=	195.16%	200.57%
	Target Compounds						
2)	A alpha-BHC	3.41	3.65	382255	285931	187.626	235.822 #
3)	A gamma-BHC	3.70	3.98	349243	257297	181.264	225.934
4)	A beta-BHC	3.78	4.06	163215	121146	164.117	198.528
5)	A delta-BHC	3.93	4.31	333037	254047	182.893	227.977
6)	A Heptachlor	4.11	4.35	319402	271158	163.973	213.557 #
7)	A Aldrin	4.37	4.61	314772	229844	186.501	222.447
8)	A Heptachlor epoxi	4.85	5.08	270882	201153	169.730	200.869
9)	A gamma-Chlordane	4.95	5.23	284010	209444	175.049	202.944
10)	A alpha-Chlordane	5.06	5.34	271944	199861	174.523	200.236
11)	A 4,4'-DDE	5.12	5.47	253282	197523	174.879	219.268 #
12)	A Endosulfan I	5.16	5.38	282178	212273	184.612	212.219
13)	A Dieldrin	5.35	5.60	276523	203771	184.497	219.014
14)	A Endrin	5.52	5.83	247762	175776	186.629	215.772
15)	A 4,4'-DDD	5.57	5.91	207271	157557	178.888	222.558
16)	A Endosulfan II	5.69	5.99	232653	170566	176.437	200.499
17)	A 4,4'-DDT	5.79	6.15	232638	174101	183.192	216.143
18)	A Endrin aldehyde	6.00	6.25	177649	132774	171.938	191.072
19)	A Methoxychlor	6.15	6.66	114570	88987	166.064	188.368
20)	A Endosulfan sulfa	6.32	6.45	208026	156831	185.193	209.846
21)	A Endrin ketone	6.54	6.86	249741	180645	202.985	191.720
23)	L8 Toxaphene{1}	0.00	5.91	0	157557	N.D.	10687.735 #
24)	L8 Toxaphene{2}	5.79	0.00	232638	0	6270.497	N.D. #
25)	L8 Toxaphene{3}	0.00	6.15	0	174101	N.D.	4877.634 #
26)	L8 Toxaphene{4}	0.00	0.00	0	0	N.D.	N.D.
27)	L8 Toxaphene{5}	6.32	0.00	208026	0	6502.670	N.D. #
	Sum Toxaphene			440663	331658	12773.167	15565.368
	Average Toxaphene					6386.583	7782.684
28)	L9 Tech Chlordane{1	4.22	0.00	4863	0	46.142	N.D. #
29)	L9 Tech Chlordane{2	4.85	5.34	270882	199861	7518.357	1723.774 #
30)	L9 Tech Chlordane{3	5.06	5.38	271944	212273	1625.131	2871.771 #
31)	L9 Tech Chlordane{4	5.12	5.38	253282	212273	1230.229	2003.717 #
32)	L9 Tech Chlordane{5	5.79	5.99	232638	170566	4518.333	11539.410 #
	Sum Tech Chlordane			1033608	794973	14938.192	18138.673
	Average Tech Chlordane					2987.638	4534.668

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

Quantitation Report (Not Reviewed)

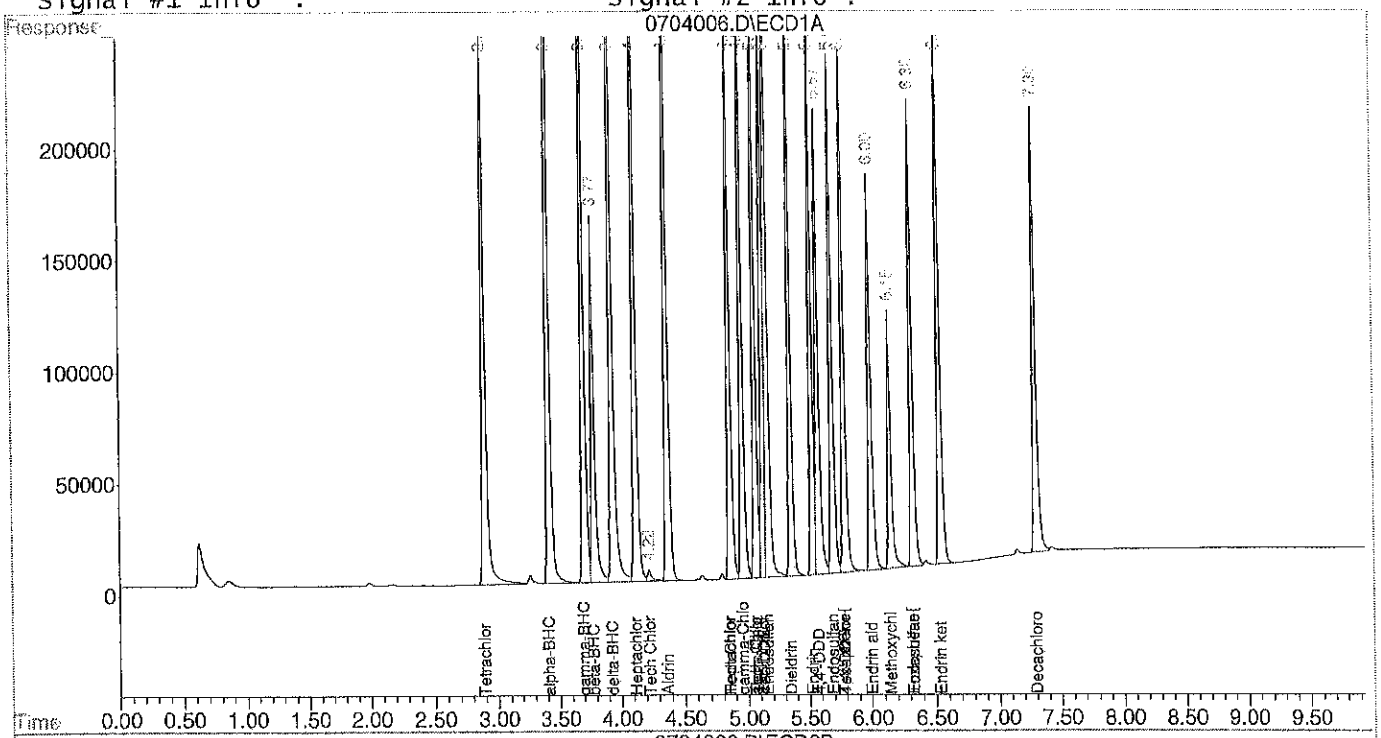
Signal #1 : D:\HPCHEM\1\DATA\G140704\0704006.D\ECD1A.CH Vial: 6
Signal #2 : D:\HPCHEM\1\DATA\G140704\0704006.D\ECD2B.CH
Acq On : 4 Jul 2014 11:26 Operator:
Sample : PEST HIGH LEVEL 0704-1 (PS3-89-03) Inst : George
Misc : Multiplr: 1.00
Sample Amount: 0.00

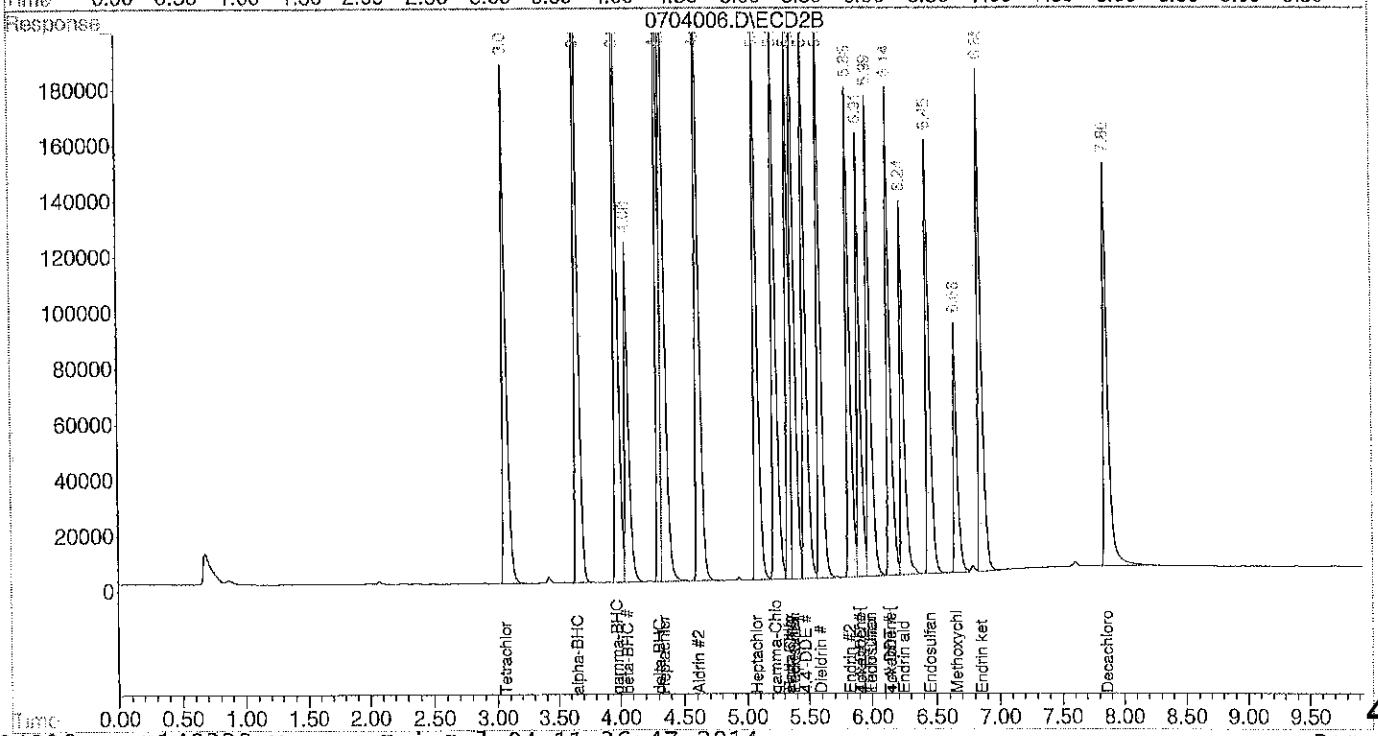
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Quant Time: Jul 4 11:36 2014 Quant Results File: P140328.RES

Quant Method : D:\HPCHEM\1\METHODS\P140328.M (Chemstation Integrator)
Title : Pestcides
Last Update : Mon Jun 30 15:06:57 2014
Response via : Multiple Level Calibration
DataAcq Meth : P140328.M

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (Not Reviewed)

Signal #1 : D:\HPCHEM\1\DATA\G140704\0704014.D\ECD1A.CH Vial: 14
Signal #2 : D:\HPCHEM\1\DATA\G140704\0704014.D\ECD2B.CH
Acq On : 4 Jul 2014 13:12 Operator:
Sample : PEST MID LEVEL 0704-2 (PS3-89-02) Inst : George
Misc : Multiplr: 1.00
Sample Amount: 0.00

IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Quant Time: Jul 4 13:22 2014 Quant Results File: P140328.RES

Quant Method : D:\HPCHEM\1\METHODS\P140328.M (Chemstation Integrator)
Title : Pestcides
Last Update : Mon Jun 30 15:06:57 2014
Response via : Initial Calibration
DataAcq Meth : P140328.M

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

KMS 7-1-14

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb	
	System Monitoring Compounds							
1)	S Tetrachloro-m-xy	2.89	3.07	128050	95612	82.269 H8	102.459	
	Spiked Amount 100.000			Recovery =		82.27%	102.46%	
22)	S Decachlorobiphen	7.30	7.86	103103	74367	99.214	101.456	
	Spiked Amount 100.000			Recovery =		99.21%	101.46%	
	Target Compounds							
2)	A alpha-BHC	3.41	3.65	196323	143000	96.364	117.940 -18	
3)	A gamma-BHC	3.70	3.98	179370	129778	93.096	113.958	
4)	A beta-BHC	3.78	4.06	84189	61001	84.655	99.966	
5)	A delta-BHC	3.93	4.31	170075	127478	93.400	114.397	
6)	A Heptachlor	4.11	4.35	171970	139127	88.285	109.572	
7)	A Aldrin	4.37	4.61	164946	116801	97.729	113.042	
8)	A Heptachlor epoxi	4.85	5.08	142068	102694	89.017	102.549	
9)	A gamma-Chlordane	4.95	5.23	146584	105641	90.347	102.362	
10)	A alpha-Chlordane	5.06	5.34	140904	101230	90.426	101.420	
11)	A 4,4'-DDE	5.12	5.47	126626	97667	87.429	108.419	
12)	A Endosulfan I	5.16	5.38	147694	105930	96.627	105.903	
13)	A Dieldrin	5.34	5.60	142730	102604	95.230	110.279	
14)	A Endrin	5.52	5.83	130355	91380	98.191	112.172	
15)	A 4,4'-DDD	5.57	5.91	102310	77414	88.300	109.352	
16)	A Endosulfan II	5.69	5.99	118834	85709	90.120	100.750	
17)	A 4,4'-DDT	5.79	6.14	118114	87279	93.009	108.355	
18)	A Endrin aldehyde	6.00	6.24	90615	66398	87.702	95.552	
19)	A Methoxychlor	6.15	6.66	59908	46187	86.834	97.769	
20)	A Endosulfan sulfa	6.32	6.45	106416	78057	94.736	104.442	
21)	A Endrin ketone	6.54	6.86	128208	90594	103.740	96.148	
23)	L8 Toxaphene{1}	0.00	5.91	0	77414	N.D.	5251.348	#
24)	L8 Toxaphene{2}	5.79	0.00	118114	0	3183.622	N.D.	#
25)	L8 Toxaphene{3}	0.00	6.14	0	87279	N.D.	2445.216	#
26)	L8 Toxaphene{4}	0.00	6.33	0	1127	N.D.	48.416	#
27)	L8 Toxaphene{5}	6.32	0.00	106416	0	3326.453	N.D.	#
	Sum Toxaphene			224529	165820	6510.075	7744.980	
	Average Toxaphene					3255.037	2581.660	
28)	L9 Tech Chlordane{1	4.22	0.00	2617	0	24.835	N.D.	#
29)	L9 Tech Chlordane{2	4.85	5.34	142068	101230	3943.116	873.097	#
30)	L9 Tech Chlordane{3	5.06	5.38	140904	105930	842.038	1433.097	#
31)	L9 Tech Chlordane{4	5.12	5.38	126626	105930	615.044	999.913	#
32)	L9 Tech Chlordane{5	5.79	5.99	118114	85709	2294.023	5798.509	#
	Sum Tech Chlordane			530329	398800	7719.055	9104.615	
	Average Tech Chlordane					1543.811	2276.154	

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

Quantitation Report (Not Reviewed)

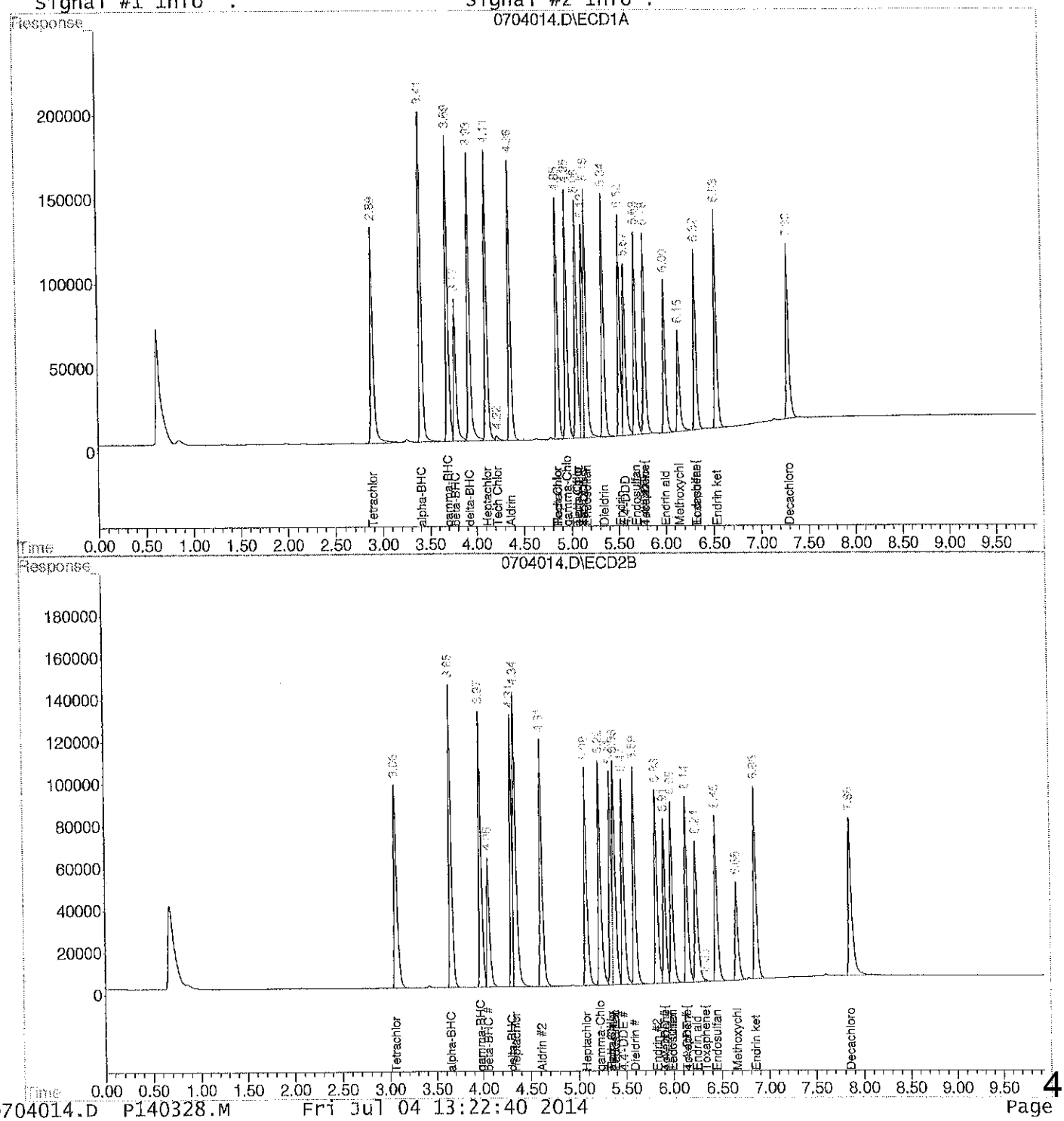
Signal #1 : D:\HPCHEM\1\DATA\G140704\0704014.D\ECD1A.CH Vial: 14
Signal #2 : D:\HPCHEM\1\DATA\G140704\0704014.D\ECD2B.CH
Acq On : 4 Jul 2014 13:12 Operator:
Sample : PEST MID LEVEL 0704-2 (PS3-89-02) Inst : George
Misc : Multiplr: 1.00
Sample Amount: 0.00

IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Quant Time: Jul 4 13:22 2014 Quant Results File: P140328.RES

Quant Method : D:\HPCHEM\1\METHODS\P140328.M (Chemstation Integrator)
Title : Pestcides
Last Update : Mon Jun 30 15:06:57 2014
Response via : Multiple Level Calibration
DataAcq Meth : P140328.M

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Quantitation Report (Not Reviewed)

Signal #1 : D:\HPCHEM\1\DATA\G140709\0709004.D\ECD1A.CH Vial: 4
Signal #2 : D:\HPCHEM\1\DATA\G140709\0709004.D\ECD2B.CH
Acq On : 9 Jul 2014 8:42 Operator:
Sample : PEST MID 0709-1 (PS3-89-02) Inst : George
Misc : Multiplr: 1.00
Sample Amount: 0.00

IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Quant Time: Jul 9 8:52 2014 Quant Results File: P140328.RES

Quant Method : D:\HPCHEM\1\METHODS\P140328.M (Chemstation Integrator)
Title : Pestcides
Last Update : Mon Jun 30 15:06:57 2014
Response via : Initial Calibration
DataAcq Meth : P140328.M

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

KMS 7-11-14

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb	
	System Monitoring Compounds							
1) S	Tetrachloro-m-xy	2.89	3.06	123499	89987	79.346 +21	96.430	
	Spiked Amount 100.000			Recovery	=	79.35%	96.43%	
22) S	Decachlorobiphen	7.30	7.86	99430	70543	95.501	95.978	
	Spiked Amount 100.000			Recovery	=	95.50%	95.98%	
	Target Compounds							
2) A	alpha-BHC	3.41	3.65	190718	139557	93.612	115.100	
3) A	gamma-BHC	3.69	3.97	175705	125394	91.194	110.109	
4) A	beta-BHC	3.77	4.05	81518	58648	81.968 +18	96.110	
5) A	delta-BHC	3.93	4.31	165659	123309	90.975	110.656	
6) A	Heptachlor	4.11	4.34	164470	131017	84.435 +16	103.185	
7) A	Aldrin	4.36	4.61	160065	112040	94.838	108.434	
8) A	Heptachlor epoxi	4.85	5.08	138498	97878	86.780	97.740	
9) A	gamma-Chlordane	4.95	5.22	143434	100938	88.405	97.806	
10) A	alpha-Chlordane	5.06	5.34	137221	97104	88.063	97.287	
11) A	4,4'-DDE	5.12	5.47	126159	93805	87.107	104.132	
12) A	Endosulfan I	5.16	5.38	142511	101552	93.236	101.526	
13) A	Dieldrin	5.34	5.59	138223	97305	92.223	104.584	
14) A	Endrin	5.52	5.83	118857	81142	89.530	99.605	
15) A	4,4'-DDD	5.57	5.91	100787	73762	86.985	104.194	
16) A	Endosulfan II	5.69	5.99	114710	81039	86.992	95.261	
17) A	4,4'-DDT	5.78	6.14	113323	80876	89.236	100.405	
18) A	Endrin aldehyde	6.00	6.24	87403	62877	84.593	90.485	
19) A	Methoxychlor	6.15	6.66	55249	41345	80.080 +10	87.519	
20) A	Endosulfan sulfa	6.32	6.45	99488	72037	88.568	96.389	
21) A	Endrin ketone	6.53	6.85	124935	88002	101.068	93.397	
23) L8	Toxaphene{1}	0.00	5.91	0	73762	N.D.	5003.621	#
24) L8	Toxaphene{2}	5.78	0.00	113323	0	3054.489	N.D.	#
25) L8	Toxaphene{3}	0.00	6.14	0	80876	N.D.	2265.817	#
26) L8	Toxaphene{4}	0.00	6.33	0	1097	N.D.	47.155	#
27) L8	Toxaphene{5}	6.32	0.00	99488	0	3109.883	N.D.	#
	Sum Toxaphene			212810	155735	6164.371	7316.593	
	Average Toxaphene					3082.186	2438.864	
28) L9	Tech Chlordane{1	0.00	0.00	0	0	N.D.	N.D.	
29) L9	Tech Chlordane{2	4.85	5.34	138498	97104	3844.023	837.511	#
30) L9	Tech Chlordane{3	5.06	5.38	137221	101552	820.028	1373.861	#
31) L9	Tech Chlordane{4	5.12	5.38	126159	101552	612.775	958.582	#
32) L9	Tech Chlordane{5	5.78	5.99	113323	81039	2200.974	5482.586	#
	Sum Tech Chlordane			515200	381247	7477.799	8652.541	
	Average Tech Chlordane					1869.450	2163.135	

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

Quantitation Report (Not Reviewed)

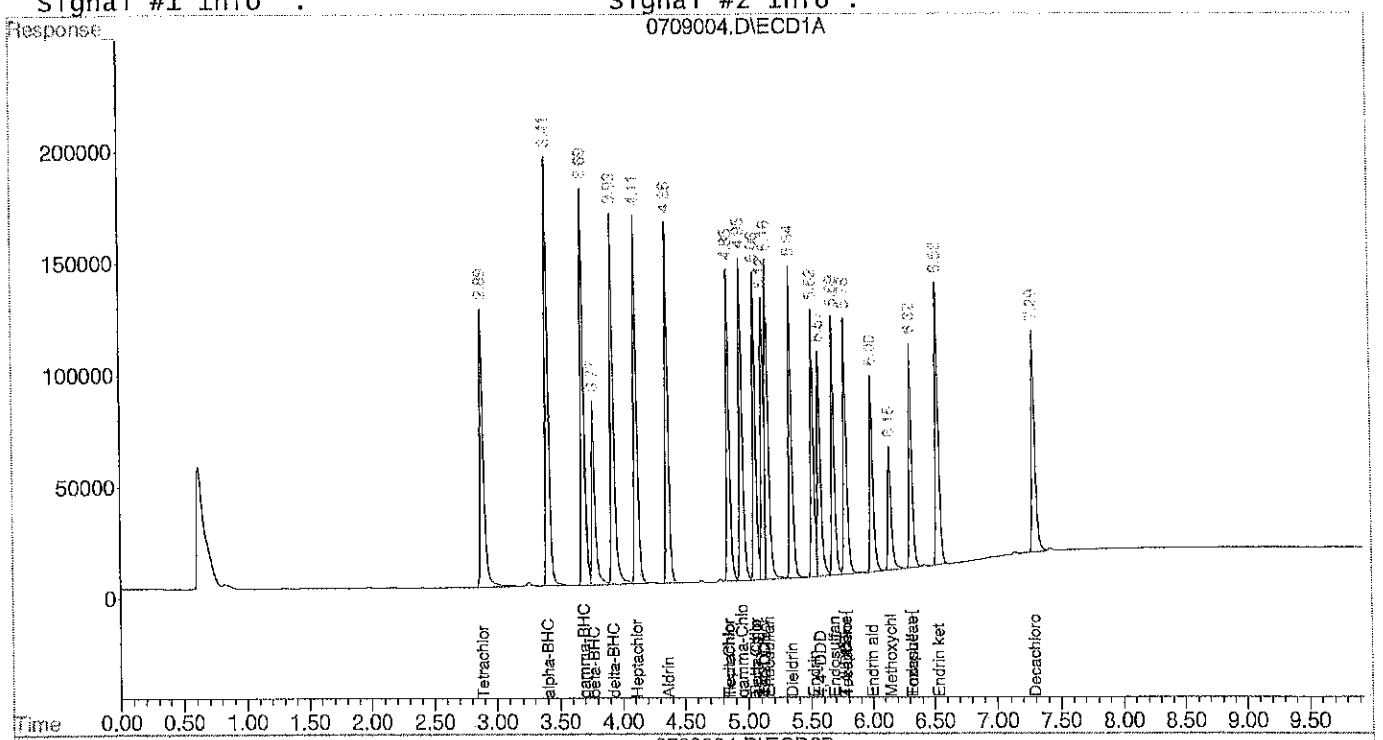
Signal #1 : D:\HPCHEM\1\DATA\G140709\0709004.D\ECD1A.CH Vial: 4
Signal #2 : D:\HPCHEM\1\DATA\G140709\0709004.D\ECD2B.CH
Acq On : 9 Jul 2014 8:42 Operator:
Sample : PEST MID 0709-1 (PS3-89-02) Inst : George
Misc : Multiplr: 1.00
Sample Amount: 0.00

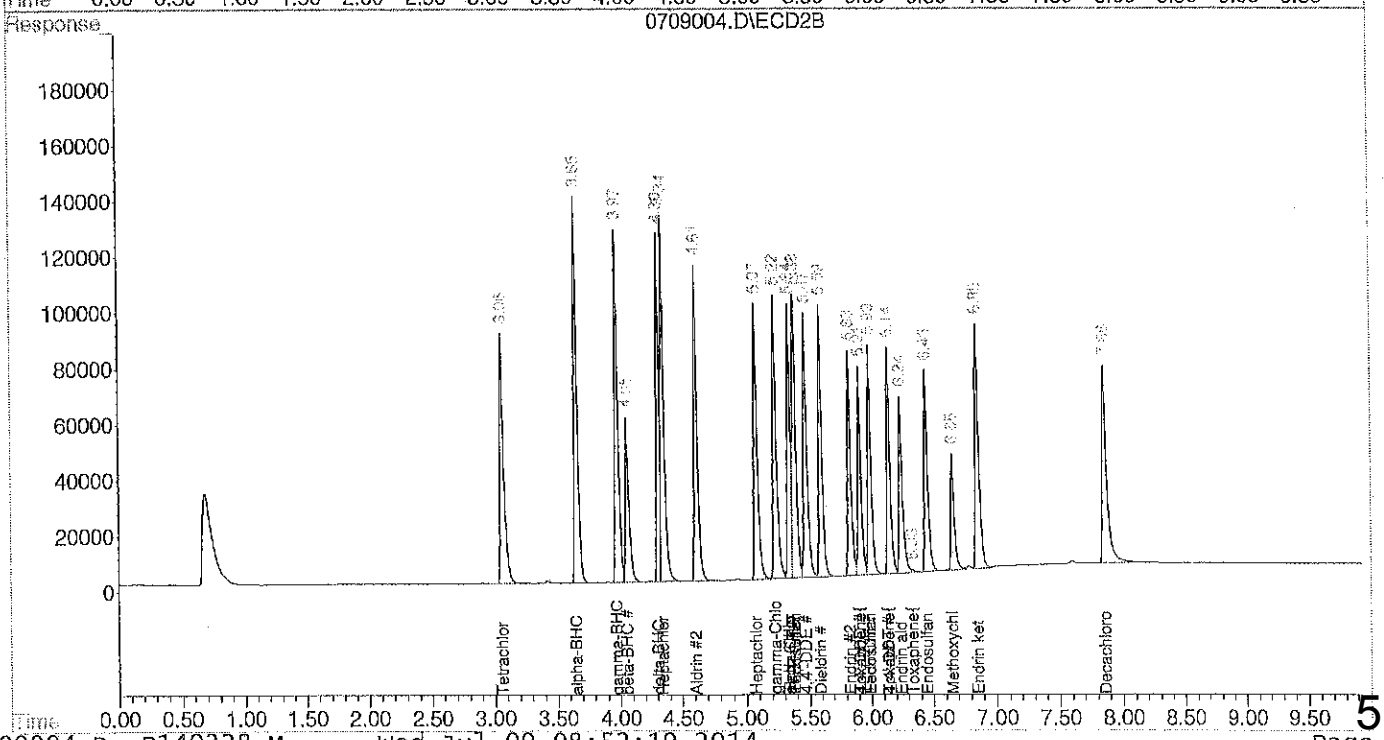
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Quant Time: Jul 9 8:52 2014 Quant Results File: P140328.RES

Quant Method : D:\HPCHEM\1\METHODS\P140328.M (Chemstation Integrator)
Title : Pestcides
Last Update : Mon Jun 30 15:06:57 2014
Response via : Multiple Level Calibration
DataAcq Meth : P140328.M

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (Not Reviewed)

Signal #1 : D:\HPCHEM\1\DATA\G140709\0709015.D\ECD1A.CH Vial: 15
Signal #2 : D:\HPCHEM\1\DATA\G140709\0709015.D\ECD2B.CH
Acq On : 9 Jul 2014 11:12 Operator:
Sample : PEST MID 0709-2 (PS3-89-02) Inst : George
Misc : Multiplr: 1.00
Sample Amount: 0.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Quant Time: Jul 9 11:22 2014 Quant Results File: P140328.RES

Quant Method : D:\HPCHEM\1\METHODS\P140328.M (Chemstation Integrator)
Title : Pestcides
Last Update : Mon Jun 30 15:06:57 2014
Response via : Initial Calibration
DataAcq Meth : P140328.M

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

KBMS 7-11-14

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb	
	System Monitoring Compounds							
1) S	Tetrachloro-m-xy	2.89	3.06	128262	95956	82.406	102.827	
Spiked Amount	100.000			Recovery	=	82.41%	102.83%	
22) S	Decachlorobiphen	7.29	7.86	103174	73850	99.286	100.716	
Spiked Amount	100.000			Recovery	=	99.29%	100.72%	
	Target Compounds							
2) A	alpha-BHC	3.41	3.65	195484	143404	95.952	118.273	
3) A	gamma-BHC	3.69	3.97	179887	128911	93.365	113.197	
4) A	beta-BHC	3.77	4.05	83339	60408	83.800	98.994	
5) A	delta-BHC	3.92	4.30	168315	126867	92.433	113.848	
6) A	Heptachlor	4.11	4.34	171572	138483	88.081	109.066	
7) A	Aldrin	4.36	4.61	163457	114880	96.847	111.183	
8) A	Heptachlor epoxi	4.85	5.08	141772	101283	88.832	101.140	
9) A	gamma-Chlordane	4.95	5.22	145785	104890	89.854	101.634	
10) A	alpha-Chlordane	5.05	5.34	137898	100458	88.498	100.646	
11) A	4,4'-DDE	5.12	5.47	129243	97597	89.236	108.341	
12) A	Endosulfan I	5.15	5.38	146021	105249	95.533	105.222	
13) A	Dieldrin	5.34	5.59	142471	101081	95.058	108.642	
14) A	Endrin	5.52	5.83	126584	88568	95.350	108.721	
15) A	4,4'-DDD	5.57	5.91	104482	78613	90.174	111.046	
16) A	Endosulfan II	5.68	5.99	118231	84682	89.663	99.543	
17) A	4,4'-DDT	5.78	6.14	116863	84736	92.024	105.197	
18) A	Endrin aldehyde	5.99	6.24	89587	65257	86.707	93.910	
19) A	Methoxychlor	6.14	6.66	59182	45132	85.781	95.536	
20) A	Endosulfan sulfa	6.32	6.45	103267	75275	91.932	100.720	
21) A	Endrin ketone	6.53	6.85	128494	91719	103.974	97.342	
23) L8	Toxaphene{1}	0.00	5.91	0	78613	N.D.	5332.685	#
24) L8	Toxaphene{2}	5.78	0.00	116863	0	3149.914	N.D.	#
25) L8	Toxaphene{3}	0.00	6.14	0	84736	N.D.	2373.956	#
26) L8	Toxaphene{4}	0.00	0.00	0	0	N.D.	N.D.	
27) L8	Toxaphene{5}	6.32	0.00	103267	0	3228.007	N.D.	#
Sum	Toxaphene			220129	163349	6377.921	7706.641	
Average	Toxaphene					3188.960	3853.320	
28) L9	Tech Chlordane{1	4.22	0.00	5619	0	53.315	N.D.	#
29) L9	Tech Chlordane{2	4.85	5.34	141772	100458	3934.905	866.433	#
30) L9	Tech Chlordane{3	5.05	5.38	137898	105249	824.078	1423.873	#
31) L9	Tech Chlordane{4	5.12	5.38	129243	105249	627.755	993.477	#
32) L9	Tech Chlordane{5	5.78	5.99	116863	84682	2269.734	5729.063	#
Sum	Tech Chlordane			531396	395637	7709.786	9012.846	
Average	Tech Chlordane					1541.957	2253.212	

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

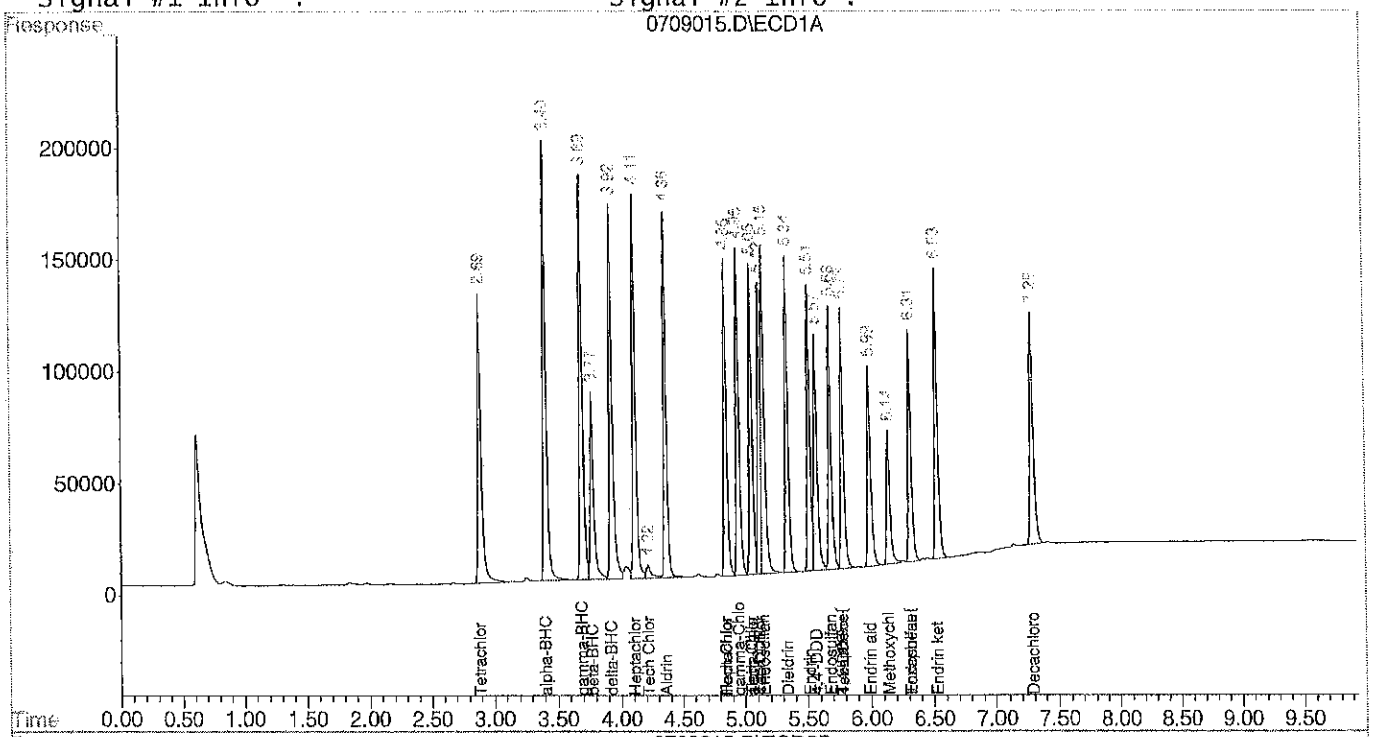
Quantitation Report (Not Reviewed)

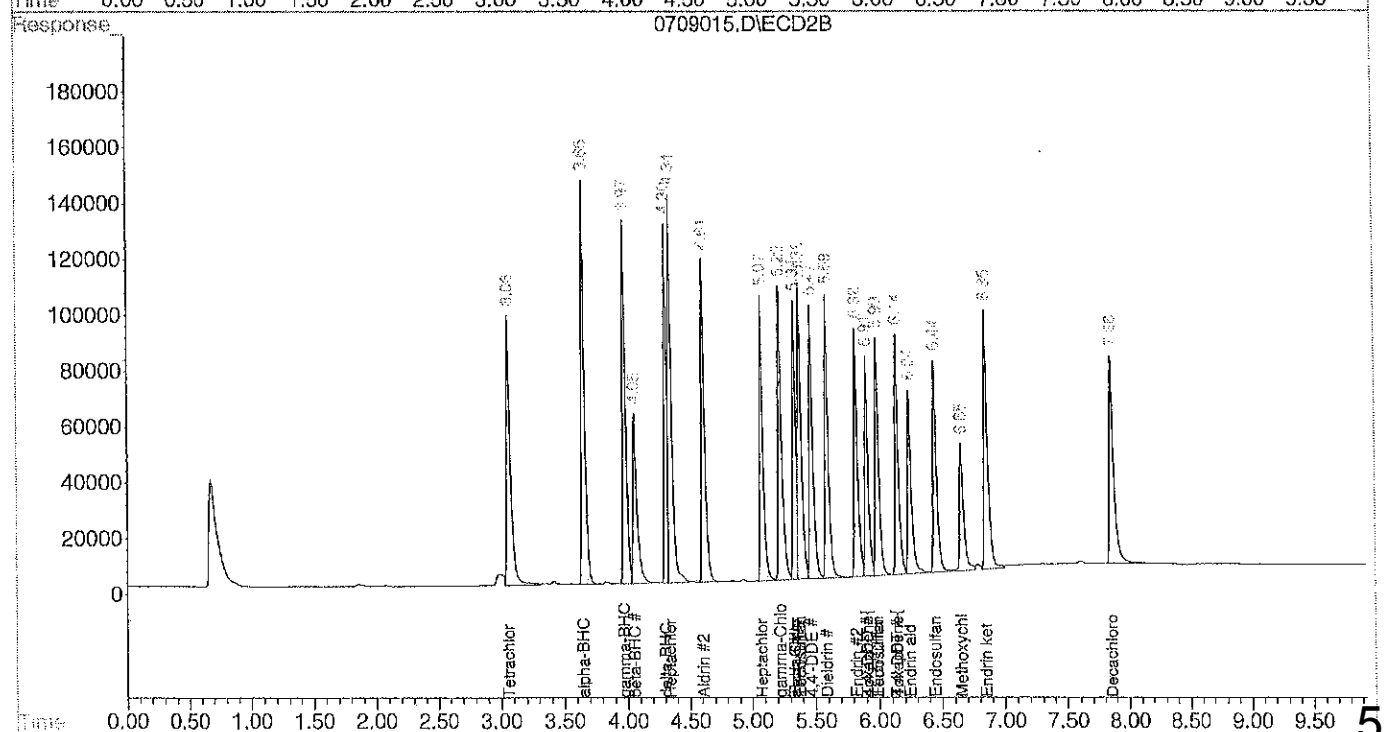
Signal #1 : D:\HPCHEM\1\DATA\G140709\0709015.D\ECD1A.CH Vial: 15
Signal #2 : D:\HPCHEM\1\DATA\G140709\0709015.D\ECD2B.CH
Acq On : 9 Jul 2014 11:12 Operator:
Sample : PEST MID 0709-2 (PS3-89-02) Inst : George
Misc : Multiplr: 1.00
Sample Amount: 0.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Quant Time: Jul 9 11:22 2014 Quant Results File: P140328.RES

Quant Method : D:\HPCHEM\1\METHODS\P140328.M (Chemstation Integrator)
Title : Pestcides
Last Update : Mon Jun 30 15:06:57 2014
Response via : Multiple Level Calibration
DataAcq Meth : P140328.M

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Chlorinated Acid Herbicides EPA 8151A Data

Evaluate Continuing Calibration Report

Data File : F0703003.D
Sample : HERBCCV 0703-1 (PS3-90-08)

Data Path : X:\PEST\FRANK\DATA\F140703\
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 03-Jul-14, 11:50:32
Operator :
Misc :
ALS Vial : 3 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: events2.e
Quant Time: Jul 03 12:01:12 2014
Quant Method : C:\MSDCHEM\1\METHODS\H140219.M
Quant Title : Herbicides
QLast Update : Wed Jul 02 15:45:12 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.03min
Max. RRF Dev : 16% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(Min)
3	S	DCAA (surr)	100.000	86.798	13.2	87	-0.08#
6	A	MCPA	10000.000	9566.231	4.3	96	-0.07#
14	A	Dinoseb	100.000	93.350	6.7	97	-0.07#

Signal #2

3	S	DCAA (surr)	100.000	121.934	-21.9#	117	-0.11#
6	A	MCPA	10000.000	12917.374	-29.2#	126	-0.11#
14	A	Dinoseb	100.000	122.839	-22.8#	127	-0.11#

Evaluate Continuing Calibration Report - Not Founds

Signal #2

(#) = Out of Range SPCC's out = 0 CCC's out = 0

H140219.M Mon Jul 14 09:22:05 2014

Evaluate Continuing Calibration Report

Data File : F0703013.D
Sample : HERBCCV 0703-2 (PS3-90-08)

Data Path : X:\PEST\FRANK\DATA\F140703\
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 03-Jul-14, 14:29:42 (#1); 03-Jul-14, 14:29:41 (#2)
Operator :
Misc :
ALS Vial : 13 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: events2.e
Quant Time: Jul 04 09:21:14 2014
Quant Method : C:\msdchem\1\METHODS\H140219.M
Quant Title : Herbicides
QLast Update : Wed Jul 02 15:45:12 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.03min
Max. RRF Dev : 16% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(Min)
3	S	DCAA (surr)	100.000	84.991	15.0	85	-0.08#
6	A	MCPA	10000.000	9273.366	7.3	93	-0.07#
14	A	Dinoseb	100.000	90.933	9.1	95	-0.07#

Signal #2

3	S	DCAA (surr)	100.000	109.952	-10.0	106	-0.11#
6	A	MCPA	10000.000	11497.566	-15.0	112	-0.11#
14	A	Dinoseb	100.000	111.440	-11.4	115	-0.11#

Evaluate Continuing Calibration Report - Not Founds

Signal #2

(#) = Out of Range SPCC's out = 0 CCC's out = 0

H140219.M Mon Jul 14 09:23:06 2014

Evaluate Continuing Calibration Report

Data File : F0711003.D
Sample : HERBCCV 0711-1 (PS3-90-08)

Data Path : X:\PEST\FRANK\DATA\F140711\
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 11-Jul-14, 11:03:32
Operator :
Misc :
ALS Vial : 3 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: events2.e
Quant Time: Jul 11 12:37:08 2014
Quant Method : C:\msdchem\1\METHODS\H140219.M
Quant Title : Herbicides
QLast Update : Fri Jul 11 12:37:03 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.03min
Max. RRF Dev : 16% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(Min)
3	S	DCAA (surr)	100.000	88.045	12.0	88	0.00
6	A	MCPA	10000.000	8958.988	10.4	90	0.00
14	A	Dinoseb	100.000	94.780	5.2	99	0.00

Signal #2

3	S	DCAA (surr)	100.000	116.990	-17.0#	112	0.00
6	A	MCPA	10000.000	12115.529	-21.2#	118	0.00
14	A	Dinoseb	100.000	123.825	-23.8#	128	0.00

Evaluate Continuing Calibration Report - Not Founds

Signal #2

(#) = Out of Range SPCC's out = 0 CCC's out = 0

H140219.M Mon Jul 14 09:24:54 2014

Evaluate Continuing Calibration Report

Data File : F0711009.D
Sample : HERBCCV 0711-2 (PS3-90-08)

Data Path : X:\PEST\FRANK\DATA\F140711\
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 11-Jul-14, 15:11:38
Operator :
Misc :
ALS Vial : 9 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: events2.e
Quant Time: Jul 14 08:53:46 2014
Quant Method : C:\msdchem\1\METHODS\H140219.M
Quant Title : Herbicides
QLast Update : Fri Jul 11 12:37:03 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.03min
Max. RRF Dev : 16% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(Min)
3	S	DCAA (surr)	100.000	89.889	10.1	90	0.00
6	A	MCPA	10000.000	8998.011	10.0	91	0.00
14	A	Dinoseb	100.000	94.306	5.7	98	0.00

Signal #2

3	S	DCAA (surr)	100.000	116.189	-16.2#	111	0.00
6	A	MCPA	10000.000	11782.438	-17.8#	115	0.00
14	A	Dinoseb	100.000	120.647	-20.6#	125	0.00

Evaluate Continuing Calibration Report - Not Founds

Signal #2

(#) = Out of Range SPCC's out = 0 CCC's out = 0

H140219.M Mon Jul 14 09:25:35 2014

Quantitation Report (QT Reviewed)

Data File : F0703007.D
Sample : 06-261-01a

Data Path : X:\PEST\FRANK\DATA\F140703\
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 03-Jul-14, 12:54:09
Operator :
Misc :
ALS Vial : 7 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: events2.e
Quant Time: Jul 04 10:53:46 2014
Quant Method : C:\msdchem\1\METHODS\H140219.M
Quant Title : Herbicides
QLast Update : Wed Jul 02 15:45:12 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb	
	System Monitoring Compounds							
3)	S DCAA (surr)	3.700	4.373	27358582	34406406	89.474	78.236m	
	Spiked Amount 100.000			Recovery	=	89.47%	78.24%	
	Target Compounds							
1)	A Dalapon	0.829	1.115	637234	1834663	0.604	1.680 #	
2)	A 2,4,6-Tri...	2.764	3.407	9118327	5582946	2.811	0.746 #	
4)	A Dicamba	3.784	4.464	223.2E6	391.6E6	175.760	212.916	
5)	A MCPP	3.916	4.555f	3087081	3278892	2990.375m	2258.643m	P
6)	A MCPA	3.993	4.663	7267119	26726298	4904.768m	14002.325m#	P
7)	A Dichlorprop	4.195	4.870f	3161900	31452235	7.631m	68.263m#	P,DL
8)	A 2,4-D	4.328	5.011	2485649	89309690	4.823m	170.625m#	
9)	A Pentachlo...	4.375	5.175	4470582	5563784	0.735	0.599	
10)	A 2,4,5-TP	4.705	5.393	25550647	50783144	12.013m	17.511m#	P
11)	A 2,4,5-T	4.848	5.582	707.9E6	42494207	369.300m	14.712m#	P
12)	A 2,4-DB	5.076f	5.832f	18417849	3661334	76.863m	8.726m#	P
13)	a Bentazon	5.429	6.164	1591.1E6	2117.3E6	8894.937	8460.821	
14)	A Dinoseb	5.494f	0.000	138.9E6	0	98.776	N.D. #	

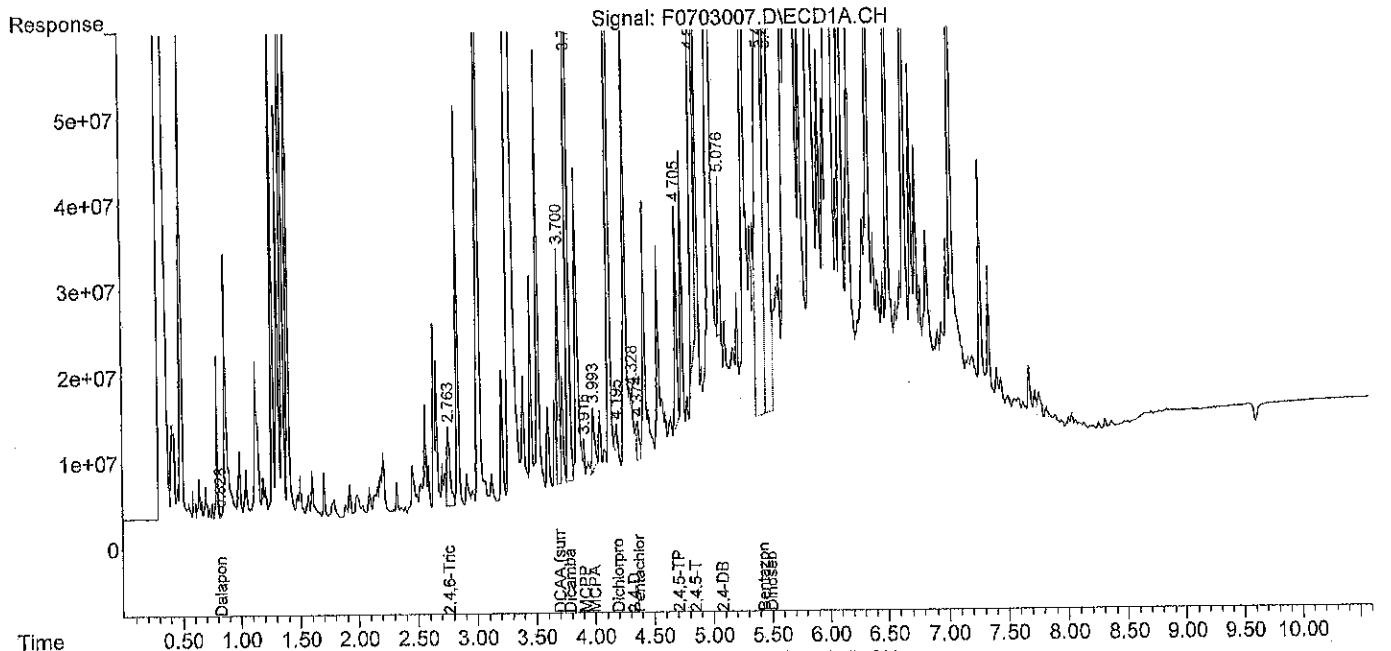
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

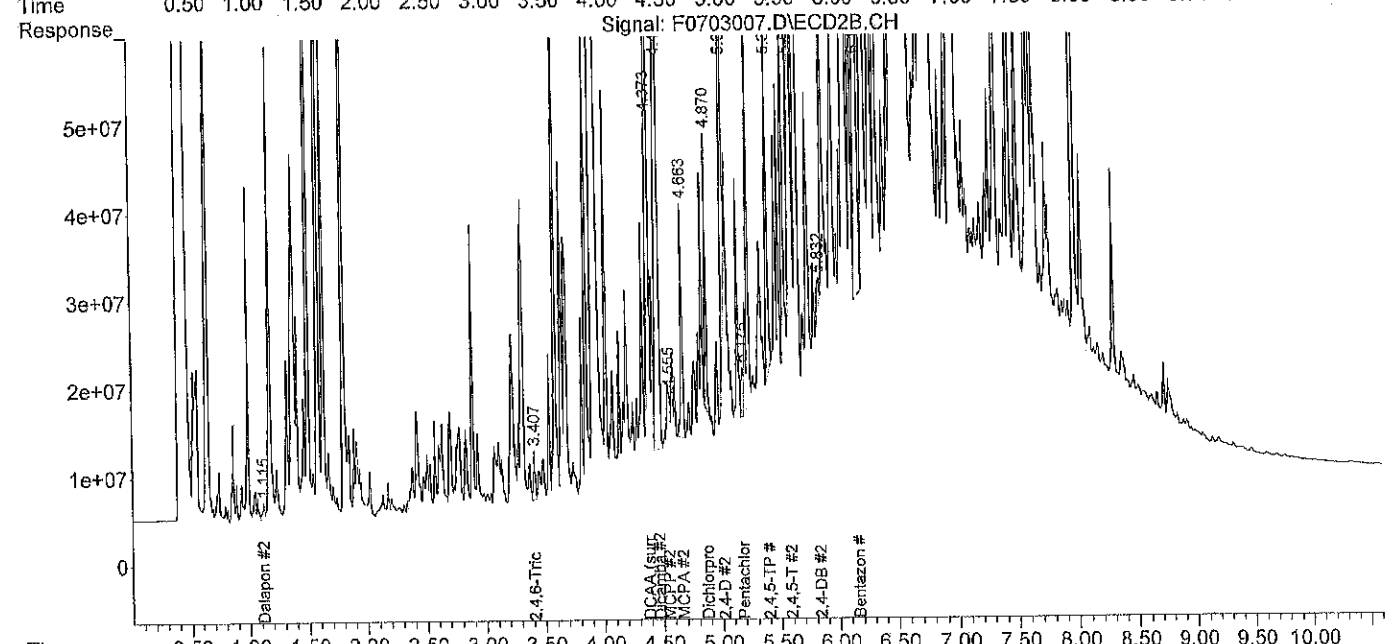
Data File : F0703007.D
Sample : 06-261-01a

Data Path : X:\PEST\FRANK\DATA\F140703\
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 03-Jul-14, 12:54:09
Operator :
Misc :
ALS Vial : 7 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: events2.e
Quant Time: Jul 04 10:53:46 2014
Quant Method : C:\msdchem\1\METHODS\H140219.M
Quant Title : Herbicides
QLast Update : Wed Jul 02 15:45:12 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase :
Signal #1 Info :
Signal #2 Phase:
Signal #2 Info :





Quantitation Report (QT Reviewed)

Data File : F0703008.D
Sample : 06-261-02a

Data Path : X:\PEST\FRANK\DATA\F140703\
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 03-Jul-14, 13:10:04
Operator :
Misc :
ALS Vial : 8 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: events2.e
Quant Time: Jul 04 10:59:14 2014
Quant Method : C:\MSDCHEM\1\METHODS\H140219.M
Quant Title : Herbicides
QLast Update : Wed Jul 02 15:45:12 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase :
Signal #1 Info :
Signal #2 Phase:
Signal #2 Info :

RMS 7-1-14

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb	
	System Monitoring Compounds							
3)	S DCAA (surr)	3.704	4.370	916.1E6	22065216	3080.169	49.095m#	
	Spiked Amount 100.000			Recovery	= 3080.17%		49.09%	
	Target Compounds							
1)	A Dalapon	0.829	1.116	1757577	4618331	2.846	5.699 #	
2)	A 2,4,6-Tri...	2.763	3.404	365.2E6	28841011	121.254	6.271 #	Dilute
4)	A Dicamba	3.783	4.464	1641.9E6	2128.3E6	1299.596	1162.401	
5)	A MCPP	0.000	4.554f	0	37300413	N.D.	28484.706m#	P
6)	A MCPA	4.002	4.674	17831961	61303243	12637.099m	32677.619m#	
7)	A Dichlorprop	4.188f	4.867f	1063324	12129224	1.116m	25.007m#	
8)	A 2,4-D	0.000	5.018	0	2118.0E6	N.D.	4090.193 #	
9)	A Pentachlo...	4.368	5.175	76460490	199.9E6	13.265m	24.343m#	P
10)	A 2,4,5-TP	4.715	5.405	1161.9E6	22315135	588.873	7.038m#	P
11)	A 2,4,5-T	4.847	5.578	95618854	138.3E6	49.094m	50.528m	
12)	A 2,4-DB	5.078	5.816	76815074	1693.8E6	324.423m	5089.485m#	Dilute
13)	a Bentazon	5.449f	6.163	2112.8E6	992.4E6	11813.072	3964.406 #	
14)	A Dinoseb	5.522	5.950f	2111.8E6	2088.9E6	1511.437	1125.048 #	Dilute

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

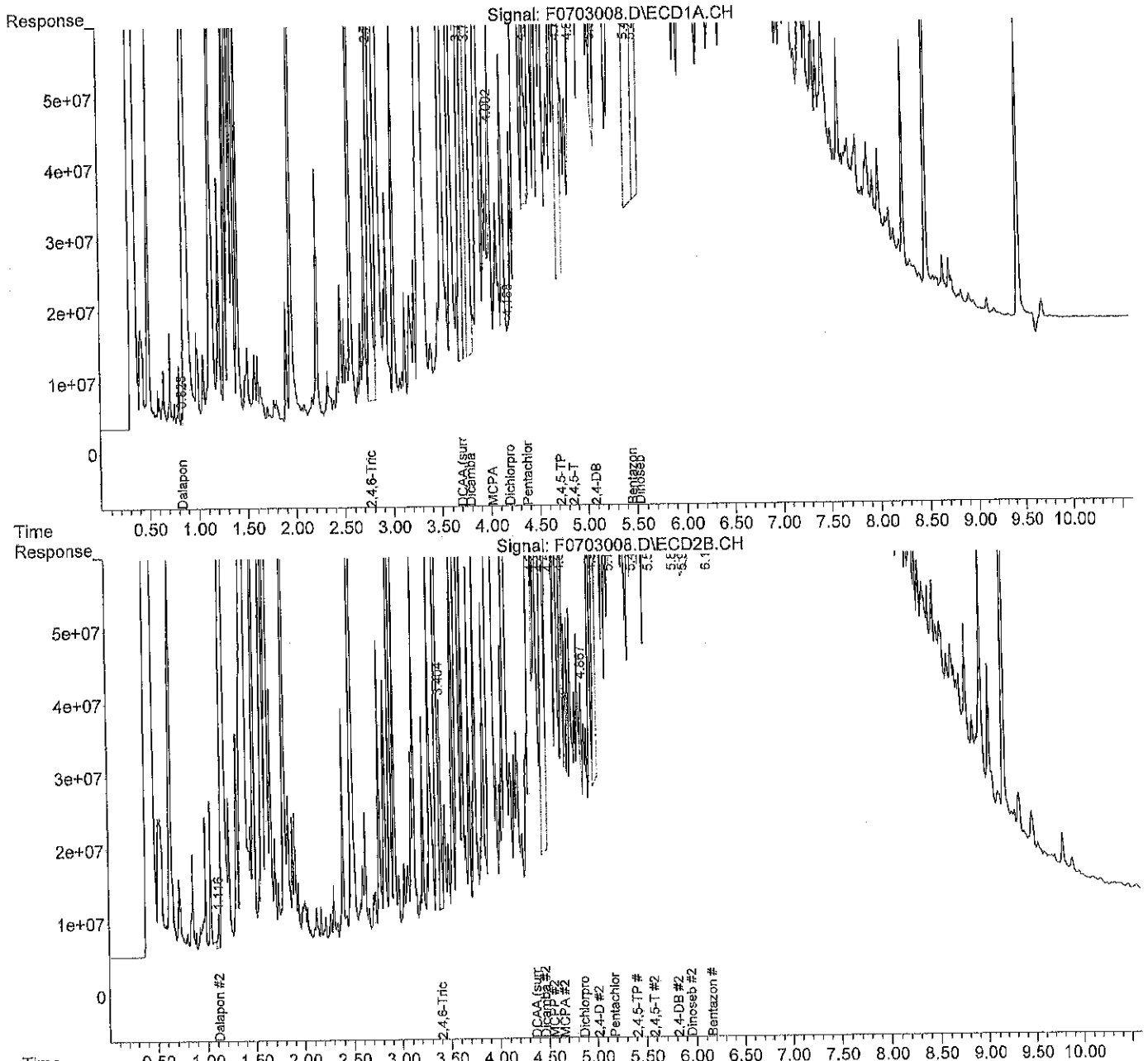
Quantitation Report (QT Reviewed)

Data File : F0703008.D
Sample : 06-261-02a

Data Path : X:\PEST\FRANK\DATA\F140703\
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 03-Jul-14, 13:10:04
Operator :
Misc :
ALS Vial : 8 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: events2.e
Quant Time: Jul 04 10:59:14 2014
Quant Method : C:\MSDCHEM\1\METHODS\H140219.M
Quant Title : Herbicides
QLast Update : Wed Jul 02 15:45:12 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase :
Signal #1 Info :
Signal #2 Phase:
Signal #2 Info :



Quantitation Report (Not Reviewed)

Data File : F0711007.D
Sample : 06-261-02a 1000X

Data Path : C:\MSDCHEM\1\DATA\F140711\
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 11-Jul-14, 14:39:44
Operator :
Misc :
ALS Vial : 7 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: events2.e
Quant Time: Jul 11 14:50:25 2014
Quant Method : C:\MSDCHEM\1\METHODS\H140219.M
Quant Title : Herbicides
QLast Update : Tue Jul 08 14:39:10 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb	
	System Monitoring Compounds							
3) S	DCAA (surr)	3.802f	0.000	751272	0	N.D.	N.D.	
Spiked Amount	100.000			Recovery	=	0.00%	0.00%	
	Target Compounds							
1) A	Dalapon	0.904f	0.000	217663	0	N.D.	N.D.	
2) A	2,4,6-Tri...	2.861	0.000	233166	0	N.D.	N.D.	
4) A	Dicamba	3.882f	4.588	1228577	2423885	N.D.	0.160	
5) A	MCPP	3.986f	0.000	192580	0	N.D.	N.D.	
6) A	MCPA	0.000	4.794	0	129401	N.D.	N.D.	
7) A	Dichlorprop	0.000	0.000	0	0	N.D.	N.D.	
8) A	2,4-D	4.396f	5.136	3135890	8648973	6.547	14.786	#
9) A	Pentachlo...	0.000	5.289f	0	3910368	N.D.	0.397	#
10) A	2,4,5-TP	4.803	5.522	1094371	440679	N.D.	N.D.	
11) A	2,4,5-T	0.000	5.707	0	2994771	N.D.	N.D.	
12) A	2,4-DB	0.000	5.947f	0	35190056	N.D.	103.507	#
13) a	Bentazon	5.525	6.278f	8694648	559814	45-147	N.D.	#
14) A	Dinoseb	5.590f	6.048f	19629807	30428466	13.396	15.598	

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

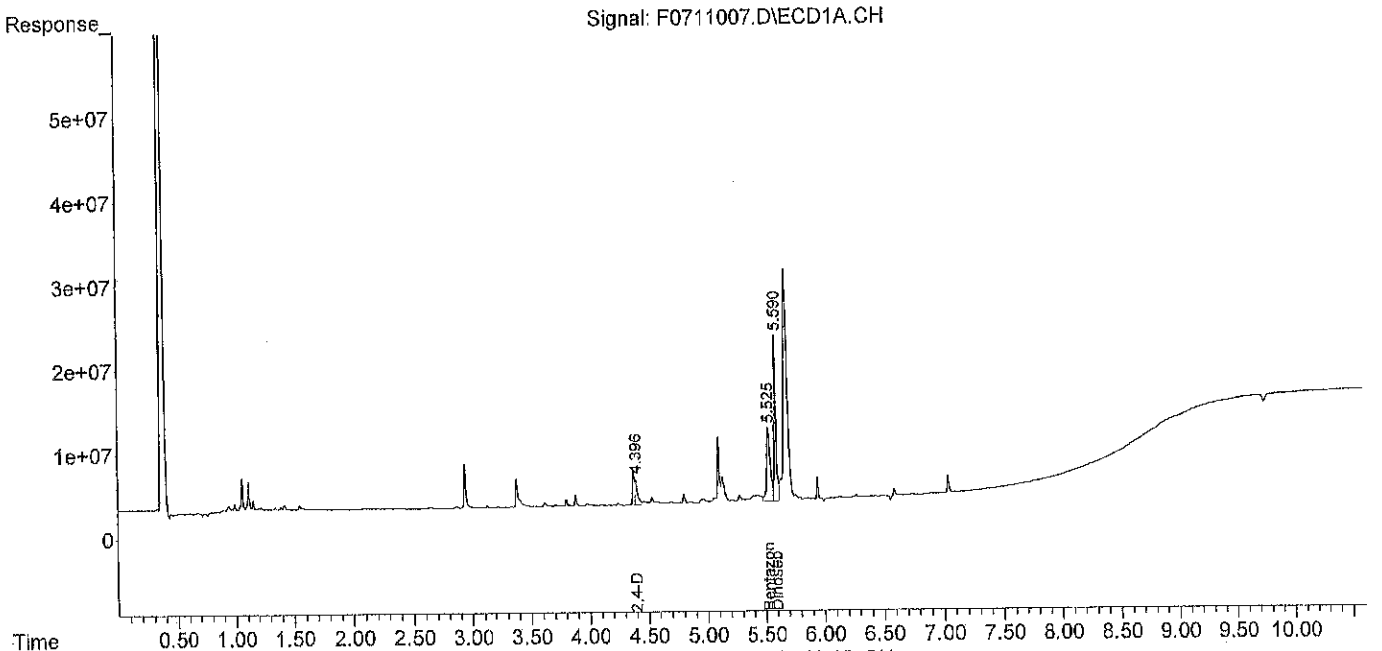
Quantitation Report (Not Reviewed)

Data File : F0711007.D
Sample : 06-261-02a 1000X

Data Path : C:\MSDCHEM\1\DATA\F140711\
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 11-Jul-14, 14:39:44
Operator :
Misc :
ALS Vial : 7 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: events2.e
Quant Time: Jul 11 14:50:25 2014
Quant Method : C:\MSDCHEM\1\METHODS\H140219.M
Quant Title : Herbicides
QLast Update : Tue Jul 08 14:39:10 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase :
Signal #1 Info :
Signal #2 Phase:
Signal #2 Info :



Quantitation Report (QT Reviewed)

Data File : F0703009.D
Sample : 06-261-03a

Data Path : X:\PEST\FRANK\DATA\F140703\
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 03-Jul-14, 13:26:03
Operator :
Misc :
ALS Vial : 9 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: events2.e
Quant Time: Jul 11 13:11:54 2014
Quant Method : C:\MSDCHEM\1\METHODS\H140219.M
Quant Title : Herbicides
QLast Update : Wed Jul 02 15:45:12 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase :
Signal #1 Info :
Signal #2 Phase:
Signal #2 Info :

KMS 7-14-14

Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
System Monitoring Compounds						
3) S DCAA (surr)	3.699	4.363	16180078	821.1E6	51.856m	1935.979 #
Spiked Amount 100.000			Recovery	=	51.86%	1935.98%
Target Compounds						
1) A Dalapon	0.829	1.114	644423	1297792	0.618	0.905 #
2) A 2,4,6-Tri...	2.766	3.401	113.1E6	14671932	37.416	2.905 #
4) A Dicamba	3.784	4.465	129.1E6	235.5E6	101.250m	127.596 #
5) A MCPP	3.914	4.538	3447334	494.6E6	3367.070m	380971.956m# P
6) A MCPA	4.003	4.664	10386739	23995537	7187.996m	12527.418m# P
7) A Dichlorprop	4.192	4.870f	2821050	33171609	6.573m	72.112m# P
8) A 2,4-D	0.000	5.010	0	2130.7E6	N.D.	4114.620 #
9) A Pentachlo...	4.392f	5.170	10288531	11639432	1.748m	1.341
10) A 2,4,5-TP	4.705	5.394	264.7E6	459.7E6	133.417	167.967m#
11) A 2,4,5-T	4.849	5.579	303.3E6	673.5E6	157.714	250.623m#
12) A 2,4-DB	5.081	5.817	5487168	241.0E6	22.047m	722.177 # Dilute
13) a Bentazon	5.436	6.163	1550.4E6	48537232	8667.263	191.446 #
14) A Dinoseb	5.509	5.936	112.8E6	150.8E6	80.096	80.498m

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

KMS 7-14-14

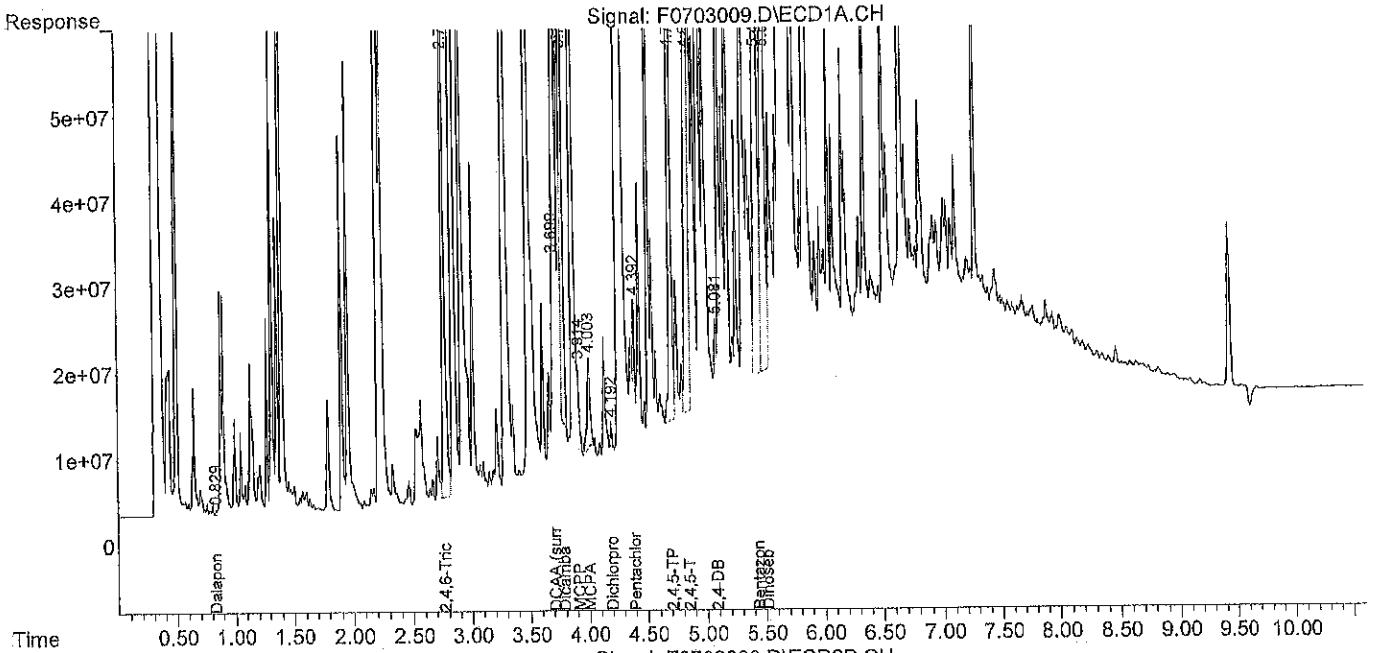
Quantitation Report (QT Reviewed)

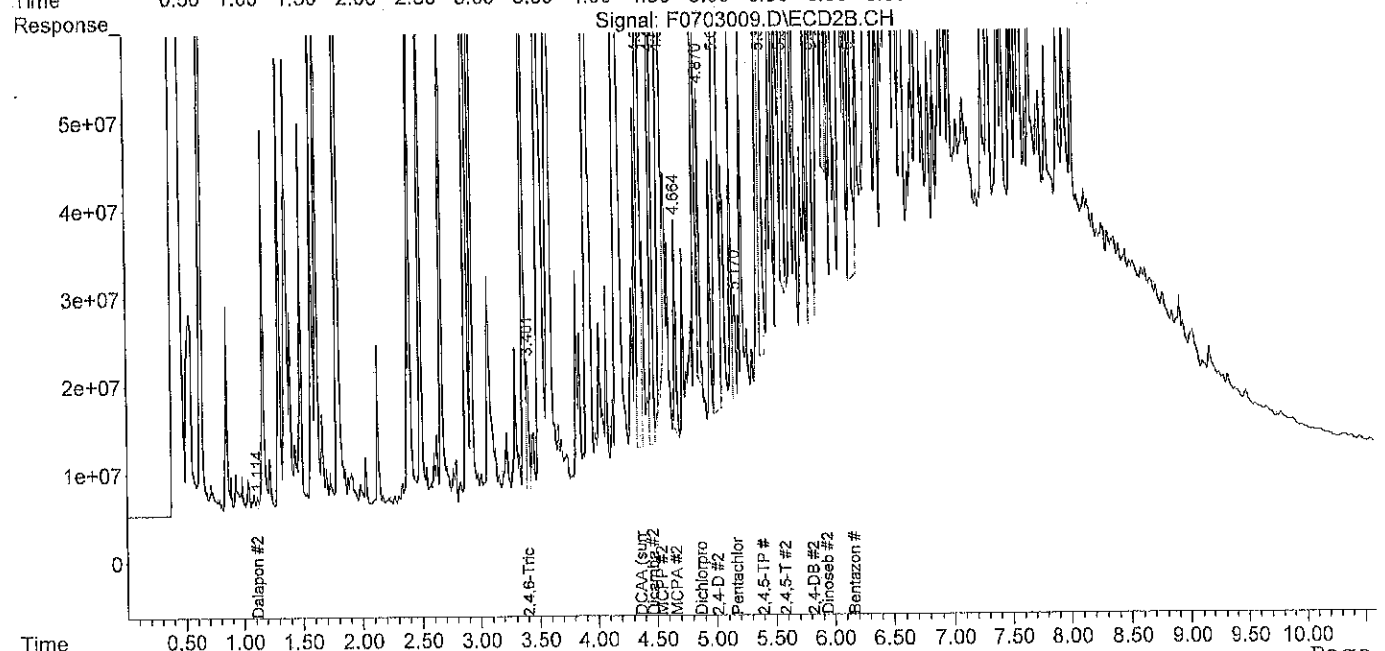
Data File : F0703009.D
Sample : 06-261-03a

Data Path : X:\PEST\FRANK\DATA\F140703\
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 03-Jul-14, 13:26:03
Operator :
Misc :
ALS Vial : 9 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: events2.e
Quant Time: Jul 11 13:11:54 2014
Quant Method : C:\MSDCHEM\1\METHODS\H140219.M
Quant Title : Herbicides
QLast Update : Wed Jul 02 15:45:12 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data File : F0703010.D
Sample : 06-261-04a

Data Path : X:\PEST\FRANK\DATA\F140703\
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 03-Jul-14, 13:41:57
Operator :
Misc :
ALS Vial : 10 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: events2.e
Quant Time: Jul 11 13:00:04 2014
Quant Method : C:\MSDCHEM\1\METHODS\H140219.M
Quant Title : Herbicides
QLast Update : Wed Jul 02 15:45:12 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

KMS 7-14-14

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb	
	System Monitoring Compounds							
3)	S DCAA (surr)	3.700	4.375	14377428	29562265	45.790m	66.798 #	
	Spiked Amount 100.000			Recovery	=	45.79%	66.80%	
	Target Compounds							
1)	A Dalapon	0.000	1.114	0	1109713	N.D.	0.633 #	
2)	A 2,4,6-Tri...	2.768	0.000	76160197	0	25.112	N.D. #	LOL
4)	A Dicamba	3.788	4.468	3734421	6468497	~~1.912m~~	2.371m	
5)	A MCPP	3.916	4.557f	2776071	3150369	2665.171m	2159.568m	
6)	A MCPA	4.019f	4.675	1784850	1450158	892.336m	350.473m#	LOL
7)	A Dichlorprop	4.214f	4.871f	3757248	6396017	9.479m	12.172m#	
8)	A 2,4-D	0.000	5.011	0	106.4E6	N.D.	203.576 #	
9)	A Pentachlo...	4.370	5.173	7911607	13671818	1.334m	1.589m	
10)	A 2,4,5-TP	4.695f	5.396	6001081	14352590	2.088m	4.108m#	LOL
11)	A 2,4,5-T	4.848	0.000	95032878	0	48.788	N.D. #	
12)	A 2,4-DB	5.078	5.817	5977325	150.7E6	24.125m	450.676m#	P
13)	a Bentazon	5.442	6.164	2115.8E6	59275704	11829.764	234.371 #	
14)	A Dinoseb	5.510	5.937	348.7E6	575.9E6	249.023m	~~309.592~~	

KMS 7-14-14

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

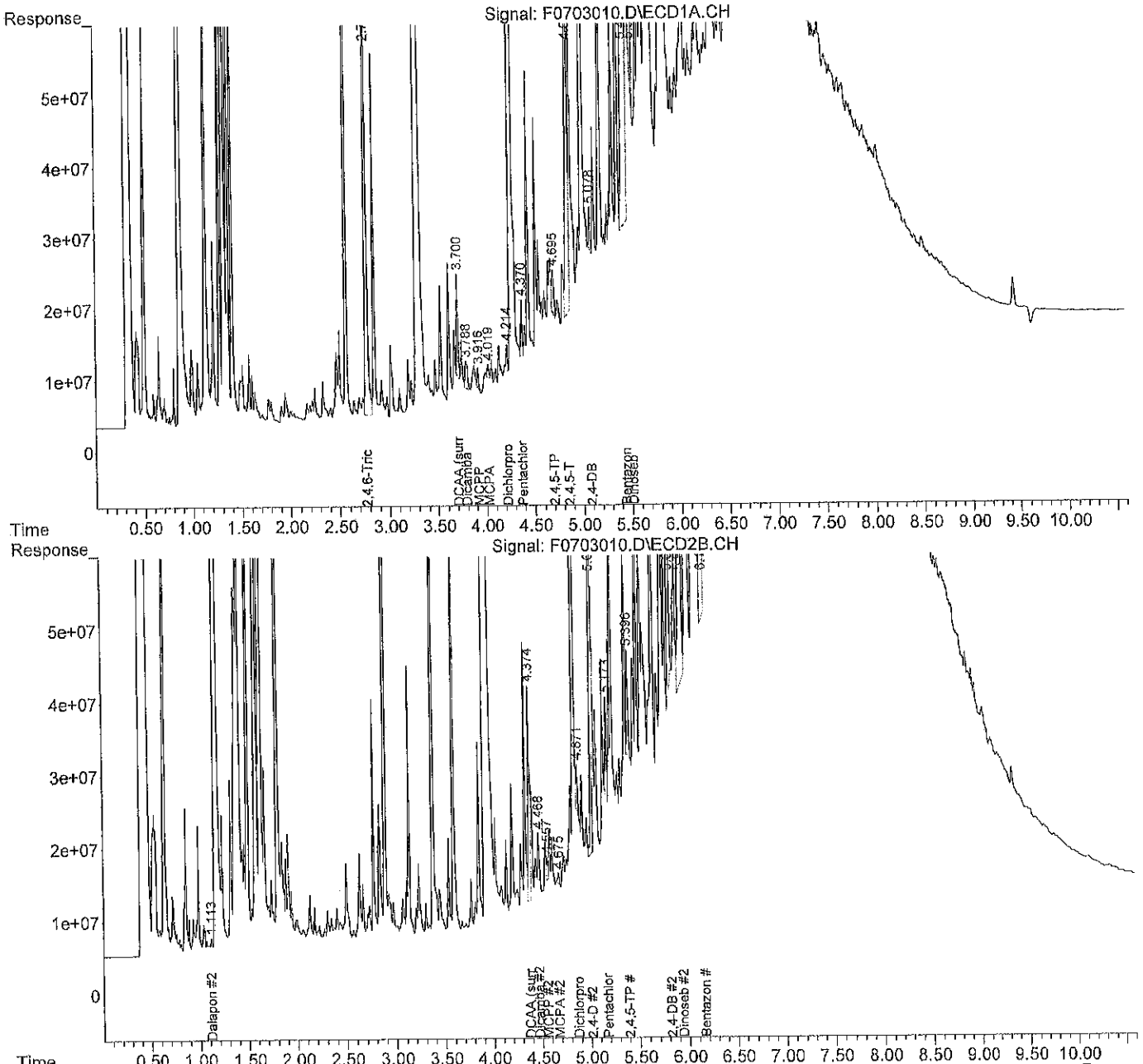
Quantitation Report (QT Reviewed)

Data File : F0703010.D
Sample : 06-261-04a

Data Path : X:\PEST\FRANK\DATA\F140703\
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 03-Jul-14, 13:41:57
Operator :
Misc :
ALS Vial : 10 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: events2.e
Quant Time: Jul 11 13:00:04 2014
Quant Method : C:\MSDCHEM\1\METHODS\H140219.M
Quant Title : Herbicides
QLast Update : Wed Jul 02 15:45:12 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase :
Signal #1 Info :
Signal #2 Phase:
Signal #2 Info :



Quantitation Report (QT Reviewed)

Data File : F0703011.D
Sample : 06-261-05a

Data Path : X:\PEST\FRANK\DATA\F140703\
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 03-Jul-14, 13:57:46 (#1); 03-Jul-14, 13:57:45 (#2)
Operator :
Misc :
ALS Vial : 11 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: events2.e
Quant Time: Jul 11 13:05:16 2014
Quant Method : C:\MSDCHEM\1\METHODS\H140219.M
Quant Title : Herbicides
QLast Update : Wed Jul 02 15:45:12 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
3)	S DCAA (surr)	3.700	4.375	11773817	24286786	37.028m	54.341 #
	Spiked Amount 100.000			Recovery	=	37.03%	54.34%
	Target Compounds						
1)	A Dalapon	0.832	1.113	384230	1109674	0.097	0.633 #
2)	A 2,4,6-Tri...	2.770	3.406	66726776	6794417	21.974	1.033 #
4)	A Dicamba	3.786	4.467	2872911	7154975	1.230m	2.747 #
5)	A MCPP	0.000	4.536	0	6912942	N.D.	5060.012 #
6)	A MCPA	4.017f	4.675	1124203	1711369	408.813m	491.555m
7)	A Dichlorprop	4.214f	4.872f	3058376	3634562	7.310m	5.990m
8)	A 2,4-D	0.000	5.011	0	94275374	N.D.	180.218 #
9)	A Pentachlo...	4.370	5.173	8305069	15187586	1.402m	1.774m#
10)	A 2,4,5-TP	4.696f	5.396	7752268	13161631	2.977	3.670m
11)	A 2,4,5-T	4.848	0.000	104.1E6	0	53.532	N.D. #
12)	A 2,4-DB	5.078	5.816	6573092	154.6E6	26.651m	462.452m#
13)	a Bentazon	5.442	6.163	2123.1E6	56581503	11870.665	223.601 #
14)	A Dinoseb	5.510	5.936	363.2E6	546.7E6	259.423	293.834m

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

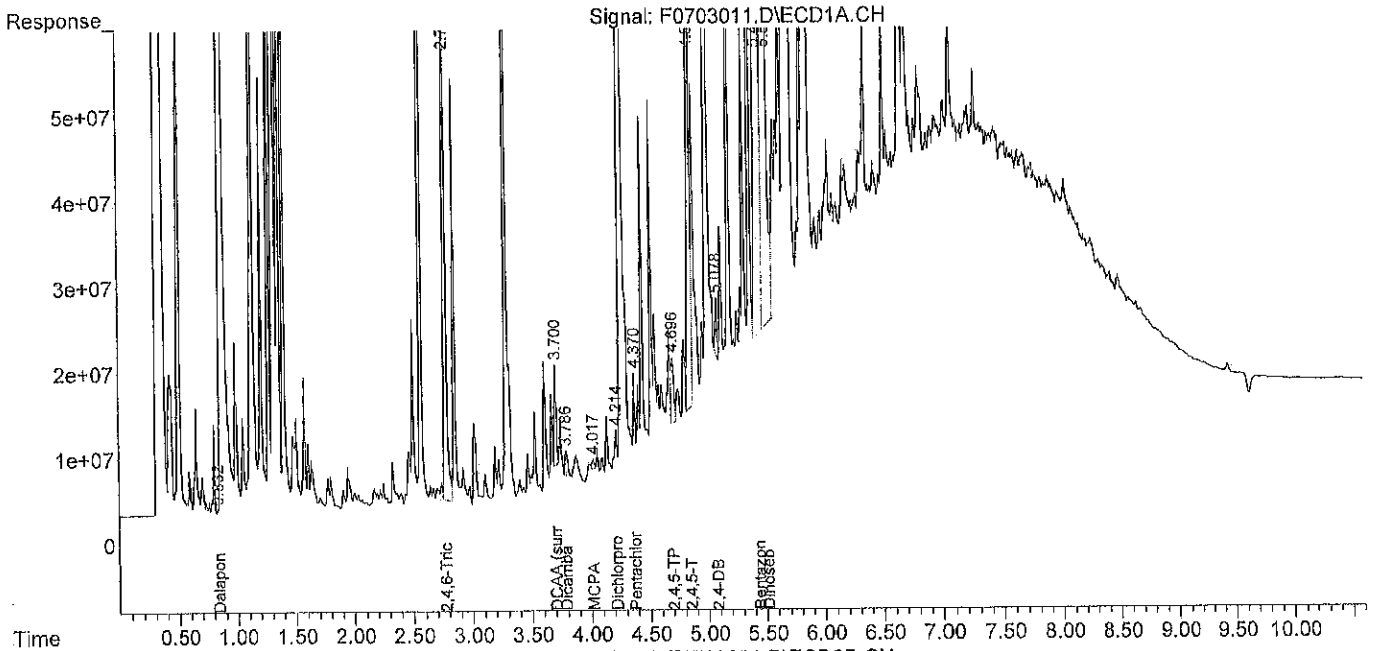
Quantitation Report (QT Reviewed)

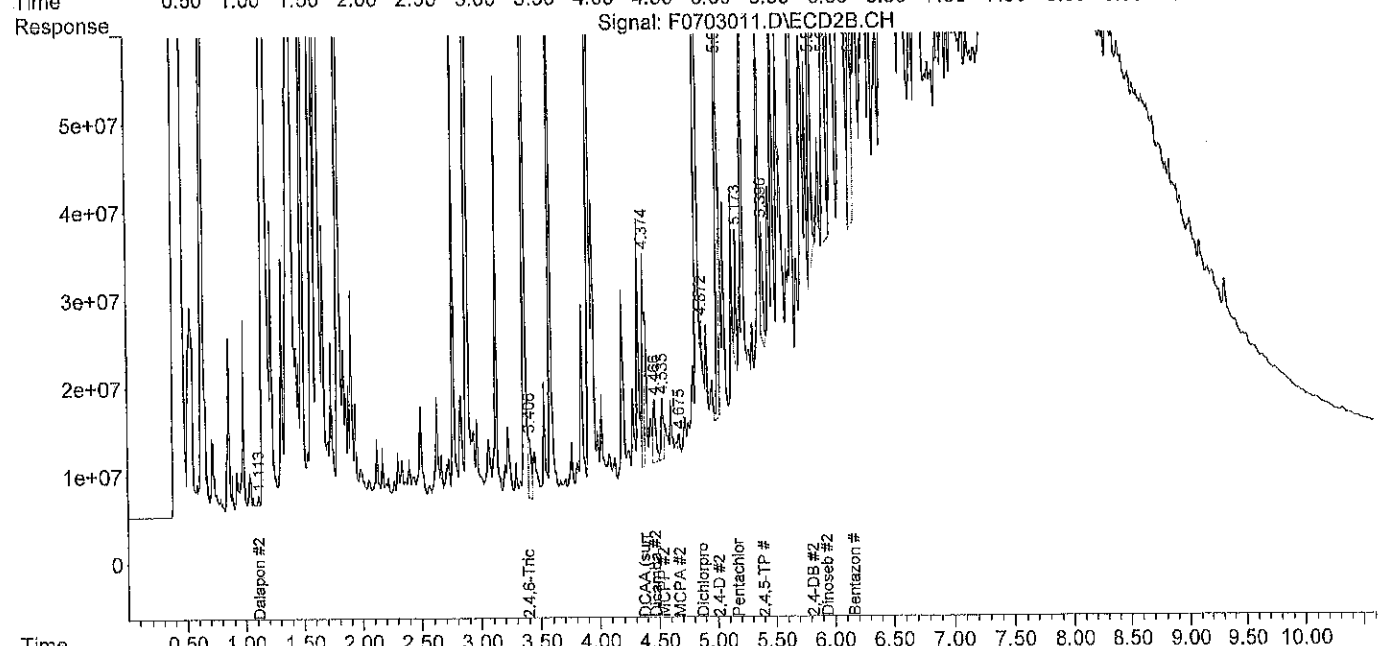
Data File : F0703011.D
Sample : 06-261-05a

Data Path : X:\PEST\FRANK\DATA\F140703\
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 03-Jul-14, 13:57:46 (#1); 03-Jul-14, 13:57:45 (#2)
Operator :
Misc :
ALS Vial : 11 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: events2.e
Quant Time: Jul 11 13:05:16 2014
Quant Method : C:\MSDCHEM\1\METHODS\H140219.M
Quant Title : Herbicides
QLast Update : Wed Jul 02 15:45:12 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data File : F0703004.D
Sample : MB0702W1

Data Path : X:\PEST\FRANK\DATA\F140703\
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 03-Jul-14, 12:06:25
Operator :
Misc :
ALS Vial : 4 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: events2.e
Quant Time: Jul 04 10:46:56 2014
Quant Method : C:\msdchem\1\METHODS\H140219.M
Quant Title : Herbicides
QLast Update : Wed Jul 02 15:45:12 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase :
Signal #1 Info :
Signal #2 Phase:
Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
3) S	DCAA (surr)	3.707	4.379	15509879	29274637	49.601m	66.119 #
	Spiked Amount 100.000			Recovery	=	49.60%	66.12%
	Target Compounds						
1) A	Dalapon	0.825	1.109	615788	2352362	0.561	2.427 #
2) A	2,4,6-Tri...	2.754f	3.401	356869	714912	N.D.	N.D.
4) A	Dicamba	0.000	4.468	0	5151832	N.D.	1.651 #
5) A	MCPP	0.000	0.000	0	0	N.D.	N.D.
6) A	MCPA	4.020f	4.667	301836	256904	N.D. m	N.D. m
7) A	Dichlorprop	0.000	4.847	0	529966	N.D.	N.D. m
8) A	2,4-D	4.330f	5.027f	133386	267467	N.D. m	N.D. m
9) A	Pentachlo...	4.378	5.177	483142	2437426	0.041m	0.217m#
10) A	2,4,5-TP	4.713	5.402	1492753	2541900	N.D.	N.D.
11) A	2,4,5-T	4.856f	0.000	2233631	0	0.255	N.D. #
12) A	2,4-DB	0.000	0.000	0	0	N.D.	N.D.
13) a	Bentazon	5.454f	6.184f	4186028	14446335	19.932	55.174 #
14) A	Dinoseb	5.505	0.000	6692709	0	4.133m	N.D. #

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

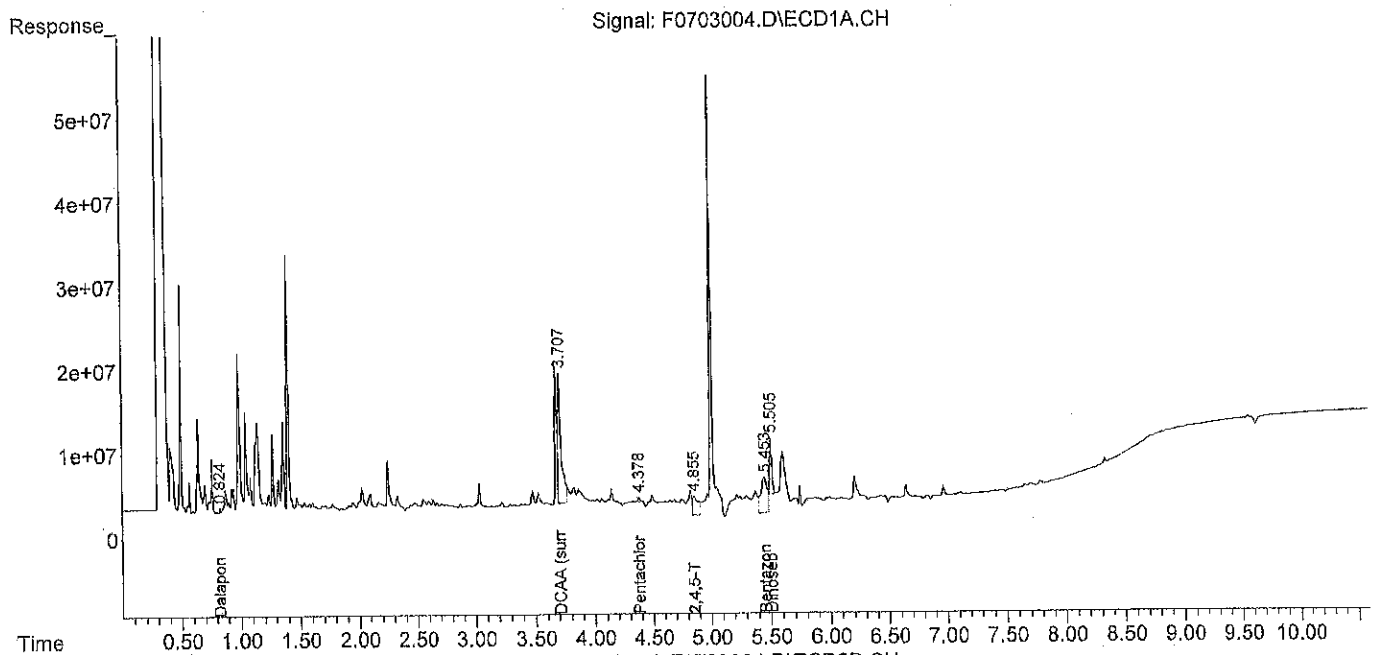
Quantitation Report (QT Reviewed)

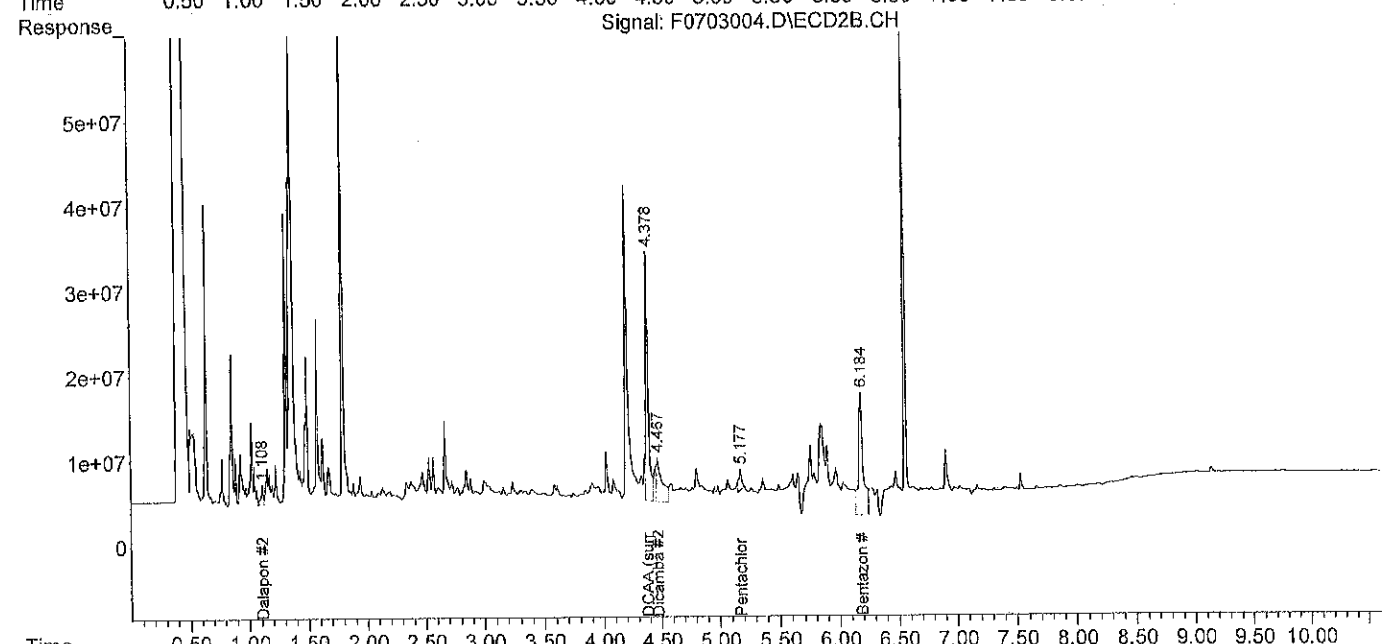
Data File : F0703004.D
Sample : MB0702W1

Data Path : X:\PEST\FRANK\DATA\F140703\
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 03-Jul-14, 12:06:25
Operator :
Misc :
ALS Vial : 4 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: events2.e
Quant Time: Jul 04 10:46:56 2014
Quant Method : C:\msdchem\1\METHODS\H140219.M
Quant Title : Herbicides
QLast Update : Wed Jul 02 15:45:12 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase :
Signal #1 Info :
Signal #2 Phase:
Signal #2 Info :





Quantitation Report (QT Reviewed)

Data File : F0703005.D
Sample : SB0702W1

Data Path : X:\PEST\FRANK\DATA\F140703\
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 03-Jul-14, 12:22:25
Operator :
Misc :
ALS Vial : 5 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: events2.e
Quant Time: Jul 14 08:56:22 2014
Quant Method : C:\MSDCHEM\1\METHODS\H140219.M
Quant Title : Herbicides
QLast Update : Wed Jul 02 15:45:12 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase :
Signal #1 Info :
Signal #2 Phase:
Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
3) S	DCAA (surr)	3.698	4.372	22480168	38550091	73.057	88.021m
	Spiked Amount 100.000			Recovery	=	73.06%	88.02%
	Target Compounds						
1) A	Dalapon	0.826	1.107	21133856	35362319	41.627	50.089
2) A	2,4,6-Tri...	2.768	3.401	346781	778178	N.D.	N.D.
4) A	Dicamba	3.783	4.464	84236227	167.2E6	65.683m	90.255 #
5) A	MCPP	3.918	4.544	9481732	16437243	9676.880	12401.980 #
6) A	MCPA	4.003	4.672	10774308	18924889	7471.654	9788.720 #
7) A	Dichlorprop	4.197	4.851	20518532	38730197	61.511	84.556 #
8) A	2,4-D	4.318	5.012	15226494	30700436	38.602	57.390m#
9) A	Pentachlo...	4.375	5.176	45677959	90208838	7.907m	10.939 #
10) A	2,4,5-TP	4.712	5.398	134.6E6	258.5E6	67.355	93.921 #
11) A	2,4,5-T	4.842	5.577	88473005	186.2E6	45.357	68.422m#
12) A	2,4-DB	5.086	5.807	13158355	20195439	54.567	58.431m
13) a	Bentazon	5.438	6.185f	3565811	13941666	16.463	53.157 #
14) A	Dinoseb	5.513	5.939	97852087	165.6E6	69.405m	88.441 #

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

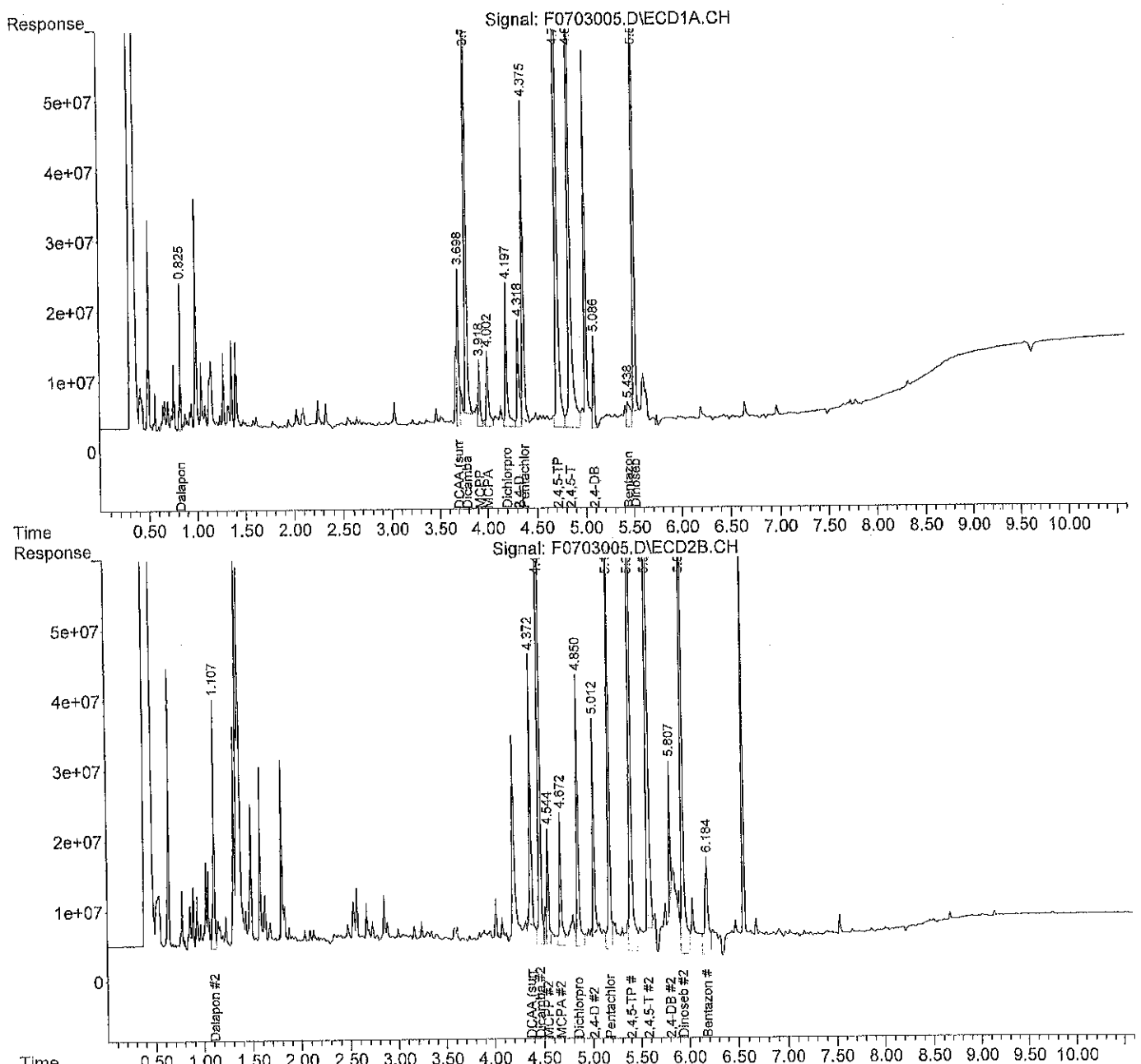
Quantitation Report (QT Reviewed)

Data File : F0703005.D
Sample : SB0702W1

Data Path : X:\PEST\FRANK\DATA\F140703\
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 03-Jul-14, 12:22:25
Operator :
Misc :
ALS Vial : 5 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: events2.e
Quant Time: Jul 14 08:56:22 2014
Quant Method : C:\MSDCHEM\1\METHODS\H140219.M
Quant Title : Herbicides
QLast Update : Wed Jul 02 15:45:12 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase :
Signal #1 Info :
Signal #2 Phase:
Signal #2 Info :



Quantitation Report (QT Reviewed)

Data File : F0703006.D
Sample : SB0702W1 DUP

Data Path : X:\PEST\FRANK\DATA\F140703\
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 03-Jul-14, 12:38:18
Operator :
Misc :
ALS Vial : 6 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: events2.e
Quant Time: Jul 14 08:56:45 2014
Quant Method : C:\msdchem\1\METHODS\H140219.M
Quant Title : Herbicides
QLast Update : Wed Jul 02 15:45:12 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
3)	S DCAA (surr)	3.698	4.372	25016350	40927650	81.592	93.635m
	Spiked Amount 100.000			Recovery	=	81.59%	93.64%
	Target Compounds						
1)	A Dalapon	0.827	1.109	21352457	35012192	42.065	49.584
2)	A 2,4,6-Tri...	2.758f	3.404	381590	904251	N.D.	N.D.
4)	A Dicamba	3.783	4.465	89057831	173.2E6	69.503m	93.502 #
5)	A MCPP	3.919	4.545	9901698	17102857	10116.014	12915.080 #
6)	A MCPA	4.003	4.673	11349553	19904721	7892.672	10317.935 #
7)	A Dichlorprop	4.196	4.851	21580045	39968443	64.806	87.328 #
8)	A 2,4-D	4.318	5.013	16389010	33940660	41.685	63.650m#
9)	A Pentachlo...	4.374	5.176	45136218	89845066	7.813m	10.895 #
10)	A 2,4,5-TP	4.712	5.399	138.3E6	261.9E6	69.265	95.166 #
11)	A 2,4,5-T	4.843	5.579	96020071	195.5E6	49.304	71.901m#
12)	A 2,4-DB	5.086	5.808	13497581	22164421	56.005	64.350m
13)	a Bentazon	5.438	6.186f	3023115	12043233	13.428	45.569 #
14)	A Dinoseb	5.513	5.940	90286335	156.1E6	63.987m	83.313 #

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

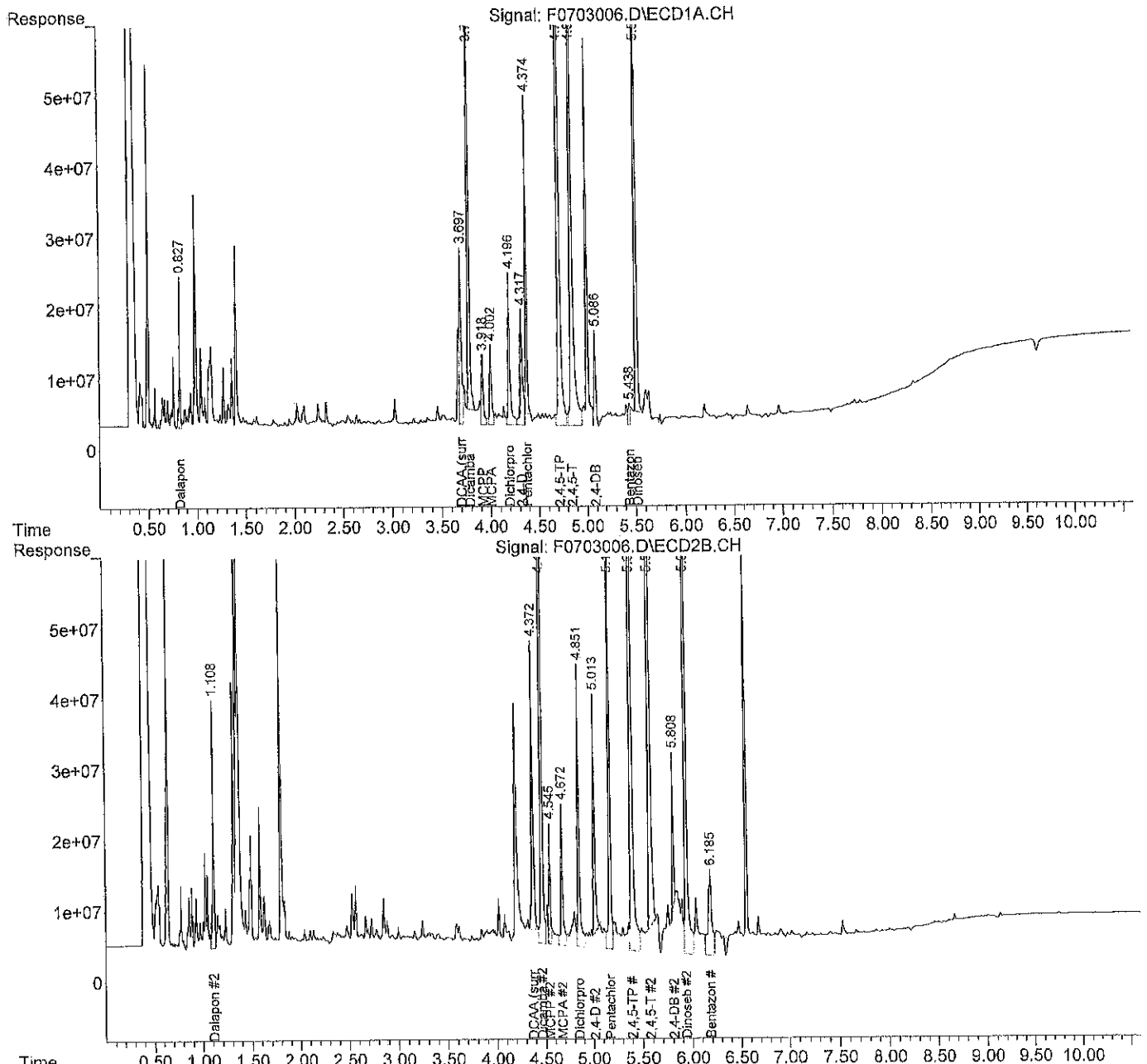
Quantitation Report (QT Reviewed)

Data File : F0703006.D
Sample : SB0702W1 DUP

Data Path : X:\PEST\FRANK\DATA\F140703\
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 03-Jul-14, 12:38:18
Operator :
Misc :
ALS Vial : 6 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: events2.e
Quant Time: Jul 14 08:56:45 2014
Quant Method : C:\msdchem\1\METHODS\H140219.M
Quant Title : Herbicides
QLast Update : Wed Jul 02 15:45:12 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Quantitation Report (Not Reviewed)

Data File : F0703003.D
Sample : HERBCCV 0703-1 (PS3-90-08)

Data Path : C:\MSDCHEM\1\DATA\F140703\
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 03-Jul-14, 11:50:32
Operator :
Misc :
ALS Vial : 3 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: events2.e
Quant Time: Jul 03 12:01:12 2014
Quant Method : C:\MSDCHEM\1\METHODS\H140219.M
Quant Title : Herbicides
QLast Update : Wed Jul 02 15:45:12 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

KMS 7-4-14

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb	
	System Monitoring Compounds							
3)	S DCAA (surr)	3.698	4.372	26563330	52912157	86.798	121.934 #	-22
	Spiked Amount 100.000			Recovery	=	86.80%	121.93%	
	Target Compounds							
1)	A Dalapon	0.828	1.109	60836757	89952030	121.092	128.910	-21 -29
2)	A 2,4,6-Tri...	2.770	3.411	128.3E6	248.3E6	42.470	58.416 #	-17
4)	A Dicamba	3.784	4.464	121.5E6	228.1E6	95.189	123.546 #	-24
5)	A MCPP	3.919	4.544	10712187	18974547	10963.493	14357.903 #	-44
6)	A MCPA	4.002	4.673	13636172	24717533	9566.231	12917.374 #	-29
7)	A Dichlorprop	4.197	4.851	26573763	50571159	80.308	111.063 #	+20
8)	A 2,4-D	4.319	5.013	26324985	54767907	68.028	103.889 #	+32
9)	A Pentachlo...	4.375	5.176	55241869	104.8E6	9.572	12.720 #	-27
10)	A 2,4,5-TP	4.714	5.399	167.4E6	316.4E6	84.012	115.227 #	+16
11)	A 2,4,5-T	4.844	5.579	143.7E6	288.9E6	74.252	106.834 #	+26
12)	A 2,4-DB	5.088	5.810	15884096	32269231	66.122	94.726 #	+34
13)	a Bentazon	5.435	6.168	16485263	30367847	88.718	118.817 #	-16
14)	A Dinoseb	5.515	5.940	131.3E6	229.4E6	93.350	122.839 #	-23

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

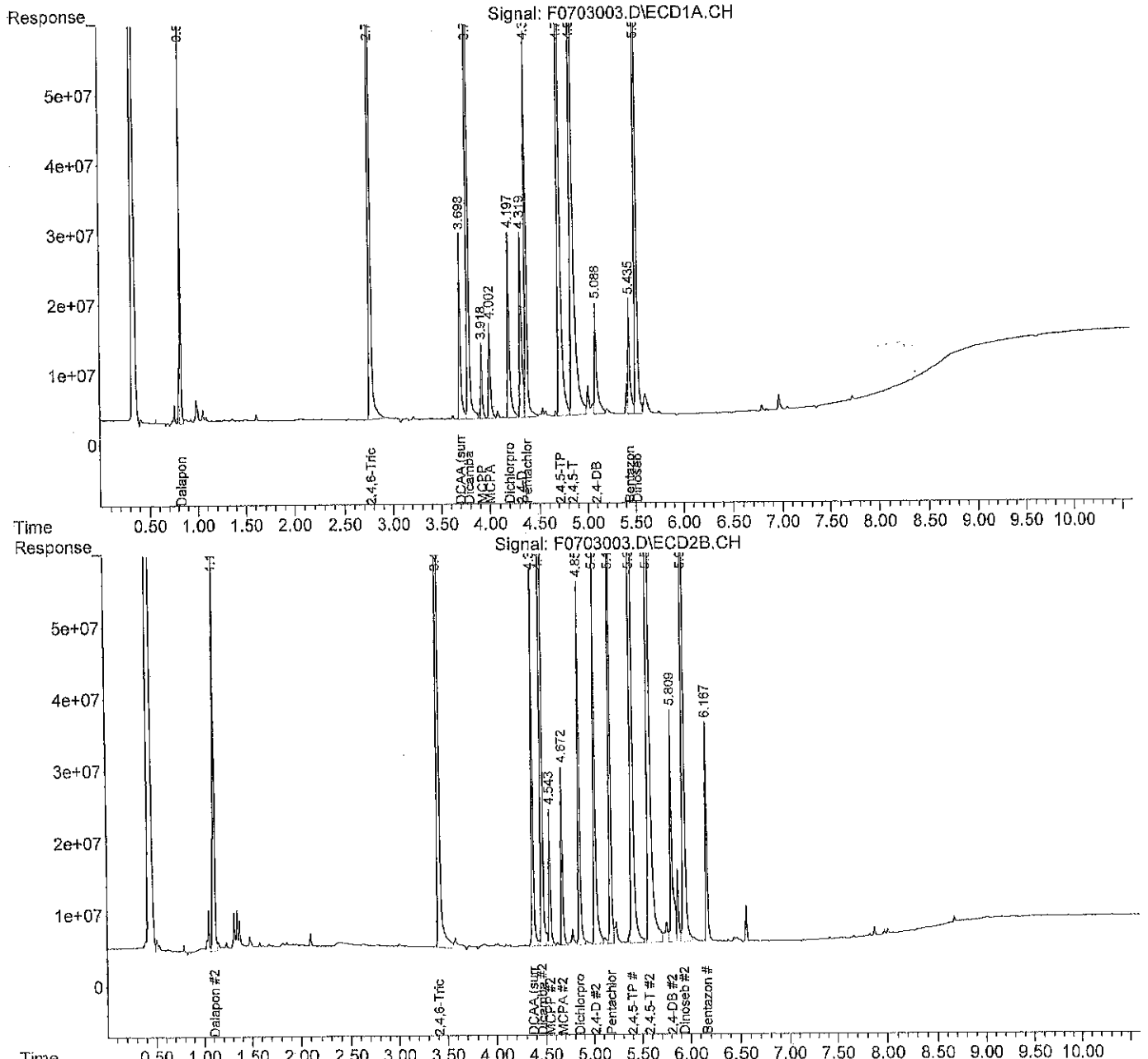
Quantitation Report (Not Reviewed)

Data File : F0703003.D
Sample : HERBCCV 0703-1 (PS3-90-08)

Data Path : C:\MSDCHEM\1\DATA\F140703\
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 03-Jul-14, 11:50:32
Operator :
Misc :
ALS Vial : 3 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: events2.e
Quant Time: Jul 03 12:01:12 2014
Quant Method : C:\MSDCHEM\1\METHODS\H140219.M
Quant Title : Herbicides
QLast Update : Wed Jul 02 15:45:12 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Quantitation Report (Not Reviewed)

Data File : F0703013.D
Sample : HERBCCV 0703-2 (PS3-90-08)

Data Path : C:\MSDCHEM\1\DATA\F140703\
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 03-Jul-14, 14:29:42 (#1); 03-Jul-14, 14:29:41 (#2)
Operator :
Misc :
ALS Vial : 13 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: events2.e
Quant Time: Jul 03 14:40:24 2014
Quant Method : C:\MSDCHEM\1\METHODS\H140219.M
Quant Title : Herbicides
QLast Update : Wed Jul 02 15:45:12 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb	
	System Monitoring Compounds							
3)	S DCAA (surr)	3.699	4.373	26026492	47837764	84.991	109.952	#
	Spiked Amount 100.000			Recovery	=	84.99%	109.95%	
	Target Compounds							
1)	A Dalapon	0.827	1.109	60741024	87794584	120.900	125.795	
2)	A 2,4,6-Tri...	2.770	3.411	123.6E6	229.4E6	40.888	53.907	#
4)	A Dicamba	3.784	4.465	116.8E6	206.6E6	91.513	111.782	
5)	A MCPP	3.919	4.545	10291521	17744950	10523.628	13410.048	#
6)	A MCPA	4.003	4.673	13236024	22088785	9273.366	11497.566	
7)	A Dichlorprop	4.195	4.850	25327726	46642509	76.440	102.268	#
8)	A 2,4-D	4.319	5.013	24644393	51443272	63.572	97.466	#
9)	A Pentachlo...	4.373	5.175	54198777	99720945	9.390	12.101	#
10)	A 2,4,5-TP	4.714	5.399	162.7E6	290.4E6	81.658	105.664	#
11)	A 2,4,5-T	4.844	5.580	137.4E6	259.7E6	70.925	95.929	#
12)	A 2,4-DB	5.089	5.811	14988311	28587338	62.325	83.658	#
13)	a Bentazon	5.435	6.169	15623378	27089855	83.898	105.714	#
14)	A Dinoseb	5.515	5.940	127.9E6	208.3E6	90.933	111.440	

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

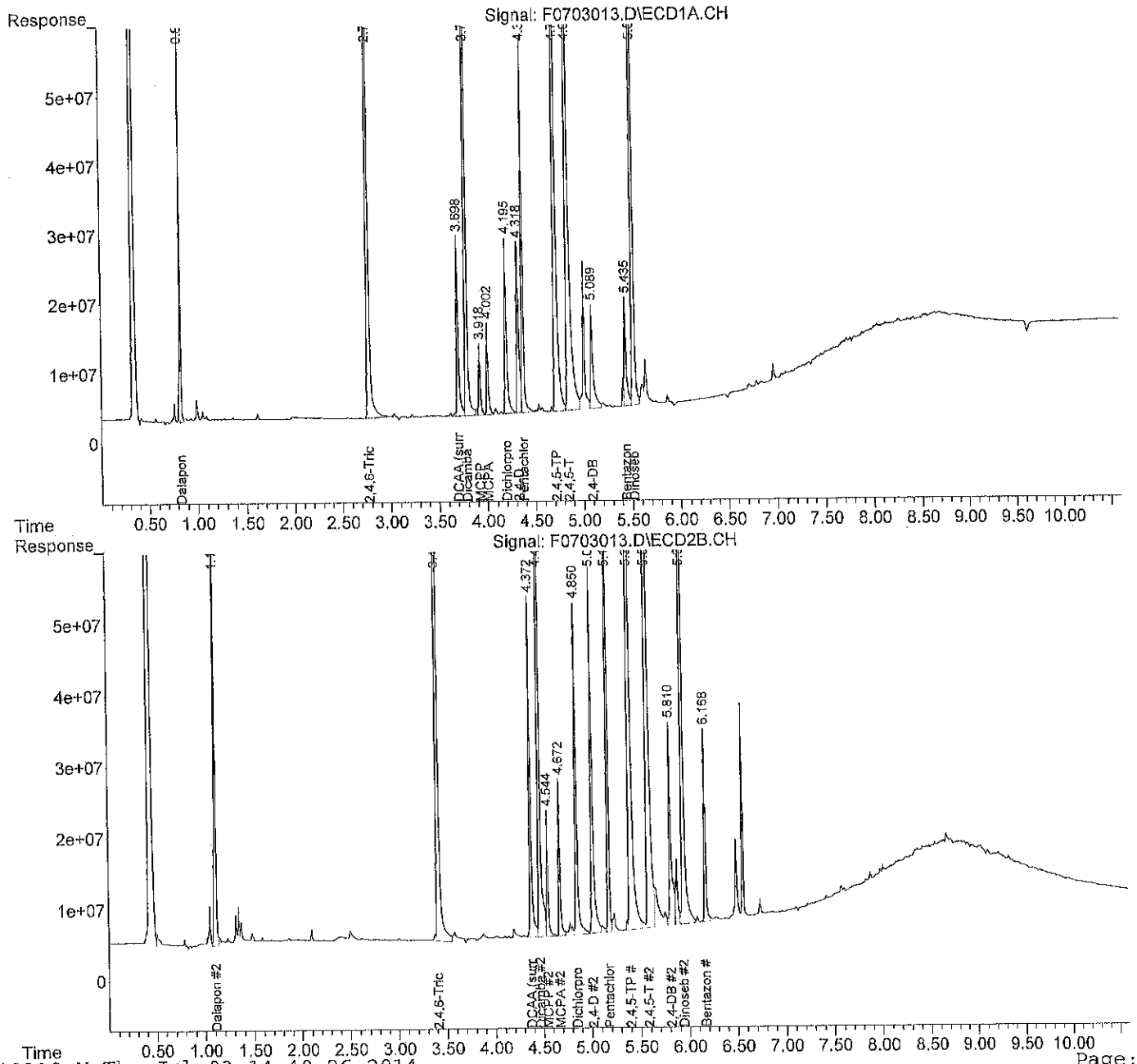
Quantitation Report (Not Reviewed)

Data File : F0703013.D
Sample : HERBCCV 0703-2 (PS3-90-08)

Data Path : C:\MSDCHEM\1\DATA\F140703\
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 03-Jul-14, 14:29:42 (#1); 03-Jul-14, 14:29:41 (#2)
Operator :
Misc :
ALS Vial : 13 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: events2.e
Quant Time: Jul 03 14:40:24 2014
Quant Method : C:\MSDCHEM\1\METHODS\H140219.M
Quant Title : Herbicides
QLast Update : Wed Jul 02 15:45:12 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase :
Signal #1 Info :
Signal #2 Phase:
Signal #2 Info :



Quantitation Report (Not Reviewed)

Data File : F0711003.D
Sample : HERBCCV 0711-1 (PS3-90-08)

Data Path : C:\MSDCHEM\1\DATA\F140711\
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 11-Jul-14, 11:03:32
Operator :
Misc :
ALS Vial : 3 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: events2.e
Quant Time: Jul 11 11:14:15 2014
Quant Method : C:\MSDCHEM\1\METHODS\H140219.M
Quant Title : Herbicides
QLast Update : Tue Jul 08 14:39:10 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb	
	System Monitoring Compounds							
3)	S DCAA (surr)	3.774f	4.487f	26934070	50818148	88.045	116.990 #	-17
	Spiked Amount 100.000			Recovery	=	88.05%	116.99%	
	Target Compounds							
1)	A Dalapon	0.886	1.204	53765435	83624914	106.939	119.774	
2)	A 2,4,6-Tri...	2.853	3.529	126.3E6	238.7E6	41.782	56.130 #	
4)	A Dicamba	3.860f	4.579f	117.5E6	217.9E6	92.064	117.940 #	
5)	A MCPP	3.992f	4.677f	10171879	1455300	10398.525	852.896 #	-21
6)	A MCPA	4.077f	4.784f	12806482	23232931	8958.988	12115.529 #	
7)	A Dichlorprop	4.276f	4.964f	29037585	53201908	87.956	116.952 #	
8)	A 2,4-D	4.393f	5.123f	30257268	59370662	78.453	112.782 #	
9)	A Pentachlo...	4.457f	5.294f	52187204	101.4E6	9.040	12.300 #	
10)	A 2,4,5-TP	4.787f	5.508f	183.2E6	335.1E6	92.018	122.126 #	
11)	A 2,4,5-T	4.916f	5.687f	163.1E6	322.8E6	84.376	119.488 #	
12)	A 2,4-DB	5.158f	5.916f	19399634	36297962	81.025	106.838 #	
13)	a Bentazon	5.507f	6.277f	17602151	31827131	94.965	124.651 #	
14)	A Dinoseb	5.584f	6.047f	133.3E6	231.2E6	94.780	123.825 #	-24

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

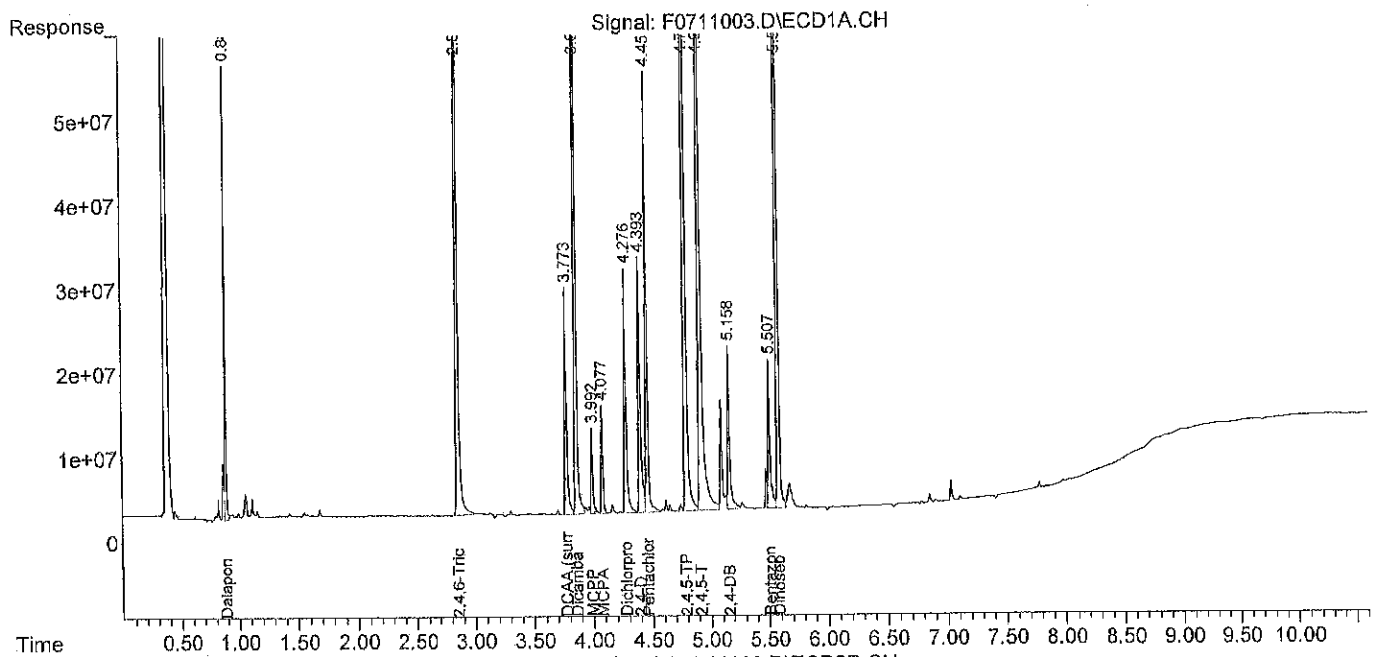
Quantitation Report (Not Reviewed)

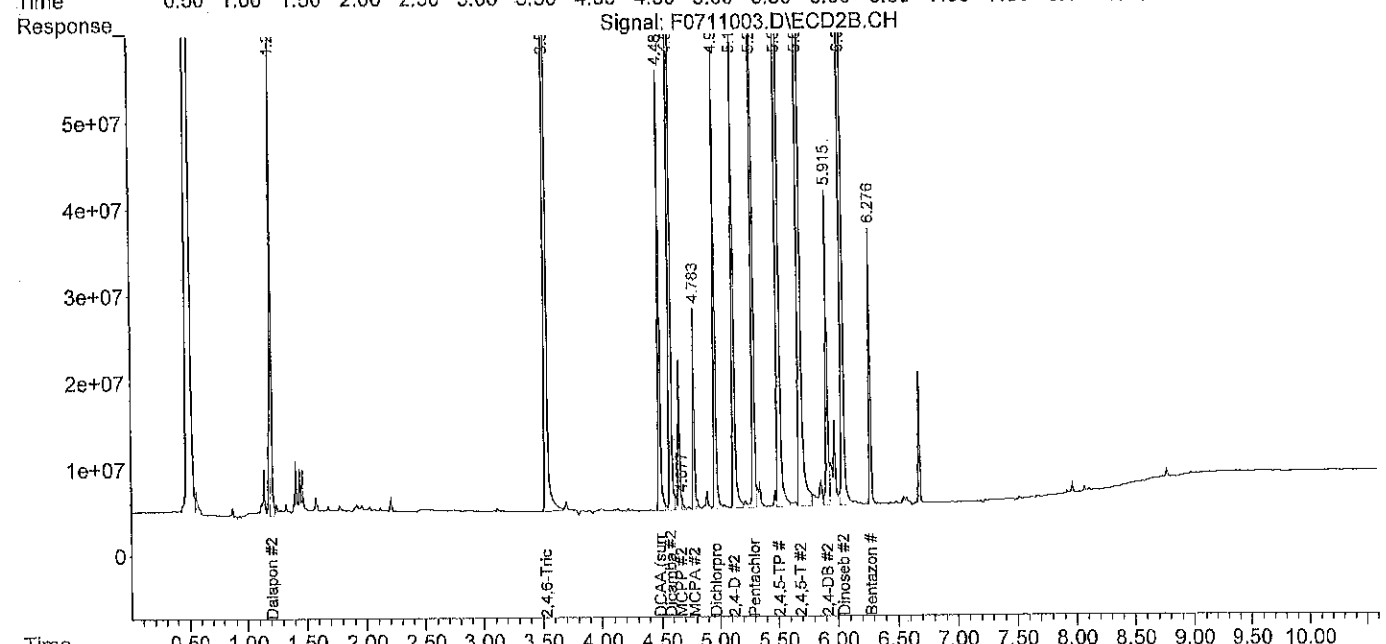
Data File : F0711003.D
Sample : HERBCCV 0711-1 (PS3-90-08)

Data Path : C:\MSDCHEM\1\DATA\F140711\
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 11-Jul-14, 11:03:32
Operator :
Misc :
ALS Vial : 3 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: events2.e
Quant Time: Jul 11 11:14:15 2014
Quant Method : C:\MSDCHEM\1\METHODS\H140219.M
Quant Title : Herbicides
QLast Update : Tue Jul 08 14:39:10 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase :
Signal #1 Info :
Signal #2 Phase:
Signal #2 Info :





Quantitation Report (Not Reviewed)

Data File : F0711009.D
Sample : HERBCCV 0711-2 (PS3-90-08)

Data Path : X:\PEST\FRANK\DATA\F140711\
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 11-Jul-14, 15:11:38
Operator :
Misc :
ALS Vial : 9 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: events2.e
Quant Time: Jul 11 15:24:08 2014
Quant Method : C:\msdchem\1\METHODS\H140219.M
Quant Title : Herbicides
QLast Update : Fri Jul 11 15:24:02 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb	
	System Monitoring Compounds							
3)	S DCAA (surr)	3.771	4.483	27481969	50479279	89.889	116.189 #	-16
	Spiked Amount 100.000			Recovery	=	89.89%	116.19%	
	Target Compounds							
1)	A Dalapon	0.884	1.204	54586862	81195858	108.583	116.267	
2)	A 2,4,6-Tri...	2.850	3.527	129.3E6	234.9E6	42.784	55.235 #	
4)	A Dicamba	3.857	4.575	120.2E6	212.4E6	94.200	114.978	
5)	A MCPP	3.990	4.652	9851928	16669550	10063.972	12581.058 #	
6)	A MCPA	4.074	4.780	12859801	22616220	8998.011	11782.438 #	-18
7)	A Dichlorprop	4.272	4.961	28054214	51162992	84.904	112.388 #	
8)	A 2,4-D	4.390	5.120	30270149	56903640	78.487	108.015 #	
9)	A Pentachlo...	4.452	5.290	52264762	97477503	9.054	11.827 #	
10)	A 2,4,5-TP	4.784	5.505	183.4E6	322.5E6	92.137	117.479 #	
11)	A 2,4,5-T	4.913	5.683	165.4E6	306.7E6	85.591	113.468 #	
12)	A 2,4-DB	5.155	5.912	19466002	35468763	81.307	104.345 #	
13)	a Bentazon	5.504	6.273	17782933	30988584	95.976	121.299 #	
14)	A Dinoseb	5.581	6.044	132.6E6	225.3E6	94.306	120.647 #	-21

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

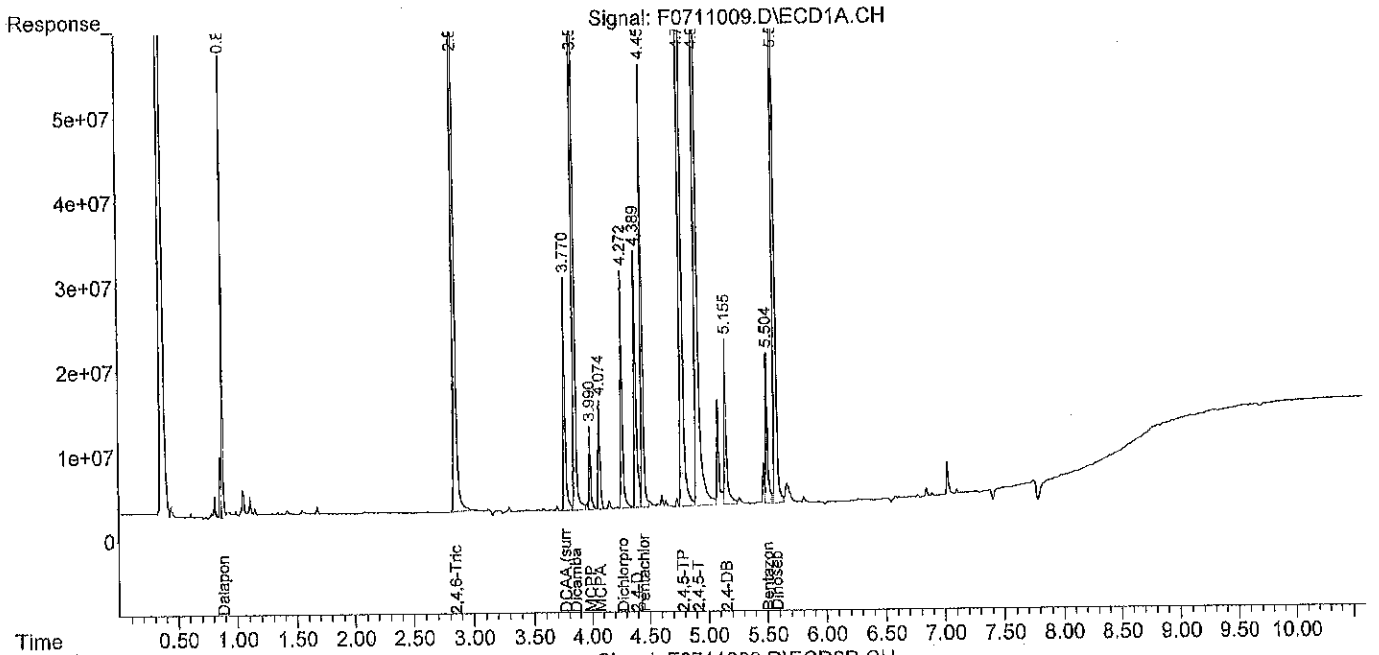
Quantitation Report (Not Reviewed)

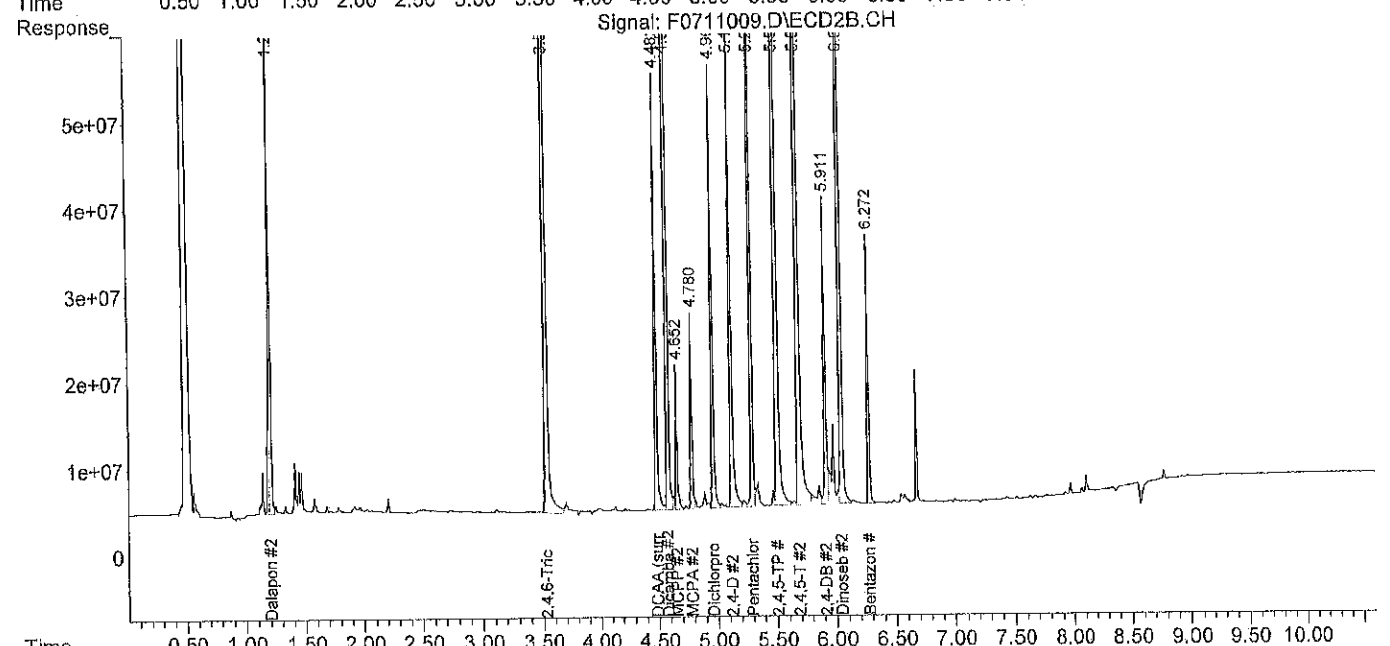
Data File : F0711009.D
Sample : HERBCCV 0711-2 (PS3-90-08)

Data Path : X:\PEST\FRANK\DATA\F140711\
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 11-Jul-14, 15:11:38
Operator :
Misc :
ALS Vial : 9 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: events2.e
Quant Time: Jul 11 15:24:08 2014
Quant Method : C:\msdchem\1\METHODS\H140219.M
Quant Title : Herbicides
QLast Update : Fri Jul 11 15:24:02 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase :
Signal #1 Info :
Signal #2 Phase:
Signal #2 Info :





OnSite Environmental Inc.
14648 NE 95th Street, Redmond, WA 98052 • (425) 883-3881

October 21, 2014

Robert Trahan
GeoEngineers, Inc.
600 Stewart, Suite 1700
Seattle, WA 98101-1233

Re: Analytical Data for Project 5364-013-08
Laboratory Reference No. 1410-126

Dear Robert:

Enclosed are the analytical results and associated quality control data for samples submitted on October 10, 2014.

The standard policy of OnSite Environmental, Inc. is to store your samples for 30 days from the date of receipt. If you require longer storage, please contact the laboratory.

We appreciate the opportunity to be of service to you on this project. If you have any questions concerning the data, or need additional information, please feel free to call me.

Sincerely,

David Baumeister
Project Manager

Enclosures

Date of Report: October 21, 2014
Samples Submitted: October 10, 2014
Laboratory Reference: 1410-126
Project: 5364-013-08

Case Narrative

Samples were collected on October 9, 2014 and received by the laboratory on October 10, 2014. They were maintained at the laboratory at a temperature of 2°C to 6°C.

General QA/QC issues associated with the analytical data enclosed in this laboratory report will be indicated with a reference to a comment or explanation on the Data Qualifier page. More complex and involved QA/QC issues will be discussed in detail below.

Organochlorine Pesticides by EPA 8081B Analysis

Due to matrix effects, the surrogate recoveries of DCB for the samples GEI-MW12 and GEI-MW12-DUP were below the quality control limits of 28-118%. The samples were re-extracted and showed similar results. No further action was performed.

Any other QA/QC issues associated with this extraction and analysis will be indicated with a footnote reference and discussed in detail on the Data Qualifier page.

Date of Report: October 21, 2014
Samples Submitted: October 10, 2014
Laboratory Reference: 1410-126
Project: 5364-013-08

ANALYTICAL REPORT FOR SAMPLES

Client ID	Laboratory ID	Matrix	Date Sampled	Date Received	Notes
GEI-MW-10	10-126-01	Water	10-9-14	10-10-14	
GEI-MW-11	10-126-02	Water	10-9-14	10-10-14	
GEI-MW-12	10-126-03	Water	10-9-14	10-10-14	
GEI-MW-12-DUP	10-126-04	Water	10-9-14	10-10-14	

Date of Report: October 21, 2014
Samples Submitted: October 10, 2014
Laboratory Reference: 1410-126
Project: 5364-013-08

ORGANOCHLORINE PESTICIDES EPA 8081B

Matrix: Water
Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**GEI-MW-10**					
Laboratory ID:	10-126-01					
Heptachlor	**ND**	0.0047	EPA 8081B	10-14-14	10-14-14	
Aldrin	**ND**	0.0047	EPA 8081B	10-14-14	10-14-14	
Heptachlor Epoxide	**ND**	0.0047	EPA 8081B	10-14-14	10-14-14	
Dieldrin	**ND**	0.0047	EPA 8081B	10-14-14	10-14-14	
Surrogate:	*Percent Recovery*	*Control Limits*				
TCMX	*66*	*35-96*				
DCB	*55*	*28-118*				
Client ID:	**GEI-MW-11**					
Laboratory ID:	10-126-02					
Heptachlor	**ND**	0.0047	EPA 8081B	10-14-14	10-14-14	
Aldrin	**ND**	0.0047	EPA 8081B	10-14-14	10-14-14	
Heptachlor Epoxide	**ND**	0.0047	EPA 8081B	10-14-14	10-14-14	
Dieldrin	**ND**	0.0047	EPA 8081B	10-14-14	10-14-14	
Surrogate:	*Percent Recovery*	*Control Limits*				
TCMX	*57*	*35-96*				
DCB	*52*	*28-118*				
Client ID:	**GEI-MW-12**					
Laboratory ID:	10-126-03					
Heptachlor	**ND**	0.0047	EPA 8081B	10-14-14	10-14-14	
Aldrin	**ND**	0.0047	EPA 8081B	10-14-14	10-14-14	
Heptachlor Epoxide	**ND**	0.0047	EPA 8081B	10-14-14	10-14-14	
Dieldrin	**ND**	0.0047	EPA 8081B	10-14-14	10-14-14	
Surrogate:	*Percent Recovery*	*Control Limits*				
TCMX	*50*	*35-96*				
DCB	*24*	*28-118*				Q
Client ID:	**GEI-MW-12-DUP**					
Laboratory ID:	10-126-04					
Heptachlor	**ND**	0.0047	EPA 8081B	10-14-14	10-14-14	
Aldrin	**ND**	0.0047	EPA 8081B	10-14-14	10-14-14	
Heptachlor Epoxide	**ND**	0.0047	EPA 8081B	10-14-14	10-14-14	
Dieldrin	**ND**	0.0047	EPA 8081B	10-14-14	10-14-14	
Surrogate:	*Percent Recovery*	*Control Limits*				
TCMX	*51*	*35-96*				
DCB	*20*	*28-118*				Q

Date of Report: October 21, 2014
Samples Submitted: October 10, 2014
Laboratory Reference: 1410-126
Project: 5364-013-08

CHLORINATED ACID HERBICIDES EPA 8151A

Matrix: Water
Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**GEI-MW-10**					
Laboratory ID:	10-126-01					
MCPA	**80**	8.2	EPA 8151A	10-14-14	10-16-14	P (100%)
2,4-D	**5.4**	0.055	EPA 8151A	10-14-14	10-16-14	
Bentazon	**26**	11	EPA 8151A	10-14-14	10-20-14	
Dinoseb	**150**	11	EPA 8151A	10-14-14	10-20-14	
Surrogate:	*Percent Recovery*	*Control Limits*				
DCAA	*52*	*30-99*				
Client ID:	**GEI-MW-11**					
Laboratory ID:	10-126-02					
MCPA	**ND**	6.6	EPA 8151A	10-14-14	10-16-14	
2,4-D	**ND**	0.044	EPA 8151A	10-14-14	10-16-14	
Bentazon	**0.74**	0.45	EPA 8151A	10-14-14	10-16-14	
Dinoseb	**0.73**	0.045	EPA 8151A	10-14-14	10-16-14	
Surrogate:	*Percent Recovery*	*Control Limits*				
DCAA	*31*	*30-99*				
Client ID:	**GEI-MW-12**					
Laboratory ID:	10-126-03					
MCPA	**ND**	6.6	EPA 8151A	10-14-14	10-16-14	
2,4-D	**ND**	0.044	EPA 8151A	10-14-14	10-16-14	
Bentazon	**0.70**	0.44	EPA 8151A	10-14-14	10-16-14	
Dinoseb	**2.3**	0.044	EPA 8151A	10-14-14	10-16-14	
Surrogate:	*Percent Recovery*	*Control Limits*				
DCAA	*34*	*30-99*				
Client ID:	**GEI-MW-12-DUP**					
Laboratory ID:	10-126-04					
MCPA	**ND**	6.6	EPA 8151A	10-14-14	10-16-14	
2,4-D	**ND**	0.044	EPA 8151A	10-14-14	10-16-14	
Bentazon	**1.0**	0.44	EPA 8151A	10-14-14	10-16-14	
Dinoseb	**8.9**	0.44	EPA 8151A	10-14-14	10-20-14	
Surrogate:	*Percent Recovery*	*Control Limits*				
DCAA	*61*	*30-99*				

Date of Report: October 21, 2014
Samples Submitted: October 10, 2014
Laboratory Reference: 1410-126
Project: 5364-013-08

ORGANOCHLORINE PESTICIDES EPA 8081B QUALITY CONTROL

Matrix: Water
Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1014W1					
Heptachlor	**ND**	0.0050	EPA 8081B	10-14-14	10-14-14	
Aldrin	**ND**	0.0050	EPA 8081B	10-14-14	10-14-14	
Heptachlor Epoxide	**ND**	0.0050	EPA 8081B	10-14-14	10-14-14	
Dieldrin	**ND**	0.0050	EPA 8081B	10-14-14	10-14-14	
Surrogate:	*Percent Recovery*	*Control Limits*				
TCMX	*76*	*35-96*				
DCB	*83*	*28-118*				

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
SPIKE BLANKS											
Laboratory ID:	SB1014W1										
	SB	SBD	SB	SBD		SB	SBD				
Heptachlor	**0.0790**	**0.0758**	0.100	0.100	N/A	**79**	**76**	43-114	4	15	
Aldrin	**0.0884**	**0.0830**	0.100	0.100	N/A	**88**	**83**	50-106	6	15	
Dieldrin	**0.0877**	**0.0831**	0.100	0.100	N/A	**88**	**83**	58-103	5	15	
Surrogate:											
TCMX						*77*	*75*	*35-96*			
DCB						*83*	*82*	*28-118*			

Date of Report: October 21, 2014
Samples Submitted: October 10, 2014
Laboratory Reference: 1410-126
Project: 5364-013-08

CHLORINATED ACID HERBICIDES EPA 8151A QUALITY CONTROL

Matrix: Water
Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1014W2					
MCPA	**ND**	7.0	EPA 8151A	10-14-14	10-16-14	
2,4-D	**ND**	0.047	EPA 8151A	10-14-14	10-16-14	
Bentazon	**ND**	0.47	EPA 8151A	10-14-14	10-16-14	
Dinoseb	**ND**	0.047	EPA 8151A	10-14-14	10-16-14	
Surrogate:	*Percent Recovery*	*Control Limits*				
DCAA	*35*	*30-99*				

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
SPIKE BLANKS											
Laboratory ID:	SB1014W2										
	SB	SBD	SB	SBD		SB	SBD				
2,4-D	**0.422**	**0.376**	1.00	1.00	N/A	**42**	**38**	35-75	12	15	
Dinoseb	**0.492**	**0.480**	1.00	1.00	N/A	**49**	**48**	17-111	2	16	
Surrogate:											
DCAA						*51*	*44*	*30-99*			

OnSite Environmental Inc.

Data Qualifiers and Abbreviations

A - Due to a high sample concentration, the amount spiked is insufficient for meaningful MS/MSD recovery data.

B - The analyte indicated was also found in the blank sample.

C - The duplicate RPD is outside control limits due to high result variability when analyte concentrations are within five times the quantitation limit.

E - The value reported exceeds the quantitation range and is an estimate.

F - Surrogate recovery data is not available due to the high concentration of coeluting target compounds.

H - The analyte indicated is a common laboratory solvent and may have been introduced during sample preparation, and be impacting the sample result.

I - Compound recovery is outside of the control limits.

J - The value reported was below the practical quantitation limit. The value is an estimate.

K - Sample duplicate RPD is outside control limits due to sample inhomogeneity. The sample was re-extracted and re-analyzed with similar results.

L - The RPD is outside of the control limits.

M - Hydrocarbons in the gasoline range are impacting the diesel range result.

M1 - Hydrocarbons in the gasoline range (toluene-napthalene) are present in the sample.

N - Hydrocarbons in the lube oil range are impacting the diesel range result.

N1 - Hydrocarbons in diesel range are impacting lube oil range results.

O - Hydrocarbons indicative of heavier fuels are present in the sample and are impacting the gasoline result.

P - The RPD of the detected concentrations between the two columns is greater than 40.

Q - Surrogate recovery is outside of the control limits.

S - Surrogate recovery data is not available due to the necessary dilution of the sample.

T - The sample chromatogram is not similar to a typical _____.

U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

U1 - The practical quantitation limit is elevated due to interferences present in the sample.

V - Matrix Spike/Matrix Spike Duplicate recoveries are outside control limits due to matrix effects.

W - Matrix Spike/Matrix Spike Duplicate RPD are outside control limits due to matrix effects.

X - Sample extract treated with a mercury cleanup procedure.

X1- Sample extract treated with a Sulfuric acid/Silica gel cleanup procedure.

Y - The calibration verification for this analyte exceeded the 20% drift specified in method 8260C, and therefore the reported result should be considered an estimate. The overall performance of the calibration verification standard met the acceptance criteria of the method.

Z -

ND - Not Detected at PQL
PQL - Practical Quantitation Limit
RPD - Relative Percent Difference

Chain of Custody

OnSite Environmental Inc.
Analytical Laboratory Testing Services
14648 NE 95th Street • Redmond, WA 98052
Phone: (425) 883-3881 • www.onsite-env.com

Company: GEOENGINEERS
Project Number: 5364-013-08
Project Name: TAXI WAY F
Project Manager: ROBERT TRAHAN
Sampled by: NATHAN SOLOMON

Turnaround Request (in working days)
(Check One)
☐ Same Day ☐ 1 Day
☐ 2 Days ☐ 3 Days
☒ Standard (7 Days) (TPH analysis 5 Days)
☐ _____ (other)

Laboratory Number: 10-126

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers	NWTPH-HCID	NWTPH-Gx/BTEX	NWTPH-Gx	NWTPH-Dx	Volatiles 8260C	Halogenated Volatiles 8260C	Semivolatiles 8270D/SIM (with low-level PAHs)	PAHs 8270D/SIM (low-level)	PCBs 8082A	Organochlorine Pesticides 8081B *	Organophosphorus Pesticides 8270D/SIM	Chlorinated Acid Herbicides 8151A **	Total RCRA Metals	Total MTCA Metals	TCLP Metals	HEM (oil and grease) 1664A	% Moisture
1	GEI-MW-10	10/9/14	940	LIQUID	3										X		X					
2	GEI-MW-11		950		2										X		X					
3	GEI-MW-12		1105		4										X		X					
4	GEI-MW-12-DUP		1110		4										X		X					

	Signature	Company	Date	Time
Relinquished		GEI	10/10/14	0945
Received		CODE	10/10/14	0945
Relinquished				
Received				
Relinquished				
Received				
Reviewed/Date		Reviewed/Date		

Comments/Special Instructions

* Heptachlor, Aldrin, Heptachlor epoxide, Dieldrin.

** - MCPA, 2,4-D, Bentazon, Dinoseb

Chromatograms with final report ☐

Data Package: Standard ☐ Level III ☒ Level IV ☐

Electronic Data Deliverables (EDDs) ☒ _____

Sample/Cooler Receipt and Acceptance Checklist

Client: GES

Client Project Name/Number: 5364-013-08

OnSite Project Number: 10-126

Initiated by: AMV

Date Initiated: 10/10/14

1.0 Cooler Verification

1.1 Were there custody seals on the outside of the cooler?	Yes	No	N/A	1 2 3 4
1.2 Were the custody seals intact?	Yes	No	N/A	1 2 3 4
1.3 Were the custody seals signed and dated by last custodian?	Yes	No	N/A	1 2 3 4
1.4 Were the samples delivered on ice or blue ice?	Yes	No		1 2 3 4
1.5 Were samples received between 0-6 degrees Celsius?	Yes	No	Temperature: 6.6	
1.6 Have shipping bills (if any) been attached to the back of this form?	Yes	N/A		
1.7 How were the samples delivered?	Client	Courier	UPS/FedEx	OSE Pickup Other

2.0 Chain of Custody Verification

2.1 Was a Chain of Custody submitted with the samples?	Yes	No	1 2 3 4
2.2 Was the COC legible and written in permanent ink?	Yes	No	1 2 3 4
2.3 Have samples been relinquished and accepted by each custodian?	Yes	No	1 2 3 4
2.4 Did the sample labels (ID, date, time, preservative) agree with COC?	Yes	No	1 2 3 4
2.5 Were all of the samples listed on the COC submitted?	Yes	No	1 2 3 4
2.6 Were any of the samples submitted omitted from the COC?	Yes	No	1 2 3 4

3.0 Sample Verification

3.1 Were any sample containers broken or compromised?	Yes	No		1 2 3 4
3.2 Were any sample labels missing or illegible?	Yes	No		1 2 3 4
3.3 Have the correct containers been used for each analysis requested?	Yes	No		1 2 3 4
3.4 Have the samples been correctly preserved?	Yes	No	N/A	1 2 3 4
3.5 Are volatiles samples free from headspace and bubbles greater than 6mm?	Yes	No	N/A	1 2 3 4
3.6 Is there sufficient sample submitted to perform requested analyses?	Yes	No		1 2 3 4
3.7 Have any holding times already expired or will expire in 24 hours?	Yes	No		1 2 3 4
3.8 Was method 5035A used?	Yes	No	N/A	1 2 3 4
3.9 If 5035A was used, which sampling option was used (#1, 2, or 3).	#		N/A	1 2 3 4

Explain any discrepancies:

1 - Discuss issue in Case Narrative

2 - Process Sample As-is

3 - Client contacted to discuss problem

4 - Sample cannot be analyzed or client does not wish to proceed

RAW DATA

- Organochlorine Pesticides by EPA 8081B Data
- Chlorinated Acid Herbicides EPA 8151A Data

Organochlorine Pesticides by EPA 8081A Data

Quantitation Report (QT Reviewed)

Signal #1 : D:\HPCHEM\1\DATA\G141014\1014012.D\ECD1A.CH Vial: 12
Signal #2 : D:\HPCHEM\1\DATA\G141014\1014012.D\ECD2B.CH
Acq On : 14 Oct 2014 20:08 Operator:
Sample : 10-126-01 Inst : George
Misc : Multiplr: 1.00
Sample Amount: 0.00

IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Quant Time: Oct 16 10:09 2014 Quant Results File: P140328.RES

Quant Method : D:\HPCHEM\1\METHODS\P140328.M (Chemstation Integrator)
Title : Pestcides
Last Update : Fri Oct 03 16:53:34 2014
Response via : Initial Calibration
DataAcq Meth : P140328.M

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

10-16-14

Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
System Monitoring Compounds						
1) S Tetrachloro-m-xy	3.07	3.25	103199	35766	66.303m	38.327m#
Spiked Amount 100.000			Recovery =		66.30%	38.33%
22) S Decachlorobiphen	7.52	8.15	52771	41967	48.335m	55.031m
Spiked Amount 100.000			Recovery =		48.34%	55.03%
Target Compounds						
2) A alpha-BHC	0.00	3.82f	0	662204	N.D.	546.154 #
3) A gamma-BHC	0.00	4.16	0	393597	N.D.	345.620 #
4) A beta-BHC	3.95	0.00	87020	0	87.501	N.D. #
5) A delta-BHC	0.00	4.49	0	765196	N.D.	686.674 #
6) A Heptachlor	0.00	0.00	0	0	N.D.	N.D.
7) A Aldrin	0.00	0.00	0	0	N.D.	N.D.
8) A Heptachlor epoxi	0.00	0.00	0	0	N.D.	N.D.
9) A gamma-Chlordane	0.00	5.44f	0	87532	N.D.	84.815 #
10) A alpha-Chlordane	5.27	5.55	23457	1494661	15.054	1497.466 #
11) A 4,4'-DDE	0.00	5.69f	0	84307	N.D.	93.588 #
12) A Endosulfan I	0.00	0.00	0	0	N.D.	N.D.
13) A Dieldrin	5.56f	5.81	1893349	1974	1263.252	2.121m#
14) A Endrin	0.00	0.00	0	0	N.D.	N.D.
15) A 4,4'-DDD	0.00	6.12f	0	1714266	N.D.	2421.501 #
16) A Endosulfan II	0.00	6.22f	0	302988	N.D.	356.160 #
17) A 4,4'-DDT	6.00f	6.36f	107173	129693	84.394	161.011 #
18) A Endrin aldehyde	6.19	6.47f	107000	126413	103.560	181.919 #
19) A Methoxychlor	6.35	6.86	179417	204055	260.056	431.944 #
20) A Endosulfan sulfa	6.53	6.65	270045	150859	240.405	201.854
21) A Endrin ketone	6.75	7.09f	181736	100039	147.451	106.172 #
23) L8 Toxaphene{1}	0.00	6.12f	0	1714266	N.D.	116285.928 #
24) L8 Toxaphene{2}	6.00f	6.29f	107173	171923	2888.729	6856.127 #
25) L8 Toxaphene{3}	0.00	6.36f	0	129693	N.D.	3633.490 #
26) L8 Toxaphene{4}	6.26f	6.52	89090	209288	3018.938	8994.190 #
27) L8 Toxaphene{5}	6.53	0.00	270045	0	8441.328	N.D. #
Sum Toxaphene			466308	2225170	14348.995	135769.735
Average Toxaphene					4782.998	33942.434
28) L9 Tech Chlordane{1	4.40f	5.04f	4053249	940213	38460.447	22653.329 #
29) L9 Tech Chlordane{2	5.02f	5.55	1055229	1494661	29288.029	12891.222 #
30) L9 Tech Chlordane{3	5.27	0.00	23457	0	140.181	N.D. #
31) L9 Tech Chlordane{4	5.34	5.55f	519367	1494661	2522.645	14108.605 #
32) L9 Tech Chlordane{5	6.00	6.22	107173	302988	2081.532	20498.243 #
Sum Tech Chlordane			5758475	4232522	72492.834	70151.400
Average Tech Chlordane					14498.567	17537.850

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

Quantitation Report (QT Reviewed)

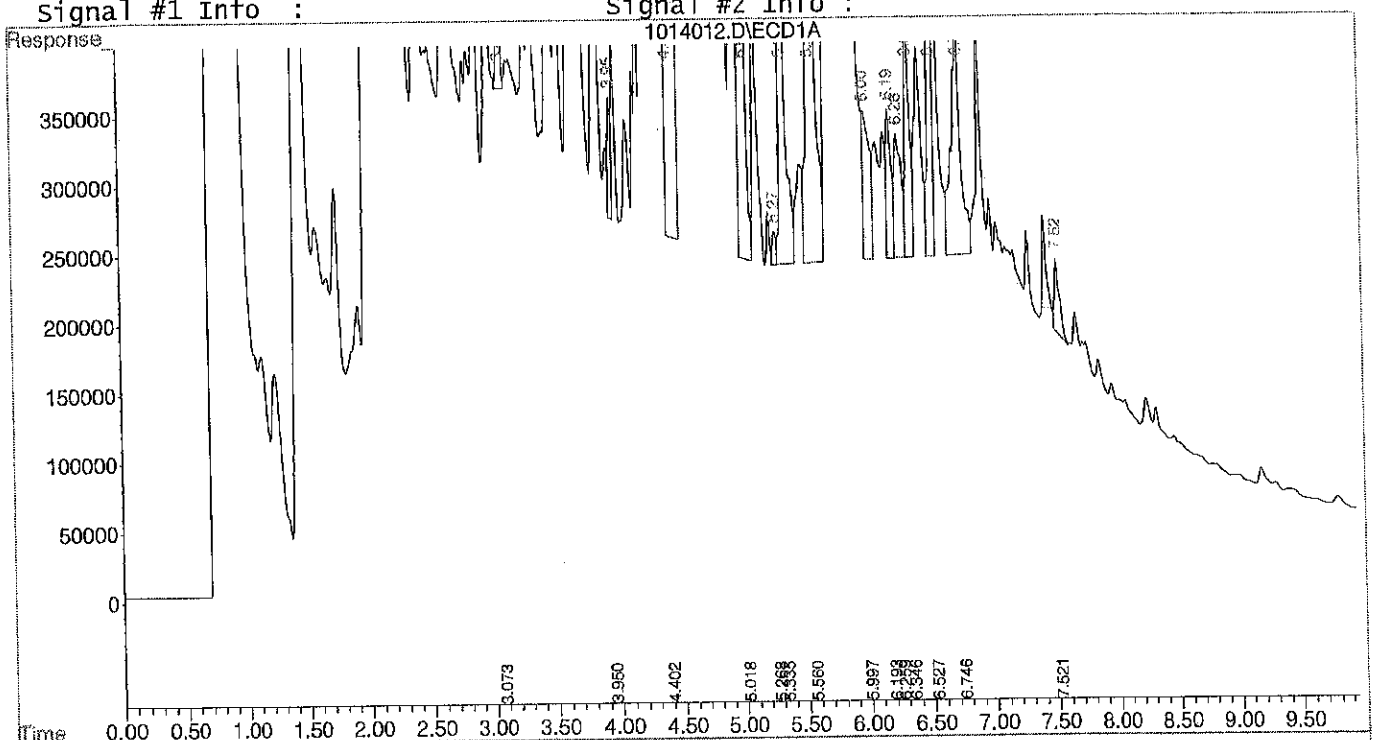
Signal #1 : D:\HPCHEM\1\DATA\G141014\1014012.D\ECD1A.CH Vial: 12
Signal #2 : D:\HPCHEM\1\DATA\G141014\1014012.D\ECD2B.CH
Acq On : 14 Oct 2014 20:08 Operator:
Sample : 10-126-01 Inst : George
Misc : Multiplr: 1.00
Sample Amount: 0.00

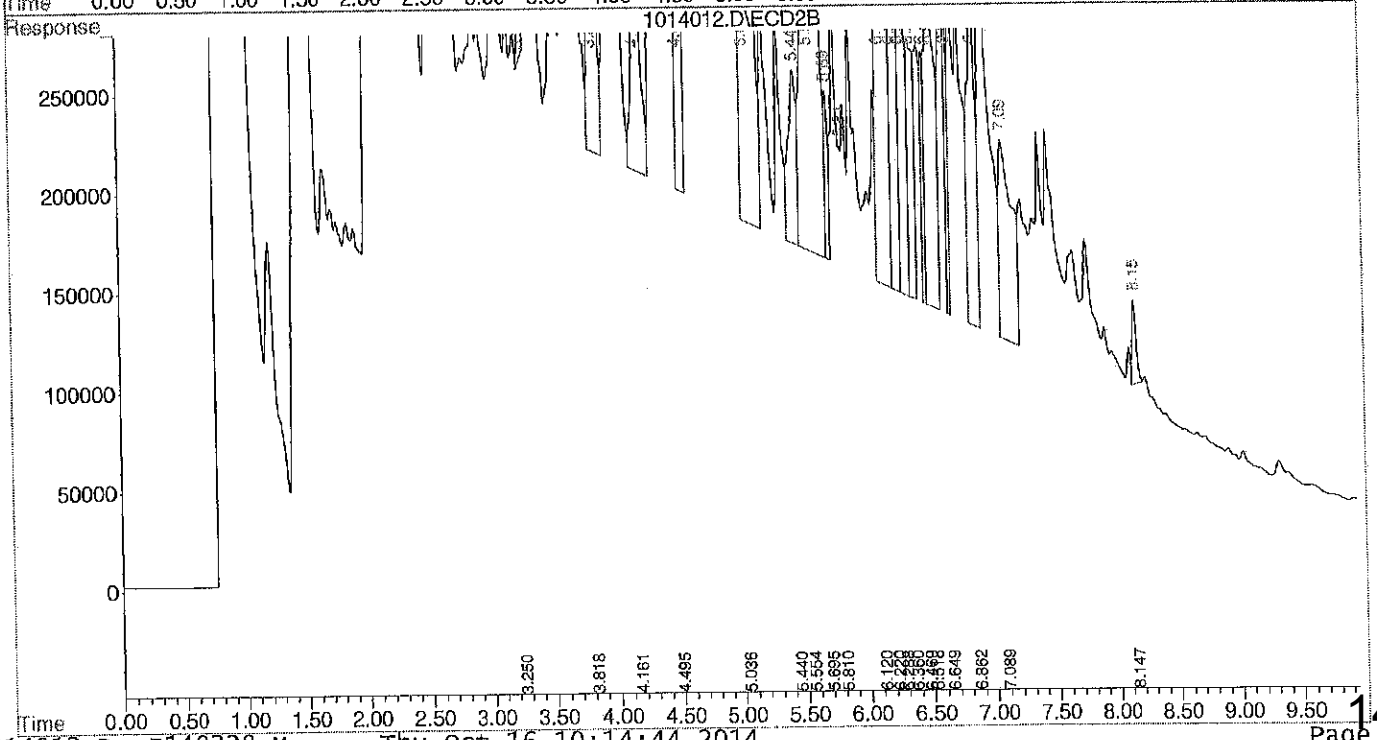
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Quant Time: Oct 16 10:09 2014 Quant Results File: P140328.RES

Quant Method : D:\HPCHEM\1\METHODS\P140328.M (Chemstation Integrator)
Title : Pestcides
Last Update : Fri Oct 03 16:53:34 2014
Response via : Multiple Level Calibration
DataAcq Meth : P140328.M

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Signal #1 : D:\HPCHEM\1\DATA\G141014\1014013.D\ECD1A.CH Vial: 13
Signal #2 : D:\HPCHEM\1\DATA\G141014\1014013.D\ECD2B.CH
Acq On : 14 Oct 2014 20:21 Operator:
Sample : 10-126-02 Inst : George
Misc : Multiplr: 1.00
Sample Amount: 0.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Quant Time: Oct 15 11:44 2014 Quant Results File: P140328.RES

Quant Method : D:\HPCHEM\1\METHODS\P140328.M (Chemstation Integrator)
Title : Pestcides
Last Update : Fri Oct 03 16:53:34 2014
Response via : Initial Calibration
DataAcq Meth : P140328.M

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

KMS 10-16-14

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb	
	System Monitoring Compounds							
1) S	Tetrachloro-m-xy	3.07	3.25	71072	52830	45.662m	56.613m	
Spiked Amount	100.000			Recovery	=	45.66%	56.61%	
22) S	Decachlorobiphen	7.52	8.14	56575	38745	52.180	50.414m	
Spiked Amount	100.000			Recovery	=	52.18%	50.41%	
	Target Compounds							
2) A	alpha-BHC	3.60	3.81f	80486	145193	39.506	119.748	#
3) A	gamma-BHC	0.00	4.16	0	22326	N.D.	19.605	#
4) A	beta-BHC	3.95f	4.25	28441	32780	28.599	53.718	#
5) A	delta-BHC	0.00	4.48f	0	206559	N.D.	185.362	#
6) A	Heptachlor	0.00	0.00	0	0	N.D.	N.D.	
7) A	Aldrin	4.56	0.00	217733	0	129.006	N.D.	#
8) A	Heptachlor epoxi	5.05	0.00	43715	0	27.391	N.D.	#
9) A	gamma-Chlordane	5.14	5.43	1331660	80255	820.766	77.764	#
10) A	alpha-Chlordane	0.00	0.00	0	0	N.D.	N.D.	
11) A	4,4'-DDE	5.33f	5.69f	397143	56787	274.208	63.038	#
12) A	Endosulfan I	0.00	5.57	0	321621	N.D.	321.540	#
13) A	Dieldrin	5.56f	5.79	15392	2954	10.270m	3.175m	# LDL
14) A	Endrin	0.00	6.03	0	83670	N.D.	102.708	#
15) A	4,4'-DDD	5.77	6.12	44326	85201	38.256	120.351	#
16) A	Endosulfan II	5.89	6.20	110489	131746	83.791	154.867	#
17) A	4,4'-DDT	5.97	0.00	33211	0	26.152	N.D.	#
18) A	Endrin aldehyde	6.18f	6.44	216568	378250	209.606	544.333	#
19) A	Methoxychlor	0.00	6.86	0	115495	N.D.	244.481	#
20) A	Endosulfan sulfa	6.52	6.65	803795	207948	715.571	278.241	#
21) A	Endrin ketone	6.76	7.09f	33746	90745	26.601	96.309	#
23) L8	Toxaphene{1}	0.00	6.12	0	85201	N.D.	5779.550	#
24) L8	Toxaphene{2}	5.97	6.29f	33211	225034	895.161	8974.170	#
25) L8	Toxaphene{3}	6.07	0.00	16534	0	460.488	N.D.	#
26) L8	Toxaphene{4}	6.30f	6.53	45005	180179	1525.054	7743.241	#
27) L8	Toxaphene{5}	6.52	0.00	803795	0	25125.835	N.D.	#
Sum	Toxaphene			898545	490415	28006.537	22496.961	
Average	Toxaphene					7001.634	7498.987	
28) L9	Tech Chlordane{1	4.40f	5.04f	3797769	1031104	36036.252	24843.230	#
29) L9	Tech Chlordane{2	5.05	0.00	43715	0	1213.310	N.D.	#
30) L9	Tech Chlordane{3	5.22f	5.57	23442	321621	140.090	4351.107	#
31) L9	Tech Chlordane{4	5.33	5.57	397143	321621	1928.986	3035.892	#
32) L9	Tech Chlordane{5	5.97	6.20	33211	131746	645.026	8913.125	#
Sum	Tech Chlordane			4295280	1806093	39963.664	41143.355	
Average	Tech Chlordane					7992.733	10285.839	

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

Quantitation Report (QT Reviewed)

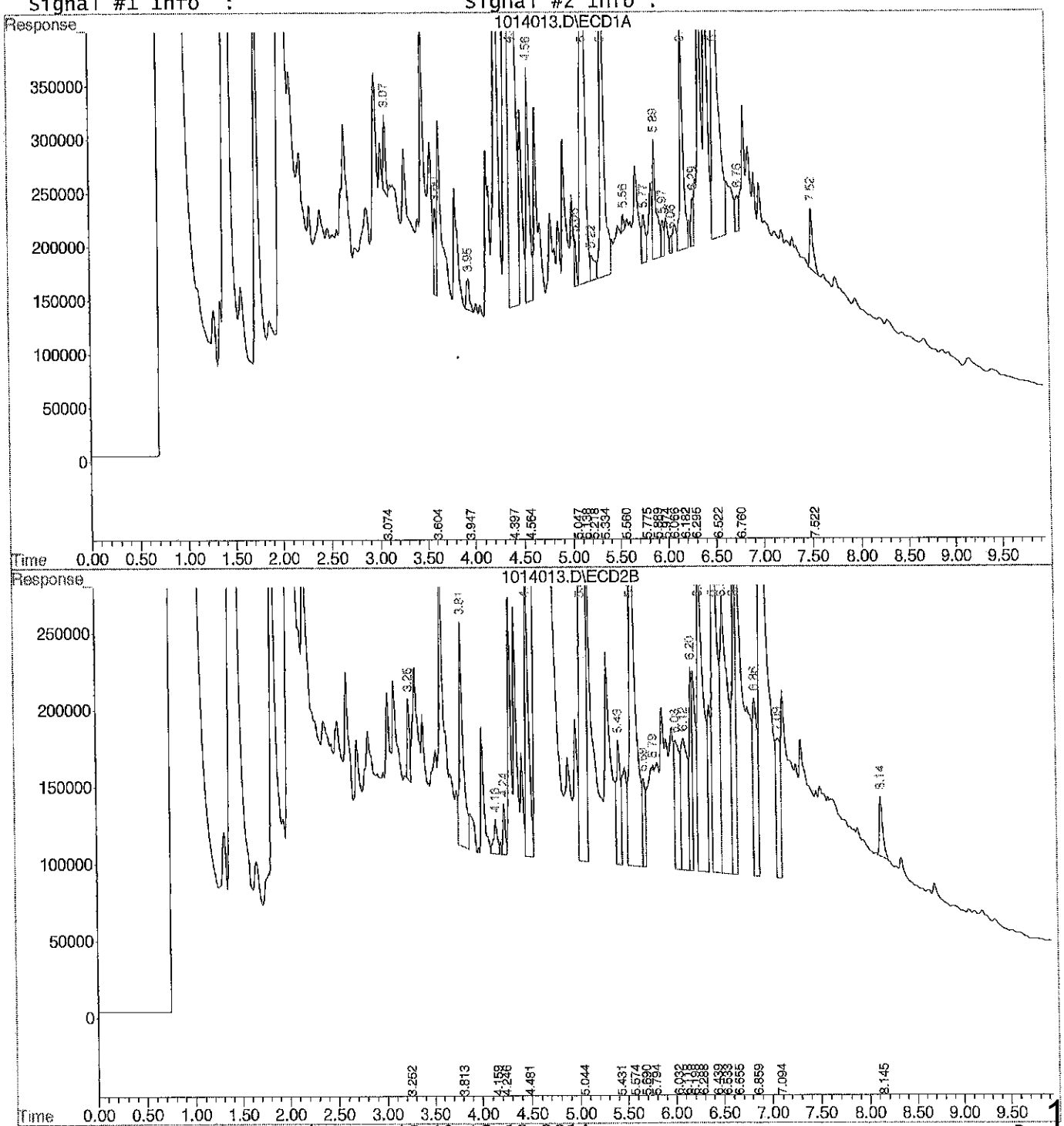
Signal #1 : D:\HPCHEM\1\DATA\G141014\1014013.D\ECD1A.CH Vial: 13
Signal #2 : D:\HPCHEM\1\DATA\G141014\1014013.D\ECD2B.CH
Acq On : 14 Oct 2014 20:21 Operator:
Sample : 10-126-02 Inst : George
Misc : Multiplr: 1.00
Sample Amount: 0.00

IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Quant Time: Oct 15 11:44 2014 Quant Results File: P140328.RES

Quant Method : D:\HPCHEM\1\METHODS\P140328.M (Chemstation Integrator)
Title : Pestcides
Last Update : Fri Oct 03 16:53:34 2014
Response via : Multiple Level Calibration
DataAcq Meth : P140328.M

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



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Quantitation Report (QT Reviewed)

Signal #1 : D:\HPCHEM\1\DATA\G141014\1014014.D\ECD1A.CH Vial: 14
Signal #2 : D:\HPCHEM\1\DATA\G141014\1014014.D\ECD2B.CH
Acq On : 14 Oct 2014 20:34 Operator:
Sample : 10-126-03 Inst : George
Misc : Multiplr: 1.00
Sample Amount: 0.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Quant Time: Oct 20 10:21 2014 Quant Results File: P140328.RES

Quant Method : D:\HPCHEM\1\METHODS\P140328.M (Chemstation Integrator)
Title : Pestcides
Last Update : Fri Oct 03 16:53:34 2014
Response via : Initial Calibration
DataAcq Meth : P140328.M

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

KMS 20 10-7-14

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb	
	System Monitoring Compounds							
1)	S Tetrachloro-m-xy	3.08	3.26	77507	45956	49.797	49.247	
	Spiked Amount 100.000			Recovery =		~~49.80%~~	49.25%	
22)	S Decachlorobiphen	7.52	8.15	28449	16585	23.748	18.660m	
	Spiked Amount 100.000			Recovery =		23.75%	18.66%	
	Target Compounds							
2)	A alpha-BHC	0.00	3.81f	0	132493	N.D.	109.274 #	
3)	A gamma-BHC	0.00	4.16	0	71579	N.D.	62.854 #	
4)	A beta-BHC	0.00	0.00	0	0	N.D.	N.D.	
5)	A delta-BHC	4.10f	4.48f	4742	109227	2.604	98.018 #	
6)	A Heptachlor	0.00	4.57f	0	100670	N.D.	79.285 #	
7)	A Aldrin	4.56	0.00	294240	0	174.336	N.D. #	
8)	A Heptachlor epoxi	0.00	0.00	0	0	N.D.	N.D.	
9)	A gamma-Chlordane	0.00	5.43	0	86799	N.D.	84.105 #	
10)	A alpha-Chlordane	0.00	0.00	0	0	N.D.	N.D.	
11)	A 4,4'-DDE	5.33f	5.65f	145858	85325	100.708	94.718	
12)	A Endosulfan I	5.35	5.58	128103	181260	83.810	181.214 #	
13)	A Dieldrin	5.56f	5.78f	1036	3105	0.691m	3.337m#	LOL
14)	A Endrin	0.00	6.02f	0	91899	N.D.	112.810 #	
15)	A 4,4'-DDD	5.77	6.12f	24354	99766	21.019	140.926 #	
16)	A Endosulfan II	5.89	6.22f	47070	122360	35.696	143.833 #	
17)	A 4,4'-DDT	0.00	6.32f	0	99876	N.D.	123.994 #	
18)	A Endrin aldehyde	6.20	6.46	23041	125241	22.300	180.233 #	
19)	A Methoxychlor	6.36f	6.87f	20029	126364	29.031	267.488 #	
20)	A Endosulfan sulfa	6.53	6.65	205550	180358	182.989	241.325 #	
21)	A Endrin ketone	6.77f	0.00	29365	0	23.024	N.D. #	
23)	L8 Toxaphene{1}	0.00	6.12f	0	99766	N.D.	6767.561 #	
24)	L8 Toxaphene{2}	0.00	6.27	0	115774	N.D.	4616.972 #	
25)	L8 Toxaphene{3}	6.06	0.00	4001	0	111.432	N.D. #	
26)	L8 Toxaphene{4}	6.29f	0.00	62098	0	2104.251	N.D. #	
27)	L8 Toxaphene{5}	6.53	0.00	205550	0	6425.278	N.D. #	
	Sum Toxaphene			271648	215540	8640.961	11384.534	
	Average Toxaphene					2880.320	5692.267	
28)	L9 Tech Chlordane{1	4.42	5.04f	85665	265262	812.855	6391.187 #	
29)	L9 Tech Chlordane{2	0.00	0.00	0	0	N.D.	N.D.	
30)	L9 Tech Chlordane{3	5.22f	5.58	29830	181260	178.262	2452.205 #	
31)	L9 Tech Chlordane{4	5.33	5.58	145858	181260	708.455	1710.974 #	
32)	L9 Tech Chlordane{5	6.01f	6.22f	32169	122360	624.793	8278.118 #	
	Sum Tech Chlordane			293522	750142	2324.365	18832.483	
	Average Tech Chlordane					581.091	4708.121	

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

Quantitation Report (QT Reviewed)

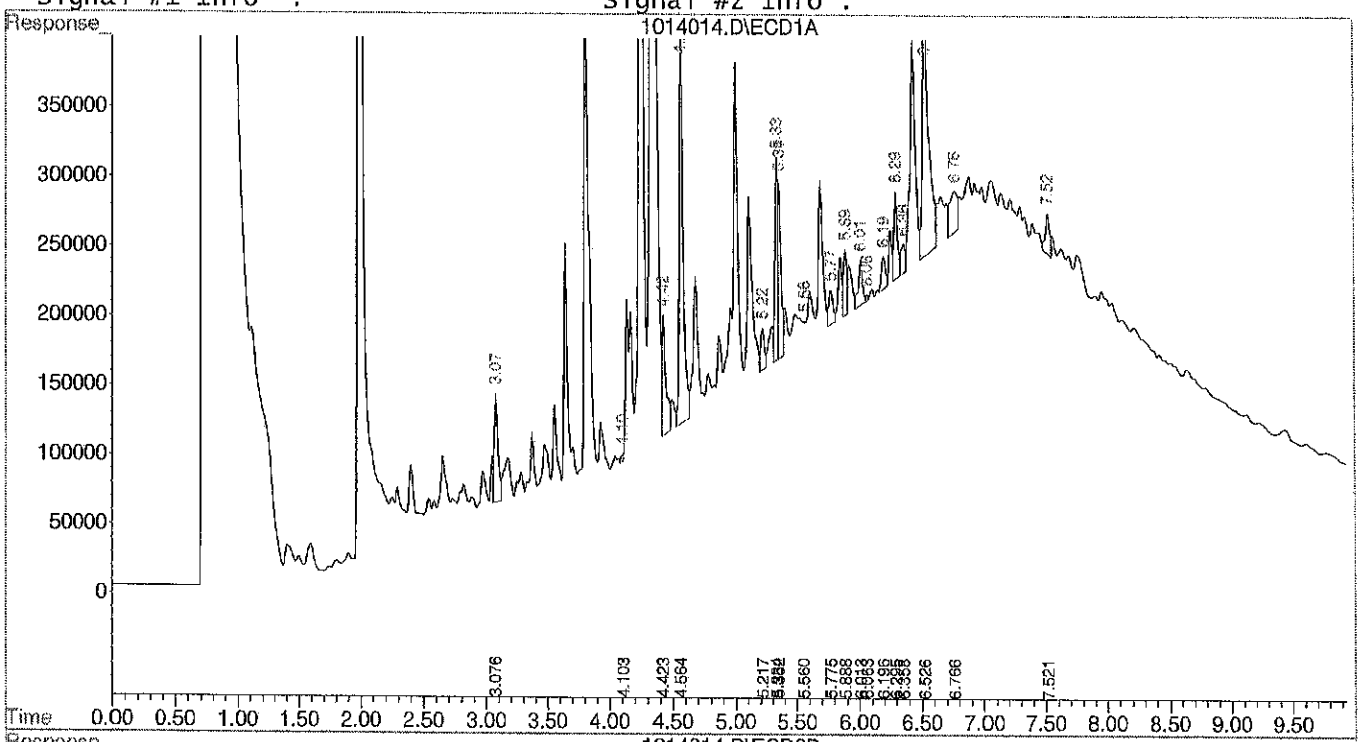
Signal #1 : D:\HPCHEM\1\DATA\G141014\1014014.D\ECD1A.CH Vial: 14
Signal #2 : D:\HPCHEM\1\DATA\G141014\1014014.D\ECD2B.CH
Acq On : 14 Oct 2014 20:34 Operator:
Sample : 10-126-03 Inst : George
Misc : Multiplr: 1.00
Sample Amount: 0.00

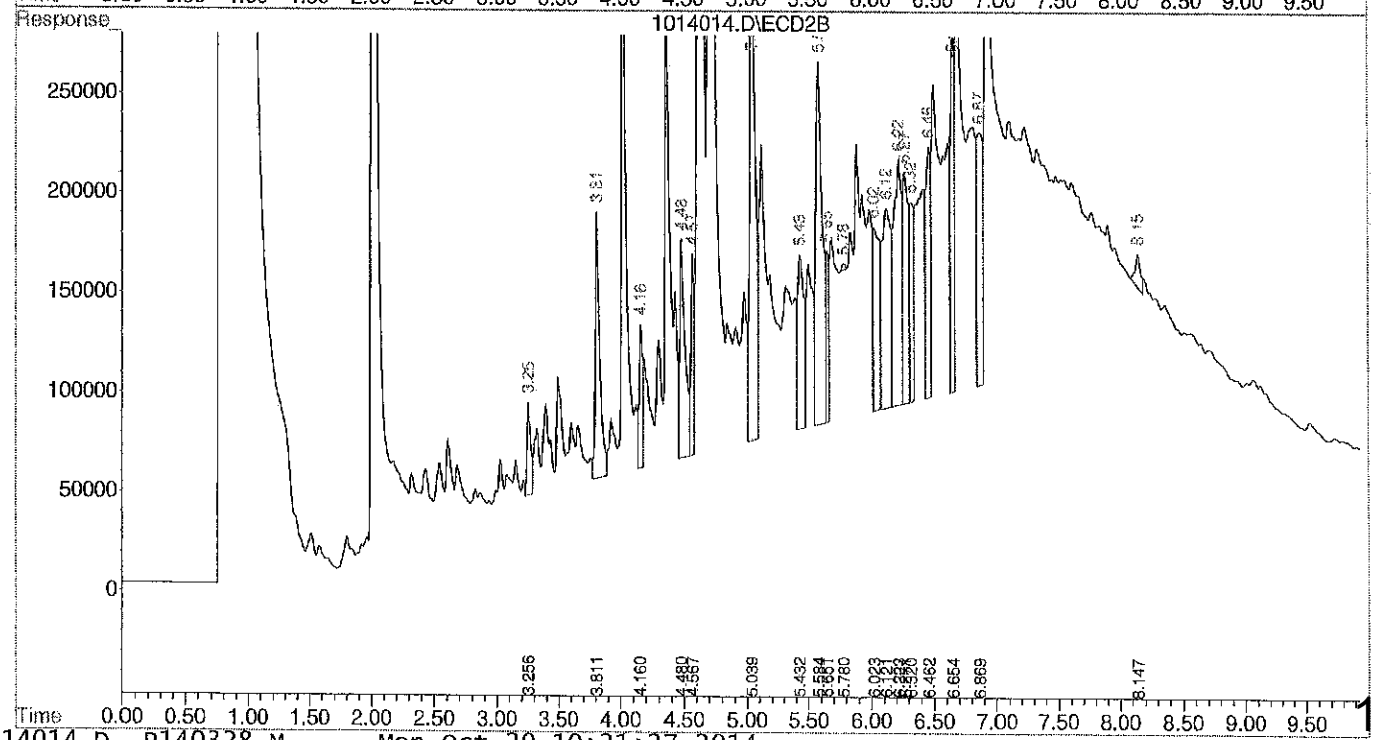
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Quant Time: Oct 20 10:21 2014 Quant Results File: P140328.RES

Quant Method : D:\HPCHEM\1\METHODS\P140328.M (Chemstation Integrator)
Title : Pestcides
Last Update : Fri Oct 03 16:53:34 2014
Response via : Multiple Level Calibration
DataAcq Meth : P140328.M

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Signal #1 : D:\HPCHEM\1\DATA\G141014\1014015.D\ECD1A.CH Vial: 15
Signal #2 : D:\HPCHEM\1\DATA\G141014\1014015.D\ECD2B.CH
Acq On : 14 Oct 2014 20:48 Operator:
Sample : 10-126-04 Inst : George
Misc : Multiplr: 1.00
Sample Amount: 0.00

IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Quant Time: Oct 20 10:22 2014 Quant Results File: P140328.RES

Quant Method : D:\HPCHEM\1\METHODS\P140328.M (Chemstation Integrator)
Title : Pestcides
Last Update : Fri Oct 03 16:53:34 2014
Response via : Initial Calibration
DataAcq Meth : P140328.M

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

KMS 10-20-14

Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
System Monitoring Compounds						
1) S Tetrachloro-m-xy	3.08	3.26	78715	47168	50.573	50.546
Spiked Amount 100.000			Recovery	=	50.57%	50.55%
22) S Decachlorobiphen	7.52	8.14	24989	14699	20.250m	15.958m
Spiked Amount 100.000			Recovery	=	20.25%	15.96%
Target Compounds						
2) A alpha-BHC	0.00	3.81f	0	133065	N.D.	109.745 #
3) A gamma-BHC	0.00	4.16	0	76415	N.D.	67.100 #
4) A beta-BHC	0.00	0.00	0	0	N.D.	N.D.
5) A delta-BHC	4.10f	4.48f	4857	108247	2.667	97.139 #
6) A Heptachlor	0.00	0.00	0	0	N.D.	N.D.
7) A Aldrin	4.56	0.00	364848	0	216.170	N.D. #
8) A Heptachlor epoxi	0.00	0.00	0	0	N.D.	N.D.
9) A gamma-Chlordane	0.00	5.43	0	90769	N.D.	87.952 #
10) A alpha-Chlordane	0.00	0.00	0	0	N.D.	N.D.
11) A 4,4'-DDE	5.33f	5.65f	133543	86614	92.205	96.150
12) A Endosulfan I	5.35	5.58	116244	177819	76.051	177.774 #
13) A Dieldrin	0.00	5.78f	0	3501	N.D.	3.763m# LOL
14) A Endrin	0.00	6.02f	0	94191	N.D.	115.623 #
15) A 4,4'-DDD	5.77	6.12f	21106	101301	18.216	143.093 #
16) A Endosulfan II	5.89	6.22f	45337	124307	34.382	146.122 #
17) A 4,4'-DDT	5.98	6.32f	8458	102725	6.661	127.531 #
18) A Endrin aldehyde	6.20	6.46	23466	129462	22.711	186.307 #
19) A Methoxychlor	6.36f	6.87	18393	134117	26.660	283.899 #
20) A Endosulfan sulfa	6.53	6.65	192943	185023	171.766	247.567 #
21) A Endrin ketone	6.77f	0.00	29302	0	22.973	N.D. #
23) L8 Toxaphene{1}	0.00	6.12f	0	101301	N.D.	6871.646 #
24) L8 Toxaphene{2}	5.98	6.27	8458	118952	227.985	4743.718 #
25) L8 Toxaphene{3}	6.06	0.00	4511	0	125.637	N.D. #
26) L8 Toxaphene{4}	6.30f	0.00	58228	0	1973.112	N.D. #
27) L8 Toxaphene{5}	6.53	0.00	192943	0	6031.218	N.D. #
Sum Toxaphene			264140	220253	8357.953	11615.363
Average Toxaphene					2089.488	5807.682
28) L9 Tech Chlordane{1	4.42	5.04f	98432	280313	933.998	6753.823 #
29) L9 Tech Chlordane{2	0.00	0.00	0	0	N.D.	N.D.
30) L9 Tech Chlordane{3	5.22f	5.58	26721	177819	159.686	2405.653 #
31) L9 Tech Chlordane{4	5.33	5.58	133543	177819	648.640	1678.493 #
32) L9 Tech Chlordane{5	5.98	6.22f	8458	124307	164.279	8409.844 #
Sum Tech Chlordane			267155	760258	1906.604	19247.812
Average Tech Chlordane					476.651	4811.953

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

Quantitation Report (QT Reviewed)

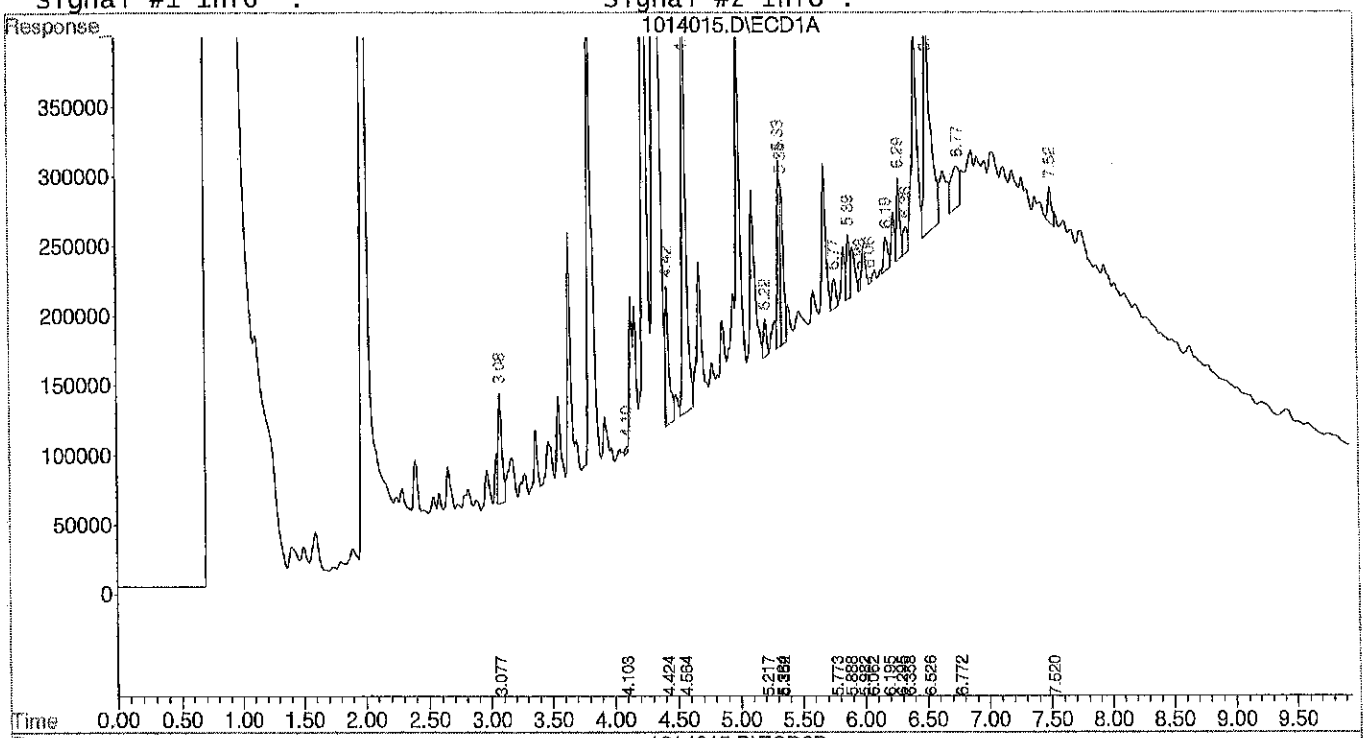
Signal #1 : D:\HPCHEM\1\DATA\G141014\1014015.D\ECD1A.CH Vial: 15
Signal #2 : D:\HPCHEM\1\DATA\G141014\1014015.D\ECD2B.CH
Acq On : 14 Oct 2014 20:48 Operator:
Sample : 10-126-04 Inst : George
Misc : Multiplr: 1.00
Sample Amount: 0.00

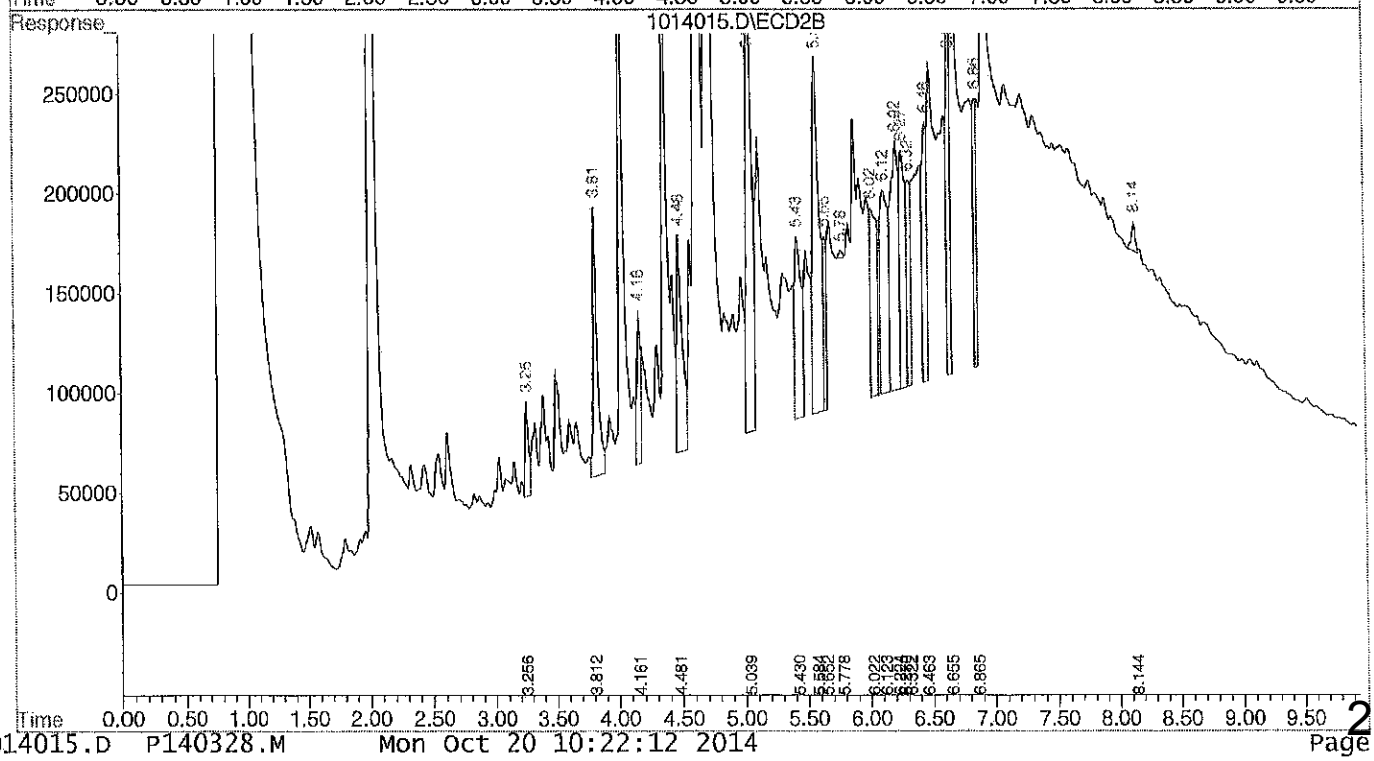
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Quant Time: Oct 20 10:22 2014 Quant Results File: P140328.RES

Quant Method : D:\HPCHEM\1\METHODS\P140328.M (Chemstation Integrator)
Title : Pestcides
Last Update : Fri Oct 03 16:53:34 2014
Response via : Multiple Level Calibration
DataAcq Meth : P140328.M

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (Not Reviewed)

Signal #1 : D:\HPCHEM\1\DATA\G141014\1014007.D\ECD1A.CH Vial: 7
Signal #2 : D:\HPCHEM\1\DATA\G141014\1014007.D\ECD2B.CH
Acq On : 14 Oct 2014 19:02 Operator:
Sample : MB1014W1 Inst : George
Misc : Multiplr: 1.00
Sample Amount: 0.00

IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Quant Time: Oct 14 19:12 2014 Quant Results File: P140328.RES

Quant Method : D:\HPCHEM\1\METHODS\P140328.M (Chemstation Integrator)
Title : Pestcides
Last Update : Fri Oct 03 16:53:34 2014
Response via : Initial Calibration
DataAcq Meth : P140328.M

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
1) S	Tetrachloro-m-xy	3.07	3.25	100121	70921	64.326	76.000
	Spiked Amount 100.000			Recovery	=	64.33%	76.00%
22) S	Decachlorobiphen	7.52	8.15	86559	61198	82.490	82.587
	Spiked Amount 100.000			Recovery	=	82.49%	82.59%
	Target Compounds						
2) A	alpha-BHC	3.58	3.85	4037	548	1.982	0.452 #
3) A	gamma-BHC	0.00	4.14f	0	665	N.D.	0.584 #
4) A	beta-BHC	3.95f	0.00	1021	0	1.026	N.D. #
5) A	delta-BHC	0.00	4.50	0	1002	N.D.	0.899 #
6) A	Heptachlor	4.31	4.53	894	1131	0.459	0.891 #
7) A	Aldrin	0.00	0.00	0	0	N.D.	N.D.
8) A	Heptachlor epoxi	0.00	5.26f	0	2966	N.D.	2.962 #
9) A	gamma-Chlordane	0.00	5.42	0	15553	N.D.	15.071 #
10) A	alpha-Chlordane	0.00	5.57f	0	253	N.D.	0.254 #
11) A	4,4'-DDE	0.00	0.00	0	0	N.D.	N.D.
12) A	Endosulfan I	5.34f	5.57f	350	253	0.229	0.253
13) A	Dieldrin	5.54	5.80	402	546	0.268	0.587 #
14) A	Endrin	0.00	6.04	0	242	N.D.	0.297 #
15) A	4,4'-DDD	0.00	0.00	0	0	N.D.	N.D.
16) A	Endosulfan II	0.00	0.00	0	0	N.D.	N.D.
17) A	4,4'-DDT	5.95f	6.33f	185	321	0.146	0.398 #
18) A	Endrin aldehyde	0.00	6.45	0	2155	N.D.	3.102 #
19) A	Methoxychlor	0.00	0.00	0	0	N.D.	N.D.
20) A	Endosulfan sulfa	0.00	6.66	0	57	N.D.	0.077 #
21) A	Endrin ketone	0.00	7.06	0	334	N.D.	0.355 #
23) L8	Toxaphene{1}	5.83	0.00	370	0	23.310	N.D. #
24) L8	Toxaphene{2}	0.00	0.00	0	0	N.D.	N.D.
25) L8	Toxaphene{3}	0.00	6.33f	0	321	N.D.	8.982 #
26) L8	Toxaphene{4}	0.00	0.00	0	0	N.D.	N.D.
27) L8	Toxaphene{5}	0.00	6.97f	0	258	N.D.	11.526 #
	Sum Toxaphene			370	578	23.310	20.507
	Average Toxaphene					23.310	10.254
28) L9	Tech Chlordane{1	4.43	4.99f	47929	332	454.791	8.004 #
29) L9	Tech Chlordane{2	0.00	5.57f	0	253	N.D.	2.186 #
30) L9	Tech Chlordane{3	0.00	5.57f	0	253	N.D.	3.429 #
31) L9	Tech Chlordane{4	5.34	5.57	350	253	1.700	2.393 #
32) L9	Tech Chlordane{5	5.95f	6.15f	185	38	3.596	2.573 #
	Sum Tech Chlordane			48464	1131	460.087	18.585
	Average Tech Chlordane					153.362	3.717

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

Quantitation Report (Not Reviewed)

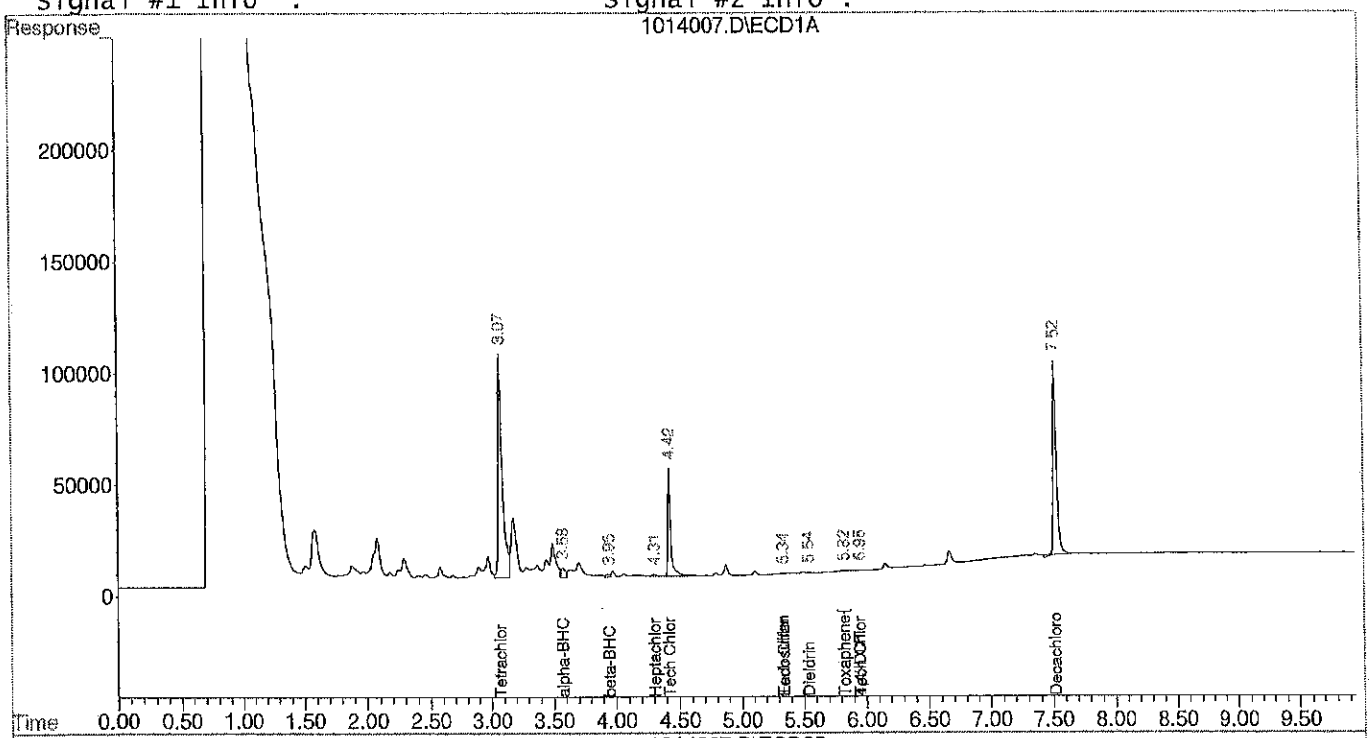
Signal #1 : D:\HPCHEM\1\DATA\G141014\1014007.D\ECD1A.CH Vial: 7
Signal #2 : D:\HPCHEM\1\DATA\G141014\1014007.D\ECD2B.CH
Acq On : 14 Oct 2014 19:02 Operator:
Sample : MB1014W1 Inst : George
Misc : Multiplr: 1.00
Sample Amount: 0.00

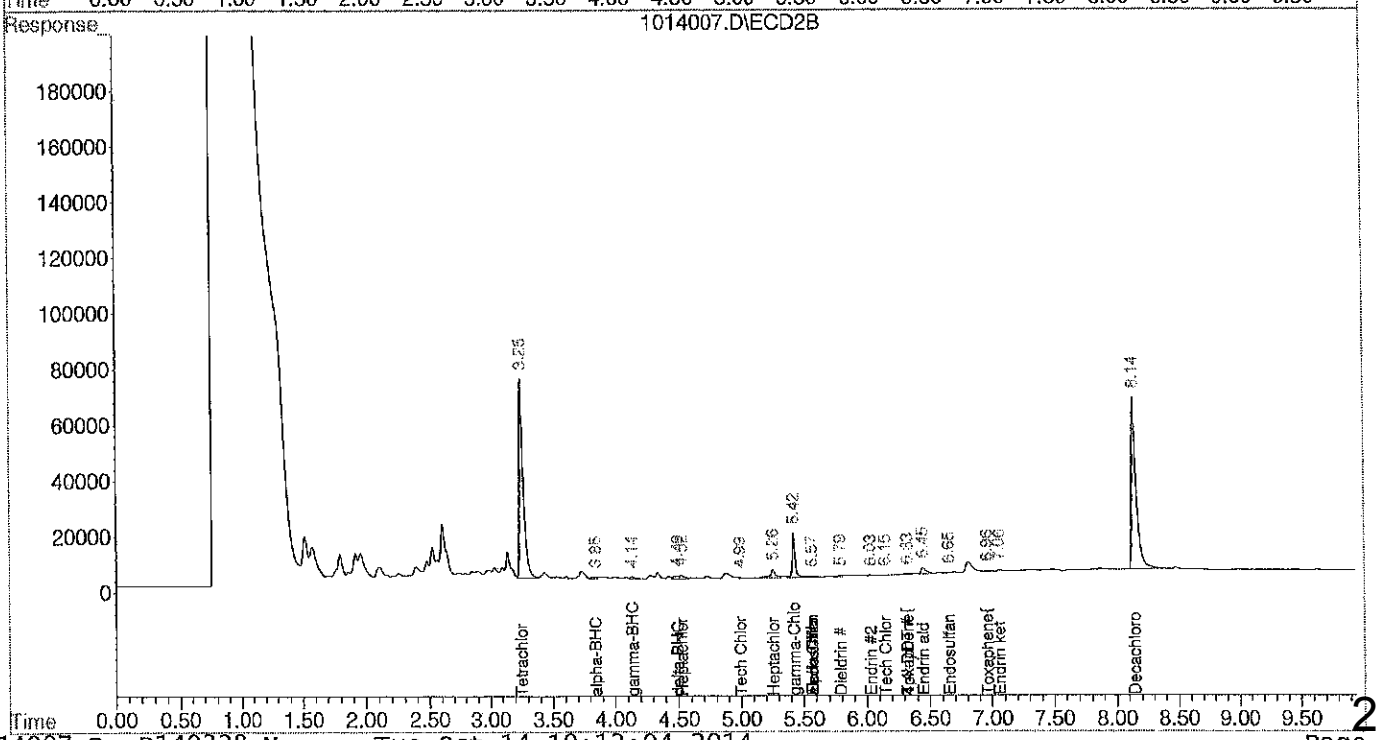
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Quant Time: Oct 14 19:12 2014 Quant Results File: P140328.RES

Quant Method : D:\HPCHEM\1\METHODS\P140328.M (Chemstation Integrator)
Title : Pestcides
Last Update : Fri Oct 03 16:53:34 2014
Response via : Multiple Level Calibration
DataAcq Meth : P140328.M

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (Not Reviewed)

Signal #1 : D:\HPCHEM\1\DATA\G141014\1014008.D\ECD1A.CH Vial: 8
Signal #2 : D:\HPCHEM\1\DATA\G141014\1014008.D\ECD2B.CH
Acq On : 14 Oct 2014 19:15 Operator:
Sample : SB1014W1 Inst : George
Misc : Multiplr: 1.00
Sample Amount: 0.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Quant Time: Oct 14 19:25 2014 Quant Results File: P140328.RES

Quant Method : D:\HPCHEM\1\METHODS\P140328.M (Chemstation Integrator)
Title : Pestcides
Last Update : Fri Oct 03 16:53:34 2014
Response via : Initial Calibration
DataAcq Meth : P140328.M

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
1)	S Tetrachloro-m-xy	3.08	3.25	102416	71788	65.801	76.928
	Spiked Amount 100.000			Recovery	=	65.80%	76.93%
22)	S Decachlorobiphen	7.52	8.15	86540	61467	82.470	82.973
	Spiked Amount 100.000			Recovery	=	82.47%	82.97%
	Target Compounds						
2)	A alpha-BHC	3.60	3.85	140265	104856	68.848	86.480 #
3)	A gamma-BHC	3.88	4.17	140560	100647	72.953	88.379
4)	A beta-BHC	3.96	4.25	65983	47240	66.348	77.415
5)	A delta-BHC	4.12	4.50	110200	78422	60.518	70.375
6)	A Heptachlor	4.31	4.54	138799	100369	71.256	79.048
7)	A Aldrin	4.56	4.81	129205	91329	76.553	88.390
8)	A Heptachlor epoxi	5.05	5.28	117920	82172	73.887	82.056
9)	A gamma-Chlordane	5.15	5.43	116946	107414	72.079	104.081 #
10)	A alpha-Chlordane	5.25	5.54	112851	81107	72.423	81.259
11)	A 4,4'-DDE	5.31	5.67	113145	79914	78.121	88.711
12)	A Endosulfan I	5.36	5.59	113746	81641	74.417	81.621
13)	A Dieldrin	5.54	5.80	116974	81604	78.046	87.708
14)	A Endrin	5.72	6.04	107486	71853	80.965	88.202
15)	A 4,4'-DDD	5.76	6.11	92841	64579	80.128	91.221
16)	A Endosulfan II	5.89	6.20	99056	69898	75.121	82.165
17)	A 4,4'-DDT	5.98	6.34	100057	70341	78.790	87.327
18)	A Endrin aldehyde	6.20	6.45	71315	59276	69.022	85.302
19)	A Methoxychlor	6.34	6.85	51789	39130	75.065	82.831
20)	A Endosulfan sulfa	6.52	6.66	83863	60787	74.658	81.335
21)	A Endrin ketone	6.74	7.07	107922	74679	87.174	79.258
23)	L8 Toxaphene{1}	0.00	6.11	0	64579	N.D.	4380.659 #
24)	L8 Toxaphene{2}	5.98	0.00	100057	0	2696.931	N.D. #
25)	L8 Toxaphene{3}	0.00	6.34	0	70341	N.D.	1970.671 #
26)	L8 Toxaphene{4}	0.00	6.54f	0	1466	N.D.	63.017 #
27)	L8 Toxaphene{5}	6.52	6.97f	83863	554	2621.466	24.767 #
	Sum Toxaphene			183920	136940	5318.397	6439.115
	Average Toxaphene					2659.198	1609.779
28)	L9 Tech Chlordane{1	4.43	5.00f	80599	226	764.789	5.446 #
29)	L9 Tech Chlordane{2	5.05	5.54	117920	81107	3272.897	699.534 #
30)	L9 Tech Chlordane{3	5.25	5.59	112851	81641	674.396	1104.498 #
31)	L9 Tech Chlordane{4	5.31	5.59	113145	81641	549.562	770.640 #
32)	L9 Tech Chlordane{5	5.98	6.20	100057	69898	1943.328	4728.860 #
	Sum Tech Chlordane			524573	314513	7204.972	7308.978
	Average Tech Chlordane					1440.994	1461.796

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

Quantitation Report (Not Reviewed)

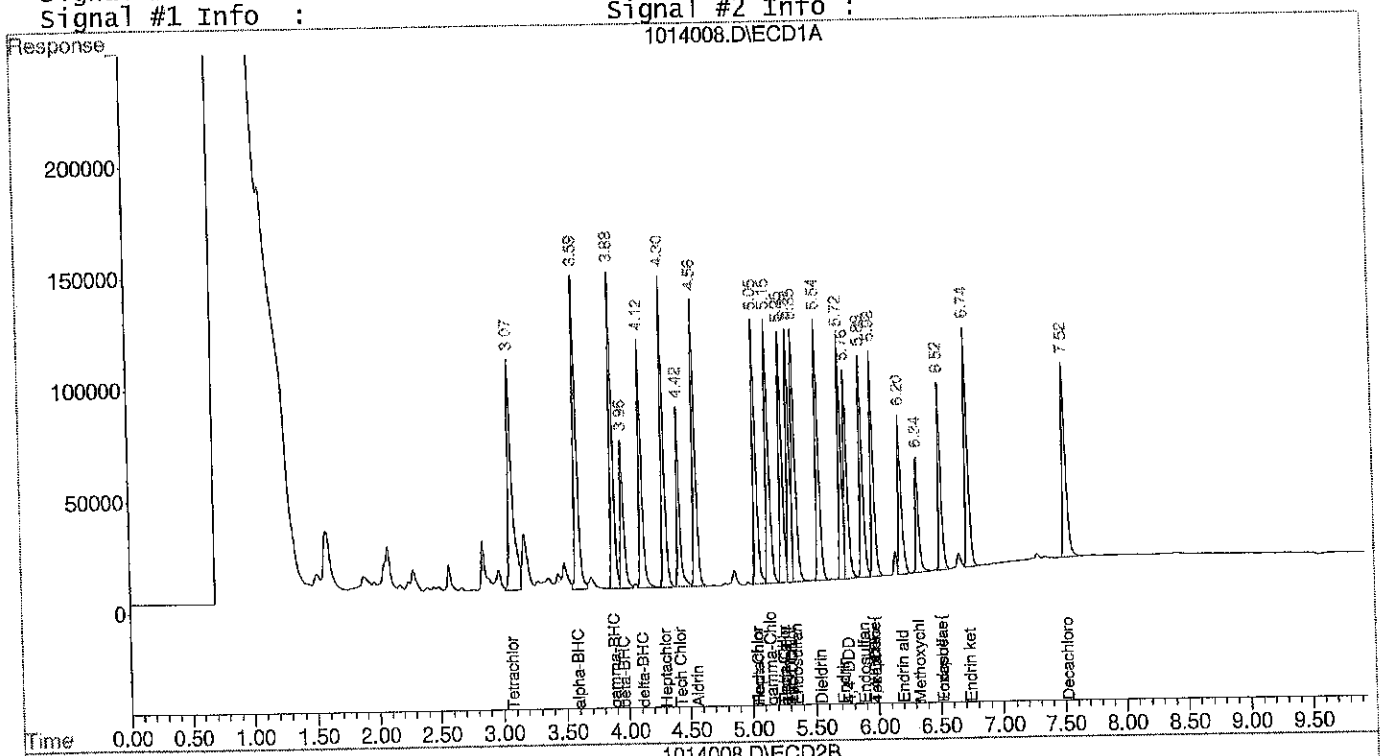
Signal #1 : D:\HPCHEM\1\DATA\G141014\1014008.D\ECD1A.CH Vial: 8
Signal #2 : D:\HPCHEM\1\DATA\G141014\1014008.D\ECD2B.CH
Acq On : 14 Oct 2014 19:15 Operator:
Sample : SB1014W1 Inst : George
Misc : Multiplr: 1.00
Sample Amount: 0.00

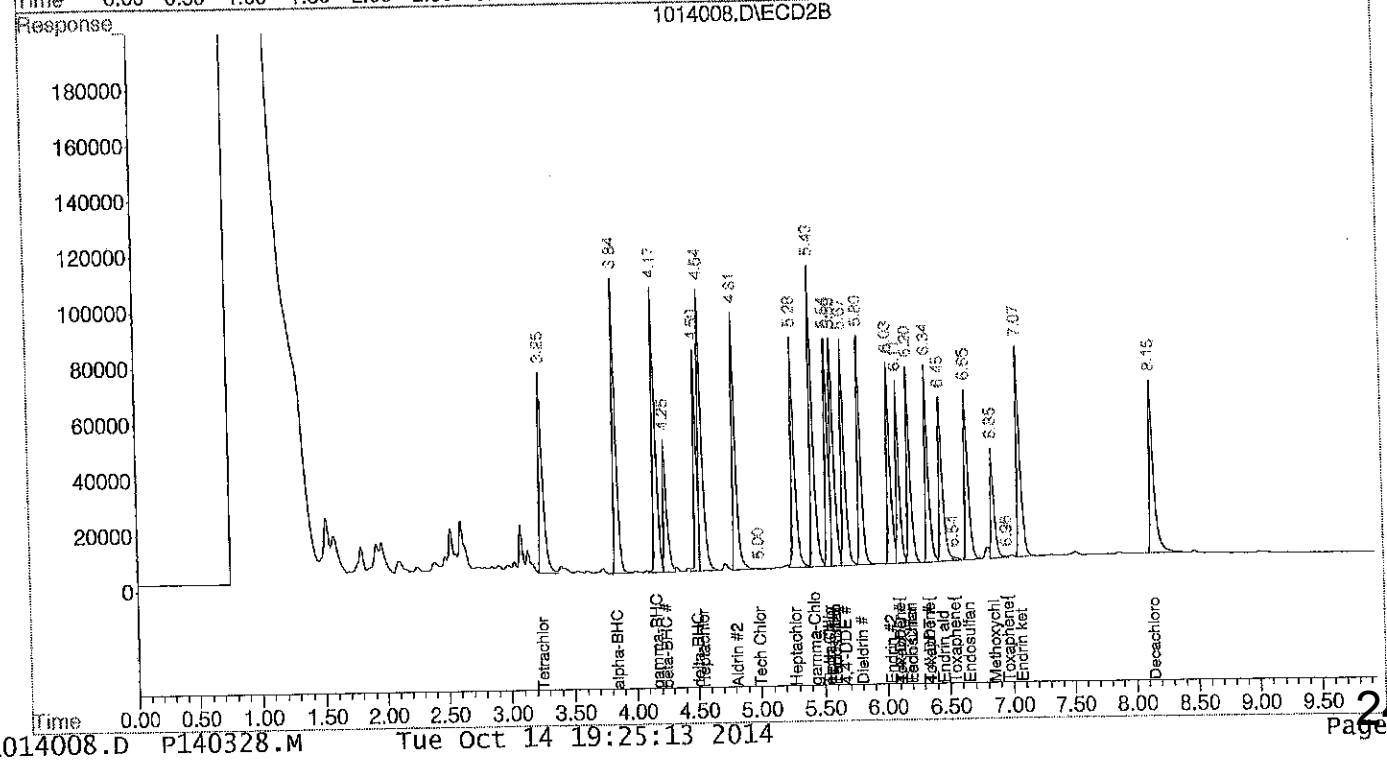
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Quant Time: Oct 14 19:25 2014 Quant Results File: P140328.RES

Quant Method : D:\HPCHEM\1\METHODS\P140328.M (Chemstation Integrator)
Title : Pestcides
Last Update : Fri Oct 03 16:53:34 2014
Response via : Multiple Level Calibration
DataAcq Meth : P140328.M

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (Not Reviewed)

Signal #1 : D:\HPCHEM\1\DATA\G141014\1014009.D\ECD1A.CH Vial: 9
Signal #2 : D:\HPCHEM\1\DATA\G141014\1014009.D\ECD2B.CH
Acq On : 14 Oct 2014 19:28 Operator:
Sample : SB1014W1 DUP Inst : George
Misc : Multiplr: 1.00
Sample Amount: 0.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Quant Time: Oct 14 19:38 2014 Quant Results File: P140328.RES

Quant Method : D:\HPCHEM\1\METHODS\P140328.M (Chemstation Integrator)
Title : Pestcides
Last Update : Fri Oct 03 16:53:34 2014
Response via : Initial Calibration
DataAcq Meth : P140328.M

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb	
	System Monitoring Compounds							
1) S	Tetrachloro-m-xy	3.08	3.25	99031	70115	63.625	75.135	
Spiked Amount	100.000			Recovery	=	63.63%	75.14%	
22) S	Decachlorobiphen	7.52	8.15	86160	60637	82.086	81.783	
Spiked Amount	100.000			Recovery	=	82.09%	81.78%	
	Target Compounds							
2) A	alpha-BHC	3.60	3.84	133372	101438	65.464	83.661	#
3) A	gamma-BHC	3.88	4.17	134910	96532	70.021	84.765	
4) A	beta-BHC	3.96	4.25	63979	46296	64.333	75.867	
5) A	delta-BHC	4.12	4.50	104651	76009	57.471	68.209	
6) A	Heptachlor	4.31	4.54	132546	96188	68.046	75.755	
7) A	Aldrin	4.56	4.81	123897	85712	73.409	82.954	
8) A	Heptachlor epoxi	5.05	5.28	110805	77941	69.428	77.831	
9) A	gamma-Chlordane	5.15	5.43	113020	90996	69.659	88.172	#
10) A	alpha-Chlordane	5.25	5.54	107891	77040	69.240	77.184	
11) A	4,4'-DDE	5.31	5.67	106432	75555	73.486	83.873	
12) A	Endosulfan I	5.36	5.59	107760	78260	70.501	78.240	
13) A	Dieldrin	5.54	5.80	111216	77353	74.204	83.140	
14) A	Endrin	5.72	6.04	101990	67699	76.825	83.103	
15) A	4,4'-DDD	5.77	6.11	87101	60219	75.174	85.063	
16) A	Endosulfan II	5.89	6.20	93842	65169	71.167	76.605	
17) A	4,4'-DDT	5.98	6.34	94177	66396	74.160	82.430	
18) A	Endrin aldehyde	6.20	6.45	68955	50367	66.739	72.483	
19) A	Methoxychlor	6.34	6.86	48711	36723	70.604	77.736	
20) A	Endosulfan sulfa	6.52	6.66	78989	56995	70.319	76.262	
21) A	Endrin ketone	6.74	7.07	101319	69714	81.782	73.988	
23) L8	Toxaphene{1}	0.00	6.11	0	60219	N.D.	4084.933	#
24) L8	Toxaphene{2}	5.98	0.00	94177	0	2538.429	N.D.	#
25) L8	Toxaphene{3}	0.00	6.34	0	66396	N.D.	1860.167	#
26) L8	Toxaphene{4}	0.00	0.00	0	0	N.D.	N.D.	
27) L8	Toxaphene{5}	6.52	6.97f	78989	498	2469.117	22.273	#
Sum	Toxaphene			173166	127114	5007.546	5967.372	
Average	Toxaphene					2503.773	1989.124	
28) L9	Tech Chlordane{1	4.43	5.00f	39611	214	375.863	5.145	#
29) L9	Tech Chlordane{2	5.05	5.54	110805	77040	3075.395	664.456	#
30) L9	Tech Chlordane{3	5.25	5.59	107891	78260	644.753	1058.753	#
31) L9	Tech Chlordane{4	5.31	5.59	106432	78260	516.957	738.723	#
32) L9	Tech Chlordane{5	5.98	6.20	94177	65169	1829.116	4408.910	#
Sum	Tech Chlordane			458915	298942	6442.084	6875.987	
Average	Tech Chlordane					1288.417	1375.197	

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

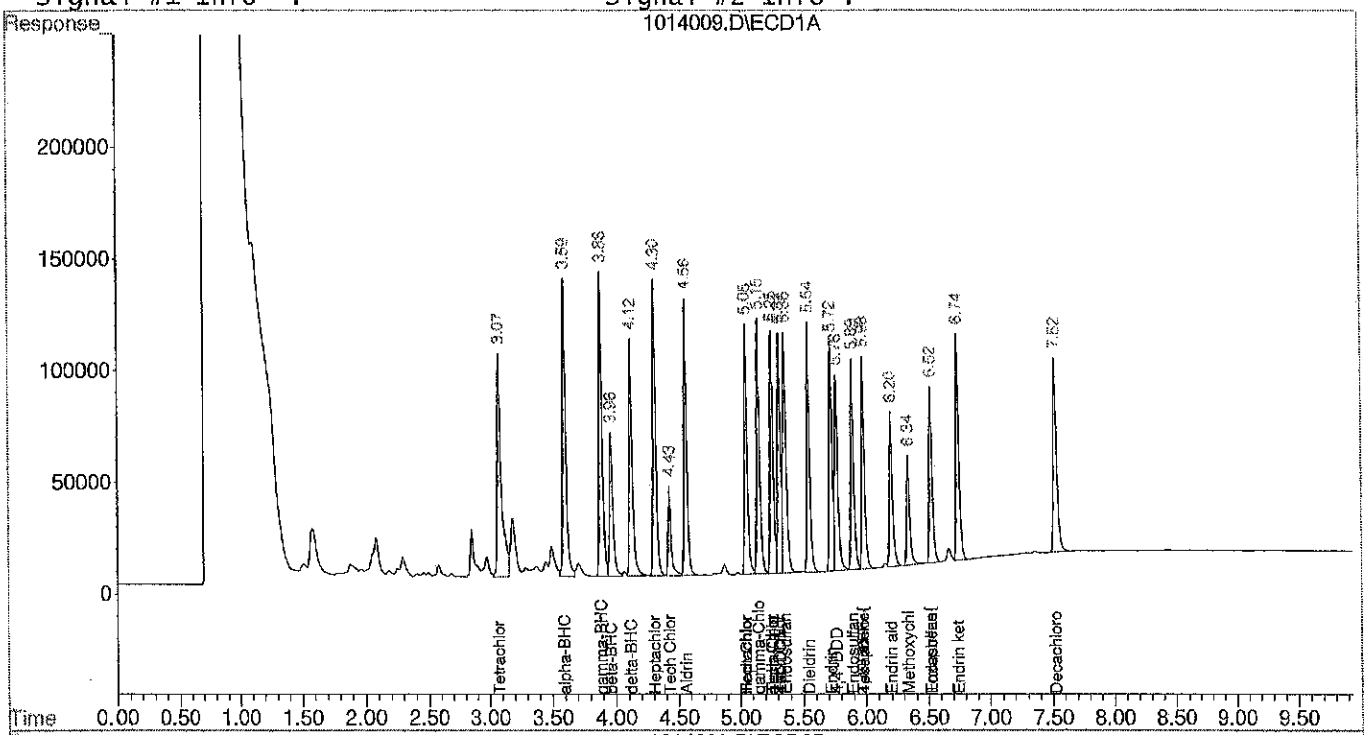
Quantitation Report (Not Reviewed)

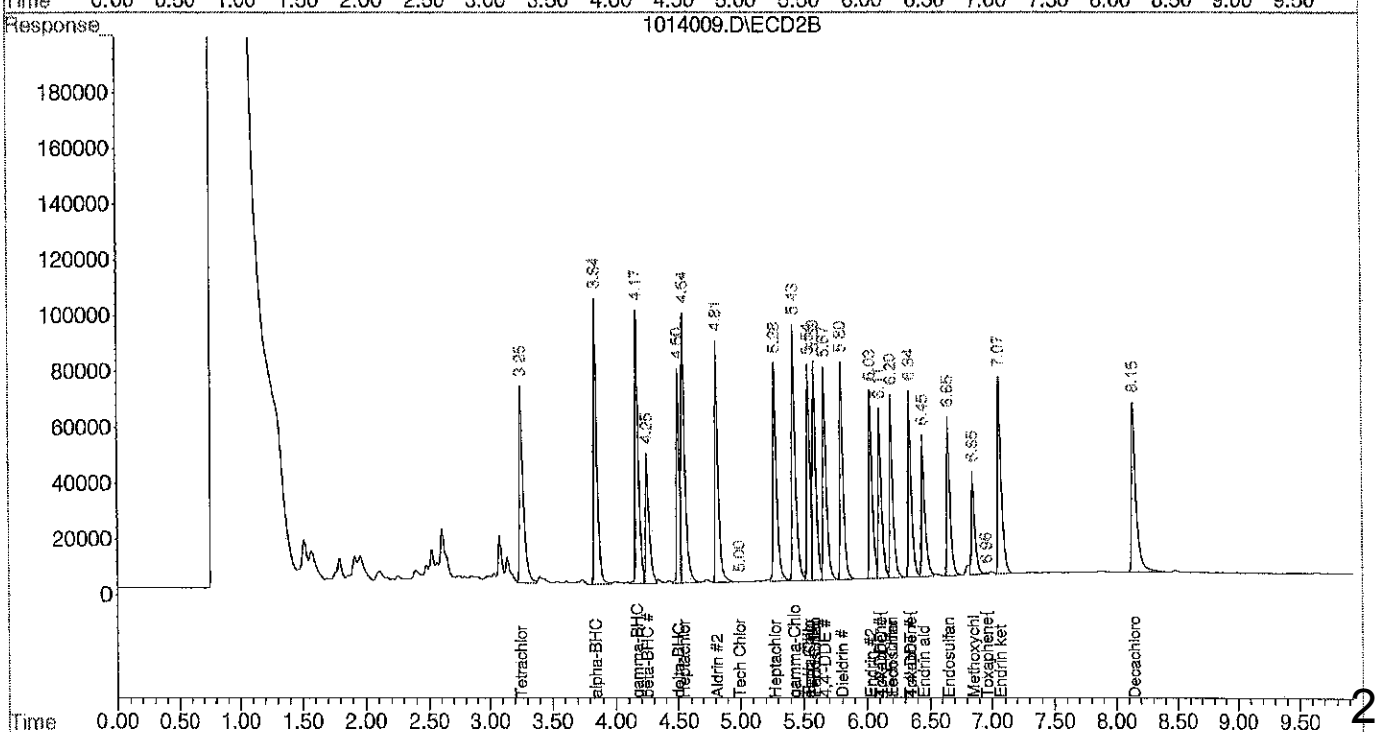
Signal #1 : D:\HPCHEM\1\DATA\G141014\1014009.D\ECD1A.CH Vial: 9
Signal #2 : D:\HPCHEM\1\DATA\G141014\1014009.D\ECD2B.CH
Acq On : 14 Oct 2014 19:28 Operator:
Sample : SB1014W1 DUP Inst : George
Misc : Multiplr: 1.00
Sample Amount: 0.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Quant Time: Oct 14 19:38 2014 Quant Results File: P140328.RES

Quant Method : D:\HPCHEM\1\METHODS\P140328.M (Chemstation Integrator)
Title : Pestcides
Last Update : Fri Oct 03 16:53:34 2014
Response via : Multiple Level Calibration
DataAcq Meth : P140328.M

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Lab ID: PEST EVAL 1014-1 (PS4-01-09)
Date Analyzed: 10-14-14
File ID:\G141014\1014003.D
Instrument: George

EPA Method 8081
DDT/ENDRIN Breakdown

Lab ID: PEST EVAL 1014-1 (PS4-01-09)

Analyte	Column 1 % Breakdown	Column 2 % Breakdown
Endrin	4.0%	7.4%
4,4'-DDT	0.97%	1.4%

Quantitation Report (Not Reviewed)

Signal #1 : D:\HPCHEM\1\DATA\G141014\1014003.D\ECD1A.CH Vial: 3
Signal #2 : D:\HPCHEM\1\DATA\G141014\1014003.D\ECD2B.CH
Acq On : 14 Oct 2014 18:09 Operator:
Sample : PEST EVAL 1014-1 (PS4-01-09) Inst : George
Misc : Multiplr: 1.00
Sample Amount: 0.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Quant Time: Oct 14 18:19 2014 Quant Results File: P140328.RES

Quant Method : D:\HPCHEM\1\METHODS\P140328.M (Chemstation Integrator)
Title : Pestcides
Last Update : Fri Oct 03 16:53:34 2014
Response via : Initial Calibration
DataAcq Meth : P140328.M

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	% Breakdown 1	2
DDT	6.97%	1.4%
Endrin	4.0%	7.4%

Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
System Monitoring Compounds						
1) S Tetrachloro-m-xy	0.00	3.24	0	40	N.D.	0.043 #
Spiked Amount 100.000			Recovery	=	0.00%	0.04%
22) S Decachlorobiphen	0.00	0.00	0	0	N.D.	N.D.
Spiked Amount 100.000			Recovery	=	0.00%	0.00%
Target Compounds						
2) A alpha-BHC	0.00	0.00	0	0	N.D.	N.D.
3) A gamma-BHC	0.00	0.00	0	0	N.D.	N.D.
4) A beta-BHC	0.00	0.00	0	0	N.D.	N.D.
5) A delta-BHC	0.00	4.50	0	224	N.D.	0.201 #
6) A Heptachlor	0.00	4.56f	0	191	N.D.	0.151 #
7) A Aldrin	0.00	0.00	0	0	N.D.	N.D.
8) A Heptachlor epoxi	0.00	0.00	0	0	N.D.	N.D.
9) A gamma-Chlordane	0.00	5.42	0	4666	N.D.	4.521 #
10) A alpha-Chlordane	0.00	0.00	0	0	N.D.	N.D.
11) A 4,4'-DDE	5.32	5.67	1134	1139	0.783	1.264 #
12) A Endosulfan I	0.00	0.00	0	0	N.D.	N.D.
13) A Dieldrin	0.00	0.00	0	0	N.D.	N.D.
14) A Endrin	5.72	6.04	124818	81548	94.020	100.103
15) A 4,4'-DDD	0.00	0.00	0	0	N.D.	N.D.
16) A Endosulfan II	0.00	6.22f	0	240	N.D.	0.282 #
17) A 4,4'-DDT	5.98	6.34	116143	81813	91.458	101.569
18) A Endrin aldehyde	6.20	6.45	1608	1197	1.556	1.722
19) A Methoxychlor	0.00	6.86	0	1169	N.D.	2.475 #
20) A Endosulfan sulfa	0.00	6.68f	0	602	N.D.	0.806 #
21) A Endrin ketone	6.74	7.07	3557	5335	1.949	5.662 #
23) L8 Toxaphene{1}	5.84f	0.00	205	0	12.946	N.D. #
24) L8 Toxaphene{2}	5.98	0.00	116143	0	3130.515	N.D. #
25) L8 Toxaphene{3}	0.00	6.34	0	81813	N.D.	2292.066 #
26) L8 Toxaphene{4}	0.00	0.00	0	0	N.D.	N.D.
27) L8 Toxaphene{5}	0.00	0.00	0	0	N.D.	N.D.
Sum Toxaphene			116348	81813	3143.461	2292.066
Average Toxaphene					1571.730	2292.066
28) L9 Tech Chlordane{1	4.43	0.00	15492	0	147.003	N.D. #
29) L9 Tech Chlordane{2	0.00	0.00	0	0	N.D.	N.D.
30) L9 Tech Chlordane{3	0.00	0.00	0	0	N.D.	N.D.
31) L9 Tech Chlordane{4	5.32	0.00	1134	0	5.509	N.D. #
32) L9 Tech Chlordane{5	5.98	6.22	116143	240	2255.756	16.203 #
Sum Tech Chlordane			132770	240	2408.268	16.203
Average Tech Chlordane					802.756	16.203

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

Quantitation Report (Not Reviewed)

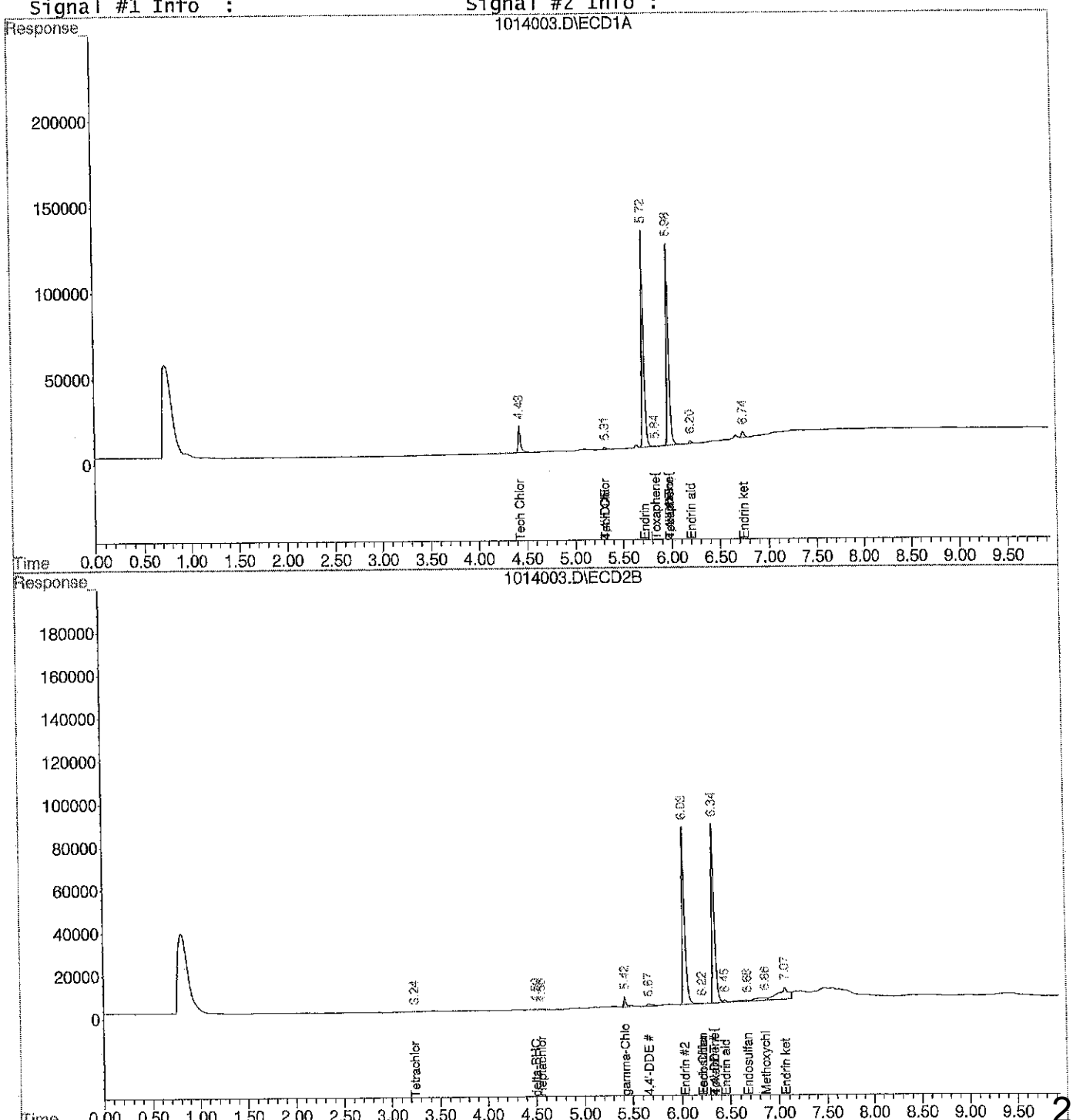
Signal #1 : D:\HPCHEM\1\DATA\G141014\1014003.D\ECD1A.CH Vial: 3
Signal #2 : D:\HPCHEM\1\DATA\G141014\1014003.D\ECD2B.CH
Acq On : 14 Oct 2014 18:09 Operator:
Sample : PEST EVAL 1014-1 (PS4-01-09) Inst : George
Misc : Multiplr: 1.00
Sample Amount: 0.00

IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Quant Time: Oct 14 18:19 2014 Quant Results File: P140328.RES

Quant Method : D:\HPCHEM\1\METHODS\P140328.M (Chemstation Integrator)
Title : Pestcides
Last Update : Fri Oct 03 16:53:34 2014
Response via : Multiple Level Calibration
DataAcq Meth : P140328.M

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Evaluate Continuing Calibration Report

Signal #1 : D:\HPCHEM\1\DATA\G141014\1014004.D\ECD1A.CH Vial: 4
Signal #2 : D:\HPCHEM\1\DATA\G141014\1014004.D\ECD2B.CH
Acq On : 14 Oct 2014 18:22 Operator:
Sample : PEST LOW LEVEL 1014-1 (PS3-89-01) Inst : George
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Method : D:\HPCHEM\1\METHODS\P140328.M (Chemstation Integrator)
Title : Pestcides
Last Update : Fri Oct 03 16:53:34 2014
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.01min
Max. RRF Dev : 16% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(Min)
1	S	Tetrachloro-m-xylene	10.000	9.220	7.8	82	0.00
6	A	Heptachlor	10.000	10.145	-1.4	93	0.00
7	A	Aldrin	10.000	10.140	-1.4	95	0.00
8	A	Heptachlor epoxide	10.000	9.848	1.5	92	0.00
13	A	Dieldrin	10.000	9.656	3.4	93	0.00
22	S	Decachlorobiphenyl	10.000	8.155	18.5#	91	0.00

Signal #2

1	S	Tetrachloro-m-xylene	10.000	10.287	-2.9	94	0.00
6	A	Heptachlor	10.000	9.265	7.3	93	0.00
7	A	Aldrin	10.000	9.677	3.2	97	0.00
8	A	Heptachlor epoxide	10.000	9.302	7.0	90	0.00
13	A	Dieldrin	10.000	9.095	9.0	93	0.00
22	S	Decachlorobiphenyl	10.000	6.729	32.7#	81	0.00

Evaluate Continuing Calibration Report

Signal #1 : D:\HPCHEM\1\DATA\G141014\1014005.D\ECD1A.CH Vial: 5
Signal #2 : D:\HPCHEM\1\DATA\G141014\1014005.D\ECD2B.CH
Acq On : 14 Oct 2014 18:35 Operator:
Sample : PEST MID LEVEL 1014-1 (PS3-89-02) Inst : George
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Method : D:\HPCHEM\1\METHODS\P140328.M (Chemstation Integrator)
Title : Pestcides
Last Update : Fri Oct 03 16:53:34 2014
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.01min
Max. RRF Dev : 16% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(Min)
1	S	Tetrachloro-m-xylene	100.000	81.956	18.0#	91	0.00
6	A	Heptachlor	100.000	87.753	12.2	98	0.00
7	A	Aldrin	100.000	98.023	2.0	101	0.00
8	A	Heptachlor epoxide	100.000	88.758	11.2	99	0.00
13	A	Dieldrin	100.000	95.351	4.6	100	0.00
22	S	Decachlorobiphenyl	100.000	97.637	2.4	97	0.00
Signal #2							
1	S	Tetrachloro-m-xylene	100.000	102.220	-2.2	104	0.00
6	A	Heptachlor	100.000	102.508	-2.5	99	0.00
7	A	Aldrin	100.000	112.673	-12.7	106	0.00
8	A	Heptachlor epoxide	100.000	100.355	-0.4	103	0.00
13	A	Dieldrin	100.000	107.333	-7.3	103	0.00
22	S	Decachlorobiphenyl	100.000	97.790	2.2	97	0.00

Evaluate Continuing Calibration Report

Signal #1 : D:\HPCHEM\1\DATA\G141014\1014006.D\ECD1A.CH Vial: 6
Signal #2 : D:\HPCHEM\1\DATA\G141014\1014006.D\ECD2B.CH
Acq On : 14 Oct 2014 18:48 Operator:
Sample : PEST HIGH LEVEL 1014-1 (PS3-89-03) Inst : George
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Method : D:\HPCHEM\1\METHODS\P140328.M (Chemstation Integrator)
Title : Pestcides
Last Update : Fri Oct 03 16:53:34 2014
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.01min
Max. RRF Dev : 16% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(Min)
1	S	Tetrachloro-m-xylene	200.000	152.942	23.5#	93	0.00
6	A	Heptachlor	200.000	160.477	19.8#	98	0.00
7	A	Aldrin	200.000	182.275	8.9	101	0.00
8	A	Heptachlor epoxide	200.000	164.644	17.7#	98	0.00
13	A	Dieldrin	200.000	179.127	10.4	100	0.00
22	S	Decachlorobiphenyl	200.000	187.520	6.2	99	0.00
Signal #2							
1	S	Tetrachloro-m-xylene	200.000	191.460	4.3	105	0.00
6	A	Heptachlor	200.000	197.701	1.1	100	0.00
7	A	Aldrin	200.000	215.089	-7.5	105	0.00
8	A	Heptachlor epoxide	200.000	190.564	4.7	102	0.00
13	A	Dieldrin	200.000	207.807	-3.9	103	0.00
22	S	Decachlorobiphenyl	200.000	189.867	5.1	101	0.00

Evaluate Continuing Calibration Report

Signal #1 : D:\HPCHEM\1\DATA\G141014\1014011.D\ECD1A.CH Vial: 11
Signal #2 : D:\HPCHEM\1\DATA\G141014\1014011.D\ECD2B.CH
Acq On : 14 Oct 2014 19:55 Operator:
Sample : PEST MID LEVEL 1014-2 (PS3-89-02) Inst : George
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Method : D:\HPCHEM\1\METHODS\P140328.M (Chemstation Integrator)
Title : Pestcides
Last Update : Fri Oct 03 16:53:34 2014
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.01min
Max. RRF Dev : 16% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(Min)
1	S	Tetrachloro-m-xylene	100.000	81.850	18.2#	91	0.00
6	A	Heptachlor	100.000	89.487	10.5	100	0.00
7	A	Aldrin	100.000	98.431	1.6	102	0.00
8	A	Heptachlor epoxide	100.000	89.117	10.9	99	0.00
13	A	Dieldrin	100.000	95.481	4.5	100	0.00
22	S	Decachlorobiphenyl	100.000	98.622	1.4	98	0.00
24	L8	Toxaphene{2}	-1.000	3197.241	0.0	99	0.00
Signal #2							
1	S	Tetrachloro-m-xylene	100.000	101.381	-1.4	103	0.00
6	A	Heptachlor	100.000	106.320	-6.3	103	0.00
7	A	Aldrin	100.000	112.965	-13.0	107	0.00
8	A	Heptachlor epoxide	100.000	101.413	-1.4	104	0.00
13	A	Dieldrin	100.000	107.888	-7.9	103	0.00
22	S	Decachlorobiphenyl	100.000	100.467	-0.5	99	0.00

Evaluate Continuing Calibration Report

Signal #1 : D:\HPCHEM\1\DATA\G141014\1014017.D\ECD1A.CH Vial: 17
Signal #2 : D:\HPCHEM\1\DATA\G141014\1014017.D\ECD2B.CH
Acq On : 14 Oct 2014 21:14 Operator:
Sample : PEST MID LEVEL 1014-3 (PS3-89-02) Inst : George
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Method : D:\HPCHEM\1\METHODS\P140328.M (Chemstation Integrator)
Title : Pestcides
Last Update : Fri Oct 03 16:53:34 2014
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.01min
Max. RRF Dev : 16% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(Min)
1	S	Tetrachloro-m-xylene	100.000	80.761	19.2#	90	0.01#
6	A	Heptachlor	100.000	85.954	14.0	96	0.00
7	A	Aldrin	100.000	93.457	6.5	97	0.00
8	A	Heptachlor epoxide	100.000	85.000	15.0	95	0.00
13	A	Dieldrin	100.000	89.759	10.2	94	0.00
22	S	Decachlorobiphenyl	100.000	91.360	8.6	91	0.00

Signal #2

1	S	Tetrachloro-m-xylene	100.000	97.334	2.7	99	0.01#
6	A	Heptachlor	100.000	102.460	-2.5	99	0.01#
7	A	Aldrin	100.000	106.825	-6.8	101	0.01#
8	A	Heptachlor epoxide	100.000	95.777	4.2	98	0.00
13	A	Dieldrin	100.000	102.286	-2.3	98	0.00
22	S	Decachlorobiphenyl	100.000	92.808	7.2	92	0.00

Quantitation Report (Not Reviewed)

Signal #1 : D:\HPCHEM\1\DATA\G141014\1014004.D\ECD1A.CH Vial: 4
Signal #2 : D:\HPCHEM\1\DATA\G141014\1014004.D\ECD2B.CH
Acq On : 14 Oct 2014 18:22 Operator:
Sample : PEST LOW LEVEL 1014-1 (PS3-89-01) Inst : George
Misc : Multiplr: 1.00
Sample Amount: 0.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Quant Time: Oct 14 18:32 2014 Quant Results File: P140328.RES

Quant Method : D:\HPCHEM\1\METHODS\P140328.M (Chemstation Integrator)
Title : Pestcides
Last Update : Fri Oct 03 16:53:34 2014
Response via : Initial Calibration
DataAcq Meth : P140328.M

KMS 10-14-14

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb	
	System Monitoring Compounds							
1)	S Tetrachloro-m-xy	3.07	3.25	14350	9600	9.220 ✓	10.287 ✓	
	Spiked Amount 100.000			Recovery =		9.22%	10.29%	
22)	S Decachlorobiphen	7.53	8.15	13024	8258	8.155 HB	6.729 +33	
	Spiked Amount 100.000			Recovery =		8.15%	6.73%	
	Target Compounds							
2)	A alpha-BHC	3.59	3.84	19605	12124	9.623	10.000	
3)	A gamma-BHC	3.88	4.16	18720	11487	9.716 ✓	10.087 ✓	
4)	A beta-BHC	3.96	4.24	9184	6112	9.235	10.015	
5)	A delta-BHC	4.12	4.50	15355	10623	8.433	9.533	
6)	A Heptachlor	4.30	4.54	19761	11764	10.145 ✓	9.265 ✓	
7)	A Aldrin	4.56	4.81	17114	9999	10.140 ✓	9.677 ✓	
8)	A Heptachlor epoxi	5.05	5.28	15717	9315	9.848 ✓	9.302 ✓	
9)	A gamma-Chlordane	5.15	5.43	15993	10751	9.857	10.417	
10)	A alpha-Chlordane	5.25	5.54	15825	9761	10.156	9.779	
11)	A 4,4'-DDE	5.31	5.67	12253	7963	8.460	8.840	
12)	A Endosulfan I	5.36	5.58	14792	8855	9.677	8.853	
13)	A Dieldrin	5.54	5.80	14472	8462	9.656 ✓	9.095 ✓	
14)	A Endrin	5.72	6.03	12642	7187	9.523 ✓	8.822 ✓	
15)	A 4,4'-DDD	5.77	6.11	9134	6052	7.884	8.549	
16)	A Endosulfan II	5.89	6.20	12403	7609	9.406	8.945	
17)	A 4,4'-DDT	5.98	6.34	11475	7256	9.036 ✓	9.008 ✓	
18)	A Endrin aldehyde	6.20	6.45	9839	6383	9.523	9.186	
19)	A Methoxychlor	6.34	6.85	5976	4500	8.661	9.526	
20)	A Endosulfan sulfa	6.52	6.65	10789	7275	9.605	9.735	
21)	A Endrin ketone	6.74	7.07	14367	8801	10.777	9.340	
23)	L8 Toxaphene{1}	0.00	6.11	0	6052	N.D.	410.525	#
24)	L8 Toxaphene{2}	5.98	0.00	11475	0	309.284	N.D.	#
25)	L8 Toxaphene{3}	0.00	6.34	0	7256	N.D.	203.272	#
26)	L8 Toxaphene{4}	0.00	0.00	0	0	N.D.	N.D.	
27)	L8 Toxaphene{5}	6.52	0.00	10789	0	337.265	N.D.	#
	Sum Toxaphene			22264	13307	646.548	613.797	
	Average Toxaphene					323.274	306.899	
28)	L9 Tech Chlordane{1	4.43	5.01	2807	96	26.635	2.308	#
29)	L9 Tech Chlordane{2	5.05	5.54	15717	9761	436.227	84.188	#
30)	L9 Tech Chlordane{3	5.25	5.58	15825	8855	94.573	119.801	#
31)	L9 Tech Chlordane{4	5.31	5.58	12253	8855	59.516	83.588	#
32)	L9 Tech Chlordane{5	5.98	6.20	11475	7609	222.861	514.806	#
	Sum Tech Chlordane			58077	35177	839.812	804.691	
	Average Tech Chlordane					167.962	160.938	

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

Quantitation Report (Not Reviewed)

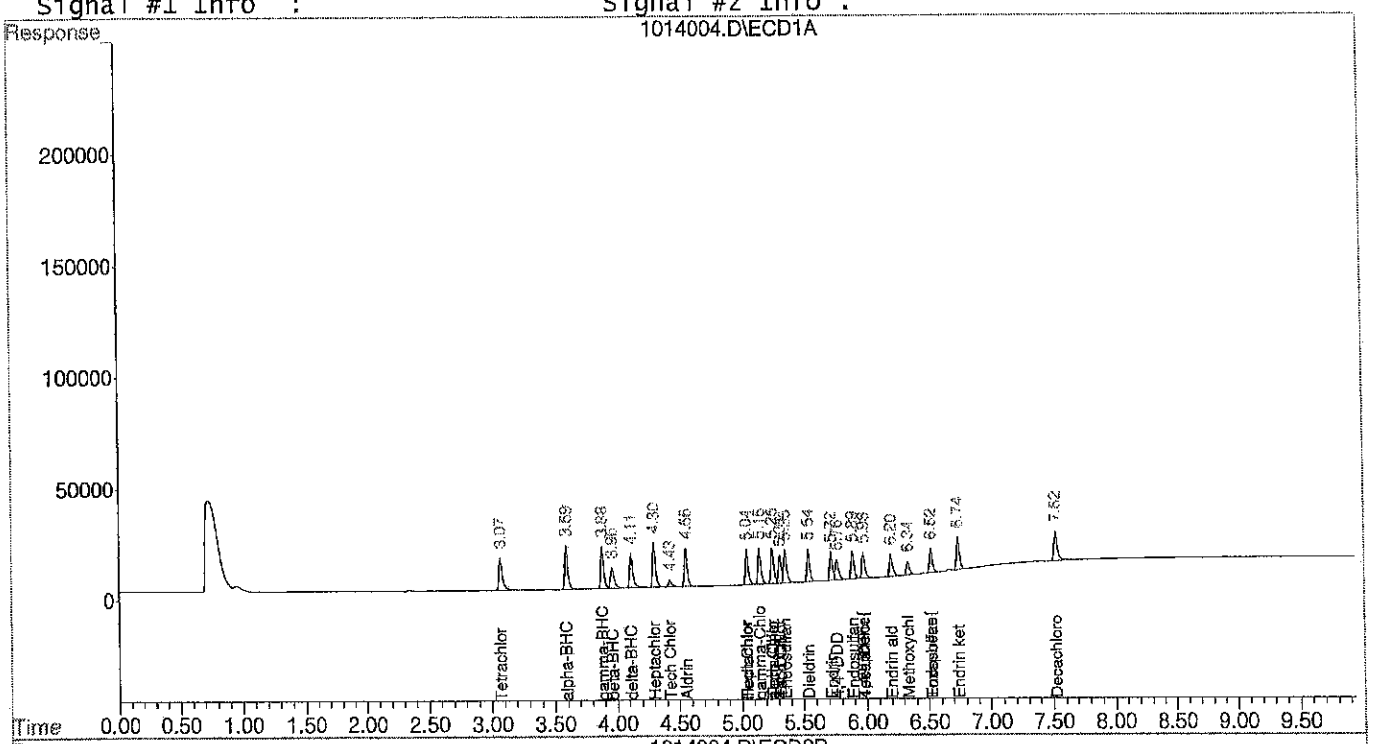
Signal #1 : D:\HPCHEM\1\DATA\G141014\1014004.D\ECD1A.CH Vial: 4
Signal #2 : D:\HPCHEM\1\DATA\G141014\1014004.D\ECD2B.CH
Acq On : 14 Oct 2014 18:22 Operator:
Sample : PEST LOW LEVEL 1014-1 (PS3-89-01) Inst : George
Misc : Multiplr: 1.00
Sample Amount: 0.00

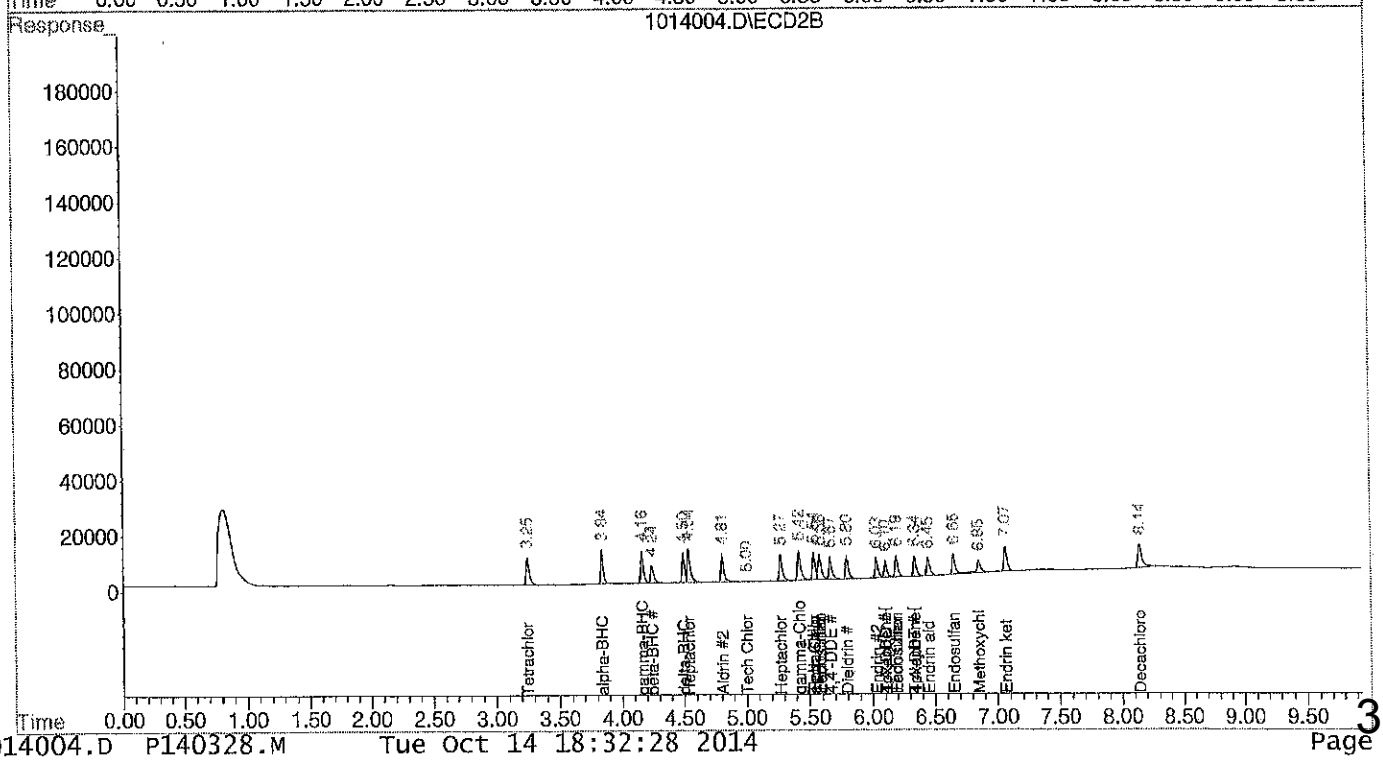
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Quant Time: Oct 14 18:32 2014 Quant Results File: P140328.RES

Quant Method : D:\HPCHEM\1\METHODS\P140328.M (Chemstation Integrator)
Title : Pestcides
Last Update : Fri Oct 03 16:53:34 2014
Response via : Multiple Level Calibration
DataAcq Meth : P140328.M

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (Not Reviewed)

Signal #1 : D:\HPCHEM\1\DATA\G141014\1014005.D\ECD1A.CH Vial: 5
Signal #2 : D:\HPCHEM\1\DATA\G141014\1014005.D\ECD2B.CH
Acq On : 14 Oct 2014 18:35 Operator:
Sample : PEST MID LEVEL 1014-1 (PS3-89-02) Inst : George
Misc : Multiplr: 1.00
Sample Amount: 0.00

IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Quant Time: Oct 14 18:45 2014 Quant Results File: P140328.RES

Quant Method : D:\HPCHEM\1\METHODS\P140328.M (Chemstation Integrator)
Title : Pestcides
Last Update : Fri Oct 03 16:53:34 2014
Response via : Initial Calibration
DataAcq Meth : P140328.M

KMS 10-15-14

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb	
	System Monitoring Compounds							
1)	S Tetrachloro-m-xy	3.07	3.25	127562	95390	81.956	102.220	
	Spiked Amount 100.000			Recovery	=	81.96%	102.22%	
22)	S Decachlorobiphen	7.53	8.15	101543	71808	97.637	97.790	
	Spiked Amount 100.000			Recovery	=	97.64%	97.79%	
	Target Compounds							
2)	A alpha-BHC	3.59	3.84	197523	144609	96.952	119.267	
3)	A gamma-BHC	3.88	4.17	181674	129349	94.292	113.582	
4)	A beta-BHC	3.96	4.25	84336	61259	84.802	100.388	
5)	A delta-BHC	4.12	4.50	168926	127879	92.769	114.756	
6)	A Heptachlor	4.30	4.54	170934	130156	87.753	102.508	
7)	A Aldrin	4.56	4.81	165441	116420	98.023	112.673	
8)	A Heptachlor epoxi	5.05	5.28	141654	100497	88.758	100.355	
9)	A gamma-Chlordane	5.15	5.43	146767	108741	90.460	105.366	
10)	A alpha-Chlordane	5.25	5.54	141131	98831	90.572	99.017	
11)	A 4,4'-DDE	5.31	5.67	128446	96739	88.686	107.389	
12)	A Endosulfan I	5.36	5.59	138468	100342	90.591	100.317	
13)	A Dieldrin	5.54	5.80	142911	99863	95.351	107.333	
14)	A Endrin	5.72	6.03	125430	82946	94.481	101.820	
15)	A 4,4'-DDD	5.76	6.11	105516	76026	91.067	107.392	
16)	A Endosulfan II	5.89	6.20	118442	82782	89.823	97.310	
17)	A 4,4'-DDT	5.98	6.34	116640	83153	91.849	103.233	
18)	A Endrin aldehyde	6.20	6.45	88443	64389	85.600	92.661	
19)	A Methoxychlor	6.34	6.85	56801	42128	82.330	89.178	
20)	A Endosulfan sulfa	6.52	6.66	103766	75365	92.376	100.841	
21)	A Endrin ketone	6.74	7.07	128291	88174	103.808	93.579	
23)	L8 Toxaphene{1}	0.00	6.11	0	76026	N.D.	5157.196	#
24)	L8 Toxaphene{2}	5.98	0.00	116640	0	3143.908	N.D.	#
25)	L8 Toxaphene{3}	0.00	6.34	0	83153	N.D.	2329.621	#
26)	L8 Toxaphene{4}	0.00	6.54f	0	1257	N.D.	54.018	#
27)	L8 Toxaphene{5}	6.52	0.00	103766	0	3243.613	N.D.	#
	Sum Toxaphene			220406	160436	6387.521	7540.835	
	Average Toxaphene					3193.761	2513.612	
28)	L9 Tech Chlordane{1	4.43	0.00	19388	0	183.971	N.D.	#
29)	L9 Tech Chlordane{2	5.05	5.54	141654	98831	3931.617	852.403	#
30)	L9 Tech Chlordane{3	5.25	5.59	141131	100342	843.396	1357.500	#
31)	L9 Tech Chlordane{4	5.31	5.59	128446	100342	623.883	947.166	#
32)	L9 Tech Chlordane{5	5.98	6.20	116640	82782	2265.407	5600.517	#
	Sum Tech Chlordane			547259	382298	7848.274	8757.586	
	Average Tech Chlordane					1569.655	2189.397	

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

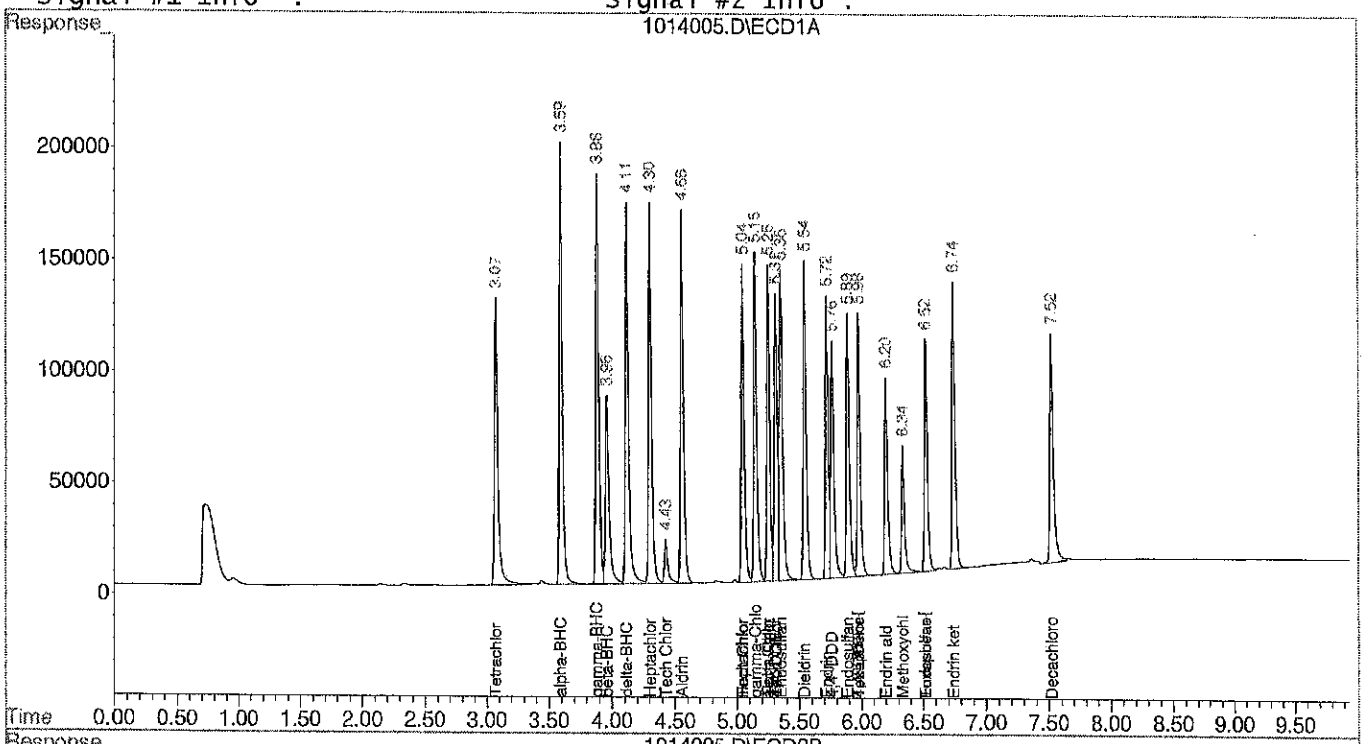
Quantitation Report (Not Reviewed)

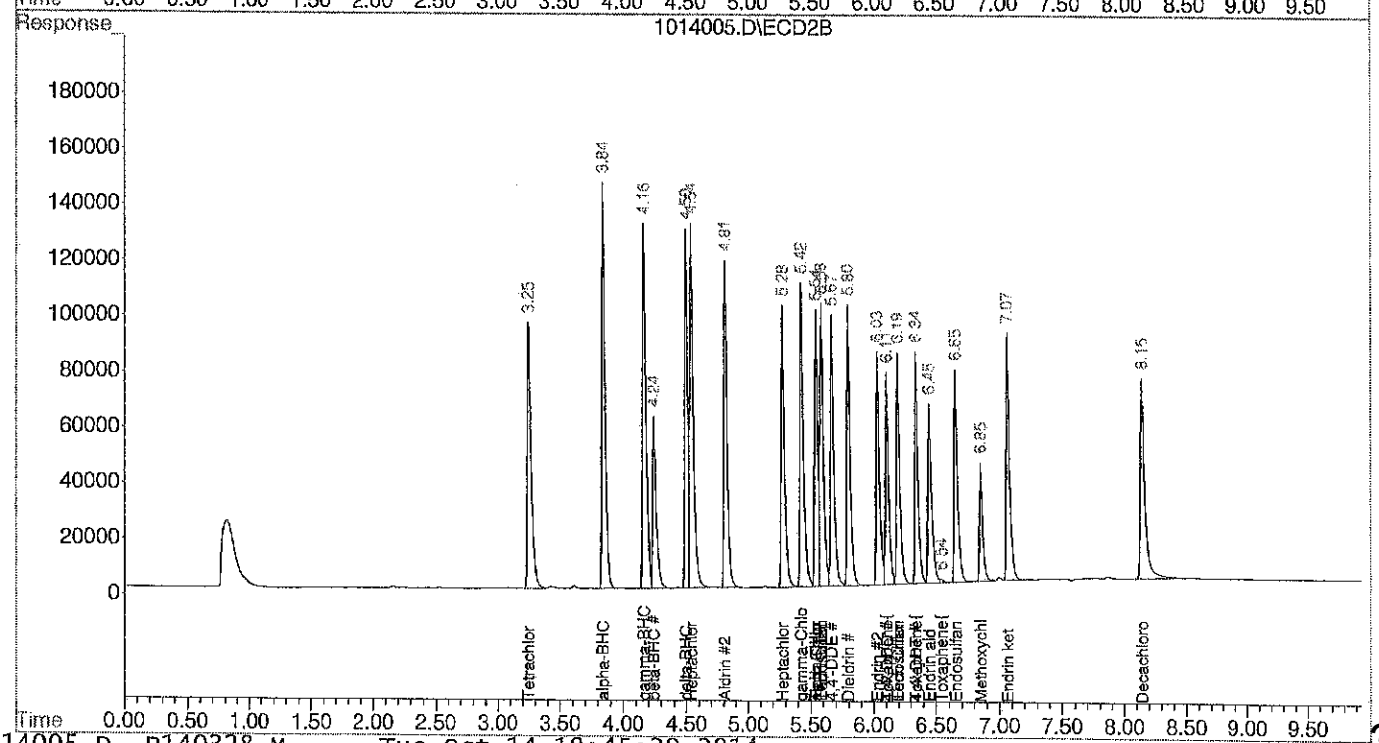
Signal #1 : D:\HPCHEM\1\DATA\G141014\1014005.D\ECD1A.CH Vial: 5
Signal #2 : D:\HPCHEM\1\DATA\G141014\1014005.D\ECD2B.CH
Acq On : 14 Oct 2014 18:35 Operator:
Sample : PEST MID LEVEL 1014-1 (PS3-89-02) Inst : George
Misc : Multiplr: 1.00
Sample Amount: 0.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Quant Time: Oct 14 18:45 2014 Quant Results File: P140328.RES

Quant Method : D:\HPCHEM\1\METHODS\P140328.M (Chemstation Integrator)
Title : Pestcides
Last Update : Fri Oct 03 16:53:34 2014
Response via : Multiple Level Calibration
DataAcq Meth : P140328.M

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (Not Reviewed)

Signal #1 : D:\HPCHEM\1\DATA\G141014\1014006.D\ECD1A.CH Vial: 6
Signal #2 : D:\HPCHEM\1\DATA\G141014\1014006.D\ECD2B.CH
Acq On : 14 Oct 2014 18:48 Operator:
Sample : PEST HIGH LEVEL 1014-1 (PS3-89-03) Inst : George
Misc : Multiplr: 1.00
Sample Amount: 0.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Quant Time: Oct 14 18:58 2014 Quant Results File: P140328.RES

Quant Method : D:\HPCHEM\1\METHODS\P140328.M (Chemstation Integrator)
Title : Pestcides
Last Update : Fri Oct 03 16:53:34 2014
Response via : Initial Calibration
DataAcq Meth : P140328.M

KMS 10-15-14

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
1)	S Tetrachloro-m-xy	3.07	3.25	238049	178666	152.942	191.460 #
	Spiked Amount 100.000			Recovery =		152.94%	191.46%
22)	S Decachlorobiphen	7.52	8.15	190459	136067	187.520	189.867
	Spiked Amount 100.000			Recovery =		187.52%	189.87%
	Target Compounds						
2)	A alpha-BHC	3.59	3.84	371664	275367	182.428	227.110
3)	A gamma-BHC	3.88	4.17	340453	244667	176.701	214.843
4)	A beta-BHC	3.96	4.25	159434	117139	160.316	191.962
5)	A delta-BHC	4.11	4.50	321569	242491	176.595	217.608
6)	A Heptachlor	4.30	4.54	312592	251026	160.477	197.701
7)	A Aldrin	4.56	4.81	307639	222242	182.275	215.089
8)	A Heptachlor epoxi	5.05	5.28	262765	190834	164.644	190.564
9)	A gamma-Chlordane	5.15	5.43	275440	200230	169.767	194.015
10)	A alpha-Chlordane	5.25	5.54	263189	190198	168.904	190.555
11)	A 4,4'-DDE	5.31	5.67	245058	187644	169.201	208.301
12)	A Endosulfan I	5.35	5.58	259132	195744	169.534	195.694
13)	A Dieldrin	5.54	5.80	268474	193344	179.127	207.807
14)	A Endrin	5.72	6.03	233953	159843	176.227	196.214
15)	A 4,4'-DDD	5.76	6.11	205818	151017	177.634	213.321
16)	A Endosulfan II	5.89	6.20	222408	160265	168.667	188.390
17)	A 4,4'-DDT	5.98	6.34	224806	163133	177.025	202.526
18)	A Endrin aldehyde	6.20	6.45	171308	125722	165.801	180.924
19)	A Methoxychlor	6.34	6.85	110372	83252	159.979	176.229
20)	A Endosulfan sulfa	6.52	6.65	200227	146872	178.250	196.520
21)	A Endrin ketone	6.74	7.07	243787	170037	198.123	180.462
23)	L8 Toxaphene{1}	0.00	6.11	0	151017	N.D.	10244.144 #
24)	L8 Toxaphene{2}	5.98	0.00	224806	0	6059.408	N.D. #
25)	L8 Toxaphene{3}	0.00	6.34	0	163133	N.D.	4570.334 #
26)	L8 Toxaphene{4}	0.00	6.54f	0	2909	N.D.	125.014 #
27)	L8 Toxaphene{5}	6.52	0.00	200227	0	6258.892	N.D. #
	Sum Toxaphene			425033	317059	12318.300	14939.492
	Average Toxaphene					6159.150	4979.831
28)	L9 Tech Chlordane{1	4.43	5.02	7875	99	74.721	2.374 #
29)	L9 Tech Chlordane{2	5.05	5.54	262765	190198	7293.079	1640.428 #
30)	L9 Tech Chlordane{3	5.25	5.58	263189	195744	1572.810	2648.155 #
31)	L9 Tech Chlordane{4	5.31	5.58	245058	195744	1190.286	1847.694 #
32)	L9 Tech Chlordane{5	5.98	6.20	224806	160265	4366.229	10842.518 #
	Sum Tech Chlordane			1003693	742049	14497.125	16981.169
	Average Tech Chlordane					2899.425	3396.234

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

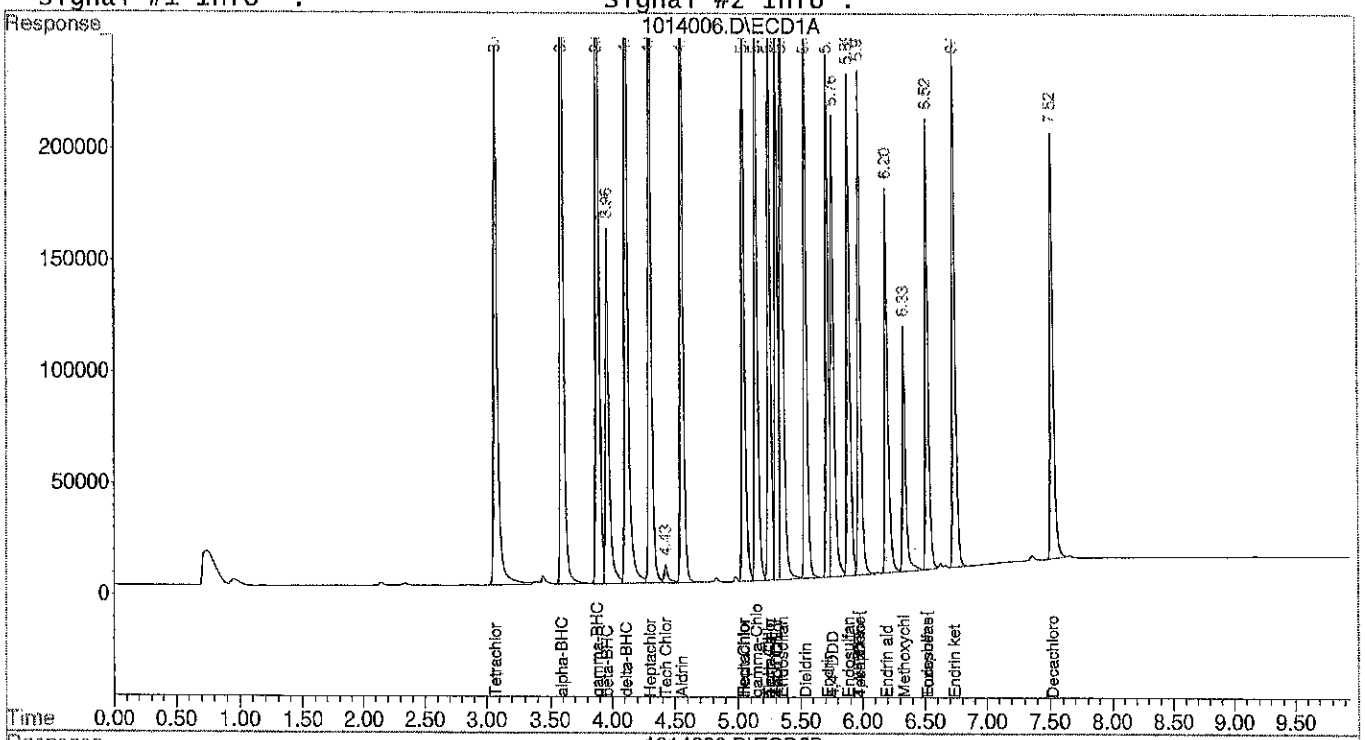
Quantitation Report (Not Reviewed)

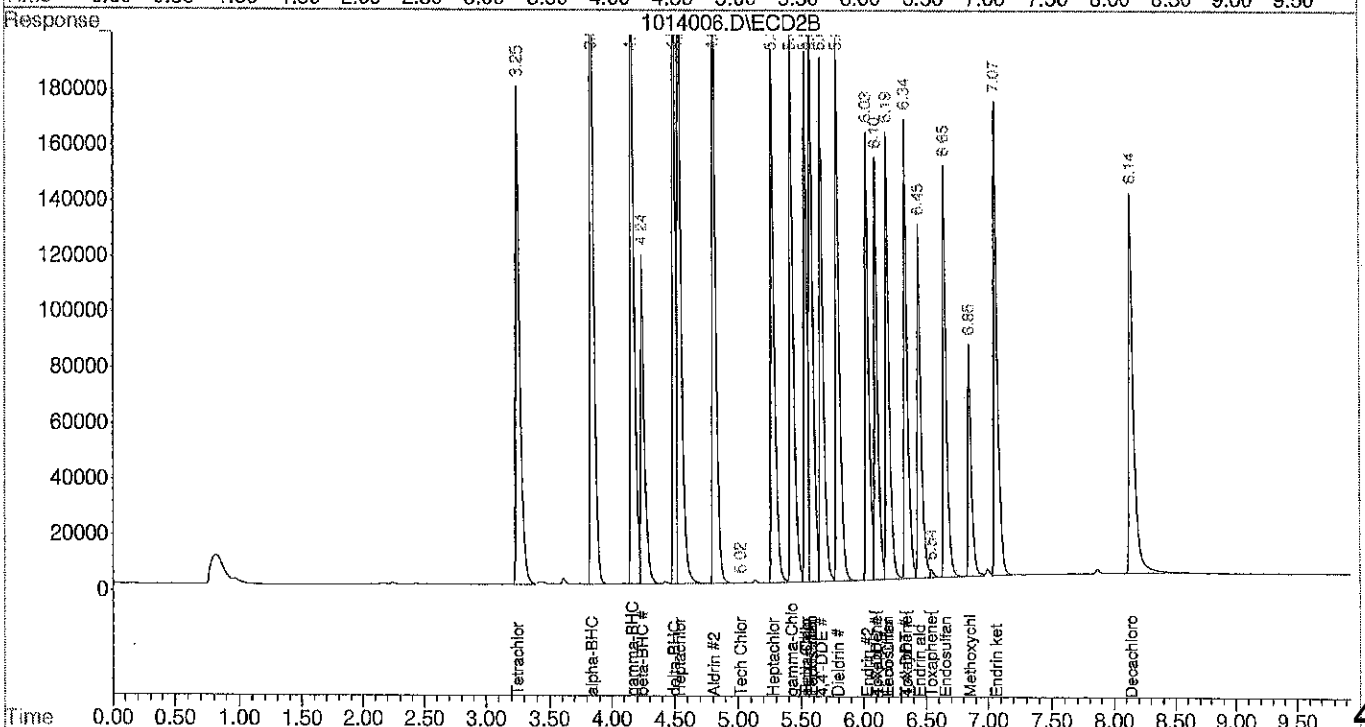
Signal #1 : D:\HPCHEM\1\DATA\G141014\1014006.D\ECD1A.CH Vial: 6
Signal #2 : D:\HPCHEM\1\DATA\G141014\1014006.D\ECD2B.CH
Acq On : 14 Oct 2014 18:48 Operator:
Sample : PEST HIGH LEVEL 1014-1 (PS3-89-03) Inst : George
Misc : Multiplr: 1.00
Sample Amount: 0.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Quant Time: Oct 14 18:58 2014 Quant Results File: P140328.RES

Quant Method : D:\HPCHEM\1\METHODS\P140328.M (Chemstation Integrator)
Title : Pestcides
Last Update : Fri Oct 03 16:53:34 2014
Response via : Multiple Level Calibration
DataAcq Meth : P140328.M

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (Not Reviewed)

Signal #1 : D:\HPCHEM\1\DATA\G141014\1014011.D\ECD1A.CH Vial: 11
Signal #2 : D:\HPCHEM\1\DATA\G141014\1014011.D\ECD2B.CH
Acq On : 14 Oct 2014 19:55 Operator:
Sample : PEST MID LEVEL 1014-2 (PS3-89-02) Inst : George
Misc : Multiplr: 1.00
Sample Amount: 0.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Quant Time: Oct 14 20:05 2014 Quant Results File: P140328.RES

Quant Method : D:\HPCHEM\1\METHODS\P140328.M (Chemstation Integrator)
Title : Pestcides
Last Update : Fri Oct 03 16:53:34 2014
Response via : Initial Calibration
DataAcq Meth : P140328.M

KMS 10-15-14

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb	
	System Monitoring Compounds							
1)	S Tetrachloro-m-xy	3.08	3.25	127397	94606	81.850	101.381	
	Spiked Amount 100.000			Recovery =		81.85%	101.38%	
22)	S Decachlorobiphen	7.52	8.15	102517	73676	98.622	100.467	
	Spiked Amount 100.000			Recovery =		98.62%	100.47%	
	Target Compounds							
2)	A alpha-BHC	3.60	3.85	197498	144089	96.940	118.837	
3)	A gamma-BHC	3.88	4.17	181766	130811	94.340	114.866	
4)	A beta-BHC	3.96	4.25	84090	61581	84.555	100.915	
5)	A delta-BHC	4.12	4.50	168449	128421	92.507	115.243	
6)	A Heptachlor	4.31	4.54	174311	134997	89.487	106.320	
7)	A Aldrin	4.56	4.82	166130	116722	98.431	112.965	
8)	A Heptachlor epoxi	5.05	5.28	142227	101557	89.117	101.413	
9)	A gamma-Chlordane	5.15	5.43	145955	105274	89.959	102.007	
10)	A alpha-Chlordane	5.25	5.54	140366	100623	90.081	100.812	
11)	A 4,4'-DDE	5.32	5.67	128174	96616	88.498	107.253	
12)	A Endosulfan I	5.36	5.59	138629	101093	90.697	101.067	
13)	A Dieldrin	5.54	5.80	143106	100379	95.481	107.888	
14)	A Endrin	5.72	6.04	128011	86555	96.425	106.250	
15)	A 4,4'-DDD	5.77	6.11	106017	77204	91.499	109.055	
16)	A Endosulfan II	5.89	6.20	118842	83720	90.126	98.412	
17)	A 4,4'-DDT	5.98	6.35	118619	85545	93.407	106.203	
18)	A Endrin aldehyde	6.20	6.45	88579	64863	85.731	93.343	
19)	A Methoxychlor	6.34	6.86	60491	44942	87.679	95.134	
20)	A Endosulfan sulfa	6.52	6.66	105473	76956	93.897	102.969	
21)	A Endrin ketone	6.74	7.07	128990	89499	104.379	94.986	
23)	L8 Toxaphene{1}	0.00	6.11	0	77204	N.D.	5237.076	#
24)	L8 Toxaphene{2}	5.98	0.00	118619	0	3197.241	N.D.	#
25)	L8 Toxaphene{3}	0.00	6.35	0	85545	N.D.	2396.644	#
26)	L8 Toxaphene{4}	0.00	0.00	0	0	N.D.	N.D.	
27)	L8 Toxaphene{5}	6.52	0.00	105473	0	3296.994	N.D.	#
	Sum Toxaphene			224092	162749	6494.236	7633.720	
	Average Toxaphene					3247.118	3816.860	
28)	L9 Tech Chlordane{1	4.43	0.00	4628	0	43.910	N.D.	#
29)	L9 Tech Chlordane{2	5.05	5.54	142227	100623	3947.530	867.862	#
30)	L9 Tech Chlordane{3	5.25	5.59	140366	101093	838.824	1367.651	#
31)	L9 Tech Chlordane{4	5.32	5.59	128174	101093	622.559	954.249	#
32)	L9 Tech Chlordane{5	5.98	6.20	118619	83720	2303.837	5663.949	#
	Sum Tech Chlordane			534013	386529	7756.659	8853.711	
	Average Tech Chlordane					1551.332	2213.428	

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

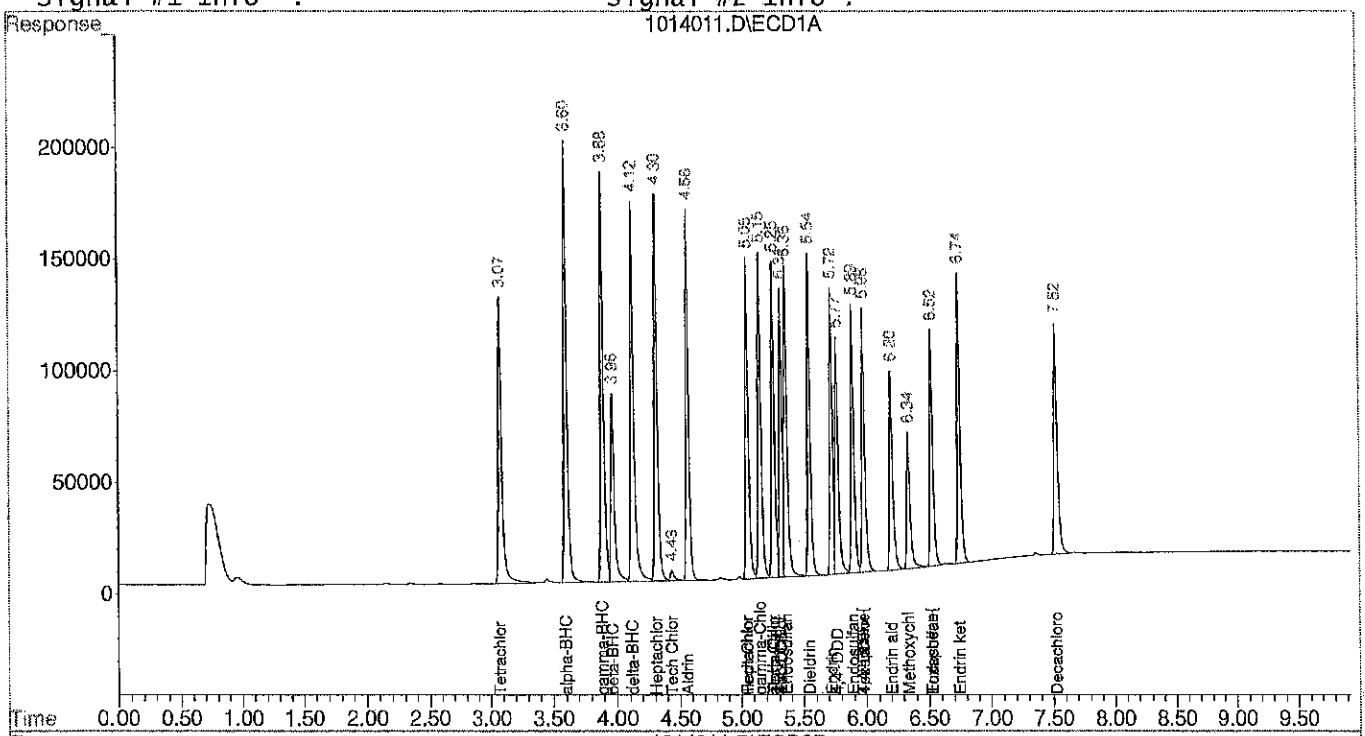
Quantitation Report (Not Reviewed)

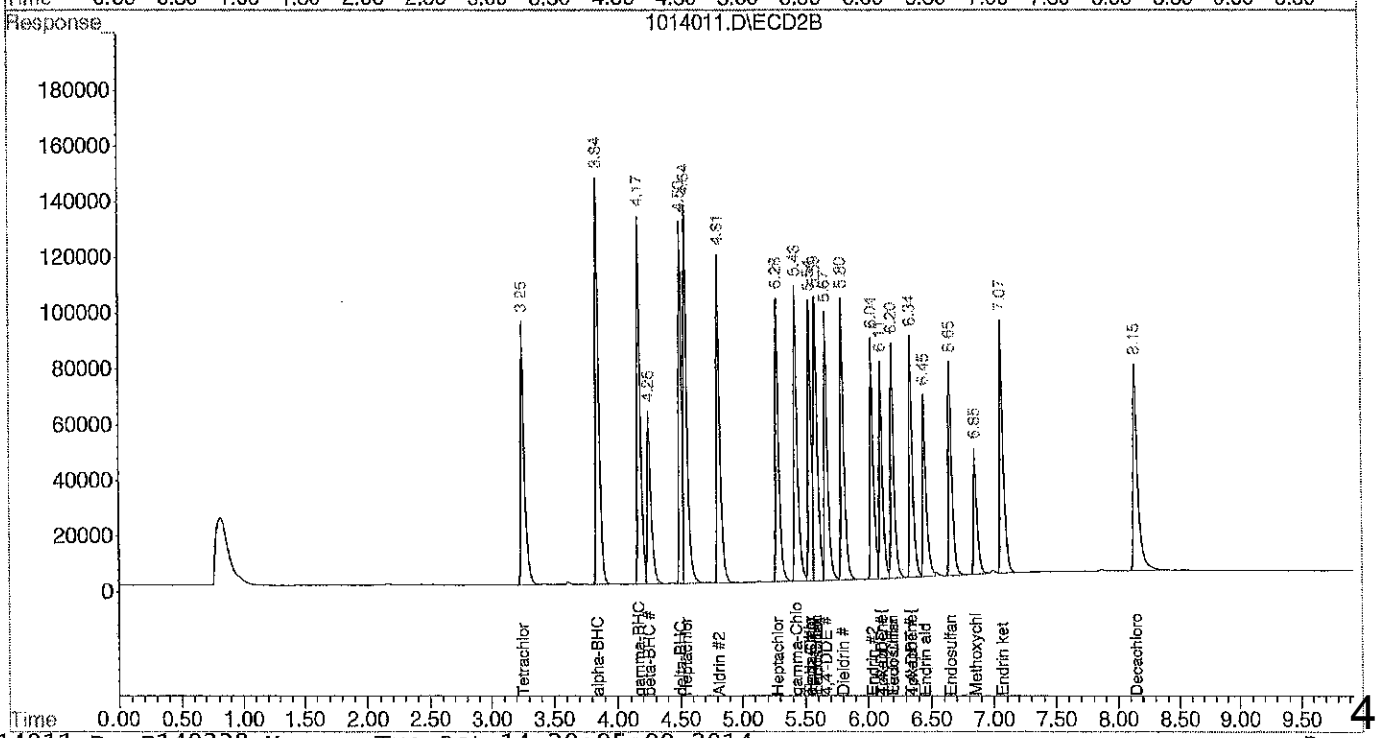
Signal #1 : D:\HPCHEM\1\DATA\G141014\1014011.D\ECD1A.CH Vial: 11
Signal #2 : D:\HPCHEM\1\DATA\G141014\1014011.D\ECD2B.CH
Acq On : 14 Oct 2014 19:55 Operator:
Sample : PEST MID LEVEL 1014-2 (PS3-89-02) Inst : George
Misc : Multiplr: 1.00
Sample Amount: 0.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Quant Time: Oct 14 20:05 2014 Quant Results File: P140328.RES

Quant Method : D:\HPCHEM\1\METHODS\P140328.M (Chemstation Integrator)
Title : Pestcides
Last Update : Fri Oct 03 16:53:34 2014
Response via : Multiple Level Calibration
DataAcq Meth : P140328.M

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (Not Reviewed)

Signal #1 : D:\HPCHEM\1\DATA\G141014\1014017.D\ECD1A.CH Vial: 17
Signal #2 : D:\HPCHEM\1\DATA\G141014\1014017.D\ECD2B.CH
Acq On : 14 Oct 2014 21:14 Operator:
Sample : PEST MID LEVEL 1014-3 (PS3-89-02) Inst : George
Misc : Multiplr: 1.00
Sample Amount: 0.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Quant Time: Oct 14 21:24 2014 Quant Results File: P140328.RES

Quant Method : D:\HPCHEM\1\METHODS\P140328.M (Chemstation Integrator)
Title : Pestcides
Last Update : Fri Oct 03 16:53:34 2014
Response via : Initial Calibration
DataAcq Meth : P140328.M

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb	
	System Monitoring Compounds							
1)	S Tetrachloro-m-xy	3.08	3.26	125702	90830	80.761	97.334	
	Spiked Amount 100.000			Recovery =		80.76%	97.33%	
22)	S Decachlorobiphen	7.52	8.15	95334	68331	91.360	92.808	
	Spiked Amount 100.000			Recovery =		91.36%	92.81%	
	Target Compounds							
2)	A alpha-BHC	3.60	3.85	191610	138154	94.050	113.943	
3)	A gamma-BHC	3.89	4.17	175771	123706	91.228	108.627	
4)	A beta-BHC	3.97	4.25f	80318	57898	80.762	94.881	
5)	A delta-BHC	4.12	4.51f	164970	122432	90.596	109.868	
6)	A Heptachlor	4.31	4.55	167429	130095	85.954	102.460	
7)	A Aldrin	4.56	4.82f	157734	110377	93.457	106.825	
8)	A Heptachlor epoxi	5.05	5.29	135656	95913	85.000	95.777	
9)	A gamma-Chlordane	5.15	5.43	137738	100983	84.895	97.849	
10)	A alpha-Chlordane	5.26	5.55	131289	93714	84.256	93.890	
11)	A 4,4'-DDE	5.32	5.67	123979	92788	85.602	103.003	
12)	A Endosulfan I	5.36	5.59	129554	96254	84.759	96.230	
13)	A Dieldrin	5.55	5.81	134530	95167	89.759	102.286	
14)	A Endrin	5.73	6.04	124546	85472	93.815	104.920	
15)	A 4,4'-DDD	5.77	6.11	103778	75629	89.567	106.830	
16)	A Endosulfan II	5.89	6.20	112450	80476	85.278	94.599	
17)	A 4,4'-DDT	5.98	6.35	113112	82784	89.070	102.775	
18)	A Endrin aldehyde	6.20	6.45	83655	61958	80.965	89.162	
19)	A Methoxychlor	6.34	6.86	60088	45505	87.095	96.325	
20)	A Endosulfan sulfa	6.53	6.66	100384	74288	89.366	99.400	
21)	A Endrin ketone	6.74	7.07	121577	87665	98.325	93.039	
23)	L8 Toxaphene{1}	0.00	6.11	0	75629	N.D.	5130.215	#
24)	L8 Toxaphene{2}	5.98	0.00	113112	0	3048.805	N.D.	#
25)	L8 Toxaphene{3}	0.00	6.35	0	82784	N.D.	2319.281	#
26)	L8 Toxaphene{4}	0.00	0.00	0	0	N.D.	N.D.	
27)	L8 Toxaphene{5}	6.53	6.94f	100384	6478	3137.911	289.661	#
	Sum Toxaphene			213496	164891	6186.716	7739.157	
	Average Toxaphene					3093.358	2579.719	
28)	L9 Tech Chlordane{1	4.43	0.00	12561	0	119.187	N.D.	#
29)	L9 Tech Chlordane{2	5.05	5.55	135656	93714	3765.156	808.267	#
30)	L9 Tech Chlordane{3	5.26	5.59	131289	96254	784.578	1302.189	#
31)	L9 Tech Chlordane{4	5.32	5.59	123979	96254	602.187	908.575	#
32)	L9 Tech Chlordane{5	5.98	6.20	113112	80476	2196.878	5444.510	#
	Sum Tech Chlordane			516597	366698	7467.987	8463.541	
	Average Tech Chlordane					1493.597	2115.885	

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
1014017.D P140328.M Tue Oct 14 21:24:36 2014

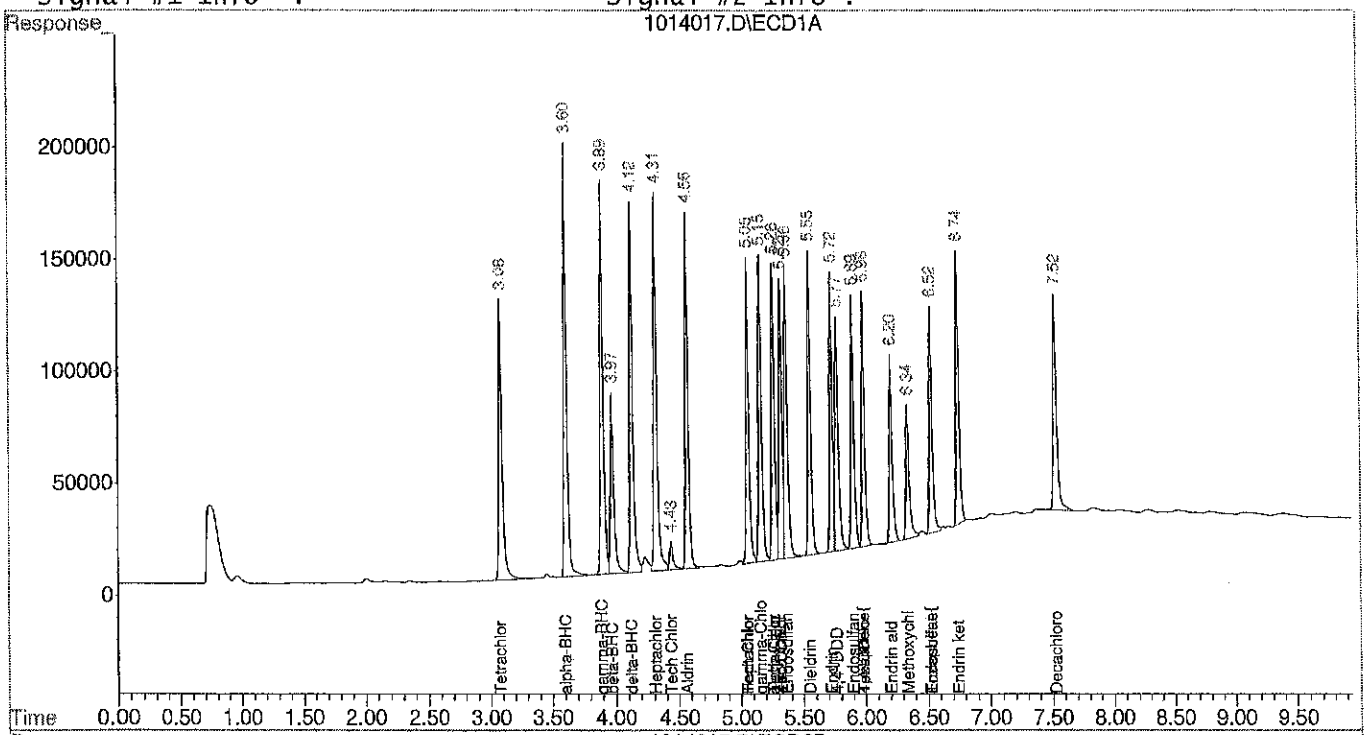
Quantitation Report (Not Reviewed)

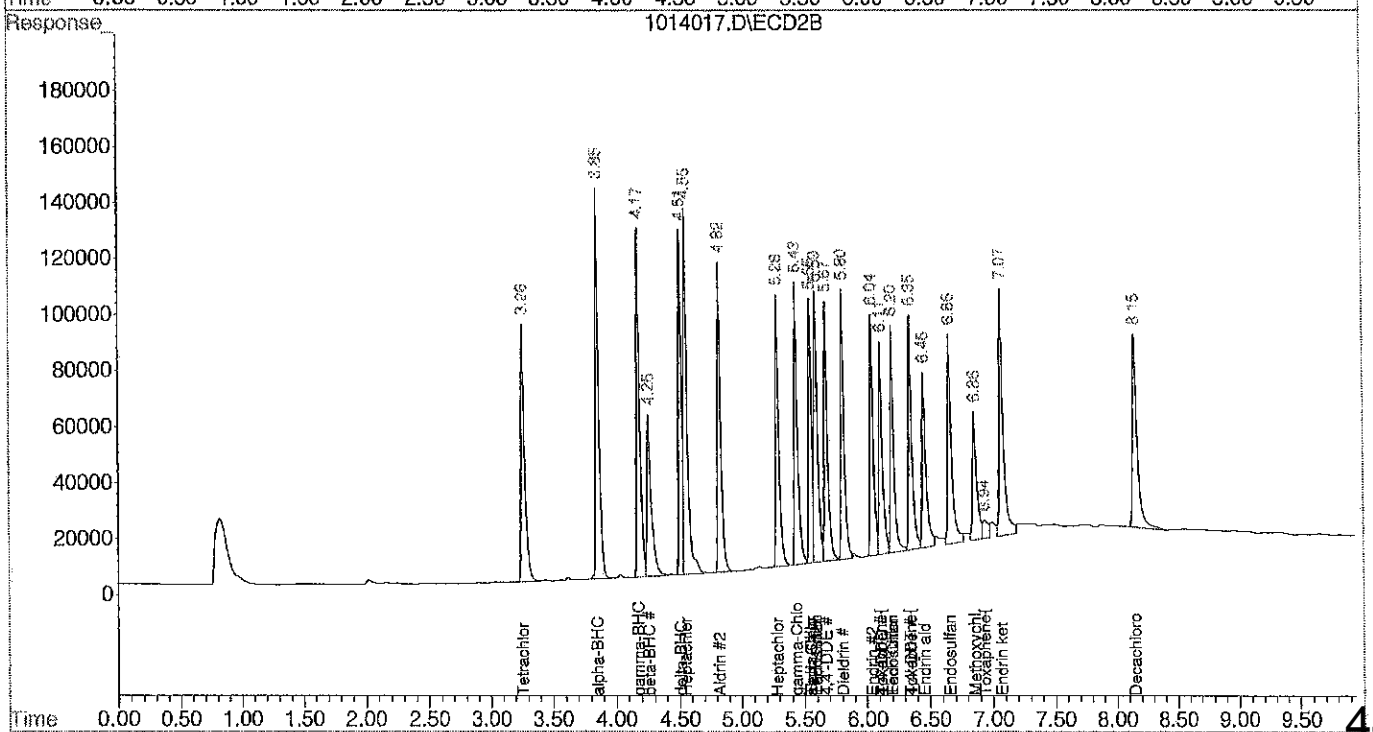
Signal #1 : D:\HPCHEM\1\DATA\G141014\1014017.D\ECD1A.CH Vial: 17
Signal #2 : D:\HPCHEM\1\DATA\G141014\1014017.D\ECD2B.CH
Acq On : 14 Oct 2014 21:14 Operator:
Sample : PEST MID LEVEL 1014-3 (PS3-89-02) Inst : George
Misc : Multiplr: 1.00
Sample Amount: 0.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Quant Time: Oct 14 21:24 2014 Quant Results File: P140328.RES

Quant Method : D:\HPCHEM\1\METHODS\P140328.M (Chemstation Integrator)
Title : Pestcides
Last Update : Fri Oct 03 16:53:34 2014
Response via : Multiple Level Calibration
DataAcq Meth : P140328.M

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Chlorinated Acid Herbicides EPA 8151A Data

Quantitation Report (QT Reviewed)

Data File : F1016011.D
Sample : 10-126-01 RR

Data Path : X:\PEST\FRANK\DATA\F141016\
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 16-Oct-14, 16:29:30
Operator :
Misc :
ALS Vial : 11 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: events2.e
Quant Time: Oct 17 15:00:01 2014
Quant Method : C:\MSDCHEM\1\METHODS\H140808.M
Quant Title : Herbicides
QLast Update : Thu Oct 16 16:26:08 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb	
	System Monitoring Compounds							
3)	S DCAA (surr)	4.801f	4.741	13888193	32069287	55.123	52.312m	
	Spiked Amount 100.000			Recovery	=	55.12%	52.31%	
	Target Compounds							
1)	A Dalapon	1.571f	1.378	1268432	8615951	3.736	9.748 #	
2)	A 2,4,6-Tri...	3.846f	3.771	208.1E6	19910919	106.001	4.284 #	
4)	A Dicamba	4.903	4.842	543.0E6	1133.3E6	576.265	501.438	
5)	A MCPP	5.009	4.908	72678912	52319025	104321.568	35162.626 #	
6)	A MCPA	5.093	5.041	7575998	45821173	7311.399m	21844.726m#	P
7)	A Dichlorprop	5.291f	5.225f	21496891	7866523	85.729	14.103 #	
8)	A 2,4-D	5.426	5.381	139.1E6	288.7E6	492.364m	421.062	
9)	A Pentachlo...	5.562f	5.571	545.8E6	58203663	150.485	5.934 #	
10)	A 2,4,5-TP	5.825f	5.756f	33769479	81541407	25.024	25.114	
11)	A 2,4,5-T	0.000	5.943	0	103.2E6	N.D.	33.771 #	
12)	A 2,4-DB	6.234	6.186	23582619	25313070	151.521	64.161 #	
13)	a Bentazon	6.652	6.570	267.1E6	516.2E6	2174.102m	1970.697	Dilute
14)	A Dinoseb	6.737f	6.339f	2122.6E6	2113.1E6	2380.587	907.295 #	

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

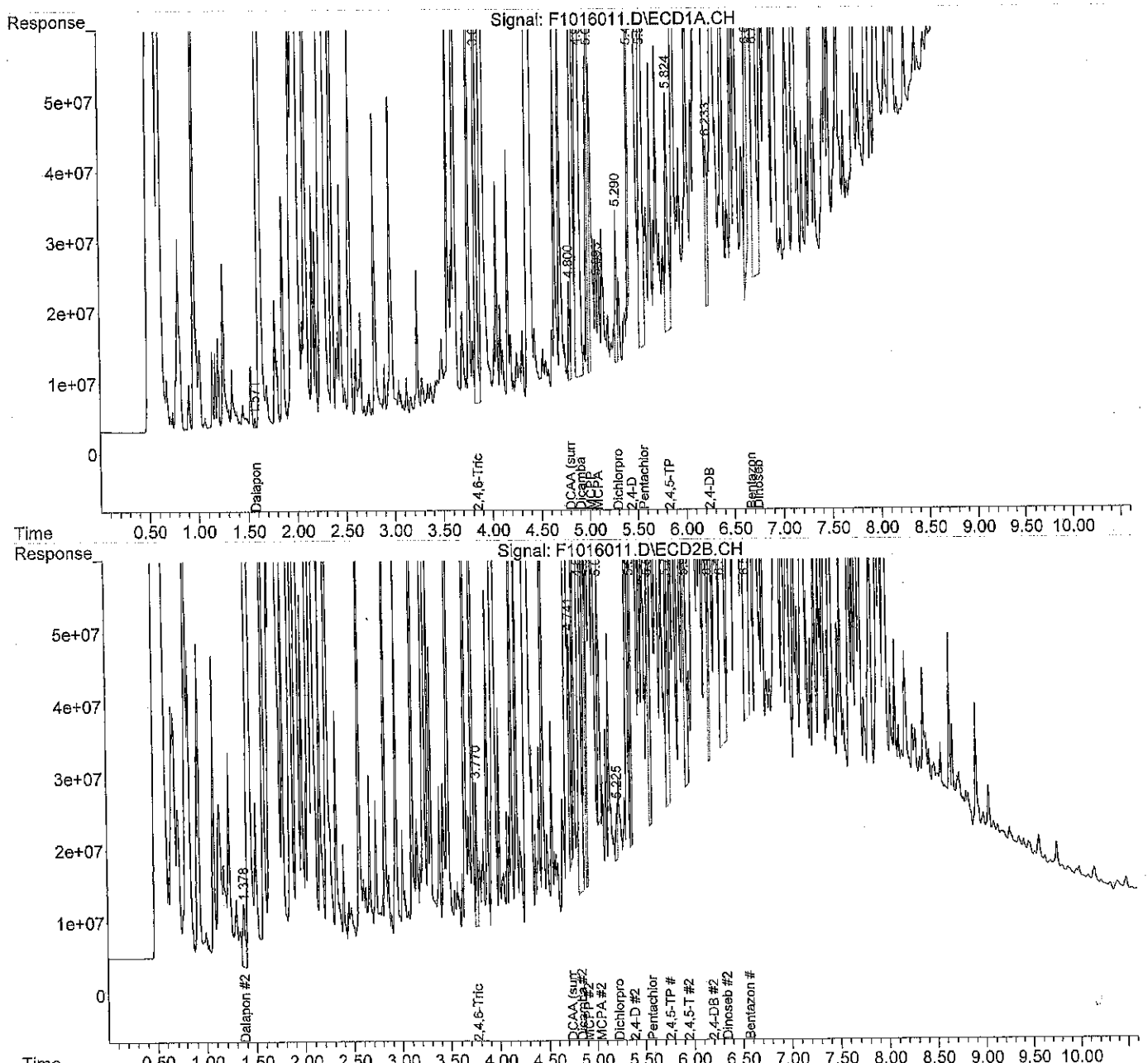
Quantitation Report (QT Reviewed)

Data File : F1016011.D
Sample : 10-126-01 RR

Data Path : X:\PEST\FRANK\DATA\F141016\
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 16-Oct-14, 16:29:30
Operator :
Misc :
ALS Vial : 11 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: events2.e
Quant Time: Oct 17 15:00:01 2014
Quant Method : C:\MSDCHEM\1\METHODS\H140808.M
Quant Title : Herbicides
QLast Update : Thu Oct 16 16:26:08 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Quantitation Report (QT Reviewed)

Data File : F1020004.D
Sample : 10-126-01 20X

Data Path : X:\PEST\FRANK\DATA\F141020\
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 20-Oct-14, 12:29:52
Operator :
Misc :
ALS Vial : 4 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: events2.e
Quant Time: Oct 20 12:56:54 2014
Quant Method : C:\MSDCHEM\1\METHODS\H140808.M
Quant Title : Herbicides
QLast Update : Thu Oct 16 16:26:08 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb	
	System Monitoring Compounds							
3)	S DCAA (surr)	4.809f	4.743	764220	3009902	3.033	4.910	#
	Spiked Amount 100.000			Recovery	=	3.03%	4.91%	
	Target Compounds							
1)	A Dalapon	1.566	1.372	480257	1210434	1.415	N.D.	#
2)	A 2,4,6-Tri...	3.849f	3.771	8400043	1605138	4.280	0.345	#
4)	A Dicamba	4.910f	4.846f	26636452	72496142	28.270	32.075	
5)	A MCPP	5.017	4.911	3956158	4210941	5717.010	2062.673	#
6)	A MCPA	5.087	5.046f	1115699	4118892	884.494	1168.861	#
7)	A Dichlorprop	5.298	5.214	945412	542208	3.770	N.D.	#
8)	A 2,4-D	0.000	5.385	0	20509485	N.D.	29.913	#
9)	A Pentachlo...	0.000	5.558	0	3603662	N.D.	0.367	#
10)	A 2,4,5-TP	5.833f	5.761	1532114	6383713	1.135	1.966	#
11)	A 2,4,5-T	5.960f	5.947	1111057	8204497	0.868	2.685	#
12)	A 2,4-DB	6.238	0.000	1527120	0	9.812	N.D.	#
13)	a Bentazon	6.659	6.573	12642893	33398216	101.571m	118.869	
14)	A Dinoseb	6.734	6.329	631.3E6	1407.6E6	704.311	604.362	

Dilute Further

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

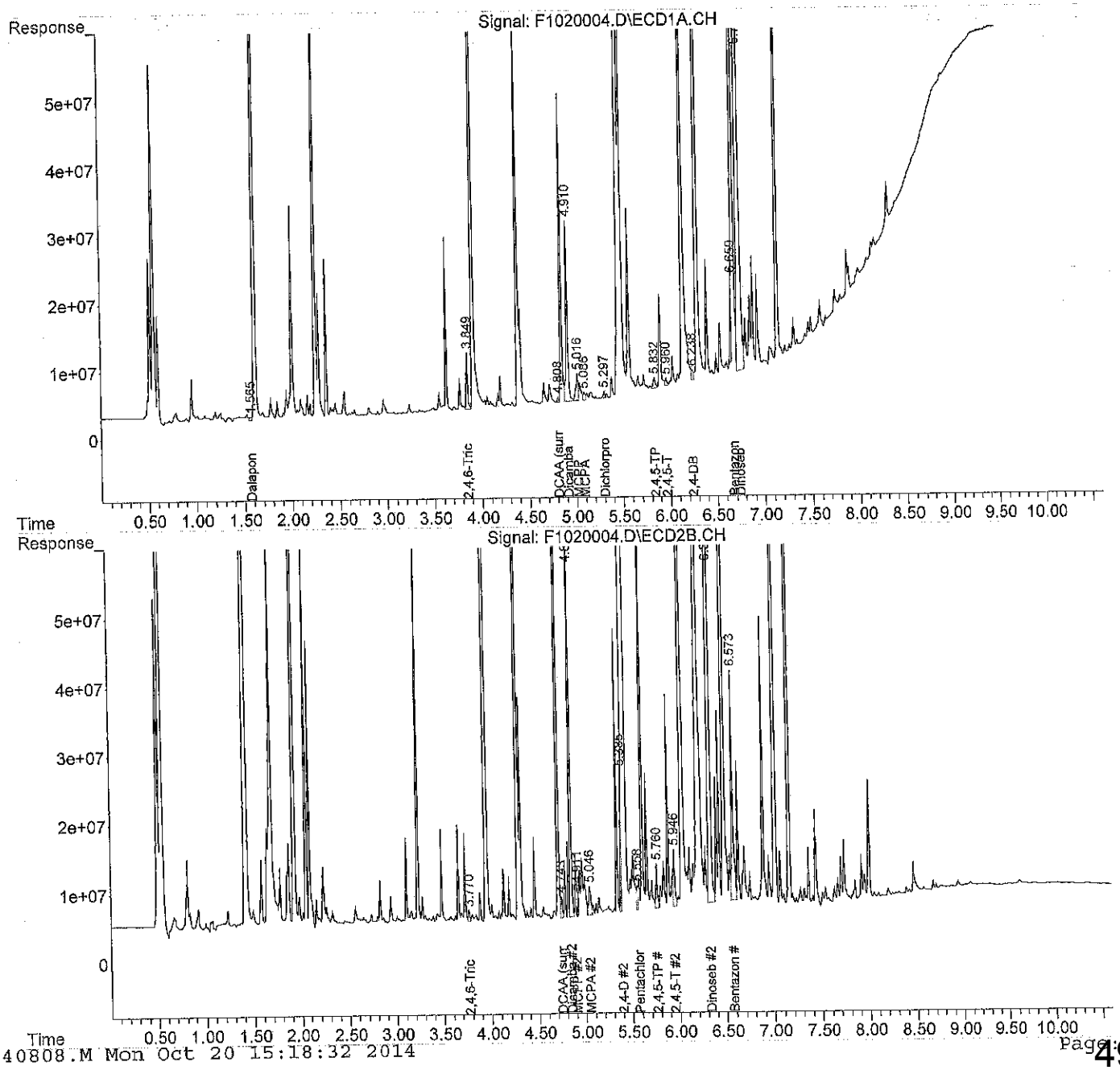
Quantitation Report (QT Reviewed)

Data File : F1020004.D
Sample : 10-126-01 20X

Data Path : X:\PEST\FRANK\DATA\F141020\
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 20-Oct-14, 12:29:52
Operator :
Misc :
ALS Vial : 4 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: events2.e
Quant Time: Oct 20 12:56:54 2014
Quant Method : C:\MSDCHEM\1\METHODS\H140808.M
Quant Title : Herbicides
QLast Update : Thu Oct 16 16:26:08 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Quantitation Report (Not Reviewed)

Data File : F1020006.D
Sample : 10-126-01 200X

Data Path : C:\MSDCHEM\1\DATA\F141020\
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 20-Oct-14, 13:04:03
Operator :
Misc :
ALS Vial : 6 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: events2.e
Quant Time: Oct 20 13:14:48 2014
Quant Method : C:\MSDCHEM\1\METHODS\H140808.M
Quant Title : Herbicides
QLast Update : Thu Oct 16 16:26:08 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb	
	System Monitoring Compounds							
3) S	DCAA (surr)	0.000	0.000	0	0	N.D.	N.D.	
	Spiked Amount 100.000			Recovery	=	0.00%	0.00%	
	Target Compounds							
1) A	Dalapon	0.000	1.373	0	617870	N.D.	N.D.	
2) A	2,4,6-Tri...	3.847f	3.774	727317	202750	0.371	0.044	#
4) A	Dicamba	4.887	4.846f	448543	8801659	0.476	3.894	#
5) A	MCPP	5.017	4.911	315864	804363	493.854	N.D.	#
6) A	MCPA	0.000	5.036	0	1134711	N.D.	N.D.	
7) A	Dichlorprop	5.299	5.203f	76581	144200	0.305	N.D.	#
8) A	2,4-D	0.000	5.386	0	2470740	N.D.	3.604	#
9) A	Pentachlo...	0.000	0.000	0	0	N.D.	N.D.	
10) A	2,4,5-TP	5.838	5.761	132599	774508	0.098	0.239	#
11) A	2,4,5-T	5.960f	5.947	93230	969120	0.073	0.317	#
12) A	2,4-DB	6.238	0.000	267247	0	1.717	N.D.	#
13) a	Bentazon	0.000	6.573	0	4262190	N.D.	~~7.122~~	#
14) A	Dinoseb	6.732	6.327	60484621	157.2E6	62.755	67.487	

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

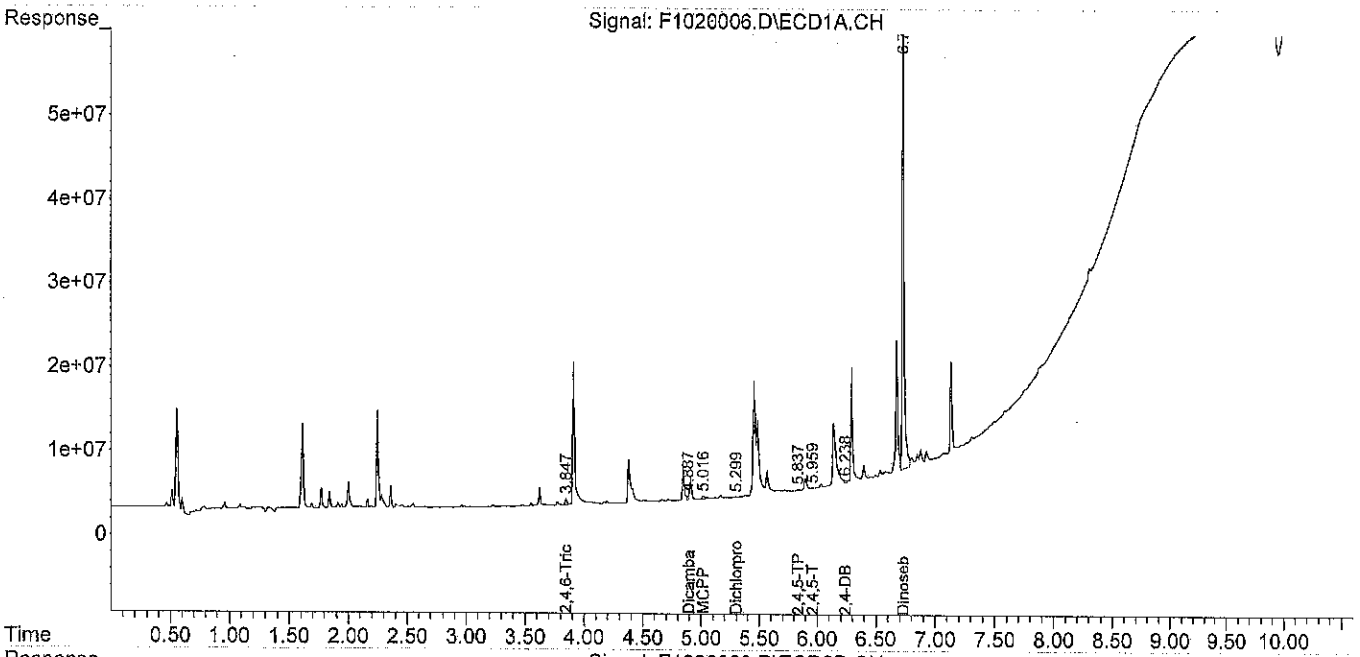
Quantitation Report (Not Reviewed)

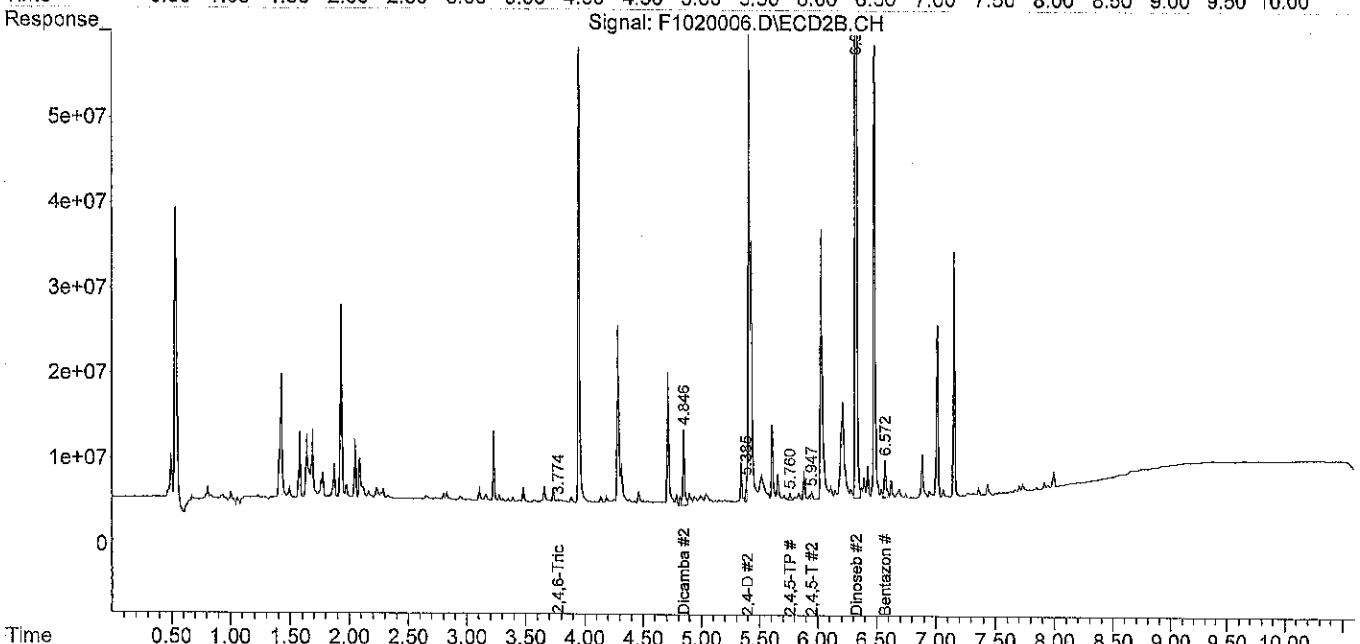
Data File : F1020006.D
Sample : 10-126-01 200X

Data Path : C:\MSDCHEM\1\DATA\F141020\
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 20-Oct-14, 13:04:03
Operator :
Misc :
ALS Vial : 6 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: events2.e
Quant Time: Oct 20 13:14:48 2014
Quant Method : C:\MSDCHEM\1\METHODS\H140808.M
Quant Title : Herbicides
QLast Update : Thu Oct 16 16:26:08 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data File : F1016012.D
Sample : 10-126-02 RR

Data Path : X:\PEST\FRANK\DATA\F141016\
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 16-Oct-14, 16:45:50
Operator :
Misc :
ALS Vial : 12 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: events2.e
Quant Time: Oct 20 15:26:42 2014
Quant Method : C:\MSDCHEM\1\METHODS\H140808.M
Quant Title : Herbicides
QLast Update : Thu Oct 16 16:26:08 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

KM 10/20/14

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
3) S	DCAA (surr)	4.800	4.745	8416816	331.5E6	33.407	540.711 #
Spiked Amount	100.000			Recovery	=	33.41%	540.71%
	Target Compounds						
1) A	Dalapon	1.572f	1.375	508646	1402207	1.498	N.D. #
2) A	2,4,6-Tri...	3.843	3.770	27799485	2905194	14.163	0.625 #
4) A	Dicamba	4.904	4.843	17671430	37243605	18.755	16.478
5) A	MCPP	4.995f	4.911	5062347	72761550	7304.188	49227.760 #
6) A	MCPA	5.082f	5.038	689675	17766695	460.672m	7935.401m#
7) A	Dichlorprop	5.289f	5.210	7278741	157.8E6	29.027	332.412 #
8) A	2,4-D	5.424	0.000	61388405	0	217.339	N.D. #
9) A	Pentachlo...	5.547	5.573	8882088	3357509	2.449	0.342 #
10) A	2,4,5-TP	5.846	5.756f	40062790	251.0E6	29.687	77.294 #
11) A	2,4,5-T	5.964f	5.961	2339716	547.1E6	1.827	179.082 #
12) A	2,4-DB	0.000	6.187	0	32212350	N.D.	85.323 #
13) a	Bentazon	6.651	6.560	10328425	22625385	82.717m	77.551m
14) A	Dinoseb	6.729	6.324	77249487	150.6E6	81.598m	64.674m

LOL

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

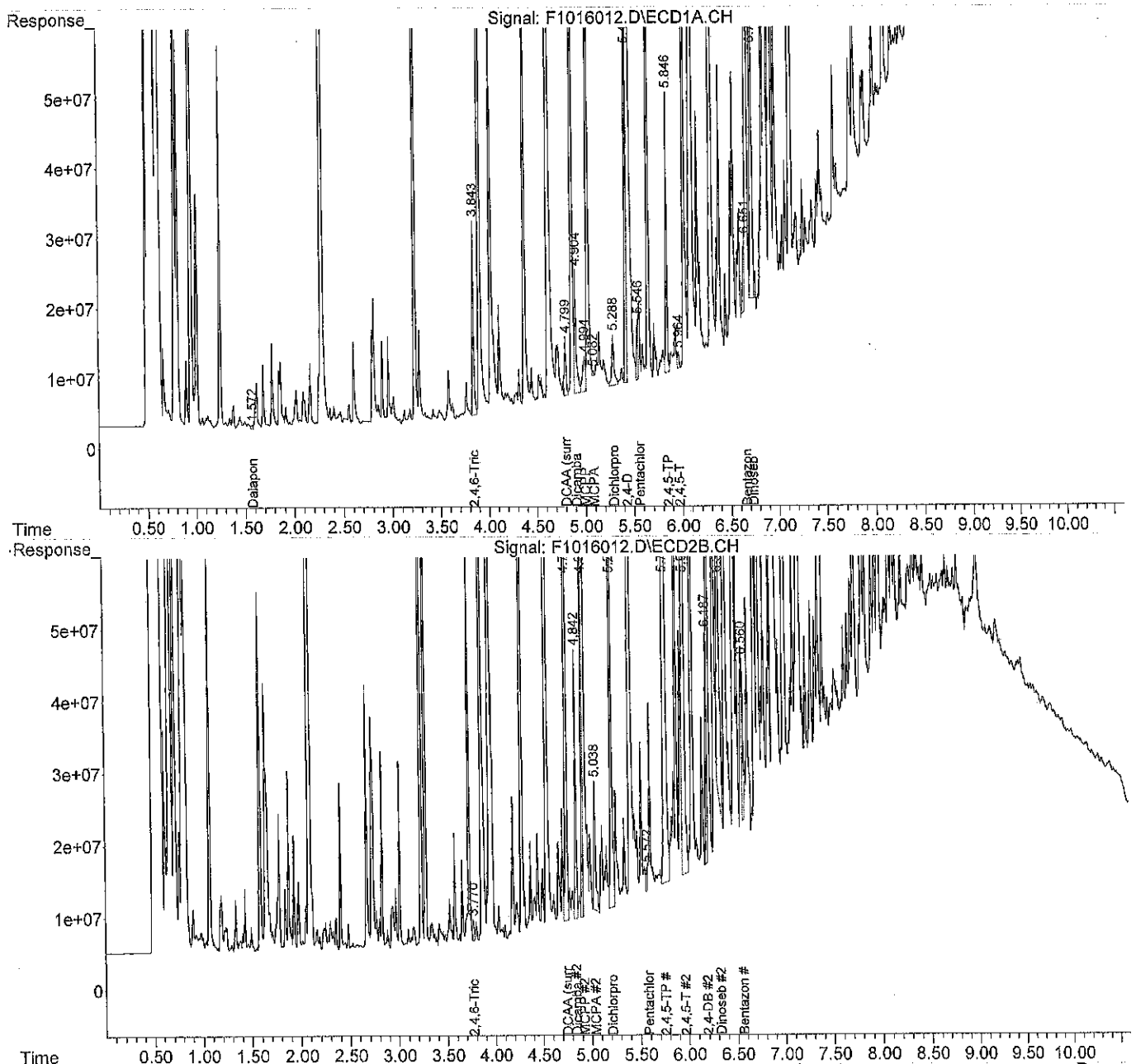
Quantitation Report (QT Reviewed)

Data File : F1016012.D
Sample : 10-126-02 RR

Data Path : X:\PEST\FRANK\DATA\F141016\
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 16-Oct-14, 16:45:50
Operator :
Misc :
ALS Vial : 12 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: events2.e
Quant Time: Oct 20 15:26:42 2014
Quant Method : C:\MSDCHEM\1\METHODS\H140808.M
Quant Title : Herbicides
QLast Update : Thu Oct 16 16:26:08 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Quantitation Report (QT Reviewed)

Data File : F1016013.D
Sample : 10-126-03 RR

Data Path : X:\PEST\FRANK\DATA\F141016\
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 16-Oct-14, 17:02:16
Operator :
Misc :
ALS Vial : 13 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: events2.e
Quant Time: Oct 20 15:28:50 2014
Quant Method : C:\MSDCHEM\1\METHODS\H140808.M
Quant Title : Herbicides
QLast Update : Thu Oct 16 16:26:08 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb	
	System Monitoring Compounds							
3) S	DCAA (surr)	4.800f	4.743	9231137	22219460	36.639	36.245	
	Spiked Amount 100.000			Recovery	=	36.64%	36.24%	
	Target Compounds							
1) A	Dalapon	1.568	1.376	2130744	1495639	6.276	N.D. #	
2) A	2,4,6-Tri...	3.848f	3.773	6013781	2560532	3.064	0.551 #	
4) A	Dicamba	4.903	4.844	3023588	14176071	3.209	6.272 #	
5) A	MCPP	0.000	4.909	0	5533432	N.D.	2972.590 #	LOL
6) A	MCPA	5.114f	5.034	556072	3136262	327.760	681.676 #	
7) A	Dichlorprop	0.000	0.000	0	0	N.D.	N.D.	
8) A	2,4-D	0.000	5.379	0	466487	N.D.	0.680 #	
9) A	Pentachlo...	5.562f	5.570	40885713	17387123	11.272	1.773 #	
10) A	2,4,5-TP	5.846	5.773	3485286	10345041	2.583	3.186	
11) A	2,4,5-T	5.992f	5.960	13225442	28843748	10.330	9.441	
12) A	2,4-DB	6.235	6.187	14908354	42900594	95.788	118.106	
13) a	Bentazon	6.650	6.566	9841313	22647514	78.750m	77.636m	
14) A	Dinoseb	6.729	6.325	237.9E6	485.0E6	262.173	208.239	

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

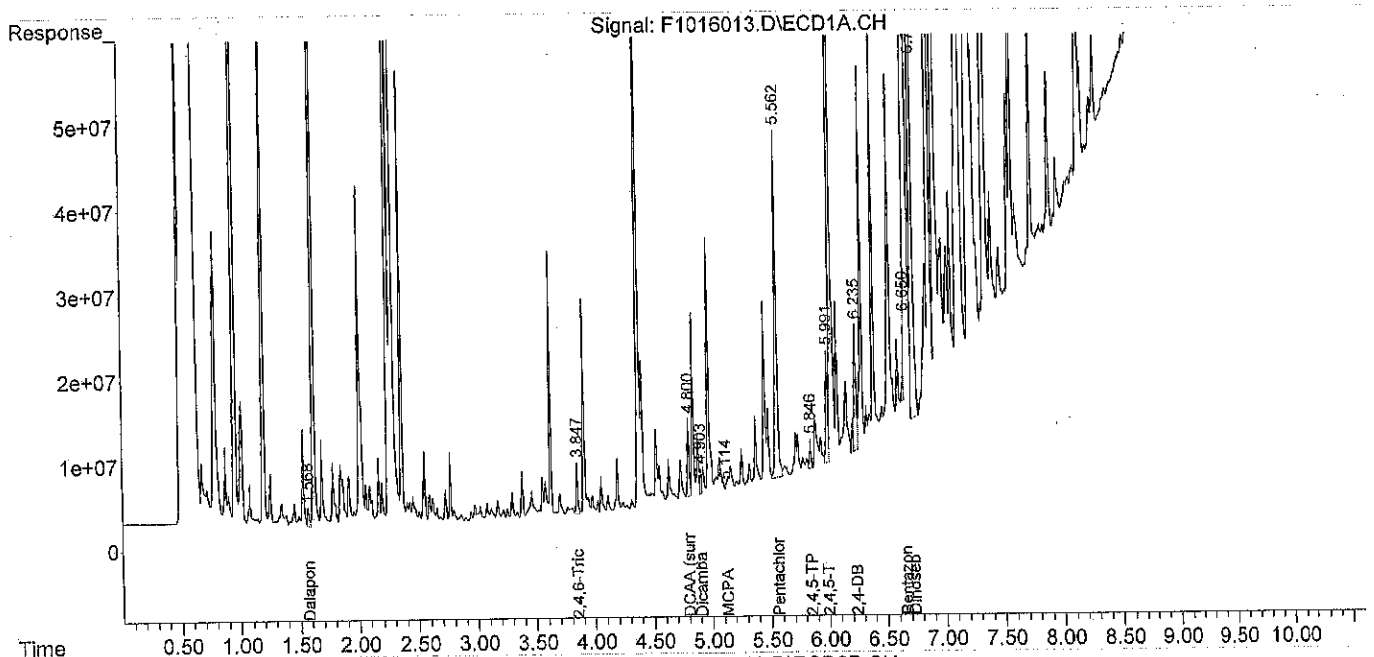
Quantitation Report (QT Reviewed)

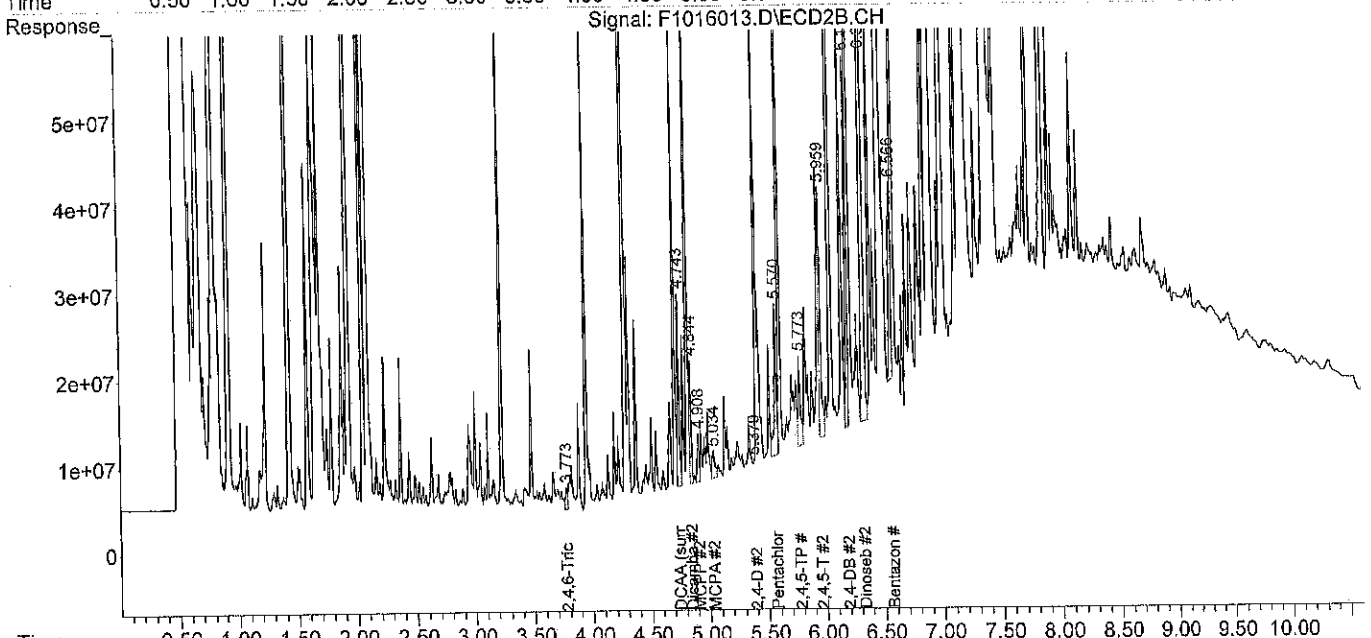
Data File : F1016013.D
Sample : 10-126-03 RR

Data Path : X:\PEST\FRANK\DATA\F141016\
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 16-Oct-14, 17:02:16
Operator :
Misc :
ALS Vial : 13 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: events2.e
Quant Time: Oct 20 15:28:50 2014
Quant Method : C:\MSDCHEM\1\METHODS\H140808.M
Quant Title : Herbicides
QLast Update : Thu Oct 16 16:26:08 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data File : F1016014.D
Sample : 10-126-04 RR

Data Path : X:\PEST\FRANK\DATA\F141016\
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 16-Oct-14, 17:18:29
Operator :
Misc :
ALS Vial : 14 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: events2.e
Quant Time: Oct 17 15:04:49 2014
Quant Method : C:\MSDCHEM\1\METHODS\H140808.M
Quant Title : Herbicides
QLast Update : Thu Oct 16 16:26:08 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

KMS 10-17-14

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb	
	System Monitoring Compounds							
3)	S DCAA (surr)	4.798	4.742	16420277	37051813	65.173	60.440m	
	Spiked Amount 100.000			Recovery	=	65.17%	60.44%	
	Target Compounds							
1)	A Dalapon	1.569	1.369	330457	1750018	0.973	0.133 #	
2)	A 2,4,6-Tri...	3.842	3.775	3001863	5132208	1.529	1.104 #	
4)	A Dicamba	4.906f	4.824f	6053044	2139.3E6	6.424	946.530 #	
5)	A MCPP	0.000	0.000	0	0	N.D.	N.D.	
6)	A MCPA	5.096	5.023f	403216	7040226	175.694m	2617.250m#	LOL
7)	A Dichlorprop	5.321f	5.222	23185718	3301433	92.464	4.409 #	
8)	A 2,4-D	0.000	5.378	0	972724	N.D.	1.419m#	
9)	A Pentachlo...	5.562f	5.570	70018908	17204059	19.304	1.754 #	
10)	A 2,4,5-TP	5.845	5.773	5883471	12545108	4.360	3.864	
11)	A 2,4,5-T	5.991f	5.959	23213912	51797046	18.131	16.954	
12)	A 2,4-DB	6.238	6.187	16639896	28662310	106.913	74.434 #	
13)	a Bentazon	6.653	6.566	14654483	33062072	117.956m	117.580m	Dilute
14)	A Dinoseb	6.729	6.325	836.8E6	1763.8E6	935.303	757.329	

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

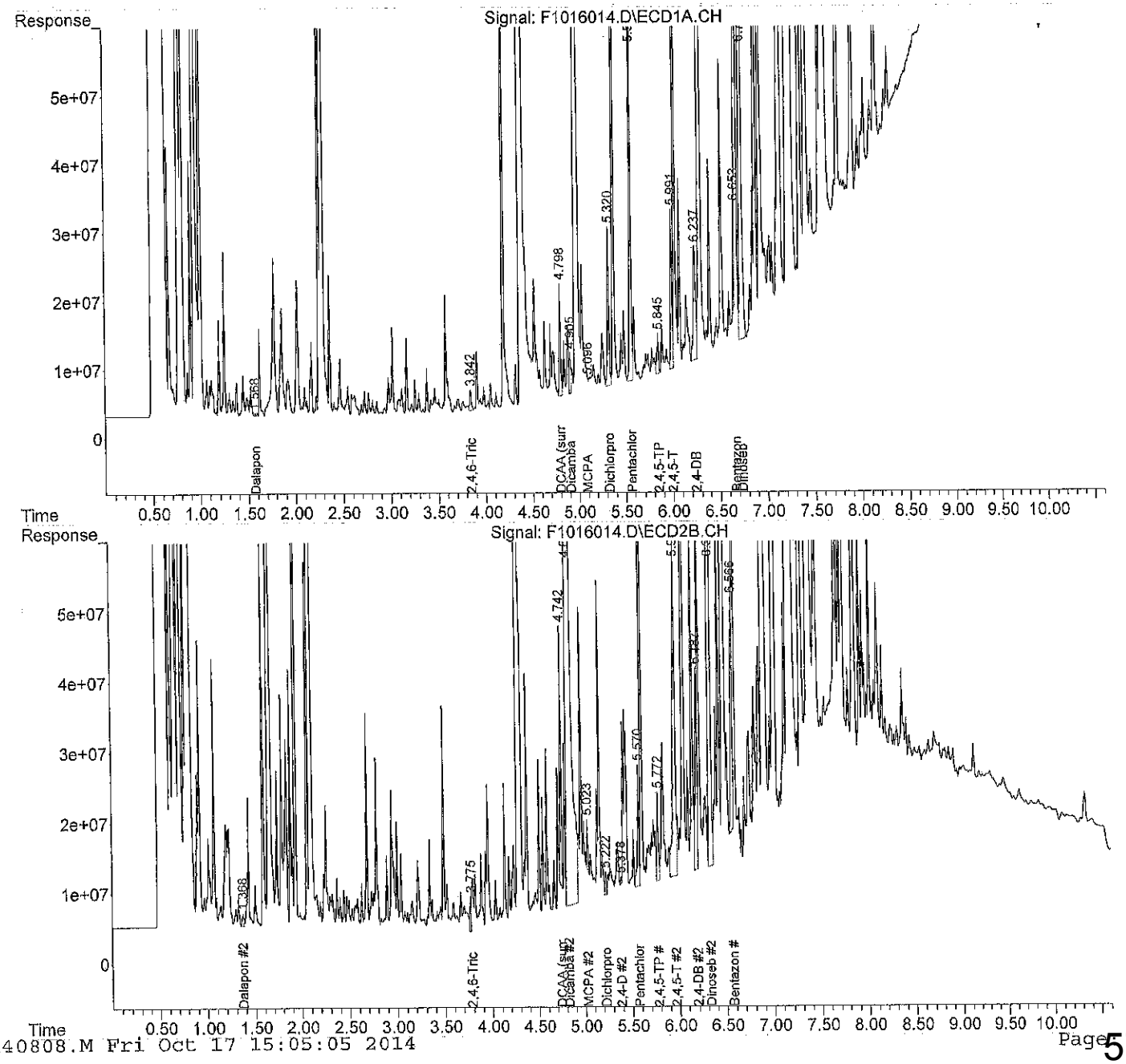
Quantitation Report (QT Reviewed)

Data File : F1016014.D
Sample : 10-126-04 RR

Data Path : X:\PEST\FRANK\DATA\F141016\
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 16-Oct-14, 17:18:29
Operator :
Misc :
ALS Vial : 14 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: events2.e
Quant Time: Oct 17 15:04:49 2014
Quant Method : C:\MSDCHEM\1\METHODS\H140808.M
Quant Title : Herbicides
QLast Update : Thu Oct 16 16:26:08 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Quantitation Report (Not Reviewed)

Data File : F1020005.D
Sample : 10-126-04 10X

Data Path : C:\MSDCHEM\1\DATA\F141020\
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 20-Oct-14, 12:45:40
Operator :
Misc :
ALS Vial : 5 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: events2.e
Quant Time: Oct 20 12:56:23 2014
Quant Method : C:\MSDCHEM\1\METHODS\H140808.M
Quant Title : Herbicides
QLast Update : Thu Oct 16 16:26:08 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb	
	System Monitoring Compounds							
3) S	DCAA (surr)	4.801f	4.744	2251197	6439190	8.935	10.504	
	Spiked Amount 100.000			Recovery	=	8.94%	10.50%	
	Target Compounds							
1) A	Dalapon	1.574f	1.366	522352	1040099	1.539	N.D.	#
2) A	2,4,6-Tri...	3.840	3.773	683917	1376059	0.348	0.296	
4) A	Dicamba	4.884f	4.819f	1346023	910.0E6	1.429	402.626	#
5) A	MCPP	0.000	0.000	0	0	N.D.	N.D.	
6) A	MCPA	0.000	5.032	0	3136056	N.D.	681.574	#
7) A	Dichlorprop	0.000	5.199f	0	2638786	N.D.	3.002	#
8) A	2,4-D	0.000	0.000	0	0	N.D.	N.D.	
9) A	Pentachlo...	0.000	5.571	0	3272462	N.D.	0.334	#
10) A	2,4,5-TP	5.848	5.775	1192027	2803180	0.883	0.863	
11) A	2,4,5-T	5.993f	5.961	3577324	8631118	2.794	2.825	
12) A	2,4-DB	6.240	6.189	3057784	5537084	19.647	3.505	#
13) a	Bentazon	0.000	6.566	0	6623188	N.D.	16.177	#
14) A	Dinoseb	6.729	6.325	93928219	232.8E6	100.345	99.960	

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

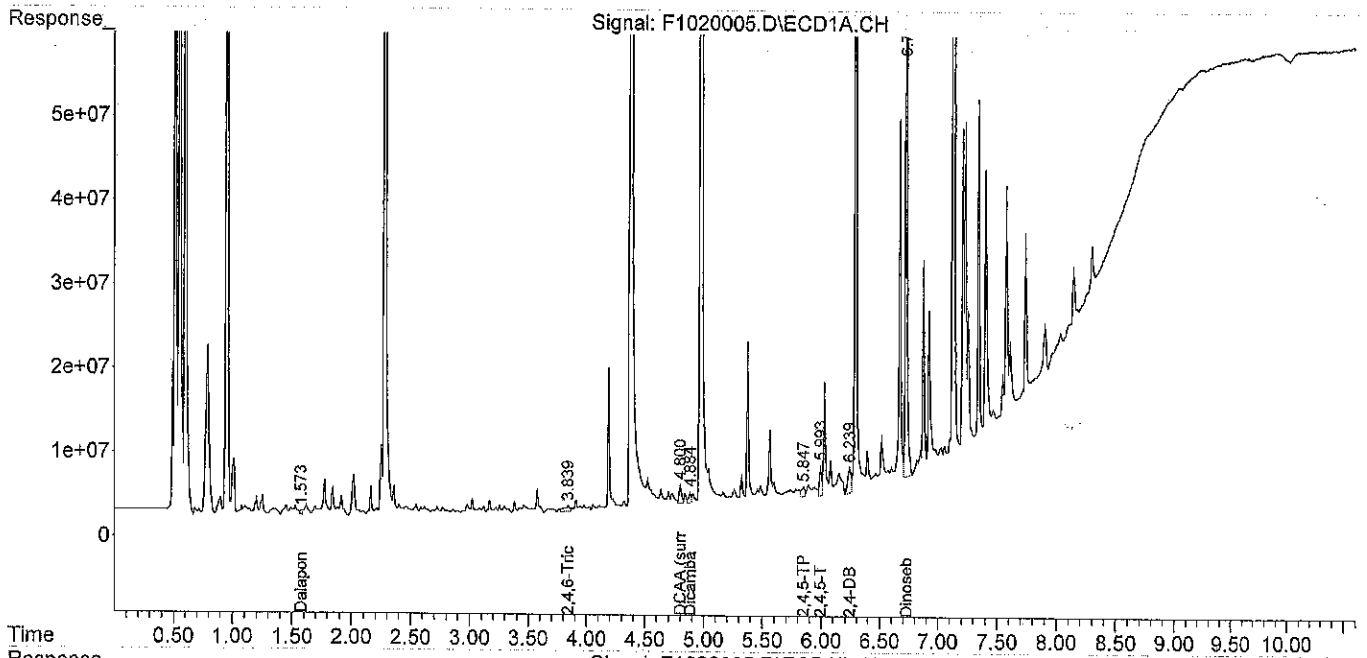
Quantitation Report (Not Reviewed)

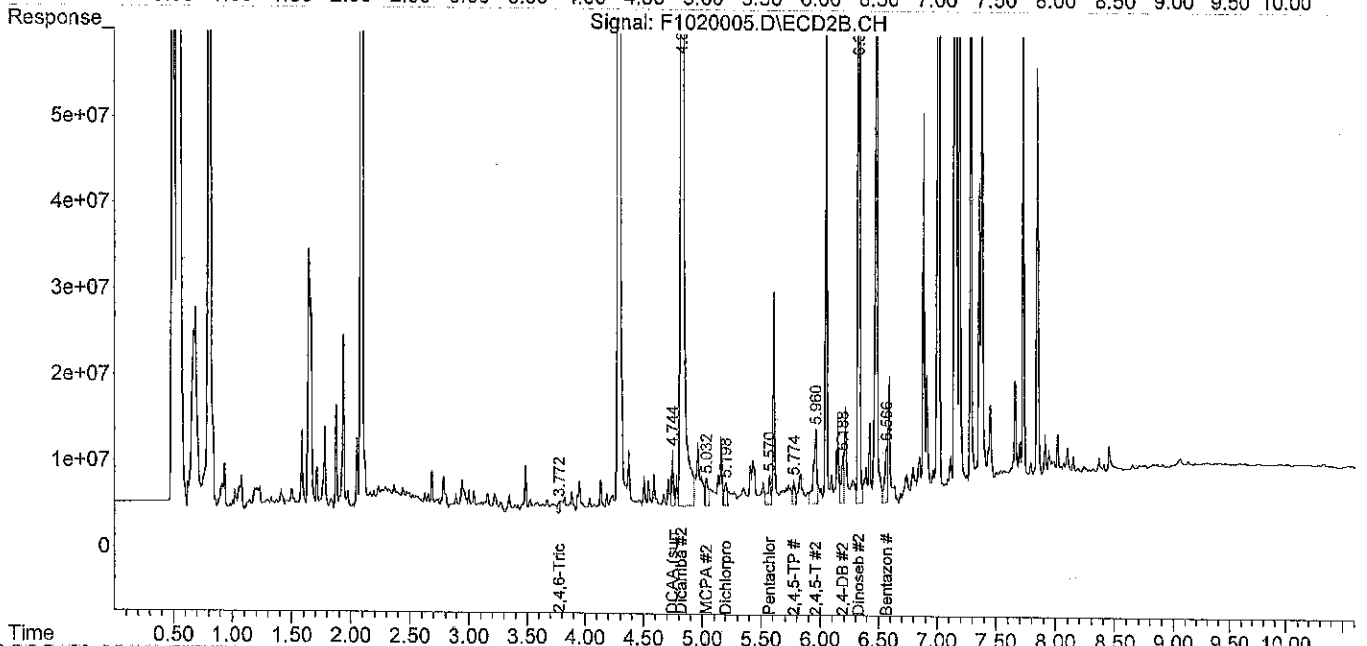
Data File : F1020005.D
Sample : 10-126-04 10X

Data Path : C:\MSDCHEM\1\DATA\F141020\
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 20-Oct-14, 12:45:40
Operator :
Misc :
ALS Vial : 5 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: events2.e
Quant Time: Oct 20 12:56:23 2014
Quant Method : C:\MSDCHEM\1\METHODS\H140808.M
Quant Title : Herbicides
QLast Update : Thu Oct 16 16:26:08 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data File : F1016004.D
Sample : MB1014W2 RR

Data Path : X:\PEST\FRANK\DATA\F141016\
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 16-Oct-14, 10:58:45
Operator :
Misc :
ALS Vial : 4 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: events2.e
Quant Time: Oct 17 14:15:58 2014
Quant Method : C:\MSDCHEM\1\METHODS\H140808.M
Quant Title : Herbicides
QLast Update : Thu Oct 16 09:31:01 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
3) S	DCAA (surr)	4.809f	4.748f	8651819	22750916	34.340m	37.112m
	Spiked Amount 100.000			Recovery	=	34.34%	37.11%
	Target Compounds						
1) A	Dalapon	1.575f	1.364	900148	1119160	2.651	N.D. #
2) A	2,4,6-Tri...	3.850f	3.778	429578	3172248	0.219	0.683 #
4) A	Dicamba	0.000	0.000	0	0	N.D.	N.D.
5) A	MCPP	5.004	0.000	1922734	0	2799.419	N.D. #
6) A	MCPA	0.000	5.037	0	1340182	N.D.	N.D. m
7) A	Dichlorprop	0.000	5.206f	0	1375320	N.D.	0.319 #
8) A	2,4-D	0.000	5.362f	0	940769	N.D.	1.372m#
9) A	Pentachlo...	5.560f	0.000	1090452	0	0.301	N.D. #
10) A	2,4,5-TP	5.852	5.756f	927119	6130341	0.687	1.888 #
11) A	2,4,5-T	0.000	5.945	0	2317957	N.D.	0.759 #
12) A	2,4-DB	0.000	6.202f	0	62102862	N.D.	177.003 #
13) a	Bentazon	6.665f	6.562	2810801	17746650	21.481m	58.840m#
14) A	Dinoseb	6.743f	0.000	27897917	0	26.128m	N.D. #

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

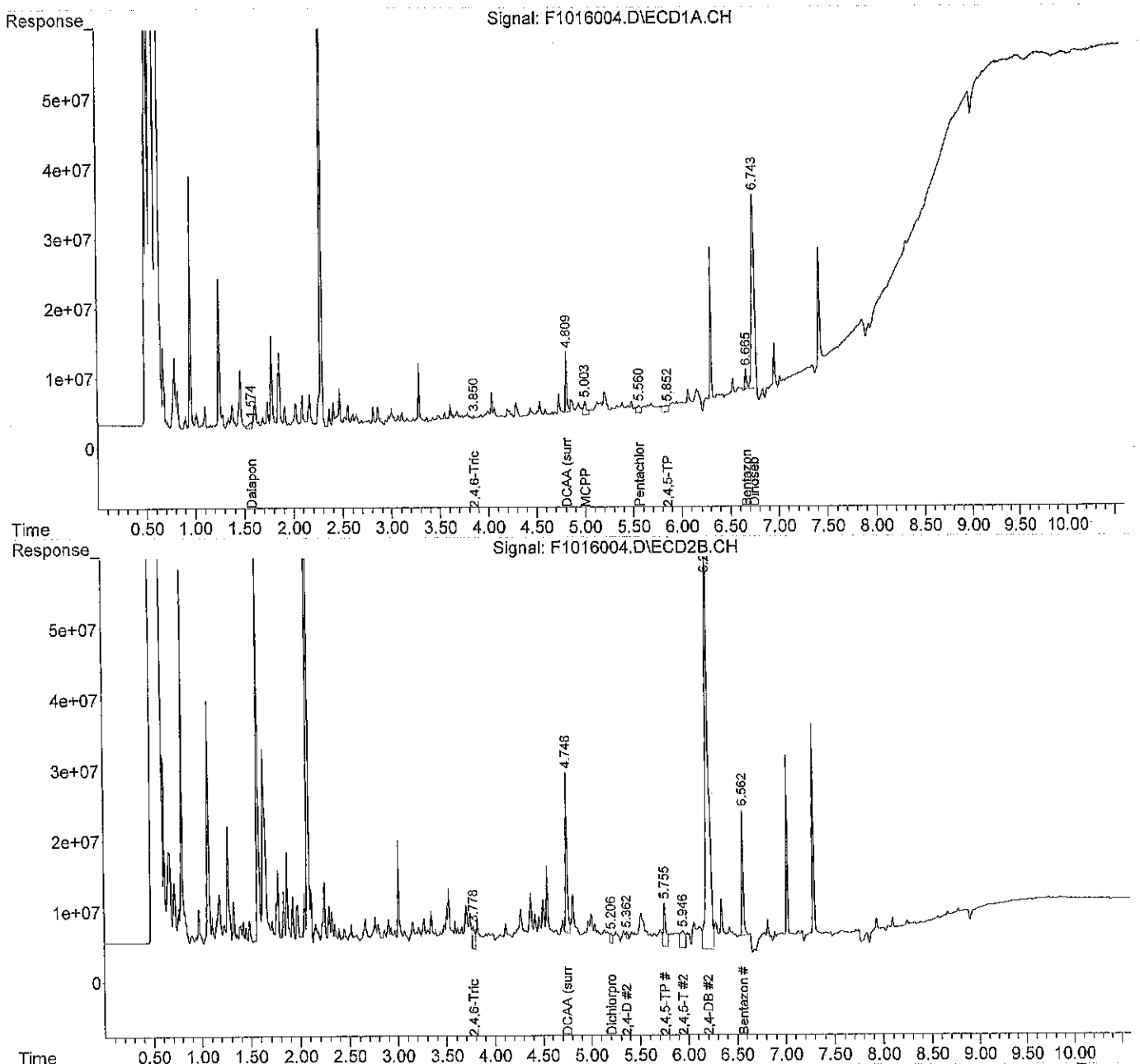
Quantitation Report (QT Reviewed)

Data File : F1016004.D
Sample : MB1014W2 RR

Data Path : X:\PEST\FRANK\DATA\F141016\
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 16-Oct-14, 10:58:45
Operator :
Misc :
ALS Vial : 4 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: events2.e
Quant Time: Oct 17 14:15:58 2014
Quant Method : C:\MSDCHEM\1\METHODS\H140808.M
Quant Title : Herbicides
QLast Update : Thu Oct 16 09:31:01 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Quantitation Report (QT Reviewed)

Data File : F1016005.D
Sample : SB1014W2 RR

Data Path : X:\PEST\FRANK\DATA\F141016\
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 16-Oct-14, 11:14:30
Operator :
Misc :
ALS Vial : 5 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: events2.e
Quant Time: Oct 17 14:20:55 2014
Quant Method : C:\MSDCHEM\1\METHODS\H140808.M
Quant Title : Herbicides
QLast Update : Thu Oct 16 09:31:01 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

KMS 10-17-14

		Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
		System Monitoring Compounds						
3)	S	DCAA (surr)	4.802	4.745	13657877	31637218	54.209m	51.607m
		Spiked Amount 100.000			Recovery	=	54.21%	51.61%
		Target Compounds						
1)	A	Dalapon	1.564	1.373	6133886	13732643	18.067	16.913
2)	A	2,4,6-Tri...	3.849f	3.779	333197	1478014	0.170	0.318 #
4)	A	Dicamba	4.908	4.844	43599115	98103209	46.274m	43.405m
5)	A	MCPP	5.022	4.914	4819545	10699579	6955.812	6527.071
6)	A	MCPA	5.108	5.044	6544403	13512785	6285.138	5826.325
7)	A	Dichlorprop	5.313	5.224	12827554	27625930	51.156	56.063
8)	A	2,4-D	5.433	5.385	12668658	28487747	44.852m	41.549m
9)	A	Pentachlo...	5.555	5.574	22221749	52550748	6.127m	5.357m
10)	A	2,4,5-TP	5.854	5.778	69847843	168.6E6	51.759	51.942
11)	A	2,4,5-T	5.987	5.959	59304542	148.6E6	46.320m	48.627m
12)	A	2,4-DB	6.241	6.189	7968100	19554535	51.196m	46.499m
13)	a	Bentazon	6.662	6.560	4213508	18749054	32.907	62.684 #
14)	A	Dinoseb	6.736	6.328	50985300	119.4E6	52.078m	51.258m

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

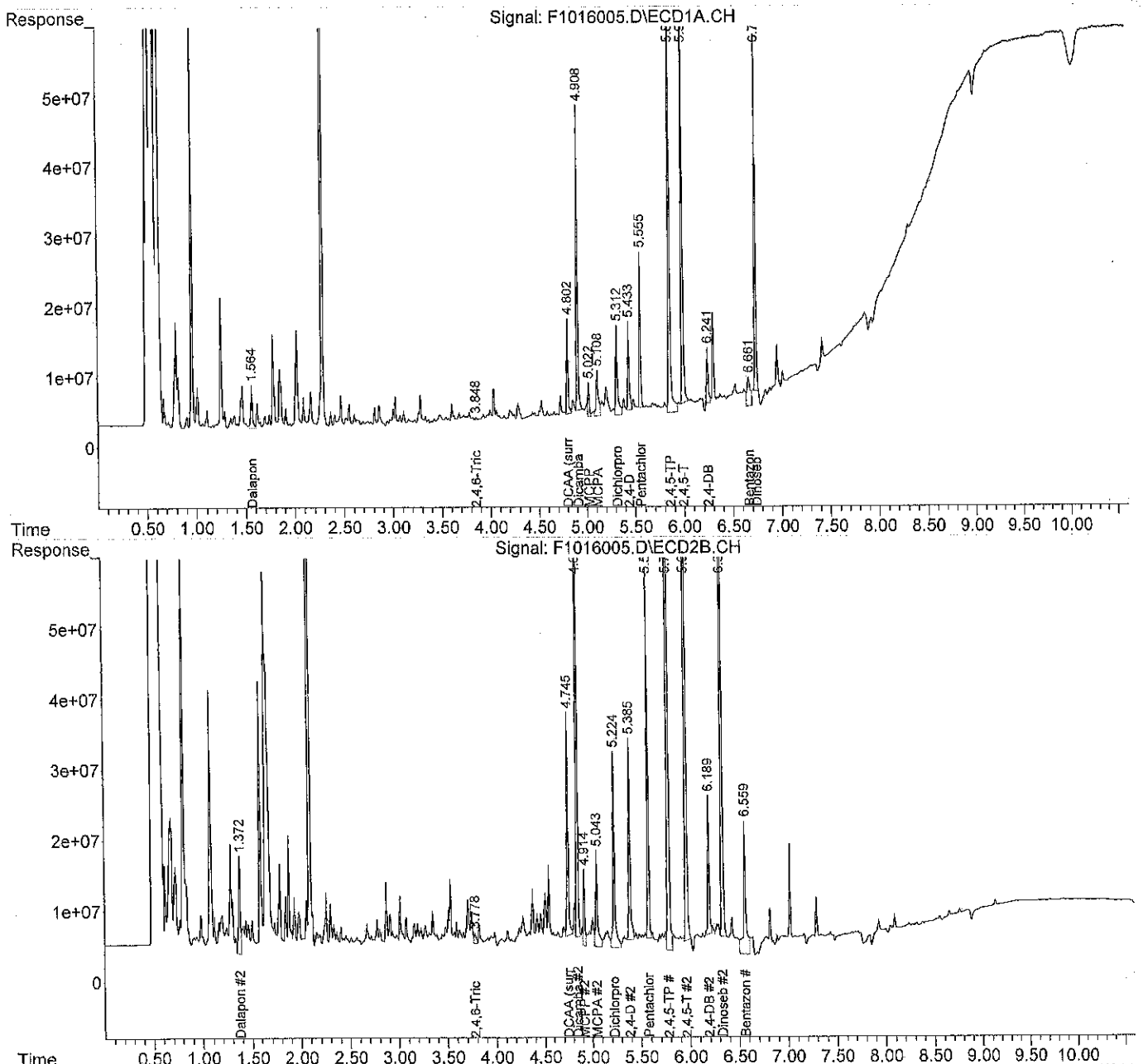
Quantitation Report (QT Reviewed)

Data File : F1016005.D
Sample : SB1014W2 RR

Data Path : X:\PEST\FRANK\DATA\F141016\
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 16-Oct-14, 11:14:30
Operator :
Misc :
ALS Vial : 5 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: events2.e
Quant Time: Oct 17 14:20:55 2014
Quant Method : C:\MSDCHEM\1\METHODS\H140808.M
Quant Title : Herbicides
QLast Update : Thu Oct 16 09:31:01 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Quantitation Report (QT Reviewed)

Data File : F1016006.D
Sample : SB1014W2 DUP RR

Data Path : X:\PEST\FRANK\DATA\F141016\
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 16-Oct-14, 11:30:26
Operator :
Misc :
ALS Vial : 6 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: events2.e
Quant Time: Oct 17 14:19:19 2014
Quant Method : C:\MSDCHEM\1\METHODS\H140808.M
Quant Title : Herbicides
QLast Update : Thu Oct 16 09:31:01 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

KMS 10/17/14

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
3)	S DCAA (surr)	4.803f	4.746	11611265	28676333	46.086m	46.778m
	Spiked Amount 100.000			Recovery	=	46.09%	46.78%
	Target Compounds						
1)	A Dalapon	1.563	1.372	4085930	8997216	12.035	10.282
2)	A 2,4,6-Tri...	3.848	3.780f	568713	1040049	0.290	0.224
4)	A Dicamba	4.908	4.845	35794617	81414515	37.990m	36.021m
5)	A MCPP	5.023	4.915	4800835	10414188	6928.967	6330.712
6)	A MCPA	5.109	5.045	6095795	12782201	5838.848	5464.104
7)	A Dichlorprop	5.313	5.225	12109911	27212154	48.294	55.184
8)	A 2,4-D	5.434	5.386	11310173	24773219	40.042m	36.131m
9)	A Pentachlo...	5.556	5.576	21690045	51942468	5.980m	5.295m
10)	A 2,4,5-TP	5.855	5.779	69819208	164.5E6	51.738	50.658
11)	A 2,4,5-T	5.988	5.960	55032963	140.8E6	42.984m	46.097m
12)	A 2,4-DB	6.241	6.190	7383811	19441376	47.442m	46.152m
13)	a Bentazon	6.662	6.560	5335560	24337402	42.047	84.118 #
14)	A Dinoseb	6.737	6.329	49847450	113.7E6	50.799m	48.800m

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

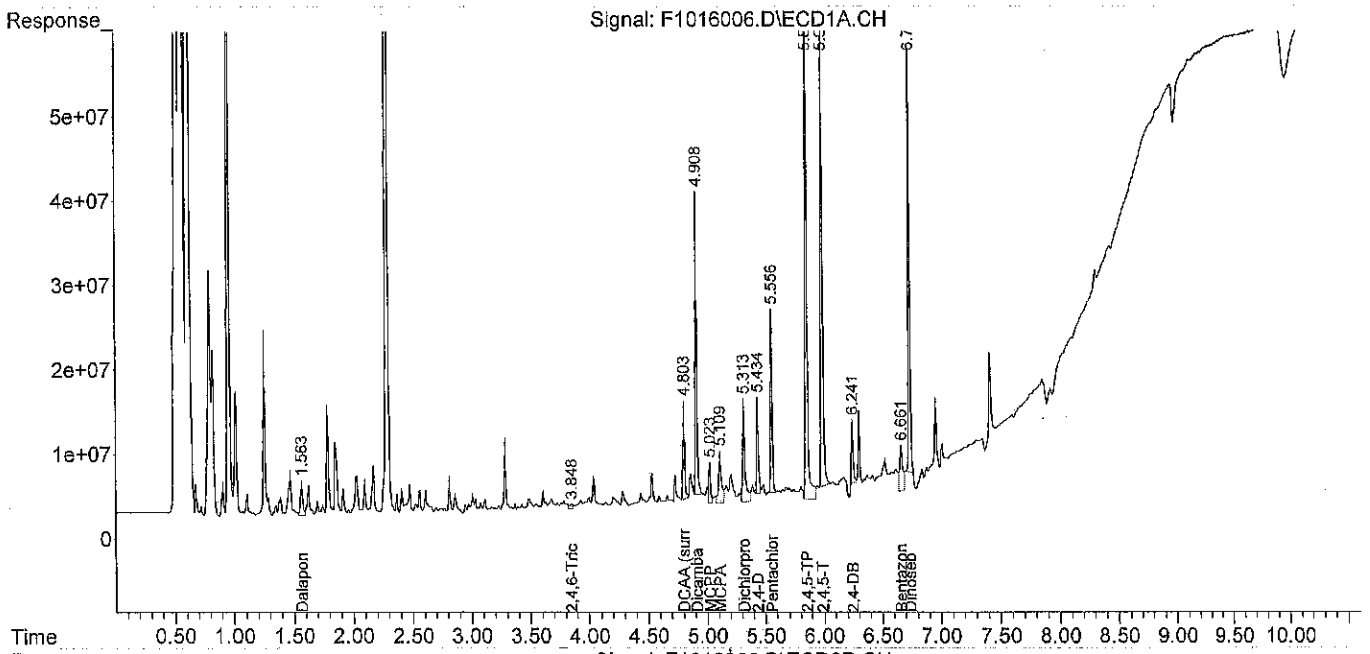
Quantitation Report (QT Reviewed)

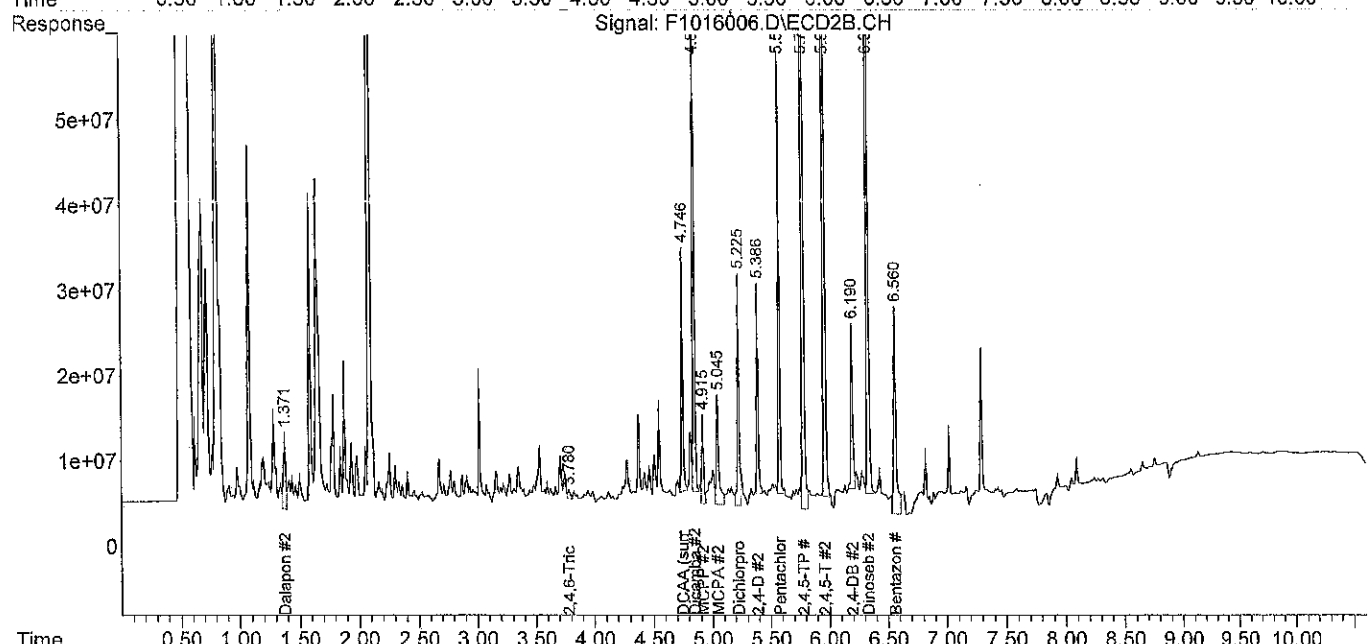
Data File : F1016006.D
Sample : SB1014W2 DUP RR

Data Path : X:\PEST\FRANK\DATA\F141016\
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 16-Oct-14, 11:30:26
Operator :
Misc :
ALS Vial : 6 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: events2.e
Quant Time: Oct 17 14:19:19 2014
Quant Method : C:\MSDCHEM\1\METHODS\H140808.M
Quant Title : Herbicides
QLast Update : Thu Oct 16 09:31:01 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Evaluate Continuing Calibration Report

Data File : F1016003.D
Sample : HERBCCV 1016-1 (PS3-90-08)

Data Path : X:\PEST\FRANK\DATA\F141016\
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 16-Oct-14, 10:14:27
Operator :
Misc :
ALS Vial : 3 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: events2.e
Quant Time: Oct 16 10:54:16 2014
Quant Method : C:\MSDCHEM\1\METHODS\H140808.M
Quant Title : Herbicides
QLast Update : Thu Oct 16 09:31:00 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.03min
Max. RRF Dev : 16% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(Min)
3	S	DCAA (surr)	100.000	100.360	-0.4	108	0.00
6	A	MCPA	10000.000	10750.545	-7.5	104	0.00
8	A	2,4-D	100.000	94.098	5.9	96	0.00
13	a	Bentazon	100.000	98.012	2.0	98	0.00
14	A	Dinoseb	100.000	103.602	-3.6	105	0.00

Signal #2

3	S	DCAA (surr)	100.000	91.822	8.2	107	0.00
6	A	MCPA	10000.000	10632.319	-6.3	104	0.00
8	A	2,4-D	100.000	90.739	9.3	102	0.00
13	a	Bentazon	100.000	102.688	-2.7	101	0.00
14	A	Dinoseb	100.000	92.827	7.2	100	0.00

Evaluate Continuing Calibration Report - Not Founds

Signal #2

(#) = Out of Range SPCC's out = 0 CCC's out = 0

H140808.M Mon Oct 20 15:55:57 2014

Evaluate Continuing Calibration Report

Data File : F1016008.D
Sample : HERBCCV 1016-2 (PS3-90-08)

Data Path : X:\PEST\FRANK\DATA\F141016\
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 16-Oct-14, 12:02:30
Operator :
Misc :
ALS Vial : 8 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: events2.e
Quant Time: Oct 17 14:13:41 2014
Quant Method : C:\MSDCHEM\1\METHODS\H140808.M
Quant Title : Herbicides
QLast Update : Thu Oct 16 09:31:01 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.03min
Max. RRF Dev : 16% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Dev	Area%	Dev(Min)
3 S	DCAA (surr)	100.000	94.632	5.4	102	0.02
6 A	MCPA	10000.000	10346.156	-3.5	100	0.02
8 A	2,4-D	100.000	87.456	12.5	89	0.01
13 a	Bentazon	100.000	89.876	10.1	90	0.01
14 A	Dinoseb	100.000	97.161	2.8	99	0.01

Signal #2

3 S	DCAA (surr)	100.000	87.794	12.2	102	0.01
6 A	MCPA	10000.000	10422.872	-4.2	102	0.01
8 A	2,4-D	100.000	83.323	16.7#	93	0.01
13 a	Bentazon	100.000	96.003	4.0	95	0.00
14 A	Dinoseb	100.000	90.573	9.4	98	0.01

Evaluate Continuing Calibration Report - Not Founds

Signal #2

(#) = Out of Range SPCC's out = 0 CCC's out = 0

H140808.M Mon Oct 20 16:00:59 2014

Evaluate Continuing Calibration Report

Data File : F1016010.D
Sample : HERBCCV 1016-3 (PS3-90-08)

Data Path : X:\PEST\FRANK\DATA\F141016\
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 16-Oct-14, 16:13:07
Operator :
Misc :
ALS Vial : 10 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: events2.e
Quant Time: Oct 16 16:26:20 2014
Quant Method : C:\MSDCHEM\1\METHODS\H140808.M
Quant Title : Herbicides
QLast Update : Thu Oct 16 16:26:08 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.03min
Max. RRF Dev : 16% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(Min)
3	S	DCAA (surr)	100.000	101.004	-1.0	109	0.00
6	A	MCPA	10000.000	11087.271	-10.9	107	0.00
8	A	2,4-D	100.000	87.120	12.9	89	0.00
13	a	Bentazon	100.000	91.440	8.6	92	0.00
14	A	Dinoseb	100.000	99.442	0.6	101	0.00

Signal #2

3	S	DCAA (surr)	100.000	99.587	0.4	116	0.00
6	A	MCPA	10000.000	12153.466	-21.5#	118	0.00
8	A	2,4-D	100.000	105.287	-5.3	118	0.00
13	a	Bentazon	100.000	116.680	-16.7#	113	0.00
14	A	Dinoseb	100.000	104.734	-4.7	113	0.00

Evaluate Continuing Calibration Report - Not Founds

Signal #2

(#) = Out of Range SPCC's out = 0 CCC's out = 0

H140808.M Mon Oct 20 16:02:19 2014

Evaluate Continuing Calibration Report

Data File : F1016016.D
Sample : HERBCCV 1016-4 (PS3-90-08)

Data Path : X:\PEST\FRANK\DATA\F141016\
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 16-Oct-14, 17:50:54
Operator :
Misc :
ALS Vial : 16 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: events2.e
Quant Time: Oct 16 18:01:39 2014
Quant Method : C:\MSDCHEM\1\METHODS\H140808.M
Quant Title : Herbicides
QLast Update : Thu Oct 16 16:26:08 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.03min
Max. RRF Dev : 16% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(Min)
3	S	DCAA (surr)	100.000	97.433	2.6	105	0.00
6	A	MCPA	10000.000	10576.158	-5.8	102	0.00
8	A	2,4-D	100.000	88.240	11.8	90	0.00
13	a	Bentazon	100.000	88.218	11.8	89	0.00
14	A	Dinoseb	100.000	98.780	1.2	100	0.00

Signal #2

3	S	DCAA (surr)	100.000	93.004	7.0	108	0.00
6	A	MCPA	10000.000	11167.908	-11.7	109	0.00
8	A	2,4-D	100.000	100.357	-0.4	113	0.00
13	a	Bentazon	100.000	106.410	-6.4	104	0.00
14	A	Dinoseb	100.000	98.045	2.0	106	0.00

Evaluate Continuing Calibration Report - Not Founds

Signal #2

(#) = Out of Range SPCC's out = 0 CCC's out = 0

H140808.M Mon Oct 20 16:03:44 2014

Evaluate Continuing Calibration Report

Data File : F1020003.D
Sample : HERBCCV 1020-1 (PS4-02-03)

Data Path : X:\PEST\FRANK\DATA\F141020\
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 20-Oct-14, 11:18:56
Operator :
Misc :
ALS Vial : 3 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: events2.e
Quant Time: Oct 20 11:29:41 2014
Quant Method : C:\MSDCHEM\1\METHODS\H140808.M
Quant Title : Herbicides
QLast Update : Thu Oct 16 16:26:08 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.03min
Max. RRF Dev : 16% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(Min)
3	S	DCAA (surr)	100.000	88.751	11.2	96	0.00
6	A	MCPA	10000.000	9809.501	1.9	95	0.00
8	A	2,4-D	100.000	80.375	19.6#	82	0.00
13	a	Bentazon	100.000	84.174	15.8#	85	0.00
14	A	Dinoseb	100.000	90.937	9.1	93	0.00
Signal #2							
3	S	DCAA (surr)	100.000	90.063	9.9	105	0.00
6	A	MCPA	10000.000	11009.334	-10.1	107	0.00
8	A	2,4-D	100.000	96.435	3.6	108	0.00
13	a	Bentazon	100.000	103.687	-3.7	101	0.00
14	A	Dinoseb	100.000	94.528	5.5	102	0.00

Evaluate Continuing Calibration Report - Not Founds

Signal #2

(#) = Out of Range SPCC's out = 0 CCC's out = 0

H140808.M Mon Oct 20 16:05:00 2014

Evaluate Continuing Calibration Report

Data File : F1020007.D
Sample : HERBCCV 1020-2 (PS4-02-03)

Data Path : X:\PEST\FRANK\DATA\F141020\
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 20-Oct-14, 13:19:57
Operator :
Misc :
ALS Vial : 7 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: events2.e
Quant Time: Oct 20 13:30:39 2014
Quant Method : C:\MSDCHEM\1\METHODS\H140808.M
Quant Title : Herbicides
QLast Update : Thu Oct 16 16:26:08 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.03min
Max. RRF Dev : 16% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(Min)
3	S	DCAA (surr)	100.000	87.251	12.7	94	0.00
6	A	MCPA	10000.000	9773.983	2.3	94	0.00
8	A	2,4-D	100.000	78.409	21.6#	80	0.00
13	a	Bentazon	100.000	81.641	18.4#	82	0.00
14	A	Dinoseb	100.000	91.092	8.9	93	0.00

Signal #2

3	S	DCAA (surr)	100.000	88.027	12.0	102	0.00
6	A	MCPA	10000.000	10785.545	-7.9	105	0.00
8	A	2,4-D	100.000	94.052	5.9	105	0.00
13	a	Bentazon	100.000	101.335	-1.3	99	0.00
14	A	Dinoseb	100.000	91.651	8.3	99	0.00

Evaluate Continuing Calibration Report - Not Founds

Signal #2

(#) = Out of Range SPCC's out = 0 CCC's out = 0

H140808.M Mon Oct 20 16:06:38 2014

Quantitation Report (Not Reviewed)

Data File : F1016003.D
Sample : HERBCCV 1016-1 (PS3-90-08)

Data Path : C:\MSDCHEM\1\DATA\F141016\
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 16-Oct-14, 10:14:27
Operator :
Misc :
ALS Vial : 3 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: events2.e
Quant Time: Oct 16 10:25:10 2014
Quant Method : C:\MSDCHEM\1\METHODS\H140808.M
Quant Title : Herbicides
QLast Update : Thu Oct 16 09:31:01 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

KMS 10/16/14

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
3)	S DCAA (surr)	4.799	4.741	25285482	56290149	100.360	91.822
	Spiked Amount 100.000			Recovery	=	100.36%	91.82%
	Target Compounds						
1)	A Dalapon	1.566	1.376	37652211	81743690	110.904	112.156
2)	A 2,4,6-Tri...	3.844	3.775	108.7E6	259.6E6	55.354	55.866
4)	A Dicamba	4.904	4.841	106.6E6	232.5E6	113.145	102.869
5)	A MCPP	5.019	4.911	7695936	16381819	11082.906	10436.640
6)	A MCPA	5.104	5.041	11033012	23206256	10750.545	10632.319
7)	A Dichlorprop	5.309	5.221	25243928	55478240	100.672	115.209
8)	A 2,4-D	5.431	5.383	26578455	62214532	94.098	90.739
9)	A Pentachlo...	5.552	5.571	40081385	99511895	11.050	10.145
10)	A 2,4,5-TP	5.851	5.775	139.9E6	330.1E6	103.696	101.680
11)	A 2,4,5-T	5.984	5.956	121.2E6	302.3E6	94.701	98.963
12)	A 2,4-DB	6.238	6.187	14115114	35869970	90.691	96.542
13)	a Bentazon	6.657	6.570	12206031	29179297	98.012	102.688
14)	A Dinoseb	6.733	6.325	96825992	216.2E6	103.602	92.827

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

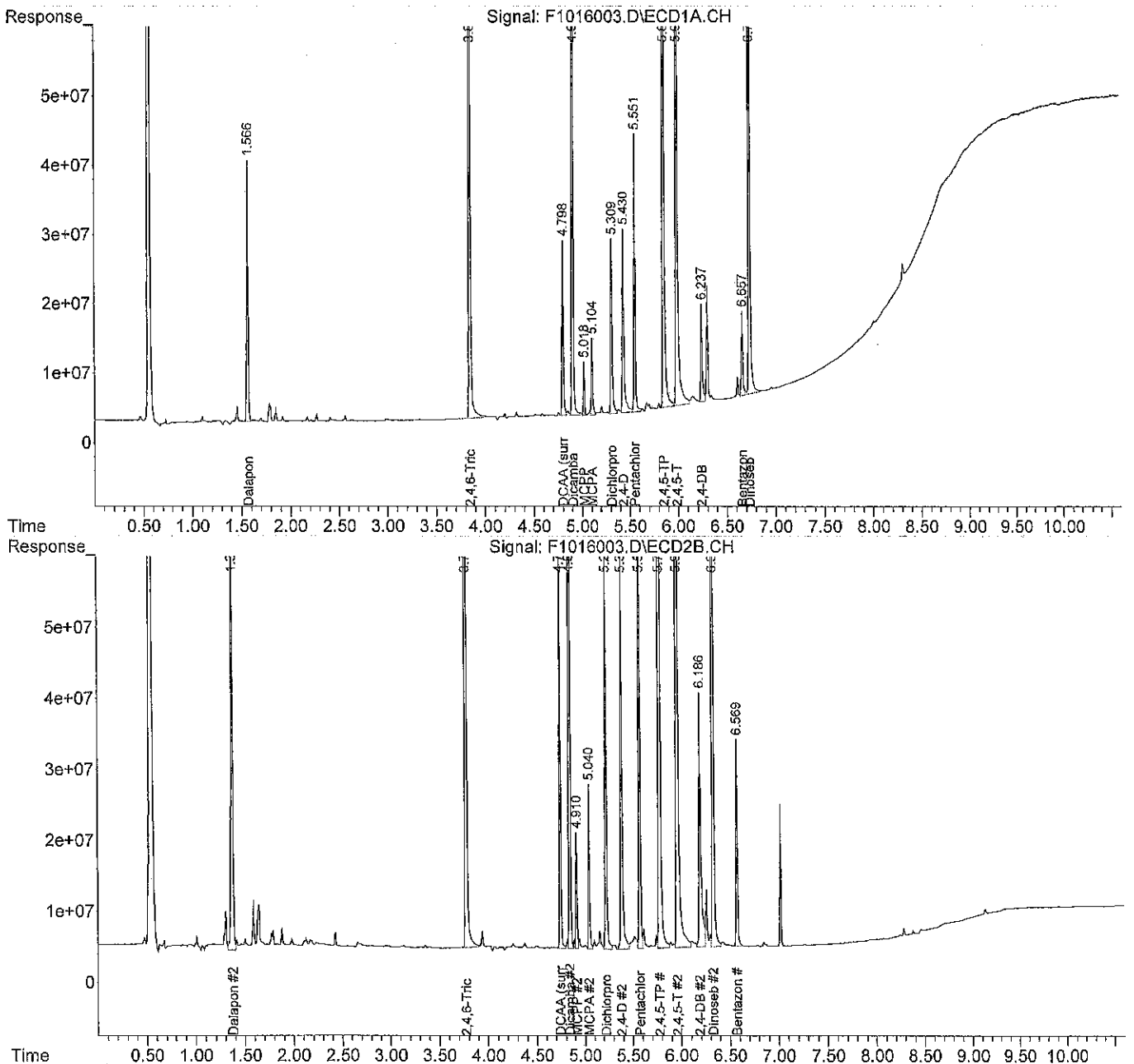
Quantitation Report (Not Reviewed)

Data File : F1016003.D
Sample : HERBCCV 1016-1 (PS3-90-08)

Data Path : C:\MSDCHEM\1\DATA\F141016\
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 16-Oct-14, 10:14:27
Operator :
Misc :
ALS Vial : 3 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: events2.e
Quant Time: Oct 16 10:25:10 2014
Quant Method : C:\MSDCHEM\1\METHODS\H140808.M
Quant Title : Herbicides
QLast Update : Thu Oct 16 09:31:01 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Quantitation Report (Not Reviewed)

Data File : F1016008.D
Sample : HERBCCV 1016-2 (PS3-90-08)

Data Path : C:\MSDCHEM\1\DATA\F141016\
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 16-Oct-14, 12:02:30
Operator :
Misc :
ALS Vial : 8 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: events2.e
Quant Time: Oct 16 12:13:13 2014
Quant Method : C:\MSDCHEM\1\METHODS\H140808.M
Quant Title : Herbicides
QLast Update : Thu Oct 16 09:31:01 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
3)	S DCAA (surr)	4.806f	4.750f	23842331	53821046	94.632	87.794
	Spiked Amount 100.000			Recovery	=	94.63%	87.79%
	Target Compounds						
1)	A Dalapon	1.570	1.379	35517685	77928785	104.616	106.813
2)	A 2,4,6-Tri...	3.852f	3.782f	103.1E6	241.8E6	52.543	52.033
4)	A Dicamba	4.911f	4.822f	100.1E6	1097086	106.284	~~-0.485~~ #
5)	A MCPP	5.027f	4.896	7642649	1193827	11006.449	N.D. #
6)	A MCPA	5.112f	5.048f	10626522	22783812	10346.156	10422.872
7)	A Dichlorprop	5.317f	5.229f	23398912	52088588	93.314	108.011
8)	A 2,4-D	5.438f	5.391f	24702264	57130293	87.456	83.323
9)	A Pentachlo...	5.559f	5.579f	37773134	93901583	10.414	9.573
10)	A 2,4,5-TP	5.858f	5.783f	129.4E6	308.3E6	95.856	94.966
11)	A 2,4,5-T	5.992f	5.964f	111.3E6	278.7E6	86.969	91.214
12)	A 2,4-DB	6.245	6.194f	12678928	33244952	81.464	88.490
13)	a Bentazon	6.663	6.576	11207285	27436351	89.876	96.003
14)	A Dinoseb	6.739	6.332	91095699	210.9E6	97.161	90.573

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

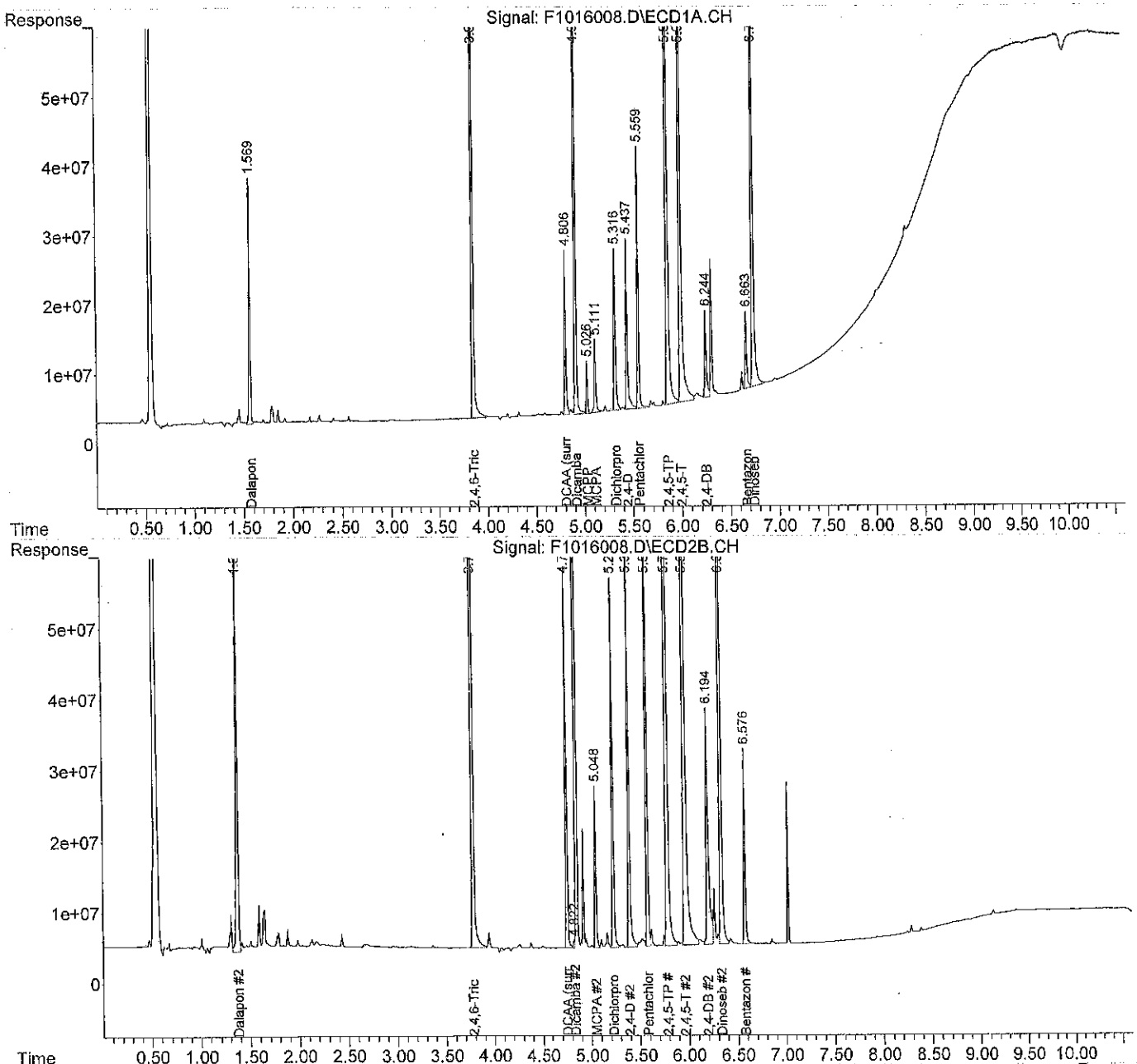
Quantitation Report (Not Reviewed)

Data File : F1016008.D
Sample : HERBCCV 1016-2 (PS3-90-08)

Data Path : C:\MSDCHEM\1\DATA\F141016\
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 16-Oct-14, 12:02:30
Operator :
Misc :
ALS Vial : 8 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: events2.e
Quant Time: Oct 16 12:13:13 2014
Quant Method : C:\MSDCHEM\1\METHODS\H140808.M
Quant Title : Herbicides
QLast Update : Thu Oct 16 09:31:01 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Quantitation Report (Not Reviewed)

Data File : F1016010.D
Sample : HERBCCV 1016-3 (PS3-90-08)

Data Path : C:\MSDCHEM\1\DATA\F141016\
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 16-Oct-14, 16:13:07
Operator :
Misc :
ALS Vial : 10 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: events2.e
Quant Time: Oct 16 16:23:50 2014
Quant Method : C:\MSDCHEM\1\METHODS\H140808.M
Quant Title : Herbicides
QLast Update : Thu Oct 16 09:31:01 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

ICAL 10-17-14

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb	
	System Monitoring Compounds							
3) S	DCAA (surr)	4.790	4.736	25447913	61050247	101.004 ✓	99.587 ✓	
	Spiked Amount 100.000			Recovery	=	101.00%	99.59%	
	Target Compounds							
1) A	Dalapon	1.560	1.369	37761122	82432732	111.224	113.120	
2) A	2,4,6-Tri...	3.836	3.767	103.5E6	281.6E6	52.741	60.602	
4) A	Dicamba	4.895	4.835	106.5E6	250.1E6	112.985	110.652	
5) A	MCPP	5.011	4.905	8308636	19063375	11962.018	12281.639	
6) A	MCPA	5.096	5.035	11371488	26274342	11087.271 ✓	12153.466	-22
7) A	Dichlorprop	5.301	5.215	24266147	61404658	96.773	127.794 #	
8) A	2,4-D	5.423	5.377	24607422	72189274	87.120 ✓	105.287 ✓	
9) A	Pentachlo...	5.543	5.566	39861009	107.3E6	10.990	10.936	
10) A	2,4,5-TP	5.844	5.770	133.4E6	369.0E6	98.850	113.647	
11) A	2,4,5-T	5.977	5.951	112.8E6	358.1E6	88.126	117.217 #	
12) A	2,4-DB	6.231	6.183	12587141	42700524	80.874	117.492 #	-77
13) a	Bentazon	6.650	6.567	11399282	32827356	91.440 ✓	116.680 #	
14) A	Dinoseb	6.726	6.322	93124756	243.9E6	99.442 ✓	104.734 ✓	

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

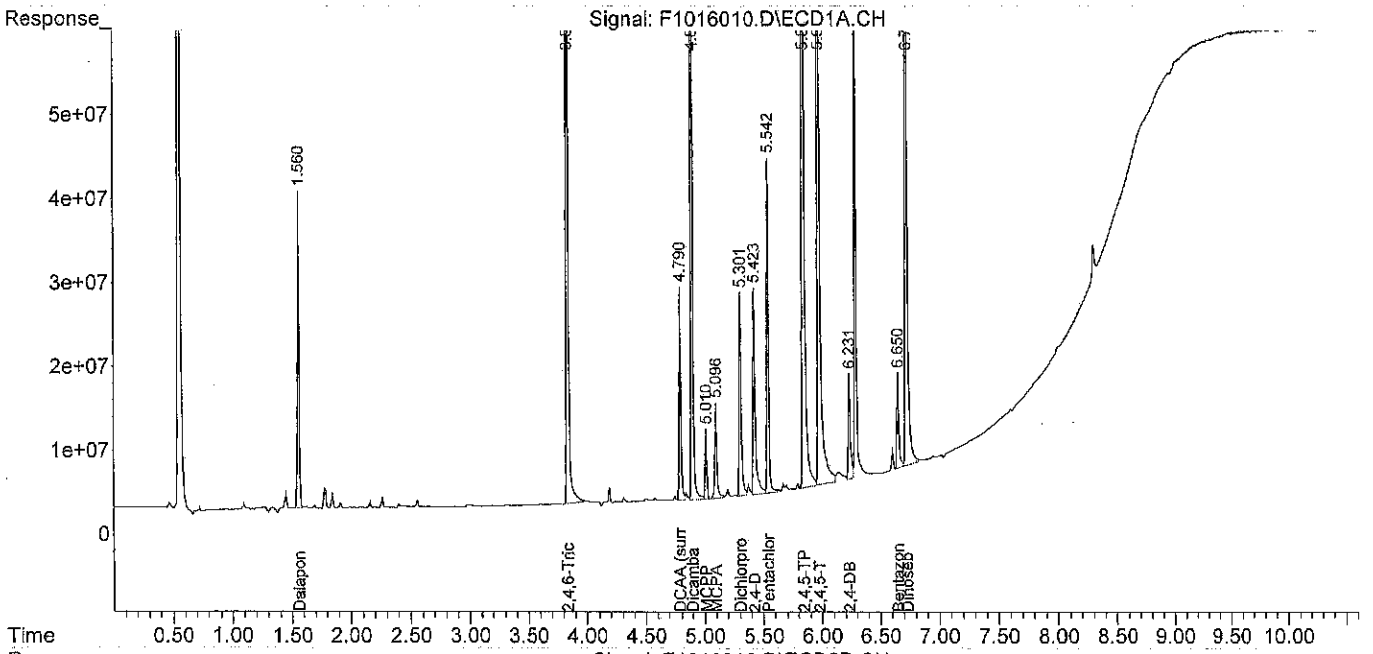
Quantitation Report (Not Reviewed)

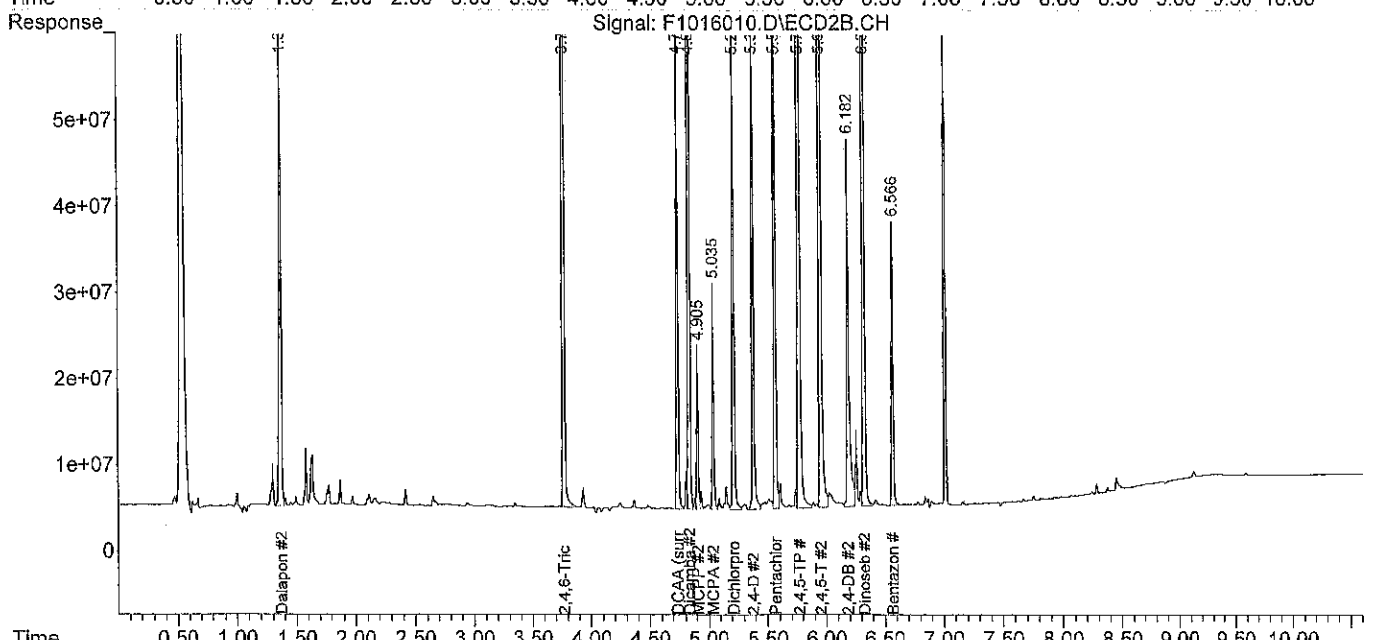
Data File : F1016010.D
Sample : HERBCCV 1016-3 (PS3-90-08)

Data Path : C:\MSDCHEM\1\DATA\F141016\
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 16-Oct-14, 16:13:07
Operator :
Misc :
ALS Vial : 10 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: events2.e
Quant Time: Oct 16 16:23:50 2014
Quant Method : C:\MSDCHEM\1\METHODS\H140808.M
Quant Title : Herbicides
QLast Update : Thu Oct 16 09:31:01 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (Not Reviewed)

Data File : F1016016.D
Sample : HERBCCV 1016-4 (PS3-90-08)

Data Path : C:\MSDCHEM\1\DATA\F141016\
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 16-Oct-14, 17:50:54
Operator :
Misc :
ALS Vial : 16 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: events2.e
Quant Time: Oct 16 18:01:39 2014
Quant Method : C:\MSDCHEM\1\METHODS\H140808.M
Quant Title : Herbicides
QLast Update : Thu Oct 16 16:26:08 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

JCMS 10-17-14

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb	
	System Monitoring Compounds							
3)	S DCAA (surr)	4.797	4.741	24548080	57014661	97.433	93.004	
	Spiked Amount 100.000			Recovery	=	97.43%	93.00%	
	Target Compounds							
1)	A Dalapon	1.564	1.373	37469512	81765158	110.365	112.186	
2)	A 2,4,6-Tri...	3.843	3.774	104.6E6	267.2E6	53.300	57.487	
4)	A Dicamba	4.901	4.840	102.7E6	228.7E6	108.992	101.168	
5)	A MCPP	5.016	4.911	7730134	17319416	11131.973	11081.738	
6)	A MCPA	5.102	5.041	10857720	24286515	10576.158	11167.908	
7)	A Dichlorprop	5.306	5.220	23780034	57641448	94.834	119.803	#
8)	A 2,4-D	5.428	5.382	24923872	68809439	88.240	100.357	
9)	A Pentachlo...	5.548	5.570	39074741	98457433	10.773	10.038	
10)	A 2,4,5-TP	5.849	5.774	129.3E6	337.9E6	95.830	104.074	
11)	A 2,4,5-T	5.982	5.956	110.3E6	328.0E6	86.155	107.376	
12)	A 2,4-DB	6.236	6.187	12452528	40929895	80.009	112.061	#
13)	a Bentazon	6.655	6.570	11003726	30149790	88.218	106.410	
14)	A Dinoseb	6.730	6.326	92535599	228.3E6	98.780	98.045	

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

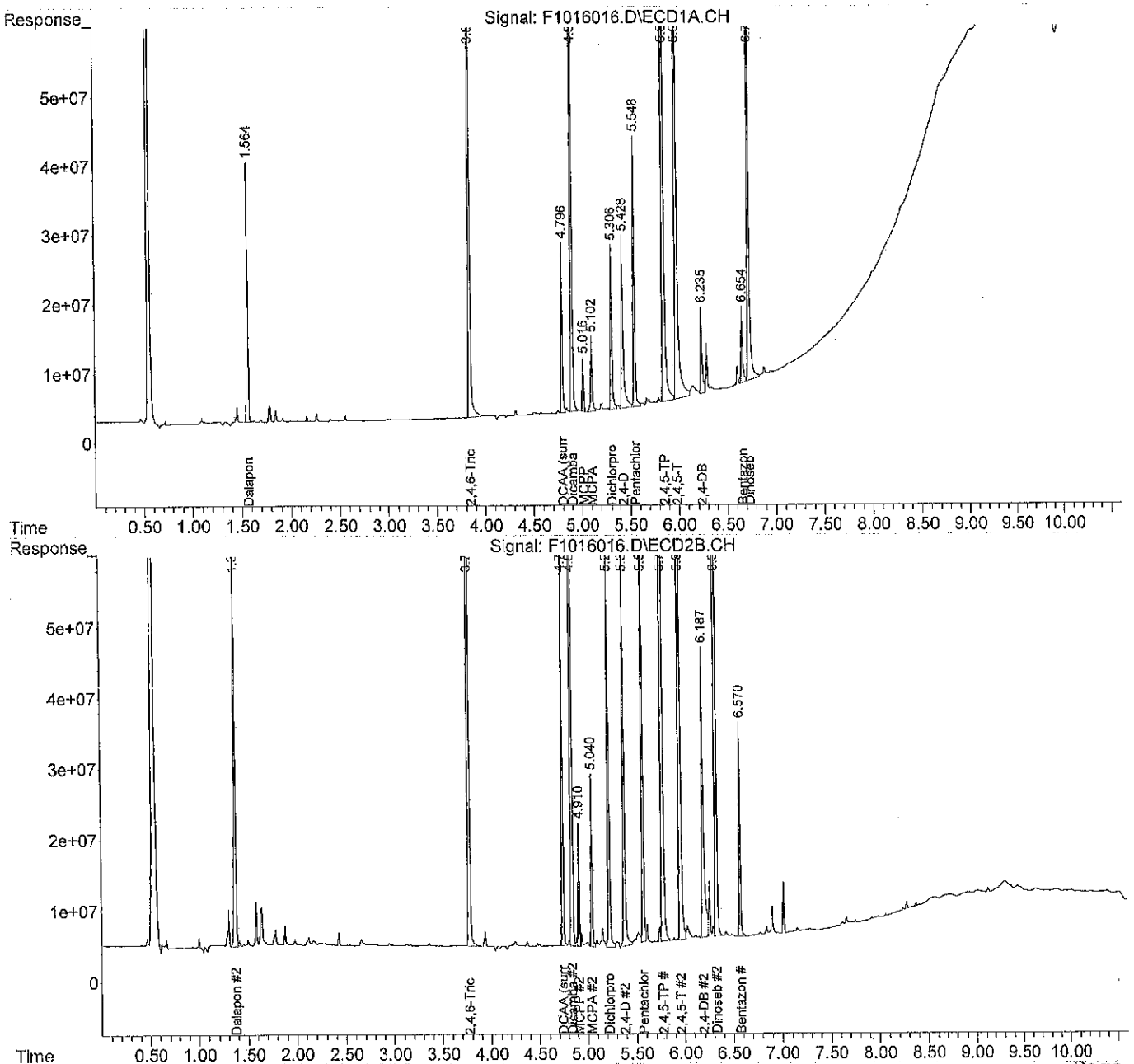
Quantitation Report (Not Reviewed)

Data File : F1016016.D
Sample : HERBCCV 1016-4 (PS3-90-08)

Data Path : C:\MSDCHEM\1\DATA\F141016\
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 16-Oct-14, 17:50:54
Operator :
Misc :
ALS Vial : 16 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: events2.e
Quant Time: Oct 16 18:01:39 2014
Quant Method : C:\MSDCHEM\1\METHODS\H140808.M
Quant Title : Herbicides
QLast Update : Thu Oct 16 16:26:08 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Quantitation Report (Not Reviewed)

Data File : F1020003.D
Sample : HERBCCV 1020-1 (PS4-02-03)

Data Path : C:\MSDCHEM\1\DATA\F141020\
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 20-Oct-14, 11:18:56
Operator :
Misc :
ALS Vial : 3 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: events2.e
Quant Time: Oct 20 11:29:41 2014
Quant Method : C:\MSDCHEM\1\METHODS\H140808.M
Quant Title : Herbicides
QLast Update : Thu Oct 16 16:26:08 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

KMS 10-2014

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

		Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb	
		System Monitoring Compounds							
3)	S	DCAA (surr)	4.797	4.742	22360686	55212183	88.751	90.063	
		Spiked Amount 100.000			Recovery	=	88.75%	90.06%	
		Target Compounds							
1)	A	Dalapon	1.564	1.374	32391810	72986515	95.409	99.892	
2)	A	2,4,6-Tri...	3.842	3.773	90805003	255.4E6	46.262	54.958	
4)	A	Dicamba	4.902	4.841	95071741	219.6E6	100.904	97.180	
5)	A	MCPP	5.017	4.911	7265539	17451393	10465.365	11172.542	
6)	A	MCPA	5.102	5.041	10087079	23966679	9809.501	11009.334	
7)	A	Dichlorprop	5.307	5.221	21697117	55979482	86.528	116.273	#
8)	A	2,4-D	5.429	5.383	22702403	66120304	80.375	96.435	
9)	A	Pentachlo...	5.549	5.572	34755258	95782963	9.582	9.765	
10)	A	2,4,5-TP	5.849	5.775	119.6E6	329.9E6	88.642	101.593	
11)	A	2,4,5-T	5.982	5.956	102.9E6	320.1E6	80.399	104.760	#
12)	A	2,4-DB	6.236	6.187	11435508	40063910	73.475	109.405	#
13)	a	Bentazon	6.655	6.570	10507203	29439570	84.174	103.687	
14)	A	Dinoseb	6.730	6.326	85557815	220.2E6	90.937	94.528	

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

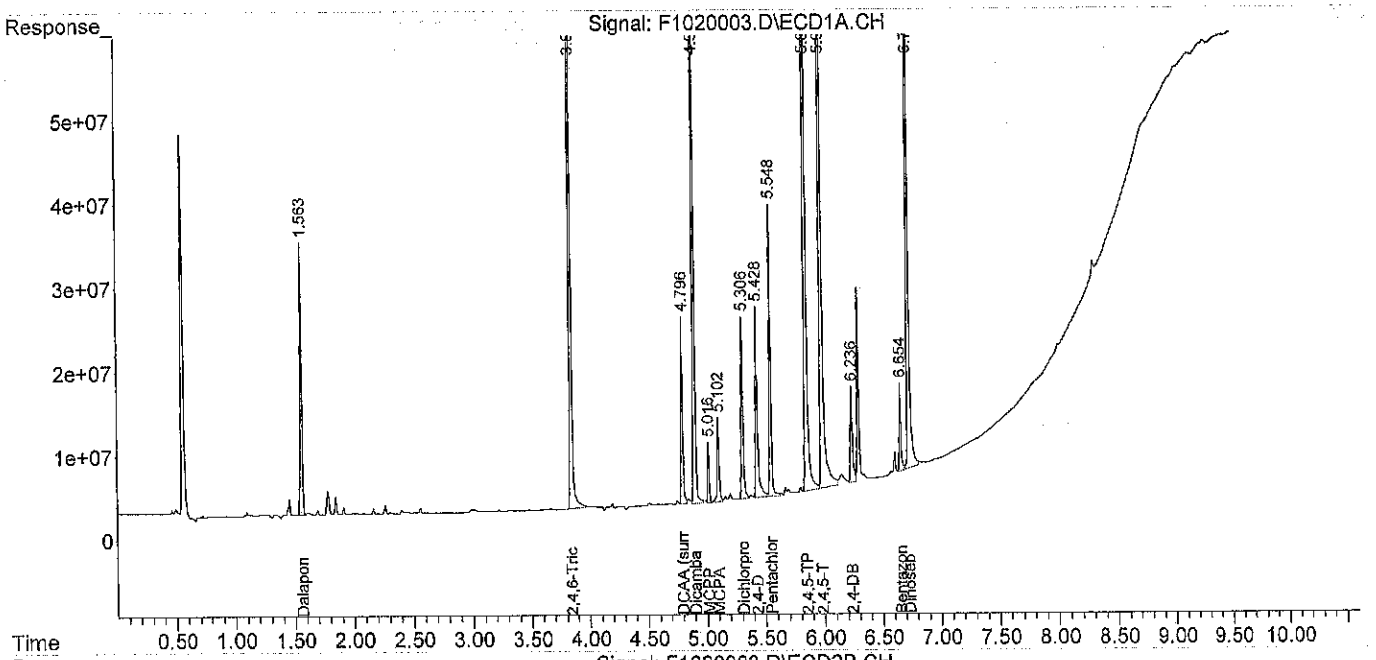
Quantitation Report (Not Reviewed)

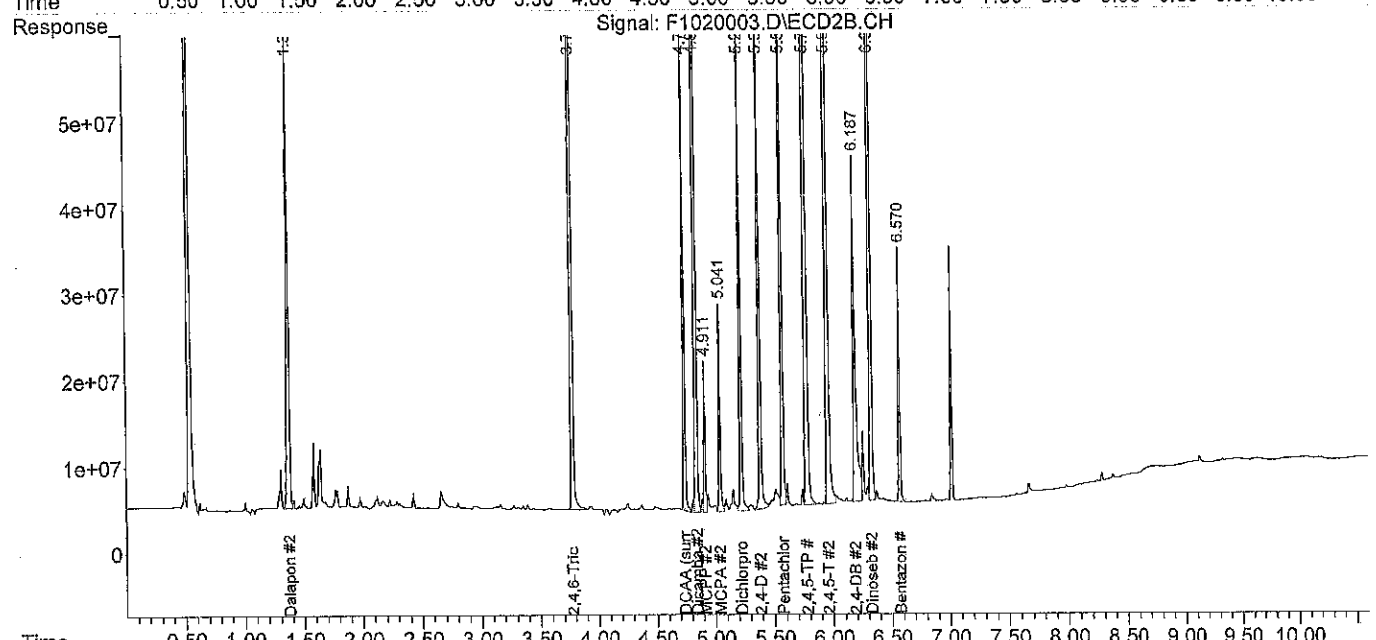
Data File : F1020003.D
Sample : HERBCCV 1020-1 (PS4-02-03)

Data Path : C:\MSDCHEM\1\DATA\F141020\
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 20-Oct-14, 11:18:56
Operator :
Misc :
ALS Vial : 3 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: events2.e
Quant Time: Oct 20 11:29:41 2014
Quant Method : C:\MSDCHEM\1\METHODS\H140808.M
Quant Title : Herbicides
QLast Update : Thu Oct 16 16:26:08 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (Not Reviewed)

Data File : F1020007.D
Sample : HERBCCV 1020-2 (PS4-02-03)

Data Path : C:\MSDCHEM\1\DATA\F141020\
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 20-Oct-14, 13:19:57
Operator :
Misc :
ALS Vial : 7 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: events2.e
Quant Time: Oct 20 13:30:39 2014
Quant Method : C:\MSDCHEM\1\METHODS\H140808.M
Quant Title : Herbicides
QLast Update : Thu Oct 16 16:26:08 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

		Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb	
		System Monitoring Compounds							
3)	S	DCAA (surr)	4.796	4.742	21982711	53963944	87.251	88.027	
		Spiked Amount 100.000			Recovery	=	87.25%	88.03%	
		Target Compounds							
1)	A	Dalapon	1.562	1.373	32583606	72621576	95.974	99.381	
2)	A	2,4,6-Tri...	3.841	3.773	90835045	249.6E6	46.277	53.704	
4)	A	Dicamba	4.901	4.841	92064975	215.2E6	97.713	95.202	
5)	A	MCPP	5.016	4.911	7182766	17043761	10346.601	10892.078	
6)	A	MCPA	5.101	5.041	10051376	23515308	9773.983	10785.545	
7)	A	Dichlorprop	5.306	5.221	21394742	54283997	85.322	112.673	#
8)	A	2,4-D	5.428	5.383	22146883	64486633	78.409	94.052	
9)	A	Pentachlo...	5.548	5.571	34885173	93941841	9.618	9.577	
10)	A	2,4,5-TP	5.848	5.775	119.3E6	324.3E6	88.435	99.881	
11)	A	2,4,5-T	5.982	5.956	100.3E6	309.8E6	78.355	101.419	#
12)	A	2,4-DB	6.236	6.187	11090450	37974032	71.258	102.995	#
13)	a	Bentazon	6.654	6.570	10196294	28826418	81.641	101.335	
14)	A	Dinoseb	6.729	6.326	85695726	213.5E6	91.092	91.651	

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

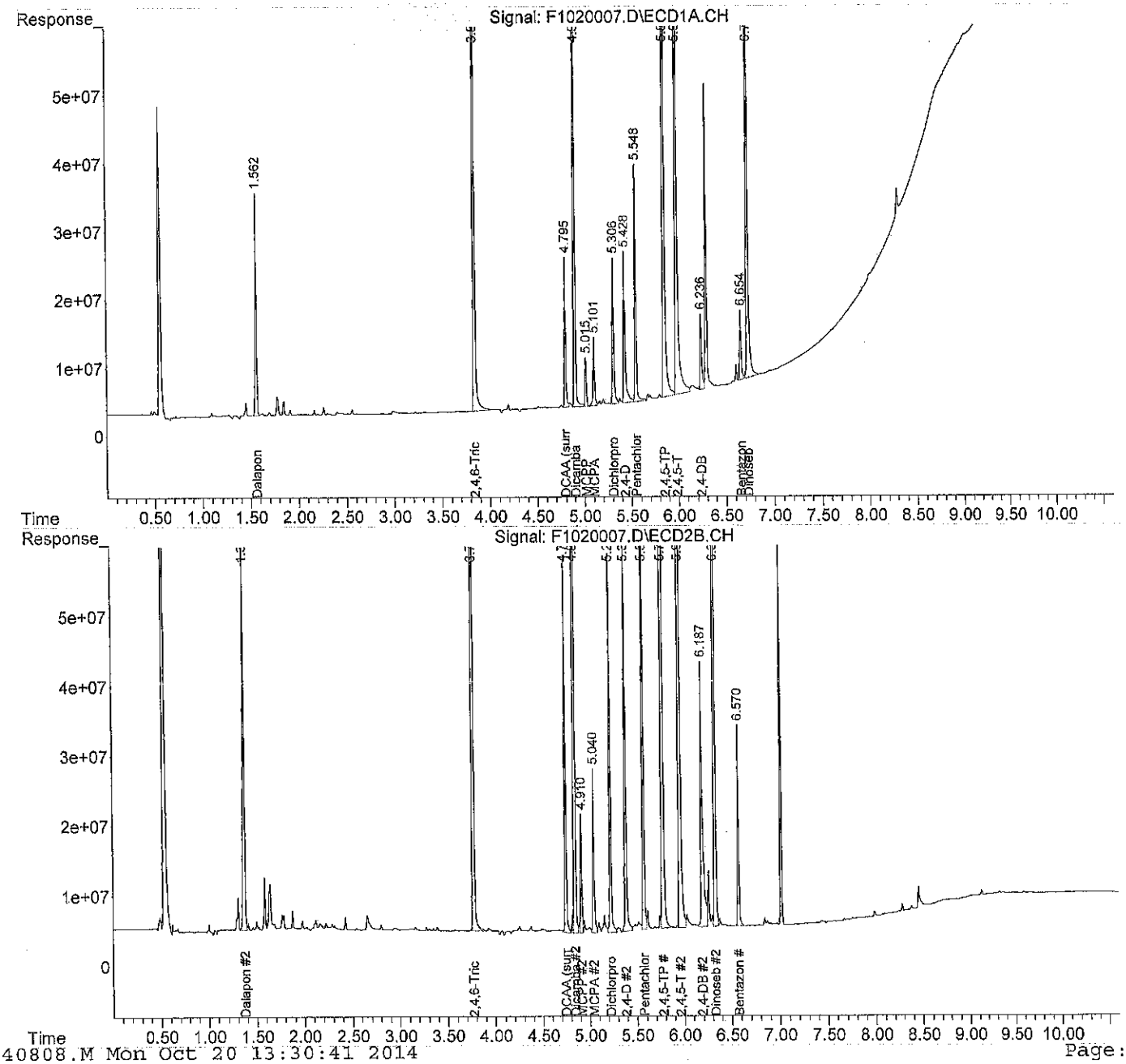
Quantitation Report (Not Reviewed)

Data File : F1020007.D
Sample : HERBCCV 1020-2 (PS4-02-03)

Data Path : C:\MSDCHEM\1\DATA\F141020\
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 20-Oct-14, 13:19:57
Operator :
Misc :
ALS Vial : 7 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: events2.e
Quant Time: Oct 20 13:30:39 2014
Quant Method : C:\MSDCHEM\1\METHODS\H140808.M
Quant Title : Herbicides
QLast Update : Thu Oct 16 16:26:08 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



OnSite Environmental Inc.

14648 NE 95th Street, Redmond, WA 98052 • (425) 883-3881

January 5, 2015

Robert Trahan
GeoEngineers, Inc.
600 Stewart, Suite 1700
Seattle, WA 98101-1233

Re: Analytical Data for Project 5364-013-08
Laboratory Reference No. 1412-237

Dear Robert:

Enclosed are the analytical results and associated quality control data for samples submitted on December 19, 2014.

The standard policy of OnSite Environmental, Inc. is to store your samples for 30 days from the date of receipt. If you require longer storage, please contact the laboratory.

We appreciate the opportunity to be of service to you on this project. If you have any questions concerning the data, or need additional information, please feel free to call me.

Sincerely,

David Baumeister
Project Manager

Enclosures

Date of Report: January 5, 2015
Samples Submitted: December 19, 2014
Laboratory Reference: 1412-237
Project: 5364-013-08

Case Narrative

Samples were collected on December 18, 2014 and received by the laboratory on December 19, 2014. They were maintained at the laboratory at a temperature of 2°C to 6°C.

General QA/QC issues associated with the analytical data enclosed in this laboratory report will be indicated with a reference to a comment or explanation on the Data Qualifier page. More complex and involved QA/QC issues will be discussed in detail below.

Organochlorine Pesticides by EPA 8081B Analysis

Due to matrix effects, the surrogate recovery of DCB for the sample DUP-121814 (27%) was below the quality control limits of 28-118%. The sample was re-extracted and showed similar results. No further action was performed.

Any other QA/QC issues associated with this extraction and analysis will be indicated with a footnote reference and discussed in detail on the Data Qualifier page.

Date of Report: January 5, 2015
Samples Submitted: December 19, 2014
Laboratory Reference: 1412-237
Project: 5364-013-08

ANALYTICAL REPORT FOR SAMPLES

Client ID	Laboratory ID	Matrix	Date Sampled	Date Received	Notes
MW-9-121814	12-237-01	Water	12-18-14	12-19-14	
MW-10-121814	12-237-02	Water	12-18-14	12-19-14	
MW-11-121814	12-237-03	Water	12-18-14	12-19-14	
MW-12-121814	12-237-04	Water	12-18-14	12-19-14	
DUP-121814	12-237-05	Water	12-18-14	12-19-14	

Date of Report: January 5, 2015
Samples Submitted: December 19, 2014
Laboratory Reference: 1412-237
Project: 5364-013-08

ORGANOCHLORINE PESTICIDES EPA 8081B

Matrix: Water
Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-9-121814**					
Laboratory ID:	12-237-01					
Heptachlor	**ND**	0.0047	EPA 8081B	12-23-14	12-24-14	
Aldrin	**ND**	0.0047	EPA 8081B	12-23-14	12-24-14	
Heptachlor Epoxide	**ND**	0.0047	EPA 8081B	12-23-14	12-24-14	
Dieldrin	**ND**	0.0047	EPA 8081B	12-23-14	12-24-14	
Surrogate:	*Percent Recovery*	*Control Limits*				
TCMX	*47*	*35-96*				
DCB	*28*	*28-118*				
Client ID:	**MW-10-121814**					
Laboratory ID:	12-237-02					
Heptachlor	**ND**	0.0048	EPA 8081B	12-23-14	12-24-14	
Aldrin	**ND**	0.0048	EPA 8081B	12-23-14	12-24-14	
Heptachlor Epoxide	**ND**	0.0048	EPA 8081B	12-23-14	12-24-14	
Dieldrin	**ND**	0.0048	EPA 8081B	12-23-14	12-24-14	
Surrogate:	*Percent Recovery*	*Control Limits*				
TCMX	*42*	*35-96*				
DCB	*34*	*28-118*				
Client ID:	**MW-11-121814**					
Laboratory ID:	12-237-03					
Heptachlor	**ND**	0.0047	EPA 8081B	12-23-14	12-24-14	
Aldrin	**ND**	0.0047	EPA 8081B	12-23-14	12-24-14	
Heptachlor Epoxide	**ND**	0.0047	EPA 8081B	12-23-14	12-24-14	
Dieldrin	**ND**	0.0047	EPA 8081B	12-23-14	12-24-14	
Surrogate:	*Percent Recovery*	*Control Limits*				
TCMX	*47*	*35-96*				
DCB	*47*	*28-118*				
Client ID:	**MW-12-121814**					
Laboratory ID:	12-237-04					
Heptachlor	**ND**	0.0048	EPA 8081B	12-23-14	12-24-14	
Aldrin	**ND**	0.0048	EPA 8081B	12-23-14	12-24-14	
Heptachlor Epoxide	**ND**	0.0048	EPA 8081B	12-23-14	12-24-14	
Dieldrin	**ND**	0.0048	EPA 8081B	12-23-14	12-24-14	
Surrogate:	*Percent Recovery*	*Control Limits*				
TCMX	*46*	*35-96*				
DCB	*29*	*28-118*				

Date of Report: January 5, 2015
Samples Submitted: December 19, 2014
Laboratory Reference: 1412-237
Project: 5364-013-08

ORGANOCHLORINE PESTICIDES EPA 8081B

Matrix: Water
Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**DUP-121814**					
Laboratory ID:	12-237-05					
Heptachlor	**ND**	0.0048	EPA 8081B	12-23-14	12-24-14	
Aldrin	**ND**	0.0048	EPA 8081B	12-23-14	12-24-14	
Heptachlor Epoxide	**ND**	0.0048	EPA 8081B	12-23-14	12-24-14	
Dieldrin	**ND**	0.0048	EPA 8081B	12-23-14	12-24-14	
Surrogate:	*Percent Recovery*	*Control Limits*				
TCMX	*50*	*35-96*				
DCB	*27*	*28-118*				Q

Date of Report: January 5, 2015
Samples Submitted: December 19, 2014
Laboratory Reference: 1412-237
Project: 5364-013-08

CHLORINATED ACID HERBICIDES EPA 8151A

Matrix: Water
Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-9-121814**					
Laboratory ID:	12-237-01					
MCPA	**13**	6.6	EPA 8151A	12-23-14	12-23-14	
Dinoseb	**ND**	0.044	EPA 8151A	12-23-14	12-23-14	
Surrogate:	*Percent Recovery*	*Control Limits*				
DCAA	*53*	*30-99*				
Client ID:	**MW-10-121814**					
Laboratory ID:	12-237-02					
MCPA	**14**	6.7	EPA 8151A	12-23-14	12-23-14	
Dinoseb	**2.1**	0.045	EPA 8151A	12-23-14	12-23-14	
Surrogate:	*Percent Recovery*	*Control Limits*				
DCAA	*36*	*30-99*				
Client ID:	**MW-11-121814**					
Laboratory ID:	12-237-03					
MCPA	**270**	6.6	EPA 8151A	12-23-14	12-23-14	
Dinoseb	**0.55**	0.044	EPA 8151A	12-23-14	12-23-14	
Surrogate:	*Percent Recovery*	*Control Limits*				
DCAA	*56*	*30-99*				
Client ID:	**MW-12-121814**					
Laboratory ID:	12-237-04					
MCPA	**ND**	6.7	EPA 8151A	12-23-14	12-23-14	
Dinoseb	**2.1**	0.045	EPA 8151A	12-23-14	12-23-14	
Surrogate:	*Percent Recovery*	*Control Limits*				
DCAA	*63*	*30-99*				
Client ID:	**DUP-121814**					
Laboratory ID:	12-237-05					
MCPA	**ND**	6.7	EPA 8151A	12-23-14	12-23-14	
Dinoseb	**1.5**	0.045	EPA 8151A	12-23-14	12-23-14	
Surrogate:	*Percent Recovery*	*Control Limits*				
DCAA	*50*	*30-99*				

Date of Report: January 5, 2015
Samples Submitted: December 19, 2014
Laboratory Reference: 1412-237
Project: 5364-013-08

ORGANOCHLORINE
PESTICIDES EPA 8081B
METHOD BLANK QUALITY CONTROL

Matrix: Water
Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1223W2					
Heptachlor	**ND**	0.0050	EPA 8081B	12-23-14	12-24-14	
Aldrin	**ND**	0.0050	EPA 8081B	12-23-14	12-24-14	
Heptachlor Epoxide	**ND**	0.0050	EPA 8081B	12-23-14	12-24-14	
Dieldrin	**ND**	0.0050	EPA 8081B	12-23-14	12-24-14	
Surrogate:	*Percent Recovery*	*Control Limits*				
TCMX	*76*	*35-96*				
DCB	*90*	*28-118*				

Date of Report: January 5, 2015
Samples Submitted: December 19, 2014
Laboratory Reference: 1412-237
Project: 5364-013-08

ORGANOCHLORINE PESTICIDES EPA 8081B SB/SBD QUALITY CONTROL

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
SPIKE BLANKS											
Laboratory ID:	SB1223W2										
	SB	SBD	SB	SBD		SB	SBD				
gamma-BHC	**0.0355**	**0.0330**	0.0500	0.0500	N/A	**71**	**66**	31-106	7	15	
Heptachlor	**0.0372**	**0.0346**	0.0500	0.0500	N/A	**74**	**69**	43-114	7	15	
Aldrin	**0.0382**	**0.0350**	0.0500	0.0500	N/A	**76**	**70**	50-106	9	15	
Dieldrin	**0.0937**	**0.0879**	0.125	0.125	N/A	**75**	**70**	58-103	6	15	
Endrin	**0.117**	**0.110**	0.125	0.125	N/A	**94**	**88**	53-112	6	15	
4,4'-DDT	**0.102**	**0.0971**	0.125	0.125	N/A	**81**	**78**	49-106	5	15	
Surrogate:											
TCMX						*82*	*75*	*35-96*			
DCB						*93*	*89*	*28-118*			

Date of Report: January 5, 2015
Samples Submitted: December 19, 2014
Laboratory Reference: 1412-237
Project: 5364-013-08

CHLORINATED ACID HERBICIDES EPA 8151A QUALITY CONTROL

Matrix: Water
Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1223W1					
MCPA	**ND**	7.0	EPA 8151A	12-23-14	12-23-14	
Dinoseb	**ND**	0.047	EPA 8151A	12-23-14	12-23-14	
Surrogate:	*Percent Recovery*	*Control Limits*				
DCAA	*54*	*30-99*				

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
SPIKE BLANKS											
Laboratory ID:	SB1223W1										
	SB	SBD	SB	SBD		SB	SBD				
Dinoseb	**0.621**	**0.615**	1.00	1.00	N/A	**62**	**62**	17-111	1	16	
Surrogate:											
DCAA						*70*	*68*	*30-99*			

OnSite Environmental Inc.

Data Qualifiers and Abbreviations

A - Due to a high sample concentration, the amount spiked is insufficient for meaningful MS/MSD recovery data.

B - The analyte indicated was also found in the blank sample.

C - The duplicate RPD is outside control limits due to high result variability when analyte concentrations are within five times the quantitation limit.

E - The value reported exceeds the quantitation range and is an estimate.

F - Surrogate recovery data is not available due to the high concentration of coeluting target compounds.

H - The analyte indicated is a common laboratory solvent and may have been introduced during sample preparation, and be impacting the sample result.

I - Compound recovery is outside of the control limits.

J - The value reported was below the practical quantitation limit. The value is an estimate.

K - Sample duplicate RPD is outside control limits due to sample inhomogeneity. The sample was re-extracted and re-analyzed with similar results.

L - The RPD is outside of the control limits.

M - Hydrocarbons in the gasoline range are impacting the diesel range result.

M1 - Hydrocarbons in the gasoline range (toluene-napthalene) are present in the sample.

N - Hydrocarbons in the lube oil range are impacting the diesel range result.

N1 - Hydrocarbons in diesel range are impacting lube oil range results.

O - Hydrocarbons indicative of heavier fuels are present in the sample and are impacting the gasoline result.

P - The RPD of the detected concentrations between the two columns is greater than 40.

Q - Surrogate recovery is outside of the control limits.

S - Surrogate recovery data is not available due to the necessary dilution of the sample.

T - The sample chromatogram is not similar to a typical _____.

U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

U1 - The practical quantitation limit is elevated due to interferences present in the sample.

V - Matrix Spike/Matrix Spike Duplicate recoveries are outside control limits due to matrix effects.

W - Matrix Spike/Matrix Spike Duplicate RPD are outside control limits due to matrix effects.

X - Sample extract treated with a mercury cleanup procedure.

X1- Sample extract treated with a Sulfuric acid/Silica gel cleanup procedure.

Y - The calibration verification for this analyte exceeded the 20% drift specified in method 8260C, and therefore the reported result should be considered an estimate. The overall performance of the calibration verification standard met the acceptance criteria of the method.

Z -

ND - Not Detected at PQL
PQL - Practical Quantitation Limit
RPD - Relative Percent Difference

Chain of Custody

OnSite Environmental Inc.
Analytical Laboratory Testing Services
14648 NE 95th Street • Redmond, WA 98052
Phone: (425) 883-3881 • www.onsite-env.com

11

Company: GeoEngineers
Project Number: 5364-013-08
Project Name: Taxiway F
Project Manager: Robert Trahan
Sampled by: Robert Trahan

Turnaround Request (in working days)
(Check One)
☐ Same Day ☐ 1 Day
☐ 2 Days ☐ 3 Days
☒ Standard (7 Days) (TPH analysis 5 Days)
☐ _____ (other)

Laboratory Number: 12-237

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers	NWTPH-HCID	NWTPH-Gx/BTEX	NWTPH-Gx	NWTPH-Dx	Volatiles 8260C	Halogenated Volatiles 8260C	Semivolatiles 8270D/SIM (with low-level PAHs)	PAHs 8270D/SIM (low-level)	PCBs 8082A	Organochlorine Pesticides 8081B	Organophosphorus Pesticides 8270D/SIM	Chlorinated Acid Herbicides 8151A	Total RCRA Metals	Total MTCA Metals	TCLP Metals	HEM (oil and grease) 1664A	* Chlorinated Pest.	** Chlorinated Herb.				% Moisture
1	MW-9-121814	12/18/14	11:00	L	4																	X	X				
2	MW-10-121814		1210																			X	X				
3	MW-11-121814		1335																			X	X				
4	MW-12-121814		1520																			X	X				
5	DUP-121814		1525																			X	X				

	Signature	Company	Date	Time
Relinquished		GeoEngineers	12/19/14	12:00
Received		OSE	12/19/14	1200
Relinquished				
Received				
Relinquished				
Received				
Reviewed/Date		Reviewed/Date		

Comments/Special Instructions
* Heptachlor, Aldrin, Heptachlor Epoxide, ~~Dieldrin~~ Dieldrin
** MCPA, Dinoseb

Chromatograms with final report ☒

Data Package: Standard ☐ Level III ☒ Level IV ☐

Electronic Data Deliverables (EDDs) ☒ _____

Sample/Cooler Receipt and Acceptance Checklist

Client: GES

Client Project Name/Number: 5364-013-08

OnSite Project Number: 12-237

Initiated by: MM

Date Initiated: 12/19/14

1.0 Cooler Verification

1.1 Were there custody seals on the outside of the cooler?	Yes	No	N/A	1 2 3 4
1.2 Were the custody seals intact?	Yes	No	N/A	1 2 3 4
1.3 Were the custody seals signed and dated by last custodian?	Yes	No	N/A	1 2 3 4
1.4 Were the samples delivered on ice or blue ice?	Yes	No		1 2 3 4
1.5 Were samples received between 0-6 degrees Celsius?	Yes	No	Temperature: 5,5	
1.6 Have shipping bills (if any) been attached to the back of this form?	Yes	N/A		
1.7 How were the samples delivered?	Client	Courier	UPS/FedEx	OSE Pickup / Other

2.0 Chain of Custody Verification

2.1 Was a Chain of Custody submitted with the samples?	Yes	No	1 2 3 4
2.2 Was the COC legible and written in permanent ink?	Yes	No	1 2 3 4
2.3 Have samples been relinquished and accepted by each custodian?	Yes	No	1 2 3 4
2.4 Did the sample labels (ID, date, time, preservative) agree with COC?	Yes	No	1 2 3 4
2.5 Were all of the samples listed on the COC submitted?	Yes	No	1 2 3 4
2.6 Were any of the samples submitted omitted from the COC?	Yes	No	1 2 3 4

3.0 Sample Verification

3.1 Were any sample containers broken or compromised?	Yes	No		1 2 3 4
3.2 Were any sample labels missing or illegible?	Yes	No		1 2 3 4
3.3 Have the correct containers been used for each analysis requested?	Yes	No		1 2 3 4
3.4 Have the samples been correctly preserved?	Yes	No	N/A	1 2 3 4
3.5 Are volatiles samples free from headspace and bubbles greater than 6mm?	Yes	No	N/A	1 2 3 4
3.6 Is there sufficient sample submitted to perform requested analyses?	Yes	No		1 2 3 4
3.7 Have any holding times already expired or will expire in 24 hours?	Yes	No		1 2 3 4
3.8 Was method 5035A used?	Yes	No	N/A	1 2 3 4
3.9 If 5035A was used, which sampling option was used (#1, 2, or 3).	#		N/A	1 2 3 4

Explain any discrepancies:

1 - Discuss issue in Case Narrative

2 - Process Sample As-is

3 - Client contacted to discuss problem

4 - Sample cannot be analyzed or client does not wish to proceed

RAW DATA

- Organochlorine Pesticides by EPA 8081B Data
- Chlorinated Acid Herbicides EPA 8151A Data

Organochlorine Pesticides Data

Quantitation Report (QT Reviewed)

Signal #1 : X:\PEST\GEORGE\DATA\G141224\1224010.D\ECD1A.CH Vial: 10
Signal #2 : X:\PEST\GEORGE\DATA\G141224\1224010.D\ECD2B.CH
Acq On : 24 Dec 2014 11:10 Operator:
Sample : 12-237-01 Inst : George
Misc : Multiplr: 1.00
Sample Amount: 0.00

IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Quant Time: Dec 30 10:18 2014 Quant Results File: P140328.RES

Quant Method : D:\HPCHEM\1\METHODS\P140328.M (Chemstation Integrator)
Title : Pestcides
Last Update : Mon Dec 15 12:04:21 2014
Response via : Initial Calibration
DataAcq Meth : P140328.M

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
1) S	Tetrachloro-m-xy	2.85	3.08	64320	44145	41.324m	47.306m
	Spiked Amount 100.000			Recovery	=	41.32%	47.31%
22) S	Decachlorobiphen	7.26	7.89	32503	21649	27.846m	25.917m
	Spiked Amount 100.000			Recovery	=	27.85%	25.92%
	Target Compounds						
2) A	alpha-BHC	0.00	3.64f	0	18524	N.D.	15.277 #
3) A	gamma-BHC	0.00	3.98	0	17258	N.D.	15.155 #
4) A	beta-BHC	0.00	0.00	0	0	N.D.	N.D.
5) A	delta-BHC	3.90	4.32	2913	36658	1.600	32.896 #
6) A	Heptachlor	0.00	0.00	0	0	N.D.	N.D.
7) A	Aldrin	4.34	0.00	2044	0	1.211	N.D. #
8) A	Heptachlor epoxi	4.80f	5.11	6051	1020	3.791m	1.019m#
9) A	gamma-Chlordane	0.00	5.23	0	80064	N.D.	77.579 #
10) A	alpha-Chlordane	0.00	5.39f	0	234447	N.D.	234.887 #
11) A	4,4'-DDE	5.10	0.00	164347	0	113.474	N.D. #
12) A	Endosulfan I	5.14f	5.39	141386	234447	92.500	234.387 #
13) A	Dieldrin	5.31	0.00	18503	0	12.345m	N.D. #
14) A	Endrin	5.49	0.00	21879	0	16.481	N.D. #
15) A	4,4'-DDD	0.00	5.93	0	93255	N.D.	131.728 #
16) A	Endosulfan II	5.65	6.01	96221	153568	72.971	180.518 #
17) A	4,4'-DDT	5.77	6.16	17241	104740	13.576	130.032 #
18) A	Endrin aldehyde	5.96	6.28f	48015	108814	46.471	156.592 #
19) A	Methoxychlor	6.13	0.00	27979	0	40.554	N.D. #
20) A	Endosulfan sulfa	6.28	6.47	496624	248994	442.115	333.163
21) A	Endrin ketone	0.00	6.86f	0	139708	N.D.	148.274 #
23) L8	Toxaphene{1}	5.65	5.93	96221	93255	6070.119	6325.866
24) L8	Toxaphene{2}	5.81	6.09f	7749	95116	208.868	3793.154 #
25) L8	Toxaphene{3}	0.00	6.16	0	104740	N.D.	2934.399 #
26) L8	Toxaphene{4}	6.13	6.40f	27979	130894	948.107	5625.171 #
27) L8	Toxaphene{5}	0.00	0.00	0	0	N.D.	N.D.
	Sum Toxaphene			131950	424005	7227.094	18678.590
	Average Toxaphene					2409.031	4669.648
28) L9	Tech Chlordane{1	4.22f	4.88f	25795	100664	244.764	2425.378 #
29) L9	Tech Chlordane{2	4.88f	5.39f	2039857	234447	56616.485	2022.068 #
30) L9	Tech Chlordane{3	5.10	5.39	164347	234447	982.134	3171.752 #
31) L9	Tech Chlordane{4	5.14	5.39	141386	234447	686.733	2213.022 #
32) L9	Tech Chlordane{5	5.81	6.01	7749	153568	150.504	10389.422 #
	Sum Tech Chlordane			2379134	957572	58680.621	20221.643
	Average Tech Chlordane					11736.124	4044.329

LDL

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

Quantitation Report (QT Reviewed)

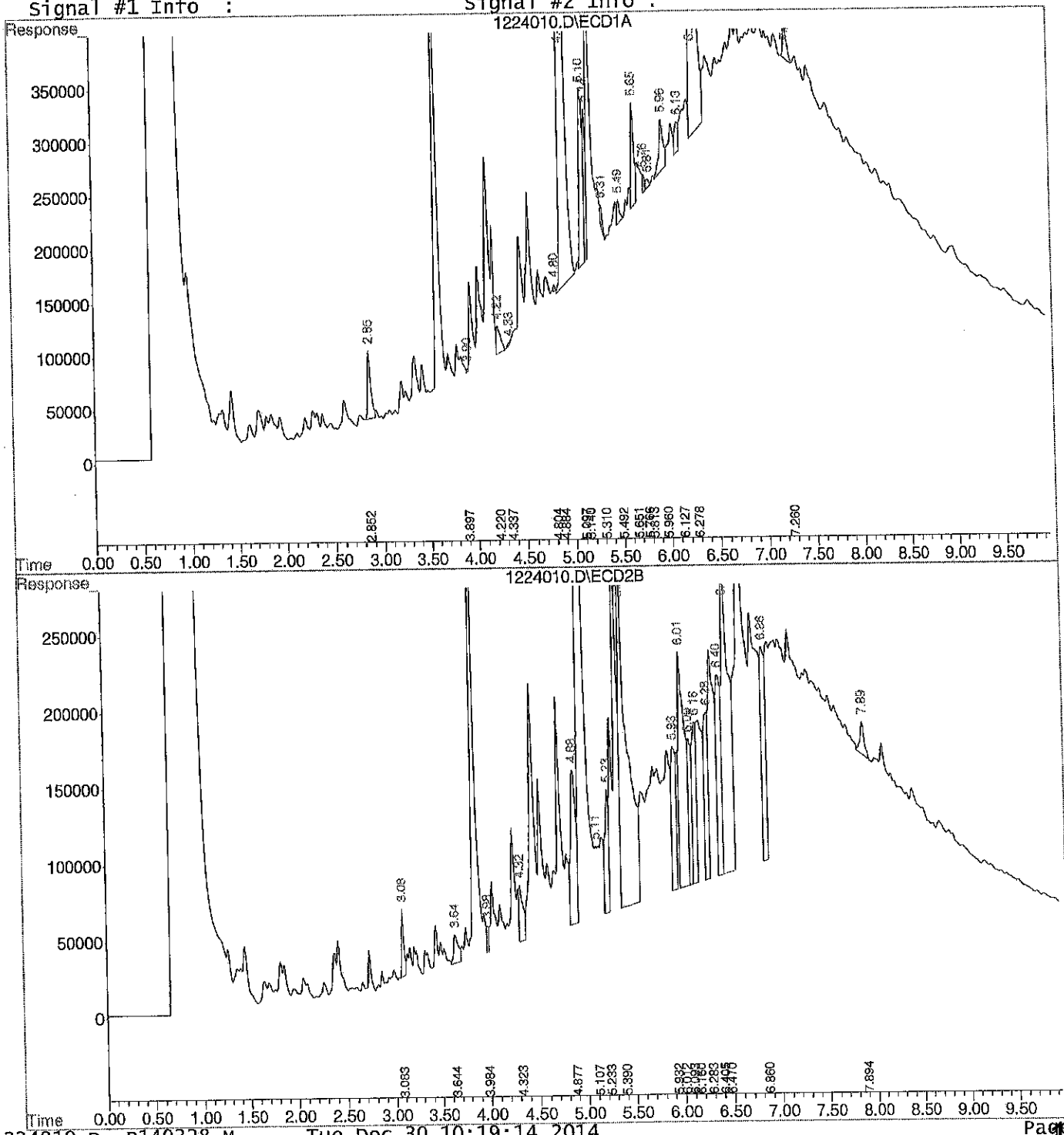
Signal #1 : X:\PEST\GEORGE\DATA\G141224\1224010.D\ECD1A.CH Vial: 10
Signal #2 : X:\PEST\GEORGE\DATA\G141224\1224010.D\ECD2B.CH
Acq On : 24 Dec 2014 11:10 Operator:
Sample : 12-237-01 Inst : George
Misc : Multiplr: 1.00
Sample Amount: 0.00

IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Quant Time: Dec 30 10:18 2014 Quant Results File: P140328.RES

Quant Method : D:\HPCHEM\1\METHODS\P140328.M (Chemstation Integrator)
Title : Pestcides
Last Update : Mon Dec 15 12:04:21 2014
Response via : Multiple Level Calibration
DataAcq Meth : P140328.M

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Quantitation Report (QT Reviewed)

Signal #1 : X:\PEST\GEORGE\DATA\G141224\1224011.D\ECD1A.CH Vial: 11
Signal #2 : X:\PEST\GEORGE\DATA\G141224\1224011.D\ECD2B.CH
Acq On : 24 Dec 2014 11:24 Operator:
Sample : 12-237-02 Inst : George
Misc : Multiplr: 1.00
Sample Amount: 0.00

IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Quant Time: Dec 30 10:20 2014 Quant Results File: P140328.RES

Quant Method : D:\HPCHEM\1\METHODS\P140328.M (Chemstation Integrator)
Title : Pestcides
Last Update : Mon Dec 15 12:04:21 2014
Response via : Initial Calibration
DataAcq Meth : P140328.M

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

KMS 12-30-14

Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
System Monitoring Compounds						
1) S Tetrachloro-m-xy	2.85	3.08	57395	39550	36.875m	42.382m
Spiked Amount 100.000			Recovery =		36.88%	42.38%
22) S Decachlorobiphen	7.26	7.89	38558	25364	33.967m	31.240m
Spiked Amount 100.000			Recovery =		33.97%	31.24%
Target Compounds						
2) A alpha-BHC	0.00	0.00	0	0	N.D.	N.D.
3) A gamma-BHC	0.00	3.99	0	20103	N.D.	17.652 #
4) A beta-BHC	3.72f	0.00	37592	0	37.800	N.D. #
5) A delta-BHC	3.90f	0.00	53665	0	29.471	N.D. #
6) A Heptachlor	0.00	4.39f	0	113224	N.D.	89.172 #
7) A Aldrin	4.34	0.00	582331	0	345.028	N.D. #
8) A Heptachlor epoxi	0.00	5.09f	0	3836	N.D.	3.830m#
9) A gamma-Chlordane	0.00	5.23	0	40260	N.D.	39.011 #
10) A alpha-Chlordane	0.00	0.00	0	0	N.D.	N.D.
11) A 4,4'-DDE	0.00	5.51f	0	31769	N.D.	35.266 #
12) A Endosulfan I	5.12	5.40	54186	74873	35.450	74.854 #
13) A Dieldrin	0.00	0.00	0	0	N.D.	N.D.
14) A Endrin	0.00	0.00	0	0	N.D.	N.D.
15) A 4,4'-DDD	0.00	5.93	0	591396	N.D.	835.382 #
16) A Endosulfan II	5.65	6.04f	44069	97358	33.421	114.444 #
17) A 4,4'-DDT	5.77	6.15f	11881	59246	9.356	73.553 #
18) A Endrin aldehyde	0.00	6.29f	0	73759	N.D.	106.145 #
19) A Methoxychlor	6.11	6.69	63463	84072	91.986	177.964 #
20) A Endosulfan sulfa	6.29	6.47	107719	84280	95.896	112.770
21) A Endrin ketone	6.53f	6.86f	36804	87105	29.099	92.445 #
23) L8 Toxaphene{1}	5.65	5.93	44069	591396	2780.098	40116.926 #
24) L8 Toxaphene{2}	0.00	0.00	0	0	N.D.	N.D.
25) L8 Toxaphene{3}	0.00	6.15f	0	59246	N.D.	1659.840 #
26) L8 Toxaphene{4}	6.11	6.39	63463	73916	2150.523	3176.566 #
27) L8 Toxaphene{5}	0.00	0.00	0	0	N.D.	N.D.
Sum Toxaphene			107532	724559	4930.621	44953.333
Average Toxaphene					2465.310	14984.444
28) L9 Tech Chlordane{1	4.27	4.87	24992	222525	237.143	5361.474 #
29) L9 Tech Chlordane{2	4.88f	0.00	53461	0	1483.822	N.D. #
30) L9 Tech Chlordane{3	5.12f	5.40	54186	74873	323.813	1012.938 #
31) L9 Tech Chlordane{4	5.12	5.40	54186	74873	263.189	706.756 #
32) L9 Tech Chlordane{5	5.77f	6.04f	11881	97358	230.760	6586.632 #
Sum Tech Chlordane			198706	469630	2538.727	13667.801
Average Tech Chlordane					507.745	3416.950

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

Quantitation Report (QT Reviewed)

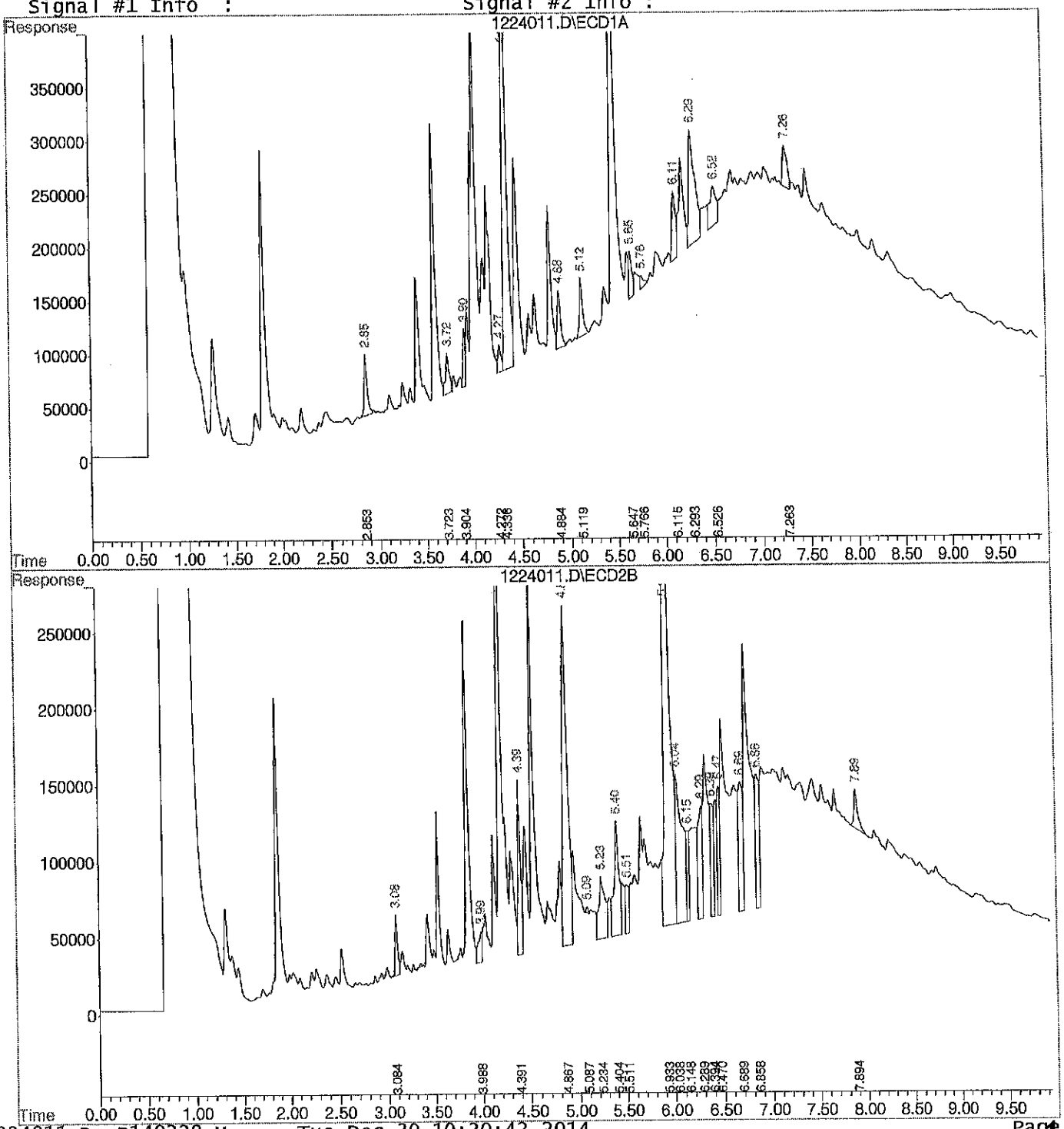
Signal #1 : X:\PEST\GEORGE\DATA\G141224\1224011.D\ECD1A.CH Vial: 11
Signal #2 : X:\PEST\GEORGE\DATA\G141224\1224011.D\ECD2B.CH
Acq On : 24 Dec 2014 11:24 Operator:
Sample : 12-237-02 Inst : George
Misc : Multiplr: 1.00
Sample Amount: 0.00

IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Quant Time: Dec 30 10:20 2014 Quant Results File: P140328.RES

Quant Method : D:\HPCHEM\1\METHODS\P140328.M (Chemstation Integrator)
Title : Pestcides
Last Update : Mon Dec 15 12:04:21 2014
Response via : Multiple Level Calibration
DataAcq Meth : P140328.M

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Quantitation Report (QT Reviewed)

Signal #1 : X:\PEST\GEORGE\DATA\G141224\1224012.D\ECD1A.CH Vial: 12
Signal #2 : X:\PEST\GEORGE\DATA\G141224\1224012.D\ECD2B.CH
Acq On : 24 Dec 2014 11:37 Operator:
Sample : 12-237-03 Inst : George
Misc : Multiplr: 1.00
Sample Amount: 0.00

IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Quant Time: Dec 30 10:21 2014 Quant Results File: P140328.RES

Quant Method : D:\HPCHEM\1\METHODS\P140328.M (Chemstation Integrator)
Title : Pestcides
Last Update : Mon Dec 15 12:04:21 2014
Response via : Initial Calibration
DataAcq Meth : P140328.M

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
System Monitoring Compounds						
1) S Tetrachloro-m-xy	2.85	3.08	67002	43481	43.047m	46.594m
Spiked Amount 100.000			Recovery	=	43.05%	46.59%
22) S Decachlorobiphen	7.26	7.89	51807	34781	47.360m	44.734m
Spiked Amount 100.000			Recovery	=	47.36%	44.73%
Target Compounds						
2) A alpha-BHC	3.38	3.64f	91528	143461	44.925	118.320 #
3) A gamma-BHC	0.00	3.99	0	43051	N.D.	37.803 #
4) A beta-BHC	3.72f	4.08	66708	45927	67.077	75.263
5) A delta-BHC	3.91f	0.00	97067	0	53.306	N.D. #
6) A Heptachlor	0.00	0.00	0	0	N.D.	N.D.
7) A Aldrin	4.34	0.00	97031	0	57.490	N.D. #
8) A Heptachlor epoxi	0.00	5.08f	0	1979	N.D.	1.977m#
9) A gamma-Chlordane	4.92	5.24	1288752	31839	794.319	30.850 #
10) A alpha-Chlordane	0.00	5.36	0	26690	N.D.	26.740 #
11) A 4,4'-DDE	5.11	5.51	121788	24650	84.089	27.364 #
12) A Endosulfan I	5.11f	5.40	121788	108381	79.678	108.354 #
13) A Dieldrin	5.32	0.00	5307	0	3.541	N.D. #
14) A Endrin	0.00	5.86	0	42310	N.D.	51.937 #
15) A 4,4'-DDD	5.54	5.93	22858	102138	19.728	144.275 #
16) A Endosulfan II	5.65	6.01	49043	75064	37.193	88.237 #
17) A 4,4'-DDT	5.74	0.00	28362	0	22.334	N.D. #
18) A Endrin aldehyde	5.95	6.26	127241	203110	123.151	292.292 #
19) A Methoxychlor	6.14f	6.68	207126	94647	300.218	200.350 #
20) A Endosulfan sulfa	6.29	6.47	2080651	134282	1852.279	179.674 #
21) A Endrin ketone	6.52	6.85f	55029	125689	43.982	133.395 #
23) L8 Toxaphene{1}	5.65	5.93	49043	102138	3093.870	6928.422 #
24) L8 Toxaphene{2}	0.00	6.11	0	131551	N.D.	5246.134 #
25) L8 Toxaphene{3}	0.00	0.00	0	0	N.D.	N.D.
26) L8 Toxaphene{4}	6.14f	6.39	207126	91560	7018.698	3934.793 #
27) L8 Toxaphene{5}	0.00	0.00	0	0	N.D.	N.D.
Sum Toxaphene			256168	325248	10112.568	16109.349
Average Toxaphene					5056.284	5369.783
28) L9 Tech Chlordane{1	0.00	4.87	0	1082435	N.D.	26079.994 #
29) L9 Tech Chlordane{2	4.92	5.36	1288752	26690	35769.478	230.200 #
30) L9 Tech Chlordane{3	5.11	5.40	121788	108381	727.802	1466.256 #
31) L9 Tech Chlordane{4	5.11	5.40	121788	108381	591.543	1023.049 #
32) L9 Tech Chlordane{5	0.00	6.01	0	75064	N.D.	5078.353 #
Sum Tech Chlordane			1532328	1400952	37088.824	33877.852
Average Tech Chlordane					12362.941	6775.570

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

Quantitation Report (QT Reviewed)

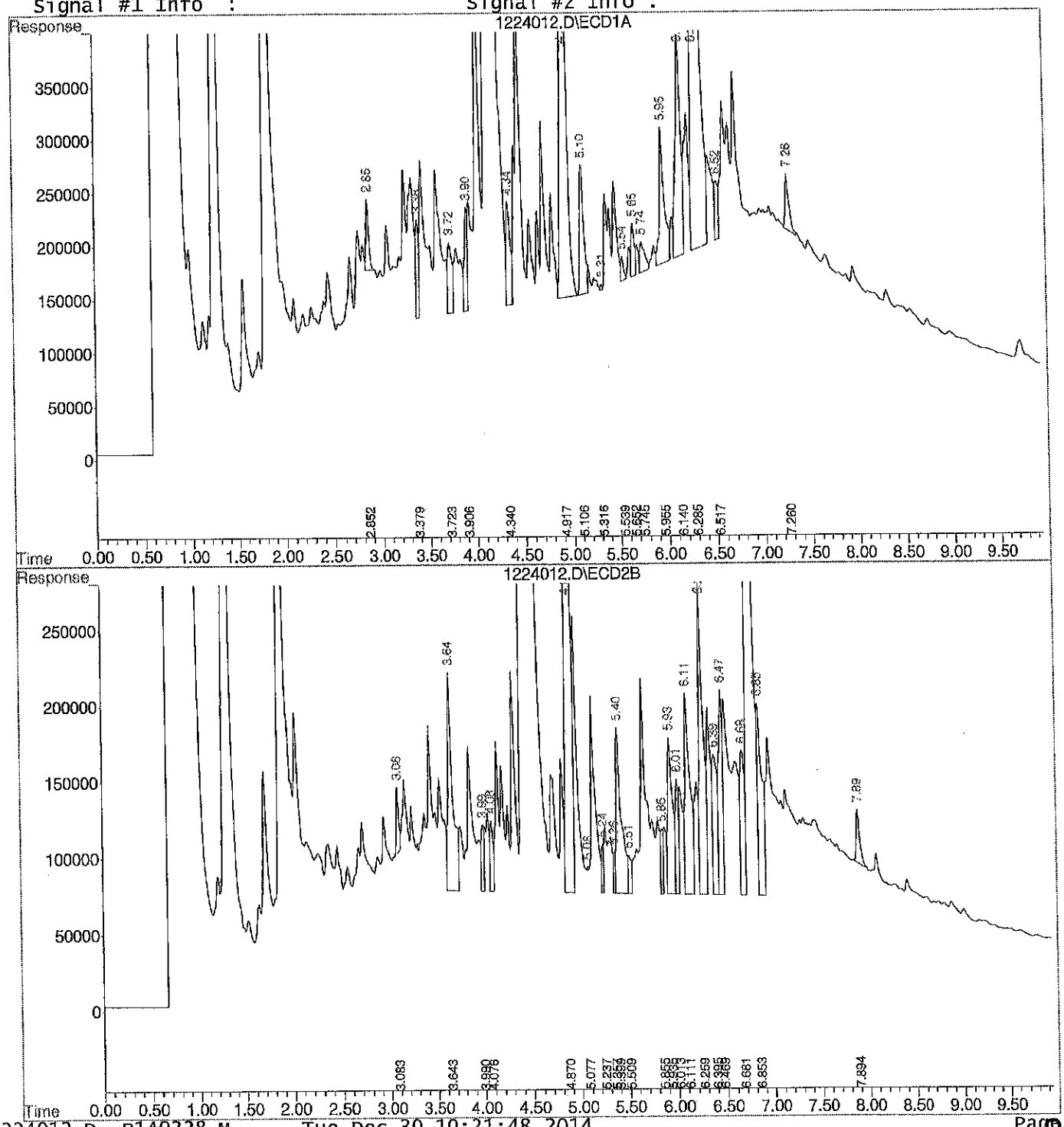
Signal #1 : X:\PEST\GEORGE\DATA\G141224\1224012.D\ECD1A.CH Vial: 12
Signal #2 : X:\PEST\GEORGE\DATA\G141224\1224012.D\ECD2B.CH
Acq On : 24 Dec 2014 11:37 Operator:
Sample : 12-237-03 Inst : George
Misc : Multiplr: 1.00
Sample Amount: 0.00

IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Quant Time: Dec 30 10:21 2014 Quant Results File: P140328.RES

Quant Method : D:\HPCHEM\1\METHODS\P140328.M (Chemstation Integrator)
Title : Pestcides
Last Update : Mon Dec 15 12:04:21 2014
Response via : Multiple Level Calibration
DataAcq Meth : P140328.M

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Quantitation Report (QT Reviewed)

Signal #1 : X:\PEST\GEORGE\DATA\G141224\1224013.D\ECD1A.CH Vial: 13
Signal #2 : X:\PEST\GEORGE\DATA\G141224\1224013.D\ECD2B.CH
Acq On : 24 Dec 2014 11:50 Operator:
Sample : 12-237-04 Inst : George
Misc : Multiplr: 1.00
Sample Amount: 0.00

IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Quant Time: Dec 30 10:23 2014 Quant Results File: P140328.RES

Quant Method : D:\HPCHEM\1\METHODS\P140328.M (Chemstation Integrator)
Title : Pestcides
Last Update : Mon Dec 15 12:04:21 2014
Response via : Initial Calibration
DataAcq Meth : P140328.M

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

KMS 12/30/14

Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
System Monitoring Compounds						
1) S Tetrachloro-m-xy	2.85	3.08	58522	42653	37.599m	45.707m
Spiked Amount 100.000			Recovery	=	37.60%	45.71%
22) S Decachlorobiphen	7.26	7.89	33369	21210	28.722m	25.288m
Spiked Amount 100.000			Recovery	=	28.72%	25.29%
Target Compounds						
2) A alpha-BHC	0.00	0.00	0	0	N.D.	N.D.
3) A gamma-BHC	0.00	3.99	0	57088	N.D.	50.130 #
4) A beta-BHC	0.00	0.00	0	0	N.D.	N.D.
5) A delta-BHC	3.90f	0.00	92235	0	50.652	N.D. #
6) A Heptachlor	0.00	4.39f	0	75345	N.D.	59.340 #
7) A Aldrin	4.34	0.00	214565	0	127.129	N.D. #
8) A Heptachlor epoxi	0.00	0.00	0	0	N.D.	N.D.
9) A gamma-Chlordane	0.00	5.23	0	76329	N.D.	73.960 #
10) A alpha-Chlordane	0.00	0.00	0	0	N.D.	N.D.
11) A 4,4'-DDE	0.00	5.51	0	53480	N.D.	59.368 #
12) A Endosulfan I	5.12	5.40	81157	105319	53.096	105.292 #
13) A Dieldrin	5.31	0.00	4829	0	3.222	N.D. #
14) A Endrin	0.00	0.00	0	0	N.D.	N.D.
15) A 4,4'-DDD	5.54	5.94	20694	71510	17.860	101.012 #
16) A Endosulfan II	5.65	6.01	45744	75618	34.691	88.889 #
17) A 4,4'-DDT	5.77f	6.17	23423	66128	18.445	82.097 #
18) A Endrin aldehyde	5.96	6.28f	14304	94762	13.844	136.370 #
19) A Methoxychlor	6.12	6.68	28611	91887	41.470	194.507 #
20) A Endosulfan sulfa	6.29	6.47	272214	148550	242.336	198.765
21) A Endrin ketone	0.00	6.85f	0	100445	N.D.	106.603 #
23) L8 Toxaphene{1}	5.65	5.94	45744	71510	2885.741	4850.844 #
24) L8 Toxaphene{2}	0.00	0.00	0	0	N.D.	N.D.
25) L8 Toxaphene{3}	0.00	6.17	0	66128	N.D.	1852.654 #
26) L8 Toxaphene{4}	6.12	6.40	28611	86082	969.509	3699.386 #
27) L8 Toxaphene{5}	0.00	0.00	0	0	N.D.	N.D.
Sum Toxaphene			74355	223721	3855.251	10402.883
Average Toxaphene					1927.625	3467.628
28) L9 Tech Chlordane{1	4.27	4.86	12781	236839	121.280	5706.365 #
29) L9 Tech Chlordane{2	4.88f	0.00	101890	0	2827.962	N.D. #
30) L9 Tech Chlordane{3	5.12f	5.40	81157	105319	484.993	1424.829 #
31) L9 Tech Chlordane{4	5.12	5.40	81157	105319	394.193	994.144 #
32) L9 Tech Chlordane{5	5.77f	6.01	23423	75618	454.935	5115.850 #
Sum Tech Chlordane			300409	523096	4283.363	13241.188
Average Tech Chlordane					856.673	3310.297

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

Quantitation Report (QT Reviewed)

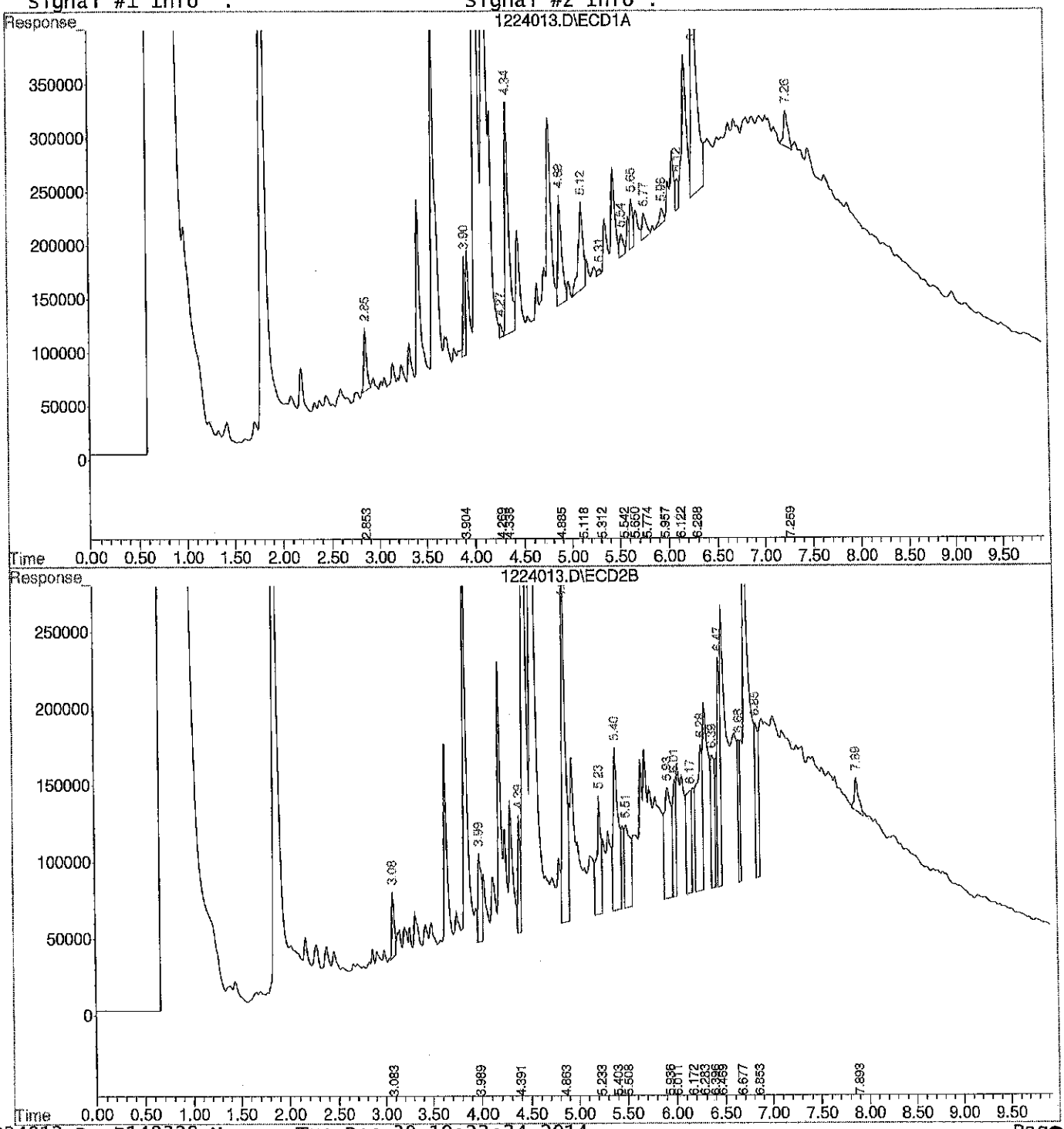
Signal #1 : X:\PEST\GEORGE\DATA\G141224\1224013.D\ECD1A.CH Vial: 13
Signal #2 : X:\PEST\GEORGE\DATA\G141224\1224013.D\ECD2B.CH
Acq On : 24 Dec 2014 11:50 Operator:
Sample : 12-237-04 Inst : George
Misc : Multiplr: 1.00
Sample Amount: 0.00

IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Quant Time: Dec 30 10:23 2014 Quant Results File: P140328.RES

Quant Method : D:\HPCHEM\1\METHODS\P140328.M (Chemstation Integrator)
Title : Pestcides
Last Update : Mon Dec 15 12:04:21 2014
Response via : Multiple Level Calibration
DataAcq Meth : P140328.M

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Quantitation Report (QT Reviewed)

Signal #1 : X:\PEST\GEORGE\DATA\G141224\1224014.D\ECD1A.CH Vial: 14
Signal #2 : X:\PEST\GEORGE\DATA\G141224\1224014.D\ECD2B.CH
Acq On : 24 Dec 2014 12:03 Operator:
Sample : 12-237-05 Inst : George
Misc : Multiplr: 1.00
Sample Amount: 0.00

IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Quant Time: Dec 30 10:24 2014 Quant Results File: P140328.RES

Quant Method : D:\HPCHEM\1\METHODS\P140328.M (Chemstation Integrator)
Title : Pestcides
Last Update : Mon Dec 15 12:04:21 2014
Response via : Initial Calibration
DataAcq Meth : P140328.M

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
System Monitoring Compounds						
1) S Tetrachloro-m-xy	2.85	3.08	66886	46669	42.973m	50.011m
Spiked Amount 100.000			Recovery =		42.97%	50.01%
22) S Decachlorobiphen	7.26	7.89	31288	22347	26.618	26.917m
Spiked Amount 100.000			Recovery =		26.62%	26.92%
Target Compounds						
2) A alpha-BHC	0.00	0.00	0	0	N.D.	N.D.
3) A gamma-BHC	0.00	3.99	0	64830	N.D.	56.927 #
4) A beta-BHC	0.00	0.00	0	0	N.D.	N.D.
5) A delta-BHC	3.90f	0.00	91465	0	50.230	N.D. #
6) A Heptachlor	0.00	4.39f	0	82444	N.D.	64.931 #
7) A Aldrin	4.34	0.00	238569	0	141.351	N.D. #
8) A Heptachlor epoxi	0.00	0.00	0	0	N.D.	N.D.
9) A gamma-Chlordane	0.00	5.23	0	83384	N.D.	80.796 #
10) A alpha-Chlordane	0.00	0.00	0	0	N.D.	N.D.
11) A 4,4'-DDE	0.00	5.51	0	57142	N.D.	63.433 #
12) A Endosulfan I	5.12	5.40	83064	106885	54.344	106.858 #
13) A Dieldrin	5.31	5.61	5564	3082	3.712	3.313m LDL
14) A Endrin	0.00	0.00	0	0	N.D.	N.D.
15) A 4,4'-DDD	5.54	5.94	23105	76418	19.941	107.944 #
16) A Endosulfan II	5.65	6.01	46840	79341	35.522	93.265 #
17) A 4,4'-DDT	5.77f	6.18	23988	71539	18.890	88.814 #
18) A Endrin aldehyde	5.96	6.28f	19267	99197	18.648	142.753 #
19) A Methoxychlor	6.12	6.68	29268	98884	42.423	209.318 #
20) A Endosulfan sulfa	6.29	6.47	243036	154040	216.360	206.111
21) A Endrin ketone	6.48f	6.85f	32964	105883	25.963	112.375 #
23) L8 Toxaphene{1}	5.65	5.94	46840	76418	2954.914	5183.734 #
24) L8 Toxaphene{2}	0.00	0.00	0	0	N.D.	N.D.
25) L8 Toxaphene{3}	0.00	6.18	0	71539	N.D.	2004.240 #
26) L8 Toxaphene{4}	6.12	6.39	29268	91825	991.787	3946.182 #
27) L8 Toxaphene{5}	0.00	0.00	0	0	N.D.	N.D.
Sum Toxaphene			76108	239781	3946.701	11134.156
Average Toxaphene					1973.350	3711.385
28) L9 Tech Chlordane{1	4.27	4.86	15587	256193	147.906	6172.682 #
29) L9 Tech Chlordane{2	4.88f	0.00	106026	0	2942.751	N.D. #
30) L9 Tech Chlordane{3	5.12f	5.40	83064	106885	496.391	1446.013 #
31) L9 Tech Chlordane{4	5.12	5.40	83064	106885	403.457	1008.925 #
32) L9 Tech Chlordane{5	5.77f	6.01	23988	79341	465.901	5367.714 #
Sum Tech Chlordane			311730	549305	4456.407	13995.333
Average Tech Chlordane					891.281	3498.833

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

Quantitation Report (QT Reviewed)

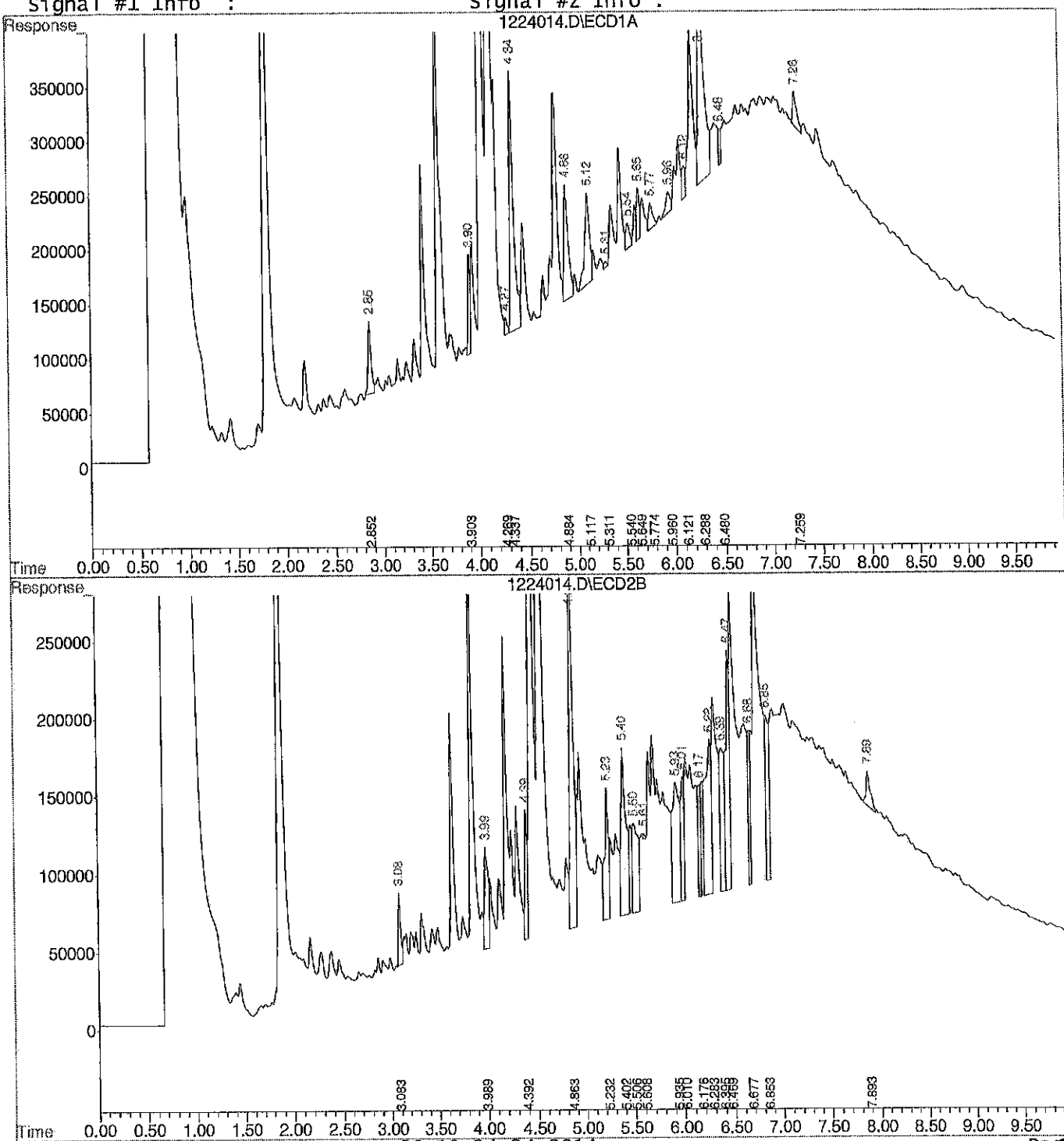
Signal #1 : X:\PEST\GEORGE\DATA\G141224\1224014.D\ECD1A.CH Vial: 14
Signal #2 : X:\PEST\GEORGE\DATA\G141224\1224014.D\ECD2B.CH
Acq On : 24 Dec 2014 12:03 Operator:
Sample : 12-237-05 Inst : George
Misc : Multiplr: 1.00
Sample Amount: 0.00

IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Quant Time: Dec 30 10:24 2014 Quant Results File: P140328.RES

Quant Method : D:\HPCHEM\1\METHODS\P140328.M (Chemstation Integrator)
Title : Pestcides
Last Update : Mon Dec 15 12:04:21 2014
Response via : Multiple Level Calibration
DataAcq Meth : P140328.M

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Quantitation Report (Not Reviewed)

Signal #1 : D:\HPCHEM\1\DATA\G141224\1224005.D\ECD1A.CH Vial: 5
Signal #2 : D:\HPCHEM\1\DATA\G141224\1224005.D\ECD2B.CH
Acq On : 24 Dec 2014 10:04 Operator:
Sample : MB1223W2 Inst : George
Misc : Multiplr: 1.00
Sample Amount: 0.00

IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Quant Time: Dec 24 10:14 2014 Quant Results File: P140328.RES

Quant Method : D:\HPCHEM\1\METHODS\P140328.M (Chemstation Integrator)
Title : Pestcides
Last Update : Mon Dec 15 12:04:21 2014
Response via : Initial Calibration
DataAcq Meth : P140328.M

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
1) S	Tetrachloro-m-xy	2.86	3.08	92335	70791	59.323	75.860 #
	Spiked Amount 100.000			Recovery	=	59.32%	75.86%
22) S	Decachlorobiphen	7.27	7.90	93940	62781	89.952	84.855
	Spiked Amount 100.000			Recovery	=	89.95%	84.86%
	Target Compounds						
2) A	alpha-BHC	0.00	3.69f	0	598	N.D.	0.493 #
3) A	gamma-BHC	0.00	3.97f	0	1053	N.D.	0.925 #
4) A	beta-BHC	3.73	0.00	1216	0	1.223	N.D. #
5) A	delta-BHC	3.89	4.33	1705	406	0.936	0.365 #
6) A	Heptachlor	4.09	4.36	959	756	0.492	0.595
7) A	Aldrin	0.00	4.63	0	123	N.D.	0.119 #
8) A	Heptachlor epoxi	0.00	5.08f	0	4630	N.D.	4.623 #
9) A	gamma-Chlordane	0.00	5.24	0	14503	N.D.	14.053 #
10) A	alpha-Chlordane	0.00	0.00	0	0	N.D.	N.D.
11) A	4,4'-DDE	0.00	0.00	0	0	N.D.	N.D.
12) A	Endosulfan I	0.00	0.00	0	0	N.D.	N.D.
13) A	Dieldrin	0.00	5.62	0	288	N.D.	0.310 #
14) A	Endrin	0.00	5.86	0	134	N.D.	0.164 #
15) A	4,4'-DDD	0.00	0.00	0	0	N.D.	N.D.
16) A	Endosulfan II	0.00	0.00	0	0	N.D.	N.D.
17) A	4,4'-DDT	0.00	6.16	0	118	N.D.	0.147 #
18) A	Endrin aldehyde	5.94f	6.28	5242	4250	5.073	6.116
19) A	Methoxychlor	0.00	0.00	0	0	N.D.	N.D.
20) A	Endosulfan sulfa	0.00	0.00	0	0	N.D.	N.D.
21) A	Endrin ketone	0.00	6.87	0	337	N.D.	0.358 #
23) L8	Toxaphene{1}	0.00	0.00	0	0	N.D.	N.D.
24) L8	Toxaphene{2}	0.00	0.00	0	0	N.D.	N.D.
25) L8	Toxaphene{3}	0.00	6.16	0	118	N.D.	3.315 #
26) L8	Toxaphene{4}	0.00	6.41f	0	666	N.D.	28.608 #
27) L8	Toxaphene{5}	0.00	6.79f	0	553	N.D.	24.719 #
	Sum Toxaphene			0	1337	N.D.	56.641
	Average Toxaphene					0.000	18.880
28) L9	Tech Chlordane{1	0.00	0.00	0	0	N.D.	N.D.
29) L9	Tech Chlordane{2	4.89f	0.00	2411	0	66.928	N.D. #
30) L9	Tech Chlordane{3	0.00	0.00	0	0	N.D.	N.D.
31) L9	Tech Chlordane{4	0.00	0.00	0	0	N.D.	N.D.
32) L9	Tech Chlordane{5	0.00	5.97f	0	94	N.D.	6.387 #
	Sum Tech Chlordane			2411	94	66.928	6.387
	Average Tech Chlordane					66.928	6.387

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

Quantitation Report (Not Reviewed)

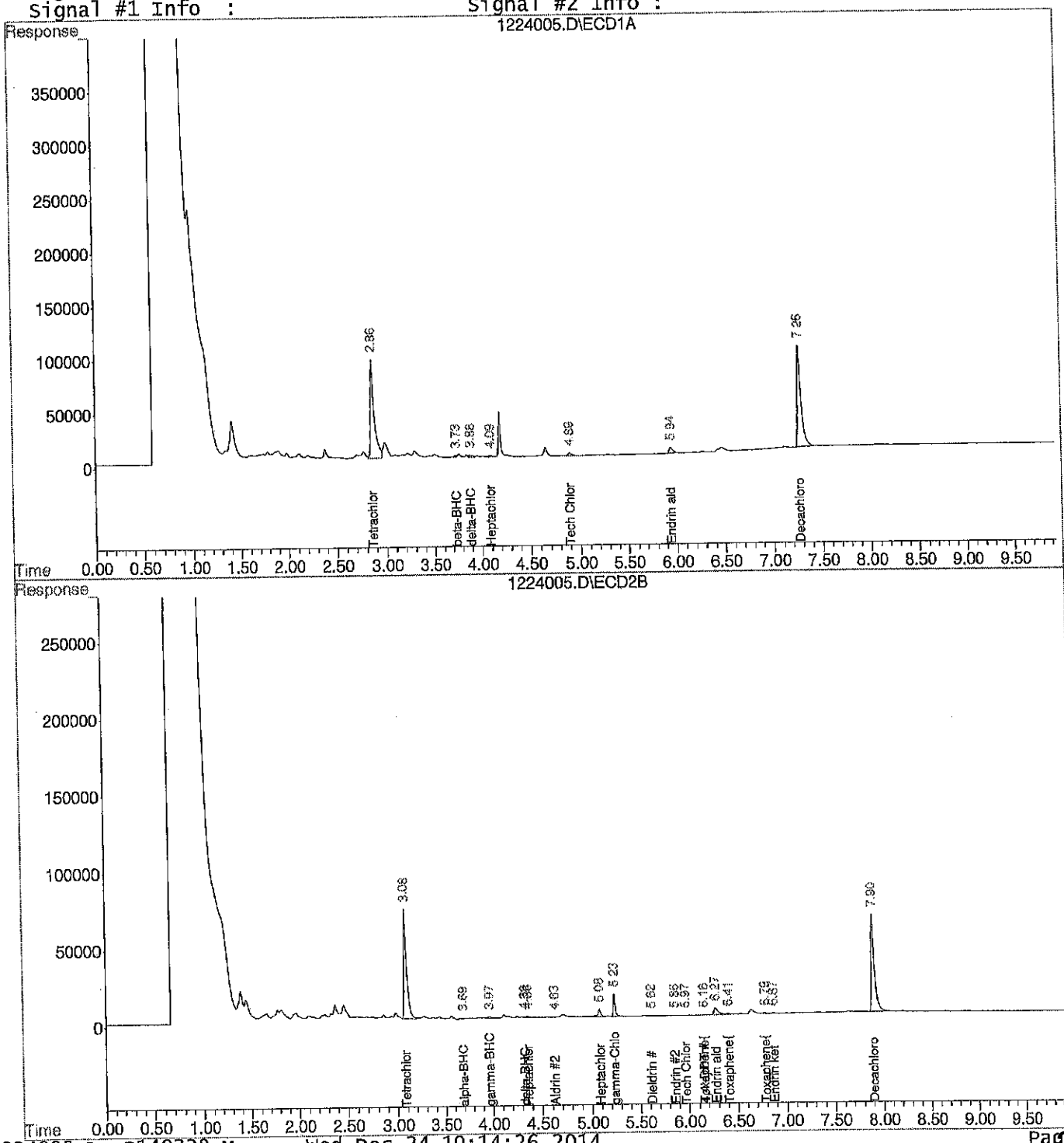
Signal #1 : D:\HPCHEM\1\DATA\G141224\1224005.D\ECD1A.CH Vial: 5
Signal #2 : D:\HPCHEM\1\DATA\G141224\1224005.D\ECD2B.CH
Acq On : 24 Dec 2014 10:04 Operator:
Sample : MB1223W2 Inst : George
Misc : Multiplr: 1.00
Sample Amount: 0.00

IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Quant Time: Dec 24 10:14 2014 Quant Results File: P140328.RES

Quant Method : D:\HPCHEM\1\METHODS\P140328.M (Chemstation Integrator)
Title : Pestcides
Last Update : Mon Dec 15 12:04:21 2014
Response via : Multiple Level Calibration
DataAcq Meth : P140328.M

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Quantitation Report (Not Reviewed)

Signal #1 : D:\HPCHEM\1\DATA\G141224\1224006.D\ECD1A.CH Vial: 6
Signal #2 : D:\HPCHEM\1\DATA\G141224\1224006.D\ECD2B.CH
Acq On : 24 Dec 2014 10:17 Operator:
Sample : SB1223W2 Inst : George
Misc : Multiplr: 1.00
Sample Amount: 0.00

IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Quant Time: Dec 24 10:27 2014 Quant Results File: P140328.RES

Quant Method : D:\HPCHEM\1\METHODS\P140328.M (Chemstation Integrator)
Title : Pestcides
Last Update : Mon Dec 15 12:04:21 2014
Response via : Initial Calibration
DataAcq Meth : P140328.M

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
1)	S Tetrachloro-m-xy	2.86	3.09	100651	76466	64.666	81.941 #
	Spiked Amount 100.000			Recovery	=	64.67%	81.94%
22)	S Decachlorobiphen	7.26	7.90	97098	64142	93.144	86.805
	Spiked Amount 100.000			Recovery	=	93.14%	86.81%
	Target Compounds						
2)	A alpha-BHC	0.00	3.70f	0	593	N.D.	0.489 #
3)	A gamma-BHC	3.66	4.00	68369	51111	35.485	44.881 #
4)	A beta-BHC	3.76f	0.00	2454	0	2.468	N.D. #
5)	A delta-BHC	0.00	4.33	0	771	N.D.	0.692 #
6)	A Heptachlor	4.08	4.37	72506	47286	37.223	37.241
7)	A Aldrin	4.33	4.64	64509	47055	38.221	45.540
8)	A Heptachlor epoxi	0.00	5.08f	0	5264	N.D.	5.257 #
9)	A gamma-Chlordane	0.00	5.24	0	9882	N.D.	9.575 #
10)	A alpha-Chlordane	0.00	0.00	0	0	N.D.	N.D.
11)	A 4,4'-DDE	5.09	5.49	1738	977	1.200	1.084
12)	A Endosulfan I	0.00	0.00	0	0	N.D.	N.D.
13)	A Dieldrin	5.31	5.62	140474	107503	93.725	115.545
14)	A Endrin	5.48	5.85	129184	95552	97.309	117.294
15)	A 4,4'-DDD	0.00	0.00	0	0	N.D.	N.D.
16)	A Endosulfan II	0.00	6.01	0	208	N.D.	0.245 #
17)	A 4,4'-DDT	5.75	6.17	117975	82007	92.900	101.810
18)	A Endrin aldehyde	0.00	6.28	0	4827	N.D.	6.946 #
19)	A Methoxychlor	0.00	0.00	0	0	N.D.	N.D.
20)	A Endosulfan sulfa	0.00	6.47	0	212	N.D.	0.283 #
21)	A Endrin ketone	6.50	6.88	5115	2115	3.221	2.244 #
23)	L8 Toxaphene{1}	0.00	0.00	0	0	N.D.	N.D.
24)	L8 Toxaphene{2}	0.00	6.09f	0	98	N.D.	3.923 #
25)	L8 Toxaphene{3}	0.00	6.17	0	82007	N.D.	2297.503 #
26)	L8 Toxaphene{4}	0.00	6.41f	0	565	N.D.	24.260 #
27)	L8 Toxaphene{5}	0.00	6.79f	0	538	N.D.	24.072 #
	Sum Toxaphene			0	83208	N.D.	2349.758
	Average Toxaphene					0.000	587.439
28)	L9 Tech Chlordane{1	4.26	4.88f	1462	421	13.872	10.146 #
29)	L9 Tech Chlordane{2	4.89f	0.00	1796	0	49.849	N.D. #
30)	L9 Tech Chlordane{3	5.09	0.00	1738	0	10.385	N.D. #
31)	L9 Tech Chlordane{4	5.09f	0.00	1738	0	8.441	N.D. #
32)	L9 Tech Chlordane{5	0.00	6.01	0	208	N.D.	14.099 #
	Sum Tech Chlordane			6734	630	82.548	24.245
	Average Tech Chlordane					20.637	12.123

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

Quantitation Report (Not Reviewed)

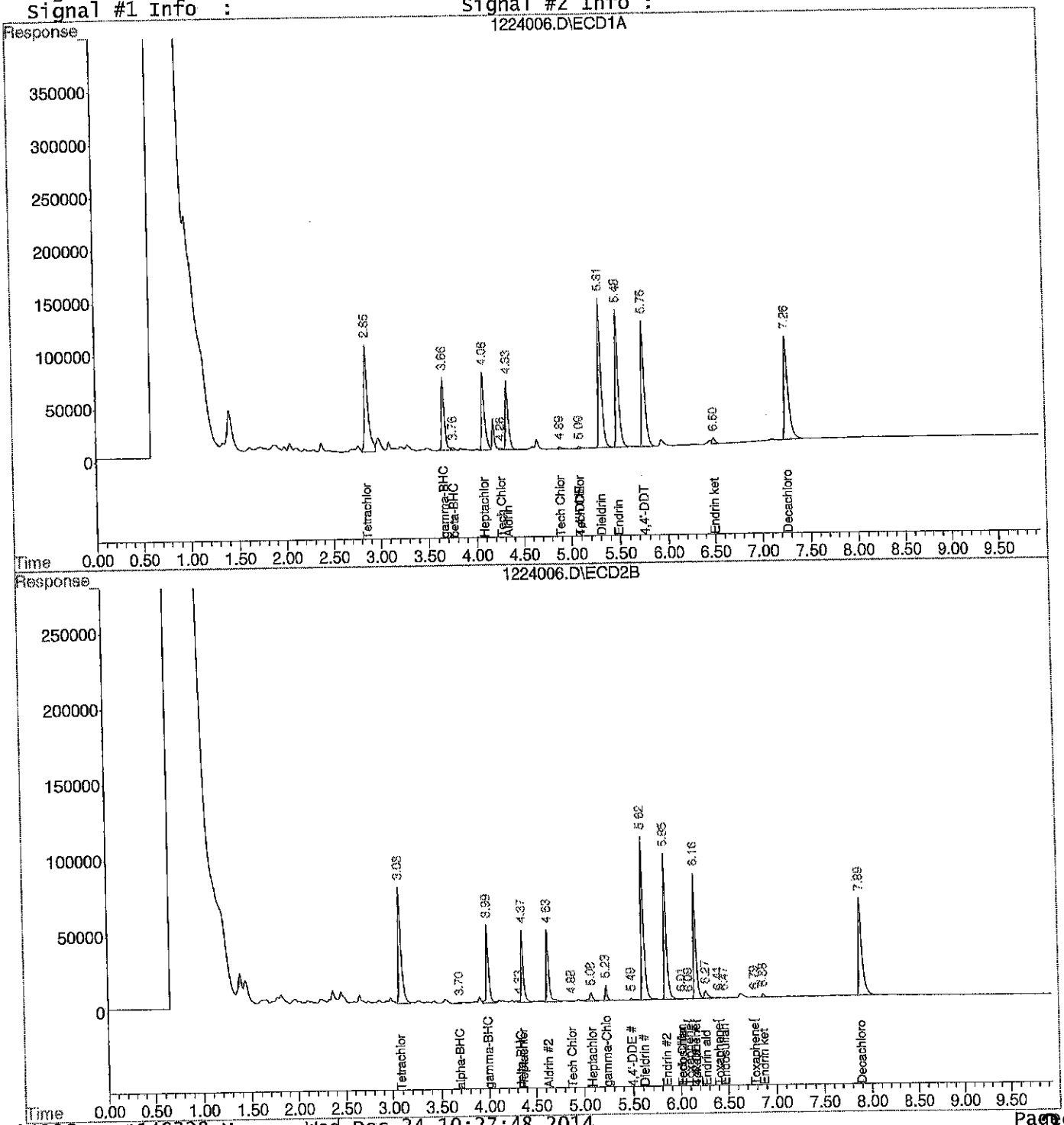
Signal #1 : D:\HPCHEM\1\DATA\G141224\1224006.D\ECD1A.CH Vial: 6
Signal #2 : D:\HPCHEM\1\DATA\G141224\1224006.D\ECD2B.CH
Acq On : 24 Dec 2014 10:17 Operator:
Sample : SB1223W2 Inst : George
Misc : Multiplr: 1.00
Sample Amount: 0.00

IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Quant Time: Dec 24 10:27 2014 Quant Results File: P140328.RES

Quant Method : D:\HPCHEM\1\METHODS\P140328.M (Chemstation Integrator)
Title : Pestcides
Last Update : Mon Dec 15 12:04:21 2014
Response via : Multiple Level Calibration
DataAcq Meth : P140328.M

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Quantitation Report (Not Reviewed)

Signal #1 : D:\HPCHEM\1\DATA\G141224\1224007.D\ECD1A.CH Vial: 7
Signal #2 : D:\HPCHEM\1\DATA\G141224\1224007.D\ECD2B.CH
Acq On : 24 Dec 2014 10:31 Operator:
Sample : SB1223W2 DUP Inst : George
Misc : Multiplr: 1.00
Sample Amount: 0.00

IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Quant Time: Dec 24 10:41 2014 Quant Results File: P140328.RES

Quant Method : D:\HPCHEM\1\METHODS\P140328.M (Chemstation Integrator)
Title : Pestcides
Last Update : Mon Dec 15 12:04:21 2014
Response via : Initial Calibration
DataAcq Meth : P140328.M

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
1)	S Tetrachloro-m-xy	2.86	3.09	92646	69724	59.523	74.717 #
	Spiked Amount 100.000			Recovery =		59.52%	74.72%
22)	S Decachlorobiphen	7.26	7.90	93307	61873	89.311	83.554
	Spiked Amount 100.000			Recovery =		89.31%	83.55%
	Target Compounds						
2)	A alpha-BHC	0.00	0.00	0	0	N.D.	N.D.
3)	A gamma-BHC	3.66	4.00	63621	46872	33.021	41.159
4)	A beta-BHC	3.76f	0.00	2156	0	2.168	N.D. #
5)	A delta-BHC	3.88	0.00	926	0	0.508	N.D. #
6)	A Heptachlor	4.08	4.37	67461	42707	34.633	33.635
7)	A Aldrin	4.33	4.64	59126	42967	35.032	41.585
8)	A Heptachlor epoxi	0.00	5.08f	0	5016	N.D.	5.009 #
9)	A gamma-Chlordane	0.00	5.24	0	14413	N.D.	13.965 #
10)	A alpha-Chlordane	0.00	0.00	0	0	N.D.	N.D.
11)	A 4,4'-DDE	5.09	5.49	1556	858	1.074	0.953
12)	A Endosulfan I	0.00	0.00	0	0	N.D.	N.D.
13)	A Dieldrin	5.31	5.62	131733	100174	87.893	107.668
14)	A Endrin	5.48	5.85	121942	89803	91.854	110.237
15)	A 4,4'-DDD	0.00	0.00	0	0	N.D.	N.D.
16)	A Endosulfan II	0.00	6.04f	0	124	N.D.	0.146 #
17)	A 4,4'-DDT	5.75	6.17	111547	78199	87.838	97.082
18)	A Endrin aldehyde	0.00	6.27	0	5627	N.D.	8.098 #
19)	A Methoxychlor	0.00	0.00	0	0	N.D.	N.D.
20)	A Endosulfan sulfa	0.00	6.46	0	169	N.D.	0.227 #
21)	A Endrin ketone	6.50	6.88	4538	1729	2.751	1.834 #
23)	L8 Toxaphene{1}	0.00	0.00	0	0	N.D.	N.D.
24)	L8 Toxaphene{2}	0.00	6.09f	0	99	N.D.	3.967 #
25)	L8 Toxaphene{3}	0.00	6.17	0	78199	N.D.	2190.818 #
26)	L8 Toxaphene{4}	0.00	6.41f	0	511	N.D.	21.975 #
27)	L8 Toxaphene{5}	0.00	6.79f	0	618	N.D.	27.612 #
	Sum Toxaphene			0	79427	N.D.	2244.372
	Average Toxaphene					0.000	561.093
28)	L9 Tech Chlordane{1	4.26	4.88f	1680	396	15.938	9.552 #
29)	L9 Tech Chlordane{2	4.89f	0.00	1711	0	47.489	N.D. #
30)	L9 Tech Chlordane{3	5.09	0.00	1556	0	9.297	N.D. #
31)	L9 Tech Chlordane{4	5.09f	0.00	1556	0	7.556	N.D. #
32)	L9 Tech Chlordane{5	0.00	6.04f	0	124	N.D.	8.404 #
	Sum Tech Chlordane			6502	521	80.281	17.956
	Average Tech Chlordane					20.070	8.978

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

Quantitation Report (Not Reviewed)

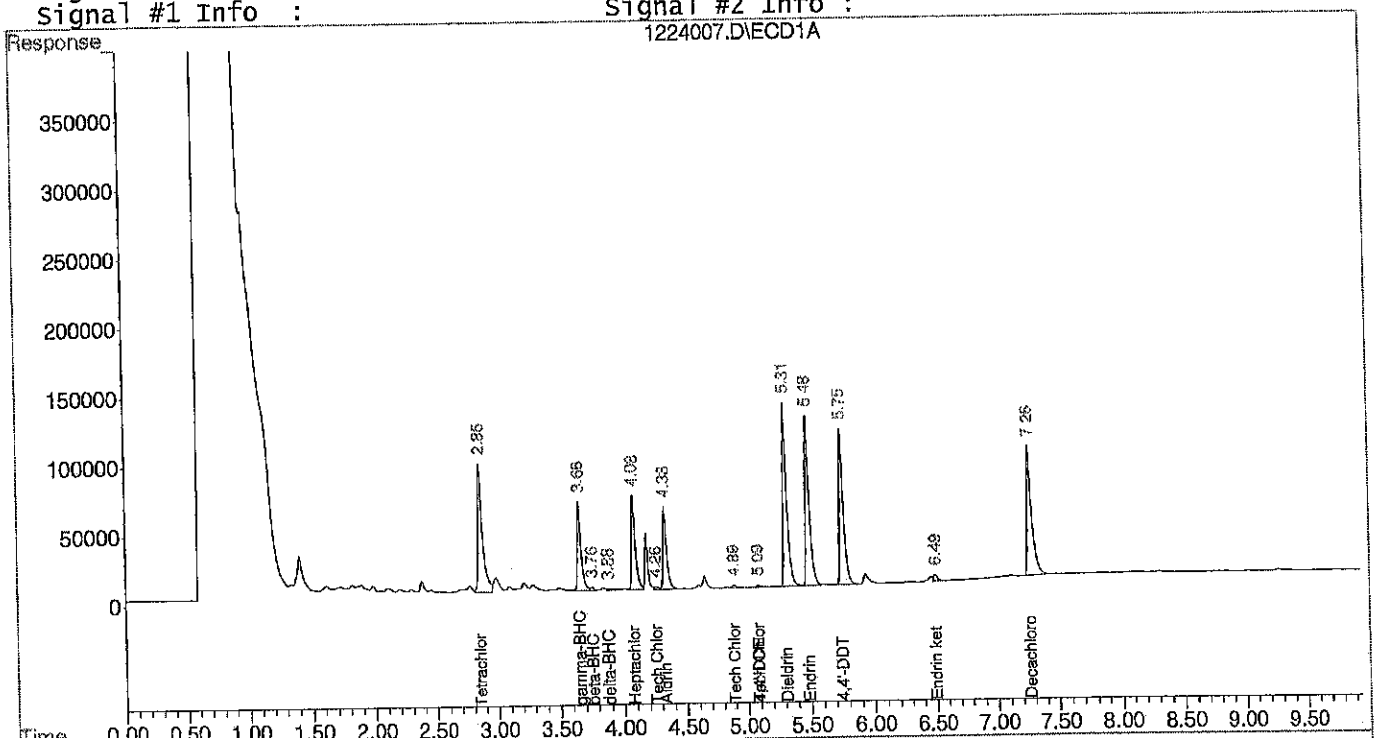
Signal #1 : D:\HPCHEM\1\DATA\G141224\1224007.D\ECD1A.CH Vial: 7
Signal #2 : D:\HPCHEM\1\DATA\G141224\1224007.D\ECD2B.CH
Acq On : 24 Dec 2014 10:31 Operator:
Sample : SB1223W2 DUP Inst : George
Misc : Multiplr: 1.00
Sample Amount: 0.00

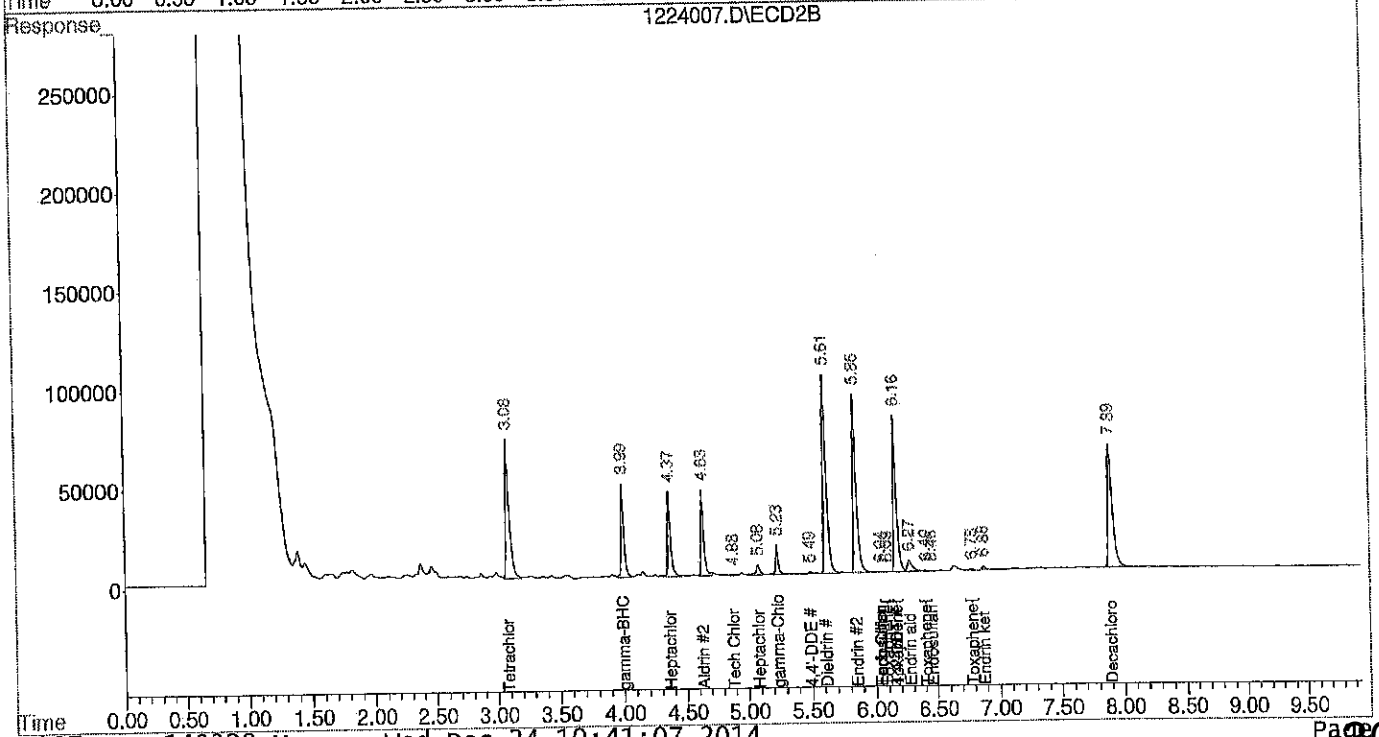
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Quant Time: Dec 24 10:41 2014 Quant Results File: P140328.RES

Quant Method : D:\HPCHEM\1\METHODS\P140328.M (Chemstation Integrator)
Title : Pestcides
Last Update : Mon Dec 15 12:04:21 2014
Response via : Multiple Level Calibration
DataAcq Meth : P140328.M

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Lab ID: PEST EVAL 1224-1 (PS4-01-09)
Date Analyzed: 12-24-14
File ID:\G141224\1224003.D
Instrument: George

EPA Method 8081
DDT/ENDRIN Breakdown

Lab ID: PEST EVAL 1224-1 (PS4-01-09)

Analyte	Column 1 % Breakdown	Column 2 % Breakdown
Endrin	6.5%	7.4%
4,4'-DDT	0.98%	4.7%

Evaluate Continuing Calibration Report

Signal #1 : X:\PEST\GEORGE\DATA\G141224\1224004.D\ECD1A.CH Vial: 4
Signal #2 : X:\PEST\GEORGE\DATA\G141224\1224004.D\ECD2B.CH
Acq On : 24 Dec 2014 9:49 Operator:
Sample : PEST MID LEVEL 1224-1 (PS4-04-03) Inst : George
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Method : D:\HPCHEM\1\METHODS\P140328.M (Chemstation Integrator)
Title : Pestcides
Last Update : Mon Dec 29 13:03:36 2014
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.01min
Max. RRF Dev : 16% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(Min)
1	S	Tetrachloro-m-xylene	100.000	81.650	18.3#	91	0.07#
6	A	Heptachlor	100.000	84.524	15.5	95	0.07#
7	A	Aldrin	100.000	95.617	4.4	99	0.07#
8	A	Heptachlor epoxide	100.000	87.197	12.8	97	0.07#
13	A	Dieldrin	100.000	95.044	5.0	100	0.08#
22	S	Decachlorobiphenyl	100.000	106.855	-6.9	106	0.09#
Signal #2							
1	S	Tetrachloro-m-xylene	100.000	108.413	-8.4	110	0.07#
6	A	Heptachlor	100.000	98.388	1.6	95	0.07#
7	A	Aldrin	100.000	116.980	-17.0#	110	0.08#
8	A	Heptachlor epoxide	100.000	103.800	-3.8	106	0.08#
13	A	Dieldrin	100.000	116.097	-16.1#	111	0.08#
22	S	Decachlorobiphenyl	100.000	100.469	-0.5	99	0.11#

(#) = Out of Range SPCC's out = 0 CCC's out = 0
1120004.D P140328.M Tue Dec 30 10:54:55 2014

Evaluate Continuing Calibration Report

Signal #1 : X:\PEST\GEORGE\DATA\G141224\1224009.D\ECD1A.CH Vial: 9
Signal #2 : X:\PEST\GEORGE\DATA\G141224\1224009.D\ECD2B.CH
Acq On : 24 Dec 2014 10:57 Operator:
Sample : PEST MID LEVEL 1224-2 (PS4-04-03) Inst : George
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Method : D:\HPCHEM\1\METHODS\P140328.M (Chemstation Integrator)
Title : Pestcides
Last Update : Mon Dec 29 13:03:36 2014
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.01min
Max. RRF Dev : 16% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(Min)
1	S	Tetrachloro-m-xylene	100.000	82.537	17.5#	92	0.07#
6	A	Heptachlor	100.000	86.651	13.3	97	0.07#
7	A	Aldrin	100.000	96.417	3.6	100	0.07#
8	A	Heptachlor epoxide	100.000	88.160	11.8	98	0.07#
13	A	Dieldrin	100.000	95.775	4.2	101	0.08#
22	S	Decachlorobiphenyl	100.000	108.276	-8.3	108	0.08#
Signal #2							
1	S	Tetrachloro-m-xylene	100.000	107.404	-7.4	109	0.07#
6	A	Heptachlor	100.000	104.399	-4.4	101	0.07#
7	A	Aldrin	100.000	117.185	-17.2#	111	0.08#
8	A	Heptachlor epoxide	100.000	104.811	-4.8	107	0.08#
13	A	Dieldrin	100.000	116.786	-16.8#	112	0.08#
22	S	Decachlorobiphenyl	100.000	101.225	-1.2	100	0.11#

(#) = Out of Range SPCC's out = 0 CCC's out = 0
1120004.D P140328.M Tue Dec 30 10:56:54 2014

Evaluate Continuing Calibration Report

Signal #1 : X:\PEST\GEORGE\DATA\G141224\1224016.D\ECD1A.CH Vial: 16
Signal #2 : X:\PEST\GEORGE\DATA\G141224\1224016.D\ECD2B.CH
Acq On : 24 Dec 2014 12:30 Operator:
Sample : PEST MID LEVEL 1224-3 (PS4-04-03) Inst : George
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Method : D:\HPCHEM\1\METHODS\P140328.M (Chemstation Integrator)
Title : Pestcides
Last Update : Mon Dec 29 13:03:36 2014
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.01min
Max. RRF Dev : 16% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(Min)
1	S	Tetrachloro-m-xylene	100.000	83.105	16.9#	92	0.07#
6	A	Heptachlor	100.000	84.361	15.6	95	0.07#
7	A	Aldrin	100.000	93.572	6.4	97	0.07#
8	A	Heptachlor epoxide	100.000	85.235	14.8	95	0.07#
13	A	Dieldrin	100.000	92.093	7.9	97	0.08#
22	S	Decachlorobiphenyl	100.000	103.063	-3.1	103	0.08#
Signal #2							
1	S	Tetrachloro-m-xylene	100.000	103.805	-3.8	106	0.07#
6	A	Heptachlor	100.000	102.722	-2.7	100	0.07#
7	A	Aldrin	100.000	111.791	-11.8	105	0.08#
8	A	Heptachlor epoxide	100.000	98.678	1.3	101	0.08#
13	A	Dieldrin	100.000	111.345	-11.3	107	0.08#
22	S	Decachlorobiphenyl	100.000	95.681	4.3	95	0.11#

(#) = Out of Range SPCC's out = 0 CCC's out = 0
1120004.D P140328.M Tue Dec 30 10:58:28 2014

Quantitation Report (Not Reviewed)

Signal #1 : D:\HPCHEM\1\DATA\G141224\1224003.D\ECD1A.CH Vial: 3
Signal #2 : D:\HPCHEM\1\DATA\G141224\1224003.D\ECD2B.CH
Acq On : 24 Dec 2014 9:36 Operator:
Sample : PEST EVAL 1224-1 (PS4-01-09) Inst : George
Misc : Multiplr: 1.00
Sample Amount: 0.00

IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Quant Time: Dec 24 9:46 2014 Quant Results File: P140328.RES

Quant Method : D:\HPCHEM\1\METHODS\P140328.M (Chemstation Integrator)
Title : Pestcides
Last Update : Mon Dec 15 12:04:21 2014
Response via : Initial Calibration
DataAcq Meth : P140328.M

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

% Breakdown

	1	2
DDT	0.98%	4.7%
Endrin	6.5%	7.4%

Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
System Monitoring Compounds						
1) S Tetrachloro-m-xy	0.00	0.00	0	0	N.D.	N.D.
Spiked Amount 100.000			Recovery	=	0.00%	0.00%
22) S Decachlorobiphen	0.00	0.00	0	0	N.D.	N.D.
Spiked Amount 100.000			Recovery	=	0.00%	0.00%
Target Compounds						
2) A alpha-BHC	0.00	0.00	0	0	N.D.	N.D.
3) A gamma-BHC	0.00	0.00	0	0	N.D.	N.D.
4) A beta-BHC	0.00	0.00	0	0	N.D.	N.D.
5) A delta-BHC	0.00	0.00	0	0	N.D.	N.D.
6) A Heptachlor	0.00	0.00	0	0	N.D.	N.D.
7) A Aldrin	0.00	0.00	0	0	N.D.	N.D.
8) A Heptachlor epoxi	0.00	0.00	0	0	N.D.	N.D.
9) A gamma-Chlordane	0.00	5.24	0	2285	N.D.	2.214 #
10) A alpha-Chlordane	0.00	0.00	0	0	N.D.	N.D.
11) A 4,4'-DDE	5.09	5.50	1125	732	0.776	0.812
12) A Endosulfan I	0.00	5.40	0	52	N.D.	0.052 #
13) A Dieldrin	0.00	0.00	0	0	N.D.	N.D.
14) A Endrin	5.48	5.85	128638	91956	96.898	112.879
15) A 4,4'-DDD	0.00	5.94	0	2870	N.D.	4.055 #
16) A Endosulfan II	0.00	6.04f	0	238	N.D.	0.280 #
17) A 4,4'-DDT	5.75	6.17	113222	72412	89.157	89.898
18) A Endrin aldehyde	5.97	6.27	875	795	0.847	1.144 #
19) A Methoxychlor	0.00	0.00	0	0	N.D.	N.D.
20) A Endosulfan sulfa	0.00	0.00	0	0	N.D.	N.D.
21) A Endrin ketone	6.50	6.88	8090	6508	5.651	6.907
23) L8 Toxaphene{1}	0.00	5.94	0	2870	N.D.	194.714 #
24) L8 Toxaphene{2}	0.00	0.00	0	0	N.D.	N.D.
25) L8 Toxaphene{3}	0.00	6.17	0	72412	N.D.	2028.691 #
26) L8 Toxaphene{4}	0.00	0.00	0	0	N.D.	N.D.
27) L8 Toxaphene{5}	0.00	0.00	0	0	N.D.	N.D.
Sum Toxaphene			0	75282	N.D.	2223.405
Average Toxaphene					0.000	1111.702
28) L9 Tech Chlordane{1	0.00	0.00	0	0	N.D.	N.D.
29) L9 Tech Chlordane{2	4.89f	0.00	267	0	7.418	N.D. #
30) L9 Tech Chlordane{3	5.09	5.40	1125	52	6.720	0.704 #
31) L9 Tech Chlordane{4	5.09f	5.40	1125	52	5.462	0.492 #
32) L9 Tech Chlordane{5	0.00	6.04f	0	238	N.D.	16.124 #
Sum Tech Chlordane			2516	342	19.600	17.320
Average Tech Chlordane					6.533	5.773

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

Quantitation Report (Not Reviewed)

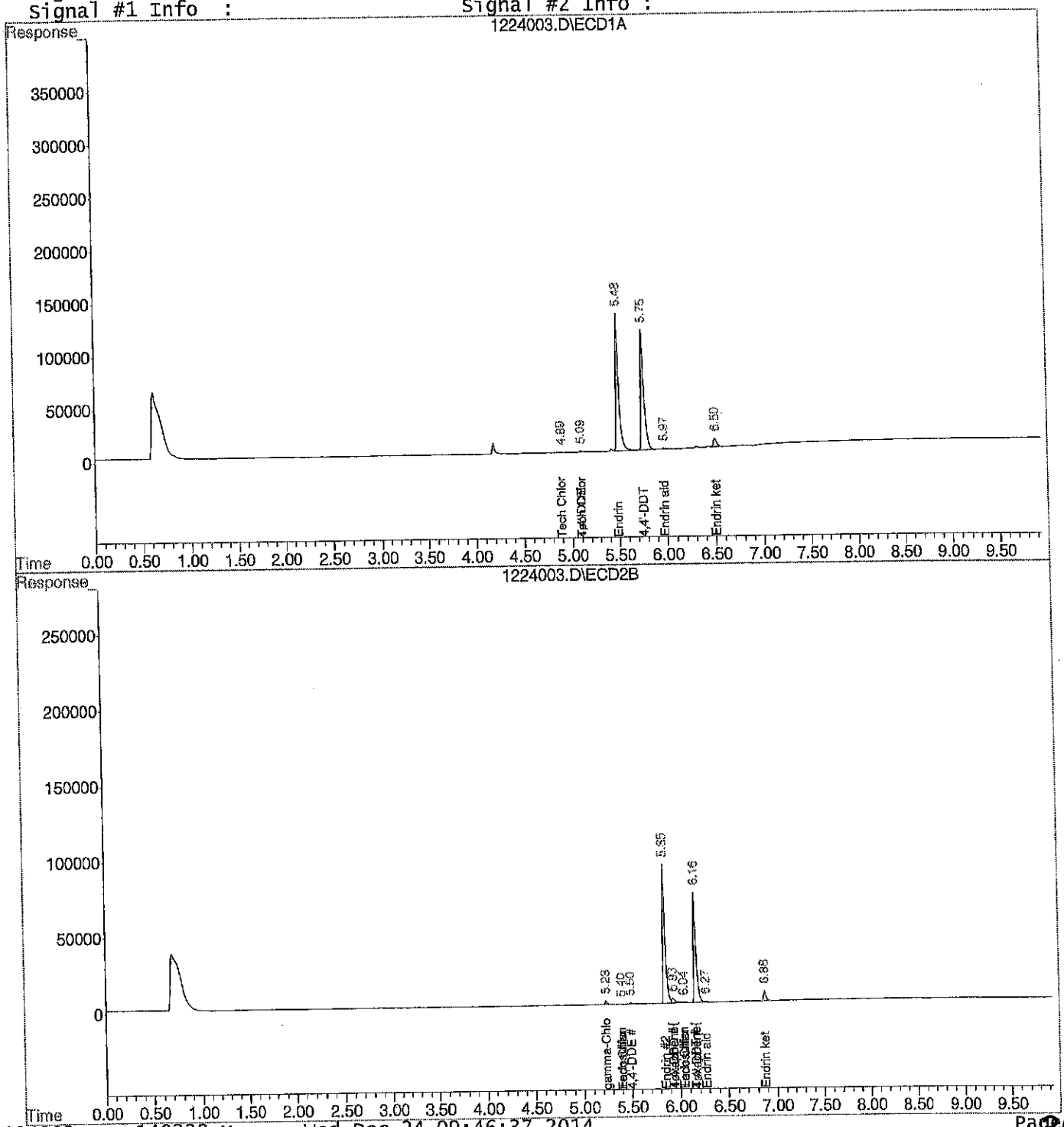
Signal #1 : D:\HPCHEM\1\DATA\G141224\1224003.D\ECD1A.CH Vial: 3
Signal #2 : D:\HPCHEM\1\DATA\G141224\1224003.D\ECD2B.CH
Acq On : 24 Dec 2014 9:36 Operator:
Sample : PEST EVAL 1224-1 (PS4-01-09) Inst : George
Misc : Multiplr: 1.00
Sample Amount: 0.00

IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Quant Time: Dec 24 9:46 2014 Quant Results File: P140328.RES

Quant Method : D:\HPCHEM\1\METHODS\P140328.M (Chemstation Integrator)
Title : Pestcides
Last Update : Mon Dec 15 12:04:21 2014
Response via : Multiple Level Calibration
DataAcq Meth : P140328.M

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Quantitation Report (Not Reviewed)

Signal #1 : D:\HPCHEM\1\DATA\G141224\1224004.D\ECD1A.CH Vial: 4
Signal #2 : D:\HPCHEM\1\DATA\G141224\1224004.D\ECD2B.CH
Acq On : 24 Dec 2014 9:49 Operator:
Sample : PEST MID LEVEL 1224-1 (PS4-04-03) Inst : George
Misc : Multiplr: 1.00
Sample Amount: 0.00

IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Quant Time: Dec 24 9:59 2014 Quant Results File: P140328.RES

Quant Method : D:\HPCHEM\1\METHODS\P140328.M (Chemstation Integrator)
Title : Pestcides
Last Update : Mon Dec 15 12:04:21 2014
Response via : Initial Calibration
DataAcq Meth : P140328.M

ICAL 12-24-14

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb	
	System Monitoring Compounds							
1) S	Tetrachloro-m-xy	2.85	3.08	127085	101168	81.650	108.413 #	+18
	Spiked Amount 100.000			Recovery =		81.65%	108.41%	
22) S	Decachlorobiphen	7.27	7.90	110662	73677	106.855	100.469	
	Spiked Amount 100.000			Recovery =		106.86%	100.47%	
	Target Compounds							
2) A	alpha-BHC	3.37	3.67	192225	150764	94.352	124.343 #	-16
3) A	gamma-BHC	3.66	3.99	173995	132193	90.306	116.080 #	
4) A	beta-BHC	3.74	4.08	82511	63099	82.967	103.404	
5) A	delta-BHC	3.89	4.33	162859	130169	89.437	116.812 #	
6) A	Heptachlor	4.08	4.36	164645	124925	84.524	98.388	
7) A	Aldrin	4.33	4.63	161380	120870	95.617	116.980	-17
8) A	Heptachlor epoxi	4.82	5.10	139162	103947	87.197	103.800	
9) A	gamma-Chlordane	4.92	5.25	145833	111752	89.884	108.283	
10) A	alpha-Chlordane	5.02	5.36	141469	108452	90.789	108.656	
11) A	4,4'-DDE	5.09	5.49	133573	101827	92.226	113.037	
12) A	Endosulfan I	5.12	5.40	169211	107145	110.704	107.118	
13) A	Dieldrin	5.31	5.62	142451	108017	95.044	116.097	-16
14) A	Endrin	5.48	5.85	124127	88641	93.499	108.810	
15) A	4,4'-DDD	5.54	5.93	111762	77924	96.458	110.072	
16) A	Endosulfan II	5.65	6.01	119808	88961	90.859	104.573	
17) A	4,4'-DDT	5.75	6.17	107548	69582	84.689	86.385	
18) A	Endrin aldehyde	5.96	6.27	94334	72265	91.301	103.996	
19) A	Methoxychlor	6.12	6.68	56662	36082	82.129	76.379	
20) A	Endosulfan sulfa	6.29	6.47	106414	78879	94.734	105.542	
21) A	Endrin ketone	6.50	6.88	126586	89826	102.416	95.333	
23) L8	Toxaphene{1}	5.65	5.93	119808	77924	7558.106	5285.905 #	
24) L8	Toxaphene{2}	0.00	0.00	0	0	N.D.	N.D.	
25) L8	Toxaphene{3}	0.00	6.17	0	69582	N.D.	1949.421 #	
26) L8	Toxaphene{4}	6.12	0.00	56662	0	1920.063	N.D. #	
27) L8	Toxaphene{5}	0.00	6.77	0	406	N.D.	18.171 #	
	Sum Toxaphene			176471	147913	9478.169	7253.497	
	Average Toxaphene					4739.084	2417.832	
28) L9	Tech Chlordane{1	0.00	0.00	0	0	N.D.	N.D.	
29) L9	Tech Chlordane{2	4.92	5.36	145833	108452	4047.608	935.386 #	
30) L9	Tech Chlordane{3	5.09	5.40	133573	107145	798.231	1449.531 #	
31) L9	Tech Chlordane{4	5.12	5.40	169211	107145	821.882	1011.379	
32) L9	Tech Chlordane{5	0.00	6.01	0	88961	N.D.	6018.526 #	
	Sum Tech Chlordane			448617	411704	5667.722	9414.822	
	Average Tech Chlordane					1889.241	2353.706	

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

Quantitation Report (Not Reviewed)

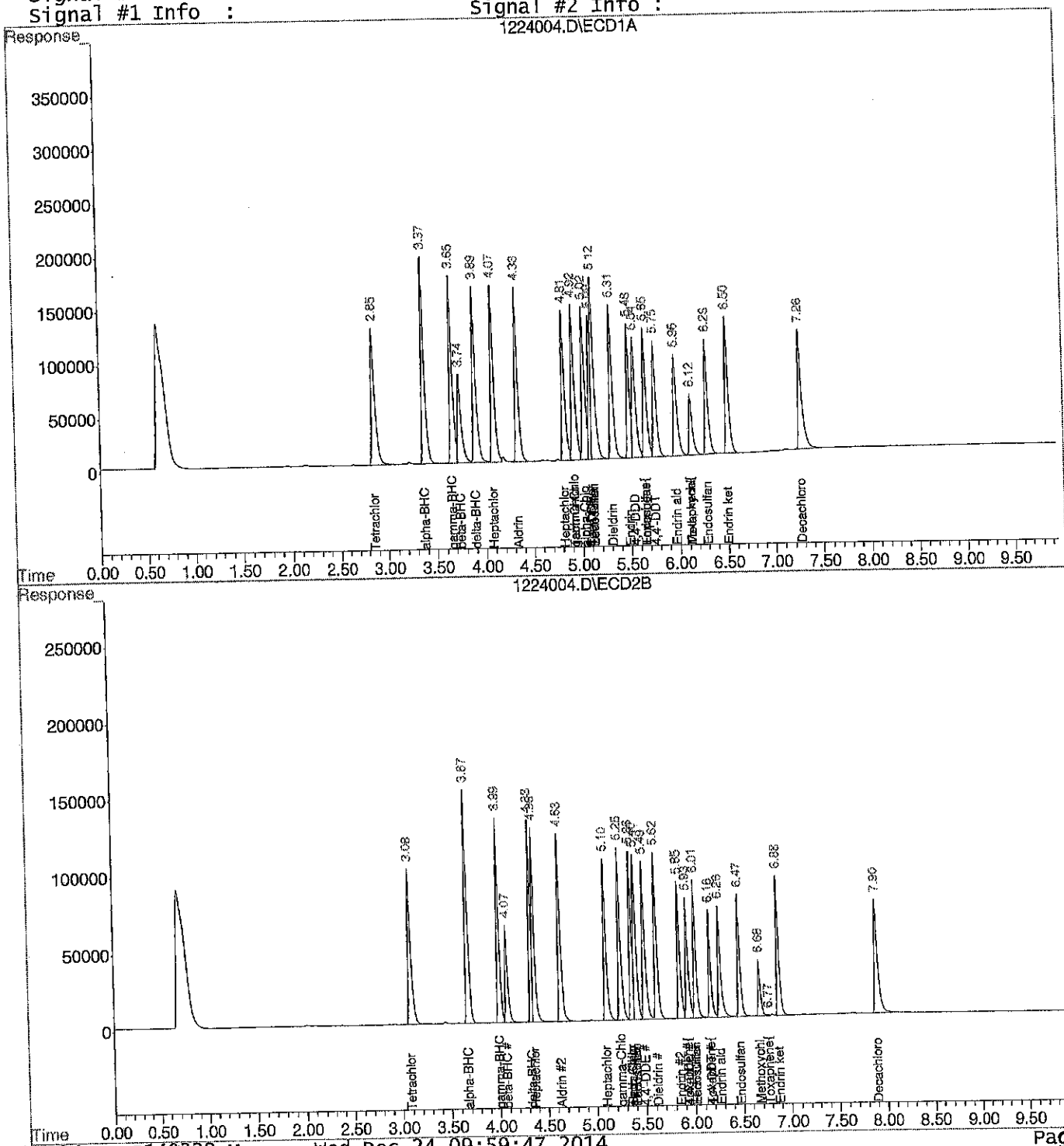
Signal #1 : D:\HPCHEM\1\DATA\G141224\1224004.D\ECD1A.CH Vial: 4
Signal #2 : D:\HPCHEM\1\DATA\G141224\1224004.D\ECD2B.CH
Acq On : 24 Dec 2014 9:49 Operator:
Sample : PEST MID LEVEL 1224-1 (PS4-04-03) Inst : George
Misc : Multiplr: 1.00
Sample Amount: 0.00

IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Quant Time: Dec 24 9:59 2014 Quant Results File: P140328.RES

Quant Method : D:\HPCHEM\1\METHODS\P140328.M (Chemstation Integrator)
Title : Pestcides
Last Update : Mon Dec 15 12:04:21 2014
Response via : Multiple Level Calibration
DataAcq Meth : P140328.M

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Quantitation Report (Not Reviewed)

Signal #1 : D:\HPCHEM\1\DATA\G141224\1224009.D\ECD1A.CH Vial: 9
Signal #2 : D:\HPCHEM\1\DATA\G141224\1224009.D\ECD2B.CH
Acq On : 24 Dec 2014 10:57 Operator:
Sample : PEST MID LEVEL 1224-2 (PS4-04-03) Inst : George
Misc : Multiplr: 1.00
Sample Amount: 0.00

IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Quant Time: Dec 24 11:07 2014 Quant Results File: P140328.RES

Quant Method : D:\HPCHEM\1\METHODS\P140328.M (Chemstation Integrator)
Title : Pestcides
Last Update : Mon Dec 15 12:04:21 2014
Response via : Initial Calibration
DataAcq Meth : P140328.M

KMS 12-24-14

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb	
	System Monitoring Compounds							
1)	S Tetrachloro-m-xy	2.85	3.08	128466	100227	82.537	107.404 #	+17
	Spiked Amount 100.000			Recovery =		82.54%	107.40%	
22)	S Decachlorobiphen	7.26	7.90	112067	74205	108.276	101.225	
	Spiked Amount 100.000			Recovery =		108.28%	101.22%	
	Target Compounds							
2)	A alpha-BHC	3.37	3.67	194768	150770	95.600	124.348 #	
3)	A gamma-BHC	3.66	3.99	176476	133708	91.594	117.410 #	-17
4)	A beta-BHC	3.74	4.08	83889	63457	84.353	103.990	
5)	A delta-BHC	3.89	4.33	165597	131550	90.940	118.050 #	
6)	A Heptachlor	4.08	4.37	168787	132558	86.651	104.399	
7)	A Aldrin	4.33	4.63	162731	121082	96.417	117.185	-17
8)	A Heptachlor epoxi	4.82	5.10	140699	104959	88.160	104.811	
9)	A gamma-Chlordane	4.92	5.25	147375	112618	90.834	109.122	
10)	A alpha-Chlordane	5.02	5.36	142713	107920	91.587	108.123	
11)	A 4,4'-DDE	5.09	5.49	134301	100866	92.728	111.970	
12)	A Endosulfan I	5.12	5.40	171385	108593	112.127	108.565	
13)	A Dieldrin	5.31	5.62	143546	108657	95.775	116.786	-17
14)	A Endrin	5.48	5.85	127904	91888	96.345	112.796	
15)	A 4,4'-DDD	5.54	5.93	113973	79671	98.366	112.540	
16)	A Endosulfan II	5.65	6.01	121618	90383	92.231	106.245	
17)	A 4,4'-DDT	5.75	6.17	111059	74182	87.454	92.095	
18)	A Endrin aldehyde	5.96	6.27	96424	73805	93.324	106.211	
19)	A Methoxychlor	6.12	6.68	59330	38925	85.995	82.396	
20)	A Endosulfan sulfa	6.28	6.47	108137	81148	96.267	108.578	
21)	A Endrin ketone	6.50	6.88	128166	93106	103.706	98.814	
23)	L8 Toxaphene{1}	5.65	5.93	121618	79671	7672.246	5404.411 #	
24)	L8 Toxaphene{2}	0.00	0.00	0	0	N.D.	N.D.	
25)	L8 Toxaphene{3}	0.00	6.17	0	74182	N.D.	2078.277 #	
26)	L8 Toxaphene{4}	6.12	0.00	59330	0	2010.456	N.D. #	
27)	L8 Toxaphene{5}	0.00	6.77	0	396	N.D.	17.697 #	
	Sum Toxaphene			180947	154248	9682.702	7500.385	
	Average Toxaphene					4841.351	2500.128	
28)	L9 Tech Chlordane{1	0.00	0.00	0	0	N.D.	N.D.	
29)	L9 Tech Chlordane{2	4.92	5.36	147375	107920	4090.400	930.796 #	
30)	L9 Tech Chlordane{3	5.09	5.40	134301	108593	802.579	1469.113 #	
31)	L9 Tech Chlordane{4	5.12	5.40	171385	108593	832.445	1025.042	
32)	L9 Tech Chlordane{5	0.00	6.01	0	90383	N.D.	6114.778 #	
	Sum Tech Chlordane			453061	415489	5725.424	9539.729	
	Average Tech Chlordane					1908.475	2384.932	

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

Quantitation Report (Not Reviewed)

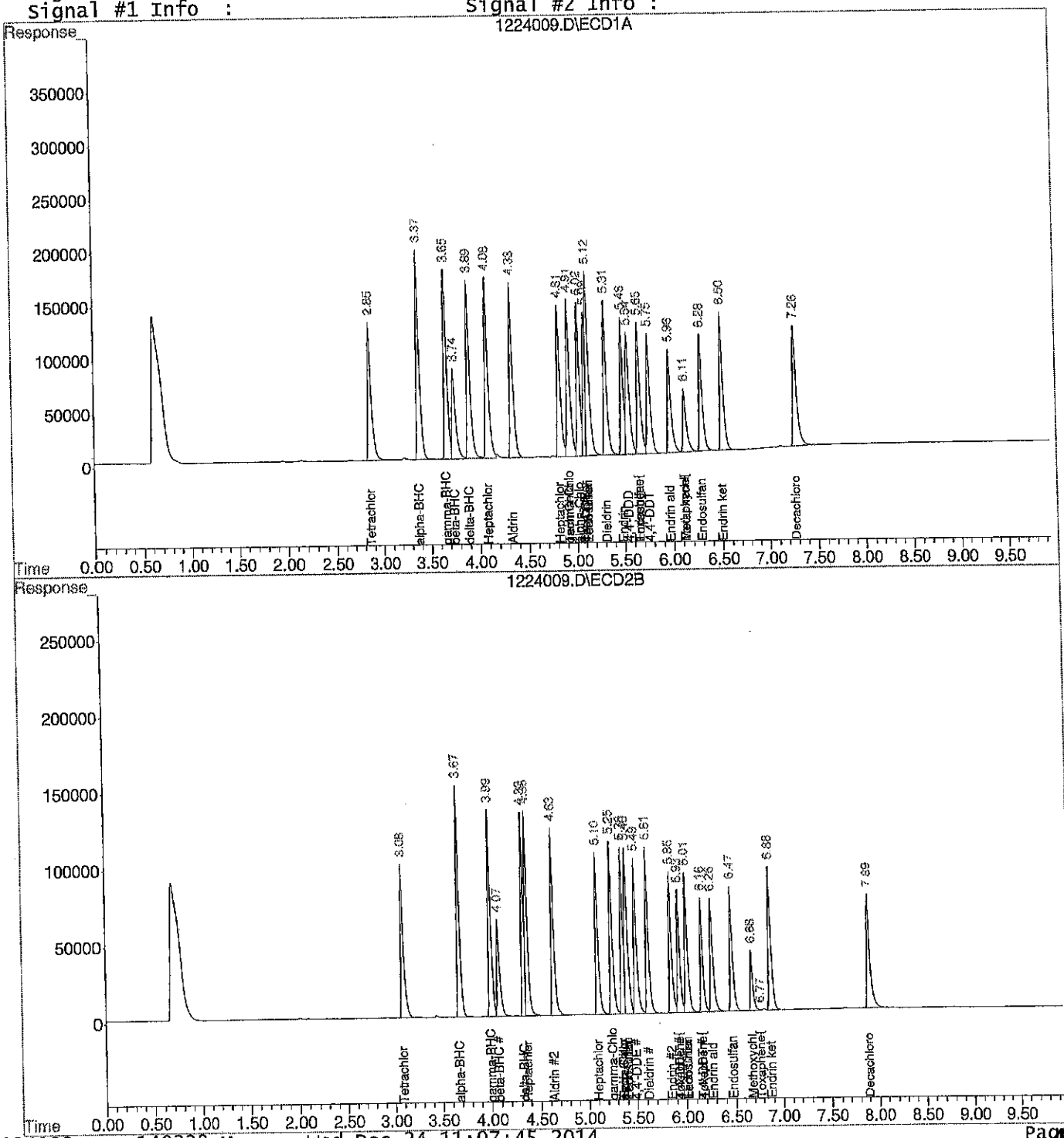
Signal #1 : D:\HPCHEM\1\DATA\G141224\1224009.D\ECD1A.CH Vial: 9
Signal #2 : D:\HPCHEM\1\DATA\G141224\1224009.D\ECD2B.CH
Acq On : 24 Dec 2014 10:57 Operator:
Sample : PEST MID LEVEL 1224-2 (PS4-04-03) Inst : George
Misc : Multiplr: 1.00
Sample Amount: 0.00

IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Quant Time: Dec 24 11:07 2014 Quant Results File: P140328.RES

Quant Method : D:\HPCHEM\1\METHODS\P140328.M (Chemstation Integrator)
Title : Pestcides
Last Update : Mon Dec 15 12:04:21 2014
Response via : Multiple Level Calibration
DataAcq Meth : P140328.M

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Quantitation Report (Not Reviewed)

Signal #1 : D:\HPCHEM\1\DATA\G141224\1224016.D\ECD1A.CH Vial: 16
Signal #2 : D:\HPCHEM\1\DATA\G141224\1224016.D\ECD2B.CH
Acq On : 24 Dec 2014 12:30 Operator:
Sample : PEST MID LEVEL 1224-3 (PS4-04-03) Inst : George
Misc : Multiplr: 1.00
Sample Amount: 0.00

IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Quant Time: Dec 24 12:40 2014 Quant Results File: P140328.RES

Quant Method : D:\HPCHEM\1\METHODS\P140328.M (Chemstation Integrator)
Title : Pestcides
Last Update : Mon Dec 15 12:04:21 2014
Response via : Initial Calibration
DataAcq Meth : P140328.M

KMS 12-24-14

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
1) S	Tetrachloro-m-xy	2.85	3.08	129351	96868	83.105 117	103.805
	Spiked Amount 100.000			Recovery	=	83.11%	103.81%
22) S	Decachlorobiphen	7.26	7.90	106911	70336	103.063	95.681
	Spiked Amount 100.000			Recovery	=	103.06%	95.68%
	Target Compounds						
2) A	alpha-BHC	3.37	3.67	193896	144527	95.172	119.199 #
3) A	gamma-BHC	3.66	3.99	174114	128313	90.369	112.672
4) A	beta-BHC	3.74	4.08	81867	59714	82.320	97.856
5) A	delta-BHC	3.89	4.33	163512	125899	89.795	112.979 #
6) A	Heptachlor	4.08	4.37	164326	130429	84.361 116	102.722
7) A	Aldrin	4.33	4.63	157929	115508	93.572	111.791
8) A	Heptachlor epoxi	4.82	5.10	136032	98818	85.235	98.678
9) A	gamma-Chlordane	4.92	5.25	140662	106516	86.697	103.210
10) A	alpha-Chlordane	5.02	5.36	134920	101681	86.586	101.872
11) A	4,4'-DDE	5.09	5.49	132139	97568	91.235	108.309
12) A	Endosulfan I	5.12	5.40	164990	104577	107.943	104.551
13) A	Dieldrin	5.31	5.62	138029	103596	92.093	111.345
14) A	Endrin	5.48	5.85	124485	89925	93.769	110.387
15) A	4,4'-DDD	5.54	5.93	118681	82755	102.430	116.896
16) A	Endosulfan II	5.65	6.01	117901	87204	89.413	102.508
17) A	4,4'-DDT	5.75	6.17	94641	62666	74.526	77.798
18) A	Endrin aldehyde	5.96	6.27	91633	69459	88.687	99.958
19) A	Methoxychlor	6.12	6.68	52785	34964	76.509	74.011
20) A	Endosulfan sulfa	6.28	6.47	102489	77771	91.239	104.060
21) A	Endrin ketone	6.50	6.88	121631	91373	98.369	96.975
23) L8	Toxaphene{1}	5.65	5.93	117901	82755	7437.774	5613.602
24) L8	Toxaphene{2}	0.00	0.00	0	0	N.D.	N.D.
25) L8	Toxaphene{3}	0.00	6.17	0	62666	N.D.	1755.649 #
26) L8	Toxaphene{4}	6.12	0.00	52785	0	1788.680	N.D. #
27) L8	Toxaphene{5}	0.00	6.77	0	2754	N.D.	123.154 #
	Sum Toxaphene			170686	148175	9226.454	7492.405
	Average Toxaphene					4613.227	2497.468
28) L9	Tech Chlordane{1	0.00	4.84	0	188	N.D.	4.519 #
29) L9	Tech Chlordane{2	4.92	5.36	140662	101681	3904.102	876.986 #
30) L9	Tech Chlordane{3	5.09	5.40	132139	104577	789.658	1414.789 #
31) L9	Tech Chlordane{4	5.12	5.40	164990	104577	801.382	987.139
32) L9	Tech Chlordane{5	0.00	6.01	0	87204	N.D.	5899.696 #
	Sum Tech Chlordane			437791	398227	5495.142	9183.128
	Average Tech Chlordane					1831.714	1836.626

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

Quantitation Report (Not Reviewed)

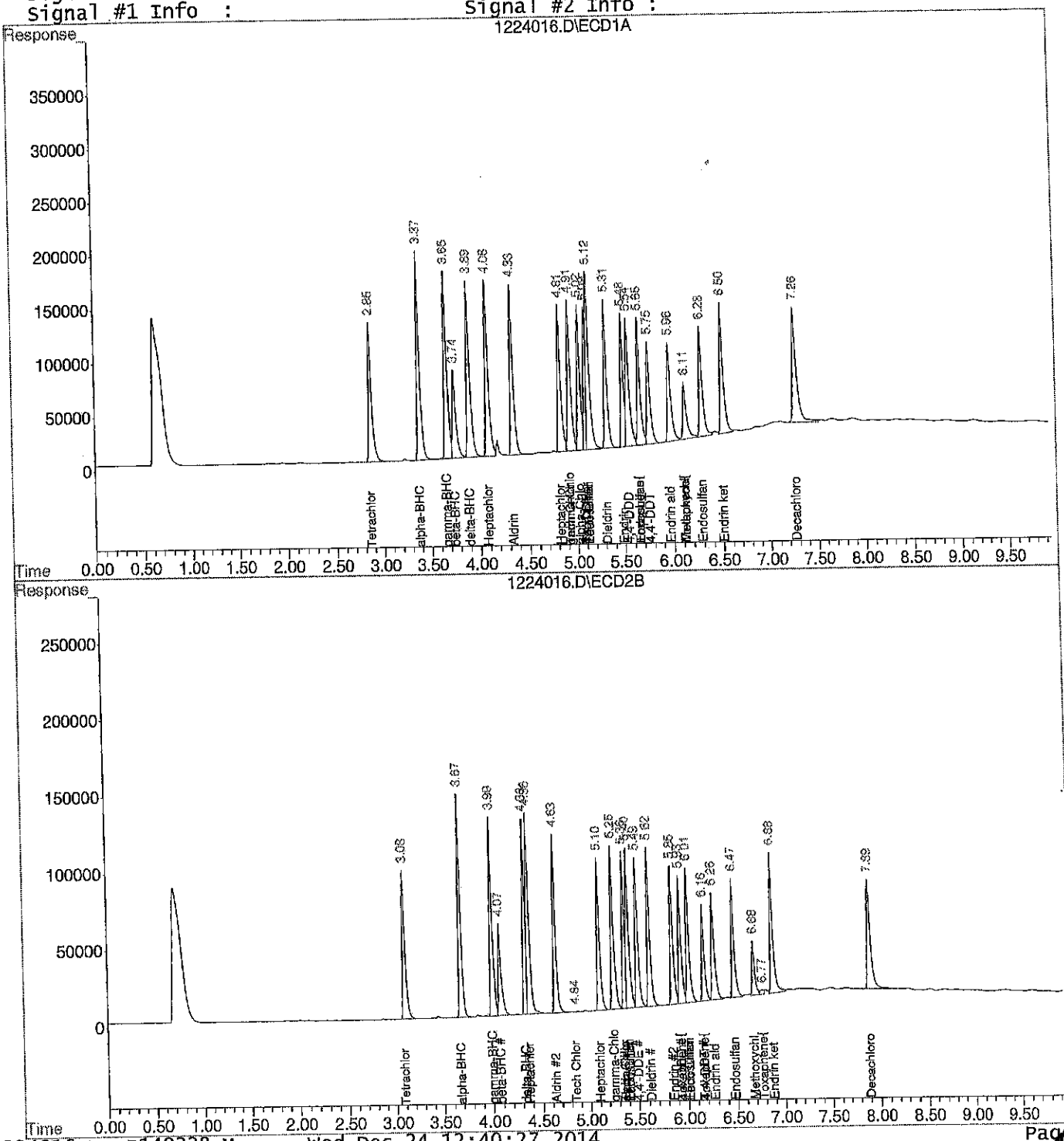
Signal #1 : D:\HPCHEM\1\DATA\G141224\1224016.D\ECD1A.CH Vial: 16
Signal #2 : D:\HPCHEM\1\DATA\G141224\1224016.D\ECD2B.CH
Acq On : 24 Dec 2014 12:30 Operator:
Sample : PEST MID LEVEL 1224-3 (PS4-04-03) Inst : George
Misc : Multiplr: 1.00
Sample Amount: 0.00

IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Quant Time: Dec 24 12:40 2014 Quant Results File: P140328.RES

Quant Method : D:\HPCHEM\1\METHODS\P140328.M (Chemstation Integrator)
Title : Pestcides
Last Update : Mon Dec 15 12:04:21 2014
Response via : Multiple Level Calibration
DataAcq Meth : P140328.M

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Chlorinated Acid Herbicides Data

Quantitation Report (QT Reviewed)

Data File : F1223007.D
Sample : 12-237-01

Data Path : X:\PEST\FRANK\DATA\F141223\
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23-Dec-14, 15:34:26
Operator :
Misc :
ALS Vial : 7 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: events2.e
Quant Time: Dec 24 10:24:15 2014
Quant Method : C:\MSDCHEM\1\METHODS\H140808.M
Quant Title : Herbicides
QLast Update : Thu Oct 23 09:19:43 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
3)	S DCAA (surr)	4.657	4.634	14162198	34468552	56.211m	56.226m
	Spiked Amount 100.000			Recovery	=	56.21%	56.23%
	Target Compounds						
1)	A Dalapon	0.000	1.288	0	1283422	N.D.	N.D.
2)	A 2,4,6-Tri...	3.705	3.665	998965	1099346	0.509	0.237 #
4)	A Dicamba	4.760	4.732	13521027	36087861	14.350	15.967
5)	A MCPP	4.880	4.821f	4016328	7916260	5803.342	4612.055
6)	A MCPA	4.975f	4.927	1436366	4701630	1203.503m	1457.781m
7)	A Dichlorprop	5.175	5.102f	984844	8627274	3.928	15.718 #
8)	A 2,4-D	5.277	5.291f	3279661	10719932	11.611	15.635 #
9)	A Pentachlo...	5.402	5.453	2818753	3946353	0.777	0.402 #
10)	A 2,4,5-TP	5.701	5.665	1752956	6252085	1.299	1.926 #
11)	A 2,4,5-T	5.845	5.866f	1295056	6406526	1.012	2.097 #
12)	A 2,4-DB	0.000	6.071	0	4661048	N.D.	0.818 #
13)	a Bentazon	6.496	6.451	55835099	134.2E6	453.404	505.432
14)	A Dinoseb	6.585	0.000	4918887	0	0.300	N.D. #

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

Quantitation Report (QT Reviewed)

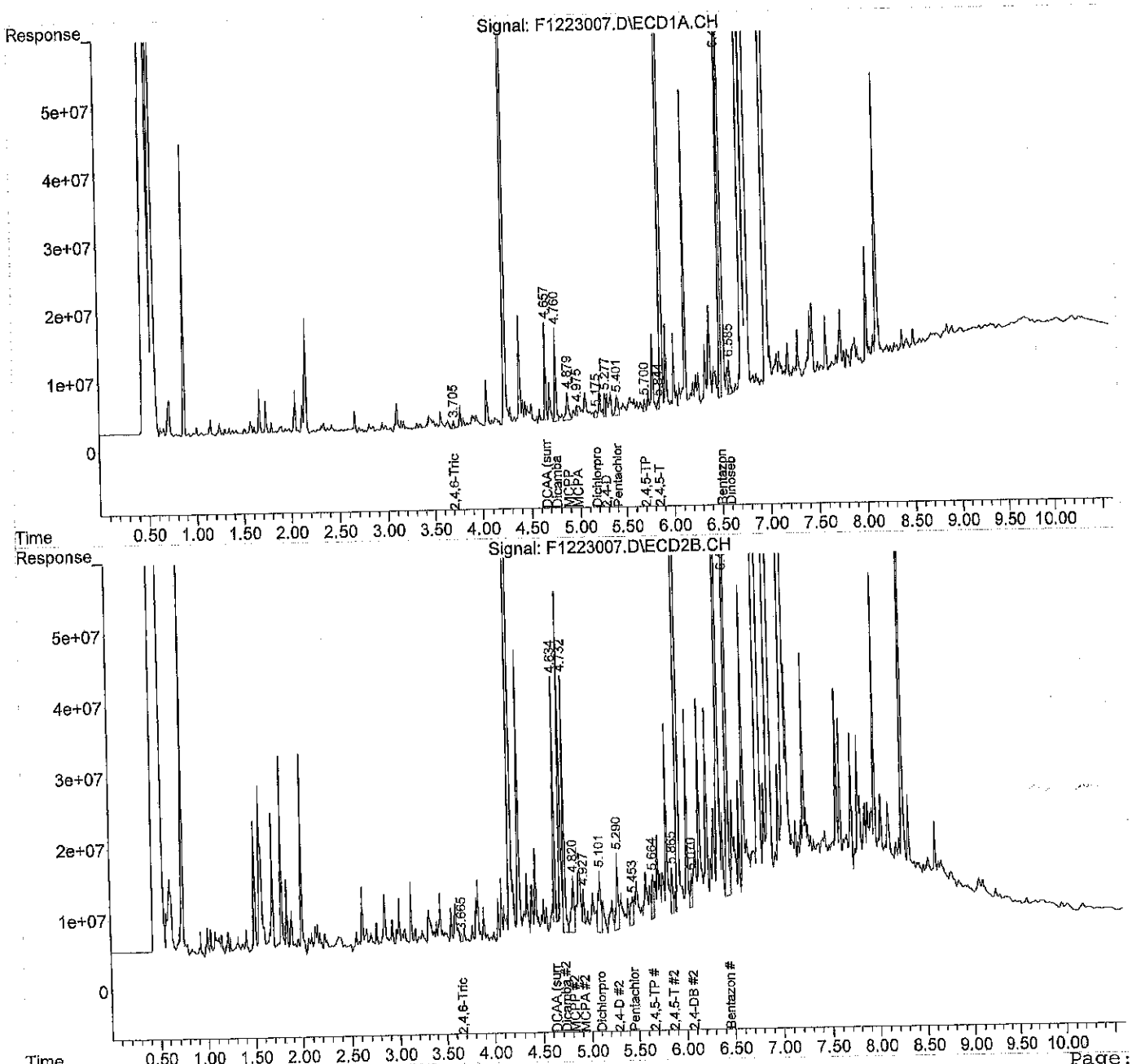
Data File : F1223007.D
Sample : 12-237-01

Data Path : X:\PEST\FRANK\DATA\F141223\
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23-Dec-14, 15:34:26
Operator :
Misc :
ALS Vial : 7 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: events2.e
Quant Time: Dec 24 10:24:15 2014
Quant Method : C:\MSDCHEM\1\METHODS\H140808.M
Quant Title : Herbicides
QLast Update : Thu Oct 23 09:19:43 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase :
Signal #1 Info :

Signal #2 Phase:
Signal #2 Info :



Quantitation Report (QT Reviewed)

Data File : F1223008.D
Sample : 12-237-02

Data Path : X:\PEST\FRANK\DATA\F141223\
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23-Dec-14, 15:50:19
Operator :
Misc :
ALS Vial : 8 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: events2.e
Quant Time: Dec 24 10:16:53 2014
Quant Method : C:\MSDCHEM\1\METHODS\H140808.M
Quant Title : Herbicides
QLast Update : Tue Dec 16 17:45:14 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

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	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
3)	S DCAA (surr)	4.657	4.635	9168481	23505207	36.390m	38.342m
	Spiked Amount 100.000			Recovery	=	36.39%	38.34%
	Target Compounds						
1)	A Dalapon	1.460	1.290	1356334	1353638	3.995	N.D. #
2)	A 2,4,6-Tri...	3.710	3.673	32567674	6838443	16.592	1.471 #
4)	A Dicamba	4.761	4.733	38581150	96655985	40.948	42.765
5)	A MCPP	4.876	4.799	2381388	4130794	3457.503	2007.529 #
6)	A MCPA	4.974f	4.929	1605184	4830767	1371.449m	1521.807m
7)	A Dichlorprop	5.174	5.122	1439725	4218743	5.742	6.357
8)	A 2,4-D	5.301f	5.290f	69527997	190.4E6	246.156	277.635
9)	A Pentachlo...	5.401	5.454	11441329	16205339	3.154	1.652 #
10)	A 2,4,5-TP	5.705	5.670	674688	4164198	0.500	1.283 #
11)	A 2,4,5-T	5.842	5.850	1993246	3588628	1.557	1.175
12)	A 2,4-DB	0.000	6.068	0	15824359	N.D.	35.058 #
13)	a Bentazon	6.517f	6.450	485.6E6	16677518	3954.433	54.739 #
14)	A Dinoseb	6.575	6.211	217.0E6	539.4E6	238.655m	231.596m

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

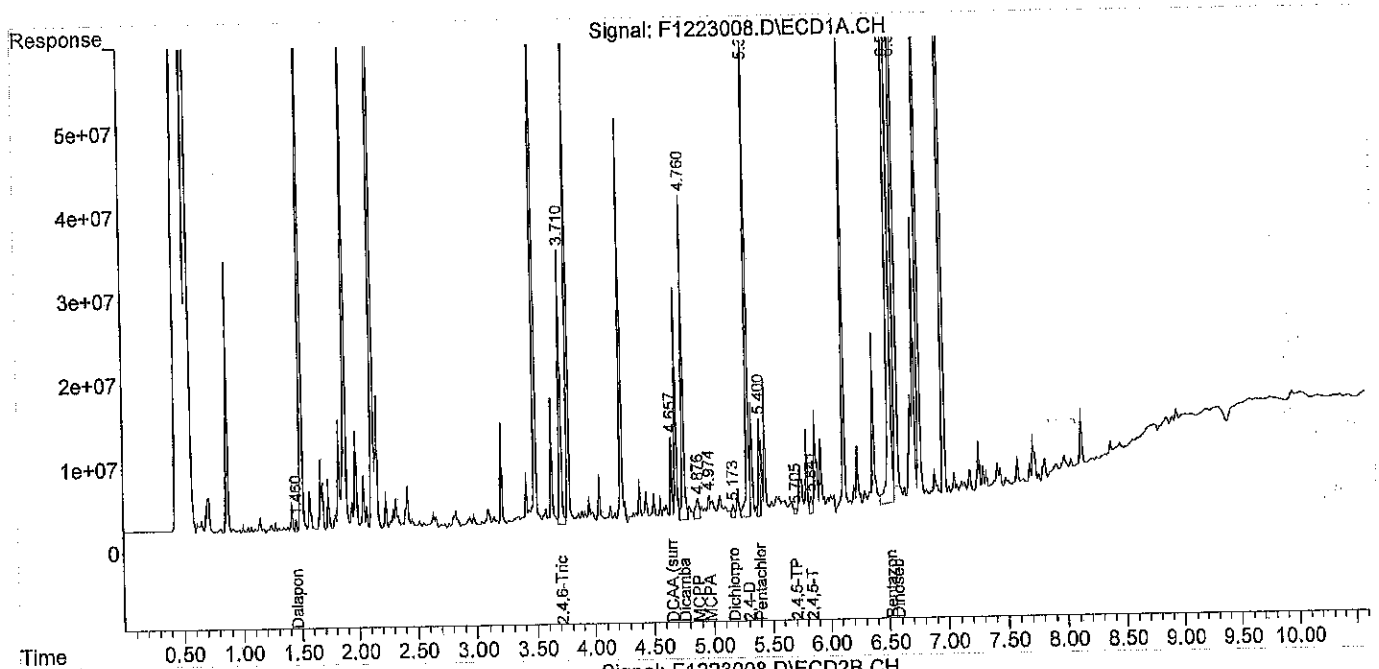
Quantitation Report (QT Reviewed)

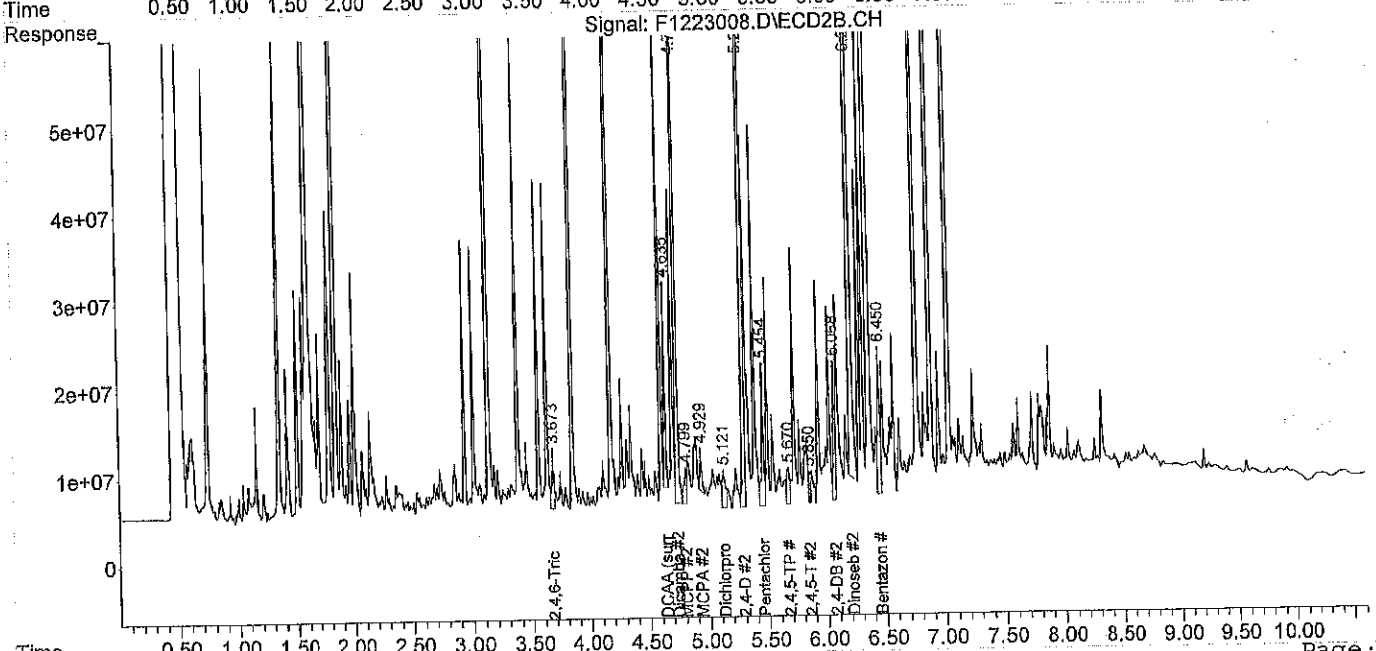
Data File : F1223008.D
Sample : 12-237-02

Data Path : X:\PEST\FRANK\DATA\F141223\
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23-Dec-14, 15:50:19
Operator :
Misc :
ALS Vial : 8 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: events2.e
Quant Time: Dec 24 10:16:53 2014
Quant Method : C:\MSDCHEM\1\METHODS\H140808.M
Quant Title : Herbicides
QLast Update : Tue Dec 16 17:45:14 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase :
Signal #1 Info :
Signal #2 Phase:
Signal #2 Info :





Quantitation Report (QT Reviewed)

Data File : F1223009.D
Sample : 12-237-03

Data Path : X:\PEST\FRANK\DATA\F141223\
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23-Dec-14, 16:06:21
Operator :
Misc :
ALS Vial : 9 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: events2.e
Quant Time: Dec 24 10:17:33 2014
Quant Method : C:\MSDCHEM\1\METHODS\H140808.M
Quant Title : Herbicides
QLast Update : Tue Dec 16 17:45:14 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
3)	S DCAA (surr)	4.657	4.634	15103125	921.8E6	59.945	1503.589 #
	Spiked Amount 100.000			Recovery	=	59.95%	1503.59%
	Target Compounds						
1)	A Dalapon	1.460	1.267f	3145023	893487	9.264	N.D. #
2)	A 2,4,6-Tri...	3.708	3.664	8570972	4111365	4.367	0.885 #
4)	A Dicamba	4.760	4.732	423.8E6	1055.6E6	449.808	467.046
5)	A MCPP	4.879	4.799	7533275	10113795	10849.517	6124.032 #
6)	A MCPA	4.973	4.929	24568371	64272860	24215.939m	30993.016m#
7)	A Dichlorprop	5.163	5.101f	1392862	10357897	5.555	19.394 #
8)	A 2,4-D	5.299f	5.289f	224.3E6	623.7E6	794.106	909.656
9)	A Pentachlo...	5.416f	5.450	9620510	8349223	2.652	0.851 #
10)	A 2,4,5-TP	5.700	5.661	214.9E6	508.7E6	159.278	156.681
11)	A 2,4,5-T	5.844	5.848	10215073	237.3E6	7.979	77.678 #
12)	A 2,4-DB	6.083	6.067	5635144	25714609	36.207	65.393 #
13)	a Bentazon	6.517f	6.451	534.5E6	32200505	4352.459	114.276 #
14)	A Dinoseb	6.575	6.211	60145815	142.1E6	62.374	61.032

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

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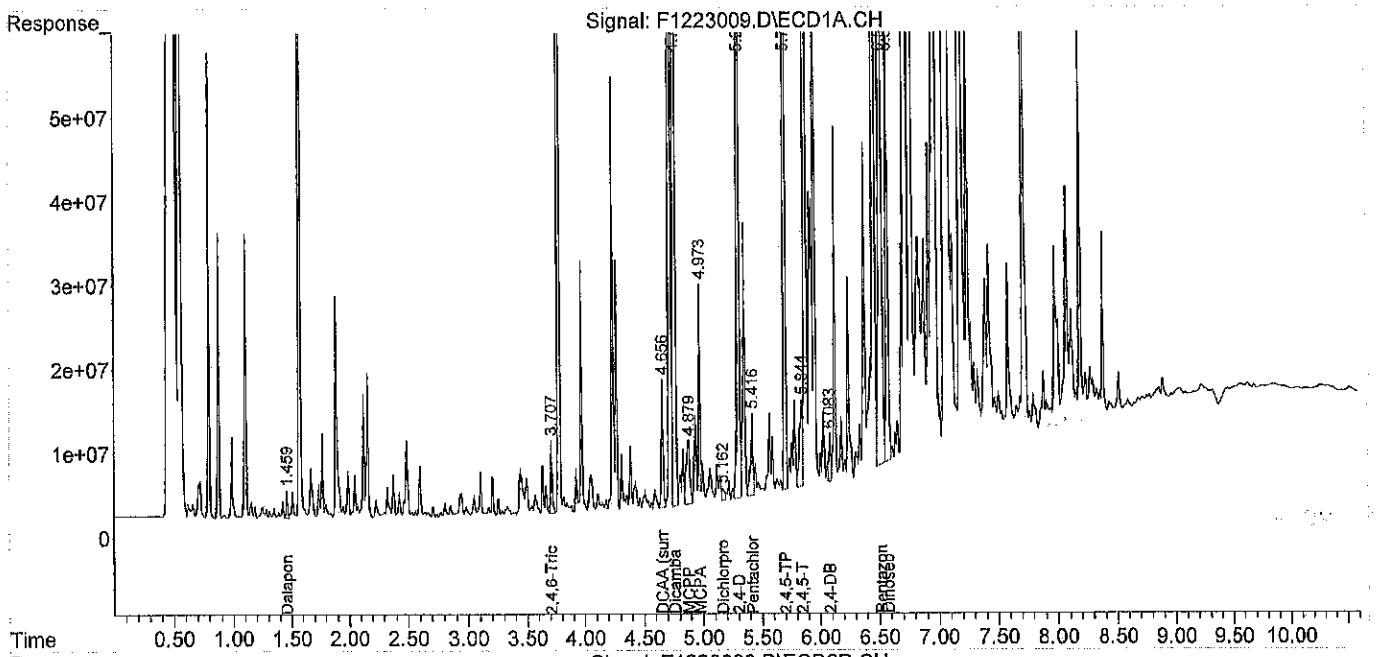
Quantitation Report (QT Reviewed)

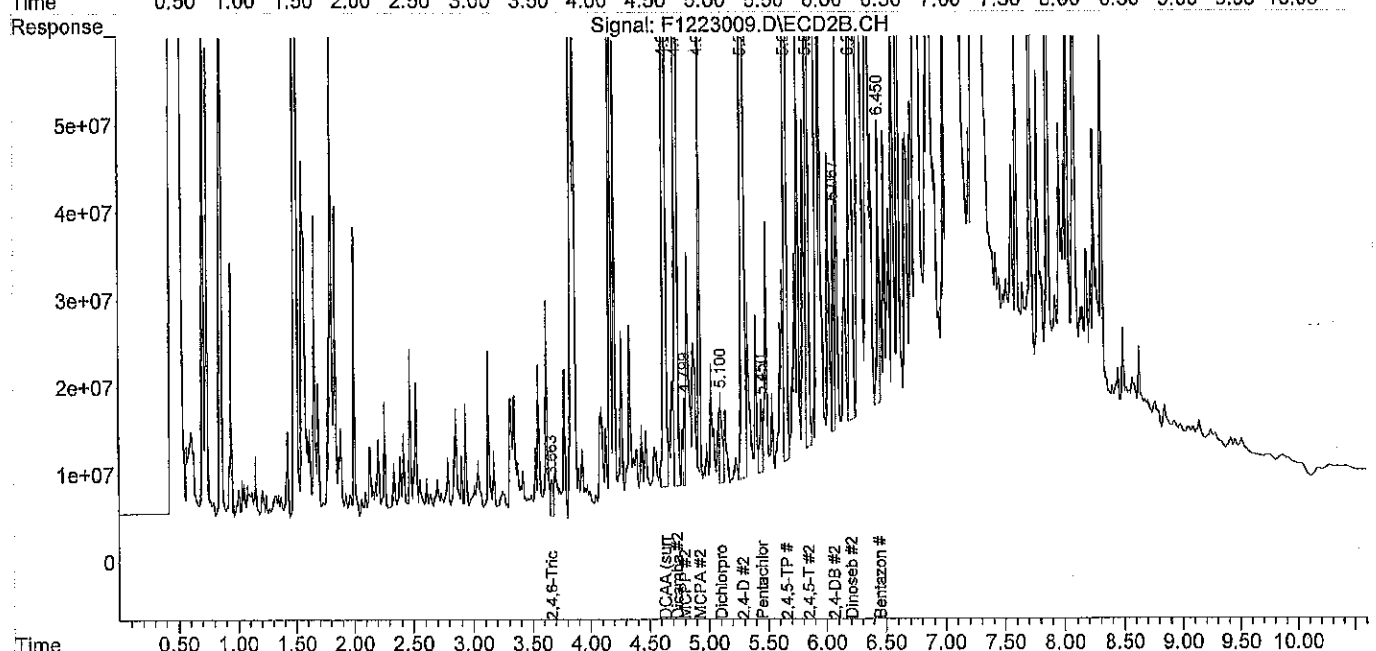
Data File : F1223009.D
Sample : 12-237-03

Data Path : X:\PEST\FRANK\DATA\F141223\
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23-Dec-14, 16:06:21
Operator :
Misc :
ALS Vial : 9 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: events2.e
Quant Time: Dec 24 10:17:33 2014
Quant Method : C:\MSDCHEM\1\METHODS\H140808.M
Quant Title : Herbicides
QLast Update : Tue Dec 16 17:45:14 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data File : F1223010.D
Sample : 12-237-04

Data Path : X:\PEST\FRANK\DATA\F141223\
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23-Dec-14, 16:22:19
Operator :
Misc :
ALS Vial : 10 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: events2.e
Quant Time: Dec 24 10:19:27 2014
Quant Method : C:\MSDCHEM\1\METHODS\H140808.M
Quant Title : Herbicides
QLast Update : Thu Oct 23 09:19:43 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb	
	System Monitoring Compounds							
3)	S DCAA (surr)	4.656	4.634	16909586	38435095	67.115	62.696m	KMS 12/24/14
	Spiked Amount 100.000			Recovery	=	67.11%	62.70%	
	Target Compounds							
1)	A Dalapon	1.460	1.291	919131	1702301	2.707	0.066 #	
2)	A 2,4,6-Tri...	3.707	3.664	8237779	3127304	4.197	0.673 #	
4)	A Dicamba	4.760	4.732	3422101	10947394	3.632	4.844 #	
5)	A MCPP	4.880	4.799	2215882	5523572	3220.032	2965.807	
6)	A MCPA	0.000	4.929	0	4770512	N.D.	1491.932 #	LOL
7)	A Dichlorprop	5.177f	5.100f	1574051	134.9E6	6.277	283.800 #	
8)	A 2,4-D	5.299f	5.289f	44927034	120.3E6	159.059	175.430	
9)	A Pentachlo...	5.417f	5.454	46577437	15985546	12.841	1.630 #	
10)	A 2,4,5-TP	5.700	5.661	3405198	9980480	2.523	3.074	
11)	A 2,4,5-T	5.846	5.837	2901016	15403172	2.266	5.042 #	
12)	A 2,4-DB	6.084	6.067	4381822	46479636	28.154	129.084 #	
13)	a Bentazon	6.521f	6.451	2138.8E6	54905406	174210.587	201.358 #	
14)	A Dinoseb	6.574	6.211	205.4E6	509.0E6	225.612m	218.542	KMS 12/24/14

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

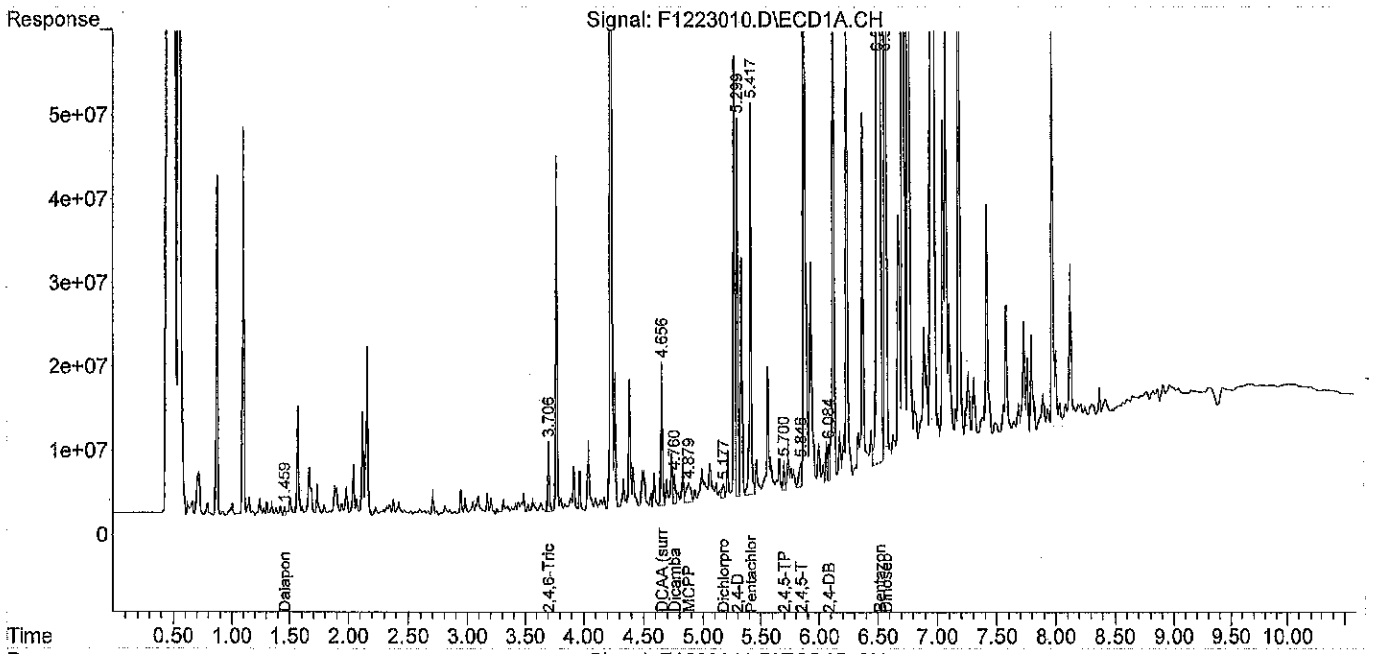
Quantitation Report (QT Reviewed)

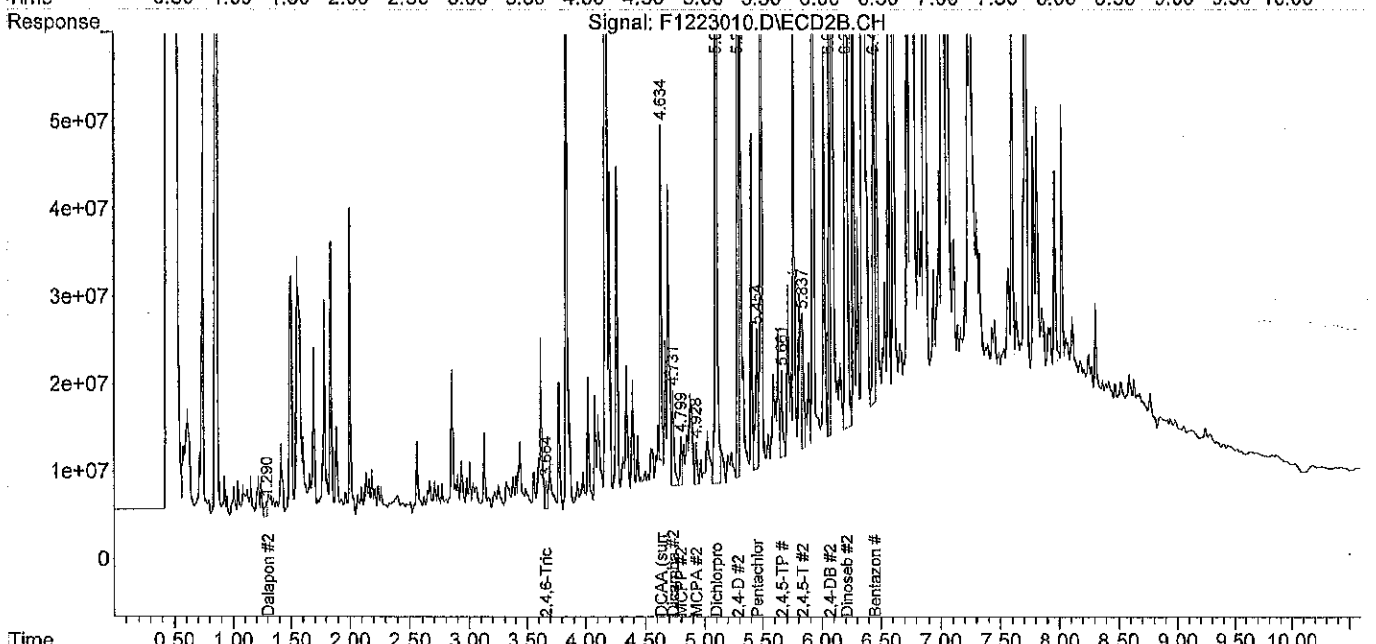
Data File : F1223010.D
Sample : 12-237-04

Data Path : X:\PEST\FRANK\DATA\F141223\
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23-Dec-14, 16:22:19
Operator :
Misc :
ALS Vial : 10 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: events2.e
Quant Time: Dec 24 10:19:27 2014
Quant Method : C:\MSDCHEM\1\METHODS\H140808.M
Quant Title : Herbicides
QLast Update : Thu Oct 23 09:19:43 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data File : F1223011.D
Sample : 12-237-05

Data Path : X:\PEST\FRANK\DATA\F141223\
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23-Dec-14, 16:38:15
Operator :
Misc :
ALS Vial : 11 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: events2.e
Quant Time: Dec 24 10:19:47 2014
Quant Method : C:\MSDCHEM\1\METHODS\H140808.M
Quant Title : Herbicides
QLast Update : Tue Dec 16 17:45:14 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
3) S	DCAA (surr)	4.657	4.633	13440597	32341977	53.347	52.757m
Spiked Amount	100.000			Recovery	=	53.35%	52.76%
	Target Compounds						
1) A	Dalapon	0.000	1.291	0	1582970	N.D.	N.D.
2) A	2,4,6-Tri...	3.707	3.663	7626298	2903165	3.885	0.625 #
4) A	Dicamba	4.760	4.731	2701943	8994056	2.868	3.979 #
5) A	MCPP	4.877	4.800	2344352	5783225	3404.364	3144.457
6) A	MCPA	0.000	4.929	0	4627835	N.D.	1421.194 #
7) A	Dichlorprop	5.178f	5.100f	748949	294.2E6	2.987	622.153 #
8) A	2,4-D	5.299f	5.289f	42420733	113.3E6	150.186	165.261
9) A	Pentachlo...	5.417f	5.454	34921080	13754422	9.628	1.402 #
10) A	2,4,5-TP	5.701	5.662	2709415	8744222	2.008	2.693 #
11) A	2,4,5-T	5.850f	5.837	1619679	12441298	1.265	4.072 #
12) A	2,4-DB	6.087	6.067	2112982	35434024	13.576	95.204 #
13) a	Bentazon	6.516f	6.451	2140.5E6	40430610	1743~~4~~.639	145.841 #
14) A	Dinoseb	6.575	6.210	156.0E6	385.8E6	170.058	165.651

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

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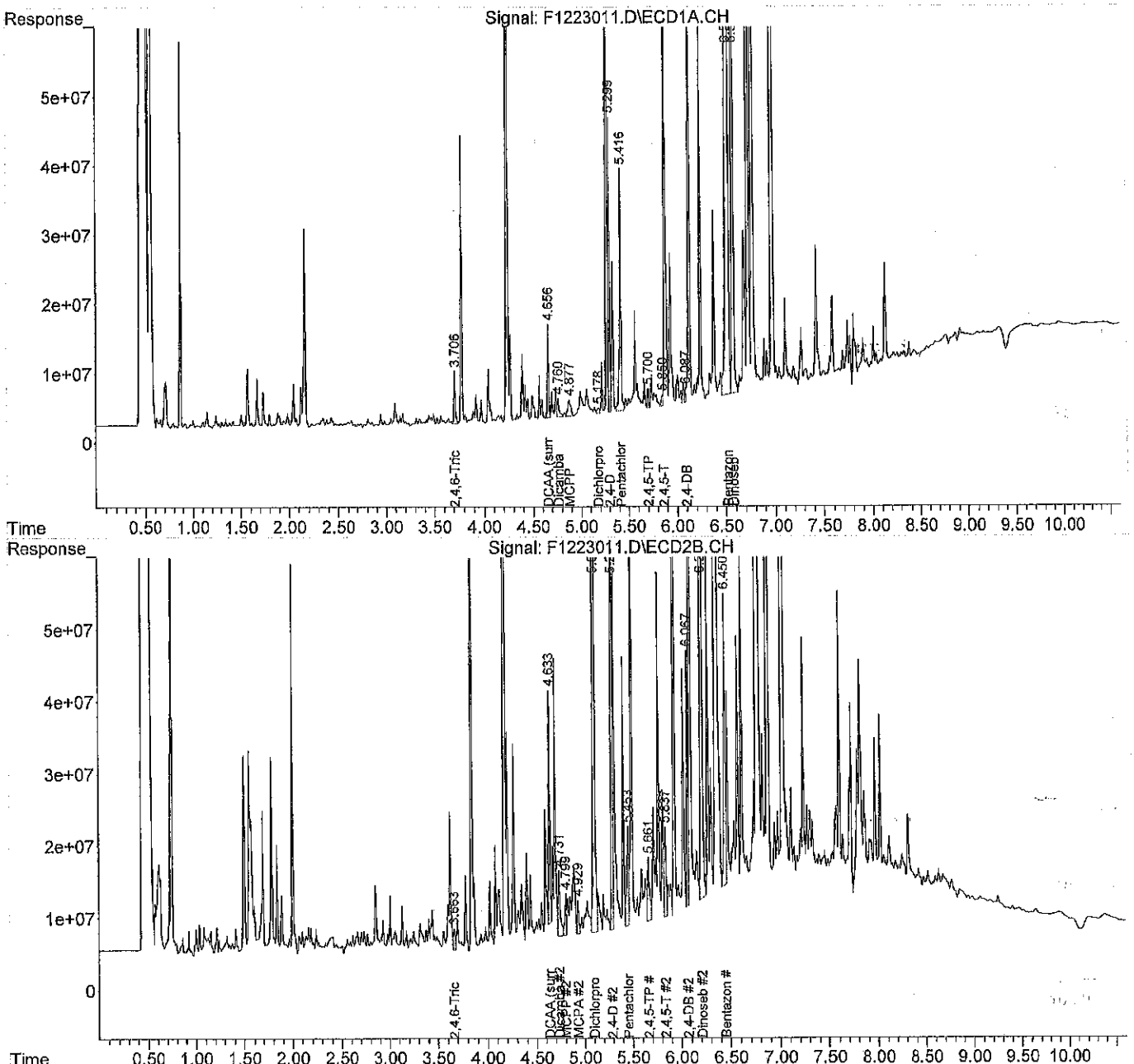
Quantitation Report (QT Reviewed)

Data File : F1223011.D
Sample : 12-237-05

Data Path : X:\PEST\FRANK\DATA\F141223\
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23-Dec-14, 16:38:15
Operator :
Misc :
ALS Vial : 11 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: events2.e
Quant Time: Dec 24 10:19:47 2014
Quant Method : C:\MSDCHEM\1\METHODS\H140808.M
Quant Title : Herbicides
QLast Update : Tue Dec 16 17:45:14 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Quantitation Report (QT Reviewed)

Data File : F1223005.D
Sample : SB1223W1

Data Path : X:\PEST\FRANK\DATA\F141223\
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23-Dec-14, 15:02:36
Operator :
Misc :
ALS Vial : 5 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: events2.e
Quant Time: Dec 24 10:13:51 2014
Quant Method : C:\MSDCHEM\1\METHODS\H140808.M
Quant Title : Herbicides
QLast Update : Tue Dec 16 17:45:14 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase :
Signal #1 Info :
Signal #2 Phase:
Signal #2 Info :

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	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
3) S	DCAA (surr)	4.656	4.633	18712498	44443198	74.271m	72.497m
	Spiked Amount 100.000			Recovery	=	74.27%	72.50%
	Target Compounds						
1) A	Dalapon	1.454	1.285	11892695	32498677	35.030	43.193
2) A	2,4,6-Tri...	3.705	3.667	2785687	1206766	1.419	0.260 #
4) A	Dicamba	4.760	4.731	65653642	167.5E6	69.681m	74.105m
5) A	MCPP	4.876	4.804	6151150	12101891	8866.420	7491.908
6) A	MCPA	4.962	4.933	7729169	16630777	7463.779	7372.216
7) A	Dichlorprop	5.164	5.111	18549093	43971122	73.973	90.773
8) A	2,4-D	5.284	5.272	18841140	42154424	66.705m	61.481m
9) A	Pentachlo...	5.401	5.454	32090336	82459408	8.847m	8.407m
10) A	2,4,5-TP	5.703	5.663	115.2E6	287.7E6	85.347	88.610
11) A	2,4,5-T	5.835	5.843	101.0E6	250.0E6	78.882m	81.835m
12) A	2,4-DB	6.086	6.073	11744738	28760716	75.461m	74.736m
13) a	Bentazon	6.506	6.449	4641618	12021416	36.394	36.881
14) A	Dinoseb	6.576	6.211	60799762	153.0E6	63.109	65.703m

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

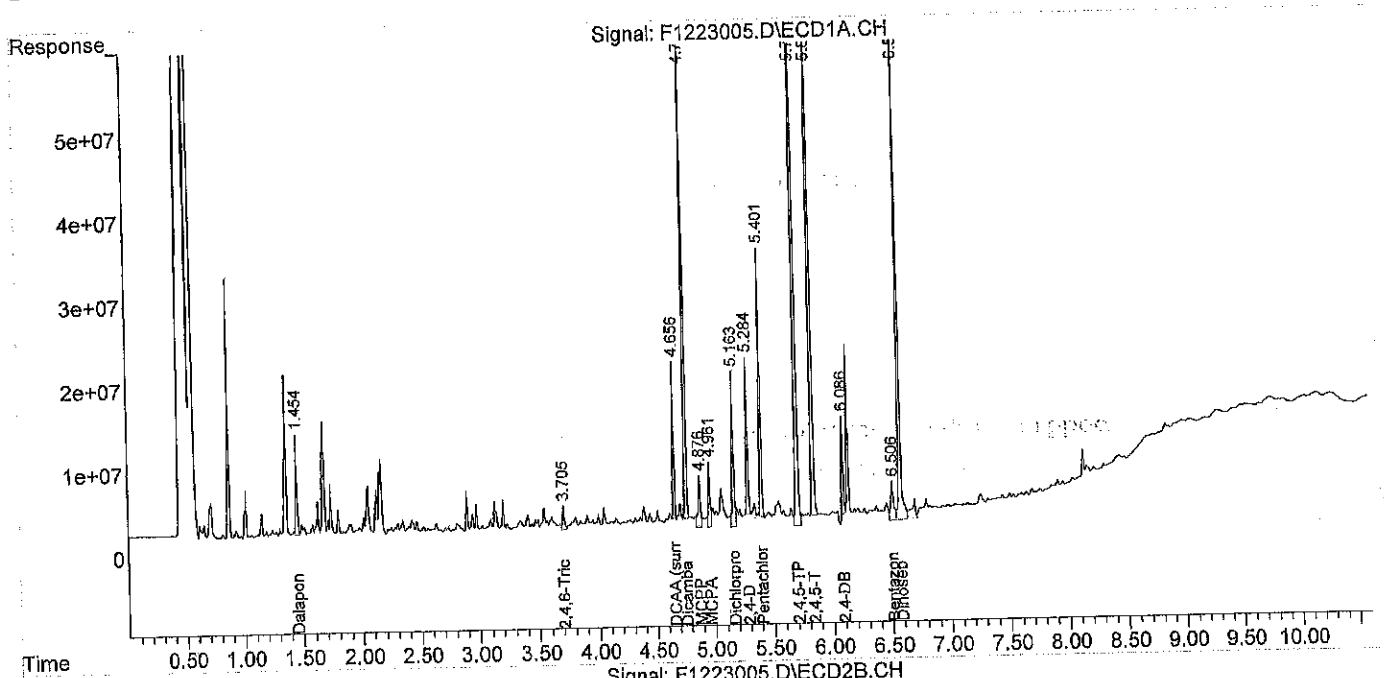
Quantitation Report (QT Reviewed)

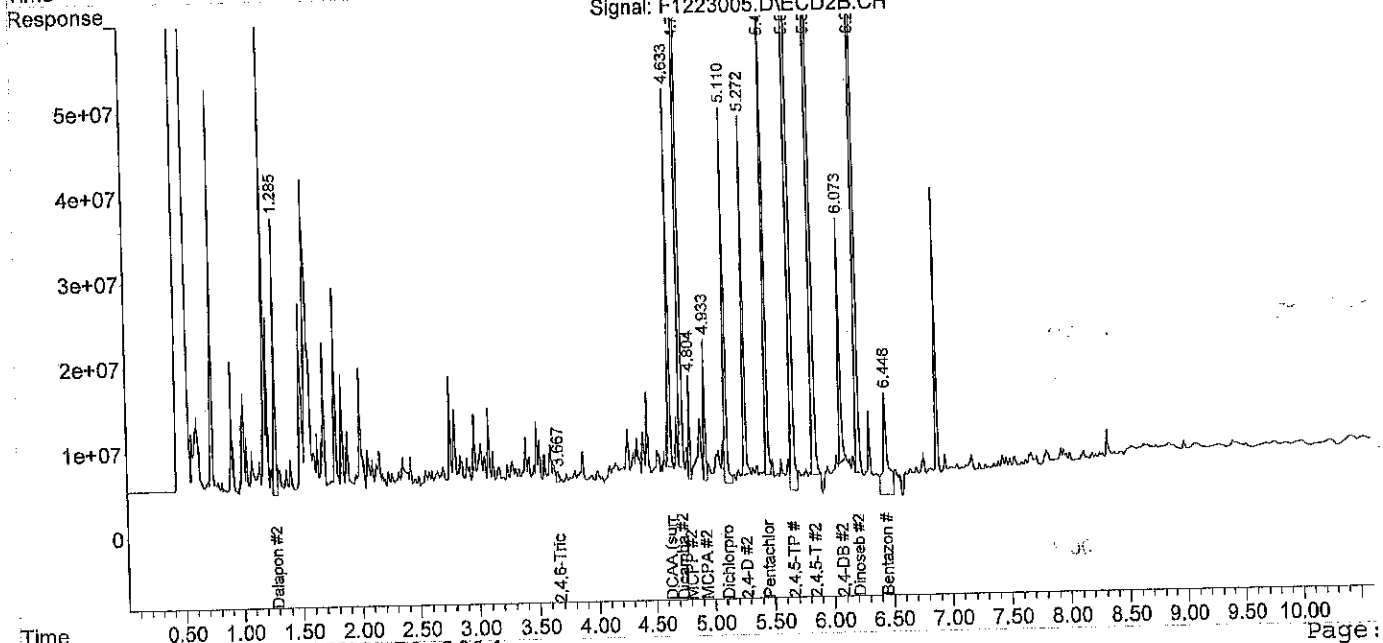
Data File : F1223005.D
Sample : SB1223W1

Data Path : X:\PEST\FRANK\DATA\F141223\
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23-Dec-14, 15:02:36
Operator :
Misc :
ALS Vial : 5 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: events2.e
Quant Time: Dec 24 10:13:51 2014
Quant Method : C:\MSDCHEM\1\METHODS\H140808.M
Quant Title : Herbicides
QLast Update : Tue Dec 16 17:45:14 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase :
Signal #1 Info :
Signal #2 Phase:
Signal #2 Info :





Quantitation Report (QT Reviewed)

Data File : F1223006.D
Sample : SB1223W1 DUP

Data Path : X:\PEST\FRANK\DATA\F141223\
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23-Dec-14, 15:18:31
Operator :
Misc :
ALS Vial : 6 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: events2.e
Quant Time: Dec 24 10:14:11 2014
Quant Method : C:\MSDCHEM\1\METHODS\H140808.M
Quant Title : Herbicides
QLast Update : Tue Dec 16 17:45:14 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

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	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
3) S	DCAA (surr)	4.656	4.634	18296903	44210579	72.622m	72.117m
	Spiked Amount 100.000			Recovery	=	72.62%	72.12%
	Target Compounds						
1) A	Dalapon	1.455	1.286	9185148	25303313	27.055	33.117
2) A	2,4,6-Tri...	3.706	3.668	792338	937909	0.404	0.202 #
4) A	Dicamba	4.759	4.731	65702851	166.1E6	69.733m	73.510m
5) A	MCPP	4.876	4.804	6199033	12783162	8935.124	7960.645
6) A	MCPA	4.961	4.933	7702992	17196423	7437.737	7652.662
7) A	Dichlorprop	5.163	5.111	18873240	44555527	75.266	92.014
8) A	2,4-D	5.283	5.272	17399790	40284939	61.602m	58.755m
9) A	Pentachlo...	5.401	5.454	34098658	84898938	9.401m	8.655m
10) A	2,4,5-TP	5.702	5.663	116.9E6	290.2E6	86.609	89.385
11) A	2,4,5-T	5.834	5.843	93838120	237.0E6	73.293m	77.564m
12) A	2,4-DB	6.085	6.073	12226392	29734768	78.556m	77.724m
13) a	Bentazon	6.506	6.448	4403507	11193231	34.454	33.705
14) A	Dinoseb	6.575	6.211	60943104	151.6E6	63.270	65.110m

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

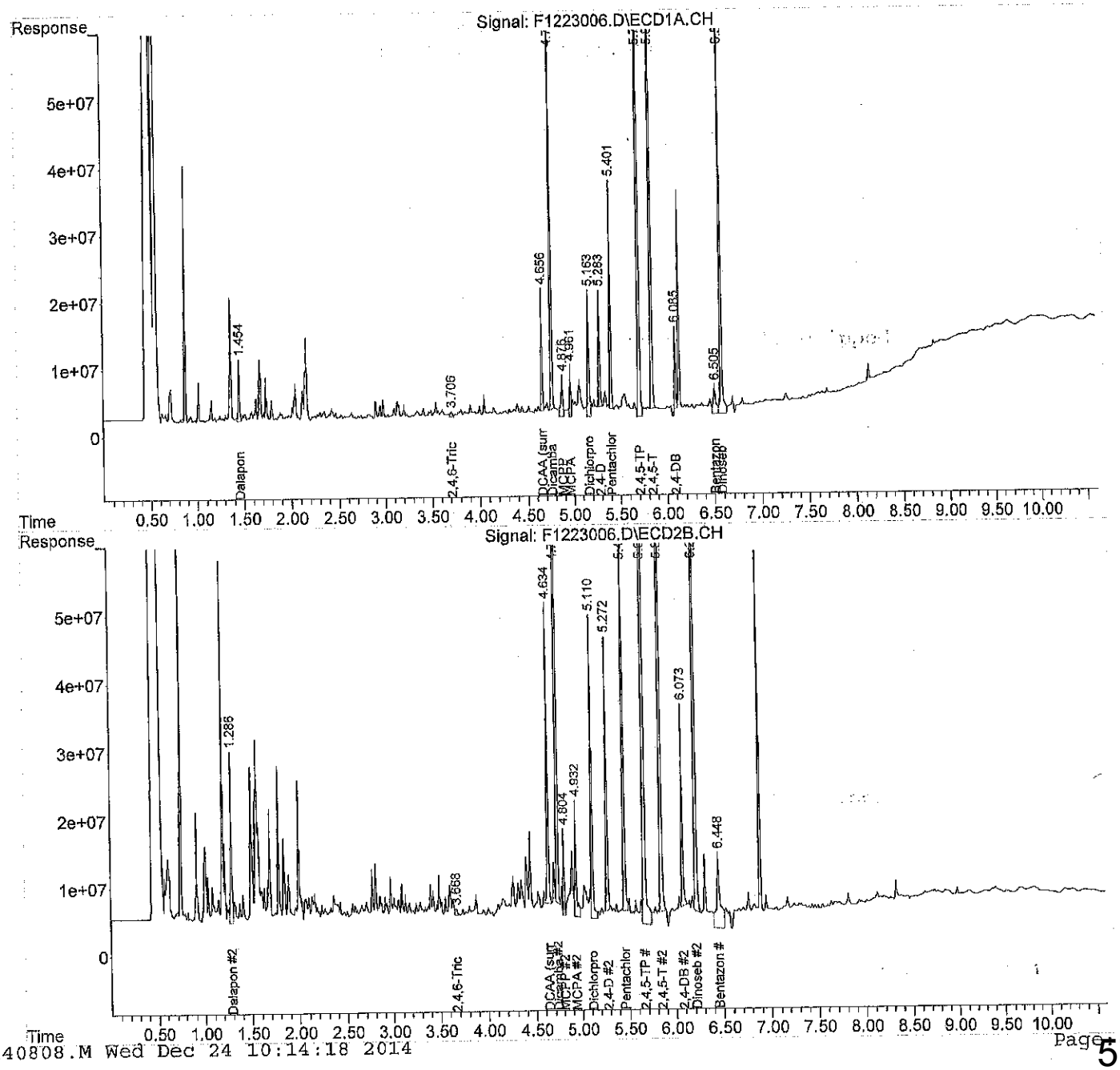
Quantitation Report (QT Reviewed)

Data File : F1223006.D
Sample : SB1223W1 DUP

Data Path : X:\PEST\FRANK\DATA\F141223\
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23-Dec-14, 15:18:31
Operator :
Misc :
ALS Vial : 6 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: events2.e
Quant Time: Dec 24 10:14:11 2014
Quant Method : C:\MSDCHEM\1\METHODS\H140808.M
Quant Title : Herbicides
QLast Update : Tue Dec 16 17:45:14 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Quantitation Report (QT Reviewed)

Data File : F1223004.D
Sample : MB1223W1

Data Path : X:\PEST\FRANK\DATA\F141223\
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23-Dec-14, 14:46:31
Operator :
Misc :
ALS Vial : 4 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: events2.e
Quant Time: Dec 23 15:50:54 2014
Quant Method : C:\MSDCHEM\1\METHODS\H140808.M
Quant Title : Herbicides
QLast Update : Tue Dec 16 17:45:14 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase :
Signal #1 Info :
Signal #2 Phase:
Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
3) S	DCAA (surr)	4.658	4.635	14476454	34492937	57.458m	56.266m
	Spiked Amount 100.000			Recovery	=	57.46%	56.27%
	Target Compounds						
1) A	Dalapon	1.453	1.286	871574	3185325	2.567	2.143
2) A	2,4,6-Tri...	3.706	3.659	1040350	933940	0.530	0.201 #
4) A	Dicamba	4.774f	4.733	170629	3757406	0.181m	1.662m#
5) A	MCPP	4.871	4.811	775364	547670	1153.153m	N.D. m#
6) A	MCPA	0.000	4.928	0	969054	N.D.	N.D. m
7) A	Dichlorprop	0.000	0.000	0	0	N.D.	N.D.
8) A	2,4-D	5.300f	5.286f	164299	658191	0.582m	0.960m#
9) A	Pentachlo...	5.402	5.452	789135	775862	0.218m	0.079m#
10) A	2,4,5-TP	5.714	5.668	306879	266601	0.227m	0.082m#
11) A	2,4,5-T	5.840	5.852	770349	232966	0.602m	0.076m#
12) A	2,4-DB	6.090	6.090f	151228	3603419	0.972m	N.D. m#
13) a	Bentazon	6.506	6.448	4658464	11849266	36.531	36.221
14) A	Dinoseb	6.593f	6.229f	1416273	2738849	N.D. m	1.176m

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

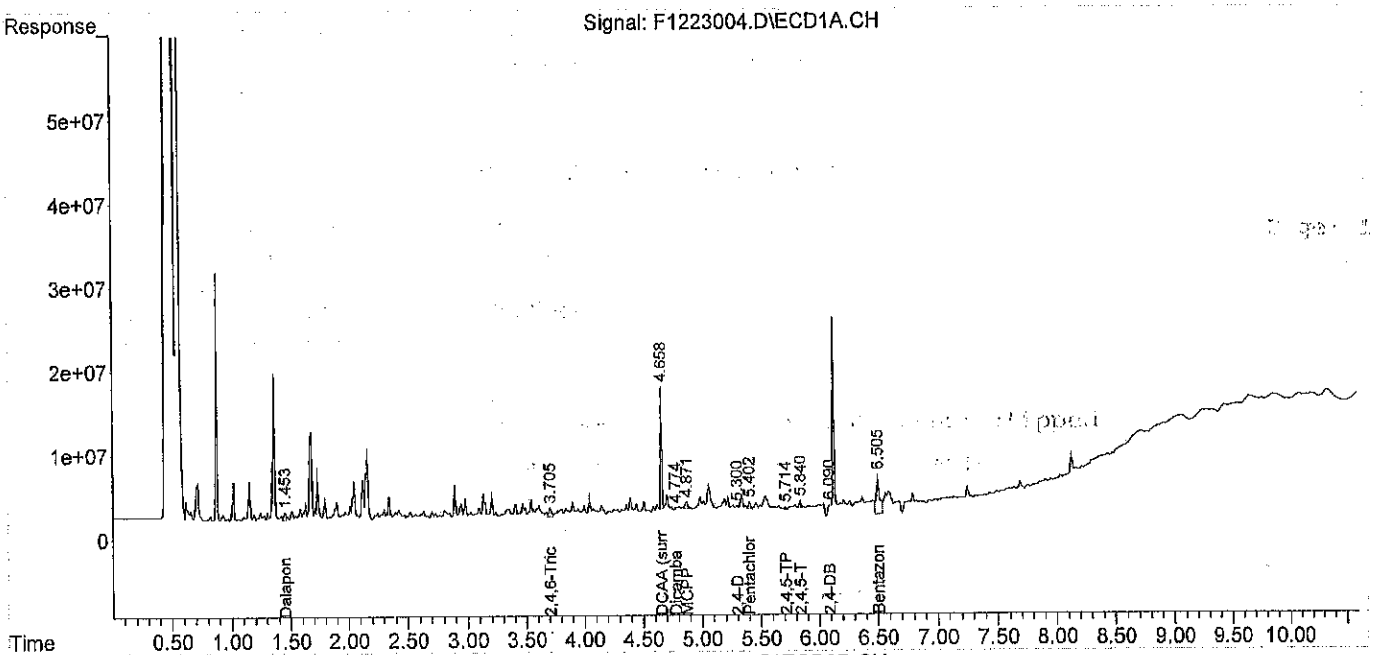
Quantitation Report (QT Reviewed)

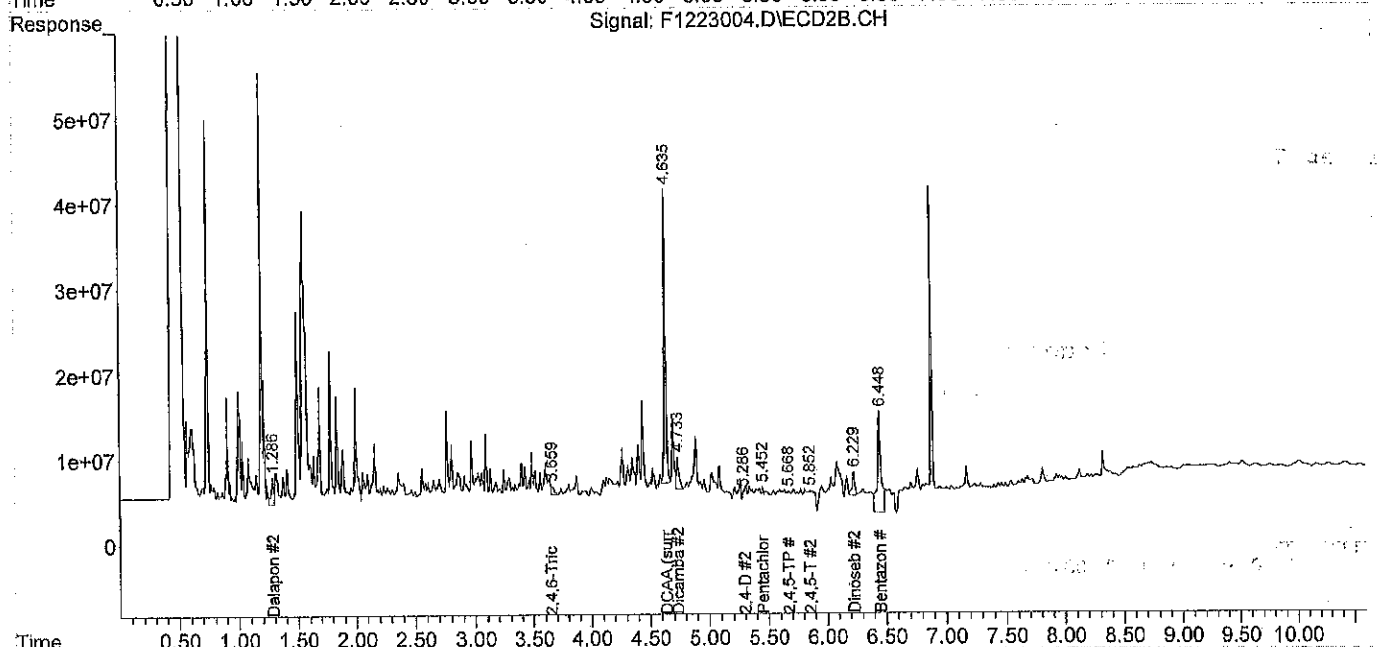
Data File : F1223004.D
Sample : MB1223W1

Data Path : X:\PEST\FRANK\DATA\F141223\
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23-Dec-14, 14:46:31
Operator :
Misc :
ALS Vial : 4 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: events2.e
Quant Time: Dec 23 15:50:54 2014
Quant Method : C:\MSDCHEM\1\METHODS\H140808.M
Quant Title : Herbicides
QLast Update : Tue Dec 16 17:45:14 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Evaluate Continuing Calibration Report

Data File : F1223003.D
Sample : HERBCCV 1223-1 (PS4-02-03)

Data Path : X:\PEST\FRANK\DATA\F141223\
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23-Dec-14, 14:30:36
Operator :
Misc :
ALS Vial : 3 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: events2.e
Quant Time: Dec 23 14:41:18 2014
Quant Method : C:\MSDCHEM\1\METHODS\H140808.M
Quant Title : Herbicides
QLast Update : Tue Dec 16 17:45:14 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.03min
Max. RRF Dev : 16% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(Min)
3	S	DCAA (surr)	100.000	96.306	3.7	104	0.00
6	A	MCPA	10000.000	9596.630	4.0	93	0.00
14	A	Dinoseb	100.000	100.751	-0.8	102	0.00

Signal #2

3	S	DCAA (surr)	100.000	96.932	3.1	113	0.00
6	A	MCPA	10000.000	10688.102	-6.9	105	0.00
14	A	Dinoseb	100.000	101.735	-1.7	110	0.00

Evaluate Continuing Calibration Report - Not Founds

Signal #2

(#) = Out of Range SPCC's out = 0 CCC's out = 0

H140808.M Wed Dec 24 10:53:29 2014

Evaluate Continuing Calibration Report

Data File : F1223013.D
Sample : HERBCCV 1223-2 (PS4-02-03)

Data Path : X:\PEST\FRANK\DATA\F141223\
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23-Dec-14, 17:10:11 (#1); 23-Dec-14, 17:10:12 (#2)
Operator :
Misc :
ALS Vial : 13 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: events2.e
Quant Time: Dec 23 17:20:54 2014
Quant Method : C:\MSDCHEM\1\METHODS\H140808.M
Quant Title : Herbicides
QLast Update : Tue Dec 16 17:45:14 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.03min
Max. RRF Dev : 16% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(Min)
3	S	DCAA (surr)	100.000	94.250	5.8	102	0.00
6	A	MCPA	10000.000	9591.540	4.1	93	0.00
14	A	Dinoseb	100.000	103.534	-3.5	105	0.00

Signal #2

3	S	DCAA (surr)	100.000	96.725	3.3	112	0.00
6	A	MCPA	10000.000	10733.327	-7.3	105	0.00
14	A	Dinoseb	100.000	103.653	-3.7	112	0.00

Evaluate Continuing Calibration Report - Not Founds

Signal #2

(#) = Out of Range SPCC's out = 0 CCC's out = 0

H140808.M Wed Dec 24 10:54:32 2014

Quantitation Report (Not Reviewed)

Data File : F1223003.D
Sample : HERBCCV 1223-1 (PS4-02-03)

Data Path : C:\MSDCHEM\1\DATA\F141223\
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23-Dec-14, 14:30:36
Operator :
Misc :
ALS Vial : 3 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: events2.e
Quant Time: Dec 23 14:41:18 2014
Quant Method : C:\MSDCHEM\1\METHODS\H140808.M
Quant Title : Herbicides
QLast Update : Tue Dec 16 17:45:14 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

KMS 12-23-14

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb	
	System Monitoring Compounds							
3)	S DCAA (surr)	4.656	4.634	24264093	59423159	96.306	96.932	
	Spiked Amount 100.000			Recovery	=	96.31%	96.93%	
	Target Compounds							
1)	A Dalapon	1.455	1.287	34310328	90012534	101.060	123.735	-24
2)	A 2,4,6-Tri...	3.707	3.666	114.1E6	292.3E6	58.131	62.895	-26
4)	A Dicamba	4.760	4.732	97326265	242.5E6	103.297	107.289	
5)	A MCPP	4.877	4.804	6491157	15605483	9354.269	9902.495	
6)	A MCPA	4.961	4.933	9873102	23318770	9596.630	10688.102	
7)	A Dichlorprop	5.163	5.111	24699258	61003012	98.500	126.941 #	-27
8)	A 2,4-D	5.284	5.273	29651112	72468122	104.977	105.693	
9)	A Pentachlo...	5.401	5.455	40234608	111.6E6	11.093	11.379	
10)	A 2,4,5-TP	5.703	5.663	148.8E6	367.1E6	110.271	113.050	-19
11)	A 2,4,5-T	5.835	5.844	141.9E6	363.4E6	110.826	118.958	
12)	A 2,4-DB	6.088	6.075	16274176	41959857	104.564	115.220	-18
13)	a Bentazon	6.498	6.452	12779319	33235692	102.682	118.246	
14)	A Dinoseb	6.577	6.212	94290000	236.9E6	100.751	101.735	

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

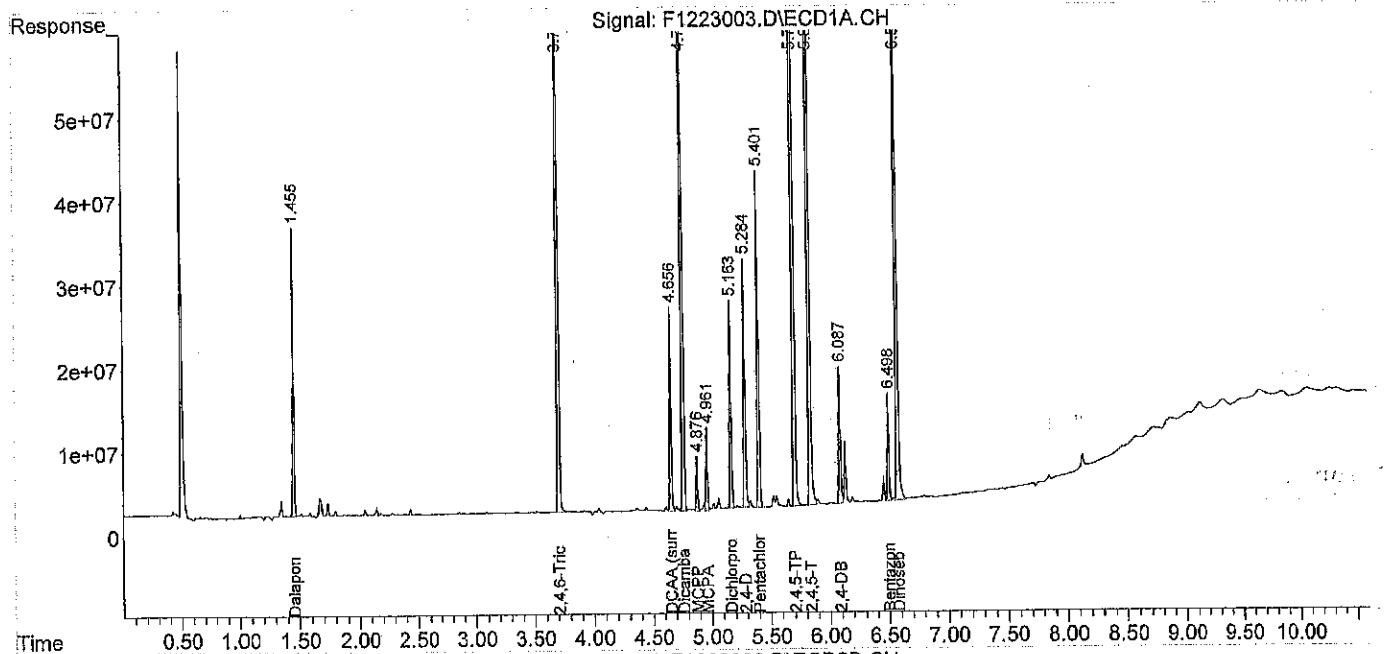
Quantitation Report (Not Reviewed)

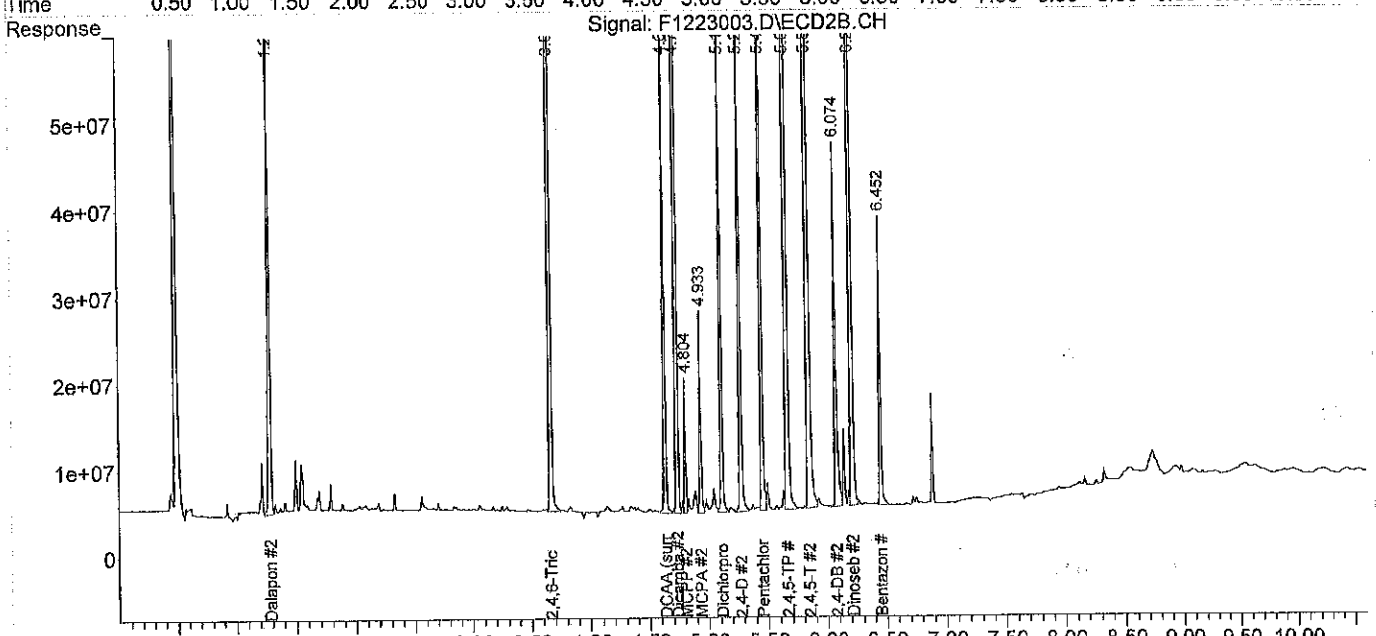
Data File : F1223003.D
Sample : HERBCCV 1223-1 (PS4-02-03)

Data Path : C:\MSDCHEM\1\DATA\F141223\
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23-Dec-14, 14:30:36
Operator :
Misc :
ALS Vial : 3 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: events2.e
Quant Time: Dec 23 14:41:18 2014
Quant Method : C:\MSDCHEM\1\METHODS\H140808.M
Quant Title : Herbicides
QLast Update : Tue Dec 16 17:45:14 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (Not Reviewed)

Data File : F1223013.D
Sample : HERBCCV 1223-2 (PS4-02-03)

Data Path : C:\MSDCHEM\1\DATA\F141223\
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23-Dec-14, 17:10:11 (#1); 23-Dec-14, 17:10:12 (#2)
Operator :
Misc :
ALS Vial : 13 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: events2.e
Quant Time: Dec 23 17:20:54 2014
Quant Method : C:\MSDCHEM\1\METHODS\H140808.M
Quant Title : Herbicides
QLast Update : Tue Dec 16 17:45:14 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

KPM 12-24-14

Volume Inj. : 1ul
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
3)	S DCAA (surr)	4.655	4.633	23746186	59296285	94.250	96.725
	Spiked Amount 100.000			Recovery	=	94.25%	96.72%
	Target Compounds						
1)	A Dalapon	1.454	1.286	33898860	90739456	99.848	124.753
2)	A 2,4,6-Tri...	3.706	3.666	109.9E6	288.6E6	55.981	62.100
4)	A Dicamba	4.759	4.731	96498933	242.9E6	102.418	107.454
5)	A MCPP	4.876	4.804	6504690	15466996	9373.686	9807.211
6)	A MCPA	4.960	4.933	9867985	23409986	9591.540	10733.327
7)	A Dichlorprop	5.163	5.111	24442155	60634209	97.475	126.158 #
8)	A 2,4-D	5.284	5.273	29032376	71296541	102.786	103.985
9)	A Pentachlo...	5.400	5.455	39960914	109.8E6	11.017	11.192
10)	A 2,4,5-TP	5.702	5.663	147.6E6	367.1E6	109.400	113.056
11)	A 2,4,5-T	5.835	5.844	143.6E6	363.5E6	112.147	118.978
12)	A 2,4-DB	6.086	6.074	16710272	41233232	107.366	112.992
13)	a Bentazon	6.497	6.452	13045766	33636865	104.852	119.785
14)	A Dinoseb	6.575	6.211	96765167	241.4E6	103.534	103.653

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

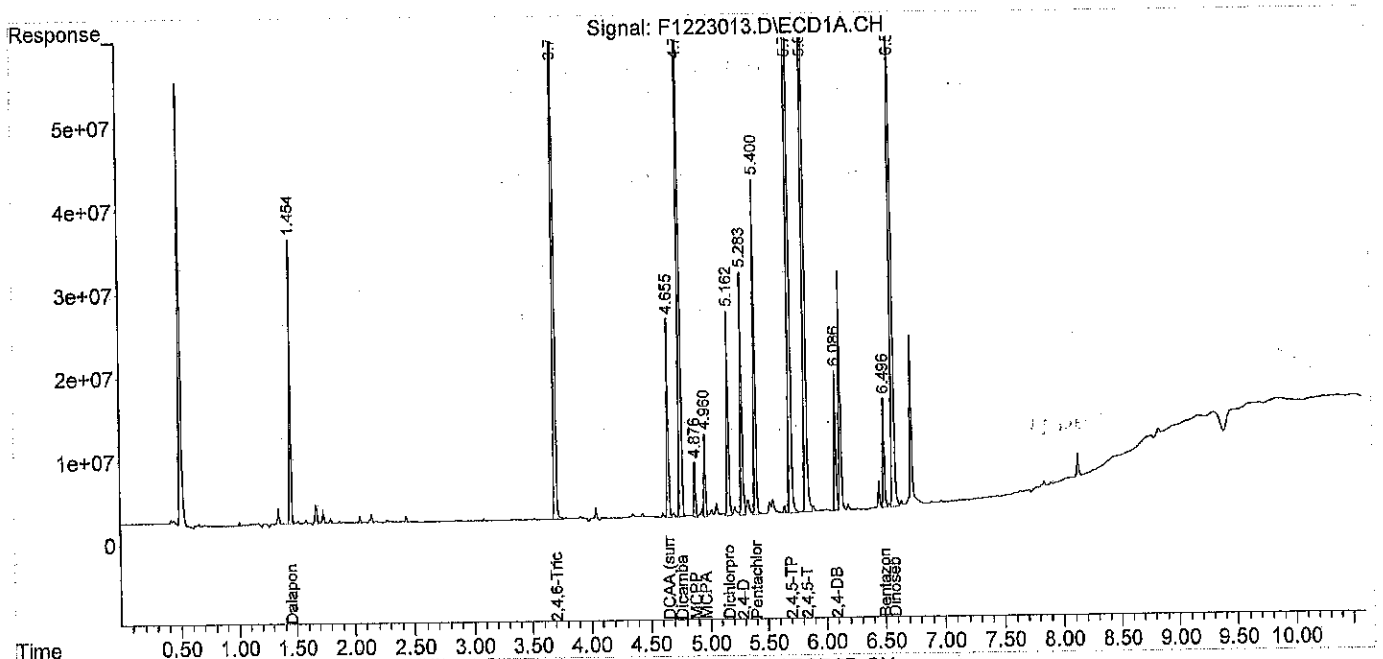
Quantitation Report (Not Reviewed)

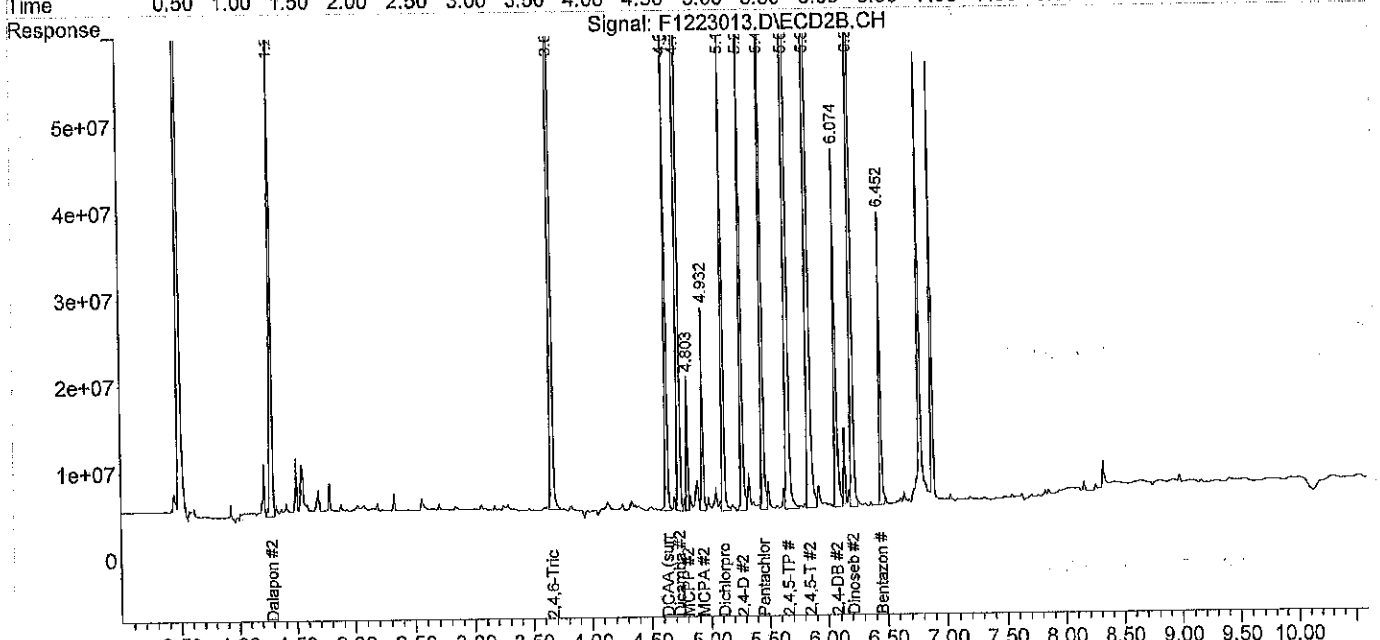
Data File : F1223013.D
Sample : HERBCCV 1223-2 (PS4-02-03)

Data Path : C:\MSDCHEM\1\DATA\F141223\
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23-Dec-14, 17:10:11 (#1); 23-Dec-14, 17:10:12 (#2)
Operator :
Misc :
ALS Vial : 13 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: events2.e
Quant Time: Dec 23 17:20:54 2014
Quant Method : C:\MSDCHEM\1\METHODS\H140808.M
Quant Title : Herbicides
QLast Update : Tue Dec 16 17:45:14 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase :
Signal #1 Info :
Signal #2 Phase:
Signal #2 Info :





OnSite Environmental Inc.
14648 NE 95th Street, Redmond, WA 98052 • (425) 883-3881

March 31, 2015

Robert Trahan
GeoEngineers, Inc.
600 Stewart, Suite 1700
Seattle, WA 98101-1233

Re: Analytical Data for Project 5364-013-08
Laboratory Reference No. 1503-208

Dear Robert:

Enclosed are the analytical results and associated quality control data for samples submitted on March 19, 2015.

The standard policy of OnSite Environmental, Inc. is to store your samples for 30 days from the date of receipt. If you require longer storage, please contact the laboratory.

We appreciate the opportunity to be of service to you on this project. If you have any questions concerning the data, or need additional information, please feel free to call me.

Sincerely,

David Baumeister
Project Manager

Enclosures

Date of Report: March 31, 2015
Samples Submitted: March 19, 2015
Laboratory Reference: 1503-208
Project: 5364-013-08

Case Narrative

Samples were collected on March 19, 2015 and received by the laboratory on March 19, 2015. They were maintained at the laboratory at a temperature of 2°C to 6°C.

General QA/QC issues associated with the analytical data enclosed in this laboratory report will be indicated with a reference to a comment or explanation on the Data Qualifier page. More complex and involved QA/QC issues will be discussed in detail below.

Date of Report: March 31, 2015
Samples Submitted: March 19, 2015
Laboratory Reference: 1503-208
Project: 5364-013-08

ANALYTICAL REPORT FOR SAMPLES

Client ID	Laboratory ID	Matrix	Date Sampled	Date Received	Notes
MW-09_031915	03-208-01	Water	3-19-15	3-19-15	
MW-10_031915	03-208-02	Water	3-19-15	3-19-15	
MW-11_031915	03-208-03	Water	3-19-15	3-19-15	
MW-12_031915	03-208-04	Water	3-19-15	3-19-15	
DUP_031915	03-208-05	Water	3-19-15	3-19-15	

Date of Report: March 31, 2015
Samples Submitted: March 19, 2015
Laboratory Reference: 1503-208
Project: 5364-013-08

ORGANOCHLORINE PESTICIDES EPA 8081B

Matrix: Water
Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-09_031915**					
Laboratory ID:	03-208-01					
Heptachlor	**ND**	0.0047	EPA 8081B	3-23-15	3-25-15	
Aldrin	**ND**	0.0047	EPA 8081B	3-23-15	3-25-15	
Heptachlor Epoxide	**ND**	0.0047	EPA 8081B	3-23-15	3-25-15	
Dieldrin	**0.0056**	0.0047	EPA 8081B	3-23-15	3-25-15	P (104%)
Surrogate:	*Percent Recovery*	*Control Limits*				
TCMX	*46*	*35-96*				
DCB	*39*	*28-118*				
Client ID:	**MW-10_031915**					
Laboratory ID:	03-208-02					
Heptachlor	**ND**	0.0047	EPA 8081B	3-23-15	3-25-15	
Aldrin	**ND**	0.0047	EPA 8081B	3-23-15	3-25-15	
Heptachlor Epoxide	**ND**	0.0047	EPA 8081B	3-23-15	3-25-15	
Dieldrin	**ND**	0.0047	EPA 8081B	3-23-15	3-25-15	
Surrogate:	*Percent Recovery*	*Control Limits*				
TCMX	*57*	*35-96*				
DCB	*51*	*28-118*				
Client ID:	**MW-11_031915**					
Laboratory ID:	03-208-03					
Heptachlor	**ND**	0.0047	EPA 8081B	3-23-15	3-25-15	
Aldrin	**ND**	0.0047	EPA 8081B	3-23-15	3-25-15	
Heptachlor Epoxide	**ND**	0.0047	EPA 8081B	3-23-15	3-25-15	
Dieldrin	**ND**	0.0047	EPA 8081B	3-23-15	3-25-15	
Surrogate:	*Percent Recovery*	*Control Limits*				
TCMX	*59*	*35-96*				
DCB	*60*	*28-118*				
Client ID:	**MW-12_031915**					
Laboratory ID:	03-208-04					
Heptachlor	**ND**	0.0047	EPA 8081B	3-23-15	3-25-15	
Aldrin	**ND**	0.0047	EPA 8081B	3-23-15	3-25-15	
Heptachlor Epoxide	**ND**	0.0047	EPA 8081B	3-23-15	3-25-15	
Dieldrin	**ND**	0.0047	EPA 8081B	3-23-15	3-25-15	
Surrogate:	*Percent Recovery*	*Control Limits*				
TCMX	*55*	*35-96*				
DCB	*63*	*28-118*				

Date of Report: March 31, 2015
Samples Submitted: March 19, 2015
Laboratory Reference: 1503-208
Project: 5364-013-08

ORGANOCHLORINE PESTICIDES EPA 8081B

Matrix: Water
Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**DUP_031915**					
Laboratory ID:	03-208-05					
Heptachlor	**ND**	0.0047	EPA 8081B	3-23-15	3-25-15	
Aldrin	**ND**	0.0047	EPA 8081B	3-23-15	3-25-15	
Heptachlor Epoxide	**ND**	0.0047	EPA 8081B	3-23-15	3-25-15	
Dieldrin	**ND**	0.0047	EPA 8081B	3-23-15	3-25-15	
Surrogate:	*Percent Recovery*	*Control Limits*				
TCMX	*61*	*35-96*				
DCB	*62*	*28-118*				

Date of Report: March 31, 2015
Samples Submitted: March 19, 2015
Laboratory Reference: 1503-208
Project: 5364-013-08

CHLORINATED ACID HERBICIDES EPA 8151A

Matrix: Water
Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-09_031915**					
Laboratory ID:	03-208-01					
MCPA	**ND**	6.6	EPA 8151A	3-23-15	3-24-15	
Dinoseb	**ND**	0.044	EPA 8151A	3-23-15	3-24-15	
Surrogate:	*Percent Recovery*	*Control Limits*				
DCAA	*57*	*30-99*				
Client ID:	**MW-10_031915**					
Laboratory ID:	03-208-02					
MCPA	**75**	6.6	EPA 8151A	3-23-15	3-24-15	
Dinoseb	**3.4**	0.045	EPA 8151A	3-23-15	3-24-15	
Surrogate:	*Percent Recovery*	*Control Limits*				
DCAA	*43*	*30-99*				
Client ID:	**MW-11_031915**					
Laboratory ID:	03-208-03					
MCPA	**210**	6.6	EPA 8151A	3-23-15	3-24-15	
Dinoseb	**0.30**	0.045	EPA 8151A	3-23-15	3-24-15	
Surrogate:	*Percent Recovery*	*Control Limits*				
DCAA	*33*	*30-99*				
Client ID:	**MW-12_031915**					
Laboratory ID:	03-208-04					
MCPA	**7.4**	6.6	EPA 8151A	3-23-15	3-24-15	P (90%)
Dinoseb	**19**	0.44	EPA 8151A	3-23-15	3-26-15	
Surrogate:	*Percent Recovery*	*Control Limits*				
DCAA	*47*	*30-99*				
Client ID:	**DUP_031915**					
Laboratory ID:	03-208-05					
MCPA	**ND**	6.6	EPA 8151A	3-23-15	3-24-15	
Dinoseb	**7.6**	0.44	EPA 8151A	3-23-15	3-26-15	
Surrogate:	*Percent Recovery*	*Control Limits*				
DCAA	*39*	*30-99*				

Date of Report: March 31, 2015
Samples Submitted: March 19, 2015
Laboratory Reference: 1503-208
Project: 5364-013-08

ORGANOCHLORINE PESTICIDES EPA 8081B QUALITY CONTROL

Matrix: Water
Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0323W1					
Heptachlor	**ND**	0.0050	EPA 8081B	3-23-15	3-24-15	
Aldrin	**ND**	0.0050	EPA 8081B	3-23-15	3-24-15	
Heptachlor Epoxide	**ND**	0.0050	EPA 8081B	3-23-15	3-24-15	
Dieldrin	**ND**	0.0050	EPA 8081B	3-23-15	3-24-15	
Surrogate:	*Percent Recovery*	*Control Limits*				
TCMX	*73*	*35-96*				
DCB	*96*	*28-118*				

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
SPIKE BLANKS											
Laboratory ID:	SB0323W1										
	SB	SBD	SB	SBD		SB	SBD				
Heptachlor	**0.0394**	**0.0370**	0.0500	0.0500	N/A	**79**	**74**	43-114	6	15	
Aldrin	**0.0411**	**0.0386**	0.0500	0.0500	N/A	**82**	**77**	50-106	6	15	
Dieldrin	**0.109**	**0.105**	0.125	0.125	N/A	**88**	**84**	58-103	4	15	
Surrogate:											
TCMX						*78*	*73*	*35-96*			
DCB						*97*	*94*	*28-118*			

Date of Report: March 31, 2015
Samples Submitted: March 19, 2015
Laboratory Reference: 1503-208
Project: 5364-013-08

CHLORINATED ACID HERBICIDES EPA 8151A QUALITY CONTROL

Matrix: Water
Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0323W1					
MCPA	**ND**	7.0	EPA 8151A	3-23-15	3-24-15	
Dinoseb	**ND**	0.047	EPA 8151A	3-23-15	3-24-15	
Surrogate:	*Percent Recovery*	*Control Limits*				
DCAA	*61*	*30-99*				

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
SPIKE BLANKS											
Laboratory ID:	SB0323W1										
	SB	SBD	SB	SBD		SB	SBD				
Dicamba	**0.647**	**0.603**	1.00	1.00	N/A	**65**	**60**	36-89	7	14	
2,4-D	**0.760**	**0.734**	1.00	1.00	N/A	**76**	**73**	35-75	3	15	
Pentachlorophenol	**0.0632**	**0.0587**	0.100	0.100	N/A	**63**	**59**	41-108	7	20	
2,4,5-T	**0.745**	**0.703**	1.00	1.00	N/A	**75**	**70**	39-86	6	13	
2,4-DB	**0.721**	**0.726**	1.00	1.00	N/A	**72**	**73**	25-93	1	17	
Surrogate:											
DCAA						*75*	*73*	*30-99*			

OnSite Environmental Inc.

Data Qualifiers and Abbreviations

A - Due to a high sample concentration, the amount spiked is insufficient for meaningful MS/MSD recovery data.

B - The analyte indicated was also found in the blank sample.

C - The duplicate RPD is outside control limits due to high result variability when analyte concentrations are within five times the quantitation limit.

E - The value reported exceeds the quantitation range and is an estimate.

F - Surrogate recovery data is not available due to the high concentration of coeluting target compounds.

H - The analyte indicated is a common laboratory solvent and may have been introduced during sample preparation, and be impacting the sample result.

I - Compound recovery is outside of the control limits.

J - The value reported was below the practical quantitation limit. The value is an estimate.

K - Sample duplicate RPD is outside control limits due to sample inhomogeneity. The sample was re-extracted and re-analyzed with similar results.

L - The RPD is outside of the control limits.

M - Hydrocarbons in the gasoline range are impacting the diesel range result.

M1 - Hydrocarbons in the gasoline range (toluene-napthalene) are present in the sample.

N - Hydrocarbons in the lube oil range are impacting the diesel range result.

N1 - Hydrocarbons in diesel range are impacting lube oil range results.

O - Hydrocarbons indicative of heavier fuels are present in the sample and are impacting the gasoline result.

P - The RPD of the detected concentrations between the two columns is greater than 40.

Q - Surrogate recovery is outside of the control limits.

S - Surrogate recovery data is not available due to the necessary dilution of the sample.

T - The sample chromatogram is not similar to a typical _____.

U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

U1 - The practical quantitation limit is elevated due to interferences present in the sample.

V - Matrix Spike/Matrix Spike Duplicate recoveries are outside control limits due to matrix effects.

W - Matrix Spike/Matrix Spike Duplicate RPD are outside control limits due to matrix effects.

X - Sample extract treated with a mercury cleanup procedure.

X1- Sample extract treated with a Sulfuric acid/Silica gel cleanup procedure.

Y - The calibration verification for this analyte exceeded the 20% drift specified in method 8260C, and therefore the reported result should be considered an estimate. The overall performance of the calibration verification standard met the acceptance criteria of the method.

Z -

ND - Not Detected at PQL
PQL - Practical Quantitation Limit
RPD - Relative Percent Difference

Chain of Custody

OnSite Environmental Inc.
Analytical Laboratory Testing Services
14648 NE 95th Street • Redmond, WA 98052
Phone: (425) 883-3881 • www.onsite-env.com

Company: GEOENGINEERS INC.
Project Number: 5364-013-08
Project Name: TAXIWAY F
Project Manager: ROBERT TRAHAN
Sampled by: NATHAN SOLOMON

Turnaround Request (in working days)
(Check One)
☐ Same Day ☐ 1 Day
☐ 2 Days ☐ 3 Days
☒ Standard (7 Days) (TPH analysis 5 Days)
☐ _____ (other)

Laboratory Number: 03-208

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers	NWTPH-HCID	NWTPH-Gx/BTEX	NWTPH-Gx	NWTPH-Dx	Volatiles 8260C	Halogenated Volatiles 8260C	Semivolatiles 8270D/SIM (with low-level PAHs)	PAHs 8270D/SIM (low-level)	PCBs 8082A	Organochlorine Pesticides 8081B	Organophosphorus Pesticides 8270D/SIM	Chlorinated Acid Herbicides 8151A	Total RCRA Metals	Total MTCA Metals	TCLP Metals	HEM (oil and grease) 1664A	CHLORINATED PESTICIDES 8081A	CHLORINATED HERBICIDES 8151A				% Moisture
1	MW-09_031915	03.19.15	1110	LIQUID	4																	X	X				
2	MW-10-031915	03.19.15	1205		4																	X	X				
3	MW-11_031915	03.19.15	1245		4																	X	X				
4	MW-12_031915	03.19.15	1335		4																	X	X				
5	DUP_031915	03.19.15	1340		4																	X	X				

	Signature	Company	Date	Time
Relinquished		GEI	3.19.15	1535
Received			3/19/15	1535
Relinquished				
Received				
Relinquished				
Received				

Comments/Special Instructions

Reviewed/Date

Reviewed/Date

Chromatograms with final report ☐

Data Package: Standard ☐ Level III ☑ Level IV ☐ Electronic Data Deliverables (EDDs) ☑ _____

APPENDIX D
Data Validation Reports

GeoEngineers

Plaza 600 Building, 600 Stewart Street, Suite 1700, Seattle, WA 98101, Telephone: 206.728.2674, Fax: 206.728.2732 www.geoengineers.com

Data Validation Report

Project: Taxiway F Site, Skagit County Regional Airport
Continued Groundwater Monitoring (Round 7)

GEI File No: 05364-013-08

Date: March 1, 2015

This report documents the results of a United States Environmental Protection Agency (USEPA)-defined Stage 2A data validation (USEPA Document 540-R-08-005; USEPA, 2009) of analytical data from the analyses of groundwater samples collected as part of the December 2014 (Round 7) sampling event, and the associated laboratory and field quality control (QC) samples. The samples were obtained from the Skagit County Regional Airport, Taxiway F Site located in Burlington, Washington.

OBJECTIVE AND QUALITY CONTROL ELEMENTS

GeoEngineers, Inc. (GeoEngineers) completed the data validation consistent with USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (USEPA, 2008) (National Functional Guidelines) to determine if the laboratory analytical results meet the project objectives and are usable for their intended purpose. Data usability was assessed by determining if:

- The samples were analyzed using well-defined and acceptable methods that provide reporting limits below applicable regulatory criteria;
- The precision and accuracy of the data are well-defined and sufficient to provide defensible data; and
- The quality assurance/quality control (QA/QC) procedures utilized by the laboratory meet acceptable industry practices and standards.

The data validation included review of the following QC elements:

- Data Package Completeness
- Chain-of-Custody Documentation
- Holding Times and Sample Preservation
- Surrogate Recoveries
- Method Blanks
- Matrix Spikes/Matrix Spike Duplicates
- Laboratory Control Samples/Laboratory Control Sample Duplicates
- Field Duplicates
- Column Confirmation RPD Values

VALIDATED SAMPLE DELIVERY GROUPS

This data validation included review of the sample delivery group (SDG) listed below in Table 1.

TABLE 1: SUMMARY OF VALIDATED SAMPLE DELIVERY GROUPS

Laboratory SDG	Samples Validated
1412-237	MW-9-121814, MW-10-121814, MW-11-121814, MW-12-121814, DUP-121814

CHEMICAL ANALYSIS PERFORMED

OnSite Environmental, Inc. (OnSite), located in Redmond, Washington, performed laboratory analysis on the groundwater samples using the following methods:

- Organochlorine Pesticides by USEPA Method 8081B; and
- Chlorinated Acid Herbicides by USEPA Method 8151A

DATA VALIDATION SUMMARY

The results for each of the QC elements are summarized below.

Data Package Completeness

OnSite provided all required deliverables for the data validation according to the National Functional Guidelines. The laboratory followed adequate corrective action processes and all identified anomalies were discussed in the relevant laboratory case narrative.

Chain-of-Custody Documentation

Chain-of-custody (COC) forms were provided with the laboratory analytical reports. The COCs were accurate and complete when submitted to the lab.

Holding Times and Sample Preservation

The sample holding time is defined as the time that elapses between sample collection and sample analysis. Maximum holding time criteria exist for each analysis to help ensure that the analyte concentrations found at the time of analysis reflect the concentration present at the time of sample collection. Established holding times were met for all analyses. The sample coolers arrived at the laboratory at the appropriate temperatures of between two and six degrees Celsius.

Surrogate Recoveries

A surrogate compound is a compound that is chemically similar to the organic analytes of interest, but unlikely to be found in any environmental sample. Surrogates are used for organic analyses and are added to all samples, standards, and blanks to serve as an accuracy and specificity check of each analysis. The surrogates are added to the samples at a known concentration and percent recoveries are calculated following analysis. All surrogate percent recoveries for field samples were within the laboratory control limits, with the following exceptions:

SDG 1412-237: (Pesticides) The percent recovery for surrogate DCB was less than the control limits in Sample DUP-121814. The reporting limits for aldrin, dieldrin, heptachlor, and heptachlor epoxide were qualified as estimated (UJ) in this sample.

Method Blanks

Method blanks are analyzed to ensure that laboratory procedures and reagents do not introduce measurable concentrations of the analytes of interest. A method blank was analyzed with each batch of samples, at a frequency of 1 per 20 samples. For all sample batches, method blanks were analyzed at the required frequency. None of the analytes of interest were detected above the reporting limits in any of the method blanks.

Matrix Spikes/Matrix Spike Duplicates

Since the actual analyte concentration in an environmental sample is not known, the accuracy of a particular analysis is usually inferred by performing a matrix spike (MS) analysis on one sample from the associated batch, known as the parent sample. One aliquot of the sample is analyzed in the normal manner and then a second aliquot of the sample is spiked with a known amount of analyte concentration and analyzed. From these analyses, a percent recovery is calculated. Matrix spike duplicate (MSD) analyses are generally performed for organic analyses as a precision check and analyzed in the same sequence as a matrix spike. Using the result values from the MS and MSD, the relative percent difference (RPD) is calculated. The percent recovery control limits for MS and MSD analyses are specified in the laboratory documents, as are the RPD control limits for MS/MSD sample sets.

There were no MS/MSD sample analyses performed on the associated field samples.

Laboratory Control Samples/Laboratory Control Sample Duplicates

A laboratory control sample (LCS) is a blank sample that is spiked with a known amount of analyte and then analyzed. An LCS is similar to an MS, but without the possibility of matrix interference. Given that matrix interference is not an issue, the LCS/LCSD control limits for accuracy and precision are usually more rigorous than for MS/MSD analyses. Additionally, data qualification based on LCS/LCSD analyses would apply to all samples in the associated batch, instead of just the parent sample. The percent recovery control limits for LCS and LCSD analyses are specified in the laboratory documents, as are the RPD control limits for LCS/LCSD sample sets.

One LCS/LCSD analysis should be performed for every analytical batch or every 20 field samples, whichever is more frequent. The frequency requirements were met for all analyses and the percent recovery and RPD values were within the proper control limits.

Field Duplicates

In order to assess precision, field duplicate samples were collected and analyzed along with the reviewed sample batches. The duplicate samples were analyzed for the same parameters as the associated parent samples. Precision is determined by calculating the RPD between each pair of samples. If one or more of the sample analytes has a concentration greater than five times the reporting limit for that sample, then the absolute difference is used instead of the RPD. The RPD control limit for water samples is 35 percent.

SDG 1412-237: One field duplicate sample pair, MW-12-121814 and DUP-121814, was submitted with this SDG. The precision criteria for all target analytes were met for this sample pair.

Column Confirmation RPD Values

The laboratory analyzed all samples submitted for analysis by SW8081B and SW8151A. These methods require the sample results to be reported from a dual-column electron capture detector (ECD) system. Since this system requires the use of two columns, it produces two results simultaneously. The laboratory is required to report the precision of these results in the form of a relative percent difference (RPD) value,

one column being considered primary and the other column being considered as a secondary check. If the RPD value is greater than 40%, the analytical result is qualified as estimated (J). If the RPD values were greater than 100%, then the analytical result is qualified as tentatively identified (NJ).

There were no RPD values greater than 40% in any of the field samples.

OVERALL ASSESSMENT

As was determined by this data validation, the laboratory followed the specified analytical methods. Accuracy was acceptable, as demonstrated by the surrogate and LCS/LCSD percent recovery values, with the exception noted above. Precision was acceptable, as demonstrated by the LCS/LCSD, field duplicate, and column confirmation RPD values.

All data are acceptable for the intended use, with the following qualifications listed below in Table 2.

TABLE 2: SUMMARY OF QUALIFIED SAMPLES

Sample ID	Analyte	Qualifier	Reason
DUP-121814	Aldrin	UJ	Surrogate Percent Recovery
	Dieldrin	UJ	Surrogate Percent Recovery
	Heptachlor	UJ	Surrogate Percent Recovery
	Heptachlor epoxide	UJ	Surrogate Percent Recovery

REFERENCES

U.S. Environmental Protection Agency (USEPA). "Guidance for Labeling Externally Validated Laboratory Analytical Data for Superfund Use," EPA-540-R-08-005. January 2009.

U.S. Environmental Protection Agency (USEPA). "Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review," EPA-540-R-08-01. June 2008.

GeoEngineers

Plaza 600 Building, 600 Stewart Street, Suite 1700, Seattle, WA 98101, Telephone: 206.728.2674, Fax: 206.728.2732 www.geoengineers.com

Data Validation Report

Project: Taxiway F Site, Skagit County Regional Airport
Continued Groundwater Monitoring (Round 5)

GEI File No: 05364-013-08

Date: July 30, 2014

This report documents the results of a United States Environmental Protection Agency (USEPA)-defined Stage 2A data validation (USEPA Document 540-R-08-005; USEPA, 2009) of analytical data from the analyses of groundwater samples collected as part of the June 2014 (Round 5) sampling event, and the associated laboratory and field quality control (QC) samples. The samples were obtained from the Skagit County Regional Airport, Taxiway F Site located in Burlington, Washington.

OBJECTIVE AND QUALITY CONTROL ELEMENTS

GeoEngineers, Inc. (GeoEngineers) completed the data validation consistent with USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (USEPA, 2008) (National Functional Guidelines) to determine if the laboratory analytical results meet the project objectives and are usable for their intended purpose. Data usability was assessed by determining if:

- The samples were analyzed using well-defined and acceptable methods that provide reporting limits below applicable regulatory criteria;
- The precision and accuracy of the data are well-defined and sufficient to provide defensible data; and
- The quality assurance/quality control (QA/QC) procedures utilized by the laboratory meet acceptable industry practices and standards.

The data validation included review of the following QC elements:

- Data Package Completeness
- Chain-of-Custody Documentation
- Holding Times and Sample Preservation
- Surrogate Recoveries
- Method Blanks
- Matrix Spikes/Matrix Spike Duplicates
- Laboratory Control Samples/Laboratory Control Sample Duplicates
- Field Duplicates
- Column Confirmation RPD Values

VALIDATED SAMPLE DELIVERY GROUPS

This data validation included review of the sample delivery group (SDG) listed below in Table 1.

TABLE 1: SUMMARY OF VALIDATED SAMPLE DELIVERY GROUPS

Laboratory SDG	Samples Validated
1406-261	GEI-MW-9, GEI-MW-10, GEI-MW-11, GEI-MW-12, GEI-MW-12-DUP

CHEMICAL ANALYSIS PERFORMED

OnSite Environmental, Inc. (OnSite), located in Redmond, Washington, performed laboratory analysis on the groundwater samples using the following methods:

- Organochlorine Pesticides by USEPA Method 8081B; and
- Chlorinated Acid Herbicides by USEPA Method 8151A

DATA VALIDATION SUMMARY

The results for each of the QC elements are summarized below.

Data Package Completeness

OnSite provided all required deliverables for the data validation according to the National Functional Guidelines. The laboratory followed adequate corrective action processes and all identified anomalies were discussed in the relevant laboratory case narrative.

Chain-of-Custody Documentation

Chain-of-custody (COC) forms were provided with the laboratory analytical reports. The COCs were accurate and complete when submitted to the lab.

Holding Times and Sample Preservation

The sample holding time is defined as the time that elapses between sample collection and sample analysis. Maximum holding time criteria exist for each analysis to help ensure that the analyte concentrations found at the time of analysis reflect the concentration present at the time of sample collection. Established holding times were met for all analyses. The sample coolers arrived at the laboratory at the appropriate temperatures of between two and six degrees Celsius.

Surrogate Recoveries

A surrogate compound is a compound that is chemically similar to the organic analytes of interest, but unlikely to be found in any environmental sample. Surrogates are used for organic analyses and are added to all samples, standards, and blanks to serve as an accuracy and specificity check of each analysis. The surrogates are added to the samples at a known concentration and percent recoveries are calculated following analysis. All surrogate percent recoveries for field samples were within the control limits specified in the National Functional Guidielines.

Method Blanks

Method blanks are analyzed to ensure that laboratory procedures and reagents do not introduce measurable concentrations of the analytes of interest. A method blank was analyzed with each batch of samples, at a frequency of 1 per 20 samples. For all sample batches, method blanks were analyzed at

the required frequency. None of the analytes of interest were detected above the reporting limits in any of the method blanks.

Matrix Spikes/Matrix Spike Duplicates

Since the actual analyte concentration in an environmental sample is not known, the accuracy of a particular analysis is usually inferred by performing a matrix spike (MS) analysis on one sample from the associated batch, known as the parent sample. One aliquot of the sample is analyzed in the normal manner and then a second aliquot of the sample is spiked with a known amount of analyte concentration and analyzed. From these analyses, a percent recovery is calculated. Matrix spike duplicate (MSD) analyses are generally performed for organic analyses as a precision check and analyzed in the same sequence as a matrix spike. Using the result values from the MS and MSD, the relative percent difference (RPD) is calculated. The percent recovery control limits for MS and MSD analyses are specified in the laboratory documents, as are the RPD control limits for MS/MSD sample sets.

There were no MS/MSD sample analyses performed on the associated field samples.

Laboratory Control Samples/Laboratory Control Sample Duplicates

A laboratory control sample (LCS) is a blank sample that is spiked with a known amount of analyte and then analyzed. An LCS is similar to an MS, but without the possibility of matrix interference. Given that matrix interference is not an issue, the LCS/LCSD control limits for accuracy and precision are usually more rigorous than for MS/MSD analyses. Additionally, data qualification based on LCS/LCSD analyses would apply to all samples in the associated batch, instead of just the parent sample. The percent recovery control limits for LCS and LCSD analyses are specified in the laboratory documents, as are the RPD control limits for LCS/LCSD sample sets.

One LCS/LCSD analysis should be performed for every analytical batch or every 20 field samples, whichever is more frequent. The frequency requirements were met for all analyses and the percent recovery and RPD values were within the proper control limits.

Field Duplicates

In order to assess precision, field duplicate samples were collected and analyzed along with the reviewed sample batches. The duplicate samples were analyzed for the same parameters as the associated parent samples. Precision is determined by calculating the RPD between each pair of samples. If one or more of the sample analytes has a concentration greater than five times the reporting limit for that sample, then the absolute difference is used instead of the RPD. The RPD control limit for water samples is 35 percent.

SDG 1406-261: One field duplicate sample pair, GEI-MW-12 and GEI-MW-12-DUP, was submitted with this SDG. The precision criteria for all target analytes were met for this sample pair.

Column Confirmation RPD Values

The laboratory analyzed all samples submitted for analysis by SW8081B and SW8151A. These methods require the sample results to be reported from a dual-column electron capture detector (ECD) system. Since this system requires the use of two columns, it produces two results simultaneously. The laboratory is required to report the precision of these results in the form of a relative percent difference (RPD) value, one column being considered primary and the other column being considered as a secondary check.

If the RPD value is greater than 40%, the analytical result is qualified as estimated (J). If the RPD values were greater than 100%, then the analytical result is qualified as tentatively identified (NJ). The tables below summarize any RPD exceedances.

Sample ID	Analyte	Qualifier
GEI-MW-9	MCPA	J
GEI-MW-10	MCPA	J
GEI-MW-11	MCPA	J

OVERALL ASSESSMENT

As was determined by this data validation, the laboratory followed the specified analytical methods. Accuracy was acceptable, as demonstrated by the surrogate and LCS/LCSD percent recovery values. Precision was acceptable, as demonstrated by the LCS/LCSD, field duplicate, and column confirmation RPD values.

All data are acceptable for the intended use, with the following qualifications listed below in Table 2:

TABLE 2: SUMMARY OF QUALIFIED SAMPLES

Sample ID	Analyte	Qualifier
GEI-MW-9	MCPA	J
GEI-MW-10	MCPA	J
GEI-MW-11	MCPA	J

REFERENCES

U.S. Environmental Protection Agency (USEPA). "Guidance for Labeling Externally Validated Laboratory Analytical Data for Superfund Use," EPA-540-R-08-005. January 2009.

U.S. Environmental Protection Agency (USEPA). "Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review," EPA-540-R-08-01. June 2008.

GeoEngineers

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Data Validation Report

Project: Taxiway F Site, Skagit County Regional Airport
Continued Groundwater Monitoring (Round 8)

GEI File No: 05364-013-08

Date: April 8, 2015

This report documents the results of a United States Environmental Protection Agency (USEPA)-defined Stage 2A data validation (USEPA Document 540-R-08-005; USEPA, 2009) of analytical data from the analyses of groundwater samples collected as part of the March 2015 (Round 8) sampling event, and the associated laboratory and field quality control (QC) samples. The samples were obtained from the Skagit County Regional Airport, Taxiway F Site located in Burlington, Washington.

OBJECTIVE AND QUALITY CONTROL ELEMENTS

GeoEngineers, Inc. (GeoEngineers) completed the data validation consistent with USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (USEPA, 2008) (National Functional Guidelines) to determine if the laboratory analytical results meet the project objectives and are usable for their intended purpose. Data usability was assessed by determining if:

- The samples were analyzed using well-defined and acceptable methods that provide reporting limits below applicable regulatory criteria;
- The precision and accuracy of the data are well-defined and sufficient to provide defensible data; and
- The quality assurance/quality control (QA/QC) procedures utilized by the laboratory meet acceptable industry practices and standards.

The data validation included review of the following QC elements:

- Data Package Completeness
- Chain-of-Custody Documentation
- Holding Times and Sample Preservation
- Surrogate Recoveries
- Method Blanks
- Matrix Spikes/Matrix Spike Duplicates
- Laboratory Control Samples/Laboratory Control Sample Duplicates
- Field Duplicates
- Column Confirmation RPD Values

VALIDATED SAMPLE DELIVERY GROUPS

This data validation included review of the sample delivery group (SDG) listed below in Table 1.

TABLE 1: SUMMARY OF VALIDATED SAMPLE DELIVERY GROUPS

Laboratory SDG	Samples Validated
1503-208	MW-09_031915, MW-10_031915, MW-11_031915, MW-12_031915, DUP_031915

CHEMICAL ANALYSIS PERFORMED

OnSite Environmental, Inc. (OnSite), located in Redmond, Washington, performed laboratory analysis on the groundwater samples using the following methods:

- Organochlorine Pesticides by USEPA Method 8081B; and
- Chlorinated Acid Herbicides by USEPA Method 8151A

DATA VALIDATION SUMMARY

The results for each of the QC elements are summarized below.

Data Package Completeness

OnSite provided all required deliverables for the data validation according to the National Functional Guidelines. The laboratory followed adequate corrective action processes and all identified anomalies were discussed in the relevant laboratory case narrative.

Chain-of-Custody Documentation

Chain-of-custody (COC) forms were provided with the laboratory analytical reports. The COCs were accurate and complete when submitted to the lab.

Holding Times and Sample Preservation

The sample holding time is defined as the time that elapses between sample collection and sample analysis. Maximum holding time criteria exist for each analysis to help ensure that the analyte concentrations found at the time of analysis reflect the concentration present at the time of sample collection. Established holding times were met for all analyses. The sample coolers arrived at the laboratory at the appropriate temperatures of between two and six degrees Celsius.

Surrogate Recoveries

A surrogate compound is a compound that is chemically similar to the organic analytes of interest, but unlikely to be found in any environmental sample. Surrogates are used for organic analyses and are added to all samples, standards, and blanks to serve as an accuracy and specificity check of each analysis. The surrogates are added to the samples at a known concentration and percent recoveries are calculated following analysis. All surrogate percent recoveries for field samples were within the laboratory control limits.

Method Blanks

Method blanks are analyzed to ensure that laboratory procedures and reagents do not introduce measurable concentrations of the analytes of interest. A method blank was analyzed with each batch of samples, at a frequency of 1 per 20 samples. For all sample batches, method blanks were analyzed at

the required frequency. None of the analytes of interest were detected above the reporting limits in any of the method blanks.

Matrix Spikes/Matrix Spike Duplicates

Since the actual analyte concentration in an environmental sample is not known, the accuracy of a particular analysis is usually inferred by performing a matrix spike (MS) analysis on one sample from the associated batch, known as the parent sample. One aliquot of the sample is analyzed in the normal manner and then a second aliquot of the sample is spiked with a known amount of analyte concentration and analyzed. From these analyses, a percent recovery is calculated. Matrix spike duplicate (MSD) analyses are generally performed for organic analyses as a precision check and analyzed in the same sequence as a matrix spike. Using the result values from the MS and MSD, the relative percent difference (RPD) is calculated. The percent recovery control limits for MS and MSD analyses are specified in the laboratory documents, as are the RPD control limits for MS/MSD sample sets.

There were no MS/MSD sample analyses performed on the associated field samples.

Laboratory Control Samples/Laboratory Control Sample Duplicates

A laboratory control sample (LCS) is a blank sample that is spiked with a known amount of analyte and then analyzed. An LCS is similar to an MS, but without the possibility of matrix interference. Given that matrix interference is not an issue, the LCS/LCSD control limits for accuracy and precision are usually more rigorous than for MS/MSD analyses. Additionally, data qualification based on LCS/LCSD analyses would apply to all samples in the associated batch, instead of just the parent sample. The percent recovery control limits for LCS and LCSD analyses are specified in the laboratory documents, as are the RPD control limits for LCS/LCSD sample sets.

One LCS/LCSD analysis should be performed for every analytical batch or every 20 field samples, whichever is more frequent. The frequency requirements were met for all analyses and the percent recovery and RPD values were within the proper control limits.

Field Duplicates

In order to assess precision, field duplicate samples were collected and analyzed along with the reviewed sample batches. The duplicate samples were analyzed for the same parameters as the associated parent samples. Precision is determined by calculating the RPD between each pair of samples. If one or more of the sample analytes has a concentration greater than five times the reporting limit for that sample, then the absolute difference is used instead of the RPD. The RPD control limit for water samples is 35 percent.

SDG 1503-208: One field duplicate sample pair, MW-12_031915 and DUP_031915, was submitted with this SDG. The precision criteria for all target analytes were met for this sample pair, with the exception of dinoseb. The positive results for this target analyte were qualified as estimated (J) in these samples.

Column Confirmation RPD Values

The laboratory analyzed all samples submitted for analysis by SW8081B and SW8151A. These methods require the sample results to be reported from a dual-column electron capture detector (ECD) system. Since this system requires the use of two columns, it produces two results simultaneously. The laboratory is required to report the precision of these results in the form of a relative percent difference (RPD) value, one column being considered primary and the other column being considered as a secondary check.

If the RPD value is greater than 40%, the analytical result is qualified as estimated (J). If the RPD values were greater than 100%, then the analytical result is qualified as tentatively identified (NJ).

Sample ID	Analyte	Qualifier
MW-09_031915	Dieldrin	NJ
MW-12_031915	MCPA	J

OVERALL ASSESSMENT

As was determined by this data validation, the laboratory followed the specified analytical methods. Accuracy was acceptable, as demonstrated by the surrogate and LCS/LCSD percent recovery values. Precision was acceptable, as demonstrated by the LCS/LCSD, field duplicate, and column confirmation RPD values.

All data are acceptable for the intended use, with the following qualifications listed below in Table 2.

TABLE 2: SUMMARY OF QUALIFIED SAMPLES

Sample ID	Analyte	Qualifier	Reason
MW-09_031915	Dieldrin	NJ	Column Confirmation RPD
MW-12_031915	MCPA	J	Column Confirmation RPD
MW-12_031915	Dinoseb	J	Field Duplicate RPD
DUP_031915	Dinoseb	J	Field Duplicate RPD

REFERENCES

U.S. Environmental Protection Agency (USEPA). "Guidance for Labeling Externally Validated Laboratory Analytical Data for Superfund Use," EPA-540-R-08-005. January 2009.

U.S. Environmental Protection Agency (USEPA). "Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review," EPA-540-R-08-01. June 2008.

GeoEngineers

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Data Validation Report

Project: Taxiway F Site, Skagit County Regional Airport
Continued Groundwater Monitoring (Round 6)

GEI File No: 05364-013-08

Date: November 21, 2014

This report documents the results of a United States Environmental Protection Agency (USEPA)-defined Stage 2A data validation (USEPA Document 540-R-08-005; USEPA, 2009) of analytical data from the analyses of groundwater samples collected as part of the October 2014 (Round 6) sampling event, and the associated laboratory and field quality control (QC) samples. The samples were obtained from the Skagit County Regional Airport, Taxiway F Site located in Burlington, Washington.

OBJECTIVE AND QUALITY CONTROL ELEMENTS

GeoEngineers, Inc. (GeoEngineers) completed the data validation consistent with USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (USEPA, 2008) (National Functional Guidelines) to determine if the laboratory analytical results meet the project objectives and are usable for their intended purpose. Data usability was assessed by determining if:

- The samples were analyzed using well-defined and acceptable methods that provide reporting limits below applicable regulatory criteria;
- The precision and accuracy of the data are well-defined and sufficient to provide defensible data; and
- The quality assurance/quality control (QA/QC) procedures utilized by the laboratory meet acceptable industry practices and standards.

The data validation included review of the following QC elements:

- Data Package Completeness
- Chain-of-Custody Documentation
- Holding Times and Sample Preservation
- Surrogate Recoveries
- Method Blanks
- Matrix Spikes/Matrix Spike Duplicates
- Laboratory Control Samples/Laboratory Control Sample Duplicates
- Field Duplicates
- Column Confirmation RPD Values

VALIDATED SAMPLE DELIVERY GROUPS

This data validation included review of the sample delivery group (SDG) listed below in Table 1.

TABLE 1: SUMMARY OF VALIDATED SAMPLE DELIVERY GROUPS

Laboratory SDG	Samples Validated
1410-126	GEI-MW-10, GEI-MW-11, GEI-MW-12, GEI-MW-12-DUP

CHEMICAL ANALYSIS PERFORMED

OnSite Environmental, Inc. (OnSite), located in Redmond, Washington, performed laboratory analysis on the groundwater samples using the following methods:

- Organochlorine Pesticides by USEPA Method 8081B; and
- Chlorinated Acid Herbicides by USEPA Method 8151A

DATA VALIDATION SUMMARY

The results for each of the QC elements are summarized below.

Data Package Completeness

OnSite provided all required deliverables for the data validation according to the National Functional Guidelines. The laboratory followed adequate corrective action processes and all identified anomalies were discussed in the relevant laboratory case narrative.

Chain-of-Custody Documentation

Chain-of-custody (COC) forms were provided with the laboratory analytical reports. The COCs were accurate and complete when submitted to the lab.

Holding Times and Sample Preservation

The sample holding time is defined as the time that elapses between sample collection and sample analysis. Maximum holding time criteria exist for each analysis to help ensure that the analyte concentrations found at the time of analysis reflect the concentration present at the time of sample collection. Established holding times were met for all analyses. The sample coolers arrived at the laboratory at the appropriate temperatures of between two and six degrees Celsius.

Surrogate Recoveries

A surrogate compound is a compound that is chemically similar to the organic analytes of interest, but unlikely to be found in any environmental sample. Surrogates are used for organic analyses and are added to all samples, standards, and blanks to serve as an accuracy and specificity check of each analysis. The surrogates are added to the samples at a known concentration and percent recoveries are calculated following analysis. All surrogate percent recoveries for field samples were within the control limits specified in the National Functional Guidelines, with the following exceptions:

SDG 1410-126: (Pesticides) The percent recoveries for surrogate DCB were less than the control limits in Samples GEI-MW-12 and GEI-MW-12-DUP. The reporting limits for aldrin, dieldrin, heptachlor, and heptachlor epoxide were qualified as estimated (UJ) in these samples.

Method Blanks

Method blanks are analyzed to ensure that laboratory procedures and reagents do not introduce measurable concentrations of the analytes of interest. A method blank was analyzed with each batch of samples, at a frequency of 1 per 20 samples. For all sample batches, method blanks were analyzed at the required frequency. None of the analytes of interest were detected above the reporting limits in any of the method blanks.

Matrix Spikes/Matrix Spike Duplicates

Since the actual analyte concentration in an environmental sample is not known, the accuracy of a particular analysis is usually inferred by performing a matrix spike (MS) analysis on one sample from the associated batch, known as the parent sample. One aliquot of the sample is analyzed in the normal manner and then a second aliquot of the sample is spiked with a known amount of analyte concentration and analyzed. From these analyses, a percent recovery is calculated. Matrix spike duplicate (MSD) analyses are generally performed for organic analyses as a precision check and analyzed in the same sequence as a matrix spike. Using the result values from the MS and MSD, the relative percent difference (RPD) is calculated. The percent recovery control limits for MS and MSD analyses are specified in the laboratory documents, as are the RPD control limits for MS/MSD sample sets.

There were no MS/MSD sample analyses performed on the associated field samples.

Laboratory Control Samples/Laboratory Control Sample Duplicates

A laboratory control sample (LCS) is a blank sample that is spiked with a known amount of analyte and then analyzed. An LCS is similar to an MS, but without the possibility of matrix interference. Given that matrix interference is not an issue, the LCS/LCSD control limits for accuracy and precision are usually more rigorous than for MS/MSD analyses. Additionally, data qualification based on LCS/LCSD analyses would apply to all samples in the associated batch, instead of just the parent sample. The percent recovery control limits for LCS and LCSD analyses are specified in the laboratory documents, as are the RPD control limits for LCS/LCSD sample sets.

One LCS/LCSD analysis should be performed for every analytical batch or every 20 field samples, whichever is more frequent. The frequency requirements were met for all analyses and the percent recovery and RPD values were within the proper control limits.

Field Duplicates

In order to assess precision, field duplicate samples were collected and analyzed along with the reviewed sample batches. The duplicate samples were analyzed for the same parameters as the associated parent samples. Precision is determined by calculating the RPD between each pair of samples. If one or more of the sample analytes has a concentration greater than five times the reporting limit for that sample, then the absolute difference is used instead of the RPD. The RPD control limit for water samples is 35 percent.

SDG 1410-126: One field duplicate sample pair, GEI-MW-12 and GEI-MW-12-DUP, was submitted with this SDG. The precision criteria for all target analytes were met for this sample pair, with the exception of dinoseb. The positive results for this target analyte were qualified as estimated (J) in these samples.

Column Confirmation RPD Values

The laboratory analyzed all samples submitted for analysis by SW8081B and SW8151A. These methods require the sample results to be reported from a dual-column electron capture detector (ECD) system. Since this system requires the use of two columns, it produces two results simultaneously. The laboratory

is required to report the precision of these results in the form of a relative percent difference (RPD) value, one column being considered primary and the other column being considered as a secondary check.

If the RPD value is greater than 40%, the analytical result is qualified as estimated (J). If the RPD values were greater than 100%, then the analytical result is qualified as tentatively identified (NJ). The table below summarizes any RPD exceedances.

Sample ID	Analyte	Qualifier
GEI-MW-10	MCPA	NJ

OVERALL ASSESSMENT

As was determined by this data validation, the laboratory followed the specified analytical methods. Accuracy was acceptable, as demonstrated by the surrogate and LCS/LCSD percent recovery values, with the exceptions noted above. Precision was acceptable, as demonstrated by the LCS/LCSD, field duplicate, and column confirmation RPD values, with the exceptions noted above.

All data are acceptable for the intended use, with the following qualifications listed below in Table 2.

TABLE 2: SUMMARY OF QUALIFIED SAMPLES

Sample ID	Analyte	Qualifier	Reason
GEI-MW-10	MCPA	NJ	Column Confirmation RPD
GEI-MW-12	Aldrin	UJ	Surrogate Percent Recovery
	Dieldrin	UJ	Surrogate Percent Recovery
	Heptachlor	UJ	Surrogate Percent Recovery
	Heptachlor epoxide	UJ	Surrogate Percent Recovery
	Dinoseb	J	Field Duplicate RPD
GEI-MW-12-DUP	Aldrin	UJ	Surrogate Percent Recovery
	Dieldrin	UJ	Surrogate Percent Recovery
	Heptachlor	UJ	Surrogate Percent Recovery
	Heptachlor epoxide	UJ	Surrogate Percent Recovery
	Dinoseb	J	Field Duplicate RPD

REFERENCES

U.S. Environmental Protection Agency (USEPA). "Guidance for Labeling Externally Validated Laboratory Analytical Data for Superfund Use," EPA-540-R-08-005. January 2009.

U.S. Environmental Protection Agency (USEPA). "Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review," EPA-540-R-08-01. June 2008.

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