

July 28, 2007

Mr. Dan Capone  
Weston Solutions  
2501 Jolly Rd., Suite 100  
Okemos, MI 48864

Phone: (517) 381-5932  
Fax: -

RE: Trace Project T07G248  
Client Project Lake Lindener / 20405120120010248

Dear Mr. Capone:

Enclosed are your analytical results.

All reports were examined through Trace's validation process to ensure that requirements for quality and completeness were satisfied. All reported analytical results were obtained in accordance with the methods referenced on the reports. Every practical effort was made to meet the reporting limit specifications for this work. Some reports may have raised reporting limits to correct for percent solids.

If you have questions concerning this report, please contact me at 231.773.5998 or by email at [jmink@trace-labs.com](mailto:jmink@trace-labs.com).

Sincerely,

Jon Mink  
Project Manager

Enclosures



TRACE OPERATES IN COMPLIANCE WITH THE DEPARTMENT OF DEFENSE  
QUALITY SYSTEMS MANUAL FOR ENVIRONMENTAL LABORATORIES

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## AN EXPLANATION OF TERMS AND SYMBOLS WHICH MAY OCCUR IN THIS REPORT

### DEFINITIONS

LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
MS	Matrix Spike
MSD	Matrix Spike Duplicate
RPD	Relative Percent Difference
DUP	Matrix Duplicate
RDL	Reporting Detection Limit
MCL	Maximum Contamination Limit
TIC	Tentatively Identified Compound
<, ND or U	Indicates the compound was analyzed for but not detected
*	Indicates a result that exceeds its associated MCL or Surrogate control limits
#	Not evaluated by NELAC

### DATA QUALIFIERS

201	The MS recovery was out of control high, resulting in an out of control RPD between the MS and the MSD. The result for this analyte, in the non-spiked version of the sample, must be considered estimated.
205	The MS and MSD recoveries were out of control low. The result and reporting limit for this analyte, in the non-spiked version of the sample, must be considered estimated.
209	The MSD recovery was out of control. Because the MS recovery and the RPD between the MS and the MSD were in control, no data require qualification.
210	The MS and MSD recoveries were out of control low. The result and reporting limit for this analyte, in the non-spiked version of the sample, must be considered estimated.
210	The MS and MSD recoveries were out of control low. The result and reporting limit for this analyte, in the non-spiked version of the sample, must be considered estimated.
222	The MS and MSD recoveries were out of control. Because the sample background concentration of this analyte is greater than four times the spike amount, no data require qualification.
630	A positive result for this analyte was found in the method blank. Because the concentration in the blank was less than 10% of the sample concentration, no qualification of data is necessary.
A-01	This surrogate was out of control low, however all other surrogates were in control so no data requires qualification.



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## SAMPLE SUMMARY

Trace Project ID: T07G248  
Client Project ID: Lake Lindener / 20405120120010248

Trace ID	Sample ID	Matrix	Collected By	Date Collected	Date Received
T07G248-01	LLV Sediment 1	Sediment	Client	07/26/07 13:40	07/27/07 08:38
T07G248-02	LLV Sediment 2	Sediment	Client	07/26/07 14:00	07/27/07 08:38

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## ANALYTICAL RESULTS

Trace Project ID: T07G248

Client Project ID: Lake Lindener / 20405120120010248

Trace ID: T07G248-01	Date Collected: 07/26/07 13:40	Matrix: Sediment
Sample ID: LLV Sediment 1	Date Received: 07/27/07 08:38	

PARAMETERS	RESULTS UNITS	RDL	DILUTION	PREPARED BY	ANALYZED BY	QUAL	MCL
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### VOLATILE ORGANIC COMPOUNDS BY GC-MS

Analysis Method: EPA 8260B

Batch: T000382

Chloromethane	<57 ug/kg dry	57	50	07/27/07	pmr	07/27/07	pmr	
Vinyl chloride	<46 ug/kg dry	46	50	07/27/07	pmr	07/27/07	pmr	#
Bromomethane	<57 ug/kg dry	57	50	07/27/07	pmr	07/27/07	pmr	
Chloroethane	<57 ug/kg dry	57	50	07/27/07	pmr	07/27/07	pmr	
1,1-Dichloroethene	<57 ug/kg dry	57	50	07/27/07	pmr	07/27/07	pmr	
Acetone	<860 ug/kg dry	860	50	07/27/07	pmr	07/27/07	pmr	
Carbon disulfide	<290 ug/kg dry	290	50	07/27/07	pmr	07/27/07	pmr	
Methylene chloride	<110 ug/kg dry	110	50	07/27/07	pmr	07/27/07	pmr	
1,1-Dichloroethane	<57 ug/kg dry	57	50	07/27/07	pmr	07/27/07	pmr	
2-Butanone	<860 ug/kg dry	860	50	07/27/07	pmr	07/27/07	pmr	
1,2-Dichloroethene (total)	<110 ug/kg dry	110	50	07/27/07	pmr	07/27/07	pmr	#
Chloroform	<57 ug/kg dry	57	50	07/27/07	pmr	07/27/07	pmr	
1,1,1-Trichloroethane	<57 ug/kg dry	57	50	07/27/07	pmr	07/27/07	pmr	
Carbon tetrachloride	<57 ug/kg dry	57	50	07/27/07	pmr	07/27/07	pmr	
Benzene	<57 ug/kg dry	57	50	07/27/07	pmr	07/27/07	pmr	
1,2-Dichloroethane	<57 ug/kg dry	57	50	07/27/07	pmr	07/27/07	pmr	
Trichloroethene	<57 ug/kg dry	57	50	07/27/07	pmr	07/27/07	pmr	
1,2-Dichloropropane	<57 ug/kg dry	57	50	07/27/07	pmr	07/27/07	pmr	
Bromodichloromethane	<57 ug/kg dry	57	50	07/27/07	pmr	07/27/07	pmr	
cis-1,3-Dichloropropene	<57 ug/kg dry	57	50	07/27/07	pmr	07/27/07	pmr	
4-Methyl-2-pentanone	<2900 ug/kg dry	2900	50	07/27/07	pmr	07/27/07	pmr	
Toluene	<57 ug/kg dry	57	50	07/27/07	pmr	07/27/07	pmr	
trans-1,3-Dichloropropene	<57 ug/kg dry	57	50	07/27/07	pmr	07/27/07	pmr	
1,1,2-Trichloroethane	<57 ug/kg dry	57	50	07/27/07	pmr	07/27/07	pmr	
Tetrachloroethene	<57 ug/kg dry	57	50	07/27/07	pmr	07/27/07	pmr	
2-Hexanone	<2900 ug/kg dry	2900	50	07/27/07	pmr	07/27/07	pmr	
Dibromochloromethane	<57 ug/kg dry	57	50	07/27/07	pmr	07/27/07	pmr	
Chlorobenzene	<57 ug/kg dry	57	50	07/27/07	pmr	07/27/07	pmr	
Ethylbenzene	<57 ug/kg dry	57	50	07/27/07	pmr	07/27/07	pmr	
m,p-Xylene	<110 ug/kg dry	110	50	07/27/07	pmr	07/27/07	pmr	#
o-Xylene	<57 ug/kg dry	57	50	07/27/07	pmr	07/27/07	pmr	#
Styrene	<57 ug/kg dry	57	50	07/27/07	pmr	07/27/07	pmr	
Bromoform	<57 ug/kg dry	57	50	07/27/07	pmr	07/27/07	pmr	
1,1,2,2-Tetrachloroethane	<57 ug/kg dry	57	50	07/27/07	pmr	07/27/07	pmr	
Xylenes, total	<170 ug/kg dry	170	50	07/27/07	pmr	07/27/07	pmr	

**Surrogates:**

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## ANALYTICAL RESULTS

Trace Project ID: T07G248

Client Project ID: Lake Lindener / 20405120120010248

Trace ID: T07G248-01	Date Collected: 07/26/07 13:40	Matrix: Sediment
Sample ID: LLV Sediment 1	Date Received: 07/27/07 08:38	

PARAMETERS	RESULTS UNITS	RDL	DILUTION	PREPARED BY	ANALYZED BY	QUAL	MCL
<b>VOLATILE ORGANIC COMPOUNDS BY GC-MS</b>							
1,2-Dichloroethane-d4	102 %	70-133	50	07/27/07	pmr	07/27/07	pmr
Toluene-d8	106 %	76-125	50	07/27/07	pmr	07/27/07	pmr #
4-Bromofluorobenzene	95 %	72-123	50	07/27/07	pmr	07/27/07	pmr #
1,2-Dichlorobenzene-d4	88 %	71-123	50	07/27/07	pmr	07/27/07	pmr #

## SEMI-VOLATILE ORGANIC COMPOUNDS BY GC-MS

Analysis Method: EPA 8270C

Batch: T000375

Bis(2-chloroethyl)ether	<49 ug/kg dry	49	1	07/27/07	kb	07/27/07	jm
2-Chlorophenol	<120 ug/kg dry	120	1	07/27/07	kb	07/27/07	jm
Phenol	<120 ug/kg dry	120	1	07/27/07	kb	07/27/07	jm
1,3-Dichlorobenzene	<120 ug/kg dry	120	1	07/27/07	kb	07/27/07	jm
1,4-Dichlorobenzene	<120 ug/kg dry	120	1	07/27/07	kb	07/27/07	jm
1,2-Dichlorobenzene	<120 ug/kg dry	120	1	07/27/07	kb	07/27/07	jm
Benzyl alcohol	<980 ug/kg dry	980	1	07/27/07	kb	07/27/07	jm
Bis(2-chloroisopropyl)ether	<120 ug/kg dry	120	1	07/27/07	kb	07/27/07	jm
2-Methylphenol (o-Cresol)	<120 ug/kg dry	120	1	07/27/07	kb	07/27/07	jm
3,4-Methylphenol (m,p Cresol)	<120 ug/kg dry	120	1	07/27/07	kb	07/27/07	jm
N-Nitrosodi-n-propylamine	<120 ug/kg dry	120	1	07/27/07	kb	07/27/07	jm
Hexachloroethane	<120 ug/kg dry	120	1	07/27/07	kb	07/27/07	jm
Nitrobenzene	<49 ug/kg dry	49	1	07/27/07	kb	07/27/07	jm
Isophorone	<120 ug/kg dry	120	1	07/27/07	kb	07/27/07	jm
2-Nitrophenol	<120 ug/kg dry	120	1	07/27/07	kb	07/27/07	jm
2,4-Dimethylphenol	<120 ug/kg dry	120	1	07/27/07	kb	07/27/07	jm
Bis(2-chloroethoxy)methane	<120 ug/kg dry	120	1	07/27/07	kb	07/27/07	jm
Benzoic acid	<1800 ug/kg dry	1800	1	07/27/07	kb	07/27/07	jm
1,2,4-Trichlorobenzene	<120 ug/kg dry	120	1	07/27/07	kb	07/27/07	jm
2,4-Dichlorophenol	<120 ug/kg dry	120	1	07/27/07	kb	07/27/07	jm
Naphthalene	<120 ug/kg dry	120	1	07/27/07	kb	07/27/07	jm
4-Chloroaniline	<120 ug/kg dry	120	1	07/27/07	kb	07/27/07	jm
Hexachlorobutadiene	<49 ug/kg dry	49	1	07/27/07	kb	07/27/07	jm
4-Chloro-3-methylphenol	<120 ug/kg dry	120	1	07/27/07	kb	07/27/07	jm
2-Methylnaphthalene	<120 ug/kg dry	120	1	07/27/07	kb	07/27/07	jm
Hexachlorocyclopentadiene	<250 ug/kg dry	250	1	07/27/07	kb	07/27/07	jm
2,4,6-Trichlorophenol	<49 ug/kg dry	49	1	07/27/07	kb	07/27/07	jm
2,4,5-Trichlorophenol	<120 ug/kg dry	120	1	07/27/07	kb	07/27/07	jm

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## ANALYTICAL RESULTS

Trace Project ID: T07G248

Client Project ID: Lake Lindener / 20405120120010248

Trace ID: T07G248-01	Date Collected: 07/26/07 13:40	Matrix: Sediment
Sample ID: LLV Sediment 1	Date Received: 07/27/07 08:38	

PARAMETERS	RESULTS UNITS	RDL	DILUTION	PREPARED BY	ANALYZED BY	QUAL	MCL
<b>SEMI-VOLATILE ORGANIC COMPOUNDS BY GC-MS</b>							
2-Chloronaphthalene	<120 ug/kg dry	120	1	07/27/07	kb	07/27/07	jm
2-Nitroaniline	<120 ug/kg dry	120	1	07/27/07	kb	07/27/07	jm
Dimethyl phthalate	<120 ug/kg dry	120	1	07/27/07	kb	07/27/07	jm
Acenaphthylene	<120 ug/kg dry	120	1	07/27/07	kb	07/27/07	jm
2,6-Dinitrotoluene	<120 ug/kg dry	120	1	07/27/07	kb	07/27/07	jm
3-Nitroaniline	<120 ug/kg dry	120	1	07/27/07	kb	07/27/07	jm
Acenaphthene	<120 ug/kg dry	120	1	07/27/07	kb	07/27/07	jm
Dibenzofuran	<120 ug/kg dry	120	1	07/27/07	kb	07/27/07	jm
2,4-Dinitrotoluene	<120 ug/kg dry	120	1	07/27/07	kb	07/27/07	jm
4-Nitrophenol	<1000 ug/kg dry	1000	1	07/27/07	kb	07/27/07	jm
2,4-Dinitrophenol	<1000 ug/kg dry	1000	1	07/27/07	kb	07/27/07	jm
Diethyl phthalate	<120 ug/kg dry	120	1	07/27/07	kb	07/27/07	jm
Fluorene	<120 ug/kg dry	120	1	07/27/07	kb	07/27/07	jm
4-Chlorophenyl phenyl ether	<120 ug/kg dry	120	1	07/27/07	kb	07/27/07	jm
4-Nitroaniline	<120 ug/kg dry	120	1	07/27/07	kb	07/27/07	jm
4,6-Dinitro-2-methylphenol	<250 ug/kg dry	250	1	07/27/07	kb	07/27/07	jm
N-Nitrosodiphenylamine	<120 ug/kg dry	120	1	07/27/07	kb	07/27/07	jm
4-Bromophenyl phenyl ether	<120 ug/kg dry	120	1	07/27/07	kb	07/27/07	jm
Hexachlorobenzene	<120 ug/kg dry	120	1	07/27/07	kb	07/27/07	jm
Pentachlorophenol	<530 ug/kg dry	530	1	07/27/07	kb	07/27/07	jm
Phenanthrene	<49 ug/kg dry	49	1	07/27/07	kb	07/27/07	jm
Anthracene	<120 ug/kg dry	120	1	07/27/07	kb	07/27/07	jm
Carbazole	<120 ug/kg dry	120	1	07/27/07	kb	07/27/07	jm
Di-n-butyl phthalate	<120 ug/kg dry	120	1	07/27/07	kb	07/27/07	jm
Fluoranthene	<49 ug/kg dry	49	1	07/27/07	kb	07/27/07	jm
Pyrene	<120 ug/kg dry	120	1	07/27/07	kb	07/27/07	jm
Butyl benzyl phthalate	<120 ug/kg dry	120	1	07/27/07	kb	07/27/07	jm
Benzo (a) anthracene	<49 ug/kg dry	49	1	07/27/07	kb	07/27/07	jm
Chrysene	<49 ug/kg dry	49	1	07/27/07	kb	07/27/07	jm
3,3'-Dichlorobenzidine	<980 ug/kg dry	980	1	07/27/07	kb	07/27/07	jm #
<b>Bis(2-ethylhexyl)phthalate</b>	<b>340 ug/kg dry</b>	<b>120</b>	<b>1</b>	<b>07/27/07</b>	<b>kb</b>	<b>07/27/07</b>	<b>jm</b>
Di-n-octyl phthalate	<120 ug/kg dry	120	1	07/27/07	kb	07/27/07	jm
Benzo (b) fluoranthene	<49 ug/kg dry	49	1	07/27/07	kb	07/27/07	jm
Benzo (k) fluoranthene	<49 ug/kg dry	49	1	07/27/07	kb	07/27/07	jm
Benzo (a) pyrene	<49 ug/kg dry	49	1	07/27/07	kb	07/27/07	jm
Indeno (1,2,3-cd) pyrene	<49 ug/kg dry	49	1	07/27/07	kb	07/27/07	jm
Dibenz (a,h) anthracene	<49 ug/kg dry	49	1	07/27/07	kb	07/27/07	jm
Benzo (g,h,i) perylene	<49 ug/kg dry	49	1	07/27/07	kb	07/27/07	jm

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## ANALYTICAL RESULTS

Trace Project ID: T07G248

Client Project ID: Lake Lindener / 20405120120010248

Trace ID: T07G248-01	Date Collected: 07/26/07 13:40	Matrix: Sediment
Sample ID: LLV Sediment 1	Date Received: 07/27/07 08:38	

PARAMETERS	RESULTS UNITS	RDL	DILUTION	PREPARED BY	ANALYZED BY	QUAL	MCL
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### SEMI-VOLATILE ORGANIC COMPOUNDS BY GC-MS

#### Surrogates:

2-Fluorophenol	* 37 %	38-81	1	07/27/07	kb	07/27/07	jm	A-01
Phenol-d5	44 %	32-102	1	07/27/07	kb	07/27/07	jm	
Nitrobenzene-d5	42 %	36-98	1	07/27/07	kb	07/27/07	jm	
2-Fluorobiphenyl	46 %	44-105	1	07/27/07	kb	07/27/07	jm	
2,4,6-Tribromophenol	54 %	38-101	1	07/27/07	kb	07/27/07	jm	
Terphenyl-d14	46 %	46-109	1	07/27/07	kb	07/27/07	jm	

### PESTICIDES/PCBS

Analysis Method: EPA 8082

Batch: T000360

Aroclor-1016	<300 ug/kg dry	300	2	07/26/07	kb	07/27/07	tml
Aroclor-1221	<300 ug/kg dry	300	2	07/26/07	kb	07/27/07	tml
Aroclor-1232	<300 ug/kg dry	300	2	07/26/07	kb	07/27/07	tml
Aroclor-1242	<300 ug/kg dry	300	2	07/26/07	kb	07/27/07	tml
Aroclor-1248	<300 ug/kg dry	300	2	07/26/07	kb	07/27/07	tml
<b>Aroclor-1254</b>	<b>990 ug/kg dry</b>	<b>300</b>	<b>2</b>	<b>07/26/07</b>	<b>kb</b>	<b>07/27/07</b>	<b>tml</b>
Aroclor-1260	<300 ug/kg dry	300	2	07/26/07	kb	07/27/07	tml

#### Surrogates:

Tetrachloro-m-xylene	68 %	40-113	2	07/26/07	kb	07/27/07	tml	#
Decachlorobiphenyl	73 %	32-111	2	07/26/07	kb	07/27/07	tml	#

### METALS, TOTAL

Analysis Method: EPA 6010B

Batch: T000371

Aluminum	5800 mg/kg dry	1.2	1	07/27/07	da	07/27/07	pe
Barium	140000 mg/kg dry	59	50	07/27/07	da	07/27/07	pe
Beryllium	8.5 mg/kg dry	0.59	1	07/27/07	da	07/27/07	pe
Cadmium	120 mg/kg dry	0.24	1	07/27/07	da	07/27/07	pe
Calcium	22000 mg/kg dry	12000	100	07/27/07	da	07/27/07	pe
Chromium	290 mg/kg dry	1.2	1	07/27/07	da	07/27/07	pe
Cobalt	30 mg/kg dry	0.59	1	07/27/07	da	07/27/07	pe
Copper	79000 mg/kg dry	59	50	07/27/07	da	07/27/07	pe
Iron	33000 mg/kg dry	360	100	07/27/07	da	07/27/07	pe
Magnesium	5100 mg/kg dry	4.8	1	07/27/07	da	07/27/07	pe
Potassium	280 mg/kg dry	240	1	07/27/07	da	07/27/07	pe

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## ANALYTICAL RESULTS

Trace Project ID: T07G248

Client Project ID: Lake Lindener / 20405120120010248

Trace ID: T07G248-01	Date Collected: 07/26/07 13:40	Matrix: Sediment
Sample ID: LLV Sediment 1	Date Received: 07/27/07 08:38	

PARAMETERS	RESULTS UNITS	RDL	DILUTION	PREPARED BY	ANALYZED BY	QUAL	MCL
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### METALS, TOTAL

Sodium	130 mg/kg dry	12	1	07/27/07	da	07/27/07	pe
Vanadium	6.1 mg/kg dry	1.2	1	07/27/07	da	07/27/07	pe

#### Analysis Method: EPA 6020

Batch: T000371

Antimony	50 mg/kg dry	0.12	10	07/27/07	da	07/27/07	pe
Arsenic	8.2 mg/kg dry	0.12	10	07/27/07	da	07/27/07	pe
Lead	80000 mg/kg dry	430	10000	07/27/07	da	07/27/07	pe
Manganese	220 mg/kg dry	0.24	10	07/27/07	da	07/27/07	pe
Nickel	160 mg/kg dry	0.24	10	07/27/07	da	07/27/07	pe
Selenium	9.1 mg/kg dry	0.24	10	07/27/07	da	07/27/07	pe
Silver	45 mg/kg dry	0.12	10	07/27/07	da	07/27/07	pe
Thallium	<0.59 mg/kg dry	0.59	10	07/27/07	da	07/27/07	pe
Zinc	13000 mg/kg dry	1200	10000	07/27/07	da	07/27/07	pe

#### Analysis Method: EPA 7471A

Batch: T000371

Mercury	1.9 mg/kg dry	0.059	10	07/27/07	da	07/27/07	pe
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### WET CHEMISTRY

#### Analysis Method: % Calculation

Batch: T000388

% Solids	67 % by Weight	0.10	1	07/27/07	at	07/27/07	at	#
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#### Analysis Method: EPA 335.2/9012B

Batch: T000387

Cyanide (total)	<0.062 mg/kg dry	0.062	1	07/27/07	ac	07/27/07	ac	210, #
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#### Analysis Method: EPA 9045C

Batch: T000368

Corrosivity-pH	7.3 pH Units		1	07/27/07	jn	07/27/07	jn	#
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## ANALYTICAL RESULTS

Trace Project ID: T07G248

Client Project ID: Lake Lindener / 20405120120010248

Trace ID: T07G248-02	Date Collected: 07/26/07 14:00	Matrix: Sediment
Sample ID: LLV Sediment 2	Date Received: 07/27/07 08:38	

PARAMETERS	RESULTS UNITS	RDL	DILUTION	PREPARED BY	ANALYZED BY	QUAL	MCL
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### VOLATILE ORGANIC COMPOUNDS BY GC-MS

Analysis Method: EPA 8260B

Batch: T000382

Chloromethane	<85 ug/kg dry	85	50	07/27/07	pmr	07/27/07	pmr	
Vinyl chloride	<68 ug/kg dry	68	50	07/27/07	pmr	07/27/07	pmr	#
Bromomethane	<85 ug/kg dry	85	50	07/27/07	pmr	07/27/07	pmr	
Chloroethane	<85 ug/kg dry	85	50	07/27/07	pmr	07/27/07	pmr	
1,1-Dichloroethene	<85 ug/kg dry	85	50	07/27/07	pmr	07/27/07	pmr	
Acetone	<1300 ug/kg dry	1300	50	07/27/07	pmr	07/27/07	pmr	
Carbon disulfide	<430 ug/kg dry	430	50	07/27/07	pmr	07/27/07	pmr	
Methylene chloride	<170 ug/kg dry	170	50	07/27/07	pmr	07/27/07	pmr	
1,1-Dichloroethane	<85 ug/kg dry	85	50	07/27/07	pmr	07/27/07	pmr	
2-Butanone	<1300 ug/kg dry	1300	50	07/27/07	pmr	07/27/07	pmr	
1,2-Dichloroethene (total)	<170 ug/kg dry	170	50	07/27/07	pmr	07/27/07	pmr	#
Chloroform	<85 ug/kg dry	85	50	07/27/07	pmr	07/27/07	pmr	
1,1,1-Trichloroethane	<85 ug/kg dry	85	50	07/27/07	pmr	07/27/07	pmr	
Carbon tetrachloride	<85 ug/kg dry	85	50	07/27/07	pmr	07/27/07	pmr	
Benzene	<85 ug/kg dry	85	50	07/27/07	pmr	07/27/07	pmr	
1,2-Dichloroethane	<85 ug/kg dry	85	50	07/27/07	pmr	07/27/07	pmr	
Trichloroethene	<85 ug/kg dry	85	50	07/27/07	pmr	07/27/07	pmr	
1,2-Dichloropropane	<85 ug/kg dry	85	50	07/27/07	pmr	07/27/07	pmr	
Bromodichloromethane	<85 ug/kg dry	85	50	07/27/07	pmr	07/27/07	pmr	
cis-1,3-Dichloropropene	<85 ug/kg dry	85	50	07/27/07	pmr	07/27/07	pmr	
4-Methyl-2-pentanone	<4300 ug/kg dry	4300	50	07/27/07	pmr	07/27/07	pmr	
Toluene	<85 ug/kg dry	85	50	07/27/07	pmr	07/27/07	pmr	
trans-1,3-Dichloropropene	<85 ug/kg dry	85	50	07/27/07	pmr	07/27/07	pmr	
1,1,2-Trichloroethane	<85 ug/kg dry	85	50	07/27/07	pmr	07/27/07	pmr	
Tetrachloroethene	<85 ug/kg dry	85	50	07/27/07	pmr	07/27/07	pmr	
2-Hexanone	<4300 ug/kg dry	4300	50	07/27/07	pmr	07/27/07	pmr	
Dibromochloromethane	<85 ug/kg dry	85	50	07/27/07	pmr	07/27/07	pmr	
Chlorobenzene	<85 ug/kg dry	85	50	07/27/07	pmr	07/27/07	pmr	
Ethylbenzene	<85 ug/kg dry	85	50	07/27/07	pmr	07/27/07	pmr	
m,p-Xylene	<170 ug/kg dry	170	50	07/27/07	pmr	07/27/07	pmr	#
o-Xylene	<85 ug/kg dry	85	50	07/27/07	pmr	07/27/07	pmr	#
Styrene	<85 ug/kg dry	85	50	07/27/07	pmr	07/27/07	pmr	
Bromoform	<85 ug/kg dry	85	50	07/27/07	pmr	07/27/07	pmr	
1,1,2,2-Tetrachloroethane	<85 ug/kg dry	85	50	07/27/07	pmr	07/27/07	pmr	
Xylenes, total	<260 ug/kg dry	260	50	07/27/07	pmr	07/27/07	pmr	

**Surrogates:**

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## ANALYTICAL RESULTS

Trace Project ID: T07G248

Client Project ID: Lake Lindener / 20405120120010248

Trace ID: T07G248-02	Date Collected: 07/26/07 14:00	Matrix: Sediment
Sample ID: LLV Sediment 2	Date Received: 07/27/07 08:38	

PARAMETERS	RESULTS UNITS	RDL	DILUTION	PREPARED BY	ANALYZED BY	QUAL	MCL
<b>VOLATILE ORGANIC COMPOUNDS BY GC-MS</b>							
1,2-Dichloroethane-d4	104 %	70-133	50	07/27/07	pmr	07/27/07	pmr
Toluene-d8	98 %	76-125	50	07/27/07	pmr	07/27/07	pmr #
4-Bromofluorobenzene	87 %	72-123	50	07/27/07	pmr	07/27/07	pmr #
1,2-Dichlorobenzene-d4	86 %	71-123	50	07/27/07	pmr	07/27/07	pmr #

## SEMI-VOLATILE ORGANIC COMPOUNDS BY GC-MS

Analysis Method: EPA 8270C

Batch: T000375

Bis(2-chloroethyl)ether	<58 ug/kg dry	58	1	07/27/07	kb	07/27/07	jm
2-Chlorophenol	<150 ug/kg dry	150	1	07/27/07	kb	07/27/07	jm
Phenol	<150 ug/kg dry	150	1	07/27/07	kb	07/27/07	jm
1,3-Dichlorobenzene	<150 ug/kg dry	150	1	07/27/07	kb	07/27/07	jm
1,4-Dichlorobenzene	<150 ug/kg dry	150	1	07/27/07	kb	07/27/07	jm
1,2-Dichlorobenzene	<150 ug/kg dry	150	1	07/27/07	kb	07/27/07	jm
Benzyl alcohol	<1200 ug/kg dry	1200	1	07/27/07	kb	07/27/07	jm
Bis(2-chloroisopropyl)ether	<150 ug/kg dry	150	1	07/27/07	kb	07/27/07	jm
2-Methylphenol (o-Cresol)	<150 ug/kg dry	150	1	07/27/07	kb	07/27/07	jm
3,4-Methylphenol (m,p Cresol)	<150 ug/kg dry	150	1	07/27/07	kb	07/27/07	jm
N-Nitrosodi-n-propylamine	<150 ug/kg dry	150	1	07/27/07	kb	07/27/07	jm
Hexachloroethane	<150 ug/kg dry	150	1	07/27/07	kb	07/27/07	jm
Nitrobenzene	<58 ug/kg dry	58	1	07/27/07	kb	07/27/07	jm
Isophorone	<150 ug/kg dry	150	1	07/27/07	kb	07/27/07	jm
2-Nitrophenol	<150 ug/kg dry	150	1	07/27/07	kb	07/27/07	jm
2,4-Dimethylphenol	<150 ug/kg dry	150	1	07/27/07	kb	07/27/07	jm
Bis(2-chloroethoxy)methane	<150 ug/kg dry	150	1	07/27/07	kb	07/27/07	jm
Benzoic acid	<2100 ug/kg dry	2100	1	07/27/07	kb	07/27/07	jm
1,2,4-Trichlorobenzene	<150 ug/kg dry	150	1	07/27/07	kb	07/27/07	jm
2,4-Dichlorophenol	<150 ug/kg dry	150	1	07/27/07	kb	07/27/07	jm
Naphthalene	<150 ug/kg dry	150	1	07/27/07	kb	07/27/07	jm
4-Chloroaniline	<150 ug/kg dry	150	1	07/27/07	kb	07/27/07	jm
Hexachlorobutadiene	<58 ug/kg dry	58	1	07/27/07	kb	07/27/07	jm
4-Chloro-3-methylphenol	<150 ug/kg dry	150	1	07/27/07	kb	07/27/07	jm
2-Methylnaphthalene	<150 ug/kg dry	150	1	07/27/07	kb	07/27/07	jm
Hexachlorocyclopentadiene	<300 ug/kg dry	300	1	07/27/07	kb	07/27/07	jm
2,4,6-Trichlorophenol	<58 ug/kg dry	58	1	07/27/07	kb	07/27/07	jm
2,4,5-Trichlorophenol	<150 ug/kg dry	150	1	07/27/07	kb	07/27/07	jm

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## ANALYTICAL RESULTS

Trace Project ID: T07G248

Client Project ID: Lake Lindener / 20405120120010248

Trace ID: T07G248-02	Date Collected: 07/26/07 14:00	Matrix: Sediment
Sample ID: LLV Sediment 2	Date Received: 07/27/07 08:38	

PARAMETERS	RESULTS UNITS	RDL	DILUTION	PREPARED BY	ANALYZED BY	QUAL	MCL
<b>SEMI-VOLATILE ORGANIC COMPOUNDS BY GC-MS</b>							
2-Chloronaphthalene	<150 ug/kg dry	150	1	07/27/07	kb	07/27/07	jm
2-Nitroaniline	<150 ug/kg dry	150	1	07/27/07	kb	07/27/07	jm
Dimethyl phthalate	<150 ug/kg dry	150	1	07/27/07	kb	07/27/07	jm
Acenaphthylene	<150 ug/kg dry	150	1	07/27/07	kb	07/27/07	jm
2,6-Dinitrotoluene	<150 ug/kg dry	150	1	07/27/07	kb	07/27/07	jm
3-Nitroaniline	<150 ug/kg dry	150	1	07/27/07	kb	07/27/07	jm
Acenaphthene	<150 ug/kg dry	150	1	07/27/07	kb	07/27/07	jm
Dibenzofuran	<150 ug/kg dry	150	1	07/27/07	kb	07/27/07	jm
2,4-Dinitrotoluene	<150 ug/kg dry	150	1	07/27/07	kb	07/27/07	jm
4-Nitrophenol	<1200 ug/kg dry	1200	1	07/27/07	kb	07/27/07	jm
2,4-Dinitrophenol	<1200 ug/kg dry	1200	1	07/27/07	kb	07/27/07	jm
Diethyl phthalate	<150 ug/kg dry	150	1	07/27/07	kb	07/27/07	jm
Fluorene	<150 ug/kg dry	150	1	07/27/07	kb	07/27/07	jm
4-Chlorophenyl phenyl ether	<150 ug/kg dry	150	1	07/27/07	kb	07/27/07	jm
4-Nitroaniline	<150 ug/kg dry	150	1	07/27/07	kb	07/27/07	jm
4,6-Dinitro-2-methylphenol	<300 ug/kg dry	300	1	07/27/07	kb	07/27/07	jm
N-Nitrosodiphenylamine	<150 ug/kg dry	150	1	07/27/07	kb	07/27/07	jm
4-Bromophenyl phenyl ether	<150 ug/kg dry	150	1	07/27/07	kb	07/27/07	jm
Hexachlorobenzene	<150 ug/kg dry	150	1	07/27/07	kb	07/27/07	jm
Pentachlorophenol	<630 ug/kg dry	630	1	07/27/07	kb	07/27/07	jm
Phenanthrene	<58 ug/kg dry	58	1	07/27/07	kb	07/27/07	jm
Anthracene	<150 ug/kg dry	150	1	07/27/07	kb	07/27/07	jm
Carbazole	<150 ug/kg dry	150	1	07/27/07	kb	07/27/07	jm
Di-n-butyl phthalate	<150 ug/kg dry	150	1	07/27/07	kb	07/27/07	jm
<b>Fluoranthene</b>	<b>59 ug/kg dry</b>	<b>58</b>	<b>1</b>	<b>07/27/07</b>	<b>kb</b>	<b>07/27/07</b>	<b>jm</b>
Pyrene	<150 ug/kg dry	150	1	07/27/07	kb	07/27/07	jm
Butyl benzyl phthalate	<150 ug/kg dry	150	1	07/27/07	kb	07/27/07	jm
Benzo (a) anthracene	<58 ug/kg dry	58	1	07/27/07	kb	07/27/07	jm
Chrysene	<58 ug/kg dry	58	1	07/27/07	kb	07/27/07	jm
3,3'-Dichlorobenzidine	<1200 ug/kg dry	1200	1	07/27/07	kb	07/27/07	jm #
Bis(2-ethylhexyl)phthalate	<150 ug/kg dry	150	1	07/27/07	kb	07/27/07	jm
Di-n-octyl phthalate	<150 ug/kg dry	150	1	07/27/07	kb	07/27/07	jm
Benzo (b) fluoranthene	<58 ug/kg dry	58	1	07/27/07	kb	07/27/07	jm
Benzo (k) fluoranthene	<58 ug/kg dry	58	1	07/27/07	kb	07/27/07	jm
Benzo (a) pyrene	<58 ug/kg dry	58	1	07/27/07	kb	07/27/07	jm
Indeno (1,2,3-cd) pyrene	<58 ug/kg dry	58	1	07/27/07	kb	07/27/07	jm
Dibenz (a,h) anthracene	<58 ug/kg dry	58	1	07/27/07	kb	07/27/07	jm
Benzo (g,h,i) perylene	<58 ug/kg dry	58	1	07/27/07	kb	07/27/07	jm

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## ANALYTICAL RESULTS

Trace Project ID: T07G248

Client Project ID: Lake Lindener / 20405120120010248

Trace ID: T07G248-02	Date Collected: 07/26/07 14:00	Matrix: Sediment
Sample ID: LLV Sediment 2	Date Received: 07/27/07 08:38	

PARAMETERS	RESULTS UNITS	RDL	DILUTION	PREPARED BY	ANALYZED BY	QUAL	MCL
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### SEMI-VOLATILE ORGANIC COMPOUNDS BY GC-MS

**Surrogates:**

2-Fluorophenol	48 %	38-81	1	07/27/07	kb	07/27/07	jm
Phenol-d5	52 %	32-102	1	07/27/07	kb	07/27/07	jm
Nitrobenzene-d5	51 %	36-98	1	07/27/07	kb	07/27/07	jm
2-Fluorobiphenyl	52 %	44-105	1	07/27/07	kb	07/27/07	jm
2,4,6-Tribromophenol	66 %	38-101	1	07/27/07	kb	07/27/07	jm
Terphenyl-d14	53 %	46-109	1	07/27/07	kb	07/27/07	jm

### PESTICIDES/PCBS

Analysis Method: EPA 8082

Batch: T000360

Aroclor-1016	<350 ug/kg dry	350	2	07/26/07	kb	07/27/07	tml
Aroclor-1221	<350 ug/kg dry	350	2	07/26/07	kb	07/27/07	tml
Aroclor-1232	<350 ug/kg dry	350	2	07/26/07	kb	07/27/07	tml
Aroclor-1242	<350 ug/kg dry	350	2	07/26/07	kb	07/27/07	tml
Aroclor-1248	<350 ug/kg dry	350	2	07/26/07	kb	07/27/07	tml
Aroclor-1254	<350 ug/kg dry	350	2	07/26/07	kb	07/27/07	tml
Aroclor-1260	<350 ug/kg dry	350	2	07/26/07	kb	07/27/07	tml

**Surrogates:**

Tetrachloro-m-xylene	61 %	40-113	2	07/26/07	kb	07/27/07	tml	#
Decachlorobiphenyl	75 %	32-111	2	07/26/07	kb	07/27/07	tml	#

### METALS, TOTAL

Analysis Method: EPA 6010B

Batch: T000371

Aluminum	7800 mg/kg dry	1.4	1	07/27/07	da	07/27/07	pe
Barium	350 mg/kg dry	1.4	1	07/27/07	da	07/27/07	pe
Beryllium	1.0 mg/kg dry	0.70	1	07/27/07	da	07/27/07	pe
Cadmium	4.2 mg/kg dry	0.28	1	07/27/07	da	07/27/07	pe
Calcium	6600 mg/kg dry	140	1	07/27/07	da	07/27/07	pe
Chromium	19 mg/kg dry	1.4	1	07/27/07	da	07/27/07	pe
Cobalt	10 mg/kg dry	0.70	1	07/27/07	da	07/27/07	pe
Copper	1900 mg/kg dry	1.4	1	07/27/07	da	07/27/07	pe
Iron	13000 mg/kg dry	4.2	1	07/27/07	da	07/27/07	pe
Magnesium	7000 mg/kg dry	5.6	1	07/27/07	da	07/27/07	pe
Potassium	540 mg/kg dry	280	1	07/27/07	da	07/27/07	pe

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## ANALYTICAL RESULTS

Trace Project ID: T07G248

Client Project ID: Lake Lindener / 20405120120010248

Trace ID: T07G248-02	Date Collected: 07/26/07 14:00	Matrix: Sediment
Sample ID: LLV Sediment 2	Date Received: 07/27/07 08:38	

PARAMETERS	RESULTS UNITS	RDL	DILUTION	PREPARED BY	ANALYZED BY	QUAL	MCL
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### METALS, TOTAL

Sodium	110 mg/kg dry	14	1	07/27/07	da	07/27/07	pe
Vanadium	28 mg/kg dry	1.4	1	07/27/07	da	07/27/07	pe

#### Analysis Method: EPA 6020

Batch: T000371

Antimony	0.97 mg/kg dry	0.14	10	07/27/07	da	07/27/07	pe
Arsenic	9.2 mg/kg dry	0.14	10	07/27/07	da	07/27/07	pe
Lead	2100 mg/kg dry	5.0	100	07/27/07	da	07/27/07	pe
Manganese	170 mg/kg dry	0.28	10	07/27/07	da	07/27/07	pe
Nickel	32 mg/kg dry	0.28	10	07/27/07	da	07/27/07	pe
Selenium	0.53 mg/kg dry	0.28	10	07/27/07	da	07/27/07	pe
Silver	8.0 mg/kg dry	0.14	10	07/27/07	da	07/27/07	pe
Thallium	<0.70 mg/kg dry	0.70	10	07/27/07	da	07/27/07	pe
Zinc	390 mg/kg dry	1.4	10	07/27/07	da	07/27/07	pe

#### Analysis Method: EPA 7471A

Batch: T000371

Mercury	0.11 mg/kg dry	0.070	10	07/27/07	da	07/27/07	pe
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### WET CHEMISTRY

#### Analysis Method: % Calculation

Batch: T000388

% Solids	57 % by Weight	0.10	1	07/27/07	at	07/27/07	at	#
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#### Analysis Method: EPA 335.2/9012B

Batch: T000387

Cyanide (total)	<0.082 mg/kg dry	0.082	1	07/27/07	ac	07/27/07	ac	#
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#### Analysis Method: EPA 9045C

Batch: T000368

Corrosivity-pH	7.0 pH Units		1	07/27/07	jn	07/27/07	jn	#
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## QUALITY CONTROL RESULTS

Trace Project ID: T07G248

Client Project ID: Lake Lindener / 20405120120010248

QC Batch: T000382

Analysis Description: Volatiles, Target Compound List

QC Batch Method: EPA 5035 Purge-and-Trap for Solids

Analysis Method: EPA 8260B

### METHOD BLANK: T000382-BLK1

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Chloromethane	ug/kg wet	<1.0	1.0	
Vinyl chloride	ug/kg wet	<0.80	0.80	
Bromomethane	ug/kg wet	<1.0	1.0	
Chloroethane	ug/kg wet	<1.0	1.0	
1,1-Dichloroethene	ug/kg wet	<1.0	1.0	
Acetone	ug/kg wet	<15	15	
Carbon disulfide	ug/kg wet	<5.0	5.0	
Methylene chloride	ug/kg wet	<2.0	2.0	
1,1-Dichloroethane	ug/kg wet	<1.0	1.0	
2-Butanone	ug/kg wet	<15	15	
Chloroform	ug/kg wet	<1.0	1.0	
1,1,1-Trichloroethane	ug/kg wet	<1.0	1.0	
Carbon tetrachloride	ug/kg wet	<1.0	1.0	
Benzene	ug/kg wet	<1.0	1.0	
1,2-Dichloroethane	ug/kg wet	<1.0	1.0	
Trichloroethene	ug/kg wet	<1.0	1.0	
1,2-Dichloropropane	ug/kg wet	<1.0	1.0	
Bromodichloromethane	ug/kg wet	<1.0	1.0	
cis-1,3-Dichloropropene	ug/kg wet	<1.0	1.0	
4-Methyl-2-pentanone	ug/kg wet	<50	50	
Toluene	ug/kg wet	<1.0	1.0	
trans-1,3-Dichloropropene	ug/kg wet	<1.0	1.0	
1,1,2-Trichloroethane	ug/kg wet	<1.0	1.0	
Tetrachloroethene	ug/kg wet	<1.0	1.0	
2-Hexanone	ug/kg wet	<50	50	
Dibromochloromethane	ug/kg wet	<1.0	1.0	
Chlorobenzene	ug/kg wet	<1.0	1.0	
Ethylbenzene	ug/kg wet	<1.0	1.0	
m,p-Xylene	ug/kg wet	<2.0	2.0	
o-Xylene	ug/kg wet	<1.0	1.0	
Styrene	ug/kg wet	<1.0	1.0	
Bromoform	ug/kg wet	<1.0	1.0	
1,1,2,2-Tetrachloroethane	ug/kg wet	<1.0	1.0	
Xylenes, total	ug/kg wet	<3.0	3.0	
1,2-Dichloroethane-d4 (S)	%	97	70-133	
Toluene-d8 (S)	%	101	76-125	
4-Bromofluorobenzene (S)	%	95	72-123	
1,2-Dichlorobenzene-d4 (S)	%	89	71-123	

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Trace Project ID: T07G248

Client Project ID: Lake Lindener / 20405120120010248

QC Batch: T000360

Analysis Description: PCBs

QC Batch Method: EPA 3550B Ultrasonic Extraction

Analysis Method: EPA 8082

#### METHOD BLANK: T000360-BLK1

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Aroclor-1016	ug/kg wet	<200	200	
Aroclor-1221	ug/kg wet	<200	200	
Aroclor-1232	ug/kg wet	<200	200	
Aroclor-1242	ug/kg wet	<200	200	
Aroclor-1248	ug/kg wet	<200	200	
Aroclor-1254	ug/kg wet	<200	200	
Aroclor-1260	ug/kg wet	<200	200	
Tetrachloro-m-xylene (S)	%	76	40-113	
Decachlorobiphenyl (S)	%	90	32-111	

#### LABORATORY CONTROL SAMPLE: T000360-BS1

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limit	Qualifiers
Aroclor-1016	ug/kg wet	667	519	78	51-110	
Aroclor-1260	ug/kg wet	667	528	79	49-110	
Tetrachloro-m-xylene (S)	%	33.3	25.3	76	40-113	
Decachlorobiphenyl (S)	%	33.3	28.3	85	32-111	

Trace Project ID: T07G248

Client Project ID: Lake Lindener / 20405120120010248

QC Batch: T000375

Analysis Description: Semi-volatiles, TCL list

QC Batch Method: EPA 3550B Ultrasonic Extraction

Analysis Method: EPA 8270C

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# **METHOD BLANK: T000375-BLK1**

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Bis(2-chloroethyl)ether	ug/kg wet	<33	33	
2-Chlorophenol	ug/kg wet	<83	83	
Phenol	ug/kg wet	<83	83	
1,3-Dichlorobenzene	ug/kg wet	<83	83	
1,4-Dichlorobenzene	ug/kg wet	<83	83	
1,2-Dichlorobenzene	ug/kg wet	<83	83	
Benzyl alcohol	ug/kg wet	<660	660	
Bis(2-chloroisopropyl)ether	ug/kg wet	<83	83	
2-Methylphenol (o-Cresol)	ug/kg wet	<83	83	
3,4-Methylphenol (m,p Cresol)	ug/kg wet	<83	83	
N-Nitrosodi-n-propylamine	ug/kg wet	<83	83	
Hexachloroethane	ug/kg wet	<83	83	
Nitrobenzene	ug/kg wet	<33	33	
Isophorone	ug/kg wet	<83	83	
2-Nitrophenol	ug/kg wet	<83	83	
2,4-Dimethylphenol	ug/kg wet	<83	83	
Bis(2-chloroethoxy)methane	ug/kg wet	<83	83	
Benzoic acid	ug/kg wet	<1200	1200	
1,2,4-Trichlorobenzene	ug/kg wet	<83	83	
2,4-Dichlorophenol	ug/kg wet	<83	83	
Naphthalene	ug/kg wet	<83	83	
4-Chloroaniline	ug/kg wet	<83	83	
Hexachlorobutadiene	ug/kg wet	<33	33	
4-Chloro-3-methylphenol	ug/kg wet	<83	83	
2-Methylnaphthalene	ug/kg wet	<83	83	
Hexachlorocyclopentadiene	ug/kg wet	<170	170	
2,4,6-Trichlorophenol	ug/kg wet	<33	33	
2,4,5-Trichlorophenol	ug/kg wet	<83	83	
2-Chloronaphthalene	ug/kg wet	<83	83	
2-Nitroaniline	ug/kg wet	<83	83	
Dimethyl phthalate	ug/kg wet	<83	83	
Acenaphthylene	ug/kg wet	<83	83	
2,6-Dinitrotoluene	ug/kg wet	<83	83	
3-Nitroaniline	ug/kg wet	<83	83	
Acenaphthene	ug/kg wet	<83	83	
Dibenzofuran	ug/kg wet	<83	83	
2,4-Dinitrotoluene	ug/kg wet	<83	83	
4-Nitrophenol	ug/kg wet	<670	670	
2,4-Dinitrophenol	ug/kg wet	<670	670	
Diethyl phthalate	ug/kg wet	<83	83	
Fluorene	ug/kg wet	<83	83	
4-Chlorophenyl phenyl ether	ug/kg wet	<83	83	
4-Nitroaniline	ug/kg wet	<83	83	
4,6-Dinitro-2-methylphenol	ug/kg wet	<170	170	
N-Nitrosodiphenylamine	ug/kg wet	<83	83	

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# **METHOD BLANK: T000375-BLK1**

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
4-Bromophenyl phenyl ether	ug/kg wet	<83	83	
Hexachlorobenzene	ug/kg wet	<83	83	
Pentachlorophenol	ug/kg wet	<360	360	
Phenanthrene	ug/kg wet	<33	33	
Anthracene	ug/kg wet	<83	83	
Carbazole	ug/kg wet	<83	83	
Di-n-butyl phthalate	ug/kg wet	<83	83	
Fluoranthene	ug/kg wet	<33	33	
Pyrene	ug/kg wet	<83	83	
Butyl benzyl phthalate	ug/kg wet	<83	83	
Benzo (a) anthracene	ug/kg wet	<33	33	
Chrysene	ug/kg wet	<33	33	
3,3'-Dichlorobenzidine	ug/kg wet	<660	660	
Bis(2-ethylhexyl)phthalate	ug/kg wet	<83	83	
Di-n-octyl phthalate	ug/kg wet	<83	83	
Benzo (b) fluoranthene	ug/kg wet	<33	33	
Benzo (k) fluoranthene	ug/kg wet	<33	33	
Benzo (a) pyrene	ug/kg wet	<33	33	
Indeno (1,2,3-cd) pyrene	ug/kg wet	<33	33	
Dibenz (a,h) anthracene	ug/kg wet	<33	33	
Benzo (g,h,i) perylene	ug/kg wet	<33	33	
2-Fluorophenol (S)	%	58	38-81	
Phenol-d5 (S)	%	53	32-102	
Nitrobenzene-d5 (S)	%	58	36-98	
2-Fluorobiphenyl (S)	%	65	44-105	
2,4,6-Tribromophenol (S)	%	82	38-101	
Terphenyl-d14 (S)	%	66	46-109	

Trace Project ID: T07G248

Client Project ID: Lake Lindener / 20405120120010248

QC Batch: T000371

Analysis Description: Aluminum, Total

QC Batch Method: EPA 3051 Microwave Assisted

Analysis Method: EPA 6010B

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#### METHOD BLANK: T000371-BLK1

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Aluminum	mg/kg wet	<1.0	1.0	
Barium	mg/kg wet	<1.0	1.0	
Beryllium	mg/kg wet	<0.50	0.50	
Calcium	mg/kg wet	<100	100	
Cadmium	mg/kg wet	<0.20	0.20	
Cobalt	mg/kg wet	<0.50	0.50	
Chromium	mg/kg wet	<1.0	1.0	
<b>Copper</b>	<b>mg/kg wet</b>	<b>1.35</b>	<b>1.0</b>	<b>630</b>
Iron	mg/kg wet	<3.0	3.0	
Potassium	mg/kg wet	<200	200	
Magnesium	mg/kg wet	<4.0	4.0	
Sodium	mg/kg wet	<10	10	
Vanadium	mg/kg wet	<1.0	1.0	

#### LABORATORY CONTROL SAMPLE: T000371-BS1

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limit	Qualifiers
Aluminum	mg/kg wet	400	410	103	80-120	
Barium	mg/kg wet	40.0	39.4	98	80-120	
Beryllium	mg/kg wet	5.00	5.03	101	80-120	
Calcium	mg/kg wet	400	413	103	80-120	
Cadmium	mg/kg wet	40.0	39.7	99	80-120	
Cobalt	mg/kg wet	40.0	39.1	98	80-120	
Chromium	mg/kg wet	40.0	39.6	99	80-120	
Copper	mg/kg wet	40.0	38.5	96	80-120	
Iron	mg/kg wet	400	395	99	80-120	
Potassium	mg/kg wet	400	393	98	80-120	
Sodium	mg/kg wet	400	399	100	80-120	
Vanadium	mg/kg wet	40.0	39.2	98	80-120	

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**MATRIX SPIKE / MATRIX SPIKE DUPLICATE: T000371-MSD1** Original: **T07G248-01**

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
<b>Aluminum</b>	<b>mg/kg dry</b>	<b>5760</b>	<b>473</b>	<b>6060</b>	<b>5800</b>	<b>65</b>	<b>10</b>	<b>75-125</b>	<b>149</b>	<b>20</b>	<b>222</b>
Barium	mg/kg dry	144000	47.3	129000	123000	-32500	-44500	75-125	-31	20	
Beryllium	mg/kg dry	8.49	5.92	13.2	12.5	79	69	75-125	15	20	
<b>Calcium</b>	<b>mg/kg dry</b>	<b>21800</b>	<b>473</b>	<b>21700</b>	<b>21900</b>	<b>-24</b>	<b>8</b>	<b>75-125</b>	<b>-380</b>	<b>20</b>	<b>222</b>
Cadmium	mg/kg dry	119	47.3	157	152	80	69	75-125	15	20	
Cobalt	mg/kg dry	29.6	47.3	67.9	66.6	81	78	75-125	4	20	
<b>Chromium</b>	<b>mg/kg dry</b>	<b>293</b>	<b>47.3</b>	<b>207</b>	<b>200</b>	<b>-182</b>	<b>-196</b>	<b>75-125</b>	<b>-8</b>	<b>20</b>	<b>222</b>
<b>Copper</b>	<b>mg/kg dry</b>	<b>78700</b>	<b>47.3</b>	<b>71800</b>	<b>67700</b>	<b>-14600</b>	<b>-23200</b>	<b>75-125</b>	<b>-46</b>	<b>20</b>	<b>222</b>
<b>Iron</b>	<b>mg/kg dry</b>	<b>32600</b>	<b>473</b>	<b>27900</b>	<b>25300</b>	<b>-1000</b>	<b>-1540</b>	<b>75-125</b>	<b>-43</b>	<b>20</b>	<b>222</b>
Potassium	mg/kg dry	278	473	683	654	86	80	75-125	8	20	
Sodium	mg/kg dry	130	473	594	592	98	97	75-125	0.7	20	
<b>Vanadium</b>	<b>mg/kg dry</b>	<b>6.10</b>	<b>47.3</b>	<b>34.2</b>	<b>34.7</b>	<b>60</b>	<b>60</b>	<b>75-125</b>	<b>2</b>	<b>20</b>	<b>205</b>

Trace Project ID: T07G248

Client Project ID: Lake Lindener / 20405120120010248

QC Batch: T000371

Analysis Description: Silver, Total

QC Batch Method: EPA 3051 Microwave Assisted

Analysis Method: EPA 6020

**METHOD BLANK: T000371-BLK1**

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Silver	mg/kg wet	<0.10	0.10	
Arsenic	mg/kg wet	<0.10	0.10	
Manganese	mg/kg wet	<0.20	0.20	
Nickel	mg/kg wet	<0.20	0.20	
Lead	mg/kg wet	<0.36	0.36	
Antimony	mg/kg wet	<0.10	0.10	
Selenium	mg/kg wet	<0.20	0.20	
Thallium	mg/kg wet	<0.50	0.50	
Zinc	mg/kg wet	<1.0	1.0	

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#### LABORATORY CONTROL SAMPLE: T000371-BS1

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limit	Qualifiers
Silver	mg/kg wet	5.00	5.28	106	80-120	
Arsenic	mg/kg wet	5.00	4.83	97	80-120	
Manganese	mg/kg wet	40.0	40.2	100	80-120	
Nickel	mg/kg wet	40.0	39.9	100	80-120	
Lead	mg/kg wet	40.0	40.7	102	80-120	
Antimony	mg/kg wet	5.00	5.02	100	80-120	
Selenium	mg/kg wet	5.00	4.46	89	80-120	
Thallium	mg/kg wet	5.00	5.39	108	80-120	
Zinc	mg/kg wet	40.0	38.0	95	80-120	

#### MATRIX SPIKE / MATRIX SPIKE DUPLICATE: T000371-MSD1 Original: T07G248-01

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
Silver	mg/kg dry	45.3	5.92	238	202	3270	2650	75-125	21	20	222
Arsenic	mg/kg dry	8.18	5.92	6.21	5.89	-33	-39	75-125	-15	20	205
Manganese	mg/kg dry	223	47.3	308	266	179	91	75-125	66	20	201
Nickel	mg/kg dry	157	47.3	177	170	43	28	75-125	43	20	205
Lead	mg/kg dry	80100	47.3	73200	75500	-14700	-9670	75-125	-41	20	222
Antimony	mg/kg dry	50.2	5.92	27.3	29.0	-388	-359	75-125	-8	20	222
Selenium	mg/kg dry	9.05	5.92	5.78	4.77	-56	-72	75-125	-26	20	205
Thallium	mg/kg dry	0.182	5.92	6.74	6.16	111	101	75-125	9	20	
Zinc	mg/kg dry	12600	47.3	11700	10900	-1940	-3670	75-125	-62	20	222

Trace Project ID: T07G248

Client Project ID: Lake Lindener / 20405120120010248

QC Batch: T000371

Analysis Description: Mercury, Total

QC Batch Method: EPA 3051 Microwave Assisted

Analysis Method: EPA 7471A

#### METHOD BLANK: T000371-BLK1

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Mercury	mg/kg wet	<0.0050	0.0050	

#### LABORATORY CONTROL SAMPLE: T000371-BS1

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limit	Qualifiers
Mercury	mg/kg wet	0.200	0.219	109	77-122	

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**MATRIX SPIKE / MATRIX SPIKE DUPLICATE: T000371-MSD1** Original: **T07G248-01**

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
Mercury	mg/kg dry	1.91	0.237	2.02	1.91	45	-2	76-123	216	20	222

Trace Project ID: T07G248

Client Project ID: Lake Lindener / 20405120120010248

QC Batch: T000388

Analysis Description: Solids, Dry Weight

QC Batch Method: % Solids

Analysis Method: % Calculation

**SAMPLE DUPLICATE: T000388-DUP1** Original: **T07G248-01**

Parameter	Units	Original Result	DUP Result	RPD	Max RPD	Qualifiers
% Solids	% by Weight	67.3	64.6	4	20	

Trace Project ID: T07G248

Client Project ID: Lake Lindener / 20405120120010248

QC Batch: T000387

Analysis Description: Cyanide, Total

QC Batch Method: EPA 335.2/9012B

Analysis Method: EPA 335.2/9012B

**METHOD BLANK: T000387-BLK1**

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Cyanide (total)	mg/kg wet	0.0720	0.050	

**LABORATORY CONTROL SAMPLE: T000387-BS1**

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limit	Qualifiers
Cyanide (total)	mg/kg wet	4.00	3.84	96	78-114	

**MATRIX SPIKE / MATRIX SPIKE DUPLICATE: T000387-MSD1** Original: **T07G248-01**

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
Cyanide (total)	mg/kg dry	0.0476	7.11	0.114	<0.089	0.9	0.2	56-123	121	28	210

Trace Project ID: T07G248

Client Project ID: Lake Lindener / 20405120120010248

QC Batch: T000368

Analysis Description: Corrosivity (pH for waste)

QC Batch Method: NO PREP

Analysis Method: EPA 9045C

**SAMPLE DUPLICATE: T000368-DUP1** Original: **T07G248-02**

Parameter	Units	Original Result	DUP Result	RPD	Max RPD	Qualifiers
Corrosivity-pH	pH Units	6.99	6.98	0.1	200	

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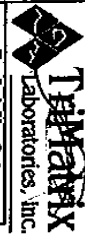


phone 231.773.5998  
toll-free 800.733.5998  
fax 231.773.6537

*Trace Analytical Laboratories, Inc.*  
2241 Black Creek Road  
Muskegon, MI 49444-2673  
info@trace-labs.com  
www.trace-labs.com

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Phone (616) 972-4500 Fax (616) 942-7463  
www.trace-labs.com

# Chain of Custody Record

COC No.

Analyses Requested

Page 1 of 1

Client Name Weston Solutions		Project Name Lakeland AER	
Address 750 E Barker Ct Suite 100 Vernon Hills, IL 60051		Client Project No. / P.O. No. 120120010248	
Phone Aptec Tanya Butler		Contact Report To Dan Capone	
Laboratory Project No.		Other (comments)	
Test Matrix Group Code	Laboratory Sample Number	Sample ID	Sample Date
1	LV Beach 1	0716	1200
2	LV Creek 1	1300	1300
3	SV LV Sediment 1	1340	1340
4	LV Sediment 2	1400	1400
5			
6			
7			
8			
9			
10			
Sampled By (print) Nancy Pasayatz		How Shipped? <input checked="" type="radio"/> Carrier	
Signature Nancy Pasayatz		Tracking No.	
Global Remediation Technologies		1. Unreceived By Date Time	
		2. Received By Date Time	
		3. Returned to Lab By Date Time	
		Comments	

Total Cyanide - 4 (H<sub>2</sub>O)  
VOCs D/G  
SVOCs - A  
PCBs - A  
TAL metals  
Corrosivity  
Flammability  
TCLP  
% H<sub>2</sub>O - VOCs

RESERVATIONS

A NONE pH-7

B HNO<sub>3</sub> pH<2

C H<sub>2</sub>SO<sub>4</sub> pH<2

D 1:1 HCl pH<2

E NaOH pH>12

F ZnAc<sub>2</sub>/NaOH pH<9

G MeOH

H Other (see below)

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### SAMPLE LOG IN CHECKLIST

Date: <u>7/27/07</u>		Client Name: <u>WESTON</u>		# of Coolers: <u>2</u>	
Trace ID #: <u>107G247 - WATER</u>		Project Name: <u>LAKE KENDENGER</u>		Cooler #s: _____	
<u>107G248 - SEDIMENT</u>		Logged in by: <u>Am</u>		Cooler #s: _____	
<b>Cooler Receipt</b>					
Cooler/samples delivered by:		Trace courier <input type="checkbox"/>		Name of delivery person: _____	
		Hand delivered <input type="checkbox"/>		UPS <input type="checkbox"/> DHL <input type="checkbox"/> FED EX <input type="checkbox"/> <input checked="" type="checkbox"/> US Mail <input type="checkbox"/>	
		Commercial courier <input checked="" type="checkbox"/>		Way Bill or Tracking #: _____	
Did cooler come with a bill of lading?		No <input checked="" type="checkbox"/>		<input type="checkbox"/> Not Applicable	
		Yes <input type="checkbox"/>			
COC Seals present and intact on cooler?		No <input checked="" type="checkbox"/>		<input type="checkbox"/> Not Applicable	
		Yes <input type="checkbox"/>			
Custody seals signed by Client?		No <input type="checkbox"/>		Client custody seal # (if applicable): _____	
		Yes <input type="checkbox"/>			
<b>Coolant and Temperature</b>					
<b>Type of Coolant Used</b>			<b>Cooler Temperature</b>		
			Correction Factor <u>10.3</u> °C		
			Date: <u>7/27/07</u> Time: <u>8:44</u>		
Slurry w/ crushed, cubed, or chip ice? <input type="checkbox"/> Yes <input type="checkbox"/> No			Temperature Blank: <u>6.8</u> °C		
Multiple bags of ice around samples? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			Average of 3 samples: <u>14-16.2</u> °C		
Ice Packs/ Blue Ice: <input type="checkbox"/> Yes <input type="checkbox"/> No			Melt Water: _____ °C		
No Coolant Present: <input type="checkbox"/> Yes <input type="checkbox"/> No			Ice still present upon receipt: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
<b>General</b>					
			Yes No NA		
COC taped to inside of cooler lid?			<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>		
All bottles arrived unbroken with labels in good condition?			<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		
Each sample point is in a sealed plastic bag?			<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>		
Labels filled out completely?			<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		
All bottle labels agree with Chain of Custody (COC)?			<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		
Sufficient sample to run tests requested?			<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		
pH checked and samples at correct pH?			<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		
Correct preservative added to samples?			<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		
DRO/GRO samples received and appropriate check in form completed?			<input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>		
Air bubbles absent from VOAs?			<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		
COC filled out properly and signed by client?			<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		
COC signed in by TRACE sample custodian?			<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		
Was project manager called and samples discussed?			<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		
Contact: _____			Date: _____		
<b>Notes:</b>					

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