

Environmental Conservation Laboratories, Inc.

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Tuesday, February 15, 2011

Tetra Tech EM, Inc. (TE014)

Attn: Jessica Vickers

1955 Evergreen Blvd., Building 200, Suite 300

Duluth, GA 30096

RE: Laboratory Results for

Project Number: 05-001-0147, Project Name/Desc: Warrenton Fire

ENCO Workorder: C101348

Dear Jessica Vickers,

Enclosed is a copy of your laboratory report for test samples received by our laboratory on Monday, February 7, 2011.

Unless otherwise noted in an attached project narrative, all samples were received in acceptable condition and processed in accordance with the referenced methods/procedures. Results for these procedures apply only to the samples as submitted.

The analytical results contained in this report are in compliance with NELAC standards, except as noted in the project narrative. This report shall not be reproduced except in full, without the written approval of the Laboratory.

This report contains only those analyses performed by Environmental Conservation Laboratories. Unless otherwise noted, all analyses were performed at ENCO Cary. Data from outside organizations will be reported under separate cover.

If you have any questions or require further information, please do not hesitate to contact me.

Sincerely,

A handwritten signature in black ink that reads "Bill Scott". The signature is written in a cursive, flowing style.

Bill Scott

Project Manager

Enclosure(s)



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SAMPLE SUMMARY/LABORATORY CHRONICLE

Client ID:	W01	Lab ID: C101348-01	Sampled: 02/04/11 18:00	Received: 02/07/11 12:40
Parameter	Hold Date/Time(s)		Prep Date/Time(s)	Analysis Date/Time(s)
EPA 8081B	02/11/11	03/21/11	02/09/11 06:00	2/9/2011 18:39
EPA 8141B	02/11/11	03/22/11	02/10/11 07:00	2/15/2011 13:22
EPA 8151A	02/11/11	03/21/11	02/09/11 11:30	2/12/2011 01:55
EPA 8270D	02/11/11	03/23/11	02/11/11 00:59	2/11/2011 14:33

Client ID:	W01	Lab ID: C101348-01RE1	Sampled: 02/04/11 18:00	Received: 02/07/11 12:40
Parameter	Hold Date/Time(s)		Prep Date/Time(s)	Analysis Date/Time(s)
EPA 8151A	02/11/11	03/21/11	02/09/11 11:30	2/14/2011 14:05



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SAMPLE DETECTION SUMMARY

Client ID:	W01	Lab ID:	C101348-01
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Analyte	Results	Flag	MDL	PQL	Units	Method	Notes
4-Nitrophenol	1.6		0.19	0.50	ug/L	EPA 8151A	
Dicamba	2.6		0.17	0.50	ug/L	EPA 8151A	
Dichlorprop	1.6		0.17	0.50	ug/L	EPA 8151A	
Stirophos (Tetrachlorvinphos)	0.42	J	0.091	0.50	ug/L	EPA 8141B	R-05

Client ID:	W01	Lab ID:	C101348-01RE1
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Analyte	Results	Flag	MDL	PQL	Units	Method	Notes
2,4-D	40	D	3.0	10	ug/L	EPA 8151A	



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ANALYTICAL RESULTS**Description:** W01**Lab Sample ID:** C101348-01**Received:** 02/07/11 12:40**Matrix:** Surface Water**Sampled:** 02/04/11 18:00**Work Order:** C101348**Project:** Warrenton Fire**Sampled By:** John Steinauer**Semivolatile Organic Compounds by GCMS**

^ - ENCO Cary certified analyte [NC 591]

<u>Analyte [CAS Number]</u>	<u>Results</u>	<u>Flag</u>	<u>Units</u>	<u>DF</u>	<u>MDL</u>	<u>MRL</u>	<u>Batch</u>	<u>Method</u>	<u>Analyzed</u>	<u>By</u>	<u>Notes</u>
1-Methylnaphthalene [90-12-0] ^	ND		ug/L	1	1.7	10	1B11001	EPA 8270D	02/11/11 14:33	DFM	
2-Methylnaphthalene [91-57-6] ^	ND		ug/L	1	1.5	10	1B11001	EPA 8270D	02/11/11 14:33	DFM	
Acenaphthene [83-32-9] ^	ND		ug/L	1	1.4	10	1B11001	EPA 8270D	02/11/11 14:33	DFM	
Acenaphthylene [208-96-8] ^	ND		ug/L	1	1.2	10	1B11001	EPA 8270D	02/11/11 14:33	DFM	
Anthracene [120-12-7] ^	ND		ug/L	1	1.6	10	1B11001	EPA 8270D	02/11/11 14:33	DFM	
Benzo(a)anthracene [56-55-3] ^	ND		ug/L	1	1.3	10	1B11001	EPA 8270D	02/11/11 14:33	DFM	
Benzo(a)pyrene [50-32-8] ^	ND		ug/L	1	1.3	10	1B11001	EPA 8270D	02/11/11 14:33	DFM	
Benzo(b)fluoranthene [205-99-2] ^	ND		ug/L	1	1.0	10	1B11001	EPA 8270D	02/11/11 14:33	DFM	
Benzo(g,h,i)perylene [191-24-2] ^	ND		ug/L	1	2.4	10	1B11001	EPA 8270D	02/11/11 14:33	DFM	
Benzo(k)fluoranthene [207-08-9] ^	ND		ug/L	1	1.3	10	1B11001	EPA 8270D	02/11/11 14:33	DFM	
Chrysene [218-01-9] ^	ND		ug/L	1	2.0	10	1B11001	EPA 8270D	02/11/11 14:33	DFM	
Dibenzo(a,h)anthracene [53-70-3] ^	ND		ug/L	1	2.3	10	1B11001	EPA 8270D	02/11/11 14:33	DFM	
Fluoranthene [206-44-0] ^	ND		ug/L	1	2.1	10	1B11001	EPA 8270D	02/11/11 14:33	DFM	
Fluorene [86-73-7] ^	ND		ug/L	1	1.7	10	1B11001	EPA 8270D	02/11/11 14:33	DFM	
Indeno(1,2,3-cd)pyrene [193-39-5] ^	ND		ug/L	1	2.2	10	1B11001	EPA 8270D	02/11/11 14:33	DFM	
Naphthalene [91-20-3] ^	ND		ug/L	1	1.3	10	1B11001	EPA 8270D	02/11/11 14:33	DFM	
Phenanthrene [85-01-8] ^	ND		ug/L	1	1.4	10	1B11001	EPA 8270D	02/11/11 14:33	DFM	
Pyrene [129-00-0] ^	ND		ug/L	1	2.1	10	1B11001	EPA 8270D	02/11/11 14:33	DFM	

<u>Surrogates</u>	<u>Results</u>	<u>DF</u>	<u>Spike Lvl</u>	<u>% Rec</u>	<u>% Rec Limits</u>	<u>Batch</u>	<u>Method</u>	<u>Analyzed</u>	<u>By</u>	<u>Notes</u>
2-Fluorobiphenyl	38	1	50.0	75 %	10-149	1B11001	EPA 8270D	02/11/11 14:33	DFM	
Nitrobenzene-d5	36	1	50.0	72 %	10-149	1B11001	EPA 8270D	02/11/11 14:33	DFM	
Terphenyl-d14	37	1	50.0	73 %	10-188	1B11001	EPA 8270D	02/11/11 14:33	DFM	



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Description: W01

Lab Sample ID: C101348-01

Received: 02/07/11 12:40

Matrix: Surface Water

Sampled: 02/04/11 18:00

Work Order: C101348

Project: Warrenton Fire

Sampled By: John Steinauer

Organochlorine Pesticides by GC

^ - ENCO Cary certified analyte [NC 591]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	Batch	Method	Analyzed	By	Notes
4,4'-DDD [72-54-8] ^	ND		ug/L	1	0.013	0.050	1B08022	EPA 8081B	02/09/11 18:39	MSZ	
4,4'-DDE [72-55-9] ^	ND		ug/L	1	0.012	0.050	1B08022	EPA 8081B	02/09/11 18:39	MSZ	
4,4'-DDT [50-29-3] ^	ND		ug/L	1	0.015	0.050	1B08022	EPA 8081B	02/09/11 18:39	MSZ	
Aldrin [309-00-2] ^	ND		ug/L	1	0.012	0.050	1B08022	EPA 8081B	02/09/11 18:39	MSZ	
alpha-BHC [319-84-6] ^	ND		ug/L	1	0.015	0.050	1B08022	EPA 8081B	02/09/11 18:39	MSZ	
beta-BHC [319-85-7] ^	ND		ug/L	1	0.012	0.050	1B08022	EPA 8081B	02/09/11 18:39	MSZ	
Chlordane (tech) [12789-03-6] ^	ND		ug/L	1	0.20	0.50	1B08022	EPA 8081B	02/09/11 18:39	MSZ	
Chlordane-alpha [5103-71-9] ^	ND		ug/L	1	0.014	0.050	1B08022	EPA 8081B	02/09/11 18:39	MSZ	
Chlordane-gamma [5566-34-7] ^	ND		ug/L	1	0.012	0.050	1B08022	EPA 8081B	02/09/11 18:39	MSZ	
delta-BHC [319-86-8] ^	ND		ug/L	1	0.014	0.050	1B08022	EPA 8081B	02/09/11 18:39	MSZ	
Dieldrin [60-57-1] ^	ND		ug/L	1	0.0089	0.050	1B08022	EPA 8081B	02/09/11 18:39	MSZ	
Endosulfan I [959-98-8] ^	ND		ug/L	1	0.016	0.050	1B08022	EPA 8081B	02/09/11 18:39	MSZ	
Endosulfan II [33213-65-9] ^	ND		ug/L	1	0.012	0.050	1B08022	EPA 8081B	02/09/11 18:39	MSZ	
Endosulfan sulfate [1031-07-8] ^	ND		ug/L	1	0.012	0.050	1B08022	EPA 8081B	02/09/11 18:39	MSZ	
Endrin [72-20-8] ^	ND		ug/L	1	0.013	0.050	1B08022	EPA 8081B	02/09/11 18:39	MSZ	
Endrin aldehyde [7421-93-4] ^	ND		ug/L	1	0.012	0.050	1B08022	EPA 8081B	02/09/11 18:39	MSZ	
Endrin ketone [53494-70-5] ^	ND		ug/L	1	0.012	0.050	1B08022	EPA 8081B	02/09/11 18:39	MSZ	
gamma-BHC [58-89-9] ^	ND		ug/L	1	0.016	0.050	1B08022	EPA 8081B	02/09/11 18:39	MSZ	
Heptachlor [76-44-8] ^	ND		ug/L	1	0.012	0.050	1B08022	EPA 8081B	02/09/11 18:39	MSZ	
Heptachlor epoxide [1024-57-3] ^	ND		ug/L	1	0.0089	0.050	1B08022	EPA 8081B	02/09/11 18:39	MSZ	
Isodrin [465-73-6] ^	ND		ug/L	1	0.013	0.050	1B08022	EPA 8081B	02/09/11 18:39	MSZ	
Methoxychlor [72-43-5] ^	ND		ug/L	1	0.016	0.050	1B08022	EPA 8081B	02/09/11 18:39	MSZ	
Mirex [2385-85-5] ^	ND		ug/L	1	0.016	0.050	1B08022	EPA 8081B	02/09/11 18:39	MSZ	
Toxaphene [8001-35-2] ^	ND		ug/L	1	0.22	0.50	1B08022	EPA 8081B	02/09/11 18:39	MSZ	

Surrogates	Results	DF	Spike Lvl	% Rec	% Rec Limits	Batch	Method	Analyzed	By	Notes
2,4,5,6-TCMX	0.86	1	1.00	86 %	44-134	1B08022	EPA 8081B	02/09/11 18:39	MSZ	
Decachlorobiphenyl	0.89	1	1.00	89 %	37-149	1B08022	EPA 8081B	02/09/11 18:39	MSZ	



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Description: W01

Lab Sample ID: C101348-01

Received: 02/07/11 12:40

Matrix: Surface Water

Sampled: 02/04/11 18:00

Work Order: C101348

Project: Warrenton Fire

Sampled By: John Steinauer

Chlorinated Herbicides by GC

^ - ENCO Orlando certified analyte [NC 424]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	Batch	Method	Analyzed	By	Notes
2,4,5-T [93-76-5] ^	ND		ug/L	1	0.14	0.50	1B09001	EPA 8151A	02/12/11 01:55	RGG	
2,4,5-TP (Silvex) [93-72-1] ^	ND		ug/L	1	0.15	0.50	1B09001	EPA 8151A	02/12/11 01:55	RGG	
2,4-D [94-75-7] ^	40	D	ug/L	20	3.0	10	1B09001	EPA 8151A	02/14/11 14:05	RGG	
2,4-DB [94-82-6] ^	ND		ug/L	1	0.32	0.50	1B09001	EPA 8151A	02/12/11 01:55	RGG	
3,5-DCBA [51-365-5] ^	ND		ug/L	1	0.19	0.50	1B09001	EPA 8151A	02/12/11 01:55	RGG	
4-Nitrophenol [100-02-7] ^	1.6		ug/L	1	0.19	0.50	1B09001	EPA 8151A	02/12/11 01:55	RGG	
Acifluorfen [50594-66-6] ^	ND		ug/L	1	0.25	0.50	1B09001	EPA 8151A	02/12/11 01:55	RGG	
Bentazon [25057-89-0] ^	ND		ug/L	1	0.17	0.50	1B09001	EPA 8151A	02/12/11 01:55	RGG	
Chloramben [133-90-4] ^	ND		ug/L	1	0.064	0.50	1B09001	EPA 8151A	02/12/11 01:55	RGG	
Dacthal [1861-32-1] ^	ND		ug/L	1	0.14	0.50	1B09001	EPA 8151A	02/12/11 01:55	RGG	
Dalapon [75-99-0] ^	ND		ug/L	1	0.49	0.50	1B09001	EPA 8151A	02/12/11 01:55	RGG	
Dicamba [1918-00-9] ^	2.6		ug/L	1	0.17	0.50	1B09001	EPA 8151A	02/12/11 01:55	RGG	
Dichlorprop [120-36-5] ^	1.6		ug/L	1	0.17	0.50	1B09001	EPA 8151A	02/12/11 01:55	RGG	
Dinoseb [88-85-7] ^	ND		ug/L	1	0.32	0.50	1B09001	EPA 8151A	02/12/11 01:55	RGG	
MCPA [94-74-6] ^	ND		ug/L	1	3.8	50	1B09001	EPA 8151A	02/12/11 01:55	RGG	
MCPP [93-65-2] ^	ND		ug/L	1	4.9	50	1B09001	EPA 8151A	02/12/11 01:55	RGG	
Pentachlorophenol [87-86-5] ^	ND		ug/L	1	0.13	0.50	1B09001	EPA 8151A	02/12/11 01:55	RGG	
Picloram [1918-02-1] ^	ND		ug/L	1	0.11	0.50	1B09001	EPA 8151A	02/12/11 01:55	RGG	

Surrogates	Results	DF	Spike Lvl	% Rec	% Rec Limits	Batch	Method	Analyzed	By	Notes
2,4-DCAA	2.6	1	2.00	128 %	68-139	1B09001	EPA 8151A	02/12/11 01:55	RGG	



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Description: W01

Lab Sample ID: C101348-01

Received: 02/07/11 12:40

Matrix: Surface Water

Sampled: 02/04/11 18:00

Work Order: C101348

Project: Warrenton Fire

Sampled By: John Steinauer

Organophosphorus Compounds by GC

^ - ENCO Orlando certified analyte [NC 424]

Analyte [CAS Number]	Results	Flag	Units	DF	MDL	MRL	Batch	Method	Analyzed	By	Notes
Azinphos-methyl [86-50-0] ^	ND		ug/L	1	0.15	0.50	1B10001	EPA 8141B	02/15/11 13:22	JJB	R-05
Bolstar [35400-43-2] ^	ND		ug/L	1	0.096	0.50	1B10001	EPA 8141B	02/15/11 13:22	JJB	R-05
Chlorpyrifos [2921-88-2] ^	ND		ug/L	1	0.078	0.50	1B10001	EPA 8141B	02/15/11 13:22	JJB	R-05
Coumaphos [56-72-4] ^	ND		ug/L	1	0.15	0.50	1B10001	EPA 8141B	02/15/11 13:22	JJB	R-05
Demeton [8065-48-3]	ND		ug/L	1	0.064	0.50	1B10001	EPA 8141B	02/15/11 13:22	JJB	R-05
Diazinon [333-41-5] ^	ND		ug/L	1	0.065	0.50	1B10001	EPA 8141B	02/15/11 13:22	JJB	R-05
Dichlorofenthion [97-17-6] ^	ND		ug/L	1	0.071	0.50	1B10001	EPA 8141B	02/15/11 13:22	JJB	R-05
Dichlorvos [62-73-7] ^	ND		ug/L	1	0.17	0.50	1B10001	EPA 8141B	02/15/11 13:22	JJB	R-05
Dimethoate [60-51-5] ^	ND		ug/L	1	0.12	0.50	1B10001	EPA 8141B	02/15/11 13:22	JJB	R-05
Disulfoton [298-04-4] ^	ND		ug/L	1	0.054	0.50	1B10001	EPA 8141B	02/15/11 13:22	JJB	R-05
EPN [2104-64-5] ^	ND		ug/L	1	0.14	0.50	1B10001	EPA 8141B	02/15/11 13:22	JJB	R-05
Ethion [563-12-2] ^	ND		ug/L	1	0.12	0.50	1B10001	EPA 8141B	02/15/11 13:22	JJB	R-05
Ethoprop [13194-48-4] ^	ND		ug/L	1	0.066	0.50	1B10001	EPA 8141B	02/15/11 13:22	JJB	R-05
Ethyl Parathion [56-38-2] ^	ND		ug/L	1	0.11	0.50	1B10001	EPA 8141B	02/15/11 13:22	JJB	R-05
Fensulfothion [115-90-2] ^	ND		ug/L	1	0.11	0.50	1B10001	EPA 8141B	02/15/11 13:22	JJB	R-05
Fenthion [55-38-9] ^	ND		ug/L	1	0.097	0.50	1B10001	EPA 8141B	02/15/11 13:22	JJB	R-05
Malathion [121-75-5] ^	ND		ug/L	1	0.10	0.50	1B10001	EPA 8141B	02/15/11 13:22	JJB	R-05
Merphos [150-50-5] ^	ND		ug/L	1	0.26	0.50	1B10001	EPA 8141B	02/15/11 13:22	JJB	R-05
Methyl parathion [298-00-0] ^	ND		ug/L	1	0.11	0.50	1B10001	EPA 8141B	02/15/11 13:22	JJB	R-05
Mevinphos [7786-34-7] ^	ND		ug/L	1	0.19	0.50	1B10001	EPA 8141B	02/15/11 13:22	JJB	R-05
Monocrotophos [6923-22-4] ^	ND		ug/L	1	0.060	0.50	1B10001	EPA 8141B	02/15/11 13:22	JJB	R-05
Naled [300-76-5] ^	ND		ug/L	1	0.24	1.0	1B10001	EPA 8141B	02/15/11 13:22	JJB	R-05
Phorate [298-02-2] ^	ND		ug/L	1	0.054	0.50	1B10001	EPA 8141B	02/15/11 13:22	JJB	R-05
Ronnel [299-84-3] ^	ND		ug/L	1	0.087	0.50	1B10001	EPA 8141B	02/15/11 13:22	JJB	R-05
Stiropfos (Tetrachlorvinfos) [22248-79-9] ^	0.42	J	ug/L	1	0.091	0.50	1B10001	EPA 8141B	02/15/11 13:22	JJB	R-05
Sulfotep [3689-24-5] ^	ND		ug/L	1	0.080	0.50	1B10001	EPA 8141B	02/15/11 13:22	JJB	R-05
TEPP [107-49-3] ^	ND		ug/L	1	0.18	1.0	1B10001	EPA 8141B	02/15/11 13:22	JJB	R-05
Tokuthion (Prothiofos) [34643-46-4] ^	ND		ug/L	1	0.092	0.50	1B10001	EPA 8141B	02/15/11 13:22	JJB	R-05
Surrogates	Results	DF	Spike Lvl	% Rec	% Rec Limits	Batch	Method	Analyzed	By	Notes	
Tributyl Phosphate	1.9	1	5.00	37 %	17-139	1B10001	EPA 8141B	02/15/11 13:22	JJB	R-05	
Triphenyl phosphate	2.3	1	5.00	47 %	22-165	1B10001	EPA 8141B	02/15/11 13:22	JJB	R-05	

This report relates only to the sample as received by the laboratory, and may only be reproduced in full.

QUALITY CONTROL

Semivolatile Organic Compounds by GCMS - Quality Control

Batch 1B11001 - EPA 3510C_MS

Blank (1B11001-BLK1)

Prepared: 02/11/2011 00:59 Analyzed: 02/11/2011 12:23

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1-Methylnaphthalene	1.7	U	10	ug/L							
2-Methylnaphthalene	1.5	U	10	ug/L							
Acenaphthene	1.4	U	10	ug/L							
Acenaphthylene	1.2	U	10	ug/L							
Anthracene	1.6	U	10	ug/L							
Benzo(a)anthracene	1.3	U	10	ug/L							
Benzo(a)pyrene	1.3	U	10	ug/L							
Benzo(b)fluoranthene	1.0	U	10	ug/L							
Benzo(g,h,i)perylene	2.4	U	10	ug/L							
Benzo(k)fluoranthene	1.3	U	10	ug/L							
Chrysene	2.0	U	10	ug/L							
Dibenzo(a,h)anthracene	2.3	U	10	ug/L							
Fluoranthene	2.1	U	10	ug/L							
Fluorene	1.7	U	10	ug/L							
Indeno(1,2,3-cd)pyrene	2.2	U	10	ug/L							
Naphthalene	1.3	U	10	ug/L							
Phenanthrene	1.4	U	10	ug/L							
Pyrene	2.1	U	10	ug/L							
Surrogate: 2-Fluorobiphenyl	43			ug/L	50.0		87	10-149			
Surrogate: Nitrobenzene-d5	43			ug/L	50.0		86	10-149			
Surrogate: Terphenyl-d14	45			ug/L	50.0		90	10-188			

LCS (1B11001-BS1)

Prepared: 02/11/2011 00:59 Analyzed: 02/11/2011 12:49

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Acenaphthene	41		10	ug/L	50.0		82	43-118			
Pyrene	45		10	ug/L	50.0		90	65-134			
Surrogate: 2-Fluorobiphenyl	44			ug/L	50.0		88	10-149			
Surrogate: Nitrobenzene-d5	44			ug/L	50.0		89	10-149			
Surrogate: Terphenyl-d14	45			ug/L	50.0		90	10-188			

Matrix Spike (1B11001-MS1)

Prepared: 02/11/2011 00:59 Analyzed: 02/11/2011 13:15

Source: C101544-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Acenaphthene	38		10	ug/L	50.0	1.4 U	76	43-118			
Pyrene	43		10	ug/L	50.0	2.1 U	87	65-134			
Surrogate: 2-Fluorobiphenyl	41			ug/L	50.0		83	10-149			
Surrogate: Nitrobenzene-d5	40			ug/L	50.0		81	10-149			
Surrogate: Terphenyl-d14	44			ug/L	50.0		88	10-188			

Matrix Spike Dup (1B11001-MSD1)

Prepared: 02/11/2011 00:59 Analyzed: 02/11/2011 13:41

Source: C101544-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Acenaphthene	38		10	ug/L	50.0	1.4 U	77	43-118	0.5	21	

QUALITY CONTROL

Semivolatile Organic Compounds by GCMS - Quality Control

Batch 1B11001 - EPA 3510C_MS

Matrix Spike Dup (1B11001-MSD1) Continued

Prepared: 02/11/2011 00:59 Analyzed: 02/11/2011 13:41

Source: C101544-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Pyrene	43		10	ug/L	50.0	2.1 U	86	65-134	1	16	
Surrogate: 2-Fluorobiphenyl	42			ug/L	50.0		83	10-149			
Surrogate: Nitrobenzene-d5	40			ug/L	50.0		79	10-149			
Surrogate: Terphenyl-d14	43			ug/L	50.0		87	10-188			

Organochlorine Pesticides by GC - Quality Control

Batch 1B08022 - EPA 3510C

Blank (1B08022-BLK1)

Prepared: 02/08/2011 12:24 Analyzed: 02/09/2011 15:33

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
4,4'-DDD	0.013	U	0.050	ug/L							
4,4'-DDE	0.012	U	0.050	ug/L							
4,4'-DDT	0.015	U	0.050	ug/L							
Aldrin	0.012	U	0.050	ug/L							
alpha-BHC	0.015	U	0.050	ug/L							
beta-BHC	0.012	U	0.050	ug/L							
Chlordane (tech)	0.20	U	0.50	ug/L							
Chlordane-alpha	0.014	U	0.050	ug/L							
Chlordane-gamma	0.012	U	0.050	ug/L							
delta-BHC	0.014	U	0.050	ug/L							
Dieldrin	0.0089	U	0.050	ug/L							
Endosulfan I	0.016	U	0.050	ug/L							
Endosulfan II	0.012	U	0.050	ug/L							
Endosulfan sulfate	0.012	U	0.050	ug/L							
Endrin	0.013	U	0.050	ug/L							
Endrin aldehyde	0.012	U	0.050	ug/L							
Endrin ketone	0.012	U	0.050	ug/L							
gamma-BHC	0.016	U	0.050	ug/L							
Heptachlor	0.012	U	0.050	ug/L							
Heptachlor epoxide	0.0089	U	0.050	ug/L							
Isodrin	0.013	U	0.050	ug/L							
Methoxychlor	0.016	U	0.050	ug/L							
Mirex	0.016	U	0.050	ug/L							
Toxaphene	0.22	U	0.50	ug/L							
Surrogate: 2,4,5,6-TCMX	0.91			ug/L	1.00		91	44-134			
Surrogate: Decachlorobiphenyl	1.1			ug/L	1.00		112	37-149			

LCS (1B08022-BS1)

Prepared: 02/08/2011 12:24 Analyzed: 02/09/2011 15:46

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
4,4'-DDT	1.1		0.050	ug/L	1.00		106	37-139			
Dieldrin	1.1		0.050	ug/L	1.00		107	46-132			
Endrin	1.1		0.050	ug/L	1.00		106	43-133			
Surrogate: 2,4,5,6-TCMX	0.88			ug/L	1.00		88	44-134			
Surrogate: Decachlorobiphenyl	1.1			ug/L	1.00		111	37-149			

QUALITY CONTROL

Organochlorine Pesticides by GC - Quality Control

Batch 1B08022 - EPA 3510C

Matrix Spike (1B08022-MS1)

Prepared: 02/08/2011 12:24 Analyzed: 02/09/2011 15:59

Source: C101344-07

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
4,4'-DDT	1.1		0.050	ug/L	1.00	0.015 U	108	37-139			
Dieldrin	1.1		0.050	ug/L	1.00	0.0089 U	108	46-132			
Endrin	1.1		0.050	ug/L	1.00	0.013 U	108	43-133			
Surrogate: 2,4,5,6-TCMX	0.90			ug/L	1.00		90	44-134			
Surrogate: Decachlorobiphenyl	1.1			ug/L	1.00		109	37-149			

Matrix Spike Dup (1B08022-MSD1)

Prepared: 02/08/2011 12:24 Analyzed: 02/09/2011 16:12

Source: C101344-07

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
4,4'-DDT	1.1		0.050	ug/L	1.00	0.015 U	106	37-139	1	26	
Dieldrin	1.0		0.050	ug/L	1.00	0.0089 U	104	46-132	4	27	
Endrin	1.1		0.050	ug/L	1.00	0.013 U	106	43-133	1	26	
Surrogate: 2,4,5,6-TCMX	0.84			ug/L	1.00		84	44-134			
Surrogate: Decachlorobiphenyl	1.1			ug/L	1.00		107	37-149			

QUALITY CONTROL

Chlorinated Herbicides by GC - Quality Control

Batch 1B09001 - EPA 3510C

Blank (1B09001-BLK1)

Prepared: 02/09/2011 11:30 Analyzed: 02/11/2011 23:05

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
2,4,5-T	0.14	U	0.50	ug/L							
2,4,5-TP (Silvex)	0.15	U	0.50	ug/L							
2,4-D	0.15	U	0.50	ug/L							
2,4-DB	0.32	U	0.50	ug/L							
3,5-DCBA	0.19	U	0.50	ug/L							
4-Nitrophenol	0.19	U	0.50	ug/L							
Acifluorfen	0.25	U	0.50	ug/L							
Bentazon	0.17	U	0.50	ug/L							
Chloramben	0.064	U	0.50	ug/L							
Dacthal	0.14	U	0.50	ug/L							
Dalapon	0.49	U	0.50	ug/L							
Dicamba	0.17	U	0.50	ug/L							
Dichlorprop	0.17	U	0.50	ug/L							
Dinoseb	0.32	U	0.50	ug/L							
MCPA	3.8	U	50	ug/L							
MCPP	4.9	U	50	ug/L							
Pentachlorophenol	0.13	U	0.50	ug/L							
Picloram	0.11	U	0.50	ug/L							
Surrogate: 2,4-DCAA	1.6			ug/L	2.00		80	68-139			

LCS (1B09001-BS1)

Prepared: 02/09/2011 11:30 Analyzed: 02/12/2011 00:18

QUALITY CONTROL

Chlorinated Herbicides by GC - Quality Control

Batch 1B09001 - EPA 3510C

LCS (1B09001-BS1) Continued

Prepared: 02/09/2011 11:30 Analyzed: 02/12/2011 00:18

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
2,4,5-TP (Silvex)	2.2		0.50	ug/L	2.00		108	68-154			
2,4-D	1.7		0.50	ug/L	2.00		86	57-132			
2,4-DB	2.5		0.50	ug/L	2.00		124	46-185			
Bentazon	2.1		0.50	ug/L	2.00		105	38-142			
Dalapon	1.8		0.50	ug/L	2.00		90	14-169			
Dicamba	2.4		0.50	ug/L	2.00		118	61-138			
Picloram	2.0		0.50	ug/L	2.00		99	23-174			
Surrogate: 2,4-DCAA	2.0			ug/L	2.00		98	68-139			

Matrix Spike (1B09001-MS1)

Prepared: 02/09/2011 11:30 Analyzed: 02/12/2011 00:43

Source: A100704-05

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
2,4,5-TP (Silvex)	2.2		0.50	ug/L	2.00	0.15 U	108	68-154			
2,4-D	2.7		0.50	ug/L	2.00	0.15 U	137	62-144			
2,4-DB	2.4		0.50	ug/L	2.00	0.32 U	120	46-185			
Bentazon	2.0		0.50	ug/L	2.00	0.17 U	98	38-142			
Dalapon	1.9		0.50	ug/L	2.00	0.49 U	94	14-169			
Dicamba	2.4		0.50	ug/L	2.00	0.17 U	119	61-138			
Picloram	2.1		0.50	ug/L	2.00	0.11 U	103	23-174			
Surrogate: 2,4-DCAA	1.9			ug/L	2.00		96	68-139			

Matrix Spike Dup (1B09001-MSD1)

Prepared: 02/09/2011 11:30 Analyzed: 02/12/2011 01:07

Source: A100704-05

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
2,4,5-TP (Silvex)	2.4		0.50	ug/L	2.00	0.15 U	121	68-154	11	15	
2,4-D	1.9		0.50	ug/L	2.00	0.15 U	96	57-132	10	21	
2,4-DB	2.8		0.50	ug/L	2.00	0.32 U	141	46-185	16	36	
Bentazon	2.2		0.50	ug/L	2.00	0.17 U	108	38-142	10	50	
Dalapon	2.2		0.50	ug/L	2.00	0.49 U	108	14-169	14	49	
Dicamba	2.6		0.50	ug/L	2.00	0.17 U	129	61-138	8	24	
Picloram	2.3		0.50	ug/L	2.00	0.11 U	113	23-174	9	27	
Surrogate: 2,4-DCAA	2.2			ug/L	2.00		109	68-139			

Organophosphorus Compounds by GC - Quality Control

Batch 1B10001 - EPA 3510C

Blank (1B10001-BLK1)

Prepared: 02/10/2011 07:00 Analyzed: 02/15/2011 09:08

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Azinphos-methyl	0.15	U	0.50	ug/L							
Bolstar	0.096	U	0.50	ug/L							
Chlorpyrifos	0.078	U	0.50	ug/L							
Coumaphos	0.15	U	0.50	ug/L							
Demeton	0.064	U	0.50	ug/L							

QUALITY CONTROL

Organophosphorus Compounds by GC - Quality Control

Batch 1B10001 - EPA 3510C

Blank (1B10001-BLK1) Continued

Prepared: 02/10/2011 07:00 Analyzed: 02/15/2011 09:08

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Diazinon	0.065	U	0.50	ug/L							
Dichlorofenthion	0.071	U	0.50	ug/L							
Dichlorvos	0.17	U	0.50	ug/L							
Dimethoate	0.12	U	0.50	ug/L							
Disulfoton	0.054	U	0.50	ug/L							
EPN	0.14	U	0.50	ug/L							
Ethion	0.12	U	0.50	ug/L							
Ethoprop	0.066	U	0.50	ug/L							
Ethyl Parathion	0.11	U	0.50	ug/L							
Fensulfothion	0.11	U	0.50	ug/L							
Fenthion	0.097	U	0.50	ug/L							
Malathion	0.10	U	0.50	ug/L							
Merphos	0.26	U	0.50	ug/L							
Methyl parathion	0.11	U	0.50	ug/L							
Mevinphos	0.19	U	0.50	ug/L							
Monocrotophos	0.060	U	0.50	ug/L							
Naled	0.24	U	1.0	ug/L							
Phorate	0.054	U	0.50	ug/L							
Ronnel	0.087	U	0.50	ug/L							
Stirophos (Tetrachlorvinphos)	0.091	U	0.50	ug/L							
Sulfotep	0.080	U	0.50	ug/L							
TEPP	0.18	U	1.0	ug/L							
Tokuthion (Prothiofos)	0.092	U	0.50	ug/L							
Surrogate: Tributyl Phosphate	5.9			ug/L	5.00		118	17-139			
Surrogate: Triphenyl phosphate	6.1			ug/L	5.00		122	22-165			

LCS (1B10001-BS1)

Prepared: 02/10/2011 07:00 Analyzed: 02/15/2011 10:11

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Dimethoate	3.6		0.50	ug/L	4.00		90	10-171			
EPN	3.6		0.50	ug/L	4.00		91	10-168			
Malathion	4.0		0.50	ug/L	4.00		99	17-167			
TEPP	4.5		1.0	ug/L	4.00		112	10-106			QL-02
Surrogate: Tributyl Phosphate	5.3			ug/L	5.00		106	17-139			
Surrogate: Triphenyl phosphate	5.3			ug/L	5.00		106	22-165			

Matrix Spike (1B10001-MS1)

Prepared: 02/10/2011 07:00 Analyzed: 02/15/2011 11:16

Source: A100669-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Dimethoate	3.7		0.50	ug/L	4.00		92	10-171			
EPN	3.6		0.50	ug/L	4.00		91	10-168			
Malathion	4.2		0.50	ug/L	4.00		105	17-167			
TEPP	4.6		1.0	ug/L	4.00		114	10-106			QL-02
Surrogate: Tributyl Phosphate	5.3			ug/L	5.00		105	17-139			
Surrogate: Triphenyl phosphate	5.5			ug/L	5.00		110	22-165			



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QUALITY CONTROL

Organophosphorus Compounds by GC - Quality Control

Batch 1B10001 - EPA 3510C

Matrix Spike Dup (1B10001-MSD1)

Prepared: 02/10/2011 07:00 Analyzed: 02/15/2011 12:19

Source: A100669-01

Analyte	Result	Flag	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Dimethoate	3.5		0.50	ug/L	4.00		88	10-171	4	20	
EPN	3.5		0.50	ug/L	4.00		86	10-168	5	50	
Malathion	4.1		0.50	ug/L	4.00		102	17-167	3	39	
TEPP	4.5		1.0	ug/L	4.00		113	10-106	0.7	28	QL-02
Surrogate: Tributyl Phosphate	5.1			ug/L	5.00		102	17-139			
Surrogate: Triphenyl phosphate	5.4			ug/L	5.00		108	22-165			

FLAGS/NOTES AND DEFINITIONS

B	The analyte was detected in the associated method blank.
D	The sample was analyzed at dilution.
J	The reported value is between the laboratory method detection limit (MDL) and the laboratory method reporting limit (MRL), adjusted for actual sample preparation data and moisture content, where applicable.
U	The analyte was analyzed for but not detected to the level shown, adjusted for actual sample preparation data and moisture content, where applicable.
E	The concentration indicated for this analyte is an estimated value above the calibration range of the instrument. This value is considered an estimate.
MRL	Method Reporting Limit. The MRL is roughly equivalent to the practical quantitation limit (PQL) and is based on the low point of the calibration curve, when applicable, sample preparation factor, dilution factor, and, in the case of soil samples, moisture content.
ND	The analyte was analyzed for but not detected to the level shown, adjusted for actual sample preparation data and moisture content, where applicable.
QL-02	The associated laboratory control sample exhibited high bias; since the result is ND, the impact on data quality is minimal.
R-05	The sample was diluted due to the presence of high levels of non-target analytes resulting in elevated reporting limits.

[illegible]

Preservation: I-Ice H-HCl N-HNO₃ S-H₂SO₄ NO-NaOH O-Other (detail in comments)

Note : All samples submitted to ENCO Labs are in accordance with the terms and conditions listed on the reverse of this form, unless prior written agreements exist.