ENTERED

DEPARTMENT OF THE AIR FORCE
27TH CIVIL ENGINEER SQUADRON (ACC)
CANNON AIR FORCE BASE NEW MEXICO

LIBRARY COPY

Mr. Michael A. Poston
Deputy Base Civil Engineer
506 N DL Ingram Blvd
Cannon AFB NM 88103-5323

RECEIVED
APR 2006
NMED Hazardous Waste Bureau

Ms. Tammy Diaz
Hazardous Waste Bureau
New Mexico Environment Department
2905 Rodeo Park Drive East Building 1
Santa Fe NM 87505-6303

Dear Ms. Diaz

Enclosed at your request, is an additional copy of the final CY 2003 groundwater monitoring and sampling reports as follows: the semi-annual report for Monitoring Wells B, C, D, Q, S, T and U at Landfill No. 5 (SWMU 113) and the annual report for Monitoring Wells E, F, G and H at the Sewage Lagoons (SWMU 101) at Cannon Air Force Base taken March 18-21, 2003 and April 2, 2003. Please contact Mr. Peter P. Zamie at 505-784-1092 if you have any further requirements.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or person who managed the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Sincerely

Michael A. Poston

MICHAEL A. POSTON, GS-13
Deputy Base Civil Engineer

LIBRARY COPY

Cannon Air Force Base, New Mexico

RCRA Ground-Water Monitoring at Sewage Lagoons and at Landfill 5

Analytical Results of Samples Collected March 18-21, and April 2, 2003

Prepared for

United States Air Force Air Combat Command
Cannon Air Force Base

October 2003

CONTENTS

Page

Executive summary 1

Figure 1. Location of Cannon Air Force Base, New Mexico 4

Figure 2. Cannon Air Force Base and location of sewage lagoons and Landfill 5 5

Figure 3. Location of monitoring wells around the sewage lagoons 6

Figure 4. Location of monitoring wells around Landfill 5 7

Table 1. Summary of concentrations of analytes in ground water from monitoring wells E, F, G, and H, at the sewage lagoons, Cannon Air Force Base, New Mexico 8

Table 2. Summary of concentrations of analytes in ground water from monitoring wells B, C, D, Q, S, T, and U, at Landfill 5, Cannon Air Force Base, New Mexico 16

Table 3. Records of water-level measurements from monitoring wells on Cannon Air Force Base, New Mexico 30

Monitoring well identification reports 37

Monitoring well semi-annual and annual sampling reports 48

APPENDIX I

Analytical Results from Severn Trent Services Laboratory for Ground-Water Samples Collected March 18-20, 2003

Severn Trent Services Report No. D3C210341 and D3C240249 (Landfill 5) I-1

Exective summary (Detection Highlights) I-9

Volatile organics I-18

Page

APPENDIX I--Continued

Analytical Results from Severn Trent Services Laboratory for Ground-Water Samples Collected March 18-20, 2003

Semivolatile organics I-51

Pesticides and PCB's I-91

Herbicides I-108

Dioxins and Furans I-116

Polynuclear aromatic hydrocarbons I-124

Total metals I-132

General chemistry (perchlorate) I-148

APPENDIX II

Analytical Results from Severn Trent Services Laboratory for Ground-Water Samples Collected March 20-21 and April 2, 2003

Severn Trent Services Report No. D3C210230, D3C220137, and D3D030147 (Sewage Lagoons) II-1

Executive summary (Detection Highlights) II-8

Volatile organics II-18

Pesticides and PCB's II-39

Total metals II-49

General chemistry (Nitrate and perchlorate) II-59

Page

APPENDIX III

Laboratory Quality Assurance / Quality Control Results

Laboratory data validation checklist for D3C210230, D3C210341, D3C220137, D3C240249, and D3D030147 ..... III-1

DODEC laboratory data review worksheet for D3C210230 and D3C210341 ..... III-45

DODEC laboratory data review worksheet for D3C220137, D3C240249, and D3D030147 ..... III-49

Severn Trent Report D3C210341 and D3C240249 quality control summary III-53

U.S. Geological Survey, Water Resources Division, New Mexico District analytical request / chain of custody III-174

Severn Trent sample receiving checklist III-181

Severn Trent D3C210230, D3220137, and D3D030147 quality control summary III-183

U.S. Geological Survey, Water Resources Division, New Mexico District analytical request / chain of custody III-290

Severn Trent sample receiving checklist III-296

APPENDIX IV

Field Data

Field methods IV-1

Sample container and preservation requirements IV-2

Field notes IV-4

EXECUTIVE SUMMARY

The U.S. Geological Survey (USGS), Water Resources Division, and the U.S. Air Force Air Combat Command (ACC) have a memorandum of understanding that addresses the USGS assisting any ACC base in their hydrology or environmental programs. The USGS has agreed to assist Cannon Air Force Base (CAFB), an ACC base, in their Resource Conservation and Recovery Act (RCRA) ground-water sampling program. Cannon AFB is located in east-central New Mexico about 6 miles west of Clovis, as shown in figure 1. The ground-water sampling is at the sewage lagoons and at Landfill 5 on the east side and southeast corner of the base, as shown in figure 2. Annual sampling is conducted at the sewage lagoons (fig. 3). Detection sampling is conducted semiannually at Landfill 5 (fig. 4) as part of the July 13, 1990, Compliance Agreement between CAFB and the New Mexico Environment Department (NMED).

This report presents the water-quality data for samples collected from four wells around the sewage lagoons and seven wells around Landfill 5, CAFB, on March 18-21, and April 2, 2003.

The monitoring wells sampled at the sewage lagoons are upgradient well E and downgradient wells F, G and H. Wells E, F, G, and H were sampled for the following Appendix IX parameters: volatile organic compounds (VOC's) by method SW8260B; pesticides and PCB's by methods SW8081A and SW8082; total metals (aluminum, barium, beryllium, calcium, cobalt, copper, iron, magnesium, manganese, molybdenum, nickel, potassium, sodium, tin, vanadium, and zinc) by method SW6010B; antimony, arsenic, cadmium, chromium, lead, selenium, silver, and thallium by method SW6020; and mercury by method SW7470A; sulfate by method MCAWW300.0A; sulfide by method SW9030B/ 9034; nitrate/nitrite by method MCAWW353.2/ 354.1; and total dissolved solids by method MCAWW160.1. All four wells around the sewage lagoons were also sampled for perchlorate by method EPA 314.0.

The monitoring wells sampled at Landfill 5 are downgradient wells B, C, D, S, T, and U, and upgradient well Q, as shown in figure 4. These wells were sampled for the following Appendix IX parameters: VOC's by method SW8260B; semivolatile organic compounds by method SW8270C; dioxins and furans by method SW8280; polynuclear aromatic hydrocarbons by method SW8310; pesticides and PCB's by methods SW8081A and SW8082; herbicides by method SW8151A; total metals (aluminum, barium, beryllium, calcium, cobalt, copper, iron, magnesium, manganese, molybdenum, nickel, potassium, sodium, tin, vanadium, and zinc) by

SW6010; antimony, arsenic, cadmium, chromium, lead, selenium, silver, and thallium by SW6020; and mercury by SW7470A); and general chemistry (cyanide by SW9012A, sulfide by SW9030B/ 9034, total organic carbon (TOC) by SW9060, and total organic halogens (TOX) by SW9020B). All seven wells around Landfill 5 were also sampled for perchlorate by method EPA 314.0.

Concentrations of analytes detected in ground water samples from wells at the sewage lagoons are presented in table 2. Only those concentrations detected above the reporting limits are discussed in this summary. Barium was detected in water samples from wells E, F, G, and H at concentrations of 52.0, 37.0, 32.0 and 33.0 µg/L, respectively. The USEPA MCL standard for barium is 2,000 µg/L. Chromium was detected in water samples from wells E, F, G, and H at concentrations 3.2, 3.3, 3.8, and 7.6 µg/L, respectively. The USEPA MCL standard for chromium is 100 µg/L. Use chromium data results with caution, the associated method blanks contained the target analyte at a reported level. Lead was detected in a water sample from well H, at concentrations of and 2.7 µg/L. The USEPA maximum contaminant level goal (SMCLG) standard for lead is zero. Selenium was detected in water samples from wells F, G, and H at concentrations of 7.2, 5.5 and 7.6 µg/L, respectively. The USEPA MCL standard for selenium is 50.0 µg/L. Zinc was detected in a water sample from wells F and H at a concentration of 42.0 and 88.0 µg/L, respectively. The USEPA SMCL standard for zinc is 5,000 µg/L. Sulfate was detected in all four wells at concentrations ranging from 83.0 µg/L (well E) to 150 µg/L (well G). The USEPA MCL standard for sulfate is 250,000 µg/L. Use discretion while reviewing sulfate data results, due to high analyte levels the results had elevated reporting limits. Perchlorate was detected in all four wells around the sewage lagoons, concentrations ranging from 1.7 µg/L (wells E and G) to 2.4 (well H). There is no current USEPA MCL standard for perchlorate.

Concentrations of analytes detected in ground water from wells at Landfill 5 are presented in table 3. Trichloroethene was detected in a water sample from well C at concentration of 1.3 µg/L. The USEPA MCL drinking-water standard for trichloroethene is 5 µg/L. Arsenic was detected in water samples from all seven wells around Landfill 5, at concentrations ranging from 5.0 µg/L (wells D and U) to 6.3 µg/L (well C). Use discretion while reviewing the arsenic data, the associated method blanks contained the target analyte at a reported level. Barium was detected in water samples from all seven wells at concentrations ranging from 27.0 µg/L (well B) to 83.0 µg/L (well D). Chromium was detected in water samples from wells B, Q, S, and T, concentrations ranging from 2.1 (well B) to 4.6 (well T). The USEPA MCL standard for chromium is 100 µg/L. Use chromium data results with caution, the associated method blanks contained the target analyte at a reported

level. Selenium was detected in water samples from wells B, Q, S, T, and U at concentrations ranging from 5.9 μg/L (well U) to 7.8 μg/L (well Q). Zinc was detected in wells S and T at concentrations of 21.0 and 20.0, respectively. The USEPA SMCL standard for zinc is 5,000 μg/L. Again, similar to arsenic and chromium, use the zinc data with caution, the associated method blanks contained the target analyte at a reported level. Lead was not detected above reporting limits in any of the samples collected from wells around Landfill 5. Perchlorate was detected in five wells around Landfill 5, concentrations ranging from 2.1 μg/L (wells B) to 2.4 (well S). There is no current USEPA MCL standard for perchlorate.

As part of the quality assurance and quality control (QA/QC) procedures for the sewage lagoons and Landfill 5 sites, four trip blanks, two field duplicate samples, one pair of matrix spike, and matrix spike duplicate samples were collected. No target parameters were detected above reporting limits in the trip blanks. All the sample cooler temperatures upon receipt by the laboratory were under the EPA's recommendation of 6.0 degrees Celsius.

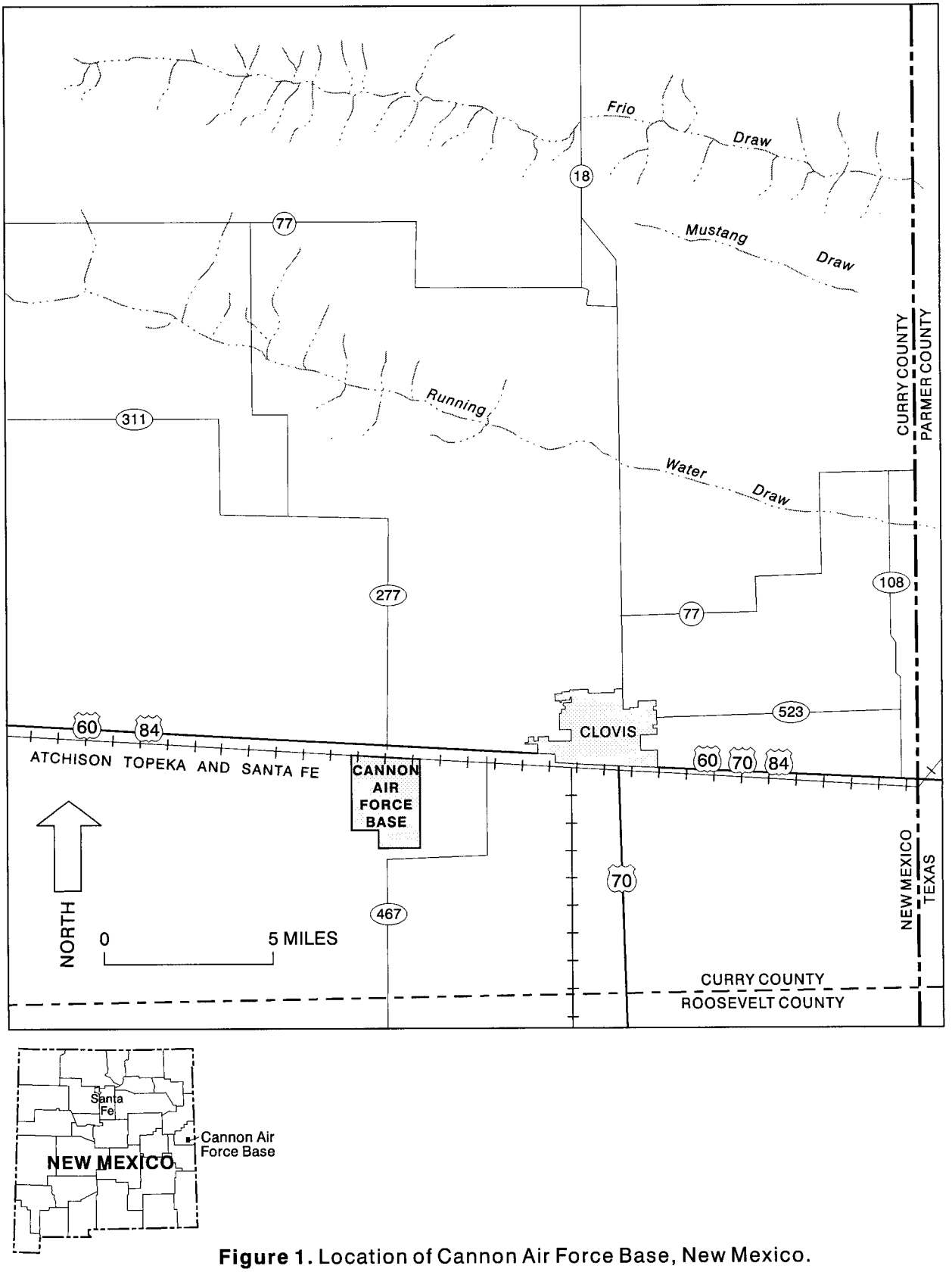

Figure 1. Location of Cannon Air Force Base, New Mexico.

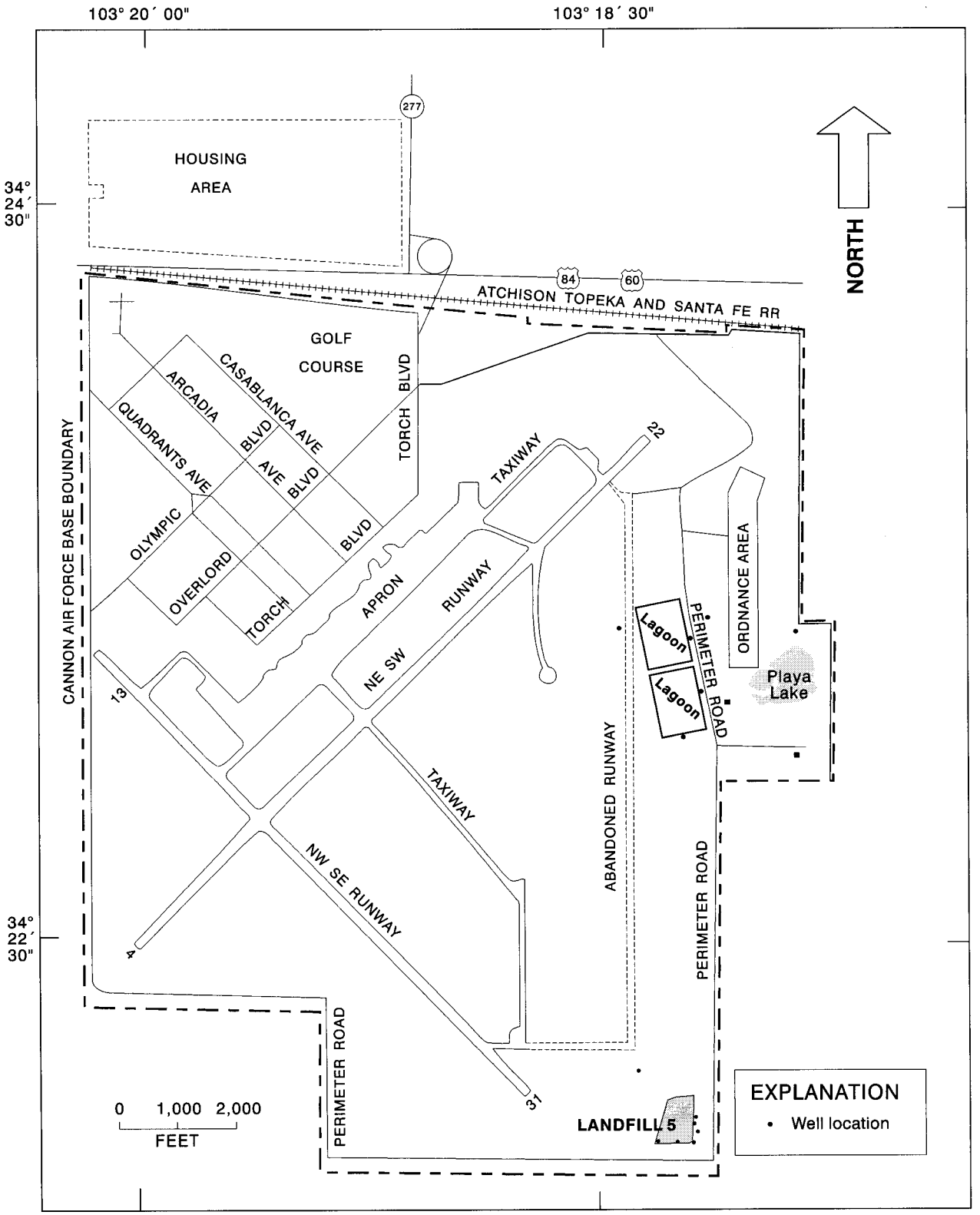

Figure 2. Cannon Air Force Base and location of sewage lagoons and Landfill 5.

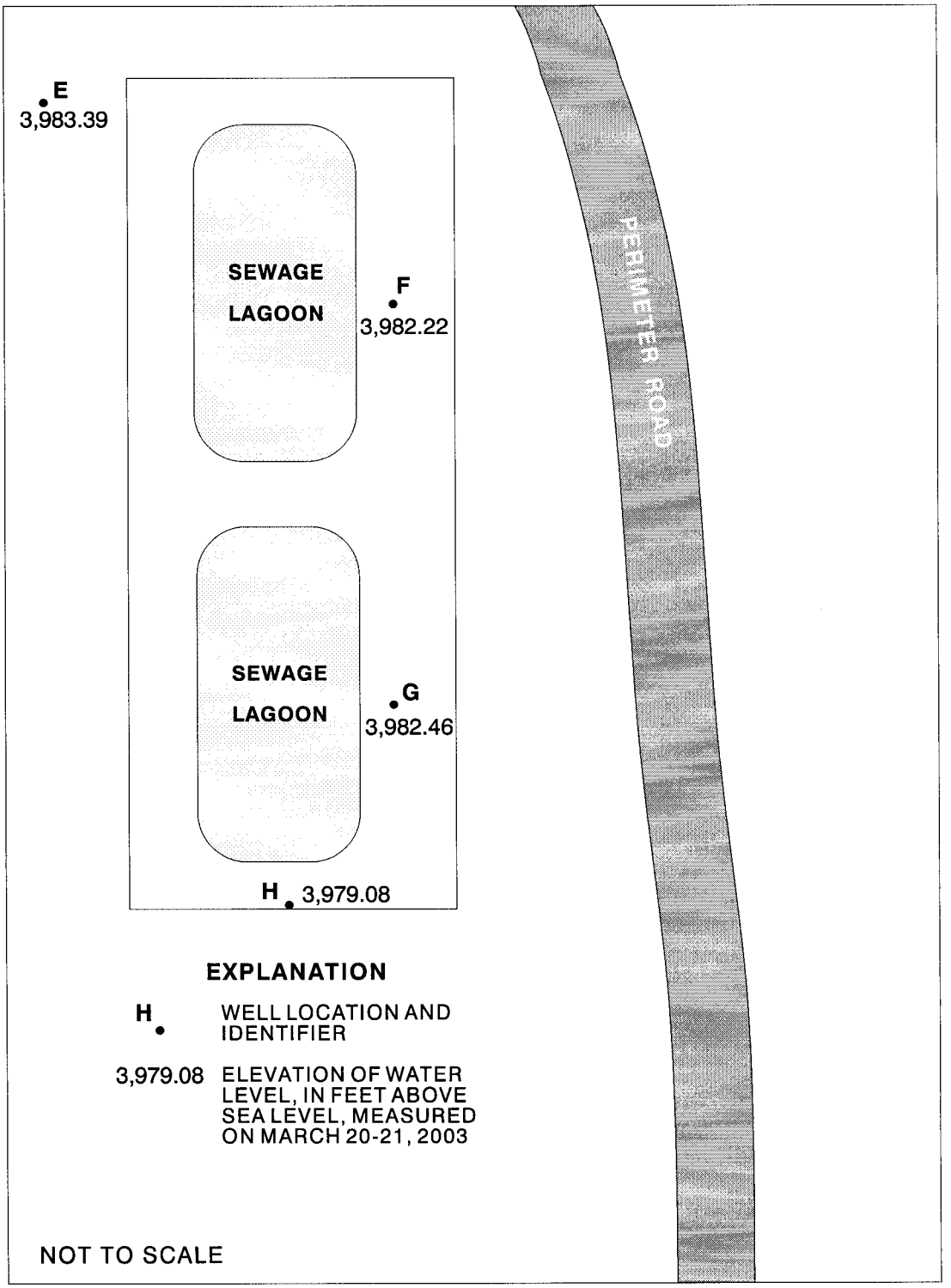

Figure 3. Location of monitoring wells around the sewage lagoons.

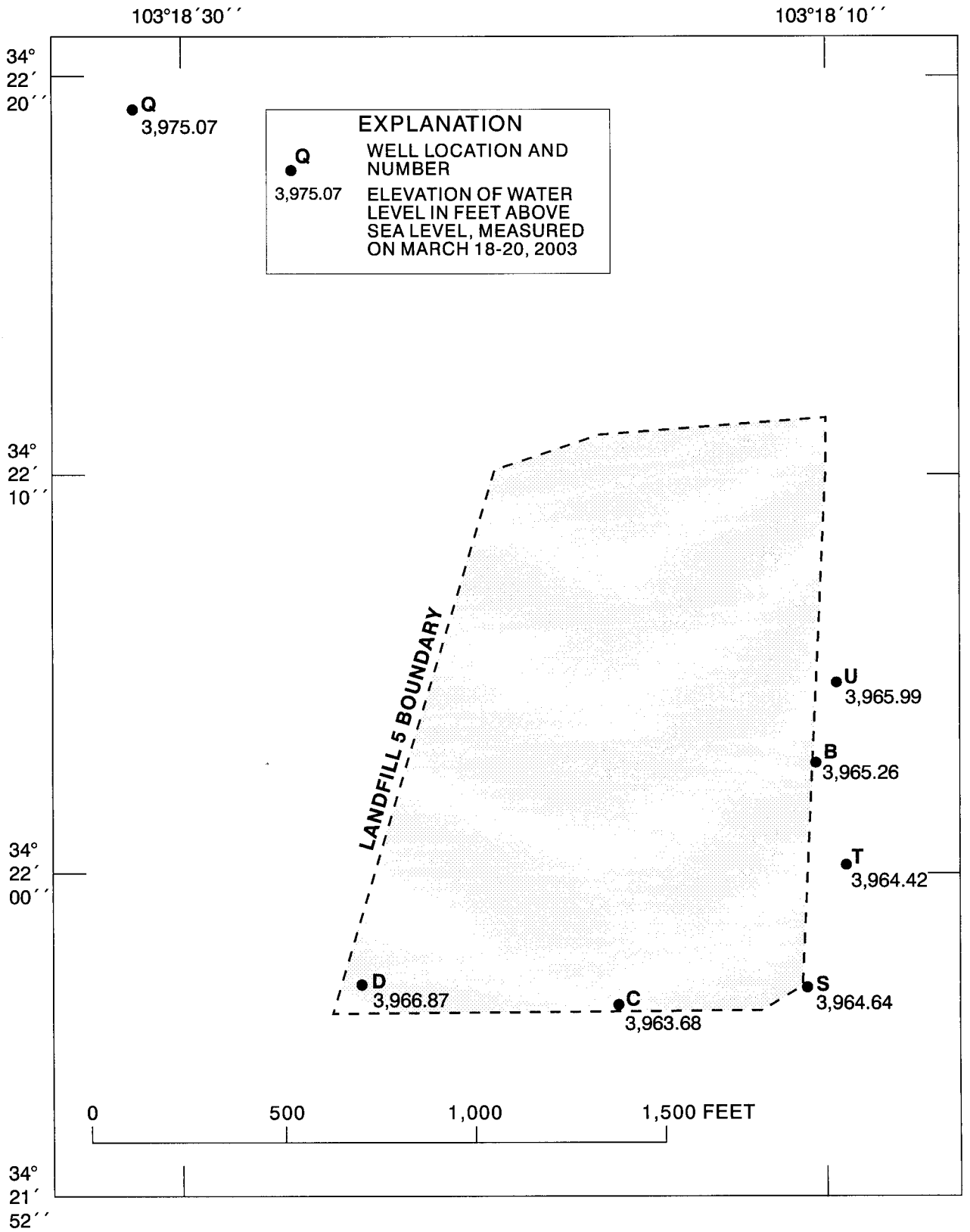

Figure 4. Location of monitoring wells around Landfill 5.

Table 1.--Summary of concentrations of analytes in ground water from monitoring well E at the Sewage Lagoons, Cannon Air Force Base, New Mexico

[RL, reporting limit; µg/L, micrograms per liter; J, result is detected below the reporting limit or is an estimated concentration; B, estimated result, result less than RL; --, no data; mg/L, milligrams per liter; Q, reporting limit is elevated due to high analyte levels; G, reporting limit is elevated due to matrix interference]

Analyte and unit	Date sampled	Result	RL
Tetrachloroethene µg/L	03/02/1999	2.1	1.0
Arsenic µg/L		4.1 B	5.0
Barium µg/L		48.2	10.0
Calcium µg/L		36900	200
Chromium µg/L		5.1	1.0
Lead µg/L		0.47 B	1.0
Magnesium µg/L		34500	200
Potassium µg/L		6200	5000
Selenium µg/L		5.7	5.0
Sodium µg/L		53200	5000
Tin µg/L		44.4	100
Vanadium µg/L		20.0	10.0
Total Dissolved Solids mg/L		414	10.0
Sulfate mg/L		60.3 Q	25.0
Methylene chloride µg/L	08/31/1999	0.28 J	1.0
Tetrachloroethene µg/L		1.9	1.0
Trichloroethene µg/L		0.11 J	1.0
2-Butanone (MEK) µg/L		1.0 J	5.0
Nitrate mg/L		4.4	0.20
Methylene chloride µg/L	03/15/2000	1.0	1.0
Tetrachloroethene µg/L		1.0	1.0
Trichloroethene µg/L		0.12 J	1.0
Aluminum µg/L		56.9 B	100
Arsenic µg/L		3.5 B	5.0
Antimony µg/L		0.75 B	1.0
Barium µg/L		51.2	10.0
Calcium µg/L		39800	200
Chromium µg/L		11.5	1.0
Iron µg/L		96.6 B	100
Lead µg/L		11.4	1.0
Magnesium µg/L		37200	200
Manganese µg/L		4.0 B	10.0
Potassium µg/L		6920	5000
Selenium µg/L		4.0 B	5.0
Sodium µg/L		56400	5000
Vanadium µg/L	03/15/2000	40.6	10.0
Zinc µg/L	-continued	12.3 B	20.0
Total Dissolved Solids mg/L		426	10.0
Nitrate mg/L		1.8	0.20
Sulfate mg/L		64.7 Q	25.0
Aluminum µg/L	03/22/2001	107	100
Arsenic µg/L		3.1 B	5.0
Barium µg/L		51.8	10.0
Calcium µg/L		47300	200
Chromium µg/L		12.0	1.0
Iron µg/L		84.0 B	100
Lead µg/L		5.4	1.0
Magnesium µg/L		43500	200
Manganese µg/L		2.0 B	10.0
Potassium µg/L		6700	5000
Selenium µg/L		5.2	5.0
Silver µg/L		0.060 B	1.0
Sodium µg/L		60300	5000
Vanadium µg/L		18.0	10.0
Zinc µg/L		7.0 B	20.0
Total Dissolved Solids mg/L		503	10.0
Nitrate mg/L		1.4	0.20
Sulfate mg/L		81.1 Q	25.0
Arsenic µg/L	03/14/2002	2.8 B	5.0
Barium µg/L		52.8	10.0
Calcium µg/L		5000	200
Chromium µg/L		6.9 J	1.0
Iron µg/L		93.0 B	100
Lead µg/L		6.7	1.0
Magnesium µg/L		44600	200
Manganese µg/L		5.2 B	10.0
Potassium µg/L		6900	5000
Selenium µg/L		5.3	5.0
Silver µg/L		0.030 B	1.0
Sodium µg/L		59500	5000

Table 1.--Summary of concentrations of analytes in ground water from monitoring well E at the Sewage Lagoons, Cannon Air Force Base, New Mexico

[RL, reporting limit; µg/L, micrograms per liter; J, result is detected below the reporting limit or is an estimated concentration; B, estimated result, result less than RL; --, no data; mg/L, milligrams per liter; Q, reporting limit is elevated due to high analyte levels; G, reporting limit is elevated due to matrix interference]

Analyte and unit	Date sampled	Result	RL
Vanadium µg/L	03/14/2002	18.4	10.0
Total Dissolved Solids mg/L	-continued	549	10.0
Nitrate mg/L		1.6	0.20
Nitrite mg/L		0.0023 B	0.010
Sulfate mg/L		85.2 Q	25.0
Perchlorate µg/L	03/21/2003	1.7	1.0
Tetrachloroethene µg/L		0.31 J	1.0
Arsenic µg/L		3.1 B,J	5.0
Barium µg/L		52.0	10.0
Calcium µg/L		53000	200
Chromium µg/L		3.2 J	2.0
Iron µg/L		32.0 B	100
Lead µg/L		0.70 B	1.0
Magnesium µg/L		48000	200
Manganese µg/L		1.9 B	10.0
Nickel µg/L		2.9 B	40.0
Potassium µg/L		7100	3000
Selenium µg/L		4.9 B,J	5.0
Sodium µg/L		61000	5000
Vanadium µg/L		18.0	10.0
Zinc µg/L		9.5 B	20.0
Total Dissolved Solids mg/L		550	10.0
Nitrate mg/L		1.7	0.10
Nitrite mg/L		0.0021 B	0.010
Sulfate mg/L		83.0 Q	25.0

Analyte and unit	Date sampled	Result	RL

Table 1.--Summary of concentrations of analytes in ground water from monitoring well F at the Sewage Lagoons, Cannon Air Force Base, New Mexico

[RL, reporting limit; µg/L, micrograms per liter; J, result is detected below the reporting limit or is an estimated concentration; B, estimated result, result less than RL; --, no data; mg/L, milligrams per liter; Q, reporting limit is elevated due to high analyte levels; G, reporting limit is elevated due to matrix interference]

Analyte and unit	Date sampled	Result	RL
Acetone µg/L	03/02/1999	1.4 J,B	10.0
Methylene chloride µg/L		0.43 J	1.0
Arsenic µg/L		4.4 B	5.0
Chromium µg/L		1.5	1.0
Selenium µg/L		5.8	5.0
Sodium µg/L		643 B	5000
Tin µg/L		29.3 B	100
Total Dissolved Solids mg/L		506	10.0
Sulfate mg/L		139 Q	25.0
Nitrate mg/L	08/31/1999	1.2	0.10
Methylene chloride µg/L	03/02/2000	0.38 J	1.0
Tetrachloroethene µg/L		0.11 J	1.0
Aluminum µg/L		52.2 B	100
Arsenic µg/L		4.2 B	5.0
Barium µg/L		37.9	10.0
Calcium µg/L		44700	200
Chromium µg/L		2.2	1.0
Iron µg/L		27.8 B	100
Lead µg/L		0.67 B	1.0
Magnesium µg/L		45000	200
Potassium µg/L		7550	5000
Selenium µg/L		8.8	5.0
Sodium µg/L		42800	5000
Thallium µg/L		0.082 B	1.0
Vanadium µg/L		18.5	10.0
Zinc µg/L		5.0 B	20.0
Total Dissolved Solids mg/L		432	10.0
Nitrate mg/L		1.3	0.20
Sulfate mg/L		139 Q	25.0
Aldrin µg/L	08/21/2001	0.013 J	0.050
beta-BHC µg/L		0.049 J	0.050
delta-BHC µg/L		0.027 J	0.050
Endosulfan I µg/L		0.011 J	0.050
Endosulfan sulfate µg/L		0.020 J	0.050

Analyte and unit	Date sampled	Result	RL
Heptachlor µg/L	08/21/2001	0.016 J	0.050
Heptachlor epoxide µg/L	-continued	0.017 J	0.050
Aluminum µg/L		1890	100
Antimony µg/L		2.0	1.0
Arsenic µg/L		4.0 B	5.0
Barium µg/L		55.0	10.0
Cadmium µg/L		0.74 B	1.0
Calcium µg/L		49600	200
Chromium µg/L		10.6	1.0
Cobalt µg/L		0.81 B	10.0
Copper µg/L		12.4 B	20.0
Iron µg/L		1730	100
Lead µg/L		10.2	1.0
Magnesium µg/L		44000	200
Manganese µg/L		42.8	10.0
Mercury µg/L		0.054 B	0.20
Molybdenum µg/L		3.0 B	20.0
Nickel µg/L		14.3 B	40.0
Potassium µg/L		8380	5000
Selenium µg/L		7.1	5.0
Silver µg/L		1.6	1.0
Sodium µg/L		46900	5000
Vanadium µg/L		23.3	10.0
Zinc µg/L		60.5	20.0
Total Dissolved Solids mg/L		538	10.0
Nitrate mg/L		1.4	0.20
Nitrite mg/L		0.0054 B	0.010
Sulfate mg/L		131 Q	25.0
Arsenic µg/L	03/14/2002	2.9 B	5.0
Barium µg/L		39.9	10.0
Cadmium µg/L		0.37 B	1.0
Calcium µg/L		49600	200
Chromium µg/L		2.0 J	1.0
Iron µg/L		4400	100
Lead µg/L		0.45 B	1.0
Magnesium µg/L		4550	200

Table 1.--Summary of concentrations of analytes in ground water from monitoring well F at the Sewage Lagoons, Cannon Air Force Base, New Mexico

[RL, reporting limit; µg/L, micrograms per liter; J, result is detected below the reporting limit or is an estimated concentration; B, estimated result, result less than RL; --, no data; mg/L, milligrams per liter; Q, reporting limit is elevated due to high analyte levels; G, reporting limit is elevated due to matrix interference]

Analyte and unit	Date sampled	Result	RL
Manganese µg/L	03/14/2002	1.2 B	10.0
Molybdenum µg/L	-continued	3.4 B	20.0
Potassium µg/L		7200	5000
Selenium µg/L		6.7	5.0
Sodium µg/L		49300	5000
Vanadium µg/L		17.4	10.0
Zinc µg/L		14.7 B	20.0
Total Dissolved Solids mg/L		525	10.0
Nitrate mg/L		1.2	0.20
Nitrite mg/L		0.0035 B	0.010
Sulfate mg/L		132 Q	25.0
Perchlorate µg/L	03/20/2003	2.3	1.0
Aluminum µg/L		24.0 B,J	100
Antimony µg/L		0.35 B	2.0
Arsenic µg/L		3.2 B	5.0
Barium µg/L		37.0	10.0
Beryllium µg/L		0.23 B	5.0
Cadmium µg/L		0.34 B	1.0
Calcium µg/L		47000	200
Chromium µg/L		3.3 J	1.0
Copper µg/L		8.6 B	20.0
Iron µg/L		53.0 B	100
Lead µg/L		0.62 B	1.0
Magnesium µg/L		46000	200
Manganese µg/L		2.3 B	10.0
Mercury µg/L		0.018 B	0.20
Molybdenum µg/L		3.8 B	20.0
Nickel µg/L		2.5 B	40.0
Potassium µg/L		7900	5000
Selenium µg/L		7.2	5.0
Silver µg/L		0.031 B	5.0
Vanadium µg/L		18.0	10.0
Zinc µg/L		42.0	20.0
Total Dissolved Solids mg/L		520	10.0
Nitrate mg/L		1.0	0.10
Sulfate mg/L		140 Q	25.0

Analyte and unit	Date sampled	Result	RL

Table 1.--Summary of concentrations of analytes in ground water from monitoring well G at the Sewage Lagoons, Cannon Air Force Base, New Mexico

[RL, reporting limit; µg/L, micrograms per liter; J, result is detected below the reporting limit or is an estimated concentration; B, estimated result, result less than RL; --, no data; mg/L, milligrams per liter; Q, reporting limit is elevated due to high analyte levels; G, reporting limit is elevated due to matrix interference]

Analyte and unit	Date sampled	Result	RL
Methylene chloride µg/L	03/02/1999	0.25 J	1.0
Antimony µg/L		0.48 B	1.0
Arsenic µg/L		3.6 B	5.0
Barium µg/L		31.4	10.0
Calcium µg/L		71900	200
Chromium µg/L		7.6	1.0
Lead µg/L		0.88 B	1.0
Magnesium µg/L		70200	200
Potassium µg/L		8690	5000
Selenium µg/L		4.2 B	5.0
Sodium µg/L		60300	5000
Tin µg/L		74.0 B	100
Vanadium µg/L		15.8	10.0
Zinc µg/L		19.9 B	20.0
Total Dissolved Solids mg/L		781	10.0
Sulfate mg/L		182 Q	25.0
Nitrate mg/L	08/31/1999	4.0	0.10
Methylene chloride µg/L	03/02/2000	0.38 J	1.0
Aluminum µg/L		45.6 B	100
Arsenic µg/L		4.3 B	5.0
Barium µg/L		33.5	10.0
Calcium µg/L		69100	200
Chromium µg/L		1.4	1.0
Copper µg/L		2.1 B	20.0
Iron µg/L		33.4 B	100
Lead µg/L		0.44 B	1.0
Magnesium µg/L		69800	200
Potassium µg/L		9060	5000
Selenium µg/L		9.1	5.0
Sodium µg/L		55600	5000
Thallium µg/L		0.043 B	1.0
Vanadium µg/L		17.3	10.0
Zinc µg/L		9.8 B	20.0
Total Dissolved Solids mg/L		696	10.0

Analyte and unit	Date sampled	Result	RL
Nitrate mg/L	03/02/2000	10.6 Q	0.50
Sulfate mg/L	-continued	183 Q	25.0
Aluminum µg/L	03/22/2001	82.6 B	100
Arsenic µg/L		3.0 B	5.0
Barium µg/L		30.3	10.0
Calcium µg/L		59000	200
Chromium µg/L		3.4	1.0
Copper µg/L		3.2 B	20.0
Iron µg/L		86.7 B	100
Lead µg/L		0.65 B	1.0
Magnesium µg/L		56900	200
Manganese µg/L		0.92 B	10.0
Molybdenum µg/L		2.9 B	20.0
Potassium µg/L		6610	5000
Selenium µg/L		6.2	5.0
Sodium µg/L		57200	5000
Vanadium µg/L		17.1	10.0
Zinc µg/L		15.9 B	20.0
Total Dissolved Solids mg/L		627	10.0
Nitrate mg/L		5.6	0.50
Sulfate mg/L		169 Q	25.0
Aluminum µg/L	03/14/2002	71.8 B	100
Arsenic µg/L		3.1 B	5.0
Barium µg/L		32.4	10.0
Cadmium µg/L		0.032 B	1.0
Calcium µg/L		58100	200
Chromium µg/L		3.6 J	1.0
Iron µg/L		83.8 B	100
Lead µg/L		0.51 B	1.0
Magnesium µg/L		54500	200
Manganese µg/L		3.3 B	10.0
Potassium µg/L		7310	5000
Selenium µg/L		5.9	5.0
Silver µg/L		0.026 B	1.0
Sodium µg/L		52900	5000

Table 1.--Summary of concentrations of analytes in ground water from monitoring well G at the Sewage Lagoons, Cannon Air Force Base, New Mexico

[RL, reporting limit; µg/L, micrograms per liter; J, result is detected below the reporting limit or is an estimated concentration; B, estimated result, result less than RL; --, no data; mg/L, milligrams per liter; Q, reporting limit is elevated due to high analyte levels; G, reporting limit is elevated due to matrix interference]

Analyte and unit	Date sampled	Result	RL
Vanadium µg/L	03/14/2002	18.0	10.0
Zinc µg/L	-continued	20.2	20.0
Total Dissolved Solids mg/L		624	10.0
Nitrate mg/L		4.2	0.10
Nitrite mg/L		0.0023 B	0.010
Sulfate mg/L		170 Q	25.0
Methylene chloride µg/L	03/20/2003	0.36 J	5.0
Perchlorate µg/L		1.7	1.0
Trichlorethene µg/L		0.18 J	1.0
Aluminum µg/L		48.0 B	100
Antimony µg/L		0.060 B	2.0
Arsenic µg/L		2.9 B	5.0
Barium µg/L		32.0	10.0
Cadmium µg/L		0.022 B	1.0
Calcium µg/L		53000	200
Chromium µg/L		3.8 J	1.0
Copper µg/L		5.3 B	20.0
Iron µg/L		45.0 B	100
Lead µg/L		0.71 B	1.0
Magnesium µg/L		53000	200
Manganese µg/L		1.4 B	10.0
Mercury µg/L		0.021 B	0.20
Molybdenum µg/L		2.7 B	20.0
Nickel µg/L		2.0 B	40.0
Potassium µg/L		8100	5000
Selenium µg/L		5.5	5.0
Silver µg/L		0.034 B	5.0
Sodium µg/L		53000	5000
Vanadium µg/L		19.0	10.0
Zinc µg/L		16.0 B	20.0
Total Dissolved Solids mg/L		550	10.0
Nitrate mg/L		2.1	0.10
Sulfate mg/L		150 Q	25.0

Analyte and unit	Date sampled	Result	RL

Table 1.--Summary of concentrations of analytes in ground water from monitoring well H at the Sewage Lagoons, Cannon Air Force Base, New Mexico

[RL, reporting limit; µg/L, micrograms per liter; J, result is detected below the reporting limit or is an estimated concentration; B, estimated result, result less than RL; --, no data; mg/L, milligrams per liter; Q, reporting limit is elevated due to high analyte levels; G, reporting limit is elevated due to matrix interference]

Analyte and unit	Date sampled	Result	RL
Acetone µg/L	03/02/1999	1.5 J	10.0
Methylene chloride µg/L		0.26 J	1.0
Aluminum µg/L		61.1 B	100
Arsenic µg/L		4.4 B	5.0
Barium µg/L		33.6	10.0
Calcium µg/L		40200	200
Chromium µg/L		5.4	1.0
Iron µg/L		284	100
Lead µg/L		2.1	1.0
Magnesium µg/L		38000	200
Manganese µg/L		6.0 B	10.0
Nickel µg/L		8.6 B	40.0
Potassium µg/L		6400	5000
Selenium µg/L		7.2	5.0
Sodium µg/L		52500	5000
Tin µg/L		28.4 B	100
Vanadium µg/L		18.0	10.0
Zinc µg/L		138	20.0
Total Dissolved Solids mg/L		492	10.0
Sulfate mg/L		132 Q	25.0
Nitrate mg/L	08/31/1999	1.1	0.10
Methylene chloride µg/L	03/02/2000	0.29 J	1.0
Aluminum µg/L		86.3 B	100
Arsenic µg/L		4.0 B	5.0
Barium µg/L		30.3	10.0
Calcium µg/L		38500	200
Chromium µg/L		2.4	1.0
Copper µg/L		1.1 B	20.0
Iron µg/L		67.0 B	100
Lead µg/L		6.6	1.0
Magnesium µg/L		38000	200
Manganese µg/L		2.2 B	10.0
Potassium µg/L		6720	5000
Selenium µg/L		6.6	5.0
Sodium µg/L		53300	5000

Analyte and unit	Date sampled	Result	RL
Vanadium µg/L	03/02/2000	21.6	10.0
Zinc µg/L	-continued	28.0	20.0
Total Dissolved Solids mg/L		454	10.0
Nitrate mg/L		1.2	0.10
Sulfate mg/L		121 Q	25.0
Total Sulfide mg/L		34.0 B	4.0
Aluminum µg/L	03/22/2001	111	100
Arsenic µg/L		3.4 B	5.0
Barium µg/L		30.3	10.0
Calcium µg/L		43500	200
Chromium µg/L		3.5	1.0
Iron µg/L		54.3 B	100
Lead µg/L		0.38 B	1.0
Magnesium µg/L		40400	200
Manganese µg/L		1.1 B	10.0
Molybdenum µg/L		2.6 B	20.0
Nickel µg/L		6.4 B	40.0
Potassium µg/L		6630	5000
Selenium µg/L		6.7	5.0
Sodium µg/L		57900	5000
Vanadium µg/L		19.4	10.0
Zinc µg/L		53.3	20.0
Total Dissolved Solids mg/L		468	10.0
Nitrate mg/L		1.3	0.50
Sulfate mg/L		126 Q	25.0
Arsenic µg/L	03/14/2002	3.3 B	5.0
Barium µg/L		36.9	10.0
Cadmium µg/L		0.030 B	1.0
Calcium µg/L		53200	200
Chromium µg/L		5.7 J	1.0
Copper µg/L		5.8 B	20.0
Iron µg/L		310	100
Lead µg/L		2.7	1.0
Magnesium µg/L		39200	200
Manganese µg/L		10.6	10.0

Table 1.--Summary of concentrations of analytes in ground water from monitoring well H at the Sewage Lagoons, Cannon Air Force Base, New Mexico

[RL, reporting limit; µg/L, micrograms per liter; J, result is detected below the reporting limit or is an estimated concentration; B, estimated result, result less than RL; --, no data; mg/L, milligrams per liter; Q, reporting limit is elevated due to high analyte levels; G, reporting limit is elevated due to matrix interference]

Analyte and unit	Date sampled	Result	RL
Molybdenum µg/L	03/14/2002	2.8 B	20.0
Nickel µg/L	-continued	9.5 B	40.0
Potassium µg/L		6800	5000
Selenium µg/L		6.7	5.0
Silver µg/L		0.053 B	5.0
Sodium µg/L		55300	5000
Vanadium µg/L		20.1	10.0
Zinc µg/L		81.1	20.0
Total Dissolved Solids mg/L		478	10.0
Nitrate mg/L		1.8	0.50
Nitrite mg/L		0.0027 B	0.010
Sulfate mg/L		129 Q	25.0
Perchlorate µg/L	04/02/2003	2.4	1.0
Aluminum µg/L		23 B	100
Antimony µg/L		0.094 B	2.0
Arsenic µg/L		3.8 B	5.0
Barium µg/L		33.0	10.0
Calcium µg/L		40000	200
Chromium µg/L		7.6 J	1.0
Colbalt µg/L		1.2 B	10.0
Iron µg/L		320	100
Lead µg/L		2.7	1.0
Magnesium µg/L		40000	200
Manganese µg/L		11.0	10.0
Nickel µg/L		4.8 B	40.0
Potassium µg/L		6700	3000
Selenium µg/L		7.6	5.0
Sodium µg/L		55000	5000
Vanadium µg/L		22.0	10.0
Zinc µg/L		88.0	20.0
Total Dissolved Solids mg/L		460	10.0
Nitrate mg/L		1.6	0.50
Sulfate mg/L		120 Q	25.0

Analyte and unit	Date sampled	Result	RL

Table 2.--Summary of concentrations of analytes in ground water from monitoring well B at Landfill 5, Cannon Air Force Base, New Mexico

[RL, reporting limit; µg/L, micrograms per liter; J, result is detected below the reporting limit or is an estimated concentration; B, estimated result, result less than RL; --, no data; mg/L, milligrams per liter; Q, reporting limit is elevated due to high analyte levels; G, reporting limit is elevated due to matrix interference]

Analyte and unit	Date sampled	Result	RL
Arsenic µg/L	03/03/1999	5.7	5.0
Barium µg/L		27.9	10.0
Calcium µg/L		42000	200
Chromium µg/L		0.74 B	1.0
Magnesium µg/L		40300	200
Mercury µg/L		0.14 B	0.20
Molybdenum µg/L		7.0 B	20.0
Potassium µg/L		6760	5000
Selenium µg/L		7.3	5.0
Sodium µg/L		58500	5000
Tin µg/L		52.4 B	100
Vanadium µg/L		27.3	10.0
Total Organic Halogens µg/L		12.9 B	30.0
Cyanide mg/L		0.0040 B	0.010
Total Organic Halogens µg/L	08/29/1999	3.5 B	30.0
Total Organic Carbon mg/L		0.43 B	1.0
Aluminum µg/L	03/01/2000	52.6 B	100
Arsenic µg/L		5.7	5.0
Barium µg/L		29.1	10.0
Calcium µg/L		40800	200
Chromium µg/L		1.3	1.0
Copper µg/L		1.1 B	20.0
Iron µg/L		52.5 B	100
Lead µg/L		0.26 B	1.0
Magnesium µg/L		40500	200
Manganese µg/L		2.3 B	10.0
Potassium µg/L		6670	5000
Selenium µg/L		9.2	5.0
Sodium µg/L		57900	5000
Thallium µg/L		0.074 B	1.0
Vanadium µg/L		27.9	10.0
Zinc µg/L		3.1 B	20.0
Sampled, no detections	08/10/2000	--	--

Analyte and unit	Date sampled	Result	RL
Aluminum µg/L	03/21/2001	87.2 B	100
Arsenic µg/L		5.4	5.0
Barium µg/L		37.9	10.0
Calcium µg/L		43200	200
Chromium µg/L		3.3	1.0
Copper µg/L		3.5 B	20.0
Iron µg/L		430	100
Lead µg/L		1.0	1.0
Magnesium µg/L		40800	200
Manganese µg/L		23.5 B	10.0
Molybdenum µg/L		4.7 B	20.0
Potassium µg/L		6410	5000
Selenium µg/L		6.7	5.0
Sodium µg/L		58000	5000
Vanadium µg/L		29.2	10.0
Zinc µg/L		8.4 B	20.0
2-Butanone (MEK) µg/L	08/21/2001	1.4 J	5.0
Arsenic µg/L	03/13/2002	4.6 B	5.0
Barium µg/L		25.1	10.0
Calcium µg/L		36100	200
Chromium µg/L		1.9 J	1.0
Iron µg/L		43.0 B	100
Lead µg/L		0.22 B	1.0
Magnesium µg/L		35200	200
Manganese µg/L		2.0 B	10.0
Molybdenum µg/L		4.1 B	20.0
Potassium µg/L		5930	5000
Selenium µg/L		6.2	5.0
Sodium µg/L		53400	5000
Vanadium µg/L		22.7	10.0
Total Organic Carbon mg/L		0.38 B,J	1.0
Total Cyanide mg/L		0.0052 B	0.010

Table 2.--Summary of concentrations of analytes in ground water from monitoring well B at Landfill 5, Cannon Air Force Base, New Mexico

[RL, reporting limit; µg/L, micrograms per liter; J, result is detected below the reporting limit or is an estimated concentration; B, estimated result, result less than RL; --, no data; mg/L, milligrams per liter; Q, reporting limit is elevated due to high analyte levels; G, reporting limit is elevated due to matrix interference]

Analyte and unit	Date sampled	Result	RL
Methylene chloride µg/L	08/16/2002	1.1	1.0
Perchlorate µg/L		5.0 B	20.0
Total Organic Carbon mg/L		0.40 B	1.0
Perchlorate µg/L	03/89/2003	2.1	1.0
Arsenic µg/L		5.6 J	5.0
Barium µg/L		27.0	10.0
Cadmium µg/L		0.027 B	1.0
Calcium µg/L		40000	200
Chromium µg/L		2.1 J	2.0
Iron µg/L		25.0 B	100
Magnesium µg/L		37000	200
Manganese µg/L		0.77 B	10.0
Molybdenum µg/L		3.9 B	20.0
Potassium µg/L		6200	3000
Selenium µg/L		6.3	5.0
Silver µg/L		0.012 B	5.0
Sodium µg/L		56000	5000
Vanadium µg/L		27.0	10.0
Total Cyanide mg/L		.0041B	.010

Analyte and unit	Date sampled	Result	RL

Table 2.--Summary of concentrations of analytes in ground water from monitoring well C at Landfill 5, Cannon Air Force Base, New Mexico

[RL, reporting limit; µg/L, micrograms per liter; J, result is detected below the reporting limit or is an estimated concentration; B, estimated result, result less than RL; --, no data; mg/L, milligrams per liter; Q, reporting limit is elevated due to high analyte levels; G, reporting limit is elevated due to matrix interference]

Analyte and unit	Date sampled	Result	RL
Acetone µg/L	03/04/1999	0.81 J	10.0
Trichloroethene µg/L		0.86 J	1.0
Arsenic µg/L		6.9	5.0
Barium µg/L		30.4	10.0
Calcium µg/L		32600	200
Chromium µg/L		0.87 B	1.0
Iron µg/L		108	100
Lead µg/L		0.29 B	1.0
Magnesium µg/L		32800	200
Manganese µg/L		4.4 B	10.0
Mercury µg/L		0.18 B	0.20
Molybdenum µg/L		5.7 B	20.0
Potassium µg/L		5950	5000
Selenium µg/L		3.8 B	5.0
Sodium µg/L		50300	5000
Vanadium µg/L		39.3	10.0
Total Organic Halogens µg/L		17.0 B	30.0
Methylene chloride µg/L	08/31/1999	1.2 B	1.0
1,1 Dichloroethene µg/L		0.22 J	1.0
Trichloroethene µg/L		0.92 J	1.0
Total Organic Halogens µg/L		3.0 B	30.0
Total Organic Carbon mg/L		0.56 B	1.0
Methylene chloride µg/L	03/01/2000	0.29 J	1.0
Trichloroethene µg/L		1.4	1.0
Aluminum µg/L		42.8 B	100
Arsenic µg/L		7.2	5.0
Barium µg/L		31.9	10.0
Calcium µg/L		30600	200
Chromium µg/L		1.3	1.0
Iron µg/L		14.2 B	100
Lead µg/L		0.16 B	1.0
Magnesium µg/L		31300	200
Potassium µg/L		6670	5000
Selenium µg/L		4.1 B	5.0

Analyte and unit	Date sampled	Result	RL
Sodium µg/L	03/01/2000	48300	5000
Thallium µg/L	-continued	0.042 B	1.0
Vanadium µg/L		42.0	10.0
Trichloroethene µg/L	08/10/2000	1.4	1.0
Total Organic Halogens µg/L		5.7 B	30.0
Trichloroethene µg/L	03/21/2001	1.8	1.0
Aluminum µg/L		26.6 B	100
Arsenic µg/L		6.2	5.0
Barium µg/L		34.5	10.0
Calcium µg/L		31400	200
Chromium µg/L		2.0	1.0
Iron µg/L		19.2 B	100
Magnesium µg/L		30700	200
Molybdenum µg/L		5.6 B	20.0
Potassium µg/L		5170	5000
Selenium µg/L		1.6 B	5.0
Sodium µg/L		47600	5000
Vanadium µg/L		40.6	10.0
Total Sulfide mg/L		0.56 B	4.0
Trichloroethene µg/L	08/22/2001	1.7	1.0
Total Organic Carbon mg/L		0.62 B	1.0
Arsenic µg/L	03/13/2002	5.8	5.0
Barium µg/L		36.4	10.0
Calcium µg/L		28800	200
Chromium µg/L		1.6 J	1.0
Iron µg/L		17.0 B	100
Magnesium µg/L		29000	200
Manganese µg/L		0.95 B	10.0
Molybdenum µg/L		4.7 B	20.0
Potassium µg/L		5600	5000
Selenium µg/L		0.86 B	5.0
Sodium µg/L		48000	5000
Vanadium µg/L		38.9	10.0

Table 2.--Summary of concentrations of analytes in ground water from monitoring well C at Landfill 5, Cannon Air Force Base, New Mexico

[RL, reporting limit; µg/L, micrograms per liter; J, result is detected below the reporting limit or is an estimated concentration; B, estimated result, result less than RL; --, no data; mg/L, milligrams per liter; Q, reporting limit is elevated due to high analyte levels; G, reporting limit is elevated due to matrix interference]

Analyte and unit	Date sampled	Result	RL
Zinc µg/L	03/13/2002	8.0 B	20.0
Total Organic Carbon mg/L	-continued	0.62 B,J	1.0
Total Cyanide mg/L		0.0059 B	0.010
Trichloroethene µg/L	08/13/2002	1.6	1.0
Total Organic Carbon mg/L		0.75 B	1.0
Methylene Chloride µg/L	03/20/2003	0.25 J	5.0
Trichloroethene µg/L		1.3	1.0
Antimony µg/L		0.25 B	2.0
Arsenic µg/L		6.3 J	5.0
Barium µg/L		40.0	10.0
Calcium µg/L		29000	200
Chromium µg/L		1.7 B	2.0
Iron µg/L		13.0 B	100
Lead µg/L		0.44 B	1.0
Magnesium µg/L		28000	200
Manganese µg/L		0.74 B	10.0
Mercury µg/L		0.019 B	0.20
Molybdenum µg/L		3.7 B	20.0
Potassium µg/L		5000	3000
Selenium µg/L		1.3 B	5.0
Sodium µg/L		45000	5000
Tin		3.4 B	100
Vanadium µg/L		41.0	10.0
Zinc µg/L		9.5 B	20.0
Total Organic Carbon mg/L		0.45 B	1.0

Analyte and unit	Date sampled	Result	RL

Table 2.--Summary of concentrations of analytes in ground water from monitoring well D at Landfill 5, Cannon Air Force Base, New Mexico

[RL, reporting limit; µg/L, micrograms per liter; J, result is detected below the reporting limit or is an estimated concentration; B, estimated result, result less than RL; --, no data; mg/L, milligrams per liter; Q, reporting limit is elevated due to high analyte levels; G, reporting limit is elevated due to matrix interference]

Analyte and unit	Date sampled	Result	RL
Trichloroethene µg/L	03/04/1999	2.4	1.0
Arsenic µg/L		6.0	5.0
Barium µg/L		61.3	10.0
Calcium µg/L		30500	200
Chromium µg/L		0.59 B	1.0
Iron µg/L		445	100
Lead µg/L		0.35 B	1.0
Magnesium µg/L		30600	200
Manganese µg/L		8.0 B	10.0
Potassium µg/L		5880	5000
Selenium µg/L		0.68 B	5.0
Sodium µg/L		47800	5000
Tin µg/L		36.2 B	100
Vanadium µg/L		39.0	10.0
Methylene chloride µg/L	08/31/1999	0.45 J	1.0
Trichloroethene µg/L		1.9	1.0
2-Butanone (MEK) µg/L		1.5 J	5.0
Total Organic Halogens µg/L		8.2 B	30.0
Total Organic Carbon mg/L		0.60 B	1.0
Chloroform µg/L	03/01/2000	0.65 B	1.0
Trichloroethene µg/L		1.4	1.0
Aluminum µg/L		49.1 B	100
Arsenic µg/L		6.1	5.0
Barium µg/L		46.8	10.0
Calcium µg/L		30200	200
Chromium µg/L		0.65 B	1.0
Copper µg/L		1.6 B	20.0
Iron µg/L		74.6 B	100
Lead µg/L		2.7 B	1.0
Magnesium µg/L		31300	200
Potassium µg/L		5980	5000
Selenium µg/L		1.8 B	5.0
Sodium µg/L		46700	5000
Vanadium µg/L		25.0	10.0
Zinc µg/L	03/01/2000	6.9 B	20.0
Total Organic Halogens µg/L	-continued	7.9 B	30.0
Boroform µg/L	08/10/2000	0.45 J	1.0
Trichloroethene µg/L		1.3	1.0
Total Organic Carbon mg/L		0.48 B	1.0
Trichloroethene µg/L	03/21/2001	1.1	1.0
Antimony µg/L		0.39 B	1.0
Arsenic µg/L		4.9 B	5.0
Barium µg/L		80.0	10.0
Calcium µg/L		31900	200
Chromium µg/L		1.6	1.0
Iron µg/L		35.1 B	100
Magnesium µg/L		31600	200
Molybdenum µg/L		4.0 B	20.0
Potassium µg/L		5290	5000
Sodium µg/L		46500	5000
Vanadium µg/L		38.8	10.0
Zinc µg/L		3.6 B	20.0
Trichloroethene µg/L	08/22/2001	0.94 J	1.0
Trichloroethene µg/L	03/12/2002	0.83 J	1.0
Arsenic µg/L		4.6 B	5.0
Barium µg/L		90.3	10.0
Calcium µg/L		32300	200
Chromium µg/L		1.1 J	1.0
Iron µg/L		26.4 B	100
Magnesium µg/L		32800	200
Manganese µg/L		1.2 B	10.0
Molybdenum µg/L		3.0 B	20.0
Potassium µg/L		6110	5000
Sodium µg/L		50800	5000
Vanadium µg/L		33.4	10.0
Total Organic Halogens µg/L		4.5 B	30.0
Total Cyanide mg/L		0.0065 B	0.010

Table 2.--Summary of concentrations of analytes in ground water from monitoring well D at Landfill 5, Cannon Air Force Base, New Mexico

[RL, reporting limit; µg/L, micrograms per liter; J, result is detected below the reporting limit or is an estimated concentration; B, estimated result, result less than RL; --, no data; mg/L, milligrams per liter; Q, reporting limit is elevated due to high analyte levels; G, reporting limit is elevated due to matrix interference]

Analyte and unit	Date sampled	Result	RL
Trichloroethene µg/L	08/13/2002	0.57 J	1.0
Total Organic Carbon mg/L		0.47 B	1.0
Methylene chloride µg/L	03/20/2003	0.23 J	5.0
Trichloroethene µg/L		0.55 J	1.0
Arsenic µg/L		5.0 J	5.0
Barium µg/L		83.0	10.0
Calcium µg/Ll		31000	200
Chromium µg/L		1.2 B,J	2.0
Iron µg/L		19.0 B	100
Magnesium µg/L		30000	200
Manganese µg/L		1.6 B	10.0
Mercury µg/L		0.021 B	0.20
Molybdenum µg/L		3.3 B	20.0
Potassium µg/L		5300	3000
Selenium µg/L		0.32 B	5.0
Sodium µg/L		47000	5000
Tin µg/L		3.8 B	100
Vanadium µg/L		36.0	10.0

Analyte and unit	Date sampled	Result	RL

Table 2.--Summary of concentrations of analytes in ground water from monitoring well Q at Landfill 5, Cannon Air Force Base, New Mexico

[RL, reporting limit; µg/L, micrograms per liter; J, result is detected below the reporting limit or is an estimated concentration; B, estimated result, result less than RL; --, no data; mg/L, milligrams per liter; Q, reporting limit is elevated due to high analyte levels; G, reporting limit is elevated due to matrix interference]

Analyte and unit	Date sampled	Result	RL
Antimony µg/L	03/02/1999	0.31 B	1.0
Arsenic µg/L		4.2 B	5.0
Barium µg/L		36.7	10.0
Calcium µg/L		47800	200
Chromium µg/L		1.1	1.0
Magnesium µg/L		47100	200
Molybdenum µg/L		4.3 B	20.0
Potassium µg/L		7420	5000
Selenium µg/L		4.8 B	5.0
Sodium µg/L		43800	5000
Tin µg/L		40.7 B	100
Vanadium µg/L		18.1	10.0
Total Organic Carbon mg/L	08/30/1999	0.57 B	1.0
Aluminum µg/L	03/01/2000	98.7 B	100
Antimony µg/L		0.53 B	1.0
Arsenic µg/L		7.3	5.0
Barium µg/L		33.4	10.0
Calcium µg/L		40900	200
Chromium µg/L		76.0	1.0
Copper µg/L		3.7 B	20.0
Iron µg/L		936 B	100
Lead µg/L		0.66 B	1.0
Magnesium µg/L		39200	200
Manganese µg/L		65.2	10.0
Nickel µg/L		149	40.0
Potassium µg/L		6280	5000
Selenium µg/L		9.2	5.0
Sodium µg/L		48500	5000
Thallium µg/L		0.077 B	1.0
Vanadium µg/L		31.4	10.0
Zinc µg/L		4.8 B	20.0
Total Organic Halogens µg/L		6.8 B	30.0
Total Organic Halogens µg/L	08/10/2000	2.9 B	30.0
Total Organic Carbon mg/L		0.51 B	1.0

Analyte and unit	Date sampled	Result	RL
Perchlorate µg/L	03/22/2001	5.8 B	20.0
Aluminum µg/L		87.2 B	100
Arsenic µg/L		5.3	5.0
Barium µg/L		26.6	10.0
Calcium µg/L		43800	200
Chromium µg/L		40.5	1.0
Iron µg/L		479	100
Magnesium µg/L		40800	200
Manganese µg/L		13.9	10.0
Molybdenum µg/L		3.8 B	20.0
Nickel µg/L		90.5	40.0
Potassium µg/L		5960	5000
Selenium µg/L		6.4 B	5.0
Sodium µg/L		51500	5000
Vanadium µg/L		27.2	10.0
Zinc µg/L		3.5 B	20.0
Total Organic Carbon mg/L		0.39 B	1.0
Total Organic Carbon mg/L	08/22/2001	0.38 B	1.0
Arsenic µg/L	03/12/2002	4.7	5.0
Barium µg/L		28.1	10.0
Calcium µg/L		41700	200
Chromium µg/L		16.6 J	1.0
Iron µg/L		290	100
Magnesium µg/L		39900	200
Manganese µg/L		18.0	10.0
Molybdenum µg/L		4.7 B	20.0
Nickel µg/L		43.0	40.0
Potassium µg/L		6090	5000
Selenium µg/L		6.6 B	5.0
Sodium µg/L		49800	5000
Vanadium µg/L		24.2	10.0
Zinc µg/L		3.3 B	20.0
Total Organic Carbon mg/L		0.69 B	1.0
Total Cyanide mg/L		0.0060 B	0.010

Table 2.--Summary of concentrations of analytes in ground water from monitoring well Q at Landfill 5, Cannon Air Force Base, New Mexico

[RL, reporting limit; µg/L, micrograms per liter; J, result is detected below the reporting limit or is an estimated concentration; B, estimated result, result less than RL; --, no data; mg/L, milligrams per liter; Q, reporting limit is elevated due to high analyte levels; G, reporting limit is elevated due to matrix interference]

Analyte and unit	Date sampled	Result	RL
Total Organic Carbon mg/L	08/13/2002	0.40 B	1.0
Perchlorate µg/L	03/19/2003	2.2	1.0
Arsenic µg/L		5.7 J	5.0
Barium µg/L		28.0	10.0
Calcium µg/L		41000	200
Chromium µg/L		3.2 J	2.0
Iron µg/L		47.0 B	100
Magnesium µg/L		37000	200
Manganese µg/L		1.2 B	10.0
Mercury µg/L		0.021 B	0.20
Molybdenum µg/L		4.7 B	20.0
Nickel µg/L		11.0 B	40.0
Potassium µg/L		5800	3000
Selenium µg/L		7.8	5.0
Sodium µg/L		47000	5000
Vanadium µg/L		25.0	10.0
Total Organic Carbon mg/L		0.30 B	1.0
Total Cyanide mg/L		0.0054B	0.010

Analyte and unit	Date sampled	Result	RL

Table 2.--Summary of concentrations of analytes in ground water from monitoring well S at Landfill 5, Cannon Air Force Base, New Mexico

[RL, reporting limit; µg/L, micrograms per liter; J, result is detected below the reporting limit or is an estimated concentration; B, estimated result, result less than RL; --, no data; mg/L, milligrams per liter; Q, reporting limit is elevated due to high analyte levels; G, reporting limit is elevated due to matrix interference]

Analyte and unit	Date sampled	Result	RL
Acetone µg/L	03/03/1999	0.96 J,B	10
Aluminum µg/L		126	100
Arsenic µg/L		5.4	5.0
Barium µg/L		45.2	10.0
Calcium µg/L		45000	200
Chromium µg/L		2.7	1.0
Iron µg/L		124	100
Magnesium µg/L		40500	200
Manganese µg/L		33.0	10.0
Mercury µg/L		0.14 B	0.20
Molybdenum µg/L		8.0 B	20.0
Potassium µg/L		6870	5000
Selenium µg/L		6.8	5.0
Sodium µg/L		53500	5000
Tin µg/L		25.6 B	100
Vanadium µg/L		25.4	10.0
Zinc µg/L		63.0	20.0
Total Organic Halogens µg/L		8.3 B	30.0
Total Organic Carbon mg/L	08/29/1999	0.30 B	1.0
Methylene Chloride µg/L	02/29/2000	0.31 J	1.0
Aluminum µg/L		118	100
Arsenic µg/L		6.5	5.0
Barium µg/L		35.3	10.0
Beryllium µg/L		1.5 B	2.0
Calcium µg/L		43500	200
Chromium µg/L		1.6	1.0
Iron µg/L		33.8 B	100
Lead µg/L		0.12 B	1.0
Magnesium µg/L		40200	200
Manganese µg/L		2.9 B	10.0
Potassium µg/L		6610	5000
Selenium µg/L		10.9	5.0
Sodium µg/L		48400	5000
Vanadium µg/L		26.8	10.0
Zinc µg/L		30.5	20.0

Analyte and unit	Date sampled	Result	RL
Sampled, no detections	08/10/2000	--	--
Aluminum µg/L	03/20/2001	51.0 B	100
Arsenic µg/L		4.7 B	5.0
Barium µg/L		35.6	10.0
Calcium µg/L		43300	200
Chromium µg/L		2.1	1.0
Iron µg/L		45.5 B	100
Magnesium µg/L		41500	200
Manganese µg/L		2.7 B	10.0
Molybdenum µg/L		3.8 B	20.0
Potassium µg/L		6490	5000
Selenium µg/L		6.5	5.0
Sodium µg/L		49800	5000
Vanadium µg/L		29.3	10.0
Zinc µg/L		26.9	20.0
Total Organic Carbon mg/L		0.40 B	1.0
Carbon disulfide µg/L	08/21/2001	3.7	1.0
Chloromethane µg/L	03/13/2002	0.43 J	2.0
Trichloroethene µg/L		1.6	1.0
Arsenic µg/L		4.5 B	5.0
Barium µg/L		31.7	10.0
Calcium µg/L		44700	200
Chromium µg/L		1.8 J	1.0
Iron µg/L		28.1 B	100
Magnesium µg/L		42900	200
Manganese µg/L		3.6 B	10.0
Molybdenum µg/L		5.1 B	20.0
Potassium µg/L		6590	5000
Selenium µg/L		5.9	5.0
Sodium µg/L		51600	5000
Vanadium µg/L		25.3	10.0
Zinc µg/L		18.0 B	20.0
Total Organic Carbon mg/L		0.43 B,J	1.0
Total Cyanide mg/L		0.0052 B	0.010

Table 2.--Summary of concentrations of analytes in ground water from monitoring well S at Landfill 5, Cannon Air Force Base, New Mexico

[RL, reporting limit; µg/L, micrograms per liter; J, result is detected below the reporting limit or is an estimated concentration; B, estimated result, result less than RL; --, no data; mg/L, milligrams per liter; Q, reporting limit is elevated due to high analyte levels; G, reporting limit is elevated due to matrix interference]

Analyte and unit	Date sampled	Result	RL
Perchlorate µg/L	08/15/2002	4.6 B	20.0
Total Organic Carbon mg/L		0.42 B	1.0
Perchlorate µg/L	03/19/2003	2.4	1.0
Arsenic µg/L		5.5 J	5.0
Barium µg/L		32.0	10.0
Calcium µg/L		46000	200
Chromium µg/L		2.3 J	2.0
Iron µg/L		21.0 B	100
Magnesium µg/L		42000	200
Manganese µg/L		2.3 B	10.0
Mercury µg/L		0.020 B	0.20
Molybdenum µg/L		3.9 B	20.0
Potassium µg/L		6100	3000
Selenium µg/L		7.3	5.0
Silver µg/L		0.068 B	5.0
Sodium µg/L		49000	5000
Vanadium µg/L		29.0	10.0
Zinc µg/L		21.0 J	20.0
Total Organic Carbon mg/L		0.32 B	1.0
Total Cyanide mg/L		0.0059B	0.010

Analyte and unit	Date sampled	Result	RL

Table 2.--Summary of concentrations of analytes in ground water from monitoring well T at Landfill 5, Cannon Air Force Base, New Mexico

[RL, reporting limit; µg/L, micrograms per liter; J, result is detected below the reporting limit or is an estimated concentration; B, estimated result, result less than RL; --, no data; mg/L, milligrams per liter; Q, reporting limit is elevated due to high analyte levels; G, reporting limit is elevated due to matrix interference]

Analyte and unit	Date sampled	Result	RL
Aluminum µg/L	03/04/1999	47.5 B	100
Arsenic µg/L		5.8	5.0
Barium µg/L		35.2	10.0
Calcium µg/L		44600	200
Chromium µg/L		1.0	1.0
Magnesium µg/L		40100	200
Manganese µg/L		15.4	10.0
Mercury µg/L		0.19 B	0.20
Molybdenum µg/L		6.6 B	20.0
Potassium µg/L		6590	5000
Selenium µg/L		8.5	5.0
Sodium µg/L		55400	5000
Vanadium µg/L		25.5	10.0
Zinc µg/L		29.9	20.0
Total Organic Carbon mg/L	08/30/1999	0.40 B	1.0
Aluminum µg/L	02/29/2000	108	100
Arsenic µg/L		6.9	5.0
Barium µg/L		29.3	10.0
Beryllium µg/L		1.5 B	2.0
Calcium µg/L		45500	200
Chromium µg/L		2.3	1.0
Iron µg/L		86.6 B	100
Lead µg/L		0.17 B	1.0
Magnesium µg/L		41800	200
Potassium µg/L		6970	5000
Selenium µg/L		13.2	5.0
Sodium µg/L		52900	5000
Vanadium µg/L		26.5	10.0
Zinc µg/L		13.3 B	20.0
Total Organic Halogens µg/L	08/10/2000	3.0 B	30.0
Perchlorate µg/L	03/21/2001	19.9 B	20.0
Aluminum µg/L		83.2 B	100
Arsenic µg/L		4.9 B	5.0

Analyte and unit	Date sampled	Result	RL
Barium µg/L	03/21/2001	35.4	10.0
Calcium µg/L	-continued	47800	200
Chromium µg/L		3.5	1.0
Iron µg/L		86.6 B	100
Magnesium µg/L		44200	200
Manganese µg/L		3.2 B	10.0
Molybdenum µg/L		4.6 B	20.0
Potassium µg/L		6180	5000
Selenium µg/L		8.4	5.0
Sodium µg/L		55400	5000
Vanadium µg/L		28.4	10.0
Zinc µg/L		17.9	20.0
Total Sulfide mg/L		0.61 B	4.0
Total Organic Carbon mg/L	08/21/2001	0.78 B	1.0
Aluminum µg/L	03/13/2002	55.8 B	100
Arsenic µg/L		4.7 B	5.0
Barium µg/L		33.5	10.0
Calcium µg/L		46900	200
Chromium µg/L		2.5 J	1.0
Iron µg/L		115	100
Magnesium µg/L		44600	200
Manganese µg/L		4.2 B	10.0
Molybdenum µg/L		3.8 B	20.0
Potassium µg/L		6800	5000
Selenium µg/L		7.8	5.0
Silver µg/L		0.030 B	1.0
Sodium µg/L		57000	5000
Vanadium µg/L		24.8	10.0
Zinc µg/L		12.0 B	20.0
Total Organic Carbon mg/L		1.1 J	1.0
Total Cyanide mg/L		0.0056 B	0.010
Chloromethane µg/L	08/15/2002	60.0 J	2.0
Perchlorate µg/L		4.6 B	20.0
Total Organic Carbon mg/L		0.60 B,J	1.0

Table 2.--Summary of concentrations of analytes in ground water from monitoring well T at Landfill 5, Cannon Air Force Base, New Mexico

[RL, reporting limit; µg/L, micrograms per liter; J, result is detected below the reporting limit or is an estimated concentration; B, estimated result, result less than RL; --, no data; mg/L, milligrams per liter; Q, reporting limit is elevated due to high analyte levels; G, reporting limit is elevated due to matrix interference]

Analyte and unit	Date sampled	Result	RL
Perchlorate µg/L	08/15/2002	4.6 B	20.0
Total Organic Carbon mg/L		0.42 B	1.0
Perchlorate µg/L	03/19/2003	2.3	1.0
Aluminum µg/L		53.0 B	100
Arsenic µg/L		5.6 J	5.0
Barium µg/L		34.0	10.0
Calcium µg/L		47000	200
Chromium µg/L		4.6 J	2.0
Copper µg/L		0.80 B	20.0
Iron µg/L		130	100
Lead µg/L		0.21 B	1.0
Magnesium µg/L		41000	200
Manganese µg/L		4.9 B	10.0
Mercury µg/L		0.021 B	0.20
Molybdenum µg/L		4.6 B	20.0
Nickel µg/L		1.9 B	40.0
Potassium µg/L		6600	3000
Selenium µg/L		6.9	5.0
Silver µg/L		0.21 B	5.0
Sodium µg/L		54000	5000
Vanadium µg/L		30.0	10.0
Zinc µg/L		20.0 J	20.0

Analyte and unit	Date sampled	Result	RL

Table 2.--Summary of concentrations of analytes in ground water from monitoring well U at Landfill 5, Cannon Air Force Base, New Mexico

[RL, reporting limit; µg/L, micrograms per liter; J, result is detected below the reporting limit or is an estimated concentration; B, estimated result, result less than RL; --, no data; mg/L, milligrams per liter; Q, reporting limit is elevated due to high analyte levels; G, reporting limit is elevated due to matrix interference]

Analyte and unit	Date sampled	Result	RL
Aluminum µg/L	03/04/1999	98.0 B	100
Arsenic µg/L		5.7	5.0
Barium µg/L		46.0	10.0
Beryllium µg/L		1.0 B	2.0
Calcium µg/L		46000	200
Chromium µg/L		1.0	1.0
Magnesium µg/L		39800	200
Manganese µg/L		6.7 B	10.0
Mercury µg/L		0.16 B	0.20
Molybdenum µg/L		3.0 B	20.0
Potassium µg/L		7230	5000
Selenium µg/L		7.6	5.0
Sodium µg/L		57300	5000
Vanadium µg/L		24.7	10.0
Total Organic Halogens µg/L		21.6 B	30.0
Sampled, no detections	08/30/1999	--	--
Aluminum µg/L	02/29/2000	112	100
Arsenic µg/L		5.7	5.0
Barium µg/L		27.7	10.0
Beryllium µg/L		1.5 B	2.0
Calcium µg/L		43400	200
Chromium µg/L		0.91 B	1.0
Iron µg/L		23.6 B	100
Lead µg/L		0.12 B	1.0
Magnesium µg/L		38700	200
Potassium µg/L		6630	5000
Selenium µg/L		9.9	5.0
Sodium µg/L		52900	5000
Vanadium µg/L		25.0	10.0
Total Organic Halogens µg/L		3.0 B	30.0
Sampled, no detections	08/10/2000	--	--
Dichlorodifluoromethane µg/L	03/21/2001	0.41 J	2.0
Trichlorofluoromethane µg/L		0.57 J	2.0

Analyte and unit	Date sampled	Result	RL
Aluminum µg/L	03/21/2001	103	100
Arsenic µg/L	-continued	4.2 B	5.0
Barium µg/L		36.8	10.0
Calcium µg/L		47500	200
Chromium µg/L		2.7	1.0
Iron µg/L		79.3 B	100
Magnesium µg/L		36800	200
Manganese µg/L		3.1 B	10.0
Molybdenum µg/L		3.9 B	20.0
Potassium µg/L		6310	5000
Selenium µg/L		7.1	5.0
Sodium µg/L		53500	5000
Vanadium µg/L		25.6	10.0
Zinc µg/L		14.1 B	20.0
Total Sulfide mg/L		0.64 B	4.0
Dichlorodifluoromethane µg/L	08/21/2001	0.36 J	2.0
Trichlorofluoromethane µg/L		0.45 J	2.0
Aluminum µg/L	03/13/2002	20.4 B	100
Arsenic µg/L		4.3 B	5.0
Barium µg/L		26.9	10.0
Calcium µg/L		44200	200
Chromium µg/L		1.8 J	1.0
Iron µg/L		20.9 B	100
Magnesium µg/L		39900	200
Manganese µg/L		2.1 B	10.0
Molybdenum µg/L		4.7 B	20.0
Potassium µg/L		6550	5000
Selenium µg/L		6.3	5.0
Sodium µg/L		55700	5000
Vanadium µg/L		23.8	10.0
Zinc µg/L		5.3 B	20.0
Total Organic Carbon mg/L		1.2 J	1.0
Total Cyanide mg/L		0.0081 B	0.010
Total Organic Carbon mg/L	08/15/2002	0.29 B,J	1.0

Table 2.--Summary of concentrations of analytes in ground water from monitoring well U at Landfill 5, Cannon Air Force Base, New Mexico

[RL, reporting limit; µg/L, micrograms per liter; J, result is detected below the reporting limit or is an estimated concentration; B, estimated result, result less than RL; --, no data; mg/L, milligrams per liter; Q, reporting limit is elevated due to high analyte levels; G, reporting limit is elevated due to matrix interference]

Analyte and unit	Date sampled	Result	RL
Perchlorate µg/L	03/19/2003	2.3	1.0
Arsenic µg/L		5.0 J	5.0
Barium µg/L		29.0	10.0
Calcium µg/L		44000	200
Chromium µg/L		1.7 B,J	2.0
Iron µg/L		19.0 B	100
Magnesium µg/L		39000	200
Manganese µg/L		1.8 B	10.0
Mercury µg/L		0.019 B	0.20
Molybdenum µg/L		4.6 B	20.0
Potassium µg/L		6000	3000
Selenium µg/L		5.9	5.0
Sodium µg/L		52000	5000
Vanadium µg/L		29.0	10.0
Zinc µg/L		15.0 B,J	20.0

Analyte and unit	Date sampled	Result	RL

Table 3.--Records of water-level measurements from monitoring wells on Cannon Air Force Base, New Mexico

Well Locations: LF5 (Landfill 5); SL (Sewage Lagoons); PL (Playa Lake)
[TOC, top of casing; --, no data; *, water quality samples not collected; #, well abandoned (water level below screen interval)]

Well identification, diameter, and depth below TOC	Date	Water level (feet below TOC)	Altitude of water level (feet above sea level)
Well-A (LF5)	02/21/1994	268.79	3,998.26
4 inches	08/09/1994	270.28	3,996.77
343 feet	02/22/1995	271.73	3,995.32
	08/21/1995	273.30	3,993.75
	02/28/1996	275.14	3,991.91
	*08/22/2001	287.90	3,979.15
	*03/12/2002	288.89	3,978.16
	*08/20/2003	292.91	3,974.14

Well identification, diameter, and depth below TOC	Date	Water level (feet below TOC)	Altitude of water level (feet above sea level)
Well-B (LF5)	02/21/1994	272.49	3,992.92
4 inches	02/22/1995	276.26	3,989.15
362.3 feet	08/23/1995	277.45	3,987.96
	03/04/1997	283.52	3,981.89
	05/29/1997	283.74	3,981.67
	*07/23/1997	284.79	3,980.62
	08/21/1997	285.33	3,980.08
	*10/29/1997	286.75	3,978.66
	*01/05/1998	286.15	3,979.26
	04/06/1998	286.72	3,978.69
	08/12/1998	290.23	3,975.18
	*12/07/1998	291.34	3,974.07
	03/01/1999	290.65	3,974.76
	08/29/1999	292.67	3,972.74
	*09/22/1999	292.76	3,972.65
	03/01/2000	292.45	3,972.96
	08/09/2000	295.38	3,970.03
	*09/22/2000	295.60	3,969.81
	*01/31/2001	294.07	3,971.34
	03/21/2001	295.51	3,969.90
	*07/17/2001	296.82	3,968.59
	08/21/2001	297.05	3,968.36
	03/13/2002	296.55	3,968.86
	08/15/2002	300.30	3,965.11
	03/18/2003	300.15	3,965.26

Table 3.--Records of water-level measurements from monitoring wells on Cannon Air Force Base, New Mexico

Well Locations: LF5 (Landfill 5); SL (Sewage Lagoons); PL (Playa Lake)
[TOC, top of casing; --, no data; *, water quality samples not collected; #, well abandoned (water level below screen interval)]

Well identification, diameter, and depth below TOC	Date	Water level (feet below TOC)	Altitude of water level (feet above sea level)
Well C (LF5)	04/06/1998	291.30	3,976.60
4 inches	03/02/1999	295.96	3,971.94
362 feet	08/29/1999	297.46	3,970.44
	03/01/2000	294.24	3,973.66
	08/10/2000	301.75	3,966.15
	03/23/2001	298.18	3,969.72
	08/22/2001	303.04	3,964.86
	03/13/2002	298.53	3,969.37
	08/13/2002	307.72	3,960.18
	03/20/2003	304.22	3,963.68

Well identification, diameter, and depth below TOC	Date	Water level (feet below TOC)	Altitude of water level (feet above sea level)
Well D (LF5)	03/02/1999	289.11	3,976.79
4 inches	08/29/1999	290.97	3,974.93
356.75 feet	03/01/2000	290.12	3,975.78
	08/10/2000	294.33	3,971.57
	03/21/2001	293.62	3,972.28
	08/22/2001	295.88	3,970.02
	03/12/2002	294.33	3,971.57
	08/13/2002	300.13	3,965.77
	03/20/2003	299.03	3,966.87

Table 3.--Records of water-level measurements from monitoring wells on Cannon Air Force Base, New Mexico

Well Locations: LF5 (Landfill 5); SL (Sewage Lagoons); PL (Playa Lake)
[TOC, top of casing; --, no data; *, water quality samples not collected; #, well abandoned (water level below screen interval)]

Well identification, diameter, and depth below TOC	Date	Water level (feet below TOC)	Altitude of water level (feet above sea level)
Well E (SL)	09/13/1994	283.46	3,997.66
4 inches	06/27/1995	285.47	3,995.65
370 feet	04/16/1996	286.61	3,994.51
	06/24/1996	287.23	3,993.89
	08/19/1996	287.59	3,993.53
	08/19/1997	288.14	3,992.98
	04/06/1998	288.68	3,992.44
	08/31/1999	291.10	3,990.02
	*03/02/2000	291.65	3,989.47
	03/15/2000	291.84	3,989.28
	03/22/2001	293.95	3,987.17
	03/12/2002	295.24	3,985.88
	03/21/2003	297.73	3,983.39

Well identification, diameter, and depth below TOC	Date	Water level (feet below TOC)	Altitude of water level (feet above sea level)
Well F (SL)	09/12/1994	280.56	3,996.76
4 inches	06/27/1995	282.48	3,994.84
370 feet	04/16/1996	282.74	3,994.58
	06/26/1996	284.07	3,993.25
	08/19/1996	285.96	3,991.36
	08/20/1997	285.32	3,992.00
	04/06/1998	285.78	3,991.54
	08/31/1999	288.31	3,989.01
	03/02/2000	288.72	3,988.60
	*03/22/2001	290.98	3,986.34
	08/21/2001	291.38	3,985.94
	03/14/2002	292.80	3,984.52
	03/18/2003	295.10	3,982.22

Table 3.--Records of water-level measurements from monitoring wells on Cannon Air Force Base, New Mexico

Well Locations: LF5 (Landfill 5); SL (Sewage Lagoons); PL (Playa Lake)
[TOC, top of casing; --, no data; *, water quality samples not collected; #, well abandoned (water level below screen interval)]

Well identification, diameter, and depth below TOC	Date	Water level (feet below TOC)	Altitude of water level (feet above sea level)
Well G (SL)	09/13/1994	282.40	3,997.59
4 inches	06/27/1995	284.17	3,995.82
372 feet	04/17/1996	284.98	3,995.01
	06/25/1996	285.95	3,994.04
	08/19/1996	287.05	3,992.94
	08/20/1997	287.55	3,992.44
	04/06/1998	287.92	3,992.07
	03/02/1999	290.12	3,989.87
	08/31/1999	290.69	3,989.30
	03/02/2000	291.08	3,988.91
	03/22/2001	293.43	3,986.56
	03/14/2002	294.68	3,985.31
	03/20/2003	297.53	3,982.46

Well identification, diameter, and depth below TOC	Date	Water level (feet below TOC)	Altitude of water level (feet above sea level)
Well H (SL)	09/13/1993	281.40	3,994.75
4 inches	06/27/1995	283.35	3,992.80
375 feet	04/17/1996	284.20	3,991.95
	06/25/1996	285.15	3,991.00
	08/19/1996	286.38	3,989.77
	08/19/1997	286.68	3,989.47
	04/06/1998	287.31	3,988.84
	03/02/1999	289.66	3,986.49
	08/31/1999	290.22	3,985.93
	03/02/2000	290.68	3,985.47
	03/22/2001	293.12	3,983.03
	03/12/2002	294.37	3,981.78
	*03/20/2003	297.07	3,979.08
	04/02/2003	297.00	3,979.15

Table 3.--Records of water-level measurements from monitoring wells on Cannon Air Force Base, New Mexico

Well Locations: LF5 (Landfill 5); SL (Sewage Lagoons); PL (Playa Lake)
[TOC, top of casing; --, no data; *, water quality samples not collected; #, well abandoned (water level below screen interval)]

Well identification, diameter, and depth below TOC	Date	Water level (feet below TOC)	Altitude of water level (feet above sea level)
Well I (LF5) 6 inches 293 feet	02/21/1994	272.84	3,989.52
	08/09/1994	275.21	3,987.15
	02/23/1995	277.06	3,985.30
	08/22/1995	278.31	3,984.05
	02/29/1996	280.07	3,982.29
	08/19/1996	282.48	3,979.88
	12/17/1996	282.40	3,979.96
	03/05/1997	283.30	3,979.06
	05/28/1997	283.54	3,978.82
	08/18/1997	285.02	3,977.34
	04/06/1998	286.70	3,975.66
	08/12/1998	290.09	3,972.27
	03/02/1999	291.06	3,971.30
	#08/29/1999	292.90	3,969.46
Well L (LF5) 4 inch/ inside 6 inches 287 feet	02/21/1994	273.27	3,991.45
	08/09/1994	275.64	3,989.08
	02/23/1995	277.45	3,987.27
	08/22/1995	278.69	3,986.03
	02/28/1996	280.45	3,984.27
	08/19/1996	282.68	3,982.04
	12/16/1996	282.72	3,982.00
	03/05/1997	283.59	3,981.13
	05/28/1997	283.86	3,980.86
	#08/19/1997	285.30	3,979.42
Well M (LF5) 6 inches 289 feet	02/21/1994	274.50	3,989.79
	08/09/1994	274.80	3,989.49
	02/23/1995	276.55	3,987.74
	08/22/1995	278.62	3,985.67
	02/29/1996	279.68	3,984.61
	08/19/1996	282.20	3,982.09
	12/16/1996	282.50	3,981.79
	03/04/1997	282.52	3,981.77
	05/27/1997	283.12	3,981.17
	08/18/1997	284.54	3,979.75
Well M (continued)	#08/06/1998	284.90	3,979.39
Well N (PL) 4 inches 299.63 feet	06/27/1995	275.16	3,994.56
	02/27/1996	275.44	3,994.28
Well O (PL) 4 inches 305.96 feet	06/27/1995	282.60	3,990.46
	02/27/1996	282.66	3,990.40
Well P (PL) 4 inches 296.49 feet	*07/15/1995	276.96	3,996.43
	*07/24/1995	277.10	3,996.29
	08/23/1995	277.45	3,995.94
	04/16/1996	278.03	3,995.36
	06/24/1996	279.30	3,994.09

Table 3.--Records of water-level measurements from monitoring wells on Cannon Air Force Base, New Mexico

Well Locations: LF5 (Landfill 5); SL (Sewage Lagoons); PL (Playa Lake)
[TOC, top of casing; --, no data; *, water quality samples not collected; #, well abandoned (water level below screen interval)]

Well identification, diameter, and depth below TOC	Date	Water level (feet below TOC)	Altitude of water level (feet above sea level)
Well Q (LF5)	11/19/1996	276.20	3,990.69
4 inches	03/04/1997	277.00	3,989.89
296.59 feet	05/27/1997	277.51	3,989.38
	08/18/1997	278.10	3,988.79
	04/06/1998	279.72	3,987.17
	08/12/1998	282.23	3,984.66
	03/02/1999	284.32	3,982.57
	08/29/1999	284.30	3,982.59
	02/28/2000	284.78	3,982.11
	08/10/2000	286.10	3,980.79
	03/20/2001	287.52	3,979.37
	08/22/2001	287.85	3,979.04
	03/12/2002	288.92	3,977.97
	08/13/2002	290.36	3,976.53
	03/19/2003	291.82	3,975.07

Well identification, diameter, and depth below TOC	Date	Water level (feet below TOC)	Altitude of water level (feet above sea level)
Well S (LF5)	03/02/1999	291.18	3,972.65
4 inches	08/29/1999	292.98	3,970.85
365 feet	02/29/2000	291.77	3,972.06
	08/10/2000	296.29	3,967.54
	03/20/2001	295.86	3,967.97
	08/21/2001	297.72	3,966.11
	03/13/2002	296.43	3,967.40
	08/15/2002	301.75	3,962.08
	03/19/2003	299.19	3,964.64

Table 3.--Records of water-level measurements from monitoring wells on Cannon Air Force Base, New Mexico

Well Locations: LF5 (Landfill 5); SL (Sewage Lagoons); PL (Playa Lake)
[TOC, top of casing; --, no data; *, water quality samples not collected; #, well abandoned (water level below screen interval)]

Well identification, diameter, and depth below TOC	Date	Water level (feet below TOC)	Altitude of water level (feet above sea level)
Well T (LF5)	03/02/1999	290.57	3,973.12
4 inches	08/29/1999	291.71	3,971.98
365 feet	02/29/2000	291.16	3,972.53
	08/10/2000	294.77	3,968.92
	03/20/2001	294.80	3,968.89
	08/21/2001	296.34	3,967.35
	03/13/2002	295.71	3,967.98
	08/15/2002	299.86	3,963.83
	03/19/2003	299.27	3,964.42

Well identification, diameter, and depth below TOC	Date	Water level (feet below TOC)	Altitude of water level (feet above sea level)
Well U (LF5)	03/02/1999	290.60	3,974.66
4 inches	08/29/1999	291.48	3,973.78
365 feet	02/29/2000	291.05	3,974.21
	08/10/2000	294.12	3,971.14
	03/20/2001	294.44	3,970.82
	08/21/2001	295.67	3,969.59
	03/13/2002	295.61	3,969.65
	08/15/2002	298.90	3,966.36
	03/19/2003	299.27	3,965.99

MONITORING WELL IDENTIFICATION REPORT

NEW MEXICO ENVIRONMENT DEPARTMENT
HAZARDOUS AND RADIOACTIVE MATERIALS BUREAU
525 CAMINO DE LOS MARQUEZ, SUITE 4
SANTA FE, NEW MEXICO 87502

FACILITY NAME Cannon Air Force Base

EPA I.D. NUMBER NM 7572124454

COUNTY Curry

WELL NUMBER B -- Landfill-5

WELL LOCATION (LONGITUDE) 103 ° 18 ' 10 "

WELL LOCATION (LATITUDE) 34 ° 22 ' 03 "

AQUIFER NAME Ogallala

AQUIFER CONFINED _____ UNCONFINED X

WELL INSTALLATION DATE 11-30-1984

DRILLING METHOD HYDRT

INNER CASING DIAMETER 4 inches

BOREHOLE DIAMETER 8 inches

CASING MATERIAL PVC

METHOD OF DEVELOPMENT AIRFT

ELEV BOTTOM OF BOREHOLE 3903.11 feet above MSL

ELEV BOTTOM OF WELL CASING 3903.11 feet above MSL

ELEV BOTTOM OF SCREENED INT 3903.11 feet above MSL

ELEV OF TOP OF SCREENED INT 3918.11 feet above MSL

SURVEYED ELEV OF CASING TOP 4265.41 feet above MSL

DATE OF REPORT 09-15-2003 SIGNATURE Fredrick E. Gebhardt

NAME (TYPED) Fredrick E. Gebhardt

MONITORING WELL IDENTIFICATION REPORT

NEW MEXICO ENVIRONMENT DEPARTMENT
HAZARDOUS AND RADIOACTIVE MATERIALS BUREAU
525 CAMINO DE LOS MARQUEZ, SUITE 4
SANTA FE, NEW MEXICO 87502

FACILITY NAME Cannon Air Force Base

EPA I.D. NUMBER NM 7572124454

COUNTY Curry

WELL NUMBER C -- Landfill-5

WELL LOCATION (LONGITUDE) 103° 18' 08.3"

WELL LOCATION (LATITUDE) 34° 21' 56.8"

AQUIFER NAME Ogalalla

AQUIFER CONFINED _____ UNCONFINED X

WELL INSTALLATION DATE 01-11-1985

DRILLING METHOD HYDRT

INNER CASING DIAMETER 4 inches

BOREHOLE DIAMETER 8 inches

CASING MATERIAL PVC

METHOD OF DEVELOPMENT AIRFT

ELEV BOTTOM OF BOREHOLE 3905.90 feet above MSL

ELEV BOTTOM OF WELL CASING 3905.90 feet above MSL

ELEV BOTTOM OF SCREENED INT 3905.90 feet above MSL

ELEV OF TOP OF SCREENED INT 3920.90 feet above MSL

SURVEYED ELEV OF CASING TOP 4267.90 feet above MSL

DATE OF REPORT 09-15-2003 SIGNATURE Fredrick E. Gebhardt

NAME (TYPED) Fredrick E. Gebhardt

MONITORING WELL IDENTIFICATION REPORT

NEW MEXICO ENVIRONMENT DEPARTMENT
HAZARDOUS AND RADIOACTIVE MATERIALS BUREAU
525 CAMINO DE LOS MARQUEZ, SUITE 4
SANTA FE, NEW MEXICO 87502

FACILITY NAME Cannon Air Force Base

EPA I.D. NUMBER NM 7572124454

COUNTY Curry

WELL NUMBER D -- Landfill-5

WELL LOCATION (LONGITUDE) 103 ° 18 ' 17 "

WELL LOCATION (LATITUDE) 34 ° 21 ' 57 "

AQUIFER NAME Ogallala

AQUIFER CONFINED _____ UNCONFINED X

WELL INSTALLATION DATE 12-16-1984

DRILLING METHOD HYDRT

INNER CASING DIAMETER 4 inches

BOREHOLE DIAMETER 8 inches

CASING MATERIAL PVC

METHOD OF DEVELOPMENT AIRFT

ELEV BOTTOM OF BOREHOLE 3909.15 feet above MSL

ELEV BOTTOM OF WELL CASING 3909.15 feet above MSL

ELEV BOTTOM OF SCREENED INT 3909.15 feet above MSL

ELEV OF TOP OF SCREENED INT 3924.15 feet above MSL

SURVEYED ELEV OF CASING TOP 4265.90 feet above MSL

DATE OF REPORT 09-15-2003 SIGNATURE Fredrick E. Gebhardt

NAME (TYPED) Fredrick E. Gebhardt

MONITORING WELL IDENTIFICATION REPORT

NEW MEXICO ENVIRONMENT DEPARTMENT
HAZARDOUS AND RADIOACTIVE MATERIALS BUREAU
525 CAMINO DE LOS MARQUEZ, SUITE 4
SANTA FE, NEW MEXICO 87502

FACILITY NAME Cannon Air Force Base

EPA I.D. NUMBER NM 7572124454

COUNTY Curry

WELL NUMBER E -- Sewage Lagoons

WELL LOCATION (LONGITUDE) 103° 18' 24.5"

WELL LOCATION (LATITUDE) 34° 23' 28.8"

AQUIFER NAME Ogalalla

AQUIFER CONFINED _____ UNCONFINED X

WELL INSTALLATION DATE 11-17-1985

DRILLING METHOD HYDRT

INNER CASING DIAMETER 4 inches

BOREHOLE DIAMETER 8 inches

CASING MATERIAL PVC

METHOD OF DEVELOPMENT AIRFT

ELEV BOTTOM OF BOREHOLE 3908.12 feet above MSL

ELEV BOTTOM OF WELL CASING 3911.12 feet above MSL

ELEV BOTTOM OF SCREENED INT 3911.12 feet above MSL

ELEV OF TOP OF SCREENED INT 3926.12 feet above MSL

SURVEYED ELEV OF CASING TOP 4281.12 feet above MSL

DATE OF REPORT 09-15-2003 SIGNATURE Fredrick E. Gebhardt

NAME (TYPED) Fredrick E. Gebhardt

MONITORING WELL IDENTIFICATION REPORT

NEW MEXICO ENVIRONMENT DEPARTMENT
HAZARDOUS AND RADIOACTIVE MATERIALS BUREAU
525 CAMINO DE LOS MARQUEZ, SUITE 4
SANTA FE, NEW MEXICO 87502

FACILITY NAME Cannon Air Force Base

EPA I.D. NUMBER NM 7572124454

COUNTY Curry

WELL NUMBER F -- Sewage Lagoons

WELL LOCATION (LONGITUDE) 103° 18' 10.5"

WELL LOCATION (LATITUDE) 34° 23' 21.4"

AQUIFER NAME Ogalalla

AQUIFER CONFINED _____ UNCONFINED X

WELL INSTALLATION DATE 11-19-1985

DRILLING METHOD HYDRT

INNER CASING DIAMETER 4 inches

BOREHOLE DIAMETER 8 inches

CASING MATERIAL PVC

METHOD OF DEVELOPMENT AIRFT

ELEV BOTTOM OF BOREHOLE 3902.32 feet above MSL

ELEV BOTTOM OF WELL CASING 3907.32 feet above MSL

ELEV BOTTOM OF SCREENED INT 3907.32 feet above MSL

ELEV OF TOP OF SCREENED INT 3922.32 feet above MSL

SURVEYED ELEV OF CASING TOP 4277.32 feet above MSL

DATE OF REPORT 09-15-2003 SIGNATURE Fredrick E. Gebhardt

NAME (TYPED) Fredrick E. Gebhardt

MONITORING WELL IDENTIFICATION REPORT

NEW MEXICO ENVIRONMENT DEPARTMENT
HAZARDOUS AND RADIOACTIVE MATERIALS BUREAU
525 CAMINO DE LOS MARQUEZ, SUITE 4
SANTA FE, NEW MEXICO 87502

FACILITY NAME Cannon Air Force Base

EPA I.D. NUMBER NM 7572124454

COUNTY Curry

WELL NUMBER G -- Sewage Lagoons

WELL LOCATION (LONGITUDE) 103° 18' 08"

WELL LOCATION (LATITUDE) 34° 23' 13.4"

AQUIFER NAME Ogalalla

AQUIFER CONFINED _____ UNCONFINED X

WELL INSTALLATION DATE 11-10-1985

DRILLING METHOD HYDRT

INNER CASING DIAMETER 4 inches

BOREHOLE DIAMETER 8 inches

CASING MATERIAL PVC

METHOD OF DEVELOPMENT AIRFT

ELEV BOTTOM OF BOREHOLE 3907.99 feet above MSL

ELEV BOTTOM OF WELL CASING 3907.90 feet above MSL

ELEV BOTTOM OF SCREENED INT 3907.99 feet above MSL

ELEV OF TOP OF SCREENED INT 3922.99 feet above MSL

SURVEYED ELEV OF CASING TOP 4279.99 feet above MSL

DATE OF REPORT 09-15-2003 SIGNATURE Fredrick E. Gebhardt

NAME (TYPED) Fredrick E. Gebhardt

MONITORING WELL IDENTIFICATION REPORT

NEW MEXICO ENVIRONMENT DEPARTMENT
HAZARDOUS AND RADIOACTIVE MATERIALS BUREAU
525 CAMINO DE LOS MARQUEZ, SUITE 4
SANTA FE, NEW MEXICO 87502

FACILITY NAME Cannon Air Force Base

EPA I.D. NUMBER NM 7572124454

COUNTY Curry

WELL NUMBER H -- Sewage Lagoons

WELL LOCATION (LONGITUDE) 103° 18' 16.80"

WELL LOCATION (LATITUDE) 34° 23' 07"

AQUIFER NAME Ogalalla

AQUIFER CONFINED _____ UNCONFINED X

WELL INSTALLATION DATE 11-18-1985

DRILLING METHOD HYDRT

INNER CASING DIAMETER 4 inches

BOREHOLE DIAMETER 8 inches

CASING MATERIAL PVC

METHOD OF DEVELOPMENT AIRFT

ELEV BOTTOM OF BOREHOLE 3901.15 feet above MSL

ELEV BOTTOM OF WELL CASING 3901.15 feet above MSL

ELEV BOTTOM OF SCREENED INT 3901.15 feet above MSL

ELEV OF TOP OF SCREENED INT 3921.15 feet above MSL

SURVEYED ELEV OF CASING TOP 4276.15 feet above MSL

DATE OF REPORT 09-15-2003 SIGNATURE Fredrick E. Gebhardt

NAME (TYPED) Fredrick E. Gebhardt

MONITORING WELL IDENTIFICATION REPORT

NEW MEXICO ENVIRONMENT DEPARTMENT
HAZARDOUS AND RADIOACTIVE MATERIALS BUREAU
525 CAMINO DE LOS MARQUEZ, SUITE 4
SANTA FE, NEW MEXICO 87502

FACILITY NAME Cannon Air Force Base

EPA I.D. NUMBER NM 7572124454

COUNTY Curry

WELL NUMBER Q -- Landfill-5

WELL LOCATION (LONGITUDE) 103° 18' 31"

WELL LOCATION (LATITUDE) 34° 22' 19"

AQUIFER NAME Ogallala

AQUIFER CONFINED _____ UNCONFINED X

WELL INSTALLATION DATE 02-24-1996

DRILLING METHOD Unknown

INNER CASING DIAMETER 4 inches

BOREHOLE DIAMETER 8 inches

CASING MATERIAL PVC

METHOD OF DEVELOPMENT BAILD

ELEV BOTTOM OF BOREHOLE 3,969.30 feet above MSL

ELEV BOTTOM OF WELL CASING 3,970.30 feet above MSL

ELEV BOTTOM OF SCREENED INT 3,970.30 feet above MSL

ELEV OF TOP OF SCREENED INT 4,000.30 feet above MSL

SURVEYED ELEV OF CASING TOP 4,266.89 feet above MSL

DATE OF REPORT 09-15-2003 SIGNATURE Fredrick E. Gebhardt

NAME (TYPED) Fredrick E. Gebhardt

MONITORING WELL IDENTIFICATION REPORT

NEW MEXICO ENVIRONMENT DEPARTMENT
HAZARDOUS AND RADIOACTIVE MATERIALS BUREAU
525 CAMINO DE LOS MARQUEZ, SUITE 4
SANTA FE, NEW MEXICO 87502

FACILITY NAME Cannon Air Force Base

EPA I.D. NUMBER NM 7572124454

COUNTY Curry

WELL NUMBER S -- Landfill-5

WELL LOCATION (LONGITUDE) 103 ° 18 ' 10.58 "

WELL LOCATION (LATITUDE) 34 ° 21 ' 57.02 "

AQUIFER NAME Ogallala

AQUIFER CONFINED _____ UNCONFINED X

WELL INSTALLATION DATE 12 -02 to 06 -1998

DRILLING METHOD HYDRT (mud rotary)

INNER CASING DIAMETER 4 inches

BOREHOLE DIAMETER 12 inches

CASING MATERIAL PVC (Schedule-80)

METHOD OF DEVELOPMENT BAILD

ELEV BOTTOM OF BOREHOLE 3898.83 feet above MSL

ELEV BOTTOM OF WELL CASING 3898.83 feet above MSL

ELEV BOTTOM OF SCREENED INT 3939.81 feet above MSL

ELEV OF TOP OF SCREENED INT 3979.83 feet above MSL

SURVEYED ELEV OF CASING TOP 4263.83 feet above MSL

DATE OF REPORT 09-15-2003 SIGNATURE Fredrick E. Gebhardt

NAME (TYPED) Fredrick E. Gebhardt

MONITORING WELL IDENTIFICATION REPORT

NEW MEXICO ENVIRONMENT DEPARTMENT
HAZARDOUS AND RADIOACTIVE MATERIALS BUREAU
525 CAMINO DE LOS MARQUEZ, SUITE 4
SANTA FE, NEW MEXICO 87502

FACILITY NAME Cannon Air Force Base

EPA I.D. NUMBER NM 7572124454

COUNTY Curry

WELL NUMBER T -- Landfill-5

WELL LOCATION (LONGITUDE) 103 ° 18 ' 09.33 "

WELL LOCATION (LATITUDE) 34 ° 22 ' 00.10 "

AQUIFER NAME Ogallala

AQUIFER CONFINED _____ UNCONFINED X

WELL INSTALLATION DATE 12 -6 to 10 -1998

DRILLING METHOD HYDRT (mud rotary)

INNER CASING DIAMETER 4 inches

BOREHOLE DIAMETER 12 inches

CASING MATERIAL PVC (Schedule-80)

METHOD OF DEVELOPMENT BAILD

ELEV BOTTOM OF BOREHOLE 3898.69 feet above MSL

ELEV BOTTOM OF WELL CASING 3898.69 feet above MSL

ELEV BOTTOM OF SCREENED INT 3939.69 feet above MSL

ELEV OF TOP OF SCREENED INT 3979.69 feet above MSL

SURVEYED ELEV OF CASING TOP 4263.69 feet above MSL

DATE OF REPORT 09-15-2003 SIGNATURE Fredrick E. Gebhardt

NAME (TYPED) Fredrick E. Gebhardt

MONITORING WELL IDENTIFICATION REPORT

NEW MEXICO ENVIRONMENT DEPARTMENT
HAZARDOUS AND RADIOACTIVE MATERIALS BUREAU
525 CAMINO DE LOS MARQUEZ, SUITE 4
SANTA FE, NEW MEXICO 87502

FACILITY NAME Cannon Air Force Base

EPA I.D. NUMBER NM 7572124454

COUNTY Curry

WELL NUMBER U -- Landfill-5

WELL LOCATION (LONGITUDE) 103 ° 18 ' 09.84 "

WELL LOCATION (LATITUDE) 34 ° 22 ' 04.88 "

AQUIFER NAME Ogallala

AQUIFER CONFINED _____ UNCONFINED X

WELL INSTALLATION DATE 12 -10 to 13 -1998

DRILLING METHOD HYDRT (mud rotary)

INNER CASING DIAMETER 4 inches

BOREHOLE DIAMETER 12 inches

CASING MATERIAL PVC (Schedule-80)

METHOD OF DEVELOPMENT BAILD

ELEV BOTTOM OF BOREHOLE 3900.26 feet above MSL

ELEV BOTTOM OF WELL CASING 3900.26 feet above MSL

ELEV BOTTOM OF SCREENED INT 3941.26 feet above MSL

ELEV OF TOP OF SCREENED INT 3981.26 feet above MSL

SURVEYED ELEV OF CASING TOP 4265.26 feet above MSL

DATE OF REPORT 09-15-2003 SIGNATURE Fredrick E. Gebhardt

NAME (TYPED) Fredrick E. Gebhardt

MONITORING WELL
SEMI-ANNUAL SAMPLING REPORT

SAMPLE COLLECTED BY Fredrick E. Gebhardt

LABORATORY NAME Severn Trent Services WELL NUMBER CAFB-B

WELL DEPTH 362.30 feet WELL CASING VOLUME 36.3 gallons

DATE SAMPLED 03-18-2003 LABORATORY SAMPLE I.D.# D3C240249

TIME SAMPLED 1420 DATE RECEIVED BY LAB 03-19-2003

PARAMETERS	STORET CODE	UNITS	VALUE	DATE
Elevation of G. Water	71993	ft.	3965.74	03-18-2003
Flow Rate	00059	gal/min	1.03	03-18-2003
Pump Period	72004	min.	39	03-18-2002
Volume Evacuated	73675	gal	40.0	03-18-2003
Well Sampling Method	84077	---	PSPMP	N/A

Sampler Material: TEFLON Well Sampling Method: BENNETT PUMP

PARAMETERS	STORET CODE	UNITS	VALUE	DETECTION LIMIT	DATE ANALYZED	METHOD USED
pH	00400	S.U.	6.61	N/A	03-18-2003	field electrometer
Specific Conductivity	00095	umhos/cm	930	N/A	03-18-2003	field electrometer
T.O.X.	70354	ug/L	ND	10	04-09-2003	SW9020B
T.O.C.	00680	mg/L	ND	1.0	04-11-2003	SW9060

SIGNATURE: Fredrick E. Gebhardt

NAME (PRINTED): Fredrick E. Gebhardt

MONITORING WELL
SEMI-ANNUAL SAMPLING REPORT

SAMPLE COLLECTED BY Fredrick E. Gebhardt

LABORATORY NAME Severn Trent Services WELL NUMBER CAFB-C

WELL DEPTH 362.00 feet WELL CASING VOLUME 33.5 gallons

DATE SAMPLED 03-20-2003 LABORATORY SAMPLE I.D.# D3C210341

TIME SAMPLED 1320 DATE RECEIVED BY LAB 03-21-2003

PARAMETERS	STORET CODE	UNITS	VALUE	DATE
Elevation of G. Water	71993	ft.	3963.68	03-20-2003
Flow Rate	00059	gal/min	0.87	03-20-2003
Pump Period	72004	min.	46	03-20-2003
Volume Evacuated	73675	gal	40.0	03-20-2003
Well Sampling Method	84077	---	PSPMP	N/A

Sampler Material: TEFLON Well Sampling Method: BENNETT PUMP

PARAMETERS	STORET CODE	UNITS	VALUE	DETECTION LIMIT	DATE ANALYZED	METHOD USED
pH	00400	S.U.	8.00	N/A	03-20-2003	field electrometer
Specific Conductivity	00095	umhos/cm	745	N/A	03-20-2003	field electrometer
T.O.X.	70354	ug/L	ND	10	04-08-2003	SW9020B
T.O.C.	00680	mg/L	0.45 B	1.0	04-11-2003	SW9060

SIGNATURE: Fredrick E. Gebhardt

NAME (PRINTED): Fredrick E. Gebhardt

MONITORING WELL
SEMI-ANNUAL SAMPLING REPORT

SAMPLE COLLECTED BY Fredrick E. Gebhardt

LABORATORY NAME Severn Trent Services WELL NUMBER CAFB-D

WELL DEPTH 354.87 feet WELL CASING VOLUME 32.4 gallons

DATE SAMPLED 03-20-2003 LABORATORY SAMPLE I.D.# D3C210341

TIME SAMPLED 1210 DATE RECEIVED BY LAB 03-21-2003

PARAMETERS	STORET CODE	UNITS	VALUE	DATE
Elevation of G. Water	71993	ft.	3966.87	03-20-2003
Flow Rate	00059	gal/min	1.21	03-20-2003
Pump Period	72004	min.	33	03-20-2003
Volume Evacuated	73675	gal	40.0	03-20-2003
Well Sampling Method	84077	---	PSPMP	N/A

Sampler Material: TEFLON Well Sampling Method: BENNETT PUMP

PARAMETERS	STORET CODE	UNITS	VALUE	DETECTION LIMIT	DATE ANALYZED	METHOD USED
pH	00400	S.U.	7.84	N/A	03-20-2003	field electrometer
Specific Conductivity	00095	umhos/cm	766	N/A	03-20-2003	field electrometer
T.O.X.	70354	ug/L	ND	10	04-08-2003	SW9020B
T.O.C.	00680	mg/L	ND	1.0	04-11-2003	SW9060

SIGNATURE: Fredrick E. Gebhardt

NAME (PRINTED): Fredrick E. Gebhardt

MONITORING WELL
ANNUAL SAMPLING REPORT

SAMPLE COLLECTED BY Fredrick E. Gebhardt

LABORATORY NAME Severn Trent Services WELL NUMBER CAFB-E

WELL DEPTH 370.00 feet WELL CASING VOLUME 41.9 gallons

DATE SAMPLED 03-21-2003 LABORATORY SAMPLE I.D.# D3C220137

TIME SAMPLED 0930 DATE RECEIVED BY LAB 03-22-2003

PARAMETERS	STORET CODE	UNITS	VALUE	DATE
Elevation of G. Water	71993	ft.	3983.39	03-21-2003
Flow Rate	00059	gal/min	0.91	03-21-2003
Pump Period	72004	min.	33.0	03-21-2003
Volume Evacuated	73675	gal	30.0	03-21-2003
Well Sampling Method	84077	---	PSPMP	N/A

Sampler Material: TEFLON Well Sampling Method: BENNETT PUMP

PARAMETERS	STORET CODE	UNITS	VALUE	DETECTION LIMIT	DATE ANALYZED	METHOD USED
pH	00400	S.U.	8.07	N/A	03-21-2003	field electrometer
Specific Conductivity	00095	umhos/cm	1240	N/A	03-21-2003	field electrometer

SIGNATURE: Fredrick E. Gebhardt

NAME (PRINTED): Fredrick E. Gebhardt

MONITORING WELL
ANNUAL SAMPLING REPORT

SAMPLE COLLECTED BY Fredrick E. Gebhardt

LABORATORY NAME Severn Trent Services WELL NUMBER CAFB-F

WELL DEPTH 370.00 feet WELL CASING VOLUME 43.4 gallons

DATE SAMPLED 03-20-2003 LABORATORY SAMPLE I.D.# D3C210230

TIME SAMPLED 1015 DATE RECEIVED BY LAB 03-21-2003

PARAMETERS	STORET CODE	UNITS	VALUE	DATE
Elevation of G. Water	71993	ft.	3982.22	03-20-2003
Flow Rate	00059	gal/min	1.21	03-20-2003
Pump Period	72004	min.	33	03-20-2003
Volume Evacuated	73675	gal	40	03-20-2003
Well Sampling Method	84077	---	PSPMP	N/A

Sampler Material: TEFLON Well Sampling Method: BENNETT PUMP

PARAMETERS	STORET CODE	UNITS	VALUE	DETECTION LIMIT	DATE ANALYZED	METHOD USED
pH	00400	S.U.	7.92	N/A	03-20-2003	field electrometer
Specific Conductivity	00095	umhos/cm	1081	N/A	03-20-2003	field electrometer

SIGNATURE: Fredrick E. Gebhardt

NAME (PRINTED): Fredrick E. Gebhardt

MONITORING WELL
ANNUAL SAMPLING REPORT

SAMPLE COLLECTED BY Fredrick E. Gebhardt

LABORATORY NAME Severn Trent Services WELL NUMBER CAFB-G

WELL DEPTH 372.09 feet WELL CASING VOLUME 44.9 gallons

DATE SAMPLED 03-20-2003 LABORATORY SAMPLE I.D.# D3C210230

TIME SAMPLED 0850 DATE RECEIVED BY LAB 03-21-2003

PARAMETERS	STORET CODE	UNITS	VALUE	DATE
Elevation of G. Water	71993	ft.	3982.46	03-20-2003
Flow Rate	00059	gal/min	1.05	03-20-2003
Pump Period	72004	min.	38	03-20-2003
Volume Evacuated	73675	gal	40.0	03-20-2003
Well Sampling Method	84077	---	PSPMP	N/A

Sampler Material: TEFLON Well Sampling Method: BENNETT PUMP

PARAMETERS	STORET CODE	UNITS	VALUE	DETECTION LIMIT	DATE ANALYZED	METHOD USED
pH	00400	S.U.	7.78	N/A	03-20-2003	field electrometer
Specific Conductivity	00095	umhos/cm	1113	N/A	03-20-2003	field electrometer

SIGNATURE: Fredrick E. Gebhardt

NAME (PRINTED): Fredrick E. Gebhardt

MONITORING WELL
ANNUAL SAMPLING REPORT

SAMPLE COLLECTED BY Fredrick E. Gebhardt

LABORATORY NAME Severn Trent Services WELL NUMBER CAFB-H

WELL DEPTH 375.00 feet WELL CASING VOLUME 45.2 gallons

DATE SAMPLED 04-02-2003 LABORATORY SAMPLE I.D.# D3D030147

TIME SAMPLED 0930 DATE RECEIVED BY LAB 04-03-2003

PARAMETERS	STORET CODE	UNITS	VALUE	DATE
Elevation of G. Water	71993	ft.	3979.15	04-02-2003
Flow Rate	00059	gal/min	1.29	04-02-2003
Pump Period	72004	min.	31	04-02-2003
Volume Evacuated	73675	gal	40.0	04-02-2003
Well Sampling Method	84077	---	PSPMP	N/A

Sampler Material: TEFLON Well Sampling Method: BENNETT PUMP

PARAMETERS	STORET CODE	UNITS	VALUE	DETECTION LIMIT	DATE ANALYZED	METHOD USED
pH	00400	S.U.	7.83	N/A	04-02-2003	field electrometer
Specific Conductivity	00095	umhos/cm	776	N/A	04-02-2003	field electrometer

SIGNATURE: Fredrick E. Gebhardt

NAME (PRINTED): Fredrick E. Gebhardt

MONITORING WELL
SEMI-ANNUAL SAMPLING REPORT

SAMPLE COLLECTED BY Fredrick E. Gebhardt

LABORATORY NAME Severn Trent Services WELL NUMBER CAFB-Q

WELL DEPTH 296.69 feet WELL CASING VOLUME 2.83 gallons

DATE SAMPLED 03-19-2003 LABORATORY SAMPLE I.D.# D3C240249

TIME SAMPLED 1230 DATE RECEIVED BY LAB 03-20-2003

PARAMETERS	STORET CODE	UNITS	VALUE	DATE
Elevation of G. Water	71993	ft.	3975.07	03-13-2003
Flow Rate	00059	gal/min	1.14	03-13-2003
Pump Period	72004	min.	35	03-13-2003
Volume Evacuated	73675	gal	40	03-13-2003
Well Sampling Method	84077	---	PSPMP	N/A

Sampler Material: TEFLON Well Sampling Method: BENNETT PUMP

PARAMETERS	STORET CODE	UNITS	VALUE	DETECTION LIMIT	DATE ANALYZED	METHOD USED
pH	00400	S.U.	7.58	N/A	03-19-2003	field electrometer
Specific Conductivity	00095	umhos/cm	969	N/A	03-19-2003	field electrometer
T.O.X.	70354	ug/L	ND	10	04-17-2003	SW9020B
T.O.C.	00680	mg/L	0.30 B	1.0	04-15-2003	SW9060

SIGNATURE: Fredrick E. Gebhardt

NAME (PRINTED): Fredrick E. Gebhardt

MONITORING WELL
SEMI-ANNUAL SAMPLING REPORT

SAMPLE COLLECTED BY Fredrick E. Gebhardt

LABORATORY NAME Severn Trent Services WELL NUMBER CAFB-S

WELL DEPTH 362.77 feet WELL CASING VOLUME 36.9 gallons

DATE SAMPLED 03-19-2003 LABORATORY SAMPLE I.D.# D3C240249

TIME SAMPLED 1125 DATE RECEIVED BY LAB 03-20-2003

PARAMETERS	STORET CODE	UNITS	VALUE	DATE
Elevation of G. Water	71993	ft.	3964.64	03-19-2003
Flow Rate	00059	gal/min	1.14	03-19-2003
Pump Period	72004	min.	35	03-19-2003
Volume Evacuated	73675	gal	40.0	03-19-2003
Well Sampling Method	84077	---	PSPMP	N/A

Sampler Material: TEFLON Well Sampling Method: BENNETT PUMP

PARAMETERS	STORET CODE	UNITS	VALUE	DETECTION LIMIT	DATE ANALYZED	METHOD USED
pH	00400	S.U.	7.52	N/A	03-19-2003	field electrometer
Specific Conductivity	00095	umhos/cm	1011	N/A	03-19-2003	field electrometer
T.O.X.	70354	ug/L	ND	10	04-17-2003	SW9020B
T.O.C.	00680	mg/L	0.32 B	1.0	04-15-2003	SW9060

SIGNATURE: Fredrick E. Gebhardt

NAME (PRINTED): Fredrick E. Gebhardt

MONITORING WELL
SEMI-ANNUAL SAMPLING REPORT

SAMPLE COLLECTED BY Fredrick E. Gebhardt

LABORATORY NAME Severn Trent Services WELL NUMBER CAFB-T

WELL DEPTH 365.00 feet WELL CASING VOLUME 37.9 gallons

DATE SAMPLED 03-19-2003 LABORATORY SAMPLE I.D.# D3C240249

TIME SAMPLED 1000 DATE RECEIVED BY LAB 03-20-2003

PARAMETERS	STORET CODE	UNITS	VALUE	DATE
Elevation of G. Water	71993	ft.	3964.00	03-19-2003
Flow Rate	00059	gal/min	1.05	03-19-2003
Pump Period	72004	min.	38	03-19-2003
Volume Evacuated	73675	gal	40	03-19-2003
Well Sampling Method	84077	---	PSPMP	N/A

Sampler Material: TEFLON Well Sampling Method: BENNETT PUMP

PARAMETERS	STORET CODE	UNITS	VALUE	DETECTION LIMIT	DATE ANALYZED	METHOD USED
pH	00400	S.U.	7.45	N/A	03-19-2003	field electrometer
Specific Conductivity	00095	umhos/cm	1003	N/A	03-19-2003	field electrometer
T.O.X.	70354	ug/L	ND	10	04-17-2003	SW9020B
T.O.C.	00680	mg/L	ND	1.0	04-15-2003	SW9060

SIGNATURE: Fredrick E. Gebhardt

NAME (PRINTED): Fredrick E. Gebhardt

MONITORING WELL
SEMI-ANNUAL SAMPLING REPORT

SAMPLE COLLECTED BY .Fredrick E. Gebhardt

LABORATORY NAME Severn Trent Services WELL NUMBER CAFB-U

WELL DEPTH 365.00 feet WELL CASING VOLUME 38.1 gallons

DATE SAMPLED 03-19-2003 LABORATORY SAMPLE I.D.# D3C240249

TIME SAMPLED 0830 DATE RECEIVED BY LAB 03-20-2003

PARAMETERS	STORET CODE	UNITS	VALUE	DATE
Elevation of G. Water	71993	ft.	3965.99	03-19-2003
Flow Rate	00059	gal/min	1.25	03-19-2003
Pump Period	72004	min.	32	03-19-2003
Volume Evacuated	73675	gal	40	03-19-2003
Well Sampling Method	84077	---	PSPMP	N/A

Sampler Material: TEFLON Well Sampling Method: BENNET PUMP

PARAMETERS	STORET CODE	UNITS	VALUE	DETECTION LIMIT	DATE ANALYZED	METHOD USED
pH	00400	S.U.	7.25	N/A	03-19-2003	field electrometer
Specific Conductivity	00095	umhos/cm	980	N/A	03-19-2003	field electrometer
T.O.X.	70354	ug/L	ND	10	04-10-2003	SW9020B
T.O.C.	00680	mg/L	ND	1.0	04-15-2003	SW9060

SIGNATURE: Fredrick E. Gebhardt

NAME (PRINTED): Fredrick E. Gebhardt

APPENDIX I

Analytical Results from Sevrn Trent Services Laboratory
for Ground-Water Samples Collected March 18-20, 2003
Report # D3C210341 and D3C240249

SEVERN TRENT STL

ANALYTICAL REPORT

Cannon AFB
SDG: CANNON-2
Lot #s: D3C210341 and D3C240249

Richard Daddow

U.S. Geological Survey

STL DENVER

Susan Decker
Project Manager

April 23, 2003
Revised April 29, 2003
Revised June 2, 2003

Severn Trent Laboratories, Inc.
STL Denver • 4955 Yarrow Street, Arvada, CO 80002
Tel 303 736 0100 Fax 303 431 7171 • *www.stl-inc.com*

A part of Severn Trent plc

Table Of Contents

Standard Deliverables with Supporting Documentation

Report Contents	Number of Pages
Standard Deliverables *(The **Cover Letter** and the **Report Cover** page are considered integral parts of this Standard Deliverable package. This report is incomplete unless all pages indicated in this Table of Contents are included.)*	
• **Table of Contents**	
• **Case Narrative**	
• **Executive Summary – Detection Highlights**	
• **Methods Summary**	
• **Method/Analyst Summary**	
• **Lot Sample Summary**	
• **Analytical Results**	
• **QC Data Association Summary**	
• **QC Sample Results**	
• **Chain-of-Custody**	

Supporting Documentation *(Note: A one-page "Description of Supporting Documentation" is provided at the beginning of this section.).*	**Check below when supporting documentation is present.**
• **Volatile GC/MS**	
• **Semivolatile GC/MS**	
• **Volatile GC**	
• **Semivolatile GC**	
• **LC/MS or HPLC**	
• **Metals**	
• **General Chemistry**	
• **Subcontracted Data**	

Case Narrative
CANNON-2

This report has been revised to correct the results for calcium, potassium, magnesium, and sodium. These results were reported incorrectly in the original report.

One April 29, 2003, this report was revised to correct the method blank for method 7470A batch 3098223. The incorrect result, preparation, and analysis time were originally reported. This narrative was also revised to provide clarification on the method 7470A ICV standard from April 14, 2003.

With exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. All laboratory quality control samples analyzed in conjunction with the samples in this project were within established control limits.

The test results presented in this report meet all requirements of NELAC, and any exceptions are noted. This report shall not be reproduced, except in full, without written permission from the laboratory.

Sample Receiving

Two samples and one trip blank were received under chain of custody on March 21, 2003 and logged under lot D3C210341. Six samples and two trip blanks were received under chain of custody on March 24, 2003 and logged under lot D3C240249. These two lots are reported here under SDG CANNON-2.

The samples were received at the lab at temperatures of 4.3°C and 2.3°C on March 21st and 2.3°C, 2.1°C, 1.8°C, 1.6°C, 2.2°C, and 3.6°C on March 24th.

One of two 500 mL amber glass bottles for sample D3C210341-001 was received broken. There remained enough sample volume to proceed with all requested analyses.

Sample aliquots for dioxin/furan analyses were sent for analysis to STL Sacramento; 880 Riverside Parkway; West Sacramento, CA 95605.

GC/MS Volatiles, SW846 8260B

The Initial Calibration (ICAL) associated with the samples demonstrated a Relative Standard Deviation (RSD) greater than 15% for 1,4-dioxane. The average RSD for all compounds was less than 15%.

The MS/MSDs were performed on samples from another client and/or lot and were in control.

GC/MS Semivolatiles, SW846 8270C

Bis(2-ethyl hexyl) phthalate was detected in the method blank associated with batch 3084225 and sample D3C240249-007 at a concentration of 13 ug/L, which is greater than the reporting limit of 10 ug/L. The compound was not detected in the sample; therefore no further corrective action was taken.

The second source verification of the initial calibration (ICV) associated with samples D3C210341-001 and 002 demonstrated a percent difference greater than 35% for 7,12-dimethylbenz(a)anthracene.

MS/MSDs associated with batches 3084225, 3085185, and 3083180 were not requested and the laboratory was unable to designate ones due to limited sample volume.

GC Semivolatiles – Pesticides, SW846 8081A

Sample D3C240249-001 demonstrated a recovery of the surrogate tetrachloro-m-xylene below control limits. The sample was re-extracted outside the recommended hold time in batch 3100186. The re-extracted sample demonstrated all surrogate recoveries within control limits.

The Continuing Calibration Verification (CCV) standards associated with samples D3C240249-002 through 007 and the first extraction of sample 001 demonstrate percent differences greater than +15% for endrin, kepone, and toxaphene. This may indicate a high bias in the sample results, but these compounds were not detected in the samples. The average percent differences of all compounds in the CCV standards were less than ±15%, meeting the criteria for the method.

The Continuing Calibration Verification (CCV) standards associated with samples D3C210341-001 and 002 demonstrated percent differences greater than +15% for methoxychlor and endrin ketone. This may indicate a high bias in the sample results, but these compounds were not detected in the samples. The CCV standards also demonstrated a percent difference greater than –15% for 4,4'-DDD. The average percent difference of all compounds in the CCV was less than ±15%, meeting the criteria for the method.

MS/MSDs associated with batches 3082447, 3085134, and 3100186 were not requested an the laboratory was unable to designate ones due to limited sample volume.

GC Semivolatiles – PCBs, SW846 8082

Sample D3C240249-001 demonstrated a recovery of the surrogate tetrachloro-m-xylene below control limits. The sample was not re-extracted due to expired hold times and limited sample volume.

MS/MSDs associated with batches 3084233 and 3085144 were not requested and the laboratory was unable to designate ones due to limited sample volume.

GC Semivolatiles – Herbicides, SW846 8151A

Sample D3C240249-002 demonstrated a recovery of the surrogate DCAA below control limits. The sample was not re-extracted due to expired hold times.

The Continuing Calibration Verification (CCV) standards associated with samples D3C240249-001 through 005 and 007 demonstrated percent differences greater than +15% for MCPA, 2,4-D, and dinoseb. This may indicate a high bias in the sample results, but these compounds were not detected in the samples. The average percent differences of all compounds in the CCV standards were less than ±15%, meeting the criteria for the method.

MS/MSDs associated with batches 3084466 and 3086189 were not requested and the laboratory was unable to designate ones due to limited sample volume.

HRGC/HRMS – Dioxins/Furans, SW846 8280A

A MS/MSD associated with batch 3091432 was not requested and the laboratory was unable to designate one due to limited sample volume.

HPLC – PAHs, SW846 8310

The MS/MSD associated with batch 3086139 was performed on a sample from another client and/or lot and was in control.

A MS/MSD associated with batch 3084184 was not requested and the laboratory was unable to designate one due to limited sample volume.

Total Metals, SW846 6010B, 6020, 7470A

There were problems with the method 7470A ICV on April 14, 2003. The ICV was re-digested and re-analyzed. The samples were analyzed after the re-digested ICV and the results are reported here. The practice of re-digesting an ICV is not in agreement with the laboratory's SOP. Therefore the samples were re-digested and re-analyzed, however the re-analyses were outside the recommended 28-hour holding time. The original and re-analysis results agree within 10% RPD as shown in the table below because all detections were below the reporting limit of 0.20 ug/L, but above the method detection limit of 0.015 ug/L.

Sample	Original Result (ug/L)	Re-analysis Result (ug/L)
D3C210341-001	0.021	ND
D3C210341-002	0.019	ND
D3C210249-001	0.019	ND
D3C240249-002	0.023	ND
D3C240249-003	0.021	ND
D3C240249-004	0.020	ND
D3C240249-005	0.021	ND

Aluminum and tin were detected in the method 6010B blank associated with batch 3084438 at concentrations below the reporting limits, but above the method detection limits. Associated positive sample results are flagged "J".

Zinc was detected in the method 6010B blank associated with batch 3086278 at a concentration below the reporting limit, but above the method detection limit. Associated positive sample results are flagged "J".

Antimony, arsenic, chromium, and selenium were detected in the method 6020 blank associated with batch 3084470 at concentrations below the reporting limits, but above the method detection limits. Associated positive sample results are flagged "J".

Antimony, arsenic, and chromium were detected in the method 6020 blank associated with batch 3085487 at concentrations below the reporting limits, but above the method detection limits. Associated positive sample results are flagged "J".

Mercury was detected in the method 7470A blank associated with batch 3098223 at a concentration below the reporting limit, but above the method detection limit. Associated positive sample results are flagged "J".

The method 6020 MS/MSD performed on sample D3C240249-002 was in control.

The method 6020 MS/MSD performed on sample D3C210341-001 was in control.

The method 7470A MS/MSD performed on sample D3C240249-007 was in control.

All other MS/MSDs were performed on samples from another client and/or lot and some were not in control.

General Chemistry, SW846 9060, 9020B, 9012A, 9030B, EPA 314.0

The method 9020 MS/MSDs performed on samples D3C240249-005 and 007 were in control for TOX.

The method 9060 MS/MSDs performed on samples D3C240249-001 and 007 were in control for TOC.

The method 9012A MS/MSD performed on sample D3C240249-001 was in control for total cyanide.

A method 9030B MS/MSD associated with batch 3088173 was not requested and the laboratory was unable to designate one due to limited sample volume.
All other MS/MSDs were performed on samples from another client and/or lot and some were not in control.

Quality Control Definitions of Terms

Term	Definition
Batch	A set of up to 20 field samples plus associated laboratory QC samples that are similar in composition (matrix) and that are processed within the same time period with the same reagent and standard lots.
Laboratory Control Sample and Laboratory Control Sample Duplicate (LCS/LCSD)	A volume of regent water for aqueous samples or a contaminant-free solid matrix (Ottawa sand) for soil and sediment samples which is spiked with known amounts of representative target analytes and required surrogates. A LCS is carried through the entire analytical process and is used to monitor the accuracy of the analytical process independent of potential matrix effects. An LCSD is a second Laboratory Control Sample.
Matrix Spike and Matrix Spike Duplicate (MS/MSD)	A field sample fortified with known quantities of target analytes that are also added to the LCS. Matrix spike duplicate is a second matrix spike sample. MSs/MSDs are carried throughout he entire analytical process and are used to determine sample matrix effect on accuracy of the measurement system. The accuracy and precision estimated using MS/MSD is only representative of the precision of the sample that was spiked.
Method Blank	A sample composed of all the reagents (in the same quantities) in reagent water carried through the entire analytical process. The method blank is used to monitor the level of contamination introduced during sample preparation steps.
Surrogate	Organic constituents not expected to be detected in environmental media and are added to every sample and QC at a known concentration. Surrogates are used to determine the efficiency of the sample preparation and the analytical process.
Sample Duplicate	A second aliquot of an environmental sample, taken form the same sample container when possible, that is processed independently with the first sample aliquot. The results are used to assess the effect of the sample matrix on the precision of the analytical process. The precision estimated using this sample is not necessarily representative to the precision for other samples in the batch.
Method Detection Limit "MDL"	The method detection limit is defined as the minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero and is determined from replicate analyses of low level standards in a typical representative matrix.
Reporting Limit "RL"	The STL reporting limit is normally the lowest level at which measurements become quantitatively meaningful, ie., the quantitation limit, which is approximately three times the MDL. Some projects require RLs that are less than the quantitation limit to achieve particular maximum contaminant levels (MCLs) or relevant and appropriate requirements (ARARs), but RLs cannot be less than the statistically determined MDL.

Quality Control Definitions of Qualifiers

Qualifier	Definition
*	Surrogate or Relative Percent Difference (RPD) is outside control limits.
a	Spiked analyte recovery is outside control limits.
B	Organics: Method blank contamination. The associated method blank contains the target analyte at a reportable level. Inorganics: Estimated result. Result is less than the RL
COL	More than 40% difference between the primary and confirmation detector results. The lower of the two results is reported.
DIL	The concentration is estimated or not reported due to dilution.
E	Estimated result. Result concentrations exceeds the calibration range.
G	Inorganics: Elevated reporting limit. The reporting limit is elevated due to matrix interference.
J	Organics: Estimated result. Result is less than RL Inorganics: Method blank contamination. The associated method blank contains the target analyte at a reportable level.
L	Serial dilution of a digestate in the analytical batch indicates that physical and chemical interferences are present
N	Spiked analyte recovery is outside stated control limits.
NC	The recovery and/or RPD were not calculated.
ND	The analyte was not detected at the MDL concentration and with a measurable degree of confidence can be said not to be present at or above the RL concentration.
p	Relative percent difference (RPD) is outside stated control limits.
Q	Elevated reporting limit. The reporting limit is elevated due to high analyte levels.
V	General Chemistry: Elevated reporting limit due to limited sample volume.
Wa	Post digestion spike recovery fell between 40-85% due to matrix interference.
Wb	Post digestion spike recovery fell between 115-150% due to matrix interference.
I	Percent recovery is estimated since the results exceeded the calibration range.
T1	A tentatively identified compound that did not generate a spectral match of 80% or greater. Typically called "unknown"
T2	A tentatively identified compound with a spectral match of 80% or better
T3	A tentatively identified compound that was calibrated for by the lab, but not on the client target analyte list.
IC	Diluted due to high inorganic chloride.

EXECUTIVE SUMMARY - Detection Highlights

CANNON-2 : D3C210341

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
CAFB-D 03/20/03 12:10 001				
Arsenic	5.0 J	5.0	ug/L	SW846 6020
Chromium	1.2 B,J	2.0	ug/L	SW846 6020
Selenium	0.32 B,J	5.0	ug/L	SW846 6020
Mercury	0.021 B,J	0.20	ug/L	SW846 7470A
Molybdenum	3.3 B	20	ug/L	SW846 6010B
Tin	3.8 B,J	100	ug/L	SW846 6010B
Barium	83	10	ug/L	SW846 6010B
Calcium	31000	200	ug/L	SW846 6010B
Iron	19 B	100	ug/L	SW846 6010B
Potassium	5300	3000	ug/L	SW846 6010B
Magnesium	30000	200	ug/L	SW846 6010B
Manganese	1.6 B	10	ug/L	SW846 6010B
Sodium	47000	5000	ug/L	SW846 6010B
Vanadium	36	10	ug/L	SW846 6010B
Methylene chloride	0.23 J	5.0	ug/L	SW846 8260B
Trichloroethene	0.55 J	1.0	ug/L	SW846 8260B
CAFB-C 03/20/03 13:20 002				
Arsenic	6.3 J	5.0	ug/L	SW846 6020
Chromium	1.7 B,J	2.0	ug/L	SW846 6020
Lead	0.44 B	1.0	ug/L	SW846 6020
Antimony	0.25 B,J	2.0	ug/L	SW846 6020
Selenium	1.3 B,J	5.0	ug/L	SW846 6020
Mercury	0.019 B,J	0.20	ug/L	SW846 7470A
Molybdenum	3.7 B	20	ug/L	SW846 6010B
Tin	3.4 B,J	100	ug/L	SW846 6010B
Barium	40	10	ug/L	SW846 6010B
Calcium	29000	200	ug/L	SW846 6010B
Iron	13 B	100	ug/L	SW846 6010B
Potassium	5000	3000	ug/L	SW846 6010B
Magnesium	28000	200	ug/L	SW846 6010B
Manganese	0.74 B	10	ug/L	SW846 6010B
Sodium	45000	5000	ug/L	SW846 6010B
Vanadium	41	10	ug/L	SW846 6010B
Zinc	9.5 B	20	ug/L	SW846 6010B
Trichloroethene	1.3	1.0	ug/L	SW846 8260B
Total Organic Carbon	0.45 B	1.0	mg/L	SW846 9060

(Continued on next page)

EXECUTIVE SUMMARY - Detection Highlights

CANNON-2 : D3C210341

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
CAFB-C-TB 03/20/03 13:25 003				
Methylene chloride	0.25 J	5.0	ug/L	SW846 8260B

(Continued on next page)

EXECUTIVE SUMMARY - Detection Highlights

CANNON-2 : D3C240249

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
CAFB-u 03/19/03 08:30 001				
Arsenic	5.0 J	5.0	ug/L	SW846 6020
Chromium	1.7 B,J	2.0	ug/L	SW846 6020
Selenium	5.9	5.0	ug/L	SW846 6020
Mercury	0.019 B,J	0.20	ug/L	SW846 7470A
Molybdenum	4.6 B	20	ug/L	SW846 6010B
Barium	29	10	ug/L	SW846 6010B
Calcium	44000	200	ug/L	SW846 6010B
Iron	19 B	100	ug/L	SW846 6010B
Potassium	6000	3000	ug/L	SW846 6010B
Magnesium	39000	200	ug/L	SW846 6010B
Manganese	1.8 B	10	ug/L	SW846 6010B
Sodium	52000	5000	ug/L	SW846 6010B
Vanadium	29	10	ug/L	SW846 6010B
Zinc	15 B,J	20	ug/L	SW846 6010B
Perchlorate	2.3	1.0	ug/L	EPA-DW1 314.0
CAFB-uu 03/19/03 08:35 002				
Arsenic	5.4 J	5.0	ug/L	SW846 6020
Chromium	1.8 B,J	2.0	ug/L	SW846 6020
Antimony	0.33 B,J	2.0	ug/L	SW846 6020
Selenium	7.0	5.0	ug/L	SW846 6020
Mercury	0.023 B,J	0.20	ug/L	SW846 7470A
Molybdenum	5.1 B	20	ug/L	SW846 6010B
Barium	30	10	ug/L	SW846 6010B
Calcium	46000	200	ug/L	SW846 6010B
Iron	14 B	100	ug/L	SW846 6010B
Potassium	6600	3000	ug/L	SW846 6010B
Magnesium	40000	200	ug/L	SW846 6010B
Manganese	1.7 B	10	ug/L	SW846 6010B
Sodium	55000	5000	ug/L	SW846 6010B
Vanadium	29	10	ug/L	SW846 6010B
Cyanide, Total	0.0041 B	0.010	mg/L	SW846 9012A
Perchlorate	2.3	1.0	ug/L	EPA-DW1 314.0
CAFB-T 03/19/03 10:00 003				
Silver	0.21 B	5.0	ug/L	SW846 6020
Arsenic	5.6 J	5.0	ug/L	SW846 6020
Chromium	4.6 J	2.0	ug/L	SW846 6020
Lead	0.21 B	1.0	ug/L	SW846 6020
Selenium	6.9	5.0	ug/L	SW846 6020
Mercury	0.021 B,J	0.20	ug/L	SW846 7470A

(Continued on next page)

EXECUTIVE SUMMARY - Detection Highlights

CANNON-2 : D3C240249

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
CAFB-T 03/19/03 10:00 003				
Molybdenum	4.6 B	20	ug/L	SW846 6010B
Aluminum	53 B	100	ug/L	SW846 6010B
Barium	34	10	ug/L	SW846 6010B
Calcium	47000	200	ug/L	SW846 6010B
Copper	0.80 B	20	ug/L	SW846 6010B
Iron	130	100	ug/L	SW846 6010B
Potassium	6600	3000	ug/L	SW846 6010B
Magnesium	41000	200	ug/L	SW846 6010B
Manganese	4.9 B	10	ug/L	SW846 6010B
Sodium	54000	5000	ug/L	SW846 6010B
Nickel	1.9 B	40	ug/L	SW846 6010B
Vanadium	30	10	ug/L	SW846 6010B
Zinc	20 J	20	ug/L	SW846 6010B
Perchlorate	2.3	1.0	ug/L	EPA-DW1 314.0
CAFB-S 03/19/03 11:25 004				
Silver	0.068 B	5.0	ug/L	SW846 6020
Arsenic	5.5 J	5.0	ug/L	SW846 6020
Chromium	2.3 J	2.0	ug/L	SW846 6020
Selenium	7.3	5.0	ug/L	SW846 6020
Mercury	0.020 B,J	0.20	ug/L	SW846 7470A
Molybdenum	3.9 B	20	ug/L	SW846 6010B
Barium	32	10	ug/L	SW846 6010B
Calcium	46000	200	ug/L	SW846 6010B
Iron	21 B	100	ug/L	SW846 6010B
Potassium	6100	3000	ug/L	SW846 6010B
Magnesium	42000	200	ug/L	SW846 6010B
Manganese	2.3 B	10	ug/L	SW846 6010B
Sodium	49000	5000	ug/L	SW846 6010B
Vanadium	29	10	ug/L	SW846 6010B
Zinc	21 J	20	ug/L	SW846 6010B
Total Organic Carbon	0.32 B	1.0	mg/L	SW846 9060
Cyanide, Total	0.0059 B	0.010	mg/L	SW846 9012A
Perchlorate	2.4	1.0	ug/L	EPA-DW1 314.0
CAFB-Q 03/19/03 12:30 005				
Arsenic	5.7 J	5.0	ug/L	SW846 6020
Chromium	3.2 J	2.0	ug/L	SW846 6020
Selenium	7.8	5.0	ug/L	SW846 6020
Mercury	0.021 B,J	0.20	ug/L	SW846 7470A
Molybdenum	4.7 B	20	ug/L	SW846 6010B

(Continued on next page)

EXECUTIVE SUMMARY - Detection Highlights

CANNON-2 : D3C240249

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
CAFB-Q 03/19/03 12:30 005				
Barium	28	10	ug/L	SW846 6010B
Calcium	41000	200	ug/L	SW846 6010B
Iron	47 B	100	ug/L	SW846 6010B
Potassium	5800	3000	ug/L	SW846 6010B
Magnesium	37000	200	ug/L	SW846 6010B
Manganese	1.2 B	10	ug/L	SW846 6010B
Sodium	47000	5000	ug/L	SW846 6010B
Nickel	11 B	40	ug/L	SW846 6010B
Vanadium	25	10	ug/L	SW846 6010B
Total Organic Carbon	0.30 B	1.0	mg/L	SW846 9060
Cyanide, Total	0.0054 B	0.010	mg/L	SW846 9012A
Perchlorate	2.2	1.0	ug/L	EPA-DW1 314.0
CAFB-WELL-B 03/18/03 14:20 007				
Silver	0.012 B	5.0	ug/L	SW846 6020
Arsenic	5.6 J	5.0	ug/L	SW846 6020
Cadmium	0.027 B	1.0	ug/L	SW846 6020
Chromium	2.1 J	2.0	ug/L	SW846 6020
Selenium	6.3	5.0	ug/L	SW846 6020
Molybdenum	3.9 B	20	ug/L	SW846 6010B
Barium	27	10	ug/L	SW846 6010B
Calcium	40000	200	ug/L	SW846 6010B
Iron	25 B	100	ug/L	SW846 6010B
Potassium	6200	3000	ug/L	SW846 6010B
Magnesium	37000	200	ug/L	SW846 6010B
Manganese	0.77 B	10	ug/L	SW846 6010B
Sodium	56000	5000	ug/L	SW846 6010B
Vanadium	27	10	ug/L	SW846 6010B
Cyanide, Total	0.0041 B	0.010	mg/L	SW846 9012A
Perchlorate	2.1	1.0	ug/L	EPA-DW1 314.0

METHODS SUMMARY

CANNON-2

PARAMETER	ANALYTICAL METHOD	PREPARATION METHOD
Chlorinated Herbicides by GC	SW846 8151A	SW846 8151A
Cyanide, Total	SW846 9012A	SW846 9012A
Dioxins/Furans, HRGC/LRMS (8280A)	SW846 8280A	SW846 8280A
Inductively Coupled Plasma (ICP) Metals	SW846 6010B	SW846 3010A
ICP-MS (6020)	SW846 6020	SW846 3010
Mercury in Liquid Waste (Manual Cold-Vapor)	SW846 7470A	SW846 7470A
Organochlorine Pesticides	SW846 8081A	SW846 3510C
Perchlorate	EPA-DW1 314.0	EPA 314.0
Polynuclear Aromatic Hydrocarbons by HPLC	SW846 8310	SW846 3510
PCBs by SW-846 8082	SW846 8082	SW846 3510C
Semivolatile Organic Compounds by GC/MS	SW846 8270C	SW846 3520C
Sulfides, Total 9030B/9034	SW846 9030B/903	SW846 9030B/903
Total Organic Carbon	SW846 9060	SW846 9060
Total Organic Halogens	SW846 9020B	SW846 9020B
Trace Inductively Coupled Plasma (ICP) Metals	SW846 6010B	SW846 3010A
Volatile Organics by GC/MS	SW846 8260B	SW846 5030B/826

References:

EPA-DW1 "METHODS FOR THE DETERMINATION OF ORGANIC AND INORGANIC COMPOUNDS IN DRINKING WATER," VOLUME 1, EPA 815-R-00-014.

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

METHOD / ANALYST SUMMARY

CANNON-2

ANALYTICAL METHOD	ANALYST	ANALYST ID
EPA-DW1 314.0	Lowell Coon	016091
SW846 6010B	Kristen Roda	5692
SW846 6010B	Lynn-Anne Trudell	6645
SW846 6020	Royce Bruce	8595
SW846 7470A	Kacey Ono	003371
SW846 7470A	Thomas Lill	006929
SW846 8081A	Dennis Jonsrud	009226
SW846 8082	Roger Bain	018049
SW846 8151A	Heather Dybas	038161
SW846 8260B	Dan Appelhans	001008
SW846 8270C	Judy Murray	016800
SW846 8270C	Mark McDaniel	000998
SW846 8280A	Ross Fernandes	003648
SW846 8310	Sonya Dacar	011595
SW846 9012A	Ewa Kudla	001167
SW846 9020B	Duane Allee	001470
SW846 9030B/9034	Adam Wilson	009870
SW846 9060	Dave Elkin	000901

References:

EPA-DW1 "METHODS FOR THE DETERMINATION OF ORGANIC AND INORGANIC COMPOUNDS IN DRINKING WATER," VOLUME 1, EPA 815-R-00-014.

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

SAMPLE SUMMARY

CANNON-2 : D3C210341

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
FKKDL	001	CAFB-D	03/20/03	12:10
FKKD2	002	CAFB-C	03/20/03	13:20
FKKD3	003	CAFB-C-TB	03/20/03	13:25

NOTE(S):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

(Continued on next page)

SAMPLE SUMMARY

CANNON-2 : D3C240249

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
FKM87	001	CAFB-u	03/19/03	08:30
FKM9C	002	CAFB-uu	03/19/03	08:35
FKM9D	003	CAFB-T	03/19/03	10:00
FKM9F	004	CAFB-S	03/19/03	11:25
FKM9J	005	CAFB-Q	03/19/03	12:30
FKM9K	006	CAFB-Q-TB	03/19/03	12:40
FKM9N	007	CAFB-WELL-B	03/18/03	14:20
FKM9P	008	CAFB-WELL-B-TB	03/18/03	14:20

NOTE(S):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-D

GC/MS Volatiles

Lot-Sample #...: D3C210341-001 Work Order #...: FKKDL1AA Matrix.....: WG
Date Sampled...: 03/20/03 12:10 Date Received..: 03/21/03
Prep Date.....: 04/01/03 Analysis Date..: 04/01/03
Prep Batch #...: 3092491 Analysis Time..: 15:45
Dilution Factor: 1

Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acetone	ND	10	ug/L	2.5
Acetonitrile	ND	20	ug/L	5.3
Acrolein	ND	20	ug/L	3.1
Acrylonitrile	ND	20	ug/L	3.1
Benzene	ND	1.0	ug/L	0.17
Bromodichloromethane	ND	1.0	ug/L	0.20
Bromoform	ND	1.0	ug/L	0.23
Bromomethane	ND	2.0	ug/L	0.22
Carbon disulfide	ND	1.0	ug/L	0.24
Carbon tetrachloride	ND	1.0	ug/L	0.20
Chlorobenzene	ND	1.0	ug/L	0.13
Chloroprene	ND	1.0	ug/L	0.21
Dibromochloromethane	ND	1.0	ug/L	0.19
Chloroethane	ND	2.0	ug/L	0.18
Chloroform	ND	1.0	ug/L	0.17
Chloromethane	ND	2.0	ug/L	0.91
Allyl chloride	ND	2.0	ug/L	0.11
Dibromomethane	ND	1.0	ug/L	0.31
trans-1,4-Dichloro-2-butene	ND	1.0	ug/L	0.45
Dichlorodifluoromethane	ND	2.0	ug/L	0.22
1,1-Dichloroethane	ND	1.0	ug/L	0.22
1,2-Dichloroethane	ND	1.0	ug/L	0.26
1,1-Dichloroethene	ND	1.0	ug/L	0.23
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.14
trans-1,2-Dichloroethene	ND	0.50	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.24
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.19
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.20
1,4-Dioxane	ND	200	ug/L	57
Ethylbenzene	ND	1.0	ug/L	0.12
Ethyl methacrylate	ND	1.0	ug/L	0.48
Trichlorofluoromethane	ND	2.0	ug/L	0.24
2-Hexanone	ND	5.0	ug/L	1.7
Iodomethane	ND	1.0	ug/L	0.19
Isobutyl alcohol	ND	50	ug/L	15

(Continued on next page)

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-D

GC/MS Volatiles

Lot-Sample #...: D3C210341-001 **Work Order #...:** FKKDL1AA **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Methacrylonitrile	ND	10	ug/L	2.3
Methylene chloride	**0.23 J**	**5.0**	**ug/L**	**0.21**
Methyl methacrylate	ND	1.0	ug/L	0.57
4-Methyl-2-pentanone	ND	5.0	ug/L	0.98
Propionitrile	ND	20	ug/L	3.8
Styrene	ND	1.0	ug/L	0.14
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	0.21
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.21
Tetrachloroethene	ND	1.0	ug/L	0.26
Toluene	ND	1.0	ug/L	0.15
1,1,1-Trichloroethane	ND	1.0	ug/L	0.16
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Trichloroethene	**0.55 J**	**1.0**	**ug/L**	**0.16**
1,2,3-Trichloropropane	ND	1.0	ug/L	0.33
Vinyl acetate	ND	2.0	ug/L	0.56
Vinyl chloride	ND	2.0	ug/L	0.19
Xylenes (total)	ND	2.0	ug/L	0.41
1,2-Dibromo-3-chloropropane (DBCP)	ND	2.0	ug/L	0.47
1,2-Dibromoethane (EDB)	ND	1.0	ug/L	0.18
2-Butanone (MEK)	ND	5.0	ug/L	2.0

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	107	(80 - 120)
1,2-Dichloroethane-d4	110	(71 - 129)
4-Bromofluorobenzene	104	(80 - 120)
Toluene-d8	100	(80 - 120)

NOTE(S):

J Estimated result. Result is less than RL.

US GEOLOGICAL SURVEY

CAFB-D

GC/MS Volatiles

Lot-Sample #: D3C210341-001 **Work Order #:** FKKDL1AA **Matrix:** WG

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT		RETENTION TIME	UNITS
Unknown		2.0 J	M	12.769	ug/L
3-Methylheptyl acetate	72218-58-7	5.92 T2	M	15.823	ug/L

NOTE(S):

M: Result was measured against nearest internal standard assuming a response factor of 1.

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-C

GC/MS Volatiles

Lot-Sample #...: D3C210341-002 **Work Order #...:** FKKD21AM **Matrix.....:** WG
Date Sampled...: 03/20/03 13:20 **Date Received..:** 03/21/03
Prep Date.....: 04/01/03 **Analysis Date..:** 04/01/03
Prep Batch #...: 3092491 **Analysis Time..:** 16:09
Dilution Factor: 1

Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acetone	ND	10	ug/L	2.5
Acetonitrile	ND	20	ug/L	5.3
Acrolein	ND	20	ug/L	3.1
Acrylonitrile	ND	20	ug/L	3.1
Benzene	ND	1.0	ug/L	0.17
Bromodichloromethane	ND	1.0	ug/L	0.20
Bromoform	ND	1.0	ug/L	0.23
Bromomethane	ND	2.0	ug/L	0.22
Carbon disulfide	ND	1.0	ug/L	0.24
Carbon tetrachloride	ND	1.0	ug/L	0.20
Chlorobenzene	ND	1.0	ug/L	0.13
Chloroprene	ND	1.0	ug/L	0.21
Dibromochloromethane	ND	1.0	ug/L	0.19
Chloroethane	ND	2.0	ug/L	0.18
Chloroform	ND	1.0	ug/L	0.17
Chloromethane	ND	2.0	ug/L	0.91
Allyl chloride	ND	2.0	ug/L	0.11
Dibromomethane	ND	1.0	ug/L	0.31
trans-1,4-Dichloro-2-butene	ND	1.0	ug/L	0.45
Dichlorodifluoromethane	ND	2.0	ug/L	0.22
1,1-Dichloroethane	ND	1.0	ug/L	0.22
1,2-Dichloroethane	ND	1.0	ug/L	0.26
1,1-Dichloroethene	ND	1.0	ug/L	0.23
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.14
trans-1,2-Dichloroethene	ND	0.50	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.24
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.19
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.20
1,4-Dioxane	ND	200	ug/L	57
Ethylbenzene	ND	1.0	ug/L	0.12
Ethyl methacrylate	ND	1.0	ug/L	0.48
Trichlorofluoromethane	ND	2.0	ug/L	0.24
2-Hexanone	ND	5.0	ug/L	1.7
Iodomethane	ND	1.0	ug/L	0.19
Isobutyl alcohol	ND	50	ug/L	15

(Continued on next page)

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-C

GC/MS Volatiles

Lot-Sample #...: D3C210341-002 **Work Order #...:** FKKD21AM **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Methacrylonitrile	ND	10	ug/L	2.3
Methylene chloride	ND	5.0	ug/L	0.21
Methyl methacrylate	ND	1.0	ug/L	0.57
4-Methyl-2-pentanone	ND	5.0	ug/L	0.98
Propionitrile	ND	20	ug/L	3.8
Styrene	ND	1.0	ug/L	0.14
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	0.21
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.21
Tetrachloroethene	ND	1.0	ug/L	0.26
Toluene	ND	1.0	ug/L	0.15
1,1,1-Trichloroethane	ND	1.0	ug/L	0.16
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Trichloroethene	**1.3**	**1.0**	**ug/L**	**0.16**
1,2,3-Trichloropropane	ND	1.0	ug/L	0.33
Vinyl acetate	ND	2.0	ug/L	0.56
Vinyl chloride	ND	2.0	ug/L	0.19
Xylenes (total)	ND	2.0	ug/L	0.41
1,2-Dibromo-3-chloropropane (DBCP)	ND	2.0	ug/L	0.47
1,2-Dibromoethane (EDB)	ND	1.0	ug/L	0.18
2-Butanone (MEK)	ND	5.0	ug/L	2.0

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	108	(80 - 120)
1,2-Dichloroethane-d4	110	(71 - 129)
4-Bromofluorobenzene	98	(80 - 120)
Toluene-d8	99	(80 - 120)

US GEOLOGICAL SURVEY

CAFB-C

GC/MS Volatiles

Lot-Sample #: D3C210341-002 **Work Order #:** FKKD21AM **Matrix:** WG

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT		RETENTION TIME	UNITS
3-Methylheptyl acetate	72218-58-7	3.62 T2	M	15.822	ug/L

NOTE(S):

M: Result was measured against nearest internal standard assuming a response factor of 1.

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-C-TB

GC/MS Volatiles

Lot-Sample #...: D3C210341-003 **Work Order #...:** FKKD31AA **Matrix.....:** WQ
Date Sampled...: 03/20/03 13:25 **Date Received..:** 03/21/03
Prep Date.....: 04/01/03 **Analysis Date..:** 04/01/03
Prep Batch #...: 3092491 **Analysis Time..:** 16:33
Dilution Factor: 1

Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acetone	ND	10	ug/L	2.5
Acetonitrile	ND	20	ug/L	5.3
Acrolein	ND	20	ug/L	3.1
Acrylonitrile	ND	20	ug/L	3.1
Benzene	ND	1.0	ug/L	0.17
Bromodichloromethane	ND	1.0	ug/L	0.20
Bromoform	ND	1.0	ug/L	0.23
Bromomethane	ND	2.0	ug/L	0.22
Carbon disulfide	ND	1.0	ug/L	0.24
Carbon tetrachloride	ND	1.0	ug/L	0.20
Chlorobenzene	ND	1.0	ug/L	0.13
Chloroprene	ND	1.0	ug/L	0.21
Dibromochloromethane	ND	1.0	ug/L	0.19
Chloroethane	ND	2.0	ug/L	0.18
Chloroform	ND	1.0	ug/L	0.17
Chloromethane	ND	2.0	ug/L	0.91
Allyl chloride	ND	2.0	ug/L	0.11
Dibromomethane	ND	1.0	ug/L	0.31
trans-1,4-Dichloro-2-butene	ND	1.0	ug/L	0.45
Dichlorodifluoromethane	ND	2.0	ug/L	0.22
1,1-Dichloroethane	ND	1.0	ug/L	0.22
1,2-Dichloroethane	ND	1.0	ug/L	0.26
1,1-Dichloroethene	ND	1.0	ug/L	0.23
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.14
trans-1,2-Dichloroethene	ND	0.50	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.24
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.19
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.20
1,4-Dioxane	ND	200	ug/L	57
Ethylbenzene	ND	1.0	ug/L	0.12
Ethyl methacrylate	ND	1.0	ug/L	0.48
Trichlorofluoromethane	ND	2.0	ug/L	0.24
2-Hexanone	ND	5.0	ug/L	1.7
Iodomethane	ND	1.0	ug/L	0.19
Isobutyl alcohol	ND	50	ug/L	15

(Continued on next page)

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-C-TB

GC/MS Volatiles

Lot-Sample #...: D3C210341-003 Work Order #...: FKKD31AA Matrix.....: WQ

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Methacrylonitrile	ND	10	ug/L	2.3
Methylene chloride	**0.25 J**	**5.0**	**ug/L**	**0.21**
Methyl methacrylate	ND	1.0	ug/L	0.57
4-Methyl-2-pentanone	ND	5.0	ug/L	0.98
Propionitrile	ND	20	ug/L	3.8
Styrene	ND	1.0	ug/L	0.14
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	0.21
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.21
Tetrachloroethene	ND	1.0	ug/L	0.26
Toluene	ND	1.0	ug/L	0.15
1,1,1-Trichloroethane	ND	1.0	ug/L	0.16
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Trichloroethene	ND	1.0	ug/L	0.16
1,2,3-Trichloropropane	ND	1.0	ug/L	0.33
Vinyl acetate	ND	2.0	ug/L	0.56
Vinyl chloride	ND	2.0	ug/L	0.19
Xylenes (total)	ND	2.0	ug/L	0.41
1,2-Dibromo-3-chloropropane (DBCP)	ND	2.0	ug/L	0.47
1,2-Dibromoethane (EDB)	ND	1.0	ug/L	0.18
2-Butanone (MEK)	ND	5.0	ug/L	2.0

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	106	(80 - 120)
1,2-Dichloroethane-d4	108	(71 - 129)
4-Bromofluorobenzene	98	(80 - 120)
Toluene-d8	97	(80 - 120)

NOTE(S):

J Estimated result. Result is less than RL.

US GEOLOGICAL SURVEY

CAFB-C-TB

GC/MS Volatiles

Lot-Sample #: D3C210341-003 **Work Order #:** FKKD31AA **Matrix:** WQ

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT		RETENTION TIME	UNITS
Unknown		14 J	M	4.4148	ug/L
Cyclotetrasiloxane, octamethyl	556-67-2	1.72 T2	M	12.769	ug/L
Acetic acid, 2-ethylhexyl este	103-09-3	2.52 T2	M	15.823	ug/L

NOTE(S):

M: Result was measured against nearest internal standard assuming a response factor of 1.

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-u

GC/MS Volatiles

Lot-Sample #...: D3C240249-001 Work Order #...: FKM871AA Matrix.....: WATER
Date Sampled...: 03/19/03 08:30 Date Received..: 03/24/03
Prep Date.....: 03/30/03 Analysis Date..: 03/30/03
Prep Batch #...: 3090242 Analysis Time..: 17:13
Dilution Factor: 1

Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acetone	ND	10	ug/L	2.5
Acetonitrile	ND	20	ug/L	5.3
Acrolein	ND	20	ug/L	3.1
Acrylonitrile	ND	20	ug/L	3.1
Benzene	ND	1.0	ug/L	0.17
Bromodichloromethane	ND	1.0	ug/L	0.20
Bromoform	ND	1.0	ug/L	0.23
Bromomethane	ND	2.0	ug/L	0.22
Carbon disulfide	ND	1.0	ug/L	0.24
Carbon tetrachloride	ND	1.0	ug/L	0.20
Chlorobenzene	ND	1.0	ug/L	0.13
Chloroprene	ND	1.0	ug/L	0.21
Dibromochloromethane	ND	1.0	ug/L	0.19
Chloroethane	ND	2.0	ug/L	0.18
Chloroform	ND	1.0	ug/L	0.17
Chloromethane	ND	2.0	ug/L	0.91
Allyl chloride	ND	2.0	ug/L	0.11
Dibromomethane	ND	1.0	ug/L	0.31
trans-1,4-Dichloro-2-butene	ND	1.0	ug/L	0.45
Dichlorodifluoromethane	ND	2.0	ug/L	0.22
1,1-Dichloroethane	ND	1.0	ug/L	0.22
1,2-Dichloroethane	ND	1.0	ug/L	0.26
1,1-Dichloroethene	ND	1.0	ug/L	0.23
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.14
trans-1,2-Dichloroethene	ND	0.50	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.24
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.19
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.20
1,4-Dioxane	ND	200	ug/L	57
Ethylbenzene	ND	1.0	ug/L	0.12
Ethyl methacrylate	ND	1.0	ug/L	0.48
Trichlorofluoromethane	ND	2.0	ug/L	0.24
2-Hexanone	ND	5.0	ug/L	1.7
Iodomethane	ND	1.0	ug/L	0.19
Isobutyl alcohol	ND	50	ug/L	15

(Continued on next page)

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-u

GC/MS Volatiles

Lot-Sample #...: D3C240249-001 **Work Order #...:** FKM871AA **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Methacrylonitrile	ND	10	ug/L	2.3
Methylene chloride	ND	5.0	ug/L	0.21
Methyl methacrylate	ND	1.0	ug/L	0.57
4-Methyl-2-pentanone	ND	5.0	ug/L	0.98
Propionitrile	ND	20	ug/L	3.8
Styrene	ND	1.0	ug/L	0.14
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	0.21
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.21
Tetrachloroethene	ND	1.0	ug/L	0.26
Toluene	ND	1.0	ug/L	0.15
1,1,1-Trichloroethane	ND	1.0	ug/L	0.16
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Trichloroethene	ND	1.0	ug/L	0.16
1,2,3-Trichloropropane	ND	1.0	ug/L	0.33
Vinyl acetate	ND	2.0	ug/L	0.56
Vinyl chloride	ND	2.0	ug/L	0.19
Xylenes (total)	ND	2.0	ug/L	0.41
1,2-Dibromo-3-chloropropane (DBCP)	ND	2.0	ug/L	0.47
1,2-Dibromoethane (EDB)	ND	1.0	ug/L	0.18
2-Butanone (MEK)	ND	5.0	ug/L	2.0

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	106	(80 - 120)
1,2-Dichloroethane-d4	107	(71 - 129)
4-Bromofluorobenzene	103	(80 - 120)
Toluene-d8	104	(80 - 120)

US GEOLOGICAL SURVEY

CAFB-u

GC/MS Volatiles

Lot-Sample #: D3C240249-001 **Work Order #:** FKM871AA **Matrix:** WATER

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT		RETENTION TIME	UNITS
Cyclotetrasiloxane, octamethyl	556-67-2	1.82 T2	M	12.728	ug/L

NOTE(S):

M: Result was measured against nearest internal standard assuming a response factor of 1.

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-uu

GC/MS Volatiles

Lot-Sample #...: D3C240249-002 Work Order #...: FKM9C1AM Matrix.....: WATER
Date Sampled...: 03/19/03 08:35 Date Received..: 03/24/03
Prep Date.....: 03/30/03 Analysis Date..: 03/30/03
Prep Batch #...: 3090242 Analysis Time..: 17:36
Dilution Factor: 1

Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acetone	ND	10	ug/L	2.5
Acetonitrile	ND	20	ug/L	5.3
Acrolein	ND	20	ug/L	3.1
Acrylonitrile	ND	20	ug/L	3.1
Benzene	ND	1.0	ug/L	0.17
Bromodichloromethane	ND	1.0	ug/L	0.20
Bromoform	ND	1.0	ug/L	0.23
Bromomethane	ND	2.0	ug/L	0.22
Carbon disulfide	ND	1.0	ug/L	0.24
Carbon tetrachloride	ND	1.0	ug/L	0.20
Chlorobenzene	ND	1.0	ug/L	0.13
Chloroprene	ND	1.0	ug/L	0.21
Dibromochloromethane	ND	1.0	ug/L	0.19
Chloroethane	ND	2.0	ug/L	0.18
Chloroform	ND	1.0	ug/L	0.17
Chloromethane	ND	2.0	ug/L	0.91
Allyl chloride	ND	2.0	ug/L	0.11
Dibromomethane	ND	1.0	ug/L	0.31
trans-1,4-Dichloro-2-butene	ND	1.0	ug/L	0.45
Dichlorodifluoromethane	ND	2.0	ug/L	0.22
1,1-Dichloroethane	ND	1.0	ug/L	0.22
1,2-Dichloroethane	ND	1.0	ug/L	0.26
1,1-Dichloroethene	ND	1.0	ug/L	0.23
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.14
trans-1,2-Dichloroethene	ND	0.50	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.24
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.19
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.20
1,4-Dioxane	ND	200	ug/L	57
Ethylbenzene	ND	1.0	ug/L	0.12
Ethyl methacrylate	ND	1.0	ug/L	0.48
Trichlorofluoromethane	ND	2.0	ug/L	0.24
2-Hexanone	ND	5.0	ug/L	1.7
Iodomethane	ND	1.0	ug/L	0.19
Isobutyl alcohol	ND	50	ug/L	15

(Continued on next page)

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-uu

GC/MS Volatiles

Lot-Sample #...: D3C240249-002 **Work Order #...:** FKM9C1AM **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Methacrylonitrile	ND	10	ug/L	2.3
Methylene chloride	ND	5.0	ug/L	0.21
Methyl methacrylate	ND	1.0	ug/L	0.57
4-Methyl-2-pentanone	ND	5.0	ug/L	0.98
Propionitrile	ND	20	ug/L	3.8
Styrene	ND	1.0	ug/L	0.14
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	0.21
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.21
Tetrachloroethene	ND	1.0	ug/L	0.26
Toluene	ND	1.0	ug/L	0.15
1,1,1-Trichloroethane	ND	1.0	ug/L	0.16
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Trichloroethene	ND	1.0	ug/L	0.16
1,2,3-Trichloropropane	ND	1.0	ug/L	0.33
Vinyl acetate	ND	2.0	ug/L	0.56
Vinyl chloride	ND	2.0	ug/L	0.19
Xylenes (total)	ND	2.0	ug/L	0.41
1,2-Dibromo-3-chloropropane (DBCP)	ND	2.0	ug/L	0.47
1,2-Dibromoethane (EDB)	ND	1.0	ug/L	0.18
2-Butanone (MEK)	ND	5.0	ug/L	2.0

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	106	(80 - 120)
1,2-Dichloroethane-d4	107	(71 - 129)
4-Bromofluorobenzene	102	(80 - 120)
Toluene-d8	101	(80 - 120)

US GEOLOGICAL SURVEY

CAFB-uu

GC/MS Volatiles

Lot-Sample #: D3C240249-002 **Work Order #:** FKM9C1AM **Matrix:** WATER

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT		RETENTION TIME	UNITS
Cyclotetrasiloxane, octamethyl	556-67-2	1.92 T2	M	12.729	ug/L
3-Methylheptyl acetate	72218-58-7	3.02 T2	M	15.773	ug/L

NOTE(S):

M: Result was measured against nearest internal standard assuming a response factor of 1.

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-T

GC/MS Volatiles

Lot-Sample #...: D3C240249-003 **Work Order #...:** FKM9D1AM **Matrix.....:** WATER
Date Sampled...: 03/19/03 10:00 **Date Received..:** 03/24/03
Prep Date.....: 03/30/03 **Analysis Date..:** 03/30/03
Prep Batch #...: 3090242 **Analysis Time..:** 18:00
Dilution Factor: 1

Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acetone	ND	10	ug/L	2.5
Acetonitrile	ND	20	ug/L	5.3
Acrolein	ND	20	ug/L	3.1
Acrylonitrile	ND	20	ug/L	3.1
Benzene	ND	1.0	ug/L	0.17
Bromodichloromethane	ND	1.0	ug/L	0.20
Bromoform	ND	1.0	ug/L	0.23
Bromomethane	ND	2.0	ug/L	0.22
Carbon disulfide	ND	1.0	ug/L	0.24
Carbon tetrachloride	ND	1.0	ug/L	0.20
Chlorobenzene	ND	1.0	ug/L	0.13
Chloroprene	ND	1.0	ug/L	0.21
Dibromochloromethane	ND	1.0	ug/L	0.19
Chloroethane	ND	2.0	ug/L	0.18
Chloroform	ND	1.0	ug/L	0.17
Chloromethane	ND	2.0	ug/L	0.91
Allyl chloride	ND	2.0	ug/L	0.11
Dibromomethane	ND	1.0	ug/L	0.31
trans-1,4-Dichloro-2-butene	ND	1.0	ug/L	0.45
Dichlorodifluoromethane	ND	2.0	ug/L	0.22
1,1-Dichloroethane	ND	1.0	ug/L	0.22
1,2-Dichloroethane	ND	1.0	ug/L	0.26
1,1-Dichloroethene	ND	1.0	ug/L	0.23
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.14
trans-1,2-Dichloroethene	ND	0.50	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.24
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.19
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.20
1,4-Dioxane	ND	200	ug/L	57
Ethylbenzene	ND	1.0	ug/L	0.12
Ethyl methacrylate	ND	1.0	ug/L	0.48
Trichlorofluoromethane	ND	2.0	ug/L	0.24
2-Hexanone	ND	5.0	ug/L	1.7
Iodomethane	ND	1.0	ug/L	0.19
Isobutyl alcohol	ND	50	ug/L	15

(Continued on next page)

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-T

GC/MS Volatiles

Lot-Sample #...: D3C240249-003 Work Order #...: FKM9D1AM Matrix.....: WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Methacrylonitrile	ND	10	ug/L	2.3
Methylene chloride	ND	5.0	ug/L	0.21
Methyl methacrylate	ND	1.0	ug/L	0.57
4-Methyl-2-pentanone	ND	5.0	ug/L	0.98
Propionitrile	ND	20	ug/L	3.8
Styrene	ND	1.0	ug/L	0.14
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	0.21
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.21
Tetrachloroethene	ND	1.0	ug/L	0.26
Toluene	ND	1.0	ug/L	0.15
1,1,1-Trichloroethane	ND	1.0	ug/L	0.16
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Trichloroethene	ND	1.0	ug/L	0.16
1,2,3-Trichloropropane	ND	1.0	ug/L	0.33
Vinyl acetate	ND	2.0	ug/L	0.56
Vinyl chloride	ND	2.0	ug/L	0.19
Xylenes (total)	ND	2.0	ug/L	0.41
1,2-Dibromo-3-chloropropane (DBCP)	ND	2.0	ug/L	0.47
1,2-Dibromoethane (EDB)	ND	1.0	ug/L	0.18
2-Butanone (MEK)	ND	5.0	ug/L	2.0

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	112	(80 - 120)
1,2-Dichloroethane-d4	109	(71 - 129)
4-Bromofluorobenzene	102	(80 - 120)
Toluene-d8	106	(80 - 120)

US GEOLOGICAL SURVEY

CAFB-T

GC/MS Volatiles

Lot-Sample #: D3C240249-003 **Work Order #:** FKM9D1AM **Matrix:** WATER

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT		RETENTION TIME	UNITS
Cyclotrisiloxane, hexamethyl-	541-05-9	1.32 T2	M	10.296	ug/L
Unknown		3.9 J	M	12.729	ug/L
Acetic acid, 2-ethylhexyl este	103-09-3	2.82 T2	M	15.773	ug/L

NOTE(S):

M: Result was measured against nearest internal standard assuming a response factor of 1.

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-S

GC/MS Volatiles

Lot-Sample #...: D3C240249-004 **Work Order #...:** FKM9F1AM **Matrix.....:** WATER
Date Sampled...: 03/19/03 11:25 **Date Received..:** 03/24/03
Prep Date.....: 03/30/03 **Analysis Date..:** 03/30/03
Prep Batch #...: 3090242 **Analysis Time..:** 18:23
Dilution Factor: 1

Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acetone	ND	10	ug/L	2.5
Acetonitrile	ND	20	ug/L	5.3
Acrolein	ND	20	ug/L	3.1
Acrylonitrile	ND	20	ug/L	3.1
Benzene	ND	1.0	ug/L	0.17
Bromodichloromethane	ND	1.0	ug/L	0.20
Bromoform	ND	1.0	ug/L	0.23
Bromomethane	ND	2.0	ug/L	0.22
Carbon disulfide	ND	1.0	ug/L	0.24
Carbon tetrachloride	ND	1.0	ug/L	0.20
Chlorobenzene	ND	1.0	ug/L	0.13
Chloroprene	ND	1.0	ug/L	0.21
Dibromochloromethane	ND	1.0	ug/L	0.19
Chloroethane	ND	2.0	ug/L	0.18
Chloroform	ND	1.0	ug/L	0.17
Chloromethane	ND	2.0	ug/L	0.91
Allyl chloride	ND	2.0	ug/L	0.11
Dibromomethane	ND	1.0	ug/L	0.31
trans-1,4-Dichloro-2-butene	ND	1.0	ug/L	0.45
Dichlorodifluoromethane	ND	2.0	ug/L	0.22
1,1-Dichloroethane	ND	1.0	ug/L	0.22
1,2-Dichloroethane	ND	1.0	ug/L	0.26
1,1-Dichloroethene	ND	1.0	ug/L	0.23
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.14
trans-1,2-Dichloroethene	ND	0.50	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.24
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.19
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.20
1,4-Dioxane	ND	200	ug/L	57
Ethylbenzene	ND	1.0	ug/L	0.12
Ethyl methacrylate	ND	1.0	ug/L	0.48
Trichlorofluoromethane	ND	2.0	ug/L	0.24
2-Hexanone	ND	5.0	ug/L	1.7
Iodomethane	ND	1.0	ug/L	0.19
Isobutyl alcohol	ND	50	ug/L	15

(Continued on next page)

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-S

GC/MS Volatiles

Lot-Sample #...: D3C240249-004 **Work Order #...:** FKM9F1AM **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Methacrylonitrile	ND	10	ug/L	2.3
Methylene chloride	ND	5.0	ug/L	0.21
Methyl methacrylate	ND	1.0	ug/L	0.57
4-Methyl-2-pentanone	ND	5.0	ug/L	0.98
Propionitrile	ND	20	ug/L	3.8
Styrene	ND	1.0	ug/L	0.14
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	0.21
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.21
Tetrachloroethene	ND	1.0	ug/L	0.26
Toluene	ND	1.0	ug/L	0.15
1,1,1-Trichloroethane	ND	1.0	ug/L	0.16
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Trichloroethene	ND	1.0	ug/L	0.16
1,2,3-Trichloropropane	ND	1.0	ug/L	0.33
Vinyl acetate	ND	2.0	ug/L	0.56
Vinyl chloride	ND	2.0	ug/L	0.19
Xylenes (total)	ND	2.0	ug/L	0.41
1,2-Dibromo-3-chloropropane (DBCP)	ND	2.0	ug/L	0.47
1,2-Dibromoethane (EDB)	ND	1.0	ug/L	0.18
2-Butanone (MEK)	ND	5.0	ug/L	2.0

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	110	(80 - 120)
1,2-Dichloroethane-d4	112	(71 - 129)
4-Bromofluorobenzene	100	(80 - 120)
Toluene-d8	100	(80 - 120)

US GEOLOGICAL SURVEY

CAFB-S

GC/MS Volatiles

Lot-Sample #: D3C240249-004 **Work Order #:** FKM9F1AM **Matrix:** WATER

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT		RETENTION TIME	UNITS
Unknown		1.9 J	M	12.729	ug/L
Acetic acid, 2-ethylhexyl este	103-09-3	7.52 T2	M	15.773	ug/L

NOTE(S):

M: Result was measured against nearest internal standard assuming a response factor of 1.

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-Q

GC/MS Volatiles

Lot-Sample #...: D3C240249-005 **Work Order #...:** FKM9J1AM **Matrix.....:** WATER
Date Sampled...: 03/19/03 12:30 **Date Received..:** 03/24/03
Prep Date.....: 03/30/03 **Analysis Date..:** 03/30/03
Prep Batch #...: 3090242 **Analysis Time..:** 18:47
Dilution Factor: 1

Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acetone	ND	10	ug/L	2.5
Acetonitrile	ND	20	ug/L	5.3
Acrolein	ND	20	ug/L	3.1
Acrylonitrile	ND	20	ug/L	3.1
Benzene	ND	1.0	ug/L	0.17
Bromodichloromethane	ND	1.0	ug/L	0.20
Bromoform	ND	1.0	ug/L	0.23
Bromomethane	ND	2.0	ug/L	0.22
Carbon disulfide	ND	1.0	ug/L	0.24
Carbon tetrachloride	ND	1.0	ug/L	0.20
Chlorobenzene	ND	1.0	ug/L	0.13
Chloroprene	ND	1.0	ug/L	0.21
Dibromochloromethane	ND	1.0	ug/L	0.19
Chloroethane	ND	2.0	ug/L	0.18
Chloroform	ND	1.0	ug/L	0.17
Chloromethane	ND	2.0	ug/L	0.91
Allyl chloride	ND	2.0	ug/L	0.11
Dibromomethane	ND	1.0	ug/L	0.31
trans-1,4-Dichloro-2-butene	ND	1.0	ug/L	0.45
Dichlorodifluoromethane	ND	2.0	ug/L	0.22
1,1-Dichloroethane	ND	1.0	ug/L	0.22
1,2-Dichloroethane	ND	1.0	ug/L	0.26
1,1-Dichloroethene	ND	1.0	ug/L	0.23
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.14
trans-1,2-Dichloroethene	ND	0.50	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.24
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.19
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.20
1,4-Dioxane	ND	200	ug/L	57
Ethylbenzene	ND	1.0	ug/L	0.12
Ethyl methacrylate	ND	1.0	ug/L	0.48
Trichlorofluoromethane	ND	2.0	ug/L	0.24
2-Hexanone	ND	5.0	ug/L	1.7
Iodomethane	ND	1.0	ug/L	0.19
Isobutyl alcohol	ND	50	ug/L	15

(Continued on next page)

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-Q

GC/MS Volatiles

Lot-Sample #...: D3C240249-005 **Work Order #...:** FKM9J1AM **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Methacrylonitrile	ND	10	ug/L	2.3
Methylene chloride	ND	5.0	ug/L	0.21
Methyl methacrylate	ND	1.0	ug/L	0.57
4-Methyl-2-pentanone	ND	5.0	ug/L	0.98
Propionitrile	ND	20	ug/L	3.8
Styrene	ND	1.0	ug/L	0.14
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	0.21
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.21
Tetrachloroethene	ND	1.0	ug/L	0.26
Toluene	ND	1.0	ug/L	0.15
1,1,1-Trichloroethane	ND	1.0	ug/L	0.16
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Trichloroethene	ND	1.0	ug/L	0.16
1,2,3-Trichloropropane	ND	1.0	ug/L	0.33
Vinyl acetate	ND	2.0	ug/L	0.56
Vinyl chloride	ND	2.0	ug/L	0.19
Xylenes (total)	ND	2.0	ug/L	0.41
1,2-Dibromo-3-chloropropane (DBCP)	ND	2.0	ug/L	0.47
1,2-Dibromoethane (EDB)	ND	1.0	ug/L	0.18
2-Butanone (MEK)	ND	5.0	ug/L	2.0

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	107	(80 - 120)
1,2-Dichloroethane-d4	107	(71 - 129)
4-Bromofluorobenzene	103	(80 - 120)
Toluene-d8	104	(80 - 120)

US GEOLOGICAL SURVEY

CAFB-Q

GC/MS Volatiles

Lot-Sample #: D3C240249-005 **Work Order #:** FKM9J1AM **Matrix:** WATER

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT		RETENTION TIME	UNITS
Unknown		2.8 J	M	12.729	ug/L
Acetic acid, 2-ethylhexyl este	103-09-3	1.42 T2	M	15.783	ug/L

NOTE(S):

M: Result was measured against nearest internal standard assuming a response factor of 1.

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-Q-TB

GC/MS Volatiles

Lot-Sample #...: D3C240249-006 **Work Order #...:** FKM9K1AA **Matrix.....:** WATER
Date Sampled...: 03/19/03 12:40 **Date Received..:** 03/24/03
Prep Date.....: 03/30/03 **Analysis Date..:** 03/30/03
Prep Batch #...: 3090242 **Analysis Time..:** 19:10
Dilution Factor: 1

Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acetone	ND	10	ug/L	2.5
Acetonitrile	ND	20	ug/L	5.3
Acrolein	ND	20	ug/L	3.1
Acrylonitrile	ND	20	ug/L	3.1
Benzene	ND	1.0	ug/L	0.17
Bromodichloromethane	ND	1.0	ug/L	0.20
Bromoform	ND	1.0	ug/L	0.23
Bromomethane	ND	2.0	ug/L	0.22
Carbon disulfide	ND	1.0	ug/L	0.24
Carbon tetrachloride	ND	1.0	ug/L	0.20
Chlorobenzene	ND	1.0	ug/L	0.13
Chloroprene	ND	1.0	ug/L	0.21
Dibromochloromethane	ND	1.0	ug/L	0.19
Chloroethane	ND	2.0	ug/L	0.18
Chloroform	ND	1.0	ug/L	0.17
Chloromethane	ND	2.0	ug/L	0.91
Allyl chloride	ND	2.0	ug/L	0.11
Dibromomethane	ND	1.0	ug/L	0.31
trans-1,4-Dichloro-2-butene	ND	1.0	ug/L	0.45
Dichlorodifluoromethane	ND	2.0	ug/L	0.22
1,1-Dichloroethane	ND	1.0	ug/L	0.22
1,2-Dichloroethane	ND	1.0	ug/L	0.26
1,1-Dichloroethene	ND	1.0	ug/L	0.23
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.14
trans-1,2-Dichloroethene	ND	0.50	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.24
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.19
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.20
1,4-Dioxane	ND	200	ug/L	57
Ethylbenzene	ND	1.0	ug/L	0.12
Ethyl methacrylate	ND	1.0	ug/L	0.48
Trichlorofluoromethane	ND	2.0	ug/L	0.24
2-Hexanone	ND	5.0	ug/L	1.7
Iodomethane	ND	1.0	ug/L	0.19
Isobutyl alcohol	ND	50	ug/L	15

(Continued on next page)

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-Q-TB

GC/MS Volatiles

Lot-Sample #...: D3C240249-006 **Work Order #...:** FKM9K1AA **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Methacrylonitrile	ND	10	ug/L	2.3
Methylene chloride	ND	5.0	ug/L	0.21
Methyl methacrylate	ND	1.0	ug/L	0.57
4-Methyl-2-pentanone	ND	5.0	ug/L	0.98
Propionitrile	ND	20	ug/L	3.8
Styrene	ND	1.0	ug/L	0.14
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	0.21
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.21
Tetrachloroethene	ND	1.0	ug/L	0.26
Toluene	ND	1.0	ug/L	0.15
1,1,1-Trichloroethane	ND	1.0	ug/L	0.16
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Trichloroethene	ND	1.0	ug/L	0.16
1,2,3-Trichloropropane	ND	1.0	ug/L	0.33
Vinyl acetate	ND	2.0	ug/L	0.56
Vinyl chloride	ND	2.0	ug/L	0.19
Xylenes (total)	ND	2.0	ug/L	0.41
1,2-Dibromo-3-chloropropane (DBCP)	ND	2.0	ug/L	0.47
1,2-Dibromoethane (EDB)	ND	1.0	ug/L	0.18
2-Butanone (MEK)	ND	5.0	ug/L	2.0

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	105	(80 - 120)
1,2-Dichloroethane-d4	108	(71 - 129)
4-Bromofluorobenzene	99	(80 - 120)
Toluene-d8	98	(80 - 120)

US GEOLOGICAL SURVEY

CAFB-Q-TB

GC/MS Volatiles

Lot-Sample #: D3C240249-006 **Work Order #:** FKM9K1AA **Matrix:** WATER

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT		RETENTION TIME	UNITS
Unknown		13 J	M	4.3648	ug/L
Unknown		2.1 J	M	12.728	ug/L

NOTE(S):

M: Result was measured against nearest internal standard assuming a response factor of 1.

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-WELL-B

GC/MS Volatiles

Lot-Sample #...: D3C240249-007 **Work Order #...:** FKM9N1AM **Matrix.....:** WATER
Date Sampled...: 03/18/03 14:20 **Date Received..:** 03/24/03
Prep Date.....: 03/30/03 **Analysis Date..:** 03/30/03
Prep Batch #...: 3090242 **Analysis Time..:** 19:34
Dilution Factor: 1

Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acetone	ND	10	ug/L	2.5
Acetonitrile	ND	20	ug/L	5.3
Acrolein	ND	20	ug/L	3.1
Acrylonitrile	ND	20	ug/L	3.1
Benzene	ND	1.0	ug/L	0.17
Bromodichloromethane	ND	1.0	ug/L	0.20
Bromoform	ND	1.0	ug/L	0.23
Bromomethane	ND	2.0	ug/L	0.22
Carbon disulfide	ND	1.0	ug/L	0.24
Carbon tetrachloride	ND	1.0	ug/L	0.20
Chlorobenzene	ND	1.0	ug/L	0.13
Chloroprene	ND	1.0	ug/L	0.21
Dibromochloromethane	ND	1.0	ug/L	0.19
Chloroethane	ND	2.0	ug/L	0.18
Chloroform	ND	1.0	ug/L	0.17
Chloromethane	ND	2.0	ug/L	0.91
Allyl chloride	ND	2.0	ug/L	0.11
Dibromomethane	ND	1.0	ug/L	0.31
trans-1,4-Dichloro-2-butene	ND	1.0	ug/L	0.45
Dichlorodifluoromethane	ND	2.0	ug/L	0.22
1,1-Dichloroethane	ND	1.0	ug/L	0.22
1,2-Dichloroethane	ND	1.0	ug/L	0.26
1,1-Dichloroethene	ND	1.0	ug/L	0.23
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.14
trans-1,2-Dichloroethene	ND	0.50	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.24
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.19
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.20
1,4-Dioxane	ND	200	ug/L	57
Ethylbenzene	ND	1.0	ug/L	0.12
Ethyl methacrylate	ND	1.0	ug/L	0.48
Trichlorofluoromethane	ND	2.0	ug/L	0.24
2-Hexanone	ND	5.0	ug/L	1.7
Iodomethane	ND	1.0	ug/L	0.19
Isobutyl alcohol	ND	50	ug/L	15

(Continued on next page)

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-WELL-B

GC/MS Volatiles

Lot-Sample #...: D3C240249-007 **Work Order #...:** FKM9N1AM **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Methacrylonitrile	ND	10	ug/L	2.3
Methylene chloride	ND	5.0	ug/L	0.21
Methyl methacrylate	ND	1.0	ug/L	0.57
4-Methyl-2-pentanone	ND	5.0	ug/L	0.98
Propionitrile	ND	20	ug/L	3.8
Styrene	ND	1.0	ug/L	0.14
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	0.21
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.21
Tetrachloroethene	ND	1.0	ug/L	0.26
Toluene	ND	1.0	ug/L	0.15
1,1,1-Trichloroethane	ND	1.0	ug/L	0.16
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Trichloroethene	ND	1.0	ug/L	0.16
1,2,3-Trichloropropane	ND	1.0	ug/L	0.33
Vinyl acetate	ND	2.0	ug/L	0.56
Vinyl chloride	ND	2.0	ug/L	0.19
Xylenes (total)	ND	2.0	ug/L	0.41
1,2-Dibromo-3-chloropropane (DBCP)	ND	2.0	ug/L	0.47
1,2-Dibromoethane (EDB)	ND	1.0	ug/L	0.18
2-Butanone (MEK)	ND	5.0	ug/L	2.0

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	113	(80 - 120)
1,2-Dichloroethane-d4	119	(71 - 129)
4-Bromofluorobenzene	108	(80 - 120)
Toluene-d8	112	(80 - 120)

US GEOLOGICAL SURVEY

CAFB-WELL-B

GC/MS Volatiles

Lot-Sample #: D3C240249-007 **Work Order #:** FKM9N1AM **Matrix:** WATER

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT		RETENTION TIME	UNITS
Unknown		1.6 J	M	12.729	ug/L
3-Methylheptyl acetate	72218-58-7	7.02 T2	M	15.773	ug/L

NOTE(S):

M: Result was measured against nearest internal standard assuming a response factor of 1.

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-WELL-B-TB

GC/MS Volatiles

Lot-Sample #...: D3C240249-008 **Work Order #...:** FKM9P1AA **Matrix.....:** WATER
Date Sampled...: 03/18/03 14:20 **Date Received..:** 03/24/03
Prep Date.....: 03/30/03 **Analysis Date..:** 03/30/03
Prep Batch #...: 3090242 **Analysis Time..:** 19:57
Dilution Factor: 1

Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acetone	ND	10	ug/L	2.5
Acetonitrile	ND	20	ug/L	5.3
Acrolein	ND	20	ug/L	3.1
Acrylonitrile	ND	20	ug/L	3.1
Benzene	ND	1.0	ug/L	0.17
Bromodichloromethane	ND	1.0	ug/L	0.20
Bromoform	ND	1.0	ug/L	0.23
Bromomethane	ND	2.0	ug/L	0.22
Carbon disulfide	ND	1.0	ug/L	0.24
Carbon tetrachloride	ND	1.0	ug/L	0.20
Chlorobenzene	ND	1.0	ug/L	0.13
Chloroprene	ND	1.0	ug/L	0.21
Dibromochloromethane	ND	1.0	ug/L	0.19
Chloroethane	ND	2.0	ug/L	0.18
Chloroform	ND	1.0	ug/L	0.17
Chloromethane	ND	2.0	ug/L	0.91
Allyl chloride	ND	2.0	ug/L	0.11
Dibromomethane	ND	1.0	ug/L	0.31
trans-1,4-Dichloro-2-butene	ND	1.0	ug/L	0.45
Dichlorodifluoromethane	ND	2.0	ug/L	0.22
1,1-Dichloroethane	ND	1.0	ug/L	0.22
1,2-Dichloroethane	ND	1.0	ug/L	0.26
1,1-Dichloroethene	ND	1.0	ug/L	0.23
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.14
trans-1,2-Dichloroethene	ND	0.50	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.24
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.19
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.20
1,4-Dioxane	ND	200	ug/L	57
Ethylbenzene	ND	1.0	ug/L	0.12
Ethyl methacrylate	ND	1.0	ug/L	0.48
Trichlorofluoromethane	ND	2.0	ug/L	0.24
2-Hexanone	ND	5.0	ug/L	1.7
Iodomethane	ND	1.0	ug/L	0.19
Isobutyl alcohol	ND	50	ug/L	15

(Continued on next page)

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-WELL-B-TB

GC/MS Volatiles

Lot-Sample #...: D3C240249-008 **Work Order #...:** FKM9P1AA **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Methacrylonitrile	ND	10	ug/L	2.3
Methylene chloride	ND	5.0	ug/L	0.21
Methyl methacrylate	ND	1.0	ug/L	0.57
4-Methyl-2-pentanone	ND	5.0	ug/L	0.98
Propionitrile	ND	20	ug/L	3.8
Styrene	ND	1.0	ug/L	0.14
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	0.21
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.21
Tetrachloroethene	ND	1.0	ug/L	0.26
Toluene	ND	1.0	ug/L	0.15
1,1,1-Trichloroethane	ND	1.0	ug/L	0.16
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Trichloroethene	ND	1.0	ug/L	0.16
1,2,3-Trichloropropane	ND	1.0	ug/L	0.33
Vinyl acetate	ND	2.0	ug/L	0.56
Vinyl chloride	ND	2.0	ug/L	0.19
Xylenes (total)	ND	2.0	ug/L	0.41
1,2-Dibromo-3-chloropropane (DBCP)	ND	2.0	ug/L	0.47
1,2-Dibromoethane (EDB)	ND	1.0	ug/L	0.18
2-Butanone (MEK)	ND	5.0	ug/L	2.0

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	105	(80 - 120)
1,2-Dichloroethane-d4	113	(71 - 129)
4-Bromofluorobenzene	104	(80 - 120)
Toluene-d8	105	(80 - 120)

US GEOLOGICAL SURVEY

CAFB-WELL-B-TB

GC/MS Volatiles

Lot-Sample #: D3C240249-008 Work Order #: FKM9P1AA Matrix: WATER

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT		RETENTION TIME	UNITS
Unknown		13 J	M	4.366	ug/L
Acetic acid, 2-ethylhexyl este	103-09-3	7.12 T2	M	15.774	ug/L

NOTE(S):

M: Result was measured against nearest internal standard assuming a response factor of 1.

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-D

GC/MS Semivolatiles

Lot-Sample #...: D3C210341-001 Work Order #...: FKKDL1AC Matrix.....: WG
Date Sampled...: 03/20/03 12:10 Date Received..: 03/21/03
Prep Date.....: 03/24/03 Analysis Date..: 04/01/03
Prep Batch #...: 3083180 Analysis Time..: 20:18
Dilution Factor: 1

Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	10	ug/L	1.0
Acenaphthylene	ND	10	ug/L	1.0
Acetophenone	ND	10	ug/L	1.9
2-Acetylaminofluorene	ND	100	ug/L	1.3
4-Aminobiphenyl	ND	50	ug/L	1.2
Aniline	ND	10	ug/L	4.1
Anthracene	ND	10	ug/L	1.6
Benzo(a)anthracene	ND	10	ug/L	1.2
Benzo(b)fluoranthene	ND	10	ug/L	2.2
Benzo(k)fluoranthene	ND	10	ug/L	2.0
Benzo(ghi)perylene	ND	10	ug/L	1.7
Benzo(a)pyrene	ND	10	ug/L	1.4
Benzyl alcohol	ND	10	ug/L	2.7
bis(2-Chloroethoxy) methane	ND	10	ug/L	1.3
bis(2-Chloroethyl)-ether	ND	10	ug/L	1.8
bis(2-Ethylhexyl) phthalate	ND	10	ug/L	3.1
4-Bromophenyl phenyl ether	ND	10	ug/L	1.5
Butyl benzyl phthalate	ND	10	ug/L	1.6
4-Chloroaniline	ND	10	ug/L	2.5
4-Chloro-3-methylphenol	ND	10	ug/L	2.0
2-Chloronaphthalene	ND	10	ug/L	1.1
2-Chlorophenol	ND	10	ug/L	1.8
4-Chlorophenyl phenyl ether	ND	10	ug/L	1.2
Chrysene	ND	10	ug/L	1.7
Dibenz(a,h)anthracene	ND	10	ug/L	1.3
Dibenzofuran	ND	10	ug/L	5.0
Di-n-butyl phthalate	ND	10	ug/L	1.1
1,2-Dichlorobenzene	ND	10	ug/L	1.6
1,3-Dichlorobenzene	ND	10	ug/L	1.7
1,4-Dichlorobenzene	ND	10	ug/L	1.8
3,3'-Dichlorobenzidine	ND	50	ug/L	8.4
2,4-Dichlorophenol	ND	10	ug/L	2.4
2,6-Dichlorophenol	ND	10	ug/L	1.2

(Continued on next page)

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-D

GC/MS Semivolatiles

Lot-Sample #...: D3C210341-001 Work Order #...: FKKDL1AC Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Diethyl phthalate	ND	10	ug/L	1.1
4-Dimethylaminoazobenzene	ND	20	ug/L	1.2
7,12-Dimethylbenz(a)-anthracene	ND	20	ug/L	1.6
3,3'-Dimethylbenzidine	ND	20	ug/L	10
alpha,alpha-Dimethylphenethylamine	ND	50	ug/L	38
2,4-Dimethylphenol	ND	10	ug/L	2.9
Dimethyl phthalate	ND	10	ug/L	5.0
Di-n-octyl phthalate	ND	10	ug/L	1.5
1,3-Dinitrobenzene	ND	10	ug/L	1.7
4,6-Dinitro-2-methylphenol	ND	50	ug/L	18
2,4-Dinitrophenol	ND	50	ug/L	18
2,4-Dinitrotoluene	ND	10	ug/L	2.6
2,6-Dinitrotoluene	ND	10	ug/L	1.6
2-sec-Butyl-4,6-dinitro-phenol	ND	20	ug/L	1.6
Diphenylamine	ND	10	ug/L	1.2
Ethyl methanesulfonate	ND	10	ug/L	1.8
Fluoranthene	ND	10	ug/L	1.5
Fluorene	ND	10	ug/L	1.3
Hexachlorobenzene	ND	10	ug/L	1.7
Hexachlorobutadiene	ND	10	ug/L	1.7
Hexachlorocyclopenta-diene	ND	50	ug/L	5.0
Hexachloroethane	ND	10	ug/L	2.2
Hexachloropropene	ND	100	ug/L	1.1
Indeno(1,2,3-cd)pyrene	ND	10	ug/L	1.2
Isophorone	ND	10	ug/L	2.3
Isosafrole	ND	20	ug/L	2.0
Methapyrilene	ND	50	ug/L	30
3-Methylcholanthrene	ND	20	ug/L	2.5
Methyl methanesulfonate	ND	10	ug/L	2.2
2-Methylnaphthalene	ND	10	ug/L	1.5
2-Methylphenol	ND	10	ug/L	2.1
3-Methylphenol	ND	10	ug/L	2.1
4-Methylphenol	ND	10	ug/L	2.1
Naphthalene	ND	10	ug/L	1.2
1,4-Naphthoquinone	ND	50	ug/L	2.0
1-Naphthylamine	ND	10	ug/L	1.6
2-Naphthylamine	ND	10	ug/L	1.4
2-Nitroaniline	ND	50	ug/L	1.8

(Continued on next page)

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-D

GC/MS Semivolatiles

Lot-Sample #...: D3C210341-001 Work Order #...: FKKDL1AC Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
3-Nitroaniline	ND	50	ug/L	7.6
4-Nitroaniline	ND	50	ug/L	2.1
Nitrobenzene	ND	10	ug/L	2.5
2-Nitrophenol	ND	10	ug/L	1.8
4-Nitrophenol	ND	50	ug/L	18
N-Nitrosodi-n-butylamine	ND	10	ug/L	2.1
N-Nitrosodiethylamine	ND	10	ug/L	2.0
N-Nitrosodimethylamine	ND	10	ug/L	2.1
N-Nitrosodi-n-propyl-amine	ND	10	ug/L	1.6
N-Nitrosodiphenylamine	ND	10	ug/L	1.5
N-Nitrosomethylethylamine	ND	10	ug/L	2.3
N-Nitrosomorpholine	ND	10	ug/L	2.4
N-Nitrosopiperidine	ND	10	ug/L	1.8
N-Nitrosopyrrolidine	ND	10	ug/L	2.3
5-Nitro-o-toluidine	ND	20	ug/L	1.2
Pentachlorobenzene	ND	10	ug/L	1.6
Pentachloroethane	ND	50	ug/L	2.3
Pentachloronitrobenzene	ND	50	ug/L	2.4
Pentachlorophenol	ND	50	ug/L	11
Phenacetin	ND	20	ug/L	1.3
Phenanthrene	ND	10	ug/L	1.3
Phenol	ND	10	ug/L	1.4
2-Picoline	ND	20	ug/L	1.3
Pronamide	ND	20	ug/L	1.4
Pyrene	ND	10	ug/L	2.0
Pyridine	ND	20	ug/L	2.6
Safrole	ND	50	ug/L	1.4
1,2,4,5-Tetrachloro-benzene	ND	10	ug/L	1.8
2,3,4,6-Tetrachlorophenol	ND	50	ug/L	4.5
1,2,4-Trichloro-benzene	ND	10	ug/L	1.5
2,4,5-Trichloro-phenol	ND	10	ug/L	1.3
2,4,6-Trichloro-phenol	ND	10	ug/L	1.3
1,3,5-Trinitrobenzene	ND	50	ug/L	2.5
Aramite	ND	20	ug/L	1.9
2-Toluidine	ND	10	ug/L	1.5
2,2'-oxybis(1-Chloropropane)	ND	10	ug/L	1.5

(Continued on next page)

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-D

GC/MS Semivolatiles

Lot-Sample #...: D3C210341-001 **Work Order #...:** FKKDL1AC **Matrix.....:** WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Fluorophenol	85	(44 - 105)
Phenol-d5	84	(45 - 107)
Nitrobenzene-d5	91	(52 - 109)
2-Fluorobiphenyl	85	(40 - 103)
2,4,6-Tribromophenol	91	(48 - 109)
Terphenyl-d14	85	(39 - 115)

US GEOLOGICAL SURVEY

CAFB-D

GC/MS Semivolatiles

Lot-Sample #: D3C210341-001 **Work Order #:** FKKDL1AC **Matrix:** WG

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT	RETENTION TIME	UNITS
None				ug/L

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-C

GC/MS Semivolatiles

Lot-Sample #...: D3C210341-002 Work Order #...: FKKD21AN Matrix.....: WG
Date Sampled...: 03/20/03 13:20 Date Received..: 03/21/03
Prep Date.....: 03/24/03 Analysis Date..: 04/01/03
Prep Batch #...: 3083180 Analysis Time..: 20:41
Dilution Factor: 1

Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	10	ug/L	1.0
Acenaphthylene	ND	10	ug/L	1.0
Acetophenone	ND	10	ug/L	1.9
2-Acetylaminofluorene	ND	100	ug/L	1.3
4-Aminobiphenyl	ND	50	ug/L	1.2
Aniline	ND	10	ug/L	4.1
Anthracene	ND	10	ug/L	1.6
Benzo(a)anthracene	ND	10	ug/L	1.2
Benzo(b)fluoranthene	ND	10	ug/L	2.2
Benzo(k)fluoranthene	ND	10	ug/L	2.0
Benzo(ghi)perylene	ND	10	ug/L	1.7
Benzo(a)pyrene	ND	10	ug/L	1.4
Benzyl alcohol	ND	10	ug/L	2.7
bis(2-Chloroethoxy) methane	ND	10	ug/L	1.3
bis(2-Chloroethyl)-ether	ND	10	ug/L	1.8
bis(2-Ethylhexyl) phthalate	ND	10	ug/L	3.1
4-Bromophenyl phenyl ether	ND	10	ug/L	1.5
Butyl benzyl phthalate	ND	10	ug/L	1.6
4-Chloroaniline	ND	10	ug/L	2.5
4-Chloro-3-methylphenol	ND	10	ug/L	2.0
2-Chloronaphthalene	ND	10	ug/L	1.1
2-Chlorophenol	ND	10	ug/L	1.8
4-Chlorophenyl phenyl ether	ND	10	ug/L	1.2
Chrysene	ND	10	ug/L	1.7
Dibenz(a,h)anthracene	ND	10	ug/L	1.3
Dibenzofuran	ND	10	ug/L	5.0
Di-n-butyl phthalate	ND	10	ug/L	1.1
1,2-Dichlorobenzene	ND	10	ug/L	1.6
1,3-Dichlorobenzene	ND	10	ug/L	1.7
1,4-Dichlorobenzene	ND	10	ug/L	1.8
3,3'-Dichlorobenzidine	ND	50	ug/L	8.4
2,4-Dichlorophenol	ND	10	ug/L	2.4
2,6-Dichlorophenol	ND	10	ug/L	1.2

(Continued on next page)

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-C

GC/MS Semivolatiles

Lot-Sample #...: D3C210341-002 Work Order #...: FKKD21AN Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Diethyl phthalate	ND	10	ug/L	1.1
4-Dimethylaminoazobenzene	ND	20	ug/L	1.2
7,12-Dimethylbenz(a)-anthracene	ND	20	ug/L	1.6
3,3'-Dimethylbenzidine	ND	20	ug/L	10
alpha,alpha-Dimethylphenethylamine	ND	50	ug/L	38
2,4-Dimethylphenol	ND	10	ug/L	2.9
Dimethyl phthalate	ND	10	ug/L	5.0
Di-n-octyl phthalate	ND	10	ug/L	1.5
1,3-Dinitrobenzene	ND	10	ug/L	1.7
4,6-Dinitro-2-methylphenol	ND	50	ug/L	18
2,4-Dinitrophenol	ND	50	ug/L	18
2,4-Dinitrotoluene	ND	10	ug/L	2.6
2,6-Dinitrotoluene	ND	10	ug/L	1.6
2-sec-Butyl-4,6-dinitro-phenol	ND	20	ug/L	1.6
Diphenylamine	ND	10	ug/L	1.2
Ethyl methanesulfonate	ND	10	ug/L	1.8
Fluoranthene	ND	10	ug/L	1.5
Fluorene	ND	10	ug/L	1.3
Hexachlorobenzene	ND	10	ug/L	1.7
Hexachlorobutadiene	ND	10	ug/L	1.7
Hexachlorocyclopenta-diene	ND	50	ug/L	5.0
Hexachloroethane	ND	10	ug/L	2.2
Hexachloropropene	ND	100	ug/L	1.1
Indeno(1,2,3-cd)pyrene	ND	10	ug/L	1.2
Isophorone	ND	10	ug/L	2.3
Isosafrole	ND	20	ug/L	2.0
Methapyrilene	ND	50	ug/L	30
3-Methylcholanthrene	ND	20	ug/L	2.5
Methyl methanesulfonate	ND	10	ug/L	2.2
2-Methylnaphthalene	ND	10	ug/L	1.5
2-Methylphenol	ND	10	ug/L	2.1
3-Methylphenol	ND	10	ug/L	2.1
4-Methylphenol	ND	10	ug/L	2.1
Naphthalene	ND	10	ug/L	1.2
1,4-Naphthoquinone	ND	50	ug/L	2.0
1-Naphthylamine	ND	10	ug/L	1.6
2-Naphthylamine	ND	10	ug/L	1.4
2-Nitroaniline	ND	50	ug/L	1.8

(Continued on next page)

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-C

GC/MS Semivolatiles

Lot-Sample #...: D3C210341-002 Work Order #...: FKKD21AN Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
3-Nitroaniline	ND	50	ug/L	7.6
4-Nitroaniline	ND	50	ug/L	2.1
Nitrobenzene	ND	10	ug/L	2.5
2-Nitrophenol	ND	10	ug/L	1.8
4-Nitrophenol	ND	50	ug/L	18
N-Nitrosodi-n-butylamine	ND	10	ug/L	2.1
N-Nitrosodiethylamine	ND	10	ug/L	2.0
N-Nitrosodimethylamine	ND	10	ug/L	2.1
N-Nitrosodi-n-propyl-amine	ND	10	ug/L	1.6
N-Nitrosodiphenylamine	ND	10	ug/L	1.5
N-Nitrosomethylethylamine	ND	10	ug/L	2.3
N-Nitrosomorpholine	ND	10	ug/L	2.4
N-Nitrosopiperidine	ND	10	ug/L	1.8
N-Nitrosopyrrolidine	ND	10	ug/L	2.3
5-Nitro-o-toluidine	ND	20	ug/L	1.2
Pentachlorobenzene	ND	10	ug/L	1.6
Pentachloroethane	ND	50	ug/L	2.3
Pentachloronitrobenzene	ND	50	ug/L	2.4
Pentachlorophenol	ND	50	ug/L	11
Phenacetin	ND	20	ug/L	1.3
Phenanthrene	ND	10	ug/L	1.3
Phenol	ND	10	ug/L	1.4
2-Picoline	ND	20	ug/L	1.3
Pronamide	ND	20	ug/L	1.4
Pyrene	ND	10	ug/L	2.0
Pyridine	ND	20	ug/L	2.6
Safrole	ND	50	ug/L	1.4
1,2,4,5-Tetrachloro-benzene	ND	10	ug/L	1.8
2,3,4,6-Tetrachlorophenol	ND	50	ug/L	4.5
1,2,4-Trichloro-benzene	ND	10	ug/L	1.5
2,4,5-Trichloro-phenol	ND	10	ug/L	1.3
2,4,6-Trichloro-phenol	ND	10	ug/L	1.3
1,3,5-Trinitrobenzene	ND	50	ug/L	2.5
Aramite	ND	20	ug/L	1.9
2-Toluidine	ND	10	ug/L	1.5
2,2'-oxybis(1-Chloropropane)	ND	10	ug/L	1.5

(Continued on next page)

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-C

GC/MS Semivolatiles

Lot-Sample #...: D3C210341-002 Work Order #...: FKKD21AN Matrix.....: WG

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Fluorophenol	78	(44 - 105)
Phenol-d5	76	(45 - 107)
Nitrobenzene-d5	84	(52 - 109)
2-Fluorobiphenyl	81	(40 - 103)
2,4,6-Tribromophenol	90	(48 - 109)
Terphenyl-d14	82	(39 - 115)

US GEOLOGICAL SURVEY

CAFB-C

GC/MS Semivolatiles

Lot-Sample #: D3C210341-002 **Work Order #:** FKKD21AN **Matrix:** WG

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT		RETENTION TIME	UNITS
Unknown		44 J	M	4.3004	ug/L

NOTE(S):

M: Result was measured against nearest internal standard assuming a response factor of 1.

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-u

GC/MS Semivolatiles

Lot-Sample #...: D3C240249-001 **Work Order #...:** FKM871AC **Matrix.....:** WATER
Date Sampled...: 03/19/03 08:30 **Date Received..:** 03/24/03
Prep Date.....: 03/26/03 **Analysis Date..:** 04/02/03
Prep Batch #...: 3085185 **Analysis Time..:** 17:08
Dilution Factor: 1

Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	10	ug/L	1.0
Acenaphthylene	ND	10	ug/L	1.0
Acetophenone	ND	10	ug/L	1.9
2-Acetylaminofluorene	ND	100	ug/L	1.3
4-Aminobiphenyl	ND	50	ug/L	1.2
Aniline	ND	10	ug/L	4.1
Anthracene	ND	10	ug/L	1.6
Benzo(a)anthracene	ND	10	ug/L	1.2
Benzo(b)fluoranthene	ND	10	ug/L	2.2
Benzo(k)fluoranthene	ND	10	ug/L	2.0
Benzo(ghi)perylene	ND	10	ug/L	1.7
Benzo(a)pyrene	ND	10	ug/L	1.4
Benzyl alcohol	ND	10	ug/L	2.7
bis(2-Chloroethoxy) methane	ND	10	ug/L	1.3
bis(2-Chloroethyl)-ether	ND	10	ug/L	1.8
bis(2-Ethylhexyl) phthalate	ND	10	ug/L	3.1
4-Bromophenyl phenyl ether	ND	10	ug/L	1.5
Butyl benzyl phthalate	ND	10	ug/L	1.6
4-Chloroaniline	ND	10	ug/L	2.5
4-Chloro-3-methylphenol	ND	10	ug/L	2.0
2-Chloronaphthalene	ND	10	ug/L	1.1
2-Chlorophenol	ND	10	ug/L	1.8
4-Chlorophenyl phenyl ether	ND	10	ug/L	1.2
Chrysene	ND	10	ug/L	1.7
Dibenz(a,h)anthracene	ND	10	ug/L	1.3
Dibenzofuran	ND	10	ug/L	5.0
Di-n-butyl phthalate	ND	10	ug/L	1.1
1,2-Dichlorobenzene	ND	10	ug/L	1.6
1,3-Dichlorobenzene	ND	10	ug/L	1.7
1,4-Dichlorobenzene	ND	10	ug/L	1.8
3,3'-Dichlorobenzidine	ND	50	ug/L	8.4
2,4-Dichlorophenol	ND	10	ug/L	2.4
2,6-Dichlorophenol	ND	10	ug/L	1.2

(Continued on next page)

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-u

GC/MS Semivolatiles

Lot-Sample #...: D3C240249-001 Work Order #...: FKM871AC Matrix.....: WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Diethyl phthalate	ND	10	ug/L	1.1
4-Dimethylaminoazobenzene	ND	20	ug/L	1.2
7,12-Dimethylbenz(a)-anthracene	ND	20	ug/L	1.6
3,3'-Dimethylbenzidine	ND	20	ug/L	10
alpha,alpha-Dimethylphenethylamine	ND	50	ug/L	38
2,4-Dimethylphenol	ND	10	ug/L	2.9
Dimethyl phthalate	ND	10	ug/L	5.0
Di-n-octyl phthalate	ND	10	ug/L	1.5
1,3-Dinitrobenzene	ND	10	ug/L	1.7
4,6-Dinitro-2-methylphenol	ND	50	ug/L	18
2,4-Dinitrophenol	ND	50	ug/L	18
2,4-Dinitrotoluene	ND	10	ug/L	2.6
2,6-Dinitrotoluene	ND	10	ug/L	1.6
2-sec-Butyl-4,6-dinitrophenol	ND	20	ug/L	1.6
Diphenylamine	ND	10	ug/L	1.2
Ethyl methanesulfonate	ND	10	ug/L	1.8
Fluoranthene	ND	10	ug/L	1.5
Fluorene	ND	10	ug/L	1.3
Hexachlorobenzene	ND	10	ug/L	1.7
Hexachlorobutadiene	ND	10	ug/L	1.7
Hexachlorocyclopentadiene	ND	50	ug/L	5.0
Hexachloroethane	ND	10	ug/L	2.2
Hexachloropropene	ND	100	ug/L	1.1
Indeno(1,2,3-cd)pyrene	ND	10	ug/L	1.2
Isophorone	ND	10	ug/L	2.3
Isosafrole	ND	20	ug/L	2.0
Methapyrilene	ND	50	ug/L	30
3-Methylcholanthrene	ND	20	ug/L	2.5
Methyl methanesulfonate	ND	10	ug/L	2.2
2-Methylnaphthalene	ND	10	ug/L	1.5
2-Methylphenol	ND	10	ug/L	2.1
3-Methylphenol	ND	10	ug/L	2.1
4-Methylphenol	ND	10	ug/L	2.1
Naphthalene	ND	10	ug/L	1.2
1,4-Naphthoquinone	ND	50	ug/L	2.0
1-Naphthylamine	ND	10	ug/L	1.6
2-Naphthylamine	ND	10	ug/L	1.4
2-Nitroaniline	ND	50	ug/L	1.8

(Continued on next page)

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-u

GC/MS Semivolatiles

Lot-Sample #...: D3C240249-001 Work Order #...: FKM871AC Matrix.....: WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
3-Nitroaniline	ND	50	ug/L	7.6
4-Nitroaniline	ND	50	ug/L	2.1
Nitrobenzene	ND	10	ug/L	2.5
2-Nitrophenol	ND	10	ug/L	1.8
4-Nitrophenol	ND	50	ug/L	18
N-Nitrosodi-n-butylamine	ND	10	ug/L	2.1
N-Nitrosodiethylamine	ND	10	ug/L	2.0
N-Nitrosodimethylamine	ND	10	ug/L	2.1
N-Nitrosodi-n-propyl-amine	ND	10	ug/L	1.6
N-Nitrosodiphenylamine	ND	10	ug/L	1.5
N-Nitrosomethylethylamine	ND	10	ug/L	2.3
N-Nitrosomorpholine	ND	10	ug/L	2.4
N-Nitrosopiperidine	ND	10	ug/L	1.8
N-Nitrosopyrrolidine	ND	10	ug/L	2.3
5-Nitro-o-toluidine	ND	20	ug/L	1.2
Pentachlorobenzene	ND	10	ug/L	1.6
Pentachloroethane	ND	50	ug/L	2.3
Pentachloronitrobenzene	ND	50	ug/L	2.4
Pentachlorophenol	ND	50	ug/L	11
Phenacetin	ND	20	ug/L	1.3
Phenanthrene	ND	10	ug/L	1.3
Phenol	ND	10	ug/L	1.4
2-Picoline	ND	20	ug/L	1.3
Pronamide	ND	20	ug/L	1.4
Pyrene	ND	10	ug/L	2.0
Pyridine	ND	20	ug/L	2.6
Safrole	ND	50	ug/L	1.4
1,2,4,5-Tetrachloro-benzene	ND	10	ug/L	1.8
2,3,4,6-Tetrachlorophenol	ND	50	ug/L	4.5
1,2,4-Trichloro-benzene	ND	10	ug/L	1.5
2,4,5-Trichloro-phenol	ND	10	ug/L	1.3
2,4,6-Trichloro-phenol	ND	10	ug/L	1.3
1,3,5-Trinitrobenzene	ND	50	ug/L	2.5
Aramite	ND	20	ug/L	1.9
2-Toluidine	ND	10	ug/L	1.5
2,2'-oxybis(1-Chloropropane)	ND	10	ug/L	1.5

(Continued on next page)

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-u

GC/MS Semivolatiles

Lot-Sample #...: D3C240249-001 **Work Order #...:** FKM871AC **Matrix.....:** WATER

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Fluorophenol	68	(44 - 105)
Phenol-d5	68	(45 - 107)
Nitrobenzene-d5	72	(52 - 109)
2-Fluorobiphenyl	63	(40 - 103)
2,4,6-Tribromophenol	71	(48 - 109)
Terphenyl-d14	73	(39 - 115)

US GEOLOGICAL SURVEY

CAFB-u

GC/MS Semivolatiles

Lot-Sample #: D3C240249-001 **Work Order #:** FKM871AC **Matrix:** WATER

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT		RETENTION TIME	UNITS
Unknown		16 J	M	2.0267	ug/L
Unknown		26 J	M	2.8527	ug/L
Unknown		12 J	M	3.5178	ug/L
Unknown		40 J	M	3.5768	ug/L
Unknown		4.6 J	M	6.6822	ug/L

NOTE(S):

M: Result was measured against nearest internal standard assuming a response factor of 1.

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-uu

GC/MS Semivolatiles

Lot-Sample #...: D3C240249-002 Work Order #...: FKM9C1AN Matrix.....: WATER
Date Sampled...: 03/19/03 08:35 Date Received..: 03/24/03
Prep Date.....: 03/26/03 Analysis Date..: 04/02/03
Prep Batch #...: 3085185 Analysis Time..: 17:32
Dilution Factor: 1

Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	10	ug/L	1.0
Acenaphthylene	ND	10	ug/L	1.0
Acetophenone	ND	10	ug/L	1.9
2-Acetylaminofluorene	ND	100	ug/L	1.3
4-Aminobiphenyl	ND	50	ug/L	1.2
Aniline	ND	10	ug/L	4.1
Anthracene	ND	10	ug/L	1.6
Benzo(a)anthracene	ND	10	ug/L	1.2
Benzo(b)fluoranthene	ND	10	ug/L	2.2
Benzo(k)fluoranthene	ND	10	ug/L	2.0
Benzo(ghi)perylene	ND	10	ug/L	1.7
Benzo(a)pyrene	ND	10	ug/L	1.4
Benzyl alcohol	ND	10	ug/L	2.7
bis(2-Chloroethoxy) methane	ND	10	ug/L	1.3
bis(2-Chloroethyl)-ether	ND	10	ug/L	1.8
bis(2-Ethylhexyl) phthalate	ND	10	ug/L	3.1
4-Bromophenyl phenyl ether	ND	10	ug/L	1.5
Butyl benzyl phthalate	ND	10	ug/L	1.6
4-Chloroaniline	ND	10	ug/L	2.5
4-Chloro-3-methylphenol	ND	10	ug/L	2.0
2-Chloronaphthalene	ND	10	ug/L	1.1
2-Chlorophenol	ND	10	ug/L	1.8
4-Chlorophenyl phenyl ether	ND	10	ug/L	1.2
Chrysene	ND	10	ug/L	1.7
Dibenz(a,h)anthracene	ND	10	ug/L	1.3
Dibenzofuran	ND	10	ug/L	5.0
Di-n-butyl phthalate	ND	10	ug/L	1.1
1,2-Dichlorobenzene	ND	10	ug/L	1.6
1,3-Dichlorobenzene	ND	10	ug/L	1.7
1,4-Dichlorobenzene	ND	10	ug/L	1.8
3,3'-Dichlorobenzidine	ND	50	ug/L	8.4
2,4-Dichlorophenol	ND	10	ug/L	2.4
2,6-Dichlorophenol	ND	10	ug/L	1.2

(Continued on next page)

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-uu

GC/MS Semivolatiles

Lot-Sample #...: D3C240249-002 Work Order #...: FKM9C1AN Matrix.....: WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Diethyl phthalate	ND	10	ug/L	1.1
4-Dimethylaminoazobenzene	ND	20	ug/L	1.2
7,12-Dimethylbenz(a)-anthracene	ND	20	ug/L	1.6
3,3'-Dimethylbenzidine	ND	20	ug/L	10
alpha,alpha-Dimethylphenethylamine	ND	50	ug/L	38
2,4-Dimethylphenol	ND	10	ug/L	2.9
Dimethyl phthalate	ND	10	ug/L	5.0
Di-n-octyl phthalate	ND	10	ug/L	1.5
1,3-Dinitrobenzene	ND	10	ug/L	1.7
4,6-Dinitro-2-methylphenol	ND	50	ug/L	18
2,4-Dinitrophenol	ND	50	ug/L	18
2,4-Dinitrotoluene	ND	10	ug/L	2.6
2,6-Dinitrotoluene	ND	10	ug/L	1.6
2-sec-Butyl-4,6-dinitrophenol	ND	20	ug/L	1.6
Diphenylamine	ND	10	ug/L	1.2
Ethyl methanesulfonate	ND	10	ug/L	1.8
Fluoranthene	ND	10	ug/L	1.5
Fluorene	ND	10	ug/L	1.3
Hexachlorobenzene	ND	10	ug/L	1.7
Hexachlorobutadiene	ND	10	ug/L	1.7
Hexachlorocyclopentadiene	ND	50	ug/L	5.0
Hexachloroethane	ND	10	ug/L	2.2
Hexachloropropene	ND	100	ug/L	1.1
Indeno(1,2,3-cd)pyrene	ND	10	ug/L	1.2
Isophorone	ND	10	ug/L	2.3
Isosafrole	ND	20	ug/L	2.0
Methapyrilene	ND	50	ug/L	30
3-Methylcholanthrene	ND	20	ug/L	2.5
Methyl methanesulfonate	ND	10	ug/L	2.2
2-Methylnaphthalene	ND	10	ug/L	1.5
2-Methylphenol	ND	10	ug/L	2.1
3-Methylphenol	ND	10	ug/L	2.1
4-Methylphenol	ND	10	ug/L	2.1
Naphthalene	ND	10	ug/L	1.2
1,4-Naphthoquinone	ND	50	ug/L	2.0
1-Naphthylamine	ND	10	ug/L	1.6
2-Naphthylamine	ND	10	ug/L	1.4
2-Nitroaniline	ND	50	ug/L	1.8

(Continued on next page)

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-uu

GC/MS Semivolatiles

Lot-Sample #...: D3C240249-002 Work Order #...: FKM9C1AN Matrix.....: WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
3-Nitroaniline	ND	50	ug/L	7.6
4-Nitroaniline	ND	50	ug/L	2.1
Nitrobenzene	ND	10	ug/L	2.5
2-Nitrophenol	ND	10	ug/L	1.8
4-Nitrophenol	ND	50	ug/L	18
N-Nitrosodi-n-butylamine	ND	10	ug/L	2.1
N-Nitrosodiethylamine	ND	10	ug/L	2.0
N-Nitrosodimethylamine	ND	10	ug/L	2.1
N-Nitrosodi-n-propyl-amine	ND	10	ug/L	1.6
N-Nitrosodiphenylamine	ND	10	ug/L	1.5
N-Nitrosomethylethylamine	ND	10	ug/L	2.3
N-Nitrosomorpholine	ND	10	ug/L	2.4
N-Nitrosopiperidine	ND	10	ug/L	1.8
N-Nitrosopyrrolidine	ND	10	ug/L	2.3
5-Nitro-o-toluidine	ND	20	ug/L	1.2
Pentachlorobenzene	ND	10	ug/L	1.6
Pentachloroethane	ND	50	ug/L	2.3
Pentachloronitrobenzene	ND	50	ug/L	2.4
Pentachlorophenol	ND	50	ug/L	11
Phenacetin	ND	20	ug/L	1.3
Phenanthrene	ND	10	ug/L	1.3
Phenol	ND	10	ug/L	1.4
2-Picoline	ND	20	ug/L	1.3
Pronamide	ND	20	ug/L	1.4
Pyrene	ND	10	ug/L	2.0
Pyridine	ND	20	ug/L	2.6
Safrole	ND	50	ug/L	1.4
1,2,4,5-Tetrachloro-benzene	ND	10	ug/L	1.8
2,3,4,6-Tetrachlorophenol	ND	50	ug/L	4.5
1,2,4-Trichloro-benzene	ND	10	ug/L	1.5
2,4,5-Trichloro-phenol	ND	10	ug/L	1.3
2,4,6-Trichloro-phenol	ND	10	ug/L	1.3
1,3,5-Trinitrobenzene	ND	50	ug/L	2.5
Aramite	ND	20	ug/L	1.9
2-Toluidine	ND	10	ug/L	1.5
2,2'-oxybis(1-Chloropropane)	ND	10	ug/L	1.5

(Continued on next page)

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-uu

GC/MS Semivolatiles

Lot-Sample #...: D3C240249-002 **Work Order #...:** FKM9C1AN **Matrix.....:** WATER

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Fluorophenol	51	(44 - 105)
Phenol-d5	52	(45 - 107)
Nitrobenzene-d5	56	(52 - 109)
2-Fluorobiphenyl	46	(40 - 103)
2,4,6-Tribromophenol	53	(48 - 109)
Terphenyl-d14	54	(39 - 115)

US GEOLOGICAL SURVEY

CAFB-uu

GC/MS Semivolatiles

Lot-Sample #: D3C240249-002 Work Order #: FKM9C1AN Matrix: WATER

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT		RETENTION TIME	UNITS
Unknown		6.0 J	M	2.024	ug/L
Unknown		4.8 J	M	2.0455	ug/L
Unknown		5.4 J	M	2.6623	ug/L
Unknown		7.2 J	M	2.6837	ug/L
Unknown		22 J	M	2.8553	ug/L
Unknown		9.3 J	M	3.515	ug/L
1-Propene, 1,2,3-trichloro-	96-19-5	32 J	M	3.574	ug/L

NOTE(S):

M: Result was measured against nearest internal standard assuming a response factor of 1.

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-T

GC/MS Semivolatiles

Lot-Sample #...: D3C240249-003 Work Order #...: FKM9D1AN Matrix.....: WATER
Date Sampled...: 03/19/03 10:00 Date Received..: 03/24/03
Prep Date.....: 03/26/03 Analysis Date..: 04/02/03
Prep Batch #...: 3085185 Analysis Time..: 17:56
Dilution Factor: 1

Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	10	ug/L	1.0
Acenaphthylene	ND	10	ug/L	1.0
Acetophenone	ND	10	ug/L	1.9
2-Acetylaminofluorene	ND	100	ug/L	1.3
4-Aminobiphenyl	ND	50	ug/L	1.2
Aniline	ND	10	ug/L	4.1
Anthracene	ND	10	ug/L	1.6
Benzo(a)anthracene	ND	10	ug/L	1.2
Benzo(b)fluoranthene	ND	10	ug/L	2.2
Benzo(k)fluoranthene	ND	10	ug/L	2.0
Benzo(ghi)perylene	ND	10	ug/L	1.7
Benzo(a)pyrene	ND	10	ug/L	1.4
Benzyl alcohol	ND	10	ug/L	2.7
bis(2-Chloroethoxy) methane	ND	10	ug/L	1.3
bis(2-Chloroethyl)-ether	ND	10	ug/L	1.8
bis(2-Ethylhexyl) phthalate	ND	10	ug/L	3.1
4-Bromophenyl phenyl ether	ND	10	ug/L	1.5
Butyl benzyl phthalate	ND	10	ug/L	1.6
4-Chloroaniline	ND	10	ug/L	2.5
4-Chloro-3-methylphenol	ND	10	ug/L	2.0
2-Chloronaphthalene	ND	10	ug/L	1.1
2-Chlorophenol	ND	10	ug/L	1.8
4-Chlorophenyl phenyl ether	ND	10	ug/L	1.2
Chrysene	ND	10	ug/L	1.7
Dibenz(a,h)anthracene	ND	10	ug/L	1.3
Dibenzofuran	ND	10	ug/L	5.0
Di-n-butyl phthalate	ND	10	ug/L	1.1
1,2-Dichlorobenzene	ND	10	ug/L	1.6
1,3-Dichlorobenzene	ND	10	ug/L	1.7
1,4-Dichlorobenzene	ND	10	ug/L	1.8
3,3'-Dichlorobenzidine	ND	50	ug/L	8.4
2,4-Dichlorophenol	ND	10	ug/L	2.4
2,6-Dichlorophenol	ND	10	ug/L	1.2

(Continued on next page)

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-T

GC/MS Semivolatiles

Lot-Sample #...: D3C240249-003 Work Order #...: FKM9D1AN Matrix.....: WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Diethyl phthalate	ND	10	ug/L	1.1
4-Dimethylaminoazobenzene	ND	20	ug/L	1.2
7,12-Dimethylbenz(a)-anthracene	ND	20	ug/L	1.6
3,3'-Dimethylbenzidine	ND	20	ug/L	10
alpha,alpha-Dimethylphenethylamine	ND	50	ug/L	38
2,4-Dimethylphenol	ND	10	ug/L	2.9
Dimethyl phthalate	ND	10	ug/L	5.0
Di-n-octyl phthalate	ND	10	ug/L	1.5
1,3-Dinitrobenzene	ND	10	ug/L	1.7
4,6-Dinitro-2-methylphenol	ND	50	ug/L	18
2,4-Dinitrophenol	ND	50	ug/L	18
2,4-Dinitrotoluene	ND	10	ug/L	2.6
2,6-Dinitrotoluene	ND	10	ug/L	1.6
2-sec-Butyl-4,6-dinitrophenol	ND	20	ug/L	1.6
Diphenylamine	ND	10	ug/L	1.2
Ethyl methanesulfonate	ND	10	ug/L	1.8
Fluoranthene	ND	10	ug/L	1.5
Fluorene	ND	10	ug/L	1.3
Hexachlorobenzene	ND	10	ug/L	1.7
Hexachlorobutadiene	ND	10	ug/L	1.7
Hexachlorocyclopentadiene	ND	50	ug/L	5.0
Hexachloroethane	ND	10	ug/L	2.2
Hexachloropropene	ND	100	ug/L	1.1
Indeno(1,2,3-cd)pyrene	ND	10	ug/L	1.2
Isophorone	ND	10	ug/L	2.3
Isosafrole	ND	20	ug/L	2.0
Methapyrilene	ND	50	ug/L	30
3-Methylcholanthrene	ND	20	ug/L	2.5
Methyl methanesulfonate	ND	10	ug/L	2.2
2-Methylnaphthalene	ND	10	ug/L	1.5
2-Methylphenol	ND	10	ug/L	2.1
3-Methylphenol	ND	10	ug/L	2.1
4-Methylphenol	ND	10	ug/L	2.1
Naphthalene	ND	10	ug/L	1.2
1,4-Naphthoquinone	ND	50	ug/L	2.0
1-Naphthylamine	ND	10	ug/L	1.6
2-Naphthylamine	ND	10	ug/L	1.4
2-Nitroaniline	ND	50	ug/L	1.8

(Continued on next page)

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-T

GC/MS Semivolatiles

Lot-Sample #...: D3C240249-003 **Work Order #...:** FKM9D1AN **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
3-Nitroaniline	ND	50	ug/L	7.6
4-Nitroaniline	ND	50	ug/L	2.1
Nitrobenzene	ND	10	ug/L	2.5
2-Nitrophenol	ND	10	ug/L	1.8
4-Nitrophenol	ND	50	ug/L	18
N-Nitrosodi-n-butylamine	ND	10	ug/L	2.1
N-Nitrosodiethylamine	ND	10	ug/L	2.0
N-Nitrosodimethylamine	ND	10	ug/L	2.1
N-Nitrosodi-n-propyl-amine	ND	10	ug/L	1.6
N-Nitrosodiphenylamine	ND	10	ug/L	1.5
N-Nitrosomethylethylamine	ND	10	ug/L	2.3
N-Nitrosomorpholine	ND	10	ug/L	2.4
N-Nitrosopiperidine	ND	10	ug/L	1.8
N-Nitrosopyrrolidine	ND	10	ug/L	2.3
5-Nitro-o-toluidine	ND	20	ug/L	1.2
Pentachlorobenzene	ND	10	ug/L	1.6
Pentachloroethane	ND	50	ug/L	2.3
Pentachloronitrobenzene	ND	50	ug/L	2.4
Pentachlorophenol	ND	50	ug/L	11
Phenacetin	ND	20	ug/L	1.3
Phenanthrene	ND	10	ug/L	1.3
Phenol	ND	10	ug/L	1.4
2-Picoline	ND	20	ug/L	1.3
Pronamide	ND	20	ug/L	1.4
Pyrene	ND	10	ug/L	2.0
Pyridine	ND	20	ug/L	2.6
Safrole	ND	50	ug/L	1.4
1,2,4,5-Tetrachloro-benzene	ND	10	ug/L	1.8
2,3,4,6-Tetrachlorophenol	ND	50	ug/L	4.5
1,2,4-Trichloro-benzene	ND	10	ug/L	1.5
2,4,5-Trichloro-phenol	ND	10	ug/L	1.3
2,4,6-Trichloro-phenol	ND	10	ug/L	1.3
1,3,5-Trinitrobenzene	ND	50	ug/L	2.5
Aramite	ND	20	ug/L	1.9
2-Toluidine	ND	10	ug/L	1.5
2,2'-oxybis(1-Chloropropane)	ND	10	ug/L	1.5

(Continued on next page)

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-T

GC/MS Semivolatiles

Lot-Sample #...: D3C240249-003 Work Order #...: FKM9D1AN Matrix.....: WATER

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Fluorophenol	50	(44 - 105)
Phenol-d5	50	(45 - 107)
Nitrobenzene-d5	54	(52 - 109)
2-Fluorobiphenyl	48	(40 - 103)
2,4,6-Tribromophenol	53	(48 - 109)
Terphenyl-d14	54	(39 - 115)

US GEOLOGICAL SURVEY

CAFB-T

GC/MS Semivolatiles

Lot-Sample #: D3C240249-003 **Work Order #:** FKM9D1AN **Matrix:** WATER

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT		RETENTION TIME	UNITS
Unknown		14 J	M	2.024	ug/L
Unknown		4.8 J	M	2.6838	ug/L
Unknown		20 J	M	2.8554	ug/L
Unknown		8.8 J	M	3.5151	ug/L
Unknown		31 J	M	3.5741	ug/L

NOTE(S):

M: Result was measured against nearest internal standard assuming a response factor of 1.

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-S

GC/MS Semivolatiles

Lot-Sample #...: D3C240249-004 Work Order #...: FKM9F1AN Matrix.....: WATER
Date Sampled...: 03/19/03 11:25 Date Received..: 03/24/03
Prep Date.....: 03/26/03 Analysis Date..: 04/02/03
Prep Batch #...: 3085185 Analysis Time..: 18:19
Dilution Factor: 1

Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	10	ug/L	1.0
Acenaphthylene	ND	10	ug/L	1.0
Acetophenone	ND	10	ug/L	1.9
2-Acetylaminofluorene	ND	100	ug/L	1.3
4-Aminobiphenyl	ND	50	ug/L	1.2
Aniline	ND	10	ug/L	4.1
Anthracene	ND	10	ug/L	1.6
Benzo(a)anthracene	ND	10	ug/L	1.2
Benzo(b)fluoranthene	ND	10	ug/L	2.2
Benzo(k)fluoranthene	ND	10	ug/L	2.0
Benzo(ghi)perylene	ND	10	ug/L	1.7
Benzo(a)pyrene	ND	10	ug/L	1.4
Benzyl alcohol	ND	10	ug/L	2.7
bis(2-Chloroethoxy) methane	ND	10	ug/L	1.3
bis(2-Chloroethyl)-ether	ND	10	ug/L	1.8
bis(2-Ethylhexyl) phthalate	ND	10	ug/L	3.1
4-Bromophenyl phenyl ether	ND	10	ug/L	1.5
Butyl benzyl phthalate	ND	10	ug/L	1.6
4-Chloroaniline	ND	10	ug/L	2.5
4-Chloro-3-methylphenol	ND	10	ug/L	2.0
2-Chloronaphthalene	ND	10	ug/L	1.1
2-Chlorophenol	ND	10	ug/L	1.8
4-Chlorophenyl phenyl ether	ND	10	ug/L	1.2
Chrysene	ND	10	ug/L	1.7
Dibenz(a,h)anthracene	ND	10	ug/L	1.3
Dibenzofuran	ND	10	ug/L	5.0
Di-n-butyl phthalate	ND	10	ug/L	1.1
1,2-Dichlorobenzene	ND	10	ug/L	1.6
1,3-Dichlorobenzene	ND	10	ug/L	1.7
1,4-Dichlorobenzene	ND	10	ug/L	1.8
3,3'-Dichlorobenzidine	ND	50	ug/L	8.4
2,4-Dichlorophenol	ND	10	ug/L	2.4
2,6-Dichlorophenol	ND	10	ug/L	1.2

(Continued on next page)

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-S

GC/MS Semivolatiles

Lot-Sample #...: D3C240249-004 **Work Order #...:** FKM9F1AN **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Diethyl phthalate	ND	10	ug/L	1.1
4-Dimethylaminoazobenzene	ND	20	ug/L	1.2
7,12-Dimethylbenz(a)-anthracene	ND	20	ug/L	1.6
3,3'-Dimethylbenzidine	ND	20	ug/L	10
alpha,alpha-Dimethylphenethylamine	ND	50	ug/L	38
2,4-Dimethylphenol	ND	10	ug/L	2.9
Dimethyl phthalate	ND	10	ug/L	5.0
Di-n-octyl phthalate	ND	10	ug/L	1.5
1,3-Dinitrobenzene	ND	10	ug/L	1.7
4,6-Dinitro-2-methylphenol	ND	50	ug/L	18
2,4-Dinitrophenol	ND	50	ug/L	18
2,4-Dinitrotoluene	ND	10	ug/L	2.6
2,6-Dinitrotoluene	ND	10	ug/L	1.6
2-sec-Butyl-4,6-dinitro-phenol	ND	20	ug/L	1.6
Diphenylamine	ND	10	ug/L	1.2
Ethyl methanesulfonate	ND	10	ug/L	1.8
Fluoranthene	ND	10	ug/L	1.5
Fluorene	ND	10	ug/L	1.3
Hexachlorobenzene	ND	10	ug/L	1.7
Hexachlorobutadiene	ND	10	ug/L	1.7
Hexachlorocyclopenta-diene	ND	50	ug/L	5.0
Hexachloroethane	ND	10	ug/L	2.2
Hexachloropropene	ND	100	ug/L	1.1
Indeno(1,2,3-cd)pyrene	ND	10	ug/L	1.2
Isophorone	ND	10	ug/L	2.3
Isosafrole	ND	20	ug/L	2.0
Methapyrilene	ND	50	ug/L	30
3-Methylcholanthrene	ND	20	ug/L	2.5
Methyl methanesulfonate	ND	10	ug/L	2.2
2-Methylnaphthalene	ND	10	ug/L	1.5
2-Methylphenol	ND	10	ug/L	2.1
3-Methylphenol	ND	10	ug/L	2.1
4-Methylphenol	ND	10	ug/L	2.1
Naphthalene	ND	10	ug/L	1.2
1,4-Naphthoquinone	ND	50	ug/L	2.0
1-Naphthylamine	ND	10	ug/L	1.6
2-Naphthylamine	ND	10	ug/L	1.4
2-Nitroaniline	ND	50	ug/L	1.8

(Continued on next page)

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-S

GC/MS Semivolatiles

Lot-Sample #...: D3C240249-004 Work Order #...: FKM9F1AN Matrix.....: WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
3-Nitroaniline	ND	50	ug/L	7.6
4-Nitroaniline	ND	50	ug/L	2.1
Nitrobenzene	ND	10	ug/L	2.5
2-Nitrophenol	ND	10	ug/L	1.8
4-Nitrophenol	ND	50	ug/L	18
N-Nitrosodi-n-butylamine	ND	10	ug/L	2.1
N-Nitrosodiethylamine	ND	10	ug/L	2.0
N-Nitrosodimethylamine	ND	10	ug/L	2.1
N-Nitrosodi-n-propyl-amine	ND	10	ug/L	1.6
N-Nitrosodiphenylamine	ND	10	ug/L	1.5
N-Nitrosomethylethylamine	ND	10	ug/L	2.3
N-Nitrosomorpholine	ND	10	ug/L	2.4
N-Nitrosopiperidine	ND	10	ug/L	1.8
N-Nitrosopyrrolidine	ND	10	ug/L	2.3
5-Nitro-o-toluidine	ND	20	ug/L	1.2
Pentachlorobenzene	ND	10	ug/L	1.6
Pentachloroethane	ND	50	ug/L	2.3
Pentachloronitrobenzene	ND	50	ug/L	2.4
Pentachlorophenol	ND	50	ug/L	11
Phenacetin	ND	20	ug/L	1.3
Phenanthrene	ND	10	ug/L	1.3
Phenol	ND	10	ug/L	1.4
2-Picoline	ND	20	ug/L	1.3
Pronamide	ND	20	ug/L	1.4
Pyrene	ND	10	ug/L	2.0
Pyridine	ND	20	ug/L	2.6
Safrole	ND	50	ug/L	1.4
1,2,4,5-Tetrachloro-benzene	ND	10	ug/L	1.8
2,3,4,6-Tetrachlorophenol	ND	50	ug/L	4.5
1,2,4-Trichloro-benzene	ND	10	ug/L	1.5
2,4,5-Trichloro-phenol	ND	10	ug/L	1.3
2,4,6-Trichloro-phenol	ND	10	ug/L	1.3
1,3,5-Trinitrobenzene	ND	50	ug/L	2.5
Aramite	ND	20	ug/L	1.9
2-Toluidine	ND	10	ug/L	1.5
2,2'-oxybis(1-Chloropropane)	ND	10	ug/L	1.5

(Continued on next page)

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-S

GC/MS Semivolatiles

Lot-Sample #...: D3C240249-004 **Work Order #...:** FKM9F1AN **Matrix.....:** WATER

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Fluorophenol	64	(44 - 105)
Phenol-d5	63	(45 - 107)
Nitrobenzene-d5	68	(52 - 109)
2-Fluorobiphenyl	59	(40 - 103)
2,4,6-Tribromophenol	68	(48 - 109)
Terphenyl-d14	71	(39 - 115)

US GEOLOGICAL SURVEY

CAFB-S

GC/MS Semivolatiles

Lot-Sample #: D3C240249-004 **Work Order #:** FKM9F1AN **Matrix:** WATER

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT		RETENTION TIME	UNITS
Unknown		31 J	M	1.9653	ug/L
Unknown		10 J	M	2.0243	ug/L
Unknown		5.7 J	M	2.0458	ug/L
Unknown		8.8 J	M	2.6572	ug/L
Unknown		5.2 J	M	2.684	ug/L
Unknown		24 J	M	2.8557	ug/L
Unknown		6.5 J	M	3.5154	ug/L
1-Propene, 1,2,3-trichloro-	96-19-5	23 J	M	3.5744	ug/L

NOTE(S):

M: Result was measured against nearest internal standard assuming a response factor of 1.

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-Q

GC/MS Semivolatiles

Lot-Sample #...: D3C240249-005 Work Order #...: FKM9J1AN Matrix.....: WATER
Date Sampled...: 03/19/03 12:30 Date Received..: 03/24/03
Prep Date.....: 03/26/03 Analysis Date..: 04/02/03
Prep Batch #...: 3085185 Analysis Time..: 18:43
Dilution Factor: 1

Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	10	ug/L	1.0
Acenaphthylene	ND	10	ug/L	1.0
Acetophenone	ND	10	ug/L	1.9
2-Acetylaminofluorene	ND	100	ug/L	1.3
4-Aminobiphenyl	ND	50	ug/L	1.2
Aniline	ND	10	ug/L	4.1
Anthracene	ND	10	ug/L	1.6
Benzo(a)anthracene	ND	10	ug/L	1.2
Benzo(b)fluoranthene	ND	10	ug/L	2.2
Benzo(k)fluoranthene	ND	10	ug/L	2.0
Benzo(ghi)perylene	ND	10	ug/L	1.7
Benzo(a)pyrene	ND	10	ug/L	1.4
Benzyl alcohol	ND	10	ug/L	2.7
bis(2-Chloroethoxy) methane	ND	10	ug/L	1.3
bis(2-Chloroethyl)-ether	ND	10	ug/L	1.8
bis(2-Ethylhexyl) phthalate	ND	10	ug/L	3.1
4-Bromophenyl phenyl ether	ND	10	ug/L	1.5
Butyl benzyl phthalate	ND	10	ug/L	1.6
4-Chloroaniline	ND	10	ug/L	2.5
4-Chloro-3-methylphenol	ND	10	ug/L	2.0
2-Chloronaphthalene	ND	10	ug/L	1.1
2-Chlorophenol	ND	10	ug/L	1.8
4-Chlorophenyl phenyl ether	ND	10	ug/L	1.2
Chrysene	ND	10	ug/L	1.7
Dibenz(a,h)anthracene	ND	10	ug/L	1.3
Dibenzofuran	ND	10	ug/L	5.0
Di-n-butyl phthalate	ND	10	ug/L	1.1
1,2-Dichlorobenzene	ND	10	ug/L	1.6
1,3-Dichlorobenzene	ND	10	ug/L	1.7
1,4-Dichlorobenzene	ND	10	ug/L	1.8
3,3'-Dichlorobenzidine	ND	50	ug/L	8.4
2,4-Dichlorophenol	ND	10	ug/L	2.4
2,6-Dichlorophenol	ND	10	ug/L	1.2

(Continued on next page)

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-Q

GC/MS Semivolatiles

Lot-Sample #...: D3C240249-005 Work Order #...: FKM9J1AN Matrix.....: WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Diethyl phthalate	ND	10	ug/L	1.1
4-Dimethylaminoazobenzene	ND	20	ug/L	1.2
7,12-Dimethylbenz(a)-anthracene	ND	20	ug/L	1.6
3,3'-Dimethylbenzidine	ND	20	ug/L	10
alpha,alpha-Dimethylphenethylamine	ND	50	ug/L	38
2,4-Dimethylphenol	ND	10	ug/L	2.9
Dimethyl phthalate	ND	10	ug/L	5.0
Di-n-octyl phthalate	ND	10	ug/L	1.5
1,3-Dinitrobenzene	ND	10	ug/L	1.7
4,6-Dinitro-2-methylphenol	ND	50	ug/L	18
2,4-Dinitrophenol	ND	50	ug/L	18
2,4-Dinitrotoluene	ND	10	ug/L	2.6
2,6-Dinitrotoluene	ND	10	ug/L	1.6
2-sec-Butyl-4,6-dinitrophenol	ND	20	ug/L	1.6
Diphenylamine	ND	10	ug/L	1.2
Ethyl methanesulfonate	ND	10	ug/L	1.8
Fluoranthene	ND	10	ug/L	1.5
Fluorene	ND	10	ug/L	1.3
Hexachlorobenzene	ND	10	ug/L	1.7
Hexachlorobutadiene	ND	10	ug/L	1.7
Hexachlorocyclopentadiene	ND	50	ug/L	5.0
Hexachloroethane	ND	10	ug/L	2.2
Hexachloropropene	ND	100	ug/L	1.1
Indeno(1,2,3-cd)pyrene	ND	10	ug/L	1.2
Isophorone	ND	10	ug/L	2.3
Isosafrole	ND	20	ug/L	2.0
Methapyrilene	ND	50	ug/L	30
3-Methylcholanthrene	ND	20	ug/L	2.5
Methyl methanesulfonate	ND	10	ug/L	2.2
2-Methylnaphthalene	ND	10	ug/L	1.5
2-Methylphenol	ND	10	ug/L	2.1
3-Methylphenol	ND	10	ug/L	2.1
4-Methylphenol	ND	10	ug/L	2.1
Naphthalene	ND	10	ug/L	1.2
1,4-Naphthoquinone	ND	50	ug/L	2.0
1-Naphthylamine	ND	10	ug/L	1.6
2-Naphthylamine	ND	10	ug/L	1.4
2-Nitroaniline	ND	50	ug/L	1.8

(Continued on next page)

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-Q

GC/MS Semivolatiles

Lot-Sample #...: D3C240249-005 **Work Order #...:** FKM9J1AN **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
3-Nitroaniline	ND	50	ug/L	7.6
4-Nitroaniline	ND	50	ug/L	2.1
Nitrobenzene	ND	10	ug/L	2.5
2-Nitrophenol	ND	10	ug/L	1.8
4-Nitrophenol	ND	50	ug/L	18
N-Nitrosodi-n-butylamine	ND	10	ug/L	2.1
N-Nitrosodiethylamine	ND	10	ug/L	2.0
N-Nitrosodimethylamine	ND	10	ug/L	2.1
N-Nitrosodi-n-propyl-amine	ND	10	ug/L	1.6
N-Nitrosodiphenylamine	ND	10	ug/L	1.5
N-Nitrosomethylethylamine	ND	10	ug/L	2.3
N-Nitrosomorpholine	ND	10	ug/L	2.4
N-Nitrosopiperidine	ND	10	ug/L	1.8
N-Nitrosopyrrolidine	ND	10	ug/L	2.3
5-Nitro-o-toluidine	ND	20	ug/L	1.2
Pentachlorobenzene	ND	10	ug/L	1.6
Pentachloroethane	ND	50	ug/L	2.3
Pentachloronitrobenzene	ND	50	ug/L	2.4
Pentachlorophenol	ND	50	ug/L	11
Phenacetin	ND	20	ug/L	1.3
Phenanthrene	ND	10	ug/L	1.3
Phenol	ND	10	ug/L	1.4
2-Picoline	ND	20	ug/L	1.3
Pronamide	ND	20	ug/L	1.4
Pyrene	ND	10	ug/L	2.0
Pyridine	ND	20	ug/L	2.6
Safrole	ND	50	ug/L	1.4
1,2,4,5-Tetrachloro-benzene	ND	10	ug/L	1.8
2,3,4,6-Tetrachlorophenol	ND	50	ug/L	4.5
1,2,4-Trichloro-benzene	ND	10	ug/L	1.5
2,4,5-Trichloro-phenol	ND	10	ug/L	1.3
2,4,6-Trichloro-phenol	ND	10	ug/L	1.3
1,3,5-Trinitrobenzene	ND	50	ug/L	2.5
Aramite	ND	20	ug/L	1.9
2-Toluidine	ND	10	ug/L	1.5
2,2'-oxybis(1-Chloropropane)	ND	10	ug/L	1.5

(Continued on next page)

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-Q

GC/MS Semivolatiles

Lot-Sample #...: D3C240249-005 **Work Order #...:** FKM9J1AN **Matrix.....:** WATER

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Fluorophenol	71	(44 - 105)
Phenol-d5	69	(45 - 107)
Nitrobenzene-d5	74	(52 - 109)
2-Fluorobiphenyl	65	(40 - 103)
2,4,6-Tribromophenol	77	(48 - 109)
Terphenyl-d14	74	(39 - 115)

US GEOLOGICAL SURVEY

CAFB-Q

GC/MS Semivolatiles

Lot-Sample #: D3C240249-005 **Work Order #:** FKM9J1AN **Matrix:** WATER

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT		RETENTION TIME	UNITS
Unknown		31 J	M	1.9651	ug/L
Unknown		9.8 J	M	2.0295	ug/L
Unknown		6.7 J	M	2.0455	ug/L
Unknown		11 J	M	2.657	ug/L
Unknown		8.1 J	M	2.6838	ug/L
Unknown		28 J	M	2.8554	ug/L
Unknown		7.9 J	M	3.5151	ug/L
Unknown		29 J	M	3.5741	ug/L

NOTE(S):

M: Result was measured against nearest internal standard assuming a response factor of 1.

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-WELL-B

GC/MS Semivolatiles

Lot-Sample #...: D3C240249-007 Work Order #...: FKM9N1AN Matrix.....: WATER
Date Sampled...: 03/18/03 14:20 Date Received..: 03/24/03
Prep Date.....: 03/25/03 Analysis Date..: 04/16/03
Prep Batch #...: 3084225 Analysis Time..: 17:03
Dilution Factor: 1

Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	10	ug/L	1.0
Acenaphthylene	ND	10	ug/L	1.0
Acetophenone	ND	10	ug/L	1.9
2-Acetylaminofluorene	ND	100	ug/L	1.3
4-Aminobiphenyl	ND	50	ug/L	1.2
Aniline	ND	10	ug/L	4.1
Anthracene	ND	10	ug/L	1.6
Benzo(a)anthracene	ND	10	ug/L	1.2
Benzo(b)fluoranthene	ND	10	ug/L	2.2
Benzo(k)fluoranthene	ND	10	ug/L	2.0
Benzo(ghi)perylene	ND	10	ug/L	1.7
Benzo(a)pyrene	ND	10	ug/L	1.4
Benzyl alcohol	ND	10	ug/L	2.7
bis(2-Chloroethoxy) methane	ND	10	ug/L	1.3
bis(2-Chloroethyl)-ether	ND	10	ug/L	1.8
bis(2-Ethylhexyl) phthalate	ND	10	ug/L	3.1
4-Bromophenyl phenyl ether	ND	10	ug/L	1.5
Butyl benzyl phthalate	ND	10	ug/L	1.6
4-Chloroaniline	ND	10	ug/L	2.5
4-Chloro-3-methylphenol	ND	10	ug/L	2.0
2-Chloronaphthalene	ND	10	ug/L	1.1
2-Chlorophenol	ND	10	ug/L	1.8
4-Chlorophenyl phenyl ether	ND	10	ug/L	1.2
Chrysene	ND	10	ug/L	1.7
Dibenz(a,h)anthracene	ND	10	ug/L	1.3
Dibenzofuran	ND	10	ug/L	5.0
Di-n-butyl phthalate	ND	10	ug/L	1.1
1,2-Dichlorobenzene	ND	10	ug/L	1.6
1,3-Dichlorobenzene	ND	10	ug/L	1.7
1,4-Dichlorobenzene	ND	10	ug/L	1.8
3,3'-Dichlorobenzidine	ND	50	ug/L	8.4
2,4-Dichlorophenol	ND	10	ug/L	2.4
2,6-Dichlorophenol	ND	10	ug/L	1.2

(Continued on next page)

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-WELL-B

GC/MS Semivolatiles

Lot-Sample #...: D3C240249-007 Work Order #...: FKM9N1AN Matrix.....: WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Diethyl phthalate	ND	10	ug/L	1.1
4-Dimethylaminoazobenzene	ND	20	ug/L	1.2
7,12-Dimethylbenz(a)-anthracene	ND	20	ug/L	1.6
3,3'-Dimethylbenzidine	ND	20	ug/L	10
alpha,alpha-Dimethylphenethylamine	ND	50	ug/L	38
2,4-Dimethylphenol	ND	10	ug/L	2.9
Dimethyl phthalate	ND	10	ug/L	5.0
Di-n-octyl phthalate	ND	10	ug/L	1.5
1,3-Dinitrobenzene	ND	10	ug/L	1.7
4,6-Dinitro-2-methylphenol	ND	50	ug/L	18
2,4-Dinitrophenol	ND	50	ug/L	18
2,4-Dinitrotoluene	ND	10	ug/L	2.6
2,6-Dinitrotoluene	ND	10	ug/L	1.6
2-sec-Butyl-4,6-dinitro-phenol	ND	20	ug/L	1.6
Diphenylamine	ND	10	ug/L	1.2
Ethyl methanesulfonate	ND	10	ug/L	1.8
Fluoranthene	ND	10	ug/L	1.5
Fluorene	ND	10	ug/L	1.3
Hexachlorobenzene	ND	10	ug/L	1.7
Hexachlorobutadiene	ND	10	ug/L	1.7
Hexachlorocyclopenta-diene	ND	50	ug/L	5.0
Hexachloroethane	ND	10	ug/L	2.2
Hexachloropropene	ND	100	ug/L	1.1
Indeno(1,2,3-cd)pyrene	ND	10	ug/L	1.2
Isophorone	ND	10	ug/L	2.3
Isosafrole	ND	20	ug/L	2.0
Methapyrilene	ND	50	ug/L	30
3-Methylcholanthrene	ND	20	ug/L	2.5
Methyl methanesulfonate	ND	10	ug/L	2.2
2-Methylnaphthalene	ND	10	ug/L	1.5
2-Methylphenol	ND	10	ug/L	2.1
3-Methylphenol	ND	10	ug/L	2.1
4-Methylphenol	ND	10	ug/L	2.1
Naphthalene	ND	10	ug/L	1.2
1,4-Naphthoquinone	ND	50	ug/L	2.0
1-Naphthylamine	ND	10	ug/L	1.6
2-Naphthylamine	ND	10	ug/L	1.4
2-Nitroaniline	ND	50	ug/L	1.8

(Continued on next page)

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-WELL-B

GC/MS Semivolatiles

Lot-Sample #...: D3C240249-007 **Work Order #...:** FKM9N1AN **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
3-Nitroaniline	ND	50	ug/L	7.6
4-Nitroaniline	ND	50	ug/L	2.1
Nitrobenzene	ND	10	ug/L	2.5
2-Nitrophenol	ND	10	ug/L	1.8
4-Nitrophenol	ND	50	ug/L	18
N-Nitrosodi-n-butylamine	ND	10	ug/L	2.1
N-Nitrosodiethylamine	ND	10	ug/L	2.0
N-Nitrosodimethylamine	ND	10	ug/L	2.1
N-Nitrosodi-n-propyl-amine	ND	10	ug/L	1.6
N-Nitrosodiphenylamine	ND	10	ug/L	1.5
N-Nitrosomethylethylamine	ND	10	ug/L	2.3
N-Nitrosomorpholine	ND	10	ug/L	2.4
N-Nitrosopiperidine	ND	10	ug/L	1.8
N-Nitrosopyrrolidine	ND	10	ug/L	2.3
5-Nitro-o-toluidine	ND	20	ug/L	1.2
Pentachlorobenzene	ND	10	ug/L	1.6
Pentachloroethane	ND	50	ug/L	2.3
Pentachloronitrobenzene	ND	50	ug/L	2.4
Pentachlorophenol	ND	50	ug/L	11
Phenacetin	ND	20	ug/L	1.3
Phenanthrene	ND	10	ug/L	1.3
Phenol	ND	10	ug/L	1.4
2-Picoline	ND	20	ug/L	1.3
Pronamide	ND	20	ug/L	1.4
Pyrene	ND	10	ug/L	2.0
Pyridine	ND	20	ug/L	2.6
Safrole	ND	50	ug/L	1.4
1,2,4,5-Tetrachloro-benzene	ND	10	ug/L	1.8
2,3,4,6-Tetrachlorophenol	ND	50	ug/L	4.5
1,2,4-Trichloro-benzene	ND	10	ug/L	1.5
2,4,5-Trichloro-phenol	ND	10	ug/L	1.3
2,4,6-Trichloro-phenol	ND	10	ug/L	1.3
1,3,5-Trinitrobenzene	ND	50	ug/L	2.5
Aramite	ND	20	ug/L	1.9
2-Toluidine	ND	10	ug/L	1.5
2,2'-oxybis(1-Chloropropane)	ND	10	ug/L	1.5

(Continued on next page)

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-WELL-B

GC/MS Semivolatiles

Lot-Sample #...: D3C240249-007 Work Order #...: FKM9N1AN Matrix.....: WATER

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Fluorophenol	65	(44 - 105)
Phenol-d5	69	(45 - 107)
Nitrobenzene-d5	72	(52 - 109)
2-Fluorobiphenyl	61	(40 - 103)
2,4,6-Tribromophenol	64	(48 - 109)
Terphenyl-d14	66	(39 - 115)

US GEOLOGICAL SURVEY

CAFB-WELL-B

GC/MS Semivolatiles

Lot-Sample #: D3C240249-007 **Work Order #:** FKM9N1AN **Matrix:** WATER

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT	RETENTION TIME	UNITS
None				ug/L

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-D

GC Semivolatiles

Lot-Sample #...: D3C210341-001 Work Order #...: FKKDL1AD Matrix.....: WG
Date Sampled...: 03/20/03 12:10 Date Received..: 03/21/03
Prep Date.....: 03/26/03 Analysis Date..: 04/03/03
Prep Batch #...: 3085134 Analysis Time..: 22:30
Dilution Factor: 1

Method.....: SW846 8081A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aldrin	ND	0.050	ug/L	0.0042
alpha-BHC	ND	0.050	ug/L	0.0076
beta-BHC	ND	0.050	ug/L	0.0051
delta-BHC	ND	0.050	ug/L	0.0050
gamma-BHC (Lindane)	ND	0.050	ug/L	0.0085
alpha-Chlordane	ND	0.050	ug/L	0.0054
gamma-Chlordane	ND	0.050	ug/L	0.0079
4,4'-DDD	ND	0.050	ug/L	0.0050
4,4'-DDE	ND	0.050	ug/L	0.015
4,4'-DDT	ND	0.050	ug/L	0.0095
Diallate	ND	1.0	ug/L	0.38
Dieldrin	ND	0.050	ug/L	0.0094
Endosulfan I	ND	0.050	ug/L	0.016
Endosulfan II	ND	0.050	ug/L	0.0074
Endosulfan sulfate	ND	0.050	ug/L	0.0063
Endrin	ND	0.050	ug/L	0.0086
Endrin aldehyde	ND	0.050	ug/L	0.014
Endrin ketone	ND	0.050	ug/L	0.0063
Heptachlor	ND	0.050	ug/L	0.0053
Heptachlor epoxide	ND	0.050	ug/L	0.0043
Isodrin	ND	0.10	ug/L	0.025
Kepone	ND	1.0	ug/L	0.13
Methoxychlor	ND	0.10	ug/L	0.0048
Toxaphene	ND	5.0	ug/L	0.47

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Decachlorobiphenyl	102	(34 - 134)
Tetrachloro-m-xylene	83	(41 - 125)

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-C

GC Semivolatiles

Lot-Sample #...: D3C210341-002 Work Order #...: FKKD21AP Matrix.....: WG
Date Sampled...: 03/20/03 13:20 Date Received..: 03/21/03
Prep Date.....: 03/26/03 Analysis Date..: 04/03/03
Prep Batch #...: 3085134 Analysis Time..: 23:01
Dilution Factor: 1

Method.....: SW846 8081A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aldrin	ND	0.050	ug/L	0.0042
alpha-BHC	ND	0.050	ug/L	0.0076
beta-BHC	ND	0.050	ug/L	0.0051
delta-BHC	ND	0.050	ug/L	0.0050
gamma-BHC (Lindane)	ND	0.050	ug/L	0.0085
alpha-Chlordane	ND	0.050	ug/L	0.0054
gamma-Chlordane	ND	0.050	ug/L	0.0079
4,4'-DDD	ND	0.050	ug/L	0.0050
4,4'-DDE	ND	0.050	ug/L	0.015
4,4'-DDT	ND	0.050	ug/L	0.0095
Diallate	ND	1.0	ug/L	0.38
Dieldrin	ND	0.050	ug/L	0.0094
Endosulfan I	ND	0.050	ug/L	0.016
Endosulfan II	ND	0.050	ug/L	0.0074
Endosulfan sulfate	ND	0.050	ug/L	0.0063
Endrin	ND	0.050	ug/L	0.0086
Endrin aldehyde	ND	0.050	ug/L	0.014
Endrin ketone	ND	0.050	ug/L	0.0063
Heptachlor	ND	0.050	ug/L	0.0053
Heptachlor epoxide	ND	0.050	ug/L	0.0043
Isodrin	ND	0.10	ug/L	0.025
Kepone	ND	1.0	ug/L	0.13
Methoxychlor	ND	0.10	ug/L	0.0048
Toxaphene	ND	5.0	ug/L	0.47

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Decachlorobiphenyl	104	(34 - 134)
Tetrachloro-m-xylene	87	(41 - 125)

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-u

GC Semivolatiles

Lot-Sample #...: D3C240249-001 **Work Order #...:** FKM871AD **Matrix.....:** WATER
Date Sampled...: 03/19/03 08:30 **Date Received..:** 03/24/03
Prep Date.....: 03/25/03 **Analysis Date..:** 04/06/03
Prep Batch #...: 3084227 **Analysis Time..:** 19:25
Dilution Factor: 1

Method.....: SW846 8081A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aldrin	ND	0.050	ug/L	0.0042
alpha-BHC	ND	0.050	ug/L	0.0076
beta-BHC	ND	0.050	ug/L	0.0051
delta-BHC	ND	0.050	ug/L	0.0050
gamma-BHC (Lindane)	ND	0.050	ug/L	0.0085
alpha-Chlordane	ND	0.050	ug/L	0.0054
gamma-Chlordane	ND	0.050	ug/L	0.0079
4,4'-DDD	ND	0.050	ug/L	0.0050
4,4'-DDE	ND	0.050	ug/L	0.015
4,4'-DDT	ND	0.050	ug/L	0.0095
Diallate	ND	1.0	ug/L	0.38
Dieldrin	ND	0.050	ug/L	0.0094
Endosulfan I	ND	0.050	ug/L	0.016
Endosulfan II	ND	0.050	ug/L	0.0074
Endosulfan sulfate	ND	0.050	ug/L	0.0063
Endrin	ND	0.050	ug/L	0.0086
Endrin aldehyde	ND	0.050	ug/L	0.014
Endrin ketone	ND	0.050	ug/L	0.0063
Heptachlor	ND	0.050	ug/L	0.0053
Heptachlor epoxide	ND	0.050	ug/L	0.0043
Isodrin	ND	0.10	ug/L	0.025
Kepone	ND	1.0	ug/L	0.13
Methoxychlor	ND	0.10	ug/L	0.0048
Toxaphene	ND	5.0	ug/L	0.47

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Decachlorobiphenyl	38	(34 - 134)
Tetrachloro-m-xylene	34 *	(41 - 125)

NOTE(S):

* Surrogate recovery is outside stated control limits.

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-u

GC Semivolatiles

Lot-Sample #...:	D3C240249-001	**Work Order #...:**	FKM872AD	**Matrix.....:**	WATER
Date Sampled...:	03/19/03 08:30	**Date Received..:**	03/24/03		
Prep Date.....:	04/10/03	**Analysis Date..:**	04/15/03		
Prep Batch #...:	3100186	**Analysis Time..:**	00:02		
Dilution Factor:	1				
		Method.....:	SW846 8081A		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aldrin	ND	0.050	ug/L	0.0042
alpha-BHC	ND	0.050	ug/L	0.0076
beta-BHC	ND	0.050	ug/L	0.0051
delta-BHC	ND	0.050	ug/L	0.0050
gamma-BHC (Lindane)	ND	0.050	ug/L	0.0085
alpha-Chlordane	ND	0.050	ug/L	0.0054
gamma-Chlordane	ND	0.050	ug/L	0.0079
4,4'-DDD	ND	0.050	ug/L	0.0050
4,4'-DDE	ND	0.050	ug/L	0.015
4,4'-DDT	ND	0.050	ug/L	0.0095
Diallate	ND	1.0	ug/L	0.38
Dieldrin	ND	0.050	ug/L	0.0094
Endosulfan I	ND	0.050	ug/L	0.016
Endosulfan II	ND	0.050	ug/L	0.0074
Endosulfan sulfate	ND	0.050	ug/L	0.0063
Endrin	ND	0.050	ug/L	0.0086
Endrin aldehyde	ND	0.050	ug/L	0.014
Endrin ketone	ND	0.050	ug/L	0.0063
Heptachlor	ND	0.050	ug/L	0.0053
Heptachlor epoxide	ND	0.050	ug/L	0.0043
Isodrin	ND	0.10	ug/L	0.025
Kepone	ND	1.0	ug/L	0.13
Methoxychlor	ND	0.10	ug/L	0.0048
Toxaphene	ND	5.0	ug/L	0.47

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Decachlorobiphenyl	100	(34 - 134)
Tetrachloro-m-xylene	91	(41 - 125)

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-uu

GC Semivolatiles

Lot-Sample #...: D3C240249-002 **Work Order #...:** FKM9C1AP **Matrix.....:** WATER
Date Sampled...: 03/19/03 08:35 **Date Received..:** 03/24/03
Prep Date.....: 03/25/03 **Analysis Date..:** 04/06/03
Prep Batch #...: 3084227 **Analysis Time..:** 19:55
Dilution Factor: 1

Method.....: SW846 8081A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aldrin	ND	0.050	ug/L	0.0042
alpha-BHC	ND	0.050	ug/L	0.0076
beta-BHC	ND	0.050	ug/L	0.0051
delta-BHC	ND	0.050	ug/L	0.0050
gamma-BHC (Lindane)	ND	0.050	ug/L	0.0085
alpha-Chlordane	ND	0.050	ug/L	0.0054
gamma-Chlordane	ND	0.050	ug/L	0.0079
4,4'-DDD	ND	0.050	ug/L	0.0050
4,4'-DDE	ND	0.050	ug/L	0.015
4,4'-DDT	ND	0.050	ug/L	0.0095
Diallate	ND	1.0	ug/L	0.38
Dieldrin	ND	0.050	ug/L	0.0094
Endosulfan I	ND	0.050	ug/L	0.016
Endosulfan II	ND	0.050	ug/L	0.0074
Endosulfan sulfate	ND	0.050	ug/L	0.0063
Endrin	ND	0.050	ug/L	0.0086
Endrin aldehyde	ND	0.050	ug/L	0.014
Endrin ketone	ND	0.050	ug/L	0.0063
Heptachlor	ND	0.050	ug/L	0.0053
Heptachlor epoxide	ND	0.050	ug/L	0.0043
Isodrin	ND	0.10	ug/L	0.025
Kepone	ND	1.0	ug/L	0.13
Methoxychlor	ND	0.10	ug/L	0.0048
Toxaphene	ND	5.0	ug/L	0.47

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Decachlorobiphenyl	98	(34 - 134)
Tetrachloro-m-xylene	81	(41 - 125)

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-T

GC Semivolatiles

Lot-Sample #...: D3C240249-003 Work Order #...: FKM9D1AP Matrix.....: WATER
Date Sampled...: 03/19/03 10:00 Date Received..: 03/24/03
Prep Date.....: 03/25/03 Analysis Date..: 04/06/03
Prep Batch #...: 3084227 Analysis Time..: 20:25
Dilution Factor: 1

Method.....: SW846 8081A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aldrin	ND	0.050	ug/L	0.0042
alpha-BHC	ND	0.050	ug/L	0.0076
beta-BHC	ND	0.050	ug/L	0.0051
delta-BHC	ND	0.050	ug/L	0.0050
gamma-BHC (Lindane)	ND	0.050	ug/L	0.0085
alpha-Chlordane	ND	0.050	ug/L	0.0054
gamma-Chlordane	ND	0.050	ug/L	0.0079
4,4'-DDD	ND	0.050	ug/L	0.0050
4,4'-DDE	ND	0.050	ug/L	0.015
4,4'-DDT	ND	0.050	ug/L	0.0095
Diallate	ND	1.0	ug/L	0.38
Dieldrin	ND	0.050	ug/L	0.0094
Endosulfan I	ND	0.050	ug/L	0.016
Endosulfan II	ND	0.050	ug/L	0.0074
Endosulfan sulfate	ND	0.050	ug/L	0.0063
Endrin	ND	0.050	ug/L	0.0086
Endrin aldehyde	ND	0.050	ug/L	0.014
Endrin ketone	ND	0.050	ug/L	0.0063
Heptachlor	ND	0.050	ug/L	0.0053
Heptachlor epoxide	ND	0.050	ug/L	0.0043
Isodrin	ND	0.10	ug/L	0.025
Kepone	ND	1.0	ug/L	0.13
Methoxychlor	ND	0.10	ug/L	0.0048
Toxaphene	ND	5.0	ug/L	0.47

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Decachlorobiphenyl	92	(34 - 134)
Tetrachloro-m-xylene	76	(41 - 125)

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-S

GC Semivolatiles

Lot-Sample #...: D3C240249-004 **Work Order #...:** FKM9F1AP **Matrix.....:** WATER
Date Sampled...: 03/19/03 11:25 **Date Received..:** 03/24/03
Prep Date.....: 03/25/03 **Analysis Date..:** 04/06/03
Prep Batch #...: 3084227 **Analysis Time..:** 20:55
Dilution Factor: 1

Method.....: SW846 8081A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aldrin	ND	0.050	ug/L	0.0042
alpha-BHC	ND	0.050	ug/L	0.0076
beta-BHC	ND	0.050	ug/L	0.0051
delta-BHC	ND	0.050	ug/L	0.0050
gamma-BHC (Lindane)	ND	0.050	ug/L	0.0085
alpha-Chlordane	ND	0.050	ug/L	0.0054
gamma-Chlordane	ND	0.050	ug/L	0.0079
4,4'-DDD	ND	0.050	ug/L	0.0050
4,4'-DDE	ND	0.050	ug/L	0.015
4,4'-DDT	ND	0.050	ug/L	0.0095
Diallate	ND	1.0	ug/L	0.38
Dieldrin	ND	0.050	ug/L	0.0094
Endosulfan I	ND	0.050	ug/L	0.016
Endosulfan II	ND	0.050	ug/L	0.0074
Endosulfan sulfate	ND	0.050	ug/L	0.0063
Endrin	ND	0.050	ug/L	0.0086
Endrin aldehyde	ND	0.050	ug/L	0.014
Endrin ketone	ND	0.050	ug/L	0.0063
Heptachlor	ND	0.050	ug/L	0.0053
Heptachlor epoxide	ND	0.050	ug/L	0.0043
Isodrin	ND	0.10	ug/L	0.025
Kepone	ND	1.0	ug/L	0.13
Methoxychlor	ND	0.10	ug/L	0.0048
Toxaphene	ND	5.0	ug/L	0.47

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Decachlorobiphenyl	88	(34 - 134)
Tetrachloro-m-xylene	76	(41 - 125)

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-Q

GC Semivolatiles

Lot-Sample #...: D3C240249-005 **Work Order #...:** FKM9J1AP **Matrix.....:** WATER
Date Sampled...: 03/19/03 12:30 **Date Received..:** 03/24/03
Prep Date.....: 03/25/03 **Analysis Date..:** 04/06/03
Prep Batch #...: 3084227 **Analysis Time..:** 21:25
Dilution Factor: 1

Method.....: SW846 8081A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aldrin	ND	0.050	ug/L	0.0042
alpha-BHC	ND	0.050	ug/L	0.0076
beta-BHC	ND	0.050	ug/L	0.0051
delta-BHC	ND	0.050	ug/L	0.0050
gamma-BHC (Lindane)	ND	0.050	ug/L	0.0085
alpha-Chlordane	ND	0.050	ug/L	0.0054
gamma-Chlordane	ND	0.050	ug/L	0.0079
4,4'-DDD	ND	0.050	ug/L	0.0050
4,4'-DDE	ND	0.050	ug/L	0.015
4,4'-DDT	ND	0.050	ug/L	0.0095
Diallate	ND	1.0	ug/L	0.38
Dieldrin	ND	0.050	ug/L	0.0094
Endosulfan I	ND	0.050	ug/L	0.016
Endosulfan II	ND	0.050	ug/L	0.0074
Endosulfan sulfate	ND	0.050	ug/L	0.0063
Endrin	ND	0.050	ug/L	0.0086
Endrin aldehyde	ND	0.050	ug/L	0.014
Endrin ketone	ND	0.050	ug/L	0.0063
Heptachlor	ND	0.050	ug/L	0.0053
Heptachlor epoxide	ND	0.050	ug/L	0.0043
Isodrin	ND	0.10	ug/L	0.025
Kepone	ND	1.0	ug/L	0.13
Methoxychlor	ND	0.10	ug/L	0.0048
Toxaphene	ND	5.0	ug/L	0.47

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Decachlorobiphenyl	89	(34 - 134)
Tetrachloro-m-xylene	76	(41 - 125)

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-WELL-B

GC Semivolatiles

Lot-Sample #...: D3C240249-007 **Work Order #...:** FKM9N1AP **Matrix.....:** WATER
Date Sampled...: 03/18/03 14:20 **Date Received..:** 03/24/03
Prep Date.....: 03/25/03 **Analysis Date..:** 04/06/03
Prep Batch #...: 3084227 **Analysis Time..:** 21:56
Dilution Factor: 1

Method.....: SW846 8081A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aldrin	ND	0.050	ug/L	0.0042
alpha-BHC	ND	0.050	ug/L	0.0076
beta-BHC	ND	0.050	ug/L	0.0051
delta-BHC	ND	0.050	ug/L	0.0050
gamma-BHC (Lindane)	ND	0.050	ug/L	0.0085
alpha-Chlordane	ND	0.050	ug/L	0.0054
gamma-Chlordane	ND	0.050	ug/L	0.0079
4,4'-DDD	ND	0.050	ug/L	0.0050
4,4'-DDE	ND	0.050	ug/L	0.015
4,4'-DDT	ND	0.050	ug/L	0.0095
Diallate	ND	1.0	ug/L	0.38
Dieldrin	ND	0.050	ug/L	0.0094
Endosulfan I	ND	0.050	ug/L	0.016
Endosulfan II	ND	0.050	ug/L	0.0074
Endosulfan sulfate	ND	0.050	ug/L	0.0063
Endrin	ND	0.050	ug/L	0.0086
Endrin aldehyde	ND	0.050	ug/L	0.014
Endrin ketone	ND	0.050	ug/L	0.0063
Heptachlor	ND	0.050	ug/L	0.0053
Heptachlor epoxide	ND	0.050	ug/L	0.0043
Isodrin	ND	0.10	ug/L	0.025
Kepone	ND	1.0	ug/L	0.13
Methoxychlor	ND	0.10	ug/L	0.0048
Toxaphene	ND	5.0	ug/L	0.47

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Decachlorobiphenyl	92	(34 - 134)
Tetrachloro-m-xylene	79	(41 - 125)

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-D

GC Semivolatiles

Lot-Sample #...: D3C210341-001 Work Order #...: FKKDL1AE Matrix.....: WG
Date Sampled...: 03/20/03 12:10 Date Received..: 03/21/03
Prep Date.....: 03/26/03 Analysis Date..: 03/31/03
Prep Batch #...: 3085144 Analysis Time..: 19:38
Dilution Factor: 1

Method.....: SW846 8082

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	1.0	ug/L	0.085
Aroclor 1221	ND	1.0	ug/L	0.12
Aroclor 1232	ND	1.0	ug/L	0.18
Aroclor 1242	ND	1.0	ug/L	0.060
Aroclor 1248	ND	1.0	ug/L	0.11
Aroclor 1254	ND	1.0	ug/L	0.074
Aroclor 1260	ND	1.0	ug/L	0.060

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	91	(52 - 160)
Decachlorobiphenyl	97	(37 - 144)

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-C

GC Semivolatiles

Lot-Sample #...: D3C210341-002 **Work Order #...:** FKKD21AQ **Matrix.....:** WG
Date Sampled...: 03/20/03 13:20 **Date Received..:** 03/21/03
Prep Date.....: 03/26/03 **Analysis Date..:** 03/31/03
Prep Batch #...: 3085144 **Analysis Time..:** 20:07
Dilution Factor: 1

Method.....: SW846 8082

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	1.0	ug/L	0.085
Aroclor 1221	ND	1.0	ug/L	0.12
Aroclor 1232	ND	1.0	ug/L	0.18
Aroclor 1242	ND	1.0	ug/L	0.060
Aroclor 1248	ND	1.0	ug/L	0.11
Aroclor 1254	ND	1.0	ug/L	0.074
Aroclor 1260	ND	1.0	ug/L	0.060

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	96	(52 - 160)
Decachlorobiphenyl	99	(37 - 144)

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-u

GC Semivolatiles

Lot-Sample #...: D3C240249-001 **Work Order #...:** FKM871AE **Matrix.....:** WATER
Date Sampled...: 03/19/03 08:30 **Date Received..:** 03/24/03
Prep Date.....: 03/25/03 **Analysis Date..:** 04/02/03
Prep Batch #...: 3084233 **Analysis Time..:** 16:50
Dilution Factor: 1

Method.....: SW846 8082

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	1.0	ug/L	0.085
Aroclor 1221	ND	1.0	ug/L	0.12
Aroclor 1232	ND	1.0	ug/L	0.18
Aroclor 1242	ND	1.0	ug/L	0.060
Aroclor 1248	ND	1.0	ug/L	0.11
Aroclor 1254	ND	1.0	ug/L	0.074
Aroclor 1260	ND	1.0	ug/L	0.060

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	42 *	(52 - 160)
Decachlorobiphenyl	59	(37 - 144)

NOTE(S):

* Surrogate recovery is outside stated control limits.

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-uu

GC Semivolatiles

Lot-Sample #...: D3C240249-002 **Work Order #...:** FKM9C1AQ **Matrix.....:** WATER
Date Sampled...: 03/19/03 08:35 **Date Received..:** 03/24/03
Prep Date.....: 03/25/03 **Analysis Date..:** 04/02/03
Prep Batch #...: 3084233 **Analysis Time..:** 17:12
Dilution Factor: 1

Method.....: SW846 8082

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	1.0	ug/L	0.085
Aroclor 1221	ND	1.0	ug/L	0.12
Aroclor 1232	ND	1.0	ug/L	0.18
Aroclor 1242	ND	1.0	ug/L	0.060
Aroclor 1248	ND	1.0	ug/L	0.11
Aroclor 1254	ND	1.0	ug/L	0.074
Aroclor 1260	ND	1.0	ug/L	0.060

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	89	(52 - 160)
Decachlorobiphenyl	109	(37 - 144)

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-T

GC Semivolatiles

Lot-Sample #...: D3C240249-003 Work Order #...: FKM9D1AQ Matrix.....: WATER
Date Sampled...: 03/19/03 10:00 Date Received..: 03/24/03
Prep Date.....: 03/25/03 Analysis Date..: 04/02/03
Prep Batch #...: 3084233 Analysis Time..: 17:34
Dilution Factor: 1

Method.....: SW846 8082

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	1.0	ug/L	0.085
Aroclor 1221	ND	1.0	ug/L	0.12
Aroclor 1232	ND	1.0	ug/L	0.18
Aroclor 1242	ND	1.0	ug/L	0.060
Aroclor 1248	ND	1.0	ug/L	0.11
Aroclor 1254	ND	1.0	ug/L	0.074
Aroclor 1260	ND	1.0	ug/L	0.060

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	87	(52 - 160)
Decachlorobiphenyl	109	(37 - 144)

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-S

GC Semivolatiles

Lot-Sample #...: D3C240249-004 **Work Order #...:** FKM9F1AQ **Matrix.....:** WATER
Date Sampled...: 03/19/03 11:25 **Date Received..:** 03/24/03
Prep Date.....: 03/25/03 **Analysis Date..:** 04/02/03
Prep Batch #...: 3084233 **Analysis Time..:** 17:56
Dilution Factor: 1

Method.....: SW846 8082

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	1.0	ug/L	0.085
Aroclor 1221	ND	1.0	ug/L	0.12
Aroclor 1232	ND	1.0	ug/L	0.18
Aroclor 1242	ND	1.0	ug/L	0.060
Aroclor 1248	ND	1.0	ug/L	0.11
Aroclor 1254	ND	1.0	ug/L	0.074
Aroclor 1260	ND	1.0	ug/L	0.060

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	81	(52 - 160)
Decachlorobiphenyl	103	(37 - 144)

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-Q

GC Semivolatiles

Lot-Sample #...: D3C240249-005 Work Order #...: FKM9J1AQ Matrix.....: WATER
Date Sampled...: 03/19/03 12:30 Date Received..: 03/24/03
Prep Date.....: 03/25/03 Analysis Date..: 04/02/03
Prep Batch #...: 3084233 Analysis Time..: 18:18
Dilution Factor: 1

Method.....: SW846 8082

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	1.0	ug/L	0.085
Aroclor 1221	ND	1.0	ug/L	0.12
Aroclor 1232	ND	1.0	ug/L	0.18
Aroclor 1242	ND	1.0	ug/L	0.060
Aroclor 1248	ND	1.0	ug/L	0.11
Aroclor 1254	ND	1.0	ug/L	0.074
Aroclor 1260	ND	1.0	ug/L	0.060

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	81	(52 - 160)
Decachlorobiphenyl	105	(37 - 144)

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-WELL-B

GC Semivolatiles

Lot-Sample #...:	D3C240249-007	**Work Order #...:**	FKM9N1AQ	**Matrix.....:**	WATER
Date Sampled...:	03/18/03 14:20	**Date Received..:**	03/24/03		
Prep Date.....:	03/25/03	**Analysis Date..:**	04/02/03		
Prep Batch #...:	3084233	**Analysis Time..:**	18:40		
Dilution Factor:	1				
		Method.....:	SW846 8082		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	1.0	ug/L	0.085
Aroclor 1221	ND	1.0	ug/L	0.12
Aroclor 1232	ND	1.0	ug/L	0.18
Aroclor 1242	ND	1.0	ug/L	0.060
Aroclor 1248	ND	1.0	ug/L	0.11
Aroclor 1254	ND	1.0	ug/L	0.074
Aroclor 1260	ND	1.0	ug/L	0.060

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	85	(52 - 160)
Decachlorobiphenyl	109	(37 - 144)

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-D

GC Semivolatiles

Lot-Sample #...: D3C210341-001 Work Order #...: FKKDL1AF Matrix.....: WG
Date Sampled...: 03/20/03 12:10 Date Received..: 03/21/03
Prep Date.....: 03/27/03 Analysis Date..: 04/04/03
Prep Batch #...: 3086189 Analysis Time..: 05:55
Dilution Factor: 1

Method.....: SW846 8151A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
2,4-D	ND	4.0	ug/L	0.24
Dinoseb	ND	0.60	ug/L	0.065
2,4,5-TP (Silvex)	ND	1.0	ug/L	0.036
2,4,5-T	ND	1.0	ug/L	0.043

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
DCAA	65	(32 - 122)

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-C

GC Semivolatiles

Lot-Sample #...: D3C210341-002 Work Order #...: FKKD21AR Matrix.....: WG
Date Sampled...: 03/20/03 13:20 Date Received..: 03/21/03
Prep Date.....: 03/27/03 Analysis Date..: 04/04/03
Prep Batch #...: 3086189 Analysis Time..: 06:25
Dilution Factor: 1

Method.....: SW846 8151A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
2,4-D	ND	4.0	ug/L	0.24
Dinoseb	ND	0.60	ug/L	0.065
2,4,5-TP (Silvex)	ND	1.0	ug/L	0.036
2,4,5-T	ND	1.0	ug/L	0.043

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
DCAA	46	(32 - 122)

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-u

GC Semivolatiles

Lot-Sample #...: D3C240249-001 Work Order #...: FKM871AF Matrix.....: WATER
Date Sampled...: 03/19/03 08:30 Date Received..: 03/24/03
Prep Date.....: 03/25/03 Analysis Date..: 04/10/03
Prep Batch #...: 3084466 Analysis Time..: 22:06
Dilution Factor: 1

Method.....: SW846 8151A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
2,4-D	ND	4.0	ug/L	0.24
Dinoseb	ND	0.60	ug/L	0.065
2,4,5-TP (Silvex)	ND	1.0	ug/L	0.036
2,4,5-T	ND	1.0	ug/L	0.043

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
DCAA	75	(32 - 122)

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-uu

GC Semivolatiles

Lot-Sample #...: D3C240249-002 Work Order #...: FKM9C1AR Matrix.....: WATER
Date Sampled...: 03/19/03 08:35 Date Received..: 03/24/03
Prep Date.....: 03/25/03 Analysis Date..: 04/10/03
Prep Batch #...: 3084466 Analysis Time..: 23:06
Dilution Factor: 1

Method.....: SW846 8151A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
2,4-D	ND	4.0	ug/L	0.24
Dinoseb	ND	0.60	ug/L	0.065
2,4,5-TP (Silvex)	ND	1.0	ug/L	0.036
2,4,5-T	ND	1.0	ug/L	0.043

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
DCAA	30 *	(32 - 122)

NOTE(S):

* Surrogate recovery is outside stated control limits.

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-T

GC Semivolatiles

Lot-Sample #...: D3C240249-003 **Work Order #...:** FKM9D1AR **Matrix.....:** WATER
Date Sampled...: 03/19/03 10:00 **Date Received..:** 03/24/03
Prep Date.....: 03/25/03 **Analysis Date..:** 04/10/03
Prep Batch #...: 3084466 **Analysis Time..:** 23:36
Dilution Factor: 1

Method.....: SW846 8151A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
2,4-D	ND	4.0	ug/L	0.24
Dinoseb	ND	0.60	ug/L	0.065
2,4,5-TP (Silvex)	ND	1.0	ug/L	0.036
2,4,5-T	ND	1.0	ug/L	0.043

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
DCAA	73	(32 - 122)

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-S

GC Semivolatiles

Lot-Sample #...:	D3C240249-004	**Work Order #...:**	FKM9F1AR	**Matrix.....:**	WATER
Date Sampled...:	03/19/03 11:25	**Date Received..:**	03/24/03		
Prep Date.....:	03/25/03	**Analysis Date..:**	04/11/03		
Prep Batch #...:	3084466	**Analysis Time..:**	00:06		
Dilution Factor:	1				
		Method.....:	SW846 8151A		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
2,4-D	ND	4.0	ug/L	0.24
Dinoseb	ND	0.60	ug/L	0.065
2,4,5-TP (Silvex)	ND	1.0	ug/L	0.036
2,4,5-T	ND	1.0	ug/L	0.043

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
DCAA	59	(32 - 122)

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-Q

GC Semivolatiles

Lot-Sample #...: D3C240249-005 Work Order #...: FKM9J1AR Matrix.....: WATER
Date Sampled...: 03/19/03 12:30 Date Received..: 03/24/03
Prep Date.....: 03/25/03 Analysis Date..: 04/11/03
Prep Batch #...: 3084466 Analysis Time..: 00:36
Dilution Factor: 1

Method.....: SW846 8151A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
2,4-D	ND	4.0	ug/L	0.24
Dinoseb	ND	0.60	ug/L	0.065
2,4,5-TP (Silvex)	ND	1.0	ug/L	0.036
2,4,5-T	ND	1.0	ug/L	0.043

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
DCAA	67	(32 - 122)

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-WELL-B

GC Semivolatiles

Lot-Sample #...:	D3C240249-007	**Work Order #...:**	FKM9N1AR	**Matrix.....:**	WATER
Date Sampled...:	03/18/03 14:20	**Date Received..:**	03/24/03		
Prep Date.....:	03/25/03	**Analysis Date..:**	04/11/03		
Prep Batch #...:	3084466	**Analysis Time..:**	01:06		
Dilution Factor:	1				
		Method.....:	SW846 8151A		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
2,4-D	ND	4.0	ug/L	0.24
Dinoseb	ND	0.60	ug/L	0.065
2,4,5-TP (Silvex)	ND	1.0	ug/L	0.036
2,4,5-T	ND	1.0	ug/L	0.043

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
DCAA	69	(32 - 122)

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-D

Trace Level Organic Compounds

Lot-Sample #...: D3C210341-001 Work Order #...: FKKDL1AM Matrix.....: WG
Date Sampled...: 03/20/03 12:10 Date Received..: 03/21/03
Prep Date.....: 04/01/03 Analysis Date..: 04/03/03
Prep Batch #...: 3091432 Analysis Time..: 22:36
Dilution Factor: 1

PARAMETER	RESULT	DETECTION LIMIT	UNITS	METHOD
2,3,7,8-TCDD	ND	0.032	ng/L	SW846 8280A
Total TCDD	ND	0.032	ng/L	SW846 8280A
Total PeCDD	ND	1.8	ng/L	SW846 8280A
Total HxCDD	ND	0.16	ng/L	SW846 8280A
Total TCDF	ND	0.055	ng/L	SW846 8280A
Total PeCDF	ND	0.20	ng/L	SW846 8280A
Total HxCDF	ND	0.15	ng/L	SW846 8280A

INTERNAL STANDARDS	PERCENT RECOVERY	RECOVERY LIMITS
13C-2,3,7,8-TCDD	90	(25 - 150)
13C-2,3,7,8-TCDF	88	(25 - 150)
13C-1,2,3,6,7,8-HxCDD	92	(25 - 150)
13C-1,2,3,4,6,7,8-HpCDF	96	(25 - 150)

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
37Cl4-2,3,7,8-TCDD	89	(25 - 150)

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-C

Trace Level Organic Compounds

Lot-Sample #...: D3C210341-002 **Work Order #...:** FKKD21A0 **Matrix.....:** WG
Date Sampled...: 03/20/03 13:20 **Date Received..:** 03/21/03
Prep Date.....: 04/01/03 **Analysis Date..:** 04/03/03
Prep Batch #...: 3091432 **Analysis Time..:** 23:22
Dilution Factor: 1

PARAMETER	RESULT	DETECTION LIMIT	UNITS	METHOD
2,3,7,8-TCDD	ND	0.062	ng/L	SW846 8280A
Total TCDD	ND	0.062	ng/L	SW846 8280A
Total PeCDD	ND	1.7	ng/L	SW846 8280A
Total HxCDD	ND	0.25	ng/L	SW846 8280A
Total TCDF	ND	0.083	ng/L	SW846 8280A
Total PeCDF	ND	0.26	ng/L	SW846 8280A
Total HxCDF	ND	0.21	ng/L	SW846 8280A

INTERNAL STANDARDS	PERCENT RECOVERY	RECOVERY LIMITS
13C-2,3,7,8-TCDD	96	(25 - 150)
13C-2,3,7,8-TCDF	92	(25 - 150)
13C-1,2,3,6,7,8-HxCDD	95	(25 - 150)
13C-1,2,3,4,6,7,8-HpCDF	100	(25 - 150)

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
37Cl4-2,3,7,8-TCDD	99	(25 - 150)

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-u

Trace Level Organic Compounds

Lot-Sample #...: D3C240249-001 **Work Order #...:** FKM871AM **Matrix.....:** WATER
Date Sampled...: 03/19/03 08:30 **Date Received..:** 03/24/03
Prep Date.....: 04/01/03 **Analysis Date..:** 04/04/03
Prep Batch #...: 3091432 **Analysis Time..:** 00:08
Dilution Factor: 1

PARAMETER	RESULT	DETECTION LIMIT	UNITS	METHOD
2,3,7,8-TCDD	ND	0.062	ng/L	SW846 8280A
Total TCDD	ND	0.062	ng/L	SW846 8280A
Total PeCDD	ND	1.6	ng/L	SW846 8280A
Total HxCDD	ND	0.11	ng/L	SW846 8280A
Total TCDF	ND	0.046	ng/L	SW846 8280A
Total PeCDF	ND	0.21	ng/L	SW846 8280A
Total HxCDF	ND	0.12	ng/L	SW846 8280A

INTERNAL STANDARDS	PERCENT RECOVERY	RECOVERY LIMITS
13C-2,3,7,8-TCDD	97	(25 - 150)
13C-2,3,7,8-TCDF	93	(25 - 150)
13C-1,2,3,6,7,8-HxCDD	94	(25 - 150)
13C-1,2,3,4,6,7,8-HpCDF	100	(25 - 150)

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
37Cl4-2,3,7,8-TCDD	95	(25 - 150)

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-uu

Trace Level Organic Compounds

Lot-Sample #...: D3C240249-002 **Work Order #...:** FKM9C1A0 **Matrix.....:** WATER
Date Sampled...: 03/19/03 08:35 **Date Received..:** 03/24/03
Prep Date.....: 04/01/03 **Analysis Date..:** 04/04/03
Prep Batch #...: 3091432 **Analysis Time..:** 00:54
Dilution Factor: 1

PARAMETER	RESULT	DETECTION LIMIT	UNITS	METHOD
2,3,7,8-TCDD	ND	0.040	ng/L	SW846 8280A
Total TCDD	ND	0.040	ng/L	SW846 8280A
Total PeCDD	ND	1.6	ng/L	SW846 8280A
Total HxCDD	ND	0.16	ng/L	SW846 8280A
Total TCDF	ND	0.029	ng/L	SW846 8280A
Total PeCDF	ND	0.13	ng/L	SW846 8280A
Total HxCDF	ND	0.070	ng/L	SW846 8280A

INTERNAL STANDARDS	PERCENT RECOVERY	RECOVERY LIMITS
13C-2,3,7,8-TCDD	90	(25 - 150)
13C-2,3,7,8-TCDF	87	(25 - 150)
13C-1,2,3,6,7,8-HxCDD	93	(25 - 150)
13C-1,2,3,4,6,7,8-HpCDF	98	(25 - 150)

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
37Cl4-2,3,7,8-TCDD	92	(25 - 150)

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-T

Trace Level Organic Compounds

Lot-Sample #...: D3C240249-003 Work Order #...: FKM9D1A0 Matrix.....: WATER
Date Sampled...: 03/19/03 10:00 Date Received..: 03/24/03
Prep Date.....: 04/01/03 Analysis Date..: 04/04/03
Prep Batch #...: 3091432 Analysis Time..: 01:40
Dilution Factor: 1

PARAMETER	RESULT	DETECTION LIMIT	UNITS	METHOD
2,3,7,8-TCDD	ND	0.043	ng/L	SW846 8280A
Total TCDD	ND	0.043	ng/L	SW846 8280A
Total PeCDD	ND	1.6	ng/L	SW846 8280A
Total HxCDD	ND	0.22	ng/L	SW846 8280A
Total TCDF	ND	0.041	ng/L	SW846 8280A
Total PeCDF	ND	0.20	ng/L	SW846 8280A
Total HxCDF	ND	0.090	ng/L	SW846 8280A

INTERNAL STANDARDS	PERCENT RECOVERY	RECOVERY LIMITS
13C-2,3,7,8-TCDD	96	(25 - 150)
13C-2,3,7,8-TCDF	93	(25 - 150)
13C-1,2,3,6,7,8-HxCDD	97	(25 - 150)
13C-1,2,3,4,6,7,8-HpCDF	101	(25 - 150)

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
37Cl4-2,3,7,8-TCDD	96	(25 - 150)

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-S

Trace Level Organic Compounds

Lot-Sample #...: D3C240249-004 **Work Order #...:** FKM9F1A0 **Matrix.....:** WATER
Date Sampled...: 03/19/03 11:25 **Date Received..:** 03/24/03
Prep Date.....: 04/01/03 **Analysis Date..:** 04/04/03
Prep Batch #...: 3091432 **Analysis Time..:** 02:26
Dilution Factor: 1

PARAMETER	RESULT	DETECTION LIMIT	UNITS	METHOD
2,3,7,8-TCDD	ND	0.048	ng/L	SW846 8280A
Total TCDD	ND	0.048	ng/L	SW846 8280A
Total PeCDD	ND	1.5	ng/L	SW846 8280A
Total HxCDD	ND	0.18	ng/L	SW846 8280A
Total TCDF	ND	0.042	ng/L	SW846 8280A
Total PeCDF	ND	0.19	ng/L	SW846 8280A
Total HxCDF	ND	0.089	ng/L	SW846 8280A

INTERNAL STANDARDS	PERCENT RECOVERY	RECOVERY LIMITS
13C-2,3,7,8-TCDD	92	(25 - 150)
13C-2,3,7,8-TCDF	88	(25 - 150)
13C-1,2,3,6,7,8-HxCDD	90	(25 - 150)
13C-1,2,3,4,6,7,8-HpCDF	95	(25 - 150)

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
37Cl4-2,3,7,8-TCDD	93	(25 - 150)

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-Q

Trace Level Organic Compounds

Lot-Sample #...: D3C240249-005 Work Order #...: FKM9J1A0 Matrix.....: WATER
Date Sampled...: 03/19/03 12:30 Date Received..: 03/24/03
Prep Date.....: 04/01/03 Analysis Date..: 04/04/03
Prep Batch #...: 3091432 Analysis Time..: 03:12
Dilution Factor: 1

PARAMETER	RESULT	DETECTION LIMIT	UNITS	METHOD
2,3,7,8-TCDD	ND	0.082	ng/L	SW846 8280A
Total TCDD	ND	0.082	ng/L	SW846 8280A
Total PeCDD	ND	1.8	ng/L	SW846 8280A
Total HxCDD	ND	0.27	ng/L	SW846 8280A
Total TCDF	ND	0.33	ng/L	SW846 8280A
Total PeCDF	ND	0.33	ng/L	SW846 8280A
Total HxCDF	ND	0.15	ng/L	SW846 8280A

INTERNAL STANDARDS	PERCENT RECOVERY	RECOVERY LIMITS
13C-2,3,7,8-TCDD	93	(25 - 150)
13C-2,3,7,8-TCDF	92	(25 - 150)
13C-1,2,3,6,7,8-HxCDD	96	(25 - 150)
13C-1,2,3,4,6,7,8-HpCDF	104	(25 - 150)

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
37Cl4-2,3,7,8-TCDD	94	(25 - 150)

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-WELL-B

Trace Level Organic Compounds

Lot-Sample #...: D3C240249-007 **Work Order #...:** FKM9N1A0 **Matrix.....:** WATER
Date Sampled...: 03/18/03 14:20 **Date Received..:** 03/24/03
Prep Date.....: 04/01/03 **Analysis Date..:** 04/04/03
Prep Batch #...: 3091432 **Analysis Time..:** 07:02
Dilution Factor: 1

PARAMETER	RESULT	DETECTION LIMIT	UNITS	METHOD
2,3,7,8-TCDD	ND	0.11	ng/L	SW846 8280A
Total TCDD	ND	0.11	ng/L	SW846 8280A
Total PeCDD	ND	1.6	ng/L	SW846 8280A
Total HxCDD	ND	0.22	ng/L	SW846 8280A
Total TCDF	ND	0.38	ng/L	SW846 8280A
Total PeCDF	ND	1.8	ng/L	SW846 8280A
Total HxCDF	ND	0.18	ng/L	SW846 8280A

INTERNAL STANDARDS	PERCENT RECOVERY	RECOVERY LIMITS
13C-2,3,7,8-TCDD	92	(25 - 150)
13C-2,3,7,8-TCDF	89	(25 - 150)
13C-1,2,3,6,7,8-HxCDD	89	(25 - 150)
13C-1,2,3,4,6,7,8-HpCDF	100	(25 - 150)

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
37Cl4-2,3,7,8-TCDD	91	(25 - 150)

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-D

HPLC

Lot-Sample #...: D3C210341-001 Work Order #...: FKKDL1AG Matrix.....: WG
Date Sampled...: 03/20/03 12:10 Date Received..: 03/21/03
Prep Date.....: 03/27/03 Analysis Date..: 03/31/03
Prep Batch #...: 3086139 Analysis Time..: 21:43
Dilution Factor: 1

Method.....: SW846 8310

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	1.0	ug/L	0.15
Acenaphthylene	ND	1.0	ug/L	0.15
Anthracene	ND	0.20	ug/L	0.094
Benzo(a)anthracene	ND	0.20	ug/L	0.049
Benzo(a)pyrene	ND	0.10	ug/L	0.030
Benzo(b)fluoranthene	ND	0.10	ug/L	0.051
Benzo(ghi)perylene	ND	0.20	ug/L	0.036
Benzo(k)fluoranthene	ND	0.10	ug/L	0.025
Chrysene	ND	0.20	ug/L	0.050
Dibenzo(a,h)anthracene	ND	0.20	ug/L	0.080
Fluoranthene	ND	0.20	ug/L	0.13
Fluorene	ND	0.20	ug/L	0.14
Indeno(1,2,3-cd)pyrene	ND	0.20	ug/L	0.089
1-Methylnaphthalene	ND	1.0	ug/L	0.11
2-Methylnaphthalene	ND	1.0	ug/L	0.16
Naphthalene	ND	1.0	ug/L	0.16
Phenanthrene	ND	0.20	ug/L	0.10
Pyrene	ND	0.20	ug/L	0.031

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Terphenyl-d14	89	(64 - 108)

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-C

HPLC

Lot-Sample #...: D3C210341-002 Work Order #...: FKKD21AT Matrix.....: WG
Date Sampled...: 03/20/03 13:20 Date Received..: 03/21/03
Prep Date.....: 03/27/03 Analysis Date..: 03/31/03
Prep Batch #...: 3086139 Analysis Time..: 22:14
Dilution Factor: 1

Method.....: SW846 8310

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	1.0	ug/L	0.15
Acenaphthylene	ND	1.0	ug/L	0.15
Anthracene	ND	0.20	ug/L	0.094
Benzo(a)anthracene	ND	0.20	ug/L	0.049
Benzo(a)pyrene	ND	0.10	ug/L	0.030
Benzo(b)fluoranthene	ND	0.10	ug/L	0.051
Benzo(ghi)perylene	ND	0.20	ug/L	0.036
Benzo(k)fluoranthene	ND	0.10	ug/L	0.025
Chrysene	ND	0.20	ug/L	0.050
Dibenzo(a,h)anthracene	ND	0.20	ug/L	0.080
Fluoranthene	ND	0.20	ug/L	0.13
Fluorene	ND	0.20	ug/L	0.14
Indeno(1,2,3-cd)pyrene	ND	0.20	ug/L	0.089
1-Methylnaphthalene	ND	1.0	ug/L	0.11
2-Methylnaphthalene	ND	1.0	ug/L	0.16
Naphthalene	ND	1.0	ug/L	0.16
Phenanthrene	ND	0.20	ug/L	0.10
Pyrene	ND	0.20	ug/L	0.031

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Terphenyl-d14	91	(64 - 108)

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-u

HPLC

Lot-Sample #...: D3C240249-001 Work Order #...: FKM871AG Matrix.....: WATER
Date Sampled...: 03/19/03 08:30 Date Received..: 03/24/03
Prep Date.....: 03/25/03 Analysis Date..: 03/27/03
Prep Batch #...: 3084184 Analysis Time..: 14:48
Dilution Factor: 1

Method.....: SW846 8310

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	1.0	ug/L	0.15
Acenaphthylene	ND	1.0	ug/L	0.15
Anthracene	ND	0.20	ug/L	0.094
Benzo(a)anthracene	ND	0.20	ug/L	0.049
Benzo(a)pyrene	ND	0.10	ug/L	0.030
Benzo(b)fluoranthene	ND	0.10	ug/L	0.051
Benzo(ghi)perylene	ND	0.20	ug/L	0.036
Benzo(k)fluoranthene	ND	0.10	ug/L	0.025
Chrysene	ND	0.20	ug/L	0.050
Dibenzo(a,h)anthracene	ND	0.20	ug/L	0.080
Fluoranthene	ND	0.20	ug/L	0.13
Fluorene	ND	0.20	ug/L	0.14
Indeno(1,2,3-cd)pyrene	ND	0.20	ug/L	0.089
1-Methylnaphthalene	ND	1.0	ug/L	0.11
2-Methylnaphthalene	ND	1.0	ug/L	0.16
Naphthalene	ND	1.0	ug/L	0.16
Phenanthrene	ND	0.20	ug/L	0.10
Pyrene	ND	0.20	ug/L	0.031

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Terphenyl-d14	91	(64 - 108)

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-uu

HPLC

Lot-Sample #...: D3C240249-002 **Work Order #...:** FKM9C1AT **Matrix.....:** WATER
Date Sampled...: 03/19/03 08:35 **Date Received..:** 03/24/03
Prep Date.....: 03/25/03 **Analysis Date..:** 03/27/03
Prep Batch #...: 3084184 **Analysis Time..:** 15:19
Dilution Factor: 1

Method.....: SW846 8310

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	1.0	ug/L	0.15
Acenaphthylene	ND	1.0	ug/L	0.15
Anthracene	ND	0.20	ug/L	0.094
Benzo(a)anthracene	ND	0.20	ug/L	0.049
Benzo(a)pyrene	ND	0.10	ug/L	0.030
Benzo(b)fluoranthene	ND	0.10	ug/L	0.051
Benzo(ghi)perylene	ND	0.20	ug/L	0.036
Benzo(k)fluoranthene	ND	0.10	ug/L	0.025
Chrysene	ND	0.20	ug/L	0.050
Dibenzo(a,h)anthracene	ND	0.20	ug/L	0.080
Fluoranthene	ND	0.20	ug/L	0.13
Fluorene	ND	0.20	ug/L	0.14
Indeno(1,2,3-cd)pyrene	ND	0.20	ug/L	0.089
1-Methylnaphthalene	ND	1.0	ug/L	0.11
2-Methylnaphthalene	ND	1.0	ug/L	0.16
Naphthalene	ND	1.0	ug/L	0.16
Phenanthrene	ND	0.20	ug/L	0.10
Pyrene	ND	0.20	ug/L	0.031

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Terphenyl-d14	94	(64 - 108)

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-T

HPLC

Lot-Sample #...: D3C240249-003 Work Order #...: FKM9D1AT Matrix.....: WATER
Date Sampled...: 03/19/03 10:00 Date Received..: 03/24/03
Prep Date.....: 03/25/03 Analysis Date..: 03/27/03
Prep Batch #...: 3084184 Analysis Time..: 15:49
Dilution Factor: 1

Method.....: SW846 8310

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	1.0	ug/L	0.15
Acenaphthylene	ND	1.0	ug/L	0.15
Anthracene	ND	0.20	ug/L	0.094
Benzo(a)anthracene	ND	0.20	ug/L	0.049
Benzo(a)pyrene	ND	0.10	ug/L	0.030
Benzo(b)fluoranthene	ND	0.10	ug/L	0.051
Benzo(ghi)perylene	ND	0.20	ug/L	0.036
Benzo(k)fluoranthene	ND	0.10	ug/L	0.025
Chrysene	ND	0.20	ug/L	0.050
Dibenzo(a,h)anthracene	ND	0.20	ug/L	0.080
Fluoranthene	ND	0.20	ug/L	0.13
Fluorene	ND	0.20	ug/L	0.14
Indeno(1,2,3-cd)pyrene	ND	0.20	ug/L	0.089
1-Methylnaphthalene	ND	1.0	ug/L	0.11
2-Methylnaphthalene	ND	1.0	ug/L	0.16
Naphthalene	ND	1.0	ug/L	0.16
Phenanthrene	ND	0.20	ug/L	0.10
Pyrene	ND	0.20	ug/L	0.031

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Terphenyl-d14	97	(64 - 108)

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-S

HPLC

Lot-Sample #...: D3C240249-004 **Work Order #...:** FKM9F1AT **Matrix.....:** WATER
Date Sampled...: 03/19/03 11:25 **Date Received..:** 03/24/03
Prep Date.....: 03/25/03 **Analysis Date..:** 03/27/03
Prep Batch #...: 3084184 **Analysis Time..:** 16:20
Dilution Factor: 1

Method.....: SW846 8310

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	1.0	ug/L	0.15
Acenaphthylene	ND	1.0	ug/L	0.15
Anthracene	ND	0.20	ug/L	0.094
Benzo(a)anthracene	ND	0.20	ug/L	0.049
Benzo(a)pyrene	ND	0.10	ug/L	0.030
Benzo(b)fluoranthene	ND	0.10	ug/L	0.051
Benzo(ghi)perylene	ND	0.20	ug/L	0.036
Benzo(k)fluoranthene	ND	0.10	ug/L	0.025
Chrysene	ND	0.20	ug/L	0.050
Dibenzo(a,h)anthracene	ND	0.20	ug/L	0.080
Fluoranthene	ND	0.20	ug/L	0.13
Fluorene	ND	0.20	ug/L	0.14
Indeno(1,2,3-cd)pyrene	ND	0.20	ug/L	0.089
1-Methylnaphthalene	ND	1.0	ug/L	0.11
2-Methylnaphthalene	ND	1.0	ug/L	0.16
Naphthalene	ND	1.0	ug/L	0.16
Phenanthrene	ND	0.20	ug/L	0.10
Pyrene	ND	0.20	ug/L	0.031

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Terphenyl-d14	95	(64 - 108)

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-Q

HPLC

Lot-Sample #...: D3C240249-005 Work Order #...: FKM9J1AT Matrix.....: WATER
Date Sampled...: 03/19/03 12:30 Date Received..: 03/24/03
Prep Date.....: 03/25/03 Analysis Date..: 03/27/03
Prep Batch #...: 3084184 Analysis Time..: 16:50
Dilution Factor: 1

Method.....: SW846 8310

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	1.0	ug/L	0.15
Acenaphthylene	ND	1.0	ug/L	0.15
Anthracene	ND	0.20	ug/L	0.094
Benzo(a)anthracene	ND	0.20	ug/L	0.049
Benzo(a)pyrene	ND	0.10	ug/L	0.030
Benzo(b)fluoranthene	ND	0.10	ug/L	0.051
Benzo(ghi)perylene	ND	0.20	ug/L	0.036
Benzo(k)fluoranthene	ND	0.10	ug/L	0.025
Chrysene	ND	0.20	ug/L	0.050
Dibenzo(a,h)anthracene	ND	0.20	ug/L	0.080
Fluoranthene	ND	0.20	ug/L	0.13
Fluorene	ND	0.20	ug/L	0.14
Indeno(1,2,3-cd)pyrene	ND	0.20	ug/L	0.089
1-Methylnaphthalene	ND	1.0	ug/L	0.11
2-Methylnaphthalene	ND	1.0	ug/L	0.16
Naphthalene	ND	1.0	ug/L	0.16
Phenanthrene	ND	0.20	ug/L	0.10
Pyrene	ND	0.20	ug/L	0.031

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Terphenyl-d14	84	(64 - 108)

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-WELL-B

HPLC

Lot-Sample #...: D3C240249-007 Work Order #...: FKM9N1AT Matrix.....: WATER
Date Sampled...: 03/18/03 14:20 Date Received..: 03/24/03
Prep Date.....: 03/25/03 Analysis Date..: 03/27/03
Prep Batch #...: 3084184 Analysis Time..: 17:51
Dilution Factor: 1

Method.....: SW846 8310

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	1.0	ug/L	0.15
Acenaphthylene	ND	1.0	ug/L	0.15
Anthracene	ND	0.20	ug/L	0.094
Benzo(a)anthracene	ND	0.20	ug/L	0.049
Benzo(a)pyrene	ND	0.10	ug/L	0.030
Benzo(b)fluoranthene	ND	0.10	ug/L	0.051
Benzo(ghi)perylene	ND	0.20	ug/L	0.036
Benzo(k)fluoranthene	ND	0.10	ug/L	0.025
Chrysene	ND	0.20	ug/L	0.050
Dibenzo(a,h)anthracene	ND	0.20	ug/L	0.080
Fluoranthene	ND	0.20	ug/L	0.13
Fluorene	ND	0.20	ug/L	0.14
Indeno(1,2,3-cd)pyrene	ND	0.20	ug/L	0.089
1-Methylnaphthalene	ND	1.0	ug/L	0.11
2-Methylnaphthalene	ND	1.0	ug/L	0.16
Naphthalene	ND	1.0	ug/L	0.16
Phenanthrene	ND	0.20	ug/L	0.10
Pyrene	ND	0.20	ug/L	0.031

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Terphenyl-d14	96	(64 - 108)

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-D

TOTAL Metals

Lot-Sample #...: D3C210341-001 Matrix.....: WG
Date Sampled...: 03/20/03 12:10 Date Received..: 03/21/03

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 3084435						
Aluminum	ND	100	ug/L	SW846 6010B	03/27-03/28/03	FKKDL1AP
		Dilution Factor: 1		Analysis Time..: 21:01	MDL.....: 20	
Barium	**83**	**10**	**ug/L**	**SW846 6010B**	**03/27-03/28/03**	**FKKDL1AQ**
		Dilution Factor: 1		Analysis Time..: 17:11	MDL.....: 1.8	
Beryllium	ND	5.0	ug/L	SW846 6010B	03/27-03/28/03	FKKDL1AR
		Dilution Factor: 1		Analysis Time..: 17:11	MDL.....: 0.22	
Calcium	**31000**	**200**	**ug/L**	**SW846 6010B**	**03/27-03/28/03**	**FKKDL1CE**
		Dilution Factor: 1		Analysis Time..: 21:01	MDL.....: 31	
Cobalt	ND	10	ug/L	SW846 6010B	03/27-03/28/03	FKKDL1CA
		Dilution Factor: 1		Analysis Time..: 17:11	MDL.....: 0.92	
Copper	ND	20	ug/L	SW846 6010B	03/27-03/28/03	FKKDL1AT
		Dilution Factor: 1		Analysis Time..: 17:11	MDL.....: 0.76	
Iron	**19 B**	**100**	**ug/L**	**SW846 6010B**	**03/27-03/28/03**	**FKKDL1AU**
		Dilution Factor: 1		Analysis Time..: 21:01	MDL.....: 13	
Potassium	**5300**	**3000**	**ug/L**	**SW846 6010B**	**03/27-03/28/03**	**FKKDL1CG**
		Dilution Factor: 1		Analysis Time..: 21:01	MDL.....: 490	
Magnesium	**30000**	**200**	**ug/L**	**SW846 6010B**	**03/27-03/28/03**	**FKKDL1CF**
		Dilution Factor: 1		Analysis Time..: 21:01	MDL.....: 24	
Manganese	**1.6 B**	**10**	**ug/L**	**SW846 6010B**	**03/27-03/28/03**	**FKKDL1AV**
		Dilution Factor: 1		Analysis Time..: 17:11	MDL.....: 0.49	
Molybdenum	**3.3 B**	**20**	**ug/L**	**SW846 6010B**	**03/27-03/28/03**	**FKKDL1CC**
		Dilution Factor: 1		Analysis Time..: 17:11	MDL.....: 2.1	
Sodium	**47000**	**5000**	**ug/L**	**SW846 6010B**	**03/27-03/28/03**	**FKKDL1CH**
		Dilution Factor: 1		Analysis Time..: 21:01	MDL.....: 1500	
Nickel	ND	40	ug/L	SW846 6010B	03/27-03/28/03	FKKDL1AW
		Dilution Factor: 1		Analysis Time..: 17:11	MDL.....: 1.7	

(Continued on next page)

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-D

TOTAL Metals

Lot-Sample #...: D3C210341-001 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Tin	**3.8 B,J**	**100**	**ug/L**	**SW846 6010B**	**03/27-03/28/03**	**FKKDL1CD**
		Dilution Factor: 1		Analysis Time..: 17:11	MDL.....: 3.4	
Vanadium	**36**	**10**	**ug/L**	**SW846 6010B**	**03/27-03/28/03**	**FKKDL1AX**
		Dilution Factor: 1		Analysis Time..: 17:11	MDL.....: 2.2	
Zinc	ND	20	ug/L	SW846 6010B	03/27-03/28/03	FKKDL1A0
		Dilution Factor: 1		Analysis Time..: 17:11	MDL.....: 6.8	
Prep Batch #...: 3084470						
Silver	ND	5.0	ug/L	SW846 6020	04/01-04/14/03	FKKDL1A6
		Dilution Factor: 1		Analysis Time..: 21:10	MDL.....: 0.012	
Arsenic	**5.0 J**	**5.0**	**ug/L**	**SW846 6020**	**04/01-04/14/03**	**FKKDL1A2**
		Dilution Factor: 1		Analysis Time..: 21:10	MDL.....: 0.061	
Cadmium	ND	1.0	ug/L	SW846 6020	04/01-04/14/03	FKKDL1A3
		Dilution Factor: 1		Analysis Time..: 21:10	MDL.....: 0.022	
Chromium	**1.2 B,J**	**2.0**	**ug/L**	**SW846 6020**	**04/01-04/14/03**	**FKKDL1A8**
		Dilution Factor: 1		Analysis Time..: 21:10	MDL.....: 0.24	
Lead	ND	1.0	ug/L	SW846 6020	04/01-04/14/03	FKKDL1A4
		Dilution Factor: 1		Analysis Time..: 21:10	MDL.....: 0.15	
Antimony	ND	2.0	ug/L	SW846 6020	04/01-04/14/03	FKKDL1A1
		Dilution Factor: 1		Analysis Time..: 21:10	MDL.....: 0.040	
Selenium	**0.32 B,J**	**5.0**	**ug/L**	**SW846 6020**	**04/01-04/14/03**	**FKKDL1A5**
		Dilution Factor: 1		Analysis Time..: 21:10	MDL.....: 0.19	
Thallium	ND	1.0	ug/L	SW846 6020	04/01-04/14/03	FKKDL1A7
		Dilution Factor: 1		Analysis Time..: 21:10	MDL.....: 0.015	
Prep Batch #...: 3098223						
Mercury	**0.021 B,J**	**0.20**	**ug/L**	**SW846 7470A**	**04/14/03**	**FKKDL1A9**
		Dilution Factor: 1		Analysis Time..: 21:17	MDL.....: 0.015	

NOTE(S):

B Estimated result. Result is less than RL.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-C

TOTAL Metals

Lot-Sample #...: D3C210341-002 Matrix.....: WG
Date Sampled...: 03/20/03 13:20 Date Received..: 03/21/03

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 3084435						
Aluminum	ND	100	ug/L	SW846 6010B	03/27-03/28/03	FKKD21A2
		Dilution Factor: 1		Analysis Time..: 21:05	MDL.....: 20	
Barium	**40**	**10**	**ug/L**	**SW846 6010B**	**03/27-03/28/03**	**FKKD21A3**
		Dilution Factor: 1		Analysis Time..: 17:16	MDL.....: 1.8	
Beryllium	ND	5.0	ug/L	SW846 6010B	03/27-03/28/03	FKKD21A4
		Dilution Factor: 1		Analysis Time..: 17:16	MDL.....: 0.22	
Calcium	**29000**	**200**	**ug/L**	**SW846 6010B**	**03/27-03/28/03**	**FKKD21CE**
		Dilution Factor: 1		Analysis Time..: 21:05	MDL.....: 31	
Cobalt	ND	10	ug/L	SW846 6010B	03/27-03/28/03	FKKD21CA
		Dilution Factor: 1		Analysis Time..: 17:16	MDL.....: 0.92	
Copper	ND	20	ug/L	SW846 6010B	03/27-03/28/03	FKKD21A5
		Dilution Factor: 1		Analysis Time..: 17:16	MDL.....: 0.76	
Iron	**13 B**	**100**	**ug/L**	**SW846 6010B**	**03/27-03/28/03**	**FKKD21A6**
		Dilution Factor: 1		Analysis Time..: 21:05	MDL.....: 13	
Potassium	**5000**	**3000**	**ug/L**	**SW846 6010B**	**03/27-03/28/03**	**FKKD21CG**
		Dilution Factor: 1		Analysis Time..: 21:05	MDL.....: 490	
Magnesium	**28000**	**200**	**ug/L**	**SW846 6010B**	**03/27-03/28/03**	**FKKD21CF**
		Dilution Factor: 1		Analysis Time..: 21:05	MDL.....: 24	
Manganese	**0.74 B**	**10**	**ug/L**	**SW846 6010B**	**03/27-03/28/03**	**FKKD21A7**
		Dilution Factor: 1		Analysis Time..: 17:16	MDL.....: 0.49	
Molybdenum	**3.7 B**	**20**	**ug/L**	**SW846 6010B**	**03/27-03/28/03**	**FKKD21CC**
		Dilution Factor: 1		Analysis Time..: 17:16	MDL.....: 2.1	
Sodium	**45000**	**5000**	**ug/L**	**SW846 6010B**	**03/27-03/28/03**	**FKKD21CH**
		Dilution Factor: 1		Analysis Time..: 21:05	MDL.....: 1500	
Nickel	ND	40	ug/L	SW846 6010B	03/27-03/28/03	FKKD21A8
		Dilution Factor: 1		Analysis Time..: 17:16	MDL.....: 1.7	

(Continued on next page)

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-C

TOTAL Metals

Lot-Sample #...: D3C210341-002 Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Tin	3.4 B,J	100	ug/L	SW846 6010B	03/27-03/28/03	FKKD21CD
		Dilution Factor: 1		Analysis Time..: 17:16	MDL.....: 3.4	
Vanadium	41	10	ug/L	SW846 6010B	03/27-03/28/03	FKKD21A9
		Dilution Factor: 1		Analysis Time..: 17:16	MDL.....: 2.2	
Zinc	9.5 B	20	ug/L	SW846 6010B	03/27-03/28/03	FKKD21AA
		Dilution Factor: 1		Analysis Time..: 17:16	MDL.....: 6.8	
Prep Batch #...: 3084470						
Silver	ND	5.0	ug/L	SW846 6020	04/01-04/14/03	FKKD21AH
		Dilution Factor: 1		Analysis Time..: 21:04	MDL.....: 0.012	
Arsenic	6.3 J	5.0	ug/L	SW846 6020	04/01-04/14/03	FKKD21AD
		Dilution Factor: 1		Analysis Time..: 21:04	MDL.....: 0.061	
Cadmium	ND	1.0	ug/L	SW846 6020	04/01-04/14/03	FKKD21AE
		Dilution Factor: 1		Analysis Time..: 21:04	MDL.....: 0.022	
Chromium	1.7 B,J	2.0	ug/L	SW846 6020	04/01-04/14/03	FKKD21AK
		Dilution Factor: 1		Analysis Time..: 21:04	MDL.....: 0.24	
Lead	0.44 B	1.0	ug/L	SW846 6020	04/01-04/14/03	FKKD21AF
		Dilution Factor: 1		Analysis Time..: 21:04	MDL.....: 0.15	
Antimony	0.25 B,J	2.0	ug/L	SW846 6020	04/01-04/14/03	FKKD21AC
		Dilution Factor: 1		Analysis Time..: 21:04	MDL.....: 0.040	
Selenium	1.3 B,J	5.0	ug/L	SW846 6020	04/01-04/14/03	FKKD21AG
		Dilution Factor: 1		Analysis Time..: 21:04	MDL.....: 0.19	
Thallium	ND	1.0	ug/L	SW846 6020	04/01-04/14/03	FKKD21AJ
		Dilution Factor: 1		Analysis Time..: 21:04	MDL.....: 0.015	
Prep Batch #...: 3098223						
Mercury	0.019 B,J	0.20	ug/L	SW846 7470A	04/14/03	FKKD21AL
		Dilution Factor: 1		Analysis Time..: 21:19	MDL.....: 0.015	

NOTE(S):

B Estimated result. Result is less than RL.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-u

TOTAL Metals

Lot-Sample #...: D3C240249-001 Matrix.....: WATER
Date Sampled...: 03/19/03 08:30 Date Received..: 03/24/03

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 3085487						
Silver	ND	5.0	ug/L	SW846 6020	04/01-04/14/03	FKM871A6
		Dilution Factor: 1		Analysis Time..: 20:32	MDL.....: 0.012	
Arsenic	**5.0 J**	**5.0**	**ug/L**	**SW846 6020**	**04/01-04/14/03**	**FKM871A2**
		Dilution Factor: 1		Analysis Time..: 20:32	MDL.....: 0.061	
Cadmium	ND	1.0	ug/L	SW846 6020	04/01-04/14/03	FKM871A3
		Dilution Factor: 1		Analysis Time..: 20:32	MDL.....: 0.022	
Chromium	**1.7 B,J**	**2.0**	**ug/L**	**SW846 6020**	**04/01-04/14/03**	**FKM871A8**
		Dilution Factor: 1		Analysis Time..: 20:32	MDL.....: 0.24	
Lead	ND	1.0	ug/L	SW846 6020	04/01-04/14/03	FKM871A4
		Dilution Factor: 1		Analysis Time..: 20:32	MDL.....: 0.15	
Antimony	ND	2.0	ug/L	SW846 6020	04/01-04/14/03	FKM871A1
		Dilution Factor: 1		Analysis Time..: 20:32	MDL.....: 0.040	
Selenium	**5.9**	**5.0**	**ug/L**	**SW846 6020**	**04/01-04/14/03**	**FKM871A5**
		Dilution Factor: 1		Analysis Time..: 20:32	MDL.....: 0.19	
Thallium	ND	1.0	ug/L	SW846 6020	04/01-04/14/03	FKM871A7
		Dilution Factor: 1		Analysis Time..: 20:32	MDL.....: 0.015	
Prep Batch #...: 3086278						
Aluminum	ND	100	ug/L	SW846 6010B	04/01-04/02/03	FKM871AP
		Dilution Factor: 1		Analysis Time..: 22:51	MDL.....: 20	
Barium	**29**	**10**	**ug/L**	**SW846 6010B**	**04/01-04/02/03**	**FKM871AQ**
		Dilution Factor: 1		Analysis Time..: 20:44	MDL.....: 1.8	
Beryllium	ND	5.0	ug/L	SW846 6010B	04/01-04/02/03	FKM871AR
		Dilution Factor: 1		Analysis Time..: 22:51	MDL.....: 0.22	
Calcium	**44000**	**200**	**ug/L**	**SW846 6010B**	**04/01-04/02/03**	**FKM871CE**
		Dilution Factor: 1		Analysis Time..: 22:51	MDL.....: 31	
Cobalt	ND	10	ug/L	SW846 6010B	04/01-04/02/03	FKM871CA
		Dilution Factor: 1		Analysis Time..: 20:44	MDL.....: 0.92	

(Continued on next page)

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-u

TOTAL Metals

Lot-Sample #...: D3C240249-001 **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Copper	ND	20	ug/L	SW846 6010B	04/01-04/02/03	FKM871AT
		Dilution Factor: 1		Analysis Time..: 20:44	MDL.....: 0.76	
Iron	**19 B**	**100**	**ug/L**	**SW846 6010B**	**04/01-04/02/03**	**FKM871AU**
		Dilution Factor: 1		Analysis Time..: 22:51	MDL.....: 13	
Potassium	**6000**	**3000**	**ug/L**	**SW846 6010B**	**04/01-04/02/03**	**FKM871CG**
		Dilution Factor: 1		Analysis Time..: 22:51	MDL.....: 49	
Magnesium	**39000**	**200**	**ug/L**	**SW846 6010B**	**04/01-04/02/03**	**FKM871CF**
		Dilution Factor: 1		Analysis Time..: 22:51	MDL.....: 24	
Manganese	**1.8 B**	**10**	**ug/L**	**SW846 6010B**	**04/01-04/02/03**	**FKM871AV**
		Dilution Factor: 1		Analysis Time..: 20:44	MDL.....: 0.49	
Molybdenum	**4.6 B**	**20**	**ug/L**	**SW846 6010B**	**04/01-04/02/03**	**FKM871CC**
		Dilution Factor: 1		Analysis Time..: 20:44	MDL.....: 2.1	
Sodium	**52000**	**5000**	**ug/L**	**SW846 6010B**	**04/01-04/02/03**	**FKM871CH**
		Dilution Factor: 1		Analysis Time..: 22:51	MDL.....: 1500	
Nickel	ND	40	ug/L	SW846 6010B	04/01-04/02/03	FKM871AW
		Dilution Factor: 1		Analysis Time..: 20:44	MDL.....: 1.7	
Tin	ND	100	ug/L	SW846 6010B	04/01-04/02/03	FKM871CD
		Dilution Factor: 1		Analysis Time..: 20:44	MDL.....: 3.4	
Vanadium	**29**	**10**	**ug/L**	**SW846 6010B**	**04/01-04/02/03**	**FKM871AX**
		Dilution Factor: 1		Analysis Time..: 20:44	MDL.....: 2.2	
Zinc	**15 B,J**	**20**	**ug/L**	**SW846 6010B**	**04/01-04/02/03**	**FKM871A0**
		Dilution Factor: 1		Analysis Time..: 20:44	MDL.....: 6.8	

Prep Batch #...: 3098223

Mercury	**0.019 B,J**	**0.20**	**ug/L**	**SW846 7470A**	**04/14/03**	**FKM871A9**
		Dilution Factor: 1		Analysis Time..: 21:43	MDL.....: 0.015	

NOTE(S):

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

B Estimated result. Result is less than RL.

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-uu

TOTAL Metals

Lot-Sample #...: D3C240249-002 **Matrix.....:** WATER
Date Sampled...: 03/19/03 08:35 **Date Received..:** 03/24/03

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 3085487						
Silver	ND	5.0	ug/L	SW846 6020	04/01-04/14/03	FKM9C1AH
		Dilution Factor: 1		Analysis Time..: 19:57	MDL.....: 0.012	
Arsenic	**5.4 J**	**5.0**	**ug/L**	**SW846 6020**	**04/01-04/14/03**	**FKM9C1AD**
		Dilution Factor: 1		Analysis Time..: 19:57	MDL.....: 0.061	
Cadmium	ND	1.0	ug/L	SW846 6020	04/01-04/14/03	FKM9C1AE
		Dilution Factor: 1		Analysis Time..: 19:57	MDL.....: 0.022	
Chromium	**1.8 B,J**	**2.0**	**ug/L**	**SW846 6020**	**04/01-04/14/03**	**FKM9C1AK**
		Dilution Factor: 1		Analysis Time..: 19:57	MDL.....: 0.24	
Lead	ND	1.0	ug/L	SW846 6020	04/01-04/14/03	FKM9C1AF
		Dilution Factor: 1		Analysis Time..: 19:57	MDL.....: 0.15	
Antimony	**0.33 B,J**	**2.0**	**ug/L**	**SW846 6020**	**04/01-04/14/03**	**FKM9C1AC**
		Dilution Factor: 1		Analysis Time..: 19:57	MDL.....: 0.040	
Selenium	**7.0**	**5.0**	**ug/L**	**SW846 6020**	**04/01-04/14/03**	**FKM9C1AG**
		Dilution Factor: 1		Analysis Time..: 19:57	MDL.....: 0.19	
Thallium	ND	1.0	ug/L	SW846 6020	04/01-04/14/03	FKM9C1AJ
		Dilution Factor: 1		Analysis Time..: 19:57	MDL.....: 0.015	
Prep Batch #...: 3086278						
Aluminum	ND	100	ug/L	SW846 6010B	04/01-04/02/03	FKM9C1A2
		Dilution Factor: 1		Analysis Time..: 22:55	MDL.....: 20	
Barium	**30**	**10**	**ug/L**	**SW846 6010B**	**04/01-04/02/03**	**FKM9C1A3**
		Dilution Factor: 1		Analysis Time..: 20:50	MDL.....: 1.8	
Beryllium	ND	5.0	ug/L	SW846 6010B	04/01-04/02/03	FKM9C1A4
		Dilution Factor: 1		Analysis Time..: 22:55	MDL.....: 0.22	
Calcium	**46000**	**200**	**ug/L**	**SW846 6010B**	**04/01-04/02/03**	**FKM9C1CE**
		Dilution Factor: 1		Analysis Time..: 22:55	MDL.....: 31	
Cobalt	ND	10	ug/L	SW846 6010B	04/01-04/02/03	FKM9C1CA
		Dilution Factor: 1		Analysis Time..: 20:50	MDL.....: 0.92	

(Continued on next page)

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-uu

TOTAL Metals

Lot-Sample #...: D3C240249-002 **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Copper	ND	20	ug/L	SW846 6010B	04/01-04/02/03	FKM9C1A5
		Dilution Factor: 1		Analysis Time..: 20:50	MDL.....: 0.76	
Iron	**14 B**	**100**	**ug/L**	**SW846 6010B**	**04/01-04/02/03**	**FKM9C1A6**
		Dilution Factor: 1		Analysis Time..: 22:55	MDL.....: 13	
Potassium	**6600**	**3000**	**ug/L**	**SW846 6010B**	**04/01-04/02/03**	**FKM9C1CG**
		Dilution Factor: 1		Analysis Time..: 22:55	MDL.....: 49	
Magnesium	**40000**	**200**	**ug/L**	**SW846 6010B**	**04/01-04/02/03**	**FKM9C1CF**
		Dilution Factor: 1		Analysis Time..: 22:55	MDL.....: 24	
Manganese	**1.7 B**	**10**	**ug/L**	**SW846 6010B**	**04/01-04/02/03**	**FKM9C1A7**
		Dilution Factor: 1		Analysis Time..: 20:50	MDL.....: 0.49	
Molybdenum	**5.1 B**	**20**	**ug/L**	**SW846 6010B**	**04/01-04/02/03**	**FKM9C1CC**
		Dilution Factor: 1		Analysis Time..: 20:50	MDL.....: 2.1	
Sodium	**55000**	**5000**	**ug/L**	**SW846 6010B**	**04/01-04/02/03**	**FKM9C1CH**
		Dilution Factor: 1		Analysis Time..: 22:55	MDL.....: 1500	
Nickel	ND	40	ug/L	SW846 6010B	04/01-04/02/03	FKM9C1A8
		Dilution Factor: 1		Analysis Time..: 20:50	MDL.....: 1.7	
Tin	ND	100	ug/L	SW846 6010B	04/01-04/02/03	FKM9C1CD
		Dilution Factor: 1		Analysis Time..: 20:50	MDL.....: 3.4	
Vanadium	**29**	**10**	**ug/L**	**SW846 6010B**	**04/01-04/02/03**	**FKM9C1A9**
		Dilution Factor: 1		Analysis Time..: 20:50	MDL.....: 2.2	
Zinc	ND	20	ug/L	SW846 6010B	04/01-04/02/03	FKM9C1AA
		Dilution Factor: 1		Analysis Time..: 20:50	MDL.....: 6.8	

Prep Batch #...: 3098223

Mercury	**0.023 B,J**	**0.20**	**ug/L**	**SW846 7470A**	**04/14/03**	**FKM9C1AL**
		Dilution Factor: 1		Analysis Time..: 21:45	MDL.....: 0.015	

NOTE(S):

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

B Estimated result. Result is less than RL.

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-T

TOTAL Metals

Lot-Sample #...: D3C240249-003 Matrix.....: WATER
Date Sampled...: 03/19/03 10:00 Date Received..: 03/24/03

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 3085487						
Silver	**0.21 B**	**5.0**	**ug/L**	**SW846 6020**	**04/01-04/14/03**	**FKM9D1AH**
		Dilution Factor: 1		Analysis Time..: 20:35	MDL.....: 0.012	
Arsenic	**5.6 J**	**5.0**	**ug/L**	**SW846 6020**	**04/01-04/14/03**	**FKM9D1AD**
		Dilution Factor: 1		Analysis Time..: 20:35	MDL.....: 0.061	
Cadmium	ND	1.0	ug/L	SW846 6020	04/01-04/14/03	FKM9D1AE
		Dilution Factor: 1		Analysis Time..: 20:35	MDL.....: 0.022	
Chromium	**4.6 J**	**2.0**	**ug/L**	**SW846 6020**	**04/01-04/14/03**	**FKM9D1AK**
		Dilution Factor: 1		Analysis Time..: 20:35	MDL.....: 0.24	
Lead	**0.21 B**	**1.0**	**ug/L**	**SW846 6020**	**04/01-04/14/03**	**FKM9D1AF**
		Dilution Factor: 1		Analysis Time..: 20:35	MDL.....: 0.15	
Antimony	ND	2.0	ug/L	SW846 6020	04/01-04/14/03	FKM9D1AC
		Dilution Factor: 1		Analysis Time..: 20:35	MDL.....: 0.040	
Selenium	**6.9**	**5.0**	**ug/L**	**SW846 6020**	**04/01-04/14/03**	**FKM9D1AG**
		Dilution Factor: 1		Analysis Time..: 20:35	MDL.....: 0.19	
Thallium	ND	1.0	ug/L	SW846 6020	04/01-04/14/03	FKM9D1AJ
		Dilution Factor: 1		Analysis Time..: 20:35	MDL.....: 0.015	
Prep Batch #...: 3086278						
Aluminum	**53 B**	**100**	**ug/L**	**SW846 6010B**	**04/01-04/02/03**	**FKM9D1A2**
		Dilution Factor: 1		Analysis Time..: 22:59	MDL.....: 20	
Barium	**34**	**10**	**ug/L**	**SW846 6010B**	**04/01-04/02/03**	**FKM9D1A3**
		Dilution Factor: 1		Analysis Time..: 20:56	MDL.....: 1.8	
Beryllium	ND	5.0	ug/L	SW846 6010B	04/01-04/02/03	FKM9D1A4
		Dilution Factor: 1		Analysis Time..: 22:59	MDL.....: 0.22	
Calcium	**47000**	**200**	**ug/L**	**SW846 6010B**	**04/01-04/02/03**	**FKM9D1CE**
		Dilution Factor: 1		Analysis Time..: 22:59	MDL.....: 31	
Cobalt	ND	10	ug/L	SW846 6010B	04/01-04/02/03	FKM9D1CA
		Dilution Factor: 1		Analysis Time..: 20:56	MDL.....: 0.92	

(Continued on next page)

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-T

TOTAL Metals

Lot-Sample #...: D3C240249-003 Matrix.....: WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Copper	0.80 B	20	ug/L	SW846 6010B	04/01-04/02/03	FKM9D1A5
		Dilution Factor: 1		Analysis Time..: 20:56	MDL.....: 0.76	
Iron	130	100	ug/L	SW846 6010B	04/01-04/02/03	FKM9D1A6
		Dilution Factor: 1		Analysis Time..: 22:59	MDL.....: 13	
Potassium	6600	3000	ug/L	SW846 6010B	04/01-04/02/03	FKM9D1CG
		Dilution Factor: 1		Analysis Time..: 22:59	MDL.....: 490	
Magnesium	41000	200	ug/L	SW846 6010B	04/01-04/02/03	FKM9D1CF
		Dilution Factor: 1		Analysis Time..: 22:59	MDL.....: 24	
Manganese	4.9 B	10	ug/L	SW846 6010B	04/01-04/02/03	FKM9D1A7
		Dilution Factor: 1		Analysis Time..: 20:56	MDL.....: 0.49	
Molybdenum	4.6 B	20	ug/L	SW846 6010B	04/01-04/02/03	FKM9D1CC
		Dilution Factor: 1		Analysis Time..: 20:56	MDL.....: 2.1	
Sodium	54000	5000	ug/L	SW846 6010B	04/01-04/02/03	FKM9D1CH
		Dilution Factor: 1		Analysis Time..: 22:59	MDL.....: 1500	
Nickel	1.9 B	40	ug/L	SW846 6010B	04/01-04/02/03	FKM9D1A8
		Dilution Factor: 1		Analysis Time..: 20:56	MDL.....: 1.7	
Tin	ND	100	ug/L	SW846 6010B	04/01-04/02/03	FKM9D1CD
		Dilution Factor: 1		Analysis Time..: 20:56	MDL.....: 3.4	
Vanadium	30	10	ug/L	SW846 6010B	04/01-04/02/03	FKM9D1A9
		Dilution Factor: 1		Analysis Time..: 20:56	MDL.....: 2.2	
Zinc	20 J	20	ug/L	SW846 6010B	04/01-04/02/03	FKM9D1AA
		Dilution Factor: 1		Analysis Time..: 20:56	MDL.....: 6.8	

Prep Batch #...: 3098223

Mercury	0.021 B,J	0.20	ug/L	SW846 7470A	04/14/03	FKM9D1AL
		Dilution Factor: 1		Analysis Time..: 21:47	MDL.....: 0.015	

NOTE(S):

B Estimated result. Result is less than RL.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-S

TOTAL Metals

Lot-Sample #...: D3C240249-004 Matrix.....: WATER
Date Sampled...: 03/19/03 11:25 Date Received..: 03/24/03

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 3085487						
Silver	**0.068 B**	**5.0**	**ug/L**	**SW846 6020**	**04/01-04/14/03**	**FKM9F1AH**
		Dilution Factor: 1		Analysis Time..: 20:38	MDL.....: 0.012	
Arsenic	**5.5 J**	**5.0**	**ug/L**	**SW846 6020**	**04/01-04/14/03**	**FKM9F1AD**
		Dilution Factor: 1		Analysis Time..: 20:38	MDL.....: 0.061	
Cadmium	ND	1.0	ug/L	SW846 6020	04/01-04/14/03	FKM9F1AE
		Dilution Factor: 1		Analysis Time..: 20:38	MDL.....: 0.022	
Chromium	**2.3 J**	**2.0**	**ug/L**	**SW846 6020**	**04/01-04/14/03**	**FKM9F1AK**
		Dilution Factor: 1		Analysis Time..: 20:38	MDL.....: 0.24	
Lead	ND	1.0	ug/L	SW846 6020	04/01-04/14/03	FKM9F1AF
		Dilution Factor: 1		Analysis Time..: 20:38	MDL.....: 0.15	
Antimony	ND	2.0	ug/L	SW846 6020	04/01-04/14/03	FKM9F1AC
		Dilution Factor: 1		Analysis Time..: 20:38	MDL.....: 0.040	
Selenium	**7.3**	**5.0**	**ug/L**	**SW846 6020**	**04/01-04/14/03**	**FKM9F1AG**
		Dilution Factor: 1		Analysis Time..: 20:38	MDL.....: 0.19	
Thallium	ND	1.0	ug/L	SW846 6020	04/01-04/14/03	FKM9F1AJ
		Dilution Factor: 1		Analysis Time..: 20:38	MDL.....: 0.015	
Prep Batch #...: 3086278						
Zinc	**21 J**	**20**	**ug/L**	**SW846 6010B**	**04/01-04/02/03**	**FKM9F1AA**
		Dilution Factor: 1		Analysis Time..: 21:01	MDL.....: 6.8	
Aluminum	ND	100	ug/L	SW846 6010B	04/01-04/02/03	FKM9F1A2
		Dilution Factor: 1		Analysis Time..: 23:03	MDL.....: 20	
Barium	**32**	**10**	**ug/L**	**SW846 6010B**	**04/01-04/02/03**	**FKM9F1A3**
		Dilution Factor: 1		Analysis Time..: 21:01	MDL.....: 1.8	
Beryllium	ND	5.0	ug/L	SW846 6010B	04/01-04/02/03	FKM9F1A4
		Dilution Factor: 1		Analysis Time..: 23:03	MDL.....: 0.22	
Calcium	**46000**	**200**	**ug/L**	**SW846 6010B**	**04/01-04/02/03**	**FKM9F1CE**
		Dilution Factor: 1		Analysis Time..: 23:03	MDL.....: 31	

(Continued on next page)

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-S

TOTAL Metals

Lot-Sample #...: D3C240249-004 Matrix.....: WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Cobalt	ND	10	ug/L	SW846 6010B	04/01-04/02/03	FKM9F1CA
		Dilution Factor: 1		Analysis Time..: 21:01	MDL.....: 0.92	
Copper	ND	20	ug/L	SW846 6010B	04/01-04/02/03	FKM9F1A5
		Dilution Factor: 1		Analysis Time..: 21:01	MDL.....: 0.76	
Iron	21 B	100	ug/L	SW846 6010B	04/01-04/02/03	FKM9F1A6
		Dilution Factor: 1		Analysis Time..: 23:03	MDL.....: 13	
Potassium	6100	3000	ug/L	SW846 6010B	04/01-04/02/03	FKM9F1CG
		Dilution Factor: 1		Analysis Time..: 23:03	MDL.....: 490	
Magnesium	42000	200	ug/L	SW846 6010B	04/01-04/02/03	FKM9F1CF
		Dilution Factor: 1		Analysis Time..: 23:03	MDL.....: 24	
Manganese	2.3 B	10	ug/L	SW846 6010B	04/01-04/02/03	FKM9F1A7
		Dilution Factor: 1		Analysis Time..: 21:01	MDL.....: 0.49	
Molybdenum	3.9 B	20	ug/L	SW846 6010B	04/01-04/02/03	FKM9F1CC
		Dilution Factor: 1		Analysis Time..: 21:01	MDL.....: 2.1	
Sodium	49000	5000	ug/L	SW846 6010B	04/01-04/02/03	FKM9F1CH
		Dilution Factor: 1		Analysis Time..: 23:03	MDL.....: 1500	
Nickel	ND	40	ug/L	SW846 6010B	04/01-04/02/03	FKM9F1A8
		Dilution Factor: 1		Analysis Time..: 21:01	MDL.....: 1.7	
Tin	ND	100	ug/L	SW846 6010B	04/01-04/02/03	FKM9F1CD
		Dilution Factor: 1		Analysis Time..: 21:01	MDL.....: 3.4	
Vanadium	29	10	ug/L	SW846 6010B	04/01-04/02/03	FKM9F1A9
		Dilution Factor: 1		Analysis Time..: 21:01	MDL.....: 2.2	

Prep Batch #...: 3098223

Mercury	0.020 B,J	0.20	ug/L	SW846 7470A	04/14/03	FKM9F1AL
		Dilution Factor: 1		Analysis Time..: 21:49	MDL.....: 0.015	

NOTE(S):

B Estimated result. Result is less than RL.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-Q

TOTAL Metals

Lot-Sample #...: D3C240249-005 **Matrix.....:** WATER
Date Sampled...: 03/19/03 12:30 **Date Received..:** 03/24/03

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 3085487						
Silver	ND	5.0	ug/L	SW846 6020	04/01-04/14/03	FKM9J1AH
		Dilution Factor: 1		Analysis Time..: 20:41	MDL.....: 0.012	
Arsenic	**5.7 J**	**5.0**	**ug/L**	**SW846 6020**	**04/01-04/14/03**	**FKM9J1AD**
		Dilution Factor: 1		Analysis Time..: 20:41	MDL.....: 0.061	
Cadmium	ND	1.0	ug/L	SW846 6020	04/01-04/14/03	FKM9J1AE
		Dilution Factor: 1		Analysis Time..: 20:41	MDL.....: 0.022	
Chromium	**3.2 J**	**2.0**	**ug/L**	**SW846 6020**	**04/01-04/14/03**	**FKM9J1AK**
		Dilution Factor: 1		Analysis Time..: 20:41	MDL.....: 0.24	
Lead	ND	1.0	ug/L	SW846 6020	04/01-04/14/03	FKM9J1AF
		Dilution Factor: 1		Analysis Time..: 20:41	MDL.....: 0.15	
Antimony	ND	2.0	ug/L	SW846 6020	04/01-04/14/03	FKM9J1AC
		Dilution Factor: 1		Analysis Time..: 20:41	MDL.....: 0.040	
Selenium	**7.8**	**5.0**	**ug/L**	**SW846 6020**	**04/01-04/14/03**	**FKM9J1AG**
		Dilution Factor: 1		Analysis Time..: 20:41	MDL.....: 0.19	
Thallium	ND	1.0	ug/L	SW846 6020	04/01-04/14/03	FKM9J1AJ
		Dilution Factor: 1		Analysis Time..: 20:41	MDL.....: 0.015	
Prep Batch #...: 3086278						
Aluminum	ND	100	ug/L	SW846 6010B	04/01-04/02/03	FKM9J1A2
		Dilution Factor: 1		Analysis Time..: 23:07	MDL.....: 20	
Barium	**28**	**10**	**ug/L**	**SW846 6010B**	**04/01-04/02/03**	**FKM9J1A3**
		Dilution Factor: 1		Analysis Time..: 21:07	MDL.....: 1.8	
Beryllium	ND	5.0	ug/L	SW846 6010B	04/01-04/02/03	FKM9J1A4
		Dilution Factor: 1		Analysis Time..: 23:07	MDL.....: 0.22	
Calcium	**41000**	**200**	**ug/L**	**SW846 6010B**	**04/01-04/02/03**	**FKM9J1CE**
		Dilution Factor: 1		Analysis Time..: 23:07	MDL.....: 31	
Cobalt	ND	10	ug/L	SW846 6010B	04/01-04/02/03	FKM9J1CA
		Dilution Factor: 1		Analysis Time..: 21:07	MDL.....: 0.92	

(Continued on next page)

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-Q

TOTAL Metals

Lot-Sample #...: D3C240249-005 **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Copper	ND	20	ug/L	SW846 6010B	04/01-04/02/03	FKM9J1A5
		Dilution Factor: 1		Analysis Time..: 21:07	MDL.....: 0.76	
Iron	**47 B**	**100**	**ug/L**	**SW846 6010B**	**04/01-04/02/03**	**FKM9J1A6**
		Dilution Factor: 1		Analysis Time..: 23:07	MDL.....: 13	
Potassium	**5800**	**3000**	**ug/L**	**SW846 6010B**	**04/01-04/02/03**	**FKM9J1CG**
		Dilution Factor: 1		Analysis Time..: 23:07	MDL.....: 490	
Magnesium	**37000**	**200**	**ug/L**	**SW846 6010B**	**04/01-04/02/03**	**FKM9J1CF**
		Dilution Factor: 1		Analysis Time..: 23:07	MDL.....: 24	
Manganese	**1.2 B**	**10**	**ug/L**	**SW846 6010B**	**04/01-04/02/03**	**FKM9J1A7**
		Dilution Factor: 1		Analysis Time..: 21:07	MDL.....: 0.49	
Molybdenum	**4.7 B**	**20**	**ug/L**	**SW846 6010B**	**04/01-04/02/03**	**FKM9J1CC**
		Dilution Factor: 1		Analysis Time..: 21:07	MDL.....: 2.1	
Sodium	**47000**	**5000**	**ug/L**	**SW846 6010B**	**04/01-04/02/03**	**FKM9J1CH**
		Dilution Factor: 1		Analysis Time..: 23:07	MDL.....: 1500	
Nickel	**11 B**	**40**	**ug/L**	**SW846 6010B**	**04/01-04/02/03**	**FKM9J1A8**
		Dilution Factor: 1		Analysis Time..: 21:07	MDL.....: 1.7	
Tin	ND	100	ug/L	SW846 6010B	04/01-04/02/03	FKM9J1CD
		Dilution Factor: 1		Analysis Time..: 21:07	MDL.....: 3.4	
Vanadium	**25**	**10**	**ug/L**	**SW846 6010B**	**04/01-04/02/03**	**FKM9J1A9**
		Dilution Factor: 1		Analysis Time..: 21:07	MDL.....: 2.2	
Zinc	ND	20	ug/L	SW846 6010B	04/01-04/02/03	FKM9J1AA
		Dilution Factor: 1		Analysis Time..: 21:07	MDL.....: 6.8	

Prep Batch #...: 3098223

Mercury	**0.021 B,J**	**0.20**	**ug/L**	**SW846 7470A**	**04/14/03**	**FKM9J1AL**
		Dilution Factor: 1		Analysis Time..: 21:51	MDL.....: 0.015	

NOTE(S):

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

B Estimated result. Result is less than RL.

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-WELL-B

TOTAL Metals

Lot-Sample #...: D3C240249-007 Matrix.....: WATER
Date Sampled...: 03/18/03 14:20 Date Received..: 03/24/03

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 3085487						
Silver	**0.012 B**	**5.0**	**ug/L**	**SW846 6020**	**04/01-04/14/03**	**FKM9N1AH**
		Dilution Factor: 1		Analysis Time..: 20:45	MDL.....: 0.012	
Arsenic	**5.6 J**	**5.0**	**ug/L**	**SW846 6020**	**04/01-04/14/03**	**FKM9N1AD**
		Dilution Factor: 1		Analysis Time..: 20:45	MDL.....: 0.061	
Cadmium	**0.027 B**	**1.0**	**ug/L**	**SW846 6020**	**04/01-04/14/03**	**FKM9N1AE**
		Dilution Factor: 1		Analysis Time..: 20:45	MDL.....: 0.022	
Chromium	**2.1 J**	**2.0**	**ug/L**	**SW846 6020**	**04/01-04/14/03**	**FKM9N1AK**
		Dilution Factor: 1		Analysis Time..: 20:45	MDL.....: 0.24	
Lead	ND	1.0	ug/L	SW846 6020	04/01-04/14/03	FKM9N1AF
		Dilution Factor: 1		Analysis Time..: 20:45	MDL.....: 0.15	
Antimony	ND	2.0	ug/L	SW846 6020	04/01-04/14/03	FKM9N1AC
		Dilution Factor: 1		Analysis Time..: 20:45	MDL.....: 0.040	
Selenium	**6.3**	**5.0**	**ug/L**	**SW846 6020**	**04/01-04/14/03**	**FKM9N1AG**
		Dilution Factor: 1		Analysis Time..: 20:45	MDL.....: 0.19	
Thallium	ND	1.0	ug/L	SW846 6020	04/01-04/14/03	FKM9N1AJ
		Dilution Factor: 1		Analysis Time..: 20:45	MDL.....: 0.015	
Prep Batch #...: 3086278						
Aluminum	ND	100	ug/L	SW846 6010B	04/01-04/02/03	FKM9N1A2
		Dilution Factor: 1		Analysis Time..: 23:11	MDL.....: 20	
Barium	**27**	**10**	**ug/L**	**SW846 6010B**	**04/01-04/02/03**	**FKM9N1A3**
		Dilution Factor: 1		Analysis Time..: 21:12	MDL.....: 1.8	
Beryllium	ND	5.0	ug/L	SW846 6010B	04/01-04/02/03	FKM9N1A4
		Dilution Factor: 1		Analysis Time..: 23:11	MDL.....: 0.22	
Calcium	**40000**	**200**	**ug/L**	**SW846 6010B**	**04/01-04/02/03**	**FKM9N1CE**
		Dilution Factor: 1		Analysis Time..: 23:11	MDL.....: 31	
Cobalt	ND	10	ug/L	SW846 6010B	04/01-04/02/03	FKM9N1CA
		Dilution Factor: 1		Analysis Time..: 21:12	MDL.....: 0.92	

(Continued on next page)

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-WELL-B

TOTAL Metals

Lot-Sample #...: D3C240249-007 Matrix.....: WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Copper	ND	20	ug/L	SW846 6010B	04/01-04/02/03	FKM9N1A5
		Dilution Factor: 1		Analysis Time..: 21:12	MDL.....: 0.76	
Iron	25 B	100	ug/L	SW846 6010B	04/01-04/02/03	FKM9N1A6
		Dilution Factor: 1		Analysis Time..: 23:11	MDL.....: 13	
Potassium	6200	3000	ug/L	SW846 6010B	04/01-04/02/03	FKM9N1CG
		Dilution Factor: 1		Analysis Time..: 23:11	MDL.....: 490	
Magnesium	37000	200	ug/L	SW846 6010B	04/01-04/02/03	FKM9N1CF
		Dilution Factor: 1		Analysis Time..: 23:11	MDL.....: 24	
Manganese	0.77 B	10	ug/L	SW846 6010B	04/01-04/02/03	FKM9N1A7
		Dilution Factor: 1		Analysis Time..: 21:12	MDL.....: 0.49	
Molybdenum	3.9 B	20	ug/L	SW846 6010B	04/01-04/02/03	FKM9N1CC
		Dilution Factor: 1		Analysis Time..: 21:12	MDL.....: 2.1	
Sodium	56000	5000	ug/L	SW846 6010B	04/01-04/02/03	FKM9N1CH
		Dilution Factor: 1		Analysis Time..: 23:11	MDL.....: 1500	
Nickel	ND	40	ug/L	SW846 6010B	04/01-04/02/03	FKM9N1A8
		Dilution Factor: 1		Analysis Time..: 21:12	MDL.....: 1.7	
Tin	ND	100	ug/L	SW846 6010B	04/01-04/02/03	FKM9N1CD
		Dilution Factor: 1		Analysis Time..: 21:12	MDL.....: 3.4	
Vanadium	27	10	ug/L	SW846 6010B	04/01-04/02/03	FKM9N1A9
		Dilution Factor: 1		Analysis Time..: 21:12	MDL.....: 2.2	
Zinc	ND	20	ug/L	SW846 6010B	04/01-04/02/03	FKM9N1AA
		Dilution Factor: 1		Analysis Time..: 21:12	MDL.....: 6.8	

Prep Batch #...: 3098222

Mercury	ND	0.20	ug/L	SW846 7470A	04/11/03	FKM9N1AL
		Dilution Factor: 1		Analysis Time..: 16:58	MDL.....: 0.015	

NOTE(S):

B Estimated result. Result is less than RL.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-D

General Chemistry

Lot-Sample #...: D3C210341-001 Work Order #...: FKKDL Matrix.....: WG
Date Sampled...: 03/20/03 12:10 Date Received..: 03/21/03

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	04/01/03	3092153
		Dilution Factor: 1		Analysis Time..: 16:00	MDL.....: 0.0039	
Perchlorate	ND	1.0	ug/L	EPA-DW1 314.0	04/15-04/16/03	3106660
		Dilution Factor: 1		Analysis Time..: 06:43	MDL.....: 0.41	
Total Organic Carbon	ND	1.0	mg/L	SW846 9060	04/11/03	3104209
		Dilution Factor: 1		Analysis Time..: 20:00	MDL.....: 0.29	
Total Organic Halogens	ND	10	ug/L	SW846 9020B	04/08/03	3100393
		Dilution Factor: 1		Analysis Time..: 12:00	MDL.....: 4.8	
Total Sulfide	ND	4.0	mg/L	SW846 9030B/9034	03/25/03	3084603
		Dilution Factor: 1		Analysis Time..: 20:00	MDL.....: 0.26	

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-C

General Chemistry

Lot-Sample #...: D3C210341-002 Work Order #...: FKKD2 Matrix.....: WG
Date Sampled...: 03/20/03 13:20 Date Received..: 03/21/03

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	04/01/03	3092153
		Dilution Factor: 1		Analysis Time..: 15:00	MDL.....: 0.0039	
Perchlorate	ND	1.0	ug/L	EPA-DW1 314.0	04/15-04/16/03	3106660
		Dilution Factor: 1		Analysis Time..: 07:03	MDL.....: 0.41	
Total Organic Carbon	0.45 B	1.0	mg/L	SW846 9060	04/11/03	3104209
		Dilution Factor: 1		Analysis Time..: 20:00	MDL.....: 0.29	
Total Organic Halogens	ND	10	ug/L	SW846 9020B	04/08/03	3100393
		Dilution Factor: 1		Analysis Time..: 12:00	MDL.....: 4.8	
Total Sulfide	ND	4.0	mg/L	SW846 9030B/9034	03/25/03	3084603
		Dilution Factor: 1		Analysis Time..: 20:00	MDL.....: 0.26	

NOTE(S):

RL Reporting Limit

B Estimated result. Result is less than RL.

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-u

General Chemistry

Lot-Sample #...: D3C240249-001 Work Order #...: FKM87 Matrix.....: WATER
Date Sampled...: 03/19/03 08:30 Date Received..: 03/24/03

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	03/31/03	3090500
		Dilution Factor: 1		Analysis Time..: 14:00	MDL.....: 0.0039	
Perchlorate	**2.3**	**1.0**	**ug/L**	**EPA-DW1 314.0**	**04/15-04/16/03**	**3106660**
		Dilution Factor: 1		Analysis Time..: 04:07	MDL.....: 0.41	
Total Organic Carbon	ND	1.0	mg/L	SW846 9060	04/15/03	3106160
		Dilution Factor: 1		Analysis Time..: 16:00	MDL.....: 0.29	
Total Organic Halogens	ND	10	ug/L	SW846 9020B	04/10/03	3107502
		Dilution Factor: 1		Analysis Time..: 12:00	MDL.....: 4.8	
Total Sulfide	ND	4.0	mg/L	SW846 9030B/9034	03/26/03	3088173
		Dilution Factor: 1		Analysis Time..: 18:00	MDL.....: 0.26	

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-uu

General Chemistry

Lot-Sample #...: D3C240249-002 Work Order #...: FKM9C Matrix.....: WATER
Date Sampled...: 03/19/03 08:35 Date Received..: 03/24/03

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	0.0041 B	0.010	mg/L	SW846 9012A	03/31/03	3090500
		Dilution Factor: 1		Analysis Time..: 14:00	MDL.....: 0.0039	
Perchlorate	2.3	1.0	ug/L	EPA-DW1 314.0	04/15-04/16/03	3106660
		Dilution Factor: 1		Analysis Time..: 04:27	MDL.....: 0.41	
Total Organic Carbon	ND	1.0	mg/L	SW846 9060	04/15/03	3106160
		Dilution Factor: 1		Analysis Time..: 17:00	MDL.....: 0.29	
Total Organic Halogens	ND	10	ug/L	SW846 9020B	04/10/03	3107502
		Dilution Factor: 1		Analysis Time..: 12:00	MDL.....: 4.8	
Total Sulfide	ND	4.0	mg/L	SW846 9030B/9034	03/26/03	3088173
		Dilution Factor: 1		Analysis Time..: 18:00	MDL.....: 0.26	

NOTE(S):

Reporting Limit

B Estimated result. Result is less than RL.

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-T

General Chemistry

Lot-Sample #...: D3C240249-003 Work Order #...: FKM9D Matrix.....: WATER
Date Sampled...: 03/19/03 10:00 Date Received..: 03/24/03

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.010	mg/L	SW846 9012A	03/31/03	3090500
		Dilution Factor: 1		Analysis Time..: 14:00	MDL.....: 0.0039	
Perchlorate	**2.3**	**1.0**	**ug/L**	**EPA-DW1 314.0**	**04/15-04/16/03**	**3106660**
		Dilution Factor: 1		Analysis Time..: 04:46	MDL.....: 0.41	
Total Organic Carbon	ND	1.0	mg/L	SW846 9060	04/15/03	3106160
		Dilution Factor: 1		Analysis Time..: 17:00	MDL.....: 0.29	
Total Organic Halogens	ND	10	ug/L	SW846 9020B	04/10-04/17/03	3107502
		Dilution Factor: 1		Analysis Time..: 12:00	MDL.....: 4.8	
Total Sulfide	ND	4.0	mg/L	SW846 9030B/9034	03/26/03	3088173
		Dilution Factor: 1		Analysis Time..: 18:00	MDL.....: 0.26	

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-S

General Chemistry

Lot-Sample #...: D3C240249-004 Work Order #...: FKM9F Matrix.....: WATER
Date Sampled...: 03/19/03 11:25 Date Received..: 03/24/03

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	0.0059 B	0.010	mg/L	SW846 9012A	03/31/03	3090500
		Dilution Factor: 1		Analysis Time..: 14:00	MDL.....: 0.0039	
Perchlorate	2.4	1.0	ug/L	EPA-DW1 314.0	04/15-04/16/03	3106660
		Dilution Factor: 1		Analysis Time..: 05:45	MDL.....: 0.41	
Total Organic Carbon	0.32 B	1.0	mg/L	SW846 9060	04/15/03	3106160
		Dilution Factor: 1		Analysis Time..: 18:00	MDL.....: 0.29	
Total Organic Halogens	ND	10	ug/L	SW846 9020B	04/10-04/17/03	3107502
		Dilution Factor: 1		Analysis Time..: 12:00	MDL.....: 4.8	
Total Sulfide	ND	4.0	mg/L	SW846 9030B/9034	03/26/03	3088173
		Dilution Factor: 1		Analysis Time..: 18:00	MDL.....: 0.26	

NOTE(S):

RL Reporting Limit

B Estimated result. Result is less than RL.

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-Q

General Chemistry

Lot-Sample #...: D3C240249-005 Work Order #...: FKM9J Matrix.....: WATER
Date Sampled...: 03/19/03 12:30 Date Received..: 03/24/03

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	0.0054 B	0.010	mg/L	SW846 9012A	03/31/03	3090500
		Dilution Factor: 1		Analysis Time..: 14:00	MDL.....: 0.0039	
Perchlorate	2.2	1.0	ug/L	EPA-DW1 314.0	04/15-04/16/03	3106660
		Dilution Factor: 1		Analysis Time..: 06:04	MDL.....: 0.41	
Total Organic Carbon	0.30 B	1.0	mg/L	SW846 9060	04/15/03	3106160
		Dilution Factor: 1		Analysis Time..: 18:00	MDL.....: 0.29	
Total Organic Halogens	ND	10	ug/L	SW846 9020B	04/10-04/17/03	3107502
		Dilution Factor: 1		Analysis Time..: 12:00	MDL.....: 4.8	
Total Sulfide	ND	4.0	mg/L	SW846 9030B/9034	03/26/03	3088173
		Dilution Factor: 1		Analysis Time..: 18:00	MDL.....: 0.26	

NOTE(S):

RL Reporting Limit

B Estimated result. Result is less than RL.

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-WELL-B

General Chemistry

Lot-Sample #...: D3C240249-007 Work Order #...: FKM9N Matrix.....: WATER
Date Sampled...: 03/18/03 14:20 Date Received..: 03/24/03

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	0.0041 B	0.010	mg/L	SW846 9012A	03/31/03	3090500
		Dilution Factor: 1		Analysis Time..: 14:00	MDL.....: 0.0039	
Perchlorate	2.1	1.0	ug/L	EPA-DW1 314.0	04/15-04/16/03	3106660
		Dilution Factor: 1		Analysis Time..: 06:24	MDL.....: 0.41	
Total Organic Carbon	ND	1.0	mg/L	SW846 9060	04/11/03	3104209
		Dilution Factor: 1		Analysis Time..: 18:00	MDL.....: 0.29	
Total Organic Halogens	ND	10	ug/L	SW846 9020B	04/08-04/09/03	3100393
		Dilution Factor: 1		Analysis Time..: 12:00	MDL.....: 4.8	
Total Sulfide	ND	4.0	mg/L	SW846 9030B/9034	03/25/03	3084603
		Dilution Factor: 1		Analysis Time..: 20:00	MDL.....: 0.26	

NOTE(S):

.L Reporting Limit

B Estimated result. Result is less than RL.

APPENDIX II

Analytical Results from Sevrn Trent Services Laboratory
for Ground-Water Samples Collected March 20, and April 2, 2003
Report # D3C210230, D3220137 and D3D030147

SEVERN TRENT STL

ANALYTICAL REPORT

Cannon AFB
SDG: CANNON-3
Lot #s: D3C210230, D3C220137 and D3D030147

Richard Daddow

U.S. Geological Survey

STL DENVER

Susan Decker
Project Manager

May 1, 2003
Revised June 2, 2003

Severn Trent Laboratories, Inc.
STL Denver • 4955 Yarrow Street, Arvada, CO 80002
Tel 303 736 0100 Fax 303 431 7171 • www.stl-inc.com

A part of Severn Trent plc

Table Of Contents

Standard Deliverables with Supporting Documentation

Report Contents	Number of Pages
Standard Deliverables *(The **Cover Letter** and the **Report Cover** page are considered integral parts of this Standard Deliverable package. This report is incomplete unless all pages indicated in this Table of Contents are included.)*	
• **Table of Contents**	
• **Case Narrative**	
• **Executive Summary – Detection Highlights**	
• **Methods Summary**	
• **Method/Analyst Summary**	
• **Lot Sample Summary**	
• **Analytical Results**	
• **QC Data Association Summary**	
• **QC Sample Results**	
• **Chain-of-Custody**	

Supporting Documentation *(Note: A one-page "Description of Supporting Documentation" is provided at the beginning of this section.).*	**Check below when supporting documentation is present.**
• **Volatile GC/MS**	
• **Semivolatile GC/MS**	
• **Volatile GC**	
• **Semivolatile GC**	
• **LC/MS or HPLC**	
• **Metals**	
• **General Chemistry**	
• **Subcontracted Data**	

Case Narrative
CANNON-3

This report has been revised to correct the results for calcium, potassium, magnesium, and sodium. These results were reported incorrectly in the original report.

With exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. All laboratory quality control samples analyzed in conjunction with the samples in this project were within established control limits.

The test results presented in this report meet all requirements of NELAC, and any exceptions are noted. This report shall not be reproduced, except in full, without written permission from the laboratory.

Sample Receiving
Three samples were received under chain of custody on March 21, 2003 and logged under lot D3C210230. One sample and one trip blank was received under chain of custody on March 22, 2003 and logged under lot D3C220137. One sample and one trip blank were received under chain of custody on April 3, 2003 and logged under lot D3D030147. These three lots are reported here under SDG CANNON-3.

The samples were received at the lab at temperatures of 2.1°C, 3.3°C, and 3.5°C on March 21st, 2.8°C on March 22nd and 2.8°C on April 3rd.

GC/MS Volatiles, SW846 8260B
The MS/MSD performed on sample D3C210230-001 was in control.

The MS/MSD performed on sample D3D030147-001 was in control.

The MS/MSD associated with batch 3092491 was performed on a sample from another client and/or lot and was in control.

The Initial Calibration (ICAL) associated with samples D3C220137-001 and 002 demonstrated a Relative Standard Deviation (RSD) greater than 15% for 1,4-dioxane.

GC Semivolatiles – Pesticides, SW846 8081A
The MS/MSD performed on sample D3C210230-002 was in control.

A MS/MSD associated with batch 3099170 was not requested an the laboratory was unable to designate one due to limited sample volume.

GC Semivolatiles – PCBs, SW846 8082

The MS/MSD performed on sample D3C210230-002 was in control.

The MS/MSD associated with batch 3098190 was performed on a sample from another client and/or lot and was in control.

A Continuing Calibration Verification (CCV) standard associated with samples D3C21023-002 and the MS/MSD performed on this sample and D3C220137-001 demonstrated a percent difference greater than −15% for the surrogate decachlorobiphenyl. The average percent difference of all compounds in the CCV standards was less than ±15%, meeting all criteria for the method.

Total Metals, SW846 6010B, 6020, 7470A

There were problems with the method 7470A ICV on April 14, 2003. The ICV was re-digested and re-analyzed. The samples were analyzed after the re-digested ICV and the results are reported here. The practice of re-digesting an ICV is not in agreement with the laboratory's SOP. Therefore the samples were re-digested and re-analyzed, however the re-analyses were outside the recommended 28-day holding time. The original and re-analysis results agree within 10% RPD as shown in the table below because all detections were below the reporting limit of 0.20 ug/L, but above the method detection limit of 0.015 ug/L.

Sample	Original Result (ug/L)	Re-analysis Result (ug/L)
D3C210230-001	0.018	ND
D3C210230-002	0.021	ND
D3C210230-003	0.018	ND

Aluminum and tin were detected in the method 6010B blank associated with batch 3084435 at concentrations below the reporting limits, but above the method detection limits. Associated positive sample results are flagged "J".

Aluminum was detected in the method 6010B blank associated with batch 3083280 at a concentration below the reporting limit, but above the method detection limit. Associated positive sample results are flagged "J".

Antimony, arsenic, chromium, and selenium were detected in the method 6020 blank associated with batch 3084470 at concentrations below the reporting limits, but above the method detection limits. Associated positive sample results are flagged "J".

Antimony and chromium were detected in the method 6020 blank associated with batch 3080385 at concentrations below the reporting limits, but above the method detection limits. Associated positive sample results are flagged "J".

Antimony, chromium, and silver were detected in the method 6020 blank associated with batch 3100281 at concentrations below the reporting limits, but above the method detection limits. Associated positive sample results are flagged "J".

Mercury was detected in the method 7470A blank associated with batch 3098223 at a concentration below the reporting limit, but above the method detection limit. Associated positive sample results are flagged "J".

The method 6010B, 6020, and 7470A MS/MSDs performed on sample D3C210230-002 were in control.

All other MS/MSDs were performed on samples from another client and/or lot and some were not in control.

General Chemistry, SW846 9030B/9034, EPA 160.1, 3535.2, 354.1, 300.0A, 314.0

Samples D3C210230-001, 002, 003, D3C220137-001, and D3D030147-001 were analyzed for sulfate at a dilution due to high analyte concentrations. The reporting limits are elevated accordingly and the associated sample data are flagged "Q".

Sulfate was detected in the method 300.0A blank associated with batch 3106618 at a concentration below the reporting limits, but above the method detection limits. Associated positive sample results are flagged "J".

The method 354.1 MS/MSDs performed on samples D3C210230-002 and D3C220137-001 were in control for nitrite.

The method 314.0 MS/MSD performed on sample D3C210230-002 was in control for perchlorate.

The method 300.0A MS/MSD performed on sample D3C210230-002 was in control for sulfate. The recoveries are estimated since the results exceed the calibration range.

The method 9030B/9034 MS/MSD performed on sample D3C210230-002 was in control for total sulfide.

A method 9030B/9034 MS/MSD associated with batch 3119373 was not requested and the laboratory was unable to designate one due to limited sample volume.

All other MS/MSDs were performed on samples from another client and/or lot and some were not in control.

The method 160.1 duplicates performed on samples D3C210230-001 and D3C220137-001 were in control for TDS.

All other duplicates were performed on samples from another client and/or lot and were in control.

Quality Control Definitions of Terms

Term	Definition
Batch	A set of up to 20 field samples plus associated laboratory QC samples that are similar in composition (matrix) and that are processed within the same time period with the same reagent and standard lots.
Laboratory Control Sample and Laboratory Control Sample Duplicate (LCS/LCSD)	A volume of regent water for aqueous samples or a contaminant-free solid matrix (Ottawa sand) for soil and sediment samples which is spiked with known amounts of representative target analytes and required surrogates. A LCS is carried through the entire analytical process and is used to monitor the accuracy of the analytical process independent of potential matrix effects. An LCSD is a second Laboratory Control Sample.
Matrix Spike and Matrix Spike Duplicate (MS/MSD)	A field sample fortified with known quantities of target analytes that are also added to the LCS. Matrix spike duplicate is a second matrix spike sample. MSs/MSDs are carried throughout he entire analytical process and are used to determine sample matrix effect on accuracy of the measurement system. The accuracy and precision estimated using MS/MSD is only representative of the precision of the sample that was spiked.
Method Blank	A sample composed of all the reagents (in the same quantities) in reagent water carried through the entire analytical process. The method blank is used to monitor the level of contamination introduced during sample preparation steps.
Surrogate	Organic constituents not expected to be detected in environmental media and are added to every sample and QC at a known concentration. Surrogates are used to determine the efficiency of the sample preparation and the analytical process.
Sample Duplicate	A second aliquot of an environmental sample, taken form the same sample container when possible, that is processed independently with the first sample aliquot. The results are used to assess the effect of the sample matrix on the precision of the analytical process. The precision estimated using this sample is not necessarily representative to the precision for other samples in the batch.
Method Detection Limit "MDL"	The method detection limit is defined as the minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero and is determined from replicate analyses of low level standards in a typical representative matrix.
Reporting Limit "RL"	The STL reporting limit is normally the lowest level at which measurements become quantitatively meaningful, ie., the quantitation limit, which is approximately three times the MDL. Some projects require RLs that are less than the quantitation limit to achieve particular maximum contaminant levels (MCLs) or relevant and appropriate requirements (ARARs), but RLs cannot be less than the statistically determined MDL.

Quality Control Definitions of Qualifiers

Qualifier	Definition
*	Surrogate or Relative Percent Difference (RPD) is outside control limits.
a	Spiked analyte recovery is outside control limits.
B	Organics: Method blank contamination. The associated method blank contains the target analyte at a reportable level. Inorganics: Estimated result. Result is less than the RL
COL	More than 40% difference between the primary and confirmation detector results. The lower of the two results is reported.
DIL	The concentration is estimated or not reported due to dilution.
E	Estimated result. Result concentrations exceeds the calibration range.
G	Inorganics: Elevated reporting limit. The reporting limit is elevated due to matrix interference.
J	Organics: Estimated result. Result is less than RL Inorganics: Method blank contamination. The associated method blank contains the target analyte at a reportable level.
L	Serial dilution of a digestate in the analytical batch indicates that physical and chemical interferences are present
N	Spiked analyte recovery is outside stated control limits.
NC	The recovery and/or RPD were not calculated.
ND	The analyte was not detected at the MDL concentration and with a measurable degree of confidence can be said not to be present at or above the RL concentration.
p	Relative percent difference (RPD) is outside stated control limits.
Q	Elevated reporting limit. The reporting limit is elevated due to high analyte levels.
V	General Chemistry: Elevated reporting limit due to limited sample volume.
Wa	Post digestion spike recovery fell between 40-85% due to matrix interference.
Wb	Post digestion spike recovery fell between 115-150% due to matrix interference.
I	Percent recovery is estimated since the results exceeded the calibration range.
T1	A tentatively identified compound that did not generate a spectral match of 80% or greater. Typically called "unknown"
T2	A tentatively identified compound with a spectral match of 80% or better
T3	A tentatively identified compound that was calibrated for by the lab, but not on the client target analyte list.
IC	Diluted due to high inorganic chloride.

EXECUTIVE SUMMARY - Detection Highlights

CANNON-3 : D3C210230

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
CAFB-F 03/20/03 10:15 001				
Silver	0.031 B	5.0	ug/L	SW846 6020
Arsenic	3.2 B	5.0	ug/L	SW846 6020
Cadmium	0.34 B	1.0	ug/L	SW846 6020
Chromium	3.3 J	2.0	ug/L	SW846 6020
Lead	0.62 B	1.0	ug/L	SW846 6020
Antimony	0.35 B,J	2.0	ug/L	SW846 6020
Selenium	7.2	5.0	ug/L	SW846 6020
Mercury	0.018 B,J	0.20	ug/L	SW846 7470A
Molybdenum	3.8 B	20	ug/L	SW846 6010B
Aluminum	24 B,J	100	ug/L	SW846 6010B
Barium	37	10	ug/L	SW846 6010B
Beryllium	0.23 B	5.0	ug/L	SW846 6010B
Calcium	47000	200	ug/L	SW846 6010B
Copper	8.6 B	20	ug/L	SW846 6010B
Iron	53 B	100	ug/L	SW846 6010B
Potassium	7900	3000	ug/L	SW846 6010B
Magnesium	46000	200	ug/L	SW846 6010B
Manganese	2.3 B	10	ug/L	SW846 6010B
Nickel	2.5 B	40	ug/L	SW846 6010B
Vanadium	18	10	ug/L	SW846 6010B
Zinc	42	20	ug/L	SW846 6010B
Total Dissolved Solids	520	10	mg/L	MCAWW 160.1
Nitrate	1.0	0.10	mg/L	MCAWW 353.2
Sulfate	140 Q	25	mg/L	MCAWW 300.0A
Perchlorate	2.3	1.0	ug/L	EPA-DW1 314.0
CAFB-G 03/20/03 08:50 002				
Silver	0.034 B	5.0	ug/L	SW846 6020
Arsenic	2.9 B	5.0	ug/L	SW846 6020
Cadmium	0.022 B	1.0	ug/L	SW846 6020
Chromium	3.8 J	2.0	ug/L	SW846 6020
Lead	0.71 B	1.0	ug/L	SW846 6020
Antimony	0.060 B,J	2.0	ug/L	SW846 6020
Selenium	5.5	5.0	ug/L	SW846 6020
Mercury	0.021 B,J	0.20	ug/L	SW846 7470A
Molybdenum	2.7 B	20	ug/L	SW846 6010B
Aluminum	48 B,J	100	ug/L	SW846 6010B
Barium	32	10	ug/L	SW846 6010B
Calcium	53000	200	ug/L	SW846 6010B
Copper	5.3 B	20	ug/L	SW846 6010B
Iron	45 B	100	ug/L	SW846 6010B

(Continued on next page)

EXECUTIVE SUMMARY - Detection Highlights

CANNON-3 : D3C210230

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
CAFB-G 03/20/03 08:50 002				
Potassium	8100	3000	ug/L	SW846 6010B
Magnesium	53000	200	ug/L	SW846 6010B
Manganese	1.4 B	10	ug/L	SW846 6010B
Sodium	53000	5000	ug/L	SW846 6010B
Nickel	2.0 B	40	ug/L	SW846 6010B
Vanadium	19	10	ug/L	SW846 6010B
Zinc	16 B	20	ug/L	SW846 6010B
Methylene chloride	0.36 J	5.0	ug/L	SW846 8260B
Trichloroethene	0.18 J	1.0	ug/L	SW846 8260B
Total Dissolved Solids	550	10	mg/L	MCAWW 160.1
Nitrate	2.1	0.10	mg/L	MCAWW 353.2
Sulfate	150 Q	25	mg/L	MCAWW 300.0A
Perchlorate	1.7	1.0	ug/L	EPA-DW1 314.0
CAFB-GG 03/20/03 08:55 003				
Silver	0.021 B	5.0	ug/L	SW846 6020
Arsenic	2.8 B	5.0	ug/L	SW846 6020
Chromium	3.5 J	2.0	ug/L	SW846 6020
Lead	0.50 B	1.0	ug/L	SW846 6020
Antimony	0.10 B,J	2.0	ug/L	SW846 6020
Selenium	5.0	5.0	ug/L	SW846 6020
Mercury	0.018 B,J	0.20	ug/L	SW846 7470A
Molybdenum	3.0 B	20	ug/L	SW846 6010B
Aluminum	73 B,J	100	ug/L	SW846 6010B
Barium	32	10	ug/L	SW846 6010B
Calcium	53000	200	ug/L	SW846 6010B
Copper	3.0 B	20	ug/L	SW846 6010B
Iron	53 B	100	ug/L	SW846 6010B
Potassium	8000	3000	ug/L	SW846 6010B
Magnesium	51000	200	ug/L	SW846 6010B
Manganese	1.5 B	10	ug/L	SW846 6010B
Sodium	51000	5000	ug/L	SW846 6010B
Nickel	2.3 B	40	ug/L	SW846 6010B
Vanadium	18	10	ug/L	SW846 6010B
Zinc	10 B	20	ug/L	SW846 6010B
Methylene chloride	0.42 J	5.0	ug/L	SW846 8260B
Trichloroethene	0.18 J	1.0	ug/L	SW846 8260B
Total Dissolved Solids	550	10	mg/L	MCAWW 160.1
Nitrate	2.2	0.10	mg/L	MCAWW 353.2
Nitrite	0.0021 B	0.010	mg/L	MCAWW 354.1

(Continued on next page)

EXECUTIVE SUMMARY - Detection Highlights

CANNON-3 : D3C210230

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
CAFB-GG 03/20/03 08:55 003				
Sulfate	160 Q	25	mg/L	MCAWW 300.0A
Perchlorate	1.7	1.0	ug/L	EPA-DW1 314.0

(Continued on next page)

EXECUTIVE SUMMARY - Detection Highlights

CANNON-3 : D3C220137

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
CAFB-E 03/21/03 09:30 001				
Arsenic	3.1 B,J	5.0	ug/L	SW846 6020
Chromium	3.2 J	2.0	ug/L	SW846 6020
Lead	0.70 B	1.0	ug/L	SW846 6020
Selenium	4.9 B,J	5.0	ug/L	SW846 6020
Barium	52	10	ug/L	SW846 6010B
Calcium	53000	200	ug/L	SW846 6010B
Iron	32 B	100	ug/L	SW846 6010B
Potassium	7100	3000	ug/L	SW846 6010B
Magnesium	48000	200	ug/L	SW846 6010B
Manganese	1.9 B	10	ug/L	SW846 6010B
Sodium	61000	5000	ug/L	SW846 6010B
Nickel	2.9 B	40	ug/L	SW846 6010B
Vanadium	18	10	ug/L	SW846 6010B
Zinc	9.5 B	20	ug/L	SW846 6010B
Tetrachloroethene	0.31 J	1.0	ug/L	SW846 8260B
Total Dissolved Solids	550	10	mg/L	MCAWW 160.1
Nitrate	1.7	0.10	mg/L	MCAWW 353.2
Nitrite	0.0021 B	0.010	mg/L	MCAWW 354.1
Sulfate	83 J,Q	25	mg/L	MCAWW 300.0A
Perchlorate	1.7	1.0	ug/L	EPA-DW1 314.0
CAFB-E-TB 03/21/03 09:35 002				
Methylene chloride	0.27 J	5.0	ug/L	SW846 8260B

(Continued on next page)

EXECUTIVE SUMMARY - Detection Highlights

CANNON-3 : D3D030147

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
CAFB-H 04/02/03 09:30 001				
Arsenic	3.8 B	5.0	ug/L	SW846 6020
Chromium	7.6 J	2.0	ug/L	SW846 6020
Lead	2.7	1.0	ug/L	SW846 6020
Antimony	0.094 B,J	2.0	ug/L	SW846 6020
Selenium	7.6	5.0	ug/L	SW846 6020
Cobalt	1.2 B	10	ug/L	SW846 6010B
Aluminum	23 B	100	ug/L	SW846 6010B
Barium	33	10	ug/L	SW846 6010B
Calcium	40000	200	ug/L	SW846 6010B
Iron	320	100	ug/L	SW846 6010B
Potassium	6700	3000	ug/L	SW846 6010B
Magnesium	40000	200	ug/L	SW846 6010B
Manganese	11	10	ug/L	SW846 6010B
Sodium	55000	5000	ug/L	SW846 6010B
Nickel	4.8 B	40	ug/L	SW846 6010B
Vanadium	22	10	ug/L	SW846 6010B
Zinc	88	20	ug/L	SW846 6010B
Total Dissolved Solids	460	10	mg/L	MCAWW 160.1
Nitrate	1.6	0.10	mg/L	MCAWW 353.2
Sulfate	120 Q	25	mg/L	MCAWW 300.0A
Perchlorate	2.4	1.0	ug/L	EPA-DW1 314.0

METHODS SUMMARY

CANNON-3

PARAMETER	ANALYTICAL METHOD	PREPARATION METHOD
Filterable Residue (TDS)	MCAWW 160.1	MCAWW 160.1
Inductively Coupled Plasma (ICP) Metals	SW846 6010B	SW846 3010A
ICP-MS (6020)	SW846 6020	SW846 3010
Mercury in Liquid Waste (Manual Cold-Vapor)	SW846 7470A	SW846 7470A
Nitrate	MCAWW 353.2	MCAWW 353.2
Nitrite	MCAWW 354.1	
Organochlorine Pesticides	SW846 8081A	SW846 3510C
Perchlorate	EPA-DW1 314.0	EPA 314.0
PCBs by SW-846 8082	SW846 8082	SW846 3510C
Sulfate	MCAWW 300.0A	MCAWW 300.0A
Sulfides, Total 9030B/9034	SW846 9030B/903	SW846 9030B/903
Trace Inductively Coupled Plasma (ICP) Metals	SW846 6010B	SW846 3010A
Volatile Organics by GC/MS	SW846 8260B	SW846 5030B/826

References:

EPA-DW1 "METHODS FOR THE DETERMINATION OF ORGANIC AND INORGANIC COMPOUNDS IN DRINKING WATER," VOLUME 1, EPA 815-R-00-014.

MCAWW "Methods for Chemical Analysis of Water and Wastes", EPA-600/4-79-020, March 1983 and subsequent revisions.

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

METHOD / ANALYST SUMMARY

CANNON-3

ANALYTICAL METHOD	ANALYST	ANALYST ID
EPA-DW1 314.0	Lowell Coon	016091
MCAWW 160.1	Melissa Hailey	009506
MCAWW 300.0A	Andrita Scofield	004409
MCAWW 300.0A	Lowell Coon	016091
MCAWW 353.2	Adam Wilson	009870
MCAWW 354.1	Adam Wilson	009870
MCAWW 354.1	Maria Fayard	002596
SW846 6010B	Kristen Roda	005692
SW846 6010B	Kristen Roda	5692
SW846 6010B	Lynn-Anne Trudell	006645
SW846 6010B	Lynn-Anne Trudell	6645
SW846 6020	Royce Bruce	8595
SW846 7470A	Kacey Ono	003371
SW846 8081A	Dennis Jonsrud	009226
SW846 8082	Roger Bain	018049
SW846 8260B	Dan Appelhans	001008
SW846 8260B	Mike Armstrong	002544
SW846 8260B	Mike G. Hoffman	001880
SW846 9030B/9034	Adam Wilson	009870

References:

EPA-DW1 "METHODS FOR THE DETERMINATION OF ORGANIC AND INORGANIC COMPOUNDS IN DRINKING WATER," VOLUME 1, EPA 815-R-00-014.

MCAWW "Methods for Chemical Analysis of Water and Wastes", EPA-600/4-79-020, March 1983 and subsequent revisions.

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

SAMPLE SUMMARY

CANNON-3 : D3C210230

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
FKJAK	001	CAFB-F	03/20/03	10:15
FKJAR	002	CAFB-G	03/20/03	08:50
FKJAT	003	CAFB-GG	03/20/03	08:55

NOTE(S):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

(Continued on next page)

SAMPLE SUMMARY

CANNON-3 : D3C220137

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
FKK1T	001	CAFB-E	03/21/03	09:30
FKK15	002	CAFB-E-TB	03/21/03	09:35

NOTE(S):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

(Continued on next page)

SAMPLE SUMMARY

CANNON-3 : D3D030147

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
FK8X3	001	CAFB-H	04/02/03	09:30
FK80L	002	CAFB-H-TB	04/02/03	09:35

NOTE(S):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-F

GC/MS Volatiles

Lot-Sample #...: D3C210230-001 Work Order #...: FKJAK1AA Matrix.....: WG
Date Sampled...: 03/20/03 10:15 Date Received..: 03/21/03
Prep Date.....: 03/31/03 Analysis Date..: 03/31/03
Prep Batch #...: 3090576 Analysis Time..: 12:49
Dilution Factor: 1

Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acetone	ND	10	ug/L	2.5
Acetonitrile	ND	20	ug/L	5.3
Acrolein	ND	20	ug/L	3.1
Acrylonitrile	ND	20	ug/L	3.1
Benzene	ND	1.0	ug/L	0.17
Bromodichloromethane	ND	1.0	ug/L	0.20
Bromoform	ND	1.0	ug/L	0.23
Bromomethane	ND	2.0	ug/L	0.22
Carbon disulfide	ND	1.0	ug/L	0.24
Carbon tetrachloride	ND	1.0	ug/L	0.20
Chlorobenzene	ND	1.0	ug/L	0.13
Chloroprene	ND	1.0	ug/L	0.21
Dibromochloromethane	ND	1.0	ug/L	0.19
Chloroethane	ND	2.0	ug/L	0.18
Chloroform	ND	1.0	ug/L	0.17
Chloromethane	ND	2.0	ug/L	0.91
Allyl chloride	ND	2.0	ug/L	0.11
Dibromomethane	ND	1.0	ug/L	0.31
trans-1,4-Dichloro-2-butene	ND	1.0	ug/L	0.45
Dichlorodifluoromethane	ND	2.0	ug/L	0.22
1,1-Dichloroethane	ND	1.0	ug/L	0.22
1,2-Dichloroethane	ND	1.0	ug/L	0.26
1,1-Dichloroethene	ND	1.0	ug/L	0.23
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.14
trans-1,2-Dichloroethene	ND	0.50	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.24
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.19
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.20
1,4-Dioxane	ND	200	ug/L	57
Ethylbenzene	ND	1.0	ug/L	0.12
Ethyl methacrylate	ND	1.0	ug/L	0.48
Trichlorofluoromethane	ND	2.0	ug/L	0.24
2-Hexanone	ND	5.0	ug/L	1.7
Iodomethane	ND	1.0	ug/L	0.19
Isobutyl alcohol	ND	50	ug/L	15

(Continued on next page)

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-F

GC/MS Volatiles

Lot-Sample #...: D3C210230-001 **Work Order #...:** FKJAK1AA **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Methacrylonitrile	ND	10	ug/L	2.3
Methylene chloride	ND	5.0	ug/L	0.21
Methyl methacrylate	ND	1.0	ug/L	0.57
4-Methyl-2-pentanone	ND	5.0	ug/L	0.98
Propionitrile	ND	20	ug/L	3.8
Styrene	ND	1.0	ug/L	0.14
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	0.21
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.21
Tetrachloroethene	ND	1.0	ug/L	0.26
Toluene	ND	1.0	ug/L	0.15
1,1,1-Trichloroethane	ND	1.0	ug/L	0.16
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Trichloroethene	ND	1.0	ug/L	0.16
1,2,3-Trichloropropane	ND	1.0	ug/L	0.33
Vinyl acetate	ND	2.0	ug/L	0.56
Vinyl chloride	ND	2.0	ug/L	0.19
Xylenes (total)	ND	2.0	ug/L	0.41
1,2-Dibromo-3-chloropropane (DBCP)	ND	2.0	ug/L	0.47
1,2-Dibromoethane (EDB)	ND	1.0	ug/L	0.18
2-Butanone (MEK)	ND	5.0	ug/L	2.0

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	107	(80 - 120)
1,2-Dichloroethane-d4	120	(71 - 129)
4-Bromofluorobenzene	103	(80 - 120)
Toluene-d8	104	(80 - 120)

US GEOLOGICAL SURVEY

CAFB-F

GC/MS Volatiles

Lot-Sample #: D3C210230-001 **Work Order #:** FKJAK1AA **Matrix:** WG

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT		RETENTION TIME	UNITS
Silane, fluorotrimethyl-	420-56-4	1.62 T2	M	5.1406	ug/L

NOTE(S):

M: Result was measured against nearest internal standard assuming a response factor of 1

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-G

GC/MS Volatiles

Lot-Sample #...: D3C210230-002 **Work Order #...:** FKJAR1AM **Matrix.....:** WG
Date Sampled...: 03/20/03 08:50 **Date Received..:** 03/21/03
Prep Date.....: 03/31/03 **Analysis Date..:** 03/31/03
Prep Batch #...: 3090576 **Analysis Time..:** 11:33
Dilution Factor: 1

Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acetone	ND	10	ug/L	2.5
Acetonitrile	ND	20	ug/L	5.3
Acrolein	ND	20	ug/L	3.1
Acrylonitrile	ND	20	ug/L	3.1
Benzene	ND	1.0	ug/L	0.17
Bromodichloromethane	ND	1.0	ug/L	0.20
Bromoform	ND	1.0	ug/L	0.23
Bromomethane	ND	2.0	ug/L	0.22
Carbon disulfide	ND	1.0	ug/L	0.24
Carbon tetrachloride	ND	1.0	ug/L	0.20
Chlorobenzene	ND	1.0	ug/L	0.13
Chloroprene	ND	1.0	ug/L	0.21
Dibromochloromethane	ND	1.0	ug/L	0.19
Chloroethane	ND	2.0	ug/L	0.18
Chloroform	ND	1.0	ug/L	0.17
Chloromethane	ND	2.0	ug/L	0.91
Allyl chloride	ND	2.0	ug/L	0.11
Dibromomethane	ND	1.0	ug/L	0.31
trans-1,4-Dichloro-2-butene	ND	1.0	ug/L	0.45
Dichlorodifluoromethane	ND	2.0	ug/L	0.22
1,1-Dichloroethane	ND	1.0	ug/L	0.22
1,2-Dichloroethane	ND	1.0	ug/L	0.26
1,1-Dichloroethene	ND	1.0	ug/L	0.23
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.14
trans-1,2-Dichloroethene	ND	0.50	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.24
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.19
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.20
1,4-Dioxane	ND	200	ug/L	57
Ethylbenzene	ND	1.0	ug/L	0.12
Ethyl methacrylate	ND	1.0	ug/L	0.48
Trichlorofluoromethane	ND	2.0	ug/L	0.24
2-Hexanone	ND	5.0	ug/L	1.7
Iodomethane	ND	1.0	ug/L	0.19
Isobutyl alcohol	ND	50	ug/L	15

(Continued on next page)

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-G

GC/MS Volatiles

Lot-Sample #...: D3C210230-002 **Work Order #...:** FKJAR1AM **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Methacrylonitrile	ND	10	ug/L	2.3
Methylene chloride	**0.36 J**	**5.0**	**ug/L**	**0.21**
Methyl methacrylate	ND	1.0	ug/L	0.57
4-Methyl-2-pentanone	ND	5.0	ug/L	0.98
Propionitrile	ND	20	ug/L	3.8
Styrene	ND	1.0	ug/L	0.14
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	0.21
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.21
Tetrachloroethene	ND	1.0	ug/L	0.26
Toluene	ND	1.0	ug/L	0.15
1,1,1-Trichloroethane	ND	1.0	ug/L	0.16
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Trichloroethene	**0.18 J**	**1.0**	**ug/L**	**0.16**
1,2,3-Trichloropropane	ND	1.0	ug/L	0.33
Vinyl acetate	ND	2.0	ug/L	0.56
Vinyl chloride	ND	2.0	ug/L	0.19
Xylenes (total)	ND	2.0	ug/L	0.41
1,2-Dibromo-3-chloropropane (DBCP)	ND	2.0	ug/L	0.47
1,2-Dibromoethane (EDB)	ND	1.0	ug/L	0.18
2-Butanone (MEK)	ND	5.0	ug/L	2.0

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	104	(80 - 120)
1,2-Dichloroethane-d4	105	(71 - 129)
4-Bromofluorobenzene	98	(80 - 120)
Toluene-d8	107	(80 - 120)

NOTE(S):

J Estimated result. Result is less than RL.

US GEOLOGICAL SURVEY

CAFB-G

GC/MS Volatiles

Lot-Sample #: D3C210230-002 **Work Order #:** FKJAR1AM **Matrix:** WG

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT	RETENTION TIME	UNITS
None				ug/L

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-GG

GC/MS Volatiles

Lot-Sample #...: D3C210230-003 Work Order #...: FKJAT1AM Matrix.....: WG
Date Sampled...: 03/20/03 08:55 Date Received..: 03/21/03
Prep Date.....: 03/31/03 Analysis Date..: 03/31/03
Prep Batch #...: 3090576 Analysis Time..: 13:14
Dilution Factor: 1

Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acetone	ND	10	ug/L	2.5
Acetonitrile	ND	20	ug/L	5.3
Acrolein	ND	20	ug/L	3.1
Acrylonitrile	ND	20	ug/L	3.1
Benzene	ND	1.0	ug/L	0.17
Bromodichloromethane	ND	1.0	ug/L	0.20
Bromoform	ND	1.0	ug/L	0.23
Bromomethane	ND	2.0	ug/L	0.22
Carbon disulfide	ND	1.0	ug/L	0.24
Carbon tetrachloride	ND	1.0	ug/L	0.20
Chlorobenzene	ND	1.0	ug/L	0.13
Chloroprene	ND	1.0	ug/L	0.21
Dibromochloromethane	ND	1.0	ug/L	0.19
Chloroethane	ND	2.0	ug/L	0.18
Chloroform	ND	1.0	ug/L	0.17
Chloromethane	ND	2.0	ug/L	0.91
Allyl chloride	ND	2.0	ug/L	0.11
Dibromomethane	ND	1.0	ug/L	0.31
trans-1,4-Dichloro-2-butene	ND	1.0	ug/L	0.45
Dichlorodifluoromethane	ND	2.0	ug/L	0.22
1,1-Dichloroethane	ND	1.0	ug/L	0.22
1,2-Dichloroethane	ND	1.0	ug/L	0.26
1,1-Dichloroethene	ND	1.0	ug/L	0.23
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.14
trans-1,2-Dichloroethene	ND	0.50	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.24
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.19
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.20
1,4-Dioxane	ND	200	ug/L	57
Ethylbenzene	ND	1.0	ug/L	0.12
Ethyl methacrylate	ND	1.0	ug/L	0.48
Trichlorofluoromethane	ND	2.0	ug/L	0.24
2-Hexanone	ND	5.0	ug/L	1.7
Iodomethane	ND	1.0	ug/L	0.19
Isobutyl alcohol	ND	50	ug/L	15

(Continued on next page)

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-GG

GC/MS Volatiles

Lot-Sample #...: D3C210230-003 **Work Order #...:** FKJAT1AM **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Methacrylonitrile	ND	10	ug/L	2.3
Methylene chloride	**0.42 J**	**5.0**	**ug/L**	**0.21**
Methyl methacrylate	ND	1.0	ug/L	0.57
4-Methyl-2-pentanone	ND	5.0	ug/L	0.98
Propionitrile	ND	20	ug/L	3.8
Styrene	ND	1.0	ug/L	0.14
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	0.21
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.21
Tetrachloroethene	ND	1.0	ug/L	0.26
Toluene	ND	1.0	ug/L	0.15
1,1,1-Trichloroethane	ND	1.0	ug/L	0.16
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Trichloroethene	**0.18 J**	**1.0**	**ug/L**	**0.16**
1,2,3-Trichloropropane	ND	1.0	ug/L	0.33
Vinyl acetate	ND	2.0	ug/L	0.56
Vinyl chloride	ND	2.0	ug/L	0.19
Xylenes (total)	ND	2.0	ug/L	0.41
1,2-Dibromo-3-chloropropane (DBCP)	ND	2.0	ug/L	0.47
1,2-Dibromoethane (EDB)	ND	1.0	ug/L	0.18
2-Butanone (MEK)	ND	5.0	ug/L	2.0

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	113	(80 - 120)
1,2-Dichloroethane-d4	128	(71 - 129)
4-Bromofluorobenzene	105	(80 - 120)
Toluene-d8	106	(80 - 120)

NOTE(S):

J Estimated result. Result is less than RL.

US GEOLOGICAL SURVEY

CAFB-GG

GC/MS Volatiles

Lot-Sample #: D3C210230-003 **Work Order #:** FKJAT1AM **Matrix:** WG

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT	RETENTION TIME	UNITS
None				ug/L

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-E

GC/MS Volatiles

Lot-Sample #...: D3C220137-001 **Work Order #...:** FKK1T1AA **Matrix.....:** WG
Date Sampled...: 03/21/03 09:30 **Date Received..:** 03/22/03
Prep Date.....: 04/01/03 **Analysis Date..:** 04/01/03
Prep Batch #...: 3092491 **Analysis Time..:** 16:57
Dilution Factor: 1

Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acetone	ND	10	ug/L	2.5
Acetonitrile	ND	20	ug/L	5.3
Acrolein	ND	20	ug/L	3.1
Acrylonitrile	ND	20	ug/L	3.1
Benzene	ND	1.0	ug/L	0.17
Bromodichloromethane	ND	1.0	ug/L	0.20
Bromoform	ND	1.0	ug/L	0.23
Bromomethane	ND	2.0	ug/L	0.22
Carbon disulfide	ND	1.0	ug/L	0.24
Carbon tetrachloride	ND	1.0	ug/L	0.20
Chlorobenzene	ND	1.0	ug/L	0.13
Chloroprene	ND	1.0	ug/L	0.21
Dibromochloromethane	ND	1.0	ug/L	0.19
Chloroethane	ND	2.0	ug/L	0.18
Chloroform	ND	1.0	ug/L	0.17
Chloromethane	ND	2.0	ug/L	0.91
Allyl chloride	ND	2.0	ug/L	0.11
Dibromomethane	ND	1.0	ug/L	0.31
trans-1,4-Dichloro-2-butene	ND	1.0	ug/L	0.45
Dichlorodifluoromethane	ND	2.0	ug/L	0.22
1,1-Dichloroethane	ND	1.0	ug/L	0.22
1,2-Dichloroethane	ND	1.0	ug/L	0.26
1,1-Dichloroethene	ND	1.0	ug/L	0.23
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.14
trans-1,2-Dichloroethene	ND	0.50	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.24
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.19
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.20
1,4-Dioxane	ND	200	ug/L	57
Ethylbenzene	ND	1.0	ug/L	0.12
Ethyl methacrylate	ND	1.0	ug/L	0.48
Trichlorofluoromethane	ND	2.0	ug/L	0.24
2-Hexanone	ND	5.0	ug/L	1.7
Iodomethane	ND	1.0	ug/L	0.19
Isobutyl alcohol	ND	50	ug/L	15

(Continued on next page)

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-E

GC/MS Volatiles

Lot-Sample #...: D3C220137-001 **Work Order #...:** FKK1T1AA **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Methacrylonitrile	ND	10	ug/L	2.3
Methylene chloride	ND	5.0	ug/L	0.21
Methyl methacrylate	ND	1.0	ug/L	0.57
4-Methyl-2-pentanone	ND	5.0	ug/L	0.98
Propionitrile	ND	20	ug/L	3.8
Styrene	ND	1.0	ug/L	0.14
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	0.21
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.21
Tetrachloroethene	0.31 J	1.0	ug/L	0.26
Toluene	ND	1.0	ug/L	0.15
1,1,1-Trichloroethane	ND	1.0	ug/L	0.16
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Trichloroethene	ND	1.0	ug/L	0.16
1,2,3-Trichloropropane	ND	1.0	ug/L	0.33
Vinyl acetate	ND	2.0	ug/L	0.56
Vinyl chloride	ND	2.0	ug/L	0.19
Xylenes (total)	ND	2.0	ug/L	0.41
1,2-Dibromo-3-chloropropane (DBCP)	ND	2.0	ug/L	0.47
1,2-Dibromoethane (EDB)	ND	1.0	ug/L	0.18
2-Butanone (MEK)	ND	5.0	ug/L	2.0

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	104	(80 - 120)
1,2-Dichloroethane-d4	108	(71 - 129)
4-Bromofluorobenzene	100	(80 - 120)
Toluene-d8	100	(80 - 120)

NOTE(S):

J Estimated result. Result is less than RL.

US GEOLOGICAL SURVEY

CAFB-E

GC/MS Volatiles

Lot-Sample #: D3C220137-001 **Work Order #:** FKK1T1AA **Matrix:** WG

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT	RETENTION TIME	UNITS
None				ug/L

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-E-TB

GC/MS Volatiles

Lot-Sample #...: D3C220137-002 **Work Order #...:** FKK151AA **Matrix.....:** WQ
Date Sampled...: 03/21/03 09:35 **Date Received..:** 03/22/03
Prep Date.....: 04/01/03 **Analysis Date..:** 04/01/03
Prep Batch #...: 3092491 **Analysis Time..:** 17:21
Dilution Factor: 1

Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acetone	ND	10	ug/L	2.5
Acetonitrile	ND	20	ug/L	5.3
Acrolein	ND	20	ug/L	3.1
Acrylonitrile	ND	20	ug/L	3.1
Benzene	ND	1.0	ug/L	0.17
Bromodichloromethane	ND	1.0	ug/L	0.20
Bromoform	ND	1.0	ug/L	0.23
Bromomethane	ND	2.0	ug/L	0.22
Carbon disulfide	ND	1.0	ug/L	0.24
Carbon tetrachloride	ND	1.0	ug/L	0.20
Chlorobenzene	ND	1.0	ug/L	0.13
Chloroprene	ND	1.0	ug/L	0.21
Dibromochloromethane	ND	1.0	ug/L	0.19
Chloroethane	ND	2.0	ug/L	0.18
Chloroform	ND	1.0	ug/L	0.17
Chloromethane	ND	2.0	ug/L	0.91
Allyl chloride	ND	2.0	ug/L	0.11
Dibromomethane	ND	1.0	ug/L	0.31
trans-1,4-Dichloro-2-butene	ND	1.0	ug/L	0.45
Dichlorodifluoromethane	ND	2.0	ug/L	0.22
1,1-Dichloroethane	ND	1.0	ug/L	0.22
1,2-Dichloroethane	ND	1.0	ug/L	0.26
1,1-Dichloroethene	ND	1.0	ug/L	0.23
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.14
trans-1,2-Dichloroethene	ND	0.50	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.24
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.19
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.20
1,4-Dioxane	ND	200	ug/L	57
Ethylbenzene	ND	1.0	ug/L	0.12
Ethyl methacrylate	ND	1.0	ug/L	0.48
Trichlorofluoromethane	ND	2.0	ug/L	0.24
2-Hexanone	ND	5.0	ug/L	1.7
Iodomethane	ND	1.0	ug/L	0.19
Isobutyl alcohol	ND	50	ug/L	15

(Continued on next page)

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-E-TB

GC/MS Volatiles

Lot-Sample #...: D3C220137-002 **Work Order #...:** FKK151AA **Matrix.....:** WQ

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Methacrylonitrile	ND	10	ug/L	2.3
Methylene chloride	**0.27 J**	**5.0**	**ug/L**	**0.21**
Methyl methacrylate	ND	1.0	ug/L	0.57
4-Methyl-2-pentanone	ND	5.0	ug/L	0.98
Propionitrile	ND	20	ug/L	3.8
Styrene	ND	1.0	ug/L	0.14
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	0.21
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.21
Tetrachloroethene	ND	1.0	ug/L	0.26
Toluene	ND	1.0	ug/L	0.15
1,1,1-Trichloroethane	ND	1.0	ug/L	0.16
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Trichloroethene	ND	1.0	ug/L	0.16
1,2,3-Trichloropropane	ND	1.0	ug/L	0.33
Vinyl acetate	ND	2.0	ug/L	0.56
Vinyl chloride	ND	2.0	ug/L	0.19
Xylenes (total)	ND	2.0	ug/L	0.41
1,2-Dibromo-3-chloropropane (DBCP)	ND	2.0	ug/L	0.47
1,2-Dibromoethane (EDB)	ND	1.0	ug/L	0.18
2-Butanone (MEK)	ND	5.0	ug/L	2.0

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	113	(80 - 120)
1,2-Dichloroethane-d4	117	(71 - 129)
4-Bromofluorobenzene	101	(80 - 120)
Toluene-d8	104	(80 - 120)

NOTE(S):

J Estimated result. Result is less than RL.

US GEOLOGICAL SURVEY

CAFB-E-TB

GC/MS Volatiles

Lot-Sample #: D3C220137-002 **Work Order #:** FKK151AA **Matrix:** WQ

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT	RETENTION TIME	UNITS
None				ug/L

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-H

GC/MS Volatiles

Lot-Sample #...: D3D030147-001 **Work Order #...:** FK8X31AA **Matrix.....:** WATER
Date Sampled...: 04/02/03 09:30 **Date Received..:** 04/03/03
Prep Date.....: 04/10/03 **Analysis Date..:** 04/10/03
Prep Batch #...: 3101527 **Analysis Time..:** 11:14
Dilution Factor: 1

Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acetone	ND	10	ug/L	2.5
Acetonitrile	ND	20	ug/L	5.3
Acrolein	ND	20	ug/L	3.1
Acrylonitrile	ND	20	ug/L	3.1
Benzene	ND	1.0	ug/L	0.17
Bromodichloromethane	ND	1.0	ug/L	0.20
Bromoform	ND	1.0	ug/L	0.23
Bromomethane	ND	2.0	ug/L	0.22
Carbon disulfide	ND	1.0	ug/L	0.24
Carbon tetrachloride	ND	1.0	ug/L	0.20
Chlorobenzene	ND	1.0	ug/L	0.13
Chloroprene	ND	1.0	ug/L	0.21
Dibromochloromethane	ND	1.0	ug/L	0.19
Chloroethane	ND	2.0	ug/L	0.18
Chloroform	ND	1.0	ug/L	0.17
Chloromethane	ND	2.0	ug/L	0.91
Allyl chloride	ND	2.0	ug/L	0.11
Dibromomethane	ND	1.0	ug/L	0.31
trans-1,4-Dichloro-2-butene	ND	1.0	ug/L	0.45
Dichlorodifluoromethane	ND	2.0	ug/L	0.22
1,1-Dichloroethane	ND	1.0	ug/L	0.22
1,2-Dichloroethane	ND	1.0	ug/L	0.26
1,1-Dichloroethene	ND	1.0	ug/L	0.23
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.14
trans-1,2-Dichloroethene	ND	0.50	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.24
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.19
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.20
1,4-Dioxane	ND	200	ug/L	57
Ethylbenzene	ND	1.0	ug/L	0.12
Ethyl methacrylate	ND	1.0	ug/L	0.48
Trichlorofluoromethane	ND	2.0	ug/L	0.24
2-Hexanone	ND	5.0	ug/L	1.7
Iodomethane	ND	1.0	ug/L	0.19
Isobutyl alcohol	ND	50	ug/L	15

(Continued on next page)

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-H

GC/MS Volatiles

Lot-Sample #...: D3D030147-001 Work Order #...: FK8X31AA Matrix.....: WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Methacrylonitrile	ND	10	ug/L	2.3
Methylene chloride	ND	5.0	ug/L	0.21
Methyl methacrylate	ND	1.0	ug/L	0.57
4-Methyl-2-pentanone	ND	5.0	ug/L	0.98
Propionitrile	ND	20	ug/L	3.8
Styrene	ND	1.0	ug/L	0.14
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	0.21
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.21
Tetrachloroethene	ND	1.0	ug/L	0.26
Toluene	ND	1.0	ug/L	0.15
1,1,1-Trichloroethane	ND	1.0	ug/L	0.16
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Trichloroethene	ND	1.0	ug/L	0.16
1,2,3-Trichloropropane	ND	1.0	ug/L	0.33
Vinyl acetate	ND	2.0	ug/L	0.56
Vinyl chloride	ND	2.0	ug/L	0.19
Xylenes (total)	ND	2.0	ug/L	0.41
1,2-Dibromo-3-chloropropane (DBCP)	ND	2.0	ug/L	0.47
1,2-Dibromoethane (EDB)	ND	1.0	ug/L	0.18
2-Butanone (MEK)	ND	5.0	ug/L	2.0

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	97	(80 - 120)
1,2-Dichloroethane-d4	87	(71 - 129)
4-Bromofluorobenzene	90	(80 - 120)
Toluene-d8	97	(80 - 120)

US GEOLOGICAL SURVEY

CAFB-H

GC/MS Volatiles

Lot-Sample #: D3D030147-001 **Work Order #:** FK8X31AA **Matrix:** WATER

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT	RETENTION TIME	UNITS
None				ug/L

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-H-TB

GC/MS Volatiles

Lot-Sample #...: D3D030147-002 **Work Order #...:** FK80L1AA **Matrix.....:** WATER
Date Sampled...: 04/02/03 09:35 **Date Received..:** 04/03/03
Prep Date.....: 04/10/03 **Analysis Date..:** 04/10/03
Prep Batch #...: 3101527 **Analysis Time..:** 12:16
Dilution Factor: 1

Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acetone	ND	10	ug/L	2.5
Acetonitrile	ND	20	ug/L	5.3
Acrolein	ND	20	ug/L	3.1
Acrylonitrile	ND	20	ug/L	3.1
Benzene	ND	1.0	ug/L	0.17
Bromodichloromethane	ND	1.0	ug/L	0.20
Bromoform	ND	1.0	ug/L	0.23
Bromomethane	ND	2.0	ug/L	0.22
Carbon disulfide	ND	1.0	ug/L	0.24
Carbon tetrachloride	ND	1.0	ug/L	0.20
Chlorobenzene	ND	1.0	ug/L	0.13
Chloroprene	ND	1.0	ug/L	0.21
Dibromochloromethane	ND	1.0	ug/L	0.19
Chloroethane	ND	2.0	ug/L	0.18
Chloroform	ND	1.0	ug/L	0.17
Chloromethane	ND	2.0	ug/L	0.91
Allyl chloride	ND	2.0	ug/L	0.11
Dibromomethane	ND	1.0	ug/L	0.31
trans-1,4-Dichloro-2-butene	ND	1.0	ug/L	0.45
Dichlorodifluoromethane	ND	2.0	ug/L	0.22
1,1-Dichloroethane	ND	1.0	ug/L	0.22
1,2-Dichloroethane	ND	1.0	ug/L	0.26
1,1-Dichloroethene	ND	1.0	ug/L	0.23
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.14
trans-1,2-Dichloroethene	ND	0.50	ug/L	0.15
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.24
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.19
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.20
1,4-Dioxane	ND	200	ug/L	57
Ethylbenzene	ND	1.0	ug/L	0.12
Ethyl methacrylate	ND	1.0	ug/L	0.48
Trichlorofluoromethane	ND	2.0	ug/L	0.24
2-Hexanone	ND	5.0	ug/L	1.7
Iodomethane	ND	1.0	ug/L	0.19
Isobutyl alcohol	ND	50	ug/L	15

(Continued on next page)

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-H-TB

GC/MS Volatiles

Lot-Sample #...: D3D030147-002 **Work Order #...:** FK80L1AA **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Methacrylonitrile	ND	10	ug/L	2.3
Methylene chloride	ND	5.0	ug/L	0.21
Methyl methacrylate	ND	1.0	ug/L	0.57
4-Methyl-2-pentanone	ND	5.0	ug/L	0.98
Propionitrile	ND	20	ug/L	3.8
Styrene	ND	1.0	ug/L	0.14
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	0.21
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.21
Tetrachloroethene	ND	1.0	ug/L	0.26
Toluene	ND	1.0	ug/L	0.15
1,1,1-Trichloroethane	ND	1.0	ug/L	0.16
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Trichloroethene	ND	1.0	ug/L	0.16
1,2,3-Trichloropropane	ND	1.0	ug/L	0.33
Vinyl acetate	ND	2.0	ug/L	0.56
Vinyl chloride	ND	2.0	ug/L	0.19
Xylenes (total)	ND	2.0	ug/L	0.41
1,2-Dibromo-3-chloropropane (DBCP)	ND	2.0	ug/L	0.47
1,2-Dibromoethane (EDB)	ND	1.0	ug/L	0.18
2-Butanone (MEK)	ND	5.0	ug/L	2.0

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	95	(80 - 120)
1,2-Dichloroethane-d4	82	(71 - 129)
4-Bromofluorobenzene	91	(80 - 120)
Toluene-d8	101	(80 - 120)

US GEOLOGICAL SURVEY

CAFB-H-TB

GC/MS Volatiles

Lot-Sample #: D3D030147-002 **Work Order #:** FK80L1AA **Matrix:** WATER

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT		RETENTION TIME	UNITS
Cyclotetrasiloxane, octamethyl	556-67-2	1.62 T2	M	11.681	ug/L

NOTE(S):

M: Result was measured against nearest internal standard assuming a response factor of 1.

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-F

GC Semivolatiles

Lot-Sample #...: D3C210230-001 **Work Order #...:** FKJAK1AC **Matrix.....:** WG
Date Sampled...: 03/20/03 10:15 **Date Received..:** 03/21/03
Prep Date.....: 03/24/03 **Analysis Date..:** 03/27/03
Prep Batch #...: 3083199 **Analysis Time..:** 19:35
Dilution Factor: 1

Method.....: SW846 8081A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aldrin	ND	0.050	ug/L	0.0042
alpha-BHC	ND	0.050	ug/L	0.0076
beta-BHC	ND	0.050	ug/L	0.0051
delta-BHC	ND	0.050	ug/L	0.0050
gamma-BHC (Lindane)	ND	0.050	ug/L	0.0085
alpha-Chlordane	ND	0.050	ug/L	0.0054
gamma-Chlordane	ND	0.050	ug/L	0.0079
4,4'-DDD	ND	0.050	ug/L	0.0050
4,4'-DDE	ND	0.050	ug/L	0.015
4,4'-DDT	ND	0.050	ug/L	0.0095
Diallate	ND	1.0	ug/L	0.38
Dieldrin	ND	0.050	ug/L	0.0094
Endosulfan I	ND	0.050	ug/L	0.016
Endosulfan II	ND	0.050	ug/L	0.0074
Endosulfan sulfate	ND	0.050	ug/L	0.0063
Endrin	ND	0.050	ug/L	0.0086
Endrin aldehyde	ND	0.050	ug/L	0.014
Endrin ketone	ND	0.050	ug/L	0.0063
Heptachlor	ND	0.050	ug/L	0.0053
Heptachlor epoxide	ND	0.050	ug/L	0.0043
Isodrin	ND	0.10	ug/L	0.025
Kepone	ND	1.0	ug/L	0.13
Methoxychlor	ND	0.10	ug/L	0.0048
Toxaphene	ND	5.0	ug/L	0.47

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Decachlorobiphenyl	90	(34 - 134)
Tetrachloro-m-xylene	75	(41 - 125)

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-G

GC Semivolatiles

Lot-Sample #...: D3C210230-002 **Work Order #...:** FKJAR1AN **Matrix.....:** WG
Date Sampled...: 03/20/03 08:50 **Date Received..:** 03/21/03
Prep Date.....: 03/24/03 **Analysis Date..:** 03/27/03
Prep Batch #...: 3083199 **Analysis Time..:** 20:05
Dilution Factor: 1

Method.....: SW846 8081A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aldrin	ND	0.050	ug/L	0.0042
alpha-BHC	ND	0.050	ug/L	0.0076
beta-BHC	ND	0.050	ug/L	0.0051
delta-BHC	ND	0.050	ug/L	0.0050
gamma-BHC (Lindane)	ND	0.050	ug/L	0.0085
alpha-Chlordane	ND	0.050	ug/L	0.0054
gamma-Chlordane	ND	0.050	ug/L	0.0079
4,4'-DDD	ND	0.050	ug/L	0.0050
4,4'-DDE	ND	0.050	ug/L	0.015
4,4'-DDT	ND	0.050	ug/L	0.0095
Diallate	ND	1.0	ug/L	0.38
Dieldrin	ND	0.050	ug/L	0.0094
Endosulfan I	ND	0.050	ug/L	0.016
Endosulfan II	ND	0.050	ug/L	0.0074
Endosulfan sulfate	ND	0.050	ug/L	0.0063
Endrin	ND	0.050	ug/L	0.0086
Endrin aldehyde	ND	0.050	ug/L	0.014
Endrin ketone	ND	0.050	ug/L	0.0063
Heptachlor	ND	0.050	ug/L	0.0053
Heptachlor epoxide	ND	0.050	ug/L	0.0043
Isodrin	ND	0.10	ug/L	0.025
Kepone	ND	1.0	ug/L	0.13
Methoxychlor	ND	0.10	ug/L	0.0048
Toxaphene	ND	5.0	ug/L	0.47

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Decachlorobiphenyl	95	(34 - 134)
Tetrachloro-m-xylene	74	(41 - 125)

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-GG

GC Semivolatiles

Lot-Sample #...: D3C210230-003 **Work Order #...:** FKJAT1AN **Matrix.....:** WG
Date Sampled...: 03/20/03 08:55 **Date Received..:** 03/21/03
Prep Date.....: 03/24/03 **Analysis Date..:** 03/27/03
Prep Batch #...: 3083199 **Analysis Time..:** 21:36
Dilution Factor: 1

Method.....: SW846 8081A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aldrin	ND	0.050	ug/L	0.0042
alpha-BHC	ND	0.050	ug/L	0.0076
beta-BHC	ND	0.050	ug/L	0.0051
delta-BHC	ND	0.050	ug/L	0.0050
gamma-BHC (Lindane)	ND	0.050	ug/L	0.0085
alpha-Chlordane	ND	0.050	ug/L	0.0054
gamma-Chlordane	ND	0.050	ug/L	0.0079
4,4'-DDD	ND	0.050	ug/L	0.0050
4,4'-DDE	ND	0.050	ug/L	0.015
4,4'-DDT	ND	0.050	ug/L	0.0095
Diallate	ND	1.0	ug/L	0.38
Dieldrin	ND	0.050	ug/L	0.0094
Endosulfan I	ND	0.050	ug/L	0.016
Endosulfan II	ND	0.050	ug/L	0.0074
Endosulfan sulfate	ND	0.050	ug/L	0.0063
Endrin	ND	0.050	ug/L	0.0086
Endrin aldehyde	ND	0.050	ug/L	0.014
Endrin ketone	ND	0.050	ug/L	0.0063
Heptachlor	ND	0.050	ug/L	0.0053
Heptachlor epoxide	ND	0.050	ug/L	0.0043
Isodrin	ND	0.10	ug/L	0.025
Kepone	ND	1.0	ug/L	0.13
Methoxychlor	ND	0.10	ug/L	0.0048
Toxaphene	ND	5.0	ug/L	0.47

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Decachlorobiphenyl	96	(34 - 134)
Tetrachloro-m-xylene	86	(41 - 125)

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-E

GC Semivolatiles

Lot-Sample #...: D3C220137-001 Work Order #...: FKK1T1AC Matrix.....: WG
Date Sampled...: 03/21/03 09:30 Date Received..: 03/22/03
Prep Date.....: 03/24/03 Analysis Date..: 03/27/03
Prep Batch #...: 3083199 Analysis Time..: 22:06
Dilution Factor: 1

Method.....: SW846 8081A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aldrin	ND	0.050	ug/L	0.0042
alpha-BHC	ND	0.050	ug/L	0.0076
beta-BHC	ND	0.050	ug/L	0.0051
delta-BHC	ND	0.050	ug/L	0.0050
gamma-BHC (Lindane)	ND	0.050	ug/L	0.0085
alpha-Chlordane	ND	0.050	ug/L	0.0054
gamma-Chlordane	ND	0.050	ug/L	0.0079
4,4'-DDD	ND	0.050	ug/L	0.0050
4,4'-DDE	ND	0.050	ug/L	0.015
4,4'-DDT	ND	0.050	ug/L	0.0095
Diallate	ND	1.0	ug/L	0.38
Dieldrin	ND	0.050	ug/L	0.0094
Endosulfan I	ND	0.050	ug/L	0.016
Endosulfan II	ND	0.050	ug/L	0.0074
Endosulfan sulfate	ND	0.050	ug/L	0.0063
Endrin	ND	0.050	ug/L	0.0086
Endrin aldehyde	ND	0.050	ug/L	0.014
Endrin ketone	ND	0.050	ug/L	0.0063
Heptachlor	ND	0.050	ug/L	0.0053
Heptachlor epoxide	ND	0.050	ug/L	0.0043
Isodrin	ND	0.10	ug/L	0.025
Kepone	ND	1.0	ug/L	0.13
Methoxychlor	ND	0.10	ug/L	0.0048
Toxaphene	ND	5.0	ug/L	0.47

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Decachlorobiphenyl	97	(34 - 134)
Tetrachloro-m-xylene	84	(41 - 125)

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-H

GC Semivolatiles

Lot-Sample #...: D3D030147-001 **Work Order #...:** FK8X31AC **Matrix.....:** WATER
Date Sampled...: 04/02/03 09:30 **Date Received..:** 04/03/03
Prep Date.....: 04/09/03 **Analysis Date..:** 04/15/03
Prep Batch #...: 3099170 **Analysis Time..:** 10:29
Dilution Factor: 1

Method.....: SW846 8081A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aldrin	ND	0.050	ug/L	0.0042
alpha-BHC	ND	0.050	ug/L	0.0076
beta-BHC	ND	0.050	ug/L	0.0051
delta-BHC	ND	0.050	ug/L	0.0050
gamma-BHC (Lindane)	ND	0.050	ug/L	0.0085
alpha-Chlordane	ND	0.050	ug/L	0.0054
gamma-Chlordane	ND	0.050	ug/L	0.0079
4,4'-DDD	ND	0.050	ug/L	0.0050
4,4'-DDE	ND	0.050	ug/L	0.015
4,4'-DDT	ND	0.050	ug/L	0.0095
Diallate	ND	1.0	ug/L	0.38
Dieldrin	ND	0.050	ug/L	0.0094
Endosulfan I	ND	0.050	ug/L	0.016
Endosulfan II	ND	0.050	ug/L	0.0074
Endosulfan sulfate	ND	0.050	ug/L	0.0063
Endrin	ND	0.050	ug/L	0.0086
Endrin aldehyde	ND	0.050	ug/L	0.014
Endrin ketone	ND	0.050	ug/L	0.0063
Heptachlor	ND	0.050	ug/L	0.0053
Heptachlor epoxide	ND	0.050	ug/L	0.0043
Isodrin	ND	0.10	ug/L	0.025
Kepone	ND	1.0	ug/L	0.13
Methoxychlor	ND	0.10	ug/L	0.0048
Toxaphene	ND	5.0	ug/L	0.47

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Decachlorobiphenyl	94	(34 - 134)
Tetrachloro-m-xylene	92	(41 - 125)

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-F

GC Semivolatiles

Lot-Sample #...: D3C210230-001 Work Order #...: FKJAK1AD Matrix.....: WG
Date Sampled...: 03/20/03 10:15 Date Received..: 03/21/03
Prep Date.....: 03/24/03 Analysis Date..: 03/27/03
Prep Batch #...: 3083207 Analysis Time..: 14:35
Dilution Factor: 1

Method.....: SW846 8082

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	1.0	ug/L	0.085
Aroclor 1221	ND	1.0	ug/L	0.12
Aroclor 1232	ND	1.0	ug/L	0.18
Aroclor 1242	ND	1.0	ug/L	0.060
Aroclor 1248	ND	1.0	ug/L	0.11
Aroclor 1254	ND	1.0	ug/L	0.074
Aroclor 1260	ND	1.0	ug/L	0.060

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	75	(52 - 160)
Decachlorobiphenyl	97	(37 - 144)

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-G

GC Semivolatiles

Lot-Sample #...: D3C210230-002 **Work Order #...:** FKJAR1AP **Matrix.....:** WG
Date Sampled...: 03/20/03 08:50 **Date Received..:** 03/21/03
Prep Date.....: 03/24/03 **Analysis Date..:** 03/27/03
Prep Batch #...: 3083207 **Analysis Time..:** 15:26
Dilution Factor: 1

Method.....: SW846 8082

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	1.0	ug/L	0.085
Aroclor 1221	ND	1.0	ug/L	0.12
Aroclor 1232	ND	1.0	ug/L	0.18
Aroclor 1242	ND	1.0	ug/L	0.060
Aroclor 1248	ND	1.0	ug/L	0.11
Aroclor 1254	ND	1.0	ug/L	0.074
Aroclor 1260	ND	1.0	ug/L	0.060

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	74	(52 - 160)
Decachlorobiphenyl	87	(37 - 144)

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-GG

GC Semivolatiles

Lot-Sample #...: D3C210230-003 **Work Order #...:** FKJAT1AP **Matrix.....:** WG
Date Sampled...: 03/20/03 08:55 **Date Received..:** 03/21/03
Prep Date.....: 03/24/03 **Analysis Date..:** 03/27/03
Prep Batch #...: 3083207 **Analysis Time..:** 16:43
Dilution Factor: 1

Method.....: SW846 8082

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	1.0	ug/L	0.085
Aroclor 1221	ND	1.0	ug/L	0.12
Aroclor 1232	ND	1.0	ug/L	0.18
Aroclor 1242	ND	1.0	ug/L	0.060
Aroclor 1248	ND	1.0	ug/L	0.11
Aroclor 1254	ND	1.0	ug/L	0.074
Aroclor 1260	ND	1.0	ug/L	0.060

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	85	(52 - 160)
Decachlorobiphenyl	87	(37 - 144)

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-E

GC Semivolatiles

Lot-Sample #...: D3C220137-001 **Work Order #...:** FKK1T1AD **Matrix.....:** WG
Date Sampled...: 03/21/03 09:30 **Date Received..:** 03/22/03
Prep Date.....: 03/24/03 **Analysis Date..:** 03/27/03
Prep Batch #...: 3083207 **Analysis Time..:** 17:09
Dilution Factor: 1

Method.....: SW846 8082

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	1.0	ug/L	0.085
Aroclor 1221	ND	1.0	ug/L	0.12
Aroclor 1232	ND	1.0	ug/L	0.18
Aroclor 1242	ND	1.0	ug/L	0.060
Aroclor 1248	ND	1.0	ug/L	0.11
Aroclor 1254	ND	1.0	ug/L	0.074
Aroclor 1260	ND	1.0	ug/L	0.060

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	83	(52 - 160)
Decachlorobiphenyl	82	(37 - 144)

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-H

GC Semivolatiles

Lot-Sample #...: D3D030147-001 **Work Order #...:** FK8X31AD **Matrix.....:** WATER
Date Sampled...: 04/02/03 09:30 **Date Received..:** 04/03/03
Prep Date.....: 04/08/03 **Analysis Date..:** 04/11/03
Prep Batch #...: 3098190 **Analysis Time..:** 12:34
Dilution Factor: 1

Method.....: SW846 8082

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	1.0	ug/L	0.085
Aroclor 1221	ND	1.0	ug/L	0.12
Aroclor 1232	ND	1.0	ug/L	0.18
Aroclor 1242	ND	1.0	ug/L	0.060
Aroclor 1248	ND	1.0	ug/L	0.11
Aroclor 1254	ND	1.0	ug/L	0.074
Aroclor 1260	ND	1.0	ug/L	0.060

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	86	(52 - 160)
Decachlorobiphenyl	103	(37 - 144)

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-F

TOTAL Metals

Lot-Sample #...: D3C210230-001 **Matrix.....:** WG
Date Sampled...: 03/20/03 10:15 **Date Received..:** 03/21/03

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 3080385						
Silver	**0.031 B**	**5.0**	**ug/L**	**SW846 6020**	**03/24-04/15/03**	**FKJAK1A3**
		Dilution Factor: 1		Analysis Time..: 16:29	MDL.....: 0.012	
Arsenic	**3.2 B**	**5.0**	**ug/L**	**SW846 6020**	**03/24-04/15/03**	**FKJAK1AX**
		Dilution Factor: 1		Analysis Time..: 16:29	MDL.....: 0.061	
Cadmium	**0.34 B**	**1.0**	**ug/L**	**SW846 6020**	**03/24-04/15/03**	**FKJAK1A0**
		Dilution Factor: 1		Analysis Time..: 16:29	MDL.....: 0.022	
Chromium	**3.3 J**	**2.0**	**ug/L**	**SW846 6020**	**03/24-04/15/03**	**FKJAK1A5**
		Dilution Factor: 1		Analysis Time..: 16:29	MDL.....: 0.24	
Lead	**0.62 B**	**1.0**	**ug/L**	**SW846 6020**	**03/24-04/15/03**	**FKJAK1A1**
		Dilution Factor: 1		Analysis Time..: 16:29	MDL.....: 0.15	
Selenium	**7.2**	**5.0**	**ug/L**	**SW846 6020**	**03/24-04/15/03**	**FKJAK1A2**
		Dilution Factor: 1		Analysis Time..: 16:29	MDL.....: 0.19	
Thallium	ND	1.0	ug/L	SW846 6020	03/24-04/15/03	FKJAK1A4
		Dilution Factor: 1		Analysis Time..: 16:29	MDL.....: 0.015	
Antimony	**0.35 B,J**	**2.0**	**ug/L**	**SW846 6020**	**03/24-04/15/03**	**FKJAK1AW**
		Dilution Factor: 1		Analysis Time..: 16:29	MDL.....: 0.040	
Prep Batch #...: 3083280						
Aluminum	**24 B,J**	**100**	**ug/L**	**SW846 6010B**	**03/25-03/26/03**	**FKJAK1AL**
		Dilution Factor: 1		Analysis Time..: 18:54	MDL.....: 20	
Barium	**37**	**10**	**ug/L**	**SW846 6010B**	**03/25-03/26/03**	**FKJAK1AM**
		Dilution Factor: 1		Analysis Time..: 11:23	MDL.....: 1.8	
Beryllium	**0.23 B**	**5.0**	**ug/L**	**SW846 6010B**	**03/25-03/26/03**	**FKJAK1AN**
		Dilution Factor: 1		Analysis Time..: 18:54	MDL.....: 0.22	
Calcium	**47000**	**200**	**ug/L**	**SW846 6010B**	**03/25-03/26/03**	**FKJAK1CA**
		Dilution Factor: 1		Analysis Time..: 18:54	MDL.....: 31	
Cobalt	ND	10	ug/L	SW846 6010B	03/25-03/26/03	FKJAK1A7
		Dilution Factor: 1		Analysis Time..: 11:23	MDL.....: 0.92	

(Continued on next page)

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-F

TOTAL Metals

Lot-Sample #...: D3C210230-001 Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Copper	8.6 B	20	ug/L	SW846 6010B	03/25-03/26/03	FKJAK1AP
		Dilution Factor: 1		Analysis Time..: 11:23	MDL.....: 0.76	
Iron	53 B	100	ug/L	SW846 6010B	03/25-03/26/03	FKJAK1AQ
		Dilution Factor: 1		Analysis Time..: 18:54	MDL.....: 13	
Potassium	7900	3000	ug/L	SW846 6010B	03/25-03/26/03	FKJAK1CD
		Dilution Factor: 1		Analysis Time..: 18:54	MDL.....: 490	
Magnesium	46000	200	ug/L	SW846 6010B	03/25-03/26/03	FKJAK1CC
		Dilution Factor: 1		Analysis Time..: 18:54	MDL.....: 24	
Manganese	2.3 B	10	ug/L	SW846 6010B	03/25-03/26/03	FKJAK1AR
		Dilution Factor: 1		Analysis Time..: 11:23	MDL.....: 0.49	
Molybdenum	3.8 B	20	ug/L	SW846 6010B	03/25-03/26/03	FKJAK1A8
		Dilution Factor: 1		Analysis Time..: 11:23	MDL.....: 2.1	
Sodium	ND	5000	ug/L	SW846 6010B	03/25-03/26/03	FKJAK1CE
		Dilution Factor: 1		Analysis Time..: 18:54	MDL.....: 1500000	
Nickel	2.5 B	40	ug/L	SW846 6010B	03/25-03/26/03	FKJAK1AT
		Dilution Factor: 1		Analysis Time..: 11:23	MDL.....: 1.7	
Tin	ND	100	ug/L	SW846 6010B	03/25-03/26/03	FKJAK1A9
		Dilution Factor: 1		Analysis Time..: 11:23	MDL.....: 3.4	
Vanadium	18	10	ug/L	SW846 6010B	03/25-03/26/03	FKJAK1AU
		Dilution Factor: 1		Analysis Time..: 11:23	MDL.....: 2.2	
Zinc	42	20	ug/L	SW846 6010B	03/25-03/26/03	FKJAK1AV
		Dilution Factor: 1		Analysis Time..: 11:23	MDL.....: 6.8	

Prep Batch #...: 3098223

Mercury	0.018 B,J	0.20	ug/L	SW846 7470A	04/14/03	FKJAK1A6
		Dilution Factor: 1		Analysis Time..: 21:04	MDL.....: 0.015	

NOTE(S):

B Estimated result. Result is less than RL.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-G

TOTAL Metals

Lot-Sample #...: D3C210230-002 Matrix.....: WG
Date Sampled...: 03/20/03 08:50 Date Received..: 03/21/03

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 3080385						
Silver	**0.034 B**	**5.0**	**ug/L**	**SW846 6020**	**03/24-04/15/03**	**FKJAR1AE**
		Dilution Factor: 1		Analysis Time..: 16:36	MDL.....: 0.012	
Arsenic	**2.9 B**	**5.0**	**ug/L**	**SW846 6020**	**03/24-04/15/03**	**FKJAR1A9**
		Dilution Factor: 1		Analysis Time..: 16:36	MDL.....: 0.061	
Cadmium	**0.022 B**	**1.0**	**ug/L**	**SW846 6020**	**03/24-04/15/03**	**FKJAR1AA**
		Dilution Factor: 1		Analysis Time..: 16:36	MDL.....: 0.022	
Chromium	**3.8 J**	**2.0**	**ug/L**	**SW846 6020**	**03/24-04/15/03**	**FKJAR1AG**
		Dilution Factor: 1		Analysis Time..: 16:36	MDL.....: 0.24	
Lead	**0.71 B**	**1.0**	**ug/L**	**SW846 6020**	**03/24-04/15/03**	**FKJAR1AC**
		Dilution Factor: 1		Analysis Time..: 16:36	MDL.....: 0.15	
Antimony	**0.060 B,J**	**2.0**	**ug/L**	**SW846 6020**	**03/24-04/15/03**	**FKJAR1A8**
		Dilution Factor: 1		Analysis Time..: 16:36	MDL.....: 0.040	
Selenium	**5.5**	**5.0**	**ug/L**	**SW846 6020**	**03/24-04/15/03**	**FKJAR1AD**
		Dilution Factor: 1		Analysis Time..: 16:36	MDL.....: 0.19	
Thallium	ND	1.0	ug/L	SW846 6020	03/24-04/15/03	FKJAR1AF
		Dilution Factor: 1		Analysis Time..: 16:36	MDL.....: 0.015	
Prep Batch #...: 3083280						
Aluminum	**48 B,J**	**100**	**ug/L**	**SW846 6010B**	**03/25-03/26/03**	**FKJAR1AX**
		Dilution Factor: 1		Analysis Time..: 18:58	MDL.....: 20	
Barium	**32**	**10**	**ug/L**	**SW846 6010B**	**03/25-03/26/03**	**FKJAR1A0**
		Dilution Factor: 1		Analysis Time..: 11:29	MDL.....: 1.8	
Beryllium	ND	5.0	ug/L	SW846 6010B	03/25-03/26/03	FKJAR1A1
		Dilution Factor: 1		Analysis Time..: 18:58	MDL.....: 0.22	
Calcium	**53000**	**200**	**ug/L**	**SW846 6010B**	**03/25-03/26/03**	**FKJAR1CA**
		Dilution Factor: 1		Analysis Time..: 18:58	MDL.....: 31	
Cobalt	ND	10	ug/L	SW846 6010B	03/25-03/26/03	FKJAR1AJ
		Dilution Factor: 1		Analysis Time..: 11:29	MDL.....: 0.92	

(Continued on next page)

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-G

TOTAL Metals

Lot-Sample #...: D3C210230-002 Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Copper	5.3 B	20	ug/L	SW846 6010B	03/25-03/26/03	FKJAR1A2
		Dilution Factor: 1		Analysis Time..: 11:29	MDL.....: 0.76	
Iron	45 B	100	ug/L	SW846 6010B	03/25-03/26/03	FKJAR1A3
		Dilution Factor: 1		Analysis Time..: 18:58	MDL.....: 13	
Potassium	8100	3000	ug/L	SW846 6010B	03/25-03/26/03	FKJAR1CD
		Dilution Factor: 1		Analysis Time..: 18:58	MDL.....: 490	
Magnesium	53000	200	ug/L	SW846 6010B	03/25-03/26/03	FKJAR1CC
		Dilution Factor: 1		Analysis Time..: 18:58	MDL.....: 24	
Manganese	1.4 B	10	ug/L	SW846 6010B	03/25-03/26/03	FKJAR1A4
		Dilution Factor: 1		Analysis Time..: 11:29	MDL.....: 0.49	
Molybdenum	2.7 B	20	ug/L	SW846 6010B	03/25-03/26/03	FKJAR1AK
		Dilution Factor: 1		Analysis Time..: 11:29	MDL.....: 2.1	
Sodium	53000	5000	ug/L	SW846 6010B	03/25-03/26/03	FKJAR1CE
		Dilution Factor: 1		Analysis Time..: 18:58	MDL.....: 1500	
Nickel	2.0 B	40	ug/L	SW846 6010B	03/25-03/26/03	FKJAR1A5
		Dilution Factor: 1		Analysis Time..: 11:29	MDL.....: 1.7	
Tin	ND	100	ug/L	SW846 6010B	03/25-03/26/03	FKJAR1AL
		Dilution Factor: 1		Analysis Time..: 11:29	MDL.....: 3.4	
Vanadium	19	10	ug/L	SW846 6010B	03/25-03/26/03	FKJAR1A6
		Dilution Factor: 1		Analysis Time..: 11:29	MDL.....: 2.2	
Zinc	16 B	20	ug/L	SW846 6010B	03/25-03/26/03	FKJAR1A7
		Dilution Factor: 1		Analysis Time..: 11:29	MDL.....: 6.8	
Prep Batch #...: 3098223						
Mercury	0.021 B,J	0.20	ug/L	SW846 7470A	04/14/03	FKJAR1AH
		Dilution Factor: 1		Analysis Time..: 21:06	MDL.....: 0.015	

NOTE(S):

B Estimated result. Result is less than RL.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-GG

TOTAL Metals

Lot-Sample #...: D3C210230-003 Matrix.....: WG
Date Sampled...: 03/20/03 08:55 Date Received..: 03/21/03

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 3080385						
Silver	**0.021 B**	**5.0**	**ug/L**	**SW846 6020**	**03/24-04/15/03**	**FKJAT1AE**
		Dilution Factor: 1		Analysis Time..: 16:33	MDL.....: 0.012	
Arsenic	**2.8 B**	**5.0**	**ug/L**	**SW846 6020**	**03/24-04/15/03**	**FKJAT1A9**
		Dilution Factor: 1		Analysis Time..: 16:33	MDL.....: 0.061	
Cadmium	ND	1.0	ug/L	SW846 6020	03/24-04/15/03	FKJAT1AA
		Dilution Factor: 1		Analysis Time..: 16:33	MDL.....: 0.022	
Chromium	**3.5 J**	**2.0**	**ug/L**	**SW846 6020**	**03/24-04/15/03**	**FKJAT1AG**
		Dilution Factor: 1		Analysis Time..: 16:33	MDL.....: 0.24	
Lead	**0.50 B**	**1.0**	**ug/L**	**SW846 6020**	**03/24-04/15/03**	**FKJAT1AC**
		Dilution Factor: 1		Analysis Time..: 16:33	MDL.....: 0.15	
Antimony	**0.10 B,J**	**2.0**	**ug/L**	**SW846 6020**	**03/24-04/15/03**	**FKJAT1A8**
		Dilution Factor: 1		Analysis Time..: 16:33	MDL.....: 0.040	
Selenium	**5.0**	**5.0**	**ug/L**	**SW846 6020**	**03/24-04/15/03**	**FKJAT1AD**
		Dilution Factor: 1		Analysis Time..: 16:33	MDL.....: 0.19	
Thallium	ND	1.0	ug/L	SW846 6020	03/24-04/15/03	FKJAT1AF
		Dilution Factor: 1		Analysis Time..: 16:33	MDL.....: 0.015	
Prep Batch #...: 3083280						
Aluminum	**73 B,J**	**100**	**ug/L**	**SW846 6010B**	**03/25-03/26/03**	**FKJAT1AX**
		Dilution Factor: 1		Analysis Time..: 19:14	MDL.....: 20	
Barium	**32**	**10**	**ug/L**	**SW846 6010B**	**03/25-03/26/03**	**FKJAT1A0**
		Dilution Factor: 1		Analysis Time..: 11:51	MDL.....: 1.8	
Beryllium	ND	5.0	ug/L	SW846 6010B	03/25-03/26/03	FKJAT1A1
		Dilution Factor: 1		Analysis Time..: 19:14	MDL.....: 0.22	
Calcium	**53000**	**200**	**ug/L**	**SW846 6010B**	**03/25-03/26/03**	**FKJAT1CA**
		Dilution Factor: 1		Analysis Time..: 19:14	MDL.....: 31	
Cobalt	ND	10	ug/L	SW846 6010B	03/25-03/26/03	FKJAT1AJ
		Dilution Factor: 1		Analysis Time..: 11:51	MDL.....: 0.92	

(Continued on next page)

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-GG

TOTAL Metals

Lot-Sample #...: D3C210230-003 Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Copper	3.0 B	20	ug/L	SW846 6010B	03/25-03/26/03	FKJAT1A2
		Dilution Factor: 1		Analysis Time..: 11:51	MDL.....: 0.76	
Iron	53 B	100	ug/L	SW846 6010B	03/25-03/26/03	FKJAT1A3
		Dilution Factor: 1		Analysis Time..: 19:14	MDL.....: 13	
Potassium	8000	3000	ug/L	SW846 6010B	03/25-03/26/03	FKJAT1CD
		Dilution Factor: 1		Analysis Time..: 19:14	MDL.....: 490	
Magnesium	51000	200	ug/L	SW846 6010B	03/25-03/26/03	FKJAT1CC
		Dilution Factor: 1		Analysis Time..: 19:14	MDL.....: 24	
Manganese	1.5 B	10	ug/L	SW846 6010B	03/25-03/26/03	FKJAT1A4
		Dilution Factor: 1		Analysis Time..: 11:51	MDL.....: 0.49	
Molybdenum	3.0 B	20	ug/L	SW846 6010B	03/25-03/26/03	FKJAT1AK
		Dilution Factor: 1		Analysis Time..: 11:51	MDL.....: 2.1	
Sodium	51000	5000	ug/L	SW846 6010B	03/25-03/26/03	FKJAT1CE
		Dilution Factor: 1		Analysis Time..: 19:14	MDL.....: 1500	
Nickel	2.3 B	40	ug/L	SW846 6010B	03/25-03/26/03	FKJAT1A5
		Dilution Factor: 1		Analysis Time..: 11:51	MDL.....: 1.7	
Tin	ND	100	ug/L	SW846 6010B	03/25-03/26/03	FKJAT1AL
		Dilution Factor: 1		Analysis Time..: 11:51	MDL.....: 3.4	
Vanadium	18	10	ug/L	SW846 6010B	03/25-03/26/03	FKJAT1A6
		Dilution Factor: 1		Analysis Time..: 11:51	MDL.....: 2.2	
Zinc	10 B	20	ug/L	SW846 6010B	03/25-03/26/03	FKJAT1A7
		Dilution Factor: 1		Analysis Time..: 11:51	MDL.....: 6.8	

Prep Batch #...: 3098223

Mercury	0.018 B,J	0.20	ug/L	SW846 7470A	04/14/03	FKJAT1AH
		Dilution Factor: 1		Analysis Time..: 21:12	MDL.....: 0.015	

NOTE(S):

B Estimated result. Result is less than RL.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-E

TOTAL Metals

Lot-Sample #...: D3C220137-001 **Matrix.....:** WG
Date Sampled...: 03/21/03 09:30 **Date Received..:** 03/22/03

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 3084435						
Aluminum	ND	100	ug/L	SW846 6010B	03/27-03/28/03	FKK1T1AL
		Dilution Factor: 1		Analysis Time..: 21:09	MDL.....: 20	
Barium	**52**	**10**	**ug/L**	**SW846 6010B**	**03/27-03/28/03**	**FKK1T1AM**
		Dilution Factor: 1		Analysis Time..: 17:21	MDL.....: 1.8	
Beryllium	ND	5.0	ug/L	SW846 6010B	03/27-03/28/03	FKK1T1AN
		Dilution Factor: 1		Analysis Time..: 17:21	MDL.....: 0.22	
Calcium	**53000**	**200**	**ug/L**	**SW846 6010B**	**03/27-03/28/03**	**FKK1T1CC**
		Dilution Factor: 1		Analysis Time..: 21:09	MDL.....: 31	
Cobalt	ND	10	ug/L	SW846 6010B	03/27-03/28/03	FKK1T1A7
		Dilution Factor: 1		Analysis Time..: 17:21	MDL.....: 0.92	
Copper	ND	20	ug/L	SW846 6010B	03/27-03/28/03	FKK1T1AP
		Dilution Factor: 1		Analysis Time..: 17:21	MDL.....: 0.76	
Iron	32 B	100	ug/L	SW846 6010B	03/27-03/28/03	FKK1T1AQ
		Dilution Factor: 1		Analysis Time..: 21:09	MDL.....: 13	
Potassium	**7100**	**3000**	**ug/L**	**SW846 6010B**	**03/27-03/28/03**	**FKK1T1CE**
		Dilution Factor: 1		Analysis Time..: 21:09	MDL.....: 490	
Magnesium	**48000**	**200**	**ug/L**	**SW846 6010B**	**03/27-03/28/03**	**FKK1T1CD**
		Dilution Factor: 1		Analysis Time..: 21:09	MDL.....: 24	
Manganese	**1.9 B**	**10**	**ug/L**	**SW846 6010B**	**03/27-03/28/03**	**FKK1T1AR**
		Dilution Factor: 1		Analysis Time..: 17:21	MDL.....: 0.49	
Molybdenum	ND	20	ug/L	SW846 6010B	03/27-03/28/03	FKK1T1A8
		Dilution Factor: 1		Analysis Time..: 17:21	MDL.....: 2.1	
Sodium	**61000**	**5000**	**ug/L**	**SW846 6010B**	**03/27-03/28/03**	**FKK1T1CF**
		Dilution Factor: 1		Analysis Time..: 21:09	MDL.....: 1500	
Nickel	**2.9 B**	**40**	**ug/L**	**SW846 6010B**	**03/27-03/28/03**	**FKK1T1AT**
		Dilution Factor: 1		Analysis Time..: 17:21	MDL.....: 1.7	

(Continued on next page)

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-E

TOTAL Metals

Lot-Sample #...: D3C220137-001 Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Tin	ND	100	ug/L	SW846 6010B	03/27-03/28/03	FKK1T1A9
		Dilution Factor: 1		Analysis Time..: 17:21	MDL.....: 3.4	
Vanadium	**18**	**10**	**ug/L**	**SW846 6010B**	**03/27-03/28/03**	**FKK1T1AU**
		Dilution Factor: 1		Analysis Time..: 17:21	MDL.....: 2.2	
Zinc	**9.5 B**	**20**	**ug/L**	**SW846 6010B**	**03/27-03/28/03**	**FKK1T1AV**
		Dilution Factor: 1		Analysis Time..: 17:21	MDL.....: 6.8	
Prep Batch #...: 3084470						
Silver	ND	5.0	ug/L	SW846 6020	04/01-04/14/03	FKK1T1A3
		Dilution Factor: 1		Analysis Time..: 21:07	MDL.....: 0.012	
Arsenic	**3.1 B,J**	**5.0**	**ug/L**	**SW846 6020**	**04/01-04/14/03**	**FKK1T1AX**
		Dilution Factor: 1		Analysis Time..: 21:07	MDL.....: 0.061	
Cadmium	ND	1.0	ug/L	SW846 6020	04/01-04/14/03	FKK1T1A0
		Dilution Factor: 1		Analysis Time..: 21:07	MDL.....: 0.022	
Chromium	**3.2 J**	**2.0**	**ug/L**	**SW846 6020**	**04/01-04/14/03**	**FKK1T1A5**
		Dilution Factor: 1		Analysis Time..: 21:07	MDL.....: 0.24	
Lead	**0.70 B**	**1.0**	**ug/L**	**SW846 6020**	**04/01-04/14/03**	**FKK1T1A1**
		Dilution Factor: 1		Analysis Time..: 21:07	MDL.....: 0.15	
Antimony	ND	2.0	ug/L	SW846 6020	04/01-04/14/03	FKK1T1AW
		Dilution Factor: 1		Analysis Time..: 21:07	MDL.....: 0.040	
Selenium	**4.9 B,J**	**5.0**	**ug/L**	**SW846 6020**	**04/01-04/14/03**	**FKK1T1A2**
		Dilution Factor: 1		Analysis Time..: 21:07	MDL.....: 0.19	
Thallium	ND	1.0	ug/L	SW846 6020	04/01-04/14/03	FKK1T1A4
		Dilution Factor: 1		Analysis Time..: 21:07	MDL.....: 0.015	
Prep Batch #...: 3098224						
Mercury	ND	0.20	ug/L	SW846 7470A	04/15/03	FKK1T1A6
		Dilution Factor: 1		Analysis Time..: 19:43	MDL.....: 0.015	

NOTE(S):

B Estimated result. Result is less than RL.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-H

TOTAL Metals

Lot-Sample #...: D3D030147-001 Matrix.....: WATER
Date Sampled...: 04/02/03 09:30 Date Received..: 04/03/03

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 3098224						
Mercury	ND	0.20	ug/L	SW846 7470A	04/15/03	FK8X31A6
		Dilution Factor: 1		Analysis Time..: 20:13	MDL.....: 0.015	
Prep Batch #...: 3100281						
Silver	ND	5.0	ug/L	SW846 6020	04/12-04/24/03	FK8X31A3
		Dilution Factor: 1		Analysis Time..: 16:45	MDL.....: 0.058	
Arsenic	**3.8 B**	**5.0**	**ug/L**	**SW846 6020**	**04/12-04/24/03**	**FK8X31AX**
		Dilution Factor: 1		Analysis Time..: 16:45	MDL.....: 0.12	
Cadmium	ND	1.0	ug/L	SW846 6020	04/12-04/24/03	FK8X31A0
		Dilution Factor: 1		Analysis Time..: 16:45	MDL.....: 0.051	
Chromium	**7.6 J**	**2.0**	**ug/L**	**SW846 6020**	**04/12-04/24/03**	**FK8X31A5**
		Dilution Factor: 1		Analysis Time..: 16:45	MDL.....: 0.13	
Lead	**2.7**	**1.0**	**ug/L**	**SW846 6020**	**04/12-04/24/03**	**FK8X31A1**
		Dilution Factor: 1		Analysis Time..: 16:45	MDL.....: 0.19	
Antimony	**0.094 B,J**	**2.0**	**ug/L**	**SW846 6020**	**04/12-04/24/03**	**FK8X31AW**
		Dilution Factor: 1		Analysis Time..: 16:45	MDL.....: 0.024	
Selenium	**7.6**	**5.0**	**ug/L**	**SW846 6020**	**04/12-04/24/03**	**FK8X31A2**
		Dilution Factor: 1		Analysis Time..: 16:45	MDL.....: 0.24	
Thallium	ND	1.0	ug/L	SW846 6020	04/12-04/24/03	FK8X31A4
		Dilution Factor: 1		Analysis Time..: 16:45	MDL.....: 0.012	
Prep Batch #...: 3100459						
Aluminum	**23 B**	**100**	**ug/L**	**SW846 6010B**	**04/12-04/14/03**	**FK8X31AL**
		Dilution Factor: 1		Analysis Time..: 18:53	MDL.....: 20	
Barium	**33**	**10**	**ug/L**	**SW846 6010B**	**04/12-04/14/03**	**FK8X31AM**
		Dilution Factor: 1		Analysis Time..: 16:05	MDL.....: 0.37	
Beryllium	ND	5.0	ug/L	SW846 6010B	04/12-04/14/03	FK8X31AN
		Dilution Factor: 1		Analysis Time..: 18:53	MDL.....: 0.41	

(Continued on next page)

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-H

TOTAL Metals

Lot-Sample #...: D3D030147-001 **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Calcium	**40000**	**200**	**ug/L**	**SW846 6010B**	**04/12-04/14/03**	**FK8X31CA**
		Dilution Factor: 1		Analysis Time..: 18:53	MDL.....: 76	
Cobalt	**1.2 B**	**10**	**ug/L**	**SW846 6010B**	**04/12-04/14/03**	**FK8X31A7**
		Dilution Factor: 1		Analysis Time..: 16:05	MDL.....: 0.67	
Copper	ND	20	ug/L	SW846 6010B	04/12-04/14/03	FK8X31AP
		Dilution Factor: 1		Analysis Time..: 16:05	MDL.....: 0.97	
Iron	320	100	ug/L	SW846 6010B	04/12-04/14/03	FK8X31AQ
		Dilution Factor: 1		Analysis Time..: 18:53	MDL.....: 19	
Potassium	**6700**	**3000**	**ug/L**	**SW846 6010B**	**04/12-04/14/03**	**FK8X31CD**
		Dilution Factor: 1		Analysis Time..: 18:53	MDL.....: 460	
Magnesium	**40000**	**200**	**ug/L**	**SW846 6010B**	**04/12-04/14/03**	**FK8X31CC**
		Dilution Factor: 1		Analysis Time..: 18:53	MDL.....: 27	
Manganese	**11**	**10**	**ug/L**	**SW846 6010B**	**04/12-04/14/03**	**FK8X31AR**
		Dilution Factor: 1		Analysis Time..: 16:05	MDL.....: 0.54	
Molybdenum	ND	20	ug/L	SW846 6010B	04/12-04/14/03	FK8X31A8
		Dilution Factor: 1		Analysis Time..: 16:05	MDL.....: 2.3	
Sodium	**55000**	**5000**	**ug/L**	**SW846 6010B**	**04/12-04/14/03**	**FK8X31CE**
		Dilution Factor: 1		Analysis Time..: 18:53	MDL.....: 1100	
Nickel	**4.8 B**	**40**	**ug/L**	**SW846 6010B**	**04/12-04/14/03**	**FK8X31AT**
		Dilution Factor: 1		Analysis Time..: 16:05	MDL.....: 4.2	
Tin	ND	100	ug/L	SW846 6010B	04/12-04/14/03	FK8X31A9
		Dilution Factor: 1		Analysis Time..: 16:05	MDL.....: 5.0	
Vanadium	**22**	**10**	**ug/L**	**SW846 6010B**	**04/12-04/14/03**	**FK8X31AU**
		Dilution Factor: 1		Analysis Time..: 16:05	MDL.....: 2.6	
Zinc	**88**	**20**	**ug/L**	**SW846 6010B**	**04/12-04/14/03**	**FK8X31AV**
		Dilution Factor: 1		Analysis Time..: 16:05	MDL.....: 7.1	

NOTE(S):

B Estimated result. Result is less than RL.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-F

General Chemistry

Lot-Sample #...: D3C210230-001 Work Order #...: FKJAK Matrix.....: WG
Date Sampled...: 03/20/03 10:15 Date Received..: 03/21/03

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrate	1.0	0.10	mg/L	MCAWW 353.2	03/21/03	3104595
		Dilution Factor: 1		Analysis Time..: 18:30	MDL.....: 0.012	
Nitrite	ND	0.010	mg/L	MCAWW 354.1	03/21/03	3081126
		Dilution Factor: 1		Analysis Time..: 18:30	MDL.....: 0.0018	
Perchlorate	2.3	1.0	ug/L	EPA-DW1 314.0	04/15-04/16/03	3106660
		Dilution Factor: 1		Analysis Time..: 07:23	MDL.....: 0.41	
Sulfate	140 Q	25	mg/L	MCAWW 300.0A	04/01-04/02/03	3094091
		Dilution Factor: 5		Analysis Time..: 00:21	MDL.....: 1.0	
Total Dissolved Solids	520	10	mg/L	MCAWW 160.1	03/27/03	3086560
		Dilution Factor: 1		Analysis Time..: 15:45	MDL.....: 5.0	
Total Sulfide	ND	4.0	mg/L	SW846 9030B/9034	03/26/03	3088174
		Dilution Factor: 1		Analysis Time..: 18:00	MDL.....: 0.26	

NOTE(S):

RL Reporting Limit

Q Elevated reporting limit. The reporting limit is elevated due to high analyte levels.

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-G

General Chemistry

Lot-Sample #...: D3C210230-002 **Work Order #...:** FKJAR **Matrix.....:** WG
Date Sampled...: 03/20/03 08:50 **Date Received..:** 03/21/03

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrate	2.1	0.10	mg/L	MCAWW 353.2	03/21/03	3104595
		Dilution Factor: 1		Analysis Time..: 18:30	MDL.....: 0.012	
Nitrite	ND	0.010	mg/L	MCAWW 354.1	03/21/03	3081126
		Dilution Factor: 1		Analysis Time..: 18:30	MDL.....: 0.0018	
Perchlorate	1.7	1.0	ug/L	EPA-DW1 314.0	04/15-04/16/03	3106660
		Dilution Factor: 1		Analysis Time..: 07:42	MDL.....: 0.41	
Sulfate	150 Q	25	mg/L	MCAWW 300.0A	04/14-04/15/03	3105600
		Dilution Factor: 5		Analysis Time..: 01:40	MDL.....: 1.0	
Total Dissolved Solids	550	10	mg/L	MCAWW 160.1	03/27/03	3086560
		Dilution Factor: 1		Analysis Time..: 15:45	MDL.....: 5.0	
Total Sulfide	ND	4.0	mg/L	SW846 9030B/9034	03/26/03	3088174
		Dilution Factor: 1		Analysis Time..: 18:00	MDL.....: 0.26	

NOTE(S):

RL Reporting Limit

Q Elevated reporting limit. The reporting limit is elevated due to high analyte levels.

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-GG

General Chemistry

Lot-Sample #...: D3C210230-003 Work Order #...: FKJAT Matrix.....: WG
Date Sampled...: 03/20/03 08:55 Date Received..: 03/21/03

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrate	2.2	0.10	mg/L	MCAWW 353.2	03/21/03	3104595
		Dilution Factor: 1		Analysis Time..: 18:30	MDL.....: 0.012	
Nitrite	0.0021 B	0.010	mg/L	MCAWW 354.1	03/21/03	3081126
		Dilution Factor: 1		Analysis Time..: 18:30	MDL.....: 0.0018	
Perchlorate	1.7	1.0	ug/L	EPA-DW1 314.0	04/15-04/16/03	3106660
		Dilution Factor: 1		Analysis Time..: 08:41	MDL.....: 0.41	
Sulfate	160 Q	25	mg/L	MCAWW 300.0A	04/01-04/02/03	3094091
		Dilution Factor: 5		Analysis Time..: 01:08	MDL.....: 1.0	
Total Dissolved Solids	550	10	mg/L	MCAWW 160.1	03/27/03	3086560
		Dilution Factor: 1		Analysis Time..: 15:45	MDL.....: 5.0	
Total Sulfide	ND	4.0	mg/L	SW846 9030B/9034	03/26/03	3088174
		Dilution Factor: 1		Analysis Time..: 18:00	MDL.....: 0.26	

NOTE(S):

RL Reporting Limit

B Estimated result. Result is less than RL.

Q Elevated reporting limit. The reporting limit is elevated due to high analyte levels.

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-E

General Chemistry

Lot-Sample #...: D3C220137-001 Work Order #...: FKK1T Matrix.....: WG
Date Sampled...: 03/21/03 09:30 Date Received..: 03/22/03

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrate	1.7	0.10	mg/L	MCAWW 353.2	03/22/03	3108441
		Dilution Factor: 1		Analysis Time..: 17:00	MDL.....: 0.012	
Nitrite	0.0021 B	0.010	mg/L	MCAWW 354.1	03/22/03	3088178
		Dilution Factor: 1		Analysis Time..: 17:00	MDL.....: 0.0018	
Perchlorate	1.7	1.0	ug/L	EPA-DW1 314.0	04/15-04/16/03	3106660
		Dilution Factor: 1		Analysis Time..: 03:48	MDL.....: 0.41	
Sulfate	83 J,Q	25	mg/L	MCAWW 300.0A	04/16/03	3106618
		Dilution Factor: 5		Analysis Time..: 15:25	MDL.....: 1.0	
Total Dissolved Solids	550	10	mg/L	MCAWW 160.1	03/27/03	3086561
		Dilution Factor: 1		Analysis Time..: 16:20	MDL.....: 5.0	
Total Sulfide	ND	4.0	mg/L	SW846 9030B/9034	03/26/03	3088174
		Dilution Factor: 1		Analysis Time..: 18:00	MDL.....: 0.26	

NOTE(S):

RL Reporting Limit

B Estimated result. Result is less than RL.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Q Elevated reporting limit. The reporting limit is elevated due to high analyte levels.

US GEOLOGICAL SURVEY

Client Sample ID: CAFB-H

General Chemistry

Lot-Sample #...: D3D030147-001 Work Order #...: FK8X3 Matrix.....: WATER
Date Sampled...: 04/02/03 09:30 Date Received..: 04/03/03

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrate	**1.6**	**0.10**	**mg/L**	**MCAWW 353.2**	**04/03/03**	**3117126**
		Dilution Factor: 1		Analysis Time..: 11:30	MDL.....: 0.012	
Nitrite	ND	0.010	mg/L	MCAWW 354.1	04/03/03	3097337
		Dilution Factor: 1		Analysis Time..: 11:30	MDL.....: 0.0018	
Perchlorate	**2.4**	**1.0**	**ug/L**	**EPA-DW1 314.0**	**04/15-04/16/03**	**3106660**
		Dilution Factor: 1		Analysis Time..: 09:39	MDL.....: 0.41	
Sulfate	**120 Q**	**25**	**mg/L**	**MCAWW 300.0A**	**04/24/03**	**3121280**
		Dilution Factor: 5		Analysis Time..: 20:40	MDL.....: 1.0	
Total Dissolved Solids	**460**	**10**	**mg/L**	**MCAWW 160.1**	**04/08/03**	**3098549**
		Dilution Factor: 1		Analysis Time..: 19:00	MDL.....: 5.0	
Total Sulfide	ND	4.0	mg/L	SW846 9030B/9034	04/09/03	3119373
		Dilution Factor: 1		Analysis Time..: 16:00	MDL.....: 0.26	

NOTE(S):

RL Reporting Limit

Q Elevated reporting limit. The reporting limit is elevated due to high analyte levels.

APPENDIX III

Laboratory Quality Assurance / Quality Control Results

LABORATORY DATA VALIDATION CHECKLIST

SECTION 1.0: GENERAL INFORMATION (Landfill 5)
(also see Appendix 1)

Data reviewer(s) name, affiliation, title, signature, and date of review:

Fredrick E. Gebhardt, USGS-WRD, Hydrologic Technician 1OCT2003

DATA INVENTORY

1.1 Sample project number: Severn Trent Services Reports # D3C210341 & # D3C240249

1.2 Operable unit and site: Landfill 5 unit, Cell 3

Sample collection date: 18MAR - 20MAR2003

1.3 Sample locations (location IDs): Wells CAFB-B, C, D, O, S, T, and U; CAFB-UU was a duplicate sample for CAFB-U.

1.4 Sample matrix (ground water, soil, other): ground water

1.5 Type and number of field samples (environmental and quality control) in sample project:

Type	number	Type	number
environmental	7	MS/MSD	0
field duplicate	1	trip blank	3
equipment blank	0	ambient blank	0

Data validation level: **(circle one)** note--see appendix 1 & 2 for description of different levels

GENERAL INFORMATION (Sewage Lagoons) ***(also see Appendix 2)***

Data reviewer(s) name, affiliation, title, signature, and date of review:

Fredrick E. Gebhardt, USGS-WRD, Hydrologic Technician 1OCT2003

DATA INVENTORY

1.1 Sample project number: Severn Trent Services Report # D3C210230, D3C220137, and D3D030147

1.2 Operable unit and site: Sewage Lagoon

Sample collection date: 20-21MAR & 2APR2003

1.3 Sample locations (location IDs): Wells CAFB-E, CAFB-F, CAFB-G, and CAFB-H; CAFB-GG duplicate sample for CAFB-G

1.4 Sample matrix (ground water, soil, other): ground water

1.5 Type and number of field samples (environmental and quality control) in sample project:

Type	number	Type	number
environmental	4	MS/MSD	1 pair
field duplicate	1	trip blank	2
equipment blank	0	ambient blank	0

Data validation level: **(circle one)** note--see appendix A for description of different levels

OTHER CHECKLIST SECTIONS COMPLETED FOR SAMPLE PROJECT:

√ 2.0 Data Reports and Completeness

√ 3.0 Appendix-IX, Volatile organic compounds (VOC)--Method SW5030/SW8260B

√ 4.0 Appendix-IX, Semivolatile organic compounds (SVOC)--Method SW3510/SW8270C

√ 5.0 Appendix-IX, Pesticides and PCB's--Method SW3520/SW8081A and 8082

√ 6.0 Appendix-IX, Herbicides--Method SW3520/SW8151A

√ 7.0 Appendix-IX, Dioxins and Furans--Method SW3520/SW8280

√ 8.0 Appendix-IX, Polynuclear aromatic hydrocarbons (PAH)--Method SW3510/SW8310

√ 9.0 Appendix-IX, Metals (Total)--Methods SW3005/SW6010B (Aluminum, Barium, Beryllium, Calcium, Cobalt, Copper, Iron, Magnesium, Manganese, Molybdenum, Nickel, Potassium, Sodium, Tin, Vanadium, and Zinc), SW3005/SW6020 (Antimony, Arsenic, Cadmium, Chromium, Lead, Selenium, Silver, and Thallium), and SW3020/SW7470A (Mercury).

√ 10.0 Cyanide and Sulfide--Methods SW9012A (cyanide), 9030B/9030 (sulfide)

√ 11.0 Total Organic Carbon (TOC)--Method SW9060

√ 12.0 Total Organic Halogens (TOX)--Method SW9020B

√ 13.0 Sulfate--Method MCAWW300.0A

√ 14.0 Nitrate/Nitrite--Method MCAWW353.2/MCAWW354.1

√ 15.0 Perchlorate--Method EPA 314.0

√ 16.0 Total Dissolved Solids (TDS)--Method MCAWW160.1

SECTION 2.0: DATA REPORTS AND COMPLETENESS

Name of reviewer(s) and review date: Fredrick E. Gebhardt 1OCT2003

LABORATORY DATA REPORTS

2.1 Analytical Results Report--report date: Revised 2JUN2003

2.2 Raw Data Report--number of volumes: N/A

2.3 Was completeness of lab reports acceptable? yes √ no ____

(overview, analytical results, quality-control report)

Lab report was complete and acceptable.

DATA COMPLETENESS

2.4 Were all samples requested on chain of custody form analyzed by lab? yes √ no ____

All appendix IX parameters (Landfill 5):

	VOC SW8260B	SVOC SW8270C	Pesticide SW8081A/ SW8082	Herbicide SW8151A	Dioxin SW8280
requested:	11	8	8	8	8
analyzed:	11	8	8	8	8

	PAH SW8310	Total Metals: 16-SW6010B, 8-SW6020, Mercury by SW7470A	Cyanide by SW9012A, Sulfide by 9030B/9034	TOC SW9060	TOX SW9020B
requested:	8	8	8	8	8
analyzed:	8	8	8	8	8

All appendix IX parameters (Sewage Lagoons):

	VOC SW8260B	Pesticides SW8081A, SW8082	Total Metals: 16-SW6010B 8-SW6020 Mercury-SW7470A	Sulfate MCAWW 300.0A	Nitrate & Nitrite by MCAWW 353.2/354.1
requested:	10	8	8	8	8
analyzed:	10	8	8	8	8

	TDS MCAWW160.1 160.1
requested:	8
analyzed:	8

2.5 List cancelled analyses on cancelled-data worksheet: None.

2.6 Was sample cooler seal intact upon receipt by lab? Yes

2.7 What was the sample cooler temperature upon receipt by lab? Temperatures ranged from 1.6 - 3.6 °C. There was a total of 13 coolers shipped.

2.8 Additional comments:

SECTION 3.0: APPENDIX-IX, VOLATILE ORGANIC COMPOUNDS-- METHOD SW5030/SW8260B (Landfill 5 & Sewage Lagoons)

Name of reviewer(s) and review date: Fredrick E. Gebhardt 1OCT2003

LEVEL I AND II -- Data Validation

HOLDING TIMES

3.1 Were project-required analytical holding times met? yes √ no ____

(14-day limit from sample date to analysis date for water samples)

[FG-ORG, p. 6-8]

sample date: 18-21MAR,2APR2003 analysis date limit: 1-4APR,15APR2003

Samples were analyzed by 1APR and 10APR2003 and met required holding times.

SURROGATE SPIKE RECOVERY

3.2 Did surrogate spike results meet frequency and QC acceptance criteria? yes √ no ____

(all samples and blanks: SW8260A:%R varies)

[FG-ORG, p. 26-29]

All surrogate spike recovery results met Severn Trent QC acceptance criteria.

PROJECT REPORTING LIMIT (PRL)

3.3 Did sample results meet project reporting limits? yes √ no ____

PRL's were not provided in Sampling and Analysis Plan (SAP). Re-

FIELD DUPLICATES

3.4 Did field duplicate results meet frequency and QC acceptance criteria?yes √ no ____

(1 set per sampling period; RPD < 30 %)

Field duplicate results met QC acceptance criteria.

EQUIPMENT BLANKS

3.5 Did equipment blank results meet frequency and QC acceptance criteria? yes ____ no ____

(1 set for non-dedicated pump; analytes <3 x RL)

[FG-ORG, p. 20-25]

No equipment blanks were collected.

AMBIENT and TRIP BLANKS (water samples only)

3.6 Did blank results meet frequency and QC acceptance criteria? yes √ no ____

(ambient and trip blank frequency varies per sampling period)

[FG-ORG, p. 20-25]

All trip blank results were ND or below reporting limit and met QC acceptance criteria. Ambient condition blank was not collected for this sampling period.

TENTATIVELY IDENTIFIED COMPOUNDS (TICs)

3.7 List number and level of TICs for each sample analyzed on TIC data sheet.

[FG-ORG, p. 41-44]

CAFB-D, 2 compounds, identified, Appendix I-20
CAFB-C, 1 compound, identified, Appendix I-23
CAFB-C-TB, 3 compounds, identified, Appendix I-26
CAFB-U, 1 compound, identified, Appendix I-29
CAFB-UU, 2 compounds, identified, Appendix I-32
CAFB-T, 3 compounds, identified, Appendix I-35
CAFB-S, 2 compounds, identified, Appendix I-38
CAFB-O, 2 compounds, identified, Appendix I-41
CAFB-O-TB, 2 compounds, unknown, Appendix I-44
CAFB-B, 2 compounds, identified, Appendix I-47
CAFB-B-TB, 2 compounds, identified, Appendix I-50
CAFB-F, 1 compound, identified, Appendix II-20
CAFB-H-TB, 1 compound, Identified, Appendix II-38

DUPLICATE CONTROL SAMPLES (DCSs)

3.8 Did DCS results meet frequency and QC acceptance criteria? yes √ no ____

(1 DCS per quarter; %R and RPD within 3 SD of historical results of lab performance)

[FG-ORG, p. 32-33]

All DCS results met QC acceptance criteria.

SINGLE CONTROL SAMPLES (SCSs)

3.9 Did SCS results meet frequency and QC acceptance criteria? yes √ no ____

(1 SCS per sample lot; %R limits established by laboratory)

[FG-ORG, p. 32-33]

All SCS results met QC acceptance criteria.

LABORATORY METHOD BLANKS

3.10 Did method blank results meet frequency and QC acceptance criteria? yes √ no ____

(1 method blank per batch; analyte concentration ≤ RL except for common lab contaminants ≤ 5 times RL)

[FG-ORG, p. 20-25]

All method blank results were ND or J value (less than RL) and met QC acceptance criteria.

MATRIX SPIKE AND MATRIX SPIKE DUPLICATE (MS/MSD)

3.11 Did MS/MSD results meet frequency and QC acceptance criteria? yes √ no ____

(1 set per quarter; method SW8260A: %R and RPD varies)

[FG-ORG, p. 30-31]

All MS/MSD results met QC acceptance criteria.

LEVEL II -- Data Validation

INSTRUMENT CALIBRATION

3.12 Did initial calibrations meet frequency and QC acceptance criteria? yes ____ no ____

[FG-ORG, p. 12-16]

Not reviewed.

3.13 Did continuing calibrations meet frequency and QC acceptance criteria? yes ____ no ____

[FG-ORG, p. 17-19]

Not reviewed.

GC/MS TUNING

3.14 Did BFB tuning results meet frequency and QC acceptance criteria? yes ____ no ____

[FG-ORG, p. 9-11]

Not reviewed.

INTERNAL STANDARDS (IS)

3.15 Did IS results meet frequency and QC acceptance criteria? yes _____ no _____

(all blanks, standards, and samples; IS area limits within 50 to 200%)
[FG-ORG, p. 35-36]

Not reviewed

SAMPLE RESULT VERIFICATION

3.16 No omissions, problems, discrepancies, transcription errors, or reduction (dilution, conversion) errors in selected raw data? [FG-ORG, p. 47] yes _____ no _____

Not reviewed

LEVEL I and II -- Data Validation

ANALYTE RESULTS WITH DATA QUALIFIERS

3.17 Summarize analyte results with data qualifiers. List pertinent information on qualified-data worksheet: _____

3.18 Additional comments: _____

SECTION 4.0: APPENDIX-IX SEMIVOLATILE ORGANIC COMPOUNDS-- METHOD SW3510/SW8270C (Landfill 5)

Name of reviewer(s) and review date: Fredrick E. Gebhardt 1OCT2003

LEVEL I AND II -- Data Validation

HOLDING TIMES

4.1 Were project-required analytical holding times met? yes √ no ____

(7-day limit from sample date to extraction date for water samples)

(40-day limit from sample extraction date to analysis date for water samples)

[FG-ORG, p. 49-50]

sample date: 18-20MAR2003 extraction date limit: 25-27MAR2003

extraction date: 24-25MAR2003 analysis date limit: 01APR-16APR2003

Samples were all extracted and analysis within holding times.

SURROGATE SPIKE RECOVERY

4.2 Did surrogate spike results meet frequency and QC acceptance criteria? yes √ no ____

(frequency: all samples and blanks: SW8270B:%R varies)

[FG-ORG, p. 66-68]

CAFB-B Surrogate Spike was outside stated control limits.

PROJECT REPORTING LIMIT (PRL)

4.3 Did sample results meet project reporting limits? yes √ no ____

PRL's were not provided in SAP. Reporting limits were not raised for any of the samples.

FIELD DUPLICATES

4.4 Did field duplicate results meet frequency and QC acceptance criteria? yes √ no ____

(1 set per sampling period; RPD ≤ 30%)

Field duplicate results met QC acceptance criteria.

EQUIPMENT BLANKS

4.5 Did equipment blank results meet frequency and QC acceptance criteria? yes ____ no ____

(1 set for non-dedicated pump; analytes < 3 x RL)

[FG-ORG, p. 62-65]

No equipment blanks were collected.

TENTATIVELY IDENTIFIED COMPOUNDS (TICs)

4.6 List number and level of TICs for each sample analyzed on TIC data sheet.

[FG-ORG, p. 80-83]

Sample ID	Page Number	Number of TICs	Reporting Level*
CAFB-U	I-65	5	Unknown
CAFB-UU	I-70	7	Unknown, T2
CAFB-T	I-75	5	Unknown
CAFB-S	I-80	8	Unknown, T2
CAFB-Q	I-85	8	Unknown

* T1 = tentative identification, T2 = confident identification, and T3 = confirmed identification.

DUPLICATE CONTROL SAMPLES (DCSs)

4.7 Did DCS results meet frequency and QC acceptance criteria? yes √ no ____

(1 DCS per quarter; %R and RPD within 3 SD of historical results of lab performance)

[FG-ORG, p. 71-72]

All DCS results met QC acceptance criteria.

SINGLE CONTROL SAMPLES (SCSs)

4.8 Did SCS results meet frequency and QC acceptance criteria? yes √ no ____

(1 SCS per quarter; %R limits established by laboratory)

[FG-ORG, p. 71-72]

All SCS results met QC acceptance criteria.

LABORATORY METHOD BLANKS

4.9 Did method blank results meet frequency and QC acceptance criteria? yes √ no ____

(1 method blank per batch; analyte concentration ≤ RL except for common lab contaminants ≤ 5 times RL)

[FG-ORG, p. 62-65]

All results were ND and met QC acceptance criteria.

MATRIX SPIKE AND MATRIX SPIKE DUPLICATE (MS/MSD)

4.10 Did MS/MSD results meet frequency and QC acceptance criteria? yes √ no ____

(1 set per quarter; method SW8270B:%R and RPD varies)

[FG-ORG, p. 69-70]

All MS/MSD results met QC acceptance criteria.

LEVEL II -- Data Validation

INSTRUMENT CALIBRATION

4.11 Did initial calibration meet frequency and QC acceptance criteria? yes ____ no ____

[FG-ORG, p. 55-58]

Not reviewed

4.12 Did continuing calibrations meet frequency and QC acceptance criteria? yes ____ no ____

[FG-ORG, p. 59-61]

Not reviewed

GC/MS TUNING

4.13 Did BFB tuning results meet frequency and QC acceptance criteria? yes ____ no ____

[FG-ORG, p. 51-54]

Not reviewed

INTERNAL STANDARDS (IS)

4.14 Did IS results meet frequency and QC acceptance criteria? yes ____ no ____

(all blanks, standards, and samples; IS area limits within 50 to 200%)

[FG-ORG, p. 74-75]

Not reviewed

SAMPLE RESULT VERIFICATION

4.15 No omissions, problems, discrepancies, transcription errors, or reduction (dilution, conversion) errors in selected raw data? yes ____ no ____

Not reviewed

LEVEL I and II -- Data Validation

ANALYTE RESULTS WITH DATA QUALIFIERS

4.16 Summarize analyte results with data qualifiers. List pertinent information on qualified-data worksheet: _____

4.17 Additional comments: _____

SECTION 5.0: APPENDIX-IX, PESTICIDES AND PCB'S-- METHOD SW3520/SW8081A AND 8082 (Landfill 5 & Sewage Lagoons)

Name of reviewer(s) and review date: Fredrick E. Gebhardt 1OCT2003

LEVEL I AND II -- Data Validation

HOLDING TIMES

5.1 Were project-required analytical holding times met? yes ____ no √

(7-day limit from sample date to extraction date and 40-day limit from extraction date to analysis date)

[FG-ORG, p. 49-50]

sample date: 18-21MAR, 2APR2003 extraction date limit: 25-26MAR, 9APR2003

extraction date: 25-26MAR, 9APR2003 analysis date limit: 3-6APR, 15APR2003

Samples were extracted and were analyzed by required extraction and analysis holding time limits, except for the reanalysis of sample CAFB-U.

SURROGATE SPIKE RECOVERY

5.2 Did surrogate spike results meet frequency and QC acceptance criteria? yes ____ no √

(frequency: all samples and blanks: SW8080A:%R varies)

[FG-ORG, p. 66-68]

Samples CAFB-U and CAFB-UU did not meet QC acceptance criteria.

PROJECT REPORTING LIMIT

5.3 Did sample results meet project reporting limits? yes √ no ____

PRL's were not provided in SAP. Reporting limits were not raised for any of the samples.

FIELD DUPLICATES

5.4 Did field duplicate results meet frequency and QC acceptance criteria? yes √ no ____

(1 set per sampling period; RPD ≤ 30%)

Field duplicate results met QC acceptance criteria.

EQUIPMENT BLANKS

5.5 Did equipment blank results meet frequency and QC acceptance criteria? yes √ no ____

(1 set for non-dedicated pump; target compound concentration ≤ RL)

[FG-ORG, p. 62-65]

Equipment blank results were ND and met QC acceptance criteria.

DUPLICATE CONTROL SAMPLES (DCSs)

5.6 Did DCS results meet frequency and QC acceptance criteria? yes √ no ____

(1 DCS per quarter; %R and RPD within 3 SD of historical results of lab performance)

[FG-ORG, p. 71-72]

All DCS results met QC acceptance criteria.

SINGLE CONTROL SAMPLES (SCSs)

5.7 Did SCS results meet frequency and QC acceptance criteria? yes √ no ____

(1 SCS per quarter; %R limits established by laboratory)

[FG-ORG, p. 71-72]

SCS results met QC acceptance criteria.

LABORATORY METHOD BLANKS

5.8 Did method blank results meet frequency and QC acceptance criteria?yes √ no ____

(1 method blank per batch; concentration ≤ 2 times RL)

[FG-ORG, p. 62-65]

All method blank results were ND and met QC acceptance criteria.

MATRIX SPIKE AND MATRIX SPIKE DUPLICATE (MS/MSD)

5.9 Did MS/MSD results meet frequency and QC acceptance criteria? yes √ no ____

(1 set per quarter; %R and RPD limits varies)

[FG-ORG, p. 69-70]

All MS/MSD results met QC acceptance.

LEVEL II -- Data Validation

INSTRUMENT CALIBRATION

5.10 Did initial and continuing calibrations meet frequency and QC criteria?yes ____ no ____

[FG-ORG, p. 55-58]

Not reviewed

SAMPLE RESULT VERIFICATION

5.11 No omissions, problems, discrepancies, transcription errors, or reduction (dilution, conversion) errors in selected raw data? yes ____ no ____

Not reviewed

5.12 Additional comments: ____

SECTION 6.0: APPENDIX-IX, HERBICIDES-- METHOD SW3520/SW8151A (Landfill 5)

Name of reviewer(s) and review date: Fredrick E. Gebhardt 1OCT2003

LEVEL I AND II -- Data Validation

HOLDING TIMES

6.1 Were project-required analytical holding times met? yes √ no ____

(7-day limit from sample date to extraction date and 40-day limit from extraction date to analysis date)

[FG-ORG, p. 49-50]

sample date: 18-20MAR2003 extraction date limit: 25-27MAR2003

extraction date: 25-27MAR2003 * analysis date limit: 04-11APR2003

All samples were extracted and analyzed within the required holding times.

SURROGATE SPIKE RECOVERY

6.2 Did surrogate spike results meet frequency and QC acceptance criteria? yes √ no ____

(frequency: all samples and blanks: SW8150:%R varies)

[FG-ORG, p. 66-68]

Surrogate spike recovery results for all samples met QC acceptance criteria.

PROJECT REPORTING LIMIT

6.3 Did sample results meet project reporting limits? yes √ no ____

PRL's were not provided in SAP. Reporting limits were not raised for any of the samples.

FIELD DUPLICATES

6.4 Did field duplicate results meet frequency and QC acceptance criteria?yes __√__ no _____

(1 set per sampling period; RPD ≤ 30%)

Field duplicate results met QC acceptance criteria.

EQUIPMENT BLANKS

6.5 Did equipment blank results meet frequency and QC acceptance criteria? yes ____ no ____

(1 set for non-dedicated pump; target compound concentration ≤ RL)

[FG-ORG, p. 62-65]

Equipment blanks were not collected.

DUPLICATE CONTROL SAMPLES (DCSs)

6.6 Did DCS results meet frequency and QC acceptance criteria? yes _____ no __√__

(1 DCS per quarter; %R and RPD within 3 SD of historical results of lab performance)

[FG-ORG, p. 71-72]

DCS results did not meet QC acceptance criteria for duplicate sample CAFB-UU.

SINGLE CONTROL SAMPLES (SCSs)

6.7 Did SCS results meet frequency and QC acceptance criteria? yes __√__ no _____

(1 SCS per quarter; %R limits established by laboratory)

[FG-ORG, p. 71-72]

SCS results met QC acceptance criteria.

LABORATORY METHOD BLANKS

6.8 Did method blank results meet frequency and QC acceptance criteria?yes __√__ no _____

(1 method blank per batch; concentration ≤ 2 times RL)

[FG-ORG, p. 62-65]

All method blank results were ND and met QC acceptance criteria.

MATRIX SPIKE AND MATRIX SPIKE DUPLICATE (MS/MSD)

6.9 Did MS/MSD results meet frequency and QC acceptance criteria? yes √ no ____

(1 set per quarter; %R and RPD limits varies)

[FG-ORG, p. 69-70]

MS/MSD results met QC acceptance criteria.

LEVEL II -- Data Validation

INSTRUMENT CALIBRATION

6.10 Did initial and continuing calibrations meet frequency and QC criteria?yes ____ no ____

[FG-ORG, p. 55-58]

Not reviewed

SAMPLE RESULT VERIFICATION

6.11 No omissions, problems, discrepancies, transcription errors, or reduction (dilution, conversion) errors in selected raw data? yes ____ no ____

Not reviewed

6.12 Additional comments: ____

SECTION 7.0: APPENDIX-IX, DIOXINS AND FURANS-- METHOD SW3520/SW8280 (Landfill 5)

Name of reviewer(s) and review date: Fredrick E. Gebhardt 1OCT2003

LEVEL I AND II -- Data Validation

HOLDING TIMES

7.1 Were project-required analytical holding times met? yes √ no ____

(30-day limit from sample date to extraction date and 45-day limit from extraction date to analysis date for method SW8280)

[FG-ORG, p. 49-50]

sample date: 18-20MAR2003 extraction date limit: 17-19APR2003

extraction date: 4APR2003 analysis date limit: 2-4APR2003

Samples were extracted and were analyzed by required, extraction and analysis holding time limits.

SURROGATE SPIKE RECOVERY

7.2 Did surrogate spike results meet frequency and QC acceptance criteria? yes √ no ____

(frequency: all samples and blanks: SW8280:%R varies)

[FG-ORG, p. 66-68]

All surrogate spike recovery results met QC acceptance criteria.

PROJECT REPORTING LIMIT

7.3 Did sample results meet project reporting limits? yes √ no ____

PRL's were not provided in SAP. Reporting limits were not raised for any of the samples.

FIELD DUPLICATES

7.4 Did field duplicate results meet frequency and QC acceptance criteria?yes √ no ____

(1 set per sampling period; RPD ≤ 30%)

Field duplicate results met QC acceptance criteria.

EQUIPMENT BLANKS

7.5 Did equipment blank results meet frequency and QC acceptance criteria? yes __√__ no ____

(1 set for non-dedicated pump; target compound concentration ≤ RL)

[FG-ORG, p. 62-65]

Equipment blank results were ND and met QC acceptance criteria.

DUPLICATE CONTROL SAMPLES (DCSs)

7.6 Did DCS results meet frequency and QC acceptance criteria? yes __√__ no ____

(1 DCS per quarter; %R and RPD within 3 SD of historical results of lab performance)

[FG-ORG, p. 71-72]

DCS results met QC acceptance criteria.

LABORATORY METHOD BLANKS

7.7 Did method blank results meet frequency and QC acceptance criteria?yes __√__ no ____

(1 method blank per batch; concentration ≤ 2 times RL)

[FG-ORG, p. 62-65]

All method blank results were ND and met QC acceptance criteria.

MATRIX SPIKE AND MATRIX SPIKE DUPLICATE (MS/MSD)

7.8 Did MS/MSD results meet frequency and QC acceptance criteria? yes __√__ no ____

(1 set per quarter; %R and RPD limits varies)

[FG-ORG, p. 69-70]

MS/MSD results met QC acceptance criteria.

LEVEL II -- Data Validation

INSTRUMENT CALIBRATION

7.9 Did initial and continuing calibrations meet frequency and QC criteria? yes ____ no ____

[FG-ORG, p. 55-58]

Not reviewed

SAMPLE RESULT VERIFICATION

7.10 No omissions, problems, discrepancies, transcription errors, or reduction (dilution, conversion) errors in selected raw data? yes _____ no _____

Not reviewed

7.11 Additional comments: _____

SECTION 8.0: APPENDIX-IX, POLYNUCLEAR AROMATIC HYDROCARBONS (PAH)--METHOD SW3510/SW8310

Name of reviewer(s) and review date: Fredrick E. Gebhardt 1OCT2003

LEVEL I AND II -- Data Validation

HOLDING TIMES

8.1 Were project-required analytical holding times met? yes √ no _____

(7-day limit from sample date to extraction date and 40-day limit from extraction date to analysis date for method SW8310)
[FG-ORG, p. 49-50]

sample date: 18-20MAR2003 extraction date limit: 25-27MAR2003
extraction date: 25-27MAR2003 analysis date limit: 17-20APR2003

Samples were extracted and were analyzed by required, extraction and analysis holding time limits.

SURROGATE SPIKE RECOVERY

8.2 Did surrogate spike results meet frequency and QC acceptance criteria? yes √ no _____

(frequency: all samples and blanks: SW8310:%R varies)
[FG-ORG, p. 66-68]

All surrogate spike recovery results met QC acceptance criteria.

PROJECT REPORTING LIMIT

8.3 Did sample results meet project reporting limits? yes √ no ____

PRL's were not provided in SAP. Reporting limits were not raised for any of the samples.

FIELD DUPLICATES

8.4 Did field duplicate results meet frequency and QC acceptance criteria? yes √ no ____

(1 set per sampling period; RPD ≤ 30%)

Field duplicate results met QC acceptance criteria.

EQUIPMENT BLANKS

8.5 Did equipment blank results meet frequency and QC acceptance criteria? yes ____ no ____

(1 set for non-dedicated pump; target compound concentration ≤ RL)
[FG-ORG, p. 62-65]

Equipment blank were not collected.

DUPLICATE CONTROL SAMPLES (DCSs)

8.6 Did DCS results meet frequency and QC acceptance criteria? yes √ no ____

(1 DCS per quarter; %R and RPD within 3 SD of historical results of lab performance)
[FG-ORG, p. 71-72]

All DCS results met QC acceptance criteria limits.

SINGLE CONTROL SAMPLES (SCSs)

8.7 Did SCS results meet frequency and QC acceptance criteria? yes √ no ____

(1 SCS per quarter; %R limits established by laboratory)

[FG-ORG, p. 71-72]

SCS results met QC acceptance criteria.

LABORATORY METHOD BLANKS

8.8 Did method blank results meet frequency and QC acceptance criteria?yes √ no ____

(1 method blank per batch; concentration ≤ 2 times RL)

[FG-ORG, p. 62-65]

All method blank results were ND and met QC acceptance criteria.

MATRIX SPIKE AND MATRIX SPIKE DUPLICATE (MS/MSD)

8.9 Did MS/MSD results meet frequency and QC acceptance criteria? yes √ no ____

(1 set per quarter; %R and RPD limits varies)

[FG-ORG, p. 69-70]

MS/MSD results met QC acceptance criteria.

LEVEL II -- Data Validation

INSTRUMENT CALIBRATION

8.10 Did initial and continuing calibrations meet frequency and QC criteria?yes ____ no ____

[FG-ORG, p. 55-58]

Not reviewed

SAMPLE RESULT VERIFICATION

8.11 No omissions, problems, discrepancies, transcription errors, or reduction (dilution, conversion) errors in selected raw data? yes ____ no ____

Not reviewed

8.12 Additional comments: _____

SECTION 9.0: APPENDIX-IX, METALS (TOTAL)-- METHODS SW3005/SW6010B (ALUMINUM, BARIUM, BERYLLIUM, CALCIUM, COBALT, COPPER, IRON, MAGNESIUM, MANGANESE, MOLYBDENUM, NICKEL, POTASSIUM, SODIUM, TIN, VANADIUM, AND ZINC), SW3005/SW6020 (ANTIMONY, ARSENIC, CADMIUM, CHROMIUM, LEAD, SELENIUM, SILVER, AND THALLIUM), AND SW3020/SW7470A (MERCURY). (Landfill 5 & Sewage Lagoons)

Name of reviewer(s) and review date: Fredrick E. Gebhardt 1OCT2003

LEVEL I AND II -- Data Validation

HOLDING TIMES

9.1 Were project-required analytical holding times met? yes √ no _____

(180-day limit from sample date to analysis, except mercury-28 days)

[FG-INORG, p. 6-7]

Mercury sample date: 18-21MAR, 2APR2003 analysis date limit: 15-18APR2003

All rest sample date: 18-21MAR, 2APR2003 analysis date limit: 14-17SEP, 28SEP2003

Mercury and all other metals were analyzed by the required analytical holding times.

PROJECT REPORTING LIMIT (PRL)

9.2 Did sample results meet project reporting limits? yes √ no _____

PRL's were not provided in SAP. Severn Trent reporting limits were not raised for any of the samples.

FIELD DUPLICATES

9.3 Did field duplicate results meet frequency and QC acceptance criteria? yes ____ no √

(1 set for each sampling period; RPD < 30 %)

[FG-INORG, p. 35]

Aluminum, Arsenic, Antimony, Chromium, and Mercury didn't meet QC acceptance criteria, due to method blank contamination.

EQUIPMENT BLANKS

9.4 Did equipment blank results meet frequency and QC acceptance criteria? yes ____ no ____

(1 set for non-dedicated pump; analytes < 3 x RL)

[FG-INORG, p. 16-18]

Equipment blank was not collected.

DUPLICATE CONTROL SAMPLES (DCSs)

9.5 Did DCS results meet frequency and QC acceptance criteria? yes ____ no √

(1 DCS per quarter; % R and RPD within 3 SD of historical results of lab performance)

[FG-INORG, p. 25-26]

Aluminum, Arsenic, Antimony, Chromium, and Mercury didn't meet QC acceptance criteria, due to method blank contamination.

LABORATORY METHOD BLANKS

9.6 Did method blank results meet frequency and QC acceptance criteria? yes ____ no √

(1 method blank per batch; analyte concentration ≤ RL except for common lab contaminants ≤ 2 times RL)

[FG-INORG, p. 16-18]

Aluminum, Arsenic, Antimony, Chromium, and Mercury didn't meet QC acceptance criteria, due to method blank contamination.

MATRIX SPIKE AND MATRIX SPIKE DUPLICATE (MS/MSD)

9.7 Did MS/MSD results meet frequency and QC acceptance criteria? yes ____ no √

(1 set per quarter; %R and RPD varies)

[FG-INORG, p. 27-29]

Aluminum, Arsenic, Antimony, Chromium, and Mercury didn't meet QC acceptance criteria, due to method blank contamination.

LEVEL II -- Data Validation

CALIBRATION

9.8 Did initial (ICV) and continuing (CCV) calibrations meet QC acceptance criteria?
[FG-INORG, p. 8-15] yes _____ no _____

Not reviewed.

INTERELEMENT CHECK SAMPLES (method SW6010 only)

9.9 Did interelement check results meet frequency and QC criteria? yes _____ no _____

(within 20% of known value)
[FG-INORG, p. 19-21]

Not reviewed.

ANALYTICAL SPIKE RECOVERY (all methods except SW6010 and mercury)

9.10 Did analytical spike results meet frequency and QC acceptance criteria? yes _____ no _____

(every sample; %R within 80-120% except when sample results are ND, the %R within 40-120%)the %R within 40-120%)
[FG-INORG, p. 27-29]

Not reviewed.

SAMPLE RESULT VERIFICATION

9.11 No omissions, problems, discrepancies, transcription errors, or reduction (dilution, conversion) errors in selected raw data? **[FG-INORG, p. 36]** yes _____ no _____

Not reviewed.

LEVEL I AND II -- Data Validation

ANALYTE RESULTS WITH DATA QUALIFIERS

9.12 Summarize analyte results with data qualifiers. List pertinent information on qualified-data worksheet: _____

9.13 Additional comments: None.

SECTION 10.0: CYANIDE--METHOD SW9012A (Landfill 5) AND SULFIDE--METHOD 9030B/9034 (Landfill 5 & Sewage Lagoons))

Name of reviewer(s) and review date: Fredrick E. Gebhardt 1OCT2003

LEVEL I AND II -- Data Validation

HOLDING TIMES

10.1 Were project-required analytical holding times met? yes √ no ____

(Cyanide: 14-day limit from sample date to analysis date for water samples)
(Sulfide: 7-day limit from sample date to analysis date for water samples)
[FG-INORG, p. 6-7]

Cyanide sample date: 18-20MAR2003 analysis date limit: 1-3APR2003
Sulfide sample date: 18-20MAR,2APR2003 analysis date limit: 25-27APR,9APR2003

Cyanide and sulfide samples all met the required holding time limits.

PROJECT REPORTING LIMIT

10.2 Did sample results meet project reporting limits? yes √ no ____

(Severn Trent RL for: Cyanide 0.01 mg/L, Sulfide 0.05 mg/L)

PRL's were not provided in SAP. Reporting limits were not raised for any of the samples.

FIELD DUPLICATES

10.3 Did field duplicate results meet frequency and QC acceptance criteria? yes √ no ____

(1 set per each sampling period; RPD ≤ 30%)
[FG-INORG, p. 35]

Field duplicate results met QC acceptance criteria.

EQUIPMENT BLANKS

10.4 Did equipment blank results meet frequency and QC acceptance criteria? yes ____ no ____

(1 set for non-dedicated pump; target compound concentration ≤ 3 times RL)
[FG-INORG, p. 16-18]

Equipment blank was not collected.

DUPLICATE CONTROL SAMPLES (DCSs)

10.5 Did DCS results meet frequency and QC acceptance criteria? yes √ no _____

(1 DCS per batch; %R and RPD within 3 SD of historical results of lab performance)

[FG-INORG, p. 25-26]

All DCS results met QC acceptance criteria.

LABORATORY METHOD BLANKS

10.6 Did method blank results meet frequency and QC acceptance criteria?yes √ no _____

(1 method blank per batch; concentration ≤ 2 times RL)

[FG-INORG, p. 16-18]

Laboratory method blank results for both cyanide and sulfide were ND and met QC acceptance criteria.

MATRIX SPIKE AND MATRIX SPIKE DUPLICATE (MS/MSD)

10.7 Did MS/MSD results meet frequency and QC acceptance criteria? yes √ no _____

(1 set per quarter; %R and RPD varies)

[FG-INORG, p. 27-29]

MS/MSD results met QC acceptance criteria for cyanide, but percent recovery for sulfide was slightly below control limit.

LEVEL II -- Data Validation

INSTRUMENT CALIBRATION

10.8 Did initial and continuing calibrations meet frequency and QC criteria?yes _____ no _____

(%R within 90-110%)

[FG-INORG, p. 8-15]

Not reviewed

SAMPLE RESULT VERIFICATION

10.9 No omissions, problems, discrepancies, transcription errors, or reduction (dilution, conversion) errors in selected raw data? **[FG-INORG, p. 36]** yes _____ no _____

Not reviewed

10.10 Additional comments: _____

SECTION 11.0: TOTAL ORGANIC CARBON (TOC)-- METHOD SW9060 (Landfill 5)

Name of reviewer(s) and review date: Fredrick E. Gebhardt 1OCT2003

LEVEL I AND II -- Data Validation

HOLDING TIMES

11.1 Were project-required analytical holding times met? yes √ no ____

(28-day limit from sample date to analysis date for water samples)

[FG-ORG, p. 6-8]

sample date: 18-20MAR2003 analysis date limit: 15-18APR2003

Samples were analyzed by the required holding times.

PROJECT REPORTING LIMIT (PRL)

11.2 Did sample results meet project reporting limits? yes √ no ____

(Severn Trent RL: 1.0 mg/L)

PRL was not provided in SAP. Reporting limit was not raised on any of the samples.

FIELD DUPLICATES

11.3 Did field duplicate results meet frequency and QC acceptance criteria? yes √ no ____

(1 set per each sampling period; RPD <30 %)

Field duplicate results were within acceptance criteria.

EQUIPMENT BLANKS

11.4 Did equipment blank results meet frequency and QC acceptance criteria? yes ____ no ____

(1 set for non-dedicated pump; target compound concentration ≤ RL)

[FG-ORG, p. 20-25]

Equipment blank was not collected.

DUPLICATE CONTROL SAMPLES (DCSs)

11.5 Did DCS results meet frequency and QC acceptance criteria? yes √ no ____

(1 DCS per batch; %R and RPD within 3 SD of historical results of Lab performance)

[FG-ORG, p. 32-33]

DCS results met QC acceptance criteria.

LABORATORY METHOD BLANK

11.6 Did method blank results meet frequency and QC acceptance criteria? yes √ no ____

(1 method blank per batch)

[FG-ORG, p. 20-25]

Method blank result was ND and met QC acceptance criteria.

MATRIX SPIKE AND MATRIX SPIKE DUPLICATE (MS/MSD)

11.7 Did MS/MSD results meet frequency and QC acceptance criteria? yes √ no ____

(1 set per quarter)

[FG-ORG, p. 30-31]

MS/MSD results met QC acceptance criteria.

LEVEL II -- Data Validation

INSTRUMENT CALIBRATION

11.8 Did initial and continuing calibrations meet frequency and QC criteria? yes ____ no ____

[FG-ORG, p. 12-16]

Not reviewed.

SAMPLE RESULT VERIFICATION

11.9 No omissions, problems, discrepancies, transcription errors, or reduction (dilution, conversion) errors in selected raw data? yes ____ no ____

Not reviewed.

11.10 Additional comments: None.

SECTION 12.0: TOTAL ORGANIC HALOGENS (TOX) METHOD SW9020B (Landfill 5)

Name of reviewer(s) and review date: Fredrick E. Gebhardt 1OCT2003

LEVEL I AND II -- Data Validation

HOLDING TIMES

12.1 Were project-required analytical holding times met? yes √ no ____

(28-day limit from sample date to analysis date for water samples)

[FG-ORG, p. 6-8]

sample date: 18-20MAR2003 analysis date limit: 15-18APR2003

Samples were analyzed by the required holding times.

PROJECT REPORTING LIMIT

12.2 Did sample results meet project reporting limits? yes √ no ____

(Severn Trent RL: 30 µg/L)

PRL was not provided in SAP.

FIELD DUPLICATES

12.3 Did field duplicate results meet frequency and QC acceptance criteria? yes ____ no √

(1 set per each sampling period; RPD ≤ 30 %)

Field duplicate results did not meet QC acceptance criteria, due to method blank contamination.

EQUIPMENT BLANKS

12.4 Did equipment blank results meet frequency and QC acceptance criteria? yes ____ no ____

(1 set for non-dedicated pump; target compound concentration ≤ RL)

[FG-ORG, p. 20-25]

Equipment blank was not collected.

DUPLICATE CONTROL SAMPLES (DCSs)

12.5 Did DCS results meet frequency and QC acceptance criteria? yes ____ no √

(1 DCS per batch; %R within 80 to 120% and RPD < 20%)

[FG-ORG, p. 32-33]

DCS results did not meet QC acceptance, due to method blank contamination.

LABORATORY METHOD BLANKS

12.6 Did method blank results meet frequency and QC acceptance criteria? yes ____ no √

(1 method blank per quarter)

[FG-ORG, p. 20-25]

Laboratory method blank result did not meet QC acceptance due to method blank contamination.

MATRIX SPIKE AND MATRIX SPIKE DUPLICATE (MS/MSD)

12.7 Did MS/MSD results meet frequency and QC acceptance criteria? yes √ no ____

(1 set per quarter; %R within 80 to 120 %; RPD < 20 %)

[FG-ORG, p. 30-31]

MS/MSD results met QC acceptance criteria.

LEVEL II -- Data Validation

INSTRUMENT CALIBRATION

12.8 Did initial and continuing calibrations meet frequency and QC criteria? yes ____ no ____

[FG-ORG, p. 12-16]

Not reviewed.

SAMPLE RESULT VERIFICATION

12.9 No omissions, problems, discrepancies, transcription errors, or reduction (dilution, conversion) errors in selected raw data? yes ____ no ____

Not reviewed.

12.10 Additional comments: ____

SECTION 13.0: SULFATE--METHOD MCAWW300.0A (Sewage Lagoons)

Name of reviewer(s) and review date: Fredrick E. Gebhardt 1OCT2003

LEVEL I AND II -- Data Validation

HOLDING TIMES

13.1 Were project-required analytical holding times met? yes √ no ____

(28-day limit from sample date to analysis date for water samples)
[FG-INORG, p. 6-7]

sample date: 20MAR, 2APR2003 analysis date limit: 11APR-30APR2003

All samples were analyzed by the required holding times.

PROJECT REPORTING LIMIT

13.2 Did sample results meet project reporting limits? yes ____ no √

PRL's were not provided in SAP. Reporting limits were raised for all samples due to high analyte levels.

FIELD DUPLICATES

13.3 Did field duplicate results meet frequency and QC acceptance criteria? yes √ no ____

(1 set per each sampling period; RPD < 30%)
[FG-INORG, p. 35]

Field duplicate results did meet QC acceptance criteria.

EQUIPMENT BLANKS

13.4 Did equipment blank results meet frequency and QC acceptance criteria? yes ____ no ____

(1 set for non-dedicated pump; target compound concentration ≤ 3 times RL)
[FG-INORG, p. 16-18]

Equipment blank was not collected.

DUPLICATE CONTROL SAMPLES (DCSs)

13.5 Did DCS results meet frequency and QC acceptance criteria? yes √ no ____

(1 DCS per batch; %R and RPD within 3 SD of historical results of lab performance)

[FG-INORG, p. 25-26]

All DCS results met QC acceptance criteria.

LABORATORY METHOD BLANKS

13.6 Did method blank results meet frequency and QC acceptance criteria?yes ____ no √

(1 method blank per batch; concentration ≤ 2 times RL)

[FG-INORG, p. 16-18]

Laboratory method blanks did not meet QC acceptance criteria, due to high analyte levels.

MATRIX SPIKE AND MATRIX SPIKE DUPLICATE (MS/MSD)

13.7 Did MS/MSD results meet frequency and QC acceptance criteria? yes √ no ____

(1 set per quarter; %R and RPD varies)

[FG-INORG, p. 27-29]

The MS/MSD results met QC acceptance criteria.

LEVEL II -- Data Validation

INSTRUMENT CALIBRATION

13.8 Did initial and continuing calibrations meet frequency and QC criteria?yes ____ no ____

(%R within 90-110%)

[FG-INORG, p. 8-15]

Not reviewed

SAMPLE RESULT VERIFICATION

13.9 No omissions, problems, discrepancies, transcription errors, or reduction (dilution, conversion) errors in selected raw data? **[FG-INORG, p. 36]** yes ____ no ____

Not reviewed

13.10 Additional comments: All samples had qualifier Q (reporting limit is elevated due to high analyte levels).

SECTION 14.0: NITRATE AND NITRITE--METHOD MCAWW353.2/354.1 (Sewage Lagoons)

Name of reviewer(s) and review date: Fredrick E. Gebhardt 1OCT2003

LEVEL I AND II -- Data Validation

HOLDING TIMES

14.1 Were project-required analytical holding times met? yes √ no ____

(48-hour limit from sample date to analysis date for Nitrite -MCAWW354.1)
(28-day limit from sample date to analysis date for Nitrate -MCAWW353.2)

[FG-INORG, p. 6-7]

Nitrite sample date: 20MAR, 2APR2003 analysis date limit: 22MAR, 4APR2003
Nitrate sample date: 20MAR, 2APR2003 analysis date limit: 17APR, 30APR2003

Nitrite and Nitrate samples were analyzed by the required holding times.

PROJECT REPORTING LIMIT

14.2 Did sample results meet project reporting limits? yes √ no ____

The reporting limits were not raised for any of the samples and met project reporting limits.

FIELD DUPLICATES

14.3 Did field duplicate results meet frequency and QC acceptance criteria? yes √ no ____

(1 set per each sampling period; RPD < 30%)

[FG-INORG, p. 35]

Field duplicate results met QC acceptance criteria.

EQUIPMENT BLANKS

14.4 Did equipment blank results meet frequency and QC acceptance criteria? yes ____ no ____

(1 set for non-dedicated pump; target compound concentration < 3 times RL)

[FG-INORG, p. 16-18]

Equipment blank was not collected.

DUPLICATE CONTROL SAMPLES (DCSs)

14.5 Did DCS results meet frequency and QC acceptance criteria? yes √ no _____

(1 DCS per batch; %R and RPD within 3 SD of historical results of lab performance)

[FG-INORG, p. 25-26]

All DCS results met QC acceptance criteria.

LABORATORY METHOD BLANKS

14.6 Did method blank results meet frequency and QC acceptance criteria?yes √ no _____

(1 method blank per batch; concentration ≤ 2 times RL)

[FG-INORG, p. 16-18]

Laboratory method blank results met QC acceptance criteria.

MATRIX SPIKE AND MATRIX SPIKE DUPLICATE (MS/MSD)

14.7 Did MS/MSD results meet frequency and QC acceptance criteria? yes √ no _____

(1 set per quarter; %R and RPD varies)

[FG-INORG, p. 27-29]

MS/MSD results did meet QC acceptance criteria.

LEVEL II -- Data Validation

INSTRUMENT CALIBRATION

14.8 Did initial and continuing calibrations meet frequency and QC criteria?yes _____ no _____

(%R within 90-110%)

[FG-INORG, p. 8-15]

Not reviewed

SAMPLE RESULT VERIFICATION

14.9 No omissions, problems, discrepancies, transcription errors, or reduction (dilution, conversion) errors in selected raw data? **[FG-INORG, p. 36]** yes _____ no _____

Not reviewed

14.10 Additional comments: None.

SECTION 15.0: PERCHLORATE METHOD EPA 314.0 (Landfill 5 & Sewage Lagoons)

Name of reviewer(s) and review date: Fredrick E. Gebhardt 1OCT2003

LEVEL I AND II -- Data Validation

HOLDING TIMES

15.1 Were project-required analytical holding times met? yes √ no ____

(28-day limit from sample date to analysis date for water samples)
[FG-INORG, p. 6-7]

sample date: 18-20MAR, 2APR2003 analysis date limit: 15-17MAR, 30APR2002

All samples were analyzed by the required holding times.

PROJECT REPORTING LIMIT

15.2 Did sample results meet project reporting limits? yes √ no ____
(Severn Trent RL: 0.05 mg/L)

PRL's were not provided in SAP. Reporting limits were not raised for any of the samples.

15.3 Did field duplicate results meet frequency and QC acceptance criteria? yes √ no ____
(1 set per each sampling period; RPD ≤ 30%)
[FG-INORG, p. 35]

Field duplicate sample did meet QC acceptance criteria.

EQUIPMENT BLANKS

15.4 Did equipment blank results meet frequency and QC acceptance criteria? yes ____ no ____
(1 set for non-dedicated pump; target compound concentration ≤ 3 times RL)
[FG-INORG, p. 16-18]

Equipment blank was not collected.

DUPLICATE CONTROL SAMPLES (DCSs)

15.5 Did DCS results meet frequency and QC acceptance criteria? yes √ no _____

(1 DCS per batch; %R and RPD within 3 SD of historical results of lab performance)

[FG-INORG, p. 25-26]

All DCS results met QC acceptance criteria.

LABORATORY METHOD BLANKS

15.6 Did method blank results meet frequency and QC acceptance criteria?yes √ no _____

(1 method blank per batch; concentration ≤ 2 times RL)

[FG-INORG, p. 16-18]

Laboratory method blank result was ND and met QC acceptance criteria.

15.7 Did MS/MSD results meet frequency and QC acceptance criteria? yes √ no _____

(1 set per quarter; %R and RPD varies)

[FG-INORG, p. 27-29]

MS/MSD results did meet QC acceptance criteria.

LEVEL II -- Data Validation

INSTRUMENT CALIBRATION

15.8 Did initial and continuing calibrations meet frequency and QC criteria?yes _____ no _____

(%R within 90-110%)

[FG-INORG, p. 8-15]

Not reviewed

SAMPLE RESULT VERIFICATION

15.9 No omissions, problems, discrepancies, transcription errors, or reduction (dilution, conversion) errors in selected raw data? **[FG-INORG, p. 36]** yes _____ no _____

Not reviewed

15.10 Additional comments: None.

SECTION 16.0: TOTAL DISSOLVED SOLIDS (TDS)-- METHOD MCAWW160.1 (Sewage Lagoons)

Name of reviewer(s) and review date: Fredrick E. Gebhardt 1OCT2003

LEVEL I AND II -- Data Validation

HOLDING TIMES

16.1 Were project-required analytical holding times met? yes √ no ____

(7-day limit from sample date to analysis date for water samples)

[FG-INORG, p. 6-7]

sample date: 20MAR, 2APR2003 analysis date limit: 27MAR, 9APR2003

Samples were analyzed by the required holding times.

PROJECT REPORTING LIMIT (PRL)

16.2 Did sample results meet project reporting limits? yes √ no ____

(Severn Trent RL: 10 mg/L)

PRL was not provided in SAP. Reporting limit was not raised on any of the samples.

FIELD DUPLICATES

16.3 Did field duplicate results meet frequency and QC acceptance criteria? yes √ no ____

(1 set per each sampling period; RPD <30 %)

[FG-INORG, p. 35]

Field duplicate did meet QC acceptance criteria.

EQUIPMENT BLANKS

16.4 Did equipment blank results meet frequency and QC acceptance criteria? yes ____ no ____

(1 set for non-dedicated pump; target compound concentration ≤ 3XRL)

[FG-INORG, p. 16-18]

Equipment blank was not collected.

DUPLICATE CONTROL SAMPLES (DCSs)

16.5 Did DCS results meet frequency and QC acceptance criteria? yes √ no ____

(1 DCS per batch; %R 86-106% and RPD ≤ 10 %)

[FG-INORG, p. 25-26]

All DCS results were within acceptance criteria.

LABORATORY METHOD BLANK

16.6 Did method blank results meet frequency and QC acceptance criteria? yes √ no ____

(1 method blank per batch; concentration ≤ 2 X RL)

[FG-INORG, p. 16-18]

Laboratory method blank result was ND and met QC acceptance criteria.

MATRIX SPIKE AND MATRIX SPIKE DUPLICATE (MS/MSD)

16.7 Did MS/MSD results meet frequency and QC acceptance criteria? yes √ no ____

(1 set per quarter; %R 86-106% and RPD ≤ 10%)

[FG-INORG, p. 27-29]

MS/MSD results meet QC acceptance criteria.

LEVEL II -- Data Validation

INSTRUMENT CALIBRATION

16.8 Did initial and continuing calibrations meet frequency and QC criteria? yes ____ no ____

(%R within 90-110%)

[FG-INORG, p. 8-15]

Not reviewed.

SAMPLE RESULT VERIFICATION

16.9 No omissions, problems, discrepancies, transcription errors, or reduction (dilution, conversion) errors in selected raw data? **[FG-INORG, p. 36]** yes ____ no ____

Not reviewed.

16.10 Additional comments: None.

Appendix A -- Laboratory Data Validation Checklist

Instruction Notes for the Data Validation Checklist

This data validation checklist will be used when validating the chemical analytical results. Data validation is a systematic and independent verification of data quality and consists of checking, verifying, evaluating, and qualifying the chemical analytical results.

Two different levels of data validation are used with level I being not as detailed or as rigorous as level II. Level I data validation includes: (1) checking holding times limits, (2) evaluating the results of field and laboratory quality-control (QC) samples such as field replicates, matrix spikes, surrogate samples, and duplicate control samples, and (3) checking that contamination during sample processing has not occurred in QC blanks such as equipment, method, ambient, and trip blanks. Most of the information and data used to conduct a level I data validation is contained in the summary-data reports prepared by the reporting laboratory. Level II data validation includes all the level I guidelines plus using the raw-data reports prepared by the reporting laboratory to: (1) check that the laboratory instruments have been properly tuned and calibrated, and (2) verify that selected sample results do not have any omissions, problems, discrepancies, transcription errors, and reduction (dilution, conversion) errors.

Field samples (environmental and QC) are processed and analyzed by the reporting laboratory in specific groups of samples called sample projects (also called sample cases). A sample project usually consists of 20 or fewer samples that are collected from one or more sampling locations (monitoring well) in a given sampling period. Numerous laboratory QC samples also are analyzed with the field samples for each sample project.

This data validation checklist is designed to be used when validating the analytical results for a given sample project and it has a multi-level organization. The first part of the checklist contains general information (section 1.0) about the scope (who, when, how, and what) of the data validation and data reports and completeness (section 2.0) for each sample project. Sections 1.0 and 2.0 will be completed and included with all data validation checklists. The data validation checklist also contains numerous supplemental sections which are listed at the bottom of the first page of this document. These supplemental checklist sections are used for specific analytical methods and will be marked with a checkmark (√) when they are completed for a given sample project. Specific project-required frequency and QC acceptance criteria, and pertinent reference page numbers are listed with most of the checklist items. The major data-validation references are the USEPA guidance documents (USEPA 1994).

Checklist Abbreviations, Acronyms, and Notes

Abbreviations:

Al	aluminum
Ag	silver
As	arsenic
CAP	Chromic Acid Pit
CCV	continuing calibration verification
Cr	chromium
DCS	duplicate control sample
Ba	barium
Be	beryllium
Ca	calcium
Cd	cadmium
Cl	chloride
Co	cobalt
Conc.	concentration
Cu	copper
Diss.	dissolved
DRO	diesel range organics with GC/FID analysis C10-C28
DU	duplicate environmental sample
EB	equipment blank
Fe	iron
FG-INORG	Functional guidelines (EPA) for evaluating inorganic analyses
FG-ORG	Functional guidelines (EPA) for evaluating organic analyses
Fl	fluoride
GFAA	graphite furnace atomic absorption
Hg	mercury
ICP	inductively coupled plasma
ID	identification
IS	internal standards
J	estimated value qualifier
K	potassium
LCS	Laboratory control sample
MCAWW	"Methods for Chemical Analysis of Water and Wastes"', EPA-600/4-79-020, March 1983 subsequent revisions.
Mg	magnesium
mg/L	milligrams per liter
Mn	manganese
Mo	molybdenum

Checklist Abbreviations, Acronyms, and Notes -- *continued*

Abbreviations:

MS/MSD	matrix spike/matrix spike duplicate
MW	monitoring well
Na	sodium
Ni	nickel
NO_2	nitrate
NO_3	nitrite
PAC	Chromic Acid Pit duplicate sample identification
Pb	lead
PO_4	orthophosphate
PRL	project reporting limit
QC	quality control
RCLs	Recovery Control Limits
RL	reporting limits
RMAL	Rocky Mountain Analytical Laboratory
RPD	relative percent difference
SA	environmental sample
SAP	Sampling and Analysis Plan
Sb	antimony
SCS	single control sample
Se	selenium
Sn	tin
SO_4	sulfate
SVOC	semivolatile organic compounds
TB	trip blank
TDS	total dissolved solids
TIC	tentatively identified compound
Tl	thallium
TOC	total organic carbon
Tot.	total
TOX	total organic halogen
TPH	total petroleum hydrocarbons
TSS	total suspended solids
USEPA	United States Environmental Protection Agency
USGS/WRD	United States Geological Survey, Water Resources Division
V	vanadium
VOC	volatile organic compounds

Checklist Abbreviations, Acronyms, and Notes -- *continued*

Abbreviations:

Zn	zinc
µg/L	microgram per liter
<	less than
>	greater than
%	percent
%R	percent recovery

USEPA, 1994, USEPA Contract laboratory program national functional guidelines for organic data review, February, 1994, Publication 9240.1-05, Document number PB94-963501, 124 p.

NOTE: this reference is abbreviated FG-ORG in this checklist.

USEPA, 1994, USEPA contract laboratory program national functional guidelines for inorganic data review, February, 1994, Publication 9240.1-05-01, Document number PB94-963502, 42 p.

NOTE: this reference is abbreviated FG-INORG in this checklist.

USGS, 1992, Laboratory data validation checklist: Wyoming District, U.S. Geological Survey checklist prepared for the U.S. Air Force, multiple pages.

CONTRACT LABORATORY DATA-REVIEW WORKSHEET

1.0 GENERAL INFORMATION Laboratory Lot Number: SDG: CANNON-2

Data reviewer: Richard Daddow Review date: May 6, 2003

District, Project, & Account #: New Mexico Cannon AFB 8636-9TU00

Sample collection date: 3/18-20/03 Sample matrix/no.: water

No. of sample types in lot: Environmental 8 Trip blank 3 Equip. blank _____

MS/MSD _____ Other: _____

2.0 INVOICE STATUS FOR LOT: OK Invoice copy attached X

3.0 DATA REPORTS and FILES

Date of Lab analytical report: 4/29/03 - Revised date Number of copies: bound 1 unbound 2

No. of volumes of raw-data report: — No. of CD copies of raw-data report: 1

Raw-data report reviewed? Yes ___ No ___ Electronic data files on CD? Yes X No ___

EDD file format: NWIS X STL standard _____ ERPIMS _____ DODEC _____

Comments—Data Reports SDG: CANNON-2 includes lots D3C210341 and D3C240249

4.0 SAMPLE ANALYSES *(Page numbers listed in worksheet refer to lab analytical report)*

4.1 Were accelerated turn-around times (TATs) requested for analyses? Yes ___ No X

If yes, list TAT period and if completed: _____

4.2 Were analyses on chain-of-custody (COC) form performed by lab? YES X NO ___

If **no**, list missing or cancelled analyses and reason for non-performance:

See case narrative regarding analysis of mercury by method 7470A in this lot.

4.3 Were the samples properly preserved, labeled, no lab log-in problems, and(or) at appropriate temperature (<6 deg. C) upon receipt by the laboratory: Yes ___ No X

If **no**, list sample/lab IDs, and associated problems with when delivered at laboratory:

One of two 500-ml amber glass bottle for sample CAFB-D (D3C210341-001) were received broken - there was enough sample volume remaining to proceed w/ all requested analyses

Laboratory Lot No: SDG: CAWNOR-2

4.4 Were preparation (extraction) and(or) analysis holding times met? Yes ____ No X

If **no**, list analytical methods and sample/lab IDs for samples that exceeded holding-time limits:

Method 8081 reanalysis for sample CAFB-U (D3C240249-001) was performed outside recommended holding times (p. 92)

4.5 Did surrogate recoveries meet QC acceptance criteria? Yes ____ No X NA ____

If **no**, list methods, surrogates, associated sample/lab IDs, lab report page #s:

8081A 1 surrogate sample: CAFB-U (D3C240249-001) p. 91; 8082 1 surrogate sample: CAFB-U (p. 100); 8151A sample: CAFB-UU (D3C240249-002) p. 109

4.6 Were dilution factors greater than 1 for ***organic*** analyses? Yes ____ No X NA ____

If **yes**, list analytical method, lab/sample IDs, and reason for raised dilution factors: dilution ____ high-analyte levels ____ matrix interferences ____ other ____

4.7 Were dilution factors greater than 1 for **inorganic** analyses? Yes ____ No X NA ____

If **yes**, list analytical method, lab/sample IDs, and reason for raised dilution factors: dilution ____ high-analyte levels ____ matrix interferences ____ other ____

4.8 Additional comments about sample analyses: ____

Laboratory Lot No: SDG: CANNOR-2

5.0 QUALITY CONTROL (QC) ANALYSES and RESULTS

5.1 Did lab control samples (LCS/LSCD) meet percent recoveries (%R) criteria? Yes___No___

If **no**, list method, analytes, LCS/LCSD, and report page #s:_____

5.2 Were any target analytes detected in the **Laboratory Method Blanks**? Yes X No_____

If **yes**, list method, analytes, report page #s: 7470A Hg (p. 232)
6010B Al, Sn (p. 228-229) 6010B Zn (p. 232)
6020 Sb, As, Cr, Se (p. 229-230)

5.3 Did the **MS/MSD** results meet %R or RPD acceptance criteria? Yes____No X NA_____

Note: matrix spike and matrix spike duplicate (MS/MSD) data are used to evaluate the effect of sample matrix on the analytical process and should be only used in conjunction with other available lab QC data. In some cases, MS samples not directly associated with this lot may be used by the laboratory.

List analytical method and if MS samples are associated with this lot.

If did not meet acceptance criteria also list analytes; MS, MSD or RPD; and lab report page #:

6010B Al MS/MSD (p. 256) associated MS lot # yes____no X
_____ associated MS lot # yes____no____
_____ associated MS lot # yes____no____
_____ associated MS lot # yes____no____
_____ associated MS lot # yes____no____
_____ associated MS lot # yes____no____

No MS results reported for method(s): 8270C, 8081A, 8082, 8151A, 8280

5.4 Additional comments about QC results: _____

Laboratory Lot No: SDG: CANNON-2

6.0 ANALYTICAL METHODS USED in this LABORATORY LOT NUMBER

X VOCs by GC/MS--method 8260B *[water (W) or solids (S) analysis holding-time (HT) of 14 days]*

___ Gasoline Range Organics (GRO) + BTEX--method 8015M-GRO *[W and S: analysis HT 14 days]*

___ Diesel Range Organics-method 8015M-DRO *[W: prep HT 7 days; S: prep HT 14 days; analysis HT 40 days]*

X Pesticides by GC--method 8081A *[W: prep HT 7 days; S: prep HT 14 days; analysis HT 40 days]*

X PCBs by GC--method 8082 *[W: prep HT 7 days; S: prep HT14 days; analysis HT 40 days]*

___ Pesticides by GC--method 8141A *[W: prep HT 7 days; S: prep HT 14 days; analysis HT 40 days]*

X Herbicides by GC--method 8151A *[W: prep HT 7 days; S: prep HT14 days; analysis HT 40 days]*

X SVOCs by GC/MS--method 8270C *[W: prep HT 7 days; S: prep HT14 days; analysis HT 40 days]*

X Dioxins and Furans--methods 8280 or 8290 *[W and S: prep HT 30 days; analysis HT 45 days]*

X PAHs by HPLC method 8310 *[W: prep HT 7 days; S: prep HT14 days; analysis HT 40 days]*

___ Explosives by HPLC method 8330 *[W: prep HT 7 days; S: prep HT14 days; analysis HT 40 days]*

___ Hexane extractable materials (HEM and SGT-HEM)--method 1664 *[W: analysis HT 28 days]*

X Total organic carbon (TOC)--methods 415.1 or 9060 *[W: analysis HT 28 days]*

___ Dissolved organic carbon (DOC)--methods 415.1 or 9060 *[W: analysis HT 28 days]*

X Total organic halides (TOX)--method 9020 *[W: analysis HT 28 days]*

X Metals by ICP--method 6010B/200.7 Dissolved ___ Total X *[W and S: analysis HT 180 days]*

X Metals by ICP/MS--method 6020/200.8 Dissolved ___ Total X *[W and S: analysis HT 180 days]*

___ Metals by GFAA methods *[W and S: analysis HT 180 days]* Methods:Sb-7041, As-7060, Cd-7131 Cr-7191, Pb-7421, Se-7740, Tl-7841 List GFAA metals: ___

___ Hexavalent chromium--method 7196 *[W: analysis HT **24-48 hours**]*

X Mercury by CVAA--method 7470A (W) and 7471A (S) *[W and S: analysis HT 28 days]*

___ Inorganic anions--method 300 *[W: analysis HT **48 hours**- NO_2, NO_3, ortho-P; HT 28 days--Br,Cl ,F, SO_4]*

___ Total dissolved solids (TDS)--method 160.1 and(or) TSS--method 160.2 *[W: analysis HT 7 days]*

___ Total alkalinity--method 310.1 *[W: analysis HT 14 days]*

___ Nitrogen, ammonia--method 350.1 *[W: analysis HT 28 days]*

___ Nitrogen, TKN--method 351.2 *[W: analysis HT 28 days]*

___ Nitrogen, nitrate + nitrite--method 353.2 *[W: analysis HT 28 days]* NO_3 or NO_2 only *[HT **48 hours**]*

___ Nitrogen, nitrite--method 354.1 *[W: analysis HT **48 hours**]*

___ Total phosphorus--method 365.3 *[W: analysis HT 28 days]*

X Cyanide, total and amenable--methods 9010B or 9012A *[W and S: analysis HT 14 days]*

X Other analyses: 314 perchlorate 9030B Sulfides

CONTRACT LABORATORY DATA-REVIEW WORKSHEET

1.0 GENERAL INFORMATION Laboratory Lot Number: SDG: CANNON-3

Data reviewer: Richard Paddow Review date: 5/7/03

District, Project, & Account #: New Mexico Cannon AFB Ground-Water Sampling

Sample collection date: 3/20 - 4/2/03 Sample matrix/no.: water B639-9JV00

No. of sample types in lot: Environmental 5 Trip blank 2 Equip. blank ____

MS/MSD 2 Other: ____

2.0 INVOICE STATUS FOR LOT: OK Invoice copy attached X

3.0 DATA REPORTS and FILES

Date of Lab analytical report: 5/1/03 Number of copies: bound 1 unbound 2

No. of volumes of raw-data report: — No. of CD copies of raw-data report: 1

Raw-data report reviewed? Yes ___ No X Electronic data files on CD? Yes X No ___

EDD file format: NWIS X STL standard ___ ERPIMS ___ DODEC ___

Comments—Data Reports SDG: CANNON-3 includes lots D3C210230, D3C220137, and D3D030147

4.0 SAMPLE ANALYSES *(Page numbers listed in worksheet refer to lab analytical report)*

4.1 Were accelerated turn-around times (TATs) requested for analyses? Yes ___ No X

If yes, list TAT period and if completed: ____

4.2 Were analyses on chain-of-custody (COC) form performed by lab? YES X NO ___

If **no**, list missing or cancelled analyses and reason for non-performance: ____

See case narrative in laboratory analytical report about problems and reanalysis results for three samples CAFB-F, CAFB-G, and CAFB-CG & D3D210230-001, -002 -003 (p. 3)

4.3 Were the samples properly preserved, labeled, no lab log-in problems, and(or) at appropriate temperature (<6 deg. C) upon receipt by the laboratory: Yes X No ___

If **no**, list sample/lab IDs, and associated problems with when delivered at laboratory:

____

Laboratory Lot No: SDG: CANNON-3

4.4 Were preparation (extraction) and(or) analysis holding times met? Yes X No ____

If **no**, list analytical methods and sample/lab IDs for samples that exceeded holding-time limits:

4.5 Did surrogate recoveries meet QC acceptance criteria? Yes X No ____ NA ____

If **no**, list methods, surrogates, associated sample/lab IDs, lab report page #s: ____

4.6 Were dilution factors greater than 1 for ***organic*** analyses? Yes ____ No X NA ____

If **yes**, list analytical method, lab/sample IDs, and reason for raised dilution factors: dilution ____ high-analyte levels ____ matrix interferences ____ other ____

4.7 Were dilution factors greater than 1 for **inorganic** analyses? Yes X No ____ NA ____

If **yes**, list analytical method, lab/sample IDs, and reason for raised dilution factors: dilution ____ high-analyte levels X matrix interferences ____ other ____

300 (SO_4) samples: ~~GA~~ CAFB-F, CAFB-G, CAFB-GG, CAFB-E, and CAFB-H (p. 57-61)

4.8 Additional comments about sample analyses: ____

Laboratory Lot No: SDG: CANNON-3

5.0 QUALITY CONTROL (QC) ANALYSES and RESULTS

5.1 Did lab control samples (LCS/LSCD) meet percent recoveries (%R) criteria? Yes X No___

If **no**, list method, analytes, LCS/LCSD, and report page #s:_____

5.2 Were any target analytes detected in the **Laboratory Method Blanks**? Yes X No_____

If **yes**, list method, analytes, report page #s: 300 (SO4) p. 153

6020 Sb, Cr (~~p. 10~~ (p. 103)

6010B Al (p. 103, 105) 6010B Sn (p. 106)

6020 Sb, As, Cr, Se (p. 106-107)

7470A Hg (p. 107) 6020 Sb, Cr, Ag (p. 107-108)

5.3 Did the **MS/MSD** results meet %R or RPD acceptance criteria? Yes____ No X NA_____

Note: matrix spike and matrix spike duplicate (MS/MSD) data are used to evaluate the effect of sample matrix on the analytical process and should be only used in conjunction with other available lab QC data. In some cases, MS samples not directly associated with this lot may be used by the laboratory.

List analytical method and if MS samples are associated with this lot.

If did not meet acceptance criteria also list analytes; MS, MSD or RPD; and lab report page #:

6020 Se (p. 146) associated MS lot # yes____ no X

6010B Sn (p. 147) associated MS lot # yes____ no X

354.1 (NO_2) p. 162 300 (SO4) p. 162 associated MS lot # yes____ no X

_____ associated MS lot # yes____ no____

_____ associated MS lot # yes____ no____

_____ associated MS lot # yes____ no____

No MS results reported for method(s):_____

5.4 Additional comments about QC results: _____

Laboratory Lot No: SDG: CANNON-3

6.0 ANALYTICAL METHODS USED in this LABORATORY LOT NUMBER

X VOCs by GC/MS--method 8260B App IX *[water (W) or solids (S) analysis holding-time (HT) of 14 days]*

____ Gasoline Range Organics (GRO) + BTEX--method 8015M-GRO *[W and S: analysis HT 14 days]*

____ Diesel Range Organics-method 8015M-DRO *[W: prep HT 7 days; S: prep HT 14 days; analysis HT 40 days]*

X Pesticides by GC--method 8081A *[W: prep HT 7 days; S: prep HT 14 days; analysis HT 40 days]*

X PCBs by GC--method 8082 *[W: prep HT 7 days; S: prep HT14 days; analysis HT 40 days]*

____ Pesticides by GC--method 8141A *[W: prep HT 7 days; S: prep HT 14 days; analysis HT 40 days]*

____ Herbicides by GC--method 8151A *[W: prep HT 7 days; S: prep HT14 days; analysis HT 40 days]*

X SVOCs by GC/MS--method 8270C ~~App IX~~ *[W: prep HT 7 days; S: prep HT14 days; analysis HT 40 days]*

____ Dioxins and Furans--methods 8280 or 8290 *[W and S: prep HT 30 days; analysis HT 45 days]*

____ PAHs by HPLC method 8310 *[W: prep HT 7 days; S: prep HT14 days; analysis HT 40 days]*

____ Explosives by HPLC method 8330 *[W: prep HT 7 days; S: prep HT14 days; analysis HT 40 days]*

____ Hexane extractable materials (HEM and SGT-HEM)--method 1664 *[W: analysis HT 28 days]*

____ Total organic carbon (TOC)--methods 415.1 or 9060 *[W: analysis HT 28 days]*

____ Dissolved organic carbon (DOC)--methods 415.1 or 9060 *[W: analysis HT 28 days]*

____ Total organic halides (TOX)--method 9020 *[W: analysis HT 28 days]*

X Metals by ICP--method 6010B/200.7 Dissolved _____ Total X *[W and S: analysis HT 180 days]*

X Metals by ICP/MS--method 6020/200.8 Dissolved _____ Total X *[W and S: analysis HT 180 days]*

____ Metals by GFAA methods *[W and S: analysis HT 180 days]* Methods:Sb-7041, As-7060, Cd-7131 Cr-7191, Pb-7421, Se-7740, Tl-7841 List GFAA metals: _____

____ Hexavalent chromium--method 7196 *[W: analysis HT **24-48 hours**]*

X Mercury by CVAA--method 7470A (W) and 7471A (S) *[W and S: analysis HT 28 days]*

X Inorganic anions--method 300 *[W: analysis HT **48 hours**- NO_2, NO_3, ortho-P; HT 28 days--Br,Cl ,F, SO_4]*

X Total dissolved solids (TDS)--method 160.1 and(or) TSS--method 160.2 *[W: analysis HT 7 days]*

____ Total alkalinity--method 310.1 *[W: analysis HT 14 days]*

____ Nitrogen, ammonia--method 350.1 *[W: analysis HT 28 days]*

____ Nitrogen, TKN--method 351.2 *[W: analysis HT 28 days]*

X Nitrogen, nitrate + nitrite--method 353.2 *[W: analysis HT 28 days]* NO_3 or NO_2 only *[HT **48 hours**]*

X Nitrogen, nitrite--method 354.1 *[W: analysis HT **48 hours**]*

____ Total phosphorus--method 365.3 *[W: analysis HT 28 days]*

____ Cyanide, total and amenable--methods 9010B or 9012A *[W and S: analysis HT 14 days]*

X Other analyses: 314 Perchlorate 9030B Total Sulfides

QC DATA ASSOCIATION SUMMARY

CANNON-2 : D3C210341

Sample Preparation and Analysis Control Numbers

SAMPLE#	MATRIX	ANALYTICAL METHOD	LEACH BATCH #	PREP BATCH #	MS RUN#
001	WG	SW846 9060		3104209	3104073
	WG	SW846 6020		3084470	3084246
	WG	SW846 9020B		3100393	3100190
	WG	SW846 7470A		3098223	3098136
	WG	SW846 8082		3085144	
	WG	SW846 8081A		3085134	
	WG	SW846 8260B		3092491	3092243
	WG	SW846 8270C		3083180	
	WG	SW846 6010B		3084435	3084231
	WG	SW846 9012A		3092153	3092047
	WG	SW846 8151A		3086189	
	WG	SW846 8280A		3091432	
	WG	SW846 8310		3086139	3086039
	WG	SW846 9030B/9034		3084603	3101144
	WG	EPA-DW1 314.0		3106660	3106355
002	WG	SW846 9060		3104209	3104073
	WG	SW846 6020		3084470	3084246
	WG	SW846 9020B		3100393	3100190
	WG	SW846 7470A		3098223	3098136
	WG	SW846 8082		3085144	
	WG	SW846 8081A		3085134	
	WG	SW846 8260B		3092491	3092243
	WG	SW846 8270C		3083180	
	WG	SW846 6010B		3084435	3084231
	WG	SW846 9012A		3092153	3092047
	WG	SW846 8151A		3086189	
	WG	SW846 8280A		3091432	
	WG	SW846 8310		3086139	3086039
	WG	SW846 9030B/9034		3084603	3101144
	WG	EPA-DW1 314.0		3106660	3106355
003	WQ	SW846 8260B		3092491	3092243
001	WATER	SW846 9060		3106160	3106052
	WATER	SW846 6020		3085487	3085251
	WATER	SW846 9020B		3107502	3107217
	WATER	SW846 7470A		3098223	3098136
	WATER	SW846 8082		3084233	
	WATER	SW846 8081A		3084227	
	WATER	SW846 8081A		3100186	
	WATER	SW846 8260B		3090242	3090104
	WATER	SW846 8270C		3085185	

(Continued on next page)

QC DATA ASSOCIATION SUMMARY

CANNON-2 : D3C240249

Sample Preparation and Analysis Control Numbers

SAMPLE#	MATRIX	ANALYTICAL METHOD	LEACH BATCH #	PREP BATCH #	MS RUN#
001	WATER	SW846 6010B		3086278	3086126
	WATER	SW846 9012A		3090500	3090258
	WATER	SW846 8151A		3084466	
	WATER	SW846 8280A		3091432	
	WATER	SW846 8310		3084184	
	WATER	SW846 9030B/9034		3088173	
	WATER	EPA-DW1 314.0		3106660	3106355
002	WATER	SW846 9060		3106160	3106052
	WATER	SW846 6020		3085487	3085251
	WATER	SW846 9020B		3107502	3107217
	WATER	SW846 7470A		3098223	3098136
	WATER	SW846 8082		3084233	
	WATER	SW846 8081A		3084227	
	WATER	SW846 8260B		3090242	3090104
	WATER	SW846 8270C		3085185	
	WATER	SW846 6010B		3086278	3086126
	WATER	SW846 9012A		3090500	3090258
	WATER	SW846 8151A		3084466	
	WATER	SW846 8280A		3091432	
	WATER	SW846 8310		3084184	
	WATER	SW846 9030B/9034		3088173	
	WATER	EPA-DW1 314.0		3106660	3106355
003	WATER	SW846 9060		3106160	3106052
	WATER	SW846 6020		3085487	3085251
	WATER	SW846 9020B		3107502	3107217
	WATER	SW846 7470A		3098223	3098136
	WATER	SW846 8082		3084233	
	WATER	SW846 8081A		3084227	
	WATER	SW846 8260B		3090242	3090104
	WATER	SW846 8270C		3085185	
	WATER	SW846 6010B		3086278	3086126
	WATER	SW846 9012A		3090500	3090258
	WATER	SW846 8151A		3084466	
	WATER	SW846 8280A		3091432	
	WATER	SW846 8310		3084184	
	WATER	SW846 9030B/9034		3088173	
	WATER	EPA-DW1 314.0		3106660	3106355
004	WATER	SW846 9060		3106160	3106052
	WATER	SW846 6020		3085487	3085251
	WATER	SW846 9020B		3107502	3107217

(Continued on next page)

QC DATA ASSOCIATION SUMMARY

CANNON-2 : D3C240249

Sample Preparation and Analysis Control Numbers

SAMPLE#	MATRIX	ANALYTICAL METHOD	LEACH BATCH #	PREP BATCH #	MS RUN#
004	WATER	SW846 7470A		3098223	3098136
	WATER	SW846 8082		3084233	
	WATER	SW846 8081A		3084227	
	WATER	SW846 8260B		3090242	3090104
	WATER	SW846 8270C		3085185	
	WATER	SW846 6010B		3086278	3086126
	WATER	SW846 9012A		3090500	3090258
	WATER	SW846 8151A		3084466	
	WATER	SW846 8280A		3091432	
	WATER	SW846 8310		3084184	
	WATER	SW846 9030B/9034		3088173	
	WATER	EPA-DW1 314.0		3106660	3106355
005	WATER	SW846 9060		3106160	3106052
	WATER	SW846 6020		3085487	3085251
	WATER	SW846 9020B		3107502	3107217
	WATER	SW846 7470A		3098223	3098136
	WATER	SW846 8082		3084233	
	WATER	SW846 8081A		3084227	
	WATER	SW846 8260B		3090242	3090104
	WATER	SW846 8270C		3085185	
	WATER	SW846 6010B		3086278	3086126
	WATER	SW846 9012A		3090500	3090258
	WATER	SW846 8151A		3084466	
	WATER	SW846 8280A		3091432	
	WATER	SW846 8310		3084184	
	WATER	SW846 9030B/9034		3088173	
	WATER	EPA-DW1 314.0		3106660	3106355
006	WATER	SW846 8260B		3090242	3090104
007	WATER	SW846 9060		3104209	3104073
	WATER	SW846 6020		3085487	3085251
	WATER	SW846 9020B		3100393	3100190
	WATER	SW846 7470A		3098222	3098134
	WATER	SW846 8082		3084233	
	WATER	SW846 8081A		3084227	
	WATER	SW846 8260B		3090242	3090104
	WATER	SW846 8270C		3084225	
	WATER	SW846 6010B		3086278	3086126
	WATER	SW846 9012A		3090500	3090258
	WATER	SW846 8151A		3084466	
	WATER	SW846 8280A		3091432	

(Continued on next page)

QC DATA ASSOCIATION SUMMARY

CANNON-2 : D3C240249

Sample Preparation and Analysis Control Numbers

SAMPLE#	MATRIX	ANALYTICAL METHOD	LEACH BATCH #	PREP BATCH #	MS RUN#
007	WATER	SW846 8310		3084184	
	WATER	SW846 9030B/9034		3084603	3101144
	WATER	EPA-DW1 314.0		3106660	3106355
008	WATER	SW846 8260B		3090242	3090104

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: CANNON-2 **Work Order #...:** FK27P1AA **Matrix.....:** WATER
MB Lot-Sample #: D3C310000-242

Prep Date.....: 03/30/03 **Analysis Time..:** 10:45

Analysis Date..: 03/30/03 **Prep Batch #...:** 3090242
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Acetone	ND	10	ug/L	SW846 8260B
Acetonitrile	ND	20	ug/L	SW846 8260B
Acrolein	ND	20	ug/L	SW846 8260B
Acrylonitrile	ND	20	ug/L	SW846 8260B
Benzene	ND	1.0	ug/L	SW846 8260B
Bromodichloromethane	ND	1.0	ug/L	SW846 8260B
Bromoform	ND	1.0	ug/L	SW846 8260B
Bromomethane	ND	2.0	ug/L	SW846 8260B
Carbon disulfide	ND	1.0	ug/L	SW846 8260B
Carbon tetrachloride	ND	1.0	ug/L	SW846 8260B
Chlorobenzene	ND	1.0	ug/L	SW846 8260B
Chloroprene	ND	1.0	ug/L	SW846 8260B
Dibromochloromethane	ND	1.0	ug/L	SW846 8260B
Chloroethane	ND	2.0	ug/L	SW846 8260B
Chloroform	ND	1.0	ug/L	SW846 8260B
Chloromethane	ND	2.0	ug/L	SW846 8260B
Allyl chloride	ND	2.0	ug/L	SW846 8260B
Dibromomethane	ND	1.0	ug/L	SW846 8260B
trans-1,4-Dichloro-2-butene	ND	1.0	ug/L	SW846 8260B
Dichlorodifluoromethane	ND	2.0	ug/L	SW846 8260B
1,1-Dichloroethane	ND	1.0	ug/L	SW846 8260B
1,2-Dichloroethane	ND	1.0	ug/L	SW846 8260B
1,1-Dichloroethene	ND	1.0	ug/L	SW846 8260B
1,2-Dichloroethene (total)	ND	1.0	ug/L	SW846 8260B
1,2-Dichloropropane	ND	1.0	ug/L	SW846 8260B
cis-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B
trans-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B
1,4-Dioxane	ND	200	ug/L	SW846 8260B
Ethylbenzene	ND	1.0	ug/L	SW846 8260B
Ethyl methacrylate	ND	1.0	ug/L	SW846 8260B
Trichlorofluoromethane	ND	2.0	ug/L	SW846 8260B
2-Hexanone	ND	5.0	ug/L	SW846 8260B
Iodomethane	ND	1.0	ug/L	SW846 8260B
Isobutyl alcohol	ND	50	ug/L	SW846 8260B
Methacrylonitrile	ND	10	ug/L	SW846 8260B
Methylene chloride	ND	5.0	ug/L	SW846 8260B
Methyl methacrylate	ND	1.0	ug/L	SW846 8260B
4-Methyl-2-pentanone	ND	5.0	ug/L	SW846 8260B
Propionitrile	ND	20	ug/L	SW846 8260B

(Continued on next page)

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: CANNON-2 Work Order #...: FK27P1AA Matrix.....: WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Styrene	ND	1.0	ug/L	SW846 8260B
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B
Tetrachloroethene	ND	1.0	ug/L	SW846 8260B
Toluene	ND	1.0	ug/L	SW846 8260B
1,1,1-Trichloroethane	ND	1.0	ug/L	SW846 8260B
1,1,2-Trichloroethane	ND	1.0	ug/L	SW846 8260B
Trichloroethene	ND	1.0	ug/L	SW846 8260B
1,2,3-Trichloropropane	ND	1.0	ug/L	SW846 8260B
Vinyl acetate	ND	2.0	ug/L	SW846 8260B
Vinyl chloride	ND	2.0	ug/L	SW846 8260B
Xylenes (total)	ND	2.0	ug/L	SW846 8260B
1,2-Dibromo-3-chloropropane (DBCP)	ND	2.0	ug/L	SW846 8260B
1,2-Dibromoethane (EDB)	ND	1.0	ug/L	SW846 8260B
2-Butanone (MEK)	ND	5.0	ug/L	SW846 8260B
cis-1,2-Dichloroethene	ND	1.0	ug/L	SW846 8260B
trans-1,2-Dichloroethene	ND	0.50	ug/L	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	108	(80 - 120)
1,2-Dichloroethane-d4	111	(71 - 129)
4-Bromofluorobenzene	100	(80 - 120)
Toluene-d8	103	(80 - 120)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

US GEOLOGICAL SURVEY

Method Blank Report

GC/MS Volatiles

Lot-Sample #: D3C310000-242 B **Work Order #:** FK27P1AA **Matrix:** WATER

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT	RETENTION TIME	UNITS
None				mg/L

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: CANNON-2 Work Order #...: FK27P1AC-LCS Matrix.....: WATER
LCS Lot-Sample#: D3C310000-242 FK27P1AD-LCSD
Prep Date.....: 03/30/03 Analysis Date..: 03/30/03
Prep Batch #...: 3090242 Analysis Time..: 09:58
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,1-Dichloroethene	**104**	**(64 - 134)**			**SW846 8260B**
	103	**(64 - 134)**	**0.45**	**(0-20)**	**SW846 8260B**
Benzene	**102**	**(81 - 121)**			**SW846 8260B**
	102	**(81 - 121)**	**0.10**	**(0-20)**	**SW846 8260B**
Chlorobenzene	**111**	**(81 - 121)**			**SW846 8260B**
	111	**(81 - 121)**	**0.10**	**(0-20)**	**SW846 8260B**
Toluene	**110**	**(81 - 121)**			**SW846 8260B**
	113	**(81 - 121)**	**2.8**	**(0-20)**	**SW846 8260B**
Trichloroethene	**103**	**(82 - 122)**			**SW846 8260B**
	104	**(82 - 122)**	**1.2**	**(0-20)**	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	98	(80 - 120)
	104	(80 - 120)
1,2-Dichloroethane-d4	102	(71 - 129)
	105	(71 - 129)
4-Bromofluorobenzene	97	(80 - 120)
	98	(80 - 120)
Toluene-d8	99	(80 - 120)
	103	(80 - 120)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #...: CANNON-2 Work Order #...: FK27P1AC-LCS Matrix.....: WATER
LCS Lot-Sample#: D3C310000-242 FK27P1AD-LCSD
Prep Date.....: 03/30/03 Analysis Date..: 03/30/03
Prep Batch #...: 3090242 Analysis Time..: 09:58
Dilution Factor: 1

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	RPD	METHOD
1,1-Dichloroethene	10.0	10.4	ug/L	104		SW846 8260B
	10.0	10.3	ug/L	103	0.45	SW846 8260B
Benzene	10.0	10.2	ug/L	102		SW846 8260B
	10.0	10.2	ug/L	102	0.10	SW846 8260B
Chlorobenzene	10.0	11.1	ug/L	111		SW846 8260B
	10.0	11.1	ug/L	111	0.10	SW846 8260B
Toluene	10.0	11.0	ug/L	110		SW846 8260B
	10.0	11.3	ug/L	113	2.8	SW846 8260B
Trichloroethene	10.0	10.3	ug/L	103		SW846 8260B
	10.0	10.4	ug/L	104	1.2	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	98	(80 - 120)
	104	(80 - 120)
1,2-Dichloroethane-d4	102	(71 - 129)
	105	(71 - 129)
4-Bromofluorobenzene	97	(80 - 120)
	98	(80 - 120)
Toluene-d8	99	(80 - 120)
	103	(80 - 120)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: CANNON-2 Work Order #...: FKK7Q1AC-MS Matrix.....: WATER
MS Lot-Sample #: D3C220162-001 FKK7Q1AD-MSD
Date Sampled...: 03/19/03 09:58 Date Received..: 03/22/03
Prep Date.....: 03/30/03 Analysis Date..: 03/30/03
Prep Batch #...: 3090242 Analysis Time..: 11:44
Dilution Factor: 200

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,1-Dichloroethene	90	(64 - 134)			SW846 8260B
	77	(64 - 134)	3.3	(0-20)	SW846 8260B
Benzene	104	(81 - 121)			SW846 8260B
	100	(81 - 121)	3.7	(0-20)	SW846 8260B
Chlorobenzene	108	(81 - 121)			SW846 8260B
	107	(81 - 121)	1.2	(0-20)	SW846 8260B
Toluene	118	(81 - 121)			SW846 8260B
	107	(81 - 121)	8.6	(0-20)	SW846 8260B
Trichloroethene	100	(82 - 122)			SW846 8260B
	102	(82 - 122)	1.9	(0-20)	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	101	(80 - 120)
	101	(80 - 120)
1,2-Dichloroethane-d4	96	(71 - 129)
	96	(71 - 129)
4-Bromofluorobenzene	98	(80 - 120)
	92	(80 - 120)
Toluene-d8	107	(80 - 120)
	102	(80 - 120)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #...: CANNON-2 Work Order #...: FKK7Q1AC-MS Matrix.....: WATER
MS Lot-Sample #: D3C220162-001 FKK7Q1AD-MSD
Date Sampled...: 03/19/03 09:58 Date Received..: 03/22/03
Prep Date.....: 03/30/03 Analysis Date..: 03/30/03
Prep Batch #...: 3090242 Analysis Time..: 11:44
Dilution Factor: 200

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD
1,1-Dichloroethene	**6200**	**2000**	**8040**	**ug/L**	**90**		**SW846 8260B**
	6200	**2000**	**7780**	**ug/L**	**77**	**3.3**	**SW846 8260B**
Benzene	**75**	**2000**	**2160**	**ug/L**	**104**		**SW846 8260B**
	75	**2000**	**2080**	**ug/L**	**100**	**3.7**	**SW846 8260B**
Chlorobenzene	**ND**	**2000**	**2170**	**ug/L**	**108**		**SW846 8260B**
	ND	**2000**	**2140**	**ug/L**	**107**	**1.2**	**SW846 8260B**
Toluene	**220**	**2000**	**2580**	**ug/L**	**118**		**SW846 8260B**
	220	**2000**	**2370**	**ug/L**	**107**	**8.6**	**SW846 8260B**
Trichloroethene	**190**	**2000**	**2190**	**ug/L**	**100**		**SW846 8260B**
	190	**2000**	**2230**	**ug/L**	**102**	**1.9**	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	101	(80 - 120)
	101	(80 - 120)
1,2-Dichloroethane-d4	96	(71 - 129)
	96	(71 - 129)
4-Bromofluorobenzene	98	(80 - 120)
	92	(80 - 120)
Toluene-d8	107	(80 - 120)
	102	(80 - 120)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: CANNON-2 **Work Order #...:** FK7481AA **Matrix.....:** WATER
MB Lot-Sample #: D3D020000-491

Prep Date.....: 04/01/03 **Analysis Time..:** 11:08

Analysis Date..: 04/01/03 **Prep Batch #...:** 3092491
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Acetone	ND	10	ug/L	SW846 8260B
Benzene	ND	1.0	ug/L	SW846 8260B
Bromodichloromethane	ND	1.0	ug/L	SW846 8260B
Bromoform	ND	1.0	ug/L	SW846 8260B
Bromomethane	ND	2.0	ug/L	SW846 8260B
Carbon disulfide	ND	1.0	ug/L	SW846 8260B
Carbon tetrachloride	ND	1.0	ug/L	SW846 8260B
Chlorobenzene	ND	1.0	ug/L	SW846 8260B
Dibromochloromethane	ND	1.0	ug/L	SW846 8260B
Chloroethane	ND	2.0	ug/L	SW846 8260B
Chloroform	ND	1.0	ug/L	SW846 8260B
Chloromethane	ND	2.0	ug/L	SW846 8260B
Dibromomethane	ND	1.0	ug/L	SW846 8260B
Dichlorodifluoromethane	ND	2.0	ug/L	SW846 8260B
1,1-Dichloroethane	ND	1.0	ug/L	SW846 8260B
1,2-Dichloroethane	ND	1.0	ug/L	SW846 8260B
1,1-Dichloroethene	ND	1.0	ug/L	SW846 8260B
cis-1,2-Dichloroethene	ND	1.0	ug/L	SW846 8260B
trans-1,2-Dichloroethene	ND	0.50	ug/L	SW846 8260B
1,2-Dichloropropane	ND	1.0	ug/L	SW846 8260B
cis-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B
trans-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B
Ethylbenzene	ND	1.0	ug/L	SW846 8260B
Trichlorofluoromethane	ND	2.0	ug/L	SW846 8260B
2-Hexanone	ND	5.0	ug/L	SW846 8260B
Methylene chloride	ND	5.0	ug/L	SW846 8260B
4-Methyl-2-pentanone	ND	5.0	ug/L	SW846 8260B
Styrene	ND	1.0	ug/L	SW846 8260B
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B
Tetrachloroethene	ND	1.0	ug/L	SW846 8260B
Toluene	ND	1.0	ug/L	SW846 8260B
1,1,1-Trichloroethane	ND	1.0	ug/L	SW846 8260B
1,1,2-Trichloroethane	ND	1.0	ug/L	SW846 8260B
Trichloroethene	ND	1.0	ug/L	SW846 8260B
1,2,3-Trichloropropane	ND	1.0	ug/L	SW846 8260B
Vinyl chloride	ND	2.0	ug/L	SW846 8260B
Acrylonitrile	ND	20	ug/L	SW846 8260B
Chloroprene	ND	1.0	ug/L	SW846 8260B
Allyl chloride	ND	2.0	ug/L	SW846 8260B
1,2-Dibromo-3-chloropropane (DBCP)	ND	2.0	ug/L	SW846 8260B

(Continued on next page)

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: CANNON-2 **Work Order #...:** FK7481AA **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
1,2-Dibromoethane (EDB)	ND	1.0	ug/L	SW846 8260B
2-Butanone (MEK)	ND	5.0	ug/L	SW846 8260B
trans-1,4-Dichloro-2-butene	ND	1.0	ug/L	SW846 8260B
Acetonitrile	ND	20	ug/L	SW846 8260B
Acrolein	ND	20	ug/L	SW846 8260B
1,2-Dichloroethene (total)	ND	1.0	ug/L	SW846 8260B
1,4-Dioxane	ND	200	ug/L	SW846 8260B
Ethyl methacrylate	ND	1.0	ug/L	SW846 8260B
Iodomethane	ND	1.0	ug/L	SW846 8260B
Isobutyl alcohol	ND	50	ug/L	SW846 8260B
Methacrylonitrile	ND	10	ug/L	SW846 8260B
Methyl methacrylate	ND	1.0	ug/L	SW846 8260B
Propionitrile	ND	20	ug/L	SW846 8260B
Vinyl acetate	ND	2.0	ug/L	SW846 8260B
Xylenes (total)	ND	2.0	ug/L	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	102	(80 - 120)
1,2-Dichloroethane-d4	101	(71 - 129)
4-Bromofluorobenzene	100	(80 - 120)
Toluene-d8	105	(80 - 120)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

US GEOLOGICAL SURVEY

Method Blank Report

GC/MS Volatiles

Lot-Sample #: D3D020000-491 B **Work Order #:** FK7481AA **Matrix:** WATER

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT	RETENTION TIME	UNITS
None				ug/L

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: CANNON-2 **Work Order #...:** FK7481AC-LCS **Matrix.....:** WATER
LCS Lot-Sample#: D3D020000-491 FK7481AD-LCSD
Prep Date.....: 04/01/03 **Analysis Date..:** 04/01/03
Prep Batch #...: 3092491 **Analysis Time..:** 10:20
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,1-Dichloroethene	**100**	**(64 - 134)**			**SW846 8260B**
	98	**(64 - 134)**	**1.7**	**(0-20)**	**SW846 8260B**
Benzene	**106**	(81 - 121)			**SW846 8260B**
	104	(81 - 121)	1.9	(0-20)	**SW846 8260B**
Chlorobenzene	**109**	(81 - 121)			SW846 8260B
	111	(81 - 121)	1.5	(0-20)	SW846 8260B
Toluene	**112**	(81 - 121)			SW846 8260B
	115	(81 - 121)	2.4	(0-20)	SW846 8260B
Trichloroethene	**102**	(82 - 122)			SW846 8260B
	102	(82 - 122)	0.56	(0-20)	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	103	(80 - 120)
	106	(80 - 120)
1,2-Dichloroethane-d4	103	(71 - 129)
	105	(71 - 129)
4-Bromofluorobenzene	97	(80 - 120)
	101	(80 - 120)
Toluene-d8	103	(80 - 120)
	107	(80 - 120)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #...: CANNON-2 Work Order #...: FK7481AC-LCS Matrix.....: WATER
LCS Lot-Sample#: D3D020000-491 FK7481AD-LCSD
Prep Date.....: 04/01/03 Analysis Date..: 04/01/03
Prep Batch #...: 3092491 Analysis Time..: 10:20
Dilution Factor: 1

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	RPD	METHOD
1,1-Dichloroethene	**10.0**	**9.96**	**ug/L**	**100**		**SW846 8260B**
	10.0	**9.79**	**ug/L**	**98**	**1.7**	**SW846 8260B**
Benzene	**10.0**	**10.6**	**ug/L**	**106**		**SW846 8260B**
	10.0	**10.4**	**ug/L**	**104**	**1.9**	**SW846 8260B**
Chlorobenzene	**10.0**	**10.9**	**ug/L**	**109**		**SW846 8260B**
	10.0	**11.1**	**ug/L**	**111**	**1.5**	**SW846 8260B**
Toluene	**10.0**	**11.2**	**ug/L**	**112**		**SW846 8260B**
	10.0	**11.5**	**ug/L**	**115**	**2.4**	**SW846 8260B**
Trichloroethene	**10.0**	**10.2**	**ug/L**	**102**		**SW846 8260B**
	10.0	**10.2**	**ug/L**	**102**	**0.56**	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	103	(80 - 120)
	106	(80 - 120)
1,2-Dichloroethane-d4	103	(71 - 129)
	105	(71 - 129)
4-Bromofluorobenzene	97	(80 - 120)
	101	(80 - 120)
Toluene-d8	103	(80 - 120)
	107	(80 - 120)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: CANNON-2 **Work Order #...:** FKMV01AC-MS **Matrix.....:** WATER
MS Lot-Sample #: D3C240210-004 FKMV01AD-MSD
Date Sampled...: 03/24/03 08:52 **Date Received..:** 03/24/03
Prep Date.....: 04/01/03 **Analysis Date..:** 04/01/03
Prep Batch #...: 3092491 **Analysis Time..:** 12:10
Dilution Factor: 40

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,1-Dichloroethene	**101**	**(64 - 134)**			**SW846 8260B**
	101	**(64 - 134)**	**0.20**	**(0-20)**	**SW846 8260B**
Benzene	103	(81 - 121)			SW846 8260B
	104	(81 - 121)	0.92	(0-20)	SW846 8260B
Chlorobenzene	107	(81 - 121)			SW846 8260B
	108	(81 - 121)	1.3	(0-20)	SW846 8260B
Toluene	112	(81 - 121)			SW846 8260B
	115	(81 - 121)	2.9	(0-20)	SW846 8260B
Trichloroethene	**105**	**(82 - 122)**			**SW846 8260B**
	103	**(82 - 122)**	**2.4**	**(0-20)**	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	104	(80 - 120)
	105	(80 - 120)
1,2-Dichloroethane-d4	106	(71 - 129)
	101	(71 - 129)
4-Bromofluorobenzene	97	(80 - 120)
	102	(80 - 120)
Toluene-d8	104	(80 - 120)
	108	(80 - 120)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #...: CANNON-2 Work Order #...: FKMV01AC-MS Matrix.....: WATER
MS Lot-Sample #: D3C240210-004 FKMV01AD-MSD
Date Sampled...: 03/24/03 08:52 Date Received..: 03/24/03
Prep Date.....: 04/01/03 Analysis Date..: 04/01/03
Prep Batch #...: 3092491 Analysis Time..: 12:10
Dilution Factor: 40

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD
1,1-Dichloroethene	ND	400	404	ug/L	101		SW846 8260B
	ND	400	404	ug/L	101	0.20	SW846 8260B
Benzene	ND	400	413	ug/L	103		SW846 8260B
	ND	400	417	ug/L	104	0.92	SW846 8260B
Chlorobenzene	ND	400	428	ug/L	107		SW846 8260B
	ND	400	433	ug/L	108	1.3	SW846 8260B
Toluene	ND	400	447	ug/L	112		SW846 8260B
	ND	400	461	ug/L	115	2.9	SW846 8260B
Trichloroethene	ND	400	420	ug/L	105		SW846 8260B
	ND	400	411	ug/L	103	2.4	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	104	(80 - 120)
	105	(80 - 120)
1,2-Dichloroethane-d4	106	(71 - 129)
	101	(71 - 129)
4-Bromofluorobenzene	97	(80 - 120)
	102	(80 - 120)
Toluene-d8	104	(80 - 120)
	108	(80 - 120)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #...: CANNON-2 **Work Order #...:** FKLTX1AA **Matrix.....:** WATER
MB Lot-Sample #: D3C240000-180

Prep Date.....: 03/24/03 **Analysis Time..:** 12:23

Analysis Date..: 04/01/03 **Prep Batch #...:** 3083180
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Acenaphthene	ND	10	ug/L	SW846 8270C
Acenaphthylene	ND	10	ug/L	SW846 8270C
Acetophenone	ND	10	ug/L	SW846 8270C
2-Acetylaminofluorene	ND	100	ug/L	SW846 8270C
4-Aminobiphenyl	ND	50	ug/L	SW846 8270C
Aniline	ND	10	ug/L	SW846 8270C
Anthracene	ND	10	ug/L	SW846 8270C
Benzo(a)anthracene	ND	10	ug/L	SW846 8270C
Benzo(b)fluoranthene	ND	10	ug/L	SW846 8270C
Benzo(k)fluoranthene	ND	10	ug/L	SW846 8270C
Benzo(ghi)perylene	ND	10	ug/L	SW846 8270C
Benzo(a)pyrene	ND	10	ug/L	SW846 8270C
Benzyl alcohol	ND	10	ug/L	SW846 8270C
bis(2-Chloroethoxy) methane	ND	10	ug/L	SW846 8270C
bis(2-Chloroethyl)-ether	ND	10	ug/L	SW846 8270C
2,2'-oxybis(1-Chloropropa	ND	10	ug/L	SW846 8270C
bis(2-Ethylhexyl) phthalate	ND	10	ug/L	SW846 8270C
4-Bromophenyl phenyl ether	ND	10	ug/L	SW846 8270C
Butyl benzyl phthalate	ND	10	ug/L	SW846 8270C
4-Chloroaniline	ND	10	ug/L	SW846 8270C
4-Chloro-3-methylphenol	ND	10	ug/L	SW846 8270C
2-Chloronaphthalene	ND	10	ug/L	SW846 8270C
2-Chlorophenol	ND	10	ug/L	SW846 8270C
4-Chlorophenyl phenyl ether	ND	10	ug/L	SW846 8270C
Chrysene	ND	10	ug/L	SW846 8270C
Dibenz(a,h)anthracene	ND	10	ug/L	SW846 8270C
Dibenzofuran	ND	10	ug/L	SW846 8270C
Di-n-butyl phthalate	ND	10	ug/L	SW846 8270C
1,2-Dichlorobenzene	ND	10	ug/L	SW846 8270C
1,3-Dichlorobenzene	ND	10	ug/L	SW846 8270C
1,4-Dichlorobenzene	ND	10	ug/L	SW846 8270C
3,3'-Dichlorobenzidine	ND	50	ug/L	SW846 8270C
2,4-Dichlorophenol	ND	10	ug/L	SW846 8270C
2,6-Dichlorophenol	ND	10	ug/L	SW846 8270C
Diethyl phthalate	ND	10	ug/L	SW846 8270C
4-Dimethylaminoazobenzene	ND	20	ug/L	SW846 8270C

(Continued on next page)

METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #...: CANNON-2 **Work Order #...:** FKLTX1AA **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
7,12-Dimethylbenz(a)-anthracene	ND	20	ug/L	SW846 8270C
3,3'-Dimethylbenzidine	ND	20	ug/L	SW846 8270C
alpha,alpha-Dimethylphene	ND	50	ug/L	SW846 8270C
2,4-Dimethylphenol	ND	10	ug/L	SW846 8270C
Dimethyl phthalate	ND	10	ug/L	SW846 8270C
Di-n-octyl phthalate	ND	10	ug/L	SW846 8270C
1,3-Dinitrobenzene	ND	10	ug/L	SW846 8270C
4,6-Dinitro-2-methylphenol	ND	50	ug/L	SW846 8270C
2,4-Dinitrophenol	ND	50	ug/L	SW846 8270C
2,4-Dinitrotoluene	ND	10	ug/L	SW846 8270C
2,6-Dinitrotoluene	ND	10	ug/L	SW846 8270C
2-sec-Butyl-4,6-dinitro-phenol	ND	20	ug/L	SW846 8270C
Diphenylamine	ND	10	ug/L	SW846 8270C
Ethyl methanesulfonate	ND	10	ug/L	SW846 8270C
Fluoranthene	ND	10	ug/L	SW846 8270C
Fluorene	ND	10	ug/L	SW846 8270C
Hexachlorobenzene	ND	10	ug/L	SW846 8270C
Hexachlorobutadiene	ND	10	ug/L	SW846 8270C
Hexachlorocyclopenta-diene	ND	50	ug/L	SW846 8270C
Hexachloroethane	ND	10	ug/L	SW846 8270C
Hexachloropropene	ND	100	ug/L	SW846 8270C
Indeno(1,2,3-cd)pyrene	ND	10	ug/L	SW846 8270C
Isophorone	ND	10	ug/L	SW846 8270C
Isosafrole	ND	20	ug/L	SW846 8270C
Methapyrilene	ND	50	ug/L	SW846 8270C
2-Toluidine	ND	10	ug/L	SW846 8270C
3-Methylcholanthrene	ND	20	ug/L	SW846 8270C
Methyl methanesulfonate	ND	10	ug/L	SW846 8270C
2-Methylnaphthalene	ND	10	ug/L	SW846 8270C
2-Methylphenol	ND	10	ug/L	SW846 8270C
3-Methylphenol	ND	10	ug/L	SW846 8270C
4-Methylphenol	ND	10	ug/L	SW846 8270C
Naphthalene	ND	10	ug/L	SW846 8270C
1,4-Naphthoquinone	ND	50	ug/L	SW846 8270C
1-Naphthylamine	ND	10	ug/L	SW846 8270C
2-Naphthylamine	ND	10	ug/L	SW846 8270C
2-Nitroaniline	ND	50	ug/L	SW846 8270C
3-Nitroaniline	ND	50	ug/L	SW846 8270C
4-Nitroaniline	ND	50	ug/L	SW846 8270C
Nitrobenzene	ND	10	ug/L	SW846 8270C
2-Nitrophenol	ND	10	ug/L	SW846 8270C

(Continued on next page)

METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #...: CANNON-2 Work Order #...: FKLTX1AA Matrix.....: WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
4-Nitrophenol	ND	50	ug/L	SW846 8270C
N-Nitrosodi-n-butylamine	ND	10	ug/L	SW846 8270C
N-Nitrosodiethylamine	ND	10	ug/L	SW846 8270C
N-Nitrosodimethylamine	ND	10	ug/L	SW846 8270C
N-Nitrosodi-n-propyl-amine	ND	10	ug/L	SW846 8270C
N-Nitrosodiphenylamine	ND	10	ug/L	SW846 8270C
N-Nitrosomethylethylamine	ND	10	ug/L	SW846 8270C
N-Nitrosomorpholine	ND	10	ug/L	SW846 8270C
N-Nitrosopiperidine	ND	10	ug/L	SW846 8270C
N-Nitrosopyrrolidine	ND	10	ug/L	SW846 8270C
5-Nitro-o-toluidine	ND	20	ug/L	SW846 8270C
Pentachlorobenzene	ND	10	ug/L	SW846 8270C
Pentachloroethane	ND	50	ug/L	SW846 8270C
Pentachloronitrobenzene	ND	50	ug/L	SW846 8270C
Pentachlorophenol	ND	50	ug/L	SW846 8270C
Phenacetin	ND	20	ug/L	SW846 8270C
Phenanthrene	ND	10	ug/L	SW846 8270C
Phenol	ND	10	ug/L	SW846 8270C
-Picoline	ND	20	ug/L	SW846 8270C
Pronamide	ND	20	ug/L	SW846 8270C
Pyrene	ND	10	ug/L	SW846 8270C
Pyridine	ND	20	ug/L	SW846 8270C
Safrole	ND	50	ug/L	SW846 8270C
1,2,4,5-Tetrachloro-benzene	ND	10	ug/L	SW846 8270C
2,3,4,6-Tetrachlorophenol	ND	50	ug/L	SW846 8270C
1,2,4-Trichloro-benzene	ND	10	ug/L	SW846 8270C
2,4,5-Trichloro-phenol	ND	10	ug/L	SW846 8270C
2,4,6-Trichloro-phenol	ND	10	ug/L	SW846 8270C
1,3,5-Trinitrobenzene	ND	50	ug/L	SW846 8270C
Aramite	ND	20	ug/L	SW846 8270C

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Fluorophenol	77	(44 - 105)
Phenol-d5	77	(45 - 107)
Nitrobenzene-d5	83	(52 - 109)
2-Fluorobiphenyl	78	(40 - 103)
2,4,6-Tribromophenol	83	(48 - 109)
Terphenyl-d14	79	(39 - 115)

(Continued on next page)

METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #...: CANNON-2 **Work Order #...:** FKLTX1AA **Matrix.....:** WATER

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

US GEOLOGICAL SURVEY

Method Blank Report

GC/MS Semivolatiles

Lot-Sample #: D3C240000-180 B **Work Order #:** FKLTX1AA **Matrix:** WATER

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT	RETENTION TIME	UNITS
Unknown		0.047 J M	6.1059	mg/L

NOTE(S):

M: Result was measured against nearest internal standard assuming a response factor of 1.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: CANNON-2 Work Order #...: FKLTX1AC-LCS Matrix.....: WATER
LCS Lot-Sample#: D3C240000-180 FKLTX1AD-LCSD
Prep Date.....: 03/24/03 Analysis Date..: 04/01/03
Prep Batch #...: 3083180 Analysis Time..: 12:47
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Acenaphthene	80	(57 - 97)			SW846 8270C
	82	(57 - 97)	2.5	(0-30)	SW846 8270C
4-Chloro-3-methylphenol	79	(58 - 100)			SW846 8270C
	83	(58 - 100)	4.6	(0-40)	SW846 8270C
2-Chlorophenol	79	(57 - 99)			SW846 8270C
	82	(57 - 99)	3.2	(0-40)	SW846 8270C
1,4-Dichlorobenzene	74	(43 - 92)			SW846 8270C
	78	(43 - 92)	4.2	(0-40)	SW846 8270C
2,4-Dinitrotoluene	81	(56 - 106)			SW846 8270C
	85	(56 - 106)	4.9	(0-40)	SW846 8270C
4-Nitrophenol	72	(36 - 114)			SW846 8270C
	78	(36 - 114)	7.5	(0-40)	SW846 8270C
N-Nitrosodi-n-propyl-amine	74	(51 - 101)			SW846 8270C
	77	(51 - 101)	4.2	(0-40)	SW846 8270C
Pentachlorophenol	85	(44 - 105)			SW846 8270C
	85	(44 - 105)	0.86	(0-40)	SW846 8270C
Phenol	85	(55 - 100)			SW846 8270C
	82	(55 - 100)	3.4	(0-40)	SW846 8270C
Pyrene	79	(55 - 98)			SW846 8270C
	80	(55 - 98)	1.7	(0-40)	SW846 8270C
1,2,4-Trichloro-benzene	79	(47 - 93)			SW846 8270C
	82	(47 - 93)	3.6	(0-40)	SW846 8270C

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Fluorophenol	77	(55 - 99)
	80	(55 - 99)
Phenol-d5	81	(56 - 102)
	82	(56 - 102)
Nitrobenzene-d5	85	(57 - 105)
	87	(57 - 105)
2-Fluorobiphenyl	77	(49 - 99)
	80	(49 - 99)
2,4,6-Tribromophenol	83	(59 - 105)
	87	(59 - 105)
Terphenyl-d14	81	(58 - 106)

(Continued on next page)

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: CANNON-2 **Work Order #...:** FKLTX1AC-LCS **Matrix.....:** WATER
LCS Lot-Sample#: D3C240000-180 FKLTX1AD-LCSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
	82	(58 - 106)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE DATA REPORT

GC/MS Semivolatiles

Client Lot #...: CANNON-2 Work Order #...: FKLTX1AC-LCS Matrix.....: WATER
LCS Lot-Sample#: D3C240000-180 FKLTX1AD-LCSD
Prep Date.....: 03/24/03 Analysis Date..: 04/01/03
Prep Batch #...: 3083180 Analysis Time..: 12:47
Dilution Factor: 1

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	RPD	METHOD
Acenaphthene	100	79.6	ug/L	80		SW846 8270C
	100	81.6	ug/L	82	2.5	SW846 8270C
4-Chloro-3-methylphenol	150	119	ug/L	79		SW846 8270C
	150	125	ug/L	83	4.6	SW846 8270C
2-Chlorophenol	150	119	ug/L	79		SW846 8270C
	150	122	ug/L	82	3.2	SW846 8270C
1,4-Dichlorobenzene	100	74.5	ug/L	74		SW846 8270C
	100	77.7	ug/L	78	4.2	SW846 8270C
2,4-Dinitrotoluene	100	80.6	ug/L	81		SW846 8270C
	100	84.7	ug/L	85	4.9	SW846 8270C
4-Nitrophenol	150	108	ug/L	72		SW846 8270C
	150	116	ug/L	78	7.5	SW846 8270C
N-Nitrosodi-n-propyl-amine	100	74.2	ug/L	74		SW846 8270C
	100	77.4	ug/L	77	4.2	SW846 8270C
Pentachlorophenol	150	127	ug/L	85		SW846 8270C
	150	128	ug/L	85	0.86	SW846 8270C
Phenol	150	128	ug/L	85		SW846 8270C
	150	124	ug/L	82	3.4	SW846 8270C
Pyrene	100	78.6	ug/L	79		SW846 8270C
	100	80.0	ug/L	80	1.7	SW846 8270C
1,2,4-Trichloro-benzene	100	79.1	ug/L	79		SW846 8270C
	100	81.9	ug/L	82	3.6	SW846 8270C

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Fluorophenol	77	(55 - 99)
	80	(55 - 99)
Phenol-d5	81	(56 - 102)
	82	(56 - 102)
Nitrobenzene-d5	85	(57 - 105)
	87	(57 - 105)
2-Fluorobiphenyl	77	(49 - 99)
	80	(49 - 99)
2,4,6-Tribromophenol	83	(59 - 105)
	87	(59 - 105)
Terphenyl-d14	81	(58 - 106)

(Continued on next page)

LABORATORY CONTROL SAMPLE DATA REPORT

GC/MS Semivolatiles

Client Lot #...: CANNON-2 **Work Order #...:** FKLTX1AC-LCS **Matrix.....:** WATER
LCS Lot-Sample#: D3C240000-180 FKLTX1AD-LCSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
	82	(58 - 106)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #...: CANNON-2 **Work Order #...:** FKNVD1AA **Matrix.....:** WATER
MB Lot-Sample #: D3C250000-225

Prep Date.....: 03/25/03 **Analysis Time..:** 15:47

Analysis Date..: 04/16/03 **Prep Batch #...:** 3084225
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Acenaphthene	ND	10	ug/L	SW846 8270C
Acenaphthylene	ND	10	ug/L	SW846 8270C
Acetophenone	ND	10	ug/L	SW846 8270C
2-Acetylaminofluorene	ND	100	ug/L	SW846 8270C
4-Aminobiphenyl	ND	50	ug/L	SW846 8270C
Aniline	ND	10	ug/L	SW846 8270C
Anthracene	ND	10	ug/L	SW846 8270C
Benzo(a)anthracene	ND	10	ug/L	SW846 8270C
Benzo(b)fluoranthene	ND	10	ug/L	SW846 8270C
Benzo(k)fluoranthene	ND	10	ug/L	SW846 8270C
Benzo(ghi)perylene	ND	10	ug/L	SW846 8270C
Benzo(a)pyrene	ND	10	ug/L	SW846 8270C
Benzyl alcohol	ND	10	ug/L	SW846 8270C
bis(2-Chloroethoxy) methane	ND	10	ug/L	SW846 8270C
bis(2-Chloroethyl)-ether	ND	10	ug/L	SW846 8270C
bis(2-Ethylhexyl) phthalate	**13**	**10**	**ug/L**	**SW846 8270C**
4-Bromophenyl phenyl ether	ND	10	ug/L	SW846 8270C
Butyl benzyl phthalate	ND	10	ug/L	SW846 8270C
4-Chloroaniline	ND	10	ug/L	SW846 8270C
4-Chloro-3-methylphenol	ND	10	ug/L	SW846 8270C
2-Chloronaphthalene	ND	10	ug/L	SW846 8270C
2-Chlorophenol	ND	10	ug/L	SW846 8270C
4-Chlorophenyl phenyl ether	ND	10	ug/L	SW846 8270C
Chrysene	ND	10	ug/L	SW846 8270C
Dibenz(a,h)anthracene	ND	10	ug/L	SW846 8270C
Dibenzofuran	ND	10	ug/L	SW846 8270C
Di-n-butyl phthalate	ND	10	ug/L	SW846 8270C
1,2-Dichlorobenzene	ND	10	ug/L	SW846 8270C
1,3-Dichlorobenzene	ND	10	ug/L	SW846 8270C
1,4-Dichlorobenzene	ND	10	ug/L	SW846 8270C
3,3'-Dichlorobenzidine	ND	50	ug/L	SW846 8270C
2,4-Dichlorophenol	ND	10	ug/L	SW846 8270C
2,6-Dichlorophenol	ND	10	ug/L	SW846 8270C
Diethyl phthalate	ND	10	ug/L	SW846 8270C
4-Dimethylaminoazobenzene	ND	20	ug/L	SW846 8270C
7,12-Dimethylbenz(a)-anthracene	ND	20	ug/L	SW846 8270C

(Continued on next page)

METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #...: CANNON-2 Work Order #...: FKNVD1AA Matrix.....: WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
3,3'-Dimethylbenzidine	ND	20	ug/L	SW846 8270C
alpha,alpha-Dimethylphene	ND	50	ug/L	SW846 8270C
2,4-Dimethylphenol	ND	10	ug/L	SW846 8270C
Dimethyl phthalate	ND	10	ug/L	SW846 8270C
Di-n-octyl phthalate	ND	10	ug/L	SW846 8270C
1,3-Dinitrobenzene	ND	10	ug/L	SW846 8270C
4,6-Dinitro-2-methylphenol	ND	50	ug/L	SW846 8270C
2,4-Dinitrophenol	ND	50	ug/L	SW846 8270C
2,4-Dinitrotoluene	ND	10	ug/L	SW846 8270C
2,6-Dinitrotoluene	ND	10	ug/L	SW846 8270C
2-sec-Butyl-4,6-dinitro-phenol	ND	20	ug/L	SW846 8270C
Diphenylamine	ND	10	ug/L	SW846 8270C
Ethyl methanesulfonate	ND	10	ug/L	SW846 8270C
Fluoranthene	ND	10	ug/L	SW846 8270C
Fluorene	ND	10	ug/L	SW846 8270C
Hexachlorobenzene	ND	10	ug/L	SW846 8270C
Hexachlorobutadiene	ND	10	ug/L	SW846 8270C
Hexachlorocyclopenta-diene	ND	50	ug/L	SW846 8270C
Hexachloroethane	ND	10	ug/L	SW846 8270C
Hexachloropropene	ND	100	ug/L	SW846 8270C
Indeno(1,2,3-cd)pyrene	ND	10	ug/L	SW846 8270C
Isophorone	ND	10	ug/L	SW846 8270C
Isosafrole	ND	20	ug/L	SW846 8270C
Methapyrilene	ND	50	ug/L	SW846 8270C
3-Methylcholanthrene	ND	20	ug/L	SW846 8270C
Methyl methanesulfonate	ND	10	ug/L	SW846 8270C
2-Methylnaphthalene	ND	10	ug/L	SW846 8270C
2-Methylphenol	ND	10	ug/L	SW846 8270C
3-Methylphenol	ND	10	ug/L	SW846 8270C
4-Methylphenol	ND	10	ug/L	SW846 8270C
Naphthalene	ND	10	ug/L	SW846 8270C
1,4-Naphthoquinone	ND	50	ug/L	SW846 8270C
1-Naphthylamine	ND	10	ug/L	SW846 8270C
2-Naphthylamine	ND	10	ug/L	SW846 8270C
2-Nitroaniline	ND	50	ug/L	SW846 8270C
3-Nitroaniline	ND	50	ug/L	SW846 8270C
4-Nitroaniline	ND	50	ug/L	SW846 8270C
Nitrobenzene	ND	10	ug/L	SW846 8270C
2-Nitrophenol	ND	10	ug/L	SW846 8270C
4-Nitrophenol	ND	50	ug/L	SW846 8270C
N-Nitrosodi-n-butylamine	ND	10	ug/L	SW846 8270C
N-Nitrosodiethylamine	ND	10	ug/L	SW846 8270C

(Continued on next page)

METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #...: CANNON-2 **Work Order #...:** FKNVD1AA **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
N-Nitrosodimethylamine	ND	10	ug/L	SW846 8270C
N-Nitrosodi-n-propyl-amine	ND	10	ug/L	SW846 8270C
N-Nitrosodiphenylamine	ND	10	ug/L	SW846 8270C
N-Nitrosomethylethylamine	ND	10	ug/L	SW846 8270C
N-Nitrosomorpholine	ND	10	ug/L	SW846 8270C
N-Nitrosopiperidine	ND	10	ug/L	SW846 8270C
N-Nitrosopyrrolidine	ND	10	ug/L	SW846 8270C
5-Nitro-o-toluidine	ND	20	ug/L	SW846 8270C
Pentachlorobenzene	ND	10	ug/L	SW846 8270C
Pentachloroethane	ND	50	ug/L	SW846 8270C
Pentachloronitrobenzene	ND	50	ug/L	SW846 8270C
Pentachlorophenol	ND	50	ug/L	SW846 8270C
Phenacetin	ND	20	ug/L	SW846 8270C
Phenanthrene	ND	10	ug/L	SW846 8270C
Phenol	ND	10	ug/L	SW846 8270C
2-Picoline	ND	20	ug/L	SW846 8270C
Pronamide	ND	20	ug/L	SW846 8270C
Pyrene	ND	10	ug/L	SW846 8270C
Pyridine	ND	20	ug/L	SW846 8270C
Safrole	ND	50	ug/L	SW846 8270C
1,2,4,5-Tetrachloro-benzene	ND	10	ug/L	SW846 8270C
2,3,4,6-Tetrachlorophenol	ND	50	ug/L	SW846 8270C
1,2,4-Trichloro-benzene	ND	10	ug/L	SW846 8270C
2,4,5-Trichloro-phenol	ND	10	ug/L	SW846 8270C
2,4,6-Trichloro-phenol	ND	10	ug/L	SW846 8270C
1,3,5-Trinitrobenzene	ND	50	ug/L	SW846 8270C
Aramite	ND	20	ug/L	SW846 8270C
2-Toluidine	ND	10	ug/L	SW846 8270C
2,2'-oxybis(1-Chloropropa	ND	10	ug/L	SW846 8270C

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Fluorophenol	75	(44 - 105)
Phenol-d5	78	(45 - 107)
Nitrobenzene-d5	83	(52 - 109)
2-Fluorobiphenyl	72	(40 - 103)
2,4,6-Tribromophenol	78	(48 - 109)
Terphenyl-d14	80	(39 - 115)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: CANNON-2 Work Order #...: FKNVD1AC-LCS Matrix.....: WATER
LCS Lot-Sample#: D3C250000-225 FKNVD1AD-LCSD
Prep Date.....: 03/25/03 Analysis Date..: 04/16/03
Prep Batch #...: 3084225 Analysis Time..: 16:12
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Acenaphthene	63	(57 - 97)			SW846 8270C
	66	(57 - 97)	3.9	(0-30)	SW846 8270C
4-Chloro-3-methylphenol	65	(58 - 100)			SW846 8270C
	72	(58 - 100)	10	(0-40)	SW846 8270C
2-Chlorophenol	66	(57 - 99)			SW846 8270C
	71	(57 - 99)	7.4	(0-40)	SW846 8270C
1,4-Dichlorobenzene	61	(43 - 92)			SW846 8270C
	67	(43 - 92)	9.4	(0-40)	SW846 8270C
2,4-Dinitrotoluene	65	(56 - 106)			SW846 8270C
	67	(56 - 106)	1.8	(0-40)	SW846 8270C
4-Nitrophenol	69	(36 - 114)			SW846 8270C
	72	(36 - 114)	4.3	(0-40)	SW846 8270C
N-Nitrosodi-n-propyl-amine	60	(51 - 101)			SW846 8270C
	66	(51 - 101)	9.2	(0-40)	SW846 8270C
Pentachlorophenol	74	(44 - 105)			SW846 8270C
	82	(44 - 105)	11	(0-40)	SW846 8270C
Phenol	65	(55 - 100)			SW846 8270C
	72	(55 - 100)	9.5	(0-40)	SW846 8270C
Pyrene	60	(55 - 98)			SW846 8270C
	66	(55 - 98)	8.7	(0-40)	SW846 8270C
1,2,4-Trichloro-benzene	60	(47 - 93)			SW846 8270C
	66	(47 - 93)	11	(0-40)	SW846 8270C

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Fluorophenol	61	(55 - 99)
	66	(55 - 99)
Phenol-d5	63	(56 - 102)
	67	(56 - 102)
Nitrobenzene-d5	65	(57 - 105)
	71	(57 - 105)
2-Fluorobiphenyl	59	(49 - 99)
	61	(49 - 99)
2,4,6-Tribromophenol	67	(59 - 105)
	67	(59 - 105)
Terphenyl-d14	63	(58 - 106)

(Continued on next page)

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: CANNON-2 Work Order #...: FKNVD1AC-LCS Matrix.....: WATER
LCS Lot-Sample#: D3C250000-225 FKNVD1AD-LCSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
	67	(58 - 106)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE DATA REPORT

GC/MS Semivolatiles

Client Lot #...: CANNON-2 Work Order #...: FKNVD1AC-LCS Matrix.....: WATER
LCS Lot-Sample#: D3C250000-225 FKNVD1AD-LCSD
Prep Date.....: 03/25/03 Analysis Date..: 04/16/03
Prep Batch #...: 3084225 Analysis Time..: 16:12
Dilution Factor: 1

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	RPD	METHOD
Acenaphthene	100	63.0	ug/L	63		SW846 8270C
	100	65.5	ug/L	66	3.9	SW846 8270C
4-Chloro-3-methylphenol	150	97.1	ug/L	65		SW846 8270C
	150	108	ug/L	72	10	SW846 8270C
2-Chlorophenol	150	99.5	ug/L	66		SW846 8270C
	150	107	ug/L	71	7.4	SW846 8270C
1,4-Dichlorobenzene	100	60.7	ug/L	61		SW846 8270C
	100	66.7	ug/L	67	9.4	SW846 8270C
2,4-Dinitrotoluene	100	65.4	ug/L	65		SW846 8270C
	100	66.6	ug/L	67	1.8	SW846 8270C
4-Nitrophenol	150	104	ug/L	69		SW846 8270C
	150	108	ug/L	72	4.3	SW846 8270C
N-Nitrosodi-n-propyl-amine	100	60.4	ug/L	60		SW846 8270C
	100	66.2	ug/L	66	9.2	SW846 8270C
Pentachlorophenol	150	110	ug/L	74		SW846 8270C
	150	123	ug/L	82	11	SW846 8270C
Phenol	150	97.6	ug/L	65		SW846 8270C
	150	107	ug/L	72	9.5	SW846 8270C
Pyrene	100	60.2	ug/L	60		SW846 8270C
	100	65.7	ug/L	66	8.7	SW846 8270C
1,2,4-Trichloro-benzene	100	59.5	ug/L	60		SW846 8270C
	100	66.3	ug/L	66	11	SW846 8270C

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Fluorophenol	61	(55 - 99)
	66	(55 - 99)
Phenol-d5	63	(56 - 102)
	67	(56 - 102)
Nitrobenzene-d5	65	(57 - 105)
	71	(57 - 105)
2-Fluorobiphenyl	59	(49 - 99)
	61	(49 - 99)
2,4,6-Tribromophenol	67	(59 - 105)
	67	(59 - 105)
Terphenyl-d14	63	(58 - 106)

(Continued on next page)

LABORATORY CONTROL SAMPLE DATA REPORT

GC/MS Semivolatiles

Client Lot #...: CANNON-2 Work Order #...: FKNVD1AC-LCS Matrix.....: WATER
LCS Lot-Sample#: D3C250000-225 FKNVD1AD-LCSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
	67	(58 - 106)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Asterisk (*) print denotes control parameters

METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #...: CANNON-2 **Work Order #...:** FKQMA1AA **Matrix.....:** WATER
MB Lot-Sample #: D3C260000-185

Prep Date.....: 03/26/03 **Analysis Time..:** 09:31

Analysis Date..: 04/02/03 **Prep Batch #...:** 3085185
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Acenaphthene	ND	10	ug/L	SW846 8270C
Acenaphthylene	ND	10	ug/L	SW846 8270C
Acetophenone	ND	10	ug/L	SW846 8270C
2-Acetylaminofluorene	ND	100	ug/L	SW846 8270C
4-Aminobiphenyl	ND	50	ug/L	SW846 8270C
Anthracene	ND	10	ug/L	SW846 8270C
Benzo(a)anthracene	ND	10	ug/L	SW846 8270C
Benzo(b)fluoranthene	ND	10	ug/L	SW846 8270C
Benzo(k)fluoranthene	ND	10	ug/L	SW846 8270C
Benzo(ghi)perylene	ND	10	ug/L	SW846 8270C
Benzo(a)pyrene	ND	10	ug/L	SW846 8270C
Benzyl alcohol	ND	10	ug/L	SW846 8270C
bis(2-Chloroethoxy) methane	ND	10	ug/L	SW846 8270C
bis(2-Chloroethyl)-ether	ND	10	ug/L	SW846 8270C
2,2'-oxybis(1-Chloropropa	ND	10	ug/L	SW846 8270C
bis(2-Ethylhexyl) phthalate	ND	10	ug/L	SW846 8270C
4-Bromophenyl phenyl ether	ND	10	ug/L	SW846 8270C
Butyl benzyl phthalate	ND	10	ug/L	SW846 8270C
4-Chloroaniline	ND	10	ug/L	SW846 8270C
4-Chloro-3-methylphenol	ND	10	ug/L	SW846 8270C
2-Chloronaphthalene	ND	10	ug/L	SW846 8270C
2-Chlorophenol	ND	10	ug/L	SW846 8270C
4-Chlorophenyl phenyl ether	ND	10	ug/L	SW846 8270C
Chrysene	ND	10	ug/L	SW846 8270C
Dibenz(a,h)anthracene	ND	10	ug/L	SW846 8270C
Dibenzofuran	ND	10	ug/L	SW846 8270C
Di-n-butyl phthalate	ND	10	ug/L	SW846 8270C
1,2-Dichlorobenzene	ND	10	ug/L	SW846 8270C
1,3-Dichlorobenzene	ND	10	ug/L	SW846 8270C
1,4-Dichlorobenzene	ND	10	ug/L	SW846 8270C
3,3'-Dichlorobenzidine	ND	50	ug/L	SW846 8270C
2,4-Dichlorophenol	ND	10	ug/L	SW846 8270C
2,6-Dichlorophenol	ND	10	ug/L	SW846 8270C
Diethyl phthalate	ND	10	ug/L	SW846 8270C
4-Dimethylaminoazobenzene	ND	20	ug/L	SW846 8270C
7,12-Dimethylbenz(a)-anthracene	ND	20	ug/L	SW846 8270C

(Continued on next page)

METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #...: CANNON-2 **Work Order #...:** FKQMA1AA **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
3,3'-Dimethylbenzidine	ND	20	ug/L	SW846 8270C
2,4-Dimethylphenol	ND	10	ug/L	SW846 8270C
Dimethyl phthalate	ND	10	ug/L	SW846 8270C
Di-n-octyl phthalate	ND	10	ug/L	SW846 8270C
1,3-Dinitrobenzene	ND	10	ug/L	SW846 8270C
4,6-Dinitro-2-methylphenol	ND	50	ug/L	SW846 8270C
2,4-Dinitrophenol	ND	50	ug/L	SW846 8270C
2,4-Dinitrotoluene	ND	10	ug/L	SW846 8270C
2,6-Dinitrotoluene	ND	10	ug/L	SW846 8270C
Diphenylamine	ND	10	ug/L	SW846 8270C
Ethyl methanesulfonate	ND	10	ug/L	SW846 8270C
Fluoranthene	ND	10	ug/L	SW846 8270C
Fluorene	ND	10	ug/L	SW846 8270C
Hexachlorobenzene	ND	10	ug/L	SW846 8270C
Hexachlorobutadiene	ND	10	ug/L	SW846 8270C
Hexachlorocyclopentadiene	ND	50	ug/L	SW846 8270C
Hexachloroethane	ND	10	ug/L	SW846 8270C
Hexachloropropene	ND	100	ug/L	SW846 8270C
Indeno(1,2,3-cd)pyrene	ND	10	ug/L	SW846 8270C
Isophorone	ND	10	ug/L	SW846 8270C
Isosafrole	ND	20	ug/L	SW846 8270C
Methapyrilene	ND	50	ug/L	SW846 8270C
2-Toluidine	ND	10	ug/L	SW846 8270C
3-Methylcholanthrene	ND	20	ug/L	SW846 8270C
Methyl methanesulfonate	ND	10	ug/L	SW846 8270C
2-Methylnaphthalene	ND	10	ug/L	SW846 8270C
2-Methylphenol	ND	10	ug/L	SW846 8270C
Naphthalene	ND	10	ug/L	SW846 8270C
1,4-Naphthoquinone	ND	50	ug/L	SW846 8270C
1-Naphthylamine	ND	10	ug/L	SW846 8270C
2-Naphthylamine	ND	10	ug/L	SW846 8270C
2-Nitroaniline	ND	50	ug/L	SW846 8270C
3-Nitroaniline	ND	50	ug/L	SW846 8270C
4-Nitroaniline	ND	50	ug/L	SW846 8270C
Nitrobenzene	ND	10	ug/L	SW846 8270C
2-Nitrophenol	ND	10	ug/L	SW846 8270C
4-Nitrophenol	ND	50	ug/L	SW846 8270C
N-Nitrosodi-n-butylamine	ND	10	ug/L	SW846 8270C
N-Nitrosodiethylamine	ND	10	ug/L	SW846 8270C
N-Nitrosodimethylamine	ND	10	ug/L	SW846 8270C
N-Nitrosodi-n-propylamine	ND	10	ug/L	SW846 8270C
N-Nitrosodiphenylamine	ND	10	ug/L	SW846 8270C

(Continued on next page)

METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #...: CANNON-2 Work Order #...: FKQMA1AA Matrix.....: WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
N-Nitrosomethylethylamine	ND	10	ug/L	SW846 8270C
N-Nitrosopiperidine	ND	10	ug/L	SW846 8270C
N-Nitrosopyrrolidine	ND	10	ug/L	SW846 8270C
5-Nitro-o-toluidine	ND	20	ug/L	SW846 8270C
Pentachlorobenzene	ND	10	ug/L	SW846 8270C
Pentachloronitrobenzene	ND	50	ug/L	SW846 8270C
Pentachlorophenol	ND	50	ug/L	SW846 8270C
Phenacetin	ND	20	ug/L	SW846 8270C
Phenanthrene	ND	10	ug/L	SW846 8270C
Phenol	ND	10	ug/L	SW846 8270C
Pronamide	ND	20	ug/L	SW846 8270C
Pyrene	ND	10	ug/L	SW846 8270C
Safrole	ND	50	ug/L	SW846 8270C
1,2,4,5-Tetrachloro-benzene	ND	10	ug/L	SW846 8270C
2,3,4,6-Tetrachlorophenol	ND	50	ug/L	SW846 8270C
1,2,4-Trichloro-benzene	ND	10	ug/L	SW846 8270C
2,4,5-Trichloro-phenol	ND	10	ug/L	SW846 8270C
2,4,6-Trichloro-phenol	ND	10	ug/L	SW846 8270C
1,3,5-Trinitrobenzene	ND	50	ug/L	SW846 8270C
Aniline	ND	10	ug/L	SW846 8270C
alpha,alpha-Dimethylphene	ND	50	ug/L	SW846 8270C
2-sec-Butyl-4,6-dinitro-phenol	ND	20	ug/L	SW846 8270C
3-Methylphenol	ND	10	ug/L	SW846 8270C
4-Methylphenol	ND	10	ug/L	SW846 8270C
N-Nitrosomorpholine	ND	10	ug/L	SW846 8270C
Pentachloroethane	ND	50	ug/L	SW846 8270C
2-Picoline	ND	20	ug/L	SW846 8270C
Pyridine	ND	20	ug/L	SW846 8270C
Aramite	ND	20	ug/L	SW846 8270C

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Flucrophenol	59	(44 - 105)
Phenol-d5	58	(45 - 107)
Nitrobenzene-d5	61	(52 - 109)
2-Fluorobiphenyl	54	(40 - 103)
2,4,6-Tribromophenol	60	(48 - 109)
Terphenyl-d14	69	(39 - 115)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

US GEOLOGICAL SURVEY

Method Blank Report

GC/MS Semivolatiles

Lot-Sample #: D3C260000-185 B **Work Order #:** FKQMA1AA **Matrix:** WATER

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT		RETENTION TIME	UNITS
Unknown		14 J	M	2.0287	ug/L
Unknown		20 J	M	2.8547	ug/L
Unknown		8.7 J	M	3.5197	ug/L
Unknown		29 J	M	3.5734	ug/L

NOTE(S):

M: Result was measured against nearest internal standard assuming a response factor of 1.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: CANNON-2 Work Order #...: FKQMA1AC-LCS Matrix.....: WATER
LCS Lot-Sample#: D3C260000-185 FKQMA1AD-LCSD
Prep Date.....: 03/26/03 Analysis Date..: 04/02/03
Prep Batch #...: 3085185 Analysis Time..: 09:55
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Acenaphthene	59	(57 - 97)			SW846 8270C
	72	(57 - 97)	19	(0-30)	SW846 8270C
4-Chloro-3-methylphenol	70	(58 - 100)			SW846 8270C
	78	(58 - 100)	11	(0-40)	SW846 8270C
2-Chlorophenol	64	(57 - 99)			SW846 8270C
	78	(57 - 99)	19	(0-40)	SW846 8270C
1,4-Dichlorobenzene	54	(43 - 92)			SW846 8270C
	63	(43 - 92)	15	(0-40)	SW846 8270C
2,4-Dinitrotoluene	69	(56 - 106)			SW846 8270C
	76	(56 - 106)	10	(0-40)	SW846 8270C
4-Nitrophenol	59	(36 - 114)			SW846 8270C
	69	(36 - 114)	14	(0-40)	SW846 8270C
N-Nitrosodi-n-propyl-amine	58	(51 - 101)			SW846 8270C
	69	(51 - 101)	17	(0-40)	SW846 8270C
Pentachlorophenol	62	(44 - 105)			SW846 8270C
	72	(44 - 105)	14	(0-40)	SW846 8270C
Phenol	62	(55 - 100)			SW846 8270C
	74	(55 - 100)	18	(0-40)	SW846 8270C
Pyrene	64	(55 - 98)			SW846 8270C
	73	(55 - 98)	13	(0-40)	SW846 8270C
1,2,4-Trichloro-benzene	56	(47 - 93)			SW846 8270C
	65	(47 - 93)	16	(0-40)	SW846 8270C

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Fluorophenol	58	(55 - 99)
	69	(55 - 99)
Phenol-d5	60	(56 - 102)
	69	(56 - 102)
Nitrobenzene-d5	62	(57 - 105)
	73	(57 - 105)
2-Fluorobiphenyl	53	(49 - 99)
	63	(49 - 99)
2,4,6-Tribromophenol	62	(59 - 105)
	70	(59 - 105)
Terphenyl-d14	65	(58 - 106)

(Continued on next page)

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: CANNON-2 **Work Order #...:** FKQMA1AC-LCS **Matrix.....:** WATER
LCS Lot-Sample#: D3C260000-185 FKQMA1AD-LCSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
	74	(58 - 106)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE DATA REPORT

GC/MS Semivolatiles

Client Lot #...: CANNON-2 Work Order #...: FKQMA1AC-LCS Matrix.....: WATER
LCS Lot-Sample#: D3C260000-185 FKQMA1AD-LCSD
Prep Date.....: 03/26/03 Analysis Date..: 04/02/03
Prep Batch #...: 3085185 Analysis Time..: 09:55
Dilution Factor: 1

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	RPD	METHOD
Acenaphthene	100	59.4	ug/L	59		SW846 8270C
	100	71.8	ug/L	72	19	SW846 8270C
4-Chloro-3-methylphenol	150	105	ug/L	70		SW846 8270C
	150	118	ug/L	78	11	SW846 8270C
2-Chlorophenol	150	96.2	ug/L	64		SW846 8270C
	150	116	ug/L	78	19	SW846 8270C
1,4-Dichlorobenzene	100	53.8	ug/L	54		SW846 8270C
	100	62.5	ug/L	63	15	SW846 8270C
2,4-Dinitrotoluene	100	69.0	ug/L	69		SW846 8270C
	100	76.4	ug/L	76	10	SW846 8270C
4-Nitrophenol	150	89.1	ug/L	59		SW846 8270C
	150	103	ug/L	69	14	SW846 8270C
N-Nitrosodi-n-propyl-amine	100	58.2	ug/L	58		SW846 8270C
	100	68.8	ug/L	69	17	SW846 8270C
Pentachlorophenol	150	93.5	ug/L	62		SW846 8270C
	150	107	ug/L	72	14	SW846 8270C
Phenol	150	93.1	ug/L	62		SW846 8270C
	150	111	ug/L	74	18	SW846 8270C
Pyrene	100	63.9	ug/L	64		SW846 8270C
	100	72.5	ug/L	73	13	SW846 8270C
1,2,4-Trichloro-benzene	100	55.7	ug/L	56		SW846 8270C
	100	65.0	ug/L	65	16	SW846 8270C

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Flucrophenol	58	(55 - 99)
	69	(55 - 99)
Phenol-d5	60	(56 - 102)
	69	(56 - 102)
Nitrobenzene-d5	62	(57 - 105)
	73	(57 - 105)
2-Fluorobiphenyl	53	(49 - 99)
	63	(49 - 99)
2,4,6-Tribromophenol	62	(59 - 105)
	70	(59 - 105)
Terphenyl-d14	65	(58 - 106)

(Continued on next page)

LABORATORY CONTROL SAMPLE DATA REPORT

GC/MS Semivolatiles

Client Lot #...: CANNON-2 Work Order #...: FKQMA1AC-LCS Matrix.....: WATER
LCS Lot-Sample#: D3C260000-185 FKQMA1AD-LCSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
	74	(58 - 106)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

METHOD BLANK REPORT

GC Semivolatiles

Client Lot #...: CANNON-2 **Work Order #...:** FKNVG1AA **Matrix.....:** WATER
MB Lot-Sample #: D3C250000-227

Prep Date.....: 03/25/03 **Analysis Time..:** 22:26

Analysis Date..: 04/06/03 **Prep Batch #...:** 3084227
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Aldrin	ND	0.050	ug/L	SW846 8081A
alpha-BHC	ND	0.050	ug/L	SW846 8081A
beta-BHC	ND	0.050	ug/L	SW846 8081A
delta-BHC	ND	0.050	ug/L	SW846 8081A
gamma-BHC (Lindane)	ND	0.050	ug/L	SW846 8081A
alpha-Chlordane	ND	0.050	ug/L	SW846 8081A
gamma-Chlordane	ND	0.050	ug/L	SW846 8081A
4,4'-DDD	ND	0.050	ug/L	SW846 8081A
4,4'-DDE	ND	0.050	ug/L	SW846 8081A
4,4'-DDT	ND	0.050	ug/L	SW846 8081A
Diallate	ND	1.0	ug/L	SW846 8081A
Dieldrin	ND	0.050	ug/L	SW846 8081A
Endosulfan I	ND	0.050	ug/L	SW846 8081A
Endosulfan II	ND	0.050	ug/L	SW846 8081A
Endosulfan sulfate	ND	0.050	ug/L	SW846 8081A
Endrin	ND	0.050	ug/L	SW846 8081A
Endrin aldehyde	ND	0.050	ug/L	SW846 8081A
Endrin ketone	ND	0.050	ug/L	SW846 8081A
Heptachlor	ND	0.050	ug/L	SW846 8081A
Heptachlor epoxide	ND	0.050	ug/L	SW846 8081A
Isodrin	ND	0.10	ug/L	SW846 8081A
Kepone	ND	1.0	ug/L	SW846 8081A
Methoxychlor	ND	0.10	ug/L	SW846 8081A
Toxaphene	ND	5.0	ug/L	SW846 8081A

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Decachlorobiphenyl	90	(34 - 134)
Tetrachloro-m-xylene	67	(41 - 125)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: CANNON-2
LCS Lot-Sample#: D3C250000-227
Prep Date.....: 03/25/03
Prep Batch #...: 3084227
Dilution Factor: 1

Work Order #...: FKNVG1AC-LCS
FKNVG1AD-LCSD
Analysis Date..: 04/06/03
Analysis Time..: 18:24

Matrix.....: WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
4,4'-DDT	**98**	**(51 - 139)**			**SW846 8081A**
	94	**(51 - 139)**	**4.6**	**(0-30)**	**SW846 8081A**
Aldrin	**79**	**(48 - 118)**			**SW846 8081A**
	74	**(48 - 118)**	**7.6**	**(0-30)**	**SW846 8081A**
Dieldrin	**98**	**(68 - 122)**			**SW846 8081A**
	94	**(68 - 122)**	**5.0**	**(0-30)**	**SW846 8081A**
Endrin	**120**	**(71 - 122)**			**SW846 8081A**
	112	**(71 - 122)**	**7.5**	**(0-30)**	**SW846 8081A**
gamma-BHC (Lindane)	**96**	**(68 - 120)**			**SW846 8081A**
	91	**(68 - 120)**	**5.5**	**(0-30)**	**SW846 8081A**
Heptachlor	**90**	**(48 - 131)**			**SW846 8081A**
	84	**(48 - 131)**	**6.4**	**(0-30)**	**SW846 8081A**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Decachlorobiphenyl	97	(71 - 127)
	92	(71 - 127)
Tetrachloro-m-xylene	73	(61 - 115)
	66	(61 - 115)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE DATA REPORT

GC Semivolatiles

Client Lot #...: CANNON-2 Work Order #...: FKNVG1AC-LCS Matrix.....: WATER
LCS Lot-Sample#: D3C250000-227 FKNVG1AD-LCSD
Prep Date.....: 03/25/03 Analysis Date..: 04/06/03
Prep Batch #...: 3084227 Analysis Time..: 18:24
Dilution Factor: 1

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	RPD	METHOD
4,4'-DDT	**0.500**	**0.492**	**ug/L**	**98**		**SW846 8081A**
	0.500	**0.470**	**ug/L**	**94**	**4.6**	**SW846 8081A**
Aldrin	**0.500**	**0.397**	**ug/L**	**79**		**SW846 8081A**
	0.500	**0.368**	**ug/L**	**74**	**7.6**	**SW846 8081A**
Dieldrin	**0.500**	**0.492**	**ug/L**	**98**		**SW846 8081A**
	0.500	**0.468**	**ug/L**	**94**	**5.0**	**SW846 8081A**
Endrin	**0.500**	**0.601**	**ug/L**	**120**		**SW846 8081A**
	0.500	**0.558**	**ug/L**	**112**	**7.5**	**SW846 8081A**
gamma-BHC (Lindane)	**0.500**	**0.478**	**ug/L**	**96**		**SW846 8081A**
	0.500	**0.453**	**ug/L**	**91**	**5.5**	**SW846 8081A**
Heptachlor	**0.500**	**0.449**	**ug/L**	**90**		**SW846 8081A**
	0.500	**0.421**	**ug/L**	**84**	**6.4**	**SW846 8081A**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Decachlorobiphenyl	97	(71 - 127)
	92	(71 - 127)
Tetrachloro-m-xylene	73	(61 - 115)
	66	(61 - 115)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

METHOD BLANK REPORT

GC Semivolatiles

Client Lot #...: CANNON-2
MB Lot-Sample #: D3C260000-134

Work Order #...: FKQJ21AA

Matrix.....: WATER

Prep Date.....: 03/26/03

Analysis Time..: 01:02

Analysis Date..: 04/04/03
Prep Batch #...: 3085134
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Aldrin	ND	0.050	ug/L	SW846 8081A
alpha-BHC	ND	0.050	ug/L	SW846 8081A
beta-BHC	ND	0.050	ug/L	SW846 8081A
delta-BHC	ND	0.050	ug/L	SW846 8081A
gamma-BHC (Lindane)	ND	0.050	ug/L	SW846 8081A
alpha-Chlordane	ND	0.050	ug/L	SW846 8081A
gamma Chlordane	ND	0.050	ug/L	SW846 8081A
4,4'-DDD	ND	0.050	ug/L	SW846 8081A
4,4'-DDE	ND	0.050	ug/L	SW846 8081A
4,4'-DDT	ND	0.050	ug/L	SW846 8081A
Dieldrin	ND	0.050	ug/L	SW846 8081A
Endosulfan I	ND	0.050	ug/L	SW846 8081A
Endosulfan II	ND	0.050	ug/L	SW846 8081A
Endosulfan sulfate	ND	0.050	ug/L	SW846 8081A
Endrin	ND	0.050	ug/L	SW846 8081A
Endrin aldehyde	ND	0.050	ug/L	SW846 8081A
Endrin ketone	ND	0.050	ug/L	SW846 8081A
Heptachlor	ND	0.050	ug/L	SW846 8081A
Heptachlor epoxide	ND	0.050	ug/L	SW846 8081A
Methoxychlor	ND	0.10	ug/L	SW846 8081A
Toxaphene	ND	5.0	ug/L	SW846 8081A
Diallate	ND	1.0	ug/L	SW846 8081A
Isodrin	ND	0.10	ug/L	SW846 8081A
Kepone	ND	1.0	ug/L	SW846 8081A

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Decachlorobiphenyl	104	(34 - 134)
Tetrachloro-m-xylene	82	(41 - 125)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: CANNON-2 Work Order #...: FKQJ21AC-LCS Matrix.....: WATER
LCS Lot-Sample#: D3C260000-134 FKQJ21AD-LCSD
Prep Date.....: 03/26/03 Analysis Date..: 04/03/03
Prep Batch #...: 3085134 Analysis Time..: 20:29
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
4,4'-DDT	**102**	**(51 - 139)**			**SW846 8081A**
	102	**(51 - 139)**	**0.11**	**(0-30)**	**SW846 8081A**
Aldrin	**95**	**(48 - 118)**			**SW846 8081A**
	97	**(48 - 118)**	**1.8**	**(0-30)**	**SW846 8081A**
Dieldrin	**102**	**(68 - 122)**			**SW846 8081A**
	101	**(68 - 122)**	**1.4**	**(0-30)**	**SW846 8081A**
Endrin	**106**	**(71 - 122)**			**SW846 8081A**
	110	**(71 - 122)**	**3.4**	**(0-30)**	**SW846 8081A**
gamma-BHC (Lindane)	**103**	**(68 - 120)**			**SW846 8081A**
	106	**(68 - 120)**	**2.5**	**(0-30)**	**SW846 8081A**
Heptachlor	**102**	**(48 - 131)**			**SW846 8081A**
	104	**(48 - 131)**	**2.2**	**(0-30)**	**SW846 8081A**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Decachlorobiphenyl	103	(71 - 127)
	102	(71 - 127)
Tetrachloro-m-xylene	81	(61 - 115)
	80	(61 - 115)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE DATA REPORT

GC Semivolatiles

Client Lot #...: CANNON-2 **Work Order #...:** FKQJ21AC-LCS **Matrix.....:** WATER
LCS Lot-Sample#: D3C260000-134 FKQJ21AD-LCSD
Prep Date.....: 03/26/03 **Analysis Date..:** 04/03/03
Prep Batch #...: 3085134 **Analysis Time..:** 20:29
Dilution Factor: 1

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	RPD	METHOD
4,4'-DDT	**0.500**	**0.509**	**ug/L**	**102**		**SW846 8081A**
	0.500	**0.510**	**ug/L**	**102**	**0.11**	**SW846 8081A**
Aldrin	**0.500**	**0.476**	**ug/L**	**95**		**SW846 8081A**
	0.500	**0.485**	**ug/L**	**97**	**1.8**	**SW846 8081A**
Dieldrin	**0.500**	**0.510**	**ug/L**	**102**		**SW846 8081A**
	0.500	**0.503**	**ug/L**	**101**	**1.4**	**SW846 8081A**
Endrin	**0.500**	**0.530**	**ug/L**	**106**		**SW846 8081A**
	0.500	**0.548**	**ug/L**	**110**	**3.4**	**SW846 8081A**
gamma-BHC (Lindane)	**0.500**	**0.517**	**ug/L**	**103**		**SW846 8081A**
	0.500	**0.531**	**ug/L**	**106**	**2.5**	**SW846 8081A**
Heptachlor	**0.500**	**0.510**	**ug/L**	**102**		**SW846 8081A**
	0.500	**0.521**	**ug/L**	**104**	**2.2**	**SW846 8081A**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Decachlorobiphenyl	103	(71 - 127)
	102	(71 - 127)
Tetrachloro-m-xylene	81	(61 - 115)
	80	(61 - 115)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

METHOD BLANK REPORT

GC Semivolatiles

Client Lot #...: CANNON-2 **Work Order #...:** FLMJ21AA **Matrix.....:** WATER
MB Lot-Sample #: D3D100000-186

Prep Date.....: 04/10/03 **Analysis Time..:** 08:58

Analysis Date..: 04/15/03 **Prep Batch #...:** 3100186
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Diallate	ND	1.0	ug/L	SW846 8081A
Aldrin	ND	0.050	ug/L	SW846 8081A
alpha-BHC	ND	0.050	ug/L	SW846 8081A
beta-BHC	ND	0.050	ug/L	SW846 8081A
delta-BHC	ND	0.050	ug/L	SW846 8081A
gamma-BHC (Lindane)	ND	0.050	ug/L	SW846 8081A
4,4'-DDD	ND	0.050	ug/L	SW846 8081A
4,4'-DDE	ND	0.050	ug/L	SW846 8081A
4,4'-DDT	ND	0.050	ug/L	SW846 8081A
Dieldrin	ND	0.050	ug/L	SW846 8081A
Endosulfan I	ND	0.050	ug/L	SW846 8081A
Endosulfan II	ND	0.050	ug/L	SW846 8081A
Endosulfan sulfate	ND	0.050	ug/L	SW846 8081A
Endrin	ND	0.050	ug/L	SW846 8081A
Endrin aldehyde	ND	0.050	ug/L	SW846 8081A
Heptachlor	ND	0.050	ug/L	SW846 8081A
Heptachlor epoxide	ND	0.050	ug/L	SW846 8081A
Methoxychlor	ND	0.10	ug/L	SW846 8081A
Toxaphene	ND	5.0	ug/L	SW846 8081A
Endrin ketone	ND	0.050	ug/L	SW846 8081A
Isodrin	ND	0.10	ug/L	SW846 8081A
alpha-Chlordane	ND	0.050	ug/L	SW846 8081A
gamma-Chlordane	ND	0.050	ug/L	SW846 8081A
Kepone	ND	1.0	ug/L	SW846 8081A

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Decachlorobiphenyl	101	(34 - 134)
Tetrachloro-m-xylene	65	(41 - 125)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: CANNON-2 Work Order #...: FLMJ21AC-LCS Matrix.....: WATER
LCS Lot-Sample#: D3D100000-186 FLMJ21AD-LCSD
Prep Date.....: 04/10/03 Analysis Date..: 04/14/03
Prep Batch #...: 3100186 Analysis Time..: 23:02
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
4,4'-DDT	109	(51 - 139)			SW846 8081A
	107	(51 - 139)	1.6	(0-30)	SW846 8081A
Aldrin	100	(48 - 118)			SW846 8081A
	100	(48 - 118)	0.23	(0-30)	SW846 8081A
Dieldrin	110	(68 - 122)			SW846 8081A
	111	(68 - 122)	0.52	(0-30)	SW846 8081A
Endrin	119	(71 - 122)			SW846 8081A
	116	(71 - 122)	3.2	(0-30)	SW846 8081A
gamma-BHC (Lindane)	104	(68 - 120)			SW846 8081A
	103	(68 - 120)	0.28	(0-30)	SW846 8081A
Heptachlor	106	(48 - 131)			SW846 8081A
	106	(48 - 131)	0.30	(0-30)	SW846 8081A

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Decachlorobiphenyl	107	(71 - 127)
	101	(71 - 127)
Tetrachloro-m-xylene	89	(61 - 115)
	89	(61 - 115)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE DATA REPORT

GC Semivolatiles

Client Lot #...: CANNON-2 Work Order #...: FLMJ21AC-LCS Matrix.....: WATER
LCS Lot-Sample#: D3D100000-186 FLMJ21AD-LCSD
Prep Date.....: 04/10/03 Analysis Date..: 04/14/03
Prep Batch #...: 3100186 Analysis Time..: 23:02
Dilution Factor: 1

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	RPD	METHOD
4,4'-DDT	0.500	0.543	ug/L	109		SW846 8081A
	0.500	0.534	ug/L	107	1.6	SW846 8081A
Aldrin	0.500	0.498	ug/L	100		SW846 8081A
	0.500	0.499	ug/L	100	0.23	SW846 8081A
Dieldrin	0.500	0.551	ug/L	110		SW846 8081A
	0.500	0.554	ug/L	111	0.52	SW846 8081A
Endrin	0.500	0.597	ug/L	119		SW846 8081A
	0.500	0.578	ug/L	116	3.2	SW846 8081A
gamma-BHC (Lindane)	0.500	0.518	ug/L	104		SW846 8081A
	0.500	0.517	ug/L	103	0.28	SW846 8081A
Heptachlor	0.500	0.531	ug/L	106		SW846 8081A
	0.500	0.530	ug/L	106	0.30	SW846 8081A

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Decachlorobiphenyl	107	(71 - 127)
	101	(71 - 127)
Tetrachloro-m-xylene	89	(61 - 115)
	89	(61 - 115)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

METHOD BLANK REPORT

GC Semivolatiles

Client Lot #...: CANNON-2
MB Lot-Sample #: D3C250000-233

Work Order #...: FKNVV1AA
Prep Date.....: 03/25/03
Prep Batch #...: 3084233

Matrix.....: WATER
Analysis Time..: 15:44

Analysis Date..: 04/02/03
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Aroclor 1016	ND	1.0	ug/L	SW846 8082
Aroclor 1221	ND	1.0	ug/L	SW846 8082
Aroclor 1232	ND	1.0	ug/L	SW846 8082
Aroclor 1242	ND	1.0	ug/L	SW846 8082
Aroclor 1248	ND	1.0	ug/L	SW846 8082
Aroclor 1254	ND	1.0	ug/L	SW846 8082
Aroclor 1260	ND	1.0	ug/L	SW846 8082

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	75	(52 - 160)
Decachlorobiphenyl	106	(37 - 144)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: CANNON-2 **Work Order #...:** FKNVV1AC-LCS **Matrix.....:** WATER
LCS Lot-Sample#: D3C250000-233 FKNVV1AD-LCSD
Prep Date.....: 03/25/03 **Analysis Date..:** 04/02/03
Prep Batch #...: 3084233 **Analysis Time..:** 16:06
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Aroclor 1016	91	(56 - 124)			SW846 8082
	98	(56 - 124)	7.4	(0-30)	SW846 8082
Aroclor 1260	102	(64 - 120)			SW846 8082
	106	(64 - 120)	3.6	(0-30)	SW846 8082

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	73	(52 - 127)
	77	(52 - 127)
Decachlorobiphenyl	104	(61 - 128)
	104	(61 - 128)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE DATA REPORT

GC Semivolatiles

Client Lot #...: CANNON-2 Work Order #...: FKNVV1AC-LCS Matrix.....: WATER
LCS Lot-Sample#: D3C250000-233 FKNVV1AD-LCSD
Prep Date.....: 03/25/03 Analysis Date..: 04/02/03
Prep Batch #...: 3084233 Analysis Time..: 16:06
Dilution Factor: 1

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	RPD	METHOD
Aroclor 1016	**2.00**	**1.82**	**ug/L**	**91**		**SW846 8082**
	2.00	**1.96**	**ug/L**	**98**	**7.4**	**SW846 8082**
Aroclor 1260	**2.00**	**2.04**	**ug/L**	**102**		**SW846 8082**
	2.00	**2.12**	**ug/L**	**106**	**3.6**	**SW846 8082**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	73	(52 - 127)
	77	(52 - 127)
Decachlorobiphenyl	104	(61 - 128)
	104	(61 - 128)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

METHOD BLANK REPORT

GC Semivolatiles

Client Lot #...: CANNON-2 Work Order #...: FKQJ81AA Matrix.....: WATER
MB Lot-Sample #: D3C260000-144
Prep Date.....: 03/26/03 Analysis Time..: 17:15
Analysis Date..: 03/31/03 Prep Batch #...: 3085144
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Aroclor 1016	ND	1.0	ug/L	SW846 8082
Aroclor 1221	ND	1.0	ug/L	SW846 8082
Aroclor 1232	ND	1.0	ug/L	SW846 8082
Aroclor 1242	ND	1.0	ug/L	SW846 8082
Aroclor 1248	ND	1.0	ug/L	SW846 8082
Aroclor 1254	ND	1.0	ug/L	SW846 8082
Aroclor 1260	ND	1.0	ug/L	SW846 8082

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	88	(52 - 160)
Decachlorobiphenyl	90	(37 - 144)

NOTE(S):

lculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: CANNON-2 **Work Order #...:** FKQJ81AC-LCS **Matrix.....:** WATER
LCS Lot-Sample#: D3C260000-144 FKQJ81AD-LCSD
Prep Date.....: 03/26/03 **Analysis Date..:** 03/31/03
Prep Batch #...: 3085144 **Analysis Time..:** 17:44
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Aroclor 1016	**103**	**(56 - 124)**			**SW846 8082**
	104	**(56 - 124)**	**1.7**	**(0-30)**	**SW846 8082**
Aroclor 1260	**99**	**(64 - 120)**			**SW846 8082**
	100	**(64 - 120)**	**1.4**	**(0-30)**	**SW846 8082**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	95	(52 - 127)
	90	(52 - 127)
Decachlorobiphenyl	100	(61 - 128)
	102	(61 - 128)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE DATA REPORT

GC Semivolatiles

Client Lot #...: CANNON-2 Work Order #...: FKQJ81AC-LCS Matrix.....: WATER
LCS Lot-Sample#: D3C260000-144 FKQJ81AD-LCSD
Prep Date.....: 03/26/03 Analysis Date..: 03/31/03
Prep Batch #...: 3085144 Analysis Time..: 17:44
Dilution Factor: 1

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	RPD	METHOD
Aroclor 1016	2.00	2.05	ug/L	103		SW846 8082
	2.00	2.09	ug/L	104	1.7	SW846 8082
Aroclor 1260	2.00	1.98	ug/L	99		SW846 8082
	2.00	2.01	ug/L	100	1.4	SW846 8082

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	95	(52 - 127)
	90	(52 - 127)
Decachlorobiphenyl	100	(61 - 128)
	102	(61 - 128)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

METHOD BLANK REPORT

GC Semivolatiles

Client Lot #...: CANNON-2
MB Lot-Sample #: D3C250000-466

Work Order #...: FKPW61AA

Matrix.....: WATER

Prep Date.....: 03/25/03

Analysis Time..: 19:35

Analysis Date..: 04/10/03
Prep Batch #...: 3084466
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
2,4-D	ND	4.0	ug/L	SW846 8151A
Dinoseb	ND	0.60	ug/L	SW846 8151A
2,4,5-TP (Silvex)	ND	1.0	ug/L	SW846 8151A
2,4,5-T	ND	1.0	ug/L	SW846 8151A

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
DCAA	70	(32 - 122)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: CANNON-2
LCS Lot-Sample#: D3C250000-466
Prep Date.....: 03/25/03
Prep Batch #...: 3084466
Dilution Factor: 1

Work Order #...: FKPW61AC-LCS
FKPW61AD-LCSD
Analysis Date..: 04/10/03
Analysis Time..: 20:06

Matrix.....: WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
2,4-D	75	(21 - 118)			SW846 8151A
	81	(21 - 118)	7.8	(0-30)	SW846 8151A
2,4,5-TP (Silvex)	87	(28 - 145)			SW846 8151A
	90	(28 - 145)	3.9	(0-30)	SW846 8151A
2,4,5-T	78	(20 - 155)			SW846 8151A
	80	(20 - 155)	2.3	(0-30)	SW846 8151A

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
DCAA	80	(32 - 122)
	81	(32 - 122)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE DATA REPORT

GC Semivolatiles

Client Lot #...: CANNON-2 **Work Order #...:** FKPW61AC-LCS **Matrix.....:** WATER
LCS Lot-Sample#: D3C250000-466 FKPW61AD-LCSD
Prep Date.....: 03/25/03 **Analysis Date..:** 04/10/03
Prep Batch #...: 3084466 **Analysis Time..:** 20:06
Dilution Factor: 1

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	RPD	METHOD
2,4-D	8.00	5.96	ug/L	75		SW846 8151A
	8.00	6.44	ug/L	81	7.8	SW846 8151A
2,4,5-TP (Silvex)	2.00	1.74	ug/L	87		SW846 8151A
	2.00	1.81	ug/L	90	3.9	SW846 8151A
2,4,5-T	2.00	1.57	ug/L	78		SW846 8151A
	2.00	**1.60**	**ug/L**	**80**	**2.3**	**SW846 8151A**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
DCAA	80	(32 - 122)
	81	(32 - 122)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold text denotes control parameters

METHOD BLANK REPORT

GC Semivolatiles

Client Lot #...: CANNON-2
MB Lot-Sample #: D3C270000-189

Work Order #...: FKTXG1AA

Matrix.....: WATER

Prep Date.....: 03/27/03

Analysis Time..: 04:25

Analysis Date..: 04/04/03
Prep Batch #...: 3086189
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
2,4-D	ND	4.0	ug/L	SW846 8151A
Dinoseb	ND	0.60	ug/L	SW846 8151A
2,4,5-TP (Silvex)	ND	1.0	ug/L	SW846 8151A
2,4,5-T	ND	1.0	ug/L	SW846 8151A

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
DCAA	47	(32 - 122)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: CANNON-2 Work Order #...: FKTXG1AC-LCS Matrix.....: WATER
LCS Lot-Sample#: D3C270000-189 FKTXG1AD-LCSD
Prep Date.....: 03/27/03 Analysis Date..: 04/04/03
Prep Batch #...: 3086189 Analysis Time..: 04:54
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
2,4-D	53	(21 - 118)			SW846 8151A
	49	(21 - 118)	8.2	(0-30)	SW846 8151A
2,4,5-TP (Silvex)	43	(28 - 145)			SW846 8151A
	44	(28 - 145)	1.5	(0-30)	SW846 8151A
2,4,5-T	56	(20 - 155)			SW846 8151A
	52	(20 - 155)	7.8	(0-30)	SW846 8151A

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
DCAA	54	(32 - 122)
	51	(32 - 122)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE DATA REPORT

GC Semivolatiles

Client Lot #...: CANNON-2 **Work Order #...:** FKTXG1AC-LCS **Matrix.....:** WATER
LCS Lot-Sample#: D3C270000-189 FKTXG1AD-LCSD
Prep Date.....: 03/27/03 **Analysis Date..:** 04/04/03
Prep Batch #...: 3086189 **Analysis Time..:** 04:54
Dilution Factor: 1

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	RPD	METHOD
2,4-D	8.00	4.26	ug/L	53		SW846 8151A
	8.00	3.92	ug/L	49	8.2	SW846 8151A
2,4,5-TP (Silvex)	2.00	0.863	ug/L	43		SW846 8151A
	2.00	0.876	ug/L	44	1.5	SW846 8151A
2,4,5-T	2.00	1.13	ug/L	56		SW846 8151A
	2.00	1.04	ug/L	52	7.8	SW846 8151A

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
DCAA	54	(32 - 122)
	51	(32 - 122)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

METHOD BLANK REPORT

Trace Level Organic Compounds

Client Lot #...: CANNON-2
MB Lot-Sample #: G3D010000-432

Work Order #...: FK49T1AA

Matrix.....: WATER

Prep Date.....: 04/01/03

Analysis Time..: 19:32

Analysis Date..: 04/03/03
Prep Batch #...: 3091432
Dilution Factor: 1

PARAMETER	RESULT	DETECTION LIMIT	UNITS	METHOD
2,3,7,8-TCDD	ND	0.052	ng/L	SW846 8280A
Total TCDD	ND	0.052	ng/L	SW846 8280A
Total PeCDD	ND	1.6	ng/L	SW846 8280A
Total HxCDD	ND	0.12	ng/L	SW846 8280A
Total TCDF	ND	0.027	ng/L	SW846 8280A
Total PeCDF	ND	0.64	ng/L	SW846 8280A
Total HxCDF	ND	0.11	ng/L	SW846 8280A

INTERNAL STANDARDS	PERCENT RECOVERY	RECOVERY LIMITS
13C-2,3,7,8-TCDD	85	(25 - 150)
13C-2,3,7,8-TCDF	81	(25 - 150)
13C-1,2,3,6,7,8-HxCDD	82	(25 - 150)
13C-1,2,3,4,6,7,8-HpCDF	90	(25 - 150)

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
37Cl4-2,3,7,8-TCDD	91	(25 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

Trace Level Organic Compounds

Client Lot #...: CANNON-2 Work Order #...: FK49T1AC Matrix.....: WATER
LCS Lot-Sample#: G3D010000-432
Prep Date.....: 04/01/03 Analysis Date..: 04/03/03
Prep Batch #...: 3091432 Analysis Time..: 20:18
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
2,3,7,8-TCDD	**86**	**(64 - 143)**	**SW846 8280A**
1,2,3,7,8-PeCDD	**86**	**(70 - 143)**	**SW846 8280A**
1,2,3,6,7,8-HxCDD	**81**	**(77 - 127)**	**SW846 8280A**
2,3,7,8-TCDF	84	(67 - 138)	SW846 8280A
1,2,3,7,8-PeCDF	90	(75 - 145)	SW846 8280A
1,2,3,6,7,8-HxCDF	80	(66 - 136)	SW846 8280A

INTERNAL STANDARD	PERCENT RECOVERY	RECOVERY LIMITS
13C-2,3,7,8-TCDD	95	(25 - 150)
13C-2,3,7,8-TCDF	90	(25 - 150)
13C-1,2,3,6,7,8-HxCDD	99	(25 - 150)
13C-1,2,3,4,6,7,8-HpCDF	100	(25 - 150)

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
37Cl4-2,3,7,8-TCDD	95	(25 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE DATA REPORT

Trace Level Organic Compounds

Client Lot #...: CANNON-2 Work Order #...: FK49T1AC Matrix.....: WATER
LCS Lot-Sample#: G3D010000-432
Prep Date.....: 04/01/03 Analysis Date..: 04/03/03
Prep Batch #...: 3091432 Analysis Time..: 20:18
Dilution Factor: 1

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	METHOD
2,3,7,8-TCDD	25.0	21.4	ng/L	86	SW846 8280A
1,2,3,7,8-PeCDD	62.5	53.9	ng/L	86	SW846 8280A
1,2,3,6,7,8-HxCDD	62.5	50.4	ng/L	81	SW846 8280A
2,3,7,8-TCDF	25.0	21.1	ng/L	84	SW846 8280A
1,2,3,7,8-PeCDF	62.5	56.3	ng/L	90	SW846 8280A
1,2,3,6,7,8-HxCDF	62.5	50.2	ng/L	80	SW846 8280A

INTERNAL STANDARD	PERCENT RECOVERY	RECOVERY LIMITS
13C-2,3,7,8-TCDD	95	(25 - 150)
13C-2,3,7,8-TCDF	90	(25 - 150)
13C-1,2,3,6,7,8-HxCDD	99	(25 - 150)
13C-1,2,3,4,6,7,8-HpCDF	100	(25 - 150)

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
37Cl4-2,3,7,8-TCDD	95	(25 - 150)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

METHOD BLANK REPORT

HPLC

Client Lot #...: CANNON-2
MB Lot-Sample #: D3C250000-184

Work Order #...: FKNPF1AA

Matrix.....: WATER

Prep Date.....: 03/25/03

Analysis Time..: 12:15

Analysis Date..: 03/27/03

Prep Batch #...: 3084184

Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Acenaphthene	ND	1.0	ug/L	SW846 8310
Acenaphthylene	ND	1.0	ug/L	SW846 8310
Anthracene	ND	0.20	ug/L	SW846 8310
Benzo(a)anthracene	ND	0.20	ug/L	SW846 8310
Benzo(a)pyrene	ND	0.10	ug/L	SW846 8310
Benzo(b)fluoranthene	ND	0.10	ug/L	SW846 8310
Benzo(ghi)perylene	ND	0.20	ug/L	SW846 8310
Benzo(k)fluoranthene	ND	0.10	ug/L	SW846 8310
Chrysene	ND	0.20	ug/L	SW846 8310
Dibenzo(a,h)anthracene	ND	0.20	ug/L	SW846 8310
Fluoranthene	ND	0.20	ug/L	SW846 8310
Fluorene	ND	0.20	ug/L	SW846 8310
Indeno(1,2,3-cd)pyrene	ND	0.20	ug/L	SW846 8310
1-Methylnaphthalene	ND	1.0	ug/L	SW846 8310
2-Methylnaphthalene	ND	1.0	ug/L	SW846 8310
Naphthalene	ND	1.0	ug/L	SW846 8310
Phenanthrene	ND	0.20	ug/L	SW846 8310
Pyrene	ND	0.20	ug/L	SW846 8310

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Terphenyl-d14	93	(64 - 108)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

HPLC

Client Lot #...: CANNON-2
LCS Lot-Sample#: D3C250000-184
Prep Date.....: 03/25/03
Prep Batch #...: 3084184
Dilution Factor: 1

Work Order #...: FKNPF1AC-LCS
FKNPF1AD-LCSD
Analysis Date..: 03/27/03
Analysis Time..: 12:46

Matrix.....: WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Benzo(a)pyrene	94	(57 - 112)			SW846 8310
	94	(57 - 112)	0.31	(0-20)	SW846 8310
Fluorene	99	(54 - 115)			SW846 8310
	96	(54 - 115)	3.1	(0-40)	SW846 8310
Indeno(1,2,3-cd)pyrene	91	(52 - 106)			SW846 8310
	91	(52 - 106)	0.22	(0-30)	SW846 8310
Naphthalene	98	(49 - 110)			SW846 8310
	94	(49 - 110)	4.2	(0-40)	SW846 8310
Pyrene	103	(62 - 117)			SW846 8310
	101	(62 - 117)	2.0	(0-40)	SW846 8310

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Terphenyl-d14	95	(64 - 108)
	94	(64 - 108)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE DATA REPORT

HPLC

Client Lot #...: CANNON-2
LCS Lot-Sample#: D3C250000-184
Prep Date.....: 03/25/03
Prep Batch #...: 3084184
Dilution Factor: 1

Work Order #...: FKNPF1AC-LCS
FKNPF1AD-LCSD
Analysis Date..: 03/27/03
Analysis Time..: 12:46

Matrix.....: WATER

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	RPD	METHOD
Benzo(a)pyrene	20.0	18.8	ug/L	94		SW846 8310
	20.0	18.8	ug/L	94	0.31	SW846 8310
Fluorene	20.0	19.9	ug/L	99		SW846 8310
	20.0	19.3	ug/L	96	3.1	SW846 8310
Indeno(1,2,3-cd)pyrene	20.0	18.2	ug/L	91		SW846 8310
	20.0	18.2	ug/L	91	0.22	SW846 8310
Naphthalene	20.0	19.5	ug/L	98		SW846 8310
	20.0	18.7	ug/L	94	4.2	SW846 8310
Pyrene	20.0	20.7	ug/L	103		SW846 8310
	20.0	20.2	ug/L	101	2.0	SW846 8310

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Terphenyl-d14	95	(64 - 108)
	94	(64 - 108)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

METHOD BLANK REPORT

HPLC

Client Lot #...: CANNON-2
MB Lot-Sample #: D3C270000-139

Work Order #...: FKTRD1AA

Matrix.....: WATER

Prep Date.....: 03/27/03

Analysis Time..: 20:12

Analysis Date..: 03/31/03
Prep Batch #...: 3086139
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Acenaphthene	ND	1.0	ug/L	SW846 8310
Acenaphthylene	ND	1.0	ug/L	SW846 8310
Anthracene	ND	0.20	ug/L	SW846 8310
Benzo(a)anthracene	ND	0.20	ug/L	SW846 8310
Benzo(a)pyrene	ND	0.10	ug/L	SW846 8310
Benzo(b)fluoranthene	ND	0.10	ug/L	SW846 8310
Benzo(ghi)perylene	ND	0.20	ug/L	SW846 8310
Benzo(k)fluoranthene	ND	0.10	ug/L	SW846 8310
Chrysene	ND	0.20	ug/L	SW846 8310
Dibenzo(a,h)anthracene	ND	0.20	ug/L	SW846 8310
Fluoranthene	ND	0.20	ug/L	SW846 8310
Fluorene	ND	0.20	ug/L	SW846 8310
Indeno(1,2,3-cd)pyrene	ND	0.20	ug/L	SW846 8310
1-Methylnaphthalene	ND	1.0	ug/L	SW846 8310
2-Methylnaphthalene	ND	1.0	ug/L	SW846 8310
Naphthalene	ND	1.0	ug/L	SW846 8310
Phenanthrene	ND	0.20	ug/L	SW846 8310
Pyrene	ND	0.20	ug/L	SW846 8310

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Terphenyl-d14	86	(64 - 108)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

HPLC

Client Lot #...: CANNON-2 Work Order #...: FKTRD1AC-LCS Matrix.....: WATER
LCS Lot-Sample#: D3C270000-139 FKTRD1AD-LCSD
Prep Date.....: 03/27/03 Analysis Date..: 03/31/03
Prep Batch #...: 3086139 Analysis Time..: 20:42
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Benzo(a)pyrene	**89**	**(57 - 112)**			**SW846 8310**
	84	**(57 - 112)**	**5.3**	**(0-20)**	**SW846 8310**
Fluorene	**83**	**(54 - 115)**			**SW846 8310**
	82	**(54 - 115)**	**1.1**	**(0-40)**	**SW846 8310**
Indeno(1,2,3-cd)pyrene	**90**	**(52 - 106)**			**SW846 8310**
	84	**(52 - 106)**	**6.6**	**(0-30)**	**SW846 8310**
Naphthalene	**68**	**(49 - 110)**			**SW846 8310**
	68	**(49 - 110)**	**1.1**	**(0-40)**	**SW846 8310**
Pyrene	**97**	**(62 - 117)**			**SW846 8310**
	96	**(62 - 117)**	**1.7**	**(0-40)**	**SW846 8310**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Terphenyl-d14	90	(64 - 108)
	88	(64 - 108)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE DATA REPORT

HPLC

Client Lot #...: CANNON-2
LCS Lot-Sample#: D3C270000-139
Prep Date.....: 03/27/03
Prep Batch #...: 3086139
Dilution Factor: 1

Work Order #...: FKTRD1AC-LCS
FKTRD1AD-LCSD
Analysis Date..: 03/31/03
Analysis Time..: 20:42

Matrix.....: WATER

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	RPD	METHOD
Benzo(a)pyrene	20.0	17.7	ug/L	89		SW846 8310
	20.0	16.8	ug/L	84	5.3	SW846 8310
Fluorene	20.0	16.7	ug/L	83		SW846 8310
	20.0	16.5	ug/L	82	1.1	SW846 8310
Indeno(1,2,3-cd)pyrene	20.0	18.0	ug/L	90		SW846 8310
	20.0	16.8	ug/L	84	6.6	SW846 8310
Naphthalene	20.0	13.5	ug/L	68		SW846 8310
	20.0	13.6	ug/L	68	1.1	SW846 8310
Pyrene	20.0	19.4	ug/L	97		SW846 8310
	20.0	19.1	ug/L	96	1.7	SW846 8310

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Terphenyl-d14	90	(64 - 108)
	88	(64 - 108)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

HPLC

Client Lot #...: CANNON-2 Work Order #...: FKM811AV-MS Matrix.....: WATER
MS Lot-Sample #: D3C240248-007 FKM811AW-MSD
Date Sampled...: 03/23/03 16:30 Date Received..: 03/24/03
Prep Date.....: 03/27/03 Analysis Date..: 04/01/03
Prep Batch #...: 3086139 Analysis Time..: 02:49
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Benzo(a)pyrene	**91**	**(57 - 112)**			**SW846 8310**
	97	**(57 - 112)**	**6.6**	**(0-20)**	**SW846 8310**
Fluorene	**88**	**(54 - 115)**			**SW846 8310**
	76	**(54 - 115)**	**27**	**(0-40)**	**SW846 8310**
Indeno(1,2,3-cd)pyrene	**86**	**(52 - 106)**			**SW846 8310**
	94	**(52 - 106)**	**4.9**	**(0-30)**	**SW846 8310**
Naphthalene	**77**	**(49 - 110)**			**SW846 8310**
	61	**(49 - 110)**	**36**	**(0-40)**	**SW846 8310**
Pyrene	**98**	**(62 - 117)**			**SW846 8310**
	97	**(62 - 117)**	**15**	**(0-40)**	**SW846 8310**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
rphenyl-d14	89	(64 - 108)
	89 00	(64 - 108)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE DATA REPORT

HPLC

Client Lot #...: CANNON-2
MS Lot-Sample #: D3C240248-007
Date Sampled...: 03/23/03 16:30
Prep Date.....: 03/27/03
Prep Batch #...: 3086139
Dilution Factor: 1

Work Order #...: FKM811AV-MS
FKM811AW-MSD
Date Received..: 03/24/03
Analysis Date..: 04/01/03
Analysis Time..: 02:49

Matrix.....: WATER

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD
Benzo(a)pyrene	ND	24.2	22.0	ug/L	91		SW846 8310
	ND	21.2	20.6	ug/L	97	6.6	SW846 8310
Fluorene	ND	24.2	21.2	ug/L	88		SW846 8310
	ND	21.2	16.1	ug/L	76	27	SW846 8310
Indeno(1,2,3-cd)pyrene	ND	24.2	20.8	ug/L	86		SW846 8310
	ND	21.2	19.9	ug/L	94	4.9	SW846 8310
Naphthalene	ND	24.2	18.5	ug/L	77		SW846 8310
	ND	21.2	12.8	ug/L	61	36	SW846 8310
Pyrene	ND	24.2	23.7	ug/L	98		SW846 8310
	ND	21.2	20.4	ug/L	97	15	SW846 8310

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Terphenyl-d14	89	(64 - 108)
	89 00	(64 - 108)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: CANNON-2 **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MB Lot-Sample #: D3C250000-435 **Prep Batch #...:** 3084435						
Aluminum	**21 B**	**100**	**ug/L**	**SW846 6010B**	**03/27-03/28/03**	**FKPP11AV**
		Dilution Factor: 1				
		Analysis Time..: 19:17				
Barium	ND	10	ug/L	SW846 6010B	03/27-03/28/03	FKPP11DT
		Dilution Factor: 1				
		Analysis Time..: 15:11				
Beryllium	ND	5.0	ug/L	SW846 6010B	03/27-03/28/03	FKPP11DL
		Dilution Factor: 1				
		Analysis Time..: 15:11				
Calcium	ND	200	ug/L	SW846 6010B	03/27-03/28/03	FKPP11AW
		Dilution Factor: 1				
		Analysis Time..: 19:17				
Cobalt	ND	10	ug/L	SW846 6010B	03/27-03/28/03	FKPP11AH
		Dilution Factor: 1				
		Analysis Time..: 15:11				
Copper	ND	20	ug/L	SW846 6010B	03/27-03/28/03	FKPP11DM
		Dilution Factor: 1				
		Analysis Time..: 15:11				
Iron	ND	100	ug/L	SW846 6010B	03/27-03/28/03	FKPP11AX
		Dilution Factor: 1				
		Analysis Time..: 19:17				
Magnesium	ND	200	ug/L	SW846 6010B	03/27-03/28/03	FKPP11A0
		Dilution Factor: 1				
		Analysis Time..: 19:17				
Manganese	ND	10	ug/L	SW846 6010B	03/27-03/28/03	FKPP11DN
		Dilution Factor: 1				
		Analysis Time..: 15:11				
Molybdenum	ND	20	ug/L	SW846 6010B	03/27-03/28/03	FKPP11AM
		Dilution Factor: 1				
		Analysis Time..: 15:11				
Nickel	ND	40	ug/L	SW846 6010B	03/27-03/28/03	FKPP11DP
		Dilution Factor: 1				
		Analysis Time..: 15:11				

(Continued on next page)

METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: CANNON-2 **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Potassium	ND	3000	ug/L	SW846 6010B	03/27-03/28/03	FKPP11A1
		Dilution Factor: 1				
		Analysis Time..: 19:17				
Sodium	ND	5000	ug/L	SW846 6010B	03/27-03/28/03	FKPP11A2
		Dilution Factor: 1				
		Analysis Time..: 19:17				
Tin	**6.8 B**	**100**	**ug/L**	**SW846 6010B**	**03/27-03/28/03**	**FKPP11DU**
		Dilution Factor: 1				
		Analysis Time..: 15:11				
Vanadium	ND	10	ug/L	SW846 6010B	03/27-03/28/03	FKPP11DQ
		Dilution Factor: 1				
		Analysis Time..: 15:11				
Zinc	ND	20	ug/L	SW846 6010B	03/27-03/28/03	FKPP11DR
		Dilution Factor: 1				
		Analysis Time..: 15:11				

MB Lot-Sample #: D3C250000-470 **Prep Batch #...:** 3084470

Antimony	**0.043 B**	**2.0**	**ug/L**	**SW846 6020**	**04/01-04/14/03**	**FKPW81AA**
		Dilution Factor: 1				
		Analysis Time..: 20:54				
Arsenic	**0.82 B**	**5.0**	**ug/L**	**SW846 6020**	**04/01-04/14/03**	**FKPW81AC**
		Dilution Factor: 1				
		Analysis Time..: 20:54				
Cadmium	ND	1.0	ug/L	SW846 6020	04/01-04/14/03	FKPW81AD
		Dilution Factor: 1				
		Analysis Time..: 20:54				
Chromium	**0.84 B**	**2.0**	**ug/L**	**SW846 6020**	**04/01-04/14/03**	**FKPW81AJ**
		Dilution Factor: 1				
		Analysis Time..: 20:54				
Lead	ND	1.0	ug/L	SW846 6020	04/01-04/14/03	FKPW81AE
		Dilution Factor: 1				
		Analysis Time..: 20:54				
Selenium	**0.21 B**	**5.0**	**ug/L**	**SW846 6020**	**04/01-04/14/03**	**FKPW81AF**
		Dilution Factor: 1				
		Analysis Time..: 20:54				

(Continued on next page)

METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: CANNON-2 **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Silver	ND	5.0	ug/L	SW846 6020	04/01-04/14/03	FKPW81AG
		Dilution Factor: 1				
		Analysis Time..: 20:54				
Thallium	ND	1.0	ug/L	SW846 6020	04/01-04/14/03	FKPW81AH
		Dilution Factor: 1				
		Analysis Time..: 20:54				

MB Lot-Sample #: D3C260000-487 **Prep Batch #...:** 3085487

Antimony	**0.094 B**	**2.0**	**ug/L**	**SW846 6020**	**04/01-04/14/03**	**FKR701AA**
		Dilution Factor: 1				
		Analysis Time..: 19:48				
Arsenic	**0.75 B**	**5.0**	**ug/L**	**SW846 6020**	**04/01-04/14/03**	**FKR701AC**
		Dilution Factor: 1				
		Analysis Time..: 19:48				
Cadmium	ND	1.0	ug/L	SW846 6020	04/01-04/14/03	FKR701AD
		Dilution Factor: 1				
		Analysis Time..: 19:48				
Chromium	**0.49 B**	**2.0**	**ug/L**	**SW846 6020**	**04/01-04/14/03**	**FKR701AJ**
		Dilution Factor: 1				
		Analysis Time..: 19:48				
Lead	ND	1.0	ug/L	SW846 6020	04/01-04/14/03	FKR701AE
		Dilution Factor: 1				
		Analysis Time..: 19:48				
Selenium	ND	5.0	ug/L	SW846 6020	04/01-04/14/03	FKR701AF
		Dilution Factor: 1				
		Analysis Time..: 19:48				
Silver	ND	5.0	ug/L	SW846 6020	04/01-04/14/03	FKR701AG
		Dilution Factor: 1				
		Analysis Time..: 19:48				
Thallium	ND	1.0	ug/L	SW846 6020	04/01-04/14/03	FKR701AH
		Dilution Factor: 1				
		Analysis Time..: 19:48				

(Continued on next page)

METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: CANNON-2 **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MB Lot-Sample #: D3C270000-278 **Prep Batch #...:** 3086278						
Aluminum	ND	100	ug/L	SW846 6010B	04/01-04/02/03	FKT951AA
		Dilution Factor: 1				
		Analysis Time..: 22:03				
Barium	ND	10	ug/L	SW846 6010B	04/01-04/02/03	FKT951AC
		Dilution Factor: 1				
		Analysis Time..: 19:38				
Beryllium	ND	5.0	ug/L	SW846 6010B	04/01-04/02/03	FKT951AD
		Dilution Factor: 1				
		Analysis Time..: 22:03				
Calcium	ND	200	ug/L	SW846 6010B	04/01-04/02/03	FKT951AE
		Dilution Factor: 1				
		Analysis Time..: 22:03				
Cobalt	ND	10	ug/L	SW846 6010B	04/01-04/02/03	FKT951C2
		Dilution Factor: 1				
		Analysis Time..: 19:38				
Copper	ND	20	ug/L	SW846 6010B	04/01-04/02/03	FKT951AF
		Dilution Factor: 1				
		Analysis Time..: 19:38				
Iron	ND	100	ug/L	SW846 6010B	04/01-04/02/03	FKT951AG
		Dilution Factor: 1				
		Analysis Time..: 22:03				
Magnesium	ND	200	ug/L	SW846 6010B	04/01-04/02/03	FKT951AH
		Dilution Factor: 1				
		Analysis Time..: 22:03				
Manganese	ND	10	ug/L	SW846 6010B	04/01-04/02/03	FKT951AJ
		Dilution Factor: 1				
		Analysis Time..: 19:38				
Molybdenum	ND	20	ug/L	SW846 6010B	04/01-04/02/03	FKT951C3
		Dilution Factor: 1				
		Analysis Time..: 19:38				
Nickel	ND	40	ug/L	SW846 6010B	04/01-04/02/03	FKT951AK
		Dilution Factor: 1				
		Analysis Time..: 19:38				

(Continued on next page)

METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: CANNON-2 **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Potassium	ND	3000	ug/L	SW846 6010B	04/01-04/02/03	FKT951AL
		Dilution Factor: 1				
		Analysis Time..: 22:03				
Sodium	ND	5000	ug/L	SW846 6010B	04/01-04/02/03	FKT951AM
		Dilution Factor: 1				
		Analysis Time..: 22:03				
Tin	ND	100	ug/L	SW846 6010B	04/01-04/02/03	FKT951C4
		Dilution Factor: 1				
		Analysis Time..: 19:38				
Vanadium	ND	10	ug/L	SW846 6010B	04/01-04/02/03	FKT951C1
		Dilution Factor: 1				
		Analysis Time..: 19:38				
Zinc	**7.8 B**	**20**	**ug/L**	**SW846 6010B**	**04/01-04/02/03**	**FKT951AN**
		Dilution Factor: 1				
		Analysis Time..: 19:38				

MB Lot-Sample #: D3D080000-222 **Prep Batch #...:** 3098222

Mercury	ND	0.20	ug/L	SW846 7470A	04/11/03	FLHFQ1AA
		Dilution Factor: 1				
		Analysis Time..: 16:11				

MB Lot-Sample #: D3D080000-223 **Prep Batch #...:** 3098223

Mercury	**0.020 B**	**0.20**	**ug/L**	**SW846 7470A**	**04/14/03**	**FLHF31AA**
		Dilution Factor: 1				
		Analysis Time..: 20:58				

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

B Estimated result. Result is less than RL.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Lot-Sample #...: CANNON-2 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP-BATCH #
Aluminum	98	(86 - 108)			SW846 6010B	03/27-03/28/03	3084435
	98	(86 - 108)	0.55	(0-20)	SW846 6010B	03/27-03/28/03	3084435
		Dilution Factor: 1			Analysis Time..: 19:21		
Barium	104	(93 - 113)			SW846 6010B	03/27-03/28/03	3084435
	105	(93 - 113)	1.3	(0-20)	SW846 6010B	03/27-03/28/03	3084435
		Dilution Factor: 1			Analysis Time..: 15:16		
Beryllium	100	(88 - 112)			SW846 6010B	03/27-03/28/03	3084435
	100	(88 - 112)	0.34	(0-20)	SW846 6010B	03/27-03/28/03	3084435
		Dilution Factor: 1			Analysis Time..: 15:16		
Calcium	100	(89 - 110)			SW846 6010B	03/27-03/28/03	3084435
	99	(89 - 110)	1.2	(0-20)	SW846 6010B	03/27-03/28/03	3084435
		Dilution Factor: 1			Analysis Time..: 19:21		
Cobalt	102	(86 - 107)			SW846 6010B	03/27-03/28/03	3084435
	104	(86 - 107)	1.6	(0-20)	SW846 6010B	03/27-03/28/03	3084435
		Dilution Factor: 1			Analysis Time..: 15:16		
Copper	102	(86 - 110)			SW846 6010B	03/27-03/28/03	3084435
	103	(86 - 110)	1.2	(0-20)	SW846 6010B	03/27-03/28/03	3084435
		Dilution Factor: 1			Analysis Time..: 15:16		
Iron	101	(88 - 110)			SW846 6010B	03/27-03/28/03	3084435
	100	(88 - 110)	0.77	(0-20)	SW846 6010B	03/27-03/28/03	3084435
		Dilution Factor: 1			Analysis Time..: 19:21		
Magnesium	101	(91 - 111)			SW846 6010B	03/27-03/28/03	3084435
	101	(91 - 111)	0.0	(0-20)	SW846 6010B	03/27-03/28/03	3084435
		Dilution Factor: 1			Analysis Time..: 19:21		
Manganese	103	(90 - 110)			SW846 6010B	03/27-03/28/03	3084435
	104	(90 - 110)	1.2	(0-20)	SW846 6010B	03/27-03/28/03	3084435
		Dilution Factor: 1			Analysis Time..: 15:16		
Molybdenum	100	(83 - 109)			SW846 6010B	03/27-03/28/03	3084435
	101	(83 - 109)	1.2	(0-20)	SW846 6010B	03/27-03/28/03	3084435
		Dilution Factor: 1			Analysis Time..: 15:16		

(Continued on next page)

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Lot-Sample #...: CANNON-2 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP-BATCH #
Nickel	103	(90 - 110)			SW846 6010B	03/27-03/28/03	3084435
	104	(90 - 110)	0.92	(0-20)	SW846 6010B	03/27-03/28/03	3084435
		Dilution Factor: 1			Analysis Time..: 15:16		
Potassium	93	(86 - 111)			SW846 6010B	03/27-03/28/03	3084435
	93	(86 - 111)	0.09	(0-20)	SW846 6010B	03/27-03/28/03	3084435
		Dilution Factor: 1			Analysis Time..: 19:21		
Sodium	101	(91 - 112)			SW846 6010B	03/27-03/28/03	3084435
	102	(91 - 112)	1.4	(0-20)	SW846 6010B	03/27-03/28/03	3084435
		Dilution Factor: 1			Analysis Time..: 19:21		
Tin	99	(86 - 107)			SW846 6010B	03/27-03/28/03	3084435
	100	(86 - 107)	1.2	(0-20)	SW846 6010B	03/27-03/28/03	3084435
		Dilution Factor: 1			Analysis Time..: 15:16		
Vanadium	103	(88 - 112)			SW846 6010B	03/27-03/28/03	3084435
	105	(88 - 112)	1.4	(0-20)	SW846 6010B	03/27-03/28/03	3084435
		Dilution Factor: 1			Analysis Time..: 15:16		
Zinc	102	(85 - 110)			SW846 6010B	03/27-03/28/03	3084435
	100	(85 - 110)	1.6	(0-20)	SW846 6010B	03/27-03/28/03	3084435
		Dilution Factor: 1			Analysis Time..: 15:16		
Antimony	97	(89 - 109)			SW846 6020	04/01-04/14/03	3084470
	99	(89 - 109)	1.8	(0-20)	SW846 6020	04/01-04/14/03	3084470
		Dilution Factor: 1			Analysis Time..: 20:57		
Arsenic	98	(87 - 109)			SW846 6020	04/01-04/14/03	3084470
	102	(87 - 109)	4.4	(0-20)	SW846 6020	04/01-04/14/03	3084470
		Dilution Factor: 1			Analysis Time..: 20:57		
Cadmium	96	(89 - 110)			SW846 6020	04/01-04/14/03	3084470
	99	(89 - 110)	2.5	(0-20)	SW846 6020	04/01-04/14/03	3084470
		Dilution Factor: 1			Analysis Time..: 20:57		
Chromium	105	(89 - 114)			SW846 6020	04/01-04/14/03	3084470
	106	(89 - 114)	1.8	(0-20)	SW846 6020	04/01-04/14/03	3084470
		Dilution Factor: 1			Analysis Time..: 20:57		

(Continued on next page)

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Lot-Sample #...: CANNON-2 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP-BATCH #
Lead	103	(89 - 114)			SW846 6020	04/01-04/14/03	3084470
	105	(89 - 114)	1.7	(0-20)	SW846 6020	04/01-04/14/03	3084470
		Dilution Factor: 1			Analysis Time..: 20:57		
Selenium	94	(82 - 112)			SW846 6020	04/01-04/14/03	3084470
	95	(82 - 112)	0.75	(0-20)	SW846 6020	04/01-04/14/03	3084470
		Dilution Factor: 1			Analysis Time..: 20:57		
Silver	95	(87 - 112)			SW846 6020	04/01-04/14/03	3084470
	97	(87 - 112)	1.8	(0-20)	SW846 6020	04/01-04/14/03	3084470
		Dilution Factor: 1			Analysis Time..: 20:57		
Thallium	102	(84 - 120)			SW846 6020	04/01-04/14/03	3084470
	105	(84 - 120)	2.3	(0-20)	SW846 6020	04/01-04/14/03	3084470
		Dilution Factor: 1			Analysis Time..: 20:57		
Antimony	95	(89 - 109)			SW846 6020	04/01-04/14/03	3085487
	99	(89 - 109)	4.0	(0-20)	SW846 6020	04/01-04/14/03	3085487
		Dilution Factor: 1			Analysis Time..: 19:51		
Arsenic	99	(87 - 109)			SW846 6020	04/01-04/14/03	3085487
	101	(87 - 109)	2.1	(0-20)	SW846 6020	04/01-04/14/03	3085487
		Dilution Factor: 1			Analysis Time..: 19:51		
Cadmium	95	(89 - 110)			SW846 6020	04/01-04/14/03	3085487
	99	(89 - 110)	3.7	(0-20)	SW846 6020	04/01-04/14/03	3085487
		Dilution Factor: 1			Analysis Time..: 19:51		
Chromium	105	(89 - 114)			SW846 6020	04/01-04/14/03	3085487
	106	(89 - 114)	0.12	(0-20)	SW846 6020	04/01-04/14/03	3085487
		Dilution Factor: 1			Analysis Time..: 19:51		
Lead	103	(89 - 114)			SW846 6020	04/01-04/14/03	3085487
	104	(89 - 114)	0.87	(0-20)	SW846 6020	04/01-04/14/03	3085487
		Dilution Factor: 1			Analysis Time..: 19:51		
Selenium	96	(82 - 112)			SW846 6020	04/01-04/14/03	3085487
	95	(82 - 112)	0.83	(0-20)	SW846 6020	04/01-04/14/03	3085487
		Dilution Factor: 1			Analysis Time..: 19:51		

(Continued on next page)

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Lot-Sample #...: CANNON-2 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP-BATCH #
Silver	94	(87 - 112)			SW846 6020	04/01-04/14/03	3085487
	98	(87 - 112)	3.7	(0-20)	SW846 6020	04/01-04/14/03	3085487
		Dilution Factor: 1			Analysis Time..: 19:51		
Thallium	104	(84 - 120)			SW846 6020	04/01-04/14/03	3085487
	104	(84 - 120)	0.04	(0-20)	SW846 6020	04/01-04/14/03	3085487
		Dilution Factor: 1			Analysis Time..: 19:51		
Aluminum	101	(86 - 108)			SW846 6010B	04/01-04/02/03	3086278
	101	(86 - 108)	0.20	(0-20)	SW846 6010B	04/01-04/02/03	3086278
		Dilution Factor: 1			Analysis Time..: 22:07		
Barium	108	(93 - 113)			SW846 6010B	04/01-04/02/03	3086278
	110	(93 - 113)	1.3	(0-20)	SW846 6010B	04/01-04/02/03	3086278
		Dilution Factor: 1			Analysis Time..: 19:43		
Beryllium	102	(88 - 112)			SW846 6010B	04/01-04/02/03	3086278
	104	(88 - 112)	1.5	(0-20)	SW846 6010B	04/01-04/02/03	3086278
		Dilution Factor: 1			Analysis Time..: 22:07		
Calcium	101	(89 - 110)			SW846 6010B	04/01-04/02/03	3086278
	102	(89 - 110)	0.64	(0-20)	SW846 6010B	04/01-04/02/03	3086278
		Dilution Factor: 1			Analysis Time..: 22:07		
Cobalt	101	(86 - 107)			SW846 6010B	04/01-04/02/03	3086278
	102	(86 - 107)	0.91	(0-20)	SW846 6010B	04/01-04/02/03	3086278
		Dilution Factor: 1			Analysis Time..: 19:43		
Copper	105	(86 - 110)			SW846 6010B	04/01-04/02/03	3086278
	106	(86 - 110)	1.5	(0-20)	SW846 6010B	04/01-04/02/03	3086278
		Dilution Factor: 1			Analysis Time..: 19:43		
Iron	101	(88 - 110)			SW846 6010B	04/01-04/02/03	3086278
	102	(88 - 110)	0.94	(0-20)	SW846 6010B	04/01-04/02/03	3086278
		Dilution Factor: 1			Analysis Time..: 22:07		
Magnesium	101	(91 - 111)			SW846 6010B	04/01-04/02/03	3086278
	101	(91 - 111)	0.61	(0-20)	SW846 6010B	04/01-04/02/03	3086278
		Dilution Factor: 1			Analysis Time..: 22:07		

(Continued on next page)

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Lot-Sample #...: CANNON-2 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP-BATCH #
Manganese	104	(90 - 110)			SW846 6010B	04/01-04/02/03	3086278
	105	(90 - 110)	1.1	(0-20)	SW846 6010B	04/01-04/02/03	3086278
		Dilution Factor: 1			Analysis Time..: 19:43		
Molybdenum	104	(83 - 109)			SW846 6010B	04/01-04/02/03	3086278
	106	(83 - 109)	1.8	(0-20)	SW846 6010B	04/01-04/02/03	3086278
		Dilution Factor: 1			Analysis Time..: 19:43		
Nickel	107	(90 - 110)			SW846 6010B	04/01-04/02/03	3086278
	107	(90 - 110)	0.69	(0-20)	SW846 6010B	04/01-04/02/03	3086278
		Dilution Factor: 1			Analysis Time..: 19:43		
Potassium	104	(86 - 111)			SW846 6010B	04/01-04/02/03	3086278
	100	(86 - 111)	3.5	(0-20)	SW846 6010B	04/01-04/02/03	3086278
		Dilution Factor: 1			Analysis Time..: 22:07		
Sodium	104	(91 - 112)			SW846 6010B	04/01-04/02/03	3086278
	104	(91 - 112)	0.04	(0-20)	SW846 6010B	04/01-04/02/03	3086278
		Dilution Factor: 1			Analysis Time..: 22:07		
Tin	103	(86 - 107)			SW846 6010B	04/01-04/02/03	3086278
	104	(86 - 107)	1.1	(0-20)	SW846 6010B	04/01-04/02/03	3086278
		Dilution Factor: 1			Analysis Time..: 19:43		
anadium	103	(88 - 112)			SW846 6010B	04/01-04/02/03	3086278
	104	(88 - 112)	1.3	(0-20)	SW846 6010B	04/01-04/02/03	3086278
		Dilution Factor: 1			Analysis Time..: 19:43		
Zinc	98	(85 - 110)			SW846 6010B	04/01-04/02/03	3086278
	99	(85 - 110)	1.3	(0-20)	SW846 6010B	04/01-04/02/03	3086278
		Dilution Factor: 1			Analysis Time..: 19:43		
Mercury	96	(84 - 114)			SW846 7470A	04/11/03	3098222
	97	(84 - 114)	0.20	(0-10)	SW846 7470A	04/11/03	3098222
		Dilution Factor: 1			Analysis Time..: 16:13		
Mercury	91	(84 - 114)			SW846 7470A	04/14/03	3098223
	95	(84 - 114)	4.7	(0-10)	SW846 7470A	04/14/03	3098223
		Dilution Factor: 1			Analysis Time..: 21:00		

(Continued on next page)

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Lot-Sample #...: CANNON-2 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP-BATCH #

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE DATA REPORT

TOTAL Metals

Lot-Sample #...: CANNON-2 **Matrix.....:** WATER

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Aluminum	2000	1970	ug/L	98		SW846 6010B	03/27-03/28/03	3084435
	2000	1960	ug/L	98	0.55	SW846 6010B	03/27-03/28/03	3084435
			Dilution Factor: 1			Analysis Time..: 19:21		
Barium	2000	2080	ug/L	104		SW846 6010B	03/27-03/28/03	3084435
	2000	2110	ug/L	105	1.3	SW846 6010B	03/27-03/28/03	3084435
			Dilution Factor: 1			Analysis Time..: 15:16		
Beryllium	50.0	49.8	ug/L	100		SW846 6010B	03/27-03/28/03	3084435
	50.0	49.9	ug/L	100	0.34	SW846 6010B	03/27-03/28/03	3084435
			Dilution Factor: 1			Analysis Time..: 15:16		
Calcium	50000	50200	ug/L	100		SW846 6010B	03/27-03/28/03	3084435
	50000	49600	ug/L	99	1.2	SW846 6010B	03/27-03/28/03	3084435
			Dilution Factor: 1			Analysis Time..: 19:21		
Cobalt	500	511	ug/L	102		SW846 6010B	03/27-03/28/03	3084435
	500	519	ug/L	104	1.6	SW846 6010B	03/27-03/28/03	3084435
			Dilution Factor: 1			Analysis Time..: 15:16		
Copper	250	255	ug/L	102		SW846 6010B	03/27-03/28/03	3084435
	250	258	ug/L	103	1.2	SW846 6010B	03/27-03/28/03	3084435
			Dilution Factor: 1			Analysis Time..: 15:16		
Iron	1000	1010	ug/L	101		SW846 6010B	03/27-03/28/03	3084435
	1000	1000	ug/L	100	0.77	SW846 6010B	03/27-03/28/03	3084435
			Dilution Factor: 1			Analysis Time..: 19:21		
Magnesium	50000	50500	ug/L	101		SW846 6010B	03/27-03/28/03	3084435
	50000	50500	ug/L	101	0.0	SW846 6010B	03/27-03/28/03	3084435
			Dilution Factor: 1			Analysis Time..: 19:21		
Manganese	500	515	ug/L	103		SW846 6010B	03/27-03/28/03	3084435
	500	521	ug/L	104	1.2	SW846 6010B	03/27-03/28/03	3084435
			Dilution Factor: 1			Analysis Time..: 15:16		
Molybdenum	1000	997	ug/L	100		SW846 6010B	03/27-03/28/03	3084435
	1000	1010	ug/L	101	1.2	SW846 6010B	03/27-03/28/03	3084435
			Dilution Factor: 1			Analysis Time..: 15:16		

(Continued on next page)

LABORATORY CONTROL SAMPLE DATA REPORT

TOTAL Metals

Lot-Sample #...: CANNON-2 **Matrix.....:** WATER

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nickel	500	517	ug/L	103		SW846 6010B	03/27-03/28/03	3084435
	500	521	ug/L	104	0.92	SW846 6010B	03/27-03/28/03	3084435
			Dilution Factor: 1			Analysis Time..: 15:16		
Potassium	50000	46300	ug/L	93		SW846 6010B	03/27-03/28/03	3084435
	50000	46400	ug/L	93	0.09	SW846 6010B	03/27-03/28/03	3084435
			Dilution Factor: 1			Analysis Time..: 19:21		
Sodium	50000	50400	ug/L	101		SW846 6010B	03/27-03/28/03	3084435
	50000	51100	ug/L	102	1.4	SW846 6010B	03/27-03/28/03	3084435
			Dilution Factor: 1			Analysis Time..: 19:21		
Tin	2000	1980	ug/L	99		SW846 6010B	03/27-03/28/03	3084435
	2000	2010	ug/L	100	1.2	SW846 6010B	03/27-03/28/03	3084435
			Dilution Factor: 1			Analysis Time..: 15:16		
Vanadium	500	517	ug/L	103		SW846 6010B	03/27-03/28/03	3084435
	500	524	ug/L	105	1.4	SW846 6010B	03/27-03/28/03	3084435
			Dilution Factor: 1			Analysis Time..: 15:16		
Zinc	500	510	ug/L	102		SW846 6010B	03/27-03/28/03	3084435
	500	502	ug/L	100	1.6	SW846 6010B	03/27-03/28/03	3084435
			Dilution Factor: 1			Analysis Time..: 15:16		
Antimony	40.0	38.7	ug/L	97		SW846 6020	04/01-04/14/03	3084470
	40.0	39.5	ug/L	99	1.8	SW846 6020	04/01-04/14/03	3084470
			Dilution Factor: 1			Analysis Time..: 20:57		
Arsenic	40.0	39.2	ug/L	98		SW846 6020	04/01-04/14/03	3084470
	40.0	40.9	ug/L	102	4.4	SW846 6020	04/01-04/14/03	3084470
			Dilution Factor: 1			Analysis Time..: 20:57		
Cadmium	40.0	38.5	ug/L	96		SW846 6020	04/01-04/14/03	3084470
	40.0	39.4	ug/L	99	2.5	SW846 6020	04/01-04/14/03	3084470
			Dilution Factor: 1			Analysis Time..: 20:57		
Chromium	40.0	41.8	ug/L	105		SW846 6020	04/01-04/14/03	3084470
	40.0	42.6	ug/L	106	1.8	SW846 6020	04/01-04/14/03	3084470
			Dilution Factor: 1			Analysis Time..: 20:57		

(Continued on next page)

LABORATORY CONTROL SAMPLE DATA REPORT

TOTAL Metals

Lot-Sample #...: CANNON-2 **Matrix.....:** WATER

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Lead	40.0	41.4	ug/L	103		SW846 6020	04/01-04/14/03	3084470
	40.0	42.1	ug/L	105	1.7	SW846 6020	04/01-04/14/03	3084470
			Dilution Factor: 1			Analysis Time..: 20:57		
Selenium	40.0	37.6	ug/L	94		SW846 6020	04/01-04/14/03	3084470
	40.0	37.9	ug/L	95	0.75	SW846 6020	04/01-04/14/03	3084470
			Dilution Factor: 1			Analysis Time..: 20:57		
Silver	40.0	38.1	ug/L	95		SW846 6020	04/01-04/14/03	3084470
	40.0	38.8	ug/L	97	1.8	SW846 6020	04/01-04/14/03	3084470
			Dilution Factor: 1			Analysis Time..: 20:57		
Thallium	40.0	40.9	ug/L	102		SW846 6020	04/01-04/14/03	3084470
	40.0	41.8	ug/L	105	2.3	SW846 6020	04/01-04/14/03	3084470
			Dilution Factor: 1			Analysis Time..: 20:57		
Antimony	40.0	38.0	ug/L	95		SW846 6020	04/01-04/14/03	3085487
	40.0	39.5	ug/L	99	4.0	SW846 6020	04/01-04/14/03	3085487
			Dilution Factor: 1			Analysis Time..: 19:51		
Arsenic	40.0	39.7	ug/L	99		SW846 6020	04/01-04/14/03	3085487
	40.0	40.5	ug/L	101	2.1	SW846 6020	04/01-04/14/03	3085487
			Dilution Factor: 1			Analysis Time..: 19:51		
Cadmium	40.0	38.0	ug/L	95		SW846 6020	04/01-04/14/03	3085487
	40.0	39.5	ug/L	99	3.7	SW846 6020	04/01-04/14/03	3085487
			Dilution Factor: 1			Analysis Time..: 19:51		
Chromium	40.0	42.2	ug/L	105		SW846 6020	04/01-04/14/03	3085487
	40.0	42.2	ug/L	106	0.12	SW846 6020	04/01-04/14/03	3085487
			Dilution Factor: 1			Analysis Time..: 19:51		
Lead	40.0	41.2	ug/L	103		SW846 6020	04/01-04/14/03	3085487
	40.0	41.6	ug/L	104	0.87	SW846 6020	04/01-04/14/03	3085487
			Dilution Factor: 1			Analysis Time..: 19:51		
Selenium	40.0	38.5	ug/L	96		SW846 6020	04/01-04/14/03	3085487
	40.0	38.1	ug/L	95	0.83	SW846 6020	04/01-04/14/03	3085487
			Dilution Factor: 1			Analysis Time..: 19:51		

(Continued on next page)

LABORATORY CONTROL SAMPLE DATA REPORT

TOTAL Metals

Lot-Sample #...: CANNON-2 **Matrix.....:** WATER

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Silver	40.0	37.7	ug/L	94		SW846 6020	04/01-04/14/03	3085487
	40.0	39.1	ug/L	98	3.7	SW846 6020	04/01-04/14/03	3085487
			Dilution Factor: 1			Analysis Time..: 19:51		
Thallium	40.0	41.5	ug/L	104		SW846 6020	04/01-04/14/03	3085487
	40.0	41.6	ug/L	104	0.04	SW846 6020	04/01-04/14/03	3085487
			Dilution Factor: 1			Analysis Time..: 19:51		
Aluminum	2000	2020	ug/L	101		SW846 6010B	04/01-04/02/03	3086278
	2000	2010	ug/L	101	0.20	SW846 6010B	04/01-04/02/03	3086278
			Dilution Factor: 1			Analysis Time..: 22:07		
Barium	2000	2160	ug/L	108		SW846 6010B	04/01-04/02/03	3086278
	2000	2190	ug/L	110	1.3	SW846 6010B	04/01-04/02/03	3086278
			Dilution Factor: 1			Analysis Time..: 19:43		
Beryllium	50.0	51.2	ug/L	102		SW846 6010B	04/01-04/02/03	3086278
	50.0	52.0	ug/L	104	1.5	SW846 6010B	04/01-04/02/03	3086278
			Dilution Factor: 1			Analysis Time..: 22:07		
Calcium	50000	50700	ug/L	101		SW846 6010B	04/01-04/02/03	3086278
	50000	51000	ug/L	102	0.64	SW846 6010B	04/01-04/02/03	3086278
			Dilution Factor: 1			Analysis Time..: 22:07		
Cobalt	500	507	ug/L	101		SW846 6010B	04/01-04/02/03	3086278
	500	512	ug/L	102	0.91	SW846 6010B	04/01-04/02/03	3086278
			Dilution Factor: 1			Analysis Time..: 19:43		
Copper	250	262	ug/L	105		SW846 6010B	04/01-04/02/03	3086278
	250	266	ug/L	106	1.5	SW846 6010B	04/01-04/02/03	3086278
			Dilution Factor: 1			Analysis Time..: 19:43		
Iron	1000	1010	ug/L	101		SW846 6010B	04/01-04/02/03	3086278
	1000	1020	ug/L	102	0.94	SW846 6010B	04/01-04/02/03	3086278
			Dilution Factor: 1			Analysis Time..: 22:07		
Magnesium	50000	50400	ug/L	101		SW846 6010B	04/01-04/02/03	3086278
	50000	50700	ug/L	101	0.61	SW846 6010B	04/01-04/02/03	3086278
			Dilution Factor: 1			Analysis Time..: 22:07		

(Continued on next page)

LABORATORY CONTROL SAMPLE DATA REPORT

TOTAL Metals

Lot-Sample #...: CANNON-2 **Matrix.....:** WATER

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Manganese	500	519	ug/L	104		SW846 6010B	04/01-04/02/03	3086278
	500	524	ug/L	105	1.1	SW846 6010B	04/01-04/02/03	3086278
			Dilution Factor: 1			Analysis Time..: 19:43		
Molybdenum	1000	1040	ug/L	104		SW846 6010B	04/01-04/02/03	3086278
	1000	1060	ug/L	106	1.8	SW846 6010B	04/01-04/02/03	3086278
			Dilution Factor: 1			Analysis Time..: 19:43		
Nickel	500	534	ug/L	107		SW846 6010B	04/01-04/02/03	3086278
	500	537	ug/L	107	0.69	SW846 6010B	04/01-04/02/03	3086278
			Dilution Factor: 1			Analysis Time..: 19:43		
Potassium	50000	51900	ug/L	104		SW846 6010B	04/01-04/02/03	3086278
	50000	50100	ug/L	100	3.5	SW846 6010B	04/01-04/02/03	3086278
			Dilution Factor: 1			Analysis Time..: 22:07		
Sodium	50000	52000	ug/L	104		SW846 6010B	04/01-04/02/03	3086278
	50000	52000	ug/L	104	0.04	SW846 6010B	04/01-04/02/03	3086278
			Dilution Factor: 1			Analysis Time..: 22:07		
Tin	2000	2060	ug/L	103		SW846 6010B	04/01-04/02/03	3086278
	2000	2080	ug/L	104	1.1	SW846 6010B	04/01-04/02/03	3086278
			Dilution Factor: 1			Analysis Time..: 19:43		
Vanadium	500	513	ug/L	103		SW846 6010B	04/01-04/02/03	3086278
	500	520	ug/L	104	1.3	SW846 6010B	04/01-04/02/03	3086278
			Dilution Factor: 1			Analysis Time..: 19:43		
Zinc	500	488	ug/L	98		SW846 6010B	04/01-04/02/03	3086278
	500	494	ug/L	99	1.3	SW846 6010B	04/01-04/02/03	3086278
			Dilution Factor: 1			Analysis Time..: 19:43		
Mercury	5.00	4.82	ug/L	96		SW846 7470A	04/11/03	3098222
	5.00	4.83	ug/L	97	0.20	SW846 7470A	04/11/03	3098222
			Dilution Factor: 1			Analysis Time..: 16:13		
Mercury	5.00	4.53	ug/L	91		SW846 7470A	04/14/03	3098223
	5.00	4.75	ug/L	95	4.7	SW846 7470A	04/14/03	3098223
			Dilution Factor: 1			Analysis Time..: 21:00		

(Continued on next page)

LABORATORY CONTROL SAMPLE DATA REPORT

TOTAL Metals

Lot-Sample #...: CANNON-2 **Matrix.....:** WATER

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: CANNON-2 **Matrix.....:** WATER
Date Sampled...: 03/19/03 08:15 **Date Received..:** 03/21/03

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: D3C210337-001 **Prep Batch #...:** 3084435							
Aluminum	99	(83 - 119)			SW846 6010B	03/27-03/28/03	FKKCP1DM
	96	(83 - 119)	3.1	(0-25)	SW846 6010B	03/27-03/28/03	FKKCP1DN
		Dilution Factor: 1					
		Analysis Time..: 20:17					
Barium	103	(85 - 120)			SW846 6010B	03/27-03/28/03	FKKCP1EN
	101	(85 - 120)	2.7	(0-25)	SW846 6010B	03/27-03/28/03	FKKCP1EP
		Dilution Factor: 1					
		Analysis Time..: 16:20					
Beryllium	98	(79 - 121)			SW846 6010B	03/27-03/28/03	FKKCP1D3
	96	(79 - 121)	2.1	(0-25)	SW846 6010B	03/27-03/28/03	FKKCP1D4
		Dilution Factor: 1					
		Analysis Time..: 16:20					
Calcium	102	(48 - 153)			SW846 6010B	03/27-03/28/03	FKKCP1DP
	97	(48 - 153)	2.9	(0-25)	SW846 6010B	03/27-03/28/03	FKKCP1DQ
		Dilution Factor: 1					
		Analysis Time..: 20:17					
Cobalt	102	(82 - 119)			SW846 6010B	03/27-03/28/03	FKKCP1CW
	100	(82 - 119)	2.1	(0-25)	SW846 6010B	03/27-03/28/03	FKKCP1CX
		Dilution Factor: 1					
		Analysis Time..: 16:20					
Copper	103	(82 - 129)			SW846 6010B	03/27-03/28/03	FKKCP1D6
	100	(82 - 129)	2.9	(0-25)	SW846 6010B	03/27-03/28/03	FKKCP1D7
		Dilution Factor: 1					
		Analysis Time..: 16:20					
Iron	101	(52 - 155)			SW846 6010B	03/27-03/28/03	FKKCP1DR
	98	(52 - 155)	2.3	(0-25)	SW846 6010B	03/27-03/28/03	FKKCP1DT
		Dilution Factor: 1					
		Analysis Time..: 20:17					
Magnesium	105	(62 - 146)			SW846 6010B	03/27-03/28/03	FKKCP1DU
	100	(62 - 146)	3.6	(0-25)	SW846 6010B	03/27-03/28/03	FKKCP1DV
		Dilution Factor: 1					
		Analysis Time..: 20:17					

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: CANNON-2 **Matrix.....:** WATER
Date Sampled...: 03/19/03 08:15 **Date Received..:** 03/21/03

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Manganese	102	(79 - 121)			SW846 6010B	03/27-03/28/03	FKKCP1D9
	100	(79 - 121)	2.4	(0-25)	SW846 6010B	03/27-03/28/03	FKKCP1EA
		Dilution Factor: 1					
		Analysis Time..: 16:20					
Molybdenum	101	(83 - 109)			SW846 6010B	03/27-03/28/03	FKKCP1C6
	98	(83 - 109)	2.4	(0-25)	SW846 6010B	03/27-03/28/03	FKKCP1C7
		Dilution Factor: 1					
		Analysis Time..: 16:20					
Nickel	103	(84 - 120)			SW846 6010B	03/27-03/28/03	FKKCP1ED
	100	(84 - 120)	2.2	(0-25)	SW846 6010B	03/27-03/28/03	FKKCP1EE
		Dilution Factor: 1					
		Analysis Time..: 16:20					
Potassium	96	(76 - 132)			SW846 6010B	03/27-03/28/03	FKKCP1DW
	92	(76 - 132)	3.8	(0-25)	SW846 6010B	03/27-03/28/03	FKKCP1DX
		Dilution Factor: 1					
		Analysis Time..: 20:17					
Sodium	111	(70 - 203)			SW846 6010B	03/27-03/28/03	FKKCP1D0
	99	(70 - 203)	4.6	(0-40)	SW846 6010B	03/27-03/28/03	FKKCP1D1
		Dilution Factor: 1					
		Analysis Time..: 20:17					
Tin	101	(77 - 126)			SW846 6010B	03/27-03/28/03	FKKCP1ER
	98	(77 - 126)	2.2	(0-25)	SW846 6010B	03/27-03/28/03	FKKCP1ET
		Dilution Factor: 1					
		Analysis Time..: 16:20					
Vanadium	103	(85 - 120)			SW846 6010B	03/27-03/28/03	FKKCP1EG
	100	(85 - 120)	3.0	(0-25)	SW846 6010B	03/27-03/28/03	FKKCP1EH
		Dilution Factor: 1					
		Analysis Time..: 16:20					
Zinc	99	(60 - 137)			SW846 6010B	03/27-03/28/03	FKKCP1EK
	99	(60 - 137)	0.59	(0-25)	SW846 6010B	03/27-03/28/03	FKKCP1EL
		Dilution Factor: 1					
		Analysis Time..: 16:20					

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: CANNON-2 **Matrix.....:** WATER
Date Sampled...: 03/19/03 08:15 **Date Received..:** 03/21/03

MS Lot-Sample #: D3C210337-001 **Prep Batch #...:** 3084435

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Aluminum									
	20	2000	1990	ug/L	99		SW846 6010B	03/27-03/28/03	FKKCP1DM
	20	2000	1930	ug/L	96	3.1	SW846 6010B	03/27-03/28/03	FKKCP1DN
			Dilution Factor: 1						
			Analysis Time..: 20:17						
Barium									
	26	2000	2090	ug/L	103		SW846 6010B	03/27-03/28/03	FKKCP1EN
	26	2000	2040	ug/L	101	2.7	SW846 6010B	03/27-03/28/03	FKKCP1EP
			Dilution Factor: 1						
			Analysis Time..: 16:20						
Beryllium									
	ND	50.0	49.0	ug/L	98		SW846 6010B	03/27-03/28/03	FKKCP1D3
	ND	50.0	48.0	ug/L	96	2.1	SW846 6010B	03/27-03/28/03	FKKCP1D4
			Dilution Factor: 1						
			Analysis Time..: 16:20						
Calcium									
	28000	50000	79000	ug/L	102		SW846 6010B	03/27-03/28/03	FKKCP1DP
	28000	50000	76700	ug/L	97	2.9	SW846 6010B	03/27-03/28/03	FKKCP1DQ
			Dilution Factor: 1						
			Analysis Time..: 20:17						
Cobalt									
	ND	500	512	ug/L	102		SW846 6010B	03/27-03/28/03	FKKCP1CW
	ND	500	501	ug/L	100	2.1	SW846 6010B	03/27-03/28/03	FKKCP1CX
			Dilution Factor: 1						
			Analysis Time..: 16:20						
Copper									
	1.0	250	259	ug/L	103		SW846 6010B	03/27-03/28/03	FKKCP1D6
	1.0	250	252	ug/L	100	2.9	SW846 6010B	03/27-03/28/03	FKKCP1D7
			Dilution Factor: 1						
			Analysis Time..: 16:20						
Iron									
	ND	1000	1020	ug/L	101		SW846 6010B	03/27-03/28/03	FKKCP1DR
	ND	1000	993	ug/L	98	2.3	SW846 6010B	03/27-03/28/03	FKKCP1DT
			Dilution Factor: 1						
			Analysis Time..: 20:17						

(Continued on next page)

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: CANNON-2 **Matrix.....:** WATER
Date Sampled...: 03/19/03 08:15 **Date Received..:** 03/21/03

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Magnesium									
	31000	50000	83600	ug/L	105		SW846 6010B	03/27-03/28/03	FKKCP1DU
	31000	50000	80700	ug/L	100	3.6	SW846 6010B	03/27-03/28/03	FKKCP1DV
			Dilution Factor: 1						
			Analysis Time..: 20:17						
Manganese									
	ND	500	511	ug/L	102		SW846 6010B	03/27-03/28/03	FKKCP1D9
	ND	500	499	ug/L	100	2.4	SW846 6010B	03/27-03/28/03	FKKCP1EA
			Dilution Factor: 1						
			Analysis Time..: 16:20						
Molybdenum									
	5.5	1000	1010	ug/L	101		SW846 6010B	03/27-03/28/03	FKKCP1C6
	5.5	1000	988	ug/L	98	2.4	SW846 6010B	03/27-03/28/03	FKKCP1C7
			Dilution Factor: 1						
			Analysis Time..: 16:20						
Nickel									
	ND	500	513	ug/L	103		SW846 6010B	03/27-03/28/03	FKKCP1ED
	ND	500	502	ug/L	100	2.2	SW846 6010B	03/27-03/28/03	FKKCP1EE
			Dilution Factor: 1						
			Analysis Time..: 16:20						
Potassium									
	4700	50000	52800	ug/L	96		SW846 6010B	03/27-03/28/03	FKKCP1DW
	4700	50000	50800	ug/L	92	3.8	SW846 6010B	03/27-03/28/03	FKKCP1DX
			Dilution Factor: 1						
			Analysis Time..: 20:17						
Sodium									
	78000	50000	134000	ug/L	111		SW846 6010B	03/27-03/28/03	FKKCP1D0
	78000	50000	128000	ug/L	99	4.6	SW846 6010B	03/27-03/28/03	FKKCP1D1
			Dilution Factor: 1						
			Analysis Time..: 20:17						
Tin									
	ND	2000	2010	ug/L	101		SW846 6010B	03/27-03/28/03	FKKCP1ER
	ND	2000	1970	ug/L	98	2.2	SW846 6010B	03/27-03/28/03	FKKCP1ET
			Dilution Factor: 1						
			Analysis Time..: 16:20						

(Continued on next page)

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: CANNON-2 **Matrix.....:** WATER
Date Sampled...: 03/19/03 08:15 **Date Received..:** 03/21/03

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Vanadium									
	72	500	589	ug/L	103		SW846 6010B	03/27-03/28/03	FKKCP1EG
	72	500	571	ug/L	100	3.0	SW846 6010B	03/27-03/28/03	FKKCP1EH
			Dilution Factor: 1						
			Analysis Time..: 16:20						
Zinc									
	ND	500	504	ug/L	99		SW846 6010B	03/27-03/28/03	FKKCP1EK
	ND	500	501	ug/L	99	0.59	SW846 6010B	03/27-03/28/03	FKKCP1EL
			Dilution Factor: 1						
			Analysis Time..: 16:20						

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: CANNON-2 **Matrix.....:** WG
Date Sampled...: 03/20/03 12:10 **Date Received..:** 03/21/03

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: D3C210341-001 **Prep Batch #...:** 3084470							
Antimony	101	(80 - 117)			SW846 6020	04/01-04/14/03	FKKDL1CJ
	98	(80 - 117)	2.3	(0-30)	SW846 6020	04/01-04/14/03	FKKDL1CK
		Dilution Factor: 1					
		Analysis Time..: 21:19					
Arsenic	96	(79 - 120)			SW846 6020	04/01-04/14/03	FKKDL1CL
	96	(79 - 120)	0.17	(0-30)	SW846 6020	04/01-04/14/03	FKKDL1CM
		Dilution Factor: 1					
		Analysis Time..: 21:19					
Cadmium	97	(82 - 115)			SW846 6020	04/01-04/14/03	FKKDL1CN
	95	(82 - 115)	2.4	(0-30)	SW846 6020	04/01-04/14/03	FKKDL1CP
		Dilution Factor: 1					
		Analysis Time..: 21:19					
Chromium	101	(80 - 124)			SW846 6020	04/01-04/14/03	FKKDL1C1
	100	(80 - 124)	0.06	(0-30)	SW846 6020	04/01-04/14/03	FKKDL1C2
		Dilution Factor: 1					
		Analysis Time..: 21:19					
Lead	101	(79 - 119)			SW846 6020	04/01-04/14/03	FKKDL1CQ
	100	(79 - 119)	1.1	(0-30)	SW846 6020	04/01-04/14/03	FKKDL1CR
		Dilution Factor: 1					
		Analysis Time..: 21:19					
Selenium	93	(64 - 134)			SW846 6020	04/01-04/14/03	FKKDL1CT
	95	(64 - 134)	2.5	(0-35)	SW846 6020	04/01-04/14/03	FKKDL1CU
		Dilution Factor: 1					
		Analysis Time..: 21:19					
Silver	93	(20 - 120)			SW846 6020	04/01-04/14/03	FKKDL1CV
	92	(20 - 120)	1.7	(0-40)	SW846 6020	04/01-04/14/03	FKKDL1CW
		Dilution Factor: 1					
		Analysis Time..: 21:19					
Thallium	103	(77 - 124)			SW846 6020	04/01-04/14/03	FKKDL1CX
	101	(77 - 124)	1.4	(0-30)	SW846 6020	04/01-04/14/03	FKKDL1C0
		Dilution Factor: 1					
		Analysis Time..: 21:19					

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: CANNON-2 **Matrix.....:** WG
Date Sampled...: 03/20/03 12:10 **Date Received..:** 03/21/03

MS Lot-Sample #: D3C210341-001 **Prep Batch #...:** 3084470

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Antimony									
	ND	40.0	40.3	ug/L	101		SW846 6020	04/01-04/14/03	FKKDL1CJ
	ND	40.0	39.4	ug/L	98	2.3	SW846 6020	04/01-04/14/03	FKKDL1CK
			Dilution Factor: 1						
			Analysis Time..: 21:19						
Arsenic									
	5.0	40.0	43.6	ug/L	96		SW846 6020	04/01-04/14/03	FKKDL1CL
	5.0	40.0	43.5	ug/L	96	0.17	SW846 6020	04/01-04/14/03	FKKDL1CM
			Dilution Factor: 1						
			Analysis Time..: 21:19						
Cadmium									
	ND	40.0	39.0	ug/L	97		SW846 6020	04/01-04/14/03	FKKDL1CN
	ND	40.0	38.0	ug/L	95	2.4	SW846 6020	04/01-04/14/03	FKKDL1CP
			Dilution Factor: 1						
			Analysis Time..: 21:19						
Chromium									
	1.2	40.0	41.4	ug/L	101		SW846 6020	04/01-04/14/03	FKKDL1C1
	1.2	40.0	41.4	ug/L	100	0.06	SW846 6020	04/01-04/14/03	FKKDL1C2
			Dilution Factor: 1						
			Analysis Time..: 21:19						
Lead									
	ND	40.0	40.5	ug/L	101		SW846 6020	04/01-04/14/03	FKKDL1CQ
	ND	40.0	40.0	ug/L	100	1.1	SW846 6020	04/01-04/14/03	FKKDL1CR
			Dilution Factor: 1						
			Analysis Time..: 21:19						
Selenium									
	0.32	40.0	37.3	ug/L	93		SW846 6020	04/01-04/14/03	FKKDL1CT
	0.32	40.0	38.3	ug/L	95	2.5	SW846 6020	04/01-04/14/03	FKKDL1CU
			Dilution Factor: 1						
			Analysis Time..: 21:19						
Silver									
	ND	40.0	37.3	ug/L	93		SW846 6020	04/01-04/14/03	FKKDL1CV
	ND	40.0	36.6	ug/L	92	1.7	SW846 6020	04/01-04/14/03	FKKDL1CW
			Dilution Factor: 1						
			Analysis Time..: 21:19						

(Continued on next page)

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: CANNON-2 **Matrix.....:** WG
Date Sampled...: 03/20/03 12:10 **Date Received..:** 03/21/03

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium									
	ND	40.0	41.1	ug/L	103		SW846 6020	04/01-04/14/03	FKKDL1CX
	ND	40.0	40.5	ug/L	101	1.4	SW846 6020	04/01-04/14/03	FKKDL1C0

Dilution Factor: 1
Analysis Time..: 21:19

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: CANNON-2 **Matrix.....:** WATER
Date Sampled...: 03/19/03 08:35 **Date Received..:** 03/24/03

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: D3C240249-002 **Prep Batch #...:** 3085487							
Antimony	101	(80 - 117)			SW846 6020	04/01-04/14/03	FKM9C1CJ
	101	(80 - 117)	0.58	(0-30)	SW846 6020	04/01-04/14/03	FKM9C1CK
		Dilution Factor: 1					
		Analysis Time..: 20:06					
Arsenic	97	(79 - 120)			SW846 6020	04/01-04/14/03	FKM9C1CL
	97	(79 - 120)	0.64	(0-30)	SW846 6020	04/01-04/14/03	FKM9C1CM
		Dilution Factor: 1					
		Analysis Time..: 20:06					
Cadmium	94	(82 - 115)			SW846 6020	04/01-04/14/03	FKM9C1CN
	98	(82 - 115)	3.6	(0-30)	SW846 6020	04/01-04/14/03	FKM9C1CP
		Dilution Factor: 1					
		Analysis Time..: 20:06					
Chromium	100	(80 - 124)			SW846 6020	04/01-04/14/03	FKM9C1C1
	100	(80 - 124)	0.38	(0-30)	SW846 6020	04/01-04/14/03	FKM9C1C2
		Dilution Factor: 1					
		Analysis Time..: 20:06					
Lead	99	(79 - 119)			SW846 6020	04/01-04/14/03	FKM9C1CQ
	101	(79 - 119)	2.3	(0-30)	SW846 6020	04/01-04/14/03	FKM9C1CR
		Dilution Factor: 1					
		Analysis Time..: 20:06					
Selenium	93	(64 - 134)			SW846 6020	04/01-04/14/03	FKM9C1CT
	95	(64 - 134)	1.2	(0-35)	SW846 6020	04/01-04/14/03	FKM9C1CU
		Dilution Factor: 1					
		Analysis Time..: 20:06					
Silver	91	(20 - 120)			SW846 6020	04/01-04/14/03	FKM9C1CV
	93	(20 - 120)	1.6	(0-40)	SW846 6020	04/01-04/14/03	FKM9C1CW
		Dilution Factor: 1					
		Analysis Time..: 20:06					
Thallium	100	(77 - 124)			SW846 6020	04/01-04/14/03	FKM9C1CX
	102	(77 - 124)	2.1	(0-30)	SW846 6020	04/01-04/14/03	FKM9C1C0
		Dilution Factor: 1					
		Analysis Time..: 20:06					

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: CANNON-2 **Matrix.....:** WATER
Date Sampled...: 03/19/03 08:35 **Date Received..:** 03/24/03

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: D3C240249-002 **Prep Batch #...:** 3085487									
Antimony									
	0.33	40.0	40.9	ug/L	101		SW846 6020	04/01-04/14/03	FKM9C1CJ
	0.33	40.0	40.7	ug/L	101	0.58	SW846 6020	04/01-04/14/03	FKM9C1CK
			Dilution Factor: 1						
			Analysis Time..: 20:06						
Arsenic									
	5.4	40.0	44.0	ug/L	97		SW846 6020	04/01-04/14/03	FKM9C1CL
	5.4	40.0	44.3	ug/L	97	0.64	SW846 6020	04/01-04/14/03	FKM9C1CM
			Dilution Factor: 1						
			Analysis Time..: 20:06						
Cadmium									
	ND	40.0	37.7	ug/L	94		SW846 6020	04/01-04/14/03	FKM9C1CN
	ND	40.0	39.1	ug/L	98	3.6	SW846 6020	04/01-04/14/03	FKM9C1CP
			Dilution Factor: 1						
			Analysis Time..: 20:06						
Chromium									
	1.8	40.0	41.7	ug/L	100		SW846 6020	04/01-04/14/03	FKM9C1C1
	1.8	40.0	41.9	ug/L	100	0.38	SW846 6020	04/01-04/14/03	FKM9C1C2
			Dilution Factor: 1						
			Analysis Time..: 20:06						
Lead									
	ND	40.0	39.7	ug/L	99		SW846 6020	04/01-04/14/03	FKM9C1CQ
	ND	40.0	40.6	ug/L	101	2.3	SW846 6020	04/01-04/14/03	FKM9C1CR
			Dilution Factor: 1						
			Analysis Time..: 20:06						
Selenium									
	7.0	40.0	44.4	ug/L	93		SW846 6020	04/01-04/14/03	FKM9C1CT
	7.0	40.0	44.9	ug/L	95	1.2	SW846 6020	04/01-04/14/03	FKM9C1CU
			Dilution Factor: 1						
			Analysis Time..: 20:06						
Silver									
	ND	40.0	36.6	ug/L	91		SW846 6020	04/01-04/14/03	FKM9C1CV
	ND	40.0	37.2	ug/L	93	1.6	SW846 6020	04/01-04/14/03	FKM9C1CW
			Dilution Factor: 1						
			Analysis Time..: 20:06						

(Continued on next page)

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: CANNON-2 **Matrix.....:** WATER
Date Sampled...: 03/19/03 08:35 **Date Received..:** 03/24/03

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium									
	ND	40.0	40.0	ug/L	100		SW846 6020	04/01-04/14/03	FKM9C1CX
	ND	40.0	40.9	ug/L	102	2.1	SW846 6020	04/01-04/14/03	FKM9C1C0

Dilution Factor: 1
Analysis Time..: 20:06

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: CANNON-2 **Matrix.....:** WATER
Date Sampled...: 03/24/03 11:22 **Date Received..:** 03/25/03

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: D3C250126-001 **Prep Batch #...:** 3086278							
Aluminum	148 N	(83 - 119)			SW846 6010B	04/01-04/02/03	FKNQ71A9
	180 N	(83 - 119)	13	(0-25)	SW846 6010B	04/01-04/02/03	FKNQ71CA
		Dilution Factor: 1					
		Analysis Time..: 22:23					
Barium	109	(85 - 120)			SW846 6010B	04/01-04/02/03	FKNQ71CC
	111	(85 - 120)	2.1	(0-25)	SW846 6010B	04/01-04/02/03	FKNQ71CD
		Dilution Factor: 1					
		Analysis Time..: 20:05					
Beryllium	104	(79 - 121)			SW846 6010B	04/01-04/02/03	FKNQ71CE
	109	(79 - 121)	4.0	(0-25)	SW846 6010B	04/01-04/02/03	FKNQ71CF
		Dilution Factor: 1					
		Analysis Time..: 22:23					
Calcium	98	(48 - 153)			SW846 6010B	04/01-04/02/03	FKNQ71CG
	104	(48 - 153)	4.2	(0-25)	SW846 6010B	04/01-04/02/03	FKNQ71CH
		Dilution Factor: 1					
		Analysis Time..: 22:23					
Cobalt	100	(82 - 119)			SW846 6010B	04/01-04/02/03	FKNQ71DJ
	103	(82 - 119)	3.1	(0-25)	SW846 6010B	04/01-04/02/03	FKNQ71DK
		Dilution Factor: 1					
		Analysis Time..: 20:05					
Copper	106	(82 - 129)			SW846 6010B	04/01-04/02/03	FKNQ71CJ
	108	(82 - 129)	1.9	(0-25)	SW846 6010B	04/01-04/02/03	FKNQ71CK
		Dilution Factor: 1					
		Analysis Time..: 20:05					
Iron	112	(52 - 155)			SW846 6010B	04/01-04/02/03	FKNQ71CL
	152	(52 - 155)	12	(0-25)	SW846 6010B	04/01-04/02/03	FKNQ71CM
		Dilution Factor: 1					
		Analysis Time..: 22:23					
Magnesium	101	(62 - 146)			SW846 6010B	04/01-04/02/03	FKNQ71CN
	107	(62 - 146)	4.9	(0-25)	SW846 6010B	04/01-04/02/03	FKNQ71CP
		Dilution Factor: 1					
		Analysis Time..: 22:23					

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: CANNON-2 **Matrix.....:** WATER
Date Sampled...: 03/24/03 11:22 **Date Received..:** 03/25/03

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Manganese	102	(79 - 121)			SW846 6010B	04/01-04/02/03	FKNQ71CQ
	106	(79 - 121)	3.3	(0-25)	SW846 6010B	04/01-04/02/03	FKNQ71CR
		Dilution Factor: 1					
		Analysis Time..: 20:05					
Molybdenum	102	(83 - 109)			SW846 6010B	04/01-04/02/03	FKNQ71DM
	106	(83 - 109)	3.9	(0-25)	SW846 6010B	04/01-04/02/03	FKNQ71DN
		Dilution Factor: 1					
		Analysis Time..: 20:05					
Nickel	105	(84 - 120)			SW846 6010B	04/01-04/02/03	FKNQ71CT
	109	(84 - 120)	3.6	(0-25)	SW846 6010B	04/01-04/02/03	FKNQ71CU
		Dilution Factor: 1					
		Analysis Time..: 20:05					
Potassium	96	(76 - 132)			SW846 6010B	04/01-04/02/03	FKNQ71CV
	104	(76 - 132)	7.5	(0-25)	SW846 6010B	04/01-04/02/03	FKNQ71CW
		Dilution Factor: 1					
		Analysis Time..: 22:23					
Sodium	99	(70 - 203)			SW846 6010B	04/01-04/02/03	FKNQ71CX
	108	(70 - 203)	6.9	(0-40)	SW846 6010B	04/01-04/02/03	FKNQ71C0
		Dilution Factor: 1					
		Analysis Time..: 22:23					
Tin	100	(77 - 126)			SW846 6010B	04/01-04/02/03	FKNQ71DQ
	105	(77 - 126)	4.4	(0-25)	SW846 6010B	04/01-04/02/03	FKNQ71DR
		Dilution Factor: 1					
		Analysis Time..: 20:05					
Vanadium	102	(85 - 120)			SW846 6010B	04/01-04/02/03	FKNQ71DF
	105	(85 - 120)	2.9	(0-25)	SW846 6010B	04/01-04/02/03	FKNQ71DG
		Dilution Factor: 1					
		Analysis Time..: 20:05					
Zinc	95	(60 - 137)			SW846 6010B	04/01-04/02/03	FKNQ71C1
	98	(60 - 137)	3.7	(0-25)	SW846 6010B	04/01-04/02/03	FKNQ71C2
		Dilution Factor: 1					
		Analysis Time..: 20:05					

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

N Spiked analyte recovery is outside stated control limits.

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: CANNON-2 **Matrix.....:** WATER
Date Sampled...: 03/24/03 11:22 **Date Received..:** 03/25/03

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: D3C250126-001 **Prep Batch #...:** 3086278									
Aluminum									
	1800	2000	4730 N	ug/L	148		SW846 6010B	04/01-04/02/03	FKNQ71A9
	1800	2000	5360 N	ug/L	180	13	SW846 6010B	04/01-04/02/03	FKNQ71CA
			Dilution Factor: 1						
			Analysis Time..: 22:23						
Barium									
	91	2000	2270	ug/L	109		SW846 6010B	04/01-04/02/03	FKNQ71CC
	91	2000	2310	ug/L	111	2.1	SW846 6010B	04/01-04/02/03	FKNQ71CD
			Dilution Factor: 1						
			Analysis Time..: 20:05						
Beryllium									
	ND	50.0	52.1	ug/L	104		SW846 6010B	04/01-04/02/03	FKNQ71CE
	ND	50.0	54.3	ug/L	109	4.0	SW846 6010B	04/01-04/02/03	FKNQ71CF
			Dilution Factor: 1						
			Analysis Time..: 22:23						
Calcium									
	28000	50000	76600	ug/L	98		SW846 6010B	04/01-04/02/03	FKNQ71CG
	28000	50000	79800	ug/L	104	4.2	SW846 6010B	04/01-04/02/03	FKNQ71CH
			Dilution Factor: 1						
			Analysis Time..: 22:23						
Cobalt									
	ND	500	502	ug/L	100		SW846 6010B	04/01-04/02/03	FKNQ71DJ
	ND	500	518	ug/L	103	3.1	SW846 6010B	04/01-04/02/03	FKNQ71DK
			Dilution Factor: 1						
			Analysis Time..: 20:05						
Copper									
	2.8	250	268	ug/L	106		SW846 6010B	04/01-04/02/03	FKNQ71CJ
	2.8	250	273	ug/L	108	1.9	SW846 6010B	04/01-04/02/03	FKNQ71CK
			Dilution Factor: 1						
			Analysis Time..: 20:05						
Iron									
	2000	1000	3090	ug/L	112		SW846 6010B	04/01-04/02/03	FKNQ71CL
	2000	1000	3480	ug/L	152	12	SW846 6010B	04/01-04/02/03	FKNQ71CM
			Dilution Factor: 1						
			Analysis Time..: 22:23						

(Continued on next page)

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: CANNON-2 **Matrix.....:** WATER
Date Sampled...: 03/24/03 11:22 **Date Received..:** 03/25/03

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Magnesium									
	11000	50000	60800	ug/L	101		SW846 6010B	04/01-04/02/03	FKNQ71CN
	11000	50000	63800	ug/L	107	4.9	SW846 6010B	04/01-04/02/03	FKNQ71CP
			Dilution Factor: 1						
			Analysis Time..: 22:23						
Manganese									
	54	500	565	ug/L	102		SW846 6010B	04/01-04/02/03	FKNQ71CQ
	54	500	584	ug/L	106	3.3	SW846 6010B	04/01-04/02/03	FKNQ71CR
			Dilution Factor: 1						
			Analysis Time..: 20:05						
Molybdenum									
	4.8	1000	1020	ug/L	102		SW846 6010B	04/01-04/02/03	FKNQ71DM
	4.8	1000	1070	ug/L	106	3.9	SW846 6010B	04/01-04/02/03	FKNQ71DN
			Dilution Factor: 1						
			Analysis Time..: 20:05						
Nickel									
	18	500	543	ug/L	105		SW846 6010B	04/01-04/02/03	FKNQ71CT
	18	500	562	ug/L	109	3.6	SW846 6010B	04/01-04/02/03	FKNQ71CU
			Dilution Factor: 1						
			Analysis Time..: 20:05						
Potassium									
	3200	50000	51400	ug/L	96		SW846 6010B	04/01-04/02/03	FKNQ71CV
	3200	50000	55400	ug/L	104	7.5	SW846 6010B	04/01-04/02/03	FKNQ71CW
			Dilution Factor: 1						
			Analysis Time..: 22:23						
Sodium									
	9400	50000	59000	ug/L	99		SW846 6010B	04/01-04/02/03	FKNQ71CX
	9400	50000	63300	ug/L	108	6.9	SW846 6010B	04/01-04/02/03	FKNQ71C0
			Dilution Factor: 1						
			Analysis Time..: 22:23						
Tin									
	ND	2000	2010	ug/L	100		SW846 6010B	04/01-04/02/03	FKNQ71DQ
	ND	2000	2100	ug/L	105	4.4	SW846 6010B	04/01-04/02/03	FKNQ71DR
			Dilution Factor: 1						
			Analysis Time..: 20:05						

(Continued on next page)

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: CANNON-2 **Matrix.....:** WATER
Date Sampled...: 03/24/03 11:22 **Date Received..:** 03/25/03

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Vanadium									
	11	500	522	ug/L	102		SW846 6010B	04/01-04/02/03	FKNQ71DF
	11	500	537	ug/L	105	2.9	SW846 6010B	04/01-04/02/03	FKNQ71DG
			Dilution Factor: 1						
			Analysis Time..: 20:05						
Zinc									
	13	500	486	ug/L	95		SW846 6010B	04/01-04/02/03	FKNQ71C1
	13	500	505	ug/L	98	3.7	SW846 6010B	04/01-04/02/03	FKNQ71C2
			Dilution Factor: 1						
			Analysis Time..: 20:05						

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

N Spiked analyte recovery is outside stated control limits.

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: CANNON-2 **Matrix.....:** WATER
Date Sampled...: 03/18/03 14:20 **Date Received..:** 03/24/03

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: D3C240249-007 **Prep Batch #...:** 3098222							
Mercury	98	(84 - 114)			SW846 7470A	04/11/03	FKM9N1CJ
	97	(84 - 114)	1.6	(0-10)	SW846 7470A	04/11/03	FKM9N1CK

Dilution Factor: 1
Analysis Time..: 17:00

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: CANNON-2 **Matrix.....:** WATER
Date Sampled...: 03/18/03 14:20 **Date Received..:** 03/24/03

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: D3C240249-007 **Prep Batch #...:** 3098222									
Mercury									
	ND	5.00	4.92	ug/L	98		SW846 7470A	04/11/03	FKM9N1CJ
	ND	5.00	4.84	ug/L	97	1.6	SW846 7470A	04/11/03	FKM9N1CK

Dilution Factor: 1
Analysis Time..: 17:00

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: CANNON-2 **Matrix.....:** WATER
Date Sampled...: 03/20/03 08:50 **Date Received..:** 03/21/03

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: D3C210230-002 **Prep Batch #...:** 3098223							
Mercury	97	(84 - 114)			SW846 7470A	04/14/03	FKJAR1DH
	97	(84 - 114)	0.20	(0-10)	SW846 7470A	04/14/03	FKJAR1DJ

Dilution Factor: 1
Analysis Time..: 21:08

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: CANNON-2 **Matrix.....:** WATER
Date Sampled...: 03/20/03 08:50 **Date Received..:** 03/21/03

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: D3C210230-002 **Prep Batch #...:** 3098223									
Mercury									
	0.021	5.00	4.87	ug/L	97		SW846 7470A	04/14/03	FKJAR1DH
	0.021	5.00	4.88	ug/L	97	0.20	SW846 7470A	04/14/03	FKJAR1DJ

Dilution Factor: 1
Analysis Time..: 21:08

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

General Chemistry

Client Lot #...: CANNON-2 **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total		Work Order #: FK35C1AA		MB Lot-Sample #:	D3C310000-500	
	ND	0.010	mg/L	SW846 9012A	03/31/03	3090500
		Dilution Factor: 1				
		Analysis Time..: 14:00				
Cyanide, Total		Work Order #: FK6D21AA		MB Lot-Sample #:	D3D020000-153	
	ND	0.010	mg/L	SW846 9012A	04/01/03	3092153
		Dilution Factor: 1				
		Analysis Time..: 15:00				
Perchlorate		Work Order #: FL3131AA		MB Lot-Sample #:	D3D160000-660	
	ND	1.0	ug/L	EPA-DW1 314.0	04/15-04/16/03	3106660
		Dilution Factor: 1				
		Analysis Time..: 03:28				
Total Organic Halogens		Work Order #: FLNQT1AA		MB Lot-Sample #:	D3D100000-393	
	ND	10	ug/L	SW846 9020B	04/08/03	3100393
		Dilution Factor: 1				
		Analysis Time..: 12:00				
Total Organic Halogens		Work Order #: FL55P1AA		MB Lot-Sample #:	D3D170000-502	
	ND	10	ug/L	SW846 9020B	04/10/03	3107502
		Dilution Factor: 1				
		Analysis Time..: 12:00				
Total Organic Carbon		Work Order #: FLVQX1AA		MB Lot-Sample #:	D3D140000-209	
	ND	1.0	mg/L	SW846 9060	04/11/03	3104209
		Dilution Factor: 1				
		Analysis Time..: 16:00				
Total Organic Carbon		Work Order #: FL1QQ1AA		MB Lot-Sample #:	D3D160000-160	
	ND	1.0	mg/L	SW846 9060	04/15/03	3106160
		Dilution Factor: 1				
		Analysis Time..: 16:00				
Total Sulfide		Work Order #: FLQ2J1AA		MB Lot-Sample #:	D3C250000-603	
	ND	4.0	mg/L	SW846 9030B/9034	03/25/03	3084603
		Dilution Factor: 1				
		Analysis Time..: 20:00				
Total Sulfide		Work Order #: FL96L1AA		MB Lot-Sample #:	D3C290000-173	
	ND	4.0	mg/L	SW846 9030B/9034	03/26/03	3088173
		Dilution Factor: 1				
		Analysis Time..: 18:00				

(Continued on next page)

METHOD BLANK REPORT

General Chemistry

Client Lot #...: CANNON-2 Matrix.....: WATER

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

General Chemistry

Lot-Sample #...: CANNON-2 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total		WO#:FK35C1AC-LCS/FK35C1AD-LCSD LCS Lot-Sample#: D3C310000-500					
	98	(89 - 109)			SW846 9012A	03/31/03	3090500
	104	(89 - 109)	5.2	(0-20)	SW846 9012A	03/31/03	3090500
		Dilution Factor: 1			Analysis Time..: 14:00		
Cyanide, Total		WO#:FK6D21AC-LCS/FK6D21AD-LCSD LCS Lot-Sample#: D3D020000-153					
	101	(89 - 109)			SW846 9012A	04/01/03	3092153
	103	(89 - 109)	1.9	(0-20)	SW846 9012A	04/01/03	3092153
		Dilution Factor: 1			Analysis Time..: 15:00		
Perchlorate		WO#:FL3131AC-LCS/FL3131AD-LCSD LCS Lot-Sample#: D3D160000-660					
	94	(80 - 120)			EPA-DW1 314.0	04/15-04/16/03	3106660
	92	(80 - 120)	1.2	(0-20)	EPA-DW1 314.0	04/15-04/16/03	3106660
		Dilution Factor: 1			Analysis Time..: 02:49		
Total Organic Halogens		WO#:FLNQT1AC-LCS/FLNQT1AD-LCSD LCS Lot-Sample#: D3D100000-393					
	111	(75 - 113)			SW846 9020B	04/08/03	3100393
	95	(75 - 113)	15	(0-30)	SW846 9020B	04/08-04/09/03	3100393
		Dilution Factor: 1			Analysis Time..: 12:00		
Total Organic Halogens		WO#:FL55P1AC-LCS/FL55P1AD-LCSD LCS Lot-Sample#: D3D170000-502					
	98	(75 - 113)			SW846 9020B	04/10/03	3107502
	98	(75 - 113)	0.10	(0-30)	SW846 9020B	04/10-04/11/03	3107502
		Dilution Factor: 1			Analysis Time..: 12:00		
Total Organic Carbon		WO#:FLVQX1AC-LCS/FLVQX1AD-LCSD LCS Lot-Sample#: D3D140000-209					
	96	(90 - 110)			SW846 9060	04/11/03	3104209
	99	(90 - 110)	2.9	(0-10)	SW846 9060	04/11/03	3104209
		Dilution Factor: 1			Analysis Time..: 16:00		
Total Organic Carbon		WO#:FL1QQ1AC-LCS/FL1QQ1AD-LCSD LCS Lot-Sample#: D3D160000-160					
	91	(90 - 110)			SW846 9060	04/15/03	3106160
	95	(90 - 110)	4.6	(0-10)	SW846 9060	04/15/03	3106160
		Dilution Factor: 1			Analysis Time..: 16:00		

(Continued on next page)

LABORATORY CONTROL SAMPLE EVALUATION REPORT

General Chemistry

Lot-Sample #...: CANNON-2 Matrix.....: WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Total Sulfide		WO#:FLQ2J1AC-LCS/FLQ2J1AD-LCSD LCS Lot-Sample#: D3C250000-603					
	79	(70 - 130)			SW846 9030B/9034	03/25/03	3084603
	83	(70 - 130)	5.3	(0-20)	SW846 9030B/9034	03/25/03	3084603
		Dilution Factor: 1			Analysis Time..: 20:00		
Total Sulfide		WO#:FL96L1AC-LCS/FL96L1AD-LCSD LCS Lot-Sample#: D3C290000-173					
	74	(70 - 130)			SW846 9030B/9034	03/26/03	3088173
	80	(70 - 130)	7.7	(0-20)	SW846 9030B/9034	03/26/03	3088173
		Dilution Factor: 1			Analysis Time..: 18:00		

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE DATA REPORT

General Chemistry

Lot-Sample #...: CANNON-2 **Matrix.....:** WATER

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total		WO#:FK35C1AC-LCS/FK35C1AD-LCSD					LCS Lot-Sample#: D3C310000-500	
	0.200	0.197	mg/L	98		SW846 9012A	03/31/03	3090500
	0.200	0.208	mg/L	104	5.2	SW846 9012A	03/31/03	3090500
		Dilution Factor: 1				Analysis Time..: 14:00		
Cyanide, Total		WO#:FK6D21AC-LCS/FK6D21AD-LCSD					LCS Lot-Sample#: D3D020000-153	
	0.200	0.202	mg/L	101		SW846 9012A	04/01/03	3092153
	0.200	0.206	mg/L	103	1.9	SW846 9012A	04/01/03	3092153
		Dilution Factor: 1				Analysis Time..: 15:00		
Perchlorate		WO#:FL3131AC-LCS/FL3131AD-LCSD					LCS Lot-Sample#: D3D160000-660	
	10.0	9.36	ug/L	94		EPA-DW1 314.0	04/15-04/16/03	3106660
	10.0	9.25	ug/L	92	1.2	EPA-DW1 314.0	04/15-04/16/03	3106660
		Dilution Factor: 1				Analysis Time..: 02:49		
Total Organic Halogens		WO#:FLNQT1AC-LCS/FLNQT1AD-LCSD					LCS Lot-Sample#: D3D100000-393	
	100	111	ug/L	111		SW846 9020B	04/08/03	3100393
	100	95.2	ug/L	95	15	SW846 9020B	04/08-04/09/03	3100393
		Dilution Factor: 1				Analysis Time..: 12:00		
Total Organic Halogens		WO#:FL55P1AC-LCS/FL55P1AD-LCSD					LCS Lot-Sample#: D3D170000-502	
	100	98.4	ug/L	98		SW846 9020B	04/10/03	3107502
	100	98.5	ug/L	98	0.10	SW846 9020B	04/10-04/11/03	3107502
		Dilution Factor: 1				Analysis Time..: 12:00		
Total Organic Carbon		WO#:FLVQX1AC-LCS/FLVQX1AD-LCSD					LCS Lot-Sample#: D3D140000-209	
	25.0	24.1	mg/L	96		SW846 9060	04/11/03	3104209
	25.0	24.8	mg/L	99	2.9	SW846 9060	04/11/03	3104209
		Dilution Factor: 1				Analysis Time..: 16:00		
Total Organic Carbon		WO#:FL1QQ1AC-LCS/FL1QQ1AD-LCSD					LCS Lot-Sample#: D3D160000-160	
	25.0	22.8	mg/L	91		SW846 9060	04/15/03	3106160
	25.0	23.9	mg/L	95	4.6	SW846 9060	04/15/03	3106160
		Dilution Factor: 1				Analysis Time..: 16:00		

(Continued on next page)

LABORATORY CONTROL SAMPLE DATA REPORT

General Chemistry

Lot-Sample #...: CANNON-2 Matrix.....: WATER

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Total Sulfide		WO#:FLQ2J1AC-LCS/FLQ2J1AD-LCSD				LCS Lot-Sample#: D3C250000-603		
	22.2	17.6	mg/L	79		SW846 9030B/9034	03/25/03	3084603
	22.2	18.5	mg/L	83	5.3	SW846 9030B/9034	03/25/03	3084603
		Dilution Factor: 1				Analysis Time..: 20:00		
Total Sulfide		WO#:FL96L1AC-LCS/FL96L1AD-LCSD				LCS Lot-Sample#: D3C290000-173		
	21.5	15.9	mg/L	74		SW846 9030B/9034	03/26/03	3088173
	21.5	17.2	mg/L	80	7.7	SW846 9030B/9034	03/26/03	3088173
		Dilution Factor: 1				Analysis Time..: 18:00		

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #...: CANNON-2 **Matrix.....:** WATER
Date Sampled...: 03/20/03 08:50 **Date Received..:** 03/21/03

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total		WO#: FKML11DJ-MS/FKML11DK-MSD				MS Lot-Sample #: D3C240185-001	
	96	(78 - 120)			SW846 9012A	04/01/03	3092153
	99	(78 - 120)	2.7	(0-20)	SW846 9012A	04/01/03	3092153
		Dilution Factor: 1					
		Analysis Time..: 15:00					
Cyanide, Total		WO#: FKM871CJ-MS/FKM871CK-MSD				MS Lot-Sample #: D3C240249-001	
	98	(78 - 120)			SW846 9012A	03/31/03	3090500
	97	(78 - 120)	0.78	(0-20)	SW846 9012A	03/31/03	3090500
		Dilution Factor: 1					
		Analysis Time..: 14:00					
Perchlorate		WO#: FKJAR1D8-MS/FKJAR1D9-MSD				MS Lot-Sample #: D3C210230-002	
	99	(80 - 120)			EPA-DW1 314.0	04/15-04/16/03	3106660
	102	(80 - 120)	3.1	(0-20)	EPA-DW1 314.0	04/15-04/16/03	3106660
		Dilution Factor: 1					
		Analysis Time..: 08:02					
Total Organic Halogens		WO#: FKM9J1CJ-MS/FKM9J1CK-MSD				MS Lot-Sample #: D3C240249-005	
	86	(75 - 113)			SW846 9020B	04/10-04/17/03	3107502
	87	(75 - 113)	1.5	(0-30)	SW846 9020B	04/10-04/17/03	3107502
		Dilution Factor: 1					
		Analysis Time..: 12:00					
Total Organic Halogens		WO#: FKM9N1CL-MS/FKM9N1CM-MSD				MS Lot-Sample #: D3C240249-007	
	96	(75 - 113)			SW846 9020B	04/08-04/09/03	3100393
	96	(75 - 113)	0.20	(0-30)	SW846 9020B	04/08-04/09/03	3100393
		Dilution Factor: 1					
		Analysis Time..: 12:00					
Total Organic Carbon		WO#: FKM871CL-MS/FKM871CM-MSD				MS Lot-Sample #: D3C240249-001	
	103	(85 - 117)			SW846 9060	04/15/03	3106160
	103	(85 - 117)	0.19	(0-10)	SW846 9060	04/15/03	3106160
		Dilution Factor: 1					
		Analysis Time..: 17:00					
Total Organic Carbon		WO#: FKM9N1CN-MS/FKM9N1CP-MSD				MS Lot-Sample #: D3C240249-007	
	113	(85 - 117)			SW846 9060	04/11/03	3104209
	113	(85 - 117)	0.28	(0-10)	SW846 9060	04/11/03	3104209
		Dilution Factor: 1					
		Analysis Time..: 18:00					

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #...: CANNON-2 Matrix.....: WATER
Date Sampled...: 03/20/03 08:50 Date Received..: 03/21/03

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Total Sulfide		WO#: FKM7P1EF-MS/FKM7P1EG-MSD MS Lot-Sample #: D3C240245-001					
	72	(70 - 130)			SW846 9030B/9034	03/25/03	3084603
	62 N	(70 - 130)	14	(0-20)	SW846 9030B/9034	03/25/03	3084603
		Dilution Factor: 1					
		Analysis Time..: 20:00					

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

N Spiked analyte recovery is outside stated control limits.

MATRIX SPIKE SAMPLE DATA REPORT

General Chemistry

Client Lot #...: CANNON-2 Matrix.....: WATER
Date Sampled...: 03/20/03 08:50 Date Received..: 03/21/03

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total			WO#: FKML11DJ-MS/FKML11DK-MSD MS Lot-Sample #: D3C240185-001						
	0.0041	0.100	0.100	mg/L	96		SW846 9012A	04/01/03	3092153
	0.0041	0.100	0.103	mg/L	99	2.7	SW846 9012A	04/01/03	3092153
			Dilution Factor: 1						
			Analysis Time..: 15:00						
Cyanide, Total			WO#: FKM871CJ-MS/FKM871CK-MSD MS Lot-Sample #: D3C240249-001						
	ND	0.100	0.102	mg/L	98		SW846 9012A	03/31/03	3090500
	ND	0.100	0.101	mg/L	97	0.78	SW846 9012A	03/31/03	3090500
			Dilution Factor: 1						
			Analysis Time..: 14:00						
Perchlorate			WO#: FKJAR1D8-MS/FKJAR1D9-MSD MS Lot-Sample #: D3C210230-002						
	1.7	10.0	11.6	ug/L	99		EPA-DW1 314.0	04/15-04/16/03	3106660
	1.7	10.0	12.0	ug/L	102	3.1	EPA-DW1 314.0	04/15-04/16/03	3106660
			Dilution Factor: 1						
			Analysis Time..: 08:02						
Total Organic Halogens			WO#: FKM9J1CJ-MS/FKM9J1CK-MSD MS Lot-Sample #: D3C240249-005						
	ND	100	85.6	ug/L	86		SW846 9020B	04/10-04/17/03	3107502
	ND	100	86.9	ug/L	87	1.5	SW846 9020B	04/10-04/17/03	3107502
			Dilution Factor: 1						
			Analysis Time..: 12:00						
Total Organic Halogens			WO#: FKM9N1CL-MS/FKM9N1CM-MSD MS Lot-Sample #: D3C240249-007						
	ND	100	96.5	ug/L	96		SW846 9020B	04/08-04/09/03	3100393
	ND	100	96.3	ug/L	96	0.20	SW846 9020B	04/08-04/09/03	3100393
			Dilution Factor: 1						
			Analysis Time..: 12:00						
Total Organic Carbon			WO#: FKM871CL-MS/FKM871CM-MSD MS Lot-Sample #: D3C240249-001						
	ND	25.0	25.8	mg/L	103		SW846 9060	04/15/03	3106160
	ND	25.0	25.8	mg/L	103	0.19	SW846 9060	04/15/03	3106160
			Dilution Factor: 1						
			Analysis Time..: 17:00						
Total Organic Carbon			WO#: FKM9N1CN-MS/FKM9N1CP-MSD MS Lot-Sample #: D3C240249-007						
	ND	25.0	28.4	mg/L	113		SW846 9060	04/11/03	3104209
	ND	25.0	28.4	mg/L	113	0.28	SW846 9060	04/11/03	3104209
			Dilution Factor: 1						
			Analysis Time..: 18:00						

(Continued on next page)

MATRIX SPIKE SAMPLE DATA REPORT

General Chemistry

Client Lot #...: CANNON-2 **Matrix.....:** WATER
Date Sampled...: 03/20/03 08:50 **Date Received..:** 03/21/03

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Total Sulfide			WO#: FKM7P1EF-MS/FKM7P1EG-MSD				MS Lot-Sample #: D3C240245-001		
	ND	22.2	15.9	mg/L	72		SW846 9030B/9	03/25/03	3084603
	ND	22.2	13.9 N	mg/L	62	14	SW846 9030B/9	03/25/03	3084603
			Dilution Factor: 1						
			Analysis Time..: 20:00						

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

N Spiked analyte recovery is outside stated control limits.

4.3°
3/21/03

U.S. GEOLOGICAL SURVEY, WATER RESOURCES DIVISION, NEW MEXICO DISTRICT
ANALYTICAL REQUEST/CHAIN OF CUSTODY

Project Name & Number: Cannon Air Force Base, Ground Water Sampling 86369JV00	PACKING AND SHIPPING DETAILS
	Packed and Sealed for Shipping by: F. Gebhardt — Seal Number: 243730
Sampling Location: Landfill 5, Cannon Air Force Base, NM	Delivered to Shipper by: F. Gebhardt — Airbill Number: 8385 4096 0139
Team Leader: Project chief -- Fred Gebhardt	Sampling Status: ☐ Done ☒ Continuing

Sample Date	Sample Time	Field Sample Number	Sample Type	No. of Containers	Analytical Methods (Parameters)	Remarks
3/20/03	1210	CAFB - D	Ground-water	17	All Apx-IX: SW8260B, SW8270C, SW8280, SW8310, SW8081, SW8082, SW8151, Total-METALS: SW6010 (Al,Ba,Be, Ca, Co, Cu, Fe, Mg, Mn, Mo, Ni, K, Na, Sn, V, Zn), SW6020-ICP-MS (Sb, Ag, Cd, As, Cr, Pb, Se, Tl), SW7470 (Hg), SW9012, SW9030, SW9060, SW9020, Perchlorate EPA 314.0	Environmental Sample

Additional Comments: THE VOC SAMPLES ARE IN COOLER W/ AIRBILL & CAFB-F SAMPLE.

CHAIN OF CUSTODY RECORD				LABORATORY LOG-IN OF SAMPLE SHIPPING CONTAINER	
Relinquished by (signed)	Received by (signed)	Date	Time	Analytical Laboratory	Seal Intact upon Receipt ☐ Yes ☐ No
Fredrick S. Gebhardt	TO FEDERAL EXPRESS	3/20/03	1600	SEVERN TRENT SERVICES 4955 Yarrow Street Arvada, CO 80002 ph: (303) 736-0118 Attention: Susan Decker	Condition of Contents
	Aaron Bindel	3/21/03	1000		Contents Temperature
					Laboratory Project Number

174

STL Denver

2.3° 3/21/03

U.S. GEOLOGICAL SURVEY, WATER RESOURCES DIVISION, NEW MEXICO DISTRICT
ANALYTICAL REQUEST/CHAIN OF CUSTODY

Project Name & Number: Cannon Air Force Base, Ground Water Sampling 86369JV00	PACKING AND SHIPPING DETAILS
Sampling Location: Landfill-5, Cannon Air Force Base, NM	Packed and Sealed for Shipping by: F. Gebhardt — Seal Number: 243740
Team Leader: Project chief -- Fred Gebhardt	Delivered to Shipper by: F. Gebhardt — Airbill Number: 8385 4096 0139
	Sampling Status: ☐ Done ☒ Continuing

Sample Date	Sample Time	Field Sample Number	Sample Type	No. of Containers	Analytical Methods (Parameters)	Remarks
3/20/03	1320	CAFB - C	Ground-water	17	All Apx-IX: SW8260B, SW8270C, SW8280, SW8310, SW8081, SW8082, SW8151, Total-METALS: SW6010 (Al,Ba,Be, Ca, Co, Cu, Fe, Mg, Mn, Mo, Ni, K, Na, Sn, V, Zn), SW6020-ICP-MS (Sb, Ag, Cd, As, Cr, Pb, Se, Tl), SW7470 (Hg), SW9012, SW9030, SW9060 ,SW9020, Perchlorate EPA 314.0	Environmental Sample
3/20/03	1325	CAFB-C-TB	ULTRA PURE WATER	2	SW8260 B (VOC) ONLY	TRIP BLANK

Additional Comments: THE VOC SAMPLE & TRIP BLANK ARE IN COOLER W/AIRBILL & SAMPLE CAFB-F.

CHAIN OF CUSTODY RECORD				LABORATORY LOG-IN OF SAMPLE SHIPPING CONTAINER	
Relinquished by (signed)	Received by (signed)	Date	Time	Analytical Laboratory	Seal Intact upon Receipt ☐ Yes ☐ No
Fredrick G. Gebhardt	TO FEDERAL EXPRESS	3/20/03	1600	SEVERN TRENT SERVICES 4955 Yarrow Street Arvada, CO 80002 ph: (303) 736-0118 Attention: Susan Decker	Condition of Contents
					Contents Temperature
					Laboratory Project Number

175

STL Denver

U.S. GEOLOGICAL SURVEY, WATER RESOURCES DIVISION, NEW MEXICO DISTRICT
ANALYTICAL REQUEST/CHAIN OF CUSTODY

Project Name & Number: Cannon Air Force Base, Ground Water Sampling 86369JV00	PACKING AND SHIPPING DETAILS
Sampling Location: Landfill-5, Cannon Air Force Base, NM	Packed and Sealed for Shipping by: F. Gebhardt; Seal Number: 243680
Team Leader: Project chief -- Fred Gebhardt	Delivered to Shipper by: F. Gebhardt; Airbill Number: 8385 4096 0140
	Sampling Status: ☐ Done ☒ Continuing

Sample Date	Sample Time	Field Sample Number	Sample Type	No. of Containers	Analytical Methods (Parameters)	Remarks
3/19/03	0830	CAFB -- U	Ground-water	17	All Apx-IX: SW8260B, SW8270C, SW8280, SW8310, SW8081, SW8082, SW8151, Total-METALS: SW6010 (Al,Ba,Be, Ca, Co, Cu, Fe, Mg, Mn, Mo, Ni, K, Na, Sn, V, Zn), SW6020-ICP-MS (Sb, Ag, Cd, As, Cr, Pb, Se, Tl), SW7470 (Hg), SW9012, SW9030, SW9060, SW9020, Perchlorate EPA 314.0	Environmental Sample

Additional Comments: THIS COOLER CONTAINS VOC SAMPLES + TRIP BLANK FOR WELLS CAFB-U, UU, T, S, + Q

CHAIN OF CUSTODY RECORD				LABORATORY LOG-IN OF SAMPLE SHIPPING CONTAINER	
Relinquished by (signed)	Received by (signed)	Date	Time	Analytical Laboratory	Seal Intact upon Receipt ☐ Yes ☐ No
Fredrick F. Gebhardt	TO FEDERAL EXPRESS	3/19/03	1600	SEVERN TRENT SERVICES 4955 Yarrow Street Arvada, CO 80002 ph: (303) 736-0118 Attention: Susan Decker	Condition of Contents
	[signature]	3/24/03	1000		Contents Temperature
					Laboratory Project Number

STL Denver

2 OF 5

U.S. GEOLOGICAL SURVEY, WATER RESOURCES DIVISION, NEW MEXICO DISTRICT
ANALYTICAL REQUEST/CHAIN OF CUSTODY

L 3/24/03

Project Name & Number: Cannon Air Force Base, Ground Water Sampling 86369JV00	PACKING AND SHIPPING DETAILS
	Packed and Sealed for Shipping by: F. Gebhardt — Seal Number: 243690
Sampling Location: Landfill-5, Cannon Air Force Base, NM	Delivered to Shipper by: F. Gebhardt — Airbill Number: 8385 4096 0140
Team Leader: Project chief -- Fred Gebhardt	Sampling Status: ☐ Done ☒ Continuing

Sample Date	Sample Time	Field Sample Number	Sample Type	No. of Containers	Analytical Methods (Parameters)	Remarks
3/19/03	0835	CAFB - 44	Ground-water	17	All Apx-IX: SW8260B, SW8270C, SW8280, SW8310, SW8081, SW8082, SW8151, Total-METALS: SW6010 (Al,Ba,Be, Ca, Co, Cu, Fe, Mg, Mn, Mo, Ni, K, Na, Sn, V, Zn), SW6020 ICP-MS (Sb, Ag, Cd, As, Cr, Pb, Se, Tl), SW7470 (Hg), SW9012, SW9030, SW9060 ,SW9020, Perchlorate EPA 314.0	Environmental Sample

Additional Comments: ~~THIS COOLER CONTAINS~~ THE VOC SAMPLE IS IN COOLER W/ AIRBILL + SAMPLE CAFB-4.

CHAIN OF CUSTODY RECORD				LABORATORY LOG-IN OF SAMPLE SHIPPING CONTAINER	
Relinquished by (signed)	Received by (signed)	Date	Time	Analytical Laboratory	Seal Intact upon Receipt ☐ Yes ☐ No
Fredrick E. Gebhardt	TO FEDERAL EXPRESS	3/19/03	1600	SEVERN TRENT SERVICES 4955 Yarrow Street Arvada, CO 80002 ph: (303) 736-0118	Condition of Contents
	[illegible]	3/24/03	1000	Attention: Susan Decker	Contents Temperature
					Laboratory Project Number

177

STL Denver

U.S. GEOLOGICAL SURVEY, WATER RESOURCES DIVISION, NEW MEXICO DISTRICT
ANALYTICAL REQUEST/CHAIN OF CUSTODY

Project Name & Number: Cannon Air Force Base, Ground Water Sampling 86369JV00	PACKING AND SHIPPING DETAILS
	Packed and Sealed for Shipping by: F. Gebhardt — Seal Number: 243700
Sampling Location: Landfill-5, Cannon Air Force Base, NM	Delivered to Shipper by: F. Gebhardt — Airbill Number: 838540960140
Team Leader: Project chief -- Fred Gebhardt	Sampling Status: ☐ Done ☒ Continuing

Sample Date	Sample Time	Field Sample Number	Sample Type	No. of Containers	Analytical Methods (Parameters)	Remarks
3/19/03	1000	CAFB - T	Ground-water	17	All Apx-IX: SW8260B, SW8270C, SW8280, SW8310, SW8081, SW8082, SW8151, Total-METALS: SW6010 (Al,Ba,Be, Ca, Co, Cu, Fe, Mg, Mn, Mo, Ni, K, Na, Sn, V, Zn), SW6020-ICP-MS (Sb, Ag, Cd, As, Cr, Pb, Se, Tl), SW7470 (Hg), SW9012, SW9030, SW9060 ,SW9020, Perchlorate EPA 314 0	Environmental Sample

Additional Comments: THE VOC SAMPLE IS IN COOLER W/ AIRBILL + SAMPLE CAFB-4

CHAIN OF CUSTODY RECORD			
Relinquished by (signed)	Received by (signed)	Date	Time
Fredrick G. Gebhardt	TO FEDERAL EXPRESS	3/19/03	1600
	[signature]	3/24/03	1000

LABORATORY LOG-IN OF SAMPLE SHIPPING CONTAINER	
Analytical Laboratory: SEVERN TRENT SERVICES, 4955 Yarrow Street, Arvada, CO 80002, ph: (303) 736-0118, Attention: Susan Decker	Seal Intact upon Receipt: ☐ Yes ☐ No
	Condition of Contents
	Contents Temperature
	Laboratory Project Number

178

STL Denver

U.S. GEOLOGICAL SURVEY, WATER RESOURCES DIVISION, NEW MEXICO DISTRICT
ANALYTICAL REQUEST/CHAIN OF CUSTODY

Z.2°C
P.JP 3/24

Project Name & Number	PACKING AND SHIPPING DETAILS	
Cannon Air Force Base, Ground Water Sampling 86369JV00	Packed and Sealed for Shipping by: F. Gebhardt	Seal Number: 243720
Sampling Location: Landfill-5, Cannon Air Force Base, NM	Delivered to Shipper by: F. Gebhardt	Airbill Number: 838540960140
Team Leader: Project chief -- Fred Gebhardt	Sampling Status: ☐ Done ☒ Continuing	

Sample Date	Sample Time	Field Sample Number	Sample Type	No. of Containers	Analytical Methods (Parameters)	Remarks
3/19/03	1230	CAFB - Q	Ground-water	17	All Apx-IX: SW8260B, SW8270C, SW8280, SW8310, SW8081, SW8082, SW8151, Total-METALS: SW6010 (Al,Ba,Be, Ca, Co, Cu, Fe, Mg, Mn, Mo, Ni, K, Na, Sn, V, Zn), SW6020-ICP-MS (Sb, Ag, Cd, As, Cr, Pb, Se, Tl), SW7470 (Hg), SW9012, SW9030, SW9060, SW9020, Perchlorate EPA 314.0	Environmental Sample
3/19/03	1240	CAFB-Q-TB	ULTRA PURE WATER	2	SW8260B (VOC ONLY)	TRIP BLANK

Additional Comments: VOC SAMPLE & TRIP BLANK ARE IN COOLER W/AIRBILL & SAMPLE CAFB-4

CHAIN OF CUSTODY RECORD				LABORATORY LOG-IN OF SAMPLE SHIPPING CONTAINER	
Relinquished by (signed)	Received by (signed)	Date	Time	Analytical Laboratory	Seal Intact upon Receipt ☐ Yes ☐ No
Fredrick S. Gebhardt	TO FEDERAL EXPRESS	3/19/03	1600	SEVERN TRENT SERVICES 4955 Yarrow Street Arvada, CO 80002 ph: (303) 736-0118	Condition of Contents
	[illegible]	3/24/03	1000	Attention: Susan Decker	Contents Temperature
					Laboratory Project Number

STL Denver

3.6
PJP 3/24

U.S. GEOLOGICAL SURVEY, WATER RESOURCES DIVISION, NEW MEXICO DISTRICT
ANALYTICAL REQUEST/CHAIN OF CUSTODY

Project Name & Number: Cannon Air Force Base, Ground Water Sampling 86369JV00	PACKING AND SHIPPING DETAILS
Sampling Location: Landfill 5, Cannon Air Force Base, NM	Packed and Sealed for Shipping by: F. Gebhardt — Seal Number: 331268
Team Leader: Project chief -- Fred Gebhardt	Delivered to Shipper by: F. Gebhardt — Airbill Number: P3B5-4096-0117
	Sampling Status: ☐ Done ☒ Continuing

Sample Date	Sample Time	Field Sample Number	Sample Type	No. of Containers	Analytical Methods (Parameters)	Remarks
3/18 03	1420	CAFB WELL-B	Ground-water	17	All Apx-IX: SW8260B, SW8270C, SW8280, SW8310, SW8081, SW8082, SW8151, Total-METALS: SW6010 (Al,Ba,Be, Ca, Co, Cu, Fe, Mg, Mn, Mo, Ni, K, Na, Sn, V, Zn), SW6020-ICP-MS (Sb, Ag, Cd, As, Cr, Pb, Se, Tl), SW7470 (Hg), SW9012, SW9030, SW9060 ,SW9020, Perchlorate EPA 314.0	Environmental Sample
"	1420	T.B. CAFB WELL B	FIELD QC	2	SW8260B (ONLY)	TRIP BLANK

Additional Comments

CHAIN OF CUSTODY RECORD				LABORATORY LOG-IN OF SAMPLE SHIPPING CONTAINER	
Relinquished by (signed)	Received by (signed)	Date	Time	Analytical Laboratory	Seal Intact upon Receipt ☐ Yes ☐ No
[signature]	FED EX	3/18	1600	SEVERN TRENT SERVICES 4955 Yarrow Street Arvada, CO 80002 ph: (303) 736-0118 Attention: Susan Decker	Condition of Contents
	[signature]	3/24/03	1000		Contents Temperature
					Laboratory Project Number

180

STL Denver

STL Denver

Sample Receiving Checklist

Lot #: D3C210341 Date/Time Received: 3/21/03 1000

Company Name & Sampling Site: USGS Cannon

*Cooler #(s): 1 2

Temperatures (°C): 4.3 2.3

PM to Complete This Section: *Yes* *No*

Residual chlorine check required: ☐ ☐

Time Zone:

• EDT/EST • CDT/CST • MDT/MST • PDT/PST • OTHER

Cannon 25228

Unpacking & Labeling Check Points:

N/A	Yes	No		Initials
☐	☑	☐	1. Cooler seals intact. (N/A if hand delivered)	AB
	☑	☐	2. Chain of custody present.	
	☐	☑	3. Bottles broken and/or are leaking, comment if yes.	
	☐	☑	4. Multiphase samples present? If yes, comment below.	
			PHOTOGRAPH BROKEN BOTTLES	
	☑	☐	5. Proper container & preservatives used (ref. Attachment D of SOP# DEN-QA-0003)	
☐	☑	☐	6. pH of all samples checked and meet requirements, note exceptions.	
	☑	☐	7. Chain of custody includes "received by" and "relinquished" by signatures, dates, and times.	
	☐	☑	8. Receipt date(s) > 48 hours past the collection date(s)? If yes, notify PA/PM.	
	☑	☐	9. Chain of custody agrees with bottle count, comment if no.	
	☑	☐	10. Chain of custody agrees with labels, comment if no.	
☐	☑	☐	11. VOA samples filled completely, comment if no.	
☐	☑	☐	12. VOA vials preserved, check label. Preservative ☑HCl ☐4±2°C ☐Sodium Thiosulfate	
	☐	☑	13. Did samples require preservation with sodium thiosulfate?	
☑	☐	☐	14. If yes to #12, did the samples contain residual chlorine?	
☑	☐	☐	15. Sediment present in dissolved/filtered bottles.	
	☐	☑	16. Are analyses with short holding times requested?	
	☐	☑	17. Was a quick Turn Around (TAT) requested?	
☑	☐	☐	18. Is extra sample volume provided for MS, MSD or matrix duplicates?	
			DOUBLECHECK METALS,SAMPLE LABELS & SUBCONTRACT	
☑	☐	☐	19. Subcontract COC signed and sent with samples to bottle prep?	
	☑	☐	20. Were sample labels double-checked by a second person?	
☑	☐	☐	21. Were sample bottles and COC double checked for dissolved/filtered metals by a second person?	
☐	☑	☐	22. If applicable, were AFCEE Metals placed in the walkin refrigerator?	
☑	☐	☐	23. Were special instructions in LIMS read and followed? (None)	

Document any problems and the actions taken to resolve them on a Condition Upon Receipt Anomaly Report (CUR).

STL Denver

Sample Receiving Checklist

Lot #: D3C240249 Date/Time Received: 3/24/03 1000

Company Name & Sampling Site: USGS - Cannon AFB

*Cooler #(s):	1	2	3	4	5	6		
Temperatures (°C):	2.3	2.1	1.8	1.6	2.2	3.6		

PM to Complete This Section: *Yes* *No*
Residual chlorine check required: ☐ ☐
Time Zone:
• EDT/EST • CDT/CST • MDT/MST • PDT/PST • OTHER

USGS Cannon AFB LF5
25228

Unpacking & Labeling Check Points:

N/A	Yes	No		Initials
☐	☑	☐	1. Cooler seals intact. (N/A if hand delivered)	DS
	☑	☐	2. Chain of custody present.	
	☑	☐	3. Bottles broken and/or are leaking, comment if yes.	
	☐	☑	4. Multiphase samples present? If yes, comment below.	
			PHOTOGRAPH BROKEN BOTTLES	
	☑	☐	5. Proper container & preservatives used (ref. Attachment D of SOP# DEN-QA-0003)	
☐	☑	☐	6. pH of all samples checked and meet requirements, note exceptions.	
	☑	☐	7. Chain of custody includes "received by" and "relinquished" by signatures, dates, and times.	
	☑	☐	8. Receipt date(s) > 48 hours past the collection date(s)? If yes, notify PA/PM.	
	☑	☐	9. Chain of custody agrees with bottle count, comment if no.	
	☑	☐	10. Chain of custody agrees with labels, comment if no.	
☐	☑	☐	11. VOA samples filled completely, comment if no.	
☐	☑	☐	12. VOA vials preserved, check label. Preservative ☑HCl ☑4±2°C ☐Sodium Thiosulfate	
	☐	☑	13. Did samples require preservation with sodium thiosulfate?	
☑	☐	☐	14. If yes to #12, did the samples contain residual chlorine?	
☑	☐	☐	15. Sediment present in dissolved/filtered bottles.	
	☐	☑	16. Are analyses with short holding times requested?	
	☐	☑	17. Was a quick Turn Around (TAT) requested?	
☑	☐	☐	18. Is extra sample volume provided for MS, MSD or matrix duplicates?	
			DOUBLECHECK METALS,SAMPLE LABELS & SUBCONTRACT	
☑	☐	☐	19. Subcontract COC signed and sent with samples to bottle prep?	
	☑	☐	20. Were sample labels double-checked by a second person?	
☑	☐	☐	21. Were sample bottles and COC double checked for dissolved/filtered metals by a second person?	
☑	☐	☐	22. If applicable, were AFCEE Metals placed in the walkin refrigerator?	
☑	☐	☐	23. Were special instructions in LIMS read and followed?	

Document any problems and the actions taken to resolve them on a Condition Upon Receipt Anomaly Report (CUR).

QC DATA ASSOCIATION SUMMARY

CANNON-3 : D3C210230

Sample Preparation and Analysis Control Numbers

SAMPLE#	MATRIX	ANALYTICAL METHOD	LEACH BATCH #	PREP BATCH #	MS RUN#
001	WG	MCAWW 160.1		3086560	3092107
	WG	MCAWW 353.2		3104595	
	WG	MCAWW 354.1		3081126	3081030
	WG	MCAWW 300.0A		3094091	3099276
	WG	SW846 6020		3080385	3080198
	WG	SW846 7470A		3098223	3098136
	WG	SW846 8082		3083207	3083086
	WG	SW846 8081A		3083199	3083080
	WG	SW846 8260B		3090576	3090281
	WG	SW846 6010B		3083280	3083131
	WG	SW846 9030B/9034		3088174	3102039
	WG	EPA-DW1 314.0		3106660	3106355
002	WG	MCAWW 160.1		3086560	3092107
	WG	MCAWW 353.2		3104595	
	WG	MCAWW 354.1		3081126	3081030
	WG	MCAWW 300.0A		3105600	3105292
	WG	SW846 6020		3080385	3080198
	WG	SW846 7470A		3098223	3098136
	WG	SW846 8082		3083207	3083086
	WG	SW846 8081A		3083199	3083080
	WG	SW846 8260B		3090576	3090281
	WG	SW846 6010B		3083280	3083131
	WG	SW846 9030B/9034		3088174	3102039
	WG	EPA-DW1 314.0		3106660	3106355
003	WG	MCAWW 160.1		3086560	3092107
	WG	MCAWW 353.2		3104595	
	WG	MCAWW 354.1		3081126	3081030
	WG	MCAWW 300.0A		3094091	3099276
	WG	SW846 6020		3080385	3080198
	WG	SW846 7470A		3098223	3098136
	WG	SW846 8082		3083207	3083086
	WG	SW846 8081A		3083199	3083080
	WG	SW846 8260B		3090576	3090281
	WG	SW846 6010B		3083280	3083131
	WG	SW846 9030B/9034		3088174	3102039
	WG	EPA-DW1 314.0		3106660	3106355
001	WG	MCAWW 160.1		3086561	3092108
	WG	MCAWW 353.2		3108441	
	WG	MCAWW 354.1		3088178	3092004
	WG	MCAWW 300.0A		3106618	3109018

(Continued on next page)

QC DATA ASSOCIATION SUMMARY

CANNON-3 : D3C220137

Sample Preparation and Analysis Control Numbers

SAMPLE#	MATRIX	ANALYTICAL METHOD	LEACH BATCH #	PREP BATCH #	MS RUN#
001	WG	SW846 6020		3084470	3084246
	WG	SW846 7470A		3098224	3098137
	WG	SW846 8082		3083207	3083086
	WG	SW846 8081A		3083199	3083080
	WG	SW846 8260B		3092491	3092243
	WG	SW846 6010B		3084435	3084231
	WG	SW846 9030B/9034		3088174	3102039
	WG	EPA-DW1 314.0		3106660	3106355
002	WQ	SW846 8260B		3092491	3092243
001	WATER	MCAWW 160.1		3098549	3101250
	WATER	MCAWW 353.2		3117126	
	WATER	MCAWW 354.1		3097337	3097159
	WATER	MCAWW 300.0A		3115516	3118236
	WATER	SW846 6020		3100281	3100112
	WATER	SW846 7470A		3098224	3098137
	WATER	SW846 8082		3098190	3098086
	WATER	SW846 8081A		3099170	
	WATER	SW846 8260B		3101527	3101253
	WATER	SW846 6010B		3100459	3100209
	WATER	SW846 9030B/9034		3119373	
	WATER	EPA-DW1 314.0		3106660	3106355
002	WATER	SW846 8260B		3101527	3101253

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: CANNON-3 **Work Order #...:** FK38L1AA **Matrix.....:** WATER
MB Lot-Sample #: D3C310000-576

Prep Date.....: 03/31/03 **Analysis Time..:** 11:08
Analysis Date..: 03/31/03 **Prep Batch #...:** 3090576
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Acetone	ND	10	ug/L	SW846 8260B
Acrylonitrile	ND	20	ug/L	SW846 8260B
Benzene	ND	1.0	ug/L	SW846 8260B
Bromodichloromethane	ND	1.0	ug/L	SW846 8260B
Bromoform	ND	1.0	ug/L	SW846 8260B
Bromomethane	ND	2.0	ug/L	SW846 8260B
Carbon disulfide	ND	1.0	ug/L	SW846 8260B
Carbon tetrachloride	ND	1.0	ug/L	SW846 8260B
Chlorobenzene	ND	1.0	ug/L	SW846 8260B
Dibromochloromethane	ND	1.0	ug/L	SW846 8260B
Chloroethane	ND	2.0	ug/L	SW846 8260B
Chloroform	ND	1.0	ug/L	SW846 8260B
Chloromethane	ND	2.0	ug/L	SW846 8260B
Dibromomethane	ND	1.0	ug/L	SW846 8260B
trans-1,4-Dichloro-2-butene	ND	1.0	ug/L	SW846 8260B
1,1-Dichloroethane	ND	1.0	ug/L	SW846 8260B
1,2-Dichloroethane	ND	1.0	ug/L	SW846 8260B
1,1-Dichloroethene	ND	1.0	ug/L	SW846 8260B
cis-1,2-Dichloroethene	ND	1.0	ug/L	SW846 8260B
trans-1,2-Dichloroethene	ND	0.50	ug/L	SW846 8260B
1,2-Dichloropropane	ND	1.0	ug/L	SW846 8260B
cis-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B
trans-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B
Ethylbenzene	ND	1.0	ug/L	SW846 8260B
Trichlorofluoromethane	ND	2.0	ug/L	SW846 8260B
2-Hexanone	ND	5.0	ug/L	SW846 8260B
Iodomethane	ND	1.0	ug/L	SW846 8260B
Methylene chloride	ND	5.0	ug/L	SW846 8260B
4-Methyl-2-pentanone	ND	5.0	ug/L	SW846 8260B
Styrene	ND	1.0	ug/L	SW846 8260B
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B
Tetrachloroethene	ND	1.0	ug/L	SW846 8260B
Toluene	ND	1.0	ug/L	SW846 8260B
1,1,1-Trichloroethane	ND	1.0	ug/L	SW846 8260B
1,1,2-Trichloroethane	ND	1.0	ug/L	SW846 8260B
Trichloroethene	ND	1.0	ug/L	SW846 8260B
1,2,3-Trichloropropane	ND	1.0	ug/L	SW846 8260B
Vinyl acetate	ND	2.0	ug/L	SW846 8260B
Vinyl chloride	ND	2.0	ug/L	SW846 8260B

(Continued on next page)

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: CANNON-3 **Work Order #...:** FK38L1AA **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Xylenes (total)	ND	2.0	ug/L	SW846 8260B
Acetonitrile	ND	20	ug/L	SW846 8260B
Acrolein	ND	20	ug/L	SW846 8260B
Chloroprene	ND	1.0	ug/L	SW846 8260B
1,2-Dibromo-3-chloropropane (DBCP)	ND	2.0	ug/L	SW846 8260B
1,2-Dibromoethane (EDB)	ND	1.0	ug/L	SW846 8260B
2-Butanone (MEK)	ND	5.0	ug/L	SW846 8260B
Allyl chloride	ND	2.0	ug/L	SW846 8260B
Dichlorodifluoromethane	ND	2.0	ug/L	SW846 8260B
1,2-Dichloroethene (total)	ND	1.0	ug/L	SW846 8260B
1,4-Dioxane	ND	200	ug/L	SW846 8260B
Ethyl methacrylate	ND	1.0	ug/L	SW846 8260B
Isobutyl alcohol	ND	50	ug/L	SW846 8260B
Methacrylonitrile	ND	10	ug/L	SW846 8260B
Methyl methacrylate	ND	1.0	ug/L	SW846 8260B
Propionitrile	ND	20	ug/L	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	107	(80 - 120)
1,2-Dichloroethane-d4	115	(71 - 129)
4-Bromofluorobenzene	102	(80 - 120)
Toluene-d8	105	(80 - 120)

(S):

ions are performed before rounding to avoid round-off errors in calculated results.

US GEOLOGICAL SURVEY

Method Blank Report

GC/MS Volatiles

Lot-Sample #: D3C310000-576 B **Work Order #:** FK38L1AA **Matrix:** WATER

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT		RETENTION TIME	UNITS
Unknown		1.1 J	M	5.135	ug/L

NOTE(S):

M: Result was measured against nearest internal standard assuming a response factor of 1.

STL Denver

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: CANNON-3 **Work Order #...:** FK38L1AC-LCS **Matrix.....:** WATER
LCS Lot-Sample#: D3C310000-576 FK38L1AD-LCSD
Prep Date.....: 03/31/03 **Analysis Date..:** 03/31/03
Prep Batch #...: 3090576 **Analysis Time..:** 09:56
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,1-Dichloroethene	**89**	**(64 - 134)**			**SW846 8260B**
	89	**(64 - 134)**	**0.010**	**(0-20)**	**SW846 8260B**
Benzene	**98**	**(81 - 121)**			**SW846 8260B**
	100	**(81 - 121)**	**1.5**	**(0-20)**	**SW846 8260B**
Chlorobenzene	99	(81 - 121)			SW846 8260B
	101	(81 - 121)	1.8	(0-20)	SW846 8260B
Toluene	**100**	**(81 - 121)**			**SW846 8260B**
	102	**(81 - 121)**	**1.2**	**(0-20)**	**SW846 8260B**
Trichloroethene	**98**	**(82 - 122)**			**SW846 8260B**
	98	**(82 - 122)**	**0.090**	**(0-20)**	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	107	(80 - 120)
	106	(80 - 120)
1,2-Dichloroethane-d4	117	(71 - 129)
	114	(71 - 129)
4-Bromofluorobenzene	101	(80 - 120)
	100	(80 - 120)
Toluene-d8	106	(80 - 120)
	105	(80 - 120)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #...: CANNON-3 **Work Order #...:** FK38L1AC-LCS **Matrix.....:** WATER
LCS Lot-Sample#: D3C310000-576 FK38L1AD-LCSD
Prep Date.....: 03/31/03 **Analysis Date..:** 03/31/03
Prep Batch #...: 3090576 **Analysis Time..:** 09:56
Dilution Factor: 1

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	RPD	METHOD
1,1-Dichloroethene	**10.0**	**8.94**	**ug/L**	**89**		**SW846 8260B**
	10.0	**8.93**	**ug/L**	**89**	**0.010**	**SW846 8260B**
Benzene	**10.0**	**9.85**	**ug/L**	**98**		**SW846 8260B**
	10.0	**10.0**	**ug/L**	**100**	**1.5**	**SW846 8260B**
Chlorobenzene	10.0	9.93	ug/L	99		SW846 8260B
	10.0	10.1	ug/L	101	1.8	SW846 8260B
Toluene	**10.0**	**10.0**	**ug/L**	**100**		**SW846 8260B**
	10.0	**10.2**	**ug/L**	**102**	**1.2**	**SW846 8260B**
Trichloroethene	**10.0**	**9.80**	**ug/L**	**98**		**SW846 8260B**
	10.0	**9.81**	**ug/L**	**98**	**0.090**	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	107	(80 - 120)
	106	(80 - 120)
1,2-Dichloroethane-d4	117	(71 - 129)
	114	(71 - 129)
4-Bromofluorobenzene	101	(80 - 120)
	100	(80 - 120)
Toluene-d8	106	(80 - 120)
	105	(80 - 120)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: CANNON-3 **Work Order #...:** FKJAR1EM-MS **Matrix.....:** WG
MS Lot-Sample #: D3C210230-002 FKJAR1EN-MSD
Date Sampled...: 03/20/03 08:50 **Date Received..:** 03/21/03
Prep Date.....: 03/31/03 **Analysis Date..:** 03/31/03
Prep Batch #...: 3090576 **Analysis Time..:** 11:58
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,1-Dichloroethene	**93**	**(64 - 134)**			**SW846 8260B**
	84	**(64 - 134)**	**10**	**(0-20)**	**SW846 8260B**
Benzene	**101**	**(81 - 121)**			**SW846 8260B**
	102	**(81 - 121)**	**0.90**	**(0-20)**	**SW846 8260B**
Chlorobenzene	**104**	**(81 - 121)**			**SW846 8260B**
	101	**(81 - 121)**	**3.2**	**(0-20)**	**SW846 8260B**
Toluene	**105**	**(81 - 121)**			**SW846 8260B**
	99	**(81 - 121)**	**5.5**	**(0-20)**	**SW846 8260B**
Trichloroethene	**99**	**(82 - 122)**			**SW846 8260B**
	100	**(82 - 122)**	**1.5**	**(0-20)**	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	104	(80 - 120)
	107	(80 - 120)
1,2-Dichloroethane-d4	109	(71 - 129)
	118	(71 - 129)
4-Bromofluorobenzene	100	(80 - 120)
	99	(80 - 120)
Toluene-d8	105	(80 - 120)
	102	(80 - 120)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #...: CANNON-3 **Work Order #...:** FKJAR1EM-MS **Matrix.....:** WG
MS Lot-Sample #: D3C210230-002 FKJAR1EN-MSD
Date Sampled...: 03/20/03 08:50 **Date Received..:** 03/21/03
Prep Date.....: 03/31/03 **Analysis Date..:** 03/31/03
Prep Batch #...: 3090576 **Analysis Time..:** 11:58
Dilution Factor: 1

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD
1,1-Dichloroethene	**ND**	**10.0**	**9.27**	**ug/L**	**93**		**SW846 8260B**
	ND	**10.0**	**8.39**	**ug/L**	**84**	**10**	**SW846 8260B**
Benzene	**ND**	**10.0**	**10.1**	**ug/L**	**101**		**SW846 8260B**
	ND	**10.0**	**10.2**	**ug/L**	**102**	**0.90**	**SW846 8260B**
Chlorobenzene	**ND**	**10.0**	**10.4**	**ug/L**	**104**		**SW846 8260B**
	ND	**10.0**	**10.1**	**ug/L**	**101**	**3.2**	**SW846 8260B**
Toluene	**ND**	**10.0**	**10.5**	**ug/L**	**105**		**SW846 8260B**
	ND	**10.0**	**9.91**	**ug/L**	**99**	**5.5**	**SW846 8260B**
Trichloroethene	**0.18**	**10.0**	**10.0**	**ug/L**	**99**		**SW846 8260B**
	0.18	**10.0**	**10.2**	**ug/L**	**100**	**1.5**	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	104	(80 - 120)
	107	(80 - 120)
1,2-Dichloroethane-d4	109	(71 - 129)
	118	(71 - 129)
4-Bromofluorobenzene	100	(80 - 120)
	99	(80 - 120)
Toluene-d8	105	(80 - 120)
	102	(80 - 120)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: CANNON-3 **Work Order #...:** FK7481AA **Matrix.....:** WATER
MB Lot-Sample #: D3D020000-491

Prep Date.....: 04/01/03 **Analysis Time..:** 11:08

Analysis Date..: 04/01/03 **Prep Batch #...:** 3092491
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Acetone	ND	10	ug/L	SW846 8260B
Benzene	ND	1.0	ug/L	SW846 8260B
Bromodichloromethane	ND	1.0	ug/L	SW846 8260B
Bromoform	ND	1.0	ug/L	SW846 8260B
Bromomethane	ND	2.0	ug/L	SW846 8260B
Carbon disulfide	ND	1.0	ug/L	SW846 8260B
Carbon tetrachloride	ND	1.0	ug/L	SW846 8260B
Chlorobenzene	ND	1.0	ug/L	SW846 8260B
Dibromochloromethane	ND	1.0	ug/L	SW846 8260B
Chloroethane	ND	2.0	ug/L	SW846 8260B
Chloroform	ND	1.0	ug/L	SW846 8260B
Chloromethane	ND	2.0	ug/L	SW846 8260B
Dibromomethane	ND	1.0	ug/L	SW846 8260B
Dichlorodifluoromethane	ND	2.0	ug/L	SW846 8260B
1,1-Dichloroethane	ND	1.0	ug/L	SW846 8260B
1,2-Dichloroethane	ND	1.0	ug/L	SW846 8260B
1,1-Dichloroethene	ND	1.0	ug/L	SW846 8260B
cis-1,2-Dichloroethene	ND	1.0	ug/L	SW846 8260B
trans-1,2-Dichloroethene	ND	0.50	ug/L	SW846 8260B
1,2-Dichloropropane	ND	1.0	ug/L	SW846 8260B
cis-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B
trans-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B
Ethylbenzene	ND	1.0	ug/L	SW846 8260B
Trichlorofluoromethane	ND	2.0	ug/L	SW846 8260B
2-Hexanone	ND	5.0	ug/L	SW846 8260B
Methylene chloride	ND	5.0	ug/L	SW846 8260B
4-Methyl-2-pentanone	ND	5.0	ug/L	SW846 8260B
Styrene	ND	1.0	ug/L	SW846 8260B
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B
Tetrachloroethene	ND	1.0	ug/L	SW846 8260B
Toluene	ND	1.0	ug/L	SW846 8260B
1,1,1-Trichloroethane	ND	1.0	ug/L	SW846 8260B
1,1,2-Trichloroethane	ND	1.0	ug/L	SW846 8260B
Trichloroethene	ND	1.0	ug/L	SW846 8260B
1,2,3-Trichloropropane	ND	1.0	ug/L	SW846 8260B
Vinyl chloride	ND	2.0	ug/L	SW846 8260B
Acrylonitrile	ND	20	ug/L	SW846 8260B
Chloroprene	ND	1.0	ug/L	SW846 8260B
Allyl chloride	ND	2.0	ug/L	SW846 8260B
1,2-Dibromo-3-chloropropane (DBCP)	ND	2.0	ug/L	SW846 8260B

(Continued on next page)

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: CANNON-3 Work Order #...: FK7481AA Matrix.....: WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
1,2-Dibromoethane (EDB)	ND	1.0	ug/L	SW846 8260B
2-Butanone (MEK)	ND	5.0	ug/L	SW846 8260B
trans-1,4-Dichloro-2-butene	ND	1.0	ug/L	SW846 8260B
Acetonitrile	ND	20	ug/L	SW846 8260B
Acrolein	ND	20	ug/L	SW846 8260B
1,2-Dichloroethene (total)	ND	1.0	ug/L	SW846 8260B
1,4-Dioxane	ND	200	ug/L	SW846 8260B
Ethyl methacrylate	ND	1.0	ug/L	SW846 8260B
Iodomethane	ND	1.0	ug/L	SW846 8260B
Isobutyl alcohol	ND	50	ug/L	SW846 8260B
Methacrylonitrile	ND	10	ug/L	SW846 8260B
Methyl methacrylate	ND	1.0	ug/L	SW846 8260B
Propionitrile	ND	20	ug/L	SW846 8260B
Vinyl acetate	ND	2.0	ug/L	SW846 8260B
Xylenes (total)	ND	2.0	ug/L	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	102	(80 - 120)
1,2-Dichloroethane-d4	101	(71 - 129)
4-Bromofluorobenzene	100	(80 - 120)
Toluene-d8	105	(80 - 120)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

US GEOLOGICAL SURVEY

Method Blank Report

GC/MS Volatiles

Lot-Sample #: D3D020000-491 B **Work Order #:** FK7481AA **Matrix:** WATER

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT	RETENTION TIME	UNITS
None				ug/L

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: CANNON-3 **Work Order #...:** FK7481AC-LCS **Matrix.....:** WATER
LCS Lot-Sample#: D3D020000-491 FK7481AD-LCSD
Prep Date.....: 04/01/03 **Analysis Date..:** 04/01/03
Prep Batch #...: 3092491 **Analysis Time..:** 10:20
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,1-Dichloroethene	**100**	**(64 - 134)**			**SW846 8260B**
	98	**(64 - 134)**	**1.7**	**(0-20)**	**SW846 8260B**
Benzene	**106**	**(81 - 121)**			**SW846 8260B**
	104	**(81 - 121)**	**1.9**	**(0-20)**	**SW846 8260B**
Chlorobenzene	**109**	**(81 - 121)**			**SW846 8260B**
	111	**(81 - 121)**	**1.5**	**(0-20)**	**SW846 8260B**
Toluene	**112**	**(81 - 121)**			**SW846 8260B**
	115	**(81 - 121)**	**2.4**	**(0-20)**	**SW846 8260B**
Trichloroethene	**102**	**(82 - 122)**			**SW846 8260B**
	102	**(82 - 122)**	**0.56**	**(0-20)**	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	103	(80 - 120)
	106	(80 - 120)
1,2-Dichloroethane-d4	103	(71 - 129)
	105	(71 - 129)
4-Bromofluorobenzene	97	(80 - 120)
	101	(80 - 120)
Toluene-d8	103	(80 - 120)
	107	(80 - 120)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #...: CANNON-3 **Work Order #...:** FK7481AC-LCS **Matrix.....:** WATER
LCS Lot-Sample#: D3D020000-491 FK7481AD-LCSD
Prep Date.....: 04/01/03 **Analysis Date..:** 04/01/03
Prep Batch #...: 3092491 **Analysis Time..:** 10:20
Dilution Factor: 1

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	RPD	METHOD
1,1-Dichloroethene	10.0	9.96	ug/L	100		SW846 8260B
	10.0	9.79	ug/L	98	1.7	SW846 8260B
Benzene	10.0	10.6	ug/L	106		SW846 8260B
	10.0	10.4	ug/L	104	1.9	SW846 8260B
Chlorobenzene	10.0	10.9	ug/L	109		SW846 8260B
	10.0	11.1	ug/L	111	1.5	SW846 8260B
Toluene	10.0	11.2	ug/L	112		SW846 8260B
	10.0	11.5	ug/L	115	2.4	SW846 8260B
Trichloroethene	10.0	10.2	ug/L	102		SW846 8260B
	10.0	10.2	ug/L	102	0.56	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	103	(80 - 120)
	106	(80 - 120)
1,2-Dichloroethane-d4	103	(71 - 129)
	105	(71 - 129)
4-Bromofluorobenzene	97	(80 - 120)
	101	(80 - 120)
Toluene-d8	103	(80 - 120)
	107	(80 - 120)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: CANNON-3 **Work Order #...:** FKMV01AC-MS **Matrix.....:** WATER
MS Lot-Sample #: D3C240210-004 FKMV01AD-MSD
Date Sampled...: 03/24/03 08:52 **Date Received..:** 03/24/03
Prep Date.....: 04/01/03 **Analysis Date..:** 04/01/03
Prep Batch #...: 3092491 **Analysis Time..:** 12:10
Dilution Factor: 40

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,1-Dichloroethene	**101**	**(64 - 134)**			**SW846 8260B**
	101	**(64 - 134)**	**0.20**	**(0-20)**	**SW846 8260B**
Benzene	**103**	**(81 - 121)**			**SW846 8260B**
	104	**(81 - 121)**	**0.92**	**(0-20)**	**SW846 8260B**
Chlorobenzene	107	(81 - 121)			SW846 8260B
	108	**(81 - 121)**	**1.3**	**(0-20)**	**SW846 8260B**
Toluene	**112**	**(81 - 121)**			**SW846 8260B**
	115	**(81 - 121)**	**2.9**	**(0-20)**	**SW846 8260B**
Trichloroethene	**105**	**(82 - 122)**			**SW846 8260B**
	103	**(82 - 122)**	**2.4**	**(0-20)**	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	104	(80 - 120)
	105	(80 - 120)
1,2-Dichloroethane-d4	106	(71 - 129)
	101	(71 - 129)
4-Bromofluorobenzene	97	(80 - 120)
	102	(80 - 120)
Toluene-d8	104	(80 - 120)
	108	(80 - 120)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #...: CANNON-3 **Work Order #...:** FKMV01AC-MS **Matrix.....:** WATER
MS Lot-Sample #: D3C240210-004 FKMV01AD-MSD
Date Sampled...: 03/24/03 08:52 **Date Received..:** 03/24/03
Prep Date.....: 04/01/03 **Analysis Date..:** 04/01/03
Prep Batch #...: 3092491 **Analysis Time..:** 12:10
Dilution Factor: 40

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD
1,1-Dichloroethene	**ND**	**400**	**404**	**ug/L**	**101**		**SW846 8260B**
	ND	**400**	**404**	**ug/L**	**101**	**0.20**	**SW846 8260B**
Benzene	**ND**	**400**	**413**	**ug/L**	**103**		**SW846 8260B**
	ND	400	417	ug/L	104	0.92	SW846 8260B
Chlorobenzene	ND	400	428	ug/L	107		SW846 8260B
	ND	400	433	ug/L	108	1.3	SW846 8260B
Toluene	**ND**	**400**	**447**	**ug/L**	**112**		**SW846 8260B**
	ND	**400**	**461**	**ug/L**	**115**	**2.9**	**SW846 8260B**
Trichloroethene	**ND**	**400**	**420**	**ug/L**	**105**		**SW846 8260B**
	ND	**400**	**411**	**ug/L**	**103**	**2.4**	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	104	(80 - 120)
	105	(80 - 120)
1,2-Dichloroethane-d4	106	(71 - 129)
	101	(71 - 129)
4-Bromofluorobenzene	97	(80 - 120)
	102	(80 - 120)
Toluene-d8	104	(80 - 120)
	108	(80 - 120)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: CANNON-3 Work Order #...: FLTEK1AA Matrix.....: WATER
MB Lot-Sample #: D3D110000-527
Prep Date.....: 04/10/03 Analysis Time..: 09:38
Analysis Date..: 04/10/03 Prep Batch #...: 3101527
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Acetone	ND	10	ug/L	SW846 8260B
Acetonitrile	ND	20	ug/L	SW846 8260B
Acrolein	ND	20	ug/L	SW846 8260B
Acrylonitrile	ND	20	ug/L	SW846 8260B
Benzene	ND	1.0	ug/L	SW846 8260B
Bromodichloromethane	ND	1.0	ug/L	SW846 8260B
Bromoform	ND	1.0	ug/L	SW846 8260B
Bromomethane	ND	2.0	ug/L	SW846 8260B
Carbon disulfide	ND	1.0	ug/L	SW846 8260B
Carbon tetrachloride	ND	1.0	ug/L	SW846 8260B
Chlorobenzene	ND	1.0	ug/L	SW846 8260B
Chloroprene	ND	1.0	ug/L	SW846 8260B
Dibromochloromethane	ND	1.0	ug/L	SW846 8260B
Chloroethane	ND	2.0	ug/L	SW846 8260B
Chloroform	ND	1.0	ug/L	SW846 8260B
Chloromethane	ND	2.0	ug/L	SW846 8260B
Allyl chloride	ND	2.0	ug/L	SW846 8260B
Dibromomethane	ND	1.0	ug/L	SW846 8260B
trans-1,4-Dichloro-2-butene	ND	1.0	ug/L	SW846 8260B
Dichlorodifluoromethane	ND	2.0	ug/L	SW846 8260B
1,1-Dichloroethane	ND	1.0	ug/L	SW846 8260B
1,2-Dichloroethane	ND	1.0	ug/L	SW846 8260B
1,1-Dichloroethene	ND	1.0	ug/L	SW846 8260B
cis-1,2-Dichloroethene	ND	1.0	ug/L	SW846 8260B
trans-1,2-Dichloroethene	ND	0.50	ug/L	SW846 8260B
1,2-Dichloroethene (total)	ND	1.0	ug/L	SW846 8260B
1,2-Dichloropropane	ND	1.0	ug/L	SW846 8260B
cis-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B
trans-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B
1,4-Dioxane	ND	200	ug/L	SW846 8260B
Ethylbenzene	ND	1.0	ug/L	SW846 8260B
Ethyl methacrylate	ND	1.0	ug/L	SW846 8260B
Trichlorofluoromethane	ND	2.0	ug/L	SW846 8260B
2-Hexanone	ND	5.0	ug/L	SW846 8260B
Iodomethane	ND	1.0	ug/L	SW846 8260B
Isobutyl alcohol	ND	50	ug/L	SW846 8260B
Methacrylonitrile	ND	10	ug/L	SW846 8260B
Methylene chloride	ND	5.0	ug/L	SW846 8260B
Methyl methacrylate	ND	1.0	ug/L	SW846 8260B

(Continued on next page)

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: CANNON-3 **Work Order #...:** FLTEK1AA **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
4-Methyl-2-pentanone	ND	5.0	ug/L	SW846 8260B
Propionitrile	ND	20	ug/L	SW846 8260B
Styrene	ND	1.0	ug/L	SW846 8260B
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B
Tetrachloroethene	ND	1.0	ug/L	SW846 8260B
Toluene	ND	1.0	ug/L	SW846 8260B
1,1,1-Trichloroethane	ND	1.0	ug/L	SW846 8260B
1,1,2-Trichloroethane	ND	1.0	ug/L	SW846 8260B
Trichloroethene	ND	1.0	ug/L	SW846 8260B
1,2,3-Trichloropropane	ND	1.0	ug/L	SW846 8260B
Vinyl acetate	ND	2.0	ug/L	SW846 8260B
Vinyl chloride	ND	2.0	ug/L	SW846 8260B
Xylenes (total)	ND	2.0	ug/L	SW846 8260B
1,2-Dibromo-3-chloropropane (DBCP)	ND	2.0	ug/L	SW846 8260B
1,2-Dibromoethane (EDB)	ND	1.0	ug/L	SW846 8260B
2-Butanone (MEK)	ND	5.0	ug/L	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	99	(80 - 120)
1,2-Dichloroethane-d4	88	(71 - 129)
4-Bromofluorobenzene	91	(80 - 120)
Toluene-d8	95	(80 - 120)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

US GEOLOGICAL SURVEY

Method Blank Report

GC/MS Volatiles

Lot-Sample #: D3D110000-527 B **Work Order #:** FLTEK1AA **Matrix:** WATER

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT	RETENTION TIME	UNITS
None				ug/L

STL Denver

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: CANNON-3 **Work Order #...:** FLTEK1AC-LCS **Matrix.....:** WATER
LCS Lot-Sample#: D3D110000-527 FLTEK1AD-LCSD
Prep Date.....: 04/10/03 **Analysis Date..:** 04/10/03
Prep Batch #...: 3101527 **Analysis Time..:** 09:17
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,1-Dichloroethene	**91**	**(64 - 134)**			**SW846 8260B**
	83	**(64 - 134)**	**8.2**	**(0-20)**	**SW846 8260B**
Benzene	**95**	**(81 - 121)**			**SW846 8260B**
	91	**(81 - 121)**	**4.8**	**(0-20)**	**SW846 8260B**
Chlorobenzene	**92**	**(81 - 121)**			**SW846 8260B**
	90	**(81 - 121)**	**1.8**	**(0-20)**	**SW846 8260B**
Toluene	**92**	**(81 - 121)**			**SW846 8260B**
	89	**(81 - 121)**	**2.9**	**(0-20)**	**SW846 8260B**
Trichloroethene	**100**	**(82 - 122)**			**SW846 8260B**
	93	**(82 - 122)**	**7.3**	**(0-20)**	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	95	(80 - 120)
	96	(80 - 120)
1,2-Dichloroethane-d4	82	(71 - 129)
	88	(71 - 129)
4-Bromofluorobenzene	89	(80 - 120)
	91	(80 - 120)
Toluene-d8	97	(80 - 120)
	98	(80 - 120)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #...: CANNON-3 **Work Order #...:** FLTEK1AC-LCS **Matrix.....:** WATER
LCS Lot-Sample#: D3D110000-527 FLTEK1AD-LCSD
Prep Date.....: 04/10/03 **Analysis Date..:** 04/10/03
Prep Batch #...: 3101527 **Analysis Time..:** 09:17
Dilution Factor: 1

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	RPD	METHOD
1,1-Dichloroethene	**10.0**	**9.06**	**ug/L**	**91**		**SW846 8260B**
	10.0	**8.34**	**ug/L**	**83**	**8.2**	**SW846 8260B**
Benzene	**10.0**	**9.51**	**ug/L**	**95**		**SW846 8260B**
	10.0	**9.07**	**ug/L**	**91**	**4.8**	**SW846 8260B**
Chlorobenzene	**10.0**	**9.19**	**ug/L**	**92**		**SW846 8260B**
	10.0	**9.03**	**ug/L**	**90**	**1.8**	**SW846 8260B**
Toluene	**10.0**	**9.16**	**ug/L**	**92**		**SW846 8260B**
	10.0	**8.90**	**ug/L**	**89**	**2.9**	**SW846 8260B**
Trichloroethene	**10.0**	**10.0**	**ug/L**	**100**		**SW846 8260B**
	10.0	**9.29**	**ug/L**	**93**	**7.3**	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	95	(80 - 120)
	96	(80 - 120)
1,2-Dichloroethane-d4	82	(71 - 129)
	88	(71 - 129)
4-Bromofluorobenzene	89	(80 - 120)
	91	(80 - 120)
Toluene-d8	97	(80 - 120)
	98	(80 - 120)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: CANNON-3 **Work Order #...:** FK8X31CF-MS **Matrix.....:** WATER
MS Lot-Sample #: D3D030147-001 FK8X31CG-MSD
Date Sampled...: 04/02/03 09:30 **Date Received..:** 04/03/03
Prep Date.....: 04/10/03 **Analysis Date..:** 04/10/03
Prep Batch #...: 3101527 **Analysis Time..:** 11:35
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,1-Dichloroethene	**83**	**(64 - 134)**			**SW846 8260B**
	84	**(64 - 134)**	**1.4**	**(0-20)**	**SW846 8260B**
Benzene	**91**	**(81 - 121)**			**SW846 8260B**
	93	**(81 - 121)**	**1.9**	**(0-20)**	**SW846 8260B**
Chlorobenzene	**90**	(81 - 121)			SW846 8260B
	90	**(81 - 121)**	**0.16**	**(0-20)**	**SW846 8260B**
Toluene	**87**	**(81 - 121)**			**SW846 8260B**
	87	**(81 - 121)**	**0.39**	**(0-20)**	**SW846 8260B**
Trichloroethene	**93**	**(82 - 122)**			**SW846 8260B**
	94	**(82 - 122)**	**0.21**	**(0-20)**	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	96	(80 - 120)
	97	(80 - 120)
1,2-Dichloroethane-d4	86	(71 - 129)
	87	(71 - 129)
4-Bromofluorobenzene	92	(80 - 120)
	91	(80 - 120)
Toluene-d8	97	(80 - 120)
	96	(80 - 120)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #...: CANNON-3 **Work Order #...:** FK8X31CF-MS **Matrix.....:** WATER
MS Lot-Sample #: D3D030147-001 FK8X31CG-MSD
Date Sampled...: 04/02/03 09:30 **Date Received..:** 04/03/03
Prep Date.....: 04/10/03 **Analysis Date..:** 04/10/03
Prep Batch #...: 3101527 **Analysis Time..:** 11:35
Dilution Factor: 1

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD
1,1-Dichloroethene	**ND**	**10.0**	**8.29**	**ug/L**	**83**		**SW846 8260B**
	ND	**10.0**	**8.40**	**ug/L**	**84**	**1.4**	**SW846 8260B**
Benzene	**ND**	**10.0**	**9.12**	**ug/L**	**91**		**SW846 8260B**
	ND	**10.0**	**9.30**	**ug/L**	**93**	**1.9**	**SW846 8260B**
Chlorobenzene	**ND**	**10.0**	**8.99**	**ug/L**	**90**		**SW846 8260B**
	ND	**10.0**	**8.98**	**ug/L**	**90**	**0.16**	**SW846 8260B**
Toluene	**ND**	**10.0**	**8.74**	**ug/L**	**87**		**SW846 8260B**
	ND	**10.0**	**8.70**	**ug/L**	**87**	**0.39**	**SW846 8260B**
Trichloroethene	**ND**	**10.0**	**9.33**	**ug/L**	**93**		**SW846 8260B**
	ND	**10.0**	**9.35**	**ug/L**	**94**	**0.21**	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	96	(80 - 120)
	97	(80 - 120)
1,2-Dichloroethane-d4	86	(71 - 129)
	87	(71 - 129)
4-Bromofluorobenzene	92	(80 - 120)
	91	(80 - 120)
Toluene-d8	97	(80 - 120)
	96	(80 - 120)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

METHOD BLANK REPORT

GC Semivolatiles

Client Lot #...: CANNON-3
MB Lot-Sample #: D3C240000-199

Work Order #...: FKLW61AA

Matrix.....: WATER

Prep Date.....: 03/24/03

Analysis Time..: 17:34

Analysis Date..: 03/27/03
Prep Batch #...: 3083199
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Aldrin	ND	0.050	ug/L	SW846 8081A
alpha-BHC	ND	0.050	ug/L	SW846 8081A
beta-BHC	ND	0.050	ug/L	SW846 8081A
delta-BHC	ND	0.050	ug/L	SW846 8081A
gamma-BHC (Lindane)	ND	0.050	ug/L	SW846 8081A
4,4'-DDD	ND	0.050	ug/L	SW846 8081A
4,4'-DDE	ND	0.050	ug/L	SW846 8081A
4,4'-DDT	ND	0.050	ug/L	SW846 8081A
Dieldrin	ND	0.050	ug/L	SW846 8081A
Endosulfan I	ND	0.050	ug/L	SW846 8081A
Endosulfan II	ND	0.050	ug/L	SW846 8081A
Endosulfan sulfate	ND	0.050	ug/L	SW846 8081A
Endrin	ND	0.050	ug/L	SW846 8081A
Endrin aldehyde	ND	0.050	ug/L	SW846 8081A
Heptachlor	ND	0.050	ug/L	SW846 8081A
Heptachlor epoxide	ND	0.050	ug/L	SW846 8081A
Isodrin	ND	0.10	ug/L	SW846 8081A
Diallate	ND	1.0	ug/L	SW846 8081A
Endrin ketone	ND	0.050	ug/L	SW846 8081A
Kepone	ND	1.0	ug/L	SW846 8081A
Methoxychlor	ND	0.10	ug/L	SW846 8081A
Toxaphene	ND	5.0	ug/L	SW846 8081A
alpha-Chlordane	ND	0.050	ug/L	SW846 8081A
gamma-Chlordane	ND	0.050	ug/L	SW846 8081A

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Decachlorobiphenyl	82	(34 - 134)
Tetrachloro-m-xylene	58	(41 - 125)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: CANNON-3 Work Order #...: FKLW61AC-LCS Matrix.....: WATER
LCS Lot-Sample#: D3C240000-199 FKLW61AD-LCSD
Prep Date.....: 03/24/03 Analysis Date..: 03/27/03
Prep Batch #...: 3083199 Analysis Time..: 13:32
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
4,4'-DDT	**88**	**(51 - 139)**			**SW846 8081A**
	89	**(51 - 139)**	**1.0**	**(0-30)**	**SW846 8081A**
Aldrin	**74**	**(48 - 118)**			**SW846 8081A**
	74	**(48 - 118)**	**0.21**	**(0-30)**	**SW846 8081A**
Dieldrin	**93**	**(68 - 122)**			**SW846 8081A**
	93	**(68 - 122)**	**0.19**	**(0-30)**	**SW846 8081A**
Endrin	**92**	**(71 - 122)**			**SW846 8081A**
	93	**(71 - 122)**	**0.30**	**(0-30)**	**SW846 8081A**
gamma-BHC (Lindane)	**88**	**(68 - 120)**			**SW846 8081A**
	89	**(68 - 120)**	**1.8**	**(0-30)**	**SW846 8081A**
Heptachlor	**81**	**(48 - 131)**			**SW846 8081A**
	78	**(48 - 131)**	**2.8**	**(0-30)**	**SW846 8081A**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Decachlorobiphenyl	82	(71 - 127)
	84	(71 - 127)
Tetrachloro-m-xylene	77	(61 - 115)
	75	(61 - 115)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE DATA REPORT

GC Semivolatiles

Client Lot #...: CANNON-3 **Work Order #...:** FKLW61AC-LCS **Matrix.....:** WATER
LCS Lot-Sample#: D3C240000-199 FKLW61AD-LCSD
Prep Date.....: 03/24/03 **Analysis Date..:** 03/27/03
Prep Batch #...: 3083199 **Analysis Time..:** 13:32
Dilution Factor: 1

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	RPD	METHOD
4,4'-DDT	**0.500**	**0.438**	**ug/L**	**88**		**SW846 8081A**
	0.500	**0.443**	**ug/L**	**89**	**1.0**	**SW846 8081A**
Aldrin	**0.500**	**0.370**	**ug/L**	**74**		**SW846 8081A**
	0.500	**0.371**	**ug/L**	**74**	**0.21**	**SW846 8081A**
Dieldrin	0.500	0.463	ug/L	93		SW846 8081A
	0.500	0.464	ug/L	93	0.19	SW846 8081A
Endrin	0.500	0.462	ug/L	92		SW846 8081A
	0.500	0.463	ug/L	93	0.30	SW846 8081A
gamma-BHC (Lindane)	**0.500**	**0.439**	**ug/L**	**88**		**SW846 8081A**
	0.500	**0.447**	**ug/L**	**89**	**1.8**	**SW846 8081A**
Heptachlor	**0.500**	**0.403**	**ug/L**	**81**		**SW846 8081A**
	0.500	**0.392**	**ug/L**	**78**	**2.8**	**SW846 8081A**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Decachlorobiphenyl	82	(71 - 127)
	84	(71 - 127)
Tetrachloro-m-xylene	77	(61 - 115)
	75	(61 - 115)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: CANNON-3 **Work Order #...:** FKJAR1DU-MS **Matrix.....:** WG
MS Lot-Sample #: D3C210230-002 FKJAR1DV-MSD
Date Sampled...: 03/20/03 08:50 **Date Received..:** 03/21/03
Prep Date.....: 03/24/03 **Analysis Date..:** 03/27/03
Prep Batch #...: 3083199 **Analysis Time..:** 20:35
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
4,4'-DDT	**93**	**(52 - 132)**			**SW846 8081A**
	91	**(52 - 132)**	**5.5**	**(0-30)**	**SW846 8081A**
Aldrin	**77**	**(39 - 121)**			**SW846 8081A**
	76	**(39 - 121)**	**4.1**	**(0-30)**	**SW846 8081A**
Dieldrin	**94**	**(62 - 120)**			**SW846 8081A**
	94	**(62 - 120)**	**3.1**	**(0-30)**	**SW846 8081A**
Endrin	**96**	**(73 - 122)**			**SW846 8081A**
	84	**(73 - 122)**	**16**	**(0-30)**	**SW846 8081A**
gamma-BHC (Lindane)	**90**	**(62 - 124)**			**SW846 8081A**
	91	**(62 - 124)**	**2.6**	**(0-30)**	**SW846 8081A**
Heptachlor	**88**	**(50 - 129)**			**SW846 8081A**
	86	**(50 - 129)**	**5.2**	**(0-30)**	**SW846 8081A**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Decachlorobiphenyl	90	(34 - 134)
	89	(34 - 134)
Tetrachloro-m-xylene	75	(41 - 125)
	75	(41 - 125)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results

Bold print denotes control parameters

MATRIX SPIKE SAMPLE DATA REPORT

GC Semivolatiles

Client Lot #...: CANNON-3 **Work Order #...:** FKJAR1DU-MS **Matrix.....:** WG
MS Lot-Sample #: D3C210230-002 FKJAR1DV-MSD
Date Sampled...: 03/20/03 08:50 **Date Received..:** 03/21/03
Prep Date.....: 03/24/03 **Analysis Date..:** 03/27/03
Prep Batch #...: 3083199 **Analysis Time..:** 20:35
Dilution Factor: 1

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD
4,4'-DDT	**ND**	**0.512**	**0.479**	**ug/L**	**93**		**SW846 8081A**
	ND	**0.499**	**0.453**	**ug/L**	**91**	**5.5**	**SW846 8081A**
Aldrin	**ND**	**0.512**	**0.396**	**ug/L**	**77**		**SW846 8081A**
	ND	**0.499**	**0.380**	**ug/L**	**76**	**4.1**	**SW846 8081A**
Dieldrin	ND	0.512	0.483	ug/L	94		SW846 8081A
	ND	0.499	0.468	ug/L	94	3.1	SW846 8081A
Endrin	ND	0.512	0.489	ug/L	96		SW846 8081A
	ND	0.499	0.419	ug/L	84	16	SW846 8081A
gamma-BHC (Lindane)	ND	0.512	0.464	ug/L	90		SW846 8081A
	ND	0.499	0.452	ug/L	91	2.6	SW846 8081A
Heptachlor	ND	0.512	0.450	ug/L	88		SW846 8081A
	ND	0.499	0.428	ug/L	86	5.2	SW846 8081A

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Decachlorobiphenyl	90	(34 - 134)
	89	(34 - 134)
Tetrachloro-m-xylene	75	(41 - 125)
	75	(41 - 125)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

METHOD BLANK REPORT

GC Semivolatiles

Client Lot #...: CANNON-3
MB Lot-Sample #: D3D090000-170

Work Order #...: FLJ111AA

Matrix.....: WATER

Prep Date.....: 04/09/03
Prep Batch #...: 3099170

Analysis Time..: 11:29

Analysis Date..: 04/15/03
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Aldrin	ND	0.050	ug/L	SW846 8081A
alpha-BHC	ND	0.050	ug/L	SW846 8081A
beta-BHC	ND	0.050	ug/L	SW846 8081A
delta-BHC	ND	0.050	ug/L	SW846 8081A
gamma-BHC (Lindane)	ND	0.050	ug/L	SW846 8081A
4,4'-DDD	ND	0.050	ug/L	SW846 8081A
4,4'-DDE	ND	0.050	ug/L	SW846 8081A
4,4'-DDT	ND	0.050	ug/L	SW846 8081A
Dieldrin	ND	0.050	ug/L	SW846 8081A
Endosulfan I	ND	0.050	ug/L	SW846 8081A
Endosulfan II	ND	0.050	ug/L	SW846 8081A
Endosulfan sulfate	ND	0.050	ug/L	SW846 8081A
Endrin	ND	0.050	ug/L	SW846 8081A
Endrin aldehyde	ND	0.050	ug/L	SW846 8081A
Heptachlor	ND	0.050	ug/L	SW846 8081A
Heptachlor epoxide	ND	0.050	ug/L	SW846 8081A
Isodrin	ND	0.10	ug/L	SW846 8081A
Kepone	ND	1.0	ug/L	SW846 8081A
Methoxychlor	ND	0.10	ug/L	SW846 8081A
Toxaphene	ND	5.0	ug/L	SW846 8081A
alpha-Chlordane	ND	0.050	ug/L	SW846 8081A
gamma-Chlordane	ND	0.050	ug/L	SW846 8081A
Diallate	ND	1.0	ug/L	SW846 8081A
Endrin ketone	ND	0.050	ug/L	SW846 8081A

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Decachlorobiphenyl	96	(34 - 134)
Tetrachloro-m-xylene	67	(41 - 125)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

STL Denver

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: CANNON-3 **Work Order #...:** FLJ111AC-LCS **Matrix.....:** WATER
LCS Lot-Sample#: D3D090000-170 FLJ111AD-LCSD
Prep Date.....: 04/09/03 **Analysis Date..:** 04/15/03
Prep Batch #...: 3099170 **Analysis Time..:** 09:28
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
4,4'-DDT	**117**	**(51 - 139)**			**SW846 8081A**
	118	**(51 - 139)**	**1.3**	**(0-30)**	**SW846 8081A**
Aldrin	**79**	**(48 - 118)**			**SW846 8081A**
	89	**(48 - 118)**	**12**	**(0-30)**	**SW846 8081A**
Dieldrin	109	(68 - 122)			SW846 8081A
	120	(68 - 122)	9.5	(0-30)	SW846 8081A
Endrin	**118**	**(71 - 122)**			**SW846 8081A**
	121	**(71 - 122)**	**2.6**	**(0-30)**	**SW846 8081A**
gamma-BHC (Lindane)	**102**	**(68 - 120)**			**SW846 8081A**
	112	**(68 - 120)**	**8.8**	**(0-30)**	**SW846 8081A**
Heptachlor	**93**	**(48 - 131)**			**SW846 8081A**
	101	**(48 - 131)**	**7.8**	**(0-30)**	**SW846 8081A**

ROGATE	PERCENT RECOVERY	RECOVERY LIMITS
achlorobiphenyl	108	(71 - 127)
	112	(71 - 127)
Tetrachloro-m-xylene	73	(61 - 115)
	81	(61 - 115)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE DATA REPORT

GC Semivolatiles

Client Lot #...: CANNON-3 Work Order #...: FLJ111AC-LCS Matrix.....: WATER
LCS Lot-Sample#: D3D090000-170 FLJ111AD-LCSD
Prep Date.....: 04/09/03 Analysis Date..: 04/15/03
Prep Batch #...: 3099170 Analysis Time..: 09:28
Dilution Factor: 1

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	RPD	METHOD
4,4'-DDT	**0.500**	**0.584**	**ug/L**	**117**		**SW846 8081A**
	0.500	**0.592**	**ug/L**	**118**	**1.3**	**SW846 8081A**
Aldrin	**0.500**	**0.397**	**ug/L**	**79**		**SW846 8081A**
	0.500	**0.446**	**ug/L**	**89**	**12**	**SW846 8081A**
Dieldrin	0.500	0.546	ug/L	109		SW846 8081A
	0.500	0.601	ug/L	120	9.5	SW846 8081A
Endrin	**0.500**	**0.591**	**ug/L**	**118**		**SW846 8081A**
	0.500	**0.607**	**ug/L**	**121**	**2.6**	**SW846 8081A**
gamma-BHC (Lindane)	**0.500**	**0.511**	**ug/L**	**102**		**SW846 8081A**
	0.500	**0.558**	**ug/L**	**112**	**8.8**	**SW846 8081A**
Heptachlor	**0.500**	**0.465**	**ug/L**	**93**		**SW846 8081A**
	0.500	**0.503**	**ug/L**	**101**	**7.8**	**SW846 8081A**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Decachlorobiphenyl	108	(71 - 127)
	112	(71 - 127)
Tetrachloro-m-xylene	73	(61 - 115)
	81	(61 - 115)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

METHOD BLANK REPORT

GC Semivolatiles

Client Lot #...: CANNON-3 **Work Order #...:** FKLXW1AA **Matrix.....:** WATER
MB Lot-Sample #: D3C240000-207

Prep Date.....: 03/24/03 **Analysis Time..:** 10:44
Analysis Date..: 03/27/03 **Prep Batch #...:** 3083207
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Aroclor 1016	ND	1.0	ug/L	SW846 8082
Aroclor 1221	ND	1.0	ug/L	SW846 8082
Aroclor 1232	ND	1.0	ug/L	SW846 8082
Aroclor 1242	ND	1.0	ug/L	SW846 8082
Aroclor 1248	ND	1.0	ug/L	SW846 8082
Aroclor 1254	ND	1.0	ug/L	SW846 8082
Aroclor 1260	ND	1.0	ug/L	SW846 8082

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	62	(52 - 160)
Decachlorobiphenyl	88	(37 - 144)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: CANNON-3 **Work Order #...:** FKLXW1AC-LCS **Matrix.....:** WATER
LCS Lot-Sample#: D3C240000-207 FKLXW1AD-LCSD
Prep Date.....: 03/24/03 **Analysis Date..:** 03/27/03
Prep Batch #...: 3083207 **Analysis Time..:** 11:10
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Aroclor 1016	**86**	**(56 - 124)**			**SW846 8082**
	84	**(56 - 124)**	**1.8**	**(0-30)**	**SW846 8082**
Aroclor 1260	**91**	**(64 - 120)**			**SW846 8082**
	88	**(64 - 120)**	**3.6**	**(0-30)**	**SW846 8082**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	79	(52 - 127)
	72	(52 - 127)
Decachlorobiphenyl	93	(61 - 128)
	92	(61 - 128)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE DATA REPORT

GC Semivolatiles

Client Lot #...: CANNON-3 Work Order #...: FKLXW1AC-LCS Matrix.....: WATER
LCS Lot-Sample#: D3C240000-207 FKLXW1AD-LCSD
Prep Date.....: 03/24/03 Analysis Date..: 03/27/03
Prep Batch #...: 3083207 Analysis Time..: 11:10
Dilution Factor: 1

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	RPD	METHOD
Aroclor 1016	**2.00**	**1.72**	**ug/L**	**86**		**SW846 8082**
	2.00	**1.69**	**ug/L**	**84**	**1.8**	**SW846 8082**
Aroclor 1260	**2.00**	**1.82**	**ug/L**	**91**		**SW846 8082**
	2.00	**1.76**	**ug/L**	**88**	**3.6**	**SW846 8082**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	79	(52 - 127)
	72	(52 - 127)
Decachlorobiphenyl	93	(61 - 128)
	92	(61 - 128)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: CANNON-3 **Work Order #...:** FKJAR1DW-MS **Matrix.....:** WG
MS Lot-Sample #: D3C210230-002 FKJAR1DX-MSD
Date Sampled...: 03/20/03 08:50 **Date Received..:** 03/21/03
Prep Date.....: 03/24/03 **Analysis Date..:** 03/27/03
Prep Batch #...: 3083207 **Analysis Time..:** 15:52
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Aroclor 1016	**84**	(57 - 135)			**SW846 8082**
	89	(57 - 135)	3.3	(0-30)	**SW846 8082**
Aroclor 1260	**83**	(55 - 130)			**SW846 8082**
	92	(55 - 130)	8.4	(0-30)	SW846 8082

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	77	(52 - 160)
	81	(52 - 160)
Decachlorobiphenyl	85	(37 - 144)
	91	(37 - 144)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE DATA REPORT

GC Semivolatiles

Client Lot #...: CANNON-3 **Work Order #...:** FKJAR1DW-MS **Matrix.....:** WG
MS Lot-Sample #: D3C210230-002 FKJAR1DX-MSD
Date Sampled...: 03/20/03 08:50 **Date Received..:** 03/21/03
Prep Date.....: 03/24/03 **Analysis Date..:** 03/27/03
Prep Batch #...: 3083207 **Analysis Time..:** 15:52
Dilution Factor: 1

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD
Aroclor 1016	**ND**	**2.01**	**1.69**	**ug/L**	**84**		**SW846 8082**
	ND	**1.97**	**1.75**	**ug/L**	**89**	**3.3**	**SW846 8082**
Aroclor 1260	**ND**	**2.01**	**1.67**	**ug/L**	**83**		**SW846 8082**
	ND	**1.97**	**1.81**	**ug/L**	**92**	**8.4**	**SW846 8082**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	77	(52 - 160)
	81	(52 - 160)
Decachlorobiphenyl	85	(37 - 144)
	91	(37 - 144)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

METHOD BLANK REPORT

GC Semivolatiles

Client Lot #...: CANNON-3
MB Lot-Sample #: D3D080000-190
Work Order #...: FLG3R1AA
Matrix.....: WATER
Prep Date.....: 04/08/03
Analysis Time..: 11:28
Analysis Date..: 04/11/03
Prep Batch #...: 3098190
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Aroclor 1016	ND	1.0	ug/L	SW846 8082
Aroclor 1221	ND	1.0	ug/L	SW846 8082
Aroclor 1232	ND	1.0	ug/L	SW846 8082
Aroclor 1242	ND	1.0	ug/L	SW846 8082
Aroclor 1248	ND	1.0	ug/L	SW846 8082
Aroclor 1254	ND	1.0	ug/L	SW846 8082
Aroclor 1260	ND	1.0	ug/L	SW846 8082

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	90	(52 - 160)
Decachlorobiphenyl	108	(37 - 144)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: CANNON-3 **Work Order #...:** FLG3R1AC-LCS **Matrix.....:** WATER
LCS Lot-Sample#: D3D080000-190 FLG3R1AD-LCSD
Prep Date.....: 04/08/03 **Analysis Date..:** 04/11/03
Prep Batch #...: 3098190 **Analysis Time..:** 11:50
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Aroclor 1016	108	(56 - 124)			SW846 8082
	99	(56 - 124)	8.1	(0-30)	SW846 8082
Aroclor 1260	106	(64 - 120)			SW846 8082
	106	(64 - 120)	0.020	(0-30)	SW846 8082

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	90	(52 - 127)
	87	(52 - 127)
Decachlorobiphenyl	113	(61 - 128)
	111	(61 - 128)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE DATA REPORT

GC Semivolatiles

Client Lot #...: CANNON-3 Work Order #...: FLG3R1AC-LCS Matrix.....: WATER
LCS Lot-Sample#: D3D080000-190 FLG3R1AD-LCSD
Prep Date.....: 04/08/03 Analysis Date..: 04/11/03
Prep Batch #...: 3098190 Analysis Time..: 11:50
Dilution Factor: 1

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	RPD	METHOD
Aroclor 1016	**2.00**	**2.15**	**ug/L**	**108**		**SW846 8082**
	2.00	**1.99**	**ug/L**	**99**	**8.1**	**SW846 8082**
Aroclor 1260	**2.00**	**2.12**	**ug/L**	**106**		**SW846 8082**
	2.00	**2.12**	**ug/L**	**106**	**0.020**	**SW846 8082**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	90	(52 - 127)
	87	(52 - 127)
Decachlorobiphenyl	113	(61 - 128)
	111	(61 - 128)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: CANNON-3 **Work Order #...:** FK9531AC-MS **Matrix.....:** WATER
MS Lot-Sample #: D3D030280-003 FK9531AD-MSD
Date Sampled...: 04/01/03 16:00 **Date Received..:** 04/03/03
Prep Date.....: 04/08/03 **Analysis Date..:** 04/11/03
Prep Batch #...: 3098190 **Analysis Time..:** 14:46
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Aroclor 1016	**98**	(57 - 135)			**SW846 8082**
	115	(57 - 135)	17	(0-30)	**SW846 8082**
Aroclor 1260	**88**	(55 - 130)			**SW846 8082**
	95	(55 - 130)	9.1	(0-30)	SW846 8082

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	94	(52 - 160)
	107	(52 - 160)
Decachlorobiphenyl	88	(37 - 144)
	95	(37 - 144)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE DATA REPORT

GC Semivolatiles

Client Lot #...: CANNON-3 **Work Order #...:** FK9531AC-MS **Matrix.....:** WATER
MS Lot-Sample #: D3D030280-003 FK9531AD-MSD
Date Sampled...: 04/01/03 16:00 **Date Received..:** 04/03/03
Prep Date.....: 04/08/03 **Analysis Date..:** 04/11/03
Prep Batch #...: 3098190 **Analysis Time..:** 14:46
Dilution Factor: 1

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD
Aroclor 1016	**ND**	**2.17**	**2.13**	**ug/L**	**98**		**SW846 8082**
	ND	**2.18**	**2.52**	**ug/L**	**115**	**17**	**SW846 8082**
Aroclor 1260	**ND**	**2.17**	**1.90**	**ug/L**	**88**		**SW846 8082**
	ND	**2.18**	**2.08**	**ug/L**	**95**	**9.1**	**SW846 8082**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	94	(52 - 160)
	107	(52 - 160)
Decachlorobiphenyl	88	(37 - 144)
	95	(37 - 144)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: CANNON-3 **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MB Lot-Sample #: D3C210000-385 **Prep Batch #...:** 3080385						
Antimony	**0.14 B**	**2.0**	**ug/L**	**SW846 6020**	**03/24-04/15/03**	**FKJPV1AH**
		Dilution Factor: 1				
		Analysis Time..: 16:20				
Arsenic	ND	5.0	ug/L	SW846 6020	03/24-04/15/03	FKJPV1AJ
		Dilution Factor: 1				
		Analysis Time..: 16:20				
Cadmium	ND	1.0	ug/L	SW846 6020	03/24-04/15/03	FKJPV1AA
		Dilution Factor: 1				
		Analysis Time..: 16:20				
Chromium	**1.4 B**	**2.0**	**ug/L**	**SW846 6020**	**03/24-04/15/03**	**FKJPV1AG**
		Dilution Factor: 1				
		Analysis Time..: 16:20				
Lead	ND	1.0	ug/L	SW846 6020	03/24-04/15/03	FKJPV1AC
		Dilution Factor: 1				
		Analysis Time..: 16:20				
Selenium	ND	5.0	ug/L	SW846 6020	03/24-04/15/03	FKJPV1AD
		Dilution Factor: 1				
		Analysis Time..: 16:20				
Silver	ND	5.0	ug/L	SW846 6020	03/24-04/15/03	FKJPV1AE
		Dilution Factor: 1				
		Analysis Time..: 16:20				
Thallium	ND	1.0	ug/L	SW846 6020	03/24-04/15/03	FKJPV1AF
		Dilution Factor: 1				
		Analysis Time..: 16:20				
MB Lot-Sample #: D3C240000-280 **Prep Batch #...:** 3083280						
Aluminum	**25 B**	**100**	**ug/L**	**SW846 6010B**	**03/25-03/26/03**	**FKL5L1AE**
		Dilution Factor: 1				
		Analysis Time..: 18:42				
Barium	ND	10	ug/L	SW846 6010B	03/25-03/26/03	FKL5L1AF
		Dilution Factor: 1				
		Analysis Time..: 11:07				

(Continued on next page)

METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: CANNON-3 **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Beryllium	ND	5.0	ug/L	SW846 6010B	03/25-03/26/03	FKL5L1AG
		Dilution Factor: 1				
		Analysis Time..: 18:42				
Calcium	ND	200	ug/L	SW846 6010B	03/25-03/26/03	FKL5L1AP
		Dilution Factor: 1				
		Analysis Time..: 18:42				
Cobalt	ND	10	ug/L	SW846 6010B	03/25-03/26/03	FKL5L1AA
		Dilution Factor: 1				
		Analysis Time..: 11:07				
Copper	ND	20	ug/L	SW846 6010B	03/25-03/26/03	FKL5L1AH
		Dilution Factor: 1				
		Analysis Time..: 11:07				
Iron	ND	100	ug/L	SW846 6010B	03/25-03/26/03	FKL5L1AJ
		Dilution Factor: 1				
		Analysis Time..: 18:42				
Magnesium	ND	200	ug/L	SW846 6010B	03/25-03/26/03	FKL5L1AQ
		Dilution Factor: 1				
		Analysis Time..: 18:42				
Manganese	ND	10	ug/L	SW846 6010B	03/25-03/26/03	FKL5L1AK
		Dilution Factor: 1				
		Analysis Time..: 11:07				
Molybdenum	ND	20	ug/L	SW846 6010B	03/25-03/26/03	FKL5L1AC
		Dilution Factor: 1				
		Analysis Time..: 11:07				
Nickel	ND	40	ug/L	SW846 6010B	03/25-03/26/03	FKL5L1AL
		Dilution Factor: 1				
		Analysis Time..: 11:07				
Potassium	ND	3000	ug/L	SW846 6010B	03/25-03/26/03	FKL5L1AR
		Dilution Factor: 1				
		Analysis Time..: 18:42				
Sodium	ND	5000	ug/L	SW846 6010B	03/25-03/26/03	FKL5L1AT
		Dilution Factor: 1				
		Analysis Time..: 18:42				
Tin	ND	100	ug/L	SW846 6010B	03/25-03/26/03	FKL5L1AD
		Dilution Factor: 1				
		Analysis Time..: 11:07				

(Continued on next page)

METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: CANNON-3 Matrix.....: WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Vanadium	ND	10	ug/L	SW846 6010B	03/25-03/26/03	FKL5L1AM
		Dilution Factor: 1				
		Analysis Time..: 11:07				
Zinc	ND	20	ug/L	SW846 6010B	03/25-03/26/03	FKL5L1AN
		Dilution Factor: 1				
		Analysis Time..: 11:07				

MB Lot-Sample #: D3C250000-435 Prep Batch #...: 3084435

Aluminum	21 B	100	ug/L	SW846 6010B	03/27-03/28/03	FKPP11AV
		Dilution Factor: 1				
		Analysis Time..: 19:17				
Barium	ND	10	ug/L	SW846 6010B	03/27-03/28/03	FKPP11DT
		Dilution Factor: 1				
		Analysis Time..: 15:11				
Beryllium	ND	5.0	ug/L	SW846 6010B	03/27-03/28/03	FKPP11DL
		Dilution Factor: 1				
		Analysis Time..: 15:11				
Calcium	ND	200	ug/L	SW846 6010B	03/27-03/28/03	FKPP11AW
		Dilution Factor: 1				
		Analysis Time..: 19:17				
Cobalt	ND	10	ug/L	SW846 6010B	03/27-03/28/03	FKPP11AH
		Dilution Factor: 1				
		Analysis Time..: 15:11				
Copper	ND	20	ug/L	SW846 6010B	03/27-03/28/03	FKPP11DM
		Dilution Factor: 1				
		Analysis Time..: 15:11				
Iron	ND	100	ug/L	SW846 6010B	03/27-03/28/03	FKPP11AX
		Dilution Factor: 1				
		Analysis Time..: 19:17				
Magnesium	ND	200	ug/L	SW846 6010B	03/27-03/28/03	FKPP11A0
		Dilution Factor: 1				
		Analysis Time..: 19:17				
Manganese	ND	10	ug/L	SW846 6010B	03/27-03/28/03	FKPP11DN
		Dilution Factor: 1				
		Analysis Time..: 15:11				

(Continued on next page)

METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: CANNON-3 **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Molybdenum	ND	20	ug/L	SW846 6010B	03/27-03/28/03	FKPP11AM
		Dilution Factor: 1				
		Analysis Time..: 15:11				
Nickel	ND	40	ug/L	SW846 6010B	03/27-03/28/03	FKPP11DP
		Dilution Factor: 1				
		Analysis Time..: 15:11				
Potassium	ND	3000	ug/L	SW846 6010B	03/27-03/28/03	FKPP11A1
		Dilution Factor: 1				
		Analysis Time..: 19:17				
Sodium	ND	5000	ug/L	SW846 6010B	03/27-03/28/03	FKPP11A2
		Dilution Factor: 1				
		Analysis Time..: 19:17				
Tin	**6.8 B**	**100**	**ug/L**	**SW846 6010B**	**03/27-03/28/03**	**FKPP11DU**
		Dilution Factor: 1				
		Analysis Time..: 15:11				
Vanadium	ND	10	ug/L	SW846 6010B	03/27-03/28/03	FKPP11DQ
		Dilution Factor: 1				
		Analysis Time..: 15:11				
Zinc	ND	20	ug/L	SW846 6010B	03/27-03/28/03	FKPP11DR
		Dilution Factor: 1				
		Analysis Time..: 15:11				

MB Lot-Sample #: D3C250000-470 **Prep Batch #...:** 3084470

Antimony	**0.043 B**	**2.0**	**ug/L**	**SW846 6020**	**04/01-04/14/03**	**FKPW81AA**
		Dilution Factor: 1				
		Analysis Time..: 20:54				
Arsenic	**0.82 B**	**5.0**	**ug/L**	**SW846 6020**	**04/01-04/14/03**	**FKPW81AC**
		Dilution Factor: 1				
		Analysis Time..: 20:54				
Cadmium	ND	1.0	ug/L	SW846 6020	04/01-04/14/03	FKPW81AD
		Dilution Factor: 1				
		Analysis Time..: 20:54				
Chromium	**0.84 B**	**2.0**	**ug/L**	**SW846 6020**	**04/01-04/14/03**	**FKPW81AJ**
		Dilution Factor: 1				
		Analysis Time..: 20:54				

(Continued on next page)

METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: CANNON-3 **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Lead	ND	1.0	ug/L	SW846 6020	04/01-04/14/03	FKPW81AE
		Dilution Factor: 1				
		Analysis Time..: 20:54				
Selenium	**0.21 B**	**5.0**	**ug/L**	**SW846 6020**	**04/01-04/14/03**	**FKPW81AF**
		Dilution Factor: 1				
		Analysis Time..: 20:54				
Silver	ND	5.0	ug/L	SW846 6020	04/01-04/14/03	FKPW81AG
		Dilution Factor: 1				
		Analysis Time..: 20:54				
Thallium	ND	1.0	ug/L	SW846 6020	04/01-04/14/03	FKPW81AH
		Dilution Factor: 1				
		Analysis Time..: 20:54				
MB Lot-Sample #: D3D080000-223	**Prep Batch #...:** 3098223					
Mercury	**0.020 B**	**0.20**	**ug/L**	**SW846 7470A**	**04/14/03**	**FLHF31AA**
		Dilution Factor: 1				
		Analysis Time..: 20:58				
MB Lot-Sample #: D3D080000-224	**Prep Batch #...:** 3098224					
Mercury	ND	0.20	ug/L	SW846 7470A	04/15/03	FLHF71AA
		Dilution Factor: 1				
		Analysis Time..: 19:37				
MB Lot-Sample #: D3D100000-281	**Prep Batch #...:** 3100281					
Antimony	**0.20 B**	**2.0**	**ug/L**	**SW846 6020**	**04/12-04/24/03**	**FLM151AT**
		Dilution Factor: 1				
		Analysis Time..: 15:58				
Arsenic	ND	5.0	ug/L	SW846 6020	04/12-04/24/03	FLM151AD
		Dilution Factor: 1				
		Analysis Time..: 15:58				
Cadmium	ND	1.0	ug/L	SW846 6020	04/12-04/24/03	FLM151AA
		Dilution Factor: 1				
		Analysis Time..: 15:58				
Chromium	**0.54 B**	**2.0**	**ug/L**	**SW846 6020**	**04/12-04/24/03**	**FLM151AC**
		Dilution Factor: 1				
		Analysis Time..: 15:58				

(Continued on next page)

METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: CANNON-3 **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Lead	ND	1.0	ug/L	SW846 6020	04/12-04/24/03	FLM151AE
		Dilution Factor: 1				
		Analysis Time..: 15:58				
Selenium	ND	5.0	ug/L	SW846 6020	04/12-04/24/03	FLM151AF
		Dilution Factor: 1				
		Analysis Time..: 15:58				
Silver	**0.089 B**	**5.0**	**ug/L**	**SW846 6020**	**04/12-04/24/03**	**FLM151AU**
		Dilution Factor: 1				
		Analysis Time..: 15:58				
Thallium	ND	1.0	ug/L	SW846 6020	04/12-04/24/03	FLM151AV
		Dilution Factor: 1				
		Analysis Time..: 15:58				

MB Lot-Sample #: D3D100000-459 **Prep Batch #...:** 3100459

Aluminum	ND	100	ug/L	SW846 6010B	04/12-04/14/03	FLN351A1
		Dilution Factor: 1				
		Analysis Time..: 17:17				
Barium	ND	10	ug/L	SW846 6010B	04/12-04/14/03	FLN351AA
		Dilution Factor: 1				
		Analysis Time..: 14:13				
Beryllium	ND	5.0	ug/L	SW846 6010B	04/12-04/14/03	FLN351AC
		Dilution Factor: 1				
		Analysis Time..: 17:17				
Calcium	ND	200	ug/L	SW846 6010B	04/12-04/14/03	FLN351AD
		Dilution Factor: 1				
		Analysis Time..: 17:17				
Cobalt	ND	10	ug/L	SW846 6010B	04/12-04/14/03	FLN351AH
		Dilution Factor: 1				
		Analysis Time..: 14:13				
Copper	ND	20	ug/L	SW846 6010B	04/12-04/14/03	FLN351A2
		Dilution Factor: 1				
		Analysis Time..: 14:13				
Iron	ND	100	ug/L	SW846 6010B	04/12-04/14/03	FLN351A3
		Dilution Factor: 1				
		Analysis Time..: 17:17				

(Continued on next page)

METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: CANNON-3

Matrix.....: WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Magnesium	ND	200	ug/L	SW846 6010B	04/12-04/14/03	FLN351AF
		Dilution Factor: 1				
		Analysis Time..: 17:17				
Manganese	ND	10	ug/L	SW846 6010B	04/12-04/14/03	FLN351A4
		Dilution Factor: 1				
		Analysis Time..: 14:13				
Molybdenum	ND	20	ug/L	SW846 6010B	04/12-04/14/03	FLN351A8
		Dilution Factor: 1				
		Analysis Time..: 14:13				
Nickel	ND	40	ug/L	SW846 6010B	04/12-04/14/03	FLN351A5
		Dilution Factor: 1				
		Analysis Time..: 14:13				
Potassium	ND	3000	ug/L	SW846 6010B	04/12-04/14/03	FLN351AE
		Dilution Factor: 1				
		Analysis Time..: 17:17				
Sodium	ND	5000	ug/L	SW846 6010B	04/12-04/14/03	FLN351AG
		Dilution Factor: 1				
		Analysis Time..: 17:17				
Tin	ND	100	ug/L	SW846 6010B	04/12-04/14/03	FLN351A9
		Dilution Factor: 1				
		Analysis Time..: 14:13				
Vanadium	ND	10	ug/L	SW846 6010B	04/12-04/14/03	FLN351A6
		Dilution Factor: 1				
		Analysis Time..: 14:13				
Zinc	ND	20	ug/L	SW846 6010B	04/12-04/14/03	FLN351A7
		Dilution Factor: 1				
		Analysis Time..: 14:13				

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

B Estimated result. Result is less than RL.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Lot-Sample #...: CANNON-3 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP-BATCH #
Antimony	102	(89 - 109)			SW846 6020	03/24-04/15/03	3080385
	102	(89 - 109)	0.0	(0-20)	SW846 6020	03/24-04/15/03	3080385
		Dilution Factor: 1			Analysis Time..: 16:23		
Arsenic	97	(87 - 109)			SW846 6020	03/24-04/15/03	3080385
	100	(87 - 109)	2.5	(0-20)	SW846 6020	03/24-04/15/03	3080385
		Dilution Factor: 1			Analysis Time..: 16:23		
Cadmium	101	(89 - 110)			SW846 6020	03/24-04/15/03	3080385
	101	(89 - 110)	0.08	(0-20)	SW846 6020	03/24-04/15/03	3080385
		Dilution Factor: 1			Analysis Time..: 16:23		
Chromium	109	(89 - 114)			SW846 6020	03/24-04/15/03	3080385
	107	(89 - 114)	1.5	(0-20)	SW846 6020	03/24-04/15/03	3080385
		Dilution Factor: 1			Analysis Time..: 16:23		
Lead	108	(89 - 114)			SW846 6020	03/24-04/15/03	3080385
	105	(89 - 114)	2.7	(0-20)	SW846 6020	03/24-04/15/03	3080385
		Dilution Factor: 1			Analysis Time..: 16:23		
Selenium	100	(82 - 112)			SW846 6020	03/24-04/15/03	3080385
	100	(82 - 112)	0.70	(0-20)	SW846 6020	03/24-04/15/03	3080385
		Dilution Factor: 1			Analysis Time..: 16:23		
Silver	99	(87 - 112)			SW846 6020	03/24-04/15/03	3080385
	95	(87 - 112)	3.8	(0-20)	SW846 6020	03/24-04/15/03	3080385
		Dilution Factor: 1			Analysis Time..: 16:23		
Thallium	105	(84 - 120)			SW846 6020	03/24-04/15/03	3080385
	102	(84 - 120)	2.7	(0-20)	SW846 6020	03/24-04/15/03	3080385
		Dilution Factor: 1			Analysis Time..: 16:23		
Aluminum	99	(86 - 108)			SW846 6010B	03/25-03/26/03	3083280
	99	(86 - 108)	0.55	(0-20)	SW846 6010B	03/25-03/26/03	3083280
		Dilution Factor: 1			Analysis Time..: 18:46		
Barium	102	(93 - 113)			SW846 6010B	03/25-03/26/03	3083280
	101	(93 - 113)	1.2	(0-20)	SW846 6010B	03/25-03/26/03	3083280
		Dilution Factor: 1			Analysis Time..: 11:12		

(Continued on next page)

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Lot-Sample #...: CANNON-3 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP-BATCH #
Beryllium	101	(88 - 112)			SW846 6010B	03/25-03/26/03	3083280
	100	(88 - 112)	0.99	(0-20)	SW846 6010B	03/25-03/26/03	3083280
		Dilution Factor: 1			Analysis Time..: 18:46		
Calcium	98	(89 - 110)			SW846 6010B	03/25-03/26/03	3083280
	98	(89 - 110)	0.20	(0-20)	SW846 6010B	03/25-03/26/03	3083280
		Dilution Factor: 1			Analysis Time..: 18:46		
Cobalt	100	(86 - 107)			SW846 6010B	03/25-03/26/03	3083280
	98	(86 - 107)	1.7	(0-20)	SW846 6010B	03/25-03/26/03	3083280
		Dilution Factor: 1			Analysis Time..: 11:12		
Copper	99	(86 - 110)			SW846 6010B	03/25-03/26/03	3083280
	98	(86 - 110)	0.89	(0-20)	SW846 6010B	03/25-03/26/03	3083280
		Dilution Factor: 1			Analysis Time..: 11:12		
Iron	98	(88 - 110)			SW846 6010B	03/25-03/26/03	3083280
	98	(88 - 110)	0.40	(0-20)	SW846 6010B	03/25-03/26/03	3083280
		Dilution Factor: 1			Analysis Time..: 18:46		
Magnesium	104	(91 - 111)			SW846 6010B	03/25-03/26/03	3083280
	104	(91 - 111)	0.67	(0-20)	SW846 6010B	03/25-03/26/03	3083280
		Dilution Factor: 1			Analysis Time..: 18:46		
Manganese	102	(90 - 110)			SW846 6010B	03/25-03/26/03	3083280
	101	(90 - 110)	1.7	(0-20)	SW846 6010B	03/25-03/26/03	3083280
		Dilution Factor: 1			Analysis Time..: 11:12		
Molybdenum	100	(83 - 109)			SW846 6010B	03/25-03/26/03	3083280
	98	(83 - 109)	1.9	(0-20)	SW846 6010B	03/25-03/26/03	3083280
		Dilution Factor: 1			Analysis Time..: 11:12		
Nickel	102	(90 - 110)			SW846 6010B	03/25-03/26/03	3083280
	100	(90 - 110)	1.6	(0-20)	SW846 6010B	03/25-03/26/03	3083280
		Dilution Factor: 1			Analysis Time..: 11:12		
Potassium	107	(86 - 111)			SW846 6010B	03/25-03/26/03	3083280
	106	(86 - 111)	0.89	(0-20)	SW846 6010B	03/25-03/26/03	3083280
		Dilution Factor: 1			Analysis Time..: 18:46		

(Continued on next page)

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Lot-Sample #...: CANNON-3 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP-BATCH #
Sodium	107	(91 - 112)			SW846 6010B	03/25-03/26/03	3083280
	106	(91 - 112)	1.3	(0-20)	SW846 6010B	03/25-03/26/03	3083280
		Dilution Factor: 1			Analysis Time..: 18:46		
Tin	98	(86 - 107)			SW846 6010B	03/25-03/26/03	3083280
	97	(86 - 107)	1.9	(0-20)	SW846 6010B	03/25-03/26/03	3083280
		Dilution Factor: 1			Analysis Time..: 11:12		
Vanadium	103	(88 - 112)			SW846 6010B	03/25-03/26/03	3083280
	101	(88 - 112)	1.8	(0-20)	SW846 6010B	03/25-03/26/03	3083280
		Dilution Factor: 1			Analysis Time..: 11:12		
Zinc	98	(85 - 110)			SW846 6010B	03/25-03/26/03	3083280
	96	(85 - 110)	2.2	(0-20)	SW846 6010B	03/25-03/26/03	3083280
		Dilution Factor: 1			Analysis Time..: 11:12		
Aluminum	98	(86 - 108)			SW846 6010B	03/27-03/28/03	3084435
	98	(86 - 108)	0.55	(0-20)	SW846 6010B	03/27-03/28/03	3084435
		Dilution Factor: 1			Analysis Time..: 19:21		
Barium	104	(93 - 113)			SW846 6010B	03/27-03/28/03	3084435
	105	(93 - 113)	1.3	(0-20)	SW846 6010B	03/27-03/28/03	3084435
		Dilution Factor: 1			Analysis Time..: 15:16		
Beryllium	100	(88 - 112)			SW846 6010B	03/27-03/28/03	3084435
	100	(88 - 112)	0.34	(0-20)	SW846 6010B	03/27-03/28/03	3084435
		Dilution Factor: 1			Analysis Time..: 15:16		
Calcium	100	(89 - 110)			SW846 6010B	03/27-03/28/03	3084435
	99	(89 - 110)	1.2	(0-20)	SW846 6010B	03/27-03/28/03	3084435
		Dilution Factor: 1			Analysis Time..: 19:21		
Cobalt	102	(86 - 107)			SW846 6010B	03/27-03/28/03	3084435
	104	(86 - 107)	1.6	(0-20)	SW846 6010B	03/27-03/28/03	3084435
		Dilution Factor: 1			Analysis Time..: 15:16		
Copper	102	(86 - 110)			SW846 6010B	03/27-03/28/03	3084435
	103	(86 - 110)	1.2	(0-20)	SW846 6010B	03/27-03/28/03	3084435
		Dilution Factor: 1			Analysis Time..: 15:16		

(Continued on next page)

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Lot-Sample #...: CANNON-3 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP-BATCH #
Iron	101	(88 - 110)			SW846 6010B	03/27-03/28/03	3084435
	100	(88 - 110)	0.77	(0-20)	SW846 6010B	03/27-03/28/03	3084435
		Dilution Factor: 1			Analysis Time..: 19:21		
Magnesium	101	(91 - 111)			SW846 6010B	03/27-03/28/03	3084435
	101	(91 - 111)	0.0	(0-20)	SW846 6010B	03/27-03/28/03	3084435
		Dilution Factor: 1			Analysis Time..: 19:21		
Manganese	103	(90 - 110)			SW846 6010B	03/27-03/28/03	3084435
	104	(90 - 110)	1.2	(0-20)	SW846 6010B	03/27-03/28/03	3084435
		Dilution Factor: 1			Analysis Time..: 15:16		
Molybdenum	100	(83 - 109)			SW846 6010B	03/27-03/28/03	3084435
	101	(83 - 109)	1.2	(0-20)	SW846 6010B	03/27-03/28/03	3084435
		Dilution Factor: 1			Analysis Time..: 15:16		
Nickel	103	(90 - 110)			SW846 6010B	03/27-03/28/03	3084435
	104	(90 - 110)	0.92	(0-20)	SW846 6010B	03/27-03/28/03	3084435
		Dilution Factor: 1			Analysis Time..: 15:16		
Potassium	93	(86 - 111)			SW846 6010B	03/27-03/28/03	3084435
	93	(86 - 111)	0.09	(0-20)	SW846 6010B	03/27-03/28/03	3084435
		Dilution Factor: 1			Analysis Time..: 19:21		
Sodium	101	(91 - 112)			SW846 6010B	03/27-03/28/03	3084435
	102	(91 - 112)	1.4	(0-20)	SW846 6010B	03/27-03/28/03	3084435
		Dilution Factor: 1			Analysis Time..: 19:21		
Tin	99	(86 - 107)			SW846 6010B	03/27-03/28/03	3084435
	100	(86 - 107)	1.2	(0-20)	SW846 6010B	03/27-03/28/03	3084435
		Dilution Factor: 1			Analysis Time..: 15:16		
Vanadium	103	(88 - 112)			SW846 6010B	03/27-03/28/03	3084435
	105	(88 - 112)	1.4	(0-20)	SW846 6010B	03/27-03/28/03	3084435
		Dilution Factor: 1			Analysis Time..: 15:16		
Zinc	102	(85 - 110)			SW846 6010B	03/27-03/28/03	3084435
	100	(85 - 110)	1.6	(0-20)	SW846 6010B	03/27-03/28/03	3084435
		Dilution Factor: 1			Analysis Time..: 15:16		

(Continued on next page)

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Lot-Sample #...: CANNON-3 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP-BATCH #
Antimony	97	(89 - 109)			SW846 6020	04/01-04/14/03	3084470
	99	(89 - 109)	1.8	(0-20)	SW846 6020	04/01-04/14/03	3084470
		Dilution Factor: 1			Analysis Time..: 20:57		
Arsenic	98	(87 - 109)			SW846 6020	04/01-04/14/03	3084470
	102	(87 - 109)	4.4	(0-20)	SW846 6020	04/01-04/14/03	3084470
		Dilution Factor: 1			Analysis Time..: 20:57		
Cadmium	96	(89 - 110)			SW846 6020	04/01-04/14/03	3084470
	99	(89 - 110)	2.5	(0-20)	SW846 6020	04/01-04/14/03	3084470
		Dilution Factor: 1			Analysis Time..: 20:57		
Chromium	105	(89 - 114)			SW846 6020	04/01-04/14/03	3084470
	106	(89 - 114)	1.8	(0-20)	SW846 6020	04/01-04/14/03	3084470
		Dilution Factor: 1			Analysis Time..: 20:57		
Lead	103	(89 - 114)			SW846 6020	04/01-04/14/03	3084470
	105	(89 - 114)	1.7	(0-20)	SW846 6020	04/01-04/14/03	3084470
		Dilution Factor: 1			Analysis Time..: 20:57		
Selenium	94	(82 - 112)			SW846 6020	04/01-04/14/03	3084470
	95	(82 - 112)	0.75	(0-20)	SW846 6020	04/01-04/14/03	3084470
		Dilution Factor: 1			Analysis Time..: 20:57		
Silver	95	(87 - 112)			SW846 6020	04/01-04/14/03	3084470
	97	(87 - 112)	1.8	(0-20)	SW846 6020	04/01-04/14/03	3084470
		Dilution Factor: 1			Analysis Time..: 20:57		
Thallium	102	(84 - 120)			SW846 6020	04/01-04/14/03	3084470
	105	(84 - 120)	2.3	(0-20)	SW846 6020	04/01-04/14/03	3084470
		Dilution Factor: 1			Analysis Time..: 20:57		
Mercury	91	(84 - 114)			SW846 7470A	04/14/03	3098223
	95	(84 - 114)	4.7	(0-10)	SW846 7470A	04/14/03	3098223
		Dilution Factor: 1			Analysis Time..: 21:00		
Mercury	98	(84 - 114)			SW846 7470A	04/15/03	3098224
	97	(84 - 114)	1.0	(0-10)	SW846 7470A	04/15/03	3098224
		Dilution Factor: 1			Analysis Time..: 19:39		

(Continued on next page)

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Lot-Sample #...: CANNON-3 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP-BATCH #
Antimony	99	(89 - 109)			SW846 6020	04/12-04/24/03	3100281
	99	(89 - 109)	0.24	(0-20)	SW846 6020	04/12-04/24/03	3100281
		Dilution Factor: 1			Analysis Time..: 16:01		
Arsenic	97	(87 - 109)			SW846 6020	04/12-04/24/03	3100281
	96	(87 - 109)	1.7	(0-20)	SW846 6020	04/12-04/24/03	3100281
		Dilution Factor: 1			Analysis Time..: 16:01		
Cadmium	98	(89 - 110)			SW846 6020	04/12-04/24/03	3100281
	97	(89 - 110)	1.6	(0-20)	SW846 6020	04/12-04/24/03	3100281
		Dilution Factor: 1			Analysis Time..: 16:01		
Chromium	101	(89 - 114)			SW846 6020	04/12-04/24/03	3100281
	102	(89 - 114)	1.6	(0-20)	SW846 6020	04/12-04/24/03	3100281
		Dilution Factor: 1			Analysis Time..: 16:01		
Lead	106	(89 - 114)			SW846 6020	04/12-04/24/03	3100281
	106	(89 - 114)	0.05	(0-20)	SW846 6020	04/12-04/24/03	3100281
		Dilution Factor: 1			Analysis Time..: 16:01		
Selenium	92	(82 - 112)			SW846 6020	04/12-04/24/03	3100281
	94	(82 - 112)	2.2	(0-20)	SW846 6020	04/12-04/24/03	3100281
		Dilution Factor: 1			Analysis Time..: 16:01		
Silver	100	(87 - 112)			SW846 6020	04/12-04/24/03	3100281
	100	(87 - 112)	0.13	(0-20)	SW846 6020	04/12-04/24/03	3100281
		Dilution Factor: 1			Analysis Time..: 16:01		
Thallium	107	(84 - 120)			SW846 6020	04/12-04/24/03	3100281
	104	(84 - 120)	3.0	(0-20)	SW846 6020	04/12-04/24/03	3100281
		Dilution Factor: 1			Analysis Time..: 16:01		
Aluminum	101	(86 - 108)			SW846 6010B	04/12-04/14/03	3100459
	100	(86 - 108)	1.6	(0-20)	SW846 6010B	04/12-04/14/03	3100459
		Dilution Factor: 1			Analysis Time..: 17:21		
Barium	106	(93 - 113)			SW846 6010B	04/12-04/14/03	3100459
	102	(93 - 113)	3.0	(0-20)	SW846 6010B	04/12-04/14/03	3100459
		Dilution Factor: 1			Analysis Time..: 14:19		

(Continued on next page)

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Lot-Sample #...: CANNON-3 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP-BATCH #
Beryllium	104	(88 - 112)			SW846 6010B	04/12-04/14/03	3100459
	103	(88 - 112)	1.6	(0-20)	SW846 6010B	04/12-04/14/03	3100459
		Dilution Factor: 1			Analysis Time..: 17:21		
Calcium	96	(89 - 110)			SW846 6010B	04/12-04/14/03	3100459
	95	(89 - 110)	1.2	(0-20)	SW846 6010B	04/12-04/14/03	3100459
		Dilution Factor: 1			Analysis Time..: 17:21		
Cobalt	103	(86 - 107)			SW846 6010B	04/12-04/14/03	3100459
	101	(86 - 107)	2.5	(0-20)	SW846 6010B	04/12-04/14/03	3100459
		Dilution Factor: 1			Analysis Time..: 14:19		
Copper	103	(86 - 110)			SW846 6010B	04/12-04/14/03	3100459
	100	(86 - 110)	3.2	(0-20)	SW846 6010B	04/12-04/14/03	3100459
		Dilution Factor: 1			Analysis Time..: 14:19		
Iron	101	(88 - 110)			SW846 6010B	04/12-04/14/03	3100459
	98	(88 - 110)	3.3	(0-20)	SW846 6010B	04/12-04/14/03	3100459
		Dilution Factor: 1			Analysis Time..: 17:21		
Magnesium	103	(91 - 111)			SW846 6010B	04/12-04/14/03	3100459
	101	(91 - 111)	1.4	(0-20)	SW846 6010B	04/12-04/14/03	3100459
		Dilution Factor: 1			Analysis Time..: 17:21		
Manganese	104	(90 - 110)			SW846 6010B	04/12-04/14/03	3100459
	102	(90 - 110)	2.6	(0-20)	SW846 6010B	04/12-04/14/03	3100459
		Dilution Factor: 1			Analysis Time..: 14:19		
Molybdenum	100	(83 - 109)			SW846 6010B	04/12-04/14/03	3100459
	97	(83 - 109)	2.6	(0-20)	SW846 6010B	04/12-04/14/03	3100459
		Dilution Factor: 1			Analysis Time..: 14:19		
Nickel	109	(90 - 110)			SW846 6010B	04/12-04/14/03	3100459
	107	(90 - 110)	2.2	(0-20)	SW846 6010B	04/12-04/14/03	3100459
		Dilution Factor: 1			Analysis Time..: 14:19		
Potassium	100	(86 - 111)			SW846 6010B	04/12-04/14/03	3100459
	99	(86 - 111)	1.2	(0-20)	SW846 6010B	04/12-04/14/03	3100459
		Dilution Factor: 1			Analysis Time..: 17:21		

(Continued on next page)

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Lot-Sample #...: CANNON-3 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP-BATCH #
Sodium	104	(91 - 112)			SW846 6010B	04/12-04/14/03	3100459
	102	(91 - 112)	1.3	(0-20)	SW846 6010B	04/12-04/14/03	3100459
		Dilution Factor: 1			Analysis Time..: 17:21		
Tin	103	(86 - 107)			SW846 6010B	04/12-04/14/03	3100459
	100	(86 - 107)	2.8	(0-20)	SW846 6010B	04/12-04/14/03	3100459
		Dilution Factor: 1			Analysis Time..: 14:19		
Vanadium	102	(88 - 112)			SW846 6010B	04/12-04/14/03	3100459
	99	(88 - 112)	2.7	(0-20)	SW846 6010B	04/12-04/14/03	3100459
		Dilution Factor: 1			Analysis Time..: 14:19		
Zinc	101	(85 - 110)			SW846 6010B	04/12-04/14/03	3100459
	98	(85 - 110)	2.8	(0-20)	SW846 6010B	04/12-04/14/03	3100459
		Dilution Factor: 1			Analysis Time..: 14:19		

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE DATA REPORT

TOTAL Metals

Lot-Sample #...: CANNON-3 **Matrix.....:** WATER

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Antimony	40.0	40.9	ug/L	102		SW846 6020	03/24-04/15/03	3080385
	40.0	40.9	ug/L	102	0.0	SW846 6020	03/24-04/15/03	3080385
			Dilution Factor: 1			Analysis Time..: 16:23		
Arsenic	40.0	38.8	ug/L	97		SW846 6020	03/24-04/15/03	3080385
	40.0	39.8	ug/L	100	2.5	SW846 6020	03/24-04/15/03	3080385
			Dilution Factor: 1			Analysis Time..: 16:23		
Cadmium	40.0	40.3	ug/L	101		SW846 6020	03/24-04/15/03	3080385
	40.0	40.2	ug/L	101	0.08	SW846 6020	03/24-04/15/03	3080385
			Dilution Factor: 1			Analysis Time..: 16:23		
Chromium	40.0	43.4	ug/L	109		SW846 6020	03/24-04/15/03	3080385
	40.0	42.8	ug/L	107	1.5	SW846 6020	03/24-04/15/03	3080385
			Dilution Factor: 1			Analysis Time..: 16:23		
Lead	40.0	43.1	ug/L	108		SW846 6020	03/24-04/15/03	3080385
	40.0	41.9	ug/L	105	2.7	SW846 6020	03/24-04/15/03	3080385
			Dilution Factor: 1			Analysis Time..: 16:23		
Selenium	40.0	39.8	ug/L	100		SW846 6020	03/24-04/15/03	3080385
	40.0	40.1	ug/L	100	0.70	SW846 6020	03/24-04/15/03	3080385
			Dilution Factor: 1			Analysis Time..: 16:23		
Silver	40.0	39.4	ug/L	99		SW846 6020	03/24-04/15/03	3080385
	40.0	37.9	ug/L	95	3.8	SW846 6020	03/24-04/15/03	3080385
			Dilution Factor: 1			Analysis Time..: 16:23		
Thallium	40.0	41.8	ug/L	105		SW846 6020	03/24-04/15/03	3080385
	40.0	40.7	ug/L	102	2.7	SW846 6020	03/24-04/15/03	3080385
			Dilution Factor: 1			Analysis Time..: 16:23		
Aluminum	2000	1980	ug/L	99		SW846 6010B	03/25-03/26/03	3083280
	2000	1970	ug/L	99	0.55	SW846 6010B	03/25-03/26/03	3083280
			Dilution Factor: 1			Analysis Time..: 18:46		
Barium	2000	2040	ug/L	102		SW846 6010B	03/25-03/26/03	3083280
	2000	2020	ug/L	101	1.2	SW846 6010B	03/25-03/26/03	3083280
			Dilution Factor: 1			Analysis Time..: 11:12		

(Continued on next page)

LABORATORY CONTROL SAMPLE DATA REPORT

TOTAL Metals

Lot-Sample #...: CANNON-3 **Matrix.....:** WATER

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Beryllium	50.0	50.4	ug/L	101		SW846 6010B	03/25-03/26/03	3083280
	50.0	49.9	ug/L	100	0.99	SW846 6010B	03/25-03/26/03	3083280
			Dilution Factor: 1			Analysis Time..: 18:46		
Calcium	50000	48800	ug/L	98		SW846 6010B	03/25-03/26/03	3083280
	50000	48900	ug/L	98	0.20	SW846 6010B	03/25-03/26/03	3083280
			Dilution Factor: 1			Analysis Time..: 18:46		
Cobalt	500	501	ug/L	100		SW846 6010B	03/25-03/26/03	3083280
	500	492	ug/L	98	1.7	SW846 6010B	03/25-03/26/03	3083280
			Dilution Factor: 1			Analysis Time..: 11:12		
Copper	250	247	ug/L	99		SW846 6010B	03/25-03/26/03	3083280
	250	245	ug/L	98	0.89	SW846 6010B	03/25-03/26/03	3083280
			Dilution Factor: 1			Analysis Time..: 11:12		
Iron	1000	982	ug/L	98		SW846 6010B	03/25-03/26/03	3083280
	1000	978	ug/L	98	0.40	SW846 6010B	03/25-03/26/03	3083280
			Dilution Factor: 1			Analysis Time..: 18:46		
Magnesium	50000	52200	ug/L	104		SW846 6010B	03/25-03/26/03	3083280
	50000	51900	ug/L	104	0.67	SW846 6010B	03/25-03/26/03	3083280
			Dilution Factor: 1			Analysis Time..: 18:46		
Manganese	500	511	ug/L	102		SW846 6010B	03/25-03/26/03	3083280
	500	503	ug/L	101	1.7	SW846 6010B	03/25-03/26/03	3083280
			Dilution Factor: 1			Analysis Time..: 11:12		
Molybdenum	1000	997	ug/L	100		SW846 6010B	03/25-03/26/03	3083280
	1000	978	ug/L	98	1.9	SW846 6010B	03/25-03/26/03	3083280
			Dilution Factor: 1			Analysis Time..: 11:12		
Nickel	500	509	ug/L	102		SW846 6010B	03/25-03/26/03	3083280
	500	501	ug/L	100	1.6	SW846 6010B	03/25-03/26/03	3083280
			Dilution Factor: 1			Analysis Time..: 11:12		
Potassium	50000	53300	ug/L	107		SW846 6010B	03/25-03/26/03	3083280
	50000	52800	ug/L	106	0.89	SW846 6010B	03/25-03/26/03	3083280
			Dilution Factor: 1			Analysis Time..: 18:46		

(Continued on next page)

LABORATORY CONTROL SAMPLE DATA REPORT

TOTAL Metals

Lot-Sample #...: CANNON-3 **Matrix.....:** WATER

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Sodium	50000	53600	ug/L	107		SW846 6010B	03/25-03/26/03	3083280
	50000	52900	ug/L	106	1.3	SW846 6010B	03/25-03/26/03	3083280
			Dilution Factor: 1			Analysis Time..: 18:46		
Tin	2000	1970	ug/L	98		SW846 6010B	03/25-03/26/03	3083280
	2000	1930	ug/L	97	1.9	SW846 6010B	03/25-03/26/03	3083280
			Dilution Factor: 1			Analysis Time..: 11:12		
Vanadium	500	513	ug/L	103		SW846 6010B	03/25-03/26/03	3083280
	500	504	ug/L	101	1.8	SW846 6010B	03/25-03/26/03	3083280
			Dilution Factor: 1			Analysis Time..: 11:12		
Zinc	500	488	ug/L	98		SW846 6010B	03/25-03/26/03	3083280
	500	478	ug/L	96	2.2	SW846 6010B	03/25-03/26/03	3083280
			Dilution Factor: 1			Analysis Time..: 11:12		
Aluminum	2000	1970	ug/L	98		SW846 6010B	03/27-03/28/03	3084435
	2000	1960	ug/L	98	0.55	SW846 6010B	03/27-03/28/03	3084435
			Dilution Factor: 1			Analysis Time..: 19:21		
Barium	2000	2080	ug/L	104		SW846 6010B	03/27-03/28/03	3084435
	2000	2110	ug/L	105	1.3	SW846 6010B	03/27-03/28/03	3084435
			Dilution Factor: 1			Analysis Time..: 15:16		
Beryllium	50.0	49.8	ug/L	100		SW846 6010B	03/27-03/28/03	3084435
	50.0	49.9	ug/L	100	0.34	SW846 6010B	03/27-03/28/03	3084435
			Dilution Factor: 1			Analysis Time..: 15:16		
Calcium	50000	50200	ug/L	100		SW846 6010B	03/27-03/28/03	3084435
	50000	49600	ug/L	99	1.2	SW846 6010B	03/27-03/28/03	3084435
			Dilution Factor: 1			Analysis Time..: 19:21		
Cobalt	500	511	ug/L	102		SW846 6010B	03/27-03/28/03	3084435
	500	519	ug/L	104	1.6	SW846 6010B	03/27-03/28/03	3084435
			Dilution Factor: 1			Analysis Time..: 15:16		
Copper	250	255	ug/L	102		SW846 6010B	03/27-03/28/03	3084435
	250	258	ug/L	103	1.2	SW846 6010B	03/27-03/28/03	3084435
			Dilution Factor: 1			Analysis Time..: 15:16		

(Continued on next page)

LABORATORY CONTROL SAMPLE DATA REPORT

TOTAL Metals

Lot-Sample #...: CANNON-3 **Matrix.....:** WATER

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Iron	1000	1010	ug/L	101		SW846 6010B	03/27-03/28/03	3084435
	1000	1000	ug/L	100	0.77	SW846 6010B	03/27-03/28/03	3084435
			Dilution Factor: 1			Analysis Time..: 19:21		
Magnesium	50000	50500	ug/L	101		SW846 6010B	03/27-03/28/03	3084435
	50000	50500	ug/L	101	0.0	SW846 6010B	03/27-03/28/03	3084435
			Dilution Factor: 1			Analysis Time..: 19:21		
Manganese	500	515	ug/L	103		SW846 6010B	03/27-03/28/03	3084435
	500	521	ug/L	104	1.2	SW846 6010B	03/27-03/28/03	3084435
			Dilution Factor: 1			Analysis Time..: 15:16		
Molybdenum	1000	997	ug/L	100		SW846 6010B	03/27-03/28/03	3084435
	1000	1010	ug/L	101	1.2	SW846 6010B	03/27-03/28/03	3084435
			Dilution Factor: 1			Analysis Time..: 15:16		
Nickel	500	517	ug/L	103		SW846 6010B	03/27-03/28/03	3084435
	500	521	ug/L	104	0.92	SW846 6010B	03/27-03/28/03	3084435
			Dilution Factor: 1			Analysis Time..: 15:16		
Potassium	50000	46300	ug/L	93		SW846 6010B	03/27-03/28/03	3084435
	50000	46400	ug/L	93	0.09	SW846 6010B	03/27-03/28/03	3084435
			Dilution Factor: 1			Analysis Time..: 19:21		
Sodium	50000	50400	ug/L	101		SW846 6010B	03/27-03/28/03	3084435
	50000	51100	ug/L	102	1.4	SW846 6010B	03/27-03/28/03	3084435
			Dilution Factor: 1			Analysis Time..: 19:21		
Tin	2000	1980	ug/L	99		SW846 6010B	03/27-03/28/03	3084435
	2000	2010	ug/L	100	1.2	SW846 6010B	03/27-03/28/03	3084435
			Dilution Factor: 1			Analysis Time..: 15:16		
Vanadium	500	517	ug/L	103		SW846 6010B	03/27-03/28/03	3084435
	500	524	ug/L	105	1.4	SW846 6010B	03/27-03/28/03	3084435
			Dilution Factor: 1			Analysis Time..: 15:16		
Zinc	500	510	ug/L	102		SW846 6010B	03/27-03/28/03	3084435
	500	502	ug/L	100	1.6	SW846 6010B	03/27-03/28/03	3084435
			Dilution Factor: 1			Analysis Time..: 15:16		

(Continued on next page)

LABORATORY CONTROL SAMPLE DATA REPORT

TOTAL Metals

Lot-Sample #...: CANNON-3 **Matrix.....:** WATER

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Antimony	40.0	38.7	ug/L	97		SW846 6020	04/01-04/14/03	3084470
	40.0	39.5	ug/L	99	1.8	SW846 6020	04/01-04/14/03	3084470
			Dilution Factor: 1			Analysis Time..: 20:57		
Arsenic	40.0	39.2	ug/L	98		SW846 6020	04/01-04/14/03	3084470
	40.0	40.9	ug/L	102	4.4	SW846 6020	04/01-04/14/03	3084470
			Dilution Factor: 1			Analysis Time..: 20:57		
Cadmium	40.0	38.5	ug/L	96		SW846 6020	04/01-04/14/03	3084470
	40.0	39.4	ug/L	99	2.5	SW846 6020	04/01-04/14/03	3084470
			Dilution Factor: 1			Analysis Time..: 20:57		
Chromium	40.0	41.8	ug/L	105		SW846 6020	04/01-04/14/03	3084470
	40.0	42.6	ug/L	106	1.8	SW846 6020	04/01-04/14/03	3084470
			Dilution Factor: 1			Analysis Time..: 20:57		
Lead	40.0	41.4	ug/L	103		SW846 6020	04/01-04/14/03	3084470
	40.0	42.1	ug/L	105	1.7	SW846 6020	04/01-04/14/03	3084470
			Dilution Factor: 1			Analysis Time..: 20:57		
Selenium	40.0	37.6	ug/L	94		SW846 6020	04/01-04/14/03	3084470
	40.0	37.9	ug/L	95	0.75	SW846 6020	04/01-04/14/03	3084470
			Dilution Factor: 1			Analysis Time..: 20:57		
Silver	40.0	38.1	ug/L	95		SW846 6020	04/01-04/14/03	3084470
	40.0	38.8	ug/L	97	1.8	SW846 6020	04/01-04/14/03	3084470
			Dilution Factor: 1			Analysis Time..: 20:57		
Thallium	40.0	40.9	ug/L	102		SW846 6020	04/01-04/14/03	3084470
	40.0	41.8	ug/L	105	2.3	SW846 6020	04/01-04/14/03	3084470
			Dilution Factor: 1			Analysis Time..: 20:57		
Mercury	5.00	4.53	ug/L	91		SW846 7470A	04/14/03	3098223
	5.00	4.75	ug/L	95	4.7	SW846 7470A	04/14/03	3098223
			Dilution Factor: 1			Analysis Time..: 21:00		
Mercury	5.00	4.89	ug/L	98		SW846 7470A	04/15/03	3098224
	5.00	4.84	ug/L	97	1.0	SW846 7470A	04/15/03	3098224
			Dilution Factor: 1			Analysis Time..: 19:39		

(Continued on next page)

LABORATORY CONTROL SAMPLE DATA REPORT

TOTAL Metals

Lot-Sample #...: CANNON-3 **Matrix.....:** WATER

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Antimony	40.0	39.8	ug/L	99		SW846 6020	04/12-04/24/03	3100281
	40.0	39.7	ug/L	99	0.24	SW846 6020	04/12-04/24/03	3100281
			Dilution Factor: 1			Analysis Time..: 16:01		
Arsenic	40.0	39.0	ug/L	97		SW846 6020	04/12-04/24/03	3100281
	40.0	38.3	ug/L	96	1.7	SW846 6020	04/12-04/24/03	3100281
			Dilution Factor: 1			Analysis Time..: 16:01		
Cadmium	40.0	39.3	ug/L	98		SW846 6020	04/12-04/24/03	3100281
	40.0	38.7	ug/L	97	1.6	SW846 6020	04/12-04/24/03	3100281
			Dilution Factor: 1			Analysis Time..: 16:01		
Chromium	40.0	40.3	ug/L	101		SW846 6020	04/12-04/24/03	3100281
	40.0	40.9	ug/L	102	1.6	SW846 6020	04/12-04/24/03	3100281
			Dilution Factor: 1			Analysis Time..: 16:01		
Lead	40.0	42.3	ug/L	106		SW846 6020	04/12-04/24/03	3100281
	40.0	42.3	ug/L	106	0.05	SW846 6020	04/12-04/24/03	3100281
			Dilution Factor: 1			Analysis Time..: 16:01		
Selenium	40.0	36.8	ug/L	92		SW846 6020	04/12-04/24/03	3100281
	40.0	37.7	ug/L	94	2.2	SW846 6020	04/12-04/24/03	3100281
			Dilution Factor: 1			Analysis Time..: 16:01		
Silver	40.0	40.1	ug/L	100		SW846 6020	04/12-04/24/03	3100281
	40.0	40.2	ug/L	100	0.13	SW846 6020	04/12-04/24/03	3100281
			Dilution Factor: 1			Analysis Time..: 16:01		
Thallium	40.0	42.8	ug/L	107		SW846 6020	04/12-04/24/03	3100281
	40.0	41.5	ug/L	104	3.0	SW846 6020	04/12-04/24/03	3100281
			Dilution Factor: 1			Analysis Time..: 16:01		
Aluminum	2000	2020	ug/L	101		SW846 6010B	04/12-04/14/03	3100459
	2000	1990	ug/L	100	1.6	SW846 6010B	04/12-04/14/03	3100459
			Dilution Factor: 1			Analysis Time..: 17:21		
Barium	2000	2110	ug/L	106		SW846 6010B	04/12-04/14/03	3100459
	2000	2050	ug/L	102	3.0	SW846 6010B	04/12-04/14/03	3100459
			Dilution Factor: 1			Analysis Time..: 14:19		

(Continued on next page)

LABORATORY CONTROL SAMPLE DATA REPORT

TOTAL Metals

Lot-Sample #...: CANNON-3 **Matrix.....:** WATER

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Beryllium	50.0	52.1	ug/L	104		SW846 6010B	04/12-04/14/03	3100459
	50.0	51.3	ug/L	103	1.6	SW846 6010B	04/12-04/14/03	3100459
			Dilution Factor: 1			Analysis Time..: 17:21		
Calcium	50000	48000	ug/L	96		SW846 6010B	04/12-04/14/03	3100459
	50000	47400	ug/L	95	1.2	SW846 6010B	04/12-04/14/03	3100459
			Dilution Factor: 1			Analysis Time..: 17:21		
Cobalt	500	517	ug/L	103		SW846 6010B	04/12-04/14/03	3100459
	500	504	ug/L	101	2.5	SW846 6010B	04/12-04/14/03	3100459
			Dilution Factor: 1			Analysis Time..: 14:19		
Copper	250	258	ug/L	103		SW846 6010B	04/12-04/14/03	3100459
	250	249	ug/L	100	3.2	SW846 6010B	04/12-04/14/03	3100459
			Dilution Factor: 1			Analysis Time..: 14:19		
Iron	1000	1010	ug/L	101		SW846 6010B	04/12-04/14/03	3100459
	1000	975	ug/L	98	3.3	SW846 6010B	04/12-04/14/03	3100459
			Dilution Factor: 1			Analysis Time..: 17:21		
Magnesium	50000	51400	ug/L	103		SW846 6010B	04/12-04/14/03	3100459
	50000	50600	ug/L	101	1.4	SW846 6010B	04/12-04/14/03	3100459
			Dilution Factor: 1			Analysis Time..: 17:21		
Manganese	500	522	ug/L	104		SW846 6010B	04/12-04/14/03	3100459
	500	509	ug/L	102	2.6	SW846 6010B	04/12-04/14/03	3100459
			Dilution Factor: 1			Analysis Time..: 14:19		
Molybdenum	1000	996	ug/L	100		SW846 6010B	04/12-04/14/03	3100459
	1000	970	ug/L	97	2.6	SW846 6010B	04/12-04/14/03	3100459
			Dilution Factor: 1			Analysis Time..: 14:19		
Nickel	500	544	ug/L	109		SW846 6010B	04/12-04/14/03	3100459
	500	533	ug/L	107	2.2	SW846 6010B	04/12-04/14/03	3100459
			Dilution Factor: 1			Analysis Time..: 14:19		
Potassium	50000	50200	ug/L	100		SW846 6010B	04/12-04/14/03	3100459
	50000	49600	ug/L	99	1.2	SW846 6010B	04/12-04/14/03	3100459
			Dilution Factor: 1			Analysis Time..: 17:21		

(Continued on next page)

LABORATORY CONTROL SAMPLE DATA REPORT

TOTAL Metals

Lot-Sample #...: CANNON-3 **Matrix.....:** WATER

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Sodium	50000	51800	ug/L	104		SW846 6010B	04/12-04/14/03	3100459
	50000	51100	ug/L	102	1.3	SW846 6010B	04/12-04/14/03	3100459
		Dilution Factor: 1				Analysis Time..: 17:21		
Tin	2000	2050	ug/L	103		SW846 6010B	04/12-04/14/03	3100459
	2000	1990	ug/L	100	2.8	SW846 6010B	04/12-04/14/03	3100459
		Dilution Factor: 1				Analysis Time..: 14:19		
Vanadium	500	509	ug/L	102		SW846 6010B	04/12-04/14/03	3100459
	500	496	ug/L	99	2.7	SW846 6010B	04/12-04/14/03	3100459
		Dilution Factor: 1				Analysis Time..: 14:19		
Zinc	500	505	ug/L	101		SW846 6010B	04/12-04/14/03	3100459
	500	491	ug/L	98	2.8	SW846 6010B	04/12-04/14/03	3100459
		Dilution Factor: 1				Analysis Time..: 14:19		

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: CANNON-3 **Matrix.....:** WG
Date Sampled...: 03/20/03 08:50 **Date Received..:** 03/21/03

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: D3C210230-002 **Prep Batch #...:** 3080385							
Antimony	106	(80 - 117)			SW846 6020	03/24-04/15/03	FKJAR1C0
	105	(80 - 117)	0.43	(0-30)	SW846 6020	03/24-04/15/03	FKJAR1C1
		Dilution Factor: 1					
		Analysis Time..: 16:45					
Arsenic	101	(79 - 120)			SW846 6020	03/24-04/15/03	FKJAR1C2
	99	(79 - 120)	1.4	(0-30)	SW846 6020	03/24-04/15/03	FKJAR1C3
		Dilution Factor: 1					
		Analysis Time..: 16:45					
Cadmium	98	(82 - 115)			SW846 6020	03/24-04/15/03	FKJAR1C4
	102	(82 - 115)	3.6	(0-30)	SW846 6020	03/24-04/15/03	FKJAR1C5
		Dilution Factor: 1					
		Analysis Time..: 16:45					
Chromium	99	(80 - 124)			SW846 6020	03/24-04/15/03	FKJAR1DF
	101	(80 - 124)	1.7	(0-30)	SW846 6020	03/24-04/15/03	FKJAR1DG
		Dilution Factor: 1					
		Analysis Time..: 16:45					
Lead	100	(79 - 119)			SW846 6020	03/24-04/15/03	FKJAR1C6
	102	(79 - 119)	1.6	(0-30)	SW846 6020	03/24-04/15/03	FKJAR1C7
		Dilution Factor: 1					
		Analysis Time..: 16:45					
Selenium	102	(64 - 134)			SW846 6020	03/24-04/15/03	FKJAR1C8
	107	(64 - 134)	4.2	(0-35)	SW846 6020	03/24-04/15/03	FKJAR1C9
		Dilution Factor: 1					
		Analysis Time..: 16:45					
Silver	89	(20 - 120)			SW846 6020	03/24-04/15/03	FKJAR1DA
	91	(20 - 120)	2.0	(0-40)	SW846 6020	03/24-04/15/03	FKJAR1DC
		Dilution Factor: 1					
		Analysis Time..: 16:45					
Thallium	100	(77 - 124)			SW846 6020	03/24-04/15/03	FKJAR1DD
	100	(77 - 124)	0.33	(0-30)	SW846 6020	03/24-04/15/03	FKJAR1DE
		Dilution Factor: 1					
		Analysis Time..: 16:45					

MS Lot-Sample #: D3C210230-002 **Prep Batch #...:** 3083280

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: CANNON-3 **Matrix.....:** WG
Date Sampled...: 03/20/03 08:50 **Date Received..:** 03/21/03

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Aluminum	107	(83 - 119)			SW846 6010B	03/25-03/26/03	FKJAR1EA
	102	(83 - 119)	4.4	(0-25)	SW846 6010B	03/25-03/26/03	FKJAR1EC
		Dilution Factor: 1					
		Analysis Time..: 19:06					
Barium	103	(85 - 120)			SW846 6010B	03/25-03/26/03	FKJAR1CF
	103	(85 - 120)	0.45	(0-25)	SW846 6010B	03/25-03/26/03	FKJAR1CG
		Dilution Factor: 1					
		Analysis Time..: 11:40					
Beryllium	105	(79 - 121)			SW846 6010B	03/25-03/26/03	FKJAR1CH
	104	(79 - 121)	1.7	(0-25)	SW846 6010B	03/25-03/26/03	FKJAR1CJ
		Dilution Factor: 1					
		Analysis Time..: 19:06					
Calcium	106	(48 - 153)			SW846 6010B	03/25-03/26/03	FKJAR1ED
	106	(48 - 153)	0.08	(0-25)	SW846 6010B	03/25-03/26/03	FKJAR1EE
		Dilution Factor: 1					
		Analysis Time..: 19:06					
Cobalt	99	(82 - 119)			SW846 6010B	03/25-03/26/03	FKJAR1DK
	98	(82 - 119)	1.4	(0-25)	SW846 6010B	03/25-03/26/03	FKJAR1DL
		Dilution Factor: 1					
		Analysis Time..: 11:40					
Copper	101	(82 - 129)			SW846 6010B	03/25-03/26/03	FKJAR1CK
	102	(82 - 129)	1.2	(0-25)	SW846 6010B	03/25-03/26/03	FKJAR1CL
		Dilution Factor: 1					
		Analysis Time..: 11:40					
Iron	106	(52 - 155)			SW846 6010B	03/25-03/26/03	FKJAR1CM
	103	(52 - 155)	2.6	(0-25)	SW846 6010B	03/25-03/26/03	FKJAR1CN
		Dilution Factor: 1					
		Analysis Time..: 19:06					
Magnesium	113	(62 - 146)			SW846 6010B	03/25-03/26/03	FKJAR1EF
	107	(62 - 146)	2.6	(0-25)	SW846 6010B	03/25-03/26/03	FKJAR1EG
		Dilution Factor: 1					
		Analysis Time..: 19:06					
Manganese	101	(79 - 121)			SW846 6010B	03/25-03/26/03	FKJAR1CP
	100	(79 - 121)	1.3	(0-25)	SW846 6010B	03/25-03/26/03	FKJAR1CQ
		Dilution Factor: 1					
		Analysis Time..: 11:40					

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: CANNON-3 **Matrix.....:** WG
Date Sampled...: 03/20/03 08:50 **Date Received..:** 03/21/03

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Molybdenum	100	(83 - 109)			SW846 6010B	03/25-03/26/03	FKJAR1DM
	99	(83 - 109)	0.49	(0-25)	SW846 6010B	03/25-03/26/03	FKJAR1DN
		Dilution Factor: 1					
		Analysis Time..: 11:40					
Nickel	101	(84 - 120)			SW846 6010B	03/25-03/26/03	FKJAR1CR
	100	(84 - 120)	0.91	(0-25)	SW846 6010B	03/25-03/26/03	FKJAR1CT
		Dilution Factor: 1					
		Analysis Time..: 11:40					
Potassium	112	(76 - 132)			SW846 6010B	03/25-03/26/03	FKJAR1EH
	106	(76 - 132)	4.5	(0-25)	SW846 6010B	03/25-03/26/03	FKJAR1EJ
		Dilution Factor: 1					
		Analysis Time..: 19:06					
Sodium	112	(70 - 203)			SW846 6010B	03/25-03/26/03	FKJAR1EK
	105	(70 - 203)	2.8	(0-40)	SW846 6010B	03/25-03/26/03	FKJAR1EL
		Dilution Factor: 1					
		Analysis Time..: 19:06					
Tin	100	(77 - 126)			SW846 6010B	03/25-03/26/03	FKJAR1DP
	99	(77 - 126)	0.82	(0-25)	SW846 6010B	03/25-03/26/03	FKJAR1DQ
		Dilution Factor: 1					
		Analysis Time..: 11:40					
Vanadium	101	(85 - 120)			SW846 6010B	03/25-03/26/03	FKJAR1CU
	100	(85 - 120)	0.99	(0-25)	SW846 6010B	03/25-03/26/03	FKJAR1CV
		Dilution Factor: 1					
		Analysis Time..: 11:40					
Zinc	96	(60 - 137)			SW846 6010B	03/25-03/26/03	FKJAR1CW
	93	(60 - 137)	3.8	(0-25)	SW846 6010B	03/25-03/26/03	FKJAR1CX
		Dilution Factor: 1					
		Analysis Time..: 11:40					

MS Lot-Sample #: D3C210230-002 **Prep Batch #...:** 3098223

Mercury	97	(84 - 114)			SW846 7470A	04/14/03	FKJAR1DH
	97	(84 - 114)	0.20	(0-10)	SW846 7470A	04/14/03	FKJAR1DJ
		Dilution Factor: 1					
		Analysis Time..: 21:08					

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: CANNON-3 **Matrix.....:** WG
Date Sampled...: 03/20/03 08:50 **Date Received..:** 03/21/03

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: D3C210230-002 **Prep Batch #...:** 3080385									
Antimony									
	0.060	40.0	42.4	ug/L	106		SW846 6020	03/24-04/15/03	FKJAR1C0
	0.060	40.0	42.2	ug/L	105	0.43	SW846 6020	03/24-04/15/03	FKJAR1C1
			Dilution Factor: 1						
			Analysis Time..: 16:45						
Arsenic									
	2.9	40.0	43.2	ug/L	101		SW846 6020	03/24-04/15/03	FKJAR1C2
	2.9	40.0	42.6	ug/L	99	1.4	SW846 6020	03/24-04/15/03	FKJAR1C3
			Dilution Factor: 1						
			Analysis Time..: 16:45						
Cadmium									
	0.022	40.0	39.3	ug/L	98		SW846 6020	03/24-04/15/03	FKJAR1C4
	0.022	40.0	40.7	ug/L	102	3.6	SW846 6020	03/24-04/15/03	FKJAR1C5
			Dilution Factor: 1						
			Analysis Time..: 16:45						
Chromium									
	3.8	40.0	43.6	ug/L	99		SW846 6020	03/24-04/15/03	FKJAR1DF
	3.8	40.0	44.3	ug/L	101	1.7	SW846 6020	03/24-04/15/03	FKJAR1DG
			Dilution Factor: 1						
			Analysis Time..: 16:45						
Lead									
	0.71	40.0	40.7	ug/L	100		SW846 6020	03/24-04/15/03	FKJAR1C6
	0.71	40.0	41.3	ug/L	102	1.6	SW846 6020	03/24-04/15/03	FKJAR1C7
			Dilution Factor: 1						
			Analysis Time..: 16:45						
Selenium									
	5.5	40.0	46.3	ug/L	102		SW846 6020	03/24-04/15/03	FKJAR1C8
	5.5	40.0	48.3	ug/L	107	4.2	SW846 6020	03/24-04/15/03	FKJAR1C9
			Dilution Factor: 1						
			Analysis Time..: 16:45						
Silver									
	0.034	40.0	35.5	ug/L	89		SW846 6020	03/24-04/15/03	FKJAR1DA
	0.034	40.0	36.3	ug/L	91	2.0	SW846 6020	03/24-04/15/03	FKJAR1DC
			Dilution Factor: 1						
			Analysis Time..: 16:45						

(Continued on next page)

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: CANNON-3 **Matrix.....:** WG
Date Sampled...: 03/20/03 08:50 **Date Received..:** 03/21/03

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium									
	ND	40.0	39.9	ug/L	100		SW846 6020	03/24-04/15/03	FKJAR1DD
	ND	40.0	40.1	ug/L	100	0.33	SW846 6020	03/24-04/15/03	FKJAR1DE
			Dilution Factor: 1						
			Analysis Time..: 16:45						

MS Lot-Sample #: D3C210230-002 **Prep Batch #...:** 3083280

Aluminum									
	48	2000	2190	ug/L	107		SW846 6010B	03/25-03/26/03	FKJAR1EA
	48	2000	2090	ug/L	102	4.4	SW846 6010B	03/25-03/26/03	FKJAR1EC
			Dilution Factor: 1						
			Analysis Time..: 19:06						
Barium									
	32	2000	2090	ug/L	103		SW846 6010B	03/25-03/26/03	FKJAR1CF
	32	2000	2100	ug/L	103	0.45	SW846 6010B	03/25-03/26/03	FKJAR1CG
			Dilution Factor: 1						
			Analysis Time..: 11:40						
Beryllium									
	ND	50.0	52.8	ug/L	105		SW846 6010B	03/25-03/26/03	FKJAR1CH
	ND	50.0	51.9	ug/L	104	1.7	SW846 6010B	03/25-03/26/03	FKJAR1CJ
			Dilution Factor: 1						
			Analysis Time..: 19:06						
Calcium									
	53000	50000	106000	ug/L	106		SW846 6010B	03/25-03/26/03	FKJAR1ED
	53000	50000	106000	ug/L	106	0.08	SW846 6010B	03/25-03/26/03	FKJAR1EE
			Dilution Factor: 1						
			Analysis Time..: 19:06						
Cobalt									
	ND	500	496	ug/L	99		SW846 6010B	03/25-03/26/03	FKJAR1DK
	ND	500	489	ug/L	98	1.4	SW846 6010B	03/25-03/26/03	FKJAR1DL
			Dilution Factor: 1						
			Analysis Time..: 11:40						
Copper									
	5.3	250	257	ug/L	101		SW846 6010B	03/25-03/26/03	FKJAR1CK
	5.3	250	260	ug/L	102	1.2	SW846 6010B	03/25-03/26/03	FKJAR1CL
			Dilution Factor: 1						
			Analysis Time..: 11:40						

(Continued on next page)

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: CANNON-3 **Matrix.....:** WG
Date Sampled...: 03/20/03 08:50 **Date Received..:** 03/21/03

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron									
	45	1000	1100	ug/L	106		SW846 6010B	03/25-03/26/03	FKJAR1CM
	45	1000	1070	ug/L	103	2.6	SW846 6010B	03/25-03/26/03	FKJAR1CN
			Dilution Factor: 1						
			Analysis Time..: 19:06						
Magnesium									
	53000	50000	109000	ug/L	113		SW846 6010B	03/25-03/26/03	FKJAR1EF
	53000	50000	106000	ug/L	107	2.6	SW846 6010B	03/25-03/26/03	FKJAR1EG
			Dilution Factor: 1						
			Analysis Time..: 19:06						
Manganese									
	1.4	500	506	ug/L	101		SW846 6010B	03/25-03/26/03	FKJAR1CP
	1.4	500	499	ug/L	100	1.3	SW846 6010B	03/25-03/26/03	FKJAR1CQ
			Dilution Factor: 1						
			Analysis Time..: 11:40						
Molybdenum									
	2.7	1000	999	ug/L	100		SW846 6010B	03/25-03/26/03	FKJAR1DM
	2.7	1000	994	ug/L	99	0.49	SW846 6010B	03/25-03/26/03	FKJAR1DN
			Dilution Factor: 1						
			Analysis Time..: 11:40						
Nickel									
	2.0	500	505	ug/L	101		SW846 6010B	03/25-03/26/03	FKJAR1CR
	2.0	500	500	ug/L	100	0.91	SW846 6010B	03/25-03/26/03	FKJAR1CT
			Dilution Factor: 1						
			Analysis Time..: 11:40						
Potassium									
	8100	50000	63900	ug/L	112		SW846 6010B	03/25-03/26/03	FKJAR1EH
	8100	50000	61000	ug/L	106	4.5	SW846 6010B	03/25-03/26/03	FKJAR1EJ
			Dilution Factor: 1						
			Analysis Time..: 19:06						
Sodium									
	53000	50000	109000	ug/L	112		SW846 6010B	03/25-03/26/03	FKJAR1EK
	53000	50000	106000	ug/L	105	2.8	SW846 6010B	03/25-03/26/03	FKJAR1EL
			Dilution Factor: 1						
			Analysis Time..: 19:06						

(Continued on next page)

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: CANNON-3 **Matrix.....:** WG
Date Sampled...: 03/20/03 08:50 **Date Received..:** 03/21/03

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Tin									
	ND	2000	1990	ug/L	100		SW846 6010B	03/25-03/26/03	FKJAR1DP
	ND	2000	1980	ug/L	99	0.82	SW846 6010B	03/25-03/26/03	FKJAR1DQ
			Dilution Factor: 1						
			Analysis Time..: 11:40						
Vanadium									
	19	500	526	ug/L	101		SW846 6010B	03/25-03/26/03	FKJAR1CU
	19	500	520	ug/L	100	0.99	SW846 6010B	03/25-03/26/03	FKJAR1CV
			Dilution Factor: 1						
			Analysis Time..: 11:40						
Zinc									
	16	500	498	ug/L	96		SW846 6010B	03/25-03/26/03	FKJAR1CW
	16	500	479	ug/L	93	3.8	SW846 6010B	03/25-03/26/03	FKJAR1CX
			Dilution Factor: 1						
			Analysis Time..: 11:40						

MS Lot-Sample #: D3C210230-002 **Prep Batch #...:** 3098223

Mercury									
	0.021	5.00	4.87	ug/L	97		SW846 7470A	04/14/03	FKJAR1DH
	0.021	5.00	4.88	ug/L	97	0.20	SW846 7470A	04/14/03	FKJAR1DJ
			Dilution Factor: 1						
			Analysis Time..: 21:08						

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: CANNON-3 **Matrix.....:** WATER
Date Sampled...: 03/19/03 08:15 **Date Received..:** 03/21/03

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: D3C210337-001 **Prep Batch #...:** 3084435							
Aluminum	99	(83 - 119)			SW846 6010B	03/27-03/28/03	FKKCP1DM
	96	(83 - 119)	3.1	(0-25)	SW846 6010B	03/27-03/28/03	FKKCP1DN
		Dilution Factor: 1					
		Analysis Time..: 20:17					
Barium	103	(85 - 120)			SW846 6010B	03/27-03/28/03	FKKCP1EN
	101	(85 - 120)	2.7	(0-25)	SW846 6010B	03/27-03/28/03	FKKCP1EP
		Dilution Factor: 1					
		Analysis Time..: 16:20					
Beryllium	98	(79 - 121)			SW846 6010B	03/27-03/28/03	FKKCP1D3
	96	(79 - 121)	2.1	(0-25)	SW846 6010B	03/27-03/28/03	FKKCP1D4
		Dilution Factor: 1					
		Analysis Time..: 16:20					
Calcium	102	(48 - 153)			SW846 6010B	03/27-03/28/03	FKKCP1DP
	97	(48 - 153)	2.9	(0-25)	SW846 6010B	03/27-03/28/03	FKKCP1DQ
		Dilution Factor: 1					
		Analysis Time..: 20:17					
Cobalt	102	(82 - 119)			SW846 6010B	03/27-03/28/03	FKKCP1CW
	100	(82 - 119)	2.1	(0-25)	SW846 6010B	03/27-03/28/03	FKKCP1CX
		Dilution Factor: 1					
		Analysis Time..: 16:20					
Copper	103	(82 - 129)			SW846 6010B	03/27-03/28/03	FKKCP1D6
	100	(82 - 129)	2.9	(0-25)	SW846 6010B	03/27-03/28/03	FKKCP1D7
		Dilution Factor: 1					
		Analysis Time..: 16:20					
Iron	101	(52 - 155)			SW846 6010B	03/27-03/28/03	FKKCP1DR
	98	(52 - 155)	2.3	(0-25)	SW846 6010B	03/27-03/28/03	FKKCP1DT
		Dilution Factor: 1					
		Analysis Time..: 20:17					
Magnesium	105	(62 - 146)			SW846 6010B	03/27-03/28/03	FKKCP1DU
	100	(62 - 146)	3.6	(0-25)	SW846 6010B	03/27-03/28/03	FKKCP1DV
		Dilution Factor: 1					
		Analysis Time..: 20:17					

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: CANNON-3 **Matrix.....:** WATER
Date Sampled...: 03/19/03 08:15 **Date Received..:** 03/21/03

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Manganese	102	(79 - 121)			SW846 6010B	03/27-03/28/03	FKKCP1D9
	100	(79 - 121)	2.4	(0-25)	SW846 6010B	03/27-03/28/03	FKKCP1EA
		Dilution Factor: 1					
		Analysis Time..: 16:20					
Molybdenum	101	(83 - 109)			SW846 6010B	03/27-03/28/03	FKKCP1C6
	98	(83 - 109)	2.4	(0-25)	SW846 6010B	03/27-03/28/03	FKKCP1C7
		Dilution Factor: 1					
		Analysis Time..: 16:20					
Nickel	103	(84 - 120)			SW846 6010B	03/27-03/28/03	FKKCP1ED
	100	(84 - 120)	2.2	(0-25)	SW846 6010B	03/27-03/28/03	FKKCP1EE
		Dilution Factor: 1					
		Analysis Time..: 16:20					
Potassium	96	(76 - 132)			SW846 6010B	03/27-03/28/03	FKKCP1DW
	92	(76 - 132)	3.8	(0-25)	SW846 6010B	03/27-03/28/03	FKKCP1DX
		Dilution Factor: 1					
		Analysis Time..: 20:17					
Sodium	111	(70 - 203)			SW846 6010B	03/27-03/28/03	FKKCP1D0
	99	(70 - 203)	4.6	(0-40)	SW846 6010B	03/27-03/28/03	FKKCP1D1
		Dilution Factor: 1					
		Analysis Time..: 20:17					
Tin	101	(77 - 126)			SW846 6010B	03/27-03/28/03	FKKCP1ER
	98	(77 - 126)	2.2	(0-25)	SW846 6010B	03/27-03/28/03	FKKCP1ET
		Dilution Factor: 1					
		Analysis Time..: 16:20					
Vanadium	103	(85 - 120)			SW846 6010B	03/27-03/28/03	FKKCP1EG
	100	(85 - 120)	3.0	(0-25)	SW846 6010B	03/27-03/28/03	FKKCP1EH
		Dilution Factor: 1					
		Analysis Time..: 16:20					
Zinc	99	(60 - 137)			SW846 6010B	03/27-03/28/03	FKKCP1EK
	99	(60 - 137)	0.59	(0-25)	SW846 6010B	03/27-03/28/03	FKKCP1EL
		Dilution Factor: 1					
		Analysis Time..: 16:20					

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: CANNON-3 **Matrix.....:** WATER
Date Sampled...: 03/19/03 08:15 **Date Received..:** 03/21/03

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: D3C210337-001 **Prep Batch #...:** 3084435									
Aluminum									
	20	2000	1990	ug/L	99		SW846 6010B	03/27-03/28/03	FKKCP1DM
	20	2000	1930	ug/L	96	3.1	SW846 6010B	03/27-03/28/03	FKKCP1DN
			Dilution Factor: 1						
			Analysis Time..: 20:17						
Barium									
	26	2000	2090	ug/L	103		SW846 6010B	03/27-03/28/03	FKKCP1EN
	26	2000	2040	ug/L	101	2.7	SW846 6010B	03/27-03/28/03	FKKCP1EP
			Dilution Factor: 1						
			Analysis Time..: 16:20						
Beryllium									
	ND	50.0	49.0	ug/L	98		SW846 6010B	03/27-03/28/03	FKKCP1D3
	ND	50.0	48.0	ug/L	96	2.1	SW846 6010B	03/27-03/28/03	FKKCP1D4
			Dilution Factor: 1						
			Analysis Time..: 16:20						
Calcium									
	28000	50000	79000	ug/L	102		SW846 6010B	03/27-03/28/03	FKKCP1DP
	28000	50000	76700	ug/L	97	2.9	SW846 6010B	03/27-03/28/03	FKKCP1DQ
			Dilution Factor: 1						
			Analysis Time..: 20:17						
Cobalt									
	ND	500	512	ug/L	102		SW846 6010B	03/27-03/28/03	FKKCP1CW
	ND	500	501	ug/L	100	2.1	SW846 6010B	03/27-03/28/03	FKKCP1CX
			Dilution Factor: 1						
			Analysis Time..: 16:20						
Copper									
	1.0	250	259	ug/L	103		SW846 6010B	03/27-03/28/03	FKKCP1D6
	1.0	250	252	ug/L	100	2.9	SW846 6010B	03/27-03/28/03	FKKCP1D7
			Dilution Factor: 1						
			Analysis Time..: 16:20						
Iron									
	ND	1000	1020	ug/L	101		SW846 6010B	03/27-03/28/03	FKKCP1DR
	ND	1000	993	ug/L	98	2.3	SW846 6010B	03/27-03/28/03	FKKCP1DT
			Dilution Factor: 1						
			Analysis Time..: 20:17						

(Continued on next page)

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: CANNON-3 **Matrix.....:** WATER
Date Sampled...: 03/19/03 08:15 **Date Received..:** 03/21/03

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Magnesium									
	31000	50000	83600	ug/L	105		SW846 6010B	03/27-03/28/03	FKKCP1DU
	31000	50000	80700	ug/L	100	3.6	SW846 6010B	03/27-03/28/03	FKKCP1DV
			Dilution Factor: 1						
			Analysis Time..: 20:17						
Manganese									
	ND	500	511	ug/L	102		SW846 6010B	03/27-03/28/03	FKKCP1D9
	ND	500	499	ug/L	100	2.4	SW846 6010B	03/27-03/28/03	FKKCP1EA
			Dilution Factor: 1						
			Analysis Time..: 16:20						
Molybdenum									
	5.5	1000	1010	ug/L	101		SW846 6010B	03/27-03/28/03	FKKCP1C6
	5.5	1000	988	ug/L	98	2.4	SW846 6010B	03/27-03/28/03	FKKCP1C7
			Dilution Factor: 1						
			Analysis Time..: 16:20						
Nickel									
	ND	500	513	ug/L	103		SW846 6010B	03/27-03/28/03	FKKCP1ED
	ND	500	502	ug/L	100	2.2	SW846 6010B	03/27-03/28/03	FKKCP1EE
			Dilution Factor: 1						
			Analysis Time..: 16:20						
Potassium									
	4700	50000	52800	ug/L	96		SW846 6010B	03/27-03/28/03	FKKCP1DW
	4700	50000	50800	ug/L	92	3.8	SW846 6010B	03/27-03/28/03	FKKCP1DX
			Dilution Factor: 1						
			Analysis Time..: 20:17						
Sodium									
	78000	50000	134000	ug/L	111		SW846 6010B	03/27-03/28/03	FKKCP1D0
	78000	50000	128000	ug/L	99	4.6	SW846 6010B	03/27-03/28/03	FKKCP1D1
			Dilution Factor: 1						
			Analysis Time..: 20:17						
Tin									
	ND	2000	2010	ug/L	101		SW846 6010B	03/27-03/28/03	FKKCP1ER
	ND	2000	1970	ug/L	98	2.2	SW846 6010B	03/27-03/28/03	FKKCP1ET
			Dilution Factor: 1						
			Analysis Time..: 16:20						

(Continued on next page)

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: CANNON-3
Date Sampled...: 03/19/03 08:15 **Date Received..:** 03/21/03

Matrix.....: WATER

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Vanadium									
	72	500	589	ug/L	103		SW846 6010B	03/27-03/28/03	FKKCP1EG
	72	500	571	ug/L	100	3.0	SW846 6010B	03/27-03/28/03	FKKCP1EH
			Dilution Factor: 1						
			Analysis Time..: 16:20						
Zinc									
	ND	500	504	ug/L	99		SW846 6010B	03/27-03/28/03	FKKCP1EK
	ND	500	501	ug/L	99	0.59	SW846 6010B	03/27-03/28/03	FKKCP1EL
			Dilution Factor: 1						
			Analysis Time..: 16:20						

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: CANNON-3 **Matrix.....:** WATER
Date Sampled...: 03/20/03 12:10 **Date Received..:** 03/21/03

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: D3C210341-001 **Prep Batch #...:** 3084470							
Antimony	101	(80 - 117)			SW846 6020	04/01-04/14/03	FKKDL1CJ
	98	(80 - 117)	2.3	(0-30)	SW846 6020	04/01-04/14/03	FKKDL1CK
		Dilution Factor: 1					
		Analysis Time..: 21:19					
Arsenic	96	(79 - 120)			SW846 6020	04/01-04/14/03	FKKDL1CL
	96	(79 - 120)	0.17	(0-30)	SW846 6020	04/01-04/14/03	FKKDL1CM
		Dilution Factor: 1					
		Analysis Time..: 21:19					
Cadmium	97	(82 - 115)			SW846 6020	04/01-04/14/03	FKKDL1CN
	95	(82 - 115)	2.4	(0-30)	SW846 6020	04/01-04/14/03	FKKDL1CP
		Dilution Factor: 1					
		Analysis Time..: 21:19					
Chromium	101	(80 - 124)			SW846 6020	04/01-04/14/03	FKKDL1C1
	100	(80 - 124)	0.06	(0-30)	SW846 6020	04/01-04/14/03	FKKDL1C2
		Dilution Factor: 1					
		Analysis Time..: 21:19					
Lead	101	(79 - 119)			SW846 6020	04/01-04/14/03	FKKDL1CQ
	100	(79 - 119)	1.1	(0-30)	SW846 6020	04/01-04/14/03	FKKDL1CR
		Dilution Factor: 1					
		Analysis Time..: 21:19					
Selenium	93	(64 - 134)			SW846 6020	04/01-04/14/03	FKKDL1CT
	95	(64 - 134)	2.5	(0-35)	SW846 6020	04/01-04/14/03	FKKDL1CU
		Dilution Factor: 1					
		Analysis Time..: 21:19					
Silver	93	(20 - 120)			SW846 6020	04/01-04/14/03	FKKDL1CV
	92	(20 - 120)	1.7	(0-40)	SW846 6020	04/01-04/14/03	FKKDL1CW
		Dilution Factor: 1					
		Analysis Time..: 21:19					
Thallium	103	(77 - 124)			SW846 6020	04/01-04/14/03	FKKDL1CX
	101	(77 - 124)	1.4	(0-30)	SW846 6020	04/01-04/14/03	FKKDL1C0
		Dilution Factor: 1					
		Analysis Time..: 21:19					

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: CANNON-3 **Matrix.....:** WATER
Date Sampled...: 03/20/03 12:10 **Date Received..:** 03/21/03

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: D3C210341-001 **Prep Batch #...:** 3084470									
Antimony									
	ND	40.0	40.3	ug/L	101		SW846 6020	04/01-04/14/03	FKKDL1CJ
	ND	40.0	39.4	ug/L	98	2.3	SW846 6020	04/01-04/14/03	FKKDL1CK
			Dilution Factor: 1						
			Analysis Time..: 21:19						
Arsenic									
	5.0	40.0	43.6	ug/L	96		SW846 6020	04/01-04/14/03	FKKDL1CL
	5.0	40.0	43.5	ug/L	96	0.17	SW846 6020	04/01-04/14/03	FKKDL1CM
			Dilution Factor: 1						
			Analysis Time..: 21:19						
Cadmium									
	ND	40.0	39.0	ug/L	97		SW846 6020	04/01-04/14/03	FKKDL1CN
	ND	40.0	38.0	ug/L	95	2.4	SW846 6020	04/01-04/14/03	FKKDL1CP
			Dilution Factor: 1						
			Analysis Time..: 21:19						
Chromium									
	1.2	40.0	41.4	ug/L	101		SW846 6020	04/01-04/14/03	FKKDL1C1
	1.2	40.0	41.4	ug/L	100	0.06	SW846 6020	04/01-04/14/03	FKKDL1C2
			Dilution Factor: 1						
			Analysis Time..: 21:19						
Lead									
	ND	40.0	40.5	ug/L	101		SW846 6020	04/01-04/14/03	FKKDL1CQ
	ND	40.0	40.0	ug/L	100	1.1	SW846 6020	04/01-04/14/03	FKKDL1CR
			Dilution Factor: 1						
			Analysis Time..: 21:19						
Selenium									
	0.32	40.0	37.3	ug/L	93		SW846 6020	04/01-04/14/03	FKKDL1CT
	0.32	40.0	38.3	ug/L	95	2.5	SW846 6020	04/01-04/14/03	FKKDL1CU
			Dilution Factor: 1						
			Analysis Time..: 21:19						
Silver									
	ND	40.0	37.3	ug/L	93		SW846 6020	04/01-04/14/03	FKKDL1CV
	ND	40.0	36.6	ug/L	92	1.7	SW846 6020	04/01-04/14/03	FKKDL1CW
			Dilution Factor: 1						
			Analysis Time..: 21:19						

(Continued on next page)

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: CANNON-3 **Matrix.....:** WATER
Date Sampled...: 03/20/03 12:10 **Date Received..:** 03/21/03

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium									
	ND	40.0	41.1	ug/L	103		SW846 6020	04/01-04/14/03	FKKDL1CX
	ND	40.0	40.5	ug/L	101	1.4	SW846 6020	04/01-04/14/03	FKKDL1C0

Dilution Factor: 1
Analysis Time..: 21:19

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: CANNON-3 **Matrix.....:** WATER
Date Sampled...: 04/01/03 14:35 **Date Received..:** 04/02/03

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: D3C260185-003 **Prep Batch #...:** 3098224							
Mercury	99	(84 - 114)			SW846 7470A	04/15/03	FK68Q1EN
	98	(84 - 114)	0.40	(0-10)	SW846 7470A	04/15/03	FK68Q1EP
		Dilution Factor: 1					
		Analysis Time..: 20:07					
MS Lot-Sample #: D3C260185-003 **Prep Batch #...:** 3100459							
Aluminum	104	(83 - 119)			SW846 6010B	04/12-04/14/03	FK68Q1CQ
	102	(83 - 119)	1.3	(0-25)	SW846 6010B	04/12-04/14/03	FK68Q1CR
		Dilution Factor: 1					
		Analysis Time..: 18:01					
Barium	102	(85 - 120)			SW846 6010B	04/12-04/14/03	FK68Q1CT
	101	(85 - 120)	1.0	(0-25)	SW846 6010B	04/12-04/14/03	FK68Q1CU
		Dilution Factor: 1					
		Analysis Time..: 14:52					
Beryllium	103	(79 - 121)			SW846 6010B	04/12-04/14/03	FK68Q1CV
	103	(79 - 121)	0.46	(0-25)	SW846 6010B	04/12-04/14/03	FK68Q1CW
		Dilution Factor: 1					
		Analysis Time..: 18:01					
Calcium	99	(48 - 153)			SW846 6010B	04/12-04/14/03	FK68Q1CX
	97	(48 - 153)	1.1	(0-25)	SW846 6010B	04/12-04/14/03	FK68Q1C0
		Dilution Factor: 1					
		Analysis Time..: 18:01					
Cobalt	103	(82 - 119)			SW846 6010B	04/12-04/14/03	FK68Q1EG
	103	(82 - 119)	0.14	(0-25)	SW846 6010B	04/12-04/14/03	FK68Q1EH
		Dilution Factor: 1					
		Analysis Time..: 14:52					
Copper	110	(82 - 129)			SW846 6010B	04/12-04/14/03	FK68Q1C3
	108	(82 - 129)	1.2	(0-25)	SW846 6010B	04/12-04/14/03	FK68Q1C4
		Dilution Factor: 1					
		Analysis Time..: 14:52					
Iron	100	(52 - 155)			SW846 6010B	04/12-04/14/03	FK68Q1C5
	98	(52 - 155)	1.3	(0-25)	SW846 6010B	04/12-04/14/03	FK68Q1C6
		Dilution Factor: 1					
		Analysis Time..: 18:01					

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: CANNON-3 **Matrix.....:** WATER
Date Sampled...: 04/01/03 14:35 **Date Received..:** 04/02/03

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Magnesium	108	(62 - 146)			SW846 6010B	04/12-04/14/03	FK68Q1C7
	105	(62 - 146)	1.4	(0-25)	SW846 6010B	04/12-04/14/03	FK68Q1C8
		Dilution Factor: 1					
		Analysis Time..: 18:01					
Manganese	101	(79 - 121)			SW846 6010B	04/12-04/14/03	FK68Q1C9
	101	(79 - 121)	0.20	(0-25)	SW846 6010B	04/12-04/14/03	FK68Q1DA
		Dilution Factor: 1					
		Analysis Time..: 14:52					
Molybdenum	104	(83 - 109)			SW846 6010B	04/12-04/14/03	FK68Q1EJ
	104	(83 - 109)	0.07	(0-25)	SW846 6010B	04/12-04/14/03	FK68Q1EK
		Dilution Factor: 1					
		Analysis Time..: 14:52					
Nickel	106	(84 - 120)			SW846 6010B	04/12-04/14/03	FK68Q1DC
	106	(84 - 120)	0.27	(0-25)	SW846 6010B	04/12-04/14/03	FK68Q1DD
		Dilution Factor: 1					
		Analysis Time..: 14:52					
Potassium	111	(76 - 132)			SW846 6010B	04/12-04/14/03	FK68Q1DE
	107	(76 - 132)	1.7	(0-25)	SW846 6010B	04/12-04/14/03	FK68Q1DF
		Dilution Factor: 1					
		Analysis Time..: 18:01					
Sodium	NC,MSB	(70 - 203)			SW846 6010B	04/12-04/14/03	FK68Q1DG
	NC,MSB	(70 - 203)		(0-40)	SW846 6010B	04/12-04/14/03	FK68Q1DH
		Dilution Factor: 1					
		Analysis Time..: 18:01					
Vanadium	99	(85 - 120)			SW846 6010B	04/12-04/14/03	FK68Q1DJ
	98	(85 - 120)	0.25	(0-25)	SW846 6010B	04/12-04/14/03	FK68Q1DK
		Dilution Factor: 1					
		Analysis Time..: 14:52					
Zinc	104	(60 - 137)			SW846 6010B	04/12-04/14/03	FK68Q1DL
	104	(60 - 137)	0.0	(0-25)	SW846 6010B	04/12-04/14/03	FK68Q1DM
		Dilution Factor: 1					
		Analysis Time..: 14:52					

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

NC The recovery and/or RPD were not calculated.

MSB The recovery and RPD were not calculated because the sample amount was greater than four times the spike amount.

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: CANNON-3 **Matrix.....:** WATER
Date Sampled...: 04/01/03 14:35 **Date Received..:** 04/02/03

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: D3C260185-003 **Prep Batch #...:** 3098224									
Mercury									
	ND	5.00	4.94	ug/L	99		SW846 7470A	04/15/03	FK68Q1EN
	ND	5.00	4.92	ug/L	98	0.40	SW846 7470A	04/15/03	FK68Q1EP
			Dilution Factor: 1						
			Analysis Time..: 20:07						
MS Lot-Sample #: D3C260185-003 **Prep Batch #...:** 3100459									
Aluminum									
	ND	2000	2080	ug/L	104		SW846 6010B	04/12-04/14/03	FK68Q1CQ
	ND	2000	2050	ug/L	102	1.3	SW846 6010B	04/12-04/14/03	FK68Q1CR
			Dilution Factor: 1						
			Analysis Time..: 18:01						
Barium									
	21	2000	2070	ug/L	102		SW846 6010B	04/12-04/14/03	FK68Q1CT
	21	2000	2050	ug/L	101	1.0	SW846 6010B	04/12-04/14/03	FK68Q1CU
			Dilution Factor: 1						
			Analysis Time..: 14:52						
Beryllium									
	ND	50.0	51.6	ug/L	103		SW846 6010B	04/12-04/14/03	FK68Q1CV
	ND	50.0	51.4	ug/L	103	0.46	SW846 6010B	04/12-04/14/03	FK68Q1CW
			Dilution Factor: 1						
			Analysis Time..: 18:01						
Calcium									
	29000	50000	78400	ug/L	99		SW846 6010B	04/12-04/14/03	FK68Q1CX
	29000	50000	77600	ug/L	97	1.1	SW846 6010B	04/12-04/14/03	FK68Q1C0
			Dilution Factor: 1						
			Analysis Time..: 18:01						
Cobalt									
	ND	500	514	ug/L	103		SW846 6010B	04/12-04/14/03	FK68Q1EG
	ND	500	513	ug/L	103	0.14	SW846 6010B	04/12-04/14/03	FK68Q1EH
			Dilution Factor: 1						
			Analysis Time..: 14:52						
Copper									
	ND	250	274	ug/L	110		SW846 6010B	04/12-04/14/03	FK68Q1C3
	ND	250	271	ug/L	108	1.2	SW846 6010B	04/12-04/14/03	FK68Q1C4
			Dilution Factor: 1						
			Analysis Time..: 14:52						

(Continued on next page)

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: CANNON-3 **Matrix.....:** WATER
Date Sampled...: 04/01/03 14:35 **Date Received..:** 04/02/03

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Iron									
	110	1000	1110	ug/L	100		SW846 6010B	04/12-04/14/03	FK68Q1C5
	110	1000	1090	ug/L	98	1.3	SW846 6010B	04/12-04/14/03	FK68Q1C6
			Dilution Factor: 1						
			Analysis Time..: 18:01						
Magnesium									
	57000	50000	111000	ug/L	108		SW846 6010B	04/12-04/14/03	FK68Q1C7
	57000	50000	109000	ug/L	105	1.4	SW846 6010B	04/12-04/14/03	FK68Q1C8
			Dilution Factor: 1						
			Analysis Time..: 18:01						
Manganese									
	5.4	500	512	ug/L	101		SW846 6010B	04/12-04/14/03	FK68Q1C9
	5.4	500	511	ug/L	101	0.20	SW846 6010B	04/12-04/14/03	FK68Q1DA
			Dilution Factor: 1						
			Analysis Time..: 14:52						
Molybdenum									
	14	1000	1060	ug/L	104		SW846 6010B	04/12-04/14/03	FK68Q1EJ
	14	1000	1060	ug/L	104	0.07	SW846 6010B	04/12-04/14/03	FK68Q1EK
			Dilution Factor: 1						
			Analysis Time..: 14:52						
Nickel									
	9.8	500	538	ug/L	106		SW846 6010B	04/12-04/14/03	FK68Q1DC
	9.8	500	539	ug/L	106	0.27	SW846 6010B	04/12-04/14/03	FK68Q1DD
			Dilution Factor: 1						
			Analysis Time..: 14:52						
Potassium									
	64000	50000	119000	ug/L	111		SW846 6010B	04/12-04/14/03	FK68Q1DE
	64000	50000	117000	ug/L	107	1.7	SW846 6010B	04/12-04/14/03	FK68Q1DF
			Dilution Factor: 1						
			Analysis Time..: 18:01						
Sodium									
	1600000	50000	1720000	ug/L			SW846 6010B	04/12-04/14/03	FK68Q1DG
			Qualifiers: NC,MSB						
	1600000	50000	1690000	ug/L			SW846 6010B	04/12-04/14/03	FK68Q1DH
			Qualifiers: NC,MSB						
			Dilution Factor: 1						
			Analysis Time..: 18:01						

(Continued on next page)

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: CANNON-3 **Matrix.....:** WATER
Date Sampled...: 04/01/03 14:35 **Date Received..:** 04/02/03

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Vanadium									
	52	500	546	ug/L	99		SW846 6010B	04/12-04/14/03	FK68Q1DJ
	52	500	544	ug/L	98	0.25	SW846 6010B	04/12-04/14/03	FK68Q1DK
			Dilution Factor: 1						
			Analysis Time..: 14:52						
Zinc									
	6.8	500	527	ug/L	104		SW846 6010B	04/12-04/14/03	FK68Q1DL
	6.8	500	527	ug/L	104	0.0	SW846 6010B	04/12-04/14/03	FK68Q1DM
			Dilution Factor: 1						
			Analysis Time..: 14:52						

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

NC The recovery and/or RPD were not calculated.

MSB The recovery and RPD were not calculated because the sample amount was greater than four times the spike amount.

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: CANNON-3 **Matrix.....:** WATER
Date Sampled...: 04/08/03 12:05 **Date Received..:** 04/09/03

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: D3D080213-006 **Prep Batch #...:** 3100281							
Antimony	102	(80 - 117)			SW846 6020	04/12-04/24/03	FLKRC1DW
	101	(80 - 117)	0.41	(0-30)	SW846 6020	04/12-04/24/03	FLKRC1DX
		Dilution Factor: 1					
		Analysis Time..: 16:16					
Arsenic	107	(79 - 120)			SW846 6020	04/12-04/24/03	FLKRC1CG
	110	(79 - 120)	1.7	(0-30)	SW846 6020	04/12-04/24/03	FLKRC1CH
		Dilution Factor: 1					
		Analysis Time..: 16:16					
Cadmium	92	(82 - 115)			SW846 6020	04/12-04/24/03	FLKRC1CC
	92	(82 - 115)	0.28	(0-30)	SW846 6020	04/12-04/24/03	FLKRC1CD
		Dilution Factor: 1					
		Analysis Time..: 16:16					
Chromium	98	(80 - 124)			SW846 6020	04/12-04/24/03	FLKRC1CE
	99	(80 - 124)	0.53	(0-30)	SW846 6020	04/12-04/24/03	FLKRC1CF
		Dilution Factor: 1					
		Analysis Time..: 16:16					
Lead	97	(79 - 119)			SW846 6020	04/12-04/24/03	FLKRC1CJ
	99	(79 - 119)	1.4	(0-30)	SW846 6020	04/12-04/24/03	FLKRC1CK
		Dilution Factor: 1					
		Analysis Time..: 16:16					
Selenium	128	(64 - 134)			SW846 6020	04/12-04/24/03	FLKRC1CL
	135 N	(64 - 134)	2.2	(0-35)	SW846 6020	04/12-04/24/03	FLKRC1CM
		Dilution Factor: 1					
		Analysis Time..: 16:16					
Silver	89	(20 - 120)			SW846 6020	04/12-04/24/03	FLKRC1D1
	90	(20 - 120)	0.82	(0-40)	SW846 6020	04/12-04/24/03	FLKRC1D2
		Dilution Factor: 1					
		Analysis Time..: 16:16					
Thallium	97	(77 - 124)			SW846 6020	04/12-04/24/03	FLKRC1D4
	98	(77 - 124)	1.2	(0-30)	SW846 6020	04/12-04/24/03	FLKRC1D5
		Dilution Factor: 1					
		Analysis Time..: 16:16					

MS Lot-Sample #: D3D080213-006 **Prep Batch #...:** 3100459
(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: CANNON-3 **Matrix.....:** WATER
Date Sampled...: 04/08/03 12:05 **Date Received..:** 04/09/03

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Barium	92	(85 - 120)			SW846 6010B	04/12-04/14/03	FLKRC1CN
	93	(85 - 120)	1.6	(0-25)	SW846 6010B	04/12-04/14/03	FLKRC1CP
		Dilution Factor: 1					
		Analysis Time..: 15:48					
Beryllium	101	(79 - 121)			SW846 6010B	04/12-04/14/03	FLKRC1CQ
	101	(79 - 121)	0.03	(0-25)	SW846 6010B	04/12-04/14/03	FLKRC1CR
		Dilution Factor: 1					
		Analysis Time..: 18:41					
Calcium	NC,MSB	(48 - 153)			SW846 6010B	04/12-04/14/03	FLKRC1CT
	NC,MSB	(48 - 153)		(0-25)	SW846 6010B	04/12-04/14/03	FLKRC1CU
		Dilution Factor: 1					
		Analysis Time..: 18:41					
Cobalt	115	(82 - 119)			SW846 6010B	04/12-04/14/03	FLKRC1C3
	111	(82 - 119)	3.5	(0-25)	SW846 6010B	04/12-04/14/03	FLKRC1C4
		Dilution Factor: 1					
		Analysis Time..: 15:48					
Magnesium	NC,MSB	(62 - 146)			SW846 6010B	04/12-04/14/03	FLKRC1CX
	NC,MSB	(62 - 146)		(0-25)	SW846 6010B	04/12-04/14/03	FLKRC1C0
		Dilution Factor: 1					
		Analysis Time..: 18:41					
Potassium	107	(76 - 132)			SW846 6010B	04/12-04/14/03	FLKRC1CV
	104	(76 - 132)	1.0	(0-25)	SW846 6010B	04/12-04/14/03	FLKRC1CW
		Dilution Factor: 1					
		Analysis Time..: 18:41					
Sodium	NC,MSB	(70 - 203)			SW846 6010B	04/12-04/14/03	FLKRC1C1
	NC,MSB	(70 - 203)		(0-40)	SW846 6010B	04/12-04/14/03	FLKRC1C2
		Dilution Factor: 1					
		Analysis Time..: 18:41					
Tin	128 N	(77 - 126)			SW846 6010B	04/12-04/14/03	FLKRC1E1
	124	(77 - 126)	2.9	(0-25)	SW846 6010B	04/12-04/14/03	FLKRC1E2
		Dilution Factor: 1					
		Analysis Time..: 15:48					

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

N Spiked analyte recovery is outside stated control limits.

NC The recovery and/or RPD were not calculated.

MSB The recovery and RPD were not calculated because the sample amount was greater than four times the spike amount.

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: CANNON-3 **Matrix.....:** WATER
Date Sampled...: 04/08/03 12:05 **Date Received..:** 04/09/03

MS Lot-Sample #: D3D080213-006 **Prep Batch #...:** 3100281

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Antimony									
	0.53	40.0	41.2	ug/L	102		SW846 6020	04/12-04/24/03	FLKRC1DW
	0.53	40.0	41.0	ug/L	101	0.41	SW846 6020	04/12-04/24/03	FLKRC1DX
			Dilution Factor: 1						
			Analysis Time..: 16:16						
Arsenic									
	18	40.0	60.7	ug/L	107		SW846 6020	04/12-04/24/03	FLKRC1CG
	18	40.0	61.7	ug/L	110	1.7	SW846 6020	04/12-04/24/03	FLKRC1CH
			Dilution Factor: 1						
			Analysis Time..: 16:16						
Cadmium									
	0.36	40.0	37.3	ug/L	92		SW846 6020	04/12-04/24/03	FLKRC1CC
	0.36	40.0	37.2	ug/L	92	0.28	SW846 6020	04/12-04/24/03	FLKRC1CD
			Dilution Factor: 1						
			Analysis Time..: 16:16						
Chromium									
	12	40.0	51.8	ug/L	98		SW846 6020	04/12-04/24/03	FLKRC1CE
	12	40.0	52.1	ug/L	99	0.53	SW846 6020	04/12-04/24/03	FLKRC1CF
			Dilution Factor: 1						
			Analysis Time..: 16:16						
Lead									
	0.19	40.0	39.1	ug/L	97		SW846 6020	04/12-04/24/03	FLKRC1CJ
	0.19	40.0	39.6	ug/L	99	1.4	SW846 6020	04/12-04/24/03	FLKRC1CK
			Dilution Factor: 1						
			Analysis Time..: 16:16						
Selenium									
	79	40.0	130	ug/L	128		SW846 6020	04/12-04/24/03	FLKRC1CL
	79	40.0	133 N	ug/L	135	2.2	SW846 6020	04/12-04/24/03	FLKRC1CM
			Dilution Factor: 1						
			Analysis Time..: 16:16						
Silver									
	0.076	40.0	35.8	ug/L	89		SW846 6020	04/12-04/24/03	FLKRC1D1
	0.076	40.0	36.1	ug/L	90	0.82	SW846 6020	04/12-04/24/03	FLKRC1D2
			Dilution Factor: 1						
			Analysis Time..: 16:16						

(Continued on next page)

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: CANNON-3 **Matrix.....:** WATER
Date Sampled...: 04/08/03 12:05 **Date Received..:** 04/09/03

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Thallium									
	ND	40.0	38.9	ug/L	97		SW846 6020	04/12-04/24/03	FLKRC1D4
	ND	40.0	39.4	ug/L	98	1.2	SW846 6020	04/12-04/24/03	FLKRC1D5
			Dilution Factor: 1						
			Analysis Time..: 16:16						

MS Lot-Sample #: D3D080213-006 **Prep Batch #...:** 3100459

Barium									
	14	2000	1850	ug/L	92		SW846 6010B	04/12-04/14/03	FLKRC1CN
	14	2000	1880	ug/L	93	1.6	SW846 6010B	04/12-04/14/03	FLKRC1CP
			Dilution Factor: 1						
			Analysis Time..: 15:48						
Beryllium									
	ND	50.0	50.7	ug/L	101		SW846 6010B	04/12-04/14/03	FLKRC1CQ
	ND	50.0	50.7	ug/L	101	0.03	SW846 6010B	04/12-04/14/03	FLKRC1CR
			Dilution Factor: 1						
			Analysis Time..: 18:41						
Calcium									
	200000	50000	249000	ug/L			SW846 6010B	04/12-04/14/03	FLKRC1CT
			Qualifiers: NC,MSB						
	200000	50000	250000	ug/L			SW846 6010B	04/12-04/14/03	FLKRC1CU
			Qualifiers: NC,MSB						
			Dilution Factor: 1						
			Analysis Time..: 18:41						
Cobalt									
	1.7	500	575	ug/L	115		SW846 6010B	04/12-04/14/03	FLKRC1C3
	1.7	500	555	ug/L	111	3.5	SW846 6010B	04/12-04/14/03	FLKRC1C4
			Dilution Factor: 1						
			Analysis Time..: 15:48						
Magnesium									
	480000	50000	527000	ug/L			SW846 6010B	04/12-04/14/03	FLKRC1CX
			Qualifiers: NC,MSB						
	480000	50000	524000	ug/L			SW846 6010B	04/12-04/14/03	FLKRC1C0
			Qualifiers: NC,MSB						
			Dilution Factor: 1						
			Analysis Time..: 18:41						

(Continued on next page)

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: CANNON-3 **Matrix.....:** WATER
Date Sampled...: 04/08/03 12:05 **Date Received..:** 04/09/03

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Potassium									
	75000	50000	128000	ug/L	107		SW846 6010B	04/12-04/14/03	FLKRC1CV
	75000	50000	127000	ug/L	104	1.0	SW846 6010B	04/12-04/14/03	FLKRC1CW
			Dilution Factor: 1						
			Analysis Time..: 18:41						
Sodium									
	2100000	50000	2110000	ug/L			SW846 6010B	04/12-04/14/03	FLKRC1C1
			Qualifiers: NC,MSB						
	2100000	50000	2080000	ug/L			SW846 6010B	04/12-04/14/03	FLKRC1C2
			Qualifiers: NC,MSB						
			Dilution Factor: 1						
			Analysis Time..: 18:41						
Tin									
	6.1	2000	2560 N	ug/L	128		SW846 6010B	04/12-04/14/03	FLKRC1E1
	6.1	2000	2490	ug/L	124	2.9	SW846 6010B	04/12-04/14/03	FLKRC1E2
			Dilution Factor: 1						
			Analysis Time..: 15:48						

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

N Spiked analyte recovery is outside stated control limits.

NC The recovery and/or RPD were not calculated.

MSB The recovery and RPD were not calculated because the sample amount was greater than four times the spike amount.

METHOD BLANK REPORT

General Chemistry

Client Lot #...: CANNON-3 **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrate		Work Order #: FL0LT1AA		MB Lot-Sample #:	D3D140000-595	
	ND	0.10	mg/L	MCAWW 353.2	03/21/03	3104595
		Dilution Factor: 1				
		Analysis Time..: 18:30				
Nitrate		Work Order #: FL8QJ1AA		MB Lot-Sample #:	D3D180000-441	
	ND	0.10	mg/L	MCAWW 353.2	03/22/03	3108441
		Dilution Factor: 1				
		Analysis Time..: 17:00				
Nitrate		Work Order #: FMNKF1AA		MB Lot-Sample #:	D3D270000-126	
	ND	0.10	mg/L	MCAWW 353.2	04/03/03	3117126
		Dilution Factor: 1				
		Analysis Time..: 11:30				
Nitrite		Work Order #: FKK6J1AA		MB Lot-Sample #:	D3C220000-126	
	ND	0.010	mg/L	MCAWW 354.1	03/21/03	3081126
		Dilution Factor: 1				
		Analysis Time..: 18:30				
Nitrite		Work Order #: FK5821AA		MB Lot-Sample #:	D3C290000-178	
	ND	0.010	mg/L	MCAWW 354.1	03/22/03	3088178
		Dilution Factor: 1				
		Analysis Time..: 17:00				
Nitrite		Work Order #: FLF3P1AA		MB Lot-Sample #:	D3D070000-337	
	ND	0.010	mg/L	MCAWW 354.1	04/03/03	3097337
		Dilution Factor: 1				
		Analysis Time..: 11:30				
Perchlorate		Work Order #: FL3131AA		MB Lot-Sample #:	D3D160000-660	
	ND	1.0	ug/L	EPA-DW1 314.0	04/15-04/16/03	3106660
		Dilution Factor: 1				
		Analysis Time..: 03:28				
Sulfate		Work Order #: FLL0J1AA		MB Lot-Sample #:	D3D040000-091	
	ND	5.0	mg/L	MCAWW 300.0A	04/01/03	3094091
		Dilution Factor: 1				
		Analysis Time..: 19:27				
Sulfate		Work Order #: FL1DN1AA		MB Lot-Sample #:	D3D150000-600	
	ND	5.0	mg/L	MCAWW 300.0A	04/14/03	3105600
		Dilution Factor: 1				
		Analysis Time..: 17:21				

(Continued on next page)

METHOD BLANK REPORT

General Chemistry

Client Lot #...: CANNON-3 **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrate		Work Order #: FL0LT1AA		MB Lot-Sample #:	D3D140000-595	
	ND	0.10	mg/L	MCAWW 353.2	03/21/03	3104595
		Dilution Factor: 1				
		Analysis Time..: 18:30				
Nitrate		Work Order #: FL8QJ1AA		MB Lot-Sample #:	D3D180000-441	
	ND	0.10	mg/L	MCAWW 353.2	03/22/03	3108441
		Dilution Factor: 1				
		Analysis Time..: 17:00				
Nitrate		Work Order #: FMNKF1AA		MB Lot-Sample #:	D3D270000-126	
	ND	0.10	mg/L	MCAWW 353.2	04/03/03	3117126
		Dilution Factor: 1				
		Analysis Time..: 11:30				
Nitrite		Work Order #: FKK6J1AA		MB Lot-Sample #:	D3C220000-126	
	ND	0.010	mg/L	MCAWW 354.1	03/21/03	3081126
		Dilution Factor: 1				
		Analysis Time..: 18:30				
Nitrite		Work Order #: FK5821AA		MB Lot-Sample #:	D3C290000-178	
	ND	0.010	mg/L	MCAWW 354.1	03/22/03	3088178
		Dilution Factor: 1				
		Analysis Time..: 17:00				
Nitrite		Work Order #: FLF3P1AA		MB Lot-Sample #:	D3D070000-337	
	ND	0.010	mg/L	MCAWW 354.1	04/03/03	3097337
		Dilution Factor: 1				
		Analysis Time..: 11:30				
Perchlorate		Work Order #: FL3131AA		MB Lot-Sample #:	D3D160000-660	
	ND	1.0	ug/L	EPA-DW1 314.0	04/15-04/16/03	3106660
		Dilution Factor: 1				
		Analysis Time..: 03:28				
Sulfate		Work Order #: FLL0J1AA		MB Lot-Sample #:	D3D040000-091	
	ND	5.0	mg/L	MCAWW 300.0A	04/01/03	3094091
		Dilution Factor: 1				
		Analysis Time..: 19:27				
Sulfate		Work Order #: FL1DN1AA		MB Lot-Sample #:	D3D150000-600	
	ND	5.0	mg/L	MCAWW 300.0A	04/14/03	3105600
		Dilution Factor: 1				
		Analysis Time..: 17:21				

(Continued on next page)

METHOD BLANK REPORT

General Chemistry

Client Lot #...: CANNON-3 **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Sulfate		Work Order #: FL9LV1AA		MB Lot-Sample #:	D3D160000-618	
	0.64 B	5.0	mg/L	**MCAWW 300.0A**	**04/16/03**	**3106618**
		Dilution Factor: 1				
		Analysis Time..: 10:10				
Sulfate		Work Order #: FMXJL1AA		MB Lot-Sample #:	D3E010000-280	
	ND	5.0	mg/L	MCAWW 300.0A	04/24/03	3121280
		Dilution Factor: 1				
		Analysis Time..: 13:12				
Total Dissolved Solids		Work Order #: FK6WL1AA		MB Lot-Sample #:	D3C270000-560	
	ND	10	mg/L	MCAWW 160.1	03/27/03	3086560
		Dilution Factor: 1				
		Analysis Time..: 15:45				
Total Dissolved Solids		Work Order #: FK6WR1AA		MB Lot-Sample #:	D3C270000-561	
	ND	10	mg/L	MCAWW 160.1	03/27/03	3086561
		Dilution Factor: 1				
		Analysis Time..: 16:20				
Total Dissolved Solids		Work Order #: FLTD81AA		MB Lot-Sample #:	D3D080000-549	
	ND	10	mg/L	MCAWW 160.1	04/08/03	3098549
		Dilution Factor: 1				
		Analysis Time..: 19:00				
Total Sulfide		Work Order #: FLT791AA		MB Lot-Sample #:	D3C290000-174	
	ND	4.0	mg/L	SW846 9030B/9034	03/26/03	3088174
		Dilution Factor: 1				
		Analysis Time..: 18:00				
Total Sulfide		Work Order #: FMRGT1AA		MB Lot-Sample #:	D3D290000-373	
	ND	4.0	mg/L	SW846 9030B/9034	04/09/03	3119373
		Dilution Factor: 1				
		Analysis Time..: 16:00				

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

B Estimated result. Result is less than RL.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

General Chemistry

Lot-Sample #...: CANNON-3 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrate		WO#:FL0LT1AC-LCS/FL0LT1AD-LCSD LCS Lot-Sample#: D3D140000-595					
	101	(87 - 108)			MCAWW 353.2	03/21/03	3104595
	100	(87 - 108)	1.4	(0-10)	MCAWW 353.2	03/21/03	3104595
		Dilution Factor: 1			Analysis Time..: 18:30		
Nitrate		WO#:FL8QJ1AC-LCS/FL8QJ1AD-LCSD LCS Lot-Sample#: D3D180000-441					
	97	(87 - 108)			MCAWW 353.2	03/22/03	3108441
	98	(87 - 108)	1.0	(0-10)	MCAWW 353.2	03/22/03	3108441
		Dilution Factor: 1			Analysis Time..: 17:00		
Nitrate		WO#:FMNKF1AC-LCS/FMNKF1AD-LCSD LCS Lot-Sample#: D3D270000-126					
	99	(87 - 108)			MCAWW 353.2	04/03/03	3117126
	99	(87 - 108)	0.0	(0-10)	MCAWW 353.2	04/03/03	3117126
		Dilution Factor: 1			Analysis Time..: 11:30		
Nitrite		WO#:FKK6J1AC-LCS/FKK6J1AD-LCSD LCS Lot-Sample#: D3C220000-126					
	101	(86 - 110)			MCAWW 354.1	03/21/03	3081126
	100	(86 - 110)	1.4	(0-10)	MCAWW 354.1	03/21/03	3081126
		Dilution Factor: 1			Analysis Time..: 18:30		
Nitrite		WO#:FK5821AC-LCS/FK5821AD-LCSD LCS Lot-Sample#: D3C290000-178					
	97	(86 - 110)			MCAWW 354.1	03/22/03	3088178
	98	(86 - 110)	1.0	(0-10)	MCAWW 354.1	03/22/03	3088178
		Dilution Factor: 1			Analysis Time..: 17:00		
Nitrite		WO#:FLF3P1AC-LCS/FLF3P1AD-LCSD LCS Lot-Sample#: D3D070000-337					
	99	(86 - 110)			MCAWW 354.1	04/03/03	3097337
	99	(86 - 110)	0.0	(0-10)	MCAWW 354.1	04/03/03	3097337
		Dilution Factor: 1			Analysis Time..: 11:30		
Perchlorate		WO#:FL3131AC-LCS/FL3131AD-LCSD LCS Lot-Sample#: D3D160000-660					
	94	(80 - 120)			EPA-DW1 314.0	04/15-04/16/03	3106660
	92	(80 - 120)	1.2	(0-20)	EPA-DW1 314.0	04/15-04/16/03	3106660
		Dilution Factor: 1			Analysis Time..: 02:49		
Sulfate		WO#:FLL0J1AC-LCS/FLL0J1AD-LCSD LCS Lot-Sample#: D3D040000-091					
	97	(90 - 110)			MCAWW 300.0A	04/01/03	3094091
	98	(90 - 110)	0.49	(0-10)	MCAWW 300.0A	04/01/03	3094091
		Dilution Factor: 1			Analysis Time..: 19:04		

(Continued on next page)

LABORATORY CONTROL SAMPLE EVALUATION REPORT

General Chemistry

Lot-Sample #...: CANNON-3 Matrix.....: WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Sulfate		WO#:FL1DN1AC-LCS/FL1DN1AD-LCSD LCS Lot-Sample#: D3D150000-600					
	99	(90 - 110)			MCAWW 300.0A	04/14/03	3105600
	98	(90 - 110)	0.56	(0-10)	MCAWW 300.0A	04/14/03	3105600
		Dilution Factor: 1			Analysis Time..: 16:46		
Sulfate		WO#:FL9LV1AC-LCS/FL9LV1AD-LCSD LCS Lot-Sample#: D3D160000-618					
	95	(90 - 110)			MCAWW 300.0A	04/16/03	3106618
	95	(90 - 110)	0.29	(0-10)	MCAWW 300.0A	04/16/03	3106618
		Dilution Factor: 1			Analysis Time..: 09:46		
Sulfate		WO#:FMXJL1AC-LCS/FMXJL1AD-LCSD LCS Lot-Sample#: D3E010000-280					
	95	(90 - 110)			MCAWW 300.0A	04/24/03	3121280
	95	(90 - 110)	0.52	(0-10)	MCAWW 300.0A	04/24/03	3121280
		Dilution Factor: 1			Analysis Time..: 12:47		
Total Dissolved Solids		WO#:FK6WL1AC-LCS/FK6WL1AD-LCSD LCS Lot-Sample#: D3C270000-560					
	99	(86 - 106)			MCAWW 160.1	03/27/03	3086560
	96	(86 - 106)	3.1	(0-20)	MCAWW 160.1	03/27/03	3086560
		Dilution Factor: 1			Analysis Time..: 15:45		
Total Dissolved Solids		WO#:FK6WR1AC-LCS/FK6WR1AD-LCSD LCS Lot-Sample#: D3C270000-561					
	99	(86 - 106)			MCAWW 160.1	03/27/03	3086561
	98	(86 - 106)	1.0	(0-20)	MCAWW 160.1	03/27/03	3086561
		Dilution Factor: 1			Analysis Time..: 16:20		
Total Dissolved Solids		WO#:FLTD81AC-LCS/FLTD81AD-LCSD LCS Lot-Sample#: D3D080000-549					
	99	(86 - 106)			MCAWW 160.1	04/08/03	3098549
	100	(86 - 106)	1.0	(0-20)	MCAWW 160.1	04/08/03	3098549
		Dilution Factor: 1			Analysis Time..: 19:00		
Total Sulfide		WO#:FLT791AC-LCS/FLT791AD-LCSD LCS Lot-Sample#: D3C290000-174					
	85	(70 - 130)			SW846 9030B/9034	03/26/03	3088174
	80	(70 - 130)	6.2	(0-20)	SW846 9030B/9034	03/26/03	3088174
		Dilution Factor: 1			Analysis Time..: 18:00		

(Continued on next page)

LABORATORY CONTROL SAMPLE EVALUATION REPORT

General Chemistry

Lot-Sample #...: CANNON-3 Matrix.....: WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Total Sulfide		WO#:FMRGT1AC-LCS/FMRGT1AD-LCSD				LCS Lot-Sample#: D3D290000-373	
	84	(70 - 130)			SW846 9030B/9034	04/09/03	3119373
	76	(70 - 130)	9.6	(0-20)	SW846 9030B/9034	04/09/03	3119373

Dilution Factor: 1 Analysis Time..: 16:00

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE DATA REPORT

General Chemistry

Lot-Sample #...: CANNON-3 **Matrix.....:** WATER

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrate		WO#:FL0LT1AC-LCS/FL0LT1AD-LCSD LCS Lot-Sample#: D3D140000-595						
	0.0500	0.0507	mg/L	101		MCAWW 353.2	03/21/03	3104595
	0.0500	0.0500	mg/L	100	1.4	MCAWW 353.2	03/21/03	3104595
		Dilution Factor: 1				Analysis Time..: 18:30		
Nitrate		WO#:FL8QJ1AC-LCS/FL8QJ1AD-LCSD LCS Lot-Sample#: D3D180000-441						
	0.0500	0.0487	mg/L	97		MCAWW 353.2	03/22/03	3108441
	0.0500	0.0492	mg/L	98	1.0	MCAWW 353.2	03/22/03	3108441
		Dilution Factor: 1				Analysis Time..: 17:00		
Nitrate		WO#:FMNKF1AC-LCS/FMNKF1AD-LCSD LCS Lot-Sample#: D3D270000-126						
	0.0500	0.0496	mg/L	99		MCAWW 353.2	04/03/03	3117126
	0.0500	0.0496	mg/L	99	0.0	MCAWW 353.2	04/03/03	3117126
		Dilution Factor: 1				Analysis Time..: 11:30		
Nitrite		WO#:FKK6J1AC-LCS/FKK6J1AD-LCSD LCS Lot-Sample#: D3C220000-126						
	0.0500	0.0507	mg/L	101		MCAWW 354.1	03/21/03	3081126
	0.0500	0.0500	mg/L	100	1.4	MCAWW 354.1	03/21/03	3081126
		Dilution Factor: 1				Analysis Time..: 18:30		
Nitrite		WO#:FK5821AC-LCS/FK5821AD-LCSD LCS Lot-Sample#: D3C290000-178						
	0.0500	0.0487	mg/L	97		MCAWW 354.1	03/22/03	3088178
	0.0500	0.0492	mg/L	98	1.0	MCAWW 354.1	03/22/03	3088178
		Dilution Factor: 1				Analysis Time..: 17:00		
Nitrite		WO#:FLF3P1AC-LCS/FLF3P1AD-LCSD LCS Lot-Sample#: D3D070000-337						
	0.0500	0.0496	mg/L	99		MCAWW 354.1	04/03/03	3097337
	0.0500	0.0496	mg/L	99	0.0	MCAWW 354.1	04/03/03	3097337
		Dilution Factor: 1				Analysis Time..: 11:30		
Perchlorate		WO#:FL3131AC-LCS/FL3131AD-LCSD LCS Lot-Sample#: D3D160000-660						
	10.0	9.36	ug/L	94		EPA-DW1 314.0	04/15-04/16/03	3106660
	10.0	9.25	ug/L	92	1.2	EPA-DW1 314.0	04/15-04/16/03	3106660
		Dilution Factor: 1				Analysis Time..: 02:49		
Sulfate		WO#:FLL0J1AC-LCS/FLL0J1AD-LCSD LCS Lot-Sample#: D3D040000-091						
	25.0	24.4	mg/L	97		MCAWW 300.0A	04/01/03	3094091
	25.0	24.5	mg/L	98	0.49	MCAWW 300.0A	04/01/03	3094091
		Dilution Factor: 1				Analysis Time..: 19:04		

(Continued on next page)

LABORATORY CONTROL SAMPLE DATA REPORT

General Chemistry

Lot-Sample #...: CANNON-3 Matrix.....: WATER

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Sulfate			WO#:FL1DN1AC-LCS/FL1DN1AD-LCSD			LCS Lot-Sample#: D3D150000-600		
	25.0	24.7	mg/L	99		MCAWW 300.0A	04/14/03	3105600
	25.0	24.6	mg/L	98	0.56	MCAWW 300.0A	04/14/03	3105600
			Dilution Factor: 1			Analysis Time..: 16:46		
Sulfate			WO#:FL9LV1AC-LCS/FL9LV1AD-LCSD			LCS Lot-Sample#: D3D160000-618		
	25.0	23.7	mg/L	95		MCAWW 300.0A	04/16/03	3106618
	25.0	23.7	mg/L	95	0.29	MCAWW 300.0A	04/16/03	3106618
			Dilution Factor: 1			Analysis Time..: 09:46		
Sulfate			WO#:FMXJL1AC-LCS/FMXJL1AD-LCSD			LCS Lot-Sample#: D3E010000-280		
	20.0	19.0	mg/L	95		MCAWW 300.0A	04/24/03	3121280
	20.0	18.9	mg/L	95	0.52	MCAWW 300.0A	04/24/03	3121280
			Dilution Factor: 1			Analysis Time..: 12:47		
Total Dissolved Solids			WO#:FK6WL1AC-LCS/FK6WL1AD-LCSD			LCS Lot-Sample#: D3C270000-560		
	500	496	mg/L	99		MCAWW 160.1	03/27/03	3086560
	500	481	mg/L	96	3.1	MCAWW 160.1	03/27/03	3086560
			Dilution Factor: 1			Analysis Time..: 15:45		
Total Dissolved Solids			WO#:FK6WR1AC-LCS/FK6WR1AD-LCSD			LCS Lot-Sample#: D3C270000-561		
	500	493	mg/L	99		MCAWW 160.1	03/27/03	3086561
	500	488	mg/L	98	1.0	MCAWW 160.1	03/27/03	3086561
			Dilution Factor: 1			Analysis Time..: 16:20		
Total Dissolved Solids			WO#:FLTD81AC-LCS/FLTD81AD-LCSD			LCS Lot-Sample#: D3D080000-549		
	500	494	mg/L	99		MCAWW 160.1	04/08/03	3098549
	500	499	mg/L	100	1.0	MCAWW 160.1	04/08/03	3098549
			Dilution Factor: 1			Analysis Time..: 19:00		
Total Sulfide			WO#:FLT791AC-LCS/FLT791AD-LCSD			LCS Lot-Sample#: D3C290000-174		
	21.9	18.6	mg/L	85		SW846 9030B/9034	03/26/03	3088174
	21.9	17.5	mg/L	80	6.2	SW846 9030B/9034	03/26/03	3088174
			Dilution Factor: 1			Analysis Time..: 18:00		

(Continued on next page)

LABORATORY CONTROL SAMPLE DATA REPORT

General Chemistry

Lot-Sample #...: CANNON-3

Matrix.....: WATER

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Total Sulfide			WO#:FMRGT1AC-LCS/FMRGT1AD-LCSD			LCS Lot-Sample#: D3D290000-373		
	22.7	19.0	mg/L	84		SW846 9030B/9034	04/09/03	3119373
	22.7	17.3	mg/L	76	9.6	SW846 9030B/9034	04/09/03	3119373

Dilution Factor: 1 Analysis Time..: 16:00

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #...: CANNON-3 Matrix.....: WG
Date Sampled...: 03/21/03 09:30 Date Received..: 03/22/03

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrite		WO#: FKJAR1D6-MS/FKJAR1D7-MSD				MS Lot-Sample #: D3C210230-002	
	91	(69 - 121)			MCAWW 354.1	03/21/03	3081126
	99	(69 - 121)	8.0	(0-10)	MCAWW 354.1	03/21/03	3081126
		Dilution Factor: 1					
		Analysis Time..: 18:30					
Nitrite		WO#: FKK1T1CG-MS/FKK1T1CH-MSD				MS Lot-Sample #: D3C220137-001	
	93	(69 - 121)			MCAWW 354.1	03/22/03	3088178
	91	(69 - 121)	1.7	(0-10)	MCAWW 354.1	03/22/03	3088178
		Dilution Factor: 1					
		Analysis Time..: 17:00					
Perchlorate		WO#: FKJAR1D8-MS/FKJAR1D9-MSD				MS Lot-Sample #: D3C210230-002	
	99	(80 - 120)			EPA-DW1 314.0	04/15-04/16/03	3106660
	102	(80 - 120)	3.1	(0-20)	EPA-DW1 314.0	04/15-04/16/03	3106660
		Dilution Factor: 1					
		Analysis Time..: 08:02					
Sulfate		WO#: FKJAR1D2-MS/FKJAR1D3-MSD				MS Lot-Sample #: D3C210230-002	
	92 I	(80 - 120)			MCAWW 300.0A	04/14-04/15/03	3105600
	84 I	(80 - 120)	4.0	(0-10)	MCAWW 300.0A	04/14-04/15/03	3105600
		Dilution Factor: 1					
		Analysis Time..: 01:58					
Total Sulfide		WO#: FKJAR1D0-MS/FKJAR1D1-MSD				MS Lot-Sample #: D3C210230-002	
	81	(70 - 130)			SW846 9030B/9034	03/26/03	3088174
	72	(70 - 130)	12	(0-20)	SW846 9030B/9034	03/26/03	3088174
		Dilution Factor: 1					
		Analysis Time..: 18:00					

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

I Estimated result. Result concentration exceeds the calibration range.

MATRIX SPIKE SAMPLE DATA REPORT

General Chemistry

Client Lot #...: CANNON-3 **Matrix.....:** WG
Date Sampled...: 03/21/03 09:30 **Date Received..:** 03/22/03

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrite			WO#: FKJAR1D6-MS/FKJAR1D7-MSD				MS Lot-Sample #: D3C210230-002		
	ND	0.0500	0.0456	mg/L	91		MCAWW 354.1	03/21/03	3081126
	ND	0.0500	0.0494	mg/L	99	8.0	MCAWW 354.1	03/21/03	3081126
			Dilution Factor: 1						
			Analysis Time..: 18:30						
Nitrite			WO#: FKK1T1CG-MS/FKK1T1CH-MSD				MS Lot-Sample #: D3C220137-001		
	0.0021	0.0500	0.0484	mg/L	93		MCAWW 354.1	03/22/03	3088178
	0.0021	0.0500	0.0476	mg/L	91	1.7	MCAWW 354.1	03/22/03	3088178
			Dilution Factor: 1						
			Analysis Time..: 17:00						
Perchlorate			WO#: FKJAR1D8-MS/FKJAR1D9-MSD				MS Lot-Sample #: D3C210230-002		
	1.7	10.0	11.6	ug/L	99		EPA-DW1 314.0	04/15-04/16/03	3106660
	1.7	10.0	12.0	ug/L	102	3.1	EPA-DW1 314.0	04/15-04/16/03	3106660
			Dilution Factor: 1						
			Analysis Time..: 08:02						
Sulfate			WO#: FKJAR1D2-MS/FKJAR1D3-MSD				MS Lot-Sample #: D3C210230-002		
	150	125	266 I	mg/L	92		MCAWW 300.0A	04/14-04/15/03	3105600
	150	125	256 I	mg/L	84	4.0	MCAWW 300.0A	04/14-04/15/03	3105600
			Dilution Factor: 1						
			Analysis Time..: 01:58						
Total Sulfide			WO#: FKJAR1D0-MS/FKJAR1D1-MSD				MS Lot-Sample #: D3C210230-002		
	ND	21.9	18.0	mg/L	81		SW846 9030B/9	03/26/03	3088174
	ND	21.9	16.0	mg/L	72	12	SW846 9030B/9	03/26/03	3088174
			Dilution Factor: 1						
			Analysis Time..: 18:00						

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

I Estimated result. Result concentration exceeds the calibration range.

MATRIX SPIKE SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #...: CANNON-3 **Matrix.....:** WATER
Date Sampled...: 03/27/03 10:40 **Date Received..:** 03/28/03

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrite		WO#: FK68Q1D9-MS/FK68Q1EA-MSD				MS Lot-Sample #: D3C260185-003	
	109	(71 - 122)			MCAWW 354.1	04/03/03	3097336
	100	(71 - 122)	8.3	(0-20)	MCAWW 354.1	04/03/03	3097336
		Dilution Factor: 1					
		Analysis Time..: 11:30					
Sulfate		WO#: FK0DK1DK-MS/FK0DK1DL-MSD				MS Lot-Sample #: D3C280214-001	
	71 N	(80 - 120)			MCAWW 300.0A	04/14-04/15/03	3105600
	68 N	(80 - 120)	3.0	(0-10)	MCAWW 300.0A	04/14-04/15/03	3105600
		Dilution Factor: 1					
		Analysis Time..: 03:27					
Sulfate		WO#: FK18C1FC-MS/FK18C1FD-MSD				MS Lot-Sample #: D3C290170-001	
	142 N	(80 - 120)			MCAWW 300.0A	04/16/03	3106618
	95 *	(80 - 120)	37	(0-10)	MCAWW 300.0A	04/16/03	3106618
		Dilution Factor: 1					
		Analysis Time..: 10:34					
Sulfate		WO#: FK4831EX-MS/FK4831E0-MSD				MS Lot-Sample #: D3D010212-004	
	108 I	(85 - 115)			MCAWW 300.0A	04/01/03	3094099
	110 I	(85 - 115)	0.72	(0-20)	MCAWW 300.0A	04/01/03	3094099
		Dilution Factor: 1					
		Analysis Time..: 21:36					
Sulfate		WO#: FLWDE1C3-MS/FLWDE1C4-MSD				MS Lot-Sample #: D3D140183-001	
	95	(80 - 120)			MCAWW 300.0A	04/14/03	3105600
	93	(80 - 120)	0.69	(0-10)	MCAWW 300.0A	04/14/03	3105600
		Dilution Factor: 1					
		Analysis Time..: 18:50					
Sulfate		WO#: FL3WM1C6-MS/FL3WM1C7-MSD				MS Lot-Sample #: D3D160334-002	
	102	(80 - 120)			MCAWW 300.0A	04/24-04/25/03	3121280
	101	(80 - 120)	0.93	(0-10)	MCAWW 300.0A	04/24-04/25/03	3121280
		Dilution Factor: 1					
		Analysis Time..: 01:07					

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

N Spiked analyte recovery is outside stated control limits.

* Relative percent difference (RPD) is outside stated control limits.

I Estimated result. Result concentration exceeds the calibration range.

MATRIX SPIKE SAMPLE DATA REPORT

General Chemistry

Client Lot #...: CANNON-3 **Matrix.....:** WATER
Date Sampled...: 03/27/03 10:40 **Date Received..:** 03/28/03

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrite			WO#: FK68Q1D9-MS/FK68Q1EA-MSD				MS Lot-Sample #: D3C260185-003		
	0.0034	0.0500	0.0578	mg/L	109		MCAWW 354.1	04/03/03	3097336
	0.0034	0.0500	0.0532	mg/L	100	8.3	MCAWW 354.1	04/03/03	3097336
			Dilution Factor: 1						
			Analysis Time..: 11:30						
Sulfate			WO#: FK0DK1DK-MS/FK0DK1DL-MSD				MS Lot-Sample #: D3C280214-001		
	2.2	25.0	19.9 N	mg/L	71		MCAWW 300.0A	04/14-04/15/03	3105600
	2.2	25.0	19.4 N	mg/L	68	3.0	MCAWW 300.0A	04/14-04/15/03	3105600
			Dilution Factor: 1						
			Analysis Time..: 03:27						
Sulfate			WO#: FK18C1FC-MS/FK18C1FD-MSD				MS Lot-Sample #: D3C290170-001		
	2.3	25.0	37.9 N	mg/L	142		MCAWW 300.0A	04/16/03	3106618
	2.3	25.0	25.9 *	mg/L	95	37	MCAWW 300.0A	04/16/03	3106618
			Dilution Factor: 1						
			Analysis Time..: 10:34						
Sulfate			WO#: FK4831EX-MS/FK4831E0-MSD				MS Lot-Sample #: D3D010212-004		
	29	25.0	56.0 I	mg/L	108		MCAWW 300.0A	04/01/03	3094099
	29	25.0	56.4 I	mg/L	110	0.72	MCAWW 300.0A	04/01/03	3094099
			Dilution Factor: 1						
			Analysis Time..: 21:36						
Sulfate			WO#: FLWDE1C3-MS/FLWDE1C4-MSD				MS Lot-Sample #: D3D140183-001		
	520	500	995	mg/L	95		MCAWW 300.0A	04/14/03	3105600
	520	500	988	mg/L	93	0.69	MCAWW 300.0A	04/14/03	3105600
			Dilution Factor: 1						
			Analysis Time..: 18:50						
Sulfate			WO#: FL3WM1C6-MS/FL3WM1C7-MSD				MS Lot-Sample #: D3D160334-002		
	69	250	325	mg/L	102		MCAWW 300.0A	04/24-04/25/03	3121280
	69	250	322	mg/L	101	0.93	MCAWW 300.0A	04/24-04/25/03	3121280
			Dilution Factor: 1						
			Analysis Time..: 01:07						

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

N Spiked analyte recovery is outside stated control limits.

* Relative percent difference (RPD) is outside stated control limits.

I Estimated result. Result concentration exceeds the calibration range.

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Client Lot #...: D3C210230 **Work Order #...:** FKJAK-SMP FKJAK-DUP **Matrix.....:** WG

Date Sampled...: 03/20/03 10:15 **Date Received..:** 03/21/03

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Total Dissolved Solids						SD Lot-Sample #:	D3C210230-001	
	520	510	mg/L	3.5	(0-20)	MCAWW 160.1	03/27/03	3086560

Dilution Factor: 1 Analysis Time..: 15:45

STL Denver

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Client Lot #...: D3C210230 **Work Order #...:** FKK1T-SMP FKK1T-DUP **Matrix.....:** WG

Date Sampled...: 03/21/03 09:30 **Date Received..:** 03/22/03

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Total Dissolved Solids						SD Lot-Sample #:	D3C220137-001	
	550	550	mg/L	0.36	(0-20)	MCAWW 160.1	03/27/03	3086561

Dilution Factor: 1 Analysis Time..: 16:20

STL Denver

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Client Lot #...: D3C210230 **Work Order #...:** FK483-SMP FK483-DUP **Matrix.....:** WATER

Date Sampled...: 03/31/03 16:15 **Date Received..:** 04/01/03

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
						SD Lot-Sample #:	D3D010212-004	
Sulfate								
	29	29	mg/L	0.14	(0-20)	MCAWW 300.0A	04/01/03	3094099

Dilution Factor: 1 Analysis Time..: 20:49

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Client Lot #...: D3C210230 **Work Order #...:** FK6XH-SMP FK6XH-DUP **Matrix.....:** WATER

Date Sampled...: 04/01/03 15:10 **Date Received..:** 04/02/03

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Total Dissolved Solids						SD Lot-Sample #: D3D020173-001		
	810	740	mg/L	9.0	(0-20)	MCAWW 160.1	04/08/03	3098550

Dilution Factor: 1 Analysis Time..: 19:00

STL Denver

U.S. GEOLOGICAL SURVEY, WATER RESOURCES DIVISION, NEW MEXICO DISTRICT
ANALYTICAL REQUEST/CHAIN OF CUSTODY

2.1° 3/21/03

Project Name & Number: Cannon Air Force Base, Ground Water Sampling 86369JV00	PACKING AND SHIPPING DETAILS
	Packed and Sealed for Shipping by: Fred Gebhardt — Seal Number: 243770
Sampling Location: Sewage Lagoons, (wells E, F, G, H) Cannon Air Force Base, New Mexico	Delivered to Shipper by: Fred Gebhardt — Airbill Number: 8385 4096 0139
Team Leader: Project chief - Fredrick E. Gebhardt	Sampling Status: ☐ Done ☒ Continuing

Sample Date	Sample Time	Field Sample Number	Sample Type	No. of Containers	Analytical Methods (Parameters)	Remarks
3/20/03	1015	CAFB- F	GROUND-WATER	10	All Apx-IX: SW8260B, SW8081, SW8082, SW6010 -Total (Al, Ba, Be, Ca, Co, Cu, Fe, Mg, Mn, Mo, Ni, K, Na, Sn, V, Zn), SW6020-ICP-MS (Sb, Ag, Cd, As, Cr, Pb, Se, Tl), SW7470 (Hg), NITRATE-E353.2, NIRITE-E354.1, SULFATE-E300, TDS-E160.1, SULFIDE-SW9030, PERCHLORATE- EPA 314.0	ENVIRONMENTAL SAMPLE

Additional Comments: THIS COOLER CONTAINS VOC SAMPLES FROM SAMPLE'S CAFB-C, D, G, + GG.

CHAIN OF CUSTODY RECORD				LABORATORY LOG-IN OF SAMPLE SHIPPING CONTAINER	
Relinquished by (signed)	Received by (signed)	Date	Time	Analytical Laboratory	Seal Intact upon Receipt ☐ Yes ☐ No
Fredrick E. Gebhardt	TO FEDERAL EXPRESS	3/20/03	1600	Severn Trent Services 4955 Yarrow Street Arvada, CO 80002 ph: (303) 736-0118 Attention: Susan Decker	Condition of Contents
	[signature]	3/21/03	1000		Contents Temperature
					Laboratory Project Number

290

STL Denver

5.3°
AB
3/21/03

U.S. GEOLOGICAL SURVEY, WATER RESOURCES DIVISION, NEW MEXICO DISTRICT
ANALYTICAL REQUEST/CHAIN OF CUSTODY

Project Name & Number
Cannon Air Force Base, Ground Water Sampling 86369JV00

Sampling Location
Sewage Lagoons, (wells E, F, G, H) Cannon Air Force Base, New Mexico

Team Leader
Project chief - Fredrick E. Gebhardt

PACKING AND SHIPPING DETAILS

Packed and Sealed for Shipping by: Fred Gebhardt
Seal Number: 243750
Delivered to Shipper by: Fred Gebhardt
Airbill Number: 838540960139
Sampling Status: ☐ Done ☒ Continuing

Sample Date	Sample Time	Field Sample Number	Sample Type	No. of Containers	Analytical Methods (Parameters)	Remarks
3/20/03	0850	CAFB-G	GROUND-WATER	10	All Apx-IX: SW8260B, SW8081, SW8082, SW6010-Total (Al, Ba, Be, Ca, Co, Cu, Fe, Mg, Mn, Mo, Ni, K, Na, Sn, V, Zn), SW6020-ICP-MS (Sb, Ag, Cd, As, Cr, Pb, Se, Tl), SW7470 (Hg), NITRATE-E353.2, NIRITE-E354.1, SULFATE-E300, TDS-E160, SULFIDE-SW9030, PERCHLORATE- EPA 314.0	ENVIRONMENTAL SAMPLE
3/20/03	0855	CAFB-GG	"	10	"	"

Additional Comments: THE VOC SAMPLES ARE IN COOLER W/AIRBILL + SAMPLE CAFB-F.

CHAIN OF CUSTODY RECORD

Relinquished by (signed)	Received by (signed)	Date	Time
Fredrick E. Gebhardt	TO FEDERAL EXPRESS	3/20/03	1600
	[signature]	3/21/03	1000

LABORATORY LOG-IN OF SAMPLE SHIPPING CONTAINER

Analytical Laboratory:
Severn Trent Services
4955 Yarrow Street
Arvada, CO 80002
ph: (303) 736-0118

Attention: Susan Decker

Seal Intact upon Receipt: ☐ Yes ☐ No
Condition of Contents:
Contents Temperature:
Laboratory Project Number:

STL Denver

291

3.5
3/21/03

5 OF 5

U.S. GEOLOGICAL SURVEY, WATER RESOURCES DIVISION, NEW MEXICO DISTRICT
ANALYTICAL REQUEST/CHAIN OF CUSTODY

Project Name & Number: Cannon Air Force Base, Ground Water Sampling 86369JV00	PACKING AND SHIPPING DETAILS
Sampling Location: Sewage Lagoons, (wells E, F, G, H) Cannon Air Force Base, New Mexico	Packed and Sealed for Shipping by: Fred Gebhardt — Seal Number: 2437600
Team Leader: Project chief - Fredrick E. Gebhardt	Delivered to Shipper by: Fred Gebhardt — Airbill Number: 838540960139
	Sampling Status: ☐ Done ☒ Continuing

Sample Date	Sample Time	Field Sample Number	Sample Type	No. of Containers	Analytical Methods (Parameters)	Remarks
3/20/03	0850	CAFB- G-MS	GROUND-WATER	10	All Apx-IX: SW8260B, SW8081, SW8082, SW6010 -Total (Al, Ba, Be, Ca, Co, Cu, Fe, Mg, Mn, Mo, Ni, K, Na, Sn, V, Zn), SW6020-ICP-MS (Sb, Ag, Cd, As, Cr, Pb, Se, Tl), SW7470 (Hg), NITRATE-E353.2, NIRITE-E354.1, SULFATE-E300, TDS-E160., SULFIDE-SW9030. PERCHLORATE- EPA 314.0	MATRIX SPIKE ~~ENVIRONMENTAL SAMPLE~~
3/20/03	0850	CAFB-G-MSD	"	10	"	MATRIX SPIKE DUPLICATE

Additional Comments TO VOC SAMPLES ARE IN COOLER W/AIRBILL & SAMPLE CAFB-F.

CHAIN OF CUSTODY RECORD				LABORATORY LOG-IN OF SAMPLE SHIPPING CONTAINER	
Relinquished by (signed)	Received by (signed)	Date	Time	Analytical Laboratory	Seal Intact upon Receipt ☐ Yes ☐ No
Fredrick E. Gebhardt	TO FEDERAL EXPRESS	3/20/03	1600	Severn Trent Services 4955 Yarrow Street Arvada, CO 80002 ph: (303) 736-0118 Attention: Susan Decker	Condition of Contents
	[illegible]	3/21/03	1000		Contents Temperature
					Laboratory Project Number

292

STL Denver

U.S. GEOLOGICAL SURVEY, WATER RESOURCES DIVISION, NEW MEXICO DISTRICT
ANALYTICAL REQUEST/CHAIN OF CUSTODY

2.8°
KB
3/22/03

Project Name & Number
Cannon Air Force Base, Ground Water Sampling 86369JV00

Sampling Location
Sewage Lagoons, (wells E, F, G, H) Cannon Air Force Base, New Mexico

Team Leader
Project chief - Fredrick E. Gebhardt

PACKING AND SHIPPING DETAILS

Packed and Sealed for Shipping by: Fred Gebhardt
Seal Number: 243780
Delivered to Shipper by: Fred Gebhardt
Airbill Number: 8 385 4046 0128
Sampling Status: [X] Done [ ] Continuing

Sample Date	Sample Time	Field Sample Number	Sample Type	No. of Containers	Analytical Methods (Parameters)	Remarks
3/21/03	0930	CAFB- E	GROUND-WATER	10	All Apx-IX: SW8260B, SW8081, SW8082, SW6010 -Total (Al, Ba, Be, Ca, Co, Cu, Fe, Mg, Mn, Mo, Ni, K, Na, Sn, V, Zn), SW6020-ICP-MS (Sb, Ag, Cd, As, Cr, Pb, Se, Tl), SW7470 (Hg), NITRATE-E353.2, NIRITE-E354.1, SULFATE-E300, TDS-E160, SULFIDE-SW9030. PERCHLORATE- EPA 314.0	ENVIRONMENTAL SAMPLE
3/21/03	0935	CAFB- E -TB	ULTRA PURE WATER	2	SW8260B(voc) ONLY	TRIP BLANK

Additional Comments

CHAIN OF CUSTODY RECORD

Relinquished by (signed)	Received by (signed)	Date	Time
Fredrick E. Gebhardt	TO FEDERAL EXPRESS	3/21/03	1330
	Lemon Bindel	3/22/03	0930

LABORATORY LOG-IN OF SAMPLE SHIPPING CONTAINER

Analytical Laboratory:
Severn Trent Services
4955 Yarrow Street
Arvada, CO 80002
ph: (303) 736-0118

Attention: Susan Decker

Seal Intact upon Receipt: [ ] Yes [ ] No
Condition of Contents:
Contents Temperature:
Laboratory Project Number:

STL Denver

293

2.0 NB 4/3/03

U.S. GEOLOGICAL SURVEY, WATER RESOURCES DIVISION, NEW MEXICO DISTRICT
ANALYTICAL REQUEST/CHAIN OF CUSTODY

Project Name & Number: Cannon Air Force Base, Ground Water Sampling 86369JV00	PACKING AND SHIPPING DETAILS
Sampling Location: Sewage Lagoons, (wells E, F, G, H) Cannon Air Force Base, New Mexico	Packed and Sealed for Shipping by: Fred Gebhardt — Seal Number: 243810
Team Leader: Project chief - Fredrick E. Gebhardt	Delivered to Shipper by: Fred Gebhardt — Airbill Number: 832435458282
	Sampling Status: [X] Done [ ] Continuing

Sample Date	Sample Time	Field Sample Number	Sample Type	No. of Containers	Analytical Methods (Parameters)	Remarks
4/2/03	0930	CAFB- H	GROUND-WATER	10	All Apx-IX: SW8260B, SW8081, SW8082, SW6010 -Total (Al, Ba, Be, Ca, Co, Cu, Fe, Mg, Mn, Mo, Ni, K, Na, Sn, V, Zn), SW6020-ICP-MS (Sb, Ag, Cd, As, Cr, Pb, Se, Tl), SW7470 (Hg), NITRATE-E353.2, NIRITE-E354.1, SULFATE-E300, TDS-E160., SULFIDE SW9030. PERCHLORATE- EPA 314.0	ENVIRONMENTAL SAMPLE
4/2/03	0935	CAFB-H-TB	ULTRA PURE WATER	2	SW8260B (VOC) ONLY	TRIP BLANK

Additional Comments: THIS SAMPLE WILL BE BATCHED WITH OTHER SEWAGE LAGOON WELLS SAMPLED ON 3/20 & 3/21/2003

CHAIN OF CUSTODY RECORD				LABORATORY LOG-IN OF SAMPLE SHIPPING CONTAINER	
Relinquished by (signed)	Received by (signed)	Date	Time	Analytical Laboratory	Seal Intact upon Receipt: [ ] Yes [ ] No
Fredrick E. Gebhardt	TO FEDERAL EXPRESS	4/2/03	1600	Severn Trent Services 4955 Yarrow Street Arvada, CO 80002 ph: (303) 736-0118 Attention: Susan Decker	Condition of Contents
	[signature]	4/3/03	0830		Contents Temperature
					Laboratory Project Number

294

STL Denver

STL Denver

Sample Receiving Checklist

Lot #: D3C210230 Date/Time Received: 3/21/03 1000

Company Name & Sampling Site: USGS / Cannon AFB

*Cooler #(s): 3

Temperatures (°C): 2.1° 3.3° 3.5°

PM to Complete This Section: *Yes* *No*

Residual chlorine check required: ☐ ☐ 252286

Time Zone:

• EDT/EST • CDT/CST • MDT/MST • PDT/PST • OTHER

Unpacking & Labeling Check Points:

N/A	Yes	No		Initials
☐	☑	☐	1. Cooler seals intact. (N/A if hand delivered)	AO
	☑	☐	2. Chain of custody present.	
	☐	☑	3. Bottles broken and/or are leaking, comment if yes.	
	☐	☑	4. Multiphase samples present? If yes, comment below.	
			PHOTOGRAPH BROKEN BOTTLES	
	☑	☐	5. Proper container & preservatives used (ref. Attachment D of SOP# DEN-QA-0003)	
☐	☑	☐	6. pH of all samples checked and meet requirements, note exceptions.	
	☑	☐	7. Chain of custody includes "received by" and "relinquished" by signatures, dates, and times.	
	☐	☑	8. Receipt date(s) > 48 hours past the collection date(s)? If yes, notify PA/PM.	
	☑	☐	9. Chain of custody agrees with bottle count, comment if no.	
	☑	☐	10. Chain of custody agrees with labels, comment if no.	
☐	☑	☐	11. VOA samples filled completely, comment if no.	
☐	☑	☐	12. VOA vials preserved, check label. Preservative ☑HCl ☐4±2°C ☐Sodium Thiosulfate	
	☐	☑	13. Did samples require preservation with sodium thiosulfate?	
☑	☐	☐	14. If yes to #12, did the samples contain residual chlorine?	
☑	☐	☐	15. Sediment present in dissolved/filtered bottles.	
	☑	☐	16. Are analyses with short holding times requested?	
	☐	☑	17. Was a quick Turn Around (TAT) requested?	
☐	☑	☐	18. Is extra sample volume provided for MS, MSD or matrix duplicates?	
			DOUBLECHECK METALS,SAMPLE LABELS & SUBCONTRACT	
☑	☐	☐	19. Subcontract COC signed and sent with samples to bottle prep?	
	☑	☐	20. Were sample labels double-checked by a second person?	
☑	☐	☐	21. Were sample bottles and COC double checked for dissolved/filtered metals by a second person?	AO
☐	☑	☐	22. If applicable, were AFCEE Metals placed in the walkin refrigerator?	
☐	☑	☐	23. Were special instructions in LIMS read and followed?	

Document any problems and the actions taken to resolve them on a Condition Upon Receipt Anomaly Report (CUR).

\QA\Forms\Sample Receiving\SR Checklist

3/13/03 Revision

STL Denver

STL Denver

Sample Receiving Checklist

Lot #: D3C220137 Date/Time Received: 3/22/03 0930

Company Name & Sampling Site: Cannon AFB

*Cooler #(s): 1

Temperatures (°C): 2.8

PM to Complete This Section: *Yes* *No*

Residual chlorine check required: ☐ ☐

Time Zone:

• EDT/EST • CDT/CST • MDT/MST • PDT/PST • OTHER

25228

Unpacking & Labeling Check Points:

N/A	Yes	No		Initials
☐	☑	☐	1. Cooler seals intact. (N/A if hand delivered)	AB
	☑	☐	2. Chain of custody present.	
	☐	☑	3. Bottles broken and/or are leaking, comment if yes.	
	☐	☑	4. Multiphase samples present? If yes, comment below.	
			PHOTOGRAPH BROKEN BOTTLES	
	☑	☐	5. Proper container & preservatives used (ref. Attachment D of SOP# DEN-QA-0003)	
☐	☑	☐	6. pH of all samples checked and meet requirements, note exceptions.	
	☑	☐	7. Chain of custody includes "received by" and "relinquished" by signatures, dates, and times.	
	☐	☑	8. Receipt date(s) > 48 hours past the collection date(s)? If yes, notify PA/PM.	
	☑	☐	9. Chain of custody agrees with bottle count, comment if no.	
	☑	☐	10. Chain of custody agrees with labels, comment if no.	
☐	☑	☐	11. VOA samples filled completely, comment if no.	
☐	☑	☐	12. VOA vials preserved, check label. Preservative ☑HCl ☐4±2°C ☐Sodium Thiosulfate	
	☐	☑	13. Did samples require preservation with sodium thiosulfate?	
☑	☐	☐	14. If yes to #12, did the samples contain residual chlorine?	
☑	☐	☐	15. Sediment present in dissolved/filtered bottles.	
	☑	☐	16. Are analyses with short holding times requested?	
	☐	☑	17. Was a quick Turn Around (TAT) requested?	
☑	☐	☐	18. Is extra sample volume provided for MS, MSD or matrix duplicates?	
			DOUBLECHECK METALS,SAMPLE LABELS & SUBCONTRACT	
☑	☐	☐	19. Subcontract COC signed and sent with samples to bottle prep?	
	☑	☐	20. Were sample labels double-checked by a second person?	
☑	☐	☐	21. Were sample bottles and COC double checked for dissolved/filtered metals by a second person?	
☐	☑	☐	22. If applicable, were AFCEE Metals placed in the walkin refrigerator?	
☑	☐	☐	23. Were special instructions in LIMS read and followed? (None)	

Document any problems and the actions taken to resolve them on a Condition Upon Receipt Anomaly Report (CUR).

STL Denver

Sample Receiving Checklist

Lot #: D3D030147 Date/Time Received: 4/3/03 0830

Company Name & Sampling Site: USGS - Cannon AFB

*Cooler #(s): 1

Temperatures (°C): 2.8

PM to Complete This Section: *Yes* *No*

Residual chlorine check required: ☐ ☐

Time Zone:

• EDT/EST • CDT/CST • MDT/MST • PDT/PST • OTHER

25:228

Unpacking & Labeling Check Points:

N/A	Yes	No		Initials
☐	☒	☐	1. Cooler seals intact. (N/A if hand delivered)	DS
	☒	☐	2. Chain of custody present.	
	☐	☒	3. Bottles broken and/or are leaking, comment if yes.	
	☐	☒	4. Multiphase samples present? If yes, comment below.	
			PHOTOGRAPH BROKEN BOTTLES	
	☒	☐	5. Proper container & preservatives used (ref. Attachment D of SOP# DEN-QA-0003)	
☐	☒	☐	6. pH of all samples checked and meet requirements, note exceptions.	
	☒	☐	7. Chain of custody includes "received by" and "relinquished" by signatures, dates, and times.	
	☐	☒	8. Receipt date(s) > 48 hours past the collection date(s)? If yes, notify PA/PM.	
	☒	☐	9. Chain of custody agrees with bottle count, comment if no.	
	☒	☐	10. Chain of custody agrees with labels, comment if no.	
☒	☐	☐	11. VOA samples filled completely, comment if no.	
☒	☐	☐	12. VOA vials preserved, check label. Preservative ☒HCl ☒4±2°C ☐Sodium Thiosulfate	
	☐	☒	13. Did samples require preservation with sodium thiosulfate?	
☒	☐	☐	14. If yes to #12, did the samples contain residual chlorine?	
☒	☐	☐	15. Sediment present in dissolved/filtered bottles.	
	☒	☐	16. Are analyses with short holding times requested?	
	☐	☒	17. Was a quick Turn Around (TAT) requested?	
☒	☐	☐	18. Is extra sample volume provided for MS, MSD or matrix duplicates?	
			DOUBLECHECK METALS,SAMPLE LABELS & SUBCONTRACT	
☒	☐	☐	19. Subcontract COC signed and sent with samples to bottle prep?	
	☒	☐	20. Were sample labels double-checked by a second person?	
☒	☐	☐	21. Were sample bottles and COC double checked for dissolved/filtered metals by a second person?	DS
☐	☒	☐	22. If applicable, were AFCEE Metals placed in the walkin refrigerator?	
☒	☐	☐	23. Were special instructions in LIMS read and followed?	

Document any problems and the actions taken to resolve them on a Condition Upon Receipt Anomaly Report (CUR).

APPENDIX IV

Field Data

FIELD METHODS

Preperation for Purging and Sampling Cannon Air Force Base Landfill 5 wells.

- Water levels are first collected using a Solinst electric tape.
- Meters for collecting water field parameters are calibrated. Meters used are: Orion pH meter, model 250A; Orion conductance meter, model 126; YSI dissolve oxygen meter, model 57.
- Nitrogen gas is connected to air intake valve on purge/sample pump. Nitrogen gas pressure varies on each well.

Purging water before sampling.

- From each well, three well volumes of water or stabilization of field parameters is achieved before sampling. Field parameters are collected at the beginning of water purging then collected after every five gallons water purged. All water purged is contained in a water tank on site next to each well.
- Each well is equiped with a dedicated Bennett Pump. Dedicated pumps require no decontamination and no equipment blanks to be collected (except for initial installation).
- Bennett Pumps are a automatic reciprocating piston motor, operated by compressed air, which generates power for operating a double acting, piston fluid pump. Each pump is set just above the water table with an approximate ten foot extension discharge hose attached to the bottom of the pump and submerged in the groundwater.

Sampling.

- Nitrogen gas pressure is reduced. EPA's Groundwater Sampling Protocol are followed for sampling procedures and the order in which each sample bottle is collected.
- After samples are collected, each bottle will be labeled, bagged, and stored on ice until samples are packed and ready for shipping.
- Each label will have the following data: Collecting agency; Location; Sample ID; Date and time; Sample type; Analytical methods; Collectors; Bottle type and number.

Shipping.

- Sample bottles will be packed in a cooler with bagged ice and packing material. Analytical Request/Chain of Custody forms will be placed in a sealed plastic bag on top of the sample bottles. Coolers will be sealed with strapping tape and a Chain of Custody Seal with seal number.
- Coolers will be shipped by Federal Express shipping company. Coolers will be shipped overnight, and shipped on the same day samples were collected.

Sample container and preservation requirements
Landfill 5

Parameters and methods	Bottle Size and Type	Preservatives
Appendix-IX, Volatile Organic Compounds SW8260B	Three 40 ml glass vials	200 uL 50 % Hydrochloric Acid, Chilled to maintain 4 degrees Celsius
Appendix-IX, Semivolatile Organic Compounds SW8270C	Two 32 oz. glass (amber)	None, Chilled to maintain 4 degrees Celsius
Appendix-IX, Pesticides and PCB's SW8081A/8082	Two 32 oz. glass	None, Chilled to maintain 4 degrees Celsius
Appendix-IX, Dioxins and Furans SW8280	One 32 oz. glass (amber)	None, Chilled to maintain 4 degrees Celsius
Polynuclear Aromatic Hydrocarbons SW8310	One 32 oz. glass (amber)	None, Chilled to maintain 4 degrees Celsius
Appendix-IX, Herbicides SW8151A	Two 32 oz. glass (amber)	None, Chilled to maintain 4 degrees Celsius
Appendix-IX, Total Metals: 16 metals by SW6010B, 8 metals by SW6020, and mercury by SW7470A	16 oz. polyethylene	10 mL 20% Nitric Acid, pH<2
Cyanide, SW9012A	8 oz. polyethylene	2 mL 50% Sodium Hydroxide, pH>12, Chilled to maintain 4 degrees Celsius
Sulfide, SW9030B/9030	8 oz. polyethylene	1 mL 1N Zinc Acetate, plus 1 mL 50% Sodium Hydroxide, pH>9, Chilled to maintain 4 degrees Celsius
Total Organic Carbon (TOC) SW9060	16 oz. glass	2 mL 50% Sulfuric Acid, pH<2, Chilled to maintain 4 degrees Celsius
Total Organic Halogen, (TOX), SW9020B	8 oz. glass (amber)	1 mL 50% Sulfuric Acid, pH<2, Chilled to maintain 4 degrees Celsius
Perchlorate, EPA 314	8 oz. polyethylene	None, Chilled to maintain 4 degrees Celsius

Sample container and preservation requirements
Sewage Lagoon

Parameters and methods	Bottle Size and Type	Preservatives
Appendix-IX, Volatile Organic Compounds SW8260b	Three 40 ml glass vials	200 uL 50 % Hydrochloric Acid, Chilled to maintain 4 degrees Celsius
Appendix-IX, Pesticides and PCB's SW8081A/8082	Two 32 oz. glass	None, Chilled to maintain 4 degrees Celsius
Appendix-IX, Total Metals: 16 metals by SW6010B, 8 by SW6020, and mercury by SW7470A	16 oz. polyethylene	10 mL 20% Nitric Acid, pH<2
Nitrate, MCAWW353.2	16 oz. glass	2 mL 50% Sulfuric Acid, pH<2, Chilled to maintain 4 degrees Celsius
Nitrite , MCAWW354.1 Sulfate, MCAWW300.0A Total dissolved solids (TDS), MCAWW160.1	32 oz. polyethylene	None, Chilled to maintain 4 degrees Celsius
Sulfide, SW9030B/9034	8 oz. polyethylene	1 mL 1N Zinc Acetate, plus 1 mL 50% Sodium Hydroxide, pH>9, Chilled to maintain 4 degrees Celsius
Perchlorate, EPA 314	8 oz. polyethylene	None, Chilled to maintain 4 degrees Celsius

18 MAR 03

1230 ARRIVE AT WELL-B, SWITCH STORAGE MODULES
W/L = 297.63 CR 510 READING 299.67 RESET

CALIBRATE ORION 250A S/N 012942 pH
7.0 & 10.01 SLOPE 103.8

ORION 130A S/N 55158-1520296-60584 COND
SLOPE = 0.667 STANDARD 1020 MTR 1020
SET ALTITUDE ON YSI 95 TO 3200 ft

TIME	VOL	pH	COND	DO	TEMP
1330	1.0	6.93	0.91	6.0	16.7
1333	5.0	7.40	0.92	6.58	17.9
1338	10.0	7.53	0.92	6.73	18.0
1341	15.0	7.55	0.92	6.65	18.0
1346	20.0	7.57	0.92	6.63	18.0
1350	25.0	7.58	0.93	6.61	18.2
1354	30.0	7.59	0.93	6.58	18.2
1359	35.0	7.60	0.93	6.59	18.2
1404	40.0	7.61	0.93	6.61	18.2

PUMP STOPPED FOR A FEW MINUTES

1420 COLLECT ENVIRONMENTAL SAMPLE

PACK & SHIP

3-19-03 CAFB

0715 USGS PERSONNEL ARRIVE AT CAFB, WELL U

CREW: FRED GEBHARDT

RK DEWEES WATER LEVEL 299.27

CALIBRATION OF METERS:

pH METER: ORION 250 A S/N 012942

BUFFERS 7.0 & 10.0

READINGS 7.0 & 10.0 SLOPE 106.1

CONDUCTIVITY METER: ORION 130 A S/N 55158

STANDARD 1620

READING 1623 SLOPE .690

DO METER ALTITUDE ON YSI 95 S/N 99A0237 3200 FT

TIME	VOL	pH	COND	DO	TEMP
0752	1.0	724	960	6.49	17.5
0755	5.0	765	950	7.83	18.0
0759	10	765	970	7.85	18.0
0803	15	759	970	7.72	18.0
0808	20	757	970	7.66	18.0
0811	25	756	980	7.62	18.0
0816	30	756	980	7.56	18.0
0820	35	756	980	7.35	18.0
0824	40	756	980	7.25	18.0

0830 COLLECTED ENVIRONMENTAL SAMPLE CAFB-U

0835 COLLECTED DUPLICATE SAMPLE CAFB-UU

3-19-03 CAFB

0905 ARRIVE AT WELL T. WL 299.69

TIME	VOL	TEMP	pH	COND	DO
0916	1.0	17.1	7.31	.976	6.43
0922	5.0	17.7	7.40	991	6.54
0926	10	17.8	7.45	1009	6.51
0930	15	17.8	7.47	1009	6.46
0935	20	17.8	7.49	1011	6.44
0940	25	17.8	7.49	1009	6.41
0945	30	17.8	7.50	1006	6.39
0949	35	17.8	7.49	1003	6.37
0954	40	17.8	7.45	1003	6.34

1000 COLLECTED ENVIRONMENTAL SAMPLE CAFB-T.

1015 ARRIVE AT WELL S. WL 299.19

TIME	VOL	TEMP	pH	COND	DO
1043	1.0	15.6	7.26	984	5.11
1047	5.0	17.7	7.46	1017	5.99
1051	10.0	17.8	7.45	1012	6.00
1055	15	17.8	7.47	1013	6.07
1059	20	17.8	7.48	1014	6.09
1105	25	17.6	7.52	1008	6.17
1109	30	17.7	7.52	1015	6.15
1114	35	17.8	7.52	1010	6.15
1118	40	17.8	7.52	1011	6.12

1125 COLLECTED ENVIRONMENTAL SAMPLE CAFB-S

3-19-03 CAFB

1140 ARRIVE AT WELL Q. WL 291.82

TIME	VOL	TEMP	PH	COND	DO
1150	1.0	15.4	8.31	938	6.40
1154	5.0	17.7	7.64	971	6.32
1158	10.0	17.7	7.58	971	6.28
1202	15	17.7	7.57	972	6.26
1206	20	17.7	7.58	971	6.46
1211	25	17.7	7.57	971	6.36
1215	30	17.7	7.57	96[illegible]	6.16
1220	35	17.6	7.57	967	7.04
1225	40	17.7	7.58	969	PROBLEMS W/ METER

1230 COLLECTED ENVIRONMENTAL SAMPLE CAFB-Q

1240 COLLECTED ~~EQUIP~~ TRIP BLANK CAFB-Q-TB.

PACK & SHIP

Frederick G. Hebhardt

3-20-03 CAFB

0720 USGS PERSONNEL ARRIVE AT THE SEWAGE LAGOONS ON CAFB. CURRENTLY THERE IS CONSTRUCTION ACTIVITY AT THE THE SEWAGE LAGOONS. TALKED WITH BEN WILLIAMS W/ ARROWHEAD CONSTRUCTION. HE GAVE USGS PERSONNEL A BRIEFING ON THE ACTIVITY AT SEWAGE LAGOONS AND GAVE US A SAFETY MEETING.

USGS CREW: FRED GEBHARDT & RK DEWEES
CALIBRATION OF METERS - SAME METERS AS YESTERDAY
- pH METER BUFFERS 7.0 & 10.0 SLOPE 104.1
- CONDUCTIVITY STANDARD 1020 SLOPE .707
- DO METER ALTITUDE OF 3200.

0750 ARRIVED AT WELL G WL 297.53

TIME	VOL	TEMP	pH	COND	DO
0805	1.0	13.9	7.29	1032	6.40
0810	5.0	17.1	7.57	1100	5.26
0814	10	17.2	7.62	1100	5.19
0818	15	17.2	7.65	1101	5.25
0823	20	17.2	7.68	1101	5.14
0828	25	17.3	7.69	1102	5.03
0833	30	17.3	7.71	1101	5.00
0838	35	17.4	7.75	1102	5.13
0843	40	17.4	7.78	1113	4.98

0850 COLLECTED ENVIRONMENTAL SAMPLE CAFB-G, CAFB-G-MS & CAFB-G-MSD.

3-20-03

CAFB

0855 COLLECTED DUPLICATE SAMPLE CAFB-GG

0925 ARRIVE AT WELL F. WL 295.10

TIME	VOL	TEMP	pH	COND	DO
0937	1.0	17.0	7.91	1066	5.31
0942	5.0	17.4	7.94	1076	5.16
0946	10	17.5	7.92	1077	5.11
0950	15	17.5	7.93	1077	5.11
0954	20	17.5	7.93	1079	5.09
0958	25	17.6	7.93	1079	5.07
1002	30	17.7	7.93	1081	5.08
1006	35	17.7	7.92	1081	5.07
1010	40	17.7	7.92	1081	5.08

1015 COLLECTED ENVIRONMENTAL SAMPLE CAFB-F.

1027 ARRIVED AT WELL H. WL. 297.07

TIME	VOL	TEMP	pH	COND.	DO
1036	1.0	16.2	8.71	905	5.93

~~WELL S~~ PUMP ONLY PRODUCING AIR. IT APPEARS THAT PUMP INTAKE IS JUST BARELY IN THE WATER. NOT EQUIPED TO LENGTHEN PUMP HOSE IN THE FIELD. WILL PULL PUMP SYSTEM AND TAKE BACK TO ALBUQUERQUE TO CORRECT THE PROBLEM.

3-20-03 CAFB

1100 CHANGE OF PLANS FOR FIXING WELL H. WILL LEAVE PUMP IN WELL. COME BACK TO CAFB IN A WEEK OR TWO AND LENGTHEN HOSE IN THE FIELD.

1120 ARRIVE AT WELL D. WL 299.03

TIME	VOL	TEMP	pH	COND	DO
1132	1.0	16.7	8.60	680	5.50
1136	5.0	18.1	7.87	751	4.16
1141	10	18.1	7.86	757	4.03
1145	15	18.2	7.85	754	3.99
1149	20	18.2	7.84	757	3.92
1153	25	18.2	7.84	761	3.88
1157	30	18.2	7.84	763	3.75
1201	35	18.2	7.84	762	3.71
1205	40	18.2	7.84	766	3.59

1210 COLLECTED ENVIRONMENTAL SAMPLE CAFB-D.

1225 ARRIVE AT WELL C. WL 304.22

3-20-03

CAFB

TIME	VOL	TEMP	pH	COND	DO
1228	1.0	18.2	8.17	762	5.40
1234	5.0	18.3	8.00 ~~7.42~~	742	4.08
1239	10	18.3	8.00	744	3.63
1244	15	18.3	8.00	746	3.23
1254	20	18.2	8.00	744	2.90
1259	25	18.3	8.00	745	2.71
1304	30	18.4	7.99	746	2.60
1309	35	18.4	7.99	746	2.50
1314	40	18.3	8.00	745	2.40

1320 COLLECTED ENVIRONMENTAL SAMPLE CAFB-C.

1325 COLLECTED TRIP BLANK CAFB-C-TB.

PACK & SHIP

Frederick G. Gebhardt

3-21-03 CAFB

0820 USGS PERSONNEL ARRIVE AT WELL E ON CAFB.

CALIBRATION OF METERS.- SAME METERS AS YESTERDAY.

pH METER - BUFFERS 7.0 & 10.0 SLOPE 105.3
CONDUCTIVITY METER - STANDARD 1020 SLOPE .676
DO METER ALTITUDE 3200 FT.

WATER LEVEL WELL E. 297.73

TIME	VOL	TEMP	pH	COND	DO
0850	1.0	15.2	7.82	1038	7.30
0854	5.0	17.8	7.78	1076	5.92
0859	10	17.8	7.92	1175	5.57
0906	15	17.6	7.95	1171	5.27
0911	20	18.1	8.04	1232	5.17
0917	25	18.1	8.05	1239	5.17
0923	30	18.1	8.07	1240	5.16

0930 COLLECTED ENVIRONMENTAL SAMPLE CAFB-E.

0935 COLLECTED TRIP BLANK CAFB-E-TB

* PROBLEMS WITH PUMP AT WELL E. WILL NEED TO PULL SOON, STOPPED PURGING EARLY DUE TO PUMP PROBLEMS.

4-1-03 CAFB

1340 USGS PERSONNEL: FRED GEBHARDT + RK DEWEES ARRIVE AT THE SEWAGE LAGOONS ON CAFB.

1345 RECEIVED SAFETY INSTRUCTIONS FROM BEN WILLIAMS WITH ARROWHEAD CONSTRUCTION.

1400 ARRIVE AT WELL H. AS DISCOVERED ON 3-20-03 THE WATER LEVEL AT WELL H IS ASSUMED TO HAVE DROPPED BELOW THE PUMP INTAKE. WE WILL LENGTHEN THE HOSES APROX. 15'.

1545 COMPLETED THE WORK ON THE HOSES. WILL LEAVE SITE, BUT WILL RETURN TOMORROW TO SAMPLE WELL H.

Fredrick G. Gebhardt

4-2-03 CAFB

0800 USGS PERSONNEL ARRIVE AT THE SEWAGE LAGOONS ON CAFB. CREW: FRED GEBHARDT + RK DEWEES.

0815 RECEIVED SAFETY INSTRUCTIONS AT CONSTRUCTION TRAILER

0820 ARRIVED AT WELL H. WATER LEVEL 297.00 ~~TOC~~ FROM TOP OF PUMP HANGER.

CALIBRATION OF METERS:

pH METER ORION 250 A S/N 012942
BUFFERS 7.0 + 10.0
READINGS 7.04 + 10.15 SLOPE 99.0

CONDUCTIVITY METER: ORION 130 A S/N 55158
STANDARD 1020
READING 1020 SLOPE .555

DO METER S/N 99A0237 YSI 95

0848 PUMP WORKING, WATER PUMPING.

4-2-03 CAFB

TIME	VOL	TEMP	pH	COND	DO
0849	1.0	17.3	7.46	~~7.49~~ 749	10.0
0853	5.0	17.6	7.50	756	6.40
0857	10	17.8	7.22	757	6.80
0900	15	17.7	7.63	756	6.77
0904	20	17.7	7.74	759	6.75
0908	25	17.8	7.77	763	6.76
0912	30	17.9	7.81	772	7.21
0916	35	18.0	7.82	776	7.50
0920	40	18.0	7.83	776	7.56

0930 COLLECTED ENVIRONMENTAL SAMPLE CAFB-H.

0935 COLLECTED TRIP BLANK CAFB-H-TB.

WILL HEAD BACK TO ALBUQUERQUE TO PACK & SHIP.

Joshua J. Gebhardt