

UCR Speciation

LABORATORY ANALYTICAL REPORT

PROJECT Salton Sea
Lab Project No. R03G0060

Report Date: 18 August 2003

Revision 0

Prepared For:

Dan Cain
Salton Sea Science Office
78-401 Hwy 111, Suite R
La Quinta, CA 92253
Fax: (760) 564 - 5288

CENTER FOR ENVIRONMENTAL MICROBIOLOGY

1960 Chicago Ave., Suite D-15, Riverside, CA 92507
Tel: (909) 788-0808; Fax: (909) 788-8011

18 August 2003

Project: Salton Sea

Salton Sea Science Office
Attention: Dan Cain
78-401 Hwy 111, Suite R
La Quinta, CA 92253

Dear Dan Cain:

This report contains the test results for the soil/groundwater sample(s) from Project No. Salton Sea received under chain of custody by the Center for Environmental Microbiology (CEM) on July 27, 2003. These samples are associated with our Laboratory Project No. R03G0060. Test results are based on analyses specified on the analytical report [following page(s)].

All applicable quality control procedures met laboratory-specified acceptance criteria. There were no deviations from the laboratory procedures.

This report may only be reproduced in full, with the written approval of CEM. This cover letter is an integral part of the analytical report.

If you have any questions, please feel free to call me at (909) 788-0808, or e-mail at mlosi@bioCEM.com.

Sincerely,

Mark E. Losi, Ph.D.
Laboratory Director

cc: Project File

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Analytical Report

Client: Salton Sea Science Office	CEM Project Number: R03G0060
Project: Salton Sea	Date Sampled: 06/25/2003
Media: Bulk	Date Received: 06/27/2003
Media Type: Sediment/Water	Date Analyzed:
	Analyst: Yiquang Zhang

Client Sample Number (Lab Sample ID)	Analysis	Method	Result	Standard Deviation	Units
White River (R03G0060-1)	Total Soluble Selenium Soluble Selenium (IV) Soluble Selenium (VI) Soluble Organic Selenium Selenium (IV) Selenium (VI) Organic Selenium Elemental Selenium OM Selenium Plus Residue Selenium Total Selenium	EPA 7742	0.029 0.015 0.007 0.007 0.061 0.020 0.011 0.024 0.197 0.313	N/A	µg/g
New River (R03G0060-2)	Total Soluble Selenium Soluble Selenium (IV) Soluble Selenium (VI) Soluble Organic Selenium Selenium (IV) Selenium (VI) Organic Selenium Elemental Selenium OM Selenium Plus Residue Selenium Total Selenium	EPA 7742	0.037 0.023 0.004 0.010 0.057 0.018 0.014 0.050 0.232 0.371	N/A	µg/g
Alamo River (R03G0060-3)	Total Soluble Selenium Soluble Selenium (IV) Soluble Selenium (VI) Soluble Organic Selenium Selenium (IV) Selenium (VI) Organic Selenium Elemental Selenium OM Selenium Plus Residue Selenium Total Selenium	EPA 7742	0.036 0.022 0.008 0.006 0.070 0.051 0.029 0.016 0.105 0.269	N/A	µg/g

LEGEND

N/A – Not applicable; µg – micrograms; L – Liters, OM- Organic Matter

Note: These data are intended to be interpreted in conjunction with the information presented in the cover letter of this report.

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Project: Salton Sea	Date Sampled: 06/25/2003
Media: Bulk	Date Received: 06/27/2003
Media Type: Sediment/Water	Date Analyzed:
	Analyst: Yiquang Zhang

Client Sample Number (Lab Sample ID)	Analysis	Method	Result	Standard Deviation	Units
SS B1 (R03G0060-4)	Total Soluble Selenium Soluble Selenium (IV) Soluble Selenium (VI) Soluble Organic Selenium Selenium (IV) Selenium (VI) Organic Selenium Elemental Selenium OM Selenium Plus Residue Selenium Total Selenium	EPA 7742	0.140 0.096 0.011 0.033 0.550 0.283 0.586 0.171 5.45 7.04	N/A	µg/g
SS B2 (R03G0060-5)	Total Soluble Selenium Soluble Selenium (IV) Soluble Selenium (VI) Soluble Organic Selenium Selenium (IV) Selenium (VI) Organic Selenium Elemental Selenium OM Selenium Plus Residue Selenium Total Selenium	EPA 7742	0.250 0.168 0.047 0.035 0.358 0.249 0.209 1.01 3.32 5.15	N/A	µg/g
SS B3 (R03G0060-6)	Total Soluble Selenium Soluble Selenium (IV) Soluble Selenium (VI) Soluble Organic Selenium Selenium (IV) Selenium (VI) Organic Selenium Elemental Selenium OM Selenium Plus Residue Selenium Total Selenium	EPA 7742	0.154 0.113 0.003 0.038 0.509 0.298 0.186 0.277 2.99 4.21	N/A	µg/g
White River (R03G0060-7)	Total Selenium Selenium (IV) Selenium (VI) Organic Selenium	Proprietary	3.15 0.655 2.37 0.127	8.49E-3 4.24E-2 7.14E-2 1.22E-1	µg/L

LEGEND

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Analytical Report

Client: Salton Sea Science Office	CEM Project Number: R03G0060
Project: Salton Sea	Date Sampled: 06/25/2003
Media: Bulk	Date Received: 06/27/2003
Media Type: Sediment/Water	Date Analyzed:
	Analyst: Yiquang Zhang

Client Sample Number (Lab Sample ID)	Analysis	Method	Result	Standard Deviation	Units
New River (R03G0060-8)	Total Selenium	Proprietary	3.87	8.84E-2	µg/L
	Selenium (IV)		1.34	1.41E-2	
	Selenium (VI)		2.06	3.11E-2	
	Organic Selenium		0.471	1.05E-1	
Alamo River (R03G0060-9)	Total Selenium	Proprietary	5.28	9.83E-2	µg/L
	Selenium (IV)		1.11	4.24E-2	
	Selenium (VI)		3.90	4.81E-2	
	Organic Selenium		0.276	1.04E-1	
SS-S1 (R03G0060-10)	Total Selenium	Proprietary	1.74	1.03E-1	µg/L
	Selenium (IV)		0.485	1.06E-1	
	Selenium (VI)		0.375	1.51E-1	
	Organic Selenium		0.884	5.80E-2	
SS-S2 (R03G0060-11)	Total Selenium	Proprietary	1.85	1.24E-1	µg/L
	Selenium (IV)		0.428	2.47E-2	
	Selenium (VI)		0.252	1.17E-1	
	Organic Selenium		1.17	2.17E-1	
SS-S3 (R03G0060-12)	Total Selenium	Proprietary	1.69	6.01E-2	µg/L
	Selenium (IV)		0.595	2.19E-1	
	Selenium (VI)		0.353	3.18E-2	
	Organic Selenium		0.738	2.47E-1	
SS-B1 (R03G0060-13)	Total Selenium	Proprietary	1.51	7.28E-2	µg/L
	Selenium (IV)		0.408	6.01E-2	
	Selenium (VI)		0.299	1.70E-2	
	Organic Selenium		0.804	1.50E-1	
SS-B2 (R03G0060-14)	Total Selenium	Proprietary	1.50	2.12E-3	µg/L
	Selenium (IV)		0.553	5.3E-2	
	Selenium (VI)		0.256	6.51E-2	
	Organic Selenium		0.693	1.2E-1	
SS-B3 (R03G0060-15)	Total Selenium	Proprietary	2.02	9.97E-2	µg/L
	Selenium (IV)		0.513	8.13E-2	
	Selenium (VI)		0.972	1.87E-1	
	Organic Selenium		0.538	5.66E-3	

LEGEND

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