

Historical surface water samples were collected by Harding Lawson and Associates at one location in RCRA Canyon, co-located with the RI surface water sampling location RISWRC-01 (Appendix D, Figure D-1), during five separate sampling events in December 2001 and January 2002. Each of the surface water samples collected were analyzed for volatile organic compounds (VOCs) via EPA method 8260, semi-volatile organic compounds (SVOCs) via EPA method 8270, chlorinated herbicides via EPA method 8150, total and amenable cyanide via EPA method 9012, and total CAM 17 metals via EPA methods 6010 and 200.8. Four of the five samples were also analyzed for dioxins and furans via EPA method 8290, general minerals, and pH. Three of the five samples were analyzed for total dissolved solids (TDS). All samples were analyzed by BC Laboratories, Incorporated, in Bakersfield, California.

Low concentrations of organic constituents were detected in each of the five samples collected (Table D-1.1). The VOC 1,1,2-Trichloro-1,2,2-trifluoroethane was detected at a concentration of 0.42 µg/L in one of the five samples collected. The SVOC bis(2-ethylhexyl)phthalate was detected at concentrations ranging from 1.2 to 2.7 µg/L in three of the five samples collected. Two SVOCs, hexadecanoic acid and octadecanoic acid, were detected in one sample at concentrations of 4.9 and 7.0 µg/L, respectively. The chlorinated herbicide dichloroprop was detected at concentrations ranging from 0.17 to 0.23 µg/L in three of the five samples. A second chlorinated herbicide, 2,4,5-T was detected in one sample at a concentration of 0.11 µg/L. With the exception of bis(2-ethylhexyl)phthalate, these compounds were not detected in surface water samples collected from the benchmark locations or RCRA Canyon during the Remedial Investigation (RI). Bis(2-ethylhexyl)phthalate was detected at a comparable concentration in a sample from the North Drainage benchmark location during the RI.

Detectable concentrations of dioxins/furans were present three of the four samples analyzed for these compounds, and included a total of five individual congeners (Table D-1.1). With the exception of 1,2,3,4,6,7,8,9-OCDD, concentrations of individual congeners were comparable or lower than those encountered in the benchmark location samples. 1,2,3,4,6,7,8,9-OCDD was detected at a concentration of 8.58 pg/L in one historical surface water sample, but was not detected in samples collected from the benchmark locations or RCRA Canyon during the RI.

Concentrations of total metals are comparable to those detected in samples collected in the North Drainage and RCRA Canyon for the RI. Cyanide was detected at a concentrations ranging from 0.0094 (total) to 0.027 mg/L (both total and amenable) in two of the five samples collected. Copies of laboratory analytical results for these historical surface water samples are included in Attachment D-2.

TABLE D-1.1
Summary of Detected Organic Analytical Results
Historical Surface Water Samples
RCRA Canyon

	12 Nov 01	2 Dec 01	29 Dec 01	3 Jan 02	27 Jan 02
VOCs					
1,1,2-Trichloro-1,2,2-trifluoroethane	0.42 µg/L				
SVOCs					
bis(2-ethylhexyl)phthalate	1.8 µg/L		2.7 µg/L	1.2 µg/L	
Hexadecanoic acid			4.9 µg/L		
Octadecanoic acid			7.0 µg/L		
Chlorinated Herbicides					
Dichloroprop		0.23 µg/L	0.19 µg/L	0.17 µg/L	
2,4,5-T					0.11 µg/L
Dioxins and Furans					
1,2,3,7,8,9-HxCDD	NA	5.16 pg/L			
1,2,3,4,6,7,8-HpCDD	NA	14.9 pg/L			
OCDD	NA	108 pg/L			4.00 pg/L
1,2,3,4,6,7,8,9-OCDD	NA		8.58 pg/L		
OCDF	NA	11.0 pg/L			2.28 pg/L
Dioxin and Furan Totals					
Total HxCDD	NA	5.16 pg/L			
Total HpCDD	NA	27.8 pg/L			

NA – Not Analyzed