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**ENVIRONMENTAL
RESTORATION
PROGRAM**

**Phase II Confirmatory Sampling Data
Report, Lower East Fork Poplar Creek,
Oak Ridge Y-12 Plant,
Oak Ridge, Tennessee**

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MANAGED BY
LOCKHEED MARTIN ENERGY SYSTEMS, INC.
FOR THE UNITED STATES
DEPARTMENT OF ENERGY

UCN-17560 (8 8-95)

ENERGY SYSTEMS



Science Applications International Corporation

contributed to the preparation of this document and should not be considered and eligible contractor for its review.

**Phase II Confirmatory Sampling Data
Report, Lower East Fork Poplar Creek,
Oak Ridge Y-12 Plant,
Oak Ridge, Tennessee**

Date Issued—January 1998

Prepared by
Science Applications International Corporation
Oak Ridge, Tennessee
under subcontract 78B-99069C/784-KDS27V

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U.S. Department of Energy
Office of Environmental Management
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Environmental Management Activities at the
OAK RIDGE Y-12 PLANT
Oak Ridge, Tennessee 37831
managed by
LOCKHEED MARTIN ENERGY SYSTEMS, INC.
for the
U.S. DEPARTMENT OF ENERGY
under contract DE-AC05-84OR21400

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ACRONYMS

BGS	below ground surface
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CLP	(EPA) Contract Laboratory Procedure
DOE	U.S. Department of Energy
DOE-OR	DOE Field Office in Oak Ridge
ECU	Excavation Confirmation Unit
EFPC	East Fork Poplar Creek
Energy Systems	Lockheed Martin Energy Systems, Inc.
ETTP	East Tennessee Technology Park
EPA	U.S. Environmental Protection Agency
GIS	Global Information System
JE	Jacob Environmental Management Team
LCS	Laboratory Control Sample
LEFPC	Lower East Fork Poplar Creek
MS	matrix spike
NIST	National Institute of Standards and Testing
NOAA	National Oceanic and Atmospheric Administration
NPL	National Priorities List
ORAU	Oak Ridge Associated Universities
OREIS	Oak Ridge Environmental Information System
ORNL	Oak Ridge National Laboratory
ORR	Oak Ridge Reservation
PCB	polychlorinated biphenyls
PCU	Perimeter Confirmation Unit
PEMS	Project Environmental Measurements System
POTW	publicly owned treatment works
ppm	parts per million
QA/QC	quality assurance/quality control
RA	Remedial Action
RPD	relative percent difference
SAIC	Science Applications International Corporation
SAP	Sampling and Analysis Plan
SRM	standard reference material
TDEC	Tennessee Department of Environment and Conservation
VOCs	volatile organic compounds

EXECUTIVE SUMMARY

A Remedial Investigation of East Fork Poplar Creek (EFPC) concluded that mercury is the principal contaminant of concern in the EFPC floodplain. The highest concentrations of mercury were found to be in a visually distinct black layer of soil that typically lies 15 to 30 cm (6 to 12 in.) below the surface. Mercury contamination was found to be situated in distinct areas along the floodplain, and generally at depths >20 cm (8 in.) below the surface. In accordance with Comprehensive, Environmental Response, Compensation, and Liability Act (CERCLA), a feasibility study was prepared to assess alternatives for remediation, and a proposed plan was issued to the public in which a preferred alternative was identified. In response to public input, the plan was modified and U.S. Department of Energy (DOE) issued a Record of Decision in 1995 committing to excavating all soil in the EFPC floodplain exceeding a concentration of 400 parts per million (ppm) of mercury.

The Lower East Fork Poplar Creek (LEFPC) remedial action (RA) focuses on the stretch of EFPC flowing from Lake Reality at the Y-12 Plant, through the city of Oak Ridge, to Poplar Creek on the Oak Ridge Reservation (ORR) and its associated floodplain. Based on the cleanup standard of 400 ppm mercury and on sampling conducted by the Jacob Environmental Management Team (JE) since the remedial investigation, specific areas were identified that required remediation at the National Oceanographic and Atmospheric Administration (NOAA) Site along Illinois Avenue and at the Bruner Site along the Oak Ridge Turnpike.

The RA was conducted for U.S. Department of Energy - Oak Ridge (DOE-OR) as part of the Environmental Restoration Program by Lockheed Martin Energy Systems, Inc. (Energy Systems). Science Applications International Corporation (SAIC) was contracted by Energy Systems to conduct the confirmatory sampling, creek water monitoring, and treatment water sampling for the RA.

The RA was conducted in two separate phases. Phase I, conducted from July to September 1996, encompassed a small area at the NOAA facility and provided an opportunity to refine the excavation techniques, soil cleanup confirmation and verification process, and test assumptions regarding sample turnaround time, verification time by the off-site laboratory, and daily field laboratory capacity. Phase II, conducted from February to October 1997, completed the remediation efforts at the NOAA facility and fully remediated the Bruner Site. During both phases, data were collected to show that the remedial efforts performed at the NOAA and Bruner sites were successful in implementing the Record of Decision and had no adverse impact on the creek water quality or the city of Oak Ridge publicly owned treatment works (POTW).

PHASE I

The Phase I remediation efforts focused on a small area at the NOAA facility. The RA began on July 27, 1996 and continued through the completion of the site renovation activities on September 15, 1996. During the RA, the *Confirmatory Sampling and Analysis Plan for the Lower East Fork Poplar Creek Operable Unit, Oak Ridge, Tennessee, Y/ER-258 (SAIC 1996a)* was implemented by SAIC. Following this Plan, the remediation area was divided into 36 excavation confirmation units (ECUs) and confirmatory soil samples were collected at 144 separate locations. The samples were analyzed for mercury content using the EPA-approved field screening methodology for mercury "Static

Headspace Analysis for Mercury in Soils" (Kriger and Turner 1996) at the on-site laboratory. In addition, 25% of the samples collected were sent to off-site laboratories for verification purposes. The data from the on-and off-site laboratories were compared to demonstrate and document data comparability for this project. The analytical methodology comparison proved that the screening method was valid and credible and produced excellent analytical data. After the results were obtained from the on-site laboratory, they were compared to the cleanup criteria of < 400 ppm using the Null and Alternative Hypothesis. This evaluation confirmed that the area excavated during the Phase I RA at the NOAA Site had been successfully remediated.

Creek water samples were collected from the LEFPC following the *Sampling and Analysis Plan for Treatment Water and Creek Water for the Lower East Fork Poplar Creek Operable Unit, Oak Ridge, Tennessee, Y/ER-261* (SAIC 1996b) to monitor the creek water to ensure that the remedial activities were not adversely impacting the creek. Water quality samples were collected on a daily basis from stationary upstream and downstream locations beginning on July 26, 1996 and continued over a period of 8 weeks until September 13, 1996. Samples were collected on a daily basis and analyzed by an off-site laboratory for metals/mercury and field parameters including pH, conductivity, turbidity, and temperature. On a weekly basis, samples were analyzed for a full suite of parameters including metals/mercury, semi-volatiles, pesticides/polychlorinated biphenyls (PCBs), radiologicals, BOD/DO, alkalinity/anions, and nitrogen, along with field parameters. Comparisons were made of the upstream versus the downstream sampling results and to background sampling results. Generally, the values remained consistent and no notable fluctuation occurred showing that the remedial efforts had not impacted the creek water quality.

Treatment water samples were collected from water obtained from soil dewatering and decontamination activities and water pumped from the excavation and drying bed area, following the *Sampling and Analysis Plan for Treatment Water and Creek Water for the Lower East Fork Poplar Creek Operable Unit, Oak Ridge, Tennessee, Y/ER-261* (SAIC 1996b). Both influent and effluent treatment water samples were collected, sent to an off-site laboratory for analysis, and compared to the city of Oak Ridge POTW permit requirements. An initial sampling event proved that the filtration unit was capable of filtering the waste water to meet the POTW discharge requirements and treatment water discharges to the POTW were approved. According to the permit, the sampled treatment water was allowed to be released prior to receiving the results based on the performance of initial filtration test. During Phase I, a nonconformance with the POTW permit resulted when an estimated 500 gal of treatment water with iron and mercury levels exceeding the permit limit was discharged to the POTW. The sampling results, which were received after the discharge, indicated that the treatment unit did not sufficiently filter the water to achieve full conformance with the permit requirements. The city of Oak Ridge was notified and the treatment water unit and release process were modified. Following this incident, treatment water discharges were only made after the sampling results were evaluated and determined to meet requirements of the POTW permit.

PHASE II

The Phase II RA completed the remedial effort at the NOAA Site and completely remediated the Bruner Site. Phase II activities began on February 21, 1997 and continued through October 24, 1997 with completion of renovation activities at both sites. Prior to beginning Phase II, efforts were made to incorporate the lessons learned from Phase I into the Phase II RA. As a result, the confirmatory

sampling approach was modified to allow sampling to be performed in front of excavation activities, the mercury field screening method was allowed to be performed on a portion of the wet soil sample, and quality assurance/quality control (QA/QC) samples were collected at a rate of 10% instead of 25%. These revisions were incorporated into the revised Confirmatory Sampling and Analysis Plan, Y/ER-258R1 (SAIC 1996c). The revised plan was implemented by SAIC. The remediation area was divided into 190 Excavation Confirmation Units (ECUs) with ECUs 37 through 96 located at the NOAA Site and 97 through 226 located at the Bruner Site. Confirmatory soil samples were collected at 797 separate locations and analyzed for mercury content at the on-site laboratory. These results were then compared to the clean-up criteria of < 400 ppm using the Null and Alternative Hypothesis. All comparisons indicated that the clean-up criteria had been met. In addition to the on-site laboratory analysis, 10% of the samples collected were sent to off-site laboratories contracted to SAIC and JE for verification purposes. As in Phase I, the data were comparable proving the field screening method was valid and produced technically and legally defensible data. The evaluation of all the data confirmed that the Phase II RA at both the NOAA and Bruner Sites was successful.

Creek water samples were collected by SAIC during Phase II to monitor the creek water quality. Following the same Sampling and Analysis Plan (SAP) utilized during Phase I, creek water quality samples were collected on a daily basis from upstream and downstream locations at the Bruner Site beginning on March 25, 1997 and continuing over a 27-week period until October 2, 1997. At the NOAA Site, creek water samples were also collected on a daily basis; however, three locations (one upstream and two downstream) were used to monitor the water quality due to the noncontiguous nature of the excavation areas. Daily water sampling began at the NOAA Site on May 13, 1997 and continued over a 21-week period until October 9, 1997. Creek water quality was evaluated by comparing the downstream results to upstream results and to initial background results. Data evaluation efforts concluded that remediation activities did not adversely affect creek water quality.

Treatment water samples were collected from water obtained from soil dewatering and decontamination activities and from the drying bed area. During Phase II, the excavation subcontractor utilized two 22,000-gal FRAC tanks to collect and store the generated waste water. Following the same SAP utilized during Phase I, SAIC collected both influent and effluent treatment water samples for 12 separate discharge events, totaling 198,000 gal, beginning on April 29, 1997 and ending on October 17, 1997. The samples were sent to an off-site laboratory for analysis and compared to the requirements of the city of Oak Ridge POTW permit, number 6-96 dated June 26, 1996 and the modification dated July 5, to determine if the effluent was suitable to be discharged. All waste water was filtered and discharges were only made after the sampling results were evaluated by Energy Systems and determined to meet the requirements of the POTW permit. The city of Oak Ridge was kept informed of the remediation schedule and notified prior to release of treatment water to the POTW. The city of Oak Ridge POTW personnel provided verbal approval for variances to permit conditions for minor increased discharge rates necessary to accommodate weather conditions, site demobilization, and for the October 9, 1997 discharge.

1. INTRODUCTION

1.1 BACKGROUND

On December 21, 1989, the U.S. Environmental Protection Agency (EPA) placed the U.S. Department of Energy's (DOE's) Oak Ridge Reservation (ORR) on the National Priorities List (NPL). On January 1, 1992, a Federal Facilities Agreement between the DOE Field Office in Oak Ridge (DOE-OR), EPA Region IV, and the Tennessee Department of Environment and Conservation (TDEC) went into effect. The DOE-OR Environmental Restoration Program for the ORR addresses the remediation of areas both within and outside the ORR boundaries, including Oak Ridge National Laboratory (ORNL), the East Tennessee Technology Park (ETTP), the Oak Ridge Y-12 Plant, Oak Ridge Associated Universities (ORAU), the Clinch River, and East Fork Poplar Creek (EFPC).

The EFPC site is designated as an ORR Operable Unit under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and is included on the NPL. Both the EFPC and its floodplain have been contaminated by releases from the Y-12 Plant since the mid-1950s. Beginning in 1952, the Y-12 Plant began production-scale separation of lithium isotopes that required the use of millions of kilograms of mercury. This process released 108,000 to 212,000 kg (239,000 to 470,000 lb) of mercury into EFPC. Although the primary discharges from the Y-12 Plant were eliminated in 1963, mercury continues to be released into EFPC from Y-12 Plant secondary sources (e.g., building drain systems, sewers, and connecting lines). The current release is ~20 g/d (0.07 oz/d) down from 100 g/d (3.5 oz/d) in 1985.

1.2 PURPOSE, SCOPE, AND OBJECTIVE

A Remedial Investigation of EFPC concluded that mercury is the principal contaminant of concern in the EFPC floodplain. The highest concentrations of mercury were found to be in a visually distinct black layer of soil that typically lies 15 to 30 cm (6 to 12 in.) below the surface. Mercury contamination was found to be situated in distinct areas along the floodplain, and generally at depths >20 cm (8 in.) below the surface. In accordance with CERCLA, a feasibility study was prepared to assess alternatives for remediation, and a proposed plan was issued to the public in which a preferred alternative was identified. In response to public input, the plan was modified and DOE issued a Record of Decision in 1995 committing to excavation of all soil in the EFPC floodplain exceeding a concentration of 400 parts per million (ppm) of mercury.

The Lower East Fork Poplar Creek (LEFPC) remedial action focused on the stretch of EFPC flowing from Lake Reality at the Y-12 Plant, through the city of Oak Ridge, to Poplar Creek on the ORR and its associated floodplain. Based on the cleanup standard of 400 ppm mercury and on sampling conducted by the Jacob Environmental Management Team (JE) since the remedial investigation, specific areas were identified that required remediation at the National Oceanographic and Atmospheric Administration (NOAA) site along Illinois Avenue and at the Bruner site along the Oak Ridge Turnpike.

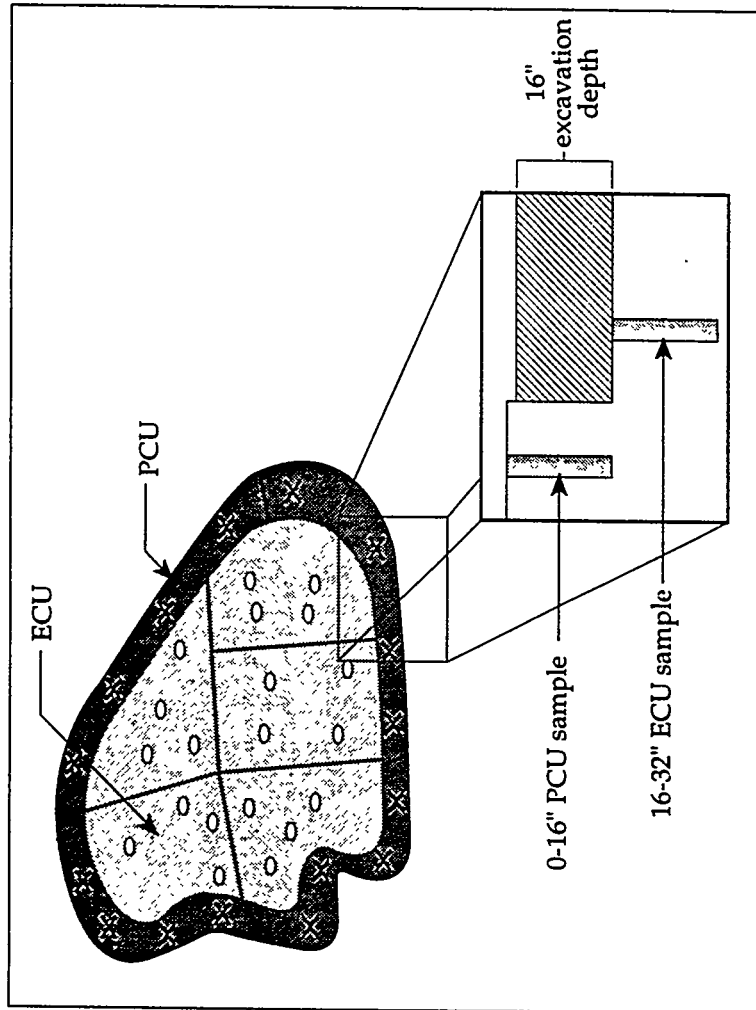
This remedial action was conducted for DOE-OR as part of the Environmental Restoration Program by Lockheed Martin Energy Systems, Inc. (Energy Systems). Science Applications

International Corporation (SAIC) was contracted by Energy Systems to conduct confirmatory soil sampling, creek water quality monitoring, and treatment water sampling for this remedial action (RA).

Two sampling and analysis plans (SAPs) were written to address the confirmatory sampling aspects of the remediation efforts. The *Confirmatory Sampling and Analysis Plan for the Lower East Fork Poplar Creek, Oak Ridge, Tennessee, Y/ER-258* (SAIC 1996a) was written and approved by the regulators to provide the strategy and methodology to be used to confirm that mercury concentrations in the soils in the remediated areas were statistically less than the cleanup standard of 400 ppm. The strategy outlined in the SAP required the collection of a sufficient number of samples to document the success of the remediation efforts utilizing the methodology provided in the U.S. Environmental Protection Agency's *Methods for Evaluating the Attainment of Cleanup Standards, Volume 1: Soils and Solid Media* (EPA 1989). According to the SAP, confirmation units of 2500 ft² were recommended for this remedial effort. Two types of confirmation units were used: Perimeter Confirmation Units (PCUs) and Excavation Confirmation Units (ECUs) (Fig. 1.1). PCUs were established prior to excavation and used to bound the areas of excavation. PCU samples were collected from a depth of 0 to 16 in. with the boundary extending 10 ft outward from the areas to be excavated. The areas to be remediated were divided into 2500 ft² ECUs and excavated to a depth of 16 in. The ECUs were then established in the excavation area and 16-in. deep samples were drawn from them. Following the EPA methodology of false positive and false negative error rates, at least four samples were randomly selected from each ECU. To allow confirmation activities to occur rapidly, the samples were analyzed by an on-site laboratory utilizing the EPA-approved field screening method "Static Headspace Analysis for Mercury in Soils" (Kriger and Turner 1996). The quantification limit goal for implementation of this method is 1 mg/kg of soil. In addition, for Quality Assurance/Quality Control (QA/QC) purposes, 25% of the samples were sent to an off-site laboratory for analysis using the Contract Laboratory Procedure (CLP) ILM3.0 protocols for mercury analysis by cold vapor atomic absorption spectroscopy. Quantification limit goals for this analysis were 0.2 mg/kg. The analytical data were subjected to the "Null and Alternative Hypotheses" to determine whether an ECU met the cleanup criteria based on the mean of the sample.

At the end of Phase I, the Confirmatory SAP was revised to include the lessons learned during Phase I (Y/ER-258/R1). As a result, three modifications were made to the SAP:

- ECUs and confirmatory soil samples were allowed to be established prior to excavation activities to allow the RA to be accomplished more effectively. Under this approach, at each surveyed and staked confirmatory sampling location, the top 16 in. of soil were removed with a hand auger to emulate excavation. A confirmatory soil sample was then collected from the next 16 in. interval.
- A portion of the homogenized wet soil sample, instead of a dried sample portion, was allowed to be used for the field screening method. This procedure adaptation was necessary to allow the analytical screening procedure to be performed more rapidly. During Phase I, it was shown that the effectiveness of the field screening method was not impacted by the adaptation.
- The rate of collection for QA/QC samples was reduced from 25% to 10%. Originally the 25 % level was required to prove the validity of the field screening method; this was adequately demonstrated during Phase I. Reducing the rate to a standard 10% allowed time and cost savings to be recognized by the project.



28-102996-098

ECU = Excavation Confirmation Unit - excavated areas

PCU = Perimeter Confirmation Unit - "clean boundaries"

○ = Confirmation sample locations

✕ = Pre-remedial action sample locations

Fig. 1.1. LEFPC remedial action confirmation unit structure.

The *Sampling and Analysis Plan for Treatment Water and Creek Water for the Lower East Fork Poplar Creek, Oak Ridge, Tennessee*, Y/ER-261 (SAIC 1996b) was written to address creek water sampling conducted to ensure remediation activities were not adversely affecting LEFPC, and treatment water sampling conducted to ensure treated water generated during soil dewatering and decontamination activities met the city of Oak Ridge discharge permit criteria. According to the SAP, water collected for treatment was staged in holding tanks (influent) prior to being treated. Following treatment, the water was staged in holding tanks (effluent) prior to discharge to the city of Oak Ridge Sewer System. Samples were collected from both holding tanks prior to and after treatment and sent to an off-site laboratory for analysis. The results were then compared to the city of Oak Ridge permit requirements before allowing the treated water to be discharged. Creek water quality samples were also collected from locations upstream and downstream of the remediation activities on a daily basis when remediation was active through site renovation and sent to an off-site laboratory for analysis. The locations remained the same throughout each phase of the remediation.

2. SAMPLING ACTIVITIES AND RESULTS

The remediation effort was conducted in two separate phases. Phase I, conducted from July to September 1996, encompassed a small area at the NOAA facility and proved to be successful (Fig. 2.1). Phase I provided an opportunity to refine the excavation techniques; soil cleanup confirmation and verification process; and test assumptions regarding sample turnaround time, verification time by the off-site laboratory, and daily field laboratory capacity. Phase II, conducted from February to October 1997, implemented the lessons learned from Phase I, and completed the remediation efforts at the NOAA facility and fully remediated the Bruner Site (Figs. 2.2 and 2.3). RA sampling activities during both Phases included confirmation soil sampling to confirm achievements of the remediation criteria established for the LEFPC floodplain soils, creek water quality sampling to ensure remediation activities were not adversely affecting the creek, and treatment water sampling to ensure water generated from soil dewatering activities and decontamination activities met the city of Oak Ridge discharge permit criteria.

The results of the Phase I confirmatory soil sampling and creek water monitoring efforts are detailed in the *Phase I Confirmatory Sampling Data Report, Lower East Fork Poplar Creek, Oak Ridge, Tennessee, (SAIC 1996d)*. This report confirms that the areas excavated during the Phase I RA were successfully remediated. The results of the Phase II activities are discussed in the following sections.

2.1 CONFIRMATORY SOIL SAMPLING

In the spring of 1996, PCUs and the excavation boundaries for the NOAA and Bruner Sites were established by JE. The data associated with this effort are provided in the *Phase I and Phase II Excavation Boundary Limits for Lower East Fork Poplar Creek Floodplain, Oak Ridge, Tennessee* (DOE 1996a, 1996b). This activity produced excavation areas at both the NOAA and Bruner Sites. SAIC then divided the Phase II areas into 190 ECUs based on the 2500 ft² maximum area criteria. ECUs 37 through 96 are located at the NOAA Site while ECUs 97 through 226 are located at the Bruner Site (Figs. 2.2 and 2.3, respectively). For tracking and reporting purposes, the excavation subcontractor grouped the ECUs together into areas at each site with the Bruner Site consisting of Areas A through L and the NOAA Site consisting of Areas AA-GG (see figures in Appendix A).

Prior to beginning excavation activities, each ECU was subdivided into four quadrants and one confirmatory sampling point was randomly located within each quadrant using the Global Information System (GIS). This provided the four required random locations for each ECU or a total of 760 total confirmatory sampling locations. These locations are shown on the Figures in Appendix A. To allow excavation activities to be expedited and to meet the project schedule, prior to beginning excavation activities, the confirmatory sample locations were staked within each ECU. Confirmatory soil sampling activities began on March 3, 1997 and were concluded on October 6, 1997.

During excavation activities it was necessary to establish a fifth quadrant with an additional randomly generated confirmatory soil sampling location at 37 separate ECUs (see figures in Appendix A). The addition of these 37 samples was required to collect a sufficient number of confirmatory samples to document the attainment of the clean-up criteria, in areas where excavation activities had increased the size of the ECU, by excavating outside the original identified boundary

in pursuit of mercury contaminated soils (i.e., the black layer). With the addition of the 37 locations, the number of confirmatory soil sampling stations for Phase II totaled 797.

A project database utilizing the Energy Systems Project Environmental Measurements Systems (PEMS) was developed by SAIC and prepopulated with the ECU sample identifiers and locations. Station names were designated as ECUXXX:N where XXX is the ECU number and N is the quadrant number (e.g., ECU37:1). Sample locations and coordinates were transferred and loaded electronically into PEMS from data files. Based on the SAP, sampling information was prepopulated into PEMS. A program was written that identified, for each soil sampling location, the samples that should be collected for each location. A sample ID system was derived for Phase II that allowed the sample number to be linked to the sampling location and sample type. All of the data collected during Phase II, including sample depth, date, and time collected, chain-of-custody numbers, field measurement parameters, on-site and off-site laboratory analytical data, and validation and verification codes were loaded into the PEMS project database and can be obtained by interested parties who have access to this system or through the Oak Ridge Environmental Information System (OREIS) which is the final data repository.

Confirmatory soil sampling activities included collecting 16 in. soil core samples at each of the surveyed locations within each ECU in 16 in.-intervals below ground surface (BGS) using a JMC Backsaver™ soil sampler. Utilizing the revised approach, samples were collected prior to excavating the ECU by removing the top 16 in. of soil with a hand auger. A confirmatory soil sample was then collected from the next 16 in. interval (see Fig. 1.1). Each 16-in. soil sample was homogenized prior to splitting and analysis. A total of 877 confirmatory soil samples were collected in Phase II.

A total of 757 of these samples were collected prior to excavation from the 16 to 32 in. interval. This technique allowed the results to be used to guide the depths of the excavation. Confirmatory soil samples were also collected during excavation activities. These samples included a total of 37 fifth quadrant samples or “extended” samples taken outside the original ECU boundaries and a total of 83 confirmatory soil “resamples” taken at depths > 32 in.

As discussed previously, the fifth quadrant samples were collected when excavation activities occurred outside the original defined ECU boundaries. These samples were taken after the contaminated soil was removed to confirm that the clean-up criteria had been met. The samples were taken using a JMC Backsaver™ to collect a 16 in. core below the depth of the excavation.

Confirmatory soil “resamples” were collected at soil sampling locations where the original confirmatory soil sample collected from 16 to 32 in. indicated the presence of mercury contaminated soil at depths > 16 in. In these instances, over excavation occurred to remove the contaminated soil. A 16 in. soil core sample was then collected below the depth of the excavation to confirm that the clean-up criteria had been met. The majority of these “resamples” were collected from 32 to 48 in. using the JMC Backsaver™, however, a few samples were collected at depths > 48 in., which prevented the Backsaver™ from being used. For these few samples, the soil was collected from the specified depth using the bucket of a front-end loader.

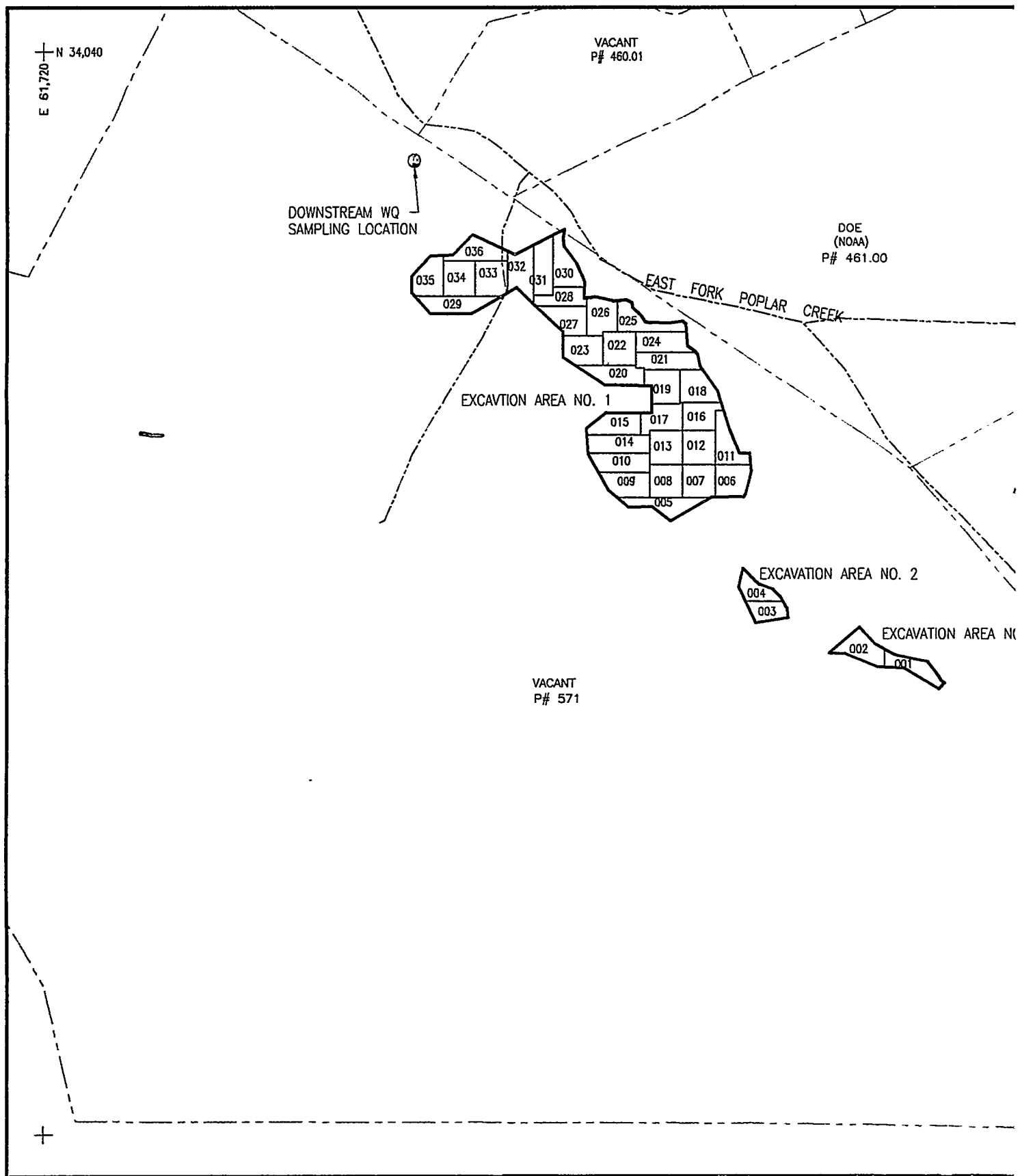
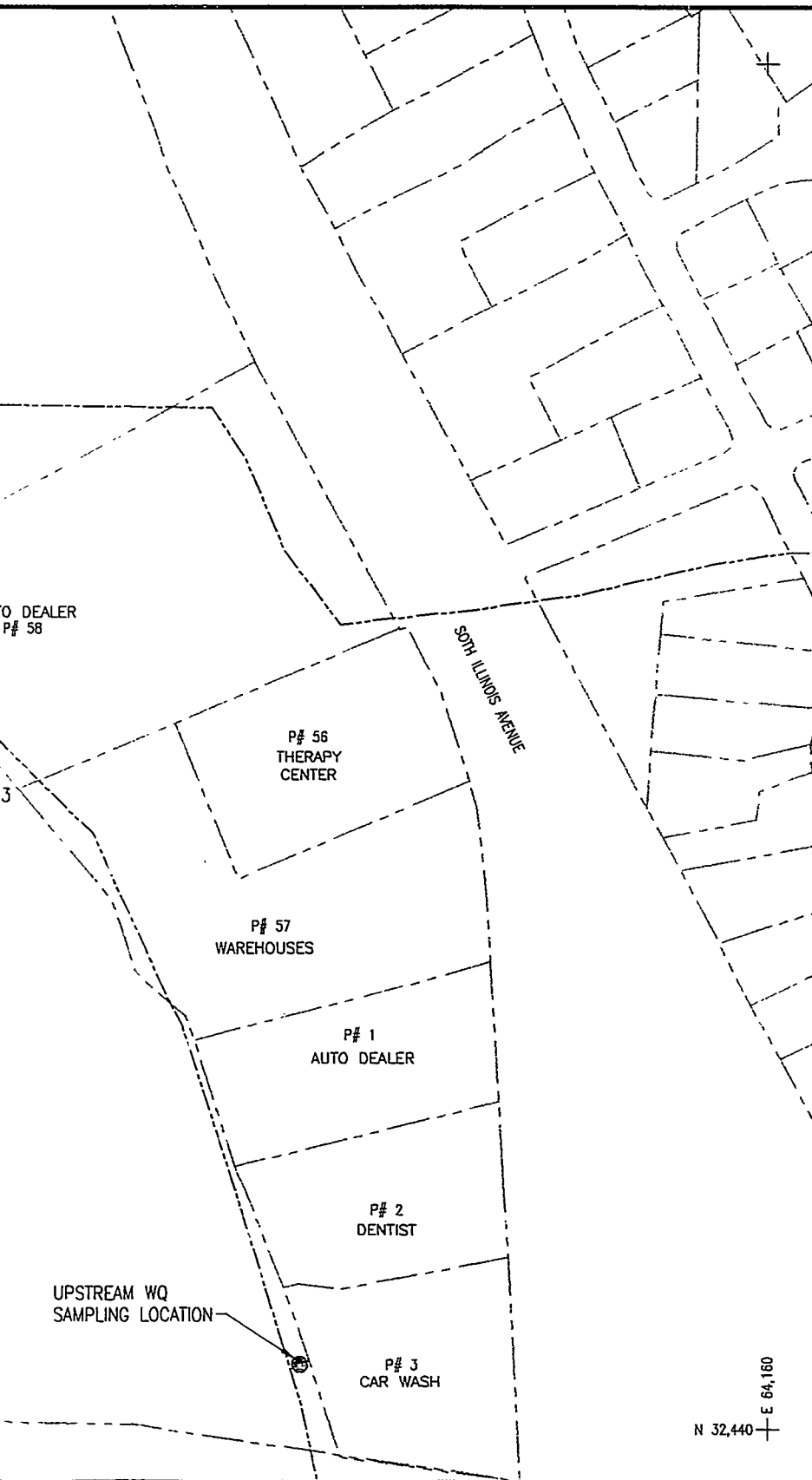


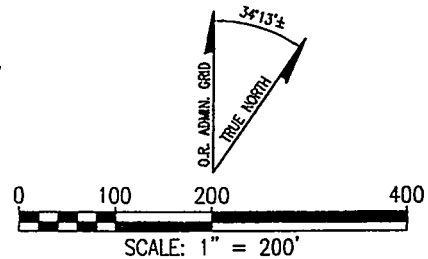
Fig. 2.1. LEFPC Phase I remedial action excavation areas and

**LEGEND:**

- PARCEL BOUNDARY
 CREEK & TRIBUTARIES
 EXCAVATION AREA
 EXCAVATION CONFIRMATION UNIT
 OAK RIDGE ADMINISTRATIVE GRID
 ... WATER QUALITY SAMPLING LOCATION

NOTES:

- EXISTING TOPOGRAPHIC SITE FEATURES AND COORDINATES SHOWN TAKEN FROM FIELD RUN TOPOGRAPHIC SURVEY PERFORMED BY ETE CONSULTING ENGINEERING, DATED 12/95. COORDINATE SYSTEM IS BASED UPON THE OAK RIDGE ADMIN. GRID.
- EXCAVATION LIMITS SHOWN ARE TAKEN FROM INFORMATION PROVIDED BY JACOBS ENGINEERING GROUP, DATED 2/28/96.



SAIC®

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LOWER EAST FORK POPLAR CREEK
PHASE I - NOAA AREA
OAK RIDGE, TENNESSEE

REVISION	DRAWN BY:	CHKD. BY:	DATE:
0	S. DUNLAP	A. BAILEY	01-21-98

XREFERENCES	PLOT FILES
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DRAWING #

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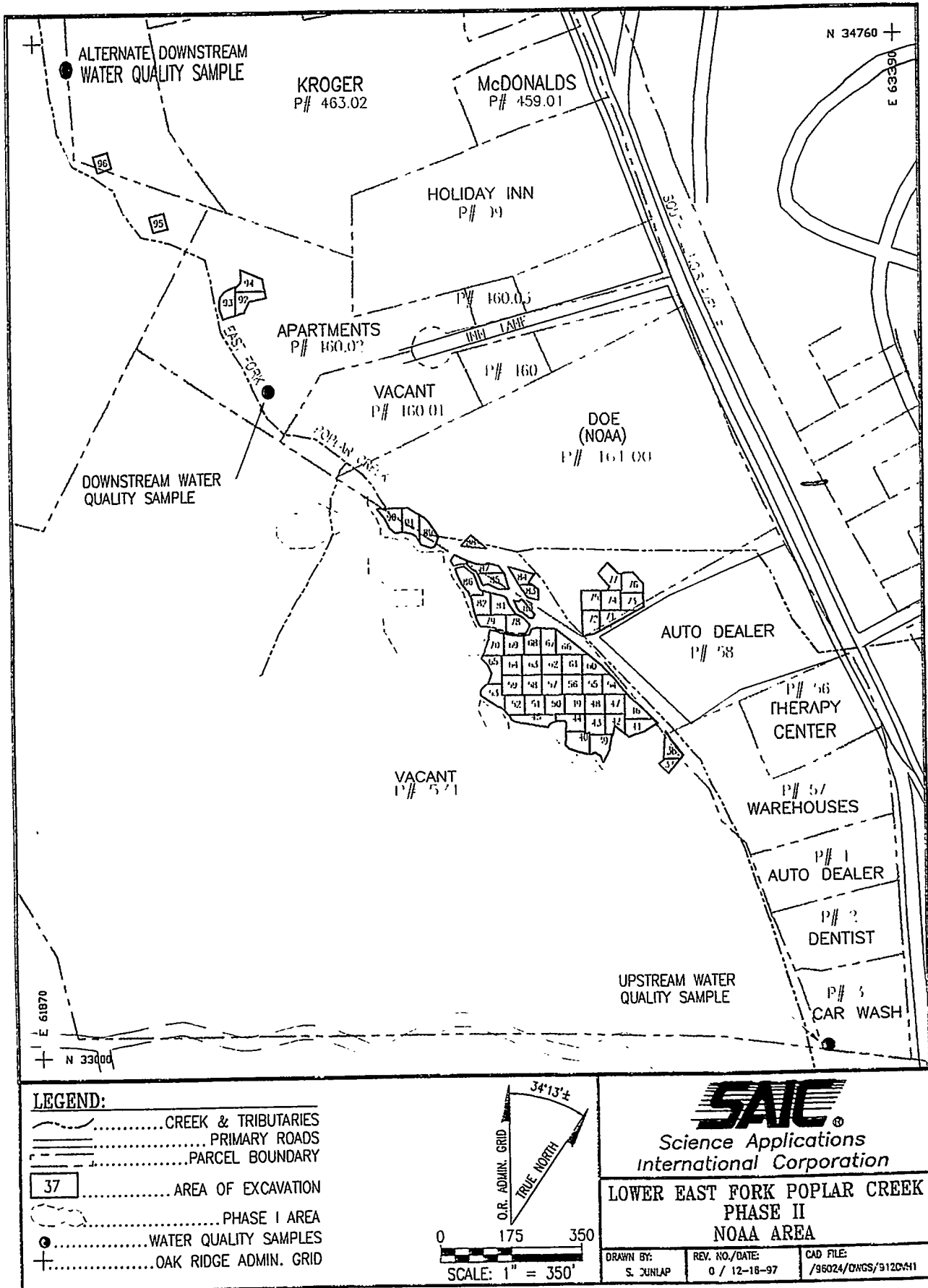


Fig. 2.2. LEFPC Phase II remedial action excavation areas and ECUs at the NOAA facility.

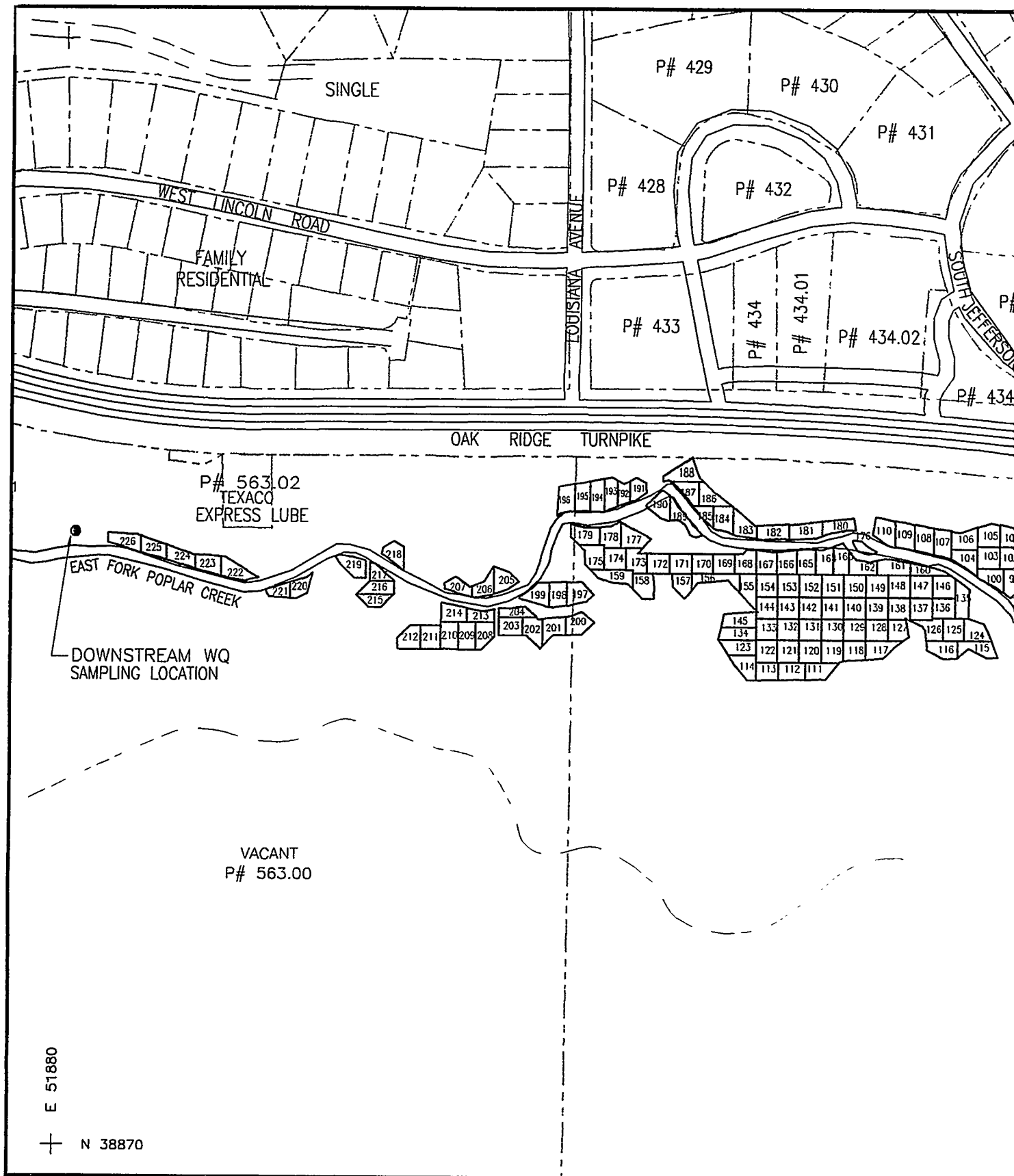
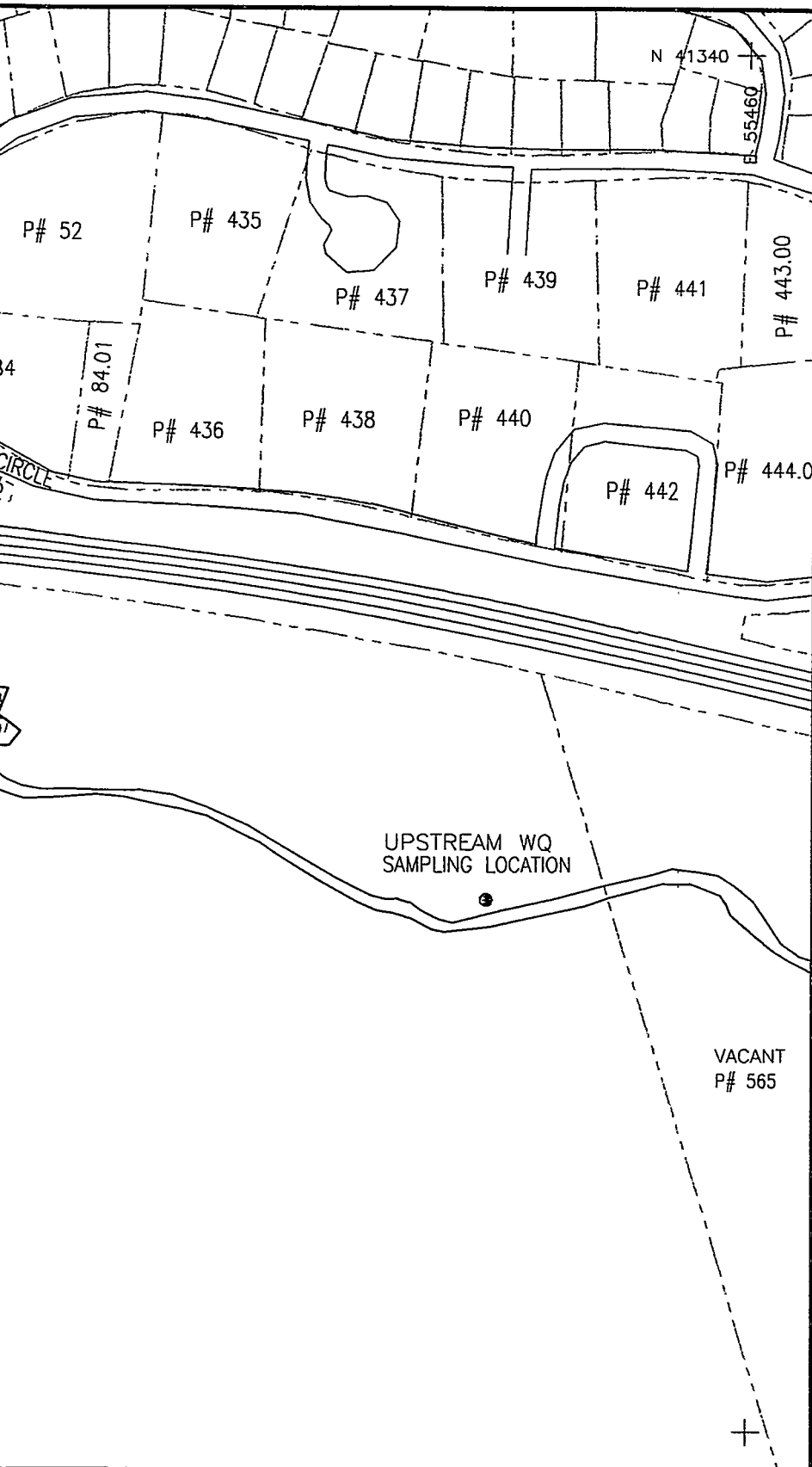
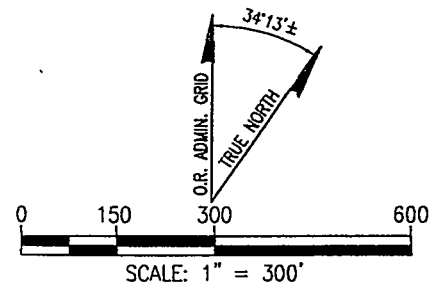


Fig. 2.3. LEFPC Phase II remedial action excavations

**LEGEND:**

- CREEK & TRIBUTARIES
 PRIMARY ROADS
 SECONDARY ROADS
 PARCEL BOUNDARY
 [115] EXCAVATION CONFIRMATION UNITS
 PHASE II
 O. WATER QUALITY SAMPLING LOCATION
 + OAK RIDGE ADMIN. GRID



SAIC

Science Applications
International Corporation

**LOWER EAST FORK
POPLAR CREEK, PHASE II
BRUNER AREA**

REVISION	DRAWN BY:	CHKD. BY:	DATE:
0	S. DUNLAP	A. BAILEY	01-21-98

XREFERENCES	PLOT FILES
/BASE/0RR/S16A/S16RDS /96024/XREF/PAR-93	/96024/PLOT/9120V12.PLT

SHT 1 OF 1
DRAWING #

/96024/DWGS/A180VH2
CAD FILE #

Table 2.1. Confirmation sampling summary for Phase II

ECU	Units	Sampling Station						Std.		μ_{α}^*	Clean/Dirty*
		1	2	3	4	5	6	Mean*	Deviation		
ECU037	UG/G	22	11.1	216.2	118	106.2		94.7	83.2	182	Clean
ECU038	UG/G	213.7	249.1	82.9	25.2	24.4		119.1	106.0	231	Clean
ECU039	UG/G	6.4	103.1	1	5.4	66.2		36.4	46.0	85	Clean
ECU040	UG/G	4.9	7.5	20.7	3.3	1		7.5	7.8	16	Clean
ECU041	UG/G	15.7	34.6	39.5	214.1	11.5		63.1	85.3	153	Clean
ECU042	UG/G	52	70.9	78.9	97.8	17.8		63.5	30.4	95	Clean
ECU043	UG/G	1	5.9	1	184			48.0	90.7	155	Clean
ECU044	UG/G	8.1	17.6	1	26.1			13.2	11.0	26	Clean
ECU045	UG/G	86.3	10.6	3	15.3			28.8	38.7	74	Clean
ECU046	UG/G	246.7	31.7	25.2	6.3			77.5	113.3	211	Clean
ECU047	UG/G	5	111.2	1	31.3			37.1	51.2	97	Clean
ECU048	UG/G	59.5	112	1	76.3			62.2	46.3	117	Clean
ECU049	UG/G	13.3	159.7	17.4	125.7			79.0	74.8	167	Clean
ECU050	UG/G	362.7	20.4	42.4	66.5			123.0	160.9	312	Clean
ECU051	UG/G	43.2	269.8	27.8	10.2			87.8	122.1	231	Clean
ECU052	UG/G	9.8	113.7	19.6	22.7			41.5	48.5	98	Clean
ECU053	UG/G	9.6	99.7	4.6	1			28.7	47.4	85	Clean
ECU054	UG/G	8	7.7	321.7	12.6			87.5	156.1	271	Clean
ECU055	UG/G	1	38.9	325.8	1			91.7	157.1	277	Clean
ECU056	UG/G	1	1	195.1	302.5			124.9	149.6	301	Clean
ECU057	UG/G	1	1	8.5	16.6			6.8	7.4	16	Clean
ECU058	UG/G	23.3	66.3	87.3	1			44.5	39.4	91	Clean
ECU059	UG/G	9.4	11.1	14.2	4.9			9.9	3.9	14	Clean
ECU060	UG/G	29.3	3.4	1	88.2			30.5	40.6	78	Clean
ECU061	UG/G	3.1	1	4	1			2.3	1.5	4	Clean
ECU062	UG/G	54.4	1	6.2	38.6			25.1	25.7	55	Clean
ECU063	UG/G	46.6	23.7	4	4.8			19.8	20.1	43	Clean
ECU064	UG/G	73.4	101.2	37.3	8			55.0	40.8	103	Clean
ECU065	UG/G	5.8	63.6	6.5	111.6			46.9	50.9	107	Clean
ECU066	UG/G	30.1	1	386.8	216.4			158.6	179.6	370	Clean
ECU067	UG/G	1	1	4.9	376.9			96.0	187.3	316	Clean
ECU068	UG/G	7.5	1	1	12.6			5.5	5.6	12	Clean
ECU069	UG/G	1	1	1	15.6			4.7	7.3	13	Clean
ECU070	UG/G	4.4	16.7	8.2	1			7.6	6.8	16	Clean
ECU071	UG/G	89.3	84.5	1	1			44.0	49.6	102	Clean
ECU072	UG/G	31.7	41.9	3.1	3.6			20.1	19.8	43	Clean
ECU073	UG/G	1	4.8	7	10.4			5.8	3.9	10	Clean
ECU074	UG/G	3	1	10.3	17.6			8.0	7.6	17	Clean
ECU075	UG/G	15.3	4.8	1	10.4			7.9	6.3	15	Clean
ECU076	UG/G	4.3	7.9	1	1	1		3.0	3.1	6	Clean
ECU077	UG/G	1	8.3	121	1			32.8	58.9	102	Clean
ECU078	UG/G	27.6	25.9	280.2	22.4			89.0	127.5	239	Clean
ECU079	UG/G	4	152.8	1	5.8			40.9	74.6	129	Clean
ECU080	UG/G	40.2	235	192.6	1			117.2	114.0	251	Clean
ECU081	UG/G	339.8	25.3	28.6	26.9			105.2	156.4	289	Clean
ECU082	UG/G	27	125.2	1	6			39.8	58.0	108	Clean
ECU083	UG/G	199.3	16	250.7	85	1	2.6	92.4	108.4	197	Clean
ECU084	UG/G	283.6	370.3	1	10.2	11.9		135.4	177.6	322	Clean
ECU085	UG/G	10.1	54.7	5.7	30.1			25.2	22.4	51	Clean
ECU086	UG/G	97.1	236	35.5	15.9			96.1	99.5	213	Clean
ECU087	UG/G	1	11	234.8	43.8			72.7	109.6	202	Clean
ECU088	UG/G	7.8	72.8	6.8	1			22.1	33.9	62	Clean
ECU089	UG/G	37.4	136.6	7.1	23.5			51.2	58.3	120	Clean
ECU090	UG/G	7.1	17.1	1	36.7	5.5		13.5	14.3	28	Clean
ECU091	UG/G	33.2	1	32.5	25			22.9	15.1	41	Clean
ECU092	UG/G	10.1	90.3	5.7	24.4			32.6	39.3	79	Clean

Table 2.1 (continued)

ECU093	UG/G	1	1	4.2	1			1.8	1.6	4	Clean
ECU094	UG/G	73.5	20.9	3.3	27.8			31.4	29.9	67	Clean
ECU095	UG/G	15.8	1	1	5.4			5.8	7.0	14	Clean
ECU096	UG/G	6	1	3.3	4.1			3.6	2.1	6	Clean
ECU097	UG/G	253	17.2	15.1	33.8	3.2		64.5	106.0	176	Clean
ECU098	UG/G	4.6	157.4	10.3	1	1		34.9	68.6	107	Clean
ECU099	UG/G	182.3	103.7	6	14.2	4.9		62.2	78.9	145	Clean
ECU100	UG/G	211.7	165.7	1	1			94.9	110.0	224	Clean
ECU101	UG/G	10.5	12.7	49.1	1			18.3	21.1	43	Clean
ECU102	UG/G	6.7	17.8	220.7	265.3	1		102.3	129.5	239	Clean
ECU103	UG/G	33.2	108.1	4.3	30.1			43.9	44.7	97	Clean
ECU104	UG/G	120.4	28.1	275.1	1			106.2	123.7	252	Clean
ECU105	UG/G	28.6	1	1	1	1		6.5	12.3	20	Clean
ECU106	UG/G	12.5	9.3	4.2	1			6.8	5.1	13	Clean
ECU107	UG/G	373	62.3	3.6	11			112.5	175.6	319	Clean
ECU108	UG/G	6.5	74.1	4.7	3.3			22.2	34.7	63	Clean
ECU109	UG/G	79.1	51.7	1	1			33.2	38.8	79	Clean
ECU110	UG/G	7.7	40.8	3.7	2.6	1		11.2	16.8	29	Clean
ECU111	UG/G	48.1	20.7	47.1	78.3			48.6	23.5	76	Clean
ECU112	UG/G	89.1	12.3	33.2	9.5			36.0	36.9	79	Clean
ECU113	UG/G	26	23.1	346	9.1			101.1	163.5	293	Clean
ECU114	UG/G	1	29.3	1	22.1			13.4	14.6	30	Clean
ECU115	UG/G	1	1	166.2	125	1		58.8	80.5	144	Clean
ECU116	UG/G	98.6	327.1	180.5	125.2			182.9	102.0	303	Clean
ECU117	UG/G	10.8	18.7	209.5	20			64.8	96.6	178	Clean
ECU118	UG/G	1	9.1	15.3	69.4			23.7	31.0	60	Clean
ECU119	UG/G	22.6	139.1	37	17.7			54.1	57.3	121	Clean
ECU120	UG/G	15.2	159.8	53.5	14.8			60.8	68.4	141	Clean
ECU121	UG/G	78.3	13.1	22	37			37.6	28.9	72	Clean
ECU122	UG/G	97.6	60	133.7	89.7			95.3	30.3	131	Clean
ECU123	UG/G	62.8	9	64.4	1			34.3	34.0	74	Clean
ECU124	UG/G	5.1	154.9	70.9	358			147.2	153.3	328	Clean
ECU125	UG/G	113.5	24.6	163.3	192.1			123.4	73.4	210	Clean
ECU126	UG/G	352.7	157	121.6	135.2	20.8		157.5	121.0	285	Clean
ECU127	UG/G	168.2	5.7	415	31.7			155.2	187.3	376	Clean
ECU128	UG/G	68.1	162.8	325.2	95.3			162.9	115.3	299	Clean
ECU129	UG/G	43.2	16.4	16.5	38.5			28.7	14.2	45	Clean
ECU130	UG/G	17.3	190.3	7.4	10			56.3	89.5	162	Clean
ECU131	UG/G	1	18.9	15.5	1			9.1	9.5	20	Clean
ECU132	UG/G	78.2	79.3	32.9	164.4			88.7	54.9	153	Clean
ECU133	UG/G	5.3	7	6.6	4.3			5.8	1.2	7	Clean
ECU134	UG/G	4.8	4.6	133.1	15.9			39.6	62.6	113	Clean
ECU135	UG/G	108.9	30.2	82.7	8			57.5	46.4	112	Clean
ECU136	UG/G	19.7	26.5	51.5	90.9			47.2	32.2	85	Clean
ECU137	UG/G	9.7	97.9	173.3	27.3			77.1	74.6	165	Clean
ECU138	UG/G	190.2	28.2	22.1	59.4			75.0	78.5	167	Clean
ECU139	UG/G	49.5	81.1	5.2	28.7			41.1	32.2	79	Clean
ECU140	UG/G	6.4	11.6	5.4	62.3			21.4	27.4	54	Clean
ECU141	UG/G	291.8	84.8	37.9	74.9			122.4	114.8	257	Clean
ECU142	UG/G	37.3	86.6	68.7	23.2			54.0	28.9	88	Clean
ECU143	UG/G	274.6	211.1	320.9	68.4			218.8	109.9	348	Clean
ECU144	UG/G	57.1	178.7	31.1	21.1			72.0	72.7	158	Clean
ECU145	UG/G	58.1	19.2	5.6	24			26.7	22.3	53	Clean
ECU146	UG/G	108.7	192.6	285.2	63.7			162.6	97.7	277	Clean
ECU147	UG/G	153.7	144.1	9.2	95.5			100.6	66.1	178	Clean
ECU148	UG/G	76.2	102.4	42.7	282.8			126.0	107.3	252	Clean
ECU149	UG/G	103.6	1	224.6	87.1			104.1	92.1	212	Clean
ECU150	UG/G	144	184.5	242.4	9.6			145.1	99.0	262	Clean

Table 2.1 (continued)

ECU151	UG/G	5.9	351.6	241.5	92.2			172.8	153.9	354	Clean
ECU152	UG/G	68.7	4.1	71	10.1			38.5	36.3	81	Clean
ECU153	UG/G	91.7	46.4	64.1	5.1			51.8	36.3	95	Clean
ECU154	UG/G	14.3	8.9	326.6	322.3			168.0	180.6	381	Clean
ECU155	UG/G	25.1	235.8	5	241.1	9.1		103.2	123.7	233	Clean
ECU156	UG/G	36.1	35.8	22.7	12	386.8		98.7	161.4	268	Clean
ECU157	UG/G	262.6	1	102.1	6.6			93.1	122.2	237	Clean
ECU158	UG/G	202.6	84.1	7.2	66.5	30.4		78.2	75.8	158	Clean
ECU159	UG/G	69.8	87.3	1	210	126.7		99.0	76.9	180	Clean
ECU160	UG/G	141	153.9	20.5	400			178.9	159.2	366	Clean
ECU161	UG/G	284.9	221	24.2	316.6			211.7	131.2	366	Clean
ECU162	UG/G	269.2	357	19.8	1			161.8	178.6	372	Clean
ECU163	UG/G	24.3	9.1	417.2	1			112.9	203.1	352	Clean
ECU164	UG/G	234.7	22.9	1	272.1			132.7	140.5	298	Clean
ECU165	UG/G	37.8	13.5	198.9	1			62.8	92.0	171	Clean
ECU166	UG/G	43.9	1	3.8	371.7			105.1	178.8	315	Clean
ECU167	UG/G	1	1	15.4	11.4			7.2	7.3	16	Clean
ECU168	UG/G	9.4	37.2	57.9	28.2			33.2	20.1	57	Clean
ECU169	UG/G	32.2	26.6	42.8	45.8			36.9	9.0	47	Clean
ECU170	UG/G	36.7	72	42.5	23.2	249		84.7	93.6	183	Clean
ECU171	UG/G	20.8	12.7	6.9	67.5	7		23.0	25.5	50	Clean
ECU172	UG/G	8.1	1	1	1	6.9		3.6	3.6	7	Clean
ECU173	UG/G	71.2	7.4	5.4	1			21.3	33.4	61	Clean
ECU174	UG/G	4.2	53.6	107.3	6.3			42.9	48.6	100	Clean
ECU175	UG/G	6.2	3.5	1	59.5			17.6	28.0	51	Clean
ECU176	UG/G	19.4	10	305	1			83.9	147.6	258	Clean
ECU177	UG/G	8.4	8.8	1	3.7	182.7		40.9	79.3	124	Clean
ECU178	UG/G	5.5	335.8	1	4			86.6	166.2	282	Clean
ECU179	UG/G	6.8	27.6	6.2	4.7			11.3	10.9	24	Clean
ECU180	UG/G	128.8	86.9	8.1	1			56.2	62.1	129	Clean
ECU181	UG/G	1	185.5	1	5.6			48.3	91.5	156	Clean
ECU182	UG/G	356	1	4.5	1			90.6	176.9	299	Clean
ECU183	UG/G	7.1	1	2.5	4.9			3.9	2.7	7	Clean
ECU184	UG/G	1	43.4	1	1			11.6	21.2	37	Clean
ECU185	UG/G	2.8	1	38.9	3.1			11.5	18.3	33	Clean
ECU186	UG/G	54.9	8.9	5.1	5.2	14.9		17.8	21.1	40	Clean
ECU187	UG/G	6.4	53.8	17.6	21.5			24.8	20.3	49	Clean
ECU188	UG/G	6.7	1	4.4	1	4.1		3.4	2.4	6	Clean
ECU189	UG/G	1	1	6.5	1			2.4	2.8	6	Clean
ECU190	UG/G	1	1	1	14.1			4.3	6.6	12	Clean
ECU191	UG/G	37.8	1	95.9	52.7			46.9	39.3	93	Clean
ECU192	UG/G	1	4.6	1	6.3			3.2	2.7	6	Clean
ECU193	UG/G	1	1	4	12.6			4.7	5.5	11	Clean
ECU194	UG/G	19.5	1	10	3.6			8.5	8.2	18	Clean
ECU195	UG/G	6.1	9.1	4.1	12.9			8.1	3.8	13	Clean
ECU196	UG/G	3.4	17.6	123.9	8.8			38.4	57.3	106	Clean
ECU197	UG/G	1	380.9	4.3	4.1	5.8		79.2	168.7	257	Clean
ECU198	UG/G	40.1	39	38.7	33.5			37.8	2.9	41	Clean
ECU199	UG/G	136.8	8.7	1	65.7	10.5		44.5	57.7	105	Clean
ECU200	UG/G	1	1	6	6			3.5	2.9	7	Clean
ECU201	UG/G	7.8	51.3	10.3	173.7			60.8	77.9	152	Clean
ECU202	UG/G	1	350.5	15.1	5.8			93.1	171.7	295	Clean
ECU203	UG/G	1	26	396.9	195.2	320.4		187.9	175.0	372	Clean
ECU204	UG/G	75.2	5.7	8.6	72.5	24.2		37.2	34.2	73	Clean
ECU205	UG/G	8.2	9.9	31.5	17.6			16.8	10.6	29	Clean
ECU206	UG/G	153.5	54.4	18.2	11.5			59.4	65.5	136	Clean
ECU207	UG/G	56.8	26.4	3.3	12.5			24.8	23.4	52	Clean
ECU208	UG/G	11.2	9.6	24.8	45.9	58		29.9	21.4	52	Clean

Table 2.1 (continued)

ECU209	UG/G	1	1	99.5	1			25.6	49.3	84	Clean
ECU210	UG/G	40.9	6	20.1	138.8			51.5	60.0	122	Clean
ECU211	UG/G	287.6	1	4.5	84.8			94.5	134.4	253	Clean
ECU212	UG/G	1	1	348.2	261.9			153.0	179.0	364	Clean
ECU213	UG/G	7.3	42.5	10.9	7.6	8.7		15.4	15.2	31	Clean
ECU214	UG/G	1	11.9	8.7	98.7			30.1	46.0	84	Clean
ECU215	UG/G	1	1	21.9	1			6.2	10.5	19	Clean
ECU216	UG/G	1	1	2.8	1	17.1		4.6	7.0	12	Clean
ECU217	UG/G	12	1	1	1	6.5		4.3	4.9	9	Clean
ECU218	UG/G	1	1	6.4	1			2.4	2.7	6	Clean
ECU219	UG/G	1	8.1	1	59.8	22.9		18.6	24.7	45	Clean
ECU220	UG/G	25.1	1	1	1			7.0	12.1	21	Clean
ECU221	UG/G	6.5	1	64.9	11.1			20.9	29.6	56	Clean
ECU222	UG/G	1	25.1	10.5	21.3			14.5	10.9	27	Clean
ECU223	UG/G	195.8	1	13	3.7			53.4	95.1	165	Clean
ECU224	UG/G	9.5	1	48.2	1			14.9	22.5	41	Clean
ECU225	UG/G	1	4.3	1	16.7			5.8	7.5	15	Clean
ECU226	UG/G	6.8	1	21.3	29.9			14.8	13.2	30	Clean
ECU = Excavation Confirmation Unit											
Station = Sampling location within the ECU											
Mean* = The mean was calculated using the final primary samples. It does not include replicate samples.											
μ_{α}^*	This value expresses the upper one-sided 100 (1- α) percent confidence limit around the mean										
	and is used to determine the success of the remedial clean-up effort by applying a confidence										
	estimate (95%) to the null and alternative hypothesis.										
*Clean/Dirty =	If $\mu_{\alpha} < 400$, then the ECU is clean										
	If $\mu_{\alpha} > 400$ or = 400, then the ECU is dirty										

To show that the clean-up standard was achieved for an ECU, the mean value and the standard deviation of the final primary mercury concentrations were calculated and inserted into the aforementioned equation. The result was then compared to the 400 ppm clean-up criteria. If the result was < 400 ppm, the ECU was determined to be clean, however, if the result was ≥ 400 ppm, the ECU was determined to be dirty and further remediation of the soils required.

As Table 2.1 demonstrates, at the conclusion of all excavation activities, the value of each ECU was below the < 400 ppm criteria. Therefore, it can be stated, with 95 % confidence, that the areas excavated during the LEFPC Phase II remedial effort at both the NOAA and Bruner Sites were successfully remediated.

2.2 CREEK WATER SAMPLING

Creek water samples were collected from the LEFPC during the Phase II RA to monitor the water quality to ensure that the remedial activities were not adversely impacting the creek. The samples were collected from stationary locations upstream and downstream at the NOAA and Bruner Sites on a daily basis during remediation and through renovation activities. An additional downstream sampling location was included at the NOAA Site to accommodate the two separate areas being remediated. The sampling locations are shown on Figs. 2.2 and 2.3, respectively. Following the requirements of the *Sampling and Analysis Plan for Treatment Water and Creek Water for the Lower East Fork Poplar Creek Operable Unit, Oak Ridge, Tennessee*, Y/ER-261 (SAIC 1996b), sampling activities included an initial sampling event prior to beginning remedial activities at each site to establish site background data, site preparation sampling events, and daily sampling during site remedial/renovation activities.

Background water quality samples were analyzed for a full suite of analytes including metals/mercury, semivolatiles, pesticides/polychlorinated biphenyls (PCBs), radiological, BOD/DO, alkalinity/anions, and nitrogen along with field parameters of pH, conductivity, temperature, and turbidity. During site preparation activities, samples were collected and analyzed for metals/mercury and field parameters. On a daily basis, the creek water quality was monitored for metals/mercury and field parameters. Once a week, typically on Tuesday, the full suite of analytes discussed previously was added to the monitoring list. During Phase II, QA/QC samples were collected at a rate of 10%. All samples collected were analyzed by the SAIC subcontracted off-site analytical laboratory. A complete set of analytical data is provided in Appendix C with summaries for the Bruner and NOAA Sites provided in Tables 2.2 and 2.3, respectively.

At the Bruner Site, background samples were collected on March 10, 1997, site preparation samples collected the weeks of March 10, 1997 and March 17, 1997. Daily water sampling began on March 25, 1997 and continued over a 27-week period until October 2, 1997. At the NOAA Site, background samples were collected on April 3, 1997, with site preparation samples collected the weeks of April 7 and 14, 1997. Daily sampling began at the NOAA Site on May 13, 1997, and continued over a 21-week period until October 9, 1997.

Creek water data were reviewed by performing a comparison of upstream verses downstream results and to background values, with the primary focus on mercury data. When greater than average values were noted, excavation activities were reviewed along with meteorological data. Throughout the RA, several occasions of elevated mercury levels were noted. Many of these events were determined to be related to precipitation in the area such as the 50-year flood event that occurred on

Table 2.2. Phase II surface water summary–Bruner Site

		Station						
		Upstream or			Total No.			
Inorganics	Units	Downstream	Background	Qual	Collected	Minimum	Maximum	Average
Aluminum	UG/L	Up	218.0	J	144	49.5	1260.0	217.2
		Down	288.0	J	143	64.7	2220.0	268.0
Antimony	UG/L	Up	2.3	U	144	0.7	4.6	2.2
		Down	2.3	U	144	0.7	4.7	2.3
Arsenic	UG/L	Up	2.9	U	144	1.4	5.4	3.0
		Down	2.9	U	144	1.2	5.2	3.1
Barium	UG/L	Up	31.9	=	144	29.0	55.2	43.4
		Down	31.7	=	144	31.3	56.9	43.8
Beryllium	UG/L	Up	0.1	U	144	0.1	0.5	0.2
		Down	0.1	U	144	0.1	0.4	0.2
Boron	UG/L	Up	25.4	U	144	22.4	266.0	74.4
		Down	31.5	U	143	24.8	1170.0	96.0
Cadmium	UG/L	Up	0.4	U	144	0.4	3.0	0.5
		Down	0.4	U	144	0.4	2.5	0.5
Calcium	UG/L	Up	35100.0	J	144	25300.0	51800.0	44328.5
		Down	34100.0	J	144	27700.0	54700.0	44400.0
Chromium	UG/L	Up	0.7	J	144	0.6	7.3	1.3
		Down	2.3	J	144	0.6	5.0	1.4
Cobalt	UG/L	Up	0.9	UJ	144	0.9	4.6	1.5
		Down	0.9	UJ	144	0.9	4.6	1.5
Copper	UG/L	Up	6.0	J	144	0.6	12.6	3.6
		Down	9.6	J	144	0.6	21.1	3.9
Iron	UG/L	Up	323.0	J	144	50.0	1770.0	247.3
		Down	447.0	J	144	62.4	3110.0	297.4
Lead	UG/L	Up	2.9	UJ	144	0.9	30.9	2.9
		Down	7.7	UJ	144	1.2	10.5	2.7
Magnesium	UG/L	Up	7110.0	=	144	4530.0	12900.0	10088.5
		Down	6450.0	=	144	4420.0	12500.0	10023.3
Manganese	UG/L	Up	36.1	=	144	14.7	143.0	36.8
		Down	42.9	=	144	17.5	167.0	40.3
Mercury	UG/L	Up	0.3	=	144	0.1	2.6	0.3
		Down	0.5	=	144	0.1	3.0	0.4
Molybdenum	UG/L	Up	2.2	U	144	1.7	14.9	3.5
		Down	2.2	U	144	1.7	13.8	3.6
Nickel	UG/L	Up	2.3	UJ	144	1.4	14.6	2.6
		Down	1.9	UJ	144	1.4	85.5	3.2
Potassium	UG/L	Up	1250.0	J	144	1270.0	3010.0	1676.4
		Down	1250.0	J	144	1220.0	3050.0	1690.6
Selenium	UG/L	Up	3.2	U	144	1.5	3.7	3.3
		Down	3.2	U	144	1.6	5.1	3.4
Silica	UG/L	Up	5090.0	J	144	3810.0	8370.0	6628.6
		Down	4730.0	J	144	3880.0	10200.0	6638.5
Silver	UG/L	Up	0.9	U	144	0.7	10.2	1.2
		Down	0.9	U	144	0.7	13.9	1.3
Sodium	UG/L	Up	4650.0	=	144	2800.0	14000.0	6328.8
		Down	4360.0	=	144	2430.0	16400.0	6314.2
Thallium	UG/L	Up	3.5	=	144	0.9	7.6	4.2
		Down	3.5	U	144	0.9	9.5	4.4
Vanadium	UG/L	Up	1.1	U	144	0.7	5.8	1.1
		Down	1.1	U	144	0.7	5.4	1.2
Zinc	UG/L	Up	24.0	J	144	5.4	75.5	15.8
		Down	21.8	J	144	4.3	80.3	14.3

Table 2.2 (continued)

		Station						
		Upstream or			Total No.			
Miscellaneous	Units	Downstream	Background	Qual	Collected	Minimum	Maximum	Average
Alkalinity	MG/L	Up	116.0	=	28	83.5	141.0	119.1
		Down	102.0	=	28	81.2	135.0	118.9
Bromide	MG/L	Up	0.3	U	28	0.3	0.3	0.3
		Down	0.3	U	28	0.3	0.3	0.3
Chloride	MG/L	Up	7.8	=	28	4.1	11.0	8.3
		Down	6.9	=	28	3.6	11.3	8.1
Fluoride	MG/L	Up	0.5	U	28	0.3	0.5	0.4
		Down	0.5	U	28	0.3	0.5	0.4
Orthophosphate	MG/L	Up	0.3	UJ	28	0.3	0.4	0.3
		Down	0.3	UJ	28	0.3	0.6	0.3
Sulfate	MG/L	Up	18.9	=	28	13.0	39.7	27.1
		Down	15.6	=	28	12.2	40.2	26.7
Suspended Solids	MG/L	Up	6.5	J	28	5.0	27.0	7.0
		Down	9.0	=	28	5.0	50.0	12.3
Phenol	UG/L	Up	10.0	U	28	10.0	11.0	10.2
		Down	10.0	U	28	10.0	11.0	10.0
Ammonia	MG/L	Up	0.1	U	28	0.1	0.1	0.1
		Down	0.1	U	28	0.1	0.1	0.1
Kjeldahl Nitrogen	MG/L	Up	0.2	=	28	0.1	0.4	0.2
		Down	0.1	=	28	0.1	0.5	0.2
Nitrate/Nitrite	MG-N/	Up	1.4	=	27	1.0	3.9	1.7
		Down	1.1	=	27	1.0	3.2	1.7
Total Phosphate as Phosphorus	MG/L	Up	0.1	=	28	0.1	0.3	0.1
		Down	0.1	=	28	0.1	0.2	0.1
Biochemical Oxygen Demand (BOD)	MG/L	Up	1.0	U	28	1.0	159.0	7.0
		Down	1.0	U	28	1.0	29.0	2.4

Table 2.2 (continued)

		Station						
		Upstream or			Total No.			
Pesticide/PCBs	Units	Downstream	Background	Qual	Collected	Minimum	Maximum	Average
4,4'-DDD	UG/L	Up	0.1	U	28	0.1	0.1	0.1
		Down	0.1	U	28	0.1	0.1	0.1
4,4'-DDE	UG/L	Up	0.1	U	28	0.1	0.1	0.1
		Down	0.1	U	28	0.1	0.1	0.1
4,4'-DDT	UG/L	Up	0.1	U	28	0.1	0.1	0.1
		Down	0.1	U	28	0.1	0.1	0.1
Aldrin	UG/L	Up	0.1	U	28	0.1	0.1	0.1
		Down	0.1	U	28	0.1	0.1	0.1
Dieldrin	UG/L	Up	0.1	U	28	0.1	0.1	0.1
		Down	0.1	U	28	0.1	0.1	0.1
Endosulfan I	UG/L	Up	0.1	U	28	0.1	0.1	0.1
		Down	0.1	U	28	0.1	0.1	0.1
Endosulfan II	UG/L	Up	0.1	U	28	0.1	0.1	0.1
		Down	0.1	U	28	0.1	0.1	0.1
Endosulfan sulfate	UG/L	Up	0.1	U	28	0.1	0.1	0.1
		Down	0.1	U	28	0.1	0.1	0.1
Endrin	UG/L	Up	0.1	U	28	0.1	0.1	0.1
		Down	0.1	U	28	0.1	0.1	0.1
Endrin aldehyde	UG/L	Up	0.1	U	27	0.1	0.1	0.1
		Down	0.1	U	27	0.1	0.1	0.1
Endrin ketone	UG/L	Up	0.1	U	28	0.1	0.1	0.1
		Down	0.1	U	28	0.1	0.1	0.1
Heptachlor	UG/L	Up	0.1	U	28	0.1	0.1	0.1
		Down	0.1	U	28	0.1	0.1	0.1
Heptachlor epoxide	UG/L	Up	0.1	U	28	0.1	0.1	0.1
		Down	0.1	U	28	0.1	0.1	0.1
Lindane	UG/L	Up	0.1	U	28	0.1	0.1	0.1
		Down	0.1	U	28	0.1	0.1	0.1
Methoxychlor	UG/L	Up	0.5	U	28	0.5	0.5	0.5
		Down	0.5	U	28	0.5	0.6	0.5
PCB-1016	UG/L	Up	1.0	U	28	1.0	1.1	1.0
		Down	1.0	U	28	1.0	1.1	1.0
PCB-1221	UG/L	Up	2.1	U	28	2.0	2.2	2.1
		Down	2.1	U	28	2.0	2.2	2.1
PCB-1232	UG/L	Up	1.0	U	28	1.0	1.1	1.0
		Down	1.0	U	28	1.0	1.1	1.0
PCB-1242	UG/L	Up	1.0	U	28	1.0	1.1	1.0
		Down	1.0	U	28	1.0	1.1	1.0
PCB-1248	UG/L	Up	1.0	U	28	1.0	1.1	1.0
		Down	1.0	U	28	1.0	1.1	1.0
PCB-1254	UG/L	Up	1.0	U	28	1.0	1.1	1.0
		Down	1.0	U	28	1.0	1.1	1.0
PCB-1260	UG/L	Up	1.0	U	28	1.0	1.1	1.0
		Down	1.0	U	28	1.0	1.1	1.0
Toxaphene	UG/L	Up	5.2	U	28	5.0	5.4	5.2
		Down	5.2	U	28	5.0	5.6	5.2
alpha-BHC	UG/L	Up	0.1	U	28	0.1	0.1	0.1
		Down	0.1	U	28	0.1	0.1	0.1
alpha-Chlordane	UG/L	Up	0.1	U	28	0.1	0.1	0.1
		Down	0.1	U	28	0.1	0.1	0.1
beta-BHC	UG/L	Up	0.1	U	28	0.1	0.1	0.1
		Down	0.1	U	28	0.1	0.1	0.1
delta-BHC	UG/L	Up	0.1	U	28	0.1	0.1	0.1
		Down	0.1	U	28	0.1	0.1	0.1
gamma-Chlordane	UG/L	Up	0.1	U	28	0.1	0.1	0.1
		Down	0.1	U	28	0.1	0.1	0.1

Table 2.2 (continued)

		Station						
		Upstream or			Total No.			
Radiological	Units	Downstream	Background	Qual	Collected	Minimum	Maximum	Average
Alpha activity	PCI/L	Up	6.7	J	29	3.5	9.9	6.0
		Down	7.0	J	29	3.0	11.9	6.7
Americium-241	PCI/L	Up	0.9	J	29	0.0	15.9	1.0
		Down	0.6	J	29	0.0	15.7	1.5
Beta activity	PCI/L	Up	3.5	=	29	2.8	7.4	5.4
		Down	3.8	=	29	2.5	8.3	5.5
Cesium-137	PCI/L	Up	1.0	U	29	-2.7	3.9	0.3
		Down	0.5	U	29	-3.6	3.8	0.2
Cobalt-60	PCI/L	Up	-1.1	U	29	-0.9	2.5	0.8
		Down	-1.4	U	29	-2.4	2.8	0.1
Neptunium-237	PCI/L	Up	0.1	U	28	0.0	1.0	0.2
		Down	0.1	U	28	0.0	0.5	0.2
Plutonium-238	PCI/L	Up	-0.6	U	28	-0.9	3.8	0.2
		Down	0.2	U	28	-1.0	1.1	0.1
Plutonium-239	PCI/L	Up	0.1	U	28	0.0	1.6	0.2
		Down	0.1	U	28	0.0	0.6	0.2
Protactinium-233	PCI/L	Up	-1.6	U	29	-3.2	1.6	-0.4
		Down	-1.6	U	29	-5.7	2.7	-0.7
Thorium-228	PCI/L	Up	0.2	U	29	0.0	0.3	0.1
		Down	0.1	U	29	0.0	2.6	0.2
Thorium-230	PCI/L	Up	0.5	J	29	0.1	3.1	0.7
		Down	0.7	J	29	0.1	3.1	0.8
Thorium-232	PCI/L	Up	0.2	J	29	0.0	0.5	0.1
		Down	0.3	J	29	0.0	2.8	0.2
Uranium-234	PCI/L	Up	2.3	=	29	1.2	3.1	2.2
		Down	2.8	=	29	1.5	3.5	2.3
Uranium-235	PCI/L	Up	0.2	UJ	29	0.0	0.8	0.2
		Down	0.3	UJ	29	0.0	0.4	0.2
Uranium-238	PCI/L	Up	4.8	=	29	1.7	6.2	3.8
		Down	5.3	=	29	1.7	7.7	4.1

Table 2.2 (continued)

		Station						
		Upstream or			Total No.			
Semivolatile Organics	Units	Downstream	Background	Qual	Collected	Minimum	Maximum	Average
1,2,4-Trichlorobenzene	UG/L	Up	10.0	U	28	10.0	11.0	10.2
		Down	10.0	U	28	10.0	11.0	10.0
1,2-Dichlorobenzene	UG/L	Up	10.0	U	28	10.0	11.0	10.2
		Down	10.0	U	28	10.0	11.0	10.0
1,3-Dichlorobenzene	UG/L	Up	10.0	U	28	10.0	11.0	10.2
		Down	10.0	U	28	10.0	11.0	10.0
1,4-Dichlorobenzene	UG/L	Up	10.0	U	28	10.0	11.0	10.2
		Down	10.0	U	28	10.0	11.0	10.0
2,4,5-Trichlorophenol	UG/L	Up	50.0	U	28	50.0	55.0	51.0
		Down	50.0	U	28	50.0	55.0	50.2
2,4,6-Trichlorophenol	UG/L	Up	10.0	U	28	10.0	11.0	10.2
		Down	10.0	U	28	10.0	11.0	10.0
2,4-Dichlorophenol	UG/L	Up	10.0	U	28	10.0	11.0	10.2
		Down	10.0	U	28	10.0	11.0	10.0
2,4-Dimethylphenol	UG/L	Up	10.0	U	28	10.0	11.0	10.2
		Down	10.0	U	28	10.0	11.0	10.0
2,4-Dinitrophenol	UG/L	Up	50.0	U	28	50.0	55.0	51.0
		Down	50.0	U	28	50.0	55.0	50.2
2,4-Dinitrotoluene	UG/L	Up	10.0	U	28	10.0	11.0	10.2
		Down	10.0	U	28	10.0	11.0	10.0
2,6-Dinitrotoluene	UG/L	Up	10.0	U	28	10.0	11.0	10.2
		Down	10.0	U	28	10.0	11.0	10.0
2-Chloronaphthalene	UG/L	Up	10.0	U	28	10.0	11.0	10.2
		Down	10.0	U	28	10.0	11.0	10.0
2-Chlorophenol	UG/L	Up	10.0	U	28	10.0	11.0	10.2
		Down	10.0	U	28	10.0	11.0	10.0
2-Methyl-4,6-dinitrophenol	UG/L	Up	50.0	U	28	50.0	55.0	51.0
		Down	50.0	U	28	50.0	55.0	50.2
2-Methylnaphthalene	UG/L	Up	10.0	U	28	10.0	11.0	10.2
		Down	10.0	U	28	10.0	11.0	10.0
2-Methylphenol	UG/L	Up	10.0	U	28	10.0	11.0	10.2
		Down	10.0	U	28	10.0	11.0	10.0
2-Nitrobenzenamine	UG/L	Up	50.0	U	28	50.0	55.0	51.0
		Down	50.0	U	28	50.0	55.0	50.2
2-Nitrophenol	UG/L	Up	10.0	U	28	10.0	11.0	10.2
		Down	10.0	U	28	10.0	11.0	10.0
3,3'-Dichlorobenzidine	UG/L	Up	20.0	U	28	20.0	22.0	20.4
		Down	20.0	U	28	20.0	22.0	20.1
3-Nitrobenzenamine	UG/L	Up	50.0	U	28	50.0	55.0	51.0
		Down	50.0	U	28	50.0	55.0	50.2
4-Bromophenyl phenyl ether	UG/L	Up	10.0	U	28	10.0	11.0	10.2
		Down	10.0	U	28	10.0	11.0	10.0
4-Chloro-3-methylphenol	UG/L	Up	10.0	U	28	10.0	11.0	10.2
		Down	10.0	U	28	10.0	11.0	10.0
4-Chlorobenzenamine	UG/L	Up	10.0	U	28	10.0	11.0	10.2
		Down	10.0	U	28	10.0	11.0	10.0
4-Chlorophenyl phenyl ether	UG/L	Up	10.0	U	28	10.0	11.0	10.2
		Down	10.0	U	28	10.0	11.0	10.0
4-Methylphenol	UG/L	Up	10.0	U	28	10.0	11.0	10.2
		Down	10.0	U	28	10.0	11.0	10.0
4-Nitrobenzenamine	UG/L	Up	50.0	U	28	50.0	55.0	51.0
		Down	50.0	U	28	50.0	55.0	50.2
4-Nitrophenol	UG/L	Up	50.0	U	28	50.0	55.0	51.0
		Down	50.0	U	28	50.0	55.0	50.2
Acenaphthene	UG/L	Up	10.0	U	28	10.0	11.0	10.2
		Down	10.0	U	28	10.0	11.0	10.0

Table 2.2 (continued)

		Station						
		Upstream or			Total No.			
Semivolatile Organics	Units	Downstream	Background	Qual	Collected	Minimum	Maximum	Average
Acenaphthylene	UG/L	Up	10.0	U	28	10.0	11.0	10.2
		Down	10.0	U	28	10.0	11.0	10.0
Anthracene	UG/L	Up	10.0	U	28	10.0	11.0	10.2
		Down	10.0	U	28	10.0	11.0	10.0
Benz(a)anthracene	UG/L	Up	10.0	U	28	10.0	11.0	10.2
		Down	10.0	U	28	10.0	11.0	10.0
Benzenemethanol	UG/L	Up	10.0	U	28	10.0	11.0	10.2
		Down	10.0	U	28	10.0	11.0	10.0
Benzo(a)pyrene	UG/L	Up	10.0	U	28	10.0	11.0	10.2
		Down	10.0	U	28	10.0	11.0	10.0
Benzo(b)fluoranthene	UG/L	Up	10.0	U	28	10.0	11.0	10.2
		Down	10.0	U	28	10.0	11.0	10.0
Benzo(ghi)perylene	UG/L	Up	10.0	U	28	10.0	11.0	10.2
		Down	10.0	U	28	10.0	11.0	10.0
Benzo(k)fluoranthene	UG/L	Up	10.0	U	28	10.0	11.0	10.2
		Down	10.0	U	28	10.0	11.0	10.0
Benzoic acid	UG/L	Up	50.0	U	28	50.0	55.0	51.0
		Down	50.0	U	28	1.0	55.0	48.5
Bis(2-chloroethoxy)methane	UG/L	Up	10.0	U	28	10.0	11.0	10.2
		Down	10.0	U	28	10.0	11.0	10.0
Bis(2-chloroethyl) ether	UG/L	Up	10.0	U	28	10.0	11.0	10.2
		Down	10.0	U	28	10.0	11.0	10.0
Bis(2-chloroisopropyl) ether	UG/L	Up	10.0	U	28	10.0	11.0	10.2
		Down	10.0	U	28	10.0	11.0	10.0
Bis(2-ethylhexyl)phthalate	UG/L	Up	10.0	U	28	1.0	230.0	14.8
		Down	10.0	U	28	2.0	15.0	8.5
Butyl benzyl phthalate	UG/L	Up	10.0	U	28	5.0	11.0	9.9
		Down	10.0	U	28	10.0	11.0	10.0
Carbazole	UG/L	Up	10.0	U	28	10.0	11.0	10.2
		Down	10.0	U	28	10.0	11.0	10.0
Chrysene	UG/L	Up	10.0	U	28	10.0	11.0	10.2
		Down	10.0	U	28	10.0	11.0	10.0
Di-n-butyl phthalate	UG/L	Up	10.0	U	28	1.0	11.0	9.4
		Down	10.0	U	28	1.0	10.0	9.1
Di-n-octylphthalate	UG/L	Up	10.0	U	28	10.0	11.0	10.2
		Down	10.0	U	28	10.0	11.0	10.0
Dibenz(a,h)anthracene	UG/L	Up	10.0	U	28	10.0	11.0	10.2
		Down	10.0	U	28	10.0	11.0	10.0
Dibenzofuran	UG/L	Up	10.0	U	28	10.0	11.0	10.2
		Down	10.0	U	28	10.0	11.0	10.0
Diethyl phthalate	UG/L	Up	10.0	U	28	2.0	11.0	9.9
		Down	10.0	U	28	10.0	11.0	10.0
Dimethyl phthalate	UG/L	Up	10.0	U	28	10.0	11.0	10.2
		Down	10.0	U	28	10.0	11.0	10.0
Fluoranthene	UG/L	Up	10.0	U	28	10.0	11.0	10.2
		Down	10.0	U	28	10.0	11.0	10.0
Fluorene	UG/L	Up	10.0	U	28	10.0	11.0	10.2
		Down	10.0	U	28	10.0	11.0	10.0
Hexachlorobenzene	UG/L	Up	10.0	U	28	10.0	11.0	10.2
		Down	10.0	U	28	10.0	11.0	10.0
Hexachlorobutadiene	UG/L	Up	10.0	U	28	10.0	11.0	10.2
		Down	10.0	U	28	10.0	11.0	10.0
Hexachlorocyclopentadiene	UG/L	Up	10.0	U	28	10.0	11.0	10.2
		Down	10.0	U	28	10.0	11.0	10.0
Hexachloroethane	UG/L	Up	10.0	U	28	10.0	11.0	10.2
		Down	10.0	U	28	10.0	11.0	10.0

Table 2.2 (continued)

		Station						
		Upstream or			Total No.			
Semivolatile Organics	Units	Downstream	Background	Qual	Collected	Minimum	Maximum	Average
Indeno(1,2,3-cd)pyrene	UG/L	Up	10.0	U	28	10.0	11.0	10.2
		Down	10.0	U	28	10.0	11.0	10.0
Isophorone	UG/L	Up	10.0	U	28	10.0	11.0	10.2
		Down	10.0	U	28	10.0	11.0	10.0
N-Nitroso-di-n-propylamine	UG/L	Up	10.0	U	28	10.0	11.0	10.2
		Down	10.0	U	28	10.0	11.0	10.0
N-Nitrosodiphenylamine	UG/L	Up	10.0	U	28	10.0	11.0	10.2
		Down	10.0	U	28	10.0	11.0	10.0
Naphthalene	UG/L	Up	10.0	U	28	10.0	11.0	10.2
		Down	10.0	U	28	10.0	11.0	10.0
Nitrobenzene	UG/L	Up	10.0	U	28	10.0	11.0	10.2
		Down	10.0	U	28	10.0	11.0	10.0
Pentachlorophenol	UG/L	Up	50.0	U	28	50.0	55.0	51.0
		Down	50.0	U	28	50.0	55.0	50.2
Phenanthrene	UG/L	Up	10.0	U	28	10.0	11.0	10.2
		Down	10.0	U	28	10.0	11.0	10.0
Pyrene	UG/L	Up	10.0	U	28	10.0	11.0	10.2
		Down	10.0	U	28	10.0	11.0	10.0
J - estimated								
U - nondetect								
UJ - estimated nondetect								
= - validated and detected at concentration reported								

Table 2.3. Phase II surface water summary--NOAA Site

		Station						
		Upstream or			Total No.			
Inorganics	Units	Downstream	Background	Qual	Collected	Minimum	Maximum	Average
Aluminum	UG/L	Up	170.0	U	115	53.1	769.0	167.1
		Down	150.0	U	108	50.5	3270.0	219.5
		Down Alt	142.0	U	28	62.3	766.0	236.1
Antimony	UG/L	Up	2.3	U	115	0.7	3.8	2.2
		Down	2.3	U	108	0.7	6.0	2.2
		Down Alt	2.3	U	28	2.0	3.1	2.1
Arsenic	UG/L	Up	2.9	U	115	1.2	6.3	3.0
		Down	2.9	U	108	1.2	12.4	3.1
		Down Alt	2.9	U	28	3.1	3.7	3.1
Barium	UG/L	Up	41.3	U	115	32.8	70.2	44.4
		Down	38.5	U	108	33.7	75.1	46.4
		Down Alt	42.8	U	28	33.5	48.8	44.5
Beryllium	UG/L	Up	0.1	U	115	0.1	0.4	0.2
		Down	0.1	U	108	0.1	0.5	0.2
		Down Alt	0.2	U	28	0.2	0.3	0.3
Boron	UG/L	Up	81.2	U	115	23.7	712.0	68.2
		Down	148.0	U	108	25.8	637.0	67.5
		Down Alt	70.6	U	28	29.3	334.0	95.7
Cadmium	UG/L	Up	0.4	U	115	0.4	2.5	0.6
		Down	0.4	U	108	0.4	2.5	0.6
		Down Alt	0.4	U	28	0.4	2.5	0.6
Calcium	UG/L	Up	44100.0	U	115	30200.0	53300.0	41479.1
		Down	39200.0	U	108	29100.0	51700.0	41773.2
		Down Alt	45400.0	U	28	28800.0	47300.0	41675.0
Chromium	UG/L	Up	0.6	U	115	0.6	7.9	1.6
		Down	9.1	U	108	0.6	26.7	1.9
		Down Alt	0.6	U	28	0.8	5.5	1.4
Cobalt	UG/L	Up	0.9	U	115	0.9	4.6	1.6
		Down	0.9	U	108	0.9	7.7	1.7
		Down Alt	0.9	U	28	1.3	4.6	2.0
Copper	UG/L	Up	3.6	U	115	0.9	15.9	5.0
		Down	3.5	U	108	0.9	23.6	5.0
		Down Alt	2.1	U	28	1.4	11.1	6.1
Iron	UG/L	Up	146.0	U	115	83.5	1160.0	217.8
		Down	168.0	U	108	89.2	4160.0	272.4
		Down Alt	123.0	U	28	37.0	805.0	256.3
Lead	UG/L	Up	1.7	U	115	0.9	16.8	2.5
		Down	1.7	U	108	0.9	9.9	2.3
		Down Alt	1.7	U	28	2.0	4.4	2.1
Magnesium	UG/L	Up	11000.0	U	115	6030.0	12100.0	10186.3
		Down	10000.0	U	108	5770.0	13000.0	10375.7
		Down Alt	11600.0	U	28	5990.0	12900.0	10890.0
Manganese	UG/L	Up	49.6	U	115	26.3	143.0	58.9
		Down	38.8	U	108	21.9	259.0	51.6
		Down Alt	38.1	U	28	19.3	110.0	40.5
Mercury	UG/L	Up	0.3	U	115	0.2	2.5	0.5
		Down	0.3	U	108	0.2	57.8	1.2
		Down Alt	0.3	U	28	0.2	3.4	0.9
Molybdenum	UG/L	Up	2.2	U	115	2.2	13.8	3.9
		Down	2.2	U	108	2.2	13.8	3.8
		Down Alt	2.2	U	28	2.6	13.8	4.9
Nickel	UG/L	Up	1.4	U	115	1.4	15.7	3.1
		Down	8.0	U	108	1.4	34.8	3.5
		Down Alt	1.4	U	28	1.6	8.9	3.2

Table 2.3 (continued)

		Station						
		Upstream or			Total No.			
Inorganics	Units	Downstream	Background	Qual	Collected	Minimum	Maximum	Average
Potassium	UG/L	Up	1600.0	U	115	1230.0	3670.0	1650.4
		Down	1520.0	U	108	970.0	3460.0	1713.2
		Down Alt	1740.0	U	28	1420.0	2090.0	1810.0
Selenium	UG/L	Up	3.2	U	115	1.5	4.7	3.3
		Down	3.2	U	108	1.5	4.6	3.3
		Down Alt	3.2	U	28	3.1	4.7	3.2
Silica	UG/L	Up	6150.0	U	115	4140.0	7580.0	6264.6
		Down	5830.0	U	108	4150.0	99200.0	7488.4
		Down Alt	6510.0	U	28	128.0	8650.0	6571.7
Silver	UG/L	Up	0.9	U	115	0.7	11.2	1.2
		Down	0.9	U	108	0.7	10.7	1.3
		Down Alt	0.9	U	28	0.7	0.9	0.7
Sodium	UG/L	Up	7530.0	U	115	4320.0	12300.0	7583.0
		Down	6720.0	U	108	3980.0	11200.0	7163.7
		Down Alt	7180.0	U	28	3750.0	12000.0	7812.5
Thallium	UG/L	Up	3.5	U	115	0.9	8.4	4.2
		Down	3.5	U	108	0.9	7.5	4.1
		Down Alt	3.5	U	28	3.8	7.4	4.2
Vanadium	UG/L	Up	1.1	U	115	0.7	3.6	1.0
		Down	1.1	U	108	0.7	7.0	1.2
		Down Alt	1.1	U	28	0.7	3.6	1.1
Zinc	UG/L	Up	31.5	U	115	13.6	72.5	29.2
		Down	23.7	U	108	11.5	81.0	24.3
		Down Alt	20.0	U	28	9.7	68.0	27.5

Table 2.3 (continued)

		Station						
		Upstream or			Total No.			
Miscellaneous	Units	Downstream	Background	Qual	Collected	Minimum	Maximum	Average
Alkalinity	MG/L	Up	109.0	U	21	83.8	139.0	109.0
		Down	107.0	U	21	90.1	127.0	109.1
		Down Alt	110.0	U	6	90.4	120.0	111.2
Bromide	MG/L	Up	0.3	U	22	0.3	0.3	0.3
		Down	0.3	U	21	0.3	0.3	0.3
		Down Alt	0.3	U	6	0.3	0.3	0.3
Chloride	MG/L	Up	9.2	U	22	7.4	11.6	9.4
		Down	8.8	U	21	6.6	12.7	9.2
		Down Alt	8.7	U	6	6.7	11.4	8.4
Fluoride	MG/L	Up	0.5	U	22	0.3	0.5	0.4
		Down	0.5	U	21	0.3	0.5	0.4
		Down Alt	0.5	U	6	0.3	0.5	0.4
Orthophosphate	MG/L	Up	0.3	U	22	0.3	0.6	0.3
		Down	0.3	U	21	0.3	0.7	0.4
		Down Alt	0.3	U	6	0.3	0.5	0.4
Sulfate	MG/L	Up	28.8	U	22	23.3	41.8	31.4
		Down	28.6	U	21	21.8	39.8	31.7
		Down Alt	26.9	U	6	33.1	44.1	37.4
Suspended Solids	MG/L	Up	5.0	U	22	5.0	28.0	7.9
		Down	5.0	U	21	5.0	31.1	9.8
		Down Alt	6.0	U	6	5.0	27.0	14.3
Phenol	UG/L	Up	10.0	U	22	10.0	11.0	10.1
		Down	10.0	U	21	10.0	11.0	10.1
		Down Alt	10.0	U	6	10.0	12.0	10.7
Ammonia	MG/L	Up	0.1	U	21	0.1	0.1	0.1
		Down	0.1	U	20	0.1	0.1	0.1
		Down Alt	0.1	U	6	0.1	0.1	0.1
Kjeldahl Nitrogen	MG/L	Up	0.1	U	22	0.1	0.4	0.2
		Down	0.1	U	21	0.1	0.4	0.2
		Down Alt	0.1	U	6	0.1	0.3	0.2
Nitrate/Nitrite (as N)	MG-N/L	Up	2.8	U	22	1.5	5.0	2.7
		Down	2.5	U	20	1.3	3.4	2.6
		Down Alt	2.8	U	6	0.9	2.8	1.8
Total Phosphate as Phosphorus	MG/L	Up	0.2	U	22	0.2	0.3	0.2
		Down	0.2	U	20	0.1	0.3	0.2
		Down Alt	0.2	U	6	0.2	0.3	0.2
Biochemical Oxygen Demand (BOD)	MG/L	Up	1.0	U	20	1.0	264.0	14.5
		Down	1.0	U	21	1.0	273.0	14.2
		Down Alt	1.0	U	6	1.0	2.0	1.2

Table 2.3 (continued)

		Station						
		Upstream or			Total No.			
Pesticide/PCBs	Units	Downstream	Background	Qual	Collected	Minimum	Maximum	Average
4,4'-DDD	UG/L	Up	0.1	U	22	0.1	0.1	0.1
		Down	0.1	U	21	0.1	0.1	0.1
		Down Alt	0.1	U	6	0.1	0.1	0.1
4,4'-DDE	UG/L	Up	0.1	U	22	0.1	0.1	0.1
		Down	0.1	U	21	0.1	0.1	0.1
		Down Alt	0.1	U	6	0.1	0.1	0.1
4,4'-DDT	UG/L	Up	0.1	U	22	0.1	0.1	0.1
		Down	0.1	U	21	0.1	0.1	0.1
		Down Alt	0.1	U	6	0.1	0.1	0.1
Aldrin	UG/L	Up	0.1	U	22	0.1	0.1	0.1
		Down	0.1	U	21	0.1	0.1	0.1
		Down Alt	0.1	U	6	0.1	0.1	0.1
Dieldrin	UG/L	Up	0.1	U	22	0.1	0.1	0.1
		Down	0.1	U	21	0.1	0.1	0.1
		Down Alt	0.1	U	6	0.1	0.1	0.1
Endosulfan I	UG/L	Up	0.1	U	22	0.1	0.1	0.1
		Down	0.1	U	21	0.1	0.1	0.1
		Down Alt	0.1	U	6	0.1	0.1	0.1
Endosulfan II	UG/L	Up	0.1	U	22	0.1	0.1	0.1
		Down	0.1	U	21	0.1	0.1	0.1
		Down Alt	0.1	U	6	0.1	0.1	0.1
Endosulfan sulfate	UG/L	Up	0.1	U	22	0.1	0.1	0.1
		Down	0.1	U	21	0.1	0.1	0.1
		Down Alt	0.1	U	6	0.1	0.1	0.1
Endrin	UG/L	Up	0.1	U	22	0.1	0.1	0.1
		Down	0.1	U	21	0.1	0.1	0.1
		Down Alt	0.1	U	6	0.1	0.1	0.1
Endrin aldehyde	UG/L	Up	0.1	U	21	0.1	0.1	0.1
		Down	0.1	U	20	0.1	0.1	0.1
		Down Alt	0.1	U	5	0.1	0.1	0.1
Endrin ketone	UG/L	Up	0.1	U	22	0.1	0.1	0.1
		Down	0.1	U	21	0.1	0.1	0.1
		Down Alt	0.1	U	6	0.1	0.1	0.1
Heptachlor	UG/L	Up	0.1	U	22	0.1	0.1	0.1
		Down	0.1	U	21	0.1	0.1	0.1
		Down Alt	0.1	U	6	0.1	0.1	0.1
Heptachlor epoxide	UG/L	Up	0.1	U	22	0.1	0.1	0.1
		Down	0.1	U	21	0.1	0.1	0.1
		Down Alt	0.1	U	6	0.1	0.1	0.1
Lindane	UG/L	Up	0.1	U	22	0.1	0.1	0.1
		Down	0.1	U	21	0.1	0.1	0.1
		Down Alt	0.1	U	6	0.1	0.1	0.1
Methoxychlor	UG/L	Up	0.5	U	22	0.5	0.6	0.5
		Down	0.6	U	21	0.5	0.5	0.5
		Down Alt	0.5	U	6	0.5	0.5	0.5
PCB-1016	UG/L	Up	1.0	U	22	1.0	1.1	1.0
		Down	1.2	U	21	1.0	1.1	1.0
		Down Alt	1.0	U	6	1.0	1.1	1.0
PCB-1221	UG/L	Up	2.0	U	22	2.0	2.2	2.0
		Down	2.4	U	21	2.0	2.1	2.1
		Down Alt	2.1	U	6	2.0	2.1	2.0
PCB-1232	UG/L	Up	1.0	U	22	1.0	1.1	1.0
		Down	1.2	U	21	1.0	1.1	1.0
		Down Alt	1.0	U	6	1.0	1.1	1.0

Table 2.3 (continued)

		Station						
		Upstream or			Total No.			
Pesticide/PCBs	Units	Downstream	Background	Qual	Collected	Minimum	Maximum	Average
PCB-1242	UG/L	Up	1.0	U	22	1.0	1.1	1.0
		Down	1.2	U	21	1.0	1.1	1.0
		Down Alt	1.0	U	6	1.0	1.1	1.0
PCB-1248	UG/L	Up	1.0	U	22	1.0	1.1	1.0
		Down	1.2	U	21	1.0	1.1	1.0
		Down Alt	1.0	U	6	1.0	1.1	1.0
PCB-1254	UG/L	Up	1.0	U	22	1.0	1.1	1.0
		Down	1.2	U	21	1.0	1.1	1.0
		Down Alt	1.0	U	6	1.0	1.1	1.0
PCB-1260	UG/L	Up	1.0	U	22	1.0	1.1	1.0
		Down	1.2	U	21	1.0	1.1	1.0
		Down Alt	1.0	U	6	1.0	1.1	1.0
Toxaphene	UG/L	Up	5.0	U	22	5.0	5.5	5.1
		Down	6.0	U	21	5.0	5.3	5.2
		Down Alt	5.2	U	6	5.0	5.3	5.1
alpha-BHC	UG/L	Up	0.1	U	22	0.1	0.1	0.1
		Down	0.1	U	21	0.1	0.1	0.1
		Down Alt	0.1	U	6	0.1	0.1	0.1
alpha-Chlordane	UG/L	Up	0.1	U	22	0.1	0.1	0.1
		Down	0.1	U	21	0.1	0.1	0.1
		Down Alt	0.1	U	6	0.1	0.1	0.1
beta-BHC	UG/L	Up	0.1	U	22	0.1	0.1	0.1
		Down	0.1	U	21	0.1	0.1	0.1
		Down Alt	0.1	U	6	0.1	0.1	0.1
delta-BHC	UG/L	Up	0.1	U	22	0.1	0.1	0.1
		Down	0.1	U	21	0.1	0.1	0.1
		Down Alt	0.1	U	6	0.1	0.1	0.1
gamma-Chlordane	UG/L	Up	0.1	U	22	0.1	0.1	0.1
		Down	0.1	U	21	0.1	0.1	0.1
		Down Alt	0.1	U	6	0.1	0.1	0.1

Table 2.3 (continued)

		Station						
		Upstream or			Total No.			
Radiological	Units	Downstream	Background	Qual	Collected	Minimum	Maximum	Average
Alpha activity	PCI/L	Up	4.8		23	3.0	15.3	6.8
		Down	6.2		21	4.1	12.3	7.4
		Down Alt	3.1		6	4.5	6.6	5.7
Americium-241	PCI/L	Up	0.7	U	23	-0.1	15.7	1.2
		Down	0.9	J	21	-0.1	15.8	1.1
		Down Alt	0.8	U	6	0.0	0.6	0.4
Beta activity	PCI/L	Up	3.9		23	2.3	91.8	10.1
		Down	5.9		21	3.5	9.4	5.9
		Down Alt	2.0	J	6	4.2	8.3	6.4
Cesium-137	PCI/L	Up	0.3	U	23	-2.2	2.3	0.0
		Down	0.3	U	21	-2.4	2.2	-0.1
		Down Alt	-0.7	U	6	-0.2	1.6	0.6
Cobalt-60	PCI/L	Up	-1.0	U	23	-1.9	3.0	0.5
		Down	0.4	U	21	-1.2	3.2	0.5
		Down Alt	5.3	J	6	-2.1	0.7	-0.3
Neptunium-237	PCI/L	Up	0.2	U	23	0.0	0.9	0.2
		Down	0.1	U	21	0.0	0.6	0.2
		Down Alt	0.3	U	6	0.1	0.2	0.2
Plutonium-238	PCI/L	Up	1.3		23	-1.0	1.2	0.0
		Down	1.4		21	-1.3	0.9	0.1
		Down Alt	1.8		6	-0.3	0.7	0.2
Plutonium-239	PCI/L	Up	0.2	U	23	0.0	0.5	0.2
		Down	0.0	J	21	0.0	0.4	0.1
		Down Alt	0.2	U	6	0.0	0.1	0.1
Protactinium-233	PCI/L	Up	-0.1	U	23	-3.4	3.8	-0.6
		Down	0.6	U	21	-2.8	4.9	-0.3
		Down Alt	-1.5	U	6	-1.1	3.3	0.7
Thorium-228	PCI/L	Up	0.0	U	23	0.0	0.4	0.2
		Down	0.1	U	21	0.0	0.4	0.1
		Down Alt	0.0	U	6	0.0	0.2	0.1
Thorium-230	PCI/L	Up	0.5		23	0.1	1.2	0.6
		Down	0.3	J	21	0.2	2.6	0.7
		Down Alt	0.5	J	6	0.3	0.8	0.5
Thorium-232	PCI/L	Up	0.0	U	23	0.0	0.3	0.1
		Down	0.0	U	21	0.0	0.3	0.1
		Down Alt	0.0	J	6	0.0	0.2	0.1
Uranium-234	PCI/L	Up	1.5		23	1.2	6.2	2.4
		Down	1.8		21	1.1	4.8	2.5
		Down Alt	1.6		6	1.4	2.2	1.9
Uranium-235	PCI/L	Up	0.2	U	23	0.0	1.3	0.3
		Down	0.3	U	21	0.0	0.6	0.2
		Down Alt	0.0	J	6	0.0	0.7	0.2
Uranium-238	PCI/L	Up	3.8		23	1.9	14.1	5.1
		Down	3.8		21	2.0	9.4	4.9
		Down Alt	4.2		6	2.2	3.7	2.8

Table 2.3 (continued)

		Station						
		Upstream or			Total No.			
Semivolatile Organics	Units	Downstream	Background	Qual	Collected	Minimum	Maximum	Average
1,2,4-Trichlorobenzene	UG/L	Up	10.0	U	22	10.0	11.0	10.1
		Down	10.0	U	21	10.0	11.0	10.1
		Down Alt	10.0	U	6	10.0	12.0	10.7
1,2-Dichlorobenzene	UG/L	Up	10.0	U	22	10.0	11.0	10.1
		Down	10.0	U	21	10.0	11.0	10.1
		Down Alt	10.0	U	6	10.0	12.0	10.7
1,3-Dichlorobenzene	UG/L	Up	10.0	U	22	10.0	11.0	10.1
		Down	10.0	U	21	10.0	11.0	10.1
		Down Alt	10.0	U	6	10.0	12.0	10.7
1,4-Dichlorobenzene	UG/L	Up	10.0	U	22	10.0	11.0	10.1
		Down	10.0	U	21	10.0	11.0	10.1
		Down Alt	10.0	U	6	10.0	12.0	10.7
2,4,5-Trichlorophenol	UG/L	Up	50.0	U	22	50.0	55.0	50.4
		Down	50.0	U	21	50.0	55.0	50.2
		Down Alt	50.0	U	6	50.0	60.0	53.6
2,4,6-Trichlorophenol	UG/L	Up	10.0	U	22	10.0	11.0	10.1
		Down	10.0	U	21	10.0	11.0	10.1
		Down Alt	10.0	U	6	10.0	12.0	10.7
2,4-Dichlorophenol	UG/L	Up	10.0	U	22	10.0	11.0	10.1
		Down	10.0	U	21	10.0	11.0	10.1
		Down Alt	10.0	U	6	10.0	12.0	10.7
2,4-Dimethylphenol	UG/L	Up	10.0	U	22	10.0	11.0	10.1
		Down	10.0	U	21	10.0	11.0	10.1
		Down Alt	10.0	U	6	10.0	12.0	10.7
2,4-Dinitrophenol	UG/L	Up	50.0	U	22	50.0	55.0	50.4
		Down	50.0	U	21	50.0	55.0	50.2
		Down Alt	50.0	U	6	50.0	60.0	53.6
2,4-Dinitrotoluene	UG/L	Up	10.0	U	22	10.0	11.0	10.1
		Down	10.0	U	21	10.0	11.0	10.1
		Down Alt	10.0	U	6	10.0	12.0	10.7
2,6-Dinitrotoluene	UG/L	Up	10.0	U	22	10.0	11.0	10.1
		Down	10.0	U	21	10.0	11.0	10.1
		Down Alt	10.0	U	6	10.0	12.0	10.7
2-Chloronaphthalene	UG/L	Up	10.0	U	22	10.0	11.0	10.1
		Down	10.0	U	21	10.0	11.0	10.1
		Down Alt	10.0	U	6	10.0	12.0	10.7
2-Chlorophenol	UG/L	Up	10.0	U	22	10.0	11.0	10.1
		Down	10.0	U	21	10.0	11.0	10.1
		Down Alt	10.0	U	6	10.0	12.0	10.7
2-Methyl-4,6-dinitrophenol	UG/L	Up	50.0	U	22	50.0	55.0	50.4
		Down	50.0	U	21	50.0	55.0	50.2
		Down Alt	50.0	U	6	50.0	60.0	53.6
2-Methylnaphthalene	UG/L	Up	10.0	U	22	10.0	11.0	10.1
		Down	10.0	U	21	10.0	11.0	10.1
		Down Alt	10.0	U	6	10.0	12.0	10.7
2-Methylphenol	UG/L	Up	10.0	U	22	10.0	11.0	10.1
		Down	10.0	U	21	10.0	11.0	10.1
		Down Alt	10.0	U	6	10.0	12.0	10.7
2-Nitrobenzenamine	UG/L	Up	50.0	U	22	50.0	55.0	50.4
		Down	50.0	U	21	50.0	55.0	50.2
		Down Alt	50.0	U	6	50.0	60.0	53.6
2-Nitrophenol	UG/L	Up	10.0	U	22	10.0	11.0	10.1
		Down	10.0	U	21	10.0	11.0	10.1
		Down Alt	10.0	U	6	10.0	12.0	10.7

Table 2.3 (continued)

		Station						
		Upstream or			Total No.			
Semivolatile Organics	Units	Downstream	Background	Qual	Collected	Minimum	Maximum	Average
3,3'-Dichlorobenzidine	UG/L	Up	20.0	U	22	20.0	22.0	20.2
		Down	20.0	U	21	20.0	22.0	20.1
		Down Alt	20.0	U	6	20.0	24.0	21.4
3-Nitrobenzenamine	UG/L	Up	50.0	U	22	50.0	55.0	50.4
		Down	50.0	U	21	50.0	55.0	50.2
		Down Alt	50.0	U	6	50.0	60.0	53.6
4-Bromophenyl phenyl ether	UG/L	Up	10.0	U	22	10.0	11.0	10.1
		Down	10.0	U	21	10.0	11.0	10.1
		Down Alt	10.0	U	6	10.0	12.0	10.7
4-Chloro-3-methylphenol	UG/L	Up	10.0	U	22	10.0	11.0	10.1
		Down	10.0	U	21	10.0	11.0	10.1
		Down Alt	10.0	U	6	10.0	12.0	10.7
4-Chlorobenzenamine	UG/L	Up	10.0	U	22	10.0	11.0	10.1
		Down	10.0	U	21	10.0	11.0	10.1
		Down Alt	10.0	U	6	10.0	12.0	10.7
4-Chlorophenyl phenyl ether	UG/L	Up	10.0	U	22	10.0	11.0	10.1
		Down	10.0	U	21	10.0	11.0	10.1
		Down Alt	10.0	U	6	10.0	12.0	10.7
4-Methylphenol	UG/L	Up	10.0	U	22	10.0	11.0	10.1
		Down	10.0	U	21	10.0	11.0	10.1
		Down Alt	10.0	U	6	10.0	12.0	10.7
4-Nitrobenzenamine	UG/L	Up	50.0	U	22	50.0	55.0	50.4
		Down	50.0	U	21	50.0	55.0	50.2
		Down Alt	50.0	U	6	50.0	60.0	53.6
4-Nitrophenol	UG/L	Up	50.0	U	22	50.0	55.0	50.4
		Down	50.0	U	21	50.0	55.0	50.2
		Down Alt	50.0	U	6	50.0	60.0	53.6
Acenaphthene	UG/L	Up	10.0	U	22	10.0	11.0	10.1
		Down	10.0	U	21	10.0	11.0	10.1
		Down Alt	10.0	U	6	10.0	12.0	10.7
Acenaphthylene	UG/L	Up	10.0	U	22	10.0	11.0	10.1
		Down	10.0	U	21	10.0	11.0	10.1
		Down Alt	10.0	U	6	10.0	12.0	10.7
Anthracene	UG/L	Up	10.0	U	22	10.0	11.0	10.1
		Down	10.0	U	21	10.0	11.0	10.1
		Down Alt	10.0	U	6	10.0	12.0	10.7
Benz(a)anthracene	UG/L	Up	10.0	U	22	10.0	11.0	10.1
		Down	10.0	U	21	10.0	11.0	10.1
		Down Alt	10.0	U	6	10.0	12.0	10.7
Benzenemethanol	UG/L	Up	10.0	U	22	10.0	11.0	10.1
		Down	10.0	U	21	10.0	11.0	10.1
		Down Alt	10.0	U	6	10.0	12.0	10.7
Benzo(a)pyrene	UG/L	Up	10.0	U	22	10.0	11.0	10.1
		Down	10.0	U	21	10.0	11.0	10.1
		Down Alt	10.0	U	6	10.0	12.0	10.7
Benzo(b)fluoranthene	UG/L	Up	10.0	U	22	10.0	11.0	10.1
		Down	10.0	U	21	10.0	11.0	10.1
		Down Alt	10.0	U	6	10.0	12.0	10.7
Benzo(ghi)perylene	UG/L	Up	10.0	U	22	10.0	11.0	10.1
		Down	10.0	U	21	10.0	11.0	10.1
		Down Alt	10.0	U	6	10.0	12.0	10.7
Benzo(k)fluoranthene	UG/L	Up	10.0	U	22	10.0	11.0	10.1
		Down	10.0	U	21	10.0	11.0	10.1
		Down Alt	10.0	U	6	10.0	12.0	10.7

Table 2.3 (continued)

		Station						
		Upstream or			Total No.			
Semivolatile Organics	Units	Downstream	Background	Qual	Collected	Minimum	Maximum	Average
Benzoic acid	UG/L	Up	50.0	U	22	50.0	55.0	50.4
		Down	50.0	U	21	50.0	55.0	50.2
		Down Alt	50.0	U	6	50.0	60.0	53.6
Bis(2-chloroethoxy)methane	UG/L	Up	10.0	U	22	10.0	11.0	10.1
		Down	10.0	U	21	10.0	11.0	10.1
		Down Alt	10.0	U	6	10.0	12.0	10.7
Bis(2-chloroethyl) ether	UG/L	Up	10.0	U	22	10.0	11.0	10.1
		Down	10.0	U	21	10.0	11.0	10.1
		Down Alt	10.0	U	6	10.0	12.0	10.7
Bis(2-chloroisopropyl) ether	UG/L	Up	10.0	U	22	10.0	11.0	10.1
		Down	10.0	U	21	10.0	11.0	10.1
		Down Alt	10.0	U	6	10.0	12.0	10.7
Bis(2-ethylhexyl)phthalate	UG/L	Up	10.0	U	22	2.0	21.0	6.7
		Down	10.0	U	21	1.0	19.0	7.1
		Down Alt	10.0	U	6	3.0	11.0	7.0
Butyl benzyl phthalate	UG/L	Up	10.0	U	22	10.0	11.0	10.1
		Down	10.0	U	21	10.0	11.0	10.1
		Down Alt	10.0	U	6	10.0	12.0	10.7
Carbazole	UG/L	Up	10.0	U	22	10.0	11.0	10.1
		Down	10.0	U	21	10.0	11.0	10.1
		Down Alt	10.0	U	6	10.0	12.0	10.7
Chrysene	UG/L	Up	10.0	U	22	10.0	11.0	10.1
		Down	10.0	U	21	10.0	11.0	10.1
		Down Alt	10.0	U	6	10.0	12.0	10.7
Di-n-butyl phthalate	UG/L	Up	10.0	U	22	1.0	11.0	7.8
		Down	10.0	U	21	1.0	11.0	8.8
		Down Alt	10.0	U	6	2.0	12.0	9.6
Di-n-octylphthalate	UG/L	Up	10.0	U	22	10.0	11.0	10.1
		Down	10.0	U	21	10.0	11.0	10.1
		Down Alt	10.0	U	6	10.0	12.0	10.7
Dibenz(a,h)anthracene	UG/L	Up	10.0	U	22	10.0	11.0	10.1
		Down	10.0	U	21	10.0	11.0	10.1
		Down Alt	10.0	U	6	10.0	12.0	10.7
Dibenzofuran	UG/L	Up	10.0	U	22	10.0	11.0	10.1
		Down	10.0	U	21	10.0	11.0	10.1
		Down Alt	10.0	U	6	10.0	12.0	10.7
Diethyl phthalate	UG/L	Up	10.0	U	22	10.0	11.0	10.1
		Down	10.0	U	21	1.0	11.0	9.6
		Down Alt	10.0	U	6	10.0	12.0	10.7
Dimethyl phthalate	UG/L	Up	10.0	U	22	10.0	11.0	10.1
		Down	10.0	U	21	10.0	11.0	10.1
		Down Alt	10.0	U	6	10.0	12.0	10.7
Fluoranthene	UG/L	Up	10.0	U	22	10.0	11.0	10.1
		Down	10.0	U	21	10.0	11.0	10.1
		Down Alt	10.0	U	6	10.0	12.0	10.7
Fluorene	UG/L	Up	10.0	U	22	10.0	11.0	10.1
		Down	10.0	U	21	10.0	11.0	10.1
		Down Alt	10.0	U	6	10.0	12.0	10.7
Hexachlorobenzene	UG/L	Up	10.0	U	22	10.0	11.0	10.1
		Down	10.0	U	21	10.0	11.0	10.1
		Down Alt	10.0	U	6	10.0	12.0	10.7
Hexachlorobutadiene	UG/L	Up	10.0	U	22	10.0	11.0	10.1
		Down	10.0	U	21	10.0	11.0	10.1
		Down Alt	10.0	U	6	10.0	12.0	10.7

Table 2.3 (continued)

		Station						
		Upstream or			Total No.			
Semivolatile Organics	Units	Downstream	Background	Qual	Collected	Minimum	Maximum	Average
Hexachlorocyclopentadiene	UG/L	Up	10.0	U	22	10.0	11.0	10.1
		Down	10.0	U	21	10.0	11.0	10.1
		Down Alt	10.0	U	6	10.0	12.0	10.7
Hexachloroethane	UG/L	Up	10.0	U	22	10.0	11.0	10.1
		Down	10.0	U	21	10.0	11.0	10.1
		Down Alt	10.0	U	6	10.0	12.0	10.7
Indeno(1,2,3-cd)pyrene	UG/L	Up	10.0	U	22	10.0	11.0	10.1
		Down	10.0	U	21	10.0	11.0	10.1
		Down Alt	10.0	U	6	10.0	12.0	10.7
Isophorone	UG/L	Up	10.0	U	22	10.0	11.0	10.1
		Down	10.0	U	21	10.0	11.0	10.1
		Down Alt	10.0	U	6	10.0	12.0	10.7
N-Nitroso-di-n-propylamine	UG/L	Up	10.0	U	22	10.0	11.0	10.1
		Down	10.0	U	21	10.0	11.0	10.1
		Down Alt	10.0	U	6	10.0	12.0	10.7
N-Nitrosodiphenylamine	UG/L	Up	10.0	U	22	10.0	11.0	10.1
		Down	10.0	U	21	10.0	11.0	10.1
		Down Alt	10.0	U	6	10.0	12.0	10.7
Naphthalene	UG/L	Up	10.0	U	22	10.0	11.0	10.1
		Down	10.0	U	21	10.0	11.0	10.1
		Down Alt	10.0	U	6	10.0	12.0	10.7
Nitrobenzene	UG/L	Up	10.0	U	22	10.0	11.0	10.1
		Down	10.0	U	21	10.0	11.0	10.1
		Down Alt	10.0	U	6	10.0	12.0	10.7
Pentachlorophenol	UG/L	Up	50.0	U	22	50.0	55.0	50.4
		Down	50.0	U	21	50.0	55.0	50.2
		Down Alt	50.0	U	6	50.0	60.0	53.6
Phenanthrene	UG/L	Up	10.0	U	22	10.0	11.0	10.1
		Down	10.0	U	21	10.0	11.0	10.1
		Down Alt	10.0	U	6	10.0	12.0	10.7
Pyrene	UG/L	Up	10.0	U	22	10.0	11.0	10.1
		Down	10.0	U	21	10.0	11.0	10.1
		Down Alt	10.0	U	6	10.0	12.0	10.7
J - estimated								
U - nondetect								
UJ - estimated nondetect								
= - validated and detected at concentration reported								

July 22-23, 1997. Most parameters were elevated at all sampling locations, with mercury levels at both sites averaging $2.4 \mu\text{g/l}$ or 6 times background. After the flood event, the excavation areas were inspected and erosion control measures repaired, prior to continuation of RA activities. Many of the elevated measurements noted at the Bruner Site were determined to be associated with construction activities being performed by the Department of Transportation on the Turnpike bridge upstream of the Bruner Site. Only a few of the elevated levels noted during Phase II were attributed to the remediation activities, with most of these events associated with excavation activities along the creek bank. However, none of these events were determined to have an adverse impact on the creek. The most notable of these events occurred at the NOAA downstream site on August 11, 1997 when mercury levels were detected at $57.8 \mu\text{g/l}$. Also noted at this time were very high total suspended solids and turbidity measurements. When it was determined that the excavation activities along the creek bank were causing these changes in the water quality, efforts were made to minimize the disturbance to the creek by adding additional erosion control measures (silt fencing and haybales) along the creek bank. Water quality samples collected over the next few days indicated that the water quality returned to normal conditions and that the quality of the creek water had not been adversely impacted.

2.3 TREATMENT WATER SAMPLING

Treatment water samples were collected from water obtained from soil dewatering and decontamination activities and from the drying bed area. During Phase II, the excavation subcontractor utilized two 22,000-gal FRAC tanks to collect and store the generated waste water. Following the *Sampling and Analysis Plan for Treatment Water and Creek Water for the Lower East Fork Poplar Creek Operable Unit, Oak Ridge, Tennessee*, Y-ER-261 (SAIC 1996b), SAIC collected both influent and effluent treatment water samples. The samples were sent to an off-site laboratory for analysis and compared to the requirements of the city of Oak Ridge publicly owned treatment works (POTW) Permit, number 6-96 dated June 26, 1996 and the modification dated July 5 to determine if the effluent was suitable to be discharged.

Phase II treatment water sampling activities began on April 29, 1997 and ended on October 17, 1997. A total of 13 influent and 16 effluent treatment water samples were collected and analyzed for the required POTW Permit parameters. Table 2.4 provides a summary of the sampling and discharge events. According to the Permit, an initial sampling event was conducted to prove that the treatment unit was capable of filtering the waste water to meet the POTW discharge requirements. After the initial sampling event, samples were collected and analyzed prior to discharge for the parameters specified in the POTW permit. These data, along with their comparison to the POTW requirements, are provided in Appendix D.

Approximately 198,000 gallons of treated water were discharged during 12 separate events to the city of Oak Ridge POTW (MH L 12-1) from May 7, 1997 to October 17, 1997. With one exception, treatment water was discharged after the sampling results were evaluated by Energy Systems and determined to meet the requirements of the POTW Permit. One discharge was made on October 9, 1997 after notifying POTW personnel and prior to receiving analytical data for parameters measured as a monthly requirement of the permit. This discharge was necessary to accommodate the site demolition schedule. The city of Oak Ridge was kept informed of the remediation schedule and prior to release of treatment water to the POTW. In addition, city of Oak Ridge personnel provided verbal approval for a variance to permit conditions for minor increases to discharge rate. This was necessary to accommodate weather conditions and site demobilization. In accordance with the POTW

permit, quarterly compliance reports documenting all treatment water sampling results and discharge events were sent to the city of Oak Ridge by DOE in July, October, and December 1997.

Table 2.4. LEFPC Phase II treatment water sample/discharge summary

Sample type	Sample collection date	No. samples collected		Tank no.	Discharge date		Discharge vol. (gal.) ^a
		Influent	Effluent		Start	End	
Initial	29-Apr-97	3	3	1	7-May-97	9-May-97	19,000
Monthly	29-May-97	1	1	1	6-Jun-97	9-Jun-97	21,000
Weekly	6-Jun-97	1	1	2	11-Jun-97	11-Jun-97	7,000
Weekly	17-Jun-97	1	1	1	30-Jun-97	1-Jul-97	14,000
Monthly & TTO ^b	7-Jul-97	1	1	2	23-Jul-97	24-Jul-97	21,000
Weekly	11-Jul-97	1	1	1	15-Jul-97	16-Jul-97	17,000
Weekly	23-Jul-97	1	1	1	25-Jul-97	29-Jul-97	21,000
Weekly & TSS ^c	24-Jul & 28-Jul 1997	1	2	2	31-Jul-97	4-Aug-97	21,000
Monthly	21-Aug-97	1	1	1	9-Sep-97	10-Sep-97	21,000
Oil & Grease ^d	29-Aug-97	0	1	1	9-Sep-97	10-Sep-97	NA ^f
Weekly	26-Sep-97	1	1	1	30-Sep-97	1-Oct-97	21,000
Monthly	6-Oct-97	1	1	1	9-Oct-97	10-Oct-97	10,000
Weekly ^e	17-Oct-97	0	1	1	14-Oct-97	17-Oct-97	5,000
Total		13	16				198,000

^a POTW Permit allows 10,000 gal/d to be discharged. Due to periods of heavy rain and to accommodate site demobilization, Mr. Bruce Giles, city of Oak Ridge, granted a variance to allow 20,000 gal/d to be discharged at times requested.

^b TTO—Total Toxic Organics

^c TSS—Total Suspended Solids. Effluent sample taken to reduce monthly average to meet POTW Permit discharge limits for TSS.

^d Effluent sample taken to reduce monthly average to meet POTW Permit discharge limits for oil and grease.

^e Water generated from Frack Tank 1 and treatment water unit flushing activities. All water was treated and contained in water truck prior to discharge. Effluent treatment water sample collected from water truck.

^f NA—Not applicable; no discharges were made.

3. DATA QUALITY EVALUATION

Data generated in support of the LEFPC Phase RA are intended to document the attainment of the cleanup goals (400 ppm) for mercury contamination, to monitor the creek water during excavation activities, and to confirm achievement of discharge levels in accordance with POTW criteria established for treatment waters. A data quality program was established to ensure that the data generated were accurate, scientifically valid, and legally defensible. Results were evaluated based on QA/QC data collected, with data comparisons between on-site measurements and off-site QC and QA laboratory results, and through verification/validation efforts.

During Phase I, the on-site laboratory mercury soil determinations had excellent agreement with off-site laboratory QC duplicate and QA split sample values. This demonstrated the excellent quality of the data, which supported the results showing that the areas excavated for the LEFPC Phase I RA at the NOAA Site were successfully remediated. Stream water monitoring data and treatment water analysis provided a consistent and defensible profile of site-related waters during the remedial effort. A detailed discussion of the data quality for Phase I can be found in the *Phase I Confirmatory Sampling Data Report, Lower East Fork Poplar Creek, Oak Ridge, Tennessee* (SAIC 1996d).

A discussion of the data quality for Phase II is provided in the following sections.

3.1 DATA REVIEW/VALIDATION

Environmental data must always be interpreted relative to known limitations and intended use. The data validation process and this data quality evaluation are intended to provide current and future data users assistance throughout the interpretation of the data produced for LEFPC Phase II RA.

This review provides an assessment of the analytical information gathered during the course of the RA and documents that the quality of the data obtained meets the project needs. Evaluation of field and laboratory QC measures will constitute the majority of this assessment, however, references will also be directed toward those QA procedures that establish data credibility. The primary intent of this review is to illustrate that data generated for this RA can withstand scientific scrutiny, are appropriate for their intended purpose, and are technically defensible.

Multiple activities were performed to achieve the desired data quality in this project. A QA program was established to standardize procedures and to document activities. This program provided a means to detect and correct any deficiencies in the process. Upon receipt by the project team, data were subjected to a verification and validation review that identified and qualified problems related to the analysis. These review steps contribute to this final quality review, which defines that data used in the investigation met the criteria and are used appropriately.

The Quality Assurance Project Plan for this project identified requirements for laboratory data reporting and identified Energy Systems qualified laboratories to support the project. EPA "definitive" data have been reported including the following basic information:

- laboratory case narratives,
- sample results,
- laboratory method blank results,
- laboratory control standard results,
- laboratory sample matrix spike recoveries,
- laboratory duplicate results,
- surrogate recoveries [volatile organic compounds (VOCs)],
- sample extraction dates, and
- sample analysis dates.

This information from the laboratory along with field information provides the basis for subsequent data evaluation.

The objective when evaluating the quality of the project data is to determine its usability. The evaluation is based on the interpretation of laboratory QC measures, field QC measures, and the project data quality objectives.

This project implemented the use of data validation checklists to facilitate laboratory data validation. These checklists were completed by the project designated validation staff and were reviewed by the project laboratory coordinator. Data validation was performed for all mercury soil analysis and for 10% of the creek water quality and treatment water analysis, per the respective SAP.

Analytical data generated for this project have been subjected to a process of data verification, validation, and review. The following describes this systematic process and the evaluation activities performed. Several criteria have been established against which the data are compared and from which a judgment is rendered regarding the acceptance and qualification of the data. Because it is beyond the scope of this report to cite those criteria, the reader is directed to the following documents for specific detail:

- SAIC Technical Support Contractor QA Technical Procedure (TP-DM-300-7) Data Verification and Validation;
- U.S. EPA–Laboratory Data Validation, Functional Guidelines for Evaluating Inorganic Analyses; and
- U.S. EPA–Laboratory Data Validation, Functional Guidelines for Evaluating Organic Analyses.

Upon receipt of field and analytical data, verification staff performed a systematic examination of the reports, following standardized data package checklists to ensure the content, presentation, and administrative validity of the data.

During the validation phase of the review and evaluation process, data were subjected to a systematic technical review by examining all field and analytical QC results and laboratory documentation for soil mercury determinations, following appropriate functional guidelines for metals data validation. Also during this phase of the review, 10% of the water data were validated following appropriate functional guidelines. These EPA data validation guidelines define the technical review criteria, methods for evaluation of the criteria, and actions to be taken resulting from the review of these criteria. The primary objective of this phase was to assess and summarize the quality and

reliability of the data for the intended use and to document factors that may affect the usability of the data. Data verification/validation included, but was not necessarily limited to, the following parameters:

Inorganic	Organic
Data completeness	Data completeness
Holding times	Holding times
calibration	calibration
• initial	• initial
• continuing	• continuing
Blanks	Blanks
Sample results verification	Surrogate recovery
Matrix spike (MS) recovery	
Field duplicate sample analysis	
Laboratory control sample (LCS) analysis	Internal standards performance
Furnace atomic absorption QC (when implemented)	
Detection limits	Compound quantitation and reported detection limits
Secondary dilutions	Secondary dilutions

As an end result of this phase of the review, the data were qualified based on the technical assessment of the validation criteria. Qualifiers were applied to each field and analytical result to indicate the usability of the data for its intended purpose.

3.2 DATA COMPARISONS

Comparisons of the project analytical data provided by the on-site and off-site laboratories were performed to determine the accuracy of the analytical methods. Accuracy for the confirmatory soil data was determined through use of Laboratory Control Sample (LCS) analysis, comparison of on-site mercury analysis to off-site QC split sample analysis by an independent laboratory, and comparison of on-site mercury analysis to QA split sample analysis conducted by JE at a separate laboratory.

The National Institute of Standards and Testing (NIST) Standard Reference Material (SRM) #8407 was analyzed routinely throughout the confirmation process. Accuracy as measured through this LCS determines the method implementation consistency and documents the analytical process control. Table 3.1 lists the LCS mercury recovery values obtained during the remediation effort between March and October 1997.

**Table 3.1. LEFPC Phase II RA
mercury confirmation analysis laboratory control sample evaluation**

Analysis date	NIST 8407 SRM (µg/g) ^a	Analysis date	NIST 8407 SRM (µg/g) ^a	Analysis date	NIST 8407 SRM (µg/g) ^a
3/7	46.4	4/8	56.0	5/1	53.9
3/10	46.7		56.0		53.9
3/11	41.4	4/10	52.1		48.7
3/12	42.3		50.0		49.7
	56.1		48.4		51.5
3/14	51.6		51.1	5/2	52.8
	50.0		49.3		51.9
	50.9	4/11	50.9		48.2
3/18	54.2		51.8		49.2
	59.6		54.0	6/3	50.5
	55.9		56.0		49.6
3/19	52.6	4/15	52.4		48.0
	56.5		48.7		49.0
	48.5		53.4	6/9	50.0
3/21	52.9		52.4		48.4
3/24	48.5		51.5	6/25	49.0
	51.2	4/18	54.7		50.9
3/25	53.6		52.0	8/7	56.5
	49.4		52.0		53.1
3/27	53.8		47.5		50.6
	54.7		51.1		54.2
	55.1	4/22	52.4		53.3
3/28	48.3		47.0	8/12	53.6
	56.4		45.8		49.4
	53.9		44.8		52.8
	49.9		45.8		49.0
	53.4		49.7	8/21	46.8

Table 3.1 (continued)

Analysis date	NIST 8407 SRM ($\mu\text{g/g}$) ^a	Analysis date	NIST 8407 SRM ($\mu\text{g/g}$) ^a	Analysis date	NIST 8407 SRM ($\mu\text{g/g}$) ^a
3/31	53.1	4/25	50.6		40.1
	57.0		52.4	8/22	51.6
	48.4		48.7		50.8
	49.4		51.5	8/29	43.3
4/1	58.7		47.8	9/4	47.4
	57.6		54.4		50.8
	52.7		48.1	9/5	48.7
	54.8		51.3	9/15	52.4
4/3	49.3	4/28	51.2		58.3
	56.5		52.2	9/19	50.9
4/4	49.6		55.8		58.8
	53.4		56.9	9/24	50.2
	54.4		49.4		51.6
4/7	53.1		55.6	10/6	54.0
	54.1				59.5
	50.1				

n = 126

mean = 51.5 $\mu\text{g/g}$ 2 sigma = 7.2 $\mu\text{g/g}$ ^aNational Institute of Standards and Testing Standard Reference Material certified value = 50 $\pm$ 2 $\mu\text{g/gm}$

The mean LCS percent recovery for the 126 measurements performed was $51.5 \pm 3.6 \mu\text{g/g}$ in comparison to the NIST SRM certified value of $50 \pm 2 \mu\text{g/g}$. All determinations fell within the original Data Quality Objective goal of $\pm 20\%$ or $\pm 10 \mu\text{g/g}$ for this measurement. This excellent performance demonstrates the field confirmatory analytical process was in-control and accurate throughout this part of the remediation.

Field replicate samples were collected to ascertain the contribution to variability (i.e., precision) due to the combination of environmental media, sampling consistency, and analytical precision. Field replicate samples were collected from the same spatial and temporal conditions as the primary environmental sample. Soil samples, water samples, field replicates, QC split samples, and QA split samples were collected from the same sampling devices. All soil samples were processed after homogenization by hand mixing.

SAIC collected QC split samples, after mixing, for analysis by an off-site contract laboratory. The comparison of these data is presented in Table 3.2. The Relative Percent Difference (RPD) was calculated only when both sample values were $>10 \mu\text{g/g}$. When one or both sample values were below $10 \mu\text{g/g}$, the absolute difference was evaluated. If both samples were not detected for a given analyte, precision was considered acceptable. In order to review this information, this data quality evaluation has implemented general criteria for comparison of absolute difference measurements and RPDs. These criteria are identified in the following:

RPD and Absolute Difference Evaluation Categories

	Good	Fair	Poor	Unacceptable
Abs. Diff.	$< 10 \mu\text{g/g}$	$< 20 \mu\text{g/g}$	—	$> 20 \mu\text{g/g}$
RPD	$< 50\%$	$< 100\%$	$< 150\%$	$> 150\%$

Overall, the comparison of on-site sample analysis and off-site QC split analysis was determined to be good. All of the values measured below $10 \mu\text{g/g}$ met the acceptance criteria for a good or fair comparison, while 89% of the calculated RPD comparison was considered good or fair. Only one RPD measurement out of 77 comparisons was considered unacceptable. The mean RPD value was 43% with a RPD range of 0 to 167%.

Table 3.2 also provides a comparison of mercury field duplicate comparisons by presenting the absolute difference or RPD for each field duplicate measurement. Overall, the comparison of field duplicate pairs was determined to be good. All of the values measured below $10 \mu\text{g/g}$ met the acceptance criteria for a good or fair comparison, while 92% of the calculated RPD comparisons were considered good or fair. Only one RPD measurement out of 77 comparisons was considered unacceptable. The mean RPD value was 39% with a RPD range of 0 to 160%.

SAIC also provided split samples, after mixing, for analysis by another off-site laboratory, subcontracted to JE. The comparison of these data is presented in Table 3.3. Values were compared relative to the criteria outlined previously. Of the 142 comparisons, 127 are considered good (89%), 8 are considered fair (6%), 2 are considered poor (1.5%), and 5 are considered unacceptable (3.5%). The mean RPD value was 31% with a RPD range of 1 to 158%.

Determination of minimum detectable values allows the investigation to assess the relative confidence that can be placed in a value relative to the magnitude or level of analyte concentration observed. The closer a measured value comes to the minimum detectable concentration, the less confidence and more variation the measurement will have. Project sensitivity goals for on-site determinations were $1 \mu\text{g/g}$. These levels were achieved throughout the remediation process.

The project SAPs called for 10% of the creek water quality samples and treatment water associated with the site activities to be subject to validation. Throughout this validation process, the data provided proved to be useful for monitoring and for disposition of the waste. None of the data validated were rejected, and laboratory QC information was acceptable and appropriate.

The field duplicate, laboratory QC split, and laboratory QA split sample comparisons indicate that the in-field analytical procedures and process were accurate and within the precision required to determine remediation levels. This verifies the credibility of the remedial activities conducted during Phase II.

Table 3.2. LEFPC Phase II RA mercury confirmation analysis
field duplicate and laboratory split sample evaluation

ECU	Sample numbers	Primary sample value ($\mu\text{g/g}$)	Field sample duplicate value ($\mu\text{g/g}$)	Laboratory split sample ($\mu\text{g/g}$)	RPD as % or absolute difference (#)
ECU039	F03912/F03922/F03932	103.1	11.3	24.1	160%/107%
ECU041	F04114/F04124/F04134	214	121	327	55%/42%
ECU044	F04412/F04422/F04432	17.6	17.6	20.1	0.0%/13%
ECU046	F04614/F04624/F04634	41.7	97.0	29.8	80%/33%
ECU049	F04912/F04922/F04932	160	59.8	26	91%/144%
ECU051	F05114/F05124/F05134	10.2	1 U	7	(9.2)/(3.2)
ECU054	F05412/F05422/F05432	202	851	658	123%/106%
ECU056	F05614/F05624/F05634	303	267	155	13%/66%
ECU059	F05912/F05922/F05932	11.1	10.1	6.9	9.4%/(4.2)
ECU061	F06114/F06124/F06134	1 U	1 U	4.1	(0)/(3.1)
ECU064	F06412/F06422/F06432	101	99.7	96.7	1.5%/4.4%
ECU066	F06614/F06624/F06634	216	164	163	27%/28%
ECU069	F06912/F06922/F06932	1 U	16.9	5.8	(15.9)/(4.8)
ECU071	F07114/F07124/F07134	1 U	9.6	8.2	(8.6)(7.2)
ECU074	F07412/F07422/F07432	1 U	1 U	2.3	(0)/(1.3)
ECU076	F07614/F07624/F07634	1 U	1 U	0.16	(0)/(0)
ECU079	F07912/F07922/F07932	153	87.0	268	55%/55%

Table 3.2 (continued)

ECU	Sample numbers	Primary sample value ($\mu\text{g/g}$)	Field sample duplicate value ($\mu\text{g/g}$)	Laboratory split sample ($\mu\text{g/g}$)	RPD as % or absolute difference (#)
ECU081	F08114/F08124/F08134	26.9	27.0	16.3	0.4%/49%
ECU084	F08412/F08422/F08432	370	379	371	2.4%/8.4%
ECU086	F08614/F08624/F08634	907	651	987	33%/86%
ECU089	F08912/F08922/F08932	137	229	345	51%/48%
ECU091	F09114/F09124/F09134	25.0	20.8	15.4	18%/0.3%
ECU094	F09412/F09422/F09432	20.9	23.6	20.2	12%/3.4%
ECU096	F09414/F09624/F09634	4.1	1 U	5	(3.1)/(0.9)
ECU099	F09912/F09922/F09932	104	82.0	45.7	23%/78%
ECU101	F10114/F10124/F10134	482	824	794	52%/49%
ECU104	F10412/F10422/F10432	28.1	21.3	62.6	27%/76%
ECU106	F10614/F10624/F10634	1 U	1 U	1	(0)/(0)
ECU109	F10912/F10922/F10932	51.7	55.4	99.5	6.9%/63%
ECU111	F11114/F11124/F11134	78.3	94.3	72.2	19%/8.1%
ECU114	F11412/F11422/F11432	29.3	38.0	34.8	26%/17%
ECU115	F11512/F11522/F11532	1 U	1 U	5.7	(0)/(4.7)
ECU116	F11614/F11624/F11634	125	191	90.5	42%/32%
ECU119	F11912/F11922/F11932	139	29.0	289	131%/70%
ECU121	F12114/F12124/F12134	37.0	49.1	82.7	28%/76%

Table 3.2 (continued)

ECU	Sample numbers	Primary sample value ($\mu\text{g/g}$)	Field sample duplicate value ($\mu\text{g/g}$)	Laboratory split sample ($\mu\text{g/g}$)	RPD as % or absolute difference (#)
ECU124	F12412/F12422/F12432	155	194	159	22%/2.5%
ECU126	F12614/F12624/F12634	135	152	117	12%/14%
ECU129	F12912/F12922/F12932	16.4	7.4	5.9	(9)/(10.5)
ECU131	F13114/F13124/F13134	1 U	1 U	3.8	(0)/(2.8)
ECU134	F13412/F13422/F13432	4.6	1 U	5.6	(3.6)/(1.0)
ECU136	F13614/F13624/F13634	90.9	102	159	12%/55%
ECU139	F13912/F13922/F13932	81.1	52.5	78.4	43%/3.4%
ECU141	F14114/F14124/F14134	791	780	846	1.4%/6.7%
ECU144	F14412/F14422/F14432	179	177	193	1.2%/7.5%
ECU146	F14614/F14624/F14634	63.7	89.0	84.1	33%/28%
ECU149	F14912/F14922/F14932	1 U	1 U	1.2	(0)/(0.2)
ECU151	F15114/F15124/F15134	92.2	63.5	113	37%/19%
ECU154	F15412/F15422/F15432	8.9	1 U	6.5	(7.9)/(2.4)
ECU156	F15614/F15624/F15634	12.0	30.6	12.5	87%/4.1%
ECU159	F15912/F15922/F15932	87.3	341	315	118%/113%
ECU161	F16114/F16124/F16134	317	256	332	21%/4.6%
ECU164	F16412/F16422/F16432	22.9	63.4	252	94%/167%
ECU166	F16614/F16624/F16634	372	392	462	5.4%/22%

Table 3.2 (continued)

ECU	Sample numbers	Primary sample value ($\mu\text{g/g}$)	Field sample duplicate value ($\mu\text{g/g}$)	Laboratory split sample ($\mu\text{g/g}$)	RPD as % or absolute difference (#)
ECU169	F16912/F16922/F16932	922	816	728	12%/24%
ECU171	F17114/F17124/F17134	67.5	62.5	63.2	7.7%/6.6%
ECU174	F17412/F17422/F17432	53.6	55.9	150	4.2%/95%
ECU176	F17614/F17624/F17634	1 U	1 U	0.8	(0)/(0)
ECU179	F17912/F17922/F17932	27.6	29.3	45.9	6.0%/50%
ECU181	F18114/F18124/F18134	5.6	1 U	0.21	(4.6)/(5.4)
ECU184	F18412/F18422/F18432	43.4	14.8	92.4	98%/72%
ECU186	F18614/F18624/F18634	5.2	1 U	10	(4.2)/(4.8)
ECU189	F18912/F18922/F18932	1 U	1 U	0.06	(0)/(0)
ECU191	F19114/F19124/F19134	52.7	18.4	27.7	97%/62%
ECU194	F19412/F19422/F19432	1 U	1 U	0.18	(0)/(0)
ECU196	F19614/F19624/F19634	8.8	1 U	2	(7.8)/(6.8)
ECU199	F19912/F19922/F19932	8.7	11.8	7.5	(3.1)/(1.2)
ECU201	F20114/F20124/F20134	174	162	225	7.2%/26%
ECU204	F20412/F20422/F20432	5.7	5.1	9.1	(0.6)/(3.4)
ECU206	F20614/F20624/F20634	11.5	1 U	7.6	(10.5)/(3.9)
ECU209	F20912/F20922/F20932	1 U	1 U	0.37	(0)/(0)
ECU211	F21114/F21124/F21134	84.8	140	81.1	49%/4.5%

Table 3.2 (continued)

ECU	Sample numbers	Primary sample value ($\mu\text{g/g}$)	Field sample duplicate value ($\mu\text{g/g}$)	Laboratory split sample ($\mu\text{g/g}$)	RPD as % or absolute difference (#)
ECU214	F21412/F21422/F21432	11.9	14.9	13.9	22%/16%
ECU216	F21614/F21624/F21634	1 U	7.8	7.1	(6.8)/(6.1)
ECU219	F21912/F21922/F21932	8.1	6.7	4.6	(1.4)/(3.5)
ECU221	F22114/F22124/F22134	11.1	10.3	11.8	7.5%/6.1%
ECU224	F22412/F22422/F22432	1 U	3.9	1.6	(2.9)/(0.6)
ECU226	F22614/F22624/F22634	29.9	62.7	38	71%/24%

(Comparison has been considered acceptable when the relative percent difference of the two values falls within the following categories (<50% = Good; <100% = Fair; <150% = Poor; >150% Unacceptable). When one of the values falls below 10 $\mu\text{g/g}$ (ppm) they have been considered acceptable when the absolute difference between the values is <10 $\mu\text{g/g}$)

**Table 3.3. LEFPC Phase II RA mercury confirmation analysis,
JE QA split sample comparison**

ECU	Sample numbers	Primary sample value ($\mu\text{g/g}$)	JE QA split sample value ($\mu\text{g/g}$)	RPD as % or absolute difference (#)
ECU040	F04013/LSS060	20.7	23	10.5%
ECU041	F04112/LSS053	34.6	47	30%
ECU042	F04214/LSS055	97.8	70	33%
ECU044	F04412/LSS062	17.6	22.1	23%
ECU045	F04513/LSS063	3.0	8.6	(5.6)
ECU046	F04671/LSS110	247	213	15%
ECU046	F04613/LSS054	1070	1200	12%
ECU046	F04673/LSS111	25.2	14.4	54%
ECU046	F04674/LSS136	6.3	2.8	(3.5)
ECU047	F04771/LSS135	5.0	5.1	(0.1)
ECU047	F04772/LSS098	111	102	8.6%
ECU047	F04773/LSS134	1 U	0.24	(0)
ECU047	F04714/LSS056	1440	873	49%
ECU047	F04774/LSS099	31.3	264	158%
ECU048	F04873/LSS100	1 U	13	(12)
ECU049	F04974/LSS127	126	111	12%
ECU050	F05014/LSS064	66.5	101	41%
ECU053	F05312/LSS065	99.7	116	15%
ECU053	F05373/LSS142	4.6	0.05 U	(4.6)
ECU053	F05374/LSS141	1 U	0.27	(0)
ECU054	F05412/LSS057	202	705	111%
ECU054	F05472/LSS102	1100	502	75%
ECU054	F054A2/LSS132	7.7	0.61	(7.6)
ECU054	F05474/LSS103	1380	2030	38%
ECU054	F054A4/LSS121	12.6	24	62%
ECU055	F05571/LSS101	6.6	4.4	(2.2)
ECU055	F055A1/LSS131	1 U	0.46	(0)

Table 3.3 (continued)

ECU	Sample numbers	Primary sample value ($\mu\text{g/g}$)	JE QA split sample value ($\mu\text{g/g}$)	RPD as % or absolute difference (#)
ECU055	F05573/LSS104	1 U	2.9	(1.9)
ECU055	F055A3/LSS133	326	382	16%
ECU055	F05514/LSS067	1 U	7	(6)
ECU059	F05973/LSS140	14.2	12.8	10.4%
ECU059	F05974/LSS142	4.9	0.14	(4.8)
ECU060	F06071/LSS129	29.3	27	8.2%
ECU060	F06072/LSS130	3.4	0.05	(3.4)
ECU060	F06073/LSS112	1 U	0.31	(0)
ECU060	F06014/LSS058	4.6	63	(58.4)
ECU060	F06074/LSS128	88.2	95	7.4%
ECU061	F06114/LSS059	1 U	5.8	(4.8)
ECU063	F06311/LSS066	46.6	41	13%
ECU063	F06373/LSS126	4.0	0.05 U	(4.0)
ECU063	F06374/LSS138	4.8	1.57	(3.2)
ECU065	F06571/LSS125	5.8	0.19	(5.6)
ECU065	F06572/LSS124	63.6	131	69%
ECU065	F06513/LSS072	6.5	3.0	(3.5)
ECU066	F06672/LSS113	1 U	4.3	(3.3)
ECU067	F06713/LSS073	187	214	14%
ECU067	F06774/LSS139	377	228	49%
ECU068	F06812/LSS074	1 U	3.0	(2.0)
ECU072	F07272/LSS115	41.9	5.3	(36.3)
ECU073	F07113/LSS069	7.0	5.2	(1.8)
ECU074	F07413/LSS071	25.7	5.1	(20.6)
ECU075	F07511/LSS070	15.3	6.2	(9.1)
ECU076	F07611/LSS068	4.3	4.4	(0.1)
ECU078	F07871/LSS114	27.6	16.5	50%

Table 3.3 (continued)

ECU	Sample numbers	Primary sample value ($\mu\text{g/g}$)	JE QA split sample value ($\mu\text{g/g}$)	RPD as % or absolute difference (#)
ECU078	F07874/LSS137	22.4	21.7	3.2%
ECU082	F08212/LSS076	125	26	131%
ECU083	F08372/LSS120	16	12	29%
ECU083	F08373/LSS119	251	232	7.7%
ECU085	F08571/LSS116	10.1	6.8	(3.3)
ECU085	F08512/LSS075	54.7	54	1.3%
ECU086	F08674/LSS117	15.9	8.6	(7.3)
ECU092	F09272/LSS118	90.3	39	79%
ECU094	F09414/LSS077	27.8	33	17%
ECU098	F09812/LSS009	157	207	27%
ECU099	F09911/LSS008	182	221	19%
ECU103	F10312/LSS007	108	75	36%
ECU104	F10414/LSS006	1 U	38	(37)
ECU105	F10513/LSS005	1 U	0.61	(0)
ECU107	F10714/LSS004	11	4.9	(6.1)
ECU110	F11013/LSS003	3.7	2.39	(1.3)
ECU113	F11314/LSS030	9.1	11.9	(2.8)
ECU117	F11712/LSS041	18.7	16.4	13%
ECU119	F11911/LSS023	22.6	33	37%
ECU120	F12013/LSS022	53.5	48	10.8%
ECU121	F12114/LSS021	37	48	26%
ECU126	F12612/LSS042	157	205	27%
ECU128	F12812/LSS038	163	127	25%
ECU131	F13113/LSS019	15.5	18	15%
ECU132	F13274/LSS093	164	121	30%
ECU133	F13314/LSS018	4.3	4.1	(0.2)
ECU134	F13411/LSS020	4.8	6.6	(1.8)

Table 3.3 (continued)

ECU	Sample numbers	Primary sample value ($\mu\text{g/g}$)	JE QA split sample value ($\mu\text{g/g}$)	RPD as % or absolute difference (#)
ECU134	F13473/LSS092	133	151	12%
ECU136	F13614/LSS043	90.9	117	25%
ECU137	F13714/LSS040	27.3	21	26%
ECU138	F13814/LSS039	59.4	96	50%
ECU139	F13911/LSS037	49.5	121	84%
ECU141	F14174/LSS087	74.9	63	17%
ECU142	F14212/LSS016	86.6	150	54%
ECU142	F14274/LSS084	23.2	23.5	1.3%
ECU143	F14314/LSS014	68.4	71	3.7%
ECU144	F14411/LSS015	57.1	100	56%
ECU146	F14611/LSS036	109	100	8.3%
ECU147	F14712/LSS035	144	161	11%
ECU147	F14773/LSS091	9.2	7.9	(1.3)
ECU148	F14812/LSS034	102	124	19%
ECU151	F15171/LSS088	5.9	2.15	(3.8)
ECU152	F15213/LSS017	71	72	1.4%
ECU153	F15312/LSS013	46.4	43	7.6%
ECU159	F15974/LSS105	210	207	1.4%
ECU161	F16113/LSS033	354	491	32%
ECU161	F16173/LSS090	24.2	25	3.3%
ECU162	F16214/LSS032	1 U	0.6	(0)
ECU163	F16374/LSS089	1 U	2.3	(1.3)
ECU164	F16473/LSS086	1 U	0.9	(0)
ECU165	F16574/LSS085	1 U	2.5	(1.5)
ECU166	F16672/LSS082	1 U	2	(1.0)
ECU166	F16613/LSS031	404	493	20%
ECU166	F16673/LSS083	3.8	5.6	(1.8)

Table 3.3 (continued)

ECU	Sample numbers	Primary sample value ($\mu\text{g/g}$)	JE QA split sample value ($\mu\text{g/g}$)	RPD as % or absolute difference (#)
ECU166	F16674/LSS109	11.4	5	(6.4)
ECU167	F16771/LSS080	1 U	22.4	(21.4)
ECU167	F16772/LSS081	1 U	2.7	(1.7)
ECU168	F16811/LSS024	9.4	25	(15.6)
ECU169	F16972/LSS079	26.6	35	27%
ECU170	F17012/LSS025	72	53	30%
ECU171	F17112/LSS026	12.7	9.5	(3.2)
ECU173	F17312/LSS027	7.4	4.7	(2.7)
ECU173	F17374/LSS122	1 U	0.62	(0)
ECU174	F17411/LSS028	4.2	4.9	(0.7)
ECU176	F17612/LSS107	10	6.4	(3.6)
ECU179	F17914/LSS029	4.7	3.6	(1.1)
ECU183	F18372/LSS078	1 U	0.65	(0)
ECU185	F18512/LSS002	1 U	3.3	(2.3)
ECU186	F18612/LSS001	8.9	11	(2.1)
ECU190	F19014/LSS108	14.1	22.7	47%
ECU192	F19211/LSS010	1 U	0.17	(0)
ECU194	F19413/LSS011	10	3	(7)
ECU195	F19511/LSS012	6.1	3.8	(2.3)
ECU197	F19711/LSS044	494	315	44%
ECU197	F19771/LSS094	1 U	0.61	(0)
ECU197	F19773/LSS109	4.3	4.5	(0.2)
ECU197	F19774/LSS095	4.1	6.7	(2.6)
ECU198	F19811/LSS045	40.1	63	44%
ECU201	F20112/LSS046	51.3	95	60%
ECU201	F20173/LSS123	10.3	1.14	(9.2)
ECU202	F20274/LSS096	5.8	2.2	(3.6)

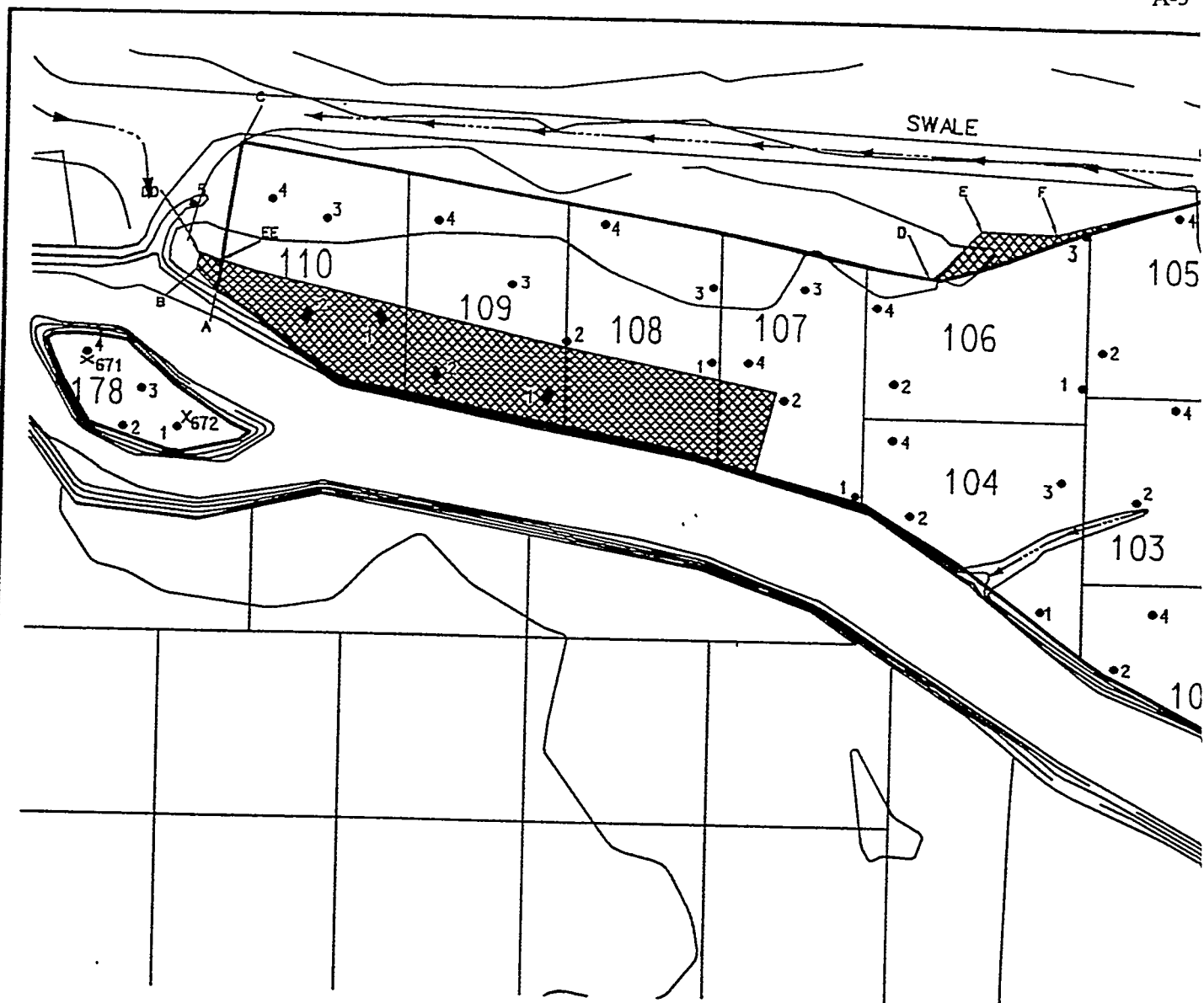
Table 3.3 (continued)

ECU	Sample numbers	Primary sample value ($\mu\text{g/g}$)	JE QA split sample value ($\mu\text{g/g}$)	RPD as % or absolute difference (#)
ECU203	F20311/LSS047	566	656	15%
ECU203	F20371/LSS097	1 U	2.6	(1.6)
ECU214	F21414/LSS048	98.7	117	17%
ECU218	F21812/LSS049	1 U	3.2	(2.2)
ECU220	F22012/LSS050	1 U	0.46	(0)
ECU224	F22411/LSS051	9.5	11.2	(1.7)
ECU225	F22511/LSS052	1 U	3.4	(2.4)

(Comparison has been considered acceptable when the Relative Percent Difference of the two values falls within the following categories (<50% = Good; <100% = Fair; <150% = Poor; >150% Unacceptable). When one of the values falls below 10 $\mu\text{g/g}$ (ppm) they have been considered acceptable when the Absolute Difference between the values is <10 $\mu\text{g/g}$)

4. REFERENCES

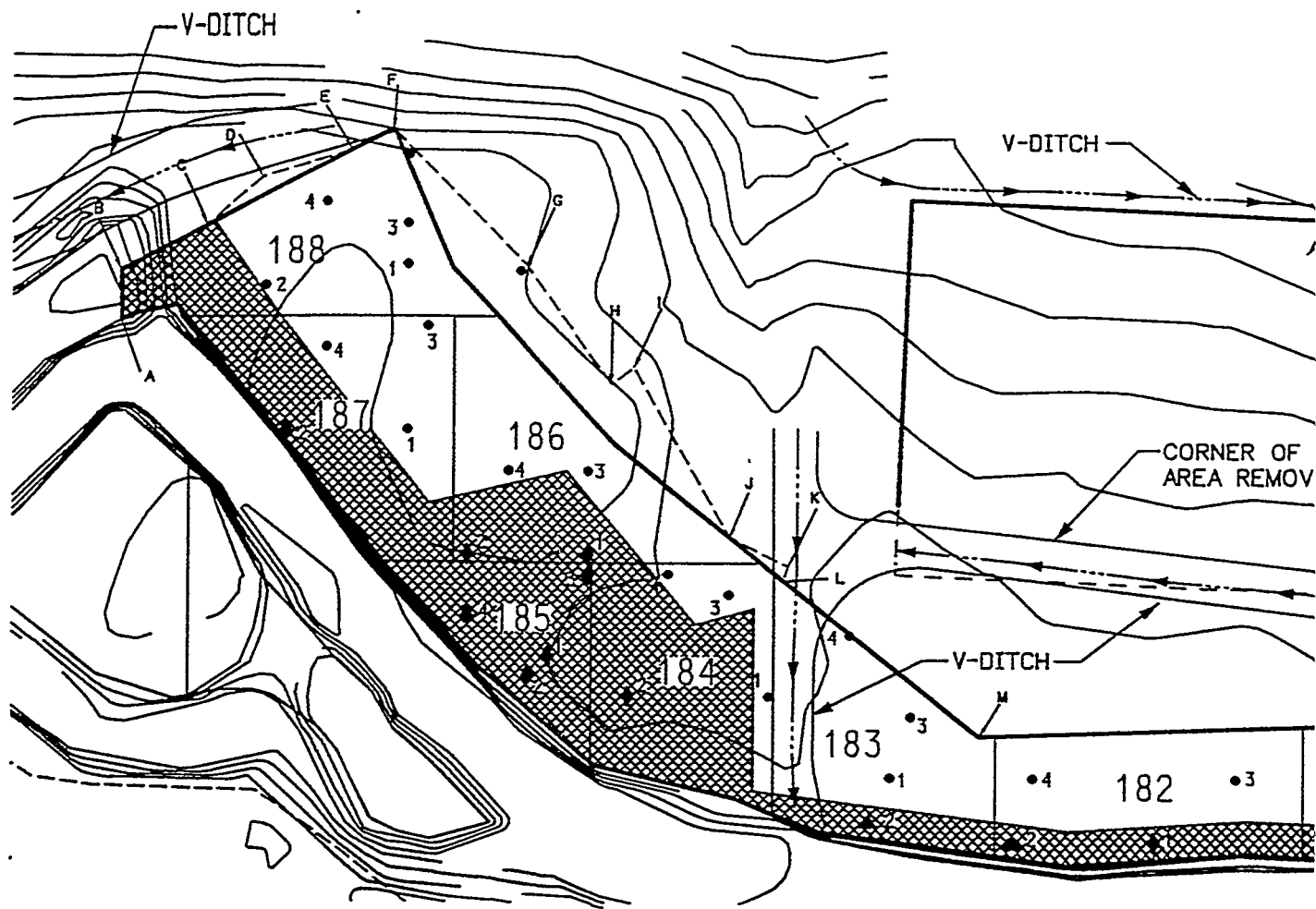
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- DOE. 1996b. *Phase II Excavation Boundary Limits for Lower East Fork Poplar Creek Floodplain, Oak Ridge, Tennessee*, Oak Ridge, Tennessee.
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- SAIC. 1996b. *Sampling and Analysis Plan for Treatment Water and Creek Water for the Lower East Fork Poplar Creek, Oak Ridge, Tennessee*, Y/ER-261, March.
- SAIC. 1996c. *Confirmatory Sampling and Analysis Plan for the Lower East Fork Poplar Creek, Oak Ridge, Tennessee*, Y/ER-258/R1, November.
- SAIC. 1996d. *Phase I Confirmatory Sampling Data Report, Lower East Fork Poplar Creek, Oak Ridge, Tennessee*, November.



	NORTHING	EASTING		NORTHING	EASTING
A	N 40259.38	E 53742.59	R	N 40119.85	E 54054.01
B	N 40265.33	E 53736.92	S	N 40265.92	E 53939.15
C	N 40297.25	E 53748.85	T	N 40276.37	E 54066.70
D	N 40267.09	E 53937.63	U	N 40242.49	E 54099.64
E	N 40277.74	E 53950.04	V	N 40207.51	E 54090.21
F	N 40277.35	E 53970.01	W	N 40157.26	E 54104.28
G	N 40287.59	E 54009.62	X	N 40101.32	E 54123.44
H	N 40287.34	E 54056.20	Y	N 40102.00	E 54087.74
I	N 40285.66	E 54065.17	Z	N 40132.54	E 54068.66
J	N 40240.61	E 54102.44	AA	N 40103.35	E 54146.91
K	N 40221.76	E 54095.36	BB	N 40096.61	E 54137.87
L	N 40205.10	E 54108.38	CC	N 40106.74	E 54127.61
M	N 40203.29	E 54121.97	DD	N 40268.72	E 53737.77
N	N 40152.47	E 54110.58	EE	N 40267.19	E 53743.88
O	N 40127.42	E 54143.52	671	N 40240.00	E 53707.50
P	N 40114.04	E 54133.23	672	N 40225.00	E 53735.00
Q	N 40099.50	E 54081.88			

- - Confirmatory soil sampling location, 16-32 in BL
 - ▲ - Confirmatory soil sampling location, >32 in BLS
 - ◆ - Confirmatory soil sampling location, 16-32 in. BL excavation was only required to a depth of 16 made during excavation activities, over excaval accomplished in portions of the ECUs to ensur
- 115 - Excavation Confirmation Unit (ECU)

Confirmatory Soil Sampling information associated with (ECUs) found in area C can be found in Science Appli field sampling logbooks. All confirmatory and sampling I maintained by Lockheed Martin Energy Systems (LMES Systems (PEMS) database and will be stored permanen Information System (OREIS). The data will be available Remedial Action Report.



	NORTHING	EASTING
A	N 40378.92	E 53261.53
B	N 40391.23	E 53261.46
C	N 40402.06	E 53282.94
D	N 40413.49	E 53296.70
E	N 40420.09	E 53318.68
F	N 40425.16	E 53328.73
G	N 40395.41	E 53368.41
H	N 40363.75	E 53383.14
I	N 40367.90	E 53388.70
J	N 40326.40	E 53412.64
K	N 40319.34	E 53427.26
L	N 40315.80	E 53426.08
M	N 40277.69	E 53474.36
N	N 40281.45	E 53574.12
O	N 40293.87	E 53699.77
P	N 40269.30	E 53703.91
Q	N 40391.63	E 53343.59
R	N 40348.78	E 53384.28

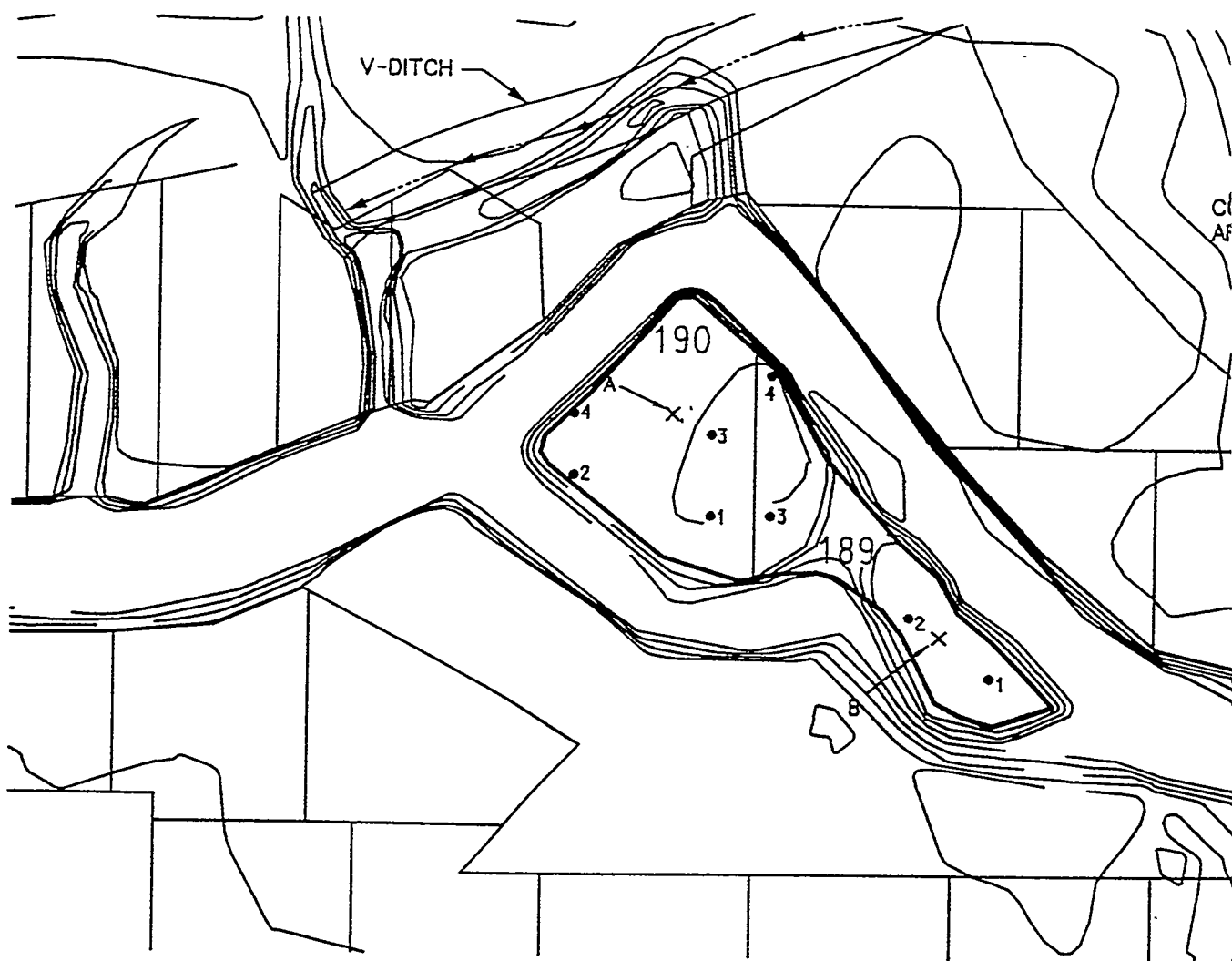
• - Confirmatory soil sampling location, 16-32 in BLS

▲ - Confirmatory soil sampling location, >32 in BLS

◆ - Confirmatory soil sampling location, 16-32 in. BLS, where analytical results indicated excavation was only required to a depth of 16 in. BLS. However, based on visual made during excavation activities, over excavation to depths greater than 16 in. B was accomplished in portions of the ECUs to ensure all of the identified "black layer"

115 - Excavation Confirmation Unit (ECU)

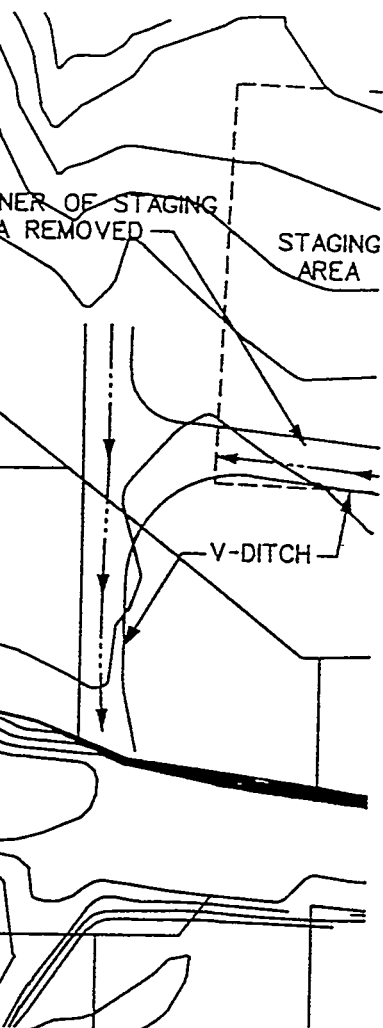
Confirmatory Soil Sampling information associated with the Excavation Confirmation Units (ECUs) found in area B can be found in Science Applications International Corporation (SAIC) field sampling logbooks. All confirmatory and sampling information and associated data is maintained by Lockheed Martin Energy Research Corporation (LM-ER) Project Environmental Measurement Systems (PEMS) database and will be stored permanently in the Oak Ridge Environmental Information System (OREIS). The data will be available to the public through the LEFPC Remedial Action Report.



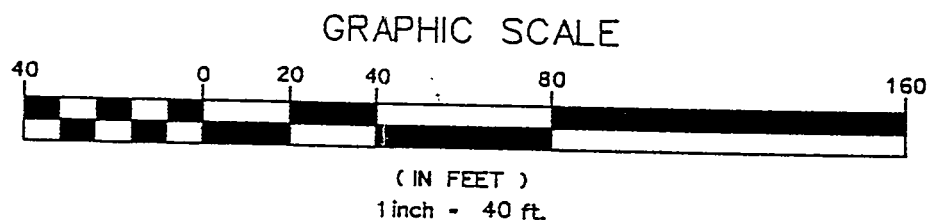
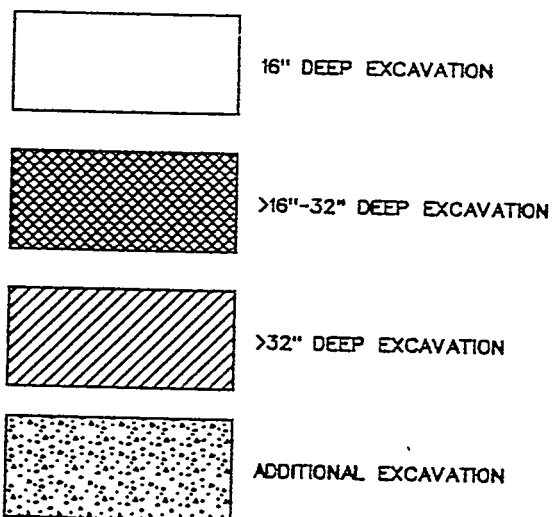
	NORTHING	EASTING
A	N 40327.50	E 53257.50
B	N 40272.50	E 53325.00

- - Confirmatory soil sampling location, 16-32 in BLS
 - ▲ - Confirmatory soil sampling location, >32 in BLS
 - ◆ - Confirmatory soil sampling location, 16-32 in. BLS, where analytical results indicate excavation was only required to a depth of 16 in. BLS. However, based on visual made during excavation activities, over excavation to depths greater than 16 in. accomplished in portions of the ECUs to ensure all of the identified "black layer"
- 115 - Excavation Confirmation Unit (ECU)

Confirmatory Soil Sampling information associated with the Excavation Confirmation Unit (ECUs) found in area I can be found in Science Applications International Corporation (SAIC) field sampling logbooks. All confirmatory and sampling information and associated data is maintained by Lockheed Martin Energy Research Corporation (LME) Project Environmental Measurement Systems (PEMS) database and will be stored permanently in the Oak Ridge Environmental Information System (OREIS). The data will be available to the public through the LEFPC Remedial Action Report.



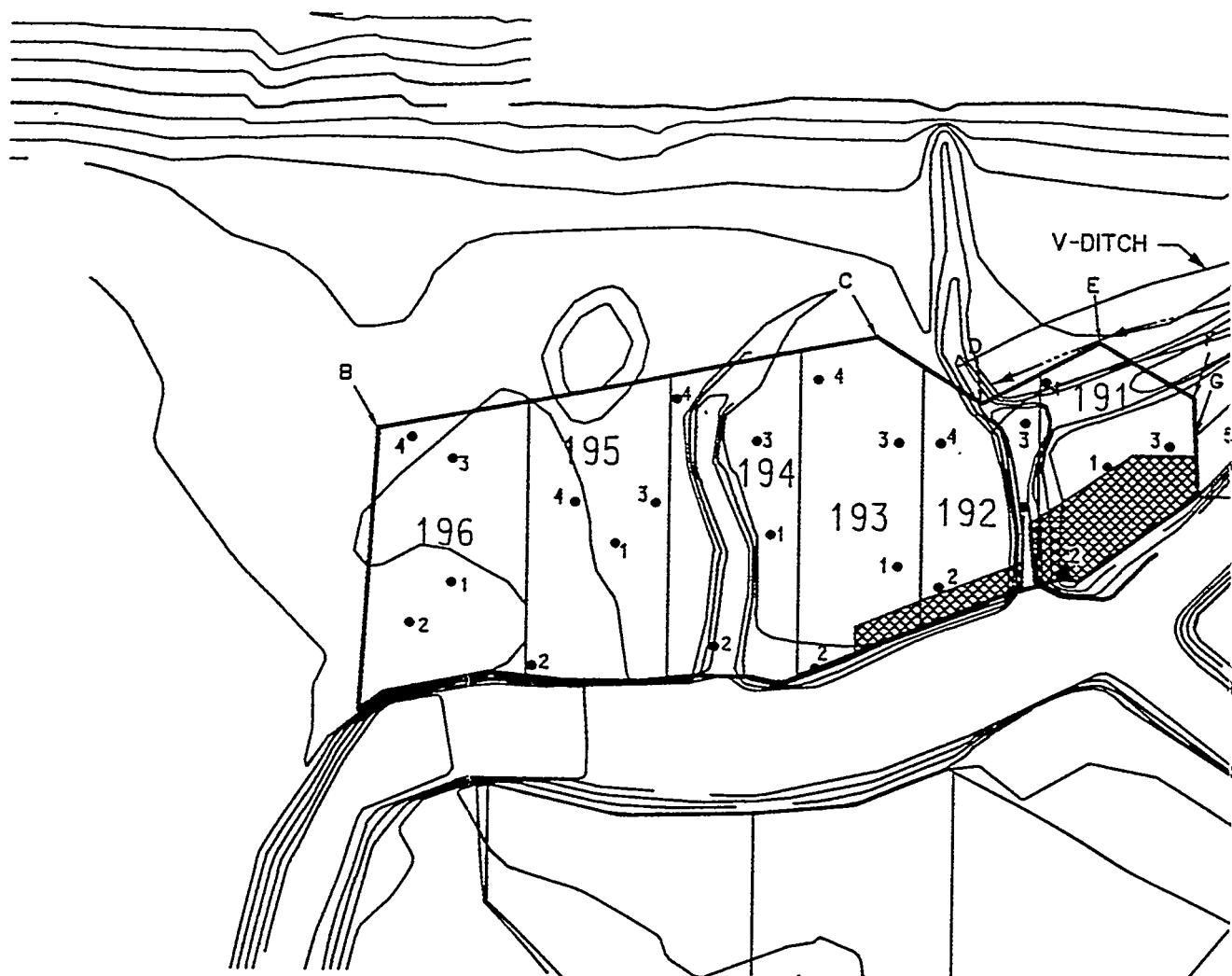
- _____ MAJOR CONTOUR
_____ MINOR CONTOUR
_____ DENOTES ORIGINAL ECU BOUNDARY
----- DENOTES EXTENDED ECU BOUNDARY



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 FOSTER WHEELER ENVIRONMENTAL CORPORATION - OAK RIDGE, TENNESSEE Designed for the DEPARTMENT OF ENERGY under Lockheed Martin Storage Systems Subcontract NLS-92-0604G; existing under Prime Contract NLS-92-0604G with the United States Department of Energy for management of Facilities under the responsibility of DOE-OES, Attn: John T. ... PROJECT NAME:			
LOWER EAST FORK POPLAR CREEK OPERABLE UNIT			
BRUNER SITE - AREA I EXCAVATION AREA #4 AS-CONSTRUCTED			
PLANT	DISC CIVIL	WORK ORDER NO. STD 97-2292	SKETCH NO.



	NORTHING	EASTING
A	N 40295.77	E 53020.50
B	N 40364.42	E 53024.44
C	N 40387.85	E 53146.69
D	N 40372.20	E 53172.00
E	N 40387.26	E 53200.15
F	N 40374.20	E 53223.24
G	N 40364.96	E 53223.70
H	N 40375.01	E 53234.83
I	N 40368.27	E 53241.65
J	N 40350.70	E 53224.40

- - Confirmatory soil sampling location, 16-32 in BLS
 - ▲ - Confirmatory soil sampling location, >32 in BLS
 - ◆ - Confirmatory soil sampling location, 16-32 in. BLS, where analytical results indicate excavation was only required to a depth of 16 in. BLS. However, based on visual made during excavation activities, over excavation to depths greater than 16 in. accomplished in portions of the ECUs to ensure all of the identified "black layer"
- 115 - Excavation Confirmation Unit (ECU)

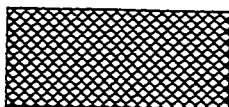
Confirmatory Soil Sampling information associated with the Excavation Confirmation Units (ECUs) found in area A can be found in Science Applications International Corporation field sampling logbooks. All confirmatory and sampling information and associated data maintained by Lockheed Martin Energy Research Corporation (LMES) Project Environmental Measurement Systems (PEMS) database and will be stored permanently in the Oak Ridge Environmental Information System (OREIS). The data will be available to the public through the LEFF Remedial Action Report.



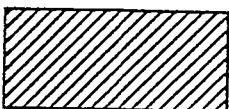
- MAJOR CONTOUR
- MINOR CONTOUR
- DENOTES ORIGINAL ECU BOUNDARY
- - - - - DENOTES EXTENDED ECU BOUNDARY



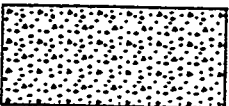
16" DEEP EXCAVATION



>16"-32" DEEP EXCAVATION



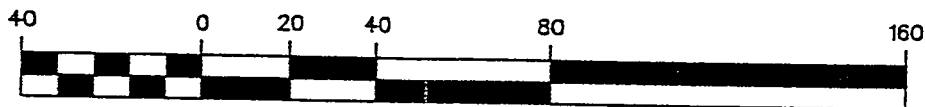
>32" DEEP EXCAVATION



ADDITIONAL EXCAVATION



GRAPHIC SCALE



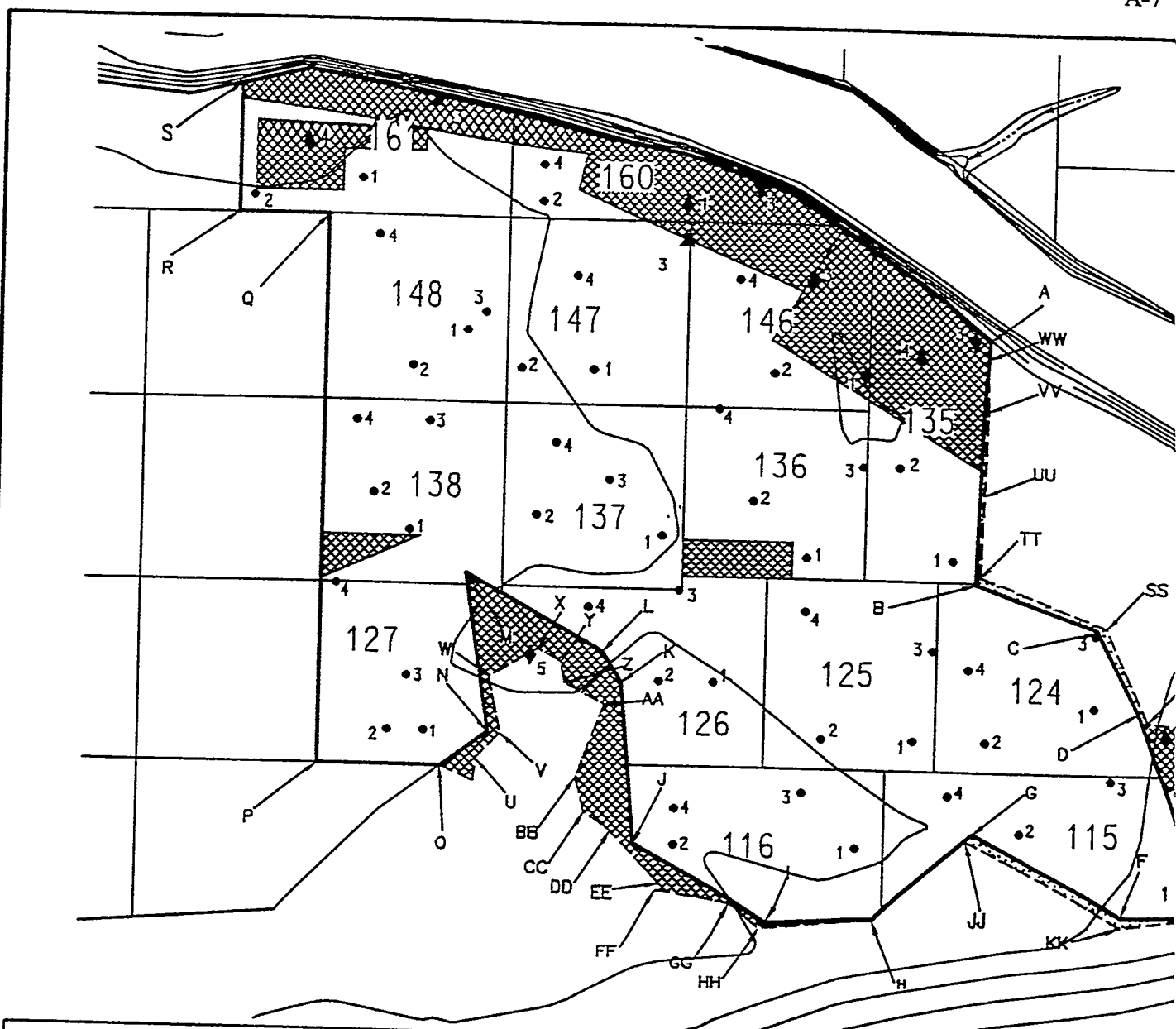
(IN FEET)

1 inch = 40 ft.

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FOSTER WHEELER ENVIRONMENTAL CORPORATION - OAK RIDGE, TENNESSEE Designed for the DEPARTMENT OF ENERGY under Contract Number DE-AC05-84OR21400 with the United States DEPARTMENT OF ENERGY for management of Facilities under the responsibility of DOE-ORNL. Oak Ridge, Tennessee A Oak Ridge, Tennessee A Oak Ridge, Tennessee A			
PROJECT NAME			
LOWER EAST FORK POPLAR CREEK OPERABLE UNIT			
BRUNER SITE - AREA A EXCAVATION AREA #6 AS-CONSTRUCTED			
PLANT	DISCIP	WORK ORDER NO.	SKETCH NO.
	CIVIL	STD 97-2292	

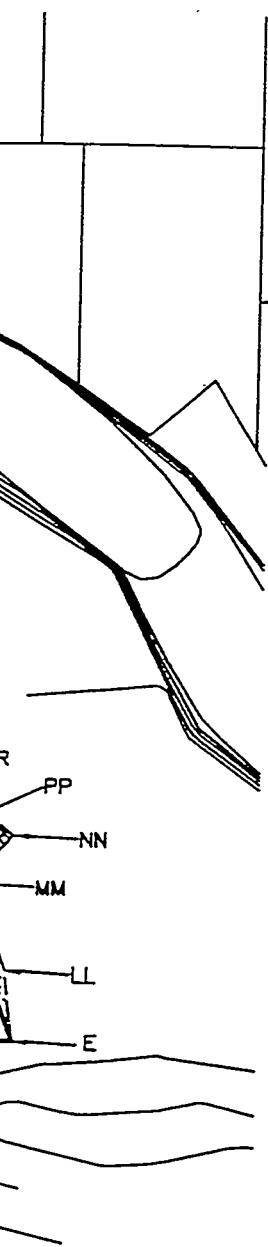


	NORTHING	EASTING			
A	N 40137.55	E 53961.42	W	N 40042.68	E 53825.44
B	N 40070.94	E 53958.89	X	N 40050.86	E 53838.51
C	N 40059.12	E 53992.79	Y	N 40047.42	E 53845.18
D	N 40036.51	E 54004.82	Z	N 40041.36	E 53846.26
E	N 39981.27	E 54025.78	AA	N 40035.86	E 53857.43
F	N 39980.67	E 54001.05	BB	N 40015.42	E 53849.90
G	N 40002.00	E 53959.47	CC	N 40005.95	E 53852.53
H	N 39978.94	E 53932.61	DD	N 40000.80	E 53859.93
I	N 39977.49	E 53903.18	EE	N 39986.66	E 53873.71
J	N 39997.45	E 53866.36	FF	N 39984.85	E 53872.91
K	N 40041.96	E 53862.13	GG	N 39981.81	E 53893.38
L	N 40050.28	E 53856.57	HH	N 39976.15	E 53901.60
M	N 40071.09	E 53818.35	JJ	N 39999.88	E 53957.87
N	N 40027.51	E 53825.39	KK	N 39978.57	E 54000.65
O	N 40017.75	E 53812.40	LL	N 39997.89	E 54024.08
P	N 40017.75	E 53778.46	MM	N 40016.35	E 54015.80
Q	N 40167.75	E 53778.46	NN	N 40027.56	E 54025.44
R	N 40167.85	E 53753.47	PP	N 40032.61	E 54018.91
S	N 40201.00	E 53753.47	RR	N 40033.97	E 54007.47
T	N 40013.80	E 53821.48	SS	N 40059.63	E 53995.58
U	N 40020.52	E 53822.45	TT	N 40072.97	E 53960.23
V	N 40027.23	E 53828.78	UU	N 40095.39	E 53960.23
			VV	N 40118.45	E 53961.45
			WW	N 40132.69	E 53961.15

- - Confirmatory soil sampling location, 16-32 in BL
- ▲ - Confirmatory soil sampling location, >32 in BLS
- ◆ - Confirmatory soil sampling location, 16-32 in. BL excavation was only required to a depth of 16 made during excavation activities, over excavat accomplished in portions of the ECUs to ensur

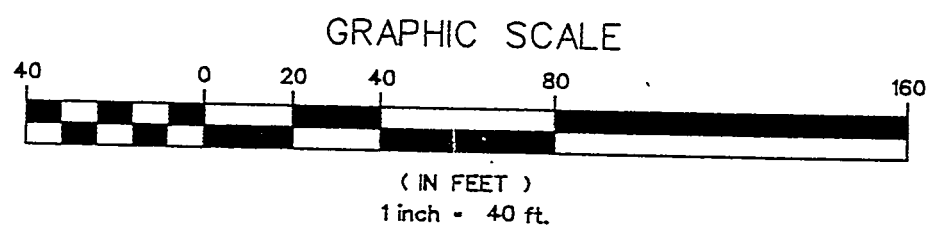
115 - Excavation Confirmation Unit (ECU)

Confirmatory Soil Sampling information associated with (ECUs) found in area D can be found in Science Appli field sampling logbooks. All confirmatory and sampling i maintained by Lockheed Martin Energy Systems (LMES Systems (PEMS) database and will be stored perman Information System (OREIS). The data will be available Remedial Action Report.



- MAJOR CONTOUR
- MINOR CONTOUR
- DENOTES ORIGINAL ECU BOUNDARY
- DENOTES EXTENDED ECU BOUNDARY

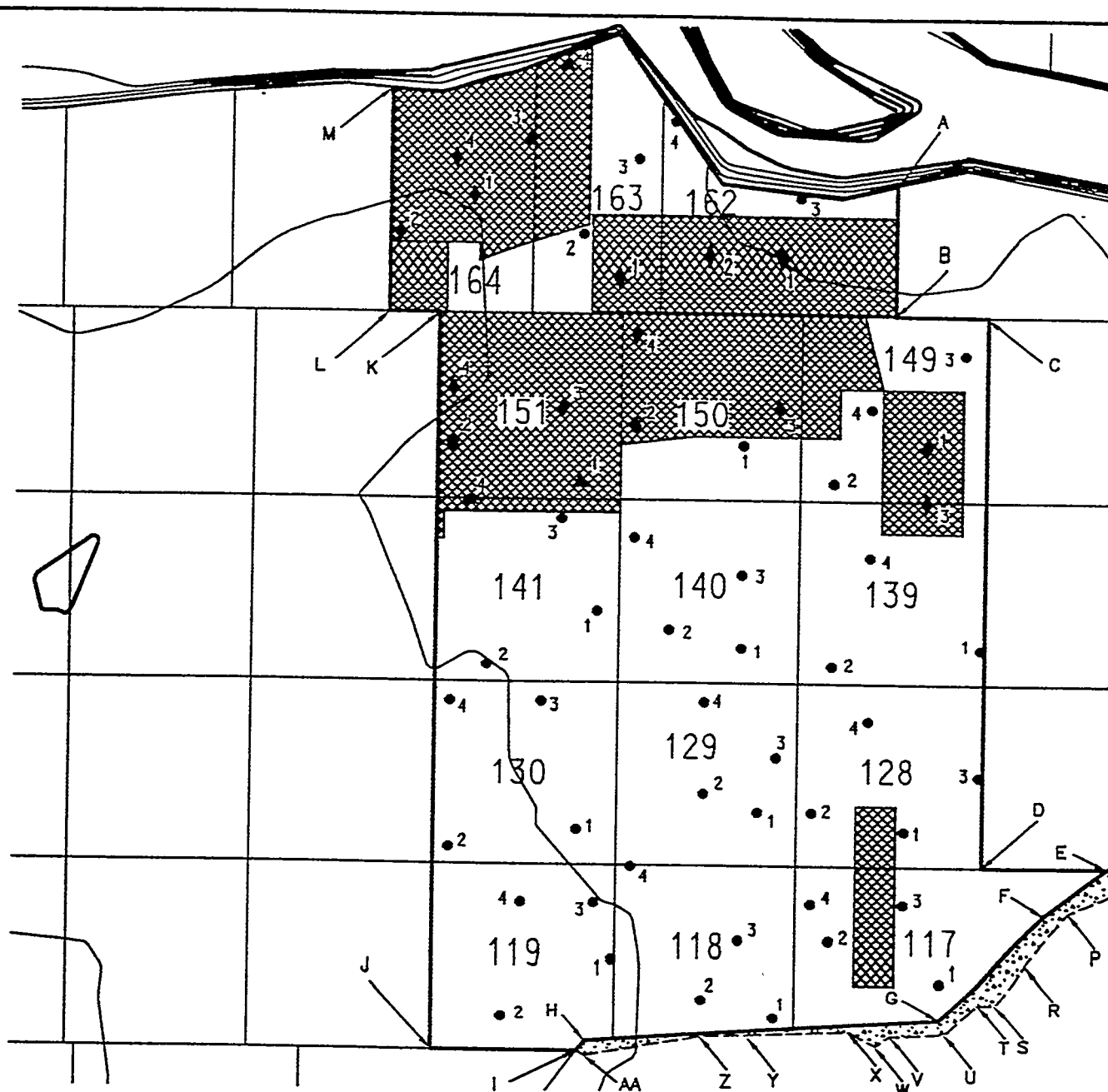
- 16" DEEP EXCAVATION
- >16"-32" DEEP EXCAVATION
- >32" DEEP EXCAVATION
- ADDITIONAL EXCAVATION



where analytical results indicated that BLS. However, based on visual observations to depths greater than 16 in. BLS was all of the identified "black layer" was removed.

Excavation Confirmation Units
 International Corporation (SAIC)
 information and associated data is being
 Project Environmental Measurement
 in the Oak Ridge Environmental
 the public through the LEFPC

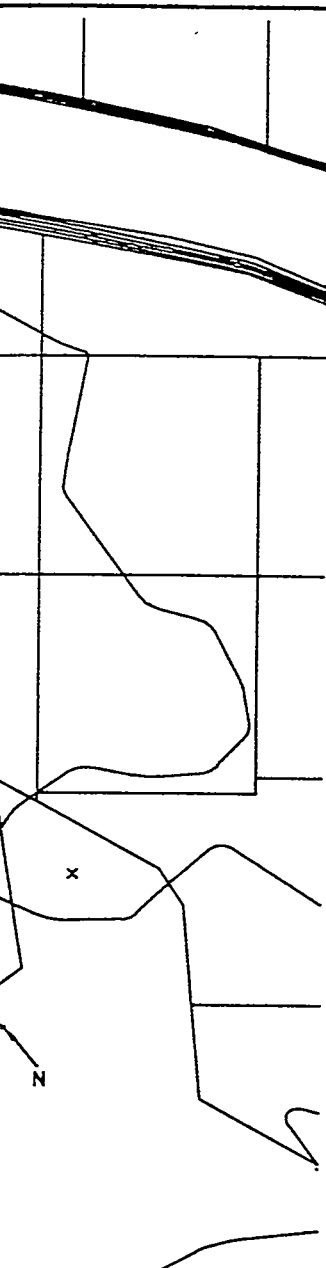
FOSTER WHEELER ENVIRONMENTAL CORPORATION - OAK RIDGE, TENNESSEE Designed for the DEPARTMENT OF ENERGY under Lockheed Martin Energy Research Corporation contract DE-AC05-84OR21400 with the United States DEPARTMENT OF ENERGY for management of facilities under the responsibility of DOE-ORNL. Oak Ridge, Tennessee, U.S.A. 37831-6001			
PROJECT NAME:			
LOWER EAST FORK POPLAR CREEK OPERABLE UNIT			
BRUNER SITE - AREA D EXCAVATION AREA #6 AS-CONSTRUCTED			
PLANT	DISC	WORK ORDER NO.	SKETCH NO.
	CIVIL	STD 97-2292	



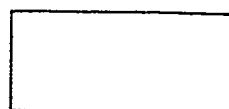
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A	N 40201.00	E 53753.47	N	N 40013.80	E 53821.48
B	N 40167.85	E 53753.47	P	N 40005.59	E 53801.98
C	N 40167.75	E 53778.46	R	N 39992.17	E 53790.62
D	N 40017.75	E 53778.46	S	N 39981.53	E 53782.77
E	N 40017.75	E 53812.40	T	N 39981.62	E 53777.99
F	N 40005.19	E 53795.69	U	N 39973.18	E 53769.15
G	N 39977.21	E 53767.50	V	N 39972.39	E 53754.52
H	N 39970.60	E 53670.49	W	N 39969.66	E 53750.46
I	N 39970.60	E 53670.49	X	N 39973.57	E 53743.27
J	N 39967.75	E 53628.46	Y	N 39972.38	E 53715.47
K	N 40167.75	E 53628.46	Z	N 39971.95	E 53702.48
L	N 40167.75	E 53614.71	AA	N 39966.46	E 53670.34
M	N 40225.56	E 53614.71			

- - Confirmatory soil sampling location, 16-32 in
- ▲ - Confirmatory soil sampling location, >32 in BL
- ◆ - Confirmatory soil sampling location, 16-32 in. excavation was only required to a depth of made during excavation activities, over excavation accomplished in portions of the ECUs to ensure
- 115 - Excavation Confirmation Unit (ECU)

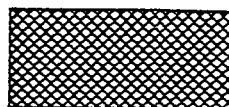
Confirmatory Soil Sampling information associated with (ECUs) found in area E can be found in Science Application field sampling logbooks. All confirmatory and sampling maintained by Lockheed Martin Energy Research Corporation (LME) Systems (PEMS) database and will be stored permanently in the Information System (OREIS). The data will be available in the Remedial Action Report.



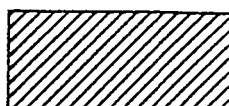
- MAJOR CONTOUR
- MINOR CONTOUR
- DENOTES ORIGINAL ECU BOUNDARY
- - - - - DENOTES EXTENDED ECU BOUNDARY



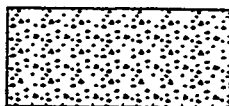
16" DEEP EXCAVATION



>16"-32" DEEP EXCAVATION



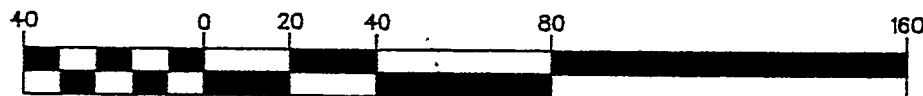
>32" DEEP EXCAVATION



ADDITIONAL EXCAVATION



GRAPHIC SCALE



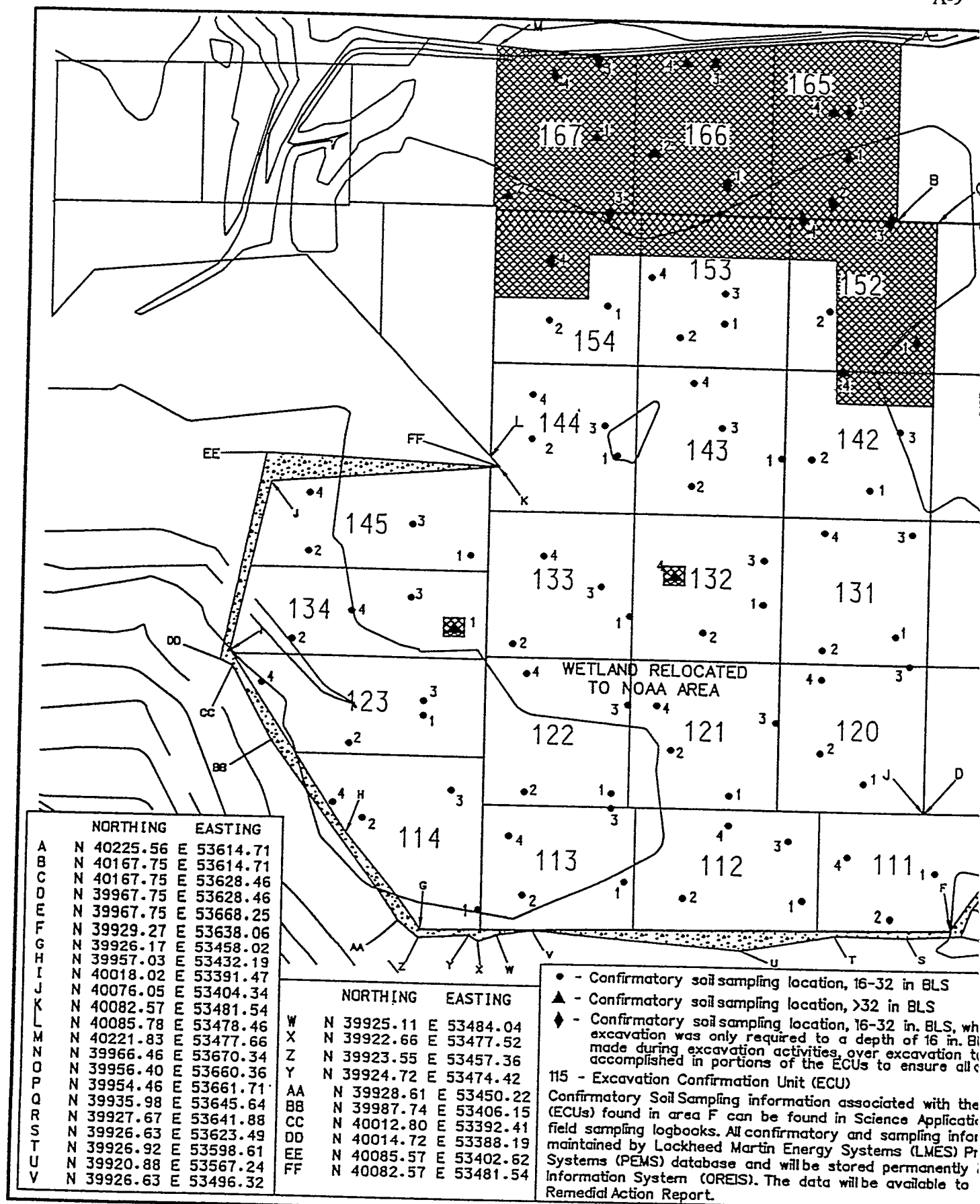
(IN FEET)

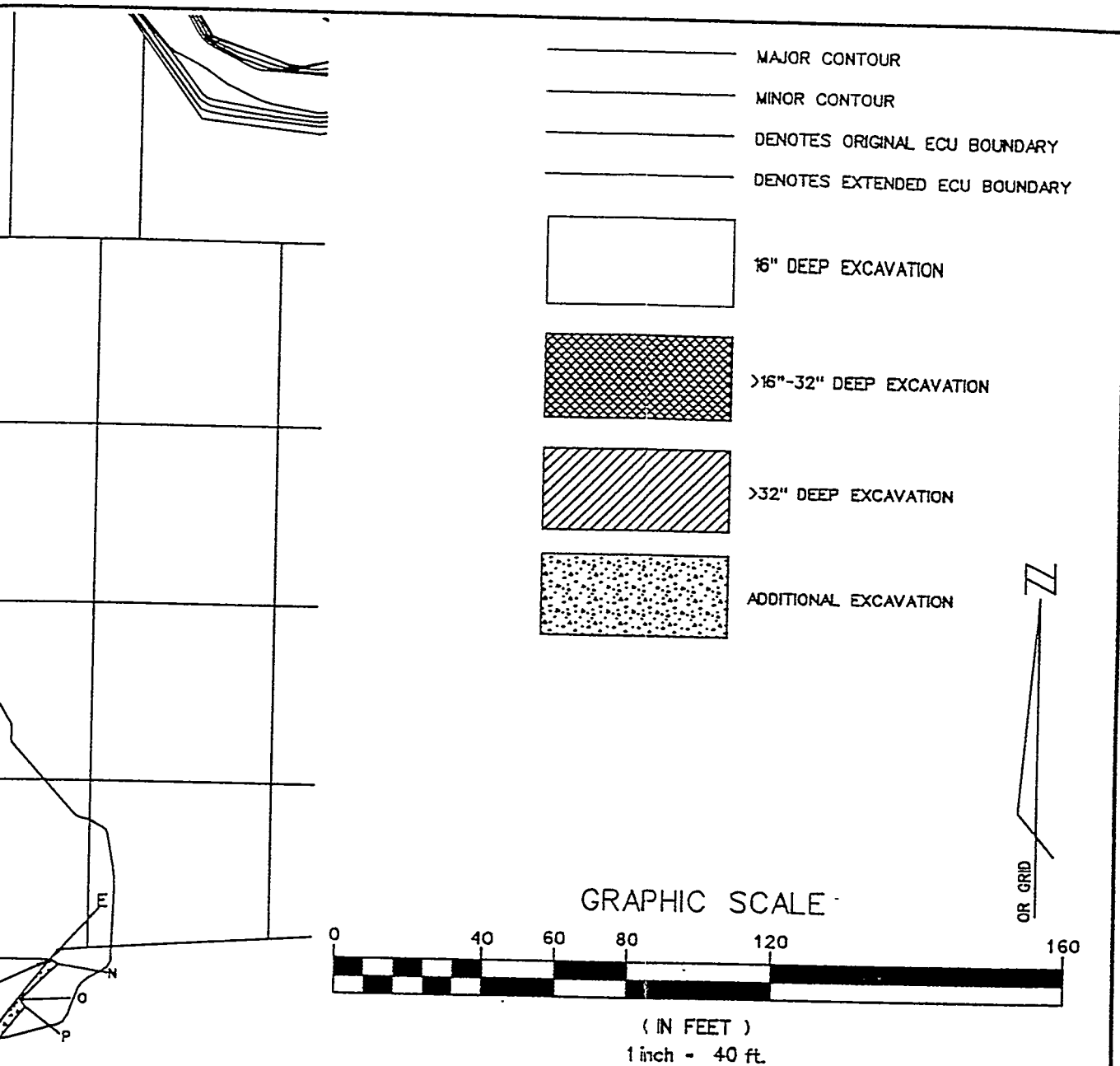
1 inch = 40 ft.

S, where analytical results indicated that
in. BLS. However, based on visual observations
ion to depths greater than 16 in. BLS was
e all of the identified "black layer" was removed.

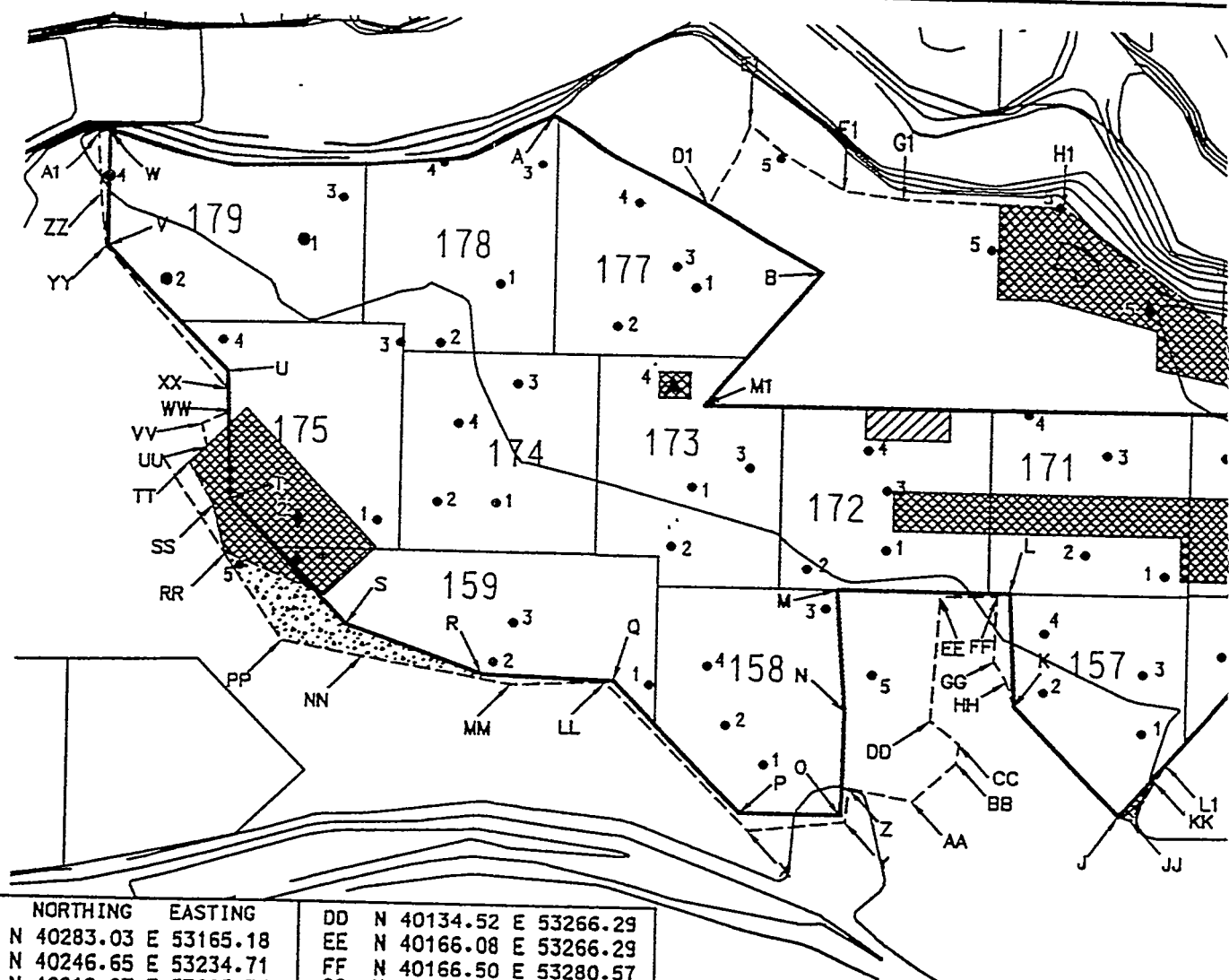
the Excavation Confirmation Units
cations International Corporation (SAIC)
information and associated data is being
) Project Environmental Measurement
ty in the Oak Ridge Environmental
to the public through the LEFPC

FOSTER WHEELER ENVIRONMENTAL CORPORATION - OAK RIDGE, TENNESSEE Designed for the DEPARTMENT OF ENERGY under Lockheed Martin Energy Research Corporation BES-OR-MS-EC under Prime Contract DE-AC05-84OR21400 with the Shared Storage DEPARTMENT OF ENERGY for management of Facilities under the responsibility of EES-OR. Oak Ridge, Tennessee, 6-1984, Revision 4, 10/1984, 01/85			
PROJECT NAME			
LOWER EAST FORK POPLAR CREEK OPERABLE UNIT			
BRUNER SITE - AREA E EXCAVATION AREA #6 AS-CONSTRUCTED			
PLANT	DISCIP	WORK ORDER NO.	SKETCH NO.
CIVIL	STD	97-2292	





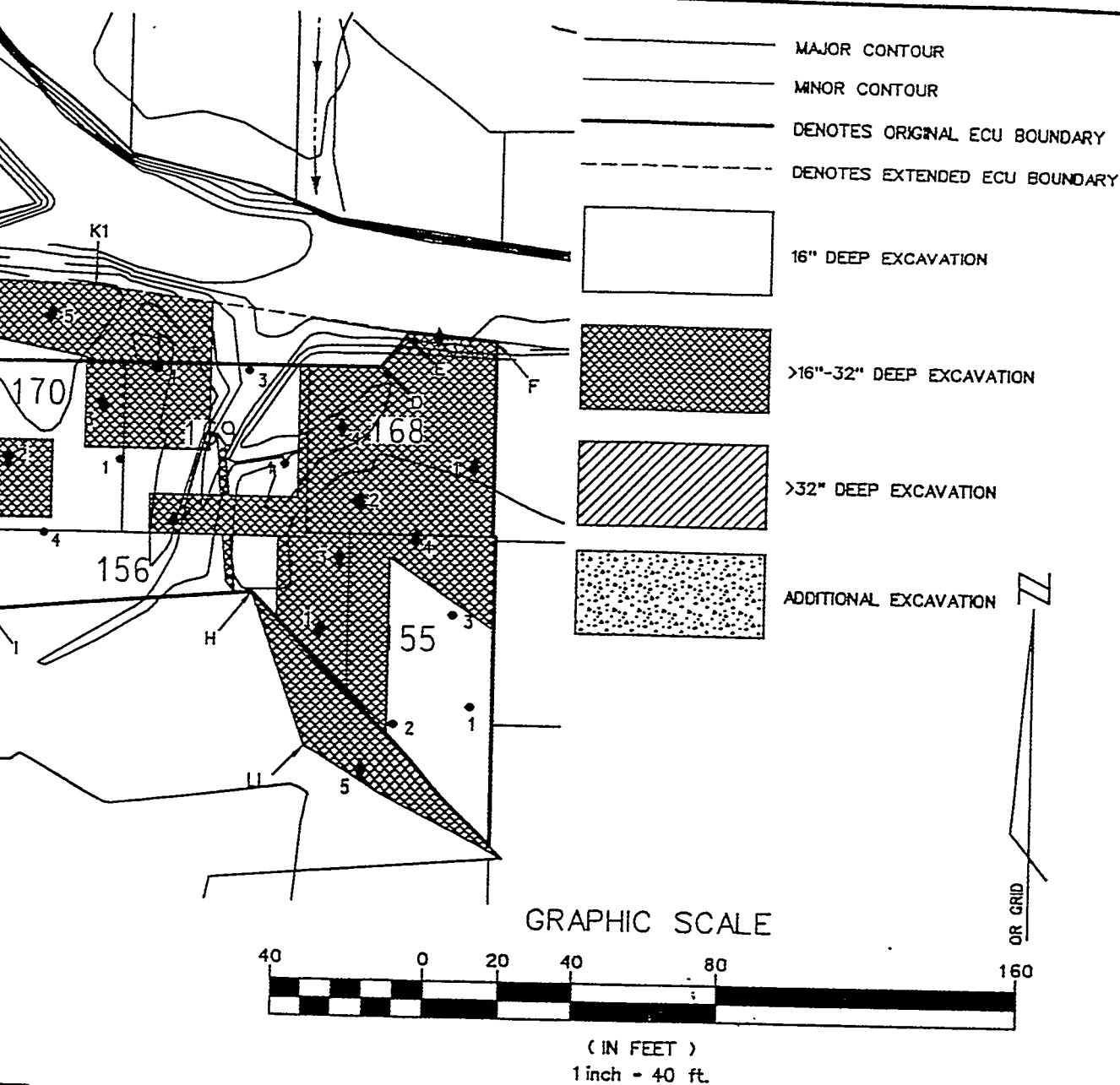
 FOSTER WHEELER ENVIRONMENTAL CORPORATION - OAK RIDGE, TENNESSEE Designed for the DEPARTMENT OF ENERGY under Lockheed Martin Energy Research Corporation contract DE-AC05-84OR21400 with the United States DEPARTMENT OF Energy for construction of facilities under the responsibility of DOE-ORNL. 200 South Columbia St., Oak Ridge, Tennessee 37830-6008, PO BOX 6008, ORNL			
PROJECT NAME			
LOWER EAST FORK POPLAR CREEK OPERABLE UNIT			
BRUNER SITE - AREA F EXCAVATION AREA #6 AS-CONSTRUCTED			
PLANT	DISC CIVIL	WORK ORDER NO. STD 97-2292	SKETCH NO.



	NORTHING	EASTING			
A	N 40283.03	E 53165.18	DD	N 40134.52	E 53266.29
B	N 40246.65	E 53234.71	EE	N 40166.08	E 53266.29
C	N 40212.97	E 53205.35	FF	N 40166.50	E 53280.57
D	N 40214.33	E 53447.32	GG	N 40150.10	E 53280.09
E	N 40223.75	E 53454.64	HH	N 40145.02	E 53283.32
F	N 40221.83	E 53477.66	JJ	N 40110.22	E 53315.32
G	N 40085.78	E 53478.46	KK	N 40120.30	E 53321.17
H	N 40152.60	E 53414.31	LL	N 40142.78	E 53181.27
I	N 40146.34	E 53342.33	MM	N 40141.79	E 53157.12
J	N 40111.18	E 53312.08	NN	N 40148.06	E 53119.30
K	N 40138.56	E 53285.29	PP	N 40151.74	E 53098.90
L	N 40167.22	E 53283.73	RR	N 40173.38	E 53084.06
M	N 40167.38	E 53240.34	SS	N 40185.64	E 53080.84
N	N 40136.14	E 53242.83	TT	N 40196.36	E 53074.47
O	N 40110.02	E 53242.29	UU	N 40200.27	E 53078.81
P	N 40110.02	E 53216.36	VV	N 40206.33	E 53077.58
Q	N 40143.25	E 53183.29	WW	N 40209.63	E 53084.97
R	N 40144.28	E 53149.60	XX	N 40214.96	E 53083.96
S	N 40156.16	E 53115.11	YY	N 40250.35	E 53051.75
T	N 40187.29	E 53085.05	ZZ	N 40262.77	E 53051.75
U	N 40219.49	E 53083.90	A1	N 40277.45	E 53049.58
V	N 40250.61	E 53052.33	D1	N 40262.03	E 53205.32
W	N 40278.00	E 53052.33	E1	N 40281.72	E 53215.62
X	N 40105.59	E 53218.77	F1	N 40266.52	E 53239.95
Y	N 40108.27	E 53243.62	G1	N 40264.67	E 53255.01
Z	N 40116.92	E 53244.30	H1	N 40263.62	E 53295.22
AA	N 40113.96	E 53260.27	J1	N 40235.64	E 53336.01
BB	N 40124.02	E 53271.22	K1	N 40234.42	E 53370.02
CC	N 40128.72	E 53271.82	L1	N 40124.75	E 53323.76
			M1	N 40212.97	E 53205.35

- - Confirmatory soil sampling location, 16-32 in BLS
 - ▲ - Confirmatory soil sampling location, >32 in BLS
 - ◆ - Confirmatory soil sampling location, 16-32 in BLS excavation was only required to a depth of 16 in. made during excavation activities, over excavation accomplished in portions of the ECUs to ensure
- 115 - Excavation Confirmation Unit (ECU)

Confirmatory Soil Sampling information associated with (ECUs) found in area G can be found in Science Applications field sampling logbooks. All confirmatory and sampling is maintained by Lockheed Martin Energy Research Corporation (LME) Systems (PEMS) database and will be stored permanently in the Information System (OREIS). The data will be available to the Remedial Action Report.

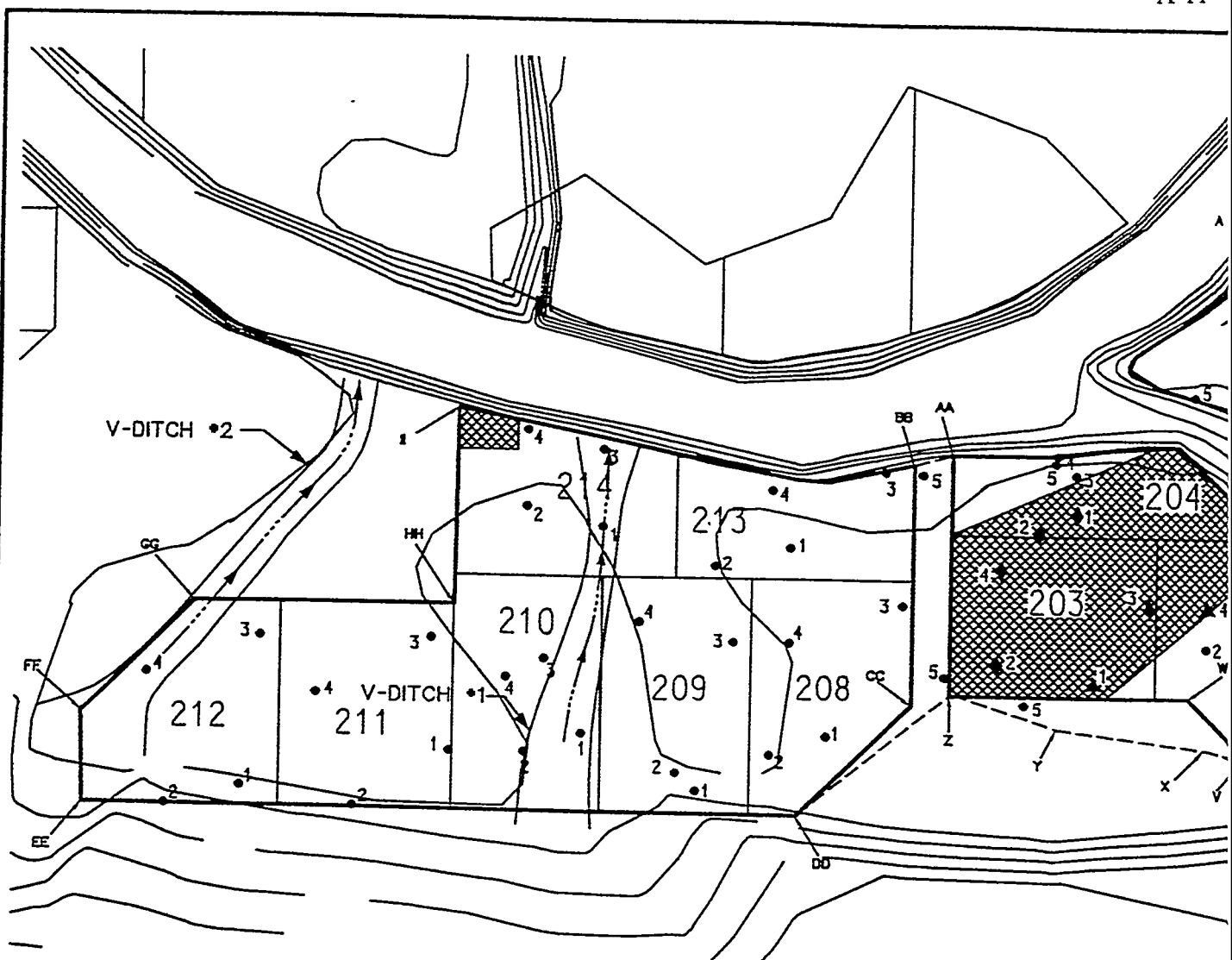


where analytical results indicated that BLS. However, based on visual observations to depths greater than 16 in. BLS was of the identified "black layer" was removed.

Excavation Confirmation Units
ons International Corporation (SAIC)
mation and associated data is being
ject Environmental Measurement
n the Oak Ridge Environmental
the public through the LEFPC

FOSTER WHEELER ENVIRONMENTAL CORPORATION - OAK RIDGE, TENNESSEE Designed for the DEPARTMENT OF ENERGY under Lockheed Martin Energy Research Corporation BRUNER-SITE under Prime Contract DE-AC02-84OR21400 with the General Motors DEPARTMENT OF ENERGY for completion of Remedial Action under the responsibility of DOE-ORNL Oak Ridge, Tennessee, 37831-6001, Lockheed Martin, 400 North Main Street, Pittsburgh, PA 15222			
PROJECT NAME			
LOWER EAST FORK POPLAR CREEK OPERABLE UNIT			
BRUNER SITE - AREA G EXCAVATION AREA #6 AS-CONSTRUCTED			
PLANT	DISC	WORK ORDER NO.	SKETCH NO.
CIVIL	STD	97-2292	

CAD FILE: C0001666.DGN DATE: 1-7-96



	NORTHING	EASTING		NORTHING	EASTING
A	N 40145.22	E 52977.39	S	N 40023.38	E 53012.96
B	N 40150.34	E 52980.43	T	N 39993.19	E 52985.91
C	N 40154.67	E 53026.99	U	N 39994.34	E 52983.38
D	N 40152.44	E 53028.96	V	N 40007.72	E 52968.02
E	N 40173.77	E 53084.34	W	N 40023.92	E 52952.64
F	N 40149.58	E 53101.31	X	N 40010.37	E 52957.24
G	N 40137.72	E 53090.58	Y	N 40015.27	E 52918.02
H	N 40118.91	E 53105.40	Z	N 40023.92	E 52890.02
I	N 40109.79	E 53104.05	AA	N 40087.34	E 52890.00
J	N 40102.29	E 53088.07	BB	N 40084.60	E 52880.02
K	N 40146.79	E 53077.52	CC	N 40021.03	E 52880.02
L	N 40079.52	E 53078.22	DD	N 39991.48	E 52849.84
M	N 40054.04	E 53106.97	EE	N 39992.27	E 52660.63
N	N 40050.21	E 53108.28	FF	N 40016.58	E 52660.14
O	N 40040.06	E 53094.50	GG	N 40046.36	E 52689.93
P	N 40023.34	E 53077.48	HH	N 40046.36	E 52758.38
Q	N 40026.20	E 53078.10	II	N 40098.21	E 52759.09
R	N 40025.59	E 53012.90			

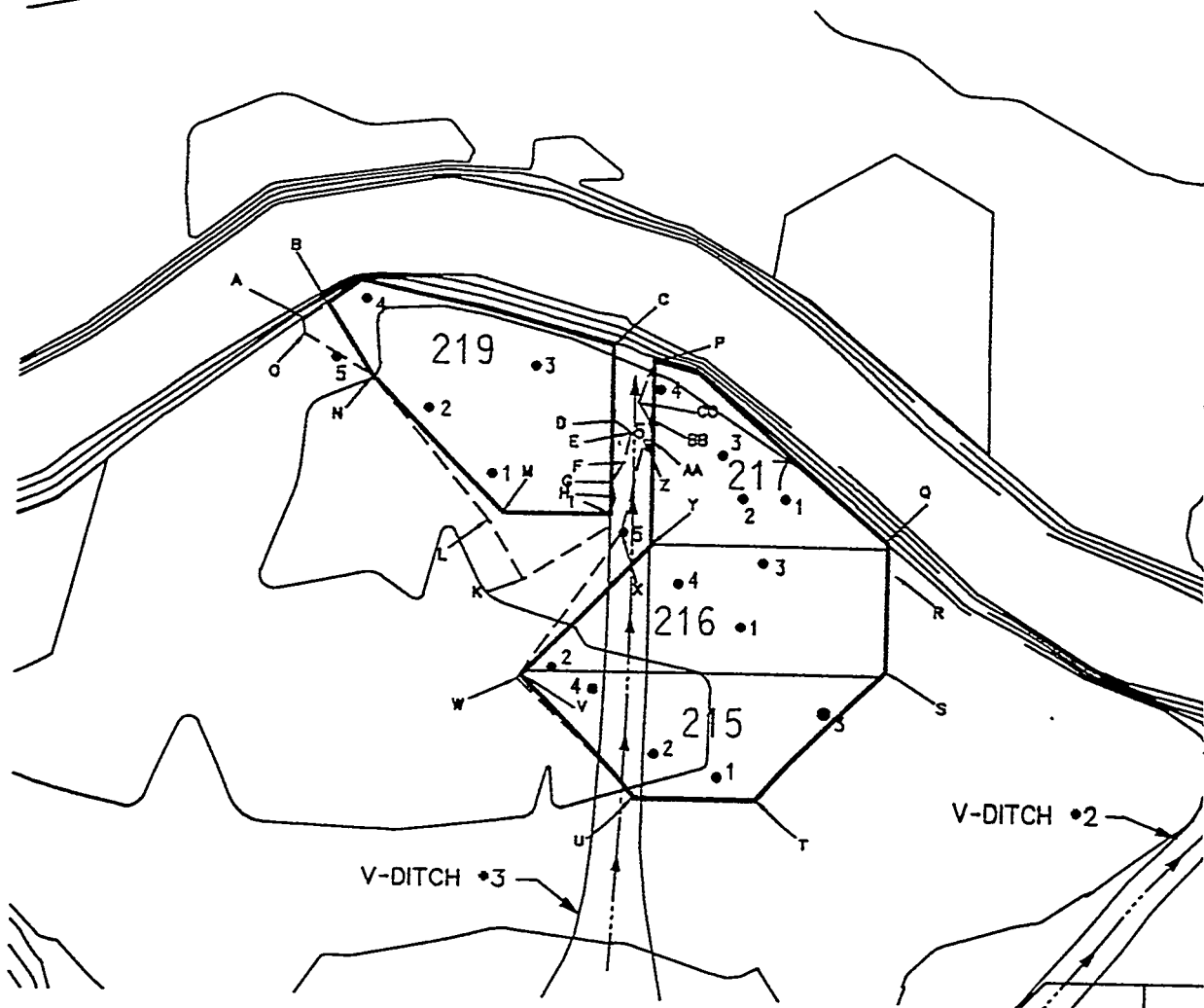
- - Confirmatory soil sampling location, 16-32 in B
 - ▲ - Confirmatory soil sampling location, >32 in BLS
 - ◆ - Confirmatory soil sampling location, 16-32 in. B excavation was only required to a depth of 16 in. made during excavation activities, over excavation accomplished in portions of the ECUs to ensure
- 115 - Excavation Confirmation Unit (ECU)

Confirmatory Soil Sampling information associated with (ECUs) found in area H can be found in Science App field sampling logbooks. All confirmatory and sampling maintained by Lockheed Martin Energy Systems (LME Systems) (PEMS) database and will be stored permanent Information System (OREIS). The data will be available Remedial Action Report.

- - Confirmatory soil sampling location, 16-32
- ▲ - Confirmatory soil sampling location, >32
- ◆ - Confirmatory soil sampling location, 16-32
excavation was only required to a depth
made during excavation activities, over
accomplished in portions of the ECUs to

115 - Excavation Confirmation Unit (ECU)

Confirmatory Soil Sampling information associated with the ECU's found in area J can be found in Scientific field sampling logbooks. All confirmatory and sampling data will be maintained by Lockheed Martin Energy Research Corporation (PEMS) database and will be stored per Environmental Information System (OREIS). The data will be available in the Remedial Action Report.



	NORTHING	EASTING		
A	N 40197.04	E 52512.81	Q	N 40193.83 E 52513.20
B	N 40201.09	E 52518.35	P	N 40189.00 E 52595.90
C	N 40192.42	E 52585.90	Q	N 40147.58 E 52651.50
D	N 40175.04	E 52586.58	R	N 40139.76 E 52653.37
E	N 40172.37	E 52590.69	S	N 40117.63 E 52651.50
F	N 40165.53	E 52589.07	T	N 40087.76 E 52621.63
G	N 40160.74	E 52586.14	U	N 40087.76 E 52592.97
H	N 40153.36	E 52585.90	V	N 40115.56 E 52565.17
I	N 40157.20	E 52587.05	W	N 40114.71 E 52564.26
J	N 40150.06	E 52585.10	X	N 40149.12 E 52588.83
K	N 40138.05	E 52565.40	Y	N 40146.41 E 52595.90
L	N 40151.71	E 52556.86	Z	N 40170.72 E 52593.85
M	N 40153.36	E 52560.17	AA	N 40170.65 E 52595.82
N	N 40184.32	E 52529.21	BB	N 40175.66 E 52594.67
			CC	N 40179.32 E 52592.51

• - Confirmatory soil sampling location, 16-32 in BLS

▲ - Confirmatory soil sampling location, >32 in BLS

◆ - Confirmatory soil sampling location, 16-32 in. BLS excavation was only required to a depth of 16 in. made during excavation activities, over excavations accomplished in portions of the ECUs to ensure

115 - Excavation Confirmation Unit (ECU)

Confirmatory Soil Sampling information associated with (ECUs) found in area K can be found in Science Application field sampling logbooks. All confirmatory and sampling data maintained by Lockheed Martin Energy Research Corporation (LME) Systems (PEMS) database and will be stored permanently in the Information System (OREIS). The data will be available in the Remedial Action Report.

- MAJOR CONTOUR
- MINOR CONTOUR
- DENOTES ORIGINAL ECU BOUNDARY
- DENOTES EXTENDED ECU BOUNDARY

16" DEEP EXCAVATION

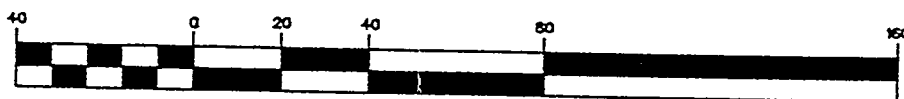
>16"-32" DEEP EXCAVATION

>32" DEEP EXCAVATION

ADDITIONAL EXCAVATION



GRAPHIC SCALE



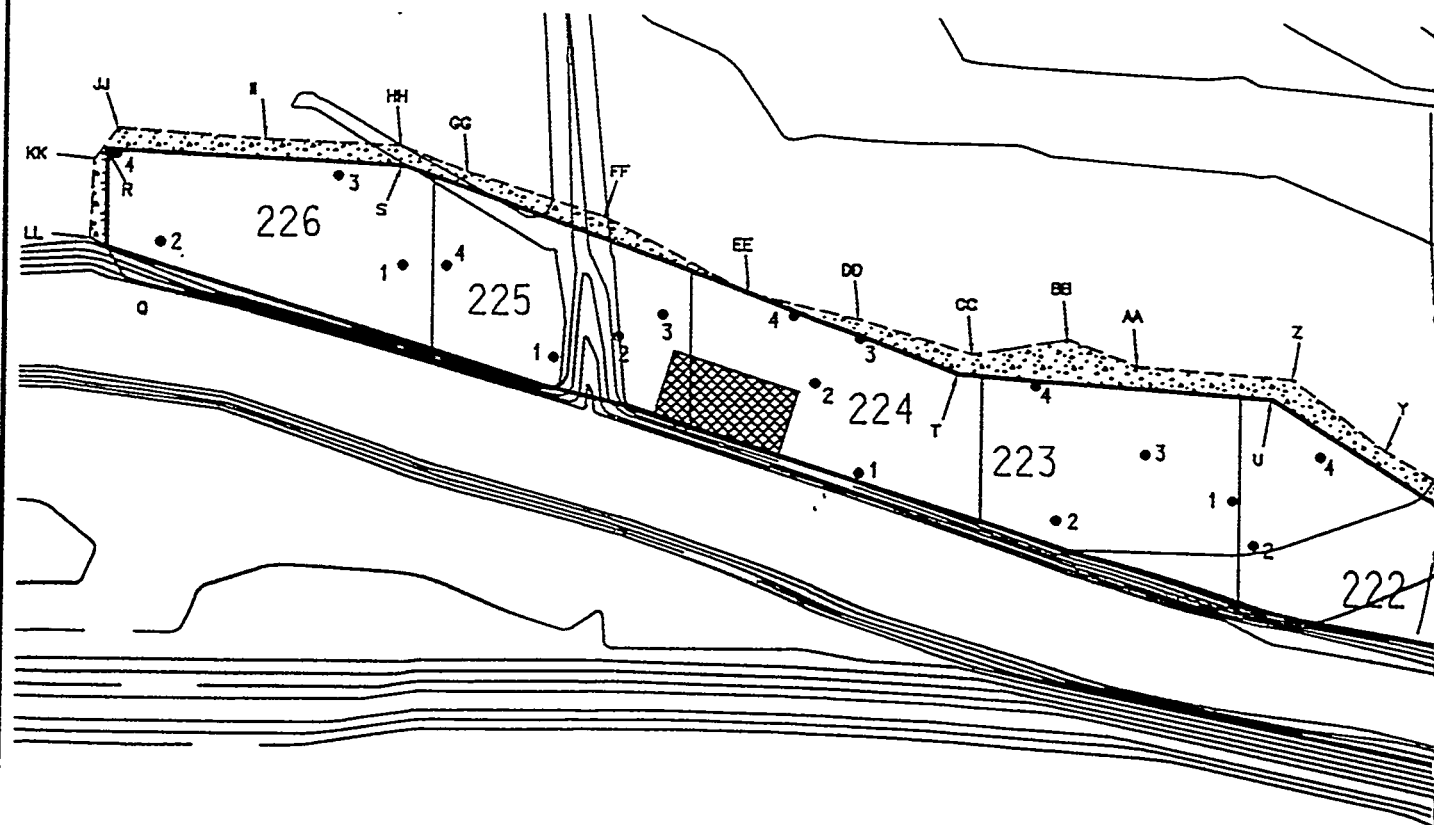
(IN FEET).
1 inch = 40 ft.

where analytical results indicated that
n. BLS. However, based on visual observations
n to depths greater than 16 in. BLS was
all of the identified "black layer" was removed.

the Excavation Confirmation Units
tions International Corporation (SAIC)
ormation and associated data is being
Project Environmental Measurement
y in the Oak Ridge Environmental
o the public through the LEFPC

FOSTER WHEELER ENVIRONMENTAL CORPORATION - OAK RIDGE, TENNESSEE Designed for the OFFICE OF ENERGY under Lockheed Martin Energy Research Corporation Subcontract HL-359-850427, award under Prime Contract HL-359-850427 with the United States DEPARTMENT OF ENERGY for management of facilities under the responsibility of DOE-ORNL. Oak Ridge, Tennessee - R. S. Stephens, Contract - R. Stephens, Contract - R. Stephens, Contract			
PROJECT NAME			
LOWER EAST FORK POPLAR CREEK OPERABLE UNIT			
BRUNER SITE - AREA K EXCAVATION AREAS *12 AND *13 AS-CONSTRUCTED			
PLANT	DISC	WORK ORDER NO.	SKETCH NO.
	CIVIL	STD 97-2292	

CAD FILE: C000167.LDGN DATE: 1-7-98

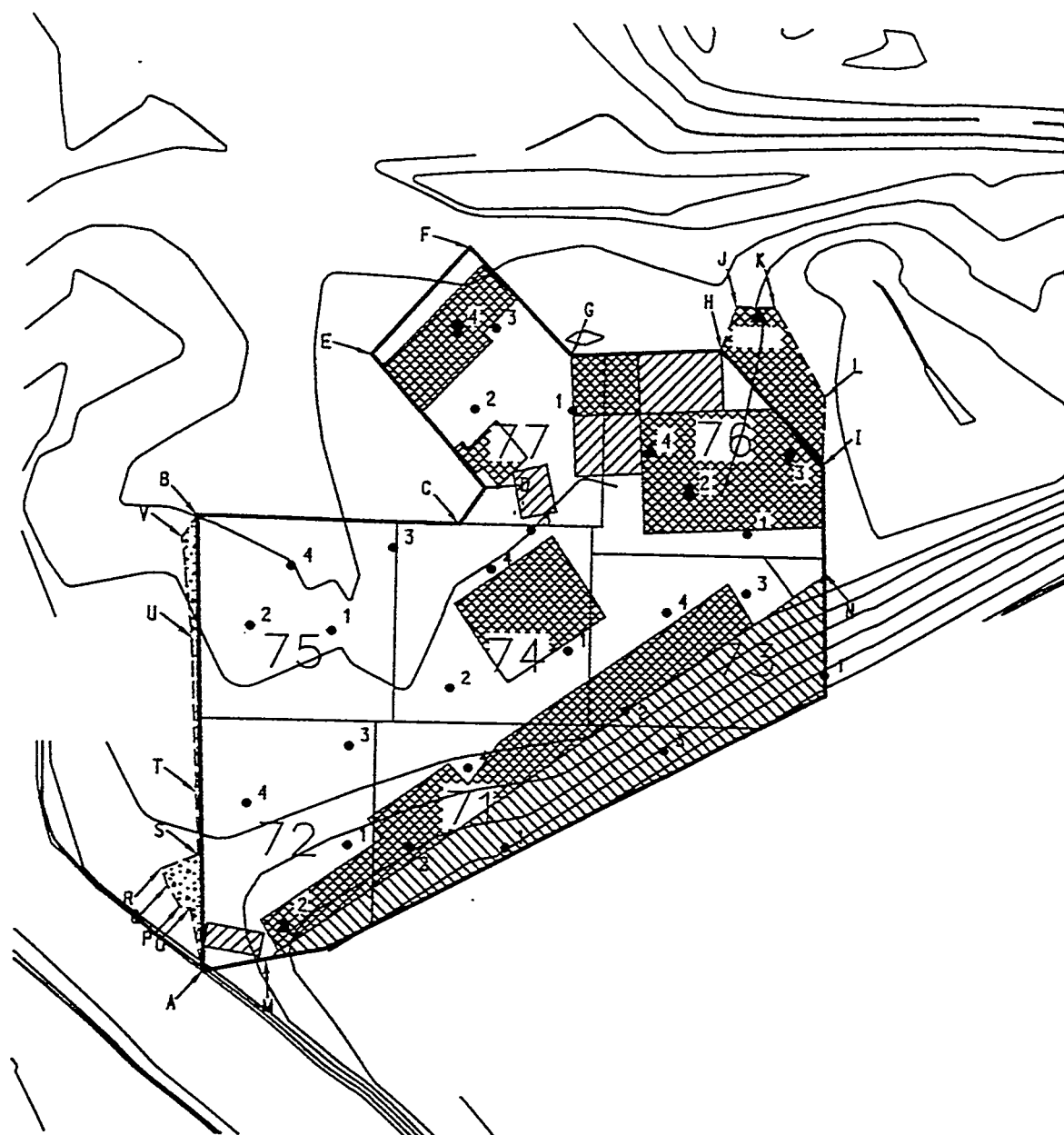


	NORTHING	EASTING			
A	N 40163.99	E 52467.26	W	N 40164.33	E 52331.17
B	N 40164.07	E 52469.67	X	N 40173.90	E 52320.29
C	N 40157.01	E 52469.39	Y	N 40188.78	E 52292.43
D	N 40156.37	E 52472.38	Z	N 40204.79	E 52270.99
E	N 40152.06	E 52469.62	AA	N 40207.13	E 52235.50
F	N 40149.49	E 52467.15	BB	N 40212.96	E 52219.54
G	N 40141.02	E 52466.84	CC	N 40209.23	E 52197.88
H	N 40118.37	E 52455.08	DD	N 40216.80	E 52172.18
I	N 40109.88	E 52446.39	EE	N 40222.32	E 52147.20
J	N 40105.82	E 52429.96	FF	N 40239.05	E 52113.67
K	N 40104.84	E 52432.33	GG	N 40248.53	E 52082.21
L	N 40106.21	E 52420.35	HH	N 40254.37	E 52066.82
M	N 40104.10	E 52414.03	II	N 40255.58	E 52036.06
N	N 40106.84	E 52413.18	JJ	N 40257.76	E 52002.64
O	N 40109.48	E 52369.78	KK	N 40251.02	E 51997.20
P	N 40125.66	E 52359.64	LL	N 40233.17	E 51996.37
Q	N 40231.26	E 52000.08			
R	N 40253.19	E 52000.03			
S	N 40249.83	E 52067.20			
T	N 40205.02	E 52194.22			
U	N 40200.20	E 52266.36			
V	N 40152.41	E 52344.22			

- - Confirmatory soil sampling location, 16-32 in BLS
- ▲ - Confirmatory soil sampling location, >32 in BLS
- ◆ - Confirmatory soil sampling location, 16-32 in. E excavation was only required to a depth of 1 made during excavation activities, over excav accomplished in portions of the ECUs to ens

115 - Excavation Confirmation Unit (ECU)

Confirmatory Soil Sampling information associated with (ECUs) found in area L can be found in Science App field sampling logbooks. All confirmatory and sampling maintained by Lockheed Martin Energy Systems (LM& Systems (PEMS) database and will be stored perman Information System (OREIS). The data will be availabl Remedial Action Report.



	NORTHING	EASTING			
A	N 33447.62	E 63060.15	N	N 33551.00	E 63214.34
B	N 33562.07	E 63056.50	O	N 33463.10	E 63056.79
C	N 33561.11	E 63121.61	P	N 33463.60	E 63054.15
D	N 33570.30	E 63127.94	Q	N 33468.77	E 63050.87
E	N 33603.05	E 63098.62	R	N 33473.13	E 63049.32
F	N 33629.73	E 63122.80	S	N 33476.79	E 63058.37
G	N 33603.49	E 63149.42	T	N 33492.59	E 63057.55
H	N 33605.67	E 63187.62	U	N 33531.62	E 63055.79
I	N 33577.51	E 63213.51	V	N 33556.51	E 63052.87
J	N 33616.33	E 63191.20			
K	N 33616.34	E 63200.68			
L	N 33594.62	E 63213.68			
M	N 33450.84	E 63075.71			

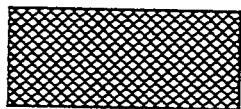
- - Confirmatory soil sampling location, 16-32 in. B
 - ▲ - Confirmatory soil sampling location, >32 in. BLS
 - ◆ - Confirmatory soil sampling location, 16-32 in. B excavation was only required to a depth of 16 in. made during excavation activities, over excavations accomplished in portions of the ECUs to ensure
- 115 - Excavation Confirmation Unit (ECU)

Confirmatory Soil Sampling information associated with ECUs found in area FF can be found in Science Applications field sampling logbooks. All confirmatory and sampling data maintained by Lockheed Martin Energy Research Corporation (LME Systems (PEMS) database and will be stored permanently in the Information System (OREIS). The data will be available in the Remedial Action Report.

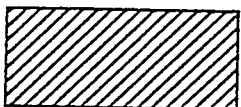
- MAJOR CONTOUR
- MINOR CONTOUR
- DENOTES ORIGINAL ECU BOUNDARY
- DENOTES EXTENDED ECU BOUNDARY
- DENOTES LIMIT OF EXCAVATION



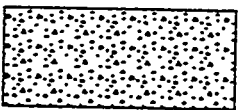
16" DEEP EXCAVATION



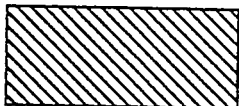
>16"-32" DEEP EXCAVATION



>32" DEEP EXCAVATION



ADDITIONAL EXCAVATION



NOT EXCAVATED

GRAPHIC SCALE



(IN FEET)
1 inch = 40 ft.



where analytical results indicated that
n. BLS. However, based on visual observations
n to depths greater than 16 in. BLS was
all of the identified "black layer" was removed.

he Excavation Confirmation Units
ations International Corporation (SAIC)
ormation and associated data is being
Project Environmental Measurement
y in the Oak Ridge Environmental
o the public through the LEFPC

FOSTER WHEELER ENVIRONMENTAL CORPORATION - OAK RIDGE, TENNESSEE Contract for the DECONTAMINATION OF BERRY under Lockheed Martin Energy Research Corporation HSL-OR-40542C issued under Prime Contract HSL-OR-40542C with the United States DEPARTMENT OF ENERGY for management of Facilities under the responsibility of DOE-ORNL. Mr. John J.			
PROJECT NAME			
LOWER EAST FORK POPLAR CREEK OPERABLE UNIT			
NOAA AREA FF EXCAVATION AREA #16 AS-CONSTRUCTED			
PLANT	DISC	WORK ORDER NO.	SKETCH NO.
CIVIL	STD	97-2292	

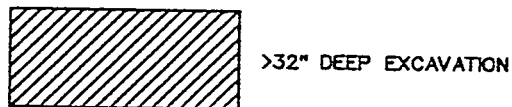
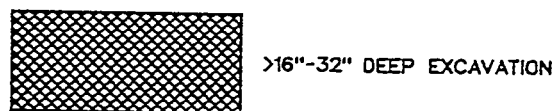
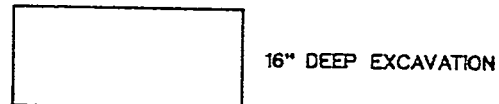


	NORTHING	EASTING		NORTHING	EASTING		NORTHING	EASTING
A	N 33228.52	E 63247.84	I	N 33351.90	E 63106.67	R	N 33149.2	E 63224.3
B	N 33211.83	E 63216.75	J	N 33351.90	E 63125.78	S	N 33171.0	E 63241.1
C	N 33198.80	E 63173.44	K	N 33160.10	E 63312.35	T	N 33203.9	E 63207.0
D	N 33223.68	E 63137.34	L	N 33114.00	E 63274.59	U	N 33200.3	E 63204.2
E	N 33204.90	E 63132.39	M	N 33140.01	E 63249.47	V	N 33196.5	E 63195.1
F	N 33204.90	E 63112.67	N	N 33151.90	E 63263.46	W	N 33200.4	E 63193.6
G	N 33301.90	E 63112.67	O	N 33209.99	E 63267.39	X	N 33199.4	E 63183.1
H	N 33301.90	E 63106.67	P	N 33158.9	E 63314.5	Y	N 33184.0	E 63172.8
			Q	N 33109.2	E 63272.5	Z	N 33180.0	E 63164.9
						AA	N 33186.6	E 63150.9
						BB	N 33173.7	E 63127.0
						CC	N 33173.8	E 63124.2

- - Confirmatory soil sam
- ▲ - Confirmatory soil sam
- ◆ - Confirmatory soil sam
excavation was only
made during excavati
accomplished in porti
removed.

115 - Excavation Confirmati
Confirmatory Soil Sam
(ECUs) found in area AA ca
field sampling logbooks. All ca
maintained by Lockheed Mar
Systems (PEMS) database or
Information System (OREIS).
Remedial Action Report.

- MAJOR CONTOUR
- MINOR CONTOUR
- DENOTES ORIGINAL ECU BOUNDARY
- DENOTES EXTENDED ECU BOUNDARY



GRAPHIC SCALE



(IN FEET)
1 inch = 40 ft.

g location, 16-32 in BLS

g location, >32 in BLS

g location, 16-32 in. BLS, where analytical results indicated that
quired to a depth of 16 in. BLS. However, based on visual observations
activities, over excavation to depths greater than 16 in. BLS was
of the ECUs to ensure all of the identified "black layer" was

Unit (ECU)

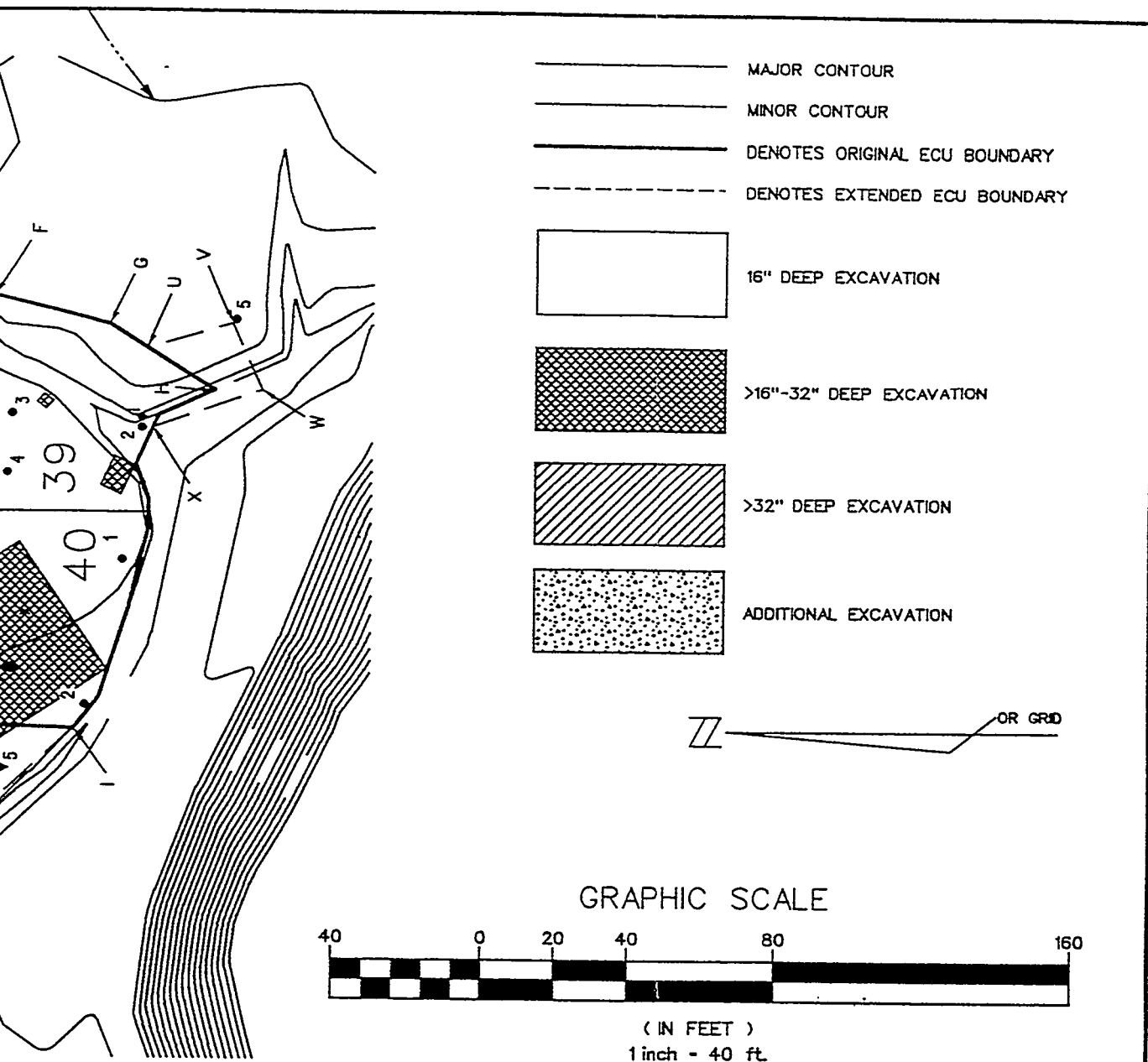
mation associated with the Excavation Confirmation Units
e found in Science Applications International Corporation (SAIC)
rmatory and sampling information and associated data is being
Energy Systems (LMES) Project Environmental Measurement
will be stored permanently in the Oak Ridge Environmental
e data will be available to the public through the LEFPC

FOSTER WHEELER ENVIRONMENTAL CORPORATION - OAK RIDGE, TENNESSEE Designed for the DEPARTMENT OF ENERGY under Lockheed Martin Energy Research Corporation MS-200-000000, using under Prime Contract DE-AC05-84OR21400 with the United States DEPARTMENT OF ENERGY for management of facilities under the responsibility of DOE-ORNL, Oak Ridge, Tennessee. A. Columbia, Tennessee. A. Tennessee, Ohio.			
PROJECT NAME:			
LOWER EAST FORK POPLAR CREEK OPERABLE UNIT			
NOAA - AREA AA EXCAVATION AREAS *17 AND *18 AS-CONSTRUCTED			
PLANT	DISCIP	WORK ORDER NO.	SKETCH NO.
	CIVIL	STD 97-2292	

NORTHING		EASTING		NORTHING		EASTING		NORTHING		EASTING	
A	N 33351.90	E 63125.78	K	N 33235.49	E 63011.71	U	N 33163.6	E 63118.0			
B	N 33351.90	E 63106.67	L	N 33230.71	E 62975.79	V	N 33140.3	E 63124.7			
C	N 33301.90	E 63106.67	M	N 33234.81	E 62989.57	W	N 33132.1	E 63106.8			
D	N 33301.90	E 63112.67	N	N 33251.90	E 62989.57	X	N 33161.8	E 63096.4			
E	N 33204.90	E 63112.67	O	N 33251.90	E 62962.67	Y	N 33206.1	E 62991.7			
F	N 33204.90	E 63132.39	P	N 33301.90	E 62962.67	Z	N 33217.5	E 63004.3			
G	N 33173.83	E 63124.21	Q	N 33301.90	E 62956.67	AA	N 33225.8	E 63007.5			
H	N 33145.08	E 63106.75	R	N 33401.90	E 62956.67	BB	N 33234.2	E 63007.3			
I	N 33182.73	E 63013.39	S	N 33401.90	E 62954.38						
J	N 33231.72	E 63015.00	T	N 33469.02	E 62954.38						

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115 - Excavation Confirmed
Confirmatory Soil Sampling
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Systems (PEMS) database
Information System (OREK
Remedial Action Report.



ing location, 16-32 in BLS

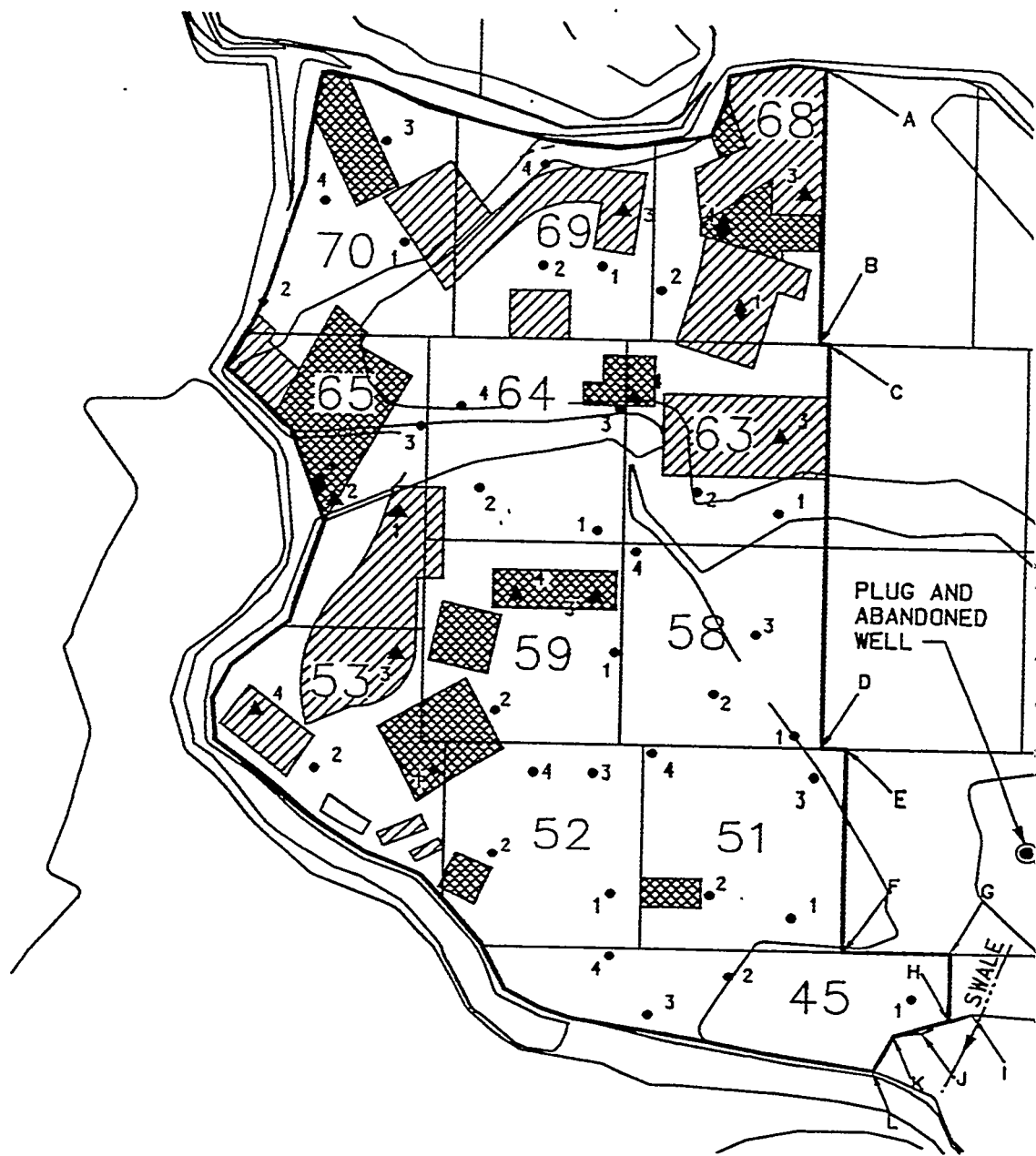
ing location, >32 in BLS

ing location, 16-32 in. BLS, where analytical results indicated that required to a depth of 16 in. BLS. However, based on visual observations in activities, over excavation to depths greater than 16 in. BLS was ns of the ECUs to ensure all of the identified "black layer" was

n Unit (ECU)

ormation associated with the Excavation Confirmation Units be found in Science Applications International Corporation (SAIC) nfirmatory and sampling information and associated data is being in Energy Systems (LMES) Project Environmental Measurement d will be stored permanently in the Oak Ridge Environmental The data will be available to the public through the LEFPC

FOSTER WHEELER ENVIRONMENTAL CORPORATION - OAK RIDGE, TENNESSEE Contract for the DEPARTMENT OF ENERGY under Lockheed Martin Energy Research Corporation DEPARTMENT OF ENERGY under Prime Contract BLS-100-1000000 with the General Services DEPARTMENT OF ENERGY for management of facilities under the responsibility of DOE-OR Oak Ridge, Tennessee. E. W. Foster, President. E. W. Foster, Vice President.			
PROJECT NAME			
LOWER EAST FORK POPLAR CREEK OPERABLE UNIT			
NOAA - AREA BB EXCAVATION AREA #18 AS-CONSTRUCTED			
PLANT	DISCIP	WORK ORDER NO.	SKETCH NO.
CIVIL	STD	97-2292	



	NORTHING	EASTING
A	N 33469.02	E 62954.38
B	N 33401.90	E 62954.38
C	N 33401.90	E 62956.67
D	N 33301.90	E 62956.67
E	N 33301.90	E 62962.67
F	N 33251.90	E 62962.67
G	N 33251.90	E 62989.57
H	N 33234.81	E 62989.57
I	N 33236.54	E 62995.40
J	N 33231.58	E 62983.01
K	N 33230.71	E 62975.79
L	N 33221.92	E 62970.61

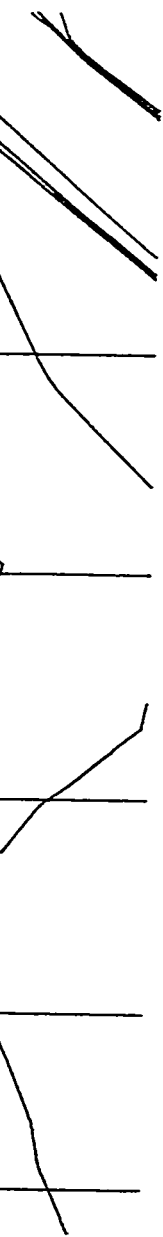
• - Confirmatory soil sampling location, 16-32 in BLS

▲ - Confirmatory soil sampling location, >32 in BLS

◆ - Confirmatory soil sampling location, 16-32 in. BLS, where analytical results indicate excavation was only required to a depth of 16 in. BLS. However, based on visual made during excavation activities, over excavation to depths greater than 16 in. accomplished in portions of the ECUs to ensure all of the identified "black layer"

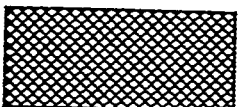
115 - Excavation Confirmation Unit (ECU)

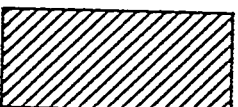
Confirmatory Soil Sampling information associated with the Excavation Confirmation Unit (ECUs) found in area CC can be found in Science Applications International Corporation field sampling logbooks. All confirmatory and sampling information and associated data is maintained by Lockheed Martin Energy Systems (LMES) Project Environmental Measurement Systems (PEMS) database and will be stored permanently in the Oak Ridge Environment Information System (OREIS). The data will be available to the public through the LEFPC Remedial Action Report.

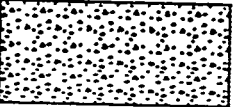


- MAJOR CONTOUR
- MINOR CONTOUR
- DENOTES ORIGINAL ECU BOUNDARY
- - - - - DENOTES EXTENDED ECU BOUNDARY

 16" DEEP EXCAVATION

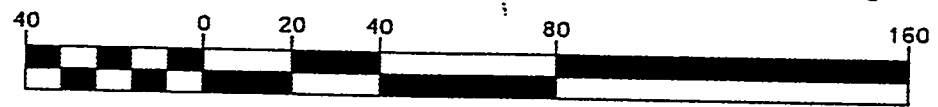
 >16"-32" DEEP EXCAVATION

 >32" DEEP EXCAVATION

 ADDITIONAL EXCAVATION



GRAPHIC SCALE



(IN FEET)
1 inch = 40 ft

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FOSTER WHEELER ENVIRONMENTAL CORPORATION - OAK RIDGE, TENNESSEE Designed for the DEPARTMENT OF ENERGY under Lockheed Martin Energy Research Corporation contract DE-AC05-84OR21400 with the National Energy Research Center for Environmental Health and Safety, Oak Ridge, Tennessee, as part of the Environmental Sciences Division of ECHS.			
PROJECT NAME			
LOWER EAST FORK POPLAR CREEK OPERABLE UNIT			
NOAA - AREA CC EXCAVATION AREA #18 AS-CONSTRUCTED			
PLANT	DISC	WORK ORDER NO.	SKETCH NO.
CIVIL	STD	97-2292	



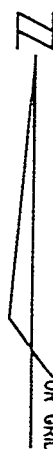
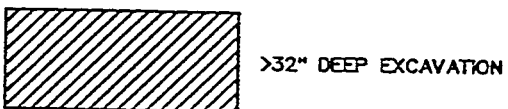
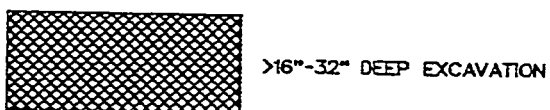
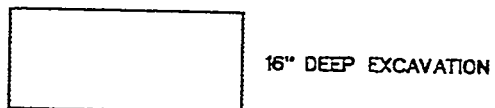
	NORTHING	EASTING
832 N	33485.00	E 62870.00
833 N	33517.50	E 62832.50
834 N	33587.50	E 62777.50

- - Confirmatory soil sampling location, 16-32 in BLS
- ▲ - Confirmatory soil sampling location, >32 in BLS
- ◆ - Confirmatory soil sampling location, 16-32 in. BLS, where analytical results indicated excavation was only required to a depth of 16 in. BLS. However, based on visual made during excavation activities, over excavation to depths greater than 16 in. (accomplished in portions of the ECUs to ensure all of the identified "black layer"

115 - Excavation Confirmation Unit (ECU)

Confirmatory Soil Sampling information associated with the Excavation Confirmation Units (ECUs) found in area DD can be found in Science Applications International Corporation (SAIC) field sampling logbooks. All confirmatory and sampling information and associated data is maintained by Lockheed Martin Energy Research Corporation (LM-ER) Project Environmental Measurement Systems (PEMS) database and will be stored permanently in the Oak Ridge Environmental Information System (OREIS). The data will be available to the public through the LEFPC Remedial Action Report.

- MAJOR CONTOUR
- MINOR CONTOUR
- DENOTES ORIGINAL ECU BOUNDARY
- DENOTES EXTENDED ECU BOUNDARY



GRAPHIC SCALE



(IN FEET)
1 inch = 40 ft.

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FOSTER WHEELER ENVIRONMENTAL CORPORATION - OAK RIDGE, TENNESSEE Prepared for the DEPARTMENT OF ENERGY under Lockheed Martin Energy Research Corporation DE-AC02-85OR21400-OR-000000 under Prime Contract DE-AC02-85OR21400-OR-000000 with The United States DEPARTMENT OF ENERGY for management of facilities under the responsibility of ORNL, Oak Ridge, Tennessee. A. J. D'Amico, Director, A. J. D'Amico, Inc.			
PROJECT NAME			
LOWER EAST FORK POPLAR CREEK OPERABLE UNIT			
NOAA AREA DD EXCAVATION AREA #19 AS-CONSTRUCTED			
PLANT	DISC	WORK ORDER NO.	SKETCH NO.
	CIVIL	STD 97-2292	



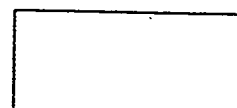
	NORTHING	EASTING				
835	N 33612.50	E 62807.50	DD	N 33624.90	E 62895.32	
836	N 33590.00	E 62840.00	EE	N 33629.68	E 62900.73	
837	N 33525.00	E 62905.00	FF	N 33610.69	E 62926.40	
838	N 33505.00	E 62927.50	GG	N 33604.39	E 62942.67	
K	N 33704.12	E 62784.62	HH	N 33590.01	E 62937.57	
L	N 33621.95	E 62875.77	II	N 33584.94	E 62944.56	
M	N 33603.64	E 62941.49	JJ	N 33580.78	E 62945.16	
N	N 33582.71	E 62925.99	KK	N 33585.20	E 62943.07	
O	N 33565.45	E 62950.26	LL	N 33566.25	E 62957.73	
P	N 33539.15	E 62950.08	MM	N 33555.54	E 62974.40	
Q	N 33545.39	E 62923.21	NN	N 33511.59	E 62992.10	
R	N 33574.32	E 62903.38	OO	N 33505.75	E 62985.29	
S	N 33565.09	E 62910.06	PP	N 33504.35	E 62975.48	
T	N 33568.50	E 62907.59	QQ	N 33509.51	E 62962.94	
U	N 33576.74	E 62898.58	RR	N 33526.92	E 62938.60	
V	N 33600.35	E 62888.29	SS	N 33537.26	E 62930.14	
X	N 33606.35	E 62884.85	TT	N 33542.94	E 62925.80	
Y	N 33610.64	E 62879.55	UU	N 33540.47	E 62935.34	
Z	N 33619.12	E 62872.26	VV	N 33578.55	E 62900.93	
AA	N 33622.53	E 62872.31	WW	N 33585.29	E 62897.02	
BB	N 33623.40	E 62875.94	XX	N 33544.02	E 62929.10	
CC	N 33629.41	E 62878.01	UU	N 33543.01	E 62933.45	

- - Confirmatory soil sampling location, 16-32 in BLS
- ▲ - Confirmatory soil sampling location, >32 in BLS
- ◆ - Confirmatory soil sampling location, 16-32 in. BLS, excavation was only required to a depth of 16 in. made during excavation activities, over excavation accomplished in portions of the ECUs to ensure c
- 115 - Excavation Confirmation Unit (ECU)

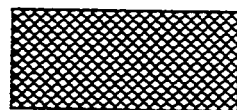
Confirmatory Soil Sampling information associated with the (ECUs) found in area EE can be found in Science Appliance field sampling logbooks. All confirmatory and sampling information maintained by Lockheed Martin Energy Research Corporation (LME) Systems (PEMS) database and will be stored permanently in the Information System (OREIS). The data will be available to Remedial Action Report.



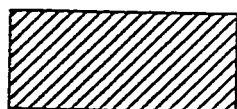
- MAJOR CONTOUR
- MINOR CONTOUR
- DENOTES ORIGINAL ECU BOUNDARY
- - - - - DENOTES EXTENDED ECU BOUNDARY



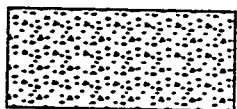
16" DEEP EXCAVATION



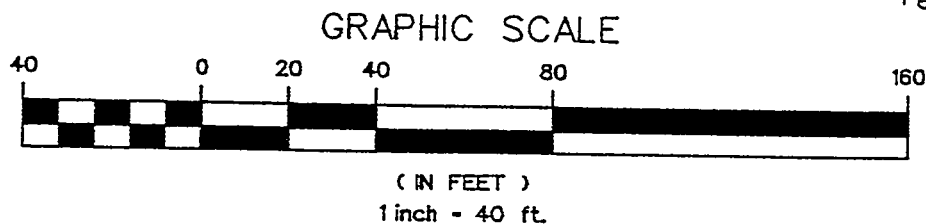
>16"-32" DEEP EXCAVATION



>32" DEEP EXCAVATION



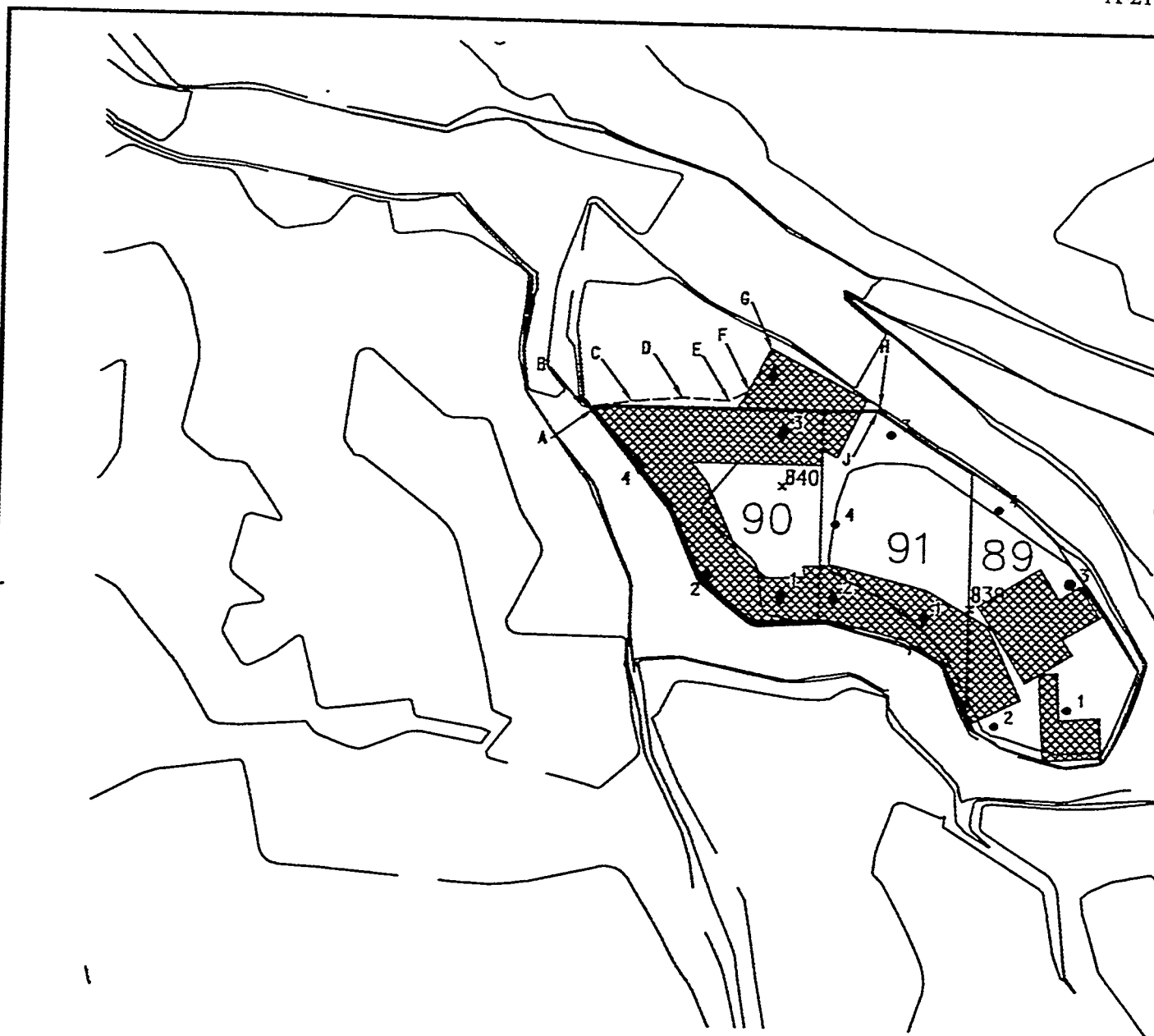
ADDITIONAL EXCAVATION



ere analytical results indicated that
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depths greater than 16 in. BLS was
f the identified "black layer" was removed.

Excavation Confirmation Units
ns International Corporation (SAIC)
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FOSTER WHEELER ENVIRONMENTAL CORPORATION - OAK RIDGE, TENNESSEE Engineered for the REPRESENTATIVE OF EBSST under Lockheed Martin Energy Research Corporation HL200-000000 under Prime Contract HL200-000000 with the United States Government of contract for management of functions under the responsibility of EBSST.			
PROJECT NAME:			
LOWER EAST FORK POPLAR CREEK OPERABLE UNIT			
NOAA AREA EE EXCAVATION AREA *20-*23 AS-CONSTRUCTED			
PLANT	DISC	WORK ORDER NO.	SKETCH NO.
	CIVIL	STD 97-2292	



	NORTHING	EASTING
A	N 33770.20	E 62551.97
B	N 33770.73	E 62549.23
C	N 33772.54	E 62562.61
D	N 33773.82	E 62576.61
E	N 33773.23	E 62589.68
F	N 33776.17	E 62595.12
G	N 33787.62	E 62601.17
H	N 33772.60	E 62631.74
J	N 33771.41	E 62631.21
839	N 33717.50	E 62657.50
840	N 33750.00	E 62605.00

• - Confirmatory soil sampling location, 16-32 in BLS

▲ - Confirmatory soil sampling location, >32 in BLS

◆ - Confirmatory soil sampling location, 16-32 in. BLS, where analytical results indicate excavation was only required to a depth of 16 in. BLS. However, based on visual made during excavation activities, over excavation to depths greater than 16 in. accomplished in portions of the ECUs to ensure all of the identified "black layer"

115 - Excavation Confirmation Unit (ECU)

Confirmatory Soil Sampling information associated with the Excavation Confirmation Unit (ECUs) found in area EE can be found in Science Applications International Corporation field sampling logbooks. All confirmatory and sampling information and associated data is maintained by Lockheed Martin Energy Research Corporation (LM-ER) Project Environmental Measurement Systems (PEMS) database and will be stored permanently in the Oak Ridge Environmental Information System (OREIS). The data will be available to the public through the LEFPC Remedial Action Report.

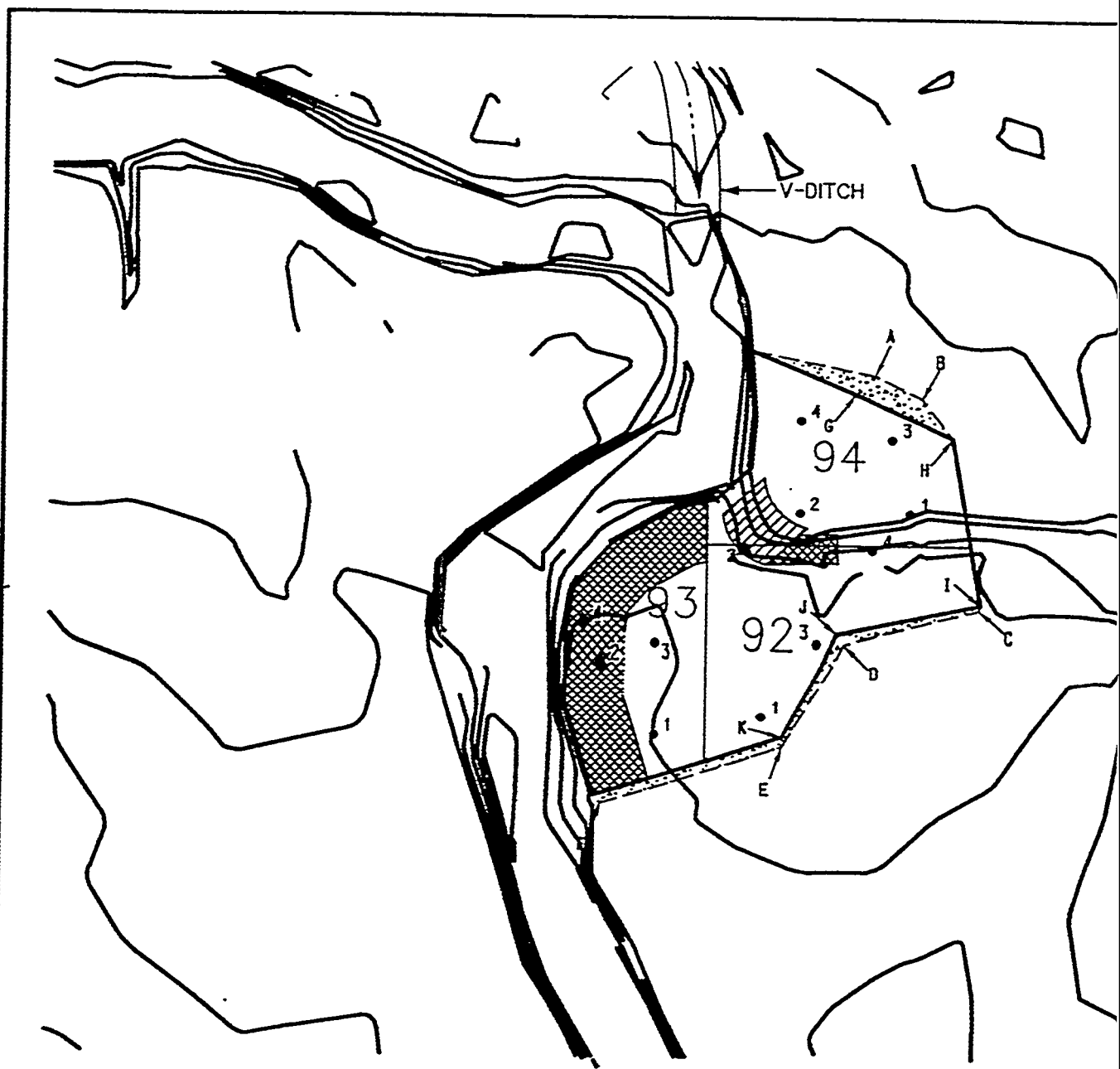


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1 inch = 40 ft

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	NORTHING	EASTING
A	N 34357.20	E 62250.20
B	N 34351.21	E 62262.84
C	N 34293.96	E 62278.82
D	N 34284.84	E 62242.46
E	N 34256.85	E 62225.74
F	N 34240.90	E 62175.38
G	N 34351.30	E 62247.21
H	N 34340.51	E 62271.18
I	N 34295.39	E 62279.17
J	N 34287.40	E 62240.41
K	N 34259.45	E 62225.63

• - Confirmatory soil sampling location, 16-32 in BLS

▲ - Confirmatory soil sampling location, >32 in BLS

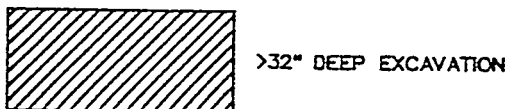
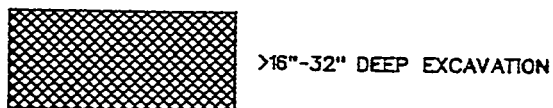
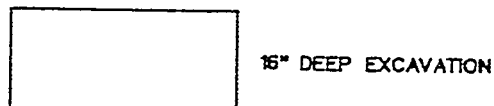
◆ - Confirmatory soil sampling location, 16-32 in. BLS, where analytical results indicate excavation was only required to a depth of 16 in. BLS. However, based on information made during excavation activities, over excavation to depths greater than 16 in. was accomplished in portions of the ECUs to ensure all of the identified "black I"

115 - Excavation Confirmation Unit (ECU)

Confirmatory Soil Sampling information associated with the Excavation Confirmation Units (ECUs) found in area GG can be found in Science Applications International Corporation field sampling logbooks. All confirmatory and sampling information and associated data maintained by Lockheed Martin Energy Research Corporation (LME) Project Environmental Measurement Systems (PEMS) database and will be stored permanently in the Oak Ridge Environmental Information System (OREIS). The data will be available to the public through the LL Remedial Action Report.



-  MAJOR CONTOUR
 MINOR CONTOUR
 DENOTES ORIGINAL ECU BOUNDARY
 DENOTES EXTENDED ECU BOUNDARY



GRAPHIC SCALE

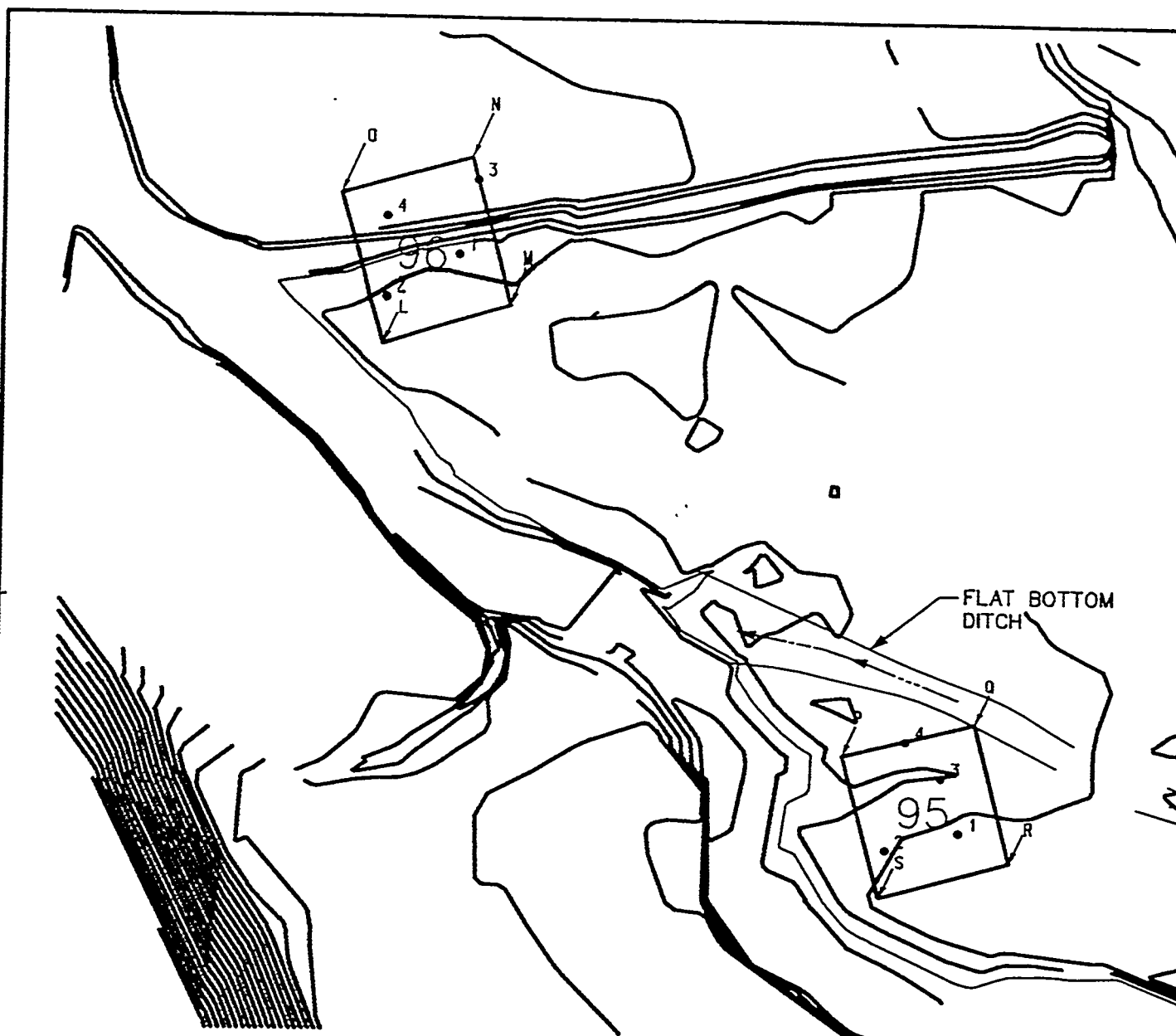


(IN FEET)
1 inch = 40 ft.

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FOSTER WHEELER ENVIRONMENTAL CORPORATION - OAK RIDGE, TENNESSEE Designed for the Department of Energy under Lockheed Martin Energy Research Corporation contract DE-AC02-84OR21400 with the United States Department of Energy for management of Facilities under the responsibility of DOE/OR, Oak Ridge, Tennessee. A. J. Johnson, Director, A. J. Johnson, Inc.			
PROJECT NAME			
LOWER EAST FORK POPLAR CREEK OPERABLE UNIT			
NOAA AREA GG EXCAVATION AREA #25 AS-CONSTRUCTED			
PLANT	DISCIP	WORK ORDER NO.	SKETCH NO.
CIVIL	STD	97-2292	



	NORTHING	EASTING
L	N 34607.22	E 61864.17
M	N 34618.18	E 61899.24
N	N 34655.89	E 61888.33
O	N 34646.00	E 61852.33
P	N 34495.99	E 61992.71
Q	N 34504.99	E 62028.97
R	N 34466.90	E 62038.85
S	N 34456.90	E 62003.49

• - Confirmatory soil sampling location, 16-32 in BLS

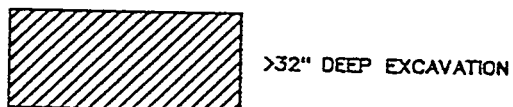
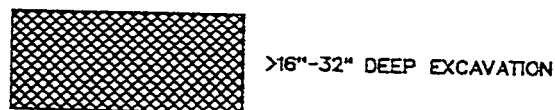
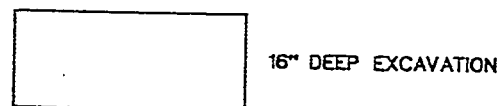
▲ - Confirmatory soil sampling location, >32 in BLS

◆ - Confirmatory soil sampling location, 16-32 in. BLS, where analytical results indicate excavation was only required to a depth of 16 in. BLS. However, based on visual made during excavation activities, over excavation to depths greater than 16 in. accomplished in portions of the ECUs to ensure all of the identified "black layer"

115 - Excavation Confirmation Unit (ECU)

Confirmatory Soil Sampling information associated with the Excavation Confirmation Units (ECUs) found in area GG can be found in Science Applications International Corporation field sampling logbooks. All confirmatory and sampling information and associated data is maintained by Lockheed Martin Energy Systems (LMES) Project Environmental Measurement Systems (PEMS) database and will be stored permanently in the Oak Ridge Environmental Information System (OREIS). The data will be available to the public through the LEFPC Remedial Action Report.

- MAJOR CONTOUR
- MINOR CONTOUR
- DENOTES ORIGINAL ECU BOUNDARY
- DENOTES EXTENDED ECU BOUNDARY



GRAPHIC SCALE



(IN FEET)
1 inch = 40 ft.

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FOSTER WHEELER ENVIRONMENTAL CORPORATION - OAK RIDGE, TENNESSEE Designed for the Department of Energy under Lockheed Martin Energy Research Corporation W-1234-56789 using under Prime Contract W-1234-56789 with the United States Department of Energy for management of Facilities under the responsibility of DOE-ORNL Site: Oak Ridge, Tennessee, U.S.A. Project: W-1234-56789			
PROJECT NAME			
LOWER EAST FORK POPLAR CREEK OPERABLE UNIT			
NOAA AREA GG EXCAVATION AREAS *26 AND *27 AS-CONSTRUCTED			
PLANT	DISCIP	WORK ORDER NO.	SKETCH NO.
CIVIL	STD	97-2292	

CAD FILE: C0001551.DGN DATE: 1-7-98

APPENDIX B

PHASE II CONFIRMATORY SOIL SAMPLE DATA

Appendix B
Phase II Confirmatory Soil Samples (Off-site Lab)

Station	ECU039:2	ECU041:4	ECU044:2	ECU046:4	ECU049:2	ECU051:4	ECU054:2	ECU056:4	ECU056:4
Sample ID	F03932	F04134	F04432	F04634	F04932	F05134	F05432	F05664	F05634
Date Collected	15-Apr-97	14-Apr-97	14-Apr-97	23-Apr-97	15-Apr-97	15-Apr-97	14-Apr-97	15-Apr-97	16-Apr-97
Depth	16 - 32 IN	16 - 32 IN	16 - 32 IN	16 - 32 IN	16 - 32 IN	16 - 28 IN	16 - 32 IN	NA	16 - 32 IN
Sample Type	FS	FS	FS	FR	FS	FS	FS	RIN	FS
Units	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	UG/L	MG/KG
Mercury	24.1	327	20.1	29.8	26	7	658	0.1	155
Station	ECU056:4	ECU059:2	ECU061:4	ECU064:2	ECU066:4	ECU069:2	ECU071:4	ECU074:2	ECU076:4
Sample ID	F05644	F05932	F06134	F06432	F06634	F06932	F07134	F07432	F07634
Date Collected	16-Apr-97	16-Apr-97	14-Apr-97	16-Apr-97	15-Apr-97	16-Apr-97	9-Apr-97	9-Apr-97	8-Apr-97
Depth	16 - 32 IN	16 - 32 IN	16 - 32 IN	16 - 32 IN	16 - 32 IN	16 - 32 IN	16 - 32 IN	16 - 32 IN	16 - 32 IN
Sample Type	FR	FS	FS	FS	FS	FS	FS	FS	FS
Units	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG
Mercury	393	6.9	4.1	96.7	163	5.8	8.2	2.3	0.16
Station	ECU079:2	ECU081:4	ECU081:4	ECU081:4	ECU084:2	ECU086:4	ECU089:2	ECU091:4	ECU094:2
Sample ID	F07932	F08164	F08134	F08144	F08432	F08634	F08932	F09134	F09432
Date Collected	17-Apr-97	17-Apr-97	18-Apr-97	18-Apr-97	17-Apr-97	18-Apr-97	18-Apr-97	18-Apr-97	18-Apr-97
Depth	16 - 32 IN	NA	16 - 32 IN	16 - 32 IN	16 - 32 IN	16 - 32 IN	16 - 32 IN	16 - 32 IN	16 - 32 IN
Sample Type	FS	RIN	FS	FR	FS	FS	FS	FS	FS
Units	MG/KG	UG/L	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG
Mercury	268	0.12	16.3	22.9	371	987	345	15.4	20.2
Station	ECU096:4	ECU099:2	ECU101:4	ECU101:4	ECU104:2	ECU106:4	ECU109:2	ECU111:4	ECU114:2
Sample ID	F09634	F09932	F10134	F10194	F10432	F10634	F10932	F11134	F11432
Date Collected	18-Apr-97	12-Mar-97	12-Mar-97	4-Apr-97	12-Mar-97	12-Mar-97	12-Mar-97	27-Mar-97	18-Mar-97
Depth	16 - 32 IN	16 - 32 IN	16 - 32 IN	32 - 48 IN	16 - 32 IN	16 - 32 IN	16 - 32 IN	16 - 32 IN	16 - 32 IN
Sample Type	FS	FS	FS	FS	FS	FS	FS	FS	FS
Units	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG
Mercury	5	45.7	794	0.16	62.6	1	99.5	72.2	34.8
Station	ECU115:2	ECU116:4	ECU119:2	ECU121:4	ECU121:4	ECU121:4	ECU124:2	ECU126:4	ECU129:2
Sample ID	F11532	F11634	F11932	F12164	F12134	F12144	F12432	F12634	F12932
Date Collected	27-Mar-97	26-Mar-97	25-Mar-97	17-Mar-97	18-Mar-97	18-Mar-97	26-Mar-97	26-Mar-97	26-Mar-97
Depth	16 - 32 IN	16 - 32 IN	16 - 32 IN	NA	16 - 32 IN	16 - 32 IN	16 - 24 IN	16 - 32 IN	16 - 32 IN
Sample Type	FS	FS	FS	RIN	FS	FR	FS	FS	FS
Units	MG/KG	MG/KG	MG/KG	UG/L	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG
Mercury	5.7	90.5	289	0.1	82.7	60.8	159	117	5.9
Station	ECU131:4	ECU134:2	ECU136:4	ECU139:2	ECU141:4	ECU144:2	ECU146:4	ECU146:4	ECU146:4
Sample ID	F13134	F13432	F13634	F13932	F14134	F14432	F14664	F14634	F14644
Date Collected	18-Mar-97	18-Mar-97	1-Apr-97	27-Mar-97	27-Mar-97	17-Mar-97	26-Mar-97	26-Mar-97	26-Mar-97
Depth	16 - 32 IN	16 - 32 IN	16 - 32 IN	16 - 21 IN	16 - 32 IN	16 - 32 IN	NA	16 - 32 IN	16 - 32 IN
Sample Type	FS	FS	FS	FS	FS	FS	RIN	FS	FR
Units	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	UG/L	MG/KG	MG/KG
Mercury	3.8	5.6	159	78.4	846	193	0.1	84.1	78.6
Station	ECU149:2	ECU151:4	ECU154:2	ECU156:4	ECU159:2	ECU159:2	ECU161:4	ECU164:2	ECU166:4
Sample ID	F14932	F15134	F15432	F15634	F15942	F15932	F16134	F16432	F16634
Date Collected	27-Mar-97	27-Mar-97	17-Mar-97	20-Mar-97	31-Mar-97	1-Apr-97	21-Mar-97	21-Mar-97	14-Mar-97
Depth	16 - 32 IN	16 - 32 IN	16 - 32 IN	16 - 32 IN	NA	16 - 22 IN	16 - 32 IN	16 - 32 IN	16 - 32 IN
Sample Type	FS	FS	FS	FS	RIN	FS	FS	FS	FS
Units	MG/KG	MG/KG	MG/KG	MG/KG	UG/L	MG/KG	MG/KG	MG/KG	MG/KG
Mercury	1.2	113	6.5	12.5	0.1	315	332	252	462

Appendix B
Phase II Confirmatory Soil Samples (Off-site Lab)

Station	ECU169:2	ECU171:4	ECU174:2	ECU176:4	ECU179:2	ECU181:4	ECU184:2	ECU186:4	ECU189:2
Sample ID	F16932	F17134	F17432	F17634	F17932	F18134	F18432	F18634	F18932
Date Collected	20-Mar-97	1-Apr-97	1-Apr-97	21-May-97	1-Apr-97	10-Mar-97	7-Mar-97	6-Mar-97	21-May-97
Depth	16 - 32 IN	16 - 32 IN	16 - 32 IN	16 - 32 IN	16 - 32 IN	20 - 32 IN	16 - 32 IN	16 - 32 IN	16 - 32 IN
Sample Type	FS	FS	FS	FS	FS	FS	FS	FS	FS
Units	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG
Mercury	728	63.2	150	0.8	45.9	0.21	92.4	10	0.06
Station	ECU191:4	ECU194:2	ECU196:4	ECU196:4	ECU196:4	ECU199:2	ECU201:4	ECU204:2	ECU206:4
Sample ID	F19134	F19432	F19664	F19634	F19644	F19932	F20134	F20432	F20634
Date Collected	10-Mar-97	11-Mar-97	11-Mar-97	11-Mar-97	11-Mar-97	3-Apr-97	3-Apr-97	3-Apr-97	7-Apr-97
Depth	16 - 32 IN	16 - 32 IN	NA	16 - 32 IN	16 - 32 IN	16 - 32 IN	16 - 32 IN	16 - 32 IN	16 - 32 IN
Sample Type	FS	FS	RIN	FS	FR	FS	FS	FS	FS
Units	MG/KG	MG/KG	UG/L	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG
Mercury	27.7	0.18	0.1	2	67	7.5	225	9.1	7.6
Station	ECU209:2	ECU211:4	ECU214:2	ECU216:4	ECU219:2	ECU221:4	ECU221:4	ECU221:4	ECU224:2
Sample ID	F20932	F21134	F21432	F21634	F21932	F22164	F22134	F22144	F22432
Date Collected	3-Apr-97	3-Apr-97	2-Apr-97	3-Apr-97	7-Apr-97	3-Apr-97	3-Apr-97	3-Apr-97	8-Apr-97
Depth	16 - 32 IN	16 - 22 IN	16 - 32 IN	16 - 32 IN	16 - 32 IN	NA	16 - 32 IN	16 - 32 IN	16 - 32 IN
Sample Type	FS	FS	FS	FS	FS	RIN	FS	FR	FS
Units	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	UG/L	MG/KG	MG/KG	MG/KG
Mercury	0.37	81.1	13.9	7.1	4.6	0.26	11.8	6.3	1.6
Station	ECU226:4								
Sample ID	F22634								
Date Collected	8-Apr-97								
Depth	16 - 32 IN								
Sample Type	FS								
Units	MG/KG								
Mercury	38								
ECU = Excavation Confirmation Unit									
FS = Field Split									
FR = Field Replicate									
RI = Rinsate									
IN = Inches									

Appendix B
Phase II Confirmatory Soil Samples (On-site Lab)

Station	ECU037:1	ECU037:2	ECU037:3	ECU037:4	ECU037:5	ECU037			
Sample ID	F03711	F03712	F03713	F03714	F03715	Mean			
Date Collected	18-Apr-97	18-Apr-97	18-Apr-97	18-Apr-97	10-Jul-97				
Depth	16 - 32 IN	16 - 32 IN	16 - 32 IN	16 - 32 IN	16 - 32 IN				
Sample Type	REG	REG	REG	REG	REG				
Units	UG/G	UG/G	UG/G	UG/G	UG/G	UG/G			
Mercury	22	11.1	216.2	118	106.2	94.7			
Station	ECU038:1	ECU038:2	ECU038:3	ECU038:4	ECU038:5	ECU038			
Sample ID	F03811	F03812	F03813	F03814	F03815	Mean			
Date Collected	18-Apr-97	18-Apr-97	18-Apr-97	18-Apr-97	10-Jul-97				
Depth	16 - 32 IN	16 - 32 IN	16 - 32 IN	16 - 32 IN	16 - 32 IN				
Sample Type	REG	REG	REG	REG	REG				
Units	UG/G	UG/G	UG/G	UG/G	UG/G	UG/G			
Mercury	213.7	249.1	82.9	25.2	24.4	119.1			
Station	ECU039:1	ECU039:2	ECU039:2	ECU039:2	ECU039:3	ECU039:4	ECU039:5	ECU039	
Sample ID	F03911	F03952	F03912	F03922	F03913	F03914	F03915	Mean	
Date Collected	11-Apr-97	14-Apr-97	15-Apr-97	15-Apr-97	11-Apr-97	11-Apr-97	10-Jul-97		
Depth	16 - 32 IN	NA	16 - 32 IN	16 - 32 IN	16 - 32 IN	16 - 32 IN	16 - 32 IN		
Sample Type	REG	RIN	REG	FR	REG	REG	REG		
Units	UG/G	UG/L	UG/G	UG/G	UG/G	UG/G	UG/G	UG/G	
Mercury	6.4	<10 U	103.1	11.3	1 U	5.4	66.2	36.4	
Station	ECU040:1	ECU040:2	ECU040:3	ECU040:4	ECU040:5	ECU040			
Sample ID	F04011	F04012	F04013	F04014	F04015	Mean			
Date Collected	11-Apr-97	11-Apr-97	14-Apr-97	11-Apr-97	1-Aug-97				
Depth	16 - 32 IN	16 - 32 IN	16 - 32 IN	16 - 32 IN	16 - 32 IN				
Sample Type	REG	REG	REG	REG	REG				
Units	UG/G	UG/G	UG/G	UG/G	UG/G	UG/G			
Mercury	4.9	7.5	20.7	3.3	1 U	7.5			
Station	ECU041:1	ECU041:2	ECU041:3	ECU041:4	ECU041:4	ECU041:4	ECU041:5	ECU041	
Sample ID	F04111	F04112	F04113	F04154	F04114	F04124	F04115	Mean	
Date Collected	11-Apr-97	14-Apr-97	11-Apr-97	14-Apr-97	14-Apr-97	14-Apr-97	10-Jul-97		
Depth	16 - 32 IN	16 - 32 IN	16 - 32 IN	NA	16 - 32 IN	16 - 32 IN	16 - 32 IN		
Sample Type	REG	REG	REG	RIN	REG	FR	REG		
Units	UG/G	UG/G	UG/G	UG/L	UG/G	UG/G	UG/G	UG/G	
Mercury	15.7	34.6	39.5	<10 U	214.1	121.2	11.5	63.1	
Station	ECU042:1	ECU042:2	ECU042:3	ECU042:4	ECU042:5	ECU042			
Sample ID	F04211	F04212	F04213	F04214	F04215	Mean			
Date Collected	11-Apr-97	11-Apr-97	11-Apr-97	14-Apr-97	10-Jul-97				
Depth	16 - 32 IN	16 - 32 IN	16 - 32 IN	16 - 32 IN	16 - 32 IN				
Sample Type	REG	REG	REG	REG	REG				
Units	UG/G	UG/G	UG/G	UG/G	UG/G	UG/G			
Mercury	52	70.9	78.9	97.8	17.8	63.5			
Station	ECU043:1	ECU043:2	ECU043:3	ECU043:4	ECU043				
Sample ID	F04311	F04312	F04313	F04314	Mean				
Date Collected	11-Apr-97	11-Apr-97	11-Apr-97	11-Apr-97					
Depth	16 - 32 IN	16 - 32 IN	16 - 32 IN	16 - 32 IN					
Sample Type	REG	REG	REG	REG					
Units	UG/G	UG/G	UG/G	UG/G	UG/G				
Mercury	1 U	5.9	1 U	184	48.0				

Appendix B
Phase II Confirmatory Soil Samples (On-site Lab)

Station	ECU044:1	ECU044:2	ECU044:2	ECU044:2	ECU044:3	ECU044:4	ECU044			
Sample ID	F04411	F04452	F04412	F04422	F04413	F04414	Mean			
Date Collected	11-Apr-97	14-Apr-97	14-Apr-97	14-Apr-97	11-Apr-97	11-Apr-97				
Depth	16 - 32 IN	NA	16 - 32 IN	16 - 32 IN	16 - 32 IN	16 - 32 IN				
Sample Type	REG	RIN	REG	FR	REG	REG				
Units	UG/G	UG/L	UG/G	UG/G	UG/G	UG/G	UG/G			
Mercury	8.1	<10 U	17.6	17.6	1 U	26.1	13.2			
Station	ECU045:1	ECU045:2	ECU045:3	ECU045:4	ECU045					
Sample ID	F04511	F04512	F04513	F04514	Mean					
Date Collected	14-Apr-97	14-Apr-97	15-Apr-97	14-Apr-97						
Depth	16 - 32 IN	16 - 32 IN	16 - 32 IN	16 - 32 IN						
Sample Type	REG	REG	REG	REG						
Units	UG/G	UG/G	UG/G	UG/G	UG/G					
Mercury	86.3	10.6	3	15.3	28.8					
Station	ECU046:1	ECU046:1	ECU046:2	ECU046:3	ECU046:3	ECU046:4	ECU046:4	ECU046:4	ECU046:4	ECU046
Sample ID	F04611	F04671	F04612	F04613	F04673	F04654	F04614	F04624	F04674	Mean
Date Collected	11-Apr-97	22-May-97	11-Apr-97	14-Apr-97	22-May-97	14-Apr-97	23-Apr-97	23-Apr-97	6-Aug-97	
Depth	16 - 32 IN	32 - 48 IN	16 - 32 IN	16 - 32 IN	32 - 48 IN	NA	16 - 32 IN	16 - 32 IN	36 - 52 IN	
Sample Type	REG	REG	REG	REG	REG	RIN	REG	FR	REG	
Units	UG/G	UG/G	UG/G	UG/G	UG/G	UG/L	UG/G	UG/G	UG/G	UG/G
Mercury	521.5	246.7	31.7	1069.5	25.2	<10 U	41.7	97	6.3	77.5
Station	ECU047:1	ECU047:1	ECU047:2	ECU047:2	ECU047:3	ECU047:3	ECU047:4	ECU047:4	ECU047	
Sample ID	F04711	F04771	F04712	F04772	F04713	F04773	F04714	F04774	Mean	
Date Collected	11-Apr-97	6-Aug-97	11-Apr-97	20-May-97	11-Apr-97	6-Aug-97	14-Apr-97	20-May-97		
Depth	16 - 32 IN	36 - 52 IN	16 - 32 IN	32 - 38 IN	16 - 32 IN	32 - 48 IN	16 - 32 IN	32 - 48 IN		
Sample Type	REG	REG	REG	REG	REG	REG	REG	REG		
Units	UG/G	UG/G	UG/G	UG/G	UG/G	UG/G	UG/G	UG/G	UG/G	
Mercury	14.3	5	541.2	111.2	366.6	1 U	1273.8	31.3	37.1	
Station	ECU048:1	ECU048:2	ECU048:3	ECU048:3	ECU048:4	ECU048				
Sample ID	F04811	F04812	F04813	F04873	F04814	Mean				
Date Collected	11-Apr-97	11-Apr-97	11-Apr-97	20-May-97	11-Apr-97					
Depth	16 - 32 IN	16 - 32 IN	16 - 32 IN	32 - 48 IN	16 - 32 IN					
Sample Type	REG	REG	REG	REG	REG					
Units	UG/G	UG/G	UG/G	UG/G	UG/G	UG/G				
Mercury	59.5	112	984.8	1 U	76.3	62.2				
Station	ECU049:1	ECU049:2	ECU049:2	ECU049:2	ECU049:3	ECU049:4	ECU049:4	ECU049		
Sample ID	F04911	F04952	F04912	F04922	F04913	F04914	F04974	Mean		
Date Collected	14-Apr-97	15-Apr-97	15-Apr-97	15-Apr-97	14-Apr-97	14-Apr-97	6-Aug-97			
Depth	16 - 32 IN	NA	16 - 32 IN	16 - 32 IN	16 - 32 IN	16 - 32 IN	32 - 48 IN			
Sample Type	REG	RIN	REG	FR	REG	REG	REG			
Units	UG/G	UG/L	UG/G	UG/G	UG/G	UG/G	UG/G	UG/G		
Mercury	13.3	<10 U	159.7	59.8	17.4	31.8	125.7	79.0		
Station	ECU050:1	ECU050:2	ECU050:3	ECU050:4	ECU050					
Sample ID	F05011	F05012	F05013	F05014	Mean					
Date Collected	14-Apr-97	14-Apr-97	14-Apr-97	15-Apr-97						
Depth	16 - 32 IN	16 - 32 IN	16 - 32 IN	16 - 32 IN						
Sample Type	REG	REG	REG	REG						
Units	UG/G	UG/G	UG/G	UG/G	UG/G					
Mercury	362.7	20.4	42.4	66.5	123.0					

Appendix B
Phase II Confirmatory Soil Samples (On-site Lab)

Station	ECU051:1	ECU051:2	ECU051:3	ECU051:4	ECU051:4	ECU051:4	ECU051			
Sample ID	F05111	F05112	F05113	F05154	F05114	F05124	Mean			
Date Collected	15-Apr-97	15-Apr-97	15-Apr-97	15-Apr-97	15-Apr-97	15-Apr-97				
Depth	16 - 32 IN	16 - 32 IN	16 - 32 IN	NA	16 - 28 IN	16 - 28 IN				
Sample Type	REG	REG	REG	RIN	REG	FR				
Units	UG/G	UG/G	UG/G	UG/L	UG/G	UG/G	UG/G			
Mercury	43.2	269.8	27.8	<10 U	10.2	1 U	87.8			
Station	ECU052:1	ECU052:2	ECU052:3	ECU052:4	ECU052					
Sample ID	F05211	F05212	F05213	F05214	Mean					
Date Collected	15-Apr-97	15-Apr-97	25-Apr-97	15-Apr-97						
Depth	16 - 32 IN	16 - 32 IN	16 - 32 IN	16 - 32 IN						
Sample Type	REG	REG	REG	REG						
Units	UG/G	UG/G	UG/G	UG/G	UG/G					
Mercury	9.8	113.7	19.6	22.7	41.5					
Station	ECU053:1	ECU053:2	ECU053:3	ECU053:3	ECU053:4	ECU053:4	ECU053			
Sample ID	F05311	F05312	F05313	F05373	F05314	F05374	Mean			
Date Collected	15-Apr-97	15-Apr-97	15-Apr-97	6-Aug-97	15-Apr-97	6-Aug-97				
Depth	16 - 32 IN	16 - 32 IN	16 - 32 IN	36 - 52 IN	16 - 32 IN	38 - 54 IN				
Sample Type	REG	REG	REG	REG	REG	REG				
Units	UG/G	UG/G	UG/G	UG/G	UG/G	UG/G	UG/G			
Mercury	9.6	99.7	675.3	4.6	575.4	1 U	28.7			
Station	ECU054:1	ECU054:2	ECU054:2	ECU054:2	ECU054:2	ECU054:2	ECU054:3	ECU054:4	ECU054:4	ECU054:4
Sample ID	F05411	F05452	F05412	F05422	F05472	F054A2	F05413	F05414	F05474	F054A4
Date Collected	11-Apr-97	14-Apr-97	14-Apr-97	14-Apr-97	20-May-97	6-Aug-97	11-Apr-97	11-Apr-97	20-May-97	4-Jun-97
Depth	16 - 32 IN	NA	16 - 32 IN	16 - 32 IN	32 - 48 IN	52 - 68 IN	16 - 32 IN	16 - 32 IN	32 - 36 IN	48 - 61 IN
Sample Type	REG	RIN	REG	FR	REG	REG	REG	REG	REG	REG
Units	UG/G	UG/L	UG/G	UG/G	UG/G	UG/G	UG/G	UG/G	UG/G	UG/G
Mercury	8	<10 U	201.6	851.1	1099.7	7.7	321.7	1781.7	1380.1	12.6
Station	ECU054									
Sample ID	Mean									
Date Collected										
Depth										
Sample Type										
Units	UG/G									
Mercury	87.5									
Station	ECU055:1	ECU055:1	ECU055:2	ECU055:1	ECU055:3	ECU055:3	ECU055:3	ECU055:4	ECU055	
Sample ID	F05511	F05571	F05512	F055A1	F05513	F05573	F055A3	F05514	Mean	
Date Collected	11-Apr-97	20-May-97	11-Apr-97	6-Aug-97	11-Apr-97	20-May-97	6-Aug-97	15-Apr-97		
Depth	16 - 32 IN	32 - 48 IN	16 - 32 IN	52 - 68 IN	16 - 24 IN	32 - 48 IN	52 - 68 IN	16 - 32 IN		
Sample Type	REG	REG	REG	REG	REG	REG	REG	REG		
Units	UG/G	UG/G	UG/G	UG/G	UG/G	UG/G	UG/G	UG/G	UG/G	
Mercury	1115.1	6.6	38.9	1 U	850.6	1 U	325.8	1 U	91.7	
Station	ECU056:1	ECU056:2	ECU056:3	ECU056:4	ECU056:4	ECU056:4	ECU056			
Sample ID	F05611	F05612	F05613	F05654	F05614	F05624	Mean			
Date Collected	15-Apr-97	15-Apr-97	15-Apr-97	15-Apr-97	16-Apr-97	16-Apr-97				
Depth	16 - 32 IN	16 - 32 IN	16 - 32 IN	NA	16 - 32 IN	16 - 32 IN				
Sample Type	REG	REG	REG	RIN	REG	FR				
Units	UG/G	UG/G	UG/G	UG/L	UG/G	UG/G	UG/G			
Mercury	1 U	1 U	195.1	<10 U	302.5	267	124.9			

Appendix B
Phase II Confirmatory Soil Samples (On-site Lab)

Station	ECU057:1	ECU057:2	ECU057:3	ECU057:4	ECU057					
Sample ID	F05711	F05712	F05713	F05714	Mean					
Date Collected	15-Apr-97	15-Apr-97	15-Apr-97	15-Apr-97						
Depth	16 - 32 IN	16 - 32 IN	16 - 32 IN	16 - 32 IN						
Sample Type	REG	REG	REG	REG						
Units	UG/G	UG/G	UG/G	UG/G	UG/G					
Mercury	1 U	1 U	8.5	16.6	6.8					
Station	ECU058:1	ECU058:2	ECU058:3	ECU058:4	ECU058					
Sample ID	F05811	F05812	F05813	F05814	Mean					
Date Collected	15-Apr-97	15-Apr-97	15-Apr-97	15-Apr-97						
Depth	16 - 32 IN	16 - 32 IN	16 - 32 IN	16 - 32 IN						
Sample Type	REG	REG	REG	REG						
Units	UG/G	UG/G	UG/G	UG/G	UG/G					
Mercury	23.3	66.3	87.3	1 U	44.5					
Station	ECU059:1	ECU059:2	ECU059:2	ECU059:2	ECU059:3	ECU059:3	ECU059:4	ECU059:4	ECU059	
Sample ID	F05911	F05952	F05912	F05922	F05913	F05973	F05914	F05974	Mean	
Date Collected	15-Apr-97	16-Apr-97	16-Apr-97	16-Apr-97	15-Apr-97	6-Aug-97	15-Apr-97	6-Aug-97		
Depth	16 - 32 IN	NA	16 - 32 IN	16 - 32 IN	16 - 32 IN	36 - 52 IN	16 - 32 IN	32 - 48 IN		
Sample Type	REG	RIN	REG	FR	REG	REG	REG	REG		
Units	UG/G	UG/L	UG/G	UG/G	UG/G	UG/G	UG/G	UG/G	UG/G	
Mercury	9.4	<10 U	11.1	10.1	32.8	14.2	126.7	4.9	9.9	
Station	ECU060:1	ECU060:1	ECU060:2	ECU060:2	ECU060:3	ECU060:3	ECU060:4	ECU060:4	ECU060	
Sample ID	F06011	F06071	F06012	F06072	F06013	F06073	F06014	F06074	Mean	
Date Collected	14-Apr-97	6-Aug-97	14-Apr-97	6-Aug-97	14-Apr-97	22-May-97	14-Apr-97	6-Aug-97		
Depth	16 - 32 IN	52 - 68 IN	16 - 32 IN	52 - 68 IN	16 - 32 IN	32 - 48 IN	16 - 32 IN	32 - 48 IN		
Sample Type	REG	REG	REG	REG	REG	REG	REG	REG		
Units	UG/G	UG/G	UG/G	UG/G	UG/G	UG/G	UG/G	UG/G	UG/G	
Mercury	156.9	29.3	7.2	3.4	476.4	1 U	4.6	88.2	30.5	
Station	ECU061:1	ECU061:1	ECU061:1	ECU061:2	ECU061:3	ECU061:4	ECU061:4	ECU061:4	ECU061	
Sample ID	F06111	F06171	F061A1	F06112	F06113	F06154	F06114	F06124	Mean	
Date Collected	16-Apr-97	22-Aug-97	3-Sep-97	16-Apr-97	16-Apr-97	14-Apr-97	14-Apr-97	14-Apr-97		
Depth	16 - 32 IN	40 - 56 IN	56 - 72 IN	16 - 32 IN	16 - 32 IN	NA	16 - 32 IN	16 - 32 IN		
Sample Type	REG	REG	REG	REG	REG	RIN	REG	FR		
Units	UG/G	UG/G	UG/G	UG/G	UG/G	UG/L	UG/G	UG/G	UG/G	
Mercury	27.3	612.7	3.1	1 U	4	<10 U	1 U	1 U	2.3	
Station	ECU062:1	ECU062:2	ECU062:3	ECU062:4	ECU062					
Sample ID	F06211	F06212	F06213	F06214	Mean					
Date Collected	16-Apr-97	16-Apr-97	16-Apr-97	16-Apr-97						
Depth	16 - 32 IN	16 - 32 IN	16 - 32 IN	16 - 20 IN						
Sample Type	REG	REG	REG	REG						
Units	UG/G	UG/G	UG/G	UG/G	UG/G					
Mercury	54.4	1 U	6.2	38.6	25.1					
Station	ECU063:1	ECU063:2	ECU063:3	ECU063:3	ECU063:4	ECU063:4	ECU063			
Sample ID	F06311	F06312	F06313	F06373	F06314	F06374	Mean			
Date Collected	15-Apr-97	16-Apr-97	16-Apr-97	6-Aug-97	16-Apr-97	6-Aug-97				
Depth	16 - 32 IN	16 - 24 IN	16 - 32 IN	46 - 62 IN	16 - 32 IN	32 - 48 IN				
Sample Type	REG	REG	REG	REG	REG	REG				
Units	UG/G	UG/G	UG/G	UG/G	UG/G	UG/G	UG/G			
Mercury	46.6	23.7	7.2	4	930.6	4.8	19.8			

Appendix B
Phase II Confirmatory Soil Samples (On-site Lab)

Station	ECU064:1	ECU064:2	ECU064:2	ECU064:2	ECU064:3	ECU064:4	ECU064			
Sample ID	F06411	F06452	F06412	F06422	F06413	F06414	Mean			
Date Collected	15-Apr-97	16-Apr-97	16-Apr-97	16-Apr-97	15-Apr-97	15-Apr-97				
Depth	16 - 32 IN	NA	16 - 32 IN	16 - 32 IN	16 - 32 IN	16 - 32 IN				
Sample Type	REG	RIN	REG	FR	REG	REG				
Units	UG/G	UG/L	UG/G	UG/G	UG/G	UG/G	UG/G			
Mercury	73.4	<10 U	101.2	99.7	37.3	8	55.0			
Station	ECU065:1	ECU065:1	ECU065:2	ECU065:2	ECU065:3	ECU065:4	ECU065			
Sample ID	F06511	F06571	F06512	F06572	F06513	F06514	Mean			
Date Collected	16-Apr-97	6-Aug-97	18-Apr-97	6-Aug-97	16-Apr-97	18-Apr-97				
Depth	16 - 32 IN	36 - 52 IN	16 - 32 IN	36 - 52 IN	16 - 32 IN	16 - 32 IN				
Sample Type	REG	REG	REG	REG	REG	REG				
Units	UG/G	UG/G	UG/G	UG/G	UG/G	UG/G	UG/G			
Mercury	32	5.8	131.2	63.6	6.5	111.6	46.9			
Station	ECU066:1	ECU066:2	ECU066:2	ECU066:3	ECU066:4	ECU066:4	ECU066:4	ECU066		
Sample ID	F06611	F06612	F06672	F06613	F06654	F06614	F06624	Mean		
Date Collected	16-Apr-97	16-Apr-97	22-May-97	16-Apr-97	15-Apr-97	15-Apr-97	15-Apr-97			
Depth	16 - 32 IN	16 - 32 IN	32 - 48 IN	16 - 32 IN	NA	16 - 32 IN	16 - 32 IN			
Sample Type	REG	REG	REG	REG	RIN	REG	FR			
Units	UG/G	UG/G	UG/G	UG/G	UG/L	UG/G	UG/G	UG/G		
Mercury	30.1	654.4	1 U	386.8	<10 U	216.4	164.2	158.6		
Station	ECU067:1	ECU067:2	ECU067:3	ECU067:3	ECU067:4	ECU067:4	ECU067			
Sample ID	F06711	F06712	F06713	F06773	F06714	F06774	Mean			
Date Collected	10-Apr-97	10-Apr-97	16-Apr-97	22-Aug-97	10-Apr-97	6-Aug-97				
Depth	16 - 32 IN	16 - 32 IN	16 - 32 IN	52 - 68 IN	16 - 32 IN	32 - 48 IN				
Sample Type	REG	REG	REG	REG	REG	REG				
Units	UG/G	UG/G	UG/G	UG/G	UG/G	UG/G	UG/G			
Mercury	1 U	1 U	186.5	4.9	1929.2	376.9	96.0			
Station	ECU068:1	ECU068:2	ECU068:3	ECU068:3	ECU068:4	ECU068				
Sample ID	F06811	F06812	F06813	F06873	F06814	Mean				
Date Collected	10-Apr-97	16-Apr-97	10-Apr-97	22-Aug-97	10-Apr-97					
Depth	16 - 32 IN	16 - 32 IN	16 - 32 IN	36 - 52 IN	16 - 32 IN					
Sample Type	REG	REG	REG	REG	REG					
Units	UG/G	UG/G	UG/G	UG/G	UG/G	UG/G				
Mercury	7.5	1 U	15	1 U	12.6	5.5				
Station	ECU069:1	ECU069:2	ECU069:2	ECU069:2	ECU069:3	ECU069:3	ECU069:4	ECU069		
Sample ID	F06911	F06952	F06912	F06922	F06913	F06973	F06914	Mean		
Date Collected	10-Apr-97	16-Apr-97	16-Apr-97	16-Apr-97	10-Apr-97	22-Aug-97	10-Apr-97			
Depth	16 - 32 IN	NA	16 - 32 IN	16 - 32 IN	16 - 32 IN	44 - 56 IN	16 - 32 IN			
Sample Type	REG	RIN	REG	FR	REG	REG	REG			
Units	UG/G	UG/L	UG/G	UG/G	UG/G	UG/G	UG/G	UG/G		
Mercury	1 U	<10 U	1 U	16.9	66.4	1 U	15.6	4.7		
Station	ECU070:1	ECU070:2	ECU070:3	ECU070:4	ECU070					
Sample ID	F07011	F07012	F07013	F07014	Mean					
Date Collected	10-Apr-97	10-Apr-97	10-Apr-97	10-Apr-97						
Depth	16 - 32 IN	20 - 36 IN	16 - 32 IN	20 - 36 IN						
Sample Type	REG	REG	REG	REG						
Units	UG/G	UG/G	UG/G	UG/G	UG/G					
Mercury	4.4	16.7	8.2	1 U	7.6					

Appendix B
Phase II Confirmatory Soil Samples (On-site Lab)

Station	ECU071:1	ECU071:2	ECU071:3	ECU071:4	ECU071:4	ECU071:4	ECU071			
Sample ID	F07111	F07112	F07113	F07154	F07114	F07124	Mean			
Date Collected	9-Apr-97	9-Apr-97	9-Apr-97	8-Apr-97	9-Apr-97	9-Apr-97				
Depth	16 - 32 IN	16 - 32 IN	16 - 32 IN	NA	16 - 32 IN	16 - 32 IN				
Sample Type	REG	REG	REG	RIN	REG	FR				
Units	UG/G	UG/G	UG/G	UG/L	UG/G	UG/G	UG/G			
Mercury	89.3	84.5	1 U	<10 U	1 U	9.6	44.0			
Station	ECU072:1	ECU072:2	ECU072:2	ECU072:3	ECU072:4	ECU072				
Sample ID	F07211	F07212	F07272	F07213	F07214	Mean				
Date Collected	9-Apr-97	9-Apr-97	22-May-97	9-Apr-97	9-Apr-97					
Depth	16 - 32 IN	16 - 32 IN	32 - 48 IN	16 - 32 IN	16 - 32 IN					
Sample Type	REG	REG	REG	REG	REG					
Units	UG/G	UG/G	UG/G	UG/G	UG/G	UG/G				
Mercury	31.7	1312.4	41.9	3.1	3.6	20.1				
Station	ECU073:1	ECU073:2	ECU073:3	ECU073:4	ECU073					
Sample ID	F07311	F07312	F07313	F07314	Mean					
Date Collected	9-Apr-97	9-Apr-97	16-Apr-97	9-Apr-97						
Depth	16 - 32 IN	16 - 32 IN	16 - 32 IN	16 - 32 IN						
Sample Type	REG	REG	REG	REG						
Units	UG/G	UG/G	UG/G	UG/G	UG/G					
Mercury	1 U	4.8	7	10.4	5.8					
Station	ECU074:1	ECU074:2	ECU074:2	ECU074:2	ECU074:3	ECU074:4	ECU074			
Sample ID	F07411	F07412	F07422	F07452	F07413	F07414	Mean			
Date Collected	8-Apr-97	9-Apr-97	9-Apr-97	8-Apr-97	16-Apr-97	8-Apr-97				
Depth	16 - 32 IN	16 - 32 IN	16 - 32 IN	NA	16 - 32 IN	16 - 32 IN				
Sample Type	REG	REG	FR	RIN	REG	REG				
Units	UG/G	UG/G	UG/G	UG/L	UG/G	UG/G	UG/G			
Mercury	3	1 U	1 U	<10 U	10.3	17.6	8.0			
Station	ECU075:1	ECU075:2	ECU075:3	ECU075:4	ECU075					
Sample ID	F07511	F07512	F07513	F07514	Mean					
Date Collected	16-Apr-97	9-Apr-97	9-Apr-97	9-Apr-97						
Depth	16 - 32 IN	16 - 32 IN	16 - 32 IN	16 - 32 IN						
Sample Type	REG	REG	REG	REG						
Units	UG/G	UG/G	UG/G	UG/G	UG/G					
Mercury	15.3	4.8	1 U	10.4	7.9					
Station	ECU076:1	ECU076:2	ECU076:3	ECU076:4	ECU076:4	ECU076:4	ECU076:4	ECU076:5	ECU076	
Sample ID	F07611	F07612	F07613	F07654	F07614	F07624	F07674	F07615	Mean	
Date Collected	16-Apr-97	8-Apr-97	8-Apr-97	8-Apr-97	6-Apr-97	8-Apr-97	18-Sep-97	23-Sep-97		
Depth	16 - 32 IN	16 - 32 IN	16 - 20 IN	NA	16 - 32 IN	16 - 32 IN	44 - 60 IN	22 - 38 IN		
Sample Type	REG	REG	REG	RIN	REG	FR	REG	REG		
Units	UG/G	UG/G	UG/G	UG/L	UG/G	UG/G	UG/G	UG/G	UG/G	
Mercury	4.3	7.9	1 U	<10 U	1 U	1 U	1 U	1 U	3.0	
Station	ECU077:1	ECU077:2	ECU077:3	ECU077:4	ECU077					
Sample ID	F07711	F07712	F07713	F07714	Mean					
Date Collected	8-Apr-97	8-Apr-97	8-Apr-97	8-Apr-97						
Depth	16 - 32 IN	16 - 32 IN	16 - 32 IN	16 - 32 IN						
Sample Type	REG	REG	REG	REG						
Units	UG/G	UG/G	UG/G	UG/G	UG/G					
Mercury	1 U	8.3	121	1 U	32.8					

Appendix B
Phase II Confirmatory Soil Samples (On-site Lab)

Station	ECU078:1	ECU078:1	ECU078:2	ECU078:3	ECU078:4	ECU078:4	ECU078			
Sample ID	F07811	F07871	F07812	F07813	F07814	F07874	Mean			
Date Collected	10-Apr-97	22-May-97	10-Apr-97	10-Apr-97	10-Apr-97	6-Aug-97				
Depth	16 - 32 IN	32 - 48 IN	16 - 32 IN	16 - 32 IN	16 - 32 IN	32 - 48 IN				
Sample Type	REG	REG	REG	REG	REG	REG				
Units	UG/G	UG/G	UG/G	UG/G	UG/G	UG/G	UG/G			
Mercury	627.6	27.6	25.9	280.2	743.5	22.4	89.0			
Station	ECU079:1	ECU079:2	ECU079:2	ECU079:2	ECU079:3	ECU079:4	ECU079			
Sample ID	F07911	F07952	F07912	F07922	F07913	F07914	Mean			
Date Collected	10-Apr-97	17-Apr-97	17-Apr-97	17-Apr-97	10-Apr-97	17-Apr-97				
Depth	16 - 32 IN	NA	16 - 32 IN	16 - 32 IN	16 - 32 IN	16 - 32 IN				
Sample Type	REG	RIN	REG	FR	REG	REG				
Units	UG/G	UG/L	UG/G	UG/G	UG/G	UG/G	UG/G			
Mercury	4	<10 U	152.8	87	1 U	5.8	40.9			
Station	ECU080:1	ECU080:2	ECU080:3	ECU080:4	ECU080					
Sample ID	F08011	F08012	F08013	F08014	Mean					
Date Collected	9-Apr-97	9-Apr-97	9-Apr-97	9-Apr-97						
Depth	16 - 32 IN	16 - 32 IN	16 - 32 IN	16 - 32 IN						
Sample Type	REG	REG	REG	REG						
Units	UG/G	UG/G	UG/G	UG/G	UG/G					
Mercury	40.2	235	192.6	1 U	117.2					
Station	ECU081:1	ECU081:2	ECU081:3	ECU081:4	ECU081:4	ECU081:4	ECU081			
Sample ID	F08111	F08112	F08113	F08154	F08114	F08124	Mean			
Date Collected	9-Apr-97	9-Apr-97	9-Apr-97	17-Apr-97	18-Apr-97	18-Apr-97				
Depth	16 - 32 IN	16 - 32 IN	16 - 32 IN	NA	16 - 32 IN	16 - 32 IN				
Sample Type	REG	REG	REG	RIN	REG	FR				
Units	UG/G	UG/G	UG/G	UG/L	UG/G	UG/G	UG/G			
Mercury	339.8	25.3	28.6	<10 U	26.9	27	105.2			
Station	ECU082:1	ECU082:2	ECU082:3	ECU082:4	ECU082					
Sample ID	F08211	F08212	F08213	F08214	Mean					
Date Collected	17-Apr-97	16-Apr-97	17-Apr-97	18-Apr-97						
Depth	16 - 32 IN	16 - 32 IN	16 - 32 IN	16 - 32 IN						
Sample Type	REG	REG	REG	REG						
Units	UG/G	UG/G	UG/G	UG/G	UG/G					
Mercury	27	125.2	1 U	6	39.8					
Station	ECU083:1	ECU083:2	ECU083:2	ECU083:3	ECU083:3	ECU083:4	ECU083:5	ECU083:6	ECU083	
Sample ID	F08311	F08312	F08372	F08313	F08373	F08314	F08315	F08316	Mean	
Date Collected	17-Apr-97	17-Apr-97	5-Jun-97	17-Apr-97	5-Jun-97	17-Apr-97	11-Sep-97	11-Sep-97		
Depth	16 - 32 IN	16 - 32 IN	32 - 48 IN	16 - 32 IN	32 - 48 IN	16 - 32 IN	32 - 48 IN	32 - 48 IN		
Sample Type	REG	REG	REG	REG	REG	REG	REG	REG		
Units	UG/G	UG/G	UG/G	UG/G	UG/G	UG/G	UG/G	UG/G	UG/G	
Mercury	199.3	1230	16	1296.1	250.7	85	1 U	2.6	92.4	
Station	ECU084:1	ECU084:2	ECU084:2	ECU084:2	ECU084:3	ECU084:4	ECU084:5	ECU084		
Sample ID	F08411	F08452	F08412	F08422	F08413	F08414	F08415	Mean		
Date Collected	9-Apr-97	17-Apr-97	17-Apr-97	17-Apr-97	9-Apr-97	9-Apr-97	26-Sep-97			
Depth	16 - 32 IN	NA	16 - 32 IN	16 - 32 IN	16 - 32 IN	16 - 32 IN	32 - 48 IN			
Sample Type	REG	RIN	REG	FR	REG	REG	REG			
Units	UG/G	UG/L	UG/G	UG/G	UG/G	UG/G	UG/G	UG/G		
Mercury	283.6	<10 U	370.3	379.4	1 U	10.2	11.9	135.4		

Appendix B
Phase II Confirmatory Soil Samples (On-site Lab)

Station	ECU085:1	ECU085:1	ECU085:2	ECU085:3	ECU085:4	ECU085				
Sample ID	F08511	F08571	F08512	F08513	F08514	Mean				
Date Collected	10-Apr-97	5-Jun-97	16-Apr-97	10-Apr-97	10-Apr-97					
Depth	16 - 32 IN	32 - 48 IN	16 - 32 IN	16 - 32 IN	16 - 32 IN					
Sample Type	REG	REG	REG	REG	REG					
Units	UG/G	UG/G	UG/G	UG/G	UG/G	UG/G				
Mercury	491.3	10.1	54.7	5.7	30.1	25.2				
Station	ECU086:1	ECU086:2	ECU086:3	ECU086:4	ECU086:4	ECU086:4	ECU086:4	ECU086		
Sample ID	F08611	F08612	F08613	F08654	F08614	F08624	F08674	Mean		
Date Collected	10-Apr-97	10-Apr-97	10-Apr-97	17-Apr-97	18-Apr-97	18-Apr-97	5-Jun-97			
Depth	16 - 32 IN	16 - 32 IN	16 - 32 IN	NA	16 - 32 IN	16 - 32 IN	32 - 48 IN			
Sample Type	REG	REG	REG	RIN	REG	FR	REG			
Units	UG/G	UG/G	UG/G	UG/L	UG/G	UG/G	UG/G	UG/G		
Mercury	97.1	236	35.5	<10 U	907.4	650.5	15.9	96.1		
Station	ECU087:1	ECU087:2	ECU087:3	ECU087:4	ECU087					
Sample ID	F08711	F08712	F08713	F08714	Mean					
Date Collected	10-Apr-97	10-Apr-97	10-Apr-97	10-Apr-97						
Depth	16 - 32 IN	16 - 32 IN	16 - 32 IN	16 - 32 IN						
Sample Type	REG	REG	REG	REG						
Units	UG/G	UG/G	UG/G	UG/G	UG/G					
Mercury	1 U	11	234.8	43.8	72.7					
Station	ECU088:1	ECU088:2	ECU088:3	ECU088:4	ECU088					
Sample ID	F08811	F08812	F08813	F08814	Mean					
Date Collected	9-Apr-97	9-Apr-97	9-Apr-97	9-Apr-97						
Depth	16 - 32 IN	16 - 32 IN	16 - 32 IN	16 - 32 IN						
Sample Type	REG	REG	REG	REG						
Units	UG/G	UG/G	UG/G	UG/G	UG/G					
Mercury	7.8	72.8	6.8	1 U	22.1					
Station	ECU089:1	ECU089:2	ECU089:2	ECU089:2	ECU089:3	ECU089:4	ECU089			
Sample ID	F08911	F08952	F08912	F08922	F08913	F08914	Mean			
Date Collected	9-Apr-97	17-Apr-97	18-Apr-97	18-Apr-97	9-Apr-97	9-Apr-97				
Depth	16 - 32 IN	NA	16 - 32 IN	16 - 32 IN	16 - 32 IN	16 - 32 IN				
Sample Type	REG	RIN	REG	FR	REG	REG				
Units	UG/G	UG/L	UG/G	UG/G	UG/G	UG/G	UG/G			
Mercury	37.4	<10 U	136.6	228.9	7.1	23.5	51.2			
Station	ECU090:1	ECU090:2	ECU090:3	ECU090:4	ECU090:5	ECU090				
Sample ID	F09011	F09012	F09013	F09014	F09015	Mean				
Date Collected	9-Apr-97	9-Apr-97	9-Apr-97	9-Apr-97	5-Sep-97					
Depth	16 - 32 IN	16 - 26 IN	16 - 32 IN	16 - 32 IN	16 - 32 IN					
Sample Type	REG	REG	REG	REG	REG					
Units	UG/G	UG/G	UG/G	UG/G	UG/G	UG/G				
Mercury	7.1	17.1	1 U	36.7	5.5	13.5				
Station	ECU091:1	ECU091:2	ECU091:3	ECU091:4	ECU091:4	ECU091:4	ECU091			
Sample ID	F09111	F09112	F09113	F09154	F09114	F09124	Mean			
Date Collected	9-Apr-97	9-Apr-97	9-Apr-97	17-Apr-97	18-Apr-97	18-Apr-97				
Depth	16 - 32 IN	16 - 32 IN	16 - 32 IN	NA	16 - 32 IN	16 - 32 IN				
Sample Type	REG	REG	REG	RIN	REG	FR				
Units	UG/G	UG/G	UG/G	UG/L	UG/G	UG/G	UG/G			
Mercury	33.2	1 U	32.5	<10 U	25	20.8	22.9			

Appendix B
Phase II Confirmatory Soil Samples (On-site Lab)

Station	ECU092:1	ECU092:2	ECU092:2	ECU092:3	ECU092:4	ECU092				
Sample ID	F09211	F09212	F09272	F09213	F09214	Mean				
Date Collected	18-Apr-97	18-Apr-97	5-Jun-97	18-Apr-97	18-Apr-97					
Depth	16 - 32 IN	16 - 32 IN	32 - 48 IN	16 - 32 IN	16 - 32 IN					
Sample Type	REG	REG	REG	REG	REG					
Units	UG/G	UG/G	UG/G	UG/G	UG/G	UG/G				
Mercury	10.1	908.2	90.3	5.7	24.4	32.6				
Station	ECU093:1	ECU093:2	ECU093:3	ECU093:4	ECU093					
Sample ID	F09311	F09312	F09313	F09314	Mean					
Date Collected	18-Apr-97	18-Apr-97	18-Apr-97	18-Apr-97						
Depth	16 - 32 IN	16 - 32 IN	16 - 32 IN	16 - 32 IN						
Sample Type	REG	REG	REG	REG						
Units	UG/G	UG/G	UG/G	UG/G	UG/G					
Mercury	1 U	1 U	4.2	1 U	1.8					
Station	ECU094:1	ECU094:2	ECU094:2	ECU094:2	ECU094:3	ECU094:4	ECU094			
Sample ID	F09411	F09452	F09412	F09422	F09413	F09414	Mean			
Date Collected	18-Apr-97	17-Apr-97	18-Apr-97	18-Apr-97	18-Apr-97	16-Apr-97				
Depth	16 - 32 IN	NA	16 - 32 IN	16 - 32 IN	16 - 32 IN	16 - 32 IN				
Sample Type	REG	RIN	REG	FR	REG	REG				
Units	UG/G	UG/L	UG/G	UG/G	UG/G	UG/G	UG/G			
Mercury	73.5	<10 U	20.9	23.6	3.3	27.8	31.4			
Station	ECU095:1	ECU095:2	ECU095:3	ECU095:4	ECU095					
Sample ID	F09511	F09512	F09513	F09514	Mean					
Date Collected	18-Apr-97	18-Apr-97	18-Apr-97	18-Apr-97						
Depth	16 - 32 IN	16 - 32 IN	16 - 32 IN	16 - 32 IN						
Sample Type	REG	REG	REG	REG						
Units	UG/G	UG/G	UG/G	UG/G	UG/G					
Mercury	15.8	1 U	1 U	5.4	5.8					
Station	ECU096:1	ECU096:2	ECU096:3	ECU096:4	ECU096:4	ECU096:4	ECU096			
Sample ID	F09611	F09612	F09613	F09654	F09614	F09624	Mean			
Date Collected	18-Apr-97	18-Apr-97	18-Apr-97	17-Apr-97	18-Apr-97	18-Apr-97				
Depth	16 - 24 IN	16 - 32 IN	16 - 32 IN	NA	16 - 32 IN	16 - 32 IN				
Sample Type	REG	REG	REG	RIN	REG	FR				
Units	UG/G	UG/G	UG/G	UG/L	UG/G	UG/G	UG/G			
Mercury	6	1 U	3.3	<10 U	4.1	1 U	3.6			
Station	ECU097:1	ECU097:2	ECU097:3	ECU097:4	ECU097:5	ECU097				
Sample ID	F09711	F09712	F09713	F09714	F09715	Mean				
Date Collected	13-Mar-97	13-Mar-97	13-Mar-97	13-Mar-97	14-Apr-97					
Depth	16 - 32 IN	16 - 32 IN	16 - 32 IN	16 - 24 IN	20 - 36 IN					
Sample Type	REG	REG	REG	REG	REG					
Units	UG/G	UG/G	UG/G	UG/G	UG/G	UG/G				
Mercury	253	17.2	15.1	33.8	3.2	64.5				
Station	ECU098:1	ECU098:2	ECU098:3	ECU098:4	ECU098:5	ECU098				
Sample ID	F09811	F09812	F09813	F09814	F09815	Mean				
Date Collected	13-Mar-97	11-Mar-97	13-Mar-97	13-Mar-97	14-Apr-97					
Depth	16 - 32 IN	16 - 32 IN	16 - 32 IN	16 - 32 IN	16 - 32 IN					
Sample Type	REG	REG	REG	REG	REG					
Units	UG/G	UG/G	UG/G	UG/G	UG/G	UG/G				
Mercury	4.6	157.4	10.3	1 U	1 U	34.9				

Appendix B
Phase II Confirmatory Soil Samples (On-site Lab)

Station	ECU099:1	ECU099:2	ECU099:2	ECU099:2	ECU099:3	ECU099:4	ECU099:5	ECU099		
Sample ID	F09911	F09952	F09912	F09922	F09913	F09914	F09915	Mean		
Date Collected	11-Mar-97	11-Mar-97	12-Mar-97	12-Mar-97	13-Mar-97	13-Mar-97	3-Jun-97			
Depth	16 - 32 IN	NA	16 - 32 IN	16 - 32 IN	16 - 32 IN	16 - 32 IN	16 - 32 IN			
Sample Type	REG	RIN	REG	FR	REG	REG	REG			
Units	UG/G	UG/L	UG/G	UG/G	UG/G	UG/G	UG/G	UG/G		
Mercury	182.3	<10 U	103.7	82	6	14.2	4.9	62.2		
Station	ECU100:1	ECU100:2	ECU100:3	ECU100:4	ECU100					
Sample ID	F10011	F10012	F10013	F10014	Mean					
Date Collected	12-Mar-97	12-Mar-97	12-Mar-97	12-Mar-97						
Depth	16 - 32 IN	16 - 32 IN	16 - 32 IN	16 - 32 IN						
Sample Type	REG	REG	REG	REG						
Units	UG/G	UG/G	UG/G	UG/G	UG/G					
Mercury	211.7	165.7	1 U	1 U	94.9					
Station	ECU101:1	ECU101:2	ECU101:3	ECU101:4	ECU101:4	ECU101:4	ECU101:4	ECU101:4	ECU101	
Sample ID	F10111	F10112	F10113	F10154	F10114	F10124	F10174	F10184	Mean	
Date Collected	12-Mar-97	12-Mar-97	12-Mar-97	11-Mar-97	12-Mar-97	12-Mar-97	4-Apr-97	4-Apr-97		
Depth	16 - 32 IN	16 - 28 IN	16 - 29 IN	NA	16 - 32 IN	16 - 32 IN	32 - 48 IN	32 - 48 IN		
Sample Type	REG	REG	REG	RIN	REG	FR	REG	FR		
Units	UG/G	UG/G	UG/G	UG/L	UG/G	UG/G	UG/G	UG/G	UG/G	
Mercury	10.5	12.7	49.1	<10 U	482.3	823.7	1 U	1 U	18.3	
Station	ECU102:1	ECU102:2	ECU102:3	ECU102:4	ECU102:5	ECU102				
Sample ID	F10211	F10212	F10213	F10214	F10215	Mean				
Date Collected	13-Mar-97	13-Mar-97	13-Mar-97	13-Mar-97	14-Apr-97					
Depth	16 - 32 IN	16 - 28 IN	16 - 32 IN	16 - 32 IN	21 - 26 IN					
Sample Type	REG	REG	REG	REG	REG					
Units	UG/G	UG/G	UG/G	UG/G	UG/G	UG/G				
Mercury	6.7	17.8	220.7	265.3	1 U	102.3				
Station	ECU103:1	ECU103:2	ECU103:3	ECU103:4	ECU103					
Sample ID	F10311	F10312	F10313	F10314	Mean					
Date Collected	12-Mar-97	11-Mar-97	12-Mar-97	12-Mar-97						
Depth	16 - 32 IN	16 - 30 IN	16 - 32 IN	16 - 24 IN						
Sample Type	REG	REG	REG	REG						
Units	UG/G	UG/G	UG/G	UG/G	UG/G					
Mercury	33.2	108.1	4.3	30.1	43.9					
Station	ECU104:1	ECU104:2	ECU104:2	ECU104:2	ECU104:3	ECU104:4	ECU104			
Sample ID	F10411	F10452	F10412	F10422	F10413	F10414	Mean			
Date Collected	12-Mar-97	11-Mar-97	12-Mar-97	12-Mar-97	12-Mar-97	11-Mar-97				
Depth	16 - 32 IN	NA	16 - 32 IN	16 - 32 IN	16 - 32 IN	16 - 32 IN				
Sample Type	REG	RIN	REG	FR	REG	REG				
Units	UG/G	UG/L	UG/G	UG/G	UG/G	UG/G	UG/G			
Mercury	120.4	<10 U	28.1	21.3	275.1	1 U	106.2			
Station	ECU105:1	ECU105:2	ECU105:3	ECU105:4	ECU105:5	ECU105				
Sample ID	F10511	F10512	F10513	F10514	F10515	Mean				
Date Collected	13-Mar-97	12-Mar-97	11-Mar-97	12-Mar-97	14-Apr-97					
Depth	16 - 32 IN	16 - 32 IN	16 - 32 IN	16 - 32 IN	18 - 34 IN					
Sample Type	REG	REG	REG	REG	REG					
Units	UG/G	UG/G	UG/G	UG/G	UG/G	UG/G				
Mercury	28.6	1 U	1 U	1 U	1 U	6.5				

Appendix B
Phase II Confirmatory Soil Samples (On-site Lab)

Station	ECU106:1	ECU106:2	ECU106:3	ECU106:4	ECU106:4	ECU106:4	ECU106			
Sample ID	F10611	F10612	F10613	F10654	F10614	F10624	Mean			
Date Collected	12-Mar-97	12-Mar-97	12-Mar-97	11-Mar-97	12-Mar-97	12-Mar-97				
Depth	16 - 26 IN	16 - 32 IN	16 - 26 IN	NA	16 - 32 IN	16 - 32 IN				
Sample Type	REG	REG	REG	RIN	REG	FR				
Units	UG/G	UG/G	UG/G	UG/L	UG/G	UG/G	UG/G			
Mercury	12.5	9.3	4.2	<10	1 U	1 U	6.8			
Station	ECU107:1	ECU107:2	ECU107:3	ECU107:4	ECU107					
Sample ID	F10711	F10712	F10713	F10714	Mean					
Date Collected	12-Mar-97	12-Mar-97	12-Mar-97	11-Mar-97						
Depth	16 - 32 IN	16 - 32 IN	16 - 32 IN	16 - 32 IN						
Sample Type	REG	REG	REG	REG						
Units	UG/G	UG/G	UG/G	UG/G	UG/G					
Mercury	373	62.3	3.6	11	112.5					
Station	ECU108:1	ECU108:2	ECU108:3	ECU108:4	ECU108					
Sample ID	F10811	F10812	F10813	F10814	Mean					
Date Collected	12-Mar-97	12-Mar-97	12-Mar-97	11-Mar-97						
Depth	16 - 30 IN	16 - 24 IN	16 - 32 IN	16 - 32 IN						
Sample Type	REG	REG	REG	REG						
Units	UG/G	UG/G	UG/G	UG/G	UG/G					
Mercury	6.5	74.1	4.7	3.3	22.2					
Station	ECU109:1	ECU109:2	ECU109:2	ECU109:2	ECU109:3	ECU109:4	ECU109			
Sample ID	F10911	F10952	F10912	F10922	F10913	F10914	Mean			
Date Collected	12-Mar-97	11-Mar-97	12-Mar-97	12-Mar-97	11-Mar-97	11-Mar-97				
Depth	16 - 32 IN	NA	16 - 32 IN	16 - 32 IN	16 - 32 IN	16 - 32 IN				
Sample Type	REG	RIN	REG	FR	REG	REG				
Units	UG/G	UG/L	UG/G	UG/G	UG/G	UG/G	UG/G			
Mercury	79.1	<10 U	51.7	55.4	1 U	1 U	33.2			
Station	ECU110:1	ECU110:2	ECU110:3	ECU110:4	ECU110:5	ECU110				
Sample ID	F11011	F11012	F11013	F11014	F11015	Mean				
Date Collected	11-Mar-97	11-Mar-97	11-Mar-97	11-Mar-97	14-Apr-97					
Depth	16 - 22 IN	16 - 32 IN	16 - 32 IN	16 - 32 IN	16 - 32 IN					
Sample Type	REG	REG	REG	REG	REG					
Units	UG/G	UG/G	UG/G	UG/G	UG/G	UG/G				
Mercury	7.7	40.8	3.7	2.6	1 U	11.2				
Station	ECU111:1	ECU111:2	ECU111:3	ECU111:4	ECU111:4	ECU111:4	ECU111			
Sample ID	F11111	F11112	F11113	F11154	F11114	F11124	Mean			
Date Collected	25-Mar-97	25-Mar-97	25-Mar-97	27-Mar-97	27-Mar-97	27-Mar-97				
Depth	16 - 32 IN	16 - 32 IN	16 - 32 IN	NA	16 - 32 IN	16 - 32 IN				
Sample Type	REG	REG	REG	RIN	REG	FR				
Units	UG/G	UG/G	UG/G	UG/L	UG/G	UG/G	UG/G			
Mercury	48.1	20.7	47.1	<10 U	78.3	94.3	48.6			
Station	ECU112:1	ECU112:2	ECU112:3	ECU112:4	ECU112					
Sample ID	F11211	F11212	F11213	F11214	Mean					
Date Collected	27-Mar-97	27-Mar-97	27-Mar-97	27-Mar-97						
Depth	16 - 32 IN	16 - 32 IN	16 - 32 IN	16 - 32 IN						
Sample Type	REG	REG	REG	REG						
Units	UG/G	UG/G	UG/G	UG/G	UG/G					
Mercury	89.1	12.3	33.2	9.5	36.0					

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Phase II Confirmatory Soil Samples (On-site Lab)

Station	ECU113:1	ECU113:2	ECU113:3	ECU113:4	ECU113					
Sample ID	F11311	F11312	F11313	F11314	Mean					
Date Collected	27-Mar-97	27-Mar-97	27-Mar-97	20-Mar-97						
Depth	16 - 32 IN	16 - 32 IN	16 - 32 IN	16 - 32 IN						
Sample Type	REG	REG	REG	REG						
Units	UG/G	UG/G	UG/G	UG/G	UG/G					
Mercury	26	23.1	346	9.1	101.1					
Station	ECU114:1	ECU114:2	ECU114:2	ECU114:2	ECU114:3	ECU114:4	ECU114			
Sample ID	F11411	F11412	F11422	F11452	F11413	F11414	Mean			
Date Collected	27-Mar-97	18-Mar-97	18-Mar-97	18-Mar-97	27-Mar-97	27-Mar-97				
Depth	16 - 32 IN	16 - 32 IN	16 - 32 IN	NA	16 - 32 IN	16 - 32 IN				
Sample Type	REG	REG	FR	RIN	REG	REG				
Units	UG/G	UG/G	UG/G	UG/L	UG/G	UG/G	UG/G			
Mercury	1 U	29.3	38	<10 U	1 U	22.1	13.4			
Station	ECU115:1	ECU115:2	ECU115:2	ECU115:2	ECU115:3	ECU115:4	ECU115:5	ECU115		
Sample ID	F11511	F11552	F11512	F11522	F11513	F11514	F11515	Mean		
Date Collected	24-Mar-97	27-Mar-97	27-Mar-97	27-Mar-97	24-Mar-97	24-Mar-97	21-Aug-97			
Depth	16 - 32 IN	NA	16 - 32 IN	16 - 32 IN	16 - 32 IN	16 - 32 IN	16 - 32 IN			
Sample Type	REG	RIN	REG	FR	REG	REG	REG			
Units	UG/G	UG/L	UG/G	UG/G	UG/G	UG/G	UG/G	UG/G		
Mercury	1 U	<10 U	1 U	1 U	166.2	125	1 U	58.8		
Station	ECU116:1	ECU116:2	ECU116:3	ECU116:4	ECU116:4	ECU116:4	ECU116			
Sample ID	F11611	F11612	F11613	F11654	F11614	F11624	Mean			
Date Collected	24-Mar-97	24-Mar-97	24-Mar-97	26-Mar-97	26-Mar-97	26-Mar-97				
Depth	16 - 32 IN	16 - 32 IN	16 - 32 IN	NA	16 - 32 IN	16 - 32 IN				
Sample Type	REG	REG	REG	RIN	REG	FR				
Units	UG/G	UG/G	UG/G	UG/L	UG/G	UG/G	UG/G			
Mercury	98.6	327.1	180.5	<10 U	125.2	190.7	182.9			
Station	ECU117:1	ECU117:2	ECU117:3	ECU117:4	ECU117					
Sample ID	F11711	F11712	F11713	F11714	Mean					
Date Collected	25-Mar-97	26-Mar-97	25-Mar-97	25-Mar-97						
Depth	16 - 32 IN	16 - 32 IN	16 - 32 IN	16 - 32 IN						
Sample Type	REG	REG	REG	REG						
Units	UG/G	UG/G	UG/G	UG/G	UG/G					
Mercury	10.8	18.7	209.5	20	64.8					
Station	ECU118:1	ECU118:2	ECU118:3	ECU118:4	ECU118					
Sample ID	F11811	F11812	F11813	F11814	Mean					
Date Collected	25-Mar-97	25-Mar-97	25-Mar-97	27-Mar-97						
Depth	16 - 32 IN	16 - 32 IN	16 - 32 IN	16 - 32 IN						
Sample Type	REG	REG	REG	REG						
Units	UG/G	UG/G	UG/G	UG/G	UG/G					
Mercury	1 U	9.1	15.3	69.4	23.7					
Station	ECU119:1	ECU119:2	ECU119:2	ECU119:2	ECU119:3	ECU119:4	ECU119			
Sample ID	F11911	F11952	F11912	F11922	F11913	F11914	Mean			
Date Collected	18-Mar-97	26-Mar-97	26-Mar-97	26-Mar-97	25-Mar-97	25-Mar-97				
Depth	16 - 32 IN	NA	16 - 32 IN	16 - 32 IN	16 - 32 IN	16 - 32 IN				
Sample Type	REG	RIN	REG	FR	REG	REG				
Units	UG/G	UG/L	UG/G	UG/G	UG/G	UG/G	UG/G			
Mercury	22.6	<10 U	139.1	29	37	17.7	54.1			

Appendix B
Phase II Confirmatory Soil Samples (On-site Lab)

Station	ECU120:1	ECU120:2	ECU120:3	ECU120:4	ECU120					
Sample ID	F12011	F12012	F12013	F12014	Mean					
Date Collected	25-Mar-97	25-Mar-97	18-Mar-97	25-Mar-97						
Depth	16 - 32 IN	16 - 32 IN	16 - 32 IN	16 - 32 IN						
Sample Type	REG	REG	REG	REG						
Units	UG/G	UG/G	UG/G	UG/G	UG/G					
Mercury	15.2	159.8	53.5	14.8	60.8					
Station	ECU121:1	ECU121:2	ECU121:3	ECU121:4	ECU121:4	ECU121				
Sample ID	F12111	F12112	F12113	F12154	F12114	F12124	Mean			
Date Collected	25-Mar-97	25-Mar-97	25-Mar-97	17-Mar-97	18-Mar-97	18-Mar-97				
Depth	16 - 32 IN	16 - 32 IN	16 - 32 IN	NA	16 - 32 IN	16 - 32 IN				
Sample Type	REG	REG	REG	RIN	REG	FR				
Units	UG/G	UG/G	UG/G	UG/L	UG/G	UG/G	UG/G			
Mercury	78.3	13.1	22	<10 U	37	49.1	37.6			
Station	ECU122:1	ECU122:2	ECU122:3	ECU122:4	ECU122					
Sample ID	F12211	F12212	F12213	F12214	Mean					
Date Collected	17-Mar-97	17-Mar-97	17-Mar-97	17-Mar-97						
Depth	16 - 32 IN	16 - 32 IN	16 - 32 IN	16 - 32 IN						
Sample Type	REG	REG	REG	REG						
Units	UG/G	UG/G	UG/G	UG/G	UG/G					
Mercury	97.6	60	133.7	89.7	95.3					
Station	ECU123:1	ECU123:2	ECU123:3	ECU123:4	ECU123					
Sample ID	F12311	F12312	F12313	F12314	Mean					
Date Collected	27-Mar-97	27-Mar-97	27-Mar-97	27-Mar-97						
Depth	16 - 32 IN	16 - 32 IN	16 - 32 IN	16 - 32 IN						
Sample Type	REG	REG	REG	REG						
Units	UG/G	UG/G	UG/G	UG/G	UG/G					
Mercury	62.8	9	64.4	1 U	34.3					
Station	ECU124:1	ECU124:2	ECU124:2	ECU124:2	ECU124:3	ECU124:4	ECU124			
Sample ID	F12411	F12452	F12412	F12422	F12413	F12414	Mean			
Date Collected	12-Jun-97	26-Mar-97	26-Mar-97	26-Mar-97	24-Mar-97	24-Mar-97				
Depth	16 - 32 IN	NA	16 - 24 IN	16 - 24 IN	16 - 24 IN	16 - 24 IN				
Sample Type	REG	RIN	REG	FR	REG	REG				
Units	UG/G	UG/L	UG/G	UG/G	UG/G	UG/G	UG/G			
Mercury	5.1	<10 U	154.9	193.9	70.9	358	147.2			
Station	ECU125:1	ECU125:2	ECU125:3	ECU125:4	ECU125					
Sample ID	F12511	F12512	F12513	F12514	Mean					
Date Collected	24-Mar-97	24-Mar-97	24-Mar-97	24-Mar-97						
Depth	16 - 32 IN	16 - 32 IN	16 - 22 IN	16 - 32 IN						
Sample Type	REG	REG	REG	REG						
Units	UG/G	UG/G	UG/G	UG/G	UG/G					
Mercury	113.5	24.6	163.3	192.1	123.4					
Station	ECU126:1	ECU126:2	ECU126:3	ECU126:4	ECU126:4	ECU126:4	ECU126:5	ECU126		
Sample ID	F12611	F12612	F12613	F12654	F12614	F12624	F12615	Mean		
Date Collected	24-Mar-97	26-Mar-97	24-Mar-97	26-Mar-97	26-Mar-97	26-Mar-97	12-Jun-97			
Depth	16 - 32 IN	16 - 32 IN	16 - 32 IN	NA	16 - 32 IN	16 - 32 IN	16 - 32 IN			
Sample Type	REG	REG	REG	RIN	REG	FR	REG			
Units	UG/G	UG/G	UG/G	UG/L	UG/G	UG/G	UG/G	UG/G		
Mercury	352.7	157	121.6	<10 U	135.2	151.7	20.8	157.5		

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Phase II Confirmatory Soil Samples (On-site Lab)

Station	ECU127:1	ECU127:2	ECU127:3	ECU127:4	ECU127					
Sample ID	F12711	F12712	F12713	F12714	Mean					
Date Collected	24-Mar-97	24-Mar-97	24-Mar-97	24-Mar-97						
Depth	16 - 32 IN	16 - 32 IN	16 - 32 IN	16 - 32 IN						
Sample Type	REG	REG	REG	REG						
Units	UG/G	UG/G	UG/G	UG/G	UG/G					
Mercury	168.2	5.7	415	31.7	155.2					
Station	ECU128:1	ECU128:2	ECU128:3	ECU128:4	ECU128					
Sample ID	F12811	F12812	F12813	F12814	Mean					
Date Collected	24-Mar-97	26-Mar-97	24-Mar-97	24-Mar-97						
Depth	16 - 32 IN	16 - 32 IN	16 - 32 IN	16 - 32 IN						
Sample Type	REG	REG	REG	REG						
Units	UG/G	UG/G	UG/G	UG/G	UG/G					
Mercury	68.1	162.8	325.2	95.3	162.9					
Station	ECU129:1	ECU129:2	ECU129:2	ECU129:2	ECU129:3	ECU129:4	ECU129			
Sample ID	F12911	F12952	F12912	F12922	F12913	F12914	Mean			
Date Collected	25-Mar-97	26-Mar-97	26-Mar-97	26-Mar-97	25-Mar-97	25-Mar-97				
Depth	16 - 32 IN	NA	16 - 32 IN	16 - 32 IN	16 - 32 IN	16 - 22 IN				
Sample Type	REG	RIN	REG	FR	REG	REG				
Units	UG/G	UG/L	UG/G	UG/G	UG/G	UG/G	UG/G			
Mercury	43.2	<10 U	16.4	7.4	16.5	38.5	28.7			
Station	ECU130:1	ECU130:2	ECU130:3	ECU130:4	ECU130					
Sample ID	F13011	F13012	F13013	F13014	Mean					
Date Collected	25-Mar-97	25-Mar-97	25-Mar-97	25-Mar-97						
Depth	16 - 32 IN	16 - 32 IN	16 - 32 IN	16 - 32 IN						
Sample Type	REG	REG	REG	REG						
Units	UG/G	UG/G	UG/G	UG/G	UG/G					
Mercury	17.3	190.3	7.4	10	56.3					
Station	ECU131:1	ECU131:2	ECU131:3	ECU131:4	ECU131:4	ECU131:4	ECU131			
Sample ID	F13111	F13112	F13113	F13154	F13114	F13124	Mean			
Date Collected	18-Mar-97	18-Mar-97	18-Mar-97	17-Mar-97	18-Mar-97	18-Mar-97				
Depth	16 - 32 IN	16 - 32 IN	16 - 32 IN	NA	16 - 32 IN	16 - 32 IN				
Sample Type	REG	REG	REG	RIN	REG	FR				
Units	UG/G	UG/G	UG/G	UG/L	UG/G	UG/G	UG/G			
Mercury	1 U	18.9	15.5	<10 U	1 U	1 U	9.1			
Station	ECU132:1	ECU132:2	ECU132:3	ECU132:4	ECU132:4	ECU132				
Sample ID	F13211	F13212	F13213	F13214	F13274	Mean				
Date Collected	18-Mar-97	18-Mar-97	18-Mar-97	18-Mar-97	30-Apr-97					
Depth	16 - 32 IN	16 - 32 IN	16 - 32 IN	16 - 32 IN	32 - 48 IN					
Sample Type	REG	REG	REG	REG	REG					
Units	UG/G	UG/G	UG/G	UG/G	UG/G	UG/G				
Mercury	78.2	79.3	32.9	636.6	164.4	88.7				
Station	ECU133:1	ECU133:2	ECU133:3	ECU133:4	ECU133					
Sample ID	F13311	F13312	F13313	F13314	Mean					
Date Collected	17-Mar-97	17-Mar-97	17-Mar-97	18-Mar-97						
Depth	16 - 32 IN	16 - 32 IN	16 - 32 IN	16 - 32 IN						
Sample Type	REG	REG	REG	REG						
Units	UG/G	UG/G	UG/G	UG/G	UG/G					
Mercury	5.3	7	6.6	4.3	5.8					

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Phase II Confirmatory Soil Samples (On-site Lab)

Station	ECU134:1	ECU134:2	ECU134:2	ECU134:2	ECU134:3	ECU134:3	ECU134:4	ECU134		
Sample ID	F13411	F13412	F13422	F13452	F13413	F13473	F13414	Mean		
Date Collected	18-Mar-97	18-Mar-97	18-Mar-97	14-Mar-97	18-Mar-97	30-Apr-97	18-Mar-97			
Depth	16 - 32 IN	16 - 32 IN	16 - 32 IN	NA	16 - 32 IN	32 - 48 IN	16 - 32 IN			
Sample Type	REG	REG	FR	RIN	REG	REG	REG			
Units	UG/G	UG/G	UG/G	UG/L	UG/G	UG/G	UG/G	UG/G		
Mercury	4.8	4.6	1 U	<10 U	584.7	133.1	15.9	39.6		
Station	ECU135:1	ECU135:2	ECU135:3	ECU135:4	ECU135					
Sample ID	F13511	F13512	F13513	F13514	Mean					
Date Collected	24-Mar-97	24-Mar-97	24-Mar-97	24-Mar-97						
Depth	16 - 32 IN	16 - 32 IN	16 - 32 IN	16 - 32 IN						
Sample Type	REG	REG	REG	REG						
Units	UG/G	UG/G	UG/G	UG/G	UG/G					
Mercury	108.9	30.2	82.7	8	57.5					
Station	ECU136:1	ECU136:2	ECU136:3	ECU136:4	ECU136:4	ECU136:4	ECU136			
Sample ID	F13611	F13612	F13613	F13654	F13614	F13624	Mean			
Date Collected	24-Mar-97	24-Mar-97	24-Mar-97	31-Mar-97	1-Apr-97	1-Apr-97				
Depth	16 - 32 IN	16 - 32 IN	16 - 32 IN	NA	16 - 32 IN	16 - 32 IN				
Sample Type	REG	REG	REG	RIN	REG	FR				
Units	UG/G	UG/G	UG/G	UG/L	UG/G	UG/G	UG/G			
Mercury	19.7	26.5	51.5	<10 U	90.9	102	47.2			
Station	ECU137:1	ECU137:2	ECU137:3	ECU137:4	ECU137					
Sample ID	F13711	F13712	F13713	F13714	Mean					
Date Collected	24-Mar-97	24-Mar-97	24-Mar-97	26-Mar-97						
Depth	16 - 32 IN	16 - 32 IN	16 - 32 IN	16 - 32 IN						
Sample Type	REG	REG	REG	REG						
Units	UG/G	UG/G	UG/G	UG/G	UG/G					
Mercury	9.7	97.9	173.3	27.3	77.1					
Station	ECU138:1	ECU138:2	ECU138:3	ECU138:4	ECU138					
Sample ID	F13811	F13812	F13813	F13814	Mean					
Date Collected	24-Mar-97	24-Mar-97	24-Mar-97	26-Mar-97						
Depth	16 - 32 IN	16 - 32 IN	16 - 32 IN	16 - 32 IN						
Sample Type	REG	REG	REG	REG						
Units	UG/G	UG/G	UG/G	UG/G	UG/G					
Mercury	190.2	28.2	22.1	59.4	75.0					
Station	ECU139:1	ECU139:2	ECU139:2	ECU139:2	ECU139:3	ECU139:4	ECU139			
Sample ID	F13911	F13952	F13912	F13922	F13913	F13914	Mean			
Date Collected	26-Mar-97	27-Mar-97	27-Mar-97	27-Mar-97	24-Mar-97	24-Mar-97				
Depth	16 - 32 IN	NA	16 - 21 IN	16 - 21 IN	16 - 32 IN	16 - 32 IN				
Sample Type	REG	RIN	REG	FR	REG	REG				
Units	UG/G	UG/L	UG/G	UG/G	UG/G	UG/G	UG/G			
Mercury	49.5	<10 U	81.1	52.5	5.2	28.7	41.1			
Station	ECU140:1	ECU140:2	ECU140:3	ECU140:4	ECU140					
Sample ID	F14011	F14012	F14013	F14014	Mean					
Date Collected	26-Mar-97	26-Mar-97	26-Mar-97	26-Mar-97						
Depth	16 - 24 IN	16 - 22 IN	16 - 32 IN	16 - 32 IN						
Sample Type	REG	REG	REG	REG						
Units	UG/G	UG/G	UG/G	UG/G	UG/G					
Mercury	6.4	11.6	5.4	62.3	21.4					

Appendix B
Phase II Confirmatory Soil Samples (On-site Lab)

Station	ECU141:1	ECU141:2	ECU141:3	ECU141:4	ECU141:4	ECU141:4	ECU141:4	ECU141		
Sample ID	F14111	F14112	F14113	F14154	F14114	F14124	F14174	Mean		
Date Collected	26-Mar-97	26-Mar-97	26-Mar-97	27-Mar-97	27-Mar-97	27-Mar-97	30-Apr-97			
Depth	16 - 32 IN	16 - 22 IN	16 - 32 IN	NA	16 - 32 IN	16 - 32 IN	32 - 48 IN			
Sample Type	REG	REG	REG	RIN	REG	FR	REG			
Units	UG/G	UG/G	UG/G	UG/L	UG/G	UG/G	UG/G	UG/G		
Mercury	291.8	84.8	37.9	<10 U	791.3	780.3	74.9	122.4		
Station	ECU142:1	ECU142:2	ECU142:3	ECU142:4	ECU142:4	ECU142				
Sample ID	F14211	F14212	F14213	F14214	F14274	Mean				
Date Collected	18-Mar-97	18-Mar-97	18-Mar-97	18-Mar-97	24-Apr-97					
Depth	16 - 32 IN	16 - 32 IN	16 - 32 IN	16 - 32 IN	32 - 48 IN					
Sample Type	REG	REG	REG	REG	REG					
Units	UG/G	UG/G	UG/G	UG/G	UG/G	UG/G				
Mercury	37.3	86.6	68.7	729.6	23.2	54.0				
Station	ECU143:1	ECU143:2	ECU143:3	ECU143:4	ECU143					
Sample ID	F14311	F14312	F14313	F14314	Mean					
Date Collected	17-Mar-97	17-Mar-97	17-Mar-97	18-Mar-97						
Depth	16 - 32 IN	16 - 24 IN	16 - 32 IN	16 - 32 IN						
Sample Type	REG	REG	REG	REG						
Units	UG/G	UG/G	UG/G	UG/G	UG/G					
Mercury	274.6	211.1	320.9	68.4	218.8					
Station	ECU144:1	ECU144:2	ECU144:2	ECU144:2	ECU144:3	ECU144:4	ECU144			
Sample ID	F14411	F14452	F14412	F14422	F14413	F14414	Mean			
Date Collected	18-Mar-97	14-Mar-97	17-Mar-97	17-Mar-97	17-Mar-97	17-Mar-97				
Depth	16 - 32 IN	NA	16 - 28 IN	16 - 32 IN	16 - 32 IN	16 - 32 IN				
Sample Type	REG	RIN	REG	FR	REG	REG				
Units	UG/G	UG/L	UG/G	UG/G	UG/G	UG/G	UG/G			
Mercury	57.1	<10 U	178.7	176.5	31.1	21.1	72.0			
Station	ECU145:1	ECU145:2	ECU145:3	ECU145:4	ECU145					
Sample ID	F14511	F14512	F14513	F14514	Mean					
Date Collected	17-Mar-97	17-Mar-97	17-Mar-97	17-Mar-97						
Depth	16 - 32 IN	16 - 32 IN	16 - 32 IN	16 - 32 IN						
Sample Type	REG	REG	REG	REG						
Units	UG/G	UG/G	UG/G	UG/G	UG/G					
Mercury	58.1	19.2	5.6	24	26.7					
Station	ECU146:1	ECU146:2	ECU146:3	ECU146:4	ECU146:4	ECU146:4	ECU146			
Sample ID	F14611	F14612	F14613	F14654	F14614	F14624	Mean			
Date Collected	20-Mar-97	21-Mar-97	21-Mar-97	26-Mar-97	26-Mar-97	26-Mar-97				
Depth	16 - 32 IN	16 - 32 IN	16 - 32 IN	NA	16 - 32 IN	16 - 32 IN				
Sample Type	REG	REG	REG	RIN	REG	FR				
Units	UG/G	UG/G	UG/G	UG/L	UG/G	UG/G	UG/G			
Mercury	108.7	192.6	285.2	<10 U	63.7	89	162.6			
Station	ECU147:1	ECU147:2	ECU147:3	ECU147:3	ECU147:4	ECU147				
Sample ID	F14711	F14712	F14713	F14773	F14714	Mean				
Date Collected	21-Mar-97	20-Mar-97	21-Mar-97	30-Apr-97	21-Mar-97					
Depth	16 - 32 IN	16 - 32 IN	16 - 32 IN	32 - 48 IN	16 - 32 IN					
Sample Type	REG	REG	REG	REG	REG					
Units	UG/G	UG/G	UG/G	UG/G	UG/G	UG/G				
Mercury	153.7	144.1	653.5	9.2	95.5	100.6				

Appendix B
Phase II Confirmatory Soil Samples (On-site Lab)

Station	ECU148:1	ECU148:2	ECU148:3	ECU148:4	ECU148					
Sample ID	F14811	F14812	F14813	F14814	Mean					
Date Collected	21-Mar-97	20-Mar-97	21-Mar-97	21-Mar-97						
Depth	16 - 32 IN	16 - 32 IN	16 - 32 IN	16 - 32 IN						
Sample Type	REG	REG	REG	REG						
Units	UG/G	UG/G	UG/G	UG/G	UG/G					
Mercury	76.2	102.4	42.7	282.8	126.0					
Station	ECU149:1	ECU149:2	ECU149:2	ECU149:2	ECU149:3	ECU149:4	ECU149			
Sample ID	F14911	F14912	F14922	F14942	F14913	F14914	Mean			
Date Collected	21-Mar-97	27-Mar-97	27-Mar-97	27-Mar-97	21-Mar-97	21-Mar-97				
Depth	16 - 32 IN	16 - 32 IN	16 - 32 IN	16 - 32 IN	16 - 32 IN	16 - 32 IN				
Sample Type	REG	REG	FR	FR	REG	REG				
Units	UG/G	UG/G	UG/G	UG/G	UG/G	UG/G	UG/G			
Mercury	103.6	1 U	1 U	1 U	224.6	87.1	104.1			
Station	ECU150:1	ECU150:2	ECU150:3	ECU150:4	ECU150					
Sample ID	F15011	F15012	F15013	F15014	Mean					
Date Collected	27-Mar-97	27-Mar-97	27-Mar-97	27-Mar-97						
Depth	16 - 32 IN	16 - 32 IN	16 - 32 IN	16 - 32 IN						
Sample Type	REG	REG	REG	REG						
Units	UG/G	UG/G	UG/G	UG/G	UG/G					
Mercury	144	184.5	242.4	9.6	145.1					
Station	ECU151:1	ECU151:1	ECU151:2	ECU151:3	ECU151:4	ECU151:4	ECU151:4	ECU151		
Sample ID	F15111	F15171	F15112	F15113	F15154	F15114	F15124	Mean		
Date Collected	26-Mar-97	30-Apr-97	26-Mar-97	27-Mar-97	27-Mar-97	27-Mar-97	27-Mar-97			
Depth	16 - 32 IN	32 - 48 IN	16 - 32 IN	16 - 32 IN	NA	16 - 32 IN	16 - 32 IN			
Sample Type	REG	REG	REG	REG	RIN	REG	FR			
Units	UG/G	UG/G	UG/G	UG/G	UG/L	UG/G	UG/G	UG/G		
Mercury	481.3	5.9	351.6	241.5	<10 U	92.2	63.5	172.8		
Station	ECU152:1	ECU152:2	ECU152:3	ECU152:4	ECU152					
Sample ID	F15211	F15212	F15213	F15214	Mean					
Date Collected	18-Mar-97	18-Mar-97	18-Mar-97	18-Mar-97						
Depth	16 - 32 IN	16 - 32 IN	16 - 32 IN	16 - 32 IN						
Sample Type	REG	REG	REG	REG						
Units	UG/G	UG/G	UG/G	UG/G	UG/G					
Mercury	68.7	4.1	71	10.1	38.5					
Station	ECU153:1	ECU153:2	ECU153:3	ECU153:4	ECU153					
Sample ID	F15311	F15312	F15313	F15314	Mean					
Date Collected	17-Mar-97	18-Mar-97	17-Mar-97	17-Mar-97						
Depth	16 - 32 IN	16 - 32 IN	16 - 32 IN	16 - 32 IN						
Sample Type	REG	REG	REG	REG						
Units	UG/G	UG/G	UG/G	UG/G	UG/G					
Mercury	91.7	46.4	64.1	5.1	51.8					
Station	ECU154:1	ECU154:2	ECU154:2	ECU154:2	ECU154:3	ECU154:4	ECU154			
Sample ID	F15411	F15452	F15412	F15422	F15413	F15414	Mean			
Date Collected	17-Mar-97	14-Mar-97	17-Mar-97	17-Mar-97	17-Mar-97	17-Mar-97				
Depth	16 - 32 IN	NA	16 - 32 IN	16 - 32 IN	16 - 32 IN	16 - 32 IN				
Sample Type	REG	RIN	REG	FR	REG	REG				
Units	UG/G	UG/L	UG/G	UG/G	UG/G	UG/G	UG/G			
Mercury	14.3	<10 U	8.9	1 U	326.6	322.3	168.0			

Appendix B
Phase II Confirmatory Soil Samples (On-site Lab)

Station	ECU155:1	ECU155:2	ECU155:3	ECU155:4	ECU155:5	ECU155				
Sample ID	F15511	F15512	F15513	F15514	F15515	Mean				
Date Collected	17-Mar-97	17-Mar-97	17-Mar-97	20-Mar-97	12-Jun-97					
Depth	16 - 32 IN	16 - 32 IN	16 - 32 IN	16 - 32 IN	16 - 32 IN					
Sample Type	REG	REG	REG	REG	REG					
Units	UG/G	UG/G	UG/G	UG/G	UG/G	UG/G				
Mercury	25.1	235.8	5	241.1	9.1	103.2				
Station	ECU156:1	ECU156:2	ECU156:3	ECU156:4	ECU156:4	ECU156:4	ECU156:5	ECU156		
Sample ID	F15611	F15612	F15613	F15614	F15614	F15624	F15615	Mean		
Date Collected	20-Mar-97	20-Mar-97	20-Mar-97	20-Mar-97	20-Mar-97	20-Mar-97	12-Jun-97			
Depth	16 - 32 IN	16 - 32 IN	16 - 32 IN	NA	16 - 32 IN	16 - 32 IN	16 - 32 IN			
Sample Type	REG	REG	REG	RIN	REG	FR	REG			
Units	UG/G	UG/G	UG/G	UG/L	UG/G	UG/G	UG/G	UG/G		
Mercury	36.1	35.8	22.7	<10 U	12	30.6	386.8	98.7		
Station	ECU157:1	ECU157:2	ECU157:3	ECU157:4	ECU157					
Sample ID	F15711	F15712	F15713	F15714	Mean					
Date Collected	31-Mar-97	31-Mar-97	31-Mar-97	31-Mar-97						
Depth	16 - 32 IN	16 - 32 IN	16 - 32 IN	16 - 32 IN						
Sample Type	REG	REG	REG	REG						
Units	UG/G	UG/G	UG/G	UG/G	UG/G					
Mercury	262.6	1 U	102.1	6.6	93.1					
Station	ECU158:1	ECU158:2	ECU158:3	ECU158:4	ECU158:5	ECU158				
Sample ID	F15811	F15812	F15813	F15814	F15815	Mean				
Date Collected	31-Mar-97	31-Mar-97	31-Mar-97	31-Mar-97	21-Aug-97					
Depth	16 - 32 IN	16 - 32 IN	16 - 32 IN	16 - 32 IN	16 - 32 IN					
Sample Type	REG	REG	REG	REG	REG					
Units	UG/G	UG/G	UG/G	UG/G	UG/G	UG/G				
Mercury	202.6	84.1	7.2	66.5	30.4	78.2				
Station	ECU159:1	ECU159:2	ECU159:2	ECU159:2	ECU159:3	ECU159:4	ECU159:4	ECU159:5	ECU159	
Sample ID	F15911	F15952	F15912	F15922	F15913	F15914	F15974	F15915	Mean	
Date Collected	31-Mar-97	31-Mar-97	1-Apr-97	1-Apr-97	31-Mar-97	31-Mar-97	20-May-97	21-Aug-97		
Depth	16 - 32 IN	NA	16 - 22 IN	16 - 22 IN	16 - 32 IN	16 - 32 IN	32 - 40 IN	16 - 32 IN		
Sample Type	REG	RIN	REG	FR	REG	REG	REG	REG		
Units	UG/G	UG/L	UG/G	UG/G	UG/G	UG/G	UG/G	UG/G	UG/G	
Mercury	69.8	<10 U	87.3	1 U	1 U	445.1	210	126.7	99.0	
Station	ECU160:1	ECU160:2	ECU160:3	ECU160:4	ECU160					
Sample ID	F16011	F16012	F16013	F16014	Mean					
Date Collected	21-Mar-97	21-Mar-97	21-Mar-97	21-Mar-97						
Depth	16 - 32 IN	16 - 32 IN	16 - 32 IN	16 - 32 IN						
Sample Type	REG	REG	REG	REG						
Units	UG/G	UG/G	UG/G	UG/G	UG/G					
Mercury	141	153.9	20.5	400	178.9					
Station	ECU161:1	ECU161:2	ECU161:3	ECU161:3	ECU161:4	ECU161:4	ECU161:4	ECU161		
Sample ID	F16111	F16112	F16113	F16173	F16154	F16114	F16124	Mean		
Date Collected	21-Mar-97	21-Mar-97	20-Mar-97	30-Apr-97	21-Mar-97	21-Mar-97	21-Mar-97			
Depth	16 - 32 IN	16 - 32 IN	16 - 32 IN	32 - 48 IN	NA	16 - 32 IN	16 - 32 IN			
Sample Type	REG	REG	REG	REG	RIN	REG	FR			
Units	UG/G	UG/G	UG/G	UG/G	UG/L	UG/G	UG/G	UG/G		
Mercury	284.9	221	354.4	24.2	<10 U	316.6	256.2	211.7		

Appendix B
Phase II Confirmatory Soil Samples (On-site Lab)

Station	ECU162:1	ECU162:2	ECU162:3	ECU162:4	ECU162					
Sample ID	F16211	F16212	F16213	F16214	Mean					
Date Collected	21-Mar-97	21-Mar-97	21-Mar-97	20-Mar-97						
Depth	16 - 32 IN	16 - 32 IN	16 - 32 IN	16 - 32 IN						
Sample Type	REG	REG	REG	REG						
Units	UG/G	UG/G	UG/G	UG/G	UG/G					
Mercury	269.2	357	19.8	1 U	161.8					
Station	ECU163:1	ECU163:2	ECU163:3	ECU163:4	ECU163:4	ECU163				
Sample ID	F16311	F16312	F16313	F16314	F16374	Mean				
Date Collected	21-Mar-97	21-Mar-97	21-Mar-97	21-Mar-97	30-Apr-97					
Depth	16 - 32 IN	16 - 32 IN	16 - 32 IN	16 - 32 IN	32 - 48 IN					
Sample Type	REG	REG	REG	REG	REG					
Units	UG/G	UG/G	UG/G	UG/G	UG/G	UG/G				
Mercury	24.3	9.1	417.2	567.1	1 U	112.9				
Station	ECU164:1	ECU164:2	ECU164:2	ECU164:2	ECU164:3	ECU164:3	ECU164:4	ECU164		
Sample ID	F16411	F16452	F16412	F16422	F16413	F16473	F16414	Mean		
Date Collected	21-Mar-97	21-Mar-97	21-Mar-97	21-Mar-97	21-Mar-97	30-Apr-97	21-Mar-97			
Depth	16 - 32 IN	NA	16 - 32 IN	16 - 32 IN	16 - 32 IN	32 - 48 IN	16 - 24 IN			
Sample Type	REG	RIN	REG	FR	REG	REG	REG			
Units	UG/G	UG/L	UG/G	UG/G	UG/G	UG/G	UG/G	UG/G		
Mercury	234.7	<10 U	22.9	63.4	435	1 U	272.1	132.7		
Station	ECU165:1	ECU165:2	ECU165:3	ECU165:4	ECU165:4	ECU165				
Sample ID	F16511	F16512	F16513	F16514	F16574	Mean				
Date Collected	21-Mar-97	21-Mar-97	20-Mar-97	20-Mar-97	30-Apr-97					
Depth	16 - 32 IN	16 - 32 IN	16 - 32 IN	16 - 32 IN	32 - 48 IN					
Sample Type	REG	REG	REG	REG	REG					
Units	UG/G	UG/G	UG/G	UG/G	UG/G	UG/G				
Mercury	37.8	13.5	198.9	528.2	1 U	62.8				
Station	ECU166:1	ECU166:2	ECU166:2	ECU166:3	ECU166:3	ECU166:4	ECU166:4	ECU166:4	ECU166	
Sample ID	F16611	F16612	F16672	F16613	F16673	F16654	F16614	F16624	Mean	
Date Collected	20-Mar-97	13-Mar-97	24-Apr-97	20-Mar-97	24-Apr-97	14-Mar-97	20-Mar-97	20-Mar-97		
Depth	16 - 32 IN	16 - 32 IN	32 - 48 IN	16 - 32 IN	32 - 48 IN	NA	16 - 32 IN	16 - 32 IN		
Sample Type	REG	REG	REG	REG	REG	RIN	REG	FR		
Units	UG/G	UG/G	UG/G	UG/G	UG/G	UG/L	UG/G	UG/G	UG/G	
Mercury	43.9	574.7	1 U	403.7	3.8	<10 U	371.7	392.2	105.1	
Station	ECU167:1	ECU167:1	ECU167:2	ECU167:2	ECU167:3	ECU167:4	ECU167:4	ECU167		
Sample ID	F16711	F16771	F16712	F16772	F16713	F16714	F16774	Mean		
Date Collected	13-Mar-97	24-Apr-97	13-Mar-97	24-Apr-97	13-Mar-97	13-Mar-97	21-May-97			
Depth	16 - 32 IN	32 - 48 IN	16 - 32 IN	32 - 48 IN	16 - 32 IN	16 - 32 IN	32 - 48 IN			
Sample Type	REG	REG	REG	REG	REG	REG	REG			
Units	UG/G	UG/G	UG/G	UG/G	UG/G	UG/G	UG/G	UG/G		
Mercury	966.3	1 U	430.8	1 U	15.4	380.7	11.4	7.2		
Station	ECU168:1	ECU168:2	ECU168:3	ECU168:4	ECU168					
Sample ID	F16811	F16812	F16813	F16814	Mean					
Date Collected	20-Mar-97	20-Mar-97	20-Mar-97	20-Mar-97						
Depth	16 - 32 IN	16 - 32 IN	16 - 32 IN	16 - 32 IN						
Sample Type	REG	REG	REG	REG						
Units	UG/G	UG/G	UG/G	UG/G	UG/G					
Mercury	9.4	37.2	57.9	28.2	33.2					

Appendix B
Phase II Confirmatory Soil Samples (On-site Lab)

Station	ECU169:1	ECU169:2	ECU169:2	ECU169:2	ECU169:2	ECU169:3	ECU169:4	ECU169		
Sample ID	F16911	F16952	F16912	F16922	F16972	F16913	F16914	Mean		
Date Collected	20-Mar-97	19-Mar-97	20-Mar-97	20-Mar-97	24-Apr-97	20-Mar-97	20-Mar-97			
Depth	16 - 32 IN	NA	16 - 32 IN	16 - 32 IN	32 - 48 IN	16 - 26 IN	16 - 32 IN			
Sample Type	REG	RIN	REG	FR	REG	REG	REG			
Units	UG/G	UG/L	UG/G	UG/G	UG/G	UG/G	UG/G	UG/G		
Mercury	32.2	<10 U	921.9	816.1	26.6	42.8	45.8	36.9		
Station	ECU170:1	ECU170:2	ECU170:3	ECU170:4	ECU170:5	ECU170				
Sample ID	F17011	F17012	F17013	F17014	F17015	Mean				
Date Collected	20-Mar-97	20-Mar-97	20-Mar-97	20-Mar-97	12-Jun-97					
Depth	16 - 32 IN	16 - 32 IN	16 - 32 IN	16 - 32 IN	16 - 32 IN					
Sample Type	REG	REG	REG	REG	REG					
Units	UG/G	UG/G	UG/G	UG/G	UG/G	UG/G				
Mercury	36.7	72	42.5	23.2	249	84.7				
Station	ECU171:1	ECU171:2	ECU171:3	ECU171:4	ECU171:4	ECU171:4	ECU171:5	ECU171		
Sample ID	F17111	F17112	F17113	F17154	F17114	F17124	F17115	Mean		
Date Collected	20-Mar-97	20-Mar-97	31-Mar-97	31-Mar-97	1-Apr-97	1-Apr-97	10-Jul-97			
Depth	16 - 32 IN	16 - 32 IN	16 - 32 IN	NA	16 - 32 IN	16 - 32 IN	16 - 32 IN			
Sample Type	REG	REG	REG	RIN	REG	FR	REG			
Units	UG/G	UG/G	UG/G	UG/L	UG/G	UG/G	UG/G	UG/G		
Mercury	20.8	12.7	6.9	<10 U	67.5	62.5	7	23.0		
Station	ECU172:1	ECU172:2	ECU172:3	ECU172:4	ECU172:5	ECU172				
Sample ID	F17211	F17212	F17213	F17214	F17215	Mean				
Date Collected	31-Mar-97	31-Mar-97	31-Mar-97	31-Mar-97	10-Jul-97					
Depth	16 - 32 IN	16 - 32 IN	16 - 32 IN	16 - 32 IN	16 - 32 IN					
Sample Type	REG	REG	REG	REG	REG					
Units	UG/G	UG/G	UG/G	UG/G	UG/G	UG/G				
Mercury	8.1	1 U	1 U	1 U	6.9	3.6				
Station	ECU173:1	ECU173:2	ECU173:3	ECU173:4	ECU173:4	ECU173				
Sample ID	F17311	F17312	F17313	F17314	F17374	Mean				
Date Collected	31-Mar-97	20-Mar-97	31-Mar-97	31-Mar-97	12-Jun-97					
Depth	16 - 32 IN	16 - 32 IN	16 - 32 IN	16 - 32 IN	32 - 48 IN					
Sample Type	REG	REG	REG	REG	REG					
Units	UG/G	UG/G	UG/G	UG/G	UG/G	UG/G				
Mercury	71.2	7.4	5.4	739.3	1 U	21.3				
Station	ECU174:1	ECU174:2	ECU174:2	ECU174:2	ECU174:3	ECU174:4	174			
Sample ID	F17411	F17452	F17412	F17422	F17413	F17414	Mean			
Date Collected	20-Mar-97	31-Mar-97	1-Apr-97	1-Apr-97	31-Mar-97	31-Mar-97				
Depth	16 - 32 IN	NA	16 - 32 IN	16 - 32 IN	16 - 32 IN	16 - 32 IN				
Sample Type	REG	RIN	REG	FR	REG	REG				
Units	UG/G	UG/L	UG/G	UG/G	UG/G	UG/G	UG/G			
Mercury	4.2	<10 U	53.6	55.9	107.3	6.3	42.9			
Station	ECU175:1	ECU175:2	ECU175:3	ECU175:4	ECU175					
Sample ID	F17511	F17512	F17513	F17514	Mean					
Date Collected	7-Apr-97	7-Apr-97	7-Apr-97	7-Apr-97						
Depth	16 - 32 IN	16 - 32 IN	16 - 32 IN	16 - 32 IN						
Sample Type	REG	REG	REG	REG						
Units	UG/G	UG/G	UG/G	UG/G	UG/G					
Mercury	6.2	3.5	1 U	59.5	17.6					

Appendix B
Phase II Confirmatory Soil Samples (On-site Lab)

Station	ECU176:1	ECU176:2	ECU176:3	ECU176:4	ECU176:4	ECU176:4	ECU176			
Sample ID	F17611	F17612	F17613	F17654	F17614	F17624	Mean			
Date Collected	21-May-97	21-May-97	21-May-97	31-Mar-97	21-May-97	21-May-97				
Depth	16 - 32 IN	16 - 32 IN	16 - 32 IN	NA	16 - 32 IN	16 - 32 IN				
Sample Type	REG	REG	REG	RIN	REG	FR				
Units	UG/G	UG/G	UG/G	UG/L	UG/G	UG/G	UG/G			
Mercury	19.4	10	305	<10 U	1 U	1 U	83.9			
Station	ECU177:1	ECU177:2	ECU177:3	ECU177:4	ECU177:5	ECU177				
Sample ID	F17711	F17712	F17713	F17714	F17715	Mean				
Date Collected	31-Mar-97	31-Mar-97	31-Mar-97	31-Mar-97	10-Jul-97					
Depth	16 - 32 IN	16 - 32 IN	16 - 32 IN	16 - 32 IN	16 - 32 IN					
Sample Type	REG	REG	REG	REG	REG					
Units	UG/G	UG/G	UG/G	UG/G	UG/G	UG/G				
Mercury	8.4	8.8	1 U	3.7	182.7	40.9				
Station	ECU178:1	ECU178:2	ECU178:3	ECU178:4	ECU178					
Sample ID	F17811	F17812	F17813	F17814	Mean					
Date Collected	31-Mar-97	31-Mar-97	31-Mar-97	31-Mar-97						
Depth	16 - 32 IN	16 - 32 IN	16 - 32 IN	16 - 32 IN						
Sample Type	REG	REG	REG	REG						
Units	UG/G	UG/G	UG/G	UG/G	UG/G					
Mercury	5.5	335.8	1 U	4	86.6					
Station	ECU179:1	ECU179:2	ECU179:2	ECU179:2	ECU179:3	ECU179:4	ECU179			
Sample ID	F17911	F17952	F17912	F17922	F17913	F17914	Mean			
Date Collected	31-Mar-97	31-Mar-97	1-Apr-97	1-Apr-97	31-Mar-97	20-Mar-97				
Depth	16 - 32 IN	NA	16 - 32 IN	16 - 32 IN	16 - 32 IN	16 - 32 IN				
Sample Type	REG	RIN	REG	FR	REG	REG				
Units	UG/G	UG/L	UG/G	UG/G	UG/G	UG/G	UG/G			
Mercury	6.8	<10 U	27.6	29.3	6.2	4.7	11.3			
Station	ECU180:1	ECU180:2	ECU180:3	ECU180:4	ECU180					
Sample ID	F18011	F18012	F18013	F18014	Mean					
Date Collected	10-Mar-97	10-Mar-97	10-Mar-97	10-Mar-97						
Depth	27 - 30 IN	20 - 32 IN	16 - 32 IN	16 - 28 IN						
Sample Type	REG	REG	REG	REG						
Units	UG/G	UG/G	UG/G	UG/G	UG/G					
Mercury	128.8	86.9	8.1	1 U	56.2					
Station	ECU181:1	ECU181:2	ECU181:3	ECU181:4	ECU181:4	ECU181:4	ECU181			
Sample ID	F18111	F18112	F18113	F18154	F18114	F18124	Mean			
Date Collected	10-Mar-97	10-Mar-97	10-Mar-97	10-Mar-97	10-Mar-97	10-Mar-97				
Depth	16 - 32 IN	16 - 24 IN	16 - 32 IN	NA	20 - 32 IN	20 - 32 IN				
Sample Type	REG	REG	REG	RIN	REG	FR				
Units	UG/G	UG/G	UG/G	UG/L	UG/G	UG/G	UG/G			
Mercury	1 U	185.5	1 U	<10 U	5.6	1 U	48.3			
Station	ECU182:1	ECU182:2	ECU182:2	ECU182:3	ECU182:4	ECU182				
Sample ID	F18211	F18212	F18272	F18213	F18214	Mean				
Date Collected	10-Mar-97	10-Mar-97	26-Mar-97	10-Mar-97	10-Mar-97					
Depth	16 - 32 IN	16 - 32 IN	32 - 48 IN	16 - 24 IN	16 - 32 IN					
Sample Type	REG	REG	REG	REG	REG					
Units	UG/G	UG/G	UG/G	UG/G	UG/G	UG/G				
Mercury	356	429	1 U	4.5	1 U	90.6				

Appendix B
Phase II Confirmatory Soil Samples (On-site Lab)

Station	ECU183:1	ECU183:2	ECU183:2	ECU183:3	ECU183:4	ECU183			
Sample ID	F18311	F18312	F18372	F18313	F18314	Mean			
Date Collected	10-Mar-97	10-Mar-97	18-Apr-97	11-Mar-97	10-Mar-97				
Depth	16 - 32 IN	16 - 32 IN	32 - 48 IN	16 - 32 IN	16 - 32 IN				
Sample Type	REG	REG	REG	REG	REG				
Units	UG/G	UG/G	UG/G	UG/G	UG/G	UG/G			
Mercury	7.1	683.9	1 U	2.5	4.9	3.9			
Station	ECU184:1	ECU184:2	ECU184:2	ECU184:2	ECU184:3	ECU184:4	ECU184		
Sample ID	F18411	F18452	F18412	F18422	F18413	F18414	Mean		
Date Collected	7-Mar-97	6-Mar-97	7-Mar-97	7-Mar-97	7-Mar-97	7-Mar-97			
Depth	16 - 26 IN	NA	16 - 32 IN	16 - 32 IN	16 - 32 IN	16 - 32 IN			
Sample Type	REG	RIN	REG	FR	REG	REG			
Units	UG/G	UG/L	UG/G	UG/G	UG/G	UG/G	UG/G		
Mercury	1 U	<10 U	43.4	14.8	1 U	1 U	11.6		
Station	ECU185:1	ECU185:2	ECU185:3	ECU185:4	ECU185				
Sample ID	F18511	F18512	F18513	F18514	Mean				
Date Collected	7-Mar-97	6-Mar-97	6-Mar-97	6-Mar-97					
Depth	16 - 32 IN	16 - 32 IN	16 - 32 IN	16 - 32 IN					
Sample Type	REG	REG	REG	REG					
Units	UG/G	UG/G	UG/G	UG/G	UG/G				
Mercury	2.8	1 U	38.9	3.1	11.5				
Station	ECU186:1	ECU186:2	ECU186:3	ECU186:4	ECU186:4	ECU186:4	ECU186:5	ECU186	
Sample ID	F18611	F18612	F18613	F18654	F18614	F18624	F18615	Mean	
Date Collected	6-Mar-97	6-Mar-97	6-Mar-97	6-Mar-97	6-Mar-97	6-Mar-97	20-May-97		
Depth	16 - 32 IN	16 - 32 IN	16 - 32 IN	NA	16 - 32 IN	16 - 32 IN	16 - 28 IN		
Sample Type	REG	REG	REG	RIN	REG	FR	REG		
Units	UG/G	UG/G	UG/G	UG/L	UG/G	UG/G	UG/G	UG/G	
Mercury	54.9	8.9	5.1	<10 U	5.2	1 U	14.9	17.8	
Station	ECU187:1	ECU187:2	ECU187:3	ECU187:4	ECU187				
Sample ID	F18711	F18712	F18713	F18714	Mean				
Date Collected	6-Mar-97	10-Mar-97	7-Mar-97	7-Mar-97					
Depth	16 - 32 IN	16 - 32 IN	16 - 30 IN	16 - 32 IN					
Sample Type	REG	REG	REG	REG					
Units	UG/G	UG/G	UG/G	UG/G	UG/G				
Mercury	6.4	53.8	17.6	21.5	24.8				
Station	ECU188:1	ECU188:2	ECU188:3	ECU188:4	ECU188:5	ECU188			
Sample ID	F18811	F18812	F18813	F18814	F18815	Mean			
Date Collected	7-Mar-97	7-Mar-97	7-Mar-97	7-Mar-97	20-May-97				
Depth	16 - 26 IN	16 - 32 IN	16 - 26 IN	16 - 26 IN	16 - 26 IN				
Sample Type	REG	REG	REG	REG	REG				
Units	UG/G	UG/G	UG/G	UG/G	UG/G	UG/G			
Mercury	6.7	1 U	4.4	1 U	4.1	3.4			
Station	ECU189:1	ECU189:2	ECU189:2	ECU189:2	ECU189:3	ECU189:4	ECU189		
Sample ID	F18911	F18952	F18912	F18922	F18913	F18914	Mean		
Date Collected	21-May-97	21-May-97	21-May-97	21-May-97	21-May-97	21-May-97			
Depth	16 - 32 IN	NA	16 - 32 IN	16 - 32 IN	16 - 32 IN	16 - 32 IN			
Sample Type	REG	RIN	REG	FR	REG	REG			
Units	UG/G	UG/L	UG/G	UG/G	UG/G	UG/G	UG/G		
Mercury	1 U	<10 U	1 U	1 U	6.5	1 U	2.4		

Appendix B
Phase II Confirmatory Soil Samples (On-site Lab)

Station	ECU190:1	ECU190:2	ECU190:3	ECU190:4	ECU190					
Sample ID	F19011	F19012	F19013	F19014	Mean					
Date Collected	21-May-97	21-May-97	21-May-97	21-May-97						
Depth	16 - 32 IN	16 - 32 IN	16 - 32 IN	16 - 32 IN						
Sample Type	REG	REG	REG	REG						
Units	UG/G	UG/G	UG/G	UG/G	UG/G					
Mercury	1 U	1 U	1 U	14.1	4.3					
Station	ECU191:1	ECU191:2	ECU191:2	ECU191:3	ECU191:4	ECU191:4	ECU191:4	ECU191		
Sample ID	F19111	F19112	F19172	F19113	F19154	F19114	F19124	Mean		
Date Collected	10-Mar-97	10-Mar-97	14-Apr-97	10-Mar-97	10-Mar-97	10-Mar-97	10-Mar-97			
Depth	16 - 32 IN	16 - 32 IN	32 - 48 IN	16 - 32 IN	NA	16 - 32 IN	16 - 32 IN			
Sample Type	REG	REG	REG	REG	RIN	REG	FR			
Units	UG/G	UG/G	UG/G	UG/G	UG/L	UG/G	UG/G	UG/G		
Mercury	37.8	493.8	1 U	95.9	<10 U	52.7	18.4	46.9		
Station	ECU192:1	ECU192:2	ECU192:3	ECU192:4	ECU192					
Sample ID	F19211	F19212	F19213	F19214	Mean					
Date Collected	11-Mar-97	10-Mar-97	10-Mar-97	10-Mar-97						
Depth	16 - 32 IN	16 - 32 IN	16 - 32 IN	16 - 32 IN						
Sample Type	REG	REG	REG	REG						
Units	UG/G	UG/G	UG/G	UG/G	UG/G					
Mercury	1 U	4.6	1 U	6.3	3.2					
Station	ECU193:1	ECU193:2	ECU193:3	ECU193:4	ECU193					
Sample ID	F19311	F19312	F19313	F19314	Mean					
Date Collected	10-Mar-97	11-Mar-97	10-Mar-97	10-Mar-97						
Depth	16 - 32 IN	16 - 32 IN	16 - 32 IN	16 - 29 IN						
Sample Type	REG	REG	REG	REG						
Units	UG/G	UG/G	UG/G	UG/G	UG/G					
Mercury	1 U	1 U	4	12.6	4.7					
Station	ECU194:1	ECU194:2	ECU194:2	ECU194:2	ECU194:3	ECU194:4	ECU194			
Sample ID	F19411	F19452	F19412	F19422	F19413	F19414	Mean			
Date Collected	11-Mar-97	11-Mar-97	11-Mar-97	11-Mar-97	11-Mar-97	11-Mar-97				
Depth	16 - 32 IN	NA	16 - 32 IN	16 - 32 IN	16 - 32 IN	16 - 32 IN				
Sample Type	REG	RIN	REG	FR	REG	REG				
Units	UG/G	UG/L	UG/G	UG/G	UG/G	UG/G	UG/G			
Mercury	19.5	<10 U	1 U	1 U	10	3.6	8.5			
Station	ECU195:1	ECU195:2	ECU195:3	ECU195:4	ECU195					
Sample ID	F19511	F19512	F19513	F19514	Mean					
Date Collected	11-Mar-97	11-Mar-97	11-Mar-97	11-Mar-97						
Depth	16 - 32 IN	16 - 32 IN	16 - 32 IN	16 - 32 IN						
Sample Type	REG	REG	REG	REG						
Units	UG/G	UG/G	UG/G	UG/G	UG/G					
Mercury	6.1	9.1	4.1	12.9	8.1					
Station	ECU196:1	ECU196:2	ECU196:3	ECU196:4	ECU196:4	ECU196:4	ECU196			
Sample ID	F19611	F19612	F19613	F19654	F19614	F19624	Mean			
Date Collected	11-Mar-97	11-Mar-97	11-Mar-97	11-Mar-97	11-Mar-97	11-Mar-97				
Depth	16 - 32 IN	16 - 32 IN	16 - 32 IN	NA	16 - 32 IN	16 - 32 IN				
Sample Type	REG	REG	REG	RIN	REG	FR				
Units	UG/G	UG/G	UG/G	UG/L	UG/G	UG/G	UG/G			
Mercury	3.4	17.6	123.9	<10 U	8.8	1 U	38.4			

Appendix B
Phase II Confirmatory Soil Samples (On-site Lab)

Station	ECU197:1	ECU197:1	ECU197:2	ECU197:3	ECU197:3	ECU197:4	ECU197:4	ECU197:5	ECU197	
Sample ID	F19711	F19771	F19712	F19713	F19773	F19714	F19774	F19715	Mean	
Date Collected	1-Apr-97	6-May-97	1-Apr-97	1-Apr-97	20-May-97	1-Apr-97	6-May-97	12-Aug-97		
Depth	16 - 32 IN	32 - 48 IN	16 - 32 IN	16 - 32 IN	32 - 48 IN	16 - 32 IN	32 - 48 IN	16 - 32 IN		
Sample Type	REG	REG	REG	REG	REG	REG	REG	REG		
Units	UG/G	UG/G	UG/G	UG/G	UG/G	UG/G	UG/G	UG/G	UG/G	
Mercury	494.2	1 U	380.9	475.2	4.3	1529.8	4.1	5.8	79.2	
Station	ECU198:1	ECU198:2	ECU198:3	ECU198:4	ECU198					
Sample ID	F19811	F19812	F19813	F19814	Mean					
Date Collected	1-Apr-97	1-Apr-97	1-Apr-97	1-Apr-97						
Depth	16 - 32 IN	16 - 32 IN	16 - 32 IN	16 - 32 IN						
Sample Type	REG	REG	REG	REG						
Units	UG/G	UG/G	UG/G	UG/G	UG/G					
Mercury	40.1	39	38.7	33.5	37.8					
Station	ECU199:1	ECU199:2	ECU199:2	ECU199:2	ECU199:3	ECU199:4	ECU199:5	ECU199		
Sample ID	F19911	F19952	F19912	F19922	F19913	F19914	F19915	Mean		
Date Collected	1-Apr-97	3-Apr-97	3-Apr-97	3-Apr-97	1-Apr-97	1-Apr-97	23-Jul-97			
Depth	16 - 32 IN	NA	16 - 32 IN	16 - 32 IN	16 - 32 IN	16 - 32 IN	16 - 32 IN			
Sample Type	REG	RIN	REG	FR	REG	REG	REG			
Units	UG/G	UG/L	UG/G	UG/G	UG/G	UG/G	UG/G	UG/G		
Mercury	136.8	<10 U	8.7	11.8	1 U	65.7	10.5	44.5		
Station	ECU200:1	ECU200:2	ECU200:3	ECU200:4	ECU200					
Sample ID	F20011	F20012	F20013	F20014	Mean					
Date Collected	1-Apr-97	1-Apr-97	1-Apr-97	2-Apr-97						
Depth	16 - 32 IN	16 - 32 IN	16 - 32 IN	16 - 32 IN						
Sample Type	REG	REG	REG	REG						
Units	UG/G	UG/G	UG/G	UG/G	UG/G					
Mercury	1 U	1 U	6	6	3.5					
Station	ECU201:1	ECU201:2	ECU201:3	ECU201:3	ECU201:4	ECU201:4	ECU201:4	ECU201		
Sample ID	F20111	F20112	F20113	F20173	F20154	F20114	F20124	Mean		
Date Collected	2-Apr-97	1-Apr-97	2-Apr-97	12-Jun-97	3-Apr-97	3-Apr-97	3-Apr-97			
Depth	16 - 32 IN	16 - 32 IN	16 - 32 IN	32 - 48 IN	NA	16 - 32 IN	16 - 32 IN			
Sample Type	REG	REG	REG	REG	RIN	REG	FR			
Units	UG/G	UG/G	UG/G	UG/G	UG/L	UG/G	UG/G	UG/G		
Mercury	7.8	51.3	425	10.3	<10 U	173.7	161.6	60.8		
Station	ECU202:1	ECU202:2	ECU202:3	ECU202:4	ECU202:4	ECU202				
Sample ID	F20211	F20212	F20213	F20214	F20274	Mean				
Date Collected	2-Apr-97	2-Apr-97	2-Apr-97	2-Apr-97	6-May-97					
Depth	16 - 32 IN	16 - 32 IN	16 - 32 IN	16 - 32 IN	32 - 48 IN					
Sample Type	REG	REG	REG	REG	REG					
Units	UG/G	UG/G	UG/G	UG/G	UG/G	UG/G				
Mercury	1 U	350.5	15.1	501.4	5.8	93.1				
Station	ECU203:1	ECU203:1	ECU203:2	ECU203:3	ECU203:4	ECU203:5	ECU203			
Sample ID	F20311	F20371	F20312	F20313	F20314	F20315	Mean			
Date Collected	1-Apr-97	6-May-97	2-Apr-97	2-Apr-97	2-Apr-97	12-Aug-97				
Depth	16 - 32 IN	32 - 48 IN	16 - 32 IN	16 - 32 IN	16 - 32 IN	16 - 32 IN				
Sample Type	REG	REG	REG	REG	REG	REG				
Units	UG/G	UG/G	UG/G	UG/G	UG/G	UG/G	UG/G			
Mercury	566.3	1 U	26	396.9	195.2	320.4	187.9			

Appendix B
Phase II Confirmatory Soil Samples (On-site Lab)

Station	ECU204:1	ECU204:2	ECU204:2	ECU204:2	ECU204:3	ECU204:4	ECU204:5	ECU204		
Sample ID	F20411	F20452	F20412	F20422	F20413	F20414	F20415	Mean		
Date Collected	2-Apr-97	3-Apr-97	3-Apr-97	3-Apr-97	2-Apr-97	2-Apr-97	23-Jul-97			
Depth	16 - 32 IN	NA	16 - 32 IN	16 - 32 IN	16 - 32 IN	16 - 32 IN	16 - 32 IN			
Sample Type	REG	RIN	REG	FR	REG	REG	REG			
Units	UG/G	UG/L	UG/G	UG/G	UG/G	UG/G	UG/G	UG/G		
Mercury	75.2	<10 U	5.7	5.1	8.6	72.5	24.2	37.2		
Station	ECU205:1	ECU205:2	ECU205:3	ECU205:4	ECU205					
Sample ID	F20511	F20512	F20513	F20514	Mean					
Date Collected	19-Mar-97	19-Mar-97	19-Mar-97	19-Mar-97						
Depth	16 - 32 IN	16 - 32 IN	16 - 32 IN	16 - 32 IN						
Sample Type	REG	REG	REG	REG						
Units	UG/G	UG/G	UG/G	UG/G	UG/G					
Mercury	8.2	9.9	31.5	17.6	16.8					
Station	ECU206:1	ECU206:2	ECU206:3	ECU206:4	ECU206:4	ECU206:4	ECU206			
Sample ID	F20611	F20612	F20613	F20654	F20614	F20624	Mean			
Date Collected	19-Mar-97	19-Mar-97	19-Mar-97	7-Apr-97	7-Apr-97	7-Apr-97				
Depth	16 - 32 IN	16 - 32 IN	16 - 32 IN	NA	16 - 32 IN	16 - 32 IN				
Sample Type	REG	REG	REG	RIN	REG	FR				
Units	UG/G	UG/G	UG/G	UG/L	UG/G	UG/G	UG/G			
Mercury	153.5	54.4	18.2	<10 U	11.5	1 U	59.4			
Station	ECU207:1	ECU207:2	ECU207:3	ECU207:4	ECU207					
Sample ID	F20711	F20712	F20713	F20714	Mean					
Date Collected	19-Mar-97	7-Apr-97	19-Mar-97	7-Apr-97						
Depth	16 - 32 IN	16 - 32 IN	16 - 32 IN	16 - 32 IN						
Sample Type	REG	REG	REG	REG						
Units	UG/G	UG/G	UG/G	UG/G	UG/G					
Mercury	56.8	26.4	3.3	12.5	24.8					
Station	ECU208:1	ECU208:2	ECU208:3	ECU208:4	ECU208:5	ECU208				
Sample ID	F20811	F20812	F20813	F20814	F20815	Mean				
Date Collected	2-Apr-97	2-Apr-97	2-Apr-97	2-Apr-97	12-Aug-97					
Depth	16 - 32 IN	16 - 32 IN	16 - 32 IN	16 - 32 IN	16 - 32 IN					
Sample Type	REG	REG	REG	REG	REG					
Units	UG/G	UG/G	UG/G	UG/G	UG/G	UG/G				
Mercury	11.2	9.6	24.8	45.9	58	29.9				
Station	ECU209:1	ECU209:2	ECU209:2	ECU209:2	ECU209:3	ECU209:4	ECU209			
Sample ID	F20911	F20952	F20912	F20922	F20913	F20914	Mean			
Date Collected	2-Apr-97	3-Apr-97	3-Apr-97	3-Apr-97	2-Apr-97	2-Apr-97				
Depth	16 - 32 IN	NA	16 - 32 IN	16 - 32 IN	16 - 32 IN	16 - 32 IN				
Sample Type	REG	RIN	REG	FR	REG	REG				
Units	UG/G	UG/L	UG/G	UG/G	UG/G	UG/G	UG/G			
Mercury	1 U	<10 U	1 U	1 U	99.5	1 U	25.6			
Station	ECU210:1	ECU210:2	ECU210:3	ECU210:4	ECU210					
Sample ID	F21011	F21012	F21013	F21014	Mean					
Date Collected	2-Apr-97	2-Apr-97	2-Apr-97	2-Apr-97						
Depth	16 - 32 IN	16 - 19 IN	16 - 32 IN	16 - 32 IN						
Sample Type	REG	REG	REG	REG						
Units	UG/G	UG/G	UG/G	UG/G	UG/G					
Mercury	40.9	6	20.1	138.8	51.5					

Appendix B
Phase II Confirmatory Soil Samples (On-site Lab)

Station	ECU211:1	ECU211:2	ECU211:3	ECU211:4	ECU211:4	ECU211:4	ECU211			
Sample ID	F21111	F21112	F21113	F21154	F21114	F21124	Mean			
Date Collected	2-Apr-97	2-Apr-97	2-Apr-97	3-Apr-97	3-Apr-97	3-Apr-97				
Depth	16 - 18 IN	16 - 32 IN	16 - 32 IN	NA	16 - 22 IN	16 - 22 IN				
Sample Type	REG	REG	REG	RIN	REG	FR				
Units	UG/G	UG/G	UG/G	UG/L	UG/G	UG/G	UG/G			
Mercury	287.6	1 U	4.5	<10 U	84.8	140	94.5			
Station	ECU212:1	ECU212:2	ECU212:3	ECU212:4	ECU212					
Sample ID	F21211	F21212	F21213	F21214	Mean					
Date Collected	2-Apr-97	2-Apr-97	2-Apr-97	2-Apr-97						
Depth	16 - 32 IN	16 - 32 IN	16 - 18 IN	16 - 18 IN						
Sample Type	REG	REG	REG	REG						
Units	UG/G	UG/G	UG/G	UG/G	UG/G					
Mercury	1 U	1 U	348.2	261.9	153.0					
Station	ECU213:1	ECU213:2	ECU213:3	ECU213:4	ECU213:5	ECU213				
Sample ID	F21311	F21312	F21313	F21314	F21315	Mean				
Date Collected	2-Apr-97	2-Apr-97	2-Apr-97	2-Apr-97	12-Aug-97					
Depth	16 - 32 IN	16 - 32 IN	16 - 32 IN	16 - 32 IN	16 - 32 IN					
Sample Type	REG	REG	REG	REG	REG					
Units	UG/G	UG/G	UG/G	UG/G	UG/G	UG/G				
Mercury	7.3	42.5	10.9	7.6	8.7	15.4				
Station	ECU214:1	ECU214:2	ECU214:2	ECU214:2	ECU214:3	ECU214:4	ECU214			
Sample ID	F21411	F21452	F21412	F21422	F21413	F21414	Mean			
Date Collected	2-Apr-97	7-Apr-97	2-Apr-97	2-Apr-97	2-Apr-97	1-Apr-97				
Depth	16 - 32 IN	NA	16 - 32 IN	16 - 32 IN	16 - 24 IN	16 - 32 IN				
Sample Type	REG	RIN	REG	FR	REG	REG				
Units	UG/G	UG/L	UG/G	UG/G	UG/G	UG/G	UG/G			
Mercury	1 U	<10 U	11.9	14.9	8.7	98.7	30.1			
Station	ECU215:1	ECU215:2	ECU215:3	ECU215:4	ECU215					
Sample ID	F21511	F21512	F21513	F21514	Mean					
Date Collected	2-Apr-97	2-Apr-97	2-Apr-97	2-Apr-97						
Depth	16 - 32 IN	16 - 32 IN	16 - 32 IN	16 - 32 IN						
Sample Type	REG	REG	REG	REG						
Units	UG/G	UG/G	UG/G	UG/G	UG/G					
Mercury	1 U	1 U	21.9	1 U	6.2					
Station	ECU216:1	ECU216:2	ECU216:3	ECU216:4	ECU216:4	ECU216:4	ECU216:5	ECU216		
Sample ID	F21611	F21612	F21613	F21654	F21614	F21624	F21615	Mean		
Date Collected	2-Apr-97	2-Apr-97	2-Apr-97	3-Apr-97	3-Apr-97	3-Apr-97	1-Aug-97			
Depth	16 - 32 IN	16 - 32 IN	16 - 32 IN	NA	16 - 32 IN	16 - 32 IN	16 - 32 IN			
Sample Type	REG	REG	REG	RIN	REG	FR	REG			
Units	UG/G	UG/G	UG/G	UG/L	UG/G	UG/G	UG/G	UG/G		
Mercury	1 U	1 U	2.8	<10 U	1 U	7.8	17.1	4.6		
Station	ECU217:1	ECU217:2	ECU217:3	ECU217:4	ECU217:5	ECU217				
Sample ID	F21711	F21712	F21713	F21714	F21715	Mean				
Date Collected	2-Apr-97	2-Apr-97	2-Apr-97	2-Apr-97	1-Aug-97					
Depth	16 - 32 IN	16 - 32 IN	16 - 32 IN	16 - 32 IN	16 - 32 IN					
Sample Type	REG	REG	REG	REG	REG					
Units	UG/G	UG/G	UG/G	UG/G	UG/G	UG/G				
Mercury	12	1 U	1 U	1 U	6.5	4.3				

Appendix B
Phase II Confirmatory Soil Samples (On-site Lab)

Station	ECU218:1	ECU218:2	ECU218:3	ECU218:4	ECU218					
Sample ID	F21811	F21812	F21813	F21814	Mean					
Date Collected	7-Apr-97	1-Apr-97	7-Apr-97	7-Apr-97						
Depth	16 - 32 IN	16 - 32 IN	16 - 20 IN	16 - 32 IN						
Sample Type	REG	REG	REG	REG						
Units	UG/G	UG/G	UG/G	UG/G	UG/G					
Mercury	1 U	1 U	6.4	1 U	2.4					
Station	ECU219:1	ECU219:2	ECU219:2	ECU219:2	ECU219:3	ECU219:4	ECU219:5	ECU219		
Sample ID	F21911	F21952	F21912	F21922	F21913	F21914	F21915	Mean		
Date Collected	3-Apr-97	7-Apr-97	7-Apr-97	7-Apr-97	3-Apr-97	3-Apr-97	23-Jul-97			
Depth	16 - 32 IN	NA	16 - 32 IN	16 - 32 IN	16 - 32 IN	16 - 32 IN	16 - 32 IN			
Sample Type	REG	RIN	REG	FR	REG	REG	REG			
Units	UG/G	UG/L	UG/G	UG/G	UG/G	UG/G	UG/G	UG/G		
Mercury	1 U	<10 U	8.1	6.7	1 U	59.8	22.9	18.6		
Station	ECU220:1	ECU220:2	ECU220:3	ECU220:4	ECU220					
Sample ID	F22011	F22012	F22013	F22014	Mean					
Date Collected	3-Apr-97	1-Apr-97	3-Apr-97	3-Apr-97						
Depth	16 - 32 IN	16 - 32 IN	16 - 32 IN	16 - 24 IN						
Sample Type	REG	REG	REG	REG						
Units	UG/G	UG/G	UG/G	UG/G	UG/G					
Mercury	25.1	1 U	1 U	1 U	7.0					
Station	ECU221:1	ECU221:2	ECU221:3	ECU221:4	ECU221:4	ECU221:4	ECU221			
Sample ID	F22111	F22112	F22113	F22154	F22114	F22124	Mean			
Date Collected	3-Apr-97	3-Apr-97	3-Apr-97	3-Apr-97	3-Apr-97	3-Apr-97				
Depth	16 - 32 IN	16 - 20 IN	16 - 32 IN	NA	16 - 32 IN	16 - 32 IN				
Sample Type	REG	REG	REG	RIN	REG	FR				
Units	UG/G	UG/G	UG/G	UG/L	UG/G	UG/G	UG/G			
Mercury	6.5	1 U	64.9	<10 U	11.1	10.3	20.9			
Station	ECU222:1	ECU222:2	ECU222:3	ECU222:4	ECU222					
Sample ID	F22211	F22212	F22213	F22214	Mean					
Date Collected	8-Apr-97	8-Apr-97	8-Apr-97	8-Apr-97						
Depth	16 - 32 IN	16 - 32 IN	16 - 32 IN	16 - 28 IN						
Sample Type	REG	REG	REG	REG						
Units	UG/G	UG/G	UG/G	UG/G	UG/G					
Mercury	1 U	25.1	10.5	21.3	14.5					
Station	ECU223:1	ECU223:2	ECU223:3	ECU223:4	ECU223					
Sample ID	F22311	F22312	F22313	F22314	Mean					
Date Collected	8-Apr-97	8-Apr-97	8-Apr-97	8-Apr-97						
Depth	16 - 32 IN	16 - 32 IN	16 - 32 IN	16 - 24 IN						
Sample Type	REG	REG	REG	REG						
Units	UG/G	UG/G	UG/G	UG/G	UG/G					
Mercury	195.8	1 U	13	3.7	53.4					
Station	ECU224:1	ECU224:2	ECU224:2	ECU224:2	ECU224:3	ECU224:4	ECU224			
Sample ID	F22411	F22452	F22412	F22422	F22413	F22414	Mean			
Date Collected	1-Apr-97	7-Apr-97	8-Apr-97	8-Apr-97	8-Apr-97	8-Apr-97				
Depth	16 - 32 IN	NA	16 - 32 IN	16 - 32 IN	16 - 22 IN	16 - 32 IN				
Sample Type	REG	RIN	REG	FR	REG	REG				
Units	UG/G	UG/L	UG/G	UG/G	UG/G	UG/G	UG/G			
Mercury	9.5	<10 U	1 U	3.9	48.2	1 U	14.9			

Appendix B
Phase II Confirmatory Soil Samples (On-site Lab)

Station	ECU225:1	ECU225:2	ECU225:3	ECU225:4	ECU225					
Sample ID	F22511	F22512	F22513	F22514	Mean					
Date Collected	1-Apr-97	8-Apr-97	8-Apr-97	8-Apr-97						
Depth	16 - 32 IN	16 - 32 IN	16 - 32 IN	16 - 32 IN						
Sample Type	REG	REG	REG	REG						
Units	UG/G	UG/G	UG/G	UG/G	UG/G					
Mercury	1 U	4.3	1 U	16.7	5.8					
Station	ECU226:1	ECU226:2	ECU226:3	ECU226:4	ECU226:4	ECU226:4	ECU226			
Sample ID	F22611	F22612	F22613	F22654	F22614	F22624	Mean			
Date Collected	8-Apr-97	8-Apr-97	8-Apr-97	7-Apr-97	8-Apr-97	8-Apr-97				
Depth	16 - 32 IN	16 - 32 IN	16 - 32 IN	NA	16 - 32 IN	16 - 32 IN				
Sample Type	REG	REG	REG	RIN	REG	FR				
Units	UG/G	UG/G	UG/G	UG/L	UG/G	UG/G	UG/G			
Mercury	6.8	1 U	21.3	<10 U	29.9	62.7	14.8			

APPENDIX C

PHASE II SURFACE WATER DATA

NOAA SITE

Appendix C
NOAA Background Sample Results

	Up/Downstream Date Collected	Up 3-Apr-97	Down 3-Apr-97	Down Alt. 3-Apr-97
Inorganics	Sample ID	F40011	F30011	F30841
Aluminum	UG/L	170 <	150 <	142 <
Antimony	UG/L	2.3 U	2.3 U	2.3 U
Arsenic	UG/L	2.9 U	2.9 U	2.9 U
Barium	UG/L	41.3 <	38.5 <	42.8 <
Beryllium	UG/L	0.12 <	0.1 U	0.15 <
Boron	UG/L	81.2 <	148 <	70.6 <
Cadmium	UG/L	0.4 U	0.4 U	0.4 U
Calcium	UG/L	44100 <	39200 <	45400 <
Chromium	UG/L	0.6 U	9.1 <	0.6 U
Cobalt	UG/L	0.9 U	0.9 U	0.9 U
Copper	UG/L	3.6 <	3.5 <	2.1 <
Iron	UG/L	146 <	168 <	123 <
Lead	UG/L	1.7 U	1.7 U	1.7 U
Magnesium	UG/L	11000 <	10000 <	11600 <
Manganese	UG/L	49.6 <	38.8 <	38.1 <
Mercury	UG/L	0.34 <	0.34 <	0.27 <
Molybdenum	UG/L	2.2 U	2.2 U	2.2 U
Nickel	UG/L	1.4 U	8 <	1.4 U
Potassium	UG/L	1600 <	1520 <	1740 <
Selenium	UG/L	3.2 U	3.2 U	3.2 U
Silica	UG/L	6150 <	5830 <	6510 <
Silver	UG/L	0.9 U	0.9 U	0.9 U
Sodium	UG/L	7530 <	6720 <	7180 <
Thallium	UG/L	3.5 U	3.5 U	3.5 U
Vanadium	UG/L	1.1 U	1.1 U	1.1 U
Zinc	UG/L	31.5 <	23.7 <	20 <

	Up/Downstream Date Collected	Up 3-Apr-97	Down 3-Apr-97	Down Alt. 3-Apr-97
Misc - Anions	Sample ID	F40016	F30016	F30846
Alkalinity	MG/L	109 <	107 <	110 <
Bromide	MG/L	0.25 U	0.25 U	0.25 U
Chloride	MG/L	9.2 <	8.8 <	8.7 <
Fluoride	MG/L	0.5 U	0.5 U	0.5 U
Orthophosphate	MG/L	0.34 <	0.31 <	0.32 <
Sulfate	MG/L	28.8 <	28.6 <	26.9 <
Suspended Solids	MG/L	5 <	5 U	6 <

	Up/Downstream Date Collected	Up 3-Apr-97	Down 3-Apr-97	Down Alt. 3-Apr-97
Misc - Phenol	Sample ID	F40012	F30012	F30842
Phenol	UG/L	10 U	10 U	10 U

	Up/Downstream Date Collected	Up 3-Apr-97	Down 3-Apr-97	Down Alt. 3-Apr-97
Miscellaneous	Sample ID	F40017	F30017	F30841
Ammonia	MG/L	0.1 U	0.1 U	0.1 U
Kjeldahl Nitrogen	MG/L	0.1 <	0.1 U	0.1 U
Nitrate-Nitrite (as N)	MG-N/L	2.8 <	2.5 <	2.8 <
Total Phosphate as Phosphorus	MG/L	0.22 <	0.2 <	0.2 <

Appendix C
NOAA Background Sample Results

	Up/Downstream Date Collected	Up 3-Apr-97	Down 3-Apr-97	Down Alt. 3-Apr-97
Miscellaneous - BOD	Sample ID	F40015	F30015	F30844
Biochemical Oxygen Demand (BOD)	MG/L	1 U	1 U	1 U

	Up/Downstream Date Collected	Up 3-Apr-97	Down 3-Apr-97	Down Alt. 3-Apr-97
Pesticide/PCBs	Sample ID	F40014	F30014	F30847
4,4'-DDD	UG/L	0.1 U	0.12 U	0.1 U
4,4'-DDE	UG/L	0.1 U	0.12 U	0.1 U
4,4'-DDT	UG/L	0.1 U	0.12 U	0.1 U
Aldrin	UG/L	0.05 U	0.06 U	0.052 U
Dieldrin	UG/L	0.1 U	0.12 U	0.1 U
Endosulfan I	UG/L	0.05 U	0.06 U	0.052 U
Endosulfan II	UG/L	0.1 U	0.12 U	0.1 U
Endosulfan sulfate	UG/L	0.1 U	0.12 U	0.1 U
Endrin	UG/L	0.1 U	0.12 U	0.1 U
Endrin aldehyde	UG/L	0.1 U	0.12 U	0.1 U
Endrin ketone	UG/L	0.1 U	0.12 U	0.1 U
Heptachlor	UG/L	0.05 U	0.06 U	0.052 U
Heptachlor epoxide	UG/L	0.05 U	0.06 U	0.052 U
Lindane	UG/L	0.05 U	0.06 U	0.052 U
Methoxychlor	UG/L	0.5 U	0.6 U	0.52 U
PCB-1016	UG/L	1 U	1.2 U	1 U
PCB-1221	UG/L	2 U	2.4 U	2.1 U
PCB-1232	UG/L	1 U	1.2 U	1 U
PCB-1242	UG/L	1 U	1.2 U	1 U
PCB-1248	UG/L	1 U	1.2 U	1 U
PCB-1254	UG/L	1 U	1.2 U	1 U
PCB-1260	UG/L	1 U	1.2 U	1 U
Toxaphene	UG/L	5 U	6 U	5.2 U
alpha-BHC	UG/L	0.05 U	0.06 U	0.052 U
alpha-Chlordane	UG/L	0.05 U	0.06 U	0.052 U
beta-BHC	UG/L	0.05 U	0.06 U	0.052 U
delta-BHC	UG/L	0.05 U	0.06 U	0.052 U
gamma-Chlordane	UG/L	0.05 U	0.06 U	0.052 U

	Up/Downstream Date Collected	Up 3-Apr-97	Down 3-Apr-97	Down Alt. 3-Apr-97
Radiological	Sample ID	F40013	F30013	F30843
Alpha activity	PCI/L	4.81	6.24	3.07
Americium-241	PCI/L	0.71 U	0.88 J	0.76 U
Beta activity	PCI/L	3.86	5.86	1.96 J
Cesium-137	PCI/L	0.32 U	0.26 U	-0.72 U
Cobalt-60	PCI/L	-1.01 U	0.36 U	5.25 J
Neptunium-237	PCI/L	0.2 U	0.14 U	0.34 U
Plutonium-238	PCI/L	1.33	1.36	1.77
Plutonium-239	PCI/L	0.2 U	0 J	0.17 U
Protactinium-233	PCI/L	-0.14 U	0.58 U	-1.49 U
Thorium-228	PCI/L	0.04 U	0.13 U	0.04 U
Thorium-230	PCI/L	0.53	0.34 J	0.51 J
Thorium-232	PCI/L	0.04 U	0.04 U	0 J
Uranium-234	PCI/L	1.49	1.82	1.6
Uranium-235	PCI/L	0.22 U	0.32 U	0 J
Uranium-238	PCI/L	3.79	3.81	4.17

Appendix C
NOAA Background Sample Results

	Up/Downstream Date Collected	Up 3-Apr-97	Down 3-Apr-97	Down Alt. 3-Apr-97
Semivolatile Organics	Sample ID	F40012	F30012	F30842
1,2,4-Trichlorobenzene	UG/L	10 U	10 U	10 U
1,2-Dichlorobenzene	UG/L	10 U	10 U	10 U
1,3-Dichlorobenzene	UG/L	10 U	10 U	10 U
1,4-Dichlorobenzene	UG/L	10 U	10 U	10 U
2,4,5-Trichlorophenol	UG/L	50 U	50 U	50 U
2,4,6-Trichlorophenol	UG/L	10 U	10 U	10 U
2,4-Dichlorophenol	UG/L	10 U	10 U	10 U
2,4-Dimethylphenol	UG/L	10 U	10 U	10 U
2,4-Dinitrophenol	UG/L	50 U	50 U	50 U
2,4-Dinitrotoluene	UG/L	10 U	10 U	10 U
2,6-Dinitrotoluene	UG/L	10 U	10 U	10 U
2-Chloronaphthalene	UG/L	10 U	10 U	10 U
2-Chlorophenol	UG/L	10 U	10 U	10 U
2-Methyl-4,6-dinitrophenol	UG/L	50 U	50 U	50 U
2-Methylnaphthalene	UG/L	10 U	10 U	10 U
2-Methylphenol	UG/L	10 U	10 U	10 U
2-Nitrobenzenamine	UG/L	50 U	50 U	50 U
2-Nitrophenol	UG/L	10 U	10 U	10 U
3,3'-Dichlorobenzidine	UG/L	20 U	20 U	20 U
3-Nitrobenzenamine	UG/L	50 U	50 U	50 U
4-Bromophenyl phenyl ether	UG/L	10 U	10 U	10 U
4-Chloro-3-methylphenol	UG/L	10 U	10 U	10 U
4-Chlorobenzenamine	UG/L	10 U	10 U	10 U
4-Chlorophenyl phenyl ether	UG/L	10 U	10 U	10 U
4-Methylphenol	UG/L	10 U	10 U	10 U
4-Nitrobenzenamine	UG/L	50 U	50 U	50 U
4-Nitrophenol	UG/L	50 U	50 U	50 U
Acenaphthene	UG/L	10 U	10 U	10 U
Acenaphthylene	UG/L	10 U	10 U	10 U
Anthracene	UG/L	10 U	10 U	10 U
Benz(a)anthracene	UG/L	10 U	10 U	10 U
Benzenemethanol	UG/L	10 U	10 U	10 U
Benzo(a)pyrene	UG/L	10 U	10 U	10 U
Benzo(b)fluoranthene	UG/L	10 U	10 U	10 U
Benzo(ghi)perylene	UG/L	10 U	10 U	10 U
Benzo(k)fluoranthene	UG/L	10 U	10 U	10 U
Benzoic acid	UG/L	50 U	50 U	50 U
Bis(2-chloroethoxy)methane	UG/L	10 U	10 U	10 U
Bis(2-chloroethyl) ether	UG/L	10 U	10 U	10 U
Bis(2-chloroisopropyl) ether	UG/L	10 U	10 U	10 U
Bis(2-ethylhexyl)phthalate	UG/L	10 U	10 U	10 U
Butyl benzyl phthalate	UG/L	10 U	10 U	10 U
Carbazole	UG/L	10 U	10 U	10 U
Chrysene	UG/L	10 U	10 U	10 U
Di-n-butyl phthalate	UG/L	10 U	10 U	10 U
Di-n-octylphthalate	UG/L	10 U	10 U	10 U
Dibenz(a,h)anthracene	UG/L	10 U	10 U	10 U
Dibenzofuran	UG/L	10 U	10 U	10 U
Diethyl phthalate	UG/L	10 U	10 U	10 U
Dimethyl phthalate	UG/L	10 U	10 U	10 U
Fluoranthene	UG/L	10 U	10 U	10 U
Fluorene	UG/L	10 U	10 U	10 U
Hexachlorobenzene	UG/L	10 U	10 U	10 U

Appendix C
NOAA Background Sample Results

	Up/Downstream	Up	Down	Down Alt.
	Date Collected	3-Apr-97	3-Apr-97	3-Apr-97
Semivolatile Organics	Sample ID	F40012	F30012	F30842
Hexachlorobutadiene	UG/L	10 U	10 U	10 U
Hexachlorocyclopentadiene	UG/L	10 U	10 U	10 U
Hexachloroethane	UG/L	10 U	10 U	10 U
Indeno(1,2,3-cd)pyrene	UG/L	10 U	10 U	10 U
Isophorone	UG/L	10 U	10 U	10 U
N-Nitroso-di-n-propylamine	UG/L	10 U	10 U	10 U
N-Nitrosodiphenylamine	UG/L	10 U	10 U	10 U
Naphthalene	UG/L	10 U	10 U	10 U
Nitrobenzene	UG/L	10 U	10 U	10 U
Pentachlorophenol	UG/L	50 U	50 U	50 U
Phenanthrene	UG/L	10 U	10 U	10 U
Pyrene	UG/L	10 U	10 U	10 U

Appendix C
NOAA Site Preparation Samples

	Up/Downstream	Up	Down	Up	Down	Up	Down
	Date Collected	9-Apr-97	9-Apr-97	10-Apr-97	10-Apr-97	11-Apr-97	11-Apr-97
Inorganics	Sample ID	F40021	F30021	F40031	F30031	F40041	F30041
Aluminum	UG/L	134 <	137 <	91.4 <	96.7 <	112 <	131 <
Antimony	UG/L	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U
Arsenic	UG/L	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U
Barium	UG/L	37.3 <	38.4 <	35 <	35.5 <	38.4 <	45.3 <
Beryllium	UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.16 <	0.18 <
Boron	UG/L	88.4 <	47.6 <	34.4 <	69.7 <	43.5 <	38.3 <
Cadmium	UG/L	0.4 U	0.4 U	0.4 U	0.4 U	0.56 <	0.4 U
Calcium	UG/L	39500 <	39200 <	38200 <	37200 <	37300 <	42600 <
Chromium	UG/L	0.6 U	0.66 <	0.6 U	0.6 U	0.6 U	0.6 U
Cobalt	UG/L	0.9 U	0.9 U	0.9 U	0.9 U	1.5 <	0.9 U
Copper	UG/L	4.4 <	3.8 <	3.4 <	2.6 <	3.5 <	2.4 <
Iron	UG/L	115 <	126 <	136 <	94.7 <	105 <	119 <
Lead	UG/L	1.7 U	1.7 U	1.7 U	1.7 U	2.3 <	1.7 U
Magnesium	UG/L	10400 <	10500 <	10000 <	9940 <	9930 <	11500 <
Manganese	UG/L	50.4 <	45.3 <	46.2 <	40.8 <	55.4 <	58.1 <
Mercury	UG/L	0.4 <	0.5 <	0.2 <	0.21 <	0.28 <	0.35 <
Molybdenum	UG/L	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U
Nickel	UG/L	1.4 U	1.7 <	1.4 U	1.4 U	1.4 <	1.4 U
Potassium	UG/L	1490 <	1490 <	1360 <	1370 <	1340 <	1590 <
Selenium	UG/L	3.2 U	3.2 U	3.2 U	3.2 U	3.2 U	3.2 U
Silica	UG/L	5580 <	5740 <	5150 <	5300 <	4780 <	5660 <
Silver	UG/L	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U
Sodium	UG/L	7760 <	7270 <	6800 <	6440 <	6530 <	7280 <
Thallium	UG/L	3.5 U	3.5 U	3.5 U	3.5 <	3.5 U	3.5 U
Vanadium	UG/L	1.1 U	1.1 U	1.1 U	1.1 U	1.4 <	1.1 U
Zinc	UG/L	24.9 <	22.8 <	23.4 <	19.8 <	24.1 <	23 <

Appendix C
NOAA Site Preparation Samples

	Up/Downstream	Up	Down	Up	Down	Up	Down
	Date Collected	14-Apr-97	14-Apr-97	15-Apr-97	15-Apr-97	21-Apr-97	21-Apr-97
Inorganics	Sample ID	F40051	F30051	F40061	F30061	F40081	F30081
Aluminum	UG/L	67.8 <	96 <	76.8 <	83.2 <	127 <	150 <
Antimony	UG/L	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U
Arsenic	UG/L	2.9 U	2.9 U	2.8 U	2.8 U	3.4 <	3 <
Barium	UG/L	44.2 <	43.3 <	37 <	40.5 <	43.7 <	45.8 <
Beryllium	UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Boron	UG/L	34.4 <	27.9 <	47.1 <	33.6 <	50 <	55.2 <
Cadmium	UG/L	0.49 <	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
Calcium	UG/L	42000 <	39900 <	36200 <	37800 <	38400 <	38800 <
Chromium	UG/L	1.1 <	0.6 U	0.8 U	0.8 U	0.8 U	1.1 <
Cobalt	UG/L	0.9 U	0.9 U	1.3 U	1.5 <	1.3 U	1.3 U
Copper	UG/L	4.1 <	3.1 <	4.3 <	3.8 <	3.8 <	3.2 <
Iron	UG/L	108 <	130 <	83.5 <	89.2 <	160 <	169 <
Lead	UG/L	1.7 U	2.2 <	3.3 <	2.1 U	2.1 U	2.1 U
Magnesium	UG/L	11400 <	11000 <	9980 <	10600 <	10100 <	10400 <
Manganese	UG/L	64 <	54.5 <	43.6 <	43.3 <	68 <	58.8 <
Mercury	UG/L	0.36 <	0.46 <	0.34 <	0.45 <	0.48 <	0.53 <
Molybdenum	UG/L	2.2 U	2.2 U	2.2 U	2.7 <	5.3 <	6 <
Nickel	UG/L	1.4 U	1.4 U	1.8 U	1.8 U	1.8 U	1.8 U
Potassium	UG/L	1510 <	1490 <	1310 <	1440 <	1500 <	1590 <
Selenium	UG/L	3.2 U	4.6 <	3.5 U	3.5 U	3.5 U	3.5 U
Silica	UG/L	5520 <	5580 <	4730 <	5150 <	5960 <	6390 <
Silver	UG/L	0.9 U	0.9 U	1.3 U	1.3 U	1.3 U	1.3 U
Sodium	UG/L	7240 <	6600 <	6330 <	6310 <	7500 <	7270 <
Thallium	UG/L	3.5 U	3.5 U	4.5 U	4.5 U	4.5 U	4.5 U
Vanadium	UG/L	1.1 U	1.1 U	0.7 U	1 <	0.7 U	0.7 U
Zinc	UG/L	29.6 <	22.4 <	20.8 <	18.4 <	35.4 <	32.1 <

Appendix C
NOAA Site Preparation Samples

	Up/Downstream	Up	Down
	Date Collected	22-Apr-97	22-Apr-97
Inorganics	Sample ID	F40664	F30661
Aluminum	UG/L	268 <	273 <
Antimony	UG/L	2.3 U	3.2 <
Arsenic	UG/L	2.8 U	2.8 U
Barium	UG/L	45 <	46.8 <
Beryllium	UG/L	0.1 U	0.1 U
Boron	UG/L	42.1 <	39.4 <
Cadmium	UG/L	0.41 <	0.4 U
Calcium	UG/L	38500 <	38800 <
Chromium	UG/L	1 <	1.1 <
Cobalt	UG/L	1.3 U	1.3 U
Copper	UG/L	2.3 <	2.3 <
Iron	UG/L	266 <	290 <
Lead	UG/L	2.1 U	2.1 U
Magnesium	UG/L	8840 <	9070 <
Manganese	UG/L	54.2 <	54.4 <
Mercury	UG/L	0.44 <	0.63 <
Molybdenum	UG/L	2.9 <	2.2 U
Nickel	UG/L	1.8 U	1.8 U
Potassium	UG/L	1610 <	1710 <
Selenium	UG/L	3.5 U	3.5 U
Silica	UG/L	6340 <	6700 <
Silver	UG/L	1.3 U	1.3 U
Sodium	UG/L	6700 <	6410 <
Thallium	UG/L	4.5 U	4.5 U
Vanadium	UG/L	1.1 <	1.5 <
Zinc	UG/L	36.8 <	32 <

Appendix C NOAA Daily Samples

Inorganics	Up/Downstream	Date Collected	Sample ID	15-May-97		16-May-97		16-May-97		19-May-97	
				Up	Down	Up	Down	Up	Down	Up	Down
Aluminum	UG/L		F40091	119 <	F30091	F40101	F30101	F40111	F30111		
Antimony	UG/L		2.3 U	105 <	2.3 U	58.7 <	59.6 <	111 <	155 <		
Arsenic	UG/L		2.8 U	2.8 U	2.8 U	2.3 U	2.3 U	2.3 U	2.3 U		
Barium	UG/L		42.9 <	43.4 <	43.4 <	2.8 U	2.8 U	2.8 U	2.8 U		
Beryllium	UG/L		0.1 U	0.1 U	0.1 U	42.7 <	45.6 <	42.1 <	43.4 <		
Boron	UG/L		43.2 <	39 <	38.7 <	0.1 U	0.1 U	0.1 U	0.1 U		
Cadmium	UG/L		0.4 U	0.4 U	0.54 <	48.3 <	38.7 <	59 <	48.3 <		
Calcium	UG/L		41700 <	40700 <	41800 <	0.4 U	0.4 U	0.4 U	0.4 U		
Chromium	UG/L		0.8 U	0.8 U	0.8 U	41000 <	41800 <	38800 <	38600 <		
Cobalt	UG/L		1.3 U	1.3 U	1.3 U	0.8 U	0.8 U	2 <	1.8 <		
Copper	UG/L		3.1 <	2.7 <	2.9 <	1.3 U	1.3 U	1.3 U	1.3 U		
Iron	UG/L		156 <	146 <	114 <	3.4 <	2.9 <	8.2 <	7 <		
Lead	UG/L		2.1 U	2.1 U	2.1 U	114 <	114 <	148 <	196 <		
Magnesium	UG/L		10700 <	10600 <	11100 <	2.1 U	2.1 U	2.1 U	2.1 U		
Manganese	UG/L		55.7 <	46.3 <	47.4 <	10700 <	11100 <	10700 <	10900 <		
Mercury	UG/L		0.3 <	0.33 <	0.39 <	53.6 <	47.4 <	56.6 <	50.1 <		
Molybdenum	UG/L		2.4 <	2.2 U	2.2 U	0.32 <	0.39 <	0.18 <	0.31 <		
Nickel	UG/L		1.8 U	1.8 U	1.9 <	2.2 U	2.2 U	2.2 U	2.5 <		
Potassium	UG/L		1510 <	1490 <	1520 <	1.8 U	1.9 <	2.5 <	1.8 <		
Selenium	UG/L		3.5 U	3.5 U	3.5 U	1420 <	1520 <	1460 <	1490 <		
Silica	UG/L		5980 <	6110 <	5570 <	3.5 U	3.5 U	3.5 U	3.5 U		
Silver	UG/L		1.3 U	1.3 U	1.3 U	5270 <	5570 <	4770 <	5210 <		
Sodium	UG/L		7610 <	7020 <	6960 <	1.3 U	1.3 U	1.3 U	1.3 U		
Thallium	UG/L		4.5 U	4.5 U	4.5 U	7080 <	6960 <	7270 <	6820 <		
Vanadium	UG/L		0.7 U	0.7 U	0.93 <	4.5 U	4.5 U	4.5 U	4.5 U		
Zinc	UG/L		30.9 <	26.3 <	28.5 <	0.7 U	0.93 <	1.2 <	0.88 <		
						29.4 <	28.5 <	31.6 <	29.3 <		

Appendix C
NOAA Daily Samples

Inorganics	Up/Downstream Date Collected	21-May-97		22-May-97		22-May-97		22-May-97		23-May-97	
		Up	Down	Up	Down	Up	Down	Up	Down	Up	Down
	Sample ID	F40121	F30121	F60131-FR	F40131	F50131-FR	F30131	F40141	F30141		
Aluminum	UG/L	105 J	99.6 J	133 <	182 <	185 <	164 <	152 <	150 <		
Antimony	UG/L	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 <		
Arsenic	UG/L	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U		
Barium	UG/L	41.5 =	43.5 =	39.8 <	41.9 <	42.5 <	44.9 <	40.4 <	41.6 <		
Beryllium	UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U		
Boron	UG/L	78.7 U	90.3 U	46.1 <	60.9 <	65.2 <	59.9 <	55.4 <	59.6 <		
Cadmium	UG/L	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.47 <	0.4 U		
Calcium	UG/L	39600 =	39800 =	35400 <	37500 <	36600 <	38700 <	35300 <	35800 <		
Chromium	UG/L	1.2 U	1.4 U	0.8 U	0.8 U	0.8 U	0.8 U	0.83 <	1.2 <		
Cobalt	UG/L	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U		
Copper	UG/L	3.5 U	2.7 U	4.9 <	4.5 <	2.9 <	3.1 <	5.2 <	5.4 <		
Iron	UG/L	113 =	109 =	180 <	170 <	163 <	161 <	232 <	209 <		
Lead	UG/L	2.1 U	2.1 U	2.8 <	2.1 U	2.1 U	2.1 U	4.4 <	2.5 <		
Magnesium	UG/L	11200 =	11400 =	10200 <	10800 <	10800 <	11400 <	10200 <	10400 <		
Manganese	UG/L	60.5 =	49.5 =	87.4 <	90.4 <	69.1 <	72.7 <	143 <	124 <		
Mercury	UG/L	0.41 =	0.41 =	0.62 <	0.53 <	0.44 <	0.5 <	0.6 <	0.44 <		
Molybdenum	UG/L	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 <		
Nickel	UG/L	1.8 U	2.1 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	2.2 <		
Potassium	UG/L	1480 =	1550 =	1380 <	1470 <	1490 <	1550 <	1570 <	1630 <		
Selenium	UG/L	3.5 U	3.5 U	3.5 U	3.5 U	3.5 U	3.5 U	3.5 U	3.5 U		
Silica	UG/L	5180 =	5560 =	4400 <	5170 <	5360 <	5560 <	4140 <	4550 <		
Silver	UG/L	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U		
Sodium	UG/L	7450 =	7180 =	6640 <	7010 <	6550 <	6930 <	6840 <	6620 <		
Thallium	UG/L	4.5 U	4.5 U	4.5 U	4.5 U	4.5 U	4.5 U	4.5 U	4.5 U		
Vanadium	UG/L	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.83 <	0.92 <		
Zinc	UG/L	21.2 J	18.8 J	29.5 <	31 <	24.1 <	23.7 <	25.4 <	19.7 <		

Appendix C NOAA Daily Samples

	Up/Downstream Date Collected	Sample ID	28-May-97		29-May-97		30-May-97		2-Jun-97	
			Up	Down	Up	Down	Up	Down	Up	Down
Inorganics										
Aluminum	UG/L	F40151	124 <	119 <	F40161	F30161	F40171	F30171	F40181	F30181
Antimony	UG/L		2.3 U	2.3 U			148 <	201 <	333 <	350 <
Arsenic	UG/L		2.8 U	2.8 U			2.3 U	2.3 U	2.3 U	2.3 U
Barium	UG/L		43.4 <	44.8 <			2.8 U	2.8 U	2.8 U	2.8 U
Beryllium	UG/L		0.1 U	0.12 <			44.9 <	48.6 <	47.9 <	48.4 <
Boron	UG/L		30 <	43.6 <			0.1 U	0.1 U	0.1 U	0.1 U
Cadmium	UG/L		0.4 U	0.4 U			75 <	81 <	100 <	68.3 <
Calcium	UG/L		35800 <	35800 <			0.4 U	0.4 U	0.4 U	0.4 U
Chromium	UG/L		1.1 <	0.96 <			42200 <	42700 <	40600 <	40100 <
Cobalt	UG/L		1.3 U	1.3 U			2.1 <	0.8 U	0.8 U	0.8 U
Copper	UG/L		5.2 <	4.9 <			1.3 U	1.3 U	1.4 <	1.3 U
Iron	UG/L		244 <	240 <			3.7 <	2.7 <	5.7 <	3.8 <
Lead	UG/L		2.1 U	2.1 U			253 <	260 <	339 <	313 <
Magnesium	UG/L		8000 <	8200 <			2.1 U	2.1 U	2.1 U	2.1 U
Manganese	UG/L		80.5 <	69.6 <			10100 <	10400 <	9590 <	9580 <
Mercury	UG/L		0.73 <	0.88 <			94.2 <	77.1 <	82.1 <	61.8 <
Molybdenum	UG/L		2.3 <	2.2 U			0.61 <	0.6 <	0.38 <	0.34 <
Nickel	UG/L		1.8 U	1.8 U			3.3 <	2.2 U	3.1 <	2.8 <
Potassium	UG/L		1630 <	1710 <			6.3 <	2.6 <	1.8 U	1.8 U
Selenium	UG/L		3.5 U	3.5 U			1680 <	1780 <	1740 <	1780 <
Silica	UG/L		4850 <	5100 <			3.5 U	3.5 U	3.5 U	3.5 U
Silver	UG/L		1.3 U	1.3 U			5670 <	6340 <	7560 <	7730 <
Sodium	UG/L		6330 <	5890 <			1.3 U	1.3 U	1.3 U	1.3 U
Thallium	UG/L		4.5 U	4.5 U			7050 <	6770 <	7060 <	6670 <
Vanadium	UG/L		1 <	1.1 <			4.5 U	4.5 U	4.5 U	4.5 U
Zinc	UG/L		48.7 <	31 <			0.7 <	0.78 <	0.73 <	0.7 U
							39.1 <	27 <	29.1 <	23.5 <

Appendix C NOAA Daily Samples

Inorganics	Up/Downstream Date Collected	Sample ID	4-Jun-97		5-Jun-97		6-Jun-97		9-Jun-97	
			Up	Down	Up	Down	Up	Down	Up	Down
Aluminum	UG/L	F40191	105 <	82.7 <	F40201	F30201	F40211	F30211	F40221	F30221
Antimony	UG/L	2.3 U	2.3 U	2.3 U	162 <	177 <	104 <	169 <	308 <	309 <
Arsenic	UG/L	2.8 U	2.8 U	2.8 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U
Barium	UG/L	44.4 <	44.4 <	45.4 <	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U
Beryllium	UG/L	0.1 U	0.1 U	0.1 U	45.6 <	44.7 <	46.7 <	48.4 <	44.1 <	45.6 <
Boron	UG/L	53.5 <	59.1 <	59.1 <	0.16 <	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Cadmium	UG/L	0.4 U	0.4 U	0.4 U	52.4 <	52.5 <	39.5 <	36.5 <	39.7 <	32.8 <
Calcium	UG/L	39700 <	41000 <	41000 <	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
Chromium	UG/L	0.8 U	0.8 U	0.8 U	39000 <	38200 <	45000 <	44900 <	35400 <	37400 <
Cobalt	UG/L	1.3 U	1.3 U	1.3 U	1.5 <	2 <	0.81 <	1.3 <	2.4 <	1.4 <
Copper	UG/L	7 <	8 <	8 <	1.3 U	1.3 U	1.3 U	1.4 <	1.3 U	1.3 U
Iron	UG/L	165 <	158 <	158 <	6.5 <	7.5 <	2.7 <	1.9 <	9.3 <	8.5 <
Lead	UG/L	2.1 U	2.1 U	2.1 U	352 <	341 <	188 <	255 <	506 <	573 <
Magnesium	UG/L	9840 <	10200 <	10200 <	2.1 U	2.1 U	2.1 U	2.1 U	3 <	2.2 <
Manganese	UG/L	70.2 <	55.3 <	55.3 <	8800 <	8570 <	10600 <	10800 <	7850 <	8570 <
Mercury	UG/L	0.44 <	0.57 <	0.57 <	85.2 <	84 <	56.8 <	56 <	132 <	125 <
Molybdenum	UG/L	2.2 U	2.2 U	2.2 U	0.37 <	0.49 <	0.46 <	0.62 <	1.6 <	1.9 <
Nickel	UG/L	1.8 U	2.3 <	2.3 <	2.2 U	3 <	2.2 U	2.2 U	2.2 U	2.2 U
Potassium	UG/L	1610 <	1690 <	1690 <	1.8 U	1.9 <	2.3 <	1.8 U	1.8 U	1.8 U
Selenium	UG/L	3.5 U	3.5 U	3.5 U	1530 <	1580 <	1630 <	1710 <	1600 <	1710 <
Silica	UG/L	5790 <	6130 <	6130 <	3.5 U	3.5 U	3.5 U	3.8 <	3.5 U	3.5 U
Silver	UG/L	1.3 U	1.3 U	1.3 U	5600 <	5880 <	6840 <	7330 <	5300 <	5620 <
Sodium	UG/L	7000 <	6730 <	6730 <	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
Thallium	UG/L	4.5 U	4.5 <	4.5 <	7050 <	6450 <	8090 <	7300 <	5840 <	5890 <
Vanadium	UG/L	0.7 U	0.7 U	0.7 U	4.5 U	4.8 <	4.5 U	4.5 U	5.3 <	4.5 U
Zinc	UG/L	27.2 <	22.6 <	22.6 <	0.7 U	0.8 <	0.88 <	0.7 U	0.89 <	0.84 <
					41 <	36.8 <	23 <	20 <	47.6 <	36.7 <

Appendix C
NOAA Daily Samples

	Up/Downstream	Up	11-Jun-97	Down	11-Jun-97	Down	12-Jun-97	Up	12-Jun-97	Down	13-Jun-97	Up	13-Jun-97	Down
	Date Collected	Sample ID	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L
Inorganics														
Aluminum			106 <	F60231-FR	F40231	152 <	11-Jun-97	F50231-FR	F30231	F40241	F30241	F40251	F30251	
Antimony	UG/L	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	200 <
Arsenic	UG/L	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	2.3 U
Barium	UG/L	46.6 <	46 <	48.5 <	48.5 <	48.5 <	48.5 <	48.5 <	48.5 <	48.5 <	48.5 <	48.5 <	48.5 <	2.8 U
Beryllium	UG/L	0.14 <	0.27 <	0.17 <	0.17 <	0.17 <	0.17 <	0.17 <	0.17 <	0.17 <	0.17 <	0.17 <	0.17 <	55 <
Boron	UG/L	57.8 <	49.1 <	45.8 <	45.8 <	45.8 <	45.8 <	45.8 <	45.8 <	45.8 <	45.8 <	45.8 <	45.8 <	0.35 <
Cadmium	UG/L	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	57.4 <
Calcium	UG/L	39900 <	39600 <	41500 <	41500 <	41500 <	41500 <	41500 <	41500 <	41500 <	41500 <	41500 <	41500 <	0.56 <
Chromium	UG/L	0.8 U	0.91 <	1.2 <	1.2 <	1.2 <	1.2 <	1.2 <	1.2 <	1.2 <	1.2 <	1.2 <	1.2 <	45100 <
Cobalt	UG/L	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.4 <
Copper	UG/L	6 <	5.2 <	7 <	7 <	7 <	7 <	7 <	7 <	7 <	7 <	7 <	7 <	1.3 U
Iron	UG/L	173 <	207 <	215 <	215 <	215 <	215 <	215 <	215 <	215 <	215 <	215 <	215 <	2.5 <
Lead	UG/L	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	269 <
Magnesium	UG/L	9680 <	9570 <	9940 <	9940 <	9940 <	9940 <	9940 <	9940 <	9940 <	9940 <	9940 <	9940 <	4.7 <
Manganese	UG/L	66.5 <	67.9 <	57.2 <	57.2 <	57.2 <	57.2 <	57.2 <	57.2 <	57.2 <	57.2 <	57.2 <	57.2 <	9660 <
Mercury	UG/L	0.5 <	0.43 <	0.47 <	0.47 <	0.47 <	0.47 <	0.47 <	0.47 <	0.47 <	0.47 <	0.47 <	0.47 <	69.5 <
Molybdenum	UG/L	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	0.62 <
Nickel	UG/L	1.8 U	1.8 <	3.4 <	3.4 <	3.4 <	3.4 <	3.4 <	3.4 <	3.4 <	3.4 <	3.4 <	3.4 <	2.2 U
Potassium	UG/L	1570 <	1570 <	1690 <	1690 <	1690 <	1690 <	1690 <	1690 <	1690 <	1690 <	1690 <	1690 <	1.8 U
Selenium	UG/L	3.5 U	3.7 <	3.7 <	3.7 <	3.7 <	3.7 <	3.7 <	3.7 <	3.7 <	3.7 <	3.7 <	3.7 <	1830 <
Silica	UG/L	5670 <	5700 <	6100 <	6100 <	6100 <	6100 <	6100 <	6100 <	6100 <	6100 <	6100 <	6100 <	3.5 U
Silver	UG/L	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	6850 <
Sodium	UG/L	7150 <	7060 <	6890 <	6890 <	6890 <	6890 <	6890 <	6890 <	6890 <	6890 <	6890 <	6890 <	1.3 U
Thallium	UG/L	4.5 U	4.5 U	4.5 U	4.5 U	4.5 U	4.5 U	4.5 U	4.5 U	4.5 U	4.5 U	4.5 U	4.5 U	7070 <
Vanadium	UG/L	0.7 U	1.1 <	0.74 <	0.74 <	0.74 <	0.74 <	0.74 <	0.74 <	0.74 <	0.74 <	0.74 <	0.74 <	4.5 U
Zinc	UG/L	31.6 <	28.2 <	27.4 <	27.4 <	27.4 <	27.4 <	27.4 <	27.4 <	27.4 <	27.4 <	27.4 <	27.4 <	0.7 U
														33.2 <

Appendix C
NOAA Daily Samples

	Up/Downstream Date Collected	Up	Down	Up	Down	Up	Down	Up	Down
	Sample ID	16-Jun-97	16-Jun-97	18-Jun-97	18-Jun-97	19-Jun-97	19-Jun-97	20-Jun-97	20-Jun-97
Inorganics									
Aluminum	F40261	224 <	400 <	122 <	149 <	81.6 <	132 <	179 <	154 <
Antimony	UG/L	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U
Arsenic	UG/L	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U
Barium	UG/L	47.7 <	49.1 <	53.2 <	55.9 <	49.8 <	52.4 <	47.2 <	48.1 <
Beryllium	UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Boron	UG/L	40 <	38.5 <	88.3 <	68 <	39.1 <	40.3 <	47.1 <	41 <
Cadmium	UG/L	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
Calcium	UG/L	43800 <	42600 <	47600 <	48500 <	47000 <	47500 <	43200 <	43300 <
Chromium	UG/L	0.89 <	0.8 U	0.9 <	0.95 <	1 <	1.4 <	0.8 U	0.8 U
Cobalt	UG/L	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
Copper	UG/L	1.2 <	0.9 U	4.3 <	4.4 <	4.6 <	3.2 <	5.8 <	5.4 <
Iron	UG/L	245 <	283 <	166 <	168 <	153 <	209 <	199 <	171 <
Lead	UG/L	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	3.2 <	2.1 U
Magnesium	UG/L	10200 <	10000 <	10900 <	11500 <	10700 <	11100 <	10700 <	11000 <
Manganese	UG/L	58.4 <	55 <	44.4 <	46.2 <	45.7 <	52.9 <	39.7 <	35.3 <
Mercury	UG/L	0.33 <	0.43 <	0.52 <	0.42 <	0.44 <	0.61 <	0.42 <	0.3 <
Molybdenum	UG/L	2.2 U	2.2 U	3.8 <	4.5 <	2.2 U	2.2 <	3.3 <	2.5 <
Nickel	UG/L	1.8 U	1.8 U	1.8 U	2.7 <	2.6 <	2.9 <	2.9 <	1.8 U
Potassium	UG/L	1640 <	1710 <	1720 <	1950 <	1680 <	1770 <	1690 <	1740 <
Selenium	UG/L	3.5 U	3.5 U	3.5 U	3.5 U	3.5 U	3.5 U	3.5 U	3.5 U
Silica	UG/L	7180 <	8050 <	7460 <	8120 <	7090 <	7680 <	7220 <	7570 <
Silver	UG/L	1.4 <	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
Sodium	UG/L	7770 <	6890 <	8510 <	8220 <	7700 <	7340 <	7770 <	7270 <
Thallium	UG/L	4.5 U	4.5 U	4.5 U	4.5 U	4.5 U	4.5 U	4.5 U	4.5 U
Vanadium	UG/L	0.7 U	0.7 U	0.82 <	0.7 U	0.7 U	0.7 U	0.98 <	0.7 U
Zinc	UG/L	26.9 <	22.5 <	31.2 <	28.9 <	29.5 <	21 <	29.1 <	19 <

Appendix C
NOAA Daily Samples

	Up/Downstream	Date Collected	Up	Down	Up	Down	Up	Down
	Sample ID		23-Jun-97	23-Jun-97	25-Jun-97	25-Jun-97	26-Jun-97	26-Jun-97
Inorganics			F40301	F30301	F40311	F30311	F40321	F30321
Aluminum	UG/L	53.1 <	67.5 <	116 <	96.1 <	130 <	2.3 U	2.3 U
Antimony	UG/L	2.3 U	5 <	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U
Arsenic	UG/L	2.8 U	2.9 <	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U
Barium	UG/L	46.8 <	48.4 <	46.8 <	46.4 <	45.6 <	45.6 <	45.6 <
Beryllium	UG/L	0.1 U	0.1 U	0.31 <	0.31 <	0.1 U	0.1 U	0.1 U
Boron	UG/L	29.6 <	27.2 <	51.9 <	49.5 <	48 <	48 <	48 <
Cadmium	UG/L	0.4 U	0.4 U	0.51 <	0.48 <	0.58 <	0.58 <	0.58 <
Calcium	UG/L	40800 <	41700 <	43600 <	45400 <	43500 <	43500 <	43500 <
Chromium	UG/L	1 <	1.1 <	1.3 <	1.1 <	1.7 <	1.7 <	1.7 <
Cobalt	UG/L	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
Copper	UG/L	7.4 <	6.6 <	1.5 <	3.1 <	2.7 <	2.7 <	2.7 <
Iron	UG/L	128 <	138 <	107 <	149 <	146 <	146 <	146 <
Lead	UG/L	2.9 <	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U
Magnesium	UG/L	9750 <	10200 <	10700 <	11000 <	10800 <	10800 <	10800 <
Manganese	UG/L	37 <	38.4 <	41.3 <	47.4 <	37.4 <	37.4 <	37.4 <
Mercury	UG/L	0.24 <	0.98 <	0.4 <	0.35 <	0.4 <	0.4 <	0.4 <
Molybdenum	UG/L	2.7 <	2.2 <	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U
Nickel	UG/L	1.8 U	1.8 U	1.8 <	1.8 U	2 <	2 <	2 <
Potassium	UG/L	1570 <	1680 <	1640 <	1720 <	1680 <	1680 <	1680 <
Selenium	UG/L	3.5 U	3.5 U	3.5 U	3.5 U	3.5 U	3.5 U	3.5 U
Silica	UG/L	6000 <	6530 <	6690 <	6890 <	7140 <	7140 <	7140 <
Silver	UG/L	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
Sodium	UG/L	7270 <	6930 <	7370 <	7400 <	6830 <	6830 <	6830 <
Thallium	UG/L	4.5 U	4.5 U	4.5 U	4.5 U	4.5 U	4.5 U	4.5 U
Vanadium	UG/L	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U
Zinc	UG/L	29.3 <	20.2 <	25.6 <	29.1 <	22.4 <	22.4 <	22.4 <

Appendix C NOAA Daily Samples

	Up/Downstream	Date Collected	Up	Down	27-Jun-97	Down	27-Jun-97	Up	30-Jun-97	Down	30-Jun-97	Up	2-Jul-97	Down	2-Jul-97
		Sample ID													
Inorganics															
Aluminum	UG/L	F60331-FR	72.8 <		F40331	58 <	F50331-FR	116 <	F30331	73.5 <	F40341	73.3 <	F40351	242 <	F30351
Antimony	UG/L		2.3 U			2.3 U		2.3 U		2.3 U		2.3 U		2.3 U	
Arsenic	UG/L		2.8 U			3.2 <		2.8 U		3.1 <		2.8 U		2.8 U	
Barium	UG/L		43 <			41.7 <		43.9 <		46 <		45 <		46.4 <	
Beryllium	UG/L		0.1 U			0.1 U		0.1 U		0.1 U		0.1 U		0.1 U	
Boron	UG/L		51.3 <			45.5 <		53.1 <		49.2 <		29.3 <		52.3 <	
Cadmium	UG/L		0.4 U			0.4 U		0.4 U		0.4 U		0.4 U		0.85 <	
Calcium	UG/L		42700 <			40800 <		41600 <		43100 <		44900 <		41200 <	
Chromium	UG/L		0.8 U			0.8 U		0.8 U		0.8 U		0.8 U		1.5 <	
Cobalt	UG/L		1.3 U			1.3 U		1.3 U		1.3 U		1.3 U		1.3 U	
Copper	UG/L		3 <			2.6 <		3.2 <		2.5 <		1.8 <		4.6 <	
Iron	UG/L		125 <			122 <		170 <		130 <		118 <		378 <	
Lead	UG/L		2.1 U			2.1 U		2.1 U		2.1 U		2.1 U		2.1 U	
Magnesium	UG/L		10100 <			9720 <		10100 <		10500 <		10300 <		9090 <	
Manganese	UG/L		51.1 <			50.1 <		41.2 <		42 <		50.1 <		52.8 <	
Mercury	UG/L		0.29 <			0.27 <		0.41 <		0.46 <		0.29 <		0.45 <	
Molybdenum	UG/L		2.2 U			2.2 U		2.2 U		2.2 U		4.6 <		2.2 U	
Nickel	UG/L		1.8 U			1.8 U		12.9 <		1.8 U		1.8 U		4.1 <	
Potassium	UG/L		1610 <			1580 <		1650 <		1730 <		1490 <		1770 <	
Selenium	UG/L		3.5 U			3.5 U		3.5 U		3.5 U		3.5 U		3.5 U	
Silica	UG/L		6590 <			6140 <		6920 <		6960 <		6600 <		6790 <	
Silver	UG/L		1.3 U			1.3 U		1.3 U		1.3 U		1.3 U		1.3 U	
Sodium	UG/L		7040 <			6840 <		6490 <		6840 <		7520 <		6570 <	
Thallium	UG/L		4.5 U			4.5 U		4.5 U		4.5 U		4.5 U		4.5 U	
Vanadium	UG/L		1.2 <			1.2 <		1 <		1.1 <		0.7 U		0.73 <	
Zinc	UG/L		19.7 <			19 <		16.1 <		15 <		36.2 <		27.5 <	

Appendix C
NOAA Daily Samples

	Up/Downstream	Up	Down	Up	Down	Up	Down	Up	Down
	Date Collected	7-Jul-97	7-Jul-97	9-Jul-97	9-Jul-97	10-Jul-97	10-Jul-97	11-Jul-97	11-Jul-97
	Sample ID	F40361	F30361	F40371	F30371	F40381	F30381	F40391	F30391
Inorganics	Aluminum	UG/L	172 <	211 <	132 <	135 <	542 <	456 <	157 <
	Antimony	UG/L	2.3 U	2.4 <	2.3 U	2.3 U	2.3 U	3.1 <	2.3 <
	Arsenic	UG/L	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U
	Barium	UG/L	44.4 <	48 <	44.5 <	46.4 <	46.3 <	48.4 <	50.6 <
	Beryllium	UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
	Boron	UG/L	25.3 <	33.2 <	60.8 <	60.9 <	131 <	182 <	33.9 <
	Cadmium	UG/L	0.4 U	0.4 U	0.4 U	0.4 U	0.51 <	0.4 U	0.46 <
	Calcium	UG/L	40500 <	42000 <	42100 <	42100 <	39200 <	39900 <	44600 <
	Chromium	UG/L	0.8 U	1.5 <	1.1 <	1.2 <	5.3 <	5.6 <	2.4 <
	Cobalt	UG/L	1.3 U	1.3 U	1.3 <	1.6 <	1.3 U	1.3 U	1.3 U
Metals	Copper	UG/L	2 <	2.6 <	1.5 <	2 <	2.9 <	3.5 <	0.9 U
	Iron	UG/L	143 <	236 <	153 <	174 <	431 <	388 <	121 <
	Lead	UG/L	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	3 <	16.8 <
	Magnesium	UG/L	9630 <	10200 <	10200 <	10400 <	8430 <	8870 <	10700 <
	Manganese	UG/L	56.9 <	50.4 <	59.9 <	49.4 <	58.1 <	50.2 <	31.2 <
	Mercury	UG/L	0.29 <	0.31 <	0.53 <	0.7 <	0.72 <	0.73 <	0.62 <
	Molybdenum	UG/L	2.4 <	3.9 <	2.2 U	3 <	2.2 U	2.2 U	2.2 U
	Nickel	UG/L	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	2.5 <	1.8 U
	Potassium	UG/L	1610 <	1740 <	1530 <	1600 <	1780 <	1830 <	1700 <
	Selenium	UG/L	3.5 U	3.5 U	3.5 U	3.5 U	3.5 U	3.5 U	3.5 U
Nonmetals	Silica	UG/L	6950 <	7730 <	6890 <	7180 <	7580 <	7780 <	7620 <
	Silver	UG/L	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
	Sodium	UG/L	6760 <	6680 <	6840 <	6680 <	6730 <	6700 <	7450 <
	Thallium	UG/L	4.5 U	4.5 U	4.5 U	4.5 U	4.5 U	4.5 U	4.5 U
	Vanadium	UG/L	0.7 U	0.72 <	1.3 <	1.2 <	1.4 <	1.7 <	0.78 <
	Zinc	UG/L	26 <	33.3 <	31.4 <	23.1 <	33.6 <	22.8 <	18 <

Appendix C NOAA Daily Samples

	Up/Downstream Date Collected	Up 14-Jul-97 F40401	Down 14-Jul-97 F30401	Up 16-Jul-97 F40411	Down 16-Jul-97 F30411	Up 17-Jul-97 F40421	Down 17-Jul-97 F30421
Inorganics	Sample ID						
Aluminum	UG/L	132 <	205 <	194 <	136 <	147 <	136 <
Antimony	UG/L	2.3 U	3.2 <	2 U	2 U	2 U	2 U
Arsenic	UG/L	2.8 U	2.8 U	3.1 U	3.1 U	3.1 U	3.1 U
Barium	UG/L	46.5 <	47.6 <	43.3 <	45.9 <	43.4 <	44.7 <
Beryllium	UG/L	0.36 <	0.37 <	0.2 U	0.2 U	0.2 U	0.2 U
Boron	UG/L	32.1 <	61.4 <	59.7 <	76.3 <	41 <	76.3 <
Cadmium	UG/L	0.48 <	0.4 U	0.4 U	0.4 U	0.42 <	0.4 U
Calcium	UG/L	40900 <	40300 <	41900 <	43500 <	41300 <	41100 <
Chromium	UG/L	2.7 <	2.5 <	1.7 <	1.6 <	7.9 <	1 <
Cobalt	UG/L	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
Copper	UG/L	3.9 <	4 <	2.7 <	2.2 <	4.4 <	4.5 <
Iron	UG/L	127 <	222 <	146 <	141 <	218 <	133 <
Lead	UG/L	2.6 <	2.1 U	2 U	2 U	2 U	2 U
Magnesium	UG/L	10200 <	10200 <	10200 <	10600 <	10200 <	10300 <
Manganese	UG/L	37.5 <	32.5 <	34.4 <	26.9 <	39 <	26.3 <
Mercury	UG/L	0.29 <	0.88 <	0.3 <	0.63 <	0.44 <	0.54 <
Molybdenum	UG/L	2.2 U	2.2 U	2.6 U	2.6 U	2.6 U	2.6 U
Nickel	UG/L	2.8 <	2.3 <	2.3 <	2.7 <	2.5 <	1.6 U
Potassium	UG/L	1510 <	1580 <	1530 <	1620 <	1560 <	1610 <
Selenium	UG/L	3.5 U	3.5 U	3.1 U	3.1 U	3.1 U	3.1 U
Silica	UG/L	6530 <	6890 <	6820 <	7130 <	6800 <	6980 <
Silver	UG/L	1.3 U	1.3 U	0.7 U	0.7 U	0.7 U	0.7 U
Sodium	UG/L	7050 <	6710 <	7030 <	6820 <	6760 <	6630 <
Thallium	UG/L	4.5 U	4.5 U	3.8 U	3.8 U	3.8 U	3.8 U
Vanadium	UG/L	1.1 <	2 <	0.7 U	0.7 U	0.7 U	0.7 U
Zinc	UG/L	31.1 <	22.3 <	27.2 <	21.6 <	28.3 <	18.9 <

Appendix C NOAA Daily Samples

	Up/Downstream	Up	Up	Down	Down
	Date Collected	18-Jul-97	18-Jul-97	18-Jul-97	18-Jul-97
	Sample ID	F60431-FR	F40431	F50431-FR	F30431
Inorganics	UG/L	125 <	113 <	143 <	95.4 <
Aluminum	UG/L	2 U	2.8 <	2 U	2 U
Antimony	UG/L	3.1 U	3.1 U	3.1 U	3.1 U
Arsenic	UG/L	44.2 <	43.6 <	46.7 <	45.6 <
Barium	UG/L	0.3 U	0.3 U	0.3 U	0.3 U
Beryllium	UG/L	46.9 <	50.4 <	61.4 <	53.9 <
Boron	UG/L	0.5 <	0.5 <	0.93 <	0.4 U
Cadmium	UG/L	44300 <	43900 <	44400 <	43900 <
Calcium	UG/L	0.8 U	0.8 U	0.8 U	0.8 U
Chromium	UG/L	1.3 U	1.3 U	1.3 U	1.3 U
Cobalt	UG/L	1.4 U	1.9 <	1.4 U	1.4 U
Copper	UG/L	120 <	107 <	128 <	111 <
Iron	UG/L	2.2 <	3.1 <	2.1 <	2 U
Lead	UG/L	10600 <	10500 <	10800 <	10600 <
Magnesium	UG/L	35.7 <	36.5 <	27.4 <	26.9 <
Manganese	UG/L	0.3 <	0.39 <	0.49 <	0.42 <
Mercury	UG/L	2.6 U	2.6 U	2.6 U	2.6 U
Molybdenum	UG/L	2.8 <	2.3 <	1.6 U	3 <
Nickel	UG/L	1550 <	1530 <	1640 <	1590 <
Potassium	UG/L	3.1 U	3.1 U	3.1 U	3.1 U
Selenium	UG/L	6920 <	6790 <	7150 <	7000 <
Silica	UG/L	0.7 U	0.7 U	0.7 U	0.7 U
Silver	UG/L	7040 <	6930 <	6900 <	6700 <
Sodium	UG/L	3.8 U	3.8 U	3.8 U	3.8 U
Thallium	UG/L	0.7 U	0.7 U	0.97 <	0.85 <
Vanadium	UG/L	37.8 <	28.3 <	20 <	18.9 <
Zinc	UG/L				

Appendix C
NOAA Daily Samples

	Up/Downstream Date Collected	Up 23-Jul-97 F40451	Down 23-Jul-97 F30451	Up 24-Jul-97 F40461	Down 24-Jul-97 F30461	Up 25-Jul-97 F40471	Down 25-Jul-97 F30471
Inorganics	Sample ID						
Aluminum	UG/L	576 <	666 <	272 <	192 <	235 <	168 <
Antimony	UG/L	2 U	2 U	2 U	2 U	2 U	2 U
Arsenic	UG/L	3.3 <	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U
Barium	UG/L	70.2 <	68.3 <	66.9 <	68.7 <	64.5 <	67.8 <
Beryllium	UG/L	0.3 U	0.3 U	0.2 U	0.2 U	0.3 U	0.3 U
Boron	UG/L	58.2 <	49.7 <	67.2 <	44 <	44.9 <	46.4 <
Cadmium	UG/L	0.4 U	0.4 U	0.51 <	0.4 U	0.46 <	0.4 U
Calcium	UG/L	46000 <	42500 <	53300 <	51700 <	47800 <	48200 <
Chromium	UG/L	3.8 <	4 <	1.8 <	1.6 <	1.4 <	1.9 <
Cobalt	UG/L	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
Copper	UG/L	13.3 <	11.7 <	9.9 <	8 <	3.7 <	3.6 <
Iron	UG/L	909 <	1110 <	429 <	344 <	347 <	293 <
Lead	UG/L	2.6 <	2.8 <	4.6 <	2 U	2 U	2 U
Magnesium	UG/L	9140 <	8360 <	10200 <	9920 <	9870 <	10200 <
Manganese	UG/L	117 <	108 <	50.7 <	45.8 <	103 <	69.5 <
Mercury	UG/L	2.3 <	2.2 <	0.64 <	0.69 <	1.1 <	1.3 <
Molybdenum	UG/L	5.4 <	2.6 U	3 <	2.6 U	2.6 U	2.6 U
Nickel	UG/L	2.5 <	3 <	2.2 <	3.6 <	1.6 U	1.6 U
Potassium	UG/L	3670 <	3460 <	2760 <	2800 <	2650 <	2750 <
Selenium	UG/L	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U
Silica	UG/L	6990 <	7310 <	7480 <	7240 <	6890 <	7160 <
Silver	UG/L	1.8 U	1.8 U	0.7 U	1.2 <	0.7 U	0.7 U
Sodium	UG/L	8660 <	7210 <	9800 <	8680 <	9980 <	9550 <
Thallium	UG/L	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
Vanadium	UG/L	1.6 <	2.3 <	0.78 <	0.73 <	1 <	1.2 <
Zinc	UG/L	43.6 <	37.3 <	35.4 <	26.6 <	29.8 <	22.1 <

Appendix C
NOAA Daily Samples

	Up/Downstream Date Collected	Up 28-Jul-97 F40481	Down 28-Jul-97 F30481	Up 30-Jul-97 F40491	Down 30-Jul-97 F30491	Up 31-Jul-97 F40501	Down 31-Jul-97 F30501	Up 1-Aug-97 F40511	Down 1-Aug-97 F30511
Inorganics	Sample ID								
Aluminum	UG/L	95.6 <	127 <	107 <	114 <	95.2 <	159 <	129 <	89.8 <
Antimony	UG/L	2.4 <	2 U	2 U	2.1 <	0.9 U	0.9 U	0.7 U	0.7 U
Arsenic	UG/L	3.1 U	3.1 U	3.1 U	3.1 U	1.4 U	1.4 U	1.4 U	1.4 U
Barium	UG/L	47.7 <	51.5 <	46.4 <	48.9 <	43.2 <	43.1 <	46.4 <	49.1 <
Beryllium	UG/L	0.3 U	0.3 U	0.3 U	0.3 U	0.2 U	0.2 U	0.2 U	0.2 U
Boron	UG/L	27.1 <	27.5 <	82 <	68.3 <	76.4 <	85 <	55.2 <	51.2 <
Cadmium	UG/L	0.4 U	0.4 U	0.41 <	0.4 U	2.5 U	2.5 U	2.5 U	2.5 U
Calcium	UG/L	44900 <	46700 <	45800 <	46600 <	42100 <	39700 <	45100 <	45600 <
Chromium	UG/L	1.3 <	2.7 <	1.1 <	1.4 <	4.4 <	3.7 U	3.7 U	3.7 U
Cobalt	UG/L	1.3 U	1.3 U	1.3 U	1.3 U	4.6 U	4.6 U	4.6 U	4.6 U
Copper	UG/L	1.4 U	1.4 U	1.4 <	4.2 <	5.8 <	4.6 <	7.8 <	4.4 <
Iron	UG/L	103 <	104 <	156 <	184 <	141 <	234 <	183 <	135 <
Lead	UG/L	2 U	2.4 <	5 <	2 U	1 <	0.9 U	1.2 <	1 <
Magnesium	UG/L	10700 <	11200 <	10900 <	11200 <	10000 <	9630 <	11100 <	11400 <
Manganese	UG/L	52.5 <	37.7 <	67 <	44 <	60.1 <	42.9 <	66.5 <	42.4 <
Mercury	UG/L	0.36 <	0.51 <	0.35 <	0.38 <	0.45 <	0.87 <	0.41 <	0.45 <
Molybdenum	UG/L	2.6 U	2.6 U	10.1 U	10.9 <	13.8 U	13.8 U	13.8 U	13.8 U
Nickel	UG/L	1.6 U	1.6 U	1.8 <	2.9 <	11.4 <	8.9 U	15.7 <	13.3 <
Potassium	UG/L	1880 <	2070 <	1230 <	970 <	1970 <	1220 <	1440 <	1230 <
Selenium	UG/L	3.1 U	3.1 U	3.1 U	3.1 U	1.5 U	2.4 <	1.5 U	1.5 U
Silica	UG/L	6960 <	7450 <	7230 <	7710 <	6290 <	6380 <	6900 <	7100 <
Silver	UG/L	0.7 U	0.7 U	1.8 U	1.8 U	11.2 <	9.3 <	3.5 <	2.2 <
Sodium	UG/L	8490 <	8520 <	7920 <	7750 <	7400 <	6850 <	8090 <	8020 <
Thallium	UG/L	3.8 U	3.8 U	3.8 U	3.8 U	0.9 U	0.9 U	0.9 U	0.9 U
Vanadium	UG/L	0.7 U	1.1 <	0.7 U	0.7 U	3.6 U	3.6 U	3.6 U	3.6 U
Zinc	UG/L	17.5 <	15.9 <	20.3 <	15.9 <	21 <	15 <	27.8 <	19.6 <

Appendix C NOAA Daily Samples

	Up/Downstream Date Collected	Up 4-Aug-97 F40521	Down 4-Aug-97 F30521	Up 7-Aug-97 F40541	Down 7-Aug-97 F30541	Up 8-Aug-97 F40551	Down 8-Aug-97 F30551	Up 11-Aug-97 F40561	Down 11-Aug-97 F30561
Inorganics	Sample ID								
Aluminum	UG/L	170 <	158 <	102 <	101 <	80.1 <	102 <	124 <	3270 <
Antimony	UG/L	1 U	0.7 U	2.3 <	2 U	2 U	2 U	2 U	2 U
Arsenic	UG/L	1.2 U	1.2 U	3.1 U	3.7 <	3.1 U	3.1 U	3.1 U	4.5 <
Barium	UG/L	48.3 <	50.6 <	44.3 <	45.5 <	45.6 <	46.8 <	45.6 <	75.1 <
Beryllium	UG/L	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Boron	UG/L	33.7 <	39.5 <	41.5 <	61 <	42.3 <	49.5 <	23.7 <	32.9 <
Cadmium	UG/L	2.5 U	2.5 U	0.4 U	0.4 U	0.61 <	0.44 <	0.4 U	1 <
Calcium	UG/L	46500 <	47100 <	43500 <	43200 <	44400 <	43300 <	41300 <	42200 <
Chromium	UG/L	3.7 U	3.7 U	1.7 <	0.92 <	1.8 <	1.4 <	1.5 <	7.1 <
Cobalt	UG/L	4.6 U	4.6 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	2.7 <
Copper	UG/L	7.3 <	6.1 <	7.4 <	5.2 <	2 <	1.5 <	6.3 <	23.6 <
Iron	UG/L	281 <	138 <	174 <	131 <	149 <	154 <	212 <	4160 <
Lead	UG/L	0.9 U	0.9 U	2 U	2 U	2 U	2 U	2 U	9.9 <
Magnesium	UG/L	11600 <	11900 <	10400 <	10500 <	10700 <	10500 <	10200 <	10600 <
Manganese	UG/L	64.8 <	44.4 <	64.9 <	42.2 <	69 <	41.9 <	65.7 <	259 <
Mercury	UG/L	0.33 <	0.5 <	0.63 <	0.87 <	0.59 <	0.65 <	0.39 <	57.8 <
Molybdenum	UG/L	13.8 U	13.8 U	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U
Nickel	UG/L	8.9 U	8.9 U	2.4 <	1.6 U	2.5 <	3.3 <	6.6 <	12.3 <
Potassium	UG/L	1240 <	1800 <	1710 <	1750 <	1630 <	1660 <	1610 <	2360 <
Selenium	UG/L	1.6 U	1.6 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U
Silica	UG/L	6650 <	7020 <	6610 <	6900 <	6630 <	6820 <	6490 <	14800 <
Silver	UG/L	7.9 <	10.7 <	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U
Sodium	UG/L	7860 <	7550 <	7690 <	7440 <	7610 <	7220 <	6550 <	6340 <
Thallium	UG/L	0.9 U	0.9 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
Vanadium	UG/L	3.6 U	3.6 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	7 <
Zinc	UG/L	30.5 <	22.9 <	24.3 <	19.2 <	24.3 <	18.4 <	38.8 <	81 <

Appendix C NOAA Daily Samples

	Up/Downstream Date Collected	Up 13-Aug-97 F40571	Down 13-Aug-97 F30571	Up 14-Aug-97 F40581	Down 14-Aug-97 F30581	Up 15-Aug-97 F40591	Down 15-Aug-97 F30591	Up 18-Aug-97 F40601	Down 18-Aug-97 F30601
Inorganics	Sample ID								
Aluminum	UG/L	173 <	215 <	225 <	171 <	193 <	222 <	230 <	278 <
Antimony	UG/L	2.6 <	3.3 <	2.1 <	2 U	2 U	2 U	2 U	2 U
Arsenic	UG/L	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.8 <
Barium	UG/L	45.1 <	45.9 <	44.4 <	45.4 <	44.3 <	47.7 <	39.9 <	40.7 <
Beryllium	UG/L	0.3 U	0.3 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U
Boron	UG/L	125 <	120 <	114 <	104 <	52.5 <	94.8 <	37.2 <	39.8 <
Cadmium	UG/L	0.4 U	0.53 <	0.4 U	0.4 U	0.4 U	0.4 U	0.61 <	0.4 U
Calcium	UG/L	42100 <	42700 <	41600 <	42200 <	42300 <	43700 <	37400 <	37400 <
Chromium	UG/L	0.86 <	0.98 <	1.8 <	1.9 <	1.7 <	1.1 <	2.4 <	2.4 <
Cobalt	UG/L	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
Copper	UG/L	8.1 <	5.8 <	1.7 <	1.4 U	1.4 U	1.4 U	7 <	6.8 <
Iron	UG/L	241 <	249 <	219 <	199 <	203 <	199 <	356 <	395 <
Lead	UG/L	2 U	2 U	2 U	2 U	2 U	4 <	2.2 <	2 U
Magnesium	UG/L	10400 <	10500 <	10400 <	10500 <	10400 <	10800 <	8450 <	8670 <
Manganese	UG/L	67.3 <	43.4 <	69.1 <	43.8 <	67 <	43.9 <	71.8 <	53.7 <
Mercury	UG/L	0.5 <	0.64 <	0.54 <	0.41 <	0.34 <	0.53 <	0.6 <	0.61 <
Molybdenum	UG/L	4.1 <	2.6 U	5.2 <	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U
Nickel	UG/L	7.9 <	8.6 <	5.7 <	10.3 <	2.2 <	1.6 U	4.4 <	3.4 <
Potassium	UG/L	1590 <	1660 <	1650 <	1730 <	1690 <	1830 <	1480 <	1590 <
Selenium	UG/L	3.1 U	3.1 U	3.2 <	3.1 U	3.4 <	3.1 U	4.4 <	3.1 U
Silica	UG/L	6550 <	6970 <	6740 <	6780 <	6490 <	7230 <	5710 <	5880 <
Silver	UG/L	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.98 <	0.7 U
Sodium	UG/L	7500 <	7350 <	8230 <	7980 <	9900 <	10200 <	6560 <	6310 <
Thallium	UG/L	3.8 U	3.8 U	5.2 <	5.8 <	3.8 U	4.5 <	3.8 U	3.8 U
Vanadium	UG/L	0.7 U	0.7 U	0.87 <	0.74 <	0.7 U	0.7 U	1.1 <	0.7 U
Zinc	UG/L	30.4 <	23.8 <	34 <	33.7 <	28 <	20.5 <	35.9 <	24.8 <

Appendix C
NOAA Daily Samples

	Up/Downstream Date Collected	Up 20-Aug-97 F40611	Down 20-Aug-97 F30611	Up 21-Aug-97 F40621	Down 21-Aug-97 F30621	Up 25-Aug-97 F60631-FR	Up 25-Aug-97 F40631	Down 25-Aug-97 F50631-FR	Down 25-Aug-97 F30631
Inorganics	Sample ID								
Aluminum	UG/L	769 <	1140 <	162 <	210 <	166 <	193 <	158 <	179 <
Antimony	UG/L	2 U	2 U	3.8 <	2.5 <	2 U	2 U	2 U	2 U
Arsenic	UG/L	3.1 U	3.8 <	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U
Barium	UG/L	42.7 <	43.7 <	48.7 <	51.7 <	44.4 <	44.7 <	45.7 <	45.6 <
Beryllium	UG/L	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Boron	UG/L	44.5 <	59.7 <	73.2 <	63.2 <	36.8 <	32.3 <	27.9 <	37.2 <
Cadmium	UG/L	0.53 <	0.69 <	0.4 U	0.4 U	0.41 <	0.4 U	0.44 <	0.4 U
Calcium	UG/L	38000 <	36400 <	44100 <	45500 <	44000 <	44300 <	45200 <	44900 <
Chromium	UG/L	2.8 <	3.8 <	1.8 <	1.7 <	1 <	1.2 <	0.8 U	0.8 U
Cobalt	UG/L	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
Copper	UG/L	9.7 <	9.6 <	3.8 <	2.8 <	2.4 <	2.2 <	1.4 <	1.9 <
Iron	UG/L	1160 <	1530 <	270 <	297 <	204 <	228 <	166 <	196 <
Lead	UG/L	3.2 <	4.8 <	2.3 <	2 U	2.2 <	2 U	2 U	2 U
Magnesium	UG/L	6270 <	6120 <	9850 <	10100 <	11000 <	11000 <	11400 <	11400 <
Manganese	UG/L	101 <	105 <	60 <	43 <	60 <	62.1 <	28.2 <	29 <
Mercury	UG/L	2.5 <	3.1 <	0.83 <	0.96 <	0.44 <	0.52 <	0.34 <	0.33 <
Molybdenum	UG/L	2.6 U	2.6 U	5.1 <	4.7 <	4.9 <	2.6 U	2.6 <	4.5 <
Nickel	UG/L	4.5 <	5.1 <	3.7 <	4 <	1.8 <	1.9 <	1.6 U	1.6 U
Potassium	UG/L	2040 <	2070 <	2150 <	2030 <	1640 <	1650 <	1730 <	1760 <
Selenium	UG/L	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U
Silica	UG/L	6210 <	7380 <	6420 <	7020 <	7090 <	7190 <	7510 <	7550 <
Silver	UG/L	0.7 U	1.1 <	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U
Sodium	UG/L	6360 <	5310 <	11100 <	10900 <	8050 <	8060 <	7700 <	7690 <
Thallium	UG/L	3.8 U	3.8 U	5.7 <	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
Vanadium	UG/L	2.1 <	2.3 <	0.86 <	0.74 <	0.7 U	0.7 U	0.7 U	0.7 U
Zinc	UG/L	55.2 <	44.7 <	25.8 <	18.1 <	22.2 <	22.8 <	11.8 <	12.2 <

Appendix C NOAA Daily Samples

	Up/Downstream Date Collected	Up 27-Aug-97 F40871	Down Alt. 27-Aug-97 F30871	Up 28-Aug-97 F40881	Down Alt. 28-Aug-97 F30881	Up 29-Aug-97 F40891	Down Alt. 29-Aug-97 F30891	Up 3-Sep-97 F40901	Down Alt. 3-Sep-97 F30901
Inorganics	Sample ID								
Aluminum	UG/L	262 <	219 <	168 <	181 <	162 <	141 <	122 <	181 <
Antimony	UG/L	2 U	2 U	2 U	2.8 <	2 U	2 U	2 U	2 U
Arsenic	UG/L	3.1 U	3.1 U	3.1 U	3.1 U	3.2 <	3.1 U	3.1 U	3.1 U
Barium	UG/L	46.6 <	48.8 <	45.4 <	48.2 <	44.1 <	45.7 <	42.4 <	44.8 <
Beryllium	UG/L	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U
Boron	UG/L	147 <	148 <	86.7 <	91.9 <	69.2 <	98.2 <	76.5 <	79.6 <
Cadmium	UG/L	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
Calcium	UG/L	42900 <	43900 <	41800 <	43000 <	41100 <	41900 <	42100 <	43700 <
Chromium	UG/L	1.6 <	1.4 <	0.8 U	0.89 <	1.5 <	0.8 U	1.1 <	1.3 <
Cobalt	UG/L	1.3 U	1.3 U	4.6 U	4.6 U	4.6 U	4.6 U	1.3 U	1.3 U
Copper	UG/L	7.3 <	6.8 <	1.4 U	1.4 U	3.4 <	5.3 <	2.4 <	3 <
Iron	UG/L	228 <	206 <	195 <	195 <	136 <	113 <	164 <	169 <
Lead	UG/L	2 U	2 U	2 U	2.6 <	2 U	2 U	2 U	2 U
Magnesium	UG/L	11300 <	11600 <	10700 <	11200 <	10700 <	11000 <	11000 <	11700 <
Manganese	UG/L	51.2 <	27.4 <	49.2 <	26.4 <	46.1 <	22.2 <	48.9 <	26.3 <
Mercury	UG/L	0.52 <	0.37 <	0.47 <	0.42 <	0.43 <	0.27 <	0.44 <	0.34 <
Molybdenum	UG/L	2.6 U	2.6 U	10.1 U	10.1 U	10.1 U	10.1 U	2.6 U	2.6 U
Nickel	UG/L	3.5 <	1.9 <	1.6 U	1.6 U	3.5 <	3 <	2.2 <	1.7 <
Potassium	UG/L	1790 <	1870 <	1740 <	1870 <	1780 <	1910 <	1570 <	1740 <
Selenium	UG/L	3.1 U	3.1 <	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U
Silica	UG/L	7250 <	7690 <	6620 <	7020 <	6520 <	6880 <	6590 <	7340 <
Silver	UG/L	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U
Sodium	UG/L	11400 <	11300 <	11900 <	11800 <	12300 <	12000 <	7850 <	7470 <
Thallium	UG/L	4.1 <	3.8 U	3.8 U	3.8 U	4.1 <	3.8 U	3.8 U	3.8 U
Vanadium	UG/L	0.7 U	1.3 <	0.7 U	0.7 U	0.7 U	0.78 <	0.7 U	0.7 U
Zinc	UG/L	33 <	63.6 <	22.1 <	14.6 <	22.2 <	16 <	21.1 <	12.7 <

Appendix C

NOAA Daily Samples

	Up/Downstream Date Collected	Up 4-Sep-97 F40911	Down 4-Sep-97 F30921	Down Alt. 4-Sep-97 F30911	Up 5-Sep-97 F40931	Down 5-Sep-97 F30641	Down Alt. 5-Sep-97 F30931
Inorganics	Sample ID						
Aluminum	UG/L	179 <	311 <	164 <	169 <	137 <	124 <
Antimony	UG/L	2 U	2 U	2 U	2 U	2 U	2 U
Arsenic	UG/L	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U
Barium	UG/L	44.2 <	47.1 <	45 <	41.6 <	45.1 <	48.3 <
Beryllium	UG/L	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Boron	UG/L	94.6 <	103 <	105 <	71.2 <	64.7 <	86.3 <
Cadmium	UG/L	0.4 U	0.4 U	0.4 U	0.47 <	0.5 <	0.4 U
Calcium	UG/L	42800 <	43500 <	43800 <	42300 <	43500 <	45800 <
Chromium	UG/L	1.6 <	1.6 <	1.4 <	1.4 <	1.4 <	0.8 U
Cobalt	UG/L	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
Copper	UG/L	2.4 <	2.8 <	2 <	5.3 <	2 <	2.4 <
Iron	UG/L	165 <	274 <	132 <	146 <	122 <	108 <
Lead	UG/L	2 U	2 U	2.1 <	2.3 <	2 U	2 U
Magnesium	UG/L	11400 <	11700 <	11700 <	10900 <	11400 <	12400 <
Manganese	UG/L	48.6 <	36.4 <	23.4 <	33.4 <	21.9 <	19.3 <
Mercury	UG/L	0.39 <	0.59 <	0.23 <	0.57 <	0.4 <	0.3 <
Molybdenum	UG/L	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U
Nickel	UG/L	2.1 <	1.8 <	1.6 U	1.6 U	1.6 U	1.9 <
Potassium	UG/L	1560 <	1640 <	1640 <	1630 <	1670 <	1840 <
Selenium	UG/L	3.1 U	3.1 U	3.1 <	3.1 U	3.1 U	3.1 U
Silica	UG/L	6700 <	7460 <	7060 <	6700 <	6810 <	7250 <
Silver	UG/L	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U
Sodium	UG/L	9430 <	9410 <	9110 <	11200 <	11200 <	11700 <
Thallium	UG/L	5.2 <	3.8 U	3.8 U	3.8 U	3.8 U	6.6 <
Vanadium	UG/L	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U
Zinc	UG/L	19.8 <	17.2 <	11.9 <	19.6 <	11.5 <	12.3 <

Appendix C NOAA Daily Samples

	Up/Downstream Date Collected	Up	Down	Down Alt.	Up	Down	Down Alt.	Up	Down	Down Alt.
		8-Sep-97 F41001	8-Sep-97 F31001	8-Sep-97 F71001	10-Sep-97 F41011	10-Sep-97 F31011	10-Sep-97 F71011	11-Sep-97 F41021	11-Sep-97 F31021	11-Sep-97 F71021
Inorganics	Sample ID									
Aluminum	UG/L	118 <	80.3 <	126 <	232 <	303 <	420 <	186 <	164 <	123 <
Antimony	UG/L	2.2 <	2 U	2 U	2 U	2 U	2 U	2 U	2 U	3.1 <
Arsenic	UG/L	3.1 U	3.1 U	3.1 U	3.1 U	3.4 <	3.1 U	4.3 <	3.1 U	3.1 U
Barium	UG/L	43.2 <	44.7 <	45.6 <	45.7 <	45.3 <	46.5 <	44.3 <	45.5 <	46.5 <
Beryllium	UG/L	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Boron	UG/L	157 <	223 <	203 <	712 <	637 <	334 <	82.9 <	106 <	138 <
Cadmium	UG/L	0.4 U	0.4 U	0.4 U	0.47 <	0.54 <	0.41 <	0.4 U	0.4 U	0.4 U
Calcium	UG/L	43900 <	44200 <	43600 <	42400 <	40300 <	40800 <	41200 <	41100 <	42000 <
Chromium	UG/L	7 <	7.6 <	5.5 <	2.8 <	2.5 <	1.4 <	0.86 <	1.2 <	0.8 U
Cobalt	UG/L	1.3 U	1.3 U	1.5 <	1.3 U	1.3 U	1.7 <	1.3 U	1.3 U	1.3 U
Copper	UG/L	2.1 <	2.1 <	2.6 <	8.8 <	7 <	6.8 <	7.6 <	4.5 <	7 <
Iron	UG/L	127 <	90.2 <	122 <	185 <	200 <	361 <	195 <	199 <	120 <
Lead	UG/L	2 U	2 U	2 <	2 U	2 U	2 U	2 U	2 <	2 U
Magnesium	UG/L	11200 <	11600 <	11800 <	10900 <	10600 <	10800 <	11000 <	11100 <	11400 <
Manganese	UG/L	35.2 <	23 <	22.5 <	51.4 <	34.2 <	40 <	50.5 <	34.8 <	26.9 <
Mercury	UG/L	0.37 <	0.35 <	0.24 <	0.38 <	0.46 <	0.58 <	0.42 <	0.48 <	0.3 <
Molybdenum	UG/L	4.4 <	6 <	5.2 <	2.6 U	3.8 <	2.6 U	2.6 U	2.6 U	2.6 U
Nickel	UG/L	4.7 <	1.9 <	2.1 <	3.2 <	2.1 <	1.7 <	1.6 U	1.6 U	1.6 U
Potassium	UG/L	1620 <	1690 <	1730 <	1720 <	1700 <	1830 <	1670 <	1630 <	1800 <
Selenium	UG/L	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U
Silica	UG/L	6470 <	6780 <	6970 <	6680 <	7390 <	7530 <	6800 <	6490 <	6690 <
Silver	UG/L	0.7 U	0.7 U	0.7 U	0.7 <	0.79 <	0.7 U	0.7 U	0.7 U	0.7 U
Sodium	UG/L	9770 <	9430 <	8850 <	8700 <	8000 <	7650 <	7820 <	7610 <	7460 <
Thallium	UG/L	3.8 U	3.8 U	4.5 <	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
Vanadium	UG/L	0.82 <	0.91 <	0.77 <	1 <	1.4 <	1.5 <	0.99 <	0.7 U	0.7 U
Zinc	UG/L	24.9 <	12.8 <	14.9 <	37.7 <	27.4 <	64.8 <	31.9 <	20.9 <	21.5 <

Appendix C NOAA Daily Samples

	Up/Downstream Date Collected	Up	Down	Down Alt.	Up	Down	Down Alt.	Up	Down	Down Alt.
		12-Sep-97 F41031	12-Sep-97 F31031	12-Sep-97 F71031	15-Sep-97 F41041	15-Sep-97 F31041	15-Sep-97 F71041	17-Sep-97 F41051	17-Sep-97 F31051	17-Sep-97 F71051
Inorganics	Sample ID									
Aluminum	UG/L	193 <	208 <	153 <	132 <	194 <	239 <	132 <	89.1 <	102 <
Antimony	UG/L	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Arsenic	UG/L	3.1 U	3.1 U	3.3 <	3.1 U	3.1 U	3.2 <	3.1 U	3.1 U	3.1 U
Barium	UG/L	43.3 <	44.9 <	43.8 <	40.9 <	42.4 <	44.1 <	42.2 <	42.2 <	44.7 <
Beryllium	UG/L	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Boron	UG/L	133 <	124 <	108 <	75.8 <	31.6 <	106 <	76.7 <	74 <	97.6 <
Cadmium	UG/L	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
Calcium	UG/L	42300 <	41900 <	40800 <	41100 <	41100 <	42100 <	42500 <	41200 <	43100 <
Chromium	UG/L	1.5 <	1.6 <	1.4 <	1.2 <	0.8 U	0.8 U	0.8 U	2.2 <	0.8 U
Cobalt	UG/L	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
Copper	UG/L	5.9 <	5.9 <	5.7 <	6.4 <	6.1 <	6 <	6.8 <	6.2 <	6.8 <
Iron	UG/L	216 <	184 <	131 <	169 <	217 <	272 <	176 <	119 <	128 <
Lead	UG/L	2 U	2 U	2 U	2 U	2 U	2 U	2 <	2 U	2 U
Magnesium	UG/L	11100 <	11300 <	11100 <	10600 <	10800 <	11100 <	11800 <	11500 <	12100 <
Manganese	UG/L	49.7 <	32.1 <	26.6 <	48.2 <	42 <	39.8 <	48.5 <	32.6 <	29.7 <
Mercury	UG/L	0.51 <	0.5 <	0.48 <	0.33 <	0.57 <	0.59 <	0.44 <	0.47 <	0.37 <
Molybdenum	UG/L	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U	2.9 <	2.6 U
Nickel	UG/L	1.6 U	1.6 U	1.9 <	4.1 <	2 <	1.6 U	1.6 U	1.7 <	1.6 U
Potassium	UG/L	1600 <	1670 <	1680 <	1570 <	1650 <	1720 <	1800 <	1780 <	1860 <
Selenium	UG/L	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	4.7 <
Silica	UG/L	6810 <	7050 <	6890 <	6270 <	6660 <	7120 <	6570 <	6370 <	6790 <
Silver	UG/L	0.7 U	0.7 U	0.85 <	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U
Sodium	UG/L	7750 <	7550 <	7120 <	7020 <	6700 <	6750 <	7930 <	7530 <	7510 <
Thallium	UG/L	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
Vanadium	UG/L	0.85 <	1.2 <	0.72 <	0.7 U	0.7 U	0.7 U	0.84 <	0.85 <	0.77 <
Zinc	UG/L	25 <	20.5 <	20.7 <	29.9 <	18.7 <	18.8 <	24.9 <	17 <	16.3 <

Appendix C NOAA Daily Samples

Up/Downstream Date Collected	Up 18-Sep-97 F41061	Down 18-Sep-97 F31061	Down Alt. 18-Sep-97 F71061	Up 19-Sep-97 F41071	Down 19-Sep-97 F31071	Down Alt. 19-Sep-97 F71071	Up 22-Sep-97 F41081	Down 22-Sep-97 F31081	Down Alt. 22-Sep-97 F71081
Inorganics									
Aluminum	133 <	121 <	337 <	85.5 <	50.5 <	171 <	161 <	129 <	155 <
Antimony	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Arsenic	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U
Barium	42 <	44.8 <	46.6 <	42.3 <	43.1 <	44.5 <	41.1 <	42.9 <	44.3 <
Beryllium	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Boron	50.8 <	115 <	108 <	63.3 <	41.4 <	48.4 <	44.7 <	34.5 <	43.2 <
Cadmium	0.61 <	0.4 <	0.4 U	0.61 <	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
Calcium	41400 <	41900 <	43300 <	43200 <	43600 <	43400 <	43200 <	43500 <	43900 <
Chromium	1.8 <	1.2 <	1 <	3 <	0.92 <	0.8 U	1.7 <	1.5 <	1.7 <
Cobalt	1.3 U	1.3 <	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
Copper	4.5 <	5.6 <	6.9 <	6.3 <	4.5 <	5.1 <	4.5 <	5.7 <	10.4 <
Iron	173 <	149 <	377 <	133 <	108 <	185 <	209 <	178 <	174 <
Lead	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Magnesium	11100 <	11400 <	11800 <	11300 <	11400 <	11600 <	11200 <	11400 <	11300 <
Manganese	48.7 <	34.6 <	49 <	46.1 <	32.9 <	32.4 <	46 <	30.4 <	35.2 <
Mercury	0.49 <	0.39 <	0.8 <	0.5 <	0.46 <	0.96 <	0.57 <	0.39 <	0.63 <
Molybdenum	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U	10.1 U	10.1 U	10.1 U
Nickel	4.3 <	3.2 <	2.7 <	9.9 <	1.6 U	2.8 <	2.1 <	1.6 U	3.8 <
Potassium	1640 <	1720 <	1840 <	1660 <	1650 <	1770 <	1610 <	1630 <	1780 <
Selenium	3.1 U	3.3 <	3.1 U	3.3 <	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U
Silica	6160 <	6450 <	7430 <	6210 <	6400 <	7280 <	6330 <	6390 <	6430 <
Silver	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.9 <	0.93 <	0.85 <
Sodium	7260 <	7310 <	7180 <	7620 <	7200 <	7060 <	7630 <	7420 <	7130 <
Thallium	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
Vanadium	0.7 U	0.74 <	0.8 <	0.7 U	1 <	0.7 U	0.7 U	0.8 <	0.8 <
Zinc	24.3 <	22.2 <	20.5 <	33.6 <	17.4 <	16.5 <	25.7 <	20.8 <	58.3 <

Appendix C
NOAA Daily Samples

Up/Downstream	Up	Up	Down	Down Alt.	Down Alt.	Up	Down	Down Alt.
Date Collected	24-Sep-97	24-Sep-97	24-Sep-97	24-Sep-97	24-Sep-97	25-Sep-97	25-Sep-97	25-Sep-97
Sample ID	F61571-DUP	F41571	F51571-DUP	F31571	F81571-DUP	F71571	F31101	F71101
Inorganics								
Aluminum	217 <	298 <	325 <	214 <	382 <	338 <	176 <	242 <
Antimony	2 U	2 U	2 U	2 U	2 U	2 U	3 <	2 U
Arsenic	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.7 <	3.1 U
Barium	35.3 <	36.4 <	36.1 <	35.2 <	38.3 <	36.1 <	45.9 <	46.3 <
Beryllium	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.2 U	0.2 U
Boron	80.9 <	66.3 <	82.2 <	81.7 <	62.1 <	49.8 <	54.2 <	74.3 <
Cadmium	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	2.5 U	2.5 U
Calcium	30600 <	30200 <	29100 <	30800 <	29400 <	28800 <	40300 <	40600 <
Chromium	0.8 U	0.8 U	0.92 <	0.8 U	1.1 <	0.8 <	2 <	1.3 <
Cobalt	1.4 <	1.3 U	1.6 <	1.3 U	1.6 <	1.3 U	4.6 U	4.6 U
Copper	9 <	10.8 <	8.3 <	10 <	10.8 <	10.2 <	9.5 <	10 <
Iron	251 <	318 <	346 <	280 <	442 <	357 <	291 <	319 <
Lead	2 U	2.5 <	2 U	2.2 <	2 U	2 U	2 U	4.4 <
Magnesium	6100 <	6030 <	5770 <	6090 <	6100 <	5990 <	8450 <	8610 <
Manganese	78 <	91.3 <	89.1 <	81.2 <	110 <	95.6 <	38.2 <	35.5 <
Mercury	1.2 <	2 <	1.4 <	1.7 <	2.7 <	2 <	0.85 <	0.53 <
Molybdenum	7.1 <	4.1 <	2.6 U	3.2 <	5 <	4.9 <	13.8 U	13.8 U
Nickel	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	8.9 U	8.9 U
Potassium	1640 <	1740 <	1650 <	1660 <	1910 <	1870 <	1720 <	1880 <
Selenium	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U
Silica	4200 <	4480 <	4210 <	4150 <	4340 <	4430 <	5120 <	5540 <
Silver	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U
Sodium	4670 <	4320 <	3980 <	4440 <	3860 <	3750 <	6210 <	6070 <
Thallium	8.4 <	6.7 <	7 <	7.5 <	6.9 <	7.4 <	3.8 U	3.8 U
Vanadium	0.84 <	1.3 <	1.2 <	0.7 U	1.1 <	1.4 <	3.6 U	3.6 U
Zinc	72.5 <	61 <	60.2 <	73.7 <	68 <	55.8 <	35.8 <	32.5 <

Appendix C NOAA Daily Samples

	Up/Downstream Date Collected	Up 26-Sep-97 F4111	Down 26-Sep-97 F31111	Down Alt. 26-Sep-97 F71111	Up 29-Sep-97 F41121	Down 29-Sep-97 F31121	Down Alt. 29-Sep-97 F71121	Up 1-Oct-97 F41131	Down 1-Oct-97 F31131	Down Alt. 1-Oct-97 F71131
Inorganics	Sample ID									
Aluminum	UG/L	188 <	313 <	357 <	212 <	203 <	167 <	112 <	126 <	62.3 <
Antimony	UG/L	2.9 <	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Arsenic	UG/L	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U
Barium	UG/L	44 <	46.3 <	47.6 <	45.9 <	45.5 <	46 <	35.2 <	42 <	38.7 <
Beryllium	UG/L	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Boron	UG/L	53.9 <	39.3 <	53.6 <	47 <	32.8 <	32.8 <	55 <	79.8 <	50.6 <
Cadmium	UG/L	2.5 U	2.5 U	2.5 U	0.4 U	0.52 <	0.4 U	0.54 <	0.57 <	0.4 U
Calcium	UG/L	46500 <	48900 <	47300 <	45000 <	44200 <	44600 <	39400 <	45500 <	43400 <
Chromium	UG/L	1.1 <	0.88 <	1 <	0.8 U	0.8 U	0.96 <	0.8 U	0.8 U	0.8 U
Cobalt	UG/L	4.6 U	4.6 U	4.6 U	1.3 U	1.3 U	1.3 U	4.6 U	4.9 <	4.6 U
Copper	UG/L	5.8 <	9 <	7.9 <	13.6 <	12.3 <	11.1 <	3.1 <	5 <	3.8 <
Iron	UG/L	194 <	253 <	397 <	194 <	235 <	182 <	132 <	168 <	37 <
Lead	UG/L	3.2 <	2.4 <	2 U	2.3 <	2 U	2 U	2 U	2 U	2 U
Magnesium	UG/L	10600 <	11200 <	11300 <	11600 <	11400 <	11600 <	10100 <	11600 <	11400 <
Manganese	UG/L	44.1 <	34.6 <	41.8 <	38.7 <	40.2 <	37.1 <	28.3 <	32.7 <	27.9 <
Mercury	UG/L	0.92 <	0.59 <	0.7 <	0.54 <	0.57 <	0.52 <	0.36 <	0.29 <	0.36 <
Molybdenum	UG/L	13.8 U	13.8 U	13.8 U	2.6 U	3.8 <	3 <	4.9 <	5.8 <	3.6 <
Nickel	UG/L	8.9 U	8.9 U	8.9 U	1.6 U	1.7 <	2.1 <	8.9 U	8.9 U	8.9 U
Potassium	UG/L	1720 <	1860 <	2000 <	1750 <	1730 <	1820 <	1490 <	1750 <	1740 <
Selenium	UG/L	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U
Silica	UG/L	6170 <	7070 <	7080 <	6830 <	6780 <	6820 <	5760 <	6670 <	128 <
Silver	UG/L	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U
Sodium	UG/L	7920 <	7880 <	7690 <	7660 <	7510 <	7240 <	6180 <	7270 <	6600 <
Thallium	UG/L	3.8 U	4.9 <	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	4.6 <	3.9 <
Vanadium	UG/L	3.6 U	3.6 U	3.6 U	0.76 <	1.7 <	1 <	0.7 U	0.7 U	0.7 U
Zinc	UG/L	30.6 <	25.6 <	24.6 <	23 <	23.6 <	21.5 <	15.2 <	18.7 <	16.2 <

Appendix C
NOAA Daily Samples

	Up/Downstream Date Collected	Up	Down	Down Alt.	Up	Down	Up	Down	Up	Down
	Sample ID	2-Oct-97 F41141	2-Oct-97 F31141	2-Oct-97 F71141	3-Oct-97 F41151	3-Oct-97 F31151	6-Oct-97 F41161	6-Oct-97 F31161	8-Oct-97 F41171	8-Oct-97 F31171
Inorganics										
Aluminum	UG/L	173 <	108 <	97.8 <	90.2 <	102 <	167 <	150 <	149 <	132 <
Antimony	UG/L	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Arsenic	UG/L	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.4 <	3.1 U
Barium	UG/L	32.8 <	35.6 <	33.5 <	35.4 <	33.7 <	41.1 <	44.3 <	42.4 <	41.9 <
Beryllium	UG/L	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U
Boron	UG/L	45.3 <	58.8 <	43.8 <	58 <	50.6 <	37.7 <	77.8 <	76 <	66.9 <
Cadmium	UG/L	0.47 <	0.4 U	0.4 U	0.64 <	0.48 <	0.4 U	0.4 U	0.4 U	0.4 U
Calcium	UG/L	37100 <	40700 <	37900 <	40400 <	39800 <	42200 <	44000 <	42700 <	41200 <
Chromium	UG/L	1.1 <	0.8 U	0.8 U	0.8 U	0.8 U	0.95 <	0.8 U	0.82 <	0.93 <
Cobalt	UG/L	4.6 U	4.6 U	4.6 U	4.6 U	4.6 U	1.3 U	1.3 U	1.3 U	1.3 U
Copper	UG/L	3.4 <	3.4 <	2.9 <	4.2 <	10 <	3.8 <	3.8 <	15.9 <	15.9 <
Iron	UG/L	201 <	127 <	105 <	101 <	98.2 <	159 <	136 <	163 <	138 <
Lead	UG/L	2 U	2 U	2 U	2 U	2 U	2.6 <	2.1 <	2 U	2 U
Magnesium	UG/L	9690 <	10500 <	9730 <	10500 <	10100 <	10900 <	11600 <	11200 <	10900 <
Manganese	UG/L	26.3 <	28.6 <	24.4 <	26.8 <	25.7 <	29.1 <	30.6 <	30.8 <	29.8 <
Mercury	UG/L	0.36 <	0.36 <	0.43 <	0.33 <	0.37 <	0.37 <	0.3 <	0.24 <	0.22 <
Molybdenum	UG/L	4.5 <	6.3 <	2.6 U	3.5 <	8.7 <	10.1 U	10.1 U	2.6 U	2.6 U
Nickel	UG/L	8.9 U	8.9 U	8.9 U	8.9 U	8.9 U	2.2 <	1.8 <	1.6 U	1.6 U
Potassium	UG/L	1390 <	1510 <	1420 <	1530 <	1450 <	1660 <	1780 <	1640 <	1670 <
Selenium	UG/L	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U
Silica	UG/L	5910 <	5940 <	5480 <	5860 <	5570 <	6300 <	6490 <	6380 <	6070 <
Silver	UG/L	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.82 <	0.7 U	0.7 U	0.7 U
Sodium	UG/L	5890 <	6330 <	5650 <	6400 <	6090 <	7100 <	7640 <	6940 <	6960 <
Thallium	UG/L	3.8 U	3.8 U	3.9 <	5.1 <	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
Vanadium	UG/L	0.7 U	0.7 U	0.78 <	0.7 U	0.7 <	0.7 U	0.7 U	0.7 U	0.7 U
Zinc	UG/L	13.6 <	14.5 <	26.9 <	14.3 <	13.3 <	16.2 <	16.7 <	19.2 <	17.1 <

Appendix C
NOAA Daily Samples

	Up/Downstream Date Collected	Up 9-Oct-97 F41181	Down 9-Oct-97 F31181
Inorganics	Sample ID		
Aluminum	UG/L	102 <	98.9 <
Antimony	UG/L	2.3 <	2 U
Arsenic	UG/L	3.1 U	3.1 U
Barium	UG/L	41.3 <	40.6 <
Beryllium	UG/L	0.2 U	0.2 U
Boron	UG/L	39.3 <	48.2 <
Cadmium	UG/L	0.4 U	0.4 U
Calcium	UG/L	41800 <	41000 <
Chromium	UG/L	0.8 U	0.8 U
Cobalt	UG/L	1.3 U	1.3 U
Copper	UG/L	7.2 <	6.8 <
Iron	UG/L	145 <	136 <
Lead	UG/L	2.3 <	2 U
Magnesium	UG/L	11000 <	10800 <
Manganese	UG/L	29.5 <	29.1 <
Mercury	UG/L	0.31 <	0.31 <
Molybdenum	UG/L	3.7 <	2.6 U
Nickel	UG/L	1.6 U	1.9 <
Potassium	UG/L	1730 <	1670 <
Selenium	UG/L	3.1 U	3.1 U
Silica	UG/L	6180 <	6040 <
Silver	UG/L	0.7 U	0.7 U
Sodium	UG/L	7100 <	6940 <
Thallium	UG/L	3.8 U	3.8 U
Vanadium	UG/L	0.7 U	0.7 U
Zinc	UG/L	16.8 <	16.6 <

Appendix C NOAA Weekly Samples

	Up/Downstream	Up	Down	Up	Down	Up	Down	Up	Down
	Date Collected	13-May-97	13-May-97	20-May-97	20-May-97	27-May-97	27-May-97	3-Jun-97	3-Jun-97
	Sample ID	F40672	F30671	F40682	F30681	F40801	F30801	F40696	F30691
Inorganics	UG/L	107 =	134 =	126 J	106 J	95.2 J	98.3 J	208 <	123 <
Aluminum	UG/L	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U
Antimony	UG/L	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	6.3 <	2.8 U
Arsenic	UG/L	38.1 =	39 =	41.8 =	44.7 =	43.2 =	46 =	46.9 <	45.6 <
Barium	UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.43 <	0.37 <
Beryllium	UG/L	32.4 U	36.5 U	62.3 U	68.9 U	25.8 U	25.8 U	71.2 <	51.9 <
Boron	UG/L	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
Cadmium	UG/L	35800 =	34800 =	39200 =	39700 =	38400 =	39600 =	46600 <	41600 <
Calcium	UG/L	1.7 =	1.5 =	0.8 U	1 U	0.8 R	0.8 R	2.4 <	0.92 <
Chromium	UG/L	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.6 <	1.6 <
Cobalt	UG/L	5.6 U	5.1 U	4.4 U	3.1 U	6.5 =	4.1 U	7.1 <	4.4 <
Copper	UG/L	195 =	207 =	138 =	126 =	201 =	159 =	312 <	200 <
Iron	UG/L	2.1 U	2.1 U	4 =	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U
Lead	UG/L	9180 =	9140 =	11100 =	11400 =	9750 =	10200 =	10300 <	9900 <
Magnesium	UG/L	57.6 =	59.1 =	60.6 =	53 =	69.1 =	50.5 =	82.8 <	59.9 <
Manganese	UG/L	0.4 =	0.56 =	0.4 =	0.52 =	0.68 =	0.77 =	0.48 <	0.45 <
Mercury	UG/L	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	4.7 <	3.6 <
Molybdenum	UG/L	1.8 U	1.8 U	1.8 U	2.1 U	1.8 U	1.8 U	1.8 U	1.8 U
Nickel	UG/L	1450 =	1450 =	1530 =	1590 =	1610 J	1670 J	1750 <	1630 <
Potassium	UG/L	3.5 U	3.5 U	3.5 U	3.5 U	3.5 U	3.5 U	3.5 U	3.5 U
Selenium	UG/L	5220 =	5450 =	5190 =	5450 =	4880 =	5550 =	6530 <	6120 <
Silica	UG/L	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
Silver	UG/L	5890 =	5690 =	7340 =	7110 =	7100 J	6870 J	7480 <	6830 <
Sodium	UG/L	4.5 U	4.5 U	4.5 U	4.5 U	4.5 U	4.5 U	8 <	4.6 <
Thallium	UG/L	0.7 U	0.92 =	0.76 U	0.7 U	0.74 =	0.7 U	1.4 <	0.96 <
Vanadium	UG/L	29.7 U	27 U	22.1 J	18.7 J	29.4 =	19.7 =	38.4 <	26.4 <
Zinc	UG/L								

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Misc - Anions	Up/Downstream	Up	Down	Up	Down	Up	Down	Up	Down
	Date Collected	13-May-97	13-May-97	20-May-97	20-May-97	27-May-97	27-May-97	3-Jun-97	3-Jun-97
	Sample ID	F40677	F30676	F40681	F30685	F40806	F30806	F40692	F30697
	MG/L	101 =	94.8 =	111 =	113 =	102 =	107 =	113 <	115 <
	Bromide	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
	Chloride	9 =	8.6 =	9.3 =	8.9 =	9.1 =	8.7 =	9.7 <	9.9 <
	Fluoride	0.5 U	0.5 U	0.25 U	0.25 U	0.5 U	0.5 U	0.5 U	0.5 U
Orthophosphate	MG/L	0.34 =	0.29 =	0.3 =	0.31 =	0.25 U	0.25 U	0.25 <	0.26 <
	Sulfate	24.5 =	25 =	28.2 =	28.9 =	24.6 =	25.7 =	25.8 <	26.2 <
	Suspended Solids	7 =	9 =	5 U	8 =	9 =	10 =	8 <	5 U
Misc - Phenol	Up/Downstream	Up	Down	Up	Down	Up	Down	Up	Down
	Date Collected	13-May-97	13-May-97	20-May-97	20-May-97	27-May-97	27-May-97	3-Jun-97	3-Jun-97
	Sample ID	F40673	F30672	F40686	F30682	F40802	F30802	F40693	F30692
	UG/L	10 U	10 U	11 U	10 U	10 U	10 U	10 U	10 U
	Miscellaneous	F40671	F30671	F40682	F30681	F40801	F30801	F40694	F30691
	Ammonia	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
	Kjeldahl Nitrogen	0.1 U	0.18 =	0.1 U	0.12 =	0.11 =	0.1 U	0.1 U	0.1 U
Nitrate-Nitrite (as N)	MG/L	2.5 =	2.3 =	1.9 =	2.4 =	5 =	3.4 =	2.4 <	2.1 <
	Total Phosphate as	0.21 J	0.2 J	0.21 =	0.2 =	0.16 =	0.14 =	0.17 <	0.16 <
	Phosphorus								
Miscellaneous - BOD	Up/Downstream	Up	Down	Up	Down	Up	Down	Up	Down
	Date Collected	13-May-97	13-May-97	20-May-97	20-May-97	27-May-97	27-May-97	3-Jun-97	3-Jun-97
	Sample ID	F40676	F30674	F40685	F30687	F40805	F30805	F40691	F30695
Biochemical Oxygen Demand (BOD)	MG/L	1 =	1 =	1 UJ	1 UJ	264 =	273 =	1 U	1 <

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	Up/Downstream Date Collected	Up 13-May-97 F40675	Down 13-May-97 F30677	Up 20-May-97 F40684	Down 20-May-97 F30684	Up 27-May-97 F40804	Down 27-May-97 F30804	Up 3-Jun-97 F40695	Down 3-Jun-97 F30693
Pesticide/PCBs	Sample ID								
4,4'-DDD	UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
4,4'-DDE	UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
4,4'-DDT	UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Aldrin	UG/L	0.051 U	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U
Dieldrin	UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Endosulfan-I	UG/L	0.051 U	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U
Endosulfan II	UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Endosulfan sulfate	UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Endrin	UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Endrin aldehyde	UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Endrin ketone	UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Heptachlor	UG/L	0.051 U	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U
Heptachlor epoxide	UG/L	0.051 U	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U
Lindane	UG/L	0.051 U	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U
Methoxychlor	UG/L	0.51 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U
PCB-1016	UG/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
PCB-1221	UG/L	2 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U
PCB-1232	UG/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
PCB-1242	UG/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
PCB-1248	UG/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
PCB-1254	UG/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
PCB-1260	UG/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Toxaphene	UG/L	5.1 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U
alpha-BHC	UG/L	0.051 U	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U
alpha-Chlordane	UG/L	0.051 U	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U
beta-BHC	UG/L	0.051 U	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U
delta-BHC	UG/L	0.051 U	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U
gamma-Chlordane	UG/L	0.051 U	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U

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	Up/Downstream Date Collected	Up 13-May-97 F40673	Down 13-May-97 F30672	Up 20-May-97 F40686	Down 20-May-97 F30682	Up 27-May-97 F40802	Down 27-May-97 F30802	Up 3-Jun-97 F40693	Down 3-Jun-97 F30692
Semivolatile Organics	Sample ID	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L
1,2,4-Trichlorobenzene	UG/L	10 U	10 U	11 U	10 U	10 U	10 U	10 U	10 U
1,2-Dichlorobenzene	UG/L	10 U	10 U	11 U	10 U	10 U	10 U	10 U	10 U
1,3-Dichlorobenzene	UG/L	10 U	10 U	11 U	10 U	10 U	10 U	10 U	10 U
1,4-Dichlorobenzene	UG/L	10 U	10 U	11 U	10 U	10 U	10 U	10 U	10 U
2,4,5-Trichlorophenol	UG/L	50 U	50 U	55 U	50 U	50 U	50 U	50 U	50 U
2,4,6-Trichlorophenol	UG/L	10 U	10 U	11 U	10 U	10 U	10 U	10 U	10 U
2,4-Dichlorophenol	UG/L	10 U	10 U	11 U	10 U	10 U	10 U	10 U	10 U
2,4-Dimethylphenol	UG/L	10 U	10 U	11 U	10 U	10 U	10 U	10 U	10 U
2,4-Dinitrophenol	UG/L	50 U	50 U	55 U	50 U	50 U	50 U	50 U	50 U
2,4-Dinitrotoluene	UG/L	10 U	10 U	11 U	10 U	10 U	10 U	10 U	10 U
2,6-Dinitrotoluene	UG/L	10 U	10 U	11 U	10 U	10 U	10 U	10 U	10 U
2-Chloronaphthalene	UG/L	10 U	10 U	11 U	10 U	10 U	10 U	10 U	10 U
2-Chlorophenol	UG/L	10 U	10 U	11 U	10 U	10 U	10 U	10 U	10 U
2-Methyl-4,6-dinitrophenol	UG/L	50 U	50 U	55 U	50 U	50 U	50 U	50 U	50 U
2-Methylnaphthalene	UG/L	10 U	10 U	11 U	10 U	10 U	10 U	10 U	10 U
2-Methylphenol	UG/L	10 U	10 U	11 U	10 U	10 U	10 U	10 U	10 U
2-Nitrobenzenamine	UG/L	50 U	50 U	55 U	50 U	50 U	50 U	50 U	50 U
2-Nitrophenol	UG/L	10 U	10 U	11 U	10 U	10 U	10 U	10 U	10 U
3,3'-Dichlorobenzidine	UG/L	20 U	20 U	22 U	20 U	20 U	20 U	20 U	20 U
3-Nitrobenzenamine	UG/L	50 U	50 U	55 U	50 U	50 U	50 U	50 U	50 U
4-Bromophenyl phenyl ether	UG/L	10 U	10 U	11 U	10 U	10 U	10 U	10 U	10 U
4-Chloro-3-methylphenol	UG/L	10 U	10 U	11 U	10 U	10 U	10 U	10 U	10 U
4-Chlorobenzenamine	UG/L	10 U	10 U	11 U	10 U	10 U	10 U	10 U	10 U
4-Chlorophenyl phenyl ether	UG/L	10 U	10 U	11 U	10 U	10 U	10 U	10 U	10 U
4-Methylphenol	UG/L	10 U	10 U	11 U	10 U	10 U	10 U	10 U	10 U
4-Nitrobenzenamine	UG/L	50 U	50 U	55 U	50 U	50 U	50 U	50 U	50 U
4-Nitrophenol	UG/L	50 U	50 U	55 U	50 U	50 U	50 U	50 U	50 U
Acenaphthene	UG/L	10 U	10 U	11 U	10 U	10 U	10 U	10 U	10 U
Acenaphthylene	UG/L	10 U	10 U	11 U	10 U	10 U	10 U	10 U	10 U
Anthracene	UG/L	10 U	10 U	11 U	10 U	10 U	10 U	10 U	10 U
Benz(a)anthracene	UG/L	10 U	10 U	11 U	10 U	10 U	10 U	10 U	10 U
Benzenemethanol	UG/L	10 U	10 U	11 U	10 U	10 U	10 U	10 U	10 U
Benzo(a)pyrene	UG/L	10 U	10 U	11 U	10 U	10 U	10 U	10 U	10 U
Benzo(b)fluoranthene	UG/L	10 U	10 U	11 U	10 U	10 U	10 U	10 U	10 U
Benzo(ghi)perylene	UG/L	10 U	10 U	11 U	10 U	10 U	10 U	10 U	10 U

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Up/Downstream Date Collected	Up	Down	Up	Down	Up	Down	Up	Down
Sample ID	13-May-97 F40673	13-May-97 F30672	20-May-97 F40686	20-May-97 F30682	27-May-97 F40802	27-May-97 F30802	3-Jun-97 F40693	3-Jun-97 F30692
Semivolatile Organics								
Benzo(k)fluoranthene	UG/L 10 U	UG/L 10 U	UG/L 11 U	UG/L 10 U	UG/L 10 U	UG/L 10 U	UG/L 10 U	UG/L 10 U
Benzoic acid	UG/L 50 U	UG/L 50 U	UG/L 55 U	UG/L 50 U	UG/L 50 U	UG/L 50 U	UG/L 50 U	UG/L 50 U
Bis(2-chloroethoxy)methane	UG/L 10 U	UG/L 10 U	UG/L 11 U	UG/L 10 U	UG/L 10 U	UG/L 10 U	UG/L 10 U	UG/L 10 U
Bis(2-chloroethyl) ether	UG/L 10 U	UG/L 10 U	UG/L 11 U	UG/L 10 U	UG/L 10 U	UG/L 10 U	UG/L 10 U	UG/L 10 U
Bis(2-chloroisopropyl) ether	UG/L 10 U	UG/L 10 U	UG/L 11 U	UG/L 10 U	UG/L 10 U	UG/L 10 U	UG/L 10 U	UG/L 10 U
Bis(2-ethylhexyl)phthalate	UG/L 10 U	UG/L 10 U	UG/L 11 U	UG/L 10 U	UG/L 4 J	UG/L 4 J	UG/L 3 J	UG/L 4 J
Butyl benzyl phthalate	UG/L 10 U	UG/L 10 U	UG/L 11 U	UG/L 10 U	UG/L 10 U	UG/L 10 U	UG/L 10 U	UG/L 10 U
Carbazole	UG/L 10 U	UG/L 10 U	UG/L 11 U	UG/L 10 U	UG/L 10 U	UG/L 10 U	UG/L 10 U	UG/L 10 U
Chrysene	UG/L 10 U	UG/L 10 U	UG/L 11 U	UG/L 10 U	UG/L 10 U	UG/L 10 U	UG/L 10 U	UG/L 10 U
Di-n-butyl phthalate	UG/L 10 U	UG/L 10 U	UG/L 11 U	UG/L 10 U	UG/L 10 U	UG/L 10 U	UG/L 1 J	UG/L 1 J
Di-n-octylphthalate	UG/L 10 U	UG/L 10 U	UG/L 11 U	UG/L 10 U	UG/L 10 U	UG/L 10 U	UG/L 10 U	UG/L 10 U
Dibenz(a,h)anthracene	UG/L 10 U	UG/L 10 U	UG/L 11 U	UG/L 10 U	UG/L 10 U	UG/L 10 U	UG/L 10 U	UG/L 10 U
Dibenzofuran	UG/L 10 U	UG/L 10 U	UG/L 11 U	UG/L 10 U	UG/L 10 U	UG/L 10 U	UG/L 10 U	UG/L 10 U
Diethyl phthalate	UG/L 10 U	UG/L 10 U	UG/L 11 U	UG/L 10 U	UG/L 10 U	UG/L 1 J	UG/L 10 U	UG/L 10 U
Dimethyl phthalate	UG/L 10 U	UG/L 10 U	UG/L 11 U	UG/L 10 U	UG/L 10 U	UG/L 10 U	UG/L 10 U	UG/L 10 U
Fluoranthene	UG/L 10 U	UG/L 10 U	UG/L 11 U	UG/L 10 U	UG/L 10 U	UG/L 10 U	UG/L 10 U	UG/L 10 U
Fluorene	UG/L 10 U	UG/L 10 U	UG/L 11 U	UG/L 10 U	UG/L 10 U	UG/L 10 U	UG/L 10 U	UG/L 10 U
Hexachlorobenzene	UG/L 10 U	UG/L 10 U	UG/L 11 U	UG/L 10 U	UG/L 10 U	UG/L 10 U	UG/L 10 U	UG/L 10 U
Hexachlorobutadiene	UG/L 10 U	UG/L 10 U	UG/L 11 U	UG/L 10 U	UG/L 10 U	UG/L 10 U	UG/L 10 U	UG/L 10 U
Hexachloro-cyclopentadiene	UG/L 10 U	UG/L 10 U	UG/L 11 U	UG/L 10 U	UG/L 10 U	UG/L 10 U	UG/L 10 U	UG/L 10 U
Hexachloroethane	UG/L 10 U	UG/L 10 U	UG/L 11 U	UG/L 10 U	UG/L 10 U	UG/L 10 U	UG/L 10 U	UG/L 10 U
Indeno(1,2,3-cd)pyrene	UG/L 10 U	UG/L 10 U	UG/L 11 U	UG/L 10 U	UG/L 10 U	UG/L 10 U	UG/L 10 U	UG/L 10 U
Isophorone	UG/L 10 U	UG/L 10 U	UG/L 11 U	UG/L 10 U	UG/L 10 U	UG/L 10 U	UG/L 10 U	UG/L 10 U
N-Nitroso-di-n-propylamine	UG/L 10 U	UG/L 10 U	UG/L 11 U	UG/L 10 U	UG/L 10 U	UG/L 10 U	UG/L 10 U	UG/L 10 U
N-Nitrosodiphenylamine	UG/L 10 U	UG/L 10 U	UG/L 11 U	UG/L 10 U	UG/L 10 U	UG/L 10 U	UG/L 10 U	UG/L 10 U
Naphthalene	UG/L 10 U	UG/L 10 U	UG/L 11 U	UG/L 10 U	UG/L 10 U	UG/L 10 U	UG/L 10 U	UG/L 10 U
Nitrobenzene	UG/L 10 U	UG/L 10 U	UG/L 11 U	UG/L 10 U	UG/L 10 U	UG/L 10 U	UG/L 10 U	UG/L 10 U
Pentachlorophenol	UG/L 50 U	UG/L 50 U	UG/L 55 U	UG/L 50 U	UG/L 50 U	UG/L 50 U	UG/L 50 U	UG/L 50 U
Phenanthrene	UG/L 10 U	UG/L 10 U	UG/L 11 U	UG/L 10 U	UG/L 10 U	UG/L 10 U	UG/L 10 U	UG/L 10 U
Pyrene	UG/L 10 U	UG/L 10 U	UG/L 11 U	UG/L 10 U	UG/L 10 U	UG/L 10 U	UG/L 10 U	UG/L 10 U

Appendix C
NOAA Weekly Samples

	Up/Downstream Date Collected	Up 10-Jun-97	Down 10-Jun-97	Up 17-Jun-97	Down 17-Jun-97	Up 24-Jun-97	Down 24-Jun-97	Up 1-Jul-97	Down 1-Jul-97
	Sample ID								
Inorganics									
Aluminum	F40703	148 =	F30701	F40714	F30711	F40811	F30811	F40721	F30723
Antimony	UG/L	2.3 U	216 =	560 <	155 <	63.4 J	84 J	194 <	284 <
Arsenic	UG/L	2.8 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U
Barium	UG/L	44.5 =	45.1 =	2.8 U	2.8 U	2.8 U	2.8 U	3.3 <	2.8 U
Beryllium	UG/L	0.23 U	0.47 U	48.5 <	52.2 <	45.2 =	47.5 =	43.6 <	42.4 <
Boron	UG/L	31.6 U	41.6 U	0.23 <	0.24 <	0.1 U	0.1 U	0.23 <	0.1 U
Cadmium	UG/L	0.4 U	0.4 U	40.1 <	50.5 <	103 =	64.5 =	40.4 <	36 <
Calcium	UG/L	41100 =	40100 =	0.81 <	0.64 <	1.1 J	0.4 J	0.4 U	0.4 U
Chromium	UG/L	1.1 =	2.9 =	36800 <	44600 <	45300 =	46200 =	36900 <	35800 <
Cobalt	UG/L	1.3 U	1.3 U	2.4 <	1.7 <	1.8 UJ	1.6 UJ	1.3 <	1.7 <
Copper	UG/L	5.1 =	4.2 =	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 <
Iron	UG/L	183 =	219 =	4.8 <	4 <	3.7 U	4 U	7.8 <	12.7 <
Lead	UG/L	2.1 =	2.1 U	824 <	187 <	141 J	157 J	312 <	455 <
Magnesium	UG/L	9820 =	9540 =	6.2 <	4.6 <	12.4 J	2.1 U	2.1 U	2.1 <
Manganese	UG/L	56.2 =	54.6 =	8250 <	10600 <	10700 =	11100 =	6810 <	6600 <
Mercury	UG/L	0.63 =	0.57 =	122 <	44.6 <	43.5 =	40.1 =	72.8 <	70.3 <
Molybdenum	UG/L	3.6 U	2.4 U	1.2 <	0.34 <	0.23 J	0.18 J	0.66 <	0.79 <
Nickel	UG/L	1.8 U	1.9 =	2.2 U	2.2 U	2.2 U	2.2 U	6.5 <	5.3 <
Potassium	UG/L	1610 =	1610 =	11.6 <	34.8 <	1.8 U	1.8 U	1.8 U	5 <
Selenium	UG/L	3.5 U	3.5 U	1880 <	1860 <	1570 =	1670 =	1640 <	1730 <
Silica	UG/L	5870 =	6210 =	3.5 U	3.5 U	3.5 U	3.5 U	3.5 U	3.5 U
Silver	UG/L	1.3 U	1.3 U	7100 <	7120 <	6770 J	7310 J	5310 <	5680 <
Sodium	UG/L	7220 =	6790 =	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
Thallium	UG/L	4.5 U	4.5 U	5920 <	8670 <	7180 =	6970 =	5310 <	4560 <
Vanadium	UG/L	0.7 U	0.7 U	4.5 U	4.5 U	4.5 U	4.5 U	4.5 U	4.5 U
Zinc	UG/L	23.6 =	29.2 =	1.5 <	0.7 <	0.7 U	0.7 U	1 <	0.99 <
				66.6 <	29.9 <	23.4 =	16.5 =	42.1 <	37.7 <

Appendix C
NOAA Weekly Samples

	Up/Downstream	Up	Down	Up	Down	Up	Down	Up	Down
	Date Collected	10-Jun-97	10-Jun-97	17-Jun-97	17-Jun-97	24-Jun-97	24-Jun-97	1-Jul-97	1-Jul-97
	Sample ID	F40706	F30706	F40716	F30714	F40816	F30816	F40726	F30721
Misc - Anions	MG/L	115 =	117 =	105 <	116 <	113 =	113 =	93.1 <	90.5 <
Alkalinity	MG/L	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
Bromide	MG/L	9.5 =	9.1 =	9.2 <	12.7 <	10.8 =	9.8 =	7.8 <	6.6 <
Chloride	MG/L	0.5 U	0.5 U	0.25 U	0.25 U	0.45 =	0.43 =	0.5 U	0.5 U
Fluoride	MG/L	0.25 U	0.25 U	0.25 U	0.25 U	0.29 =	0.29 =	0.25 U	0.25 U
Orthophosphate	MG/L	32.9 =	26.3 =	25.4 <	39.8 <	31.9 =	32.6 =	23.3 <	21.8 <
Sulfate	MG/L	5 U	5 U	28 <	6 <	5 U	5 U	5 <	7.2 <
Suspended Solids	MG/L								

	Up/Downstream	Up	Down	Up	Down	Up	Down	Up	Down
	Date Collected	10-Jun-97	10-Jun-97	17-Jun-97	17-Jun-97	24-Jun-97	24-Jun-97	1-Jul-97	1-Jul-97
	Sample ID	F40704	F30702	F40715	F30712	F40812	F30812	F40722	F30727
Misc - Phenol	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Phenol	Sample ID	F40703	F30701	F40711	F30711	F40811	F30811	F40721	F30722
Miscellaneous	MG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	
Ammonia	MG/L	0.1 U	0.1 U	0.37 <	0.1 U	0.1 U	0.1 U	0.26 <	0.23 <
Kjeldahl Nitrogen	MG-N/L	2.5 =	2.4 =	1.9 <	2.9 <	2.7 =	2.5 =	3.6 <	2.2 <
Nitrate-Nitrite (as N)	MG/L	0.19 =	0.16 =	0.22 <	0.18 <	0.23 =	0.22 =	0.19 <	0.17 <
Total Phosphate as Phosphorus									

	Up/Downstream	Up	Down	Up	Down	Up	Down	Up	Down
	Date Collected	10-Jun-97	10-Jun-97	17-Jun-97	17-Jun-97	24-Jun-97	24-Jun-97	1-Jul-97	1-Jul-97
	Sample ID	F40702	F30704	F40713	F30715	F40815	F30815	F40725	F30725
Miscellaneous - BOD	MG/L	1 =	2 =	1 U	1 U	1 =	1 =	1 U	1 U
Biochemical Oxygen Demand (BOD)									

Appendix C NOAA Weekly Samples

	Up/Downstream	Up	Down	Up	Down	Up	Down	Up	Down
	Date Collected	10-Jun-97	10-Jun-97	17-Jun-97	17-Jun-97	24-Jun-97	24-Jun-97	1-Jul-97	1-Jul-97
	Sample ID								
Pesticide/PCBs	UG/L	F40701	F30703	F40712	F30716	F40814	F30814	F40724	F30726
4,4'-DDD	UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
4,4'-DDE	UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
4,4'-DDT	UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Aldrin	UG/L	0.052 U	0.052 U	0.051 U	0.052 U	0.052 U	0.052 U	0.051 U	0.051 U
Dieldrin	UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Endosulfan I	UG/L	0.052 U	0.052 U	0.051 U	0.052 U	0.052 U	0.052 U	0.051 U	0.051 U
Endosulfan II	UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Endosulfan sulfate	UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Endrin	UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Endrin aldehyde	UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Endrin ketone	UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Heptachlor	UG/L	0.052 U	0.052 U	0.051 U	0.052 U	0.052 U	0.052 U	0.051 U	0.051 U
Heptachlor epoxide	UG/L	0.052 U	0.052 U	0.051 U	0.052 U	0.052 U	0.052 U	0.051 U	0.051 U
Lindane	UG/L	0.052 U	0.052 U	0.051 U	0.052 U	0.052 U	0.052 U	0.051 U	0.051 U
Methoxychlor	UG/L	0.52 U	0.52 U	0.51 U	0.52 U	0.52 U	0.52 U	0.51 U	0.51 U
PCB-1016	UG/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
PCB-1221	UG/L	2.1 U	2.1 U	2 U	2.1 U	2.1 U	2.1 U	2 U	2 U
PCB-1232	UG/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
PCB-1242	UG/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
PCB-1248	UG/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
PCB-1254	UG/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
PCB-1260	UG/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Toxaphene	UG/L	5.2 U	5.2 U	5.1 U	5.2 U	5.2 U	5.2 U	5.1 U	5.1 U
alpha-BHC	UG/L	0.052 U	0.052 U	0.051 U	0.052 U	0.052 U	0.052 U	0.051 U	0.051 U
alpha-Chlordane	UG/L	0.052 U	0.052 U	0.051 U	0.052 U	0.052 U	0.052 U	0.051 U	0.051 U
beta-BHC	UG/L	0.052 U	0.052 U	0.051 U	0.052 U	0.052 U	0.052 U	0.051 U	0.051 U
delta-BHC	UG/L	0.052 U	0.052 U	0.051 U	0.052 U	0.052 U	0.052 U	0.051 U	0.051 U
gamma-Chlordane	UG/L	0.052 U	0.052 U	0.051 U	0.052 U	0.052 U	0.052 U	0.051 U	0.051 U

Appendix C
NOAA Weekly Samples

	Up/Downstream Date Collected	Up 10-Jun-97 F40705	Down 10-Jun-97 F30705	Up 17-Jun-97 F40711	Down 17-Jun-97 F30713	Up 24-Jun-97 F40813	Down 24-Jun-97 F30813	Up 1-Jul-97 F40723	Down 1-Jul-97 F30724
Radiological	Sample ID								
Alpha activity	PCI/L	10.98	11.39	10.31	12.27	6.27	6.5	15.29	10.77
Americium-241	PCI/L	0.14 U	0.19 U	0.29 U	0.19 U	0.52 U	0.43 J	0.43 J	0.54 J
Beta activity	PCI/L	9.26	9.41	6.68	6.05	6.03	7.68	8.67	7.43
Cesium-137	PCI/L	-0.44 U	-0.66 U	-0.39 U	-0.15 U	0.27 U	-0.32 U	0.37 U	-2.41 U
Cobalt-60	PCI/L	-0.34 U	-1.15 U	1.12 U	1.81 U	2.79 U	-0.08 U	3.03 J	0.17 U
Neptunium-237	PCI/L	0.27 J	0.03 U	0.17 U	0.36 J	0.18 U	0.18 U	0.27 U	0.08 U
Plutonium-238	PCI/L	0.21 U	0.09 U	-1.01 U	-0.31 U	-0.62 U	-0.01 U	0.24 U	0.87 U
Plutonium-239	PCI/L	0.53 J	0.04 U	0.09 U	0.14 U	0.09 U	0.18 U	0.13 U	0.39 J
Protactinium-233	PCI/L	1.25 U	-2.75 U	-2.69 U	-0.73 U	-0.7 U	1.08 U	2.29 U	-1.32 U
Thorium-228	PCI/L	-0.02 U	0.06 U	0.04 U	0 J	0.09 U	0.37 J	0.27 J	0.06 U
Thorium-230	PCI/L	0.87	0.43 J	0.94	1.42	0.93	0.97	1.24	2.61
Thorium-232	PCI/L	0.08 U	-0.02 U	0.22 J	0.32 J	0 J	0.18 U	0.32 J	0.06 U
Uranium-234	PCI/L	2.49	3.64	2.07	2.92	2.82	2.19	4.94	4.83
Uranium-235	PCI/L	0.29 J	0.35 J	0.32 J	0.59 J	0.18 U	0.4 J	0.52 J	0.32 J
Uranium-238	PCI/L	9.94	8.7	9.92	9.43	6.6	6.59	11.69	9.21

Appendix C NOAA Weekly Samples

	Up/Downstream Date Collected	Up 10-Jun-97 F40704	Down 10-Jun-97 F30702	Up 17-Jun-97 F40715	Down 17-Jun-97 F30712	Up 24-Jun-97 F40812	Down 24-Jun-97 F30812	Up 1-Jul-97 F40722	Down 1-Jul-97 F30727
Semivolatile Organics	Sample ID	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L
1,2,4-Trichlorobenzene	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,2-Dichlorobenzene	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,3-Dichlorobenzene	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,4-Dichlorobenzene	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2,4,5-Trichlorophenol	UG/L	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
2,4,6-Trichlorophenol	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2,4-Dichlorophenol	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2,4-Dimethylphenol	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2,4-Dinitrophenol	UG/L	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
2,4-Dinitrotoluene	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2,6-Dinitrotoluene	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Chloronaphthalene	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Chlorophenol	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Methyl-4,6-dinitrophenol	UG/L	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
2-Methylnaphthalene	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Methylphenol	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Nitrobenzenamine	UG/L	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
2-Nitrophenol	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
3,3'-Dichlorobenzidine	UG/L	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U
3-Nitrobenzenamine	UG/L	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
4-Bromophenyl phenyl ether	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Chloro-3-methylphenol	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Chlorobenzenamine	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Chlorophenyl phenyl ether	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Methylphenol	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Nitrobenzenamine	UG/L	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
4-Nitrophenol	UG/L	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Acenaphthene	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Acenaphthylene	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Anthracene	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benz(a)anthracene	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzenemethanol	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(a)pyrene	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(b)fluoranthene	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(g,h,i)perylene	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U

Appendix C
NOAA Weekly Samples

	Up/Downstream Date Collected	Up 10-Jun-97 F40704	Down 10-Jun-97 F30702	Up 17-Jun-97 F40715	Down 17-Jun-97 F30712	Up 24-Jun-97 F40812	Down 24-Jun-97 F30812	Up 1-Jul-97 F40722	Down 1-Jul-97 F30727
Semivolatle Organics	Sample ID								
Benzo(k)fluoranthene	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzoic acid	UG/L	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Bis(2-chloroethoxy)methane	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Bis(2-chloroethyl) ether	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Bis(2-chloroisopropyl) ether	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Bis(2-ethylhexyl)phthalate	UG/L	10 U	10 U	4 B, J	2 B, J	10 U	10 U	7 B, J	5 B, J
Butyl benzyl phthalate	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Carbazole	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chrysene	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Di-n-butyl phthalate	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Di-n-octylphthalate	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibenz(a,h)anthracene	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibenzofuran	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Diethyl phthalate	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dimethyl phthalate	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Fluoranthene	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Fluorene	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Hexachlorobenzene	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Hexachlorobutadiene	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Hexachloro-cyclopentadiene	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Hexachloroethane	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Indeno(1,2,3-cd)pyrene	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Isophorone	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
N-Nitroso-di-n-propylamine	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
N-Nitrosodiphenylamine	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Naphthalene	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Nitrobenzene	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Pentachlorophenol	UG/L	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Phenanthrene	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Pyrene	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U

Appendix C NOAA Weekly Samples

	Up/Downstream Date Collected	Up	Down	Up	Down	Up	Down	Up	Down
	Sample ID	8-Jul-97	8-Jul-97	15-Jul-97	15-Jul-97	22-Jul-97	22-Jul-97	29-Jul-97	29-Jul-97
Inorganics									
Aluminum	F40734	117 <	F30731	165 <	F30741	58.6 <	F30821	67.1 <	F30767
Antimony	UG/L	2.3 U	181 <	2 U	140 <	2 U	2 U	2.3 <	119 <
Arsenic	UG/L	2.8 U	2.8 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 <	6 <
Barium	UG/L	45.2 <	47.3 <	44.2 <	47 <	41.8 <	45.1 <	45.9 <	3.1 U
Beryllium	UG/L	0.1 U	0.1 U	0.3 U	0.3 U	0.2 U	0.2 U	0.2 U	46.9 <
Boron	UG/L	140 <	109 <	62.9 <	73.8 <	62.9 <	54.3 <	68.9 <	0.2 U
Cadmium	UG/L	0.73 <	0.62 <	0.4 U	0.44 <	0.4 U	0.4 U	0.4 U	70.5 <
Calcium	UG/L	43100 <	43100 <	42300 <	42800 <	38300 <	39000 <	42400 <	0.4 U
Chromium	UG/L	3.7 <	3.7 <	0.9 <	1.4 <	2.5 <	2.6 <	2.8 <	42500 <
Cobalt	UG/L	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.9 <
Copper	UG/L	6.7 <	5.9 <	1.9 <	3 <	9.7 <	9.8 <	7 <	1.3 U
Iron	UG/L	139 <	191 <	136 <	129 <	130 <	130 <	183 <	6.5 <
Lead	UG/L	2.1 U	2.1 U	2 U	2 U	2 U	2 U	2 U	170 <
Magnesium	UG/L	10800 <	11100 <	10300 <	10700 <	10100 <	10500 <	9940 <	2 U
Manganese	UG/L	55.6 <	47.2 <	37.1 <	28.4 <	32.3 <	26.5 <	67.3 <	10100 <
Mercury	UG/L	0.51 <	0.7 <	0.37 <	0.62 <	0.32 <	0.66 <	0.38 <	44.6 <
Molybdenum	UG/L	2.2 U	2.2 U	2.6 U	2.7 <	2.6 U	2.6 U	2.6 U	0.41 <
Nickel	UG/L	1.8 U	1.8 U	1.6 U	2.5 <	1.9 <	2.5 <	2 <	2.6 U
Potassium	UG/L	1680 <	1720 <	1560 <	1570 <	1580 <	1700 <	1610 <	1.6 <
Selenium	UG/L	3.5 U	3.5 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	1700 <
Silica	UG/L	7070 <	7440 <	6740 <	6960 <	6530 <	6720 <	6290 <	3.1 U
Silver	UG/L	1.3 U	1.3 U	1.1 <	1.7 <	1.8 U	1.8 U	1.6 <	6580 <
Sodium	UG/L	7580 <	7270 <	7170 <	6980 <	7380 <	6890 <	7550 <	0.7 U
Thallium	UG/L	4.5 U	4.5 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	7230 <
Vanadium	UG/L	0.85 <	0.84 <	0.79 <	1 <	0.7 U	0.7 U	1.4 <	3.8 U
Zinc	UG/L	27.2 <	21 <	22.7 <	19.1 <	21.4 <	18.1 <	22.5 <	1.4 <
									20.6 <

Appendix C
NOAA Weekly Samples

	Up/Downstream Date Collected	Sample ID	Up		Down		Up		Down		Up		Down	
			8-Jul-97		15-Jul-97		22-Jul-97		29-Jul-97		29-Jul-97		29-Jul-97	
Misc - Anions														
Alkalinity		MG/L	F40736	112 <	F30734	88.6 <	F40826	90.1 <	F40766	104 <	F30762	104 <		
Bromide		MG/L	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U		
Chloride		MG/L	10.6 <	10.3 <	11.1 <	11.1 <	10.1 <	9 <	9.6 <	10.1 <	10.1 <	10.1 <		
Fluoride		MG/L	0.5 U	0.5 U	0.25 U	0.25 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U		
Orthophosphate		MG/L	0.39 <	0.7 <	0.29 <	0.29 <	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U		
Sulfate		MG/L	33.5 <	35.1 <	35.1 <	35.1 <	31 <	31.2 <	33.3 <	33.3 <	33.8 <	33.8 <		
Suspended Solids		MG/L	7 <	7 <	12 <	12 <	5 U	5 U	7 <	7 <	8 <	8 <		
	Up/Downstream Date Collected	Sample ID	Up		Down		Up		Down		Up		Down	
			8-Jul-97		15-Jul-97		22-Jul-97		29-Jul-97		29-Jul-97		29-Jul-97	
Misc - Phenol		UG/L	F40735	10 U	F30732	10 U	F40822	10 U	F40762	10 U	F30764	10 U		
Miscellaneous														
Ammonia		MG/L	F40731	0.1 U	F30731	0.1 U	F40821	0.1 U	F40761	0.12 <	F30763	0.1 U		
Kjeldahl Nitrogen		MG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.17 <	0.15 <	0.37 <	0.37 <	0.24 <	0.24 <		
Nitrate-Nitrite (as N)		MG-N/L	2.8 <	2.1 <	1.9 <	2 <	2.1 <	2.1 <	2.6 <	2.6 <	2.8 <	2.8 <		
Total Phosphate as Phosphorus		MG/L	0.29 <	0.29 <	0.29 <	0.26 <	0.25 <	0.22 <	0.17 <	0.17 <	0.14 <	0.14 <		
	Up/Downstream Date Collected	Sample ID	Up		Down		Up		Down		Up		Down	
			8-Jul-97		15-Jul-97		22-Jul-97		29-Jul-97		29-Jul-97		29-Jul-97	
Miscellaneous - BOD														
Biochemical Oxygen Demand (BOD)		MG/L	F40735	2 <	F30735	2 <	F40825	2 <	F30825	1 <	F40765	1 <	F30761	1 <

Appendix C
NOAA Weekly Samples

Up/Downstream	Up	Down	Up	Down	Up	Down	Up	Down
Date Collected	Sample ID							
Pesticide/PCBs								
4,4'-DDD	8-Jul-97 F40732	0.1 U	8-Jul-97 F30736	0.1 U	15-Jul-97 F40745	0.1 U	15-Jul-97 F30747	0.1 U
4,4'-DDE	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
4,4'-DDT	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Aldrin	0.051 U	0.052 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U
Dieldrin	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Endosulfan I	0.051 U	0.052 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U
Endosulfan II	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Endosulfan sulfate	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Endrin	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Endrin aldehyde	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Endrin ketone	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Heptachlor	0.051 U	0.052 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U
Heptachlor epoxide	0.051 U	0.052 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U
Lindane	0.051 U	0.052 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U
Methoxychlor	0.51 U	0.52 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U
PCB-1016	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
PCB-1221	2 U	2.1 U	2 U	2 U	2 U	2.1 U	2 U	2 U
PCB-1232	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
PCB-1242	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
PCB-1248	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
PCB-1254	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
PCB-1260	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Toxaphene	5.1 U	5.2 U	5.1 U	5.1 U	5.1 U	5.2 U	5.1 U	5.1 U
alpha-BHC	0.051 U	0.052 U	0.051 U	0.051 U	0.051 U	0.052 U	0.051 U	0.051 U
alpha-Chlordane	0.051 U	0.052 U	0.051 U	0.051 U	0.051 U	0.052 U	0.051 U	0.051 U
beta-BHC	0.051 U	0.052 U	0.051 U	0.051 U	0.051 U	0.052 U	0.051 U	0.051 U
delta-BHC	0.051 U	0.052 U	0.051 U	0.051 U	0.051 U	0.052 U	0.051 U	0.051 U
gamma-Chlordane	0.051 U	0.052 U	0.051 U	0.051 U	0.051 U	0.052 U	0.051 U	0.051 U

Appendix C NOAA Weekly Samples

Radiological	Up/Downstream Date Collected	Sample ID	8-Jul-97		15-Jul-97		22-Jul-97		29-Jul-97	
			Up	Down	Up	Down	Up	Down	Up	Down
Alpha activity	PCI/L	F40731	4.93	F30733	F40744	F30743	F40823	F30823	F40763	F30766
Americium-241	PCI/L	15.66	6.48	4.23	6.44 J	0.3 U	-0.05 U	-0.02 U	0.13 U	-0.12 U
Beta activity	PCI/L	5.96	5.69	4.66	4.66	4.31	8.92	3.96	8.99	7.09
Cesium-137	PCI/L	1 U	2.11 J	0.65 U	0.65 U	-0.46 U	-0.32 U	1.04 U	-0.49 U	-1.42 U
Cobalt-60	PCI/L	0.89 U	1.02 U	-1.09 U	0.95 U	0.95 U	0.15 U	-0.18 U	1.87 U	-0.19 U
Neptunium-237	PCI/L	0.27 J	0.12 U	0.87 J	0.3 U	0.3 U	0.15 U	0.04 U	0.14 U	0.09 U
Plutonium-238	PCI/L	-0.3 U	-0.21 U	0.3 U	-0.38 U	0.5 U	1.21	0.5 U	0.06 U	-0.13 U
Plutonium-239	PCI/L	0.46 J	0.23 J	0.14 U	0.29 U	0.15 U	0.15 U	0.15 J	0.14 U	0.13 U
Protactinium-233	PCI/L	-3.12 U	0.59 U	-2.59 U	-1.54 U	-2.47 U	-0.24 U	-0.24 U	-0.66 U	-0.43 U
Thorium-228	PCI/L	0.18 U	0.14 U	0.14 U	0.15 U	0.22 U	0.21 U	0.21 U	0.04 U	-0.02 U
Thorium-230	PCI/L	1.18	0.42 J	0.57 J	0.6	0.42 J	0.37 J	0.42 J	0.56 J	1.84
Thorium-232	PCI/L	0.06 U	0.07 U	0.24 J	0.05 U	0 J	0.15 U	0 J	-0.02 U	-0.02 U
Uranium-234	PCI/L	1.84	1.93	2.69	2.43	1.58	1.49	1.58	6.21	3.18
Uranium-235	PCI/L	0.3 J	0.5 J	1.28	0 J	0.07 U	0.38 J	0.07 U	0.19 U	0.37 J
Uranium-238	PCI/L	3.76	4.3	4.81	4.08	3.55	2.93	3.55	14.12	6.84

Appendix C
NOAA Weekly Samples

Up/Downstream Date Collected	Up	Down	Up	Down	Up	Down	Up	Down
Sample ID	8-Jul-97 F40735	8-Jul-97 F30732	15-Jul-97 F40743	15-Jul-97 F30742	22-Jul-97 F40822	22-Jul-97 F30822	29-Jul-97 F40762	29-Jul-97 F30764
UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Semivolatile Organics	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,2,4-Trichlorobenzene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,2-Dichlorobenzene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,3-Dichlorobenzene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,4-Dichlorobenzene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2,4,5-Trichlorophenol	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
2,4,6-Trichlorophenol	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2,4-Dichlorophenol	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2,4-Dimethylphenol	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2,4-Dinitrophenol	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
2,4-Dinitrotoluene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2,6-Dinitrotoluene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Chloronaphthalene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Chlorophenol	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Methyl-4,6-dinitrophenol	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
2-Methylnaphthalene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Methylphenol	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Nitrobenzenamine	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
2-Nitrophenol	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
3,3'-Dichlorobenzidine	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U
3-Nitrobenzenamine	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
4-Bromophenyl phenyl ether	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Chloro-3-methylphenol	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Chlorobenzenamine	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Chlorophenyl phenyl ether	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Methylphenol	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Nitrobenzenamine	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
4-Nitrophenol	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Acenaphthene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Acenaphthylene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Anthracene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benz(a)anthracene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzenemethanol	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(a)pyrene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(b)fluoranthene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(ghi)perylene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U

Appendix C
NOAA Weekly Samples

Up/Downstream	Up	Down	Up	Down	Up	Down	Up	Down
Date Collected	8-Jul-97	8-Jul-97	15-Jul-97	15-Jul-97	22-Jul-97	22-Jul-97	29-Jul-97	29-Jul-97
Sample ID	F40735	F30732	F40743	F30742	F40822	F30822	F40762	F30764
Semivolatile Organics	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(k)fluoranthene	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Benzoic acid	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Bis(2-chloroethoxy)methane	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Bis(2-chloroethyl) ether	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Bis(2-chloroisopropyl) ether	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Bis(2-ethylhexyl)phthalate	UG/L	3 B, J	3 B, J	5 B, J	8 B, J	4 B, J	10 U	10 U
Butyl benzyl phthalate	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Carbazole	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chrysene	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Di-n-butyl phthalate	UG/L	10 U	10 U	10 U	1 J	10 U	10 U	10 U
Di-n-octylphthalate	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibenz(a,h)anthracene	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibenzofuran	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Diethyl phthalate	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dimethyl phthalate	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Fluoranthene	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Fluorene	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Hexachlorobenzene	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Hexachlorobutadiene	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Hexachloro-cyclopentadiene	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Hexachloroethane	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Indeno(1,2,3-cd)pyrene	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Isophorone	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
N-Nitroso-di-n-propylamine	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
N-Nitrosodiphenylamine	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Naphthalene	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Nitrobenzene	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Pentachlorophenol	UG/L	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Phenanthrene	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Pyrene	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U

Appendix C
NOAA Weekly Samples

	Up/Downstream	Up	Up	Down	Down	Up	Down	Up	Down	Up	Down Alt.
	Date Collected	5-Aug-97	5-Aug-97	5-Aug-97	5-Aug-97	12-Aug-97	12-Aug-97	12-Aug-97	12-Aug-97	26-Aug-97	26-Aug-97
	Sample ID	F60753-FR	F40752	F50751-FR	F30756	F40781	F30786	F40851	F30851		
Inorganics	UG/L	156 <	170 <	250 <	332 <	130 <	177 <	211 <	211 <		
Aluminum	UG/L	3.3 <	2.7 <	3.7 <	2 U	2 U	2 U	2 U	2 U		
Antimony	UG/L	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U		
Arsenic	UG/L	47.4 <	45.6 <	48.5 <	49.3 <	44.5 <	46.6 <	43.1 <	44.7 <		
Barium	UG/L	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.2 U	0.2 U		
Beryllium	UG/L	102 <	93.9 <	96.6 <	96.4 <	113 <	100 <	104 <	96.4 <		
Boron	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	0.4 U	0.55 <	0.4 U	0.4 U		
Cadmium	UG/L	43100 <	41200 <	41200 <	43200 <	42100 <	42500 <	42600 <	43200 <		
Calcium	UG/L	3.7 U	6.1 <	3.7 U	7.3 <	0.8 U	0.8 U	1 <	0.97 <		
Chromium	UG/L	4.6 U	4.6 <	4.6 U	7.7 <	1.3 U	1.3 U	1.3 U	1.3 U		
Cobalt	UG/L	4.2 U	4.2 U	4.2 U	7 <	3.7 <	2.8 <	4.5 <	4.8 <		
Copper	UG/L	231 <	227 <	282 <	357 <	227 <	204 <	212 <	225 <		
Iron	UG/L	3 <	4.1 <	2 U	2 U	2 U	2 U	2 U	2 U		
Lead	UG/L	10800 <	10300 <	10600 <	10900 <	10500 <	10700 <	10900 <	11300 <		
Magnesium	UG/L	77.2 <	72.7 <	61.4 <	64.2 <	68.5 <	43 <	59.9 <	27.6 <		
Manganese	UG/L	0.61 <	0.63 <	1.6 <	1.4 <	0.42 <	0.75 <	0.46 <	3.4 <		
Mercury	UG/L	13.8 U	13.8 U	13.8 U	13.8 U	2.6 U	2.6 <	2.6 U	2.6 U		
Molybdenum	UG/L	8.9 U	8.9 U	8.9 U	12.6 <	6 <	2.9 <	1.6 U	2.5 <		
Nickel	UG/L	1660 <	1380 <	1790 <	1640 <	1570 <	1680 <	1720 <	1780 <		
Potassium	UG/L	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U		
Selenium	UG/L	6450 <	6050 <	6310 <	7000 <	6850 <	7170 <	6730 <	7290 <		
Silica	UG/L	2.3 <	2.9 <	2.3 <	2 <	0.7 U	0.7 U	0.7 U	0.7 U		
Silver	UG/L	8400 <	8000 <	7780 <	7790 <	7150 <	7020 <	11100 <	10900 <		
Sodium	UG/L	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	4.3 <	3.8 U		
Thallium	UG/L	3.6 U	3.6 U	3.6 U	4.5 <	0.7 U	0.87 <	0.73 <	1.1 <		
Vanadium	UG/L	21.9 <	21.6 <	19.2 <	20.1 <	25.6 <	18.4 <	22.2 <	13.2 <		
Zinc	UG/L										

Appendix C
NOAA Weekly Samples

	Up/Downstream	Up	Up	Down	Up	Down	Up	Down	Alt.
	Date Collected	5-Aug-97	5-Aug-97	5-Aug-97	12-Aug-97	12-Aug-97	26-Aug-97	26-Aug-97	
	Sample ID	F60756-FR	F40755	F50756-FR	F30754	F30784	F40856	F30856	
Misc - Anions									
Alkalinity	MG/L	139 <	118 <	117 <	127 <	100	111 <	114 <	
Bromide	MG/L	0.25 U	0.25 U	0.25 U	0.25 U	0.25	0.25 U	0.25 U	
Chloride	MG/L	10.3 <	10.4 <	9.9 <	9.9 <	8.9	10 <	9.1 <	
Fluoride	MG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.25	0.25 <	0.25 U	
Orthophosphate	MG/L	0.31 <	0.29 <	0.27 <	0.35 <	0.34	0.52 <	0.47 <	
Sulfate	MG/L	35.4 <	35.7 <	35.2 <	35.5 <	32.9	41.8 <	44.1 <	
Suspended Solids	MG/L	9 <	6 <	10 <	12 <	27	5 U	5 U	

	Up/Downstream	Up	Up	Down	Up	Down	Up	Down	Alt.
	Date Collected	5-Aug-97	5-Aug-97	5-Aug-97	12-Aug-97	12-Aug-97	26-Aug-97	26-Aug-97	
	Sample ID	F60754-FR	F40757	F50752-FR	F30751	F30785	F40852	F30852	
Misc - Phenol									
Phenol	UG/L	10 U	10 U	10 U	10 U	10	10 U	10 U	
Miscellaneous									
Ammonia	MG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.1	0.1 U	0.1 U	
Kjeldahl Nitrogen	MG/L	0.11 <	0.1 U	0.1 U	0.15 <	0.23	0.1 U	0.1 U	
Nitrate-Nitrite (as N)	MG-N/L	2.1 <	2.2 <	2.2 <	2 <		1.8 <	1.7 <	
Total Phosphate as Phosphorus	MG/L	0.25 <	0.26 <	0.2 <	0.2 <		0.26 <	0.21 <	

	Up/Downstream	Up	Down	Up	Down	Up	Down	Alt.
	Date Collected	5-Aug-97	5-Aug-97	5-Aug-97	12-Aug-97	12-Aug-97	26-Aug-97	26-Aug-97
	Sample ID	F60752-FR	F40754	F50754-FR	F30757	F30783	F40855	F30855
Miscellaneous - BOD								
Biochemical Oxygen Demand (BOD)	MG/L	3 <	2 <	1 <	2 <	1	1 <	1 U

Appendix C
NOAA Weekly Samples

Pesticide/PCBs	Up/Downstream Date Collected	Sample ID	5-Aug-97		12-Aug-97		26-Aug-97		Down Alt. 26-Aug-97
			Up	Down	Up	Down	Up	Down	
			F40753	F50753-FR	F30753	F30782	F40854	F30854	
4,4'-DDD	UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.1	0.11 U	0.1 U	
4,4'-DDE	UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.1	0.11 U	0.1 U	
4,4'-DDT	UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.1	0.11 U	0.1 U	
Aldrin	UG/L	0.05 U	0.05 U	0.05 U	0.051 U	0.052	0.055 U	0.05 U	
Dieldrin	UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.1	0.11 U	0.1 U	
Endosulfan I	UG/L	0.05 U	0.05 U	0.05 U	0.051 U	0.052	0.055 U	0.05 U	
Endosulfan II	UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.1	0.11 U	0.1 U	
Endosulfan sulfate	UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.1	0.11 U	0.1 U	
Endrin	UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.1	0.11 U	0.1 U	
Endrin aldehyde	UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.1	0.11 U	0.1 U	
Endrin ketone	UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.1	0.11 U	0.1 U	
Heptachlor	UG/L	0.05 U	0.05 U	0.05 U	0.051 U	0.052	0.055 U	0.05 U	
Heptachlor epoxide	UG/L	0.05 U	0.05 U	0.05 U	0.051 U	0.052	0.055 U	0.05 U	
Lindane	UG/L	0.05 U	0.05 U	0.05 U	0.051 U	0.052	0.055 U	0.05 U	
Methoxychlor	UG/L	0.5 U	0.5 U	0.5 U	0.51 U	0.52	0.55 U	0.5 U	
PCB-1016	UG/L	1 U	1 U	1 U	1 U	1	1.1 U	1 U	
PCB-1221	UG/L	2 U	2 U	2 U	2 U	2.1	2.2 U	2 U	
PCB-1232	UG/L	1 U	1 U	1 U	1 U	1	1.1 U	1 U	
PCB-1242	UG/L	1 U	1 U	1 U	1 U	1	1.1 U	1 U	
PCB-1248	UG/L	1 U	1 U	1 U	1 U	1	1.1 U	1 U	
PCB-1254	UG/L	1 U	1 U	1 U	1 U	1	1.1 U	1 U	
PCB-1260	UG/L	1 U	1 U	1 U	1 U	1	1.1 U	1 U	
Toxaphene	UG/L	5 U	5 U	5 U	5.1 U	5.2	5.5 U	5 U	
alpha-BHC	UG/L	0.05 U	0.05 U	0.05 U	0.051 U	0.052	0.055 U	0.05 U	
alpha-Chlordane	UG/L	0.05 U	0.05 U	0.05 U	0.051 U	0.052	0.055 U	0.05 U	
beta-BHC	UG/L	0.05 U	0.05 U	0.05 U	0.051 U	0.052	0.055 U	0.05 U	
delta-BHC	UG/L	0.05 U	0.05 U	0.05 U	0.051 U	0.052	0.055 U	0.05 U	
gamma-Chlordane	UG/L	0.05 U	0.05 U	0.05 U	0.051 U	0.052	0.055 U	0.05 U	

Appendix C

NOAA Weekly Samples

Radiological	Up/Downstream	Date Collected		5-Aug-97		5-Aug-97		5-Aug-97		12-Aug-97		26-Aug-97						
		Sample ID	PCI/L	Up	F60755-FR	Up	F40756	Down	F50755-FR	Down	F30752	Up	F40783	Down	F30781	Up	F40853	Down Alt
Alpha activity				7.64		6.79		7.21		6.7		5.27		7.1		2.95 J		6.12
Americium-241				0.2 U		0.13 U		0.17 J		0.36 J		0.17 U		0.58 J		0.52 J		0.05 U
Beta activity				5.16		5.08		5.02		5.97		8.82		7.71		5.25		6.23
Cesium-137				0.55 U		1.42 U		0.05 U		0.34 U		-0.15 U		-1.23 U		-2.23 U		1.55 U
Cobalt-60				-0.72 U		0.41 U		0.71 U		0.85 U		1.46 U		-0.05 U		-1.17 U		0.7 U
Neptunium-237				0.04 U		0.27 J		0 J		0.05 U		0.22 J		0.17 J		0.1 U		0.13 J
Plutonium-238				-0.65 U		0.09 U		0.19 U		0 U		-0.05 U		-0.44 U		0 U		-0.02 U
Plutonium-239				0.11 U		0.05 U		0.06 U		0 J		0.04 U		0.03 U		0.07 U		0.03 U
Protactinium-233				-0.8 U		0.12 U		-2.17 U		0.21 U		-0.78 U		1.3 U		0.12 U		1.8 U
Thorium-228				0.15 J		0.38 J		0.04 U		0.14 U		0.13 U		0.24 J		0.05 U		0.14 U
Thorium-230				0.22 J		0.15 U		0.39 J		0.54 J		0.22 J		0.53 J		0.41 J		0.33 J
Thorium-232				0.07 U		0.08 U		0.04 U		0 J		0 J		0.1 U		0.1 U		0.05 U
Uranium-234				2.48		2.4		2.92		2.67		1.65		2.48		1.64		1.96
Uranium-235				0.07 U		0.7		0.21 U		0.25 J		0.68		0.38 J		0.05 U		0.66 J
Uranium-238				5.02		3.2		4.63		4.55		2.5		3.98		4.33		3.72

Appendix C
NOAA Weekly Samples

	Up/Downstream Date Collected	Up 5-Aug-97 F60754-FR	Up 5-Aug-97 F40757	Down 5-Aug-97 F50752-FR	Down 5-Aug-97 F30751	Up 12-Aug-97	Down 12-Aug-97 F30785	Up 26-Aug-97 F40852	Down Alt. 26-Aug-97 F30852
Semivolatile Organics	Sample ID								
1,2,4-Trichlorobenzene	UG/L	10 U	10 U	10 U	10 U		10	10 U	10 U
1,2-Dichlorobenzene	UG/L	10 U	10 U	10 U	10 U		10	10 U	10 U
1,3-Dichlorobenzene	UG/L	10 U	10 U	10 U	10 U		10	10 U	10 U
1,4-Dichlorobenzene	UG/L	10 U	10 U	10 U	10 U		10	10 U	10 U
2,4,5-Trichlorophenol	UG/L	50 U	50 U	50 U	50 U		50	50 U	50 U
2,4,6-Trichlorophenol	UG/L	10 U	10 U	10 U	10 U		10	10 U	10 U
2,4-Dichlorophenol	UG/L	10 U	10 U	10 U	10 U		10	10 U	10 U
2,4-Dimethylphenol	UG/L	10 U	10 U	10 U	10 U		10	10 U	10 U
2,4-Dinitrophenol	UG/L	50 U	50 U	50 U	50 U		50	50 U	50 U
2,4-Dinitrotoluene	UG/L	10 U	10 U	10 U	10 U		10	10 U	10 U
2,6-Dinitrotoluene	UG/L	10 U	10 U	10 U	10 U		10	10 U	10 U
2-Chloronaphthalene	UG/L	10 U	10 U	10 U	10 U		10	10 U	10 U
2-Chlorophenol	UG/L	10 U	10 U	10 U	10 U		10	10 U	10 U
2-Methyl-4,6-dinitrophenol	UG/L	50 U	50 U	50 U	50 U		50	50 U	50 U
2-Methylnaphthalene	UG/L	10 U	10 U	10 U	10 U		10	10 U	10 U
2-Methylphenol	UG/L	10 U	10 U	10 U	10 U		10	10 U	10 U
2-Nitrobenzenamine	UG/L	50 U	50 U	50 U	50 U		50	50 U	50 U
2-Nitrophenol	UG/L	10 U	10 U	10 U	10 U		10	10 U	10 U
3,3'-Dichlorobenzidine	UG/L	20 U	20 U	20 U	20 U		20	20 U	20 U
3-Nitrobenzenamine	UG/L	50 U	50 U	50 U	50 U		50	50 U	50 U
4-Bromophenyl phenyl ether	UG/L	10 U	10 U	10 U	10 U		10	10 U	10 U
4-Chloro-3-methylphenol	UG/L	10 U	10 U	10 U	10 U		10	10 U	10 U
4-Chlorobenzenamine	UG/L	10 U	10 U	10 U	10 U		10	10 U	10 U
4-Chlorophenyl phenyl ether	UG/L	10 U	10 U	10 U	10 U		10	10 U	10 U
4-Methylphenol	UG/L	10 U	10 U	10 U	10 U		10	10 U	10 U
4-Nitrobenzenamine	UG/L	50 U	50 U	50 U	50 U		50	50 U	50 U
4-Nitrophenol	UG/L	50 U	50 U	50 U	50 U		50	50 U	50 U
Acenaphthene	UG/L	10 U	10 U	10 U	10 U		10	10 U	10 U
Acenaphthylene	UG/L	10 U	10 U	10 U	10 U		10	10 U	10 U
Anthracene	UG/L	10 U	10 U	10 U	10 U		10	10 U	10 U
Benz(a)anthracene	UG/L	10 U	10 U	10 U	10 U		10	10 U	10 U
Benzenemethanol	UG/L	10 U	10 U	10 U	10 U		10	10 U	10 U
Benzo(a)pyrene	UG/L	10 U	10 U	10 U	10 U		10	10 U	10 U
Benzo(b)fluoranthene	UG/L	10 U	10 U	10 U	10 U		10	10 U	10 U
Benzo(ghi)perylene	UG/L	10 U	10 U	10 U	10 U		10	10 U	10 U

Appendix C
NOAA Weekly Samples

	Up/Downstream Date Collected	Up 5-Aug-97 F60754-FR	Up 5-Aug-97 F40757	Down 5-Aug-97 F50752-FR	Down 5-Aug-97 F30751	Up 12-Aug-97	Down 12-Aug-97 F30785	Up 26-Aug-97 F40852	Down Alt. 26-Aug-97 F30852
Semivolatile Organics	Sample ID								
Benzo(k)fluoranthene	UG/L	10 U	10 U	10 U	10 U		10	10 U	10 U
Benzoic acid	UG/L	50 U	50 U	50 U	50 U		50	50 U	50 U
Bis(2-chloroethoxy)methane	UG/L	10 U	10 U	10 U	10 U		10	10 U	10 U
Bis(2-chloroethyl) ether	UG/L	10 U	10 U	10 U	10 U		10	10 U	12 U
Bis(2-chloroisopropyl) ether	UG/L	10 U	10 U	10 U	10 U		10	10 U	10 U
Bis(2-ethylhexyl)phthalate	UG/L	11 B	7 B, J	9 B, J	3 B, J		10	5 B, J	7 B, J
Butyl benzyl phthalate	UG/L	10 U	10 U	10 U	10 U		10	10 U	10 U
Carbazole	UG/L	10 U	10 U	10 U	10 U		10	10 U	10 U
Chrysene	UG/L	10 U	10 U	10 U	10 U		10	10 U	10 U
Di-n-butyl phthalate	UG/L	2 J	1 J	1 J	1 J		10	2 B, J	12 U
Di-n-octylphthalate	UG/L	10 U	10 U	10 U	10 U		10	10 U	10 U
Dibenz(a,h)anthracene	UG/L	10 U	10 U	10 U	10 U		10	10 U	10 U
Dibenzofuran	UG/L	10 U	10 U	10 U	10 U		10	10 U	10 U
Diethyl phthalate	UG/L	10 U	10 U	10 U	10 U		10	10 U	10 U
Dimethyl phthalate	UG/L	10 U	10 U	10 U	10 U		10	10 U	10 U
Fluoranthene	UG/L	10 U	10 U	10 U	10 U		10	10 U	10 U
Fluorene	UG/L	10 U	10 U	10 U	10 U		10	10 U	10 U
Hexachlorobenzene	UG/L	10 U	10 U	10 U	10 U		10	10 U	10 U
Hexachlorobutadiene	UG/L	10 U	10 U	10 U	10 U		10	10 U	10 U
Hexachloro-cyclopentadiene	UG/L	10 U	10 U	10 U	10 U		10	10 U	10 U
Hexachloroethane	UG/L	10 U	10 U	10 U	10 U		10	10 U	10 U
Indeno(1,2,3-cd)pyrene	UG/L	10 U	10 U	10 U	10 U		10	10 U	10 U
Isophorone	UG/L	10 U	10 U	10 U	10 U		10	10 U	10 U
N-Nitroso-di-n-propylamine	UG/L	10 U	10 U	10 U	10 U		10	10 U	10 U
N-Nitrosodiphenylamine	UG/L	10 U	10 U	10 U	10 U		10	10 U	10 U
Naphthalene	UG/L	10 U	10 U	10 U	10 U		10	10 U	10 U
Nitrobenzene	UG/L	10 U	10 U	10 U	10 U		10	10 U	10 U
Pentachlorophenol	UG/L	50 U	50 U	50 U	50 U		50	50 U	50 U
Phenanthrene	UG/L	10 U	10 U	10 U	10 U		10	10 U	10 U
Pyrene	UG/L	10 U	10 U	10 U	10 U		10	10 U	10 U

Appendix C NOAA Weekly Samples

	Up/Downstream	Up	Down Alt.	Up	Down	Down Alt.	Up	Down	Down Alt.
	Date Collected	2-Sep-97	2-Sep-97	9-Sep-97	9-Sep-97	9-Sep-97	16-Sep-97	16-Sep-97	16-Sep-97
	Sample ID	F40861	F30862	F41451	F31451	F71451	F41461	F31461	F71461
Inorganics	UG/L	127 <	90 <	265 <	417 <	482 <	102 <	1100 <	397 <
Aluminum	UG/L	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.3 <
Antimony	UG/L	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.7 <
Arsenic	UG/L	41.3 <	42.8 <	43 <	45.8 <	44.7 <	40.8 <	53.2 <	47.2 <
Barium	UG/L	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Beryllium	UG/L	30.9 <	29.3 <	92.6 <	98.7 <	100 <	160 <	108 <	166 <
Boron	UG/L	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
Cadmium	UG/L	40900 <	41500 <	36600 <	37200 <	35500 <	40700 <	43200 <	42800 <
Calcium	UG/L	1.4 <	1.5 <	0.8 U	1.5 <	1.8 <	3.6 <	5.6 <	5 <
Chromium	UG/L	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
Cobalt	UG/L	2.2 <	2.4 <	7 <	8 <	7.2 <	9.6 <	16.4 <	11 <
Copper	UG/L	152 <	111 <	359 <	509 <	574 <	219 <	1680 <	634 <
Iron	UG/L	2 U	2 U	2 U	2.9 <	2.1 <	2.2 <	4.4 <	2.1 <
Lead	UG/L	10700 <	11100 <	8980 <	9350 <	9090 <	12100 <	13000 <	12900 <
Magnesium	UG/L	46.9 <	22.9 <	82.7 <	79.4 <	91 <	47.7 <	149 <	56.2 <
Manganese	UG/L	0.33 <	0.3 <	0.99 <	1.1 <	1.4 <	0.43 <	5.4 <	2.4 <
Mercury	UG/L	2.6 U	2.6 U	2.6 U	2.6 U	4.1 <	2.6 U	2.6 U	3.7 <
Molybdenum	UG/L	2.1 <	2.2 <	2.4 <	3.1 <	2.5 <	4.3 <	6 <	6.1 <
Nickel	UG/L	1490 <	1630 <	1630 <	1800 <	1930 <	1880 <	2340 <	2090 <
Potassium	UG/L	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	4.7 <	3.1 U	4.5 <
Selenium	UG/L	6350 <	6650 <	5560 <	6280 <	6450 <	6700 <	99200 <	8050 <
Silica	UG/L	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U
Silver	UG/L	7840 <	7280 <	6980 <	7030 <	6440 <	8610 <	9100 <	8810 <
Sodium	UG/L	3.8 U	3.8 U	3.8 U	3.8 U	5.4 <	3.9 <	3.8 U	3.8 U
Thallium	UG/L	0.7 U	0.7 U	1.4 <	1.6 <	1.2 <	0.9 <	2.9 <	1.5 <
Vanadium	UG/L	17.7 <	9.7 <	57.1 <	43.6 <	41.2 <	27.6 <	56.3 <	29.2 <
Zinc	UG/L								

Appendix C
NOAA Weekly Samples

Misc - Anions	Up/Downstream	Up	Down Alt.	Up	Down	Down Alt.	Up	Down	Down Alt.
	Date Collected	2-Sep-97	2-Sep-97	9-Sep-97	9-Sep-97	9-Sep-97	16-Sep-97	16-Sep-97	16-Sep-97
	Sample ID	F40866	F30865	F41456	F31456	F71456	F41466	F31466	F71466
	Alkalinity	113 <	113 <	93.4 <	92.8 <	90.4 <	120 <	121 <	120 <
	Bromide	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
	Chloride	8.4 <	7.8 <	7.4 <	7 <	6.7 <	11.6 <	11.6 <	11.4 <
	Fluoride	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.37 <	0.34 <	0.35 <
	Orthophosphate	0.32 <	0.35 <	0.37 <	0.38 <	0.34 <	0.41 <	0.46 <	0.44 <
Sulfate	MG/L	30.6 <	33.1 <	32.9 <	32.9 <	33.2 <	39 <	39.3 <	42.1 <
	MG/L	8 <	6 <	13 <	18 <	27 <	9.8 <	31.1 <	26 <
	Suspended Solids								
Misc - Phenol	Up/Downstream	Up	Down Alt.	Up	Down	Down Alt.	Up	Down	Down Alt.
	Date Collected	2-Sep-97	2-Sep-97	9-Sep-97	9-Sep-97	9-Sep-97	16-Sep-97	16-Sep-97	16-Sep-97
	Sample ID	F40862	F30863	F41452	F31452	F71452	F41462	F31462	F71462
	Phenol	10 U	10 U	10 U	10 U	11 U	10 U	10 U	10 U
	Miscellaneous	F40861	F30861	F41451	F31451	F71451	F41461	F31461	F71461
	Ammonia	0.1 U	0.1 U	0.1 U	0.1 U	0.13 <	0.1 U	0.1 U	0.1 U
	Kjeldahl Nitrogen	0.12 <	0.1 U	0.23 <	0.35 <	0.33 <	0.1 U	0.13 <	0.1 U
	Nitrate-Nitrite (as N)	1.7 <	1.6 <	1.8 <	1.9 <	1.8 <	1.9 <	1.8 <	1.7 <
Total Phosphorus	MG/L	0.19 <	0.17 <	0.2 <	0.2 <	0.22 <	0.24 <	0.3 <	0.23 <
	Phosphorus								
Miscellaneous - BOD	Up/Downstream	Up	Down Alt.	Up	Down	Down Alt.	Up	Down	Down Alt.
	Date Collected	2-Sep-97	2-Sep-97	9-Sep-97	9-Sep-97	9-Sep-97	16-Sep-97	16-Sep-97	16-Sep-97
	Sample ID	F40866	F30866	F41455	F31455	F71455	F41465	F31465	F71465
Biochemical Oxygen Demand (BOD)	MG/L	1 <	1 <	1 <	1 <	1 <	2 <	1 <	2 <

Appendix C NOAA Weekly Samples

	Up/Downstream Date Collected	Up	Down Alt.	Up	Down	Down Alt.	Up	Down	Down Alt.
Pesticide/PCBs	Sample ID	2-Sep-97	2-Sep-97	9-Sep-97	9-Sep-97	9-Sep-97	16-Sep-97	16-Sep-97	16-Sep-97
4,4'-DDD	UG/L	F40864 0.1 U	F30864 0.1 U	F41454 0.1 U	F31454 0.1 U	F71454 0.1 U	F41464 0.1 U	F31464 0.1 U	F71464 0.1 U
4,4'-DDE	UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
4,4'-DDT	UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Aldrin	UG/L	0.052 U	0.052 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U
Dieldrin	UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Endosulfan I	UG/L	0.052 U	0.052 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U
Endosulfan II	UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Endosulfan sulfate	UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Endrin	UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Endrin aldehyde	UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Endrin ketone	UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Heptachlor	UG/L	0.052 U	0.052 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U
Heptachlor epoxide	UG/L	0.052 U	0.052 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U
Lindane	UG/L	0.052 U	0.052 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U
Methoxychlor	UG/L	0.52 U	0.52 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U
PCB-1016	UG/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
PCB-1221	UG/L	2.1 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U
PCB-1232	UG/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
PCB-1242	UG/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
PCB-1248	UG/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
PCB-1254	UG/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
PCB-1260	UG/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Toxaphene	UG/L	5.2 U	5.2 U	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U
alpha-BHC	UG/L	0.052 U	0.052 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U
alpha-Chlordane	UG/L	0.052 U	0.052 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U
beta-BHC	UG/L	0.052 U	0.052 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U
delta-BHC	UG/L	0.052 U	0.052 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U
gamma-Chlordane	UG/L	0.052 U	0.052 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U

Appendix C
NOAA Weekly Samples

	Up/Downstream	Up	Down Alt.	Up	Down	Down Alt.	Up	Down	Down Alt.
	Date Collected	2-Sep-97	2-Sep-97	9-Sep-97	9-Sep-97	9-Sep-97	16-Sep-97	16-Sep-97	16-Sep-97
	Sample ID	F40863	F30867	F41453	F31453	F71453	F41463	F31463	F71463
Radiological	PCI/L	6.92	4.5	9.11	6.94	6.64	4.28	7.49	5.83
Alpha activity	PCI/L	0.15 U	0.4 J	0.6 J	0.86 J	0.61 U	0.46 J	0.07 U	0.35 U
Americium-241	PCI/L	91.75	5.26	6.32	6.48	8.28	11.51	4.55	4.15 J
Beta activity	PCI/L	0.37 U	0.3 U	-2.05 U	-0.05 U	0.22 U	2.3 U	-0.57 U	0.35 U
Cesium-137	PCI/L	0.09 U	-0.92 U	1.52 U	1.08 U	-2.09 U	1.26 U	0.67 U	0.49 U
Cobalt-60	PCI/L	0.03 U	0.2 J	0.51 J	0.04 U	0.15 J	0.26 J	0 J	0.13 U
Neptunium-237	PCI/L	-0.14 U	-0.28 U	0.24 U	-0.21 U	0.13 U	0.22 U	0.59 U	0.42 U
Plutonium-238	PCI/L	0.03 U	0 J	0.1 U	0.11 U	0.11 U	0.07 U	0.04 U	0.03 U
Plutonium-239	PCI/L	-1.37 U	0.05 U	-0.39 U	-1.35 U	-0.07 U	3.83 U	-0.45 U	0.42 U
Protactinium-233	PCI/L	0.17 J	0.16 J	0.1 U	0.16 U	0 J	0.18 U	0.25 J	0.12 U
Thorium-228	PCI/L	0.62	0.47	0.52 J	0.16 U	0.64 J	0.09 U	0.58 J	0.77
Thorium-230	PCI/L	0.04 U	0.04 U	0.05 U	0.05 U	0.15 U	0.05 U	0.1 U	0.2 J
Thorium-232	PCI/L	1.95	1.69	2.31	3.16	2.16	1.42	3.33	1.82
Uranium-234	PCI/L	0.31 J	-0.01 U	0.5 J	0 J	0.16 U	0.19 U	0 J	-0.02 U
Uranium-235	PCI/L	2.53	2.74	2.25	3.1	2.46	1.9	3.12	2.49
Uranium-238	PCI/L								

Appendix C
NOAA Weekly Samples

	Up/Downstream Date Collected Sample ID	Up 2-Sep-97 F40862	Down Alt. 2-Sep-97 F30863	Up 9-Sep-97 F41452	Down 9-Sep-97 F31452	Down Alt. 9-Sep-97 F71452	Up 16-Sep-97 F41462	Down 16-Sep-97 F31462	Down Alt. 16-Sep-97 F71462
Semivolatile Organics	UG/L	10 U	10 U	10 U	10 U	11 U	10 U	10 U	10 U
1,2,4-Trichlorobenzene	UG/L	10 U	10 U	10 U	10 U	11 U	10 U	10 U	10 U
1,2-Dichlorobenzene	UG/L	10 U	10 U	10 U	10 U	11 U	10 U	10 U	10 U
1,3-Dichlorobenzene	UG/L	10 U	10 U	10 U	10 U	11 U	10 U	10 U	10 U
1,4-Dichlorobenzene	UG/L	10 U	10 U	10 U	10 U	11 U	10 U	10 U	10 U
2,4,5-Trichlorophenol	UG/L	50 U	50 U	50 U	50 U	55 U	50 U	50 U	50 U
2,4,6-Trichlorophenol	UG/L	10 U	10 U	10 U	10 U	11 U	10 U	10 U	10 U
2,4-Dichlorophenol	UG/L	10 U	10 U	10 U	10 U	11 U	10 U	10 U	10 U
2,4-Dimethylphenol	UG/L	10 U	10 U	10 U	10 U	11 U	10 U	10 U	10 U
2,4-Dinitrophenol	UG/L	50 U	50 U	50 U	50 U	55 U	50 U	50 U	50 U
2,4-Dinitrotoluene	UG/L	10 U	10 U	10 U	10 U	11 U	10 U	10 U	10 U
2,6-Dinitrotoluene	UG/L	10 U	10 U	10 U	10 U	11 U	10 U	10 U	10 U
2-Chloronaphthalene	UG/L	10 U	10 U	10 U	10 U	11 U	10 U	10 U	10 U
2-Chlorophenol	UG/L	10 U	10 U	10 U	10 U	11 U	10 U	10 U	10 U
2-Methyl-4,6-dinitrophenol	UG/L	50 U	50 U	50 U	50 U	55 U	50 U	50 U	50 U
2-Methylnaphthalene	UG/L	10 U	10 U	10 U	10 U	11 U	10 U	10 U	10 U
2-Methylphenol	UG/L	10 U	10 U	10 U	10 U	11 U	10 U	10 U	10 U
2-Nitrobenzenamine	UG/L	50 U	50 U	50 U	50 U	55 U	50 U	50 U	50 U
2-Nitrophenol	UG/L	10 U	10 U	10 U	10 U	11 U	10 U	10 U	10 U
3,3'-Dichlorobenzidine	UG/L	20 U	20 U	20 U	20 U	22 U	20 U	20 U	20 U
3-Nitrobenzenamine	UG/L	50 U	50 U	50 U	50 U	55 U	50 U	50 U	50 U
4-Bromophenyl phenyl ether	UG/L	10 U	10 U	10 U	10 U	11 U	10 U	10 U	10 U
4-Chloro-3-methylphenol	UG/L	10 U	10 U	10 U	10 U	11 U	10 U	10 U	10 U
4-Chlorobenzenamine	UG/L	10 U	10 U	10 U	10 U	11 U	10 U	10 U	10 U
4-Chlorophenyl phenyl ether	UG/L	10 U	10 U	10 U	10 U	11 U	10 U	10 U	10 U
4-Methylphenol	UG/L	10 U	10 U	10 U	10 U	11 U	10 U	10 U	10 U
4-Nitrobenzenamine	UG/L	50 U	50 U	50 U	50 U	55 U	50 U	50 U	50 U
4-Nitrophenol	UG/L	50 U	50 U	50 U	50 U	55 U	50 U	50 U	50 U
Acenaphthene	UG/L	10 U	10 U	10 U	10 U	11 U	10 U	10 U	10 U
Acenaphthylene	UG/L	10 U	10 U	10 U	10 U	11 U	10 U	10 U	10 U
Anthracene	UG/L	10 U	10 U	10 U	10 U	11 U	10 U	10 U	10 U
Benz(a)anthracene	UG/L	10 U	10 U	10 U	10 U	11 U	10 U	10 U	10 U
Benzenemethanol	UG/L	10 U	10 U	10 U	10 U	11 U	10 U	10 U	10 U
Benzo(a)pyrene	UG/L	10 U	10 U	10 U	10 U	11 U	10 U	10 U	10 U
Benzo(b)fluoranthene	UG/L	10 U	10 U	10 U	10 U	11 U	10 U	10 U	10 U
Benzo(g,h,i)perylene	UG/L	10 U	10 U	10 U	10 U	11 U	10 U	10 U	10 U

Appendix C
NOAA Weekly Samples

	Up/Downstream Date Collected	Up 2-Sep-97 F40862	Down Alt. 2-Sep-97 F30863	Up 9-Sep-97 F41452	Down 9-Sep-97 F31452	Down Alt. 9-Sep-97 F71452	Up 16-Sep-97 F41462	Down 16-Sep-97 F31462	Down Alt. 16-Sep-97 F71462
Semivolatile Organics	Sample ID								
Benzo(k)fluoranthene	UG/L	10 U	10 U	10 U	10 U	11 U	10 U	10 U	10 U
Benzoic acid	UG/L	50 U	50 U	50 U	50 U	55 U	50 U	50 U	50 U
Bis(2-chloroethoxy)methane	UG/L	10 U	10 U	10 U	10 U	11 U	10 U	10 U	10 U
Bis(2-chloroethyl) ether	UG/L	10 U	10 U	10 U	10 U	11 U	10 U	10 U	10 U
Bis(2-chloroisopropyl) ether	UG/L	10 U	10 U	10 U	10 U	11 U	10 U	10 U	10 U
Bis(2-ethylhexyl)phthalate	UG/L	4 J	7 J	3 J	10 U	6 B, J	5 B, J	10 U	4 B, J
Butyl benzyl phthalate	UG/L	10 U	10 U	10 U	10 U	11 U	10 U	10 U	10 U
Carbazole	UG/L	10 U	10 U	10 U	10 U	11 U	10 U	10 U	10 U
Chrysene	UG/L	10 U	10 U	10 U	10 U	11 U	10 U	10 U	10 U
Di-n-butyl phthalate	UG/L	10 U	10 U	10 U	10 U	11 U	10 U	10 U	10 U
Di-n-octylphthalate	UG/L	10 U	10 U	10 U	10 U	11 U	10 U	10 U	10 U
Dibenz(a,h)anthracene	UG/L	10 U	10 U	10 U	10 U	11 U	10 U	10 U	10 U
Dibenzofuran	UG/L	10 U	10 U	10 U	10 U	11 U	10 U	10 U	10 U
Diethyl phthalate	UG/L	10 U	10 U	10 U	10 U	11 U	10 U	10 U	10 U
Dimethyl phthalate	UG/L	10 U	10 U	10 U	10 U	11 U	10 U	10 U	10 U
Fluoranthene	UG/L	10 U	10 U	10 U	10 U	11 U	10 U	10 U	10 U
Fluorene	UG/L	10 U	10 U	10 U	10 U	11 U	10 U	10 U	10 U
Hexachlorobenzene	UG/L	10 U	10 U	10 U	10 U	11 U	10 U	10 U	10 U
Hexachlorobutadiene	UG/L	10 U	10 U	10 U	10 U	11 U	10 U	10 U	10 U
Hexachloro-cyclopentadiene	UG/L	10 U	10 U	10 U	10 U	11 U	10 U	10 U	10 U
Hexachloroethane	UG/L	10 U	10 U	10 U	10 U	11 U	10 U	10 U	10 U
Indeno(1,2,3-cd)pyrene	UG/L	10 U	10 U	10 U	10 U	11 U	10 U	10 U	10 U
Isophorone	UG/L	10 U	10 U	10 U	10 U	11 U	10 U	10 U	10 U
N-Nitroso-di-n-propylamine	UG/L	10 U	10 U	10 U	10 U	11 U	10 U	10 U	10 U
N-Nitrosodiphenylamine	UG/L	10 U	10 U	10 U	10 U	11 U	10 U	10 U	10 U
Naphthalene	UG/L	10 U	10 U	10 U	10 U	11 U	10 U	10 U	10 U
Nitrobenzene	UG/L	10 U	10 U	10 U	10 U	11 U	10 U	10 U	10 U
Pentachlorophenol	UG/L	50 U	50 U	50 U	50 U	55 U	50 U	50 U	50 U
Phenanthrene	UG/L	10 U	10 U	10 U	10 U	11 U	10 U	10 U	10 U
Pyrene	UG/L	10 U	10 U	10 U	10 U	11 U	10 U	10 U	10 U

Appendix C
NOAA Weekly Samples

	Up/Downstream	Up	Down	Down Alt.	Up	Down	Down Alt.
	Date Collected	23-Sep-97	23-Sep-97	23-Sep-97	30-Sep-97	30-Sep-97	30-Sep-97
	Sample ID	F41471	F31471	F71471	F41481	F31481	F71481
Inorganics	UG/L	117 <	185 <	766 <	92.8 <	137 <	183 <
Aluminum	UG/L	2 U	2 U	2 U	2 U	2 U	2 U
Antimony	UG/L	3.1 U	12.4 <	3.1 U	3.1 U	3.1 U	3.1 U
Arsenic	UG/L	40.8 <	43.9 <	46.2 <	41.4 <	44.1 <	45 <
Barium	UG/L	0.3 U	0.3 U	0.3 U	0.2 U	0.2 U	0.2 U
Beryllium	UG/L	65.7 <	80 <	61.9 <	61.9 <	71.8 <	64.4 <
Boron	UG/L	0.56 <	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
Cadmium	UG/L	43600 <	44300 <	43600 <	42600 <	43500 <	43200 <
Calcium	UG/L	0.99 <	26.7 <	2.2 <	1.2 <	0.86 <	1.3 <
Chromium	UG/L	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
Cobalt	UG/L	2.3 <	3.4 <	4 <	6.8 <	7.1 <	6.8 <
Copper	UG/L	177 <	198 <	805 <	128 <	144 <	195 <
Iron	UG/L	3.4 <	2 U	2 U	2 U	2 U	2 U
Lead	UG/L	11200 <	11700 <	11700 <	11100 <	11600 <	11500 <
Magnesium	UG/L	43.9 <	34.1 <	75.9 <	44.7 <	36.7 <	39.5 <
Manganese	UG/L	0.45 <	0.45 <	1.5 <	0.6 <	0.53 <	0.7 <
Mercury	UG/L	10.1 U	10.1 U	10.1 U	2.6 U	6.9 <	2.6 U
Molybdenum	UG/L	1.6 U	1.6 U	2.4 <	1.6 U	1.6 U	1.6 U
Nickel	UG/L	1580 <	1720 <	1880 <	1650 <	1720 <	1850 <
Potassium	UG/L	3.1 U	4.5 <	3.1 U	3.1 U	3.1 U	3.1 U
Selenium	UG/L	6020 <	6770 <	8650 <	6100 <	6650 <	6730 <
Silica	UG/L	0.7 U	2.6 <	0.7 U	0.7 U	0.7 U	0.7 U
Silver	UG/L	7820 <	7820 <	7230 <	7560 <	7530 <	7140 <
Sodium	UG/L	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
Thallium	UG/L	0.7 U	1.4 <	1.5 <	0.89 <	0.7 U	0.7 U
Vanadium	UG/L	20.2 <	16.7 <	22.6 <	26.5 <	21.4 <	25.2 <
Zinc	UG/L						

Appendix C
NOAA Weekly Samples

	Up/Downstream		Up		Down		Down Alt.		Up		Down		Down Alt.	
	Date Collected	Sample ID	23-Sep-97	F41476	23-Sep-97	F31476	23-Sep-97	F71476	30-Sep-97	F41486	30-Sep-97	F31486	30-Sep-97	F71486
Misc - Anions														
Alkalinity		MG/L	116 <	0.25 U	115 <	0.25 U	115 <	0.25 U	114 <	0.25 U	119 <	0.25 U	115 <	0.25 U
Bromide		MG/L	8 <	0.25 U	7.8 <	0.25 U	7.5 <	0.25 U	8.4 <	0.25 U	8.2 <	0.25 U	8.1 <	0.25 U
Chloride		MG/L	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.32 <	0.32 <	0.32 <	0.32 <	0.29 <	0.29 <
Fluoride		MG/L	0.37 <	0.37 <	0.38 <	0.38 <	0.4 <	0.4 <	0.55 <	0.55 <	0.53 <	0.53 <	0.48 <	0.48 <
Orthophosphate		MG/L	33.3 <	33.3 <	34 <	34 <	35.6 <	35.6 <	33.7 <	33.7 <	34.7 <	34.7 <	36.2 <	36.2 <
Sulfate		MG/L	5 U	5 U	5 U	5 U	13 <	13 <	5 U	5 U	5 <	5 <	9 <	9 <
Suspended Solids		MG/L												
	Up/Downstream		Up		Down		Down Alt.		Up		Down		Down Alt.	
	Date Collected	Sample ID	23-Sep-97	F41472	23-Sep-97	F31472	23-Sep-97	F71472	30-Sep-97	F41482	30-Sep-97	F31482	30-Sep-97	F71482
Misc - Phenol		UG/L	10 U	10 U	11 U	11 U	11 U	11 U	10 U	10 U	10 U	10 U	11 U	11 U
Phenol		UG/L												
Miscellaneous		Sample ID												
Ammonia		MG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Kjeldahl Nitrogen		MG/L	0.1 U	0.1 U	0.21 <	0.21 <	0.19 <	0.19 <	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Nitrate-Nitrite (as N)		MG-N/L	1.5 <	1.5 <	1.8 <	1.8 <	0.88 <	0.88 <	2.5 <	2.5 <	2.3 <	2.3 <	1.7 <	1.7 <
Total Phosphate as Phosphorus		MG/L	0.29 <	0.29 <	0.27 <	0.27 <	0.26 <	0.26 <	0.27 <	0.27 <	0.26 <	0.26 <	0.25 <	0.25 <
	Up/Downstream		Up		Down		Down Alt.		Up		Down		Down Alt.	
	Date Collected	Sample ID	23-Sep-97	F41475	23-Sep-97	F31475	23-Sep-97	F71475	30-Sep-97	F41485	30-Sep-97	F31485	30-Sep-97	F71485
Miscellaneous - BOD														
Biochemical Oxygen Demand (BOD)		MG/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U

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NOAA Weekly Samples

	Up/Downstream Date Collected	Up 23-Sep-97 F41474	Down 23-Sep-97 F31474	Down Alt. 23-Sep-97 F71474	Up 30-Sep-97 F41484	Down 30-Sep-97 F31484	Down Alt. 30-Sep-97 F71484
Pesticide/PCBs	Sample ID						
4,4'-DDD	UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U
4,4'-DDE	UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U
4,4'-DDT	UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U
Aldrin	UG/L	0.051 U	0.051 U	0.051 U	0.051 U	0.053 U	0.053 U
Dieldrin	UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U
Endosulfan I	UG/L	0.051 U	0.051 U	0.051 U	0.051 U	0.053 U	0.053 U
Endosulfan II	UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U
Endosulfan sulfate	UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U
Endrin	UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U
Endrin aldehyde	UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U
Endrin ketone	UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U
Heptachlor	UG/L	0.051 U	0.051 U	0.051 U	0.051 U	0.053 U	0.053 U
Heptachlor epoxide	UG/L	0.051 U	0.051 U	0.051 U	0.051 U	0.053 U	0.053 U
Lindane	UG/L	0.051 U	0.051 U	0.051 U	0.051 U	0.053 U	0.053 U
Methoxychlor	UG/L	0.51 U	0.51 U	0.51 U	0.51 U	0.53 U	0.53 U
PCB-1016	UG/L	1 U	1 U	1 U	1 U	1.1 U	1.1 U
PCB-1221	UG/L	2 U	2 U	2 U	2 U	2.1 U	2.1 U
PCB-1232	UG/L	1 U	1 U	1 U	1 U	1.1 U	1.1 U
PCB-1242	UG/L	1 U	1 U	1 U	1 U	1.1 U	1.1 U
PCB-1248	UG/L	1 U	1 U	1 U	1 U	1.1 U	1.1 U
PCB-1254	UG/L	1 U	1 U	1 U	1 U	1.1 U	1.1 U
PCB-1260	UG/L	1 U	1 U	1 U	1 U	1.1 U	1.1 U
Toxaphene	UG/L	5.1 U	5.1 U	5.1 U	5.1 U	5.3 U	5.3 U
alpha-BHC	UG/L	0.051 U	0.051 U	0.051 U	0.051 U	0.053 U	0.053 U
alpha-Chlordane	UG/L	0.051 U	0.051 U	0.051 U	0.051 U	0.053 U	0.053 U
beta-BHC	UG/L	0.051 U	0.051 U	0.051 U	0.051 U	0.053 U	0.053 U
delta-BHC	UG/L	0.051 U	0.051 U	0.051 U	0.051 U	0.053 U	0.053 U
gamma-Chlordane	UG/L	0.051 U	0.051 U	0.051 U	0.051 U	0.053 U	0.053 U

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NOAA Weekly Samples

	Up/Downstream	Up	Down	Down Alt.	Up	Down	Down Alt.
	Date Collected	23-Sep-97	23-Sep-97	23-Sep-97	30-Sep-97	30-Sep-97	30-Sep-97
	Sample ID	F41473	F31473	F71473	F41483	F31483	F71483
Radiological	PCI/L	3.44	4.08	5.2	5.35	6.01	5.81
Alpha activity	PCI/L	0.34 J	0.65 J	0.63 J	0.49 J	0.51 J	0.04 U
Americium-241	PCI/L	3.83	4.99	7.49	6.65	6.17	6.87
Beta activity	PCI/L	1.37 U	-0.4 U	-0.21 U	-0.22 U	1.09 U	1.27 U
Cesium-137	PCI/L	-1.93 U	-0.85 U	0.45 U	-1.02 U	1.53 U	-0.21 U
Cobalt-60	PCI/L	0.12 J	0.18 J	0.06 U	0.07 U	0.04 U	0.21 J
Neptunium-237	PCI/L	0.11 U	0.46 U	-0.02 U	0.23 U	0.73 J	0.73 J
Plutonium-238	PCI/L	0.09 U	0.04 U	0.12 J	0.04 U	0.09 U	0.09 U
Plutonium-239	PCI/L	1.72 U	0.61 U	-1.1 U	-3.03 U	-0.23 U	3.32 U
Protactinium-233	PCI/L	0.29 J	0.12 U	0.22 U	0.17 U	0.24 J	0.15 U
Thorium-228	PCI/L	0.53 J	0.46 J	0.78 J	0.33 J	0.19 J	0.25 J
Thorium-230	PCI/L	0.06 U	0 J	0.07 U	0.11 U	0.14 U	0.05 U
Thorium-232	PCI/L	1.43	1.4	1.41	1.56	2.02	2.08
Uranium-234	PCI/L	0.1 U	0 J	0.23 J	0.2 U	0.28 J	0.18 U
Uranium-235	PCI/L	2.27	2.08	2.2	2.78	3.11	2.96
Uranium-238	PCI/L						

Appendix C
NOAA Weekly Samples

	Up/Downstream Date Collected	Up 23-Sep-97 F41472	Down 23-Sep-97 F31472	Down Alt. 23-Sep-97 F71472	Up 30-Sep-97 F41482	Down 30-Sep-97 F31482	Down Alt. 30-Sep-97 F71482
Semivolatile Organics	Sample ID						
1,2,4-Trichlorobenzene	UG/L	10 U	11 U	11 U	10 U	10 U	11 U
1,2-Dichlorobenzene	UG/L	10 U	11 U	11 U	10 U	10 U	11 U
1,3-Dichlorobenzene	UG/L	10 U	11 U	11 U	10 U	10 U	11 U
1,4-Dichlorobenzene	UG/L	10 U	11 U	11 U	10 U	10 U	11 U
2,4,5-Trichlorophenol	UG/L	50 U	55 U	55 U	50 U	50 U	55 U
2,4,6-Trichlorophenol	UG/L	10 U	11 U	11 U	10 U	10 U	11 U
2,4-Dichlorophenol	UG/L	10 U	11 U	11 U	10 U	10 U	11 U
2,4-Dimethylphenol	UG/L	10 U	11 U	11 U	10 U	10 U	11 U
2,4-Dinitrophenol	UG/L	50 U	55 U	55 U	50 U	50 U	55 U
2,4-Dinitrotoluene	UG/L	10 U	11 U	11 U	10 U	10 U	11 U
2,6-Dinitrotoluene	UG/L	10 U	11 U	11 U	10 U	10 U	11 U
2-Chloronaphthalene	UG/L	10 U	11 U	11 U	10 U	10 U	11 U
2-Chlorophenol	UG/L	10 U	11 U	11 U	10 U	10 U	11 U
2-Methyl-4,6-dinitrophenol	UG/L	50 U	55 U	55 U	50 U	50 U	55 U
2-Methylnaphthalene	UG/L	10 U	11 U	11 U	10 U	10 U	11 U
2-Methylphenol	UG/L	10 U	11 U	11 U	10 U	10 U	11 U
2-Nitrobenzenamine	UG/L	50 U	55 U	55 U	50 U	50 U	55 U
2-Nitrophenol	UG/L	10 U	11 U	11 U	10 U	10 U	11 U
3,3'-Dichlorobenzidine	UG/L	20 U	22 U	22 U	20 U	20 U	22 U
3-Nitrobenzenamine	UG/L	50 U	55 U	55 U	50 U	50 U	55 U
4-Bromophenyl phenyl ether	UG/L	10 U	11 U	11 U	10 U	10 U	11 U
4-Chloro-3-methylphenol	UG/L	10 U	11 U	11 U	10 U	10 U	11 U
4-Chlorobenzenamine	UG/L	10 U	11 U	11 U	10 U	10 U	11 U
4-Chlorophenyl phenyl ether	UG/L	10 U	11 U	11 U	10 U	10 U	11 U
4-Methylphenol	UG/L	10 U	11 U	11 U	10 U	10 U	11 U
4-Nitrobenzenamine	UG/L	50 U	55 U	55 U	50 U	50 U	55 U
4-Nitrophenol	UG/L	50 U	55 U	55 U	50 U	50 U	55 U
Acenaphthene	UG/L	10 U	11 U	11 U	10 U	10 U	11 U
Acenaphthylene	UG/L	10 U	11 U	11 U	10 U	10 U	11 U
Anthracene	UG/L	10 U	11 U	11 U	10 U	10 U	11 U
Benz(a)anthracene	UG/L	10 U	11 U	11 U	10 U	10 U	11 U
Benzenemethanol	UG/L	10 U	11 U	11 U	10 U	10 U	11 U
Benzo(a)pyrene	UG/L	10 U	11 U	11 U	10 U	10 U	11 U
Benzo(b)fluoranthene	UG/L	10 U	11 U	11 U	10 U	10 U	11 U
Benzo(ghi)perylene	UG/L	10 U	11 U	11 U	10 U	10 U	11 U

Appendix C
NOAA Weekly Samples

	Up/Downstream Date Collected	Up 23-Sep-97 F41472	Down 23-Sep-97 F31472	Down Alt. 23-Sep-97 F71472	Up 30-Sep-97 F41482	Down 30-Sep-97 F31482	Down Alt. 30-Sep-97 F71482
Semivolatile Organics	Sample ID						
Benzo(k)fluoranthene	UG/L	10 U	11 U	11 U	10 U	10 U	11 U
Benzoic acid	UG/L	50 U	55 U	55 U	50 U	50 U	55 U
Bis(2-chloroethoxy)methane	UG/L	10 U	11 U	11 U	10 U	10 U	11 U
Bis(2-chloroethyl) ether	UG/L	10 U	11 U	11 U	10 U	10 U	11 U
Bis(2-chloroisopropyl) ether	UG/L	10 U	11 U	11 U	10 U	10 U	11 U
Bis(2-ethylhexyl)phthalate	UG/L	10 U	11 U	11 U	5 J	2 J	11 U
Butyl benzyl phthalate	UG/L	10 U	11 U	11 U	10 U	10 U	11 U
Carbazole	UG/L	10 U	11 U	11 U	10 U	10 U	11 U
Chrysene	UG/L	10 U	11 U	11 U	10 U	10 U	11 U
Di-n-butyl phthalate	UG/L	10 U	11 U	11 U	10 U	10 U	11 U
Di-n-octylphthalate	UG/L	10 U	11 U	11 U	10 U	10 U	11 U
Dibenz(a,h)anthracene	UG/L	10 U	11 U	11 U	10 U	10 U	11 U
Dibenzofuran	UG/L	10 U	11 U	11 U	10 U	10 U	11 U
Diethyl phthalate	UG/L	10 U	11 U	11 U	10 U	10 U	11 U
Dimethyl phthalate	UG/L	10 U	11 U	11 U	10 U	10 U	11 U
Fluoranthene	UG/L	10 U	11 U	11 U	10 U	10 U	11 U
Fluorene	UG/L	10 U	11 U	11 U	10 U	10 U	11 U
Hexachlorobenzene	UG/L	10 U	11 U	11 U	10 U	10 U	11 U
Hexachlorobutadiene	UG/L	10 U	11 U	11 U	10 U	10 U	11 U
Hexachloro-cyclopentadiene	UG/L	10 U	11 U	11 U	10 U	10 U	11 U
Hexachloroethane	UG/L	10 U	11 U	11 U	10 U	10 U	11 U
Indeno(1,2,3-cd)pyrene	UG/L	10 U	11 U	11 U	10 U	10 U	11 U
Isophorone	UG/L	10 U	11 U	11 U	10 U	10 U	11 U
N-Nitroso-di-n-propylamine	UG/L	10 U	11 U	11 U	10 U	10 U	11 U
N-Nitrosodiphenylamine	UG/L	10 U	11 U	11 U	10 U	10 U	11 U
Naphthalene	UG/L	10 U	11 U	11 U	10 U	10 U	11 U
Nitrobenzene	UG/L	10 U	11 U	11 U	10 U	10 U	11 U
Pentachlorophenol	UG/L	50 U	55 U	55 U	50 U	50 U	55 U
Phenanthrene	UG/L	10 U	11 U	11 U	10 U	10 U	11 U
Pyrene	UG/L	10 U	11 U	11 U	10 U	10 U	11 U

Appendix C
NOAA Weekly Samples

	Up/Downstream	Date Collected	Up	Down	7-Oct-97
		Sample ID	7-Oct-97	7-Oct-97	7-Oct-97
			F61491-DUP	F51496-DUP	F31496
Inorganics					
Aluminum	UG/L	124 <	177 <	154 <	151 <
Antimony	UG/L	2 U	2 <	2 U	2 U
Arsenic	UG/L	3.1 U	3.1 U	3.1 U	3.2 <
Barium	UG/L	41.2 <	42.1 <	40.8 <	41.6 <
Beryllium	UG/L	0.3 U	0.3 U	0.3 U	0.3 U
Boron	UG/L	45.5 <	91.1 <	50.9 <	81.4 <
Cadmium	UG/L	0.4 U	0.4 U	0.4 U	0.4 U
Calcium	UG/L	41100 <	41500 <	41000 <	40800 <
Chromium	UG/L	0.8 U	1.3 <	0.94 <	0.91 <
Cobalt	UG/L	1.3 U	1.3 U	1.3 U	1.3 U
Copper	UG/L	5.4 <	5.9 <	4.6 <	5 <
Iron	UG/L	116 <	161 <	154 <	146 <
Lead	UG/L	2 U	2 U	2 U	2 U
Magnesium	UG/L	10700 <	10900 <	10700 <	10700 <
Manganese	UG/L	28.8 <	30 <	29.6 <	29.2 <
Mercury	UG/L	0.25 <	0.2 <	0.25 <	0.24 <
Molybdenum	UG/L	2.6 U	2.6 U	2.6 U	2.6 U
Nickel	UG/L	1.6 U	1.6 U	1.6 U	1.6 U
Potassium	UG/L	1600 <	1690 <	1580 <	1640 <
Selenium	UG/L	3.1 U	3.1 U	3.1 U	3.1 U
Silica	UG/L	6050 <	6470 <	6190 <	6100 <
Silver	UG/L	0.7 U	0.7 U	0.7 U	0.81 <
Sodium	UG/L	6900 <	7070 <	6820 <	6950 <
Thallium	UG/L	3.8 U	3.8 U	3.8 U	3.8 U
Vanadium	UG/L	1 <	1.4 <	0.7 U	1 <
Zinc	UG/L	16 <	17.2 <	15.4 <	16.5 <

Appendix C
NOAA Weekly Samples

	Up/Downstream	Up	Up	Down	Down
	Date Collected	7-Oct-97	7-Oct-97	7-Oct-97	7-Oct-97
Misc - Anions	Sample ID	F61494-DUP	F41494	F51495-DUP	F31495
Alkalinity	MG/L	118 <	116 <	115 <	116 <
Bromide	MG/L	0.25 U	0.25 U	0.25 U	0.25 U
Chloride	MG/L	7.9 <	7.7 <	7.8 <	7.8 <
Fluoride	MG/L	0.25 U	0.25 U	0.25 U	0.25 U
Orthophosphate	MG/L	0.46 <	0.52 <	0.49 <	0.44 <
Sulfate	MG/L	29.7 <	29.6 <	29.7 <	29.8 <
Suspended Solids	MG/L	5 <	5 U	5 U	5 U

	Up/Downstream	Up	Up	Down	Down
	Date Collected	7-Oct-97	7-Oct-97	7-Oct-97	7-Oct-97
Misc - Phenol	Sample ID	F61497-DUP	F41497	F51491-DUP	F31491
Phenol	UG/L	10 U	10 U	10 U	10 U
Miscellaneous	Sample ID	F61491-DUP	F41491	F51492-DUP	F31492
Ammonia	MG/L	0.1 U	0.1 U	0.1 U	0.1 U
Kjeldahl Nitrogen	MG/L	0.1 U	0.1 U	0.1 U	0.1 U
Nitrate-Nitrite (as N)	MG-N/L	1.5 <	1.6 <	1.5 <	1.3 <
Total Phosphate as Phosphorus	MG/L	0.23 <	0.22 <	0.22 <	0.24 <

	Up/Downstream	Up	Up	Down	Down
	Date Collected	7-Oct-97	7-Oct-97	7-Oct-97	7-Oct-97
Miscellaneous - BOD	Sample ID	F61493-DUP	F41493	F51494-DUP	F31494
Biochemical Oxygen Demand (BOD)	MG/L	2 <	2 <	2 <	2 <

Appendix C
NOAA Weekly Samples

	Up/Downstream Date Collected	Up 7-Oct-97 F61496-DUP	Up 7-Oct-97 F41496	Down 7-Oct-97 F51493-DUP	Down 7-Oct-97 F31493
Pesticide/PCBs	Sample ID				
4,4'-DDD	UG/L	0.1 U	0.1 U	0.1 U	0.1 U
4,4'-DDE	UG/L	0.1 U	0.1 U	0.1 U	0.1 U
4,4'-DDT	UG/L	0.1 U	0.1 U	0.1 U	0.1 U
Aldrin	UG/L	0.051 U	0.051 U	0.051 U	0.051 U
Dieldrin	UG/L	0.1 U	0.1 U	0.1 U	0.1 U
Endosulfan I	UG/L	0.051 U	0.051 U	0.051 U	0.051 U
Endosulfan II	UG/L	0.1 U	0.1 U	0.1 U	0.1 U
Endosulfan sulfate	UG/L	0.1 U	0.1 U	0.1 U	0.1 U
Endrin	UG/L	0.1 U	0.1 U	0.1 U	0.1 U
Endrin aldehyde	UG/L	0.1 U	0.1 U	0.1 U	0.1 U
Endrin ketone	UG/L	0.1 U	0.1 U	0.1 U	0.1 U
Heptachlor	UG/L	0.051 U	0.051 U	0.051 U	0.051 U
Heptachlor epoxide	UG/L	0.051 U	0.051 U	0.051 U	0.051 U
Lindane	UG/L	0.051 U	0.051 U	0.051 U	0.051 U
Methoxychlor	UG/L	0.51 U	0.51 U	0.51 U	0.51 U
PCB-1016	UG/L	1 U	1 U	1 U	1 U
PCB-1221	UG/L	2 U	2 U	2 U	2 U
PCB-1232	UG/L	1 U	1 U	1 U	1 U
PCB-1242	UG/L	1 U	1 U	1 U	1 U
PCB-1248	UG/L	1 U	1 U	1 U	1 U
PCB-1254	UG/L	1 U	1 U	1 U	1 U
PCB-1260	UG/L	1 U	1 U	1 U	1 U
Toxaphene	UG/L	5.1 U	5.1 U	5.1 U	5.1 U
alpha-BHC	UG/L	0.051 U	0.051 U	0.051 U	0.051 U
alpha-Chlordane	UG/L	0.051 U	0.051 U	0.051 U	0.051 U
beta-BHC	UG/L	0.051 U	0.051 U	0.051 U	0.051 U
delta-BHC	UG/L	0.051 U	0.051 U	0.051 U	0.051 U
gamma-Chlordane	UG/L	0.051 U	0.051 U	0.051 U	0.051 U

Appendix C
NOAA Weekly Samples

Radiological	Up/Downstream Date Collected	Up		Down	
		Sample ID	7-Oct-97	7-Oct-97 F51492-DUP	7-Oct-97 F31492
Alpha activity	PCI/L				6
Americium-241	PCI/L	3.57	0.47 J	0.23 U	0.34 J
Beta activity	PCI/L				4.86 J
Cesium-137	PCI/L	2.91 J	0.86 U	2.15 U	-0.24 U
Cobalt-60	PCI/L	1.5 U	0.47 U	3.22 J	0.14 U
Neptunium-237	PCI/L	0.12 U	0.09 U	0.12 U	0.2 J
Plutonium-238	PCI/L	0.15 U	0.39 U	0.06 U	0.66 J
Plutonium-239	PCI/L	0.04 U	0.08 U	0.24 J	0.03 U
Protactinium-233	PCI/L	-0.92 U	-3.37 U	-1.88 U	-2.5 U
Thorium-228	PCI/L	0.14 U	0.19 U	0.07 U	0.08 U
Thorium-230	PCI/L	0.54 J	1.24 J	0.78 J	0.98
Thorium-232	PCI/L	0.13 U	0 J	0.07 U	0 J
Uranium-234	PCI/L	1.72	1.15	1.49	1.36
Uranium-235	PCI/L	0.25 J	0.04 U	0.06 U	0.18 U
Uranium-238	PCI/L	2.32	1.98	2.78	2.03

Appendix C
NOAA Weekly Samples

	Up/Downstream Date Collected	Up 7-Oct-97 F61497-DUP	Up 7-Oct-97 F41497	Down 7-Oct-97 F51491-DUP	Down 7-Oct-97 F31491
Semivolatile Organics	Sample ID				
1,2,4-Trichlorobenzene	UG/L	10 U	10 U	10 U	10 U
1,2-Dichlorobenzene	UG/L	10 U	10 U	10 U	10 U
1,3-Dichlorobenzene	UG/L	10 U	10 U	10 U	10 U
1,4-Dichlorobenzene	UG/L	10 U	10 U	10 U	10 U
2,4,5-Trichlorophenol	UG/L	50 U	50 U	50 U	50 U
2,4,6-Trichlorophenol	UG/L	10 U	10 U	10 U	10 U
2,4-Dichlorophenol	UG/L	10 U	10 U	10 U	10 U
2,4-Dimethylphenol	UG/L	10 U	10 U	10 U	10 U
2,4-Dinitrophenol	UG/L	50 U	50 U	50 U	50 U
2,4-Dinitrotoluene	UG/L	10 U	10 U	10 U	10 U
2,6-Dinitrotoluene	UG/L	10 U	10 U	10 U	10 U
2-Chloronaphthalene	UG/L	10 U	10 U	10 U	10 U
2-Chlorophenol	UG/L	10 U	10 U	10 U	10 U
2-Methyl-4,6-dinitrophenol	UG/L	50 U	50 U	50 U	50 U
2-Methylnaphthalene	UG/L	10 U	10 U	10 U	10 U
2-Methylphenol	UG/L	10 U	10 U	10 U	10 U
2-Nitrobenzenamine	UG/L	50 U	50 U	50 U	50 U
2-Nitrophenol	UG/L	10 U	10 U	10 U	10 U
3,3'-Dichlorobenzidine	UG/L	20 U	20 U	20 U	20 U
3-Nitrobenzenamine	UG/L	50 U	50 U	50 U	50 U
4-Bromophenyl phenyl ether	UG/L	10 U	10 U	10 U	10 U
4-Chloro-3-methylphenol	UG/L	10 U	10 U	10 U	10 U
4-Chlorobenzenamine	UG/L	10 U	10 U	10 U	10 U
4-Chlorophenyl phenyl ether	UG/L	10 U	10 U	10 U	10 U
4-Methylphenol	UG/L	10 U	10 U	10 U	10 U
4-Nitrobenzenamine	UG/L	50 U	50 U	50 U	50 U
4-Nitrophenol	UG/L	50 U	50 U	50 U	50 U
Acenaphthene	UG/L	10 U	10 U	10 U	10 U
Acenaphthylene	UG/L	10 U	10 U	10 U	10 U
Anthracene	UG/L	10 U	10 U	10 U	10 U
Benz(a)anthracene	UG/L	10 U	10 U	10 U	10 U
Benzenemethanol	UG/L	10 U	10 U	10 U	10 U
Benzo(a)pyrene	UG/L	10 U	10 U	10 U	10 U
Benzo(b)fluoranthene	UG/L	10 U	10 U	10 U	10 U
Benzo(ghi)perylene	UG/L	10 U	10 U	10 U	10 U

Appendix C
NOAA Weekly Samples

	Up/Downstream Date Collected	Up 7-Oct-97 F61497-DUP	Up 7-Oct-97 F41497	Down 7-Oct-97 F51491-DUP	Down 7-Oct-97 F31491
Semivolatile Organics	Sample ID				
Benzo(k)fluoranthene	UG/L	10 U	10 U	10 U	10 U
Benzoic acid	UG/L	50 U	50 U	50 U	50 U
Bis(2-chloroethoxy)methane	UG/L	10 U	10 U	10 U	10 U
Bis(2-chloroethyl) ether	UG/L	10 U	10 U	10 U	10 U
Bis(2-chloroisopropyl) ether	UG/L	10 U	10 U	10 U	10 U
Bis(2-ethylhexyl)phthalate	UG/L	2 B, J	21 B	2 B, J	1 B, J
Butyl benzyl phthalate	UG/L	10 U	10 U	10 U	10 U
Carbazole	UG/L	10 U	10 U	10 U	10 U
Chrysene	UG/L	10 U	10 U	10 U	10 U
Di-n-butyl phthalate	UG/L	1 J	10 U	10 U	10 U
Di-n-octylphthalate	UG/L	10 U	10 U	10 U	10 U
Dibenz(a,h)anthracene	UG/L	10 U	10 U	10 U	10 U
Dibenzofuran	UG/L	10 U	10 U	10 U	10 U
Diethyl phthalate	UG/L	10 U	10 U	10 U	10 U
Dimethyl phthalate	UG/L	10 U	10 U	10 U	10 U
Fluoranthene	UG/L	10 U	10 U	10 U	10 U
Fluorene	UG/L	10 U	10 U	10 U	10 U
Hexachlorobenzene	UG/L	10 U	10 U	10 U	10 U
Hexachlorobutadiene	UG/L	10 U	10 U	10 U	10 U
Hexachloro-cyclopentadiene	UG/L	10 U	10 U	10 U	10 U
Hexachloroethane	UG/L	10 U	10 U	10 U	10 U
Indeno(1,2,3-cd)pyrene	UG/L	10 U	10 U	10 U	10 U
Isophorone	UG/L	10 U	10 U	10 U	10 U
N-Nitroso-di-n-propylamine	UG/L	10 U	10 U	10 U	10 U
N-Nitrosodiphenylamine	UG/L	10 U	10 U	10 U	10 U
Naphthalene	UG/L	10 U	10 U	10 U	10 U
Nitrobenzene	UG/L	10 U	10 U	10 U	10 U
Pentachlorophenol	UG/L	50 U	50 U	50 U	50 U
Phenanthrene	UG/L	10 U	10 U	10 U	10 U
Pyrene	UG/L	10 U	10 U	10 U	10 U

BRUNER SITE

Appendix C
Bruner Background Sample Results

	Up/Downstream	Up	Down
	Date Collected	10-Mar-97	10-Mar-97
Inorganics	Sample ID	FB0011	FA0010
Aluminum	UG/L	218 J	288 J
Antimony	UG/L	2.3 U	2.3 U
Arsenic	UG/L	2.9 U	2.9 U
Barium	UG/L	31.9 =	31.7 =
Beryllium	UG/L	0.1 U	0.1 U
Boron	UG/L	25.4 U	31.5 U
Cadmium	UG/L	0.4 U	0.4 U
Calcium	UG/L	35100 J	34100 J
Chromium	UG/L	0.69 J	2.3 J
Cobalt	UG/L	0.9 UJ	0.9 UJ
Copper	UG/L	6 J	9.6 J
Iron	UG/L	323 J	447 J
Lead	UG/L	2.9 UJ	7.7 UJ
Magnesium	UG/L	7110 =	6450 =
Manganese	UG/L	36.1 =	42.9 =
Mercury	UG/L	0.28 =	0.5 =
Molybdenum	UG/L	2.2 U	2.2 U
Nickel	UG/L	2.3 UJ	1.9 UJ
Potassium	UG/L	1250 J	1250 J
Selenium	UG/L	3.2 U	3.2 U
Silica	UG/L	5090 J	4730 J
Silver	UG/L	0.9 U	0.9 U
Sodium	UG/L	4650 =	4360 =
Thallium	UG/L	3.5 =	3.5 U
Vanadium	UG/L	1.1 U	1.1 U
Zinc	UG/L	24 J	21.8 J

	Up/Downstream	Up	Down
	Date Collected	10-Mar-97	10-Mar-97
Misc - Anions	Sample ID	FB0016	FA0015
Alkalinity	MG/L	116 =	102 =
Bromide	MG/L	0.25 U	0.25 U
Chloride	MG/L	7.8 =	6.9 =
Fluoride	MG/L	0.5 U	0.5 U
Orthophosphate	MG/L	0.25 UJ	0.25 UJ
Sulfate	MG/L	18.9 =	15.6 =
Suspended Solids	MG/L	6.5 J	9 =

	Up/Downstream	Up	Down
	Date Collected	10-Mar-97	10-Mar-97
Misc - Phenol	Sample ID	FB0012	FA0011
Phenol	UG/L	10 U	10 U

	Up/Downstream	Up	Down
	Date Collected	10-Mar-97	10-Mar-97
Miscellaneous	Sample ID	FB0017	FA0012
Ammonia	MG/L	0.1 U	0.1 U
Kjeldahl Nitrogen	MG/L	0.16 =	0.12 =
Nitrate-Nitrite (as N)	MG-N/L	1.4 =	1.1 =
Total Phosphate as Phosphorus	MG/L	0.06 =	0.058 =

	Up/Downstream	Up	Down
	Date Collected	10-Mar-97	10-Mar-97
Miscellaneous - BOD	Sample ID	FB0015	FA0014
Biochemical Oxygen Demand (BOD)	MG/L	1 U	1 U

Appendix C
Bruner Background Sample Results

	Up/Downstream	Up	Down
	Date Collected	10-Mar-97	10-Mar-97
Pesticide/PCBs	Sample ID	FB0014	FA0013
4,4'-DDD	UG/L	0.1 U	0.1 U
4,4'-DDE	UG/L	0.1 U	0.1 U
4,4'-DDT	UG/L	0.1 U	0.1 U
Aldrin	UG/L	0.052 U	0.052 U
Dieldrin	UG/L	0.1 U	0.1 U
Endosulfan I	UG/L	0.052 U	0.052 U
Endosulfan II	UG/L	0.1 U	0.1 U
Endosulfan sulfate	UG/L	0.1 U	0.1 U
Endrin	UG/L	0.1 U	0.1 U
Endrin aldehyde	UG/L	0.1 U	0.1 U
Endrin ketone	UG/L	0.1 U	0.1 U
Heptachlor	UG/L	0.052 U	0.052 U
Heptachlor epoxide	UG/L	0.052 U	0.052 U
Lindane	UG/L	0.052 U	0.052 U
Methoxychlor	UG/L	0.52 U	0.52 U
PCB-1016	UG/L	1 U	1 U
PCB-1221	UG/L	2.1 U	2.1 U
PCB-1232	UG/L	1 U	1 U
PCB-1242	UG/L	1 U	1 U
PCB-1248	UG/L	1 U	1 U
PCB-1254	UG/L	1 U	1 U
PCB-1260	UG/L	1 U	1 U
Toxaphene	UG/L	5.2 U	5.2 U
alpha-BHC	UG/L	0.052 U	0.052 U
alpha-Chlordane	UG/L	0.052 U	0.052 U
beta-BHC	UG/L	0.052 U	0.052 U
delta-BHC	UG/L	0.052 U	0.052 U
gamma-Chlordane	UG/L	0.052 U	0.052 U

Appendix C
Bruner Background Sample Results

	Up/Downstream	Up	Down
	Date Collected	10-Mar-97	10-Mar-97
Radiological	Sample ID	FB0013	FA0012
Alpha activity	PCI/L	6.73 J	7 J
Americium-241	PCI/L	0.88 J	0.58 J
Beta activity	PCI/L	3.51 =	3.83 =
Cesium-137	PCI/L	0.96 U	0.46 U
Cobalt-60	PCI/L	-1.06 U	-1.42 U
Neptunium-237	PCI/L	0.06 U	0.14 U
Plutonium-238	PCI/L	-0.55 U	0.22 U
Plutonium-239	PCI/L	0.12 U	0.07 U
Protactinium-233	PCI/L	-1.64 U	-1.63 U
Thorium-228	PCI/L	0.16 U	0.13 U
Thorium-230	PCI/L	0.45 J	0.74 J
Thorium-232	PCI/L	0.16 J	0.26 J
Uranium-234	PCI/L	2.3 =	2.76 =
Uranium-235	PCI/L	0.19 UJ	0.26 UJ
Uranium-238	PCI/L	4.84 =	5.28 =

Appendix C
Bruner Background Sample Results

	Up/Downstream Date Collected	Up 10-Mar-97	Down 10-Mar-97
Semivolatile Organics	Sample ID	FB0012	FA0011
1,2,4-Trichlorobenzene	UG/L	10 U	10 U
1,2-Dichlorobenzene	UG/L	10 U	10 U
1,3-Dichlorobenzene	UG/L	10 U	10 U
1,4-Dichlorobenzene	UG/L	10 U	10 U
2,4,5-Trichlorophenol	UG/L	50 U	50 U
2,4,6-Trichlorophenol	UG/L	10 U	10 U
2,4-Dichlorophenol	UG/L	10 U	10 U
2,4-Dimethylphenol	UG/L	10 U	10 U
2,4-Dinitrophenol	UG/L	50 U	50 U
2,4-Dinitrotoluene	UG/L	10 U	10 U
2,6-Dinitrotoluene	UG/L	10 U	10 U
2-Chloronaphthalene	UG/L	10 U	10 U
2-Chlorophenol	UG/L	10 U	10 U
2-Methyl-4,6-dinitrophenol	UG/L	50 U	50 U
2-Methylnaphthalene	UG/L	10 U	10 U
2-Methylphenol	UG/L	10 U	10 U
2-Nitrobenzenamine	UG/L	50 U	50 U
2-Nitrophenol	UG/L	10 U	10 U
3,3'-Dichlorobenzidine	UG/L	20 U	20 U
3-Nitrobenzenamine	UG/L	50 U	50 U
4-Bromophenyl phenyl ether	UG/L	10 U	10 U
4-Chloro-3-methylphenol	UG/L	10 U	10 U
4-Chlorobenzenamine	UG/L	10 U	10 U
4-Chlorophenyl phenyl ether	UG/L	10 U	10 U
4-Methylphenol	UG/L	10 U	10 U
4-Nitrobenzenamine	UG/L	50 U	50 U
4-Nitrophenol	UG/L	50 U	50 U
Acenaphthene	UG/L	10 U	10 U
Acenaphthylene	UG/L	10 U	10 U
Anthracene	UG/L	10 U	10 U
Benz(a)anthracene	UG/L	10 U	10 U
Benzenemethanol	UG/L	10 U	10 U
Benzo(a)pyrene	UG/L	10 U	10 U
Benzo(b)fluoranthene	UG/L	10 U	10 U
Benzo(ghi)perylene	UG/L	10 U	10 U
Benzo(k)fluoranthene	UG/L	10 U	10 U
Benzoic acid	UG/L	50 U	50 U
Bis(2-chloroethoxy)methane	UG/L	10 U	10 U
Bis(2-chloroethyl) ether	UG/L	10 U	10 U
Bis(2-chloroisopropyl) ether	UG/L	10 U	10 U
Bis(2-ethylhexyl)phthalate	UG/L	10 U	10 U
Butyl benzyl phthalate	UG/L	10 U	10 U
Carbazole	UG/L	10 U	10 U
Chrysene	UG/L	10 U	10 U
Di-n-butyl phthalate	UG/L	10 U	10 U
Di-n-octylphthalate	UG/L	10 U	10 U
Dibenz(a,h)anthracene	UG/L	10 U	10 U
Dibenzofuran	UG/L	10 U	10 U
Diethyl phthalate	UG/L	10 U	10 U
Dimethyl phthalate	UG/L	10 U	10 U
Fluoranthene	UG/L	10 U	10 U
Fluorene	UG/L	10 U	10 U
Hexachlorobenzene	UG/L	10 U	10 U

Appendix C
Bruner Background Sample Results

	Up/Downstream	Up	Down
	Date Collected	10-Mar-97	10-Mar-97
Semivolatile Organics	Sample ID	FB0012	FA0011
Hexachlorobutadiene	UG/L	10 U	10 U
Hexachlorocyclopentadiene	UG/L	10 U	10 U
Hexachloroethane	UG/L	10 U	10 U
Indeno(1,2,3-cd)pyrene	UG/L	10 U	10 U
Isophorone	UG/L	10 U	10 U
N-Nitroso-di-n-propylamine	UG/L	10 U	10 U
N-Nitrosodiphenylamine	UG/L	10 U	10 U
Naphthalene	UG/L	10 U	10 U
Nitrobenzene	UG/L	10 U	10 U
Pentachlorophenol	UG/L	50 U	50 U
Phenanthrene	UG/L	10 U	10 U
Pyrene	UG/L	10 U	10 U

Appendix C
Bruner Site Preparation Samples

	Up/Downstream	Up	Down	Up	Down
	Date Collected	13-Mar-97	13-Mar-97	20-Mar-97	20-Mar-97
	Sample ID	FB0021	FA0021	FB0031	FA0031
Inorganics					
Aluminum	UG/L	77.7 <	127 <	298 <	257 <
Antimony	UG/L	4.6 <	4.7 <	2.3 U	2.3 U
Arsenic	UG/L	2.9 U	2.9 U	2.9 U	2.9 U
Barium	UG/L	41.2 <	48.4 <	34 <	35.5 <
Beryllium	UG/L	0.1 U	0.1 U	0.1 U	0.1 U
Boron	UG/L	88 <	153 <	29.1 <	24.8 <
Cadmium	UG/L	0.4 U	0.46 <	0.51 <	0.4 U
Calcium	UG/L	47500 <	54700 <	36700 <	38800 <
Chromium	UG/L	0.88 <	0.98 <	0.6 U	0.6 U
Cobalt	UG/L	0.9 U	0.9 U	0.9 U	0.9 U
Copper	UG/L	2 <	3.4 <	2.4 <	2.8 <
Iron	UG/L	119 <	182 <	296 <	293 <
Lead	UG/L	2 U	2.2 U	3.3 <	9.3 <
Magnesium	UG/L	10900 <	12400 <	7160 <	7320 <
Manganese	UG/L	32.6 <	44.8 <	41.3 <	44.7 <
Mercury	UG/L	0.13 <	0.34 <	0.23 <	0.45 <
Molybdenum	UG/L	2.2 U	2.2 U	2.2 U	2.2 U
Nickel	UG/L	2.7 <	4.9 <	1.4 U	1.4 U
Potassium	UG/L	1510 <	1710 <	1550 <	1580 <
Selenium	UG/L	3.2 U	3.2 U	3.2 U	3.2 U
Silica	UG/L	5710 <	6350 <	6320 <	6270 <
Silver	UG/L	0.9 U	0.9 U	0.9 U	0.9 U
Sodium	UG/L	6350 <	7370 <	4330 <	4470 <
Thallium	UG/L	3.5 U	4.3 <	3.5 U	3.5 U
Vanadium	UG/L	1.1 U	1.1 U	1.1 U	1.1 U
Zinc	UG/L	75.5 <	17.4 <	15.4 <	19.9 <

Appendix C

Bruner Daily Samples

	Up/Downstream	Date Collected				Up	Down	Up	Down	Up	Down	Up	Down
		Sample ID	26-Mar-97	26-Mar-97	26-Mar-97								
Inorganics			FB0041	FA0041	FB0051	FA0051	FB0061	FA0061	FB0071	FA0071			
Aluminum	UG/L	193 <	298 <	298 <	199 <	73.8 <	845 <	1060 <	123 <	89.6 <			
Antimony	UG/L	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U			
Arsenic	UG/L	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U	3.3 <	2.9 U	2.9 U			
Barium	UG/L	36.8 <	35.3 <	35.3 <	42.2 <	37.3 <	32.9 <	34.3 <	32.1 <	35.8 <			
Beryllium	UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U			
Boron	UG/L	136 <	80.1 <	80.1 <	65.9 <	80.7 <	32.3 <	42.2 <	47.7 <	26.6 <			
Cadmium	UG/L	0.4 U	0.4 U	0.4 U	0.72 <	0.56 <	0.4 U	0.4 U	0.4 U	0.4 U			
Calcium	UG/L	42200 <	38800 <	38800 <	48600 <	44500 <	34400 <	33400 <	38900 <	43600 <			
Chromium	UG/L	0.6 U	0.74 <	0.74 <	0.6 U	0.67 <	1.5 <	1.6 <	0.6 U	0.6 U			
Cobalt	UG/L	1.2 <	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U			
Copper	UG/L	2.4 <	3.3 <	3.3 <	2 <	1.6 <	2.9 <	3.6 <	0.6 U	0.6 U			
Iron	UG/L	194 <	271 <	271 <	255 <	105 <	665 <	785 <	123 <	99.6 <			
Lead	UG/L	1.7 U	1.7 U	1.7 U	10.2 <	8.8 <	2.6 <	2.9 <	3.1 <	3.4 <			
Magnesium	UG/L	9060 <	8030 <	8030 <	11000 <	9950 <	6590 <	6810 <	8920 <	9930 <			
Manganese	UG/L	38 <	38.8 <	38.8 <	49.1 <	28.9 <	51.3 <	53.1 <	27.2 <	26.8 <			
Mercury	UG/L	0.21 <	0.28 <	0.28 <	0.1 U	0.2 <	0.23 <	0.29 <	0.24 <	0.16 <			
Molybdenum	UG/L	3.4 <	2.2 U	2.2 U	2.2 U	2.2 U	2.6 <	3 <	2.2 U	2.2 U			
Nickel	UG/L	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	4.7 <	1.4 U			
Potassium	UG/L	1600 <	1530 <	1530 <	1650 <	1450 <	1520 <	1600 <	1330 <	1430 <			
Selenium	UG/L	3.2 U	3.2 U	3.2 U	3.2 U	3.2 U	3.2 U	3.2 U	3.2 U	3.2 U			
Silica	UG/L	5860 <	5590 <	5590 <	6550 <	5310 <	7900 <	8740 <	5400 <	5380 <			
Silver	UG/L	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U			
Sodium	UG/L	5410 <	4880 <	4880 <	5880 <	5320 <	4390 <	4160 <	4870 <	5330 <			
Thallium	UG/L	3.5 U	5.1 <	5.1 <	3.5 U	3.5 U	4.8 <	6 <	3.5 U	3.5 U			
Vanadium	UG/L	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	2 <	2 <	1.1 U	1.1 U			
Zinc	UG/L	17.7 <	16.9 <	16.9 <	34.6 <	7.5 <	25.6 <	27.1 <	42.5 <	6.5 <			

Appendix C Bruner Daily Samples

	Up/Downstream	Up	Down	Up	Down	Up	Down	Up	Down
	Date Collected	2-Apr-97	2-Apr-97	3-Apr-97	3-Apr-97	4-Apr-97	4-Apr-97	7-Apr-97	7-Apr-97
	Sample ID	FB0081	FA0081	FB0091	FA0091	FB0101	FA0101	FB0111	FA0111
Inorganics	UG/L	86 <	86.1 <	128 <	103 <	141 <	92.7 <	159 <	117 <
Aluminum	UG/L	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U
Antimony	UG/L	3.5 <	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U
Arsenic	UG/L	33.4 <	36.8 <	41.3 <	36 <	42.3 <	43.9 <	40.7 <	40.2 <
Barium	UG/L	0.1 U	0.1 U	0.17 <	0.14 <	0.17 <	0.13 <	0.1 U	0.1 U
Beryllium	UG/L	69.2 <	125 <	110 <	184 <	112 <	191 <	28.9 <	26.4 <
Boron	UG/L	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
Cadmium	UG/L	39100 <	42600 <	49400 <	42300 <	47900 <	49600 <	46100 <	45300 <
Calcium	UG/L	0.6 U	0.6 U	0.6 U	0.88 <	1.9 <	0.6 U	0.6 U	0.6 U
Chromium	UG/L	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U	0.94 <
Cobalt	UG/L	1.4 <	0.63 <	0.82 <	1.4 <	0.6 U	0.6 U	1.8 <	1.6 <
Copper	UG/L	84.8 <	86.4 <	104 <	80.2 <	127 <	78.9 <	138 <	103 <
Iron	UG/L	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U
Lead	UG/L	9280 <	10100 <	11500 <	9690 <	11200 <	11500 <	10900 <	10600 <
Magnesium	UG/L	25.3 <	26 <	31.5 <	26.1 <	34.5 <	31.8 <	35.7 <	32.3 <
Manganese	UG/L	0.16 <	0.13 <	0.18 <	0.12 <	0.12 <	0.1 <	0.25 <	0.12 <
Mercury	UG/L	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	3.9 <	3.8 <
Molybdenum	UG/L	1.4 U	1.4 U	1.4 U	6.3 <	1.4 U	1.4 U	1.4 U	1.4 U
Nickel	UG/L	1280 <	1350 <	1660 <	1410 <	1730 <	1640 <	1520 <	1450 <
Potassium	UG/L	3.2 U	3.2 U	3.2 U	3.2 U	3.2 U	3.2 U	3.2 U	3.2 U
Selenium	UG/L	4770 <	4850 <	5800 <	4580 <	5450 <	5060 <	6290 <	5850 <
Silica	UG/L	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U
Silver	UG/L	4940 <	5390 <	6390 <	5520 <	6190 <	6190 <	5710 <	5500 <
Sodium	UG/L	3.5 U	3.5 U	3.5 U	3.5 U	3.5 U	3.5 U	3.5 U	3.5 U
Thallium	UG/L	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U
Vanadium	UG/L	29.4 <	28 <	15 <	12.4 <	21.9 <	14.1 <	17 <	14 <
Zinc	UG/L								

Appendix C

Bruner Daily Samples

Up/Downstream	Up	Down	Up	Down	Up	Down	Up	Down
Date Collected	Sample ID							
Inorganics	9-Apr-97	9-Apr-97	10-Apr-97	10-Apr-97	10-Apr-97	10-Apr-97	11-Apr-97	11-Apr-97
Aluminum	FB0121	FA0121	FD0131-FR	FB0131	FC0131-FR	FA0131	FB0141	FA0141
Antimony	189 <	114 <	131 <	77.4 <	71.3 <	72.2 <	92.9 <	115 <
Arsenic	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U
Barium	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U
Beryllium	40.1 <	40.9 <	40.6 <	40.7 <	38.1 <	36.3 <	43 <	43.7 <
Boron	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.17 <	0.16 <
Cadmium	96.8 <	150 <	66.1 <	59.6 <	67.1 <	67.3 <	46.8 <	47.1 <
Calcium	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
Chromium	43300 <	44500 <	40600 <	41000 <	38700 <	36600 <	43600 <	43500 <
Cobalt	1.5 <	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U
Copper	0.98 <	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U	1.1 <
Iron	3.2 <	2.7 <	1.3 <	1.1 <	1.4 <	1.6 <	1.1 <	1.4 <
Lead	217 <	119 <	132 <	86.5 <	77.8 <	77.1 <	77.3 <	91.5 <
Magnesium	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U
Manganese	10900 <	11100 <	10600 <	10600 <	9990 <	9440 <	11100 <	11000 <
Mercury	44 <	35.7 <	31.6 <	30.6 <	28.4 <	26.7 <	32 <	34.4 <
Molybdenum	0.53 <	0.19 <	0.1 U	0.1 <	0.1 U	0.1 U	0.13 <	0.1 U
Nickel	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U
Potassium	2.2 <	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U
Selenium	1520 <	1530 <	1380 <	1370 <	1280 <	1220 <	1480 <	1460 <
Silica	3.2 U	3.3 <	3.2 U	3.2 U	3.2 U	3.2 U	3.2 U	3.2 U
Silver	5660 <	5240 <	5360 <	5080 <	4620 <	4370 <	4990 <	4830 <
Sodium	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U
Thallium	6450 <	6640 <	5490 <	5520 <	5210 <	4950 <	5960 <	5840 <
Vanadium	3.5 U	3.5 U	3.5 U	3.5 U	3.5 U	4.3 <	3.5 U	3.5 U
Zinc	1.2 <	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U
	23 <	12.2 <	23.6 <	19 <	11.8 <	12.1 <	13.8 <	13.3 <

Appendix C
Brunner Daily Samples

	Up/Downstream	Up	Down	Up	Down	Up	Down	Up	Down
	Date Collected	14-Apr-97	14-Apr-97	16-Apr-97	16-Apr-97	17-Apr-97	17-Apr-97	18-Apr-97	18-Apr-97
	Sample ID	FB0151	FA0151	FB0161	FA0161	FB0171	FA0171	FB0181	FA0181
Inorganics									
Aluminum	UG/L	125 <	90.8 <	79.8 <	108 <	118 <	208 <	110 <	134 <
Antimony	UG/L	2.3 U	2.5 <	2.3 U	2.3 U	2.3 U	2.7 <	2.3 U	2.3 U
Arsenic	UG/L	2.9 U	2.9 U	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U
Barium	UG/L	41.6 <	43.5 <	39.6 <	42.5 <	43.9 <	45.9 <	53.2 <	48.3 <
Beryllium	UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.14 <	0.1 <	0.44 <	0.31 <
Boron	UG/L	42.6 <	39 <	81.4 <	105 <	66.3 <	98.2 <	41.2 <	49 <
Cadmium	UG/L	0.4 U	0.4 U	0.4 U	0.4 U	0.41 <	0.56 <	0.4 U	0.4 U
Calcium	UG/L	43100 <	45500 <	41400 <	43400 <	44100 <	45100 <	50200 <	45400 <
Chromium	UG/L	0.81 <	0.6 U	0.8 U	0.8 U	0.8 U	0.8 U	1.5 <	1.2 <
Cobalt	UG/L	0.9 U	0.9 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
Copper	UG/L	3.3 <	2 <	1.4 <	2.2 <	2.1 <	2.4 <	0.9 U	0.9 U
Iron	UG/L	167 <	137 <	84.5 <	122 <	130 <	224 <	96.5 <	130 <
Lead	UG/L	1.7 U	1.7 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U
Magnesium	UG/L	11100 <	11600 <	10900 <	11500 <	11200 <	11400 <	12900 <	11800 <
Manganese	UG/L	43.9 <	44 <	35.6 <	42.2 <	44.8 <	53 <	40.6 <	40.6 <
Mercury	UG/L	0.24 <	0.16 <	0.16 <	0.19 <	0.26 <	0.31 <	0.19 <	0.25 <
Molybdenum	UG/L	2.4 <	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U
Nickel	UG/L	1.4 U	1.4 U	1.8 U	1.8 U	2.7 <	2 <	1.8 U	1.8 <
Potassium	UG/L	1520 <	1580 <	1460 <	1530 <	1550 <	1620 <	1670 <	1530 <
Selenium	UG/L	3.2 U	3.2 U	3.5 U	3.5 U	3.5 U	3.5 U	3.5 U	3.5 U
Silica	UG/L	5790 <	5820 <	5210 <	5430 <	5430 <	5820 <	6180 <	5720 <
Silver	UG/L	0.9 U	0.9 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
Sodium	UG/L	5830 <	6140 <	5710 <	5980 <	5860 <	5990 <	6440 <	5820 <
Thallium	UG/L	3.5 U	3.5 U	4.5 U	4.5 U	4.9 <	4.5 U	4.5 U	4.5 U
Vanadium	UG/L	1.1 U	1.1 U	0.7 U	1.1 <	0.71 <	1.3 <	0.91 <	0.7 U
Zinc	UG/L	36.5 <	11.1 <	21.9 <	14.1 <	12.2 <	13 <	20.4 <	14.9 <

Appendix C

Bruner Daily Samples

	Up/Downstream Date Collected	Up	Down	Up	Down	Up	Down	Up	Down
	Sample ID	21-Apr-97 FB0191	21-Apr-97 FA0191	23-Apr-97 FB0201	23-Apr-97 FA0201	24-Apr-97 FB0211	24-Apr-97 FA0211	25-Apr-97 FB0221	25-Apr-97 FA0221
Inorganics									
Aluminum	UG/L	411 <	380 <	631 <	520 <	163 <	236 <	140 <	200 <
Antimony	UG/L	2.3 U	2.3 U	2.8 <	2.5 <	2.9 U	2.9 U	2.3 U	2.3 U
Arsenic	UG/L	2.8 U	2.8 U	2.8 U	2.8 U	2.5 U	5.1 <	2.8 U	2.8 U
Barium	UG/L	42.3 <	43.4 <	40.9 <	40.8 <	42.6 <	43 <	42.3 <	43.3 <
Beryllium	UG/L	0.14 <	0.16 <	0.1 U	0.1 U	0.4 U	0.4 U	0.18 <	0.19 <
Boron	UG/L	32.5 <	33.3 <	74.4 <	57.1 <	44.1 <	86.4 <	67.1 <	68.1 <
Cadmium	UG/L	0.4 U	0.4 U	0.72 <	0.52 <	0.4 U	0.4 U	0.4 U	0.4 U
Calcium	UG/L	41800 <	41900 <	39600 <	39200 <	44700 <	44700 <	45000 <	45700 <
Chromium	UG/L	1.9 <	1.2 <	1.2 <	1.2 <	1.3 <	0.9 <	0.8 U	0.8 U
Cobalt	UG/L	1.3 U	1.3 U	1.3 U	1.3 U	0.9 U	0.9 U	1.3 U	1.3 U
Copper	UG/L	2.7 <	2.3 <	2.7 <	2.3 <	1.2 <	2.4 <	0.9 U	0.9 U
Iron	UG/L	988 <	468 <	536 <	444 <	192 <	237 <	137 <	182 <
Lead	UG/L	2.1 U	7.7 <	2.9 <	2.4 <	2.3 U	3.2 <	2.1 U	2.1 U
Magnesium	UG/L	9430 <	10200 <	7680 <	7960 <	9880 <	9670 <	9940 <	9960 <
Manganese	UG/L	63.3 <	60.9 <	55.3 <	48.1 <	41.6 <	44.3 <	38.8 <	41.8 <
Mercury	UG/L	0.39 <	0.47 <	0.4 <	0.29 <	0.14 <	0.16 <	0.19 <	0.16 <
Molybdenum	UG/L	5.2 <	4.2 <	2.2 U	2.2 U	1.7 U	1.7 U	2.2 U	3.2 <
Nickel	UG/L	1.8 U	1.8 U	1.8 U	3.3 <	1.8 U	1.8 U	1.9 <	1.8 U
Potassium	UG/L	1610 <	1610 <	1790 <	1760 <	1670 <	1700 <	1570 <	1590 <
Selenium	UG/L	3.5 U	3.5 U	3.5 U	3.6 <	2.8 U	2.8 U	3.5 U	3.5 U
Silica	UG/L	5980 <	5900 <	7660 <	7280 <	6780 <	7080 <	6150 <	6440 <
Silver	UG/L	1.3 U	1.3 U	1.3 U	1.3 U	1.1 <	1 U	1.3 U	1.3 U
Sodium	UG/L	5760 <	5880 <	4880 <	5000 <	5640 <	5570 <	5810 <	5740 <
Thallium	UG/L	4.5 U	4.5 U	4.5 U	4.5 U	3.6 U	3.7 <	4.7 <	9.5 <
Vanadium	UG/L	0.75 <	0.7 U	1.8 <	1.9 <	1.7 U	1.7 U	0.7 U	0.72 <
Zinc	UG/L	35.1 <	18.8 <	17.8 <	17.3 <	16.6 <	13.5 <	25.1 <	16.2 <

Appendix C Bruner Daily Samples

	Up/Downstream Date Collected	Up	Down	Up	Down	Up	Down	Up	Down
	Sample ID	28-Apr-97 FD0231-FR	28-Apr-97 FB0231	28-Apr-97 FC0231-FR	28-Apr-97 FA0231	30-Apr-97 FB0241	30-Apr-97 FA0241	1-May-97 FB0251	1-May-97 FA0251
Inorganics	UG/L	484 <	429 <	359 <	385 <	359 <	255 <	199 <	194 <
Aluminum	UG/L	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U
Antimony	UG/L	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U
Arsenic	UG/L	42.7 <	42.5 <	39.6 <	42.5 <	44.5 <	42.9 <	43.8 <	45.1 <
Barium	UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.11 <	0.1 U	0.1 U	0.21 <
Beryllium	UG/L	69.6 <	78.1 <	44.7 <	40.4 <	51.6 <	68.2 <	50.4 <	84.3 <
Boron	UG/L	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.61 <
Cadmium	UG/L	45100 <	44800 <	40900 <	44000 <	45000 <	44800 <	45500 <	47100 <
Calcium	UG/L	1.3 <	0.8 U	1.1 <	0.8 U	1.2 <	1.1 <	0.94 <	1.1 <
Chromium	UG/L	1.3 U	1.7 <	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
Cobalt	UG/L	3 <	3.1 <	5.5 <	3.3 <	4.6 <	1.9 <	1.5 <	1.9 <
Copper	UG/L	423 <	401 <	470 <	378 <	345 <	264 <	254 <	241 <
Iron	UG/L	2.1 U	2.1 U	3.2 <	2.1 U	2.1 U	2.1 U	2.6 <	2.1 U
Lead	UG/L	9220 <	9070 <	8460 <	9200 <	9910 <	9680 <	10400 <	10500 <
Magnesium	UG/L	53.1 <	51.4 <	54.6 <	57.3 <	51.6 <	46.1 <	46 <	51.1 <
Manganese	UG/L	0.26 <	0.17 <	0.42 <	0.45 <	0.36 <	0.13 <	0.25 <	0.32 <
Mercury	UG/L	2.2 U	2.2 U	2.2 U	2.2 U	4.3 <	3.6 <	2.2 U	2.2 U
Molybdenum	UG/L	1.8 U	1.8 U	1.8 U	1.8 U	14.6 <	1.9 <	1.8 U	1.8 U
Nickel	UG/L	1690 <	1640 <	1560 <	1670 <	1650 <	1610 <	1620 <	1660 <
Potassium	UG/L	3.5 U	3.5 U	3.5 U	3.5 U	3.5 U	3.5 U	3.5 U	3.5 U
Selenium	UG/L	7450 <	7220 <	6150 <	6910 <	7250 <	6750 <	6560 <	6570 <
Silica	UG/L	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
Silver	UG/L	5900 <	5820 <	5200 <	5350 <	5500 <	5390 <	5810 <	5840 <
Sodium	UG/L	4.5 U	7.1 <	4.5 U	4.5 U	4.5 U	4.5 U	4.5 U	4.5 U
Thallium	UG/L	0.75 <	0.7 U	0.7 U	0.7 U	0.74 <	0.7 U	0.73 <	2.3 <
Vanadium	UG/L	28.1 <	27.7 <	38.7 <	27.4 <	24.1 <	9.1 <	13.4 <	11.6 <
Zinc	UG/L								

Bruner Daily Samples

	Up/Downstream	Date Collected		Up		Down		Up		Down		Up		Down	
		Sample ID		2-May-97	5-May-97	2-May-97	5-May-97	7-May-97	8-May-97	7-May-97	8-May-97	7-May-97	8-May-97	7-May-97	8-May-97
Inorganics		FB0261	FA0261	FB0271	FA0271	FB0281	FA0281	FB0291	FA0291	FB0291	FA0291	FB0291	FA0291	FB0291	FA0291
Aluminum	UG/L	164 <	234 <	181 <	218 <	358 <	211 <	89.5 <	134 <	89.5 <	134 <	89.5 <	134 <	89.5 <	134 <
Antimony	UG/L	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.4 <	2.3 U	2.4 <	2.3 U	2.4 <	2.3 U	2.4 <	2.3 U
Arsenic	UG/L	2.8 U	2.8 U	2.8 U	2.8 <	2.8 U	2.8 <	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U
Barium	UG/L	43.6 <	44.9 <	41.8 <	42 <	42.6 <	44.3 <	43.8 <	43.3 <	43.8 <	43.3 <	43.8 <	43.3 <	43.8 <	43.3 <
Beryllium	UG/L	0.23 <	0.2 <	0.1 U	0.1 U	0.16 <	0.14 <	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Boron	UG/L	59.8 <	83.2 <	40.3 <	66.8 <	101 <	132 <	86.5 <	138 <	86.5 <	138 <	86.5 <	138 <	86.5 <	138 <
Cadmium	UG/L	0.4 U	0.4 U	0.4 U	0.62 <	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
Calcium	UG/L	45000 <	46900 <	45900 <	46700 <	44200 <	47300 <	46300 <	45400 <	46300 <	45400 <	46300 <	45400 <	46300 <	45400 <
Chromium	UG/L	1 <	0.8 U	0.8 U	0.8 U	1.4 <	0.87 <	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
Cobalt	UG/L	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
Copper	UG/L	1 <	0.9 U	1.5 <	1.9 <	4.8 <	2.5 <	0.96 <	1.1 <	0.96 <	1.1 <	0.96 <	1.1 <	0.96 <	1.1 <
Iron	UG/L	172 <	198 <	191 <	211 <	378 <	191 <	128 <	174 <	128 <	174 <	128 <	174 <	128 <	174 <
Lead	UG/L	2.1 U	3.5 <	2.1 U	6.1 <	2.1 U	3.1 <	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U
Magnesium	UG/L	10200 <	10400 <	9760 <	9740 <	9780 <	10400 <	10500 <	10100 <	10500 <	10100 <	10500 <	10100 <	10500 <	10100 <
Manganese	UG/L	37.9 <	41.2 <	36.6 <	39.6 <	43.8 <	37.6 <	33.9 <	34.6 <	33.9 <	34.6 <	33.9 <	34.6 <	33.9 <	34.6 <
Mercury	UG/L	0.2 <	0.62 <	0.24 <	0.21 <	0.27 <	0.22 <	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Molybdenum	UG/L	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U
Nickel	UG/L	1.8 U	2.6 <	1.8 U	1.8 U	1.8 U	2.5 <	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U
Potassium	UG/L	1600 <	1630 <	1550 <	1590 <	1580 <	1620 <	1530 <	1520 <	1530 <	1520 <	1530 <	1520 <	1530 <	1520 <
Selenium	UG/L	3.5 U	3.5 U	3.5 U	3.5 U	3.5 U	3.5 U	3.5 U	3.5 U	3.5 U	3.5 U	3.5 U	3.5 U	3.5 U	3.5 U
Silica	UG/L	6420 <	6870 <	6840 <	7060 <	6840 <	6870 <	6300 <	6300 <	6300 <	6300 <	6300 <	6300 <	6300 <	6300 <
Silver	UG/L	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
Sodium	UG/L	5950 <	6010 <	5350 <	5370 <	5510 <	5470 <	5400 <	5240 <	5400 <	5240 <	5400 <	5240 <	5400 <	5240 <
Thallium	UG/L	4.5 U	4.5 U	4.5 U	4.5 U	4.5 U	4.5 U	4.5 U	4.5 U	4.5 U	4.5 U	4.5 U	4.5 U	4.5 U	4.5 U
Vanadium	UG/L	0.7 U	0.7 U	0.83 <	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U
Zinc	UG/L	10.2 <	8.8 <	14.5 <	15 <	23.8 <	12.7 <	14.6 <	13 <	14.6 <	13 <	14.6 <	13 <	14.6 <	13 <

Inorganics	Up/Downstream		9-May-97		9-May-97		12-May-97		14-May-97	
	Date Collected	Sample ID	Up	Down	Up	Down	Up	Down	Up	Down
	UG/L									
Aluminum	UG/L	FB0301	142 <	254 <	85 <	129 <	119 <	103 <	FA0321	14-May-97
Antimony	UG/L		2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U		
Arsenic	UG/L		2.8 U	3.6 <	2.8 U	2.8 U	2.8 U	3.1 <		
Barium	UG/L		41.8 <	41.1 <	42.5 <	44.2 <	42.8 <	45.3 <		
Beryllium	UG/L		0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 <		
Boron	UG/L		67.2 <	83.9 <	22.4 <	26.1 <	104 <	179 <		
Cadmium	UG/L		0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U		
Calcium	UG/L		46200 <	42500 <	44400 <	44900 <	42100 <	44600 <		
Chromium	UG/L		0.8 U	1.3 <	0.8 U	0.8 U	0.8 U	0.8 U		
Cobalt	UG/L		1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U		
Copper	UG/L		2.1 <	1.8 <	1.6 <	2.1 <	2.8 <	3.7 <		
Iron	UG/L		230 <	324 <	125 <	161 <	138 <	153 <		
Lead	UG/L		2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U		
Magnesium	UG/L		10100 <	9180 <	10800 <	10800 <	10300 <	10700 <		
Manganese	UG/L		38 <	41.2 <	31.6 <	35 <	32 <	33.7 <		
Mercury	UG/L		0.23 <	0.31 <	0.23 <	0.35 <	0.25 <	0.31 <		
Molybdenum	UG/L		3.4 <	2.9 <	3.1 <	2.5 <	4.3 <	4.3 <		
Nickel	UG/L		1.8 U	1.9 <	1.8 U	1.8 U	1.8 U	1.8 U		
Potassium	UG/L		1570 <	1510 <	1490 <	1500 <	1480 <	1590 <		
Selenium	UG/L		3.5 U	3.5 U	3.5 U	3.5 U	3.5 U	3.5 U		
Silica	UG/L		6570 <	6320 <	6210 <	6230 <	6330 <	6350 <		
Silver	UG/L		1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U		
Sodium	UG/L		5250 <	4880 <	5310 <	5350 <	6070 <	6470 <		
Thallium	UG/L		4.5 U	4.5 U	7 <	7.5 <	4.5 U	5.3 <		
Vanadium	UG/L		0.7 U	0.7 U	0.99 <	1.2 <	0.89 <	1 <		
Zinc	UG/L		16.1 <	19.1 <	15.6 <	13.7 <	16.5 <	15.5 <		

Appendix C

Bruner Daily Samples

	Up/Downstream Date Collected	Sample ID	15-May-97		15-May-97		16-May-97		16-May-97		19-May-97	
			Up	Down	Up	Down	Up	Down	Up	Down	Up	Down
Inorganics												
Aluminum	UG/L	FD0331-FR	91.2 <		FB0331	96.8 <	FC0331-FR	89.7 <	FA0331	99.9 <	FB0341	49.5 <
Antimony	UG/L		2.3 U			2.3 U		2.3 U		2.3 U		2.3 U
Arsenic	UG/L		2.8 U			2.8 U		2.8 U		3.7 <		2.8 U
Barium	UG/L		43.9 <			43.6 <		44.2 <		44.3 <		44 <
Beryllium	UG/L		0.1 U			0.1 U		0.1 U		0.1 U		0.1 U
Boron	UG/L		65.6 <			68 <		78 <		82.7 <		45.3 <
Cadmium	UG/L		0.4 U			0.4 U		0.4 U		0.4 U		0.4 U
Calcium	UG/L		46100 <			45400 <		45600 <		46000 <		42800 <
Chromium	UG/L		0.8 U			0.8 U		0.86 <		1 <		0.96 <
Cobalt	UG/L		1.3 U			1.3 U		1.3 U		1.3 U		1.3 U
Copper	UG/L		2 <			2.3 <		2.3 <		2.4 <		8.7 <
Iron	UG/L		125 <			121 <		133 <		140 <		130 <
Lead	UG/L		2.7 <			2.1 U		2.1 U		2.1 U		2.1 U
Magnesium	UG/L		11100 <			11000 <		11000 <		11000 <		11300 <
Manganese	UG/L		32.4 <			32.2 <		33.4 <		33.8 <		32.8 <
Mercury	UG/L		0.24 <			0.2 <		0.22 <		0.12 <		0.17 <
Molybdenum	UG/L		2.2 U			2.2 U		2.2 U		2.2 U		4 <
Nickel	UG/L		1.8 U			1.8 U		9.8 <		1.8 <		2.6 <
Potassium	UG/L		1530 <			1510 <		1550 <		1550 <		1530 <
Selenium	UG/L		3.5 U			3.5 U		3.5 U		3.5 U		3.5 U
Silica	UG/L		6370 <			6360 <		6190 <		6230 <		5310 <
Silver	UG/L		1.3 U			1.3 U		1.3 U		1.3 U		1.4 <
Sodium	UG/L		6280 <			6210 <		6250 <		6220 <		6290 <
Thallium	UG/L		4.5 U			4.5 U		4.5 U		4.5 U		4.5 U
Vanadium	UG/L		0.7 U			0.7 U		0.7 U		0.77 <		0.85 <
Zinc	UG/L		15.9 <			16.1 <		15.8 <		16.2 <		18.1 <

Appendix C Brunner Daily Samples

	Up/Downstream	Up	Down	Up	Down	Up	Down	Up	Down
	Date Collected	21-May-97	21-May-97	22-May-97	22-May-97	23-May-97	23-May-97	28-May-97	28-May-97
	Sample ID	FB0361	FA0361	FB0371	FA0371	FB0381	FA0381	FB0391	FA0391
Inorganics	UG/L	77.8 J	172 J	96.6 <	86.3 <	114 <	140 <	326 <	294 <
Aluminum	UG/L	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U
Antimony	UG/L	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U
Arsenic	UG/L	43.4 =	44.5 =	42.6 <	42.9 <	39.9 <	40.1 <	36.3 <	36.2 <
Barium	UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Beryllium	UG/L	195 =	217 =	51.3 <	40.6 <	62.7 <	56.3 <	43.1 <	26.4 <
Boron	UG/L	0.4 U	0.4 U	0.4 U	0.4 U	0.53 <	1 <	0.4 U	0.4 U
Cadmium	UG/L	43600 =	43500 =	41800 <	42000 <	39000 <	38900 <	35300 <	35600 <
Calcium	UG/L	1.2 U	0.9 U	0.8 U	0.8 U	0.84 <	1.1 <	0.91 <	1.7 <
Chromium	UG/L	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
Cobalt	UG/L	2.4 U	2.2 U	2.4 <	2.8 <	4.9 <	5.4 <	4.1 <	4.7 <
Copper	UG/L	92.9 =	151 =	99 <	103 <	172 <	198 <	513 <	523 <
Iron	UG/L	2.1 U	2.1 U	2.1 U	2.1 U	3.7 <	7.1 <	3.3 <	2.1 U
Lead	UG/L	11700 =	11700 =	11500 <	11500 <	10700 <	10600 <	6370 <	6110 <
Magnesium	UG/L	32.1 =	35.3 =	31.5 <	31 <	85.7 <	86.7 <	51.4 <	62.6 <
Manganese	UG/L	0.2 =	0.34 =	0.21 <	0.35 <	0.32 <	0.34 <	0.55 <	0.69 <
Mercury	UG/L	2.5 =	2.2 U	2.6 <	2.2 U	2.2 U	2.4 <	2.2 U	2.2 U
Molybdenum	UG/L	1.8 U	1.8 U	1.8 U	1.8 U	2.3 <	1.8 U	1.8 U	4.7 <
Nickel	UG/L	1590 =	1610 =	1480 <	1480 <	1730 <	1640 <	1730 <	1770 <
Potassium	UG/L	3.5 U	3.5 U	3.5 U	3.5 U	3.5 U	3.8 <	3.5 U	3.5 U
Selenium	UG/L	5630 =	5820 =	5550 <	5280 <	4630 <	4550 <	5580 <	5320 <
Silica	UG/L	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
Silver	UG/L	6390 =	6360 =	6000 <	5910 <	6130 <	5950 <	4020 <	3710 <
Sodium	UG/L	4.5 U	4.5 U	4.5 U	4.5 U	4.5 U	4.5 U	4.5 U	4.5 U
Thallium	UG/L	0.7 U	1.1 U	0.7 U	0.7 U	0.7 U	1 <	1.3 <	1.5 <
Vanadium	UG/L	10.8 U	9.2 U	12.5 <	10.2 <	13.2 <	10.7 <	18 <	25.2 <
Zinc	UG/L								

Appendix C

Bruner Daily Samples

	Up/Downstream	Up	Down	Up	Down	Up	Down
	Date Collected	29-May-97	29-May-97	30-May-97	30-May-97	2-Jun-97	2-Jun-97
	Sample ID	FB0401	FA0401	FB0411	FA0411	FB0421	FA0421
Inorganics	UG/L	451 <	470 <	240 <	338 <	373 <	287 <
Aluminum	UG/L	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U
Antimony	UG/L	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U
Arsenic	UG/L	40.1 <	40.5 <	43.5 <	43.3 <	42.4 <	42.1 <
Barium	UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Beryllium	UG/L	54.6 <	63.6 <	72.2 <	84.9 <	48.9 <	44.8 <
Boron	UG/L	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
Cadmium	UG/L	41600 <	40800 <	47100 <	47200 <	44100 <	44100 <
Calcium	UG/L	0.92 <	0.98 <	0.8 U	0.8 U	0.8 U	0.8 U
Chromium	UG/L	1.3 U	1.3 U	1.5 <	1.3 U	1.3 U	1.3 U
Cobalt	UG/L	2.1 <	4 <	3 <	2.6 <	3 <	3.1 <
Copper	UG/L	453 <	449 <	304 <	321 <	357 <	300 <
Iron	UG/L	2.1 U	2.1 U	2.2 <	2.1 U	2.1 U	2.1 U
Lead	UG/L	7810 <	7780 <	9390 <	9120 <	8710 <	8450 <
Magnesium	UG/L	54.2 <	62.7 <	53.9 <	56.1 <	48.9 <	48.1 <
Manganese	UG/L	0.39 <	0.73 <	0.34 <	0.4 <	0.21 <	0.19 <
Mercury	UG/L	2.2 U	2.2 U	2.2 U	2.7 <	4.2 <	3.6 <
Molybdenum	UG/L	1.8 U	1.8 U	2.2 <	2 <	1.8 U	1.8 U
Nickel	UG/L	1670 <	1670 <	1800 <	1790 <	1710 <	1690 <
Potassium	UG/L	3.5 U	3.5 U	3.5 U	3.5 U	3.5 U	3.5 U
Selenium	UG/L	6850 <	6900 <	6850 <	7340 <	7780 <	7400 <
Silica	UG/L	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
Silver	UG/L	4800 <	4600 <	5420 <	5280 <	4950 <	4820 <
Sodium	UG/L	4.5 U	4.5 U	4.5 U	4.5 U	4.5 U	4.5 U
Thallium	UG/L	0.7 U	0.7 U	1.9 <	1.1 <	0.7 U	0.74 <
Vanadium	UG/L	18.6 <	19.8 <	14.6 <	13.2 <	12.9 <	13.6 <
Zinc	UG/L						

Appendix C Brunner Daily Samples

Inorganics	Up/Downstream Date Collected	Sample ID	4-Jun-97		4-Jun-97		5-Jun-97		5-Jun-97		6-Jun-97	
			Up	Down	Up	Down	Up	Down	Up	Down	Up	Down
Aluminum	UG/L	FD0431-FR	115 <	165 <	130 <	183 <	490 <	630 <	186 <	274 <		
Antimony	UG/L	FB0431	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U		
Arsenic	UG/L	FB0431	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U		
Barium	UG/L	FB0431	41.6 <	40 <	41.1 <	42.3 <	35.1 <	33.3 <	43.1 <	43.4 <		
Beryllium	UG/L	FB0431	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.17 <	0.1 U	0.1 U		
Boron	UG/L	FB0431	71.2 <	83.8 <	81.7 <	86 <	54.3 <	48.2 <	37.2 <	39.3 <		
Cadmium	UG/L	FB0431	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U		
Calcium	UG/L	FC0431-FR	44900 <	44100 <	43800 <	47900 <	33400 <	30400 <	49300 <	49200 <		
Chromium	UG/L	FC0431-FR	0.83 <	0.82 <	0.8 U	0.8 U	1.8 <	1.6 <	0.82 <	0.8 <		
Cobalt	UG/L	FC0431-FR	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.5 <	1.6 <		
Copper	UG/L	FC0431-FR	6.4 <	6.3 <	5.6 <	7.1 <	7.6 <	6.6 <	1.4 <	1.5 <		
Iron	UG/L	FC0431-FR	164 <	220 <	176 <	269 <	732 <	849 <	245 <	338 <		
Lead	UG/L	FC0431-FR	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U		
Magnesium	UG/L	FC0431-FR	9620 <	9160 <	9340 <	9600 <	6080 <	5260 <	9890 <	9450 <		
Manganese	UG/L	FC0431-FR	37 <	40.8 <	37.8 <	43.1 <	72.8 <	79.7 <	44.6 <	57.3 <		
Mercury	UG/L	FC0431-FR	0.21 <	0.3 <	0.2 <	0.32 <	0.49 <	0.57 <	0.23 <	0.35 <		
Molybdenum	UG/L	FC0431-FR	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	3 <	2.2 U		
Nickel	UG/L	FC0431-FR	2.1 <	1.8 U	1.8 U	2.6 <	1.8 U	1.8 U	1.8 U	1.8 U		
Potassium	UG/L	FC0431-FR	1620 <	1550 <	1600 <	1670 <	1680 <	1640 <	1640 <	1610 <		
Selenium	UG/L	FC0431-FR	3.5 U	3.5 U	3.5 U	3.5 U	3.5 U	3.5 U	3.5 U	3.5 U		
Silica	UG/L	FC0431-FR	6440 <	6200 <	6300 <	6490 <	5910 <	5770 <	7420 <	7490 <		
Silver	UG/L	FC0431-FR	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	13.9 <	1.3 U	1.3 U		
Sodium	UG/L	FC0431-FR	5480 <	5160 <	5440 <	5480 <	3870 <	3220 <	5760 <	5430 <		
Thallium	UG/L	FC0431-FR	4.5 U	4.5 U	4.5 <	7.1 <	4.5 U	5.1 <	4.5 U	4.5 U		
Vanadium	UG/L	FC0431-FR	0.7 U	0.7 U	0.7 U	0.7 U	1.1 <	1.4 <	0.93 <	1.5 <		
Zinc	UG/L	FC0431-FR	27.1 <	12.5 <	12.8 <	14.1 <	25.4 <	22.3 <	10.2 <	9.7 <		

Appendix C

Bruner Daily Samples

	Up/Downstream	Date Collected	Sample ID	9-Jun-97		11-Jun-97		12-Jun-97		13-Jun-97	
				Up	Down	Up	Down	Up	Down	Up	Down
Inorganics											
Aluminum	UG/L	FB0461	382 <	2.3 U	2.8 U	2.3 U	2.8 U	2.3 U	2.8 U	2.3 U	2.8 U
Antimony	UG/L	FA0461	204 <	2.3 U	2.8 U	2.3 U	2.8 U	2.3 U	2.8 U	2.3 U	2.8 U
Arsenic	UG/L	FB0461	43.2 <	0.11 <	0.33 <	0.11 <	0.33 <	0.11 <	0.33 <	0.11 <	0.33 <
Barium	UG/L	FA0461	0.18 <	39.5 <	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
Beryllium	UG/L	FB0461	46.3 <	41500 <	1.7 <	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
Boron	UG/L	FA0461	0.4 U	1.9 <	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
Cadmium	UG/L	FB0461	42000 <	6.7 <	5.4 <	5.8 <	5.8 <	5.8 <	5.8 <	5.8 <	5.8 <
Calcium	UG/L	FA0461	1.9 <	489 <	2.6 <	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U
Chromium	UG/L	FB0461	8440 <	74.7 <	0.62 <	0.62 <	0.62 <	0.62 <	0.62 <	0.62 <	0.62 <
Chromium	UG/L	FA0461	74.7 <	0.62 <	0.62 <	0.62 <	0.62 <	0.62 <	0.62 <	0.62 <	0.62 <
Cobalt	UG/L	FB0461	0.62 <	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U
Copper	UG/L	FA0461	2.2 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U
Copper	UG/L	FB0461	1630 <	3.5 U	3.5 U	3.5 U	3.5 U	3.5 U	3.5 U	3.5 U	3.5 U
Iron	UG/L	FA0461	6290 <	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
Lead	UG/L	FB0461	5040 <	4.5 U	4.5 U	4.5 U	4.5 U	4.5 U	4.5 U	4.5 U	4.5 U
Magnesium	UG/L	FA0461	4.5 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U
Magnesium	UG/L	FB0461	20.7 <	14 <	14 <	14 <	14 <	14 <	14 <	14 <	14 <
Manganese	UG/L	FA0461	14 <	14 <	14 <	14 <	14 <	14 <	14 <	14 <	14 <
Mercury	UG/L	FB0461	14 <	14 <	14 <	14 <	14 <	14 <	14 <	14 <	14 <
Molybdenum	UG/L	FA0461	14 <	14 <	14 <	14 <	14 <	14 <	14 <	14 <	14 <
Nickel	UG/L	FB0461	14 <	14 <	14 <	14 <	14 <	14 <	14 <	14 <	14 <
Potassium	UG/L	FA0461	14 <	14 <	14 <	14 <	14 <	14 <	14 <	14 <	14 <
Selenium	UG/L	FB0461	14 <	14 <	14 <	14 <	14 <	14 <	14 <	14 <	14 <
Silica	UG/L	FA0461	14 <	14 <	14 <	14 <	14 <	14 <	14 <	14 <	14 <
Silver	UG/L	FB0461	14 <	14 <	14 <	14 <	14 <	14 <	14 <	14 <	14 <
Sodium	UG/L	FA0461	14 <	14 <	14 <	14 <	14 <	14 <	14 <	14 <	14 <
Thallium	UG/L	FB0461	14 <	14 <	14 <	14 <	14 <	14 <	14 <	14 <	14 <
Vanadium	UG/L	FA0461	14 <	14 <	14 <	14 <	14 <	14 <	14 <	14 <	14 <
Zinc	UG/L	FB0461	14 <	14 <	14 <	14 <	14 <	14 <	14 <	14 <	14 <

Appendix C Bruner Daily Samples

	Up/Downstream Date Collected	Sample ID	16-Jun-97		18-Jun-97		19-Jun-97	
			Up	Down	Up	Down	Up	Down
Inorganics								
Aluminum	UG/L	FB0511	246 <	472 <	204 <	217 <	115 <	279 <
Antimony	UG/L		2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U
Arsenic	UG/L		2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U
Barium	UG/L		41.4 <	43.3 <	46.3 <	48 <	43.9 <	46.7 <
Beryllium	UG/L		0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Boron	UG/L		33.4 <	46.4 <	121 <	156 <	57.4 <	104 <
Cadmium	UG/L		0.4 U	0.4 U	0.4 U	0.43 <	0.4 U	0.4 U
Calcium	UG/L		45900 <	46300 <	51800 <	53900 <	51400 <	53000 <
Chromium	UG/L		0.8 U	0.8 U	0.9 <	0.8 U	1.5 <	1.3 <
Cobalt	UG/L		1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
Copper	UG/L		0.9 U	0.9 U	2.8 <	3 <	2.5 <	2.8 <
Iron	UG/L		286 <	397 <	232 <	268 <	194 <	305 <
Lead	UG/L		2.4 <	4 <	2.1 U	2.1 U	2.1 U	2.1 U
Magnesium	UG/L		8630 <	8330 <	9900 <	10200 <	9800 <	9980 <
Manganese	UG/L		45.5 <	53 <	58.8 <	52 <	42.8 <	53.6 <
Mercury	UG/L		0.19 <	0.43 <	0.19 <	0.25 <	0.14 <	0.25 <
Molybdenum	UG/L		2.2 U	3.5 <	2.9 <	3.7 <	2.2 U	2.2 U
Nickel	UG/L		1.8 U	1.8 U	1.8 U	1.8 U	1.9 <	4.6 <
Potassium	UG/L		1600 <	1650 <	1810 <	1920 <	1670 <	1770 <
Selenium	UG/L		3.5 U	3.5 U	3.5 U	3.5 U	3.5 U	3.5 U
Silica	UG/L		7640 <	8620 <	7970 <	8170 <	7540 <	8190 <
Silver	UG/L		1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
Sodium	UG/L		4870 <	4750 <	5560 <	5570 <	5310 <	5390 <
Thallium	UG/L		4.5 U	4.5 U	4.5 U	4.5 U	4.5 U	4.5 U
Vanadium	UG/L		0.7 U	1 <	0.77 <	0.86 <	0.78 <	0.7 <
Zinc	UG/L		10.4 <	13.8 <	10.9 <	10.8 <	10 <	11.9 <

Appendix C Brunner Daily Samples

	Up/Downstream Date Collected	Sample ID	Up		Down		Up		Down		Up		Down	
			20-Jun-97	FB0531	20-Jun-97	FC0531-FR	20-Jun-97	FA0531	23-Jun-97	FB0541	23-Jun-97	FA0541	25-Jun-97	FB0551
Inorganics														
Aluminum	UG/L	111 <	89.4 <	2.3 U	114 <	2.3 U	100 <	2.3 U	116 <	2.3 U	207 <	2.3 U	143 <	166 <
Antimony	UG/L	2.3 U	2.8 U	2.8 U	2.8 U	2.8 U	2.3 U	2.8 U	2.3 U	2.8 U	2.3 U	2.8 U	2.3 U	2.9 <
Arsenic	UG/L	2.8 U	44.9 <	44.2 <	44.3 <	44.3 <	44 <	41.4 <	41.4 <	41.4 <	41.2 <	45 <	45 <	2.8 U
Barium	UG/L	44.2 <	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.32 <	0.32 <	46.3 <
Beryllium	UG/L	0.1 U	42.8 <	70.1 <	70.1 <	70.1 <	75.9 <	26.8 <	26.8 <	26.8 <	34.1 <	74.3 <	74.3 <	0.36 <
Boron	UG/L	67.7 <	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.62 <	0.62 <	112 <
Cadmium	UG/L	0.4 U	49800 <	49800 <	49200 <	49200 <	48600 <	44900 <	44900 <	44900 <	44400 <	47300 <	47300 <	0.41 <
Calcium	UG/L	48600 <	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	1 <	1.2 <	1.2 <	49100 <
Chromium	UG/L	0.8 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	2.1 <
Cobalt	UG/L	1.3 U	4.2 <	4.2 <	5 <	5 <	21.1 <	6 <	6 <	6 <	5.1 <	0.9 U	0.9 U	1.3 U
Copper	UG/L	4.9 <	116 <	165 <	165 <	165 <	183 <	196 <	196 <	196 <	314 <	136 <	136 <	0.9 U
Iron	UG/L	147 <	5.3 <	2.1 U	2.1 U	2.1 U	4 <	4.3 <	4.3 <	4.3 <	2.1 <	3.7 <	3.7 <	160 <
Lead	UG/L	2.1 U	10700 <	10400 <	10400 <	10400 <	10200 <	9150 <	9150 <	9150 <	8850 <	10500 <	10500 <	2.1 U
Magnesium	UG/L	10500 <	41.2 <	43.6 <	43.6 <	43.6 <	42.7 <	41.7 <	41.7 <	41.7 <	50.2 <	35.9 <	35.9 <	10800 <
Manganese	UG/L	40.2 <	0.1 U	0.11 <	0.11 <	0.11 <	0.1 U	0.13 <	0.13 <	0.13 <	0.41 <	0.15 <	0.15 <	37.5 <
Mercury	UG/L	0.1 U	2.2 U	2.2 <	2.2 <	2.2 <	2.8 <	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	0.2 <
Molybdenum	UG/L	2.2 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	2.6 <	2.6 <	2.2 <
Nickel	UG/L	1.8 U	1680 <	1670 <	1670 <	1670 <	1640 <	1630 <	1630 <	1630 <	1640 <	1700 <	1700 <	2.2 <
Potassium	UG/L	1650 <	3.5 U	3.5 U	3.5 U	3.5 U	3.5 U	3.5 U	3.5 U	3.5 U	3.5 U	3.5 U	3.5 U	1720 <
Selenium	UG/L	3.5 U	7410 <	7300 <	7300 <	7300 <	7060 <	6710 <	6710 <	6710 <	6690 <	7120 <	7120 <	3.5 U
Silica	UG/L	7490 <	1.3 U	1.3 U	1.3 U	1.3 U	2.4 <	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	7220 <
Silver	UG/L	1.3 U	5820 <	5640 <	5640 <	5640 <	5570 <	5080 <	5080 <	5080 <	4800 <	5990 <	5990 <	1.3 U
Sodium	UG/L	5760 <	4.7 <	5.1 <	5.1 <	5.1 <	7.6 <	4.5 U	4.5 U	4.5 U	4.5 U	4.5 U	4.5 U	6210 <
Thallium	UG/L	4.5 U	0.71 <	0.7 U	0.7 U	0.7 U	0.71 <	0.7 U	0.7 U	0.7 U	0.72 <	0.7 U	0.7 U	4.5 U
Vanadium	UG/L	0.93 <	10.1 <	11.6 <	11.6 <	11.6 <	11.6 <	12.1 <	12.1 <	12.1 <	9.4 <	11 <	11 <	0.7 U
Zinc	UG/L	12.9 <												6.8 <

Appendix C Brunner Daily Samples

	Up/Downstream Date Collected	Up	Down	Up	Down	Up	Down	Up	Down
	Sample ID	26-Jun-97 FB0561	26-Jun-97 FA0561	27-Jun-97 FB0571	27-Jun-97 FA0571	30-Jun-97 FB0581	30-Jun-97 FA0581	2-Jul-97 FB0591	2-Jul-97 FA0591
Inorganics	UG/L	184 <	195 <	103 <	129 <	375 <	296 <	242 <	398 <
Aluminum	UG/L	2.9 <	2.6 <	2.3 U	2.3 U	2.3 U	2.3 U	2.6 <	2.9 <
Antimony	UG/L	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	3.8 <
Arsenic	UG/L	44.2 <	45.4 <	43.9 <	44.4 <	41.2 <	37.8 <	43 <	42.9 <
Barium	UG/L	0.1 U	0.1 U	0.1 U	0.1 <	0.24 <	0.12 <	0.1 U	0.11 <
Beryllium	UG/L	60.4 <	66.2 <	74.6 <	110 <	32.8 <	32.8 <	89.6 <	99.9 <
Boron	UG/L	0.47 <	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.51 <	0.54 <
Cadmium	UG/L	47900 <	47900 <	46600 <	46300 <	44900 <	41100 <	45300 <	45500 <
Calcium	UG/L	1.4 <	1.9 <	0.8 U	0.8 U	0.8 U	0.8 U	0.87 <	2.1 <
Chromium	UG/L	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
Cobalt	UG/L	2.2 <	1.8 <	1.6 <	1.1 <	0.9 U	1.4 <	4.1 <	4.8 <
Copper	UG/L	178 <	203 <	146 <	155 <	342 <	290 <	311 <	484 <
Iron	UG/L	2.1 U	2.1 U	2.1 U	3.6 <	2.1 U	3.8 <	4.5 <	2.8 <
Lead	UG/L	10700 <	10600 <	10300 <	10200 <	9470 <	8540 <	8540 <	8350 <
Magnesium	UG/L	36.9 <	34.9 <	34.7 <	33.4 <	49.1 <	37.6 <	47.8 <	54.3 <
Manganese	UG/L	0.19 <	0.25 <	0.18 <	0.19 <	0.21 <	0.33 <	0.41 <	0.32 <
Mercury	UG/L	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U
Molybdenum	UG/L	2 <	1.8 U	1.8 U	1.8 U	1.8 U	2.1 <	3.3 <	3.7 <
Nickel	UG/L	1660 <	1610 <	1720 <	1700 <	1620 <	1540 <	1610 <	1620 <
Potassium	UG/L	3.5 U	3.5 U	3.5 U	3.5 U	3.5 U	3.5 U	3.5 U	3.5 U
Selenium	UG/L	7540 <	7350 <	7190 <	7010 <	7500 <	6660 <	6940 <	7390 <
Silica	UG/L	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
Silver	UG/L	5860 <	5810 <	5760 <	5680 <	5610 <	4870 <	5070 <	4860 <
Sodium	UG/L	4.5 U	4.5 U	4.5 U	4.5 U	4.5 U	4.5 U	4.5 U	4.5 U
Thallium	UG/L	0.7 U	0.83 <	0.85 <	1 <	0.7 U	0.7 U	0.73 <	1.2 <
Vanadium	UG/L	8.4 <	7.6 <	6 <	6.9 <	10.7 <	9.3 <	10.7 <	14.5 <
Zinc	UG/L								

Appendix C
Bruner Daily Samples

	Up/Downstream	Up	Down	Up	Down
	Date Collected	7-Jul-97	7-Jul-97	9-Jul-97	9-Jul-97
	Sample ID	FB0601	FA0601	FB0611	FA0611
Inorganics	UG/L	194 <	210 <	470 <	254 <
Aluminum	UG/L	2.3 U	2.3 U	2.3 U	2.3 U
Antimony	UG/L	3.4 <	2.8 U	2.8 U	2.8 U
Arsenic	UG/L	44.5 <	42.3 <	46.1 <	45.4 <
Barium	UG/L	0.1 U	0.1 U	0.1 U	0.11 <
Beryllium	UG/L	33 <	29.2 <	76.1 <	92.7 <
Boron	UG/L	0.4 U	0.4 U	0.4 U	0.4 U
Cadmium	UG/L	46300 <	44100 <	44700 <	45000 <
Calcium	UG/L	0.8 U	0.8 U	1.7 <	0.8 U
Chromium	UG/L	1.3 U	1.3 U	1.5 <	1.7 <
Cobalt	UG/L	1.2 <	0.9 U	7 <	6.1 <
Copper	UG/L	177 <	213 <	668 <	392 <
Iron	UG/L	2.1 U	2.5 <	6.9 <	2.7 <
Lead	UG/L	10300 <	9690 <	10200 <	10400 <
Magnesium	UG/L	33.3 <	32.7 <	63.8 <	45 <
Manganese	UG/L	0.12 <	0.2 <	1 <	0.58 <
Mercury	UG/L	2.2 U	2.8 <	3.5 <	3.6 <
Molybdenum	UG/L	1.8 U	1.8 U	1.8 <	2.1 <
Nickel	UG/L	1620 <	1550 <	1650 <	1610 <
Potassium	UG/L	3.5 U	3.5 U	3.5 U	3.5 U
Selenium	UG/L	7640 <	7210 <	7740 <	7120 <
Silica	UG/L	1.3 U	1.3 U	1.3 U	1.3 U
Silver	UG/L	5850 <	5500 <	6130 <	6200 <
Sodium	UG/L	4.5 U	4.5 U	4.5 U	4.5 U
Thallium	UG/L	0.7 U	0.7 U	2.2 <	1.7 <
Vanadium	UG/L	9.2 <	7.9 <	23.7 <	16.3 <
Zinc	UG/L				

Appendix C Brunner Daily Samples

	Up/Downstream	Up	Down	Up	Down	Up	Down	Up	Down	Up	Down
	Date Collected	Sample ID	UG/L	10-Jul-97	11-Jul-97	11-Jul-97	11-Jul-97	11-Jul-97	11-Jul-97	14-Jul-97	14-Jul-97
Inorganics											
Aluminum		FB0621	258 <	385 <	FA0621	385 <	FB0631	193 <	FB0631	207 <	FA0631
Antimony		2.3 U	4 <	2.3 U	2.4 <	2.4 <	2.8 U	2.8 U	2.8 U	2.3 U	2.3 U
Arsenic		2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U
Barium		48.3 <	52.2 <	48.7 <	50 <	51.1 <	49.6 <	43.4 <	43.4 <	45 <	45 <
Beryllium		0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.34 <	0.34 <	0.2 U	0.2 U
Boron		168 <	240 <	44.7 <	47.4 <	61.3 <	57.8 <	69 <	69 <	156 <	219 <
Cadmium		0.55 <	0.43 <	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 <
Calcium		47100 <	50600 <	50800 <	51700 <	52500 <	51900 <	41800 <	41800 <	46000 <	46800 <
Chromium		4.6 <	5 <	1.9 <	2.9 <	2.1 <	1.7 <	1.9 <	1.9 <	0.88 <	1.8 <
Cobalt		1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
Copper		2.3 <	2.5 <	0.9 U	0.9 U	0.9 U	0.9 U	3.6 <	3.6 <	1.5 <	1.7 <
Iron		260 <	331 <	206 <	249 <	219 <	182 <	154 <	154 <	113 <	234 <
Lead		2.1 U	2.7 <	2.1 U	2.1 U	2.1 U	2.3 <	2.9 <	2.9 <	2 U	2 U
Magnesium		9440 <	9740 <	10700 <	11000 <	11000 <	10800 <	9920 <	9920 <	10600 <	10700 <
Manganese		36.8 <	49.5 <	31.4 <	32.3 <	38.4 <	36.8 <	29.6 <	29.6 <	25 <	28.4 <
Mercury		0.37 <	0.4 <	0.26 <	0.21 <	0.33 <	0.3 <	0.39 <	0.39 <	0.25 <	0.31 <
Molybdenum		2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	2.6 U	2.6 U
Nickel		3 <	2.9 <	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	2.7 <	2.8 <
Potassium		1870 <	2030 <	1720 <	1780 <	1830 <	1750 <	1490 <	1490 <	1590 <	1660 <
Selenium		3.5 U	3.5 U	3.5 U	3.5 U	3.5 U	3.5 U	3.5 U	3.5 U	3.1 U	3.1 U
Silica		7590 <	8330 <	8000 <	8110 <	8240 <	7740 <	6630 <	6630 <	6760 <	7160 <
Silver		1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	0.7 U	0.7 U
Sodium		6630 <	6930 <	6950 <	7170 <	7330 <	7110 <	5880 <	5880 <	6630 <	6540 <
Thallium		4.5 U	4.5 U	4.5 U	4.5 U	4.5 U	4.5 U	4.5 U	4.5 U	3.8 U	3.8 U
Vanadium		0.87 <	1.7 <	1 <	0.7 U	1.2 <	0.7 U	1.7 <	1.7 <	0.7 U	0.86 <
Zinc		10.8 <	10.3 <	9.2 <	8.2 <	7.2 <	6.4 <	10.4 <	10.4 <	8.2 <	9.7 <

Appendix C

Brunner Daily Samples

	Up/Downstream		Up		Down		Up		Down		Up		Down		Up		Down				
	Date Collected	Sample ID	28-Jul-97	FB0721	28-Jul-97	FA0721	30-Jul-97	FD0731-FR	30-Jul-97	FB0731	30-Jul-97	FC0731-FR	30-Jul-97	FA0731	31-Jul-97	FB0741	31-Jul-97	FA0741	1-Aug-97	FB0751	1-Aug-97
Inorganics																					
Aluminum	UG/L		193 <		232 <		221 <		235 <		221 <		224 <		223 <		117 <		258 <		225 <
Antimony	UG/L		2.9 <		2 U		2 U		2 U		2.7 <		2 U		0.9 U		0.9 U		0.7 U		0.7 U
Arsenic	UG/L		3.1 U		4.2 <		3.1 U		3.1 U		3.1 U		4.8 <		1.4 U		1.4 U		1.4 U		1.4 U
Barium	UG/L		50 <		50 <		47.8 <		48.7 <		48.7 <		47.6 <		42.9 <		44.9 <		49.8 <		48.4 <
Beryllium	UG/L		0.3 U		0.3 U		0.3 U		0.3 U		0.3 U		0.3 U		0.2 U		0.2 U		0.2 U		0.2 U
Boron	UG/L		28.8 <		30.7 <		62.6 <		79.4 <		77.2 <		81.4 <		87.8 <		83.7 <		97 <		76.2 <
Cadmium	UG/L		0.4 U		0.4 U		0.4 U		0.42 <		0.4 U		0.4 U		2.5 U		2.5 U		2.5 U		2.5 U
Calcium	UG/L		49700 <		49000 <		48700 <		49100 <		49400 <		48600 <		43800 <		46200 <		49100 <		49500 <
Chromium	UG/L		2.7 <		2.6 <		0.8 U		1.8 <		1.5 <		1 <		3.7 U		3.7 U		3.7 U		3.7 U
Cobalt	UG/L		1.3 U		1.3 U		1.3 U		1.3 U		1.3 U		1.3 U		4.6 U		4.6 U		4.6 U		4.6 U
Copper	UG/L		1.4 U		1.4 U		1.4 U		1.4 U		1.4 <		2 <		4.2 U		4.2 U		6.4 <		5.6 <
Iron	UG/L		185 <		208 <		246 <		241 <		273 <		270 <		277 <		189 <		216 <		212 <
Lead	UG/L		3 <		3 <		2 U		8.2 <		2 U		2.3 <		0.9 U		4.5 <		1.6 <		1.2 <
Magnesium	UG/L		10900 <		10800 <		10700 <		10800 <		10700 <		10500 <		9680 <		10300 <		11500 <		11400 <
Manganese	UG/L		29.4 <		30.5 <		25.5 <		25.9 <		32.7 <		32.1 <		26.6 <		22.5 <		24.7 <		24.1 <
Mercury	UG/L		0.36 <		0.34 <		0.11 <		0.24 <		0.22 <		0.23 <		0.49 <		0.31 <		0.35 <		0.22 <
Molybdenum	UG/L		2.6 U		2.6 U		10.1 U		14.9 <		10.1 U		10.1 U		13.8 U		13.8 U		13.8 U		13.8 U
Nickel	UG/L		1.6 U		1.6 U		1.6 U		2.8 <		1.8 <		4 <		8.9 U		8.9 U		14.5 <		10.3 <
Potassium	UG/L		2010 <		1970 <		1410 <		1650 <		1360 <		1810 <		1750 <		1230 <		1460 <		1790 <
Selenium	UG/L		3.1 U		3.1 U		3.1 U		3.1 U		3.1 U		3.1 U		1.5 U		2.2 <		1.5 U		2.6 <
Silica	UG/L		7640 <		7930 <		7960 <		8220 <		8200 <		8230 <		6710 <		6700 <		7830 <		7620 <
Silver	UG/L		0.7 U		0.7 U		1.8 U		1.8 U		2 <		2.3 <		10.2 <		9.3 <		5.2 <		5.2 <
Sodium	UG/L		7660 <		7430 <		7000 <		7090 <		7050 <		6980 <		6510 <		7060 <		8020 <		7620 <
Thallium	UG/L		3.8 U		3.8 U		3.8 U		3.8 U		3.8 U		3.8 U		0.9 U		0.9 U		0.9 U		0.9 U
Vanadium	UG/L		0.81 <		1.2 <		0.7 U		0.7 U		1.2 <		1 <		5.8 <		3.6 U		3.6 U		3.6 U
Zinc	UG/L		7.6 <		7.1 <		7 <		8.6 <		8.8 <		8.3 <		12.3 <		7 <		13.2 <		13.4 <

Appendix C Brunner Daily Samples

Inorganics	Up/Downstream		4-Aug-97		7-Aug-97		8-Aug-97		11-Aug-97		11-Aug-97		13-Aug-97	
	Date Collected	Sample ID	Up	Down	Up	Down	Up	Down	Up	Down	Up	Down	Up	Down
Aluminum	UG/L	FB0761	200 <	290 <	159 <	167 <	201 <	137 <	186 <	250 <	103 <	164 <	13-Aug-97	FA0811
Antimony	UG/L	0.7 U	0.7 U	0.7 U	2 U	2 U	2.6 <	2.9 <	2 U	2 U	2 U	3.7 <		
Arsenic	UG/L	4 <	1.2 U	1.2 U	3.1 U	3.1 U	3.1 U	4.9 <	3.1 U	3.1 U	3.1 U	3.1 U		
Barium	UG/L	49 <	49.4 <	49.4 <	45.9 <	45 <	47.3 <	47.6 <	47.8 <	48.7 <	47.7 <	47.3 <		
Beryllium	UG/L	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U		
Boron	UG/L	41.1 <	53.2 <	53.2 <	44.5 <	48.9 <	48.4 <	42.7 <	30.3 <	44.9 <	146 <	132 <		
Cadmium	UG/L	3 <	2.5 U	2.5 U	0.4 U	0.4 U	0.53 <	0.53 <	0.4 U	0.4 U	0.4 U	0.72 <		
Calcium	UG/L	49700 <	50000 <	50000 <	46400 <	45400 <	46600 <	46900 <	45500 <	43800 <	48000 <	48300 <		
Chromium	UG/L	3.7 U	3.7 U	3.7 U	0.95 <	0.91 <	1.7 <	1.5 <	0.94 <	1.4 <	0.88 <	1 <		
Cobalt	UG/L	4.6 U	4.6 U	4.6 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U		
Copper	UG/L	7.3 <	6.1 <	6.1 <	3.7 <	5.9 <	1.7 <	1.4 U	6.8 <	6.3 <	6.2 <	5.7 <		
Iron	UG/L	181 <	261 <	261 <	197 <	220 <	209 <	149 <	229 <	268 <	135 <	207 <		
Lead	UG/L	1.1 <	1.4 <	1.4 <	2 U	2 U	2 U	2 U	2 U	2 U	2 U	3.7 <		
Magnesium	UG/L	11800 <	11900 <	11900 <	10700 <	10500 <	10800 <	11000 <	10800 <	10400 <	10900 <	10900 <		
Manganese	UG/L	23.2 <	24.1 <	24.1 <	23.3 <	24 <	27.8 <	24.2 <	21.4 <	21.9 <	20.5 <	23.7 <		
Mercury	UG/L	0.2 <	0.17 <	0.17 <	0.24 <	0.23 <	0.41 <	0.31 <	0.23 <	0.31 <	0.24 <	0.26 <		
Molybdenum	UG/L	13.8 U	13.8 U	13.8 U	2.6 U	2.6 U	2.6 U	2.6 U	2.6 <	2.6 U	2.6 U	2.6 U		
Nickel	UG/L	8.9 U	8.9 U	8.9 U	1.6 U	1.6 U	2.9 <	2.1 <	2 <	3.5 <	14.2 <	11.4 <		
Potassium	UG/L	2040 <	1730 <	1730 <	1800 <	1780 <	1720 <	1750 <	1720 <	1720 <	1690 <	1720 <		
Selenium	UG/L	2.3 <	1.6 U	1.6 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U		
Silica	UG/L	7250 <	7360 <	7360 <	7000 <	6770 <	7240 <	6990 <	7230 <	7020 <	6820 <	6840 <		
Silver	UG/L	6.3 <	9.5 <	9.5 <	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U		
Sodium	UG/L	7400 <	7600 <	7600 <	7420 <	7340 <	7430 <	7670 <	6710 <	6700 <	7430 <	7370 <		
Thallium	UG/L	0.9 U	0.9 U	0.9 U	3.9 <	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U		
Vanadium	UG/L	4 <	3.6 U	3.6 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.74 <		
Zinc	UG/L	17.3 <	12.5 <	12.5 <	8.7 <	8.9 <	10.4 <	9.2 <	19.2 <	11 <	18.9 <	23 <		

Appendix C Brunner Daily Samples

	Up/Downstream	Up	14-Aug-97	Down	14-Aug-97	Down	15-Aug-97	Up	15-Aug-97	Down	18-Aug-97	Up	18-Aug-97	Down	20-Aug-97
	Sample ID	FD0831-FR	FB0831	FC0831-FR	FA0831	FB0821	FA0821	FB0841	FA0841	FB0851	FA0851	FB0851	FA0851	FB0851	FA0851
Inorganics	UG/L	182 <	228 <	271 <	321 <	277 <	269 <	276 <	408 <	1260 <	2220 <	1260 <	2220 <	1260 <	2220 <
Aluminum	UG/L	2 U	2 U	2.3 <	2 U	2 U	2.7 <	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Antimony	UG/L	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	4.2 <	5.2 <	4.2 <	5.2 <	4.2 <	5.2 <
Arsenic	UG/L	46.2 <	46.7 <	47.9 <	45.7 <	47.3 <	47.8 <	38.5 <	39.3 <	40 <	45.9 <	40 <	45.9 <	40 <	45.9 <
Barium	UG/L	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Beryllium	UG/L	135 <	58.5 <	138 <	145 <	145 <	67.4 <	28.7 <	58.5 <	47.3 <	62.5 <	47.3 <	62.5 <	47.3 <	62.5 <
Boron	UG/L	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.58 <	0.72 <	0.64 <	0.86 <	0.64 <	0.86 <	0.64 <	0.86 <
Cadmium	UG/L	45700 <	45800 <	46700 <	45200 <	46000 <	46600 <	37900 <	36900 <	33300 <	35000 <	33300 <	35000 <	33300 <	35000 <
Calcium	UG/L	0.8 U	0.8 U	0.8 U	0.8 U	2.4 <	0.8 U	2.2 <	2.9 <	4 <	4.7 <	4 <	4.7 <	4 <	4.7 <
Chromium	UG/L	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	2 <	1.3 U	2 <	1.3 U	2 <
Cobalt	UG/L	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	5.9 <	6.3 <	9.6 <	12.8 <	9.6 <	12.8 <	9.6 <	12.8 <
Copper	UG/L	120 <	171 <	218 <	216 <	176 <	256 <	392 <	506 <	1770 <	3110 <	1770 <	3110 <	1770 <	3110 <
Iron	UG/L	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.5 <	6.1 <	7.7 <	6.1 <	7.7 <	6.1 <	7.7 <
Lead	UG/L	10700 <	10900 <	11000 <	10600 <	10800 <	11000 <	7930 <	7800 <	5340 <	5420 <	5340 <	5420 <	5340 <	5420 <
Magnesium	UG/L	17.6 <	19.6 <	22.3 <	21.6 <	18.4 <	25.3 <	36.1 <	44.9 <	92.5 <	149 <	92.5 <	149 <	92.5 <	149 <
Manganese	UG/L	0.11 <	0.15 <	0.16 <	0.13 <	0.1 U	0.2 <	0.39 <	0.54 <	1.6 <	3 <	1.6 <	3 <	1.6 <	3 <
Mercury	UG/L	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U
Molybdenum	UG/L	1.6 U	1.6 U	1.6 U	1.6 U	2 <	1.6 U	2.5 <	3.7 <	4.8 <	5.6 <	4.8 <	5.6 <	4.8 <	5.6 <
Nickel	UG/L	1750 <	1770 <	1830 <	1770 <	1790 <	1810 <	1550 <	1590 <	1970 <	2320 <	1970 <	2320 <	1970 <	2320 <
Potassium	UG/L	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.2 <	4.7 <	3.2 <	4.7 <	3.2 <	4.7 <
Selenium	UG/L	7210 <	6970 <	7520 <	7490 <	7630 <	7110 <	5660 <	5940 <	7780 <	10200 <	7780 <	10200 <	7780 <	10200 <
Silica	UG/L	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	1.1 <	0.7 U	1.1 <	0.7 U	1.1 <	0.7 U
Silver	UG/L	7980 <	9870 <	8170 <	7840 <	8130 <	9630 <	5620 <	5680 <	4120 <	3910 <	4120 <	3910 <	4120 <	3910 <
Sodium	UG/L	3.8 U	4.3 <	3.8 U	5.8 <	5.2 <	5.1 <	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
Thallium	UG/L	0.7 U	0.7 U	0.7 U	1.2 <	0.7 U	0.7 U	1.4 <	1.4 <	2.9 <	5.4 <	2.9 <	5.4 <	2.9 <	5.4 <
Vanadium	UG/L	10.9 <	10.9 <	11.3 <	11.9 <	10.1 <	9.3 <	14.6 <	25 <	35.4 <	80.3 <	35.4 <	80.3 <	35.4 <	80.3 <
Zinc	UG/L														

Appendix C Brunner Daily Samples

	Up/Downstream	Date Collected	Up	Down	Up	Down	Up	Down	Up	Down	Up	Down	Up	Down	Up	Down	Up	Down	
	Sample ID																		
Inorganics		21-Aug-97	21-Aug-97	21-Aug-97	25-Aug-97	25-Aug-97	27-Aug-97	27-Aug-97	28-Aug-97	28-Aug-97	29-Aug-97	29-Aug-97	29-Aug-97	29-Aug-97	29-Aug-97	29-Aug-97	29-Aug-97	29-Aug-97	
Aluminum	UG/L	FB0861	176 <	FA0861	189 <	FB0871	156 <	FA0871	190 <	FB0881	207 <	FA0881	293 <	FB0891	258 <	FA0891	268 <	FB0901	FA0901
Antimony	UG/L	3 <	2 U	3.1 U	3.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Arsenic	UG/L	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	4 <	4 <	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U
Barium	UG/L	49.7 <	49.1 <	49.1 <	45.7 <	45.7 <	45.7 <	45.9 <	45.9 <	45.5 <	45.5 <	50.2 <	50.2 <	53.5 <	53.5 <	53.3 <	53.3 <	49.5 <	49.5 <
Beryllium	UG/L	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Boron	UG/L	61.6 <	69.6 <	69.6 <	27.1 <	27.1 <	27.1 <	33.3 <	33.3 <	155 <	155 <	148 <	148 <	165 <	165 <	116 <	116 <	60.1 <	66.7 <
Cadmium	UG/L	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
Calcium	UG/L	50900 <	51000 <	51000 <	47400 <	47400 <	47400 <	48300 <	48300 <	46100 <	46100 <	47500 <	47500 <	45900 <	45900 <	47100 <	47100 <	45300 <	45400 <
Chromium	UG/L	1.2 <	0.98 <	0.98 <	0.8 U	0.8 U	0.8 U	0.92 <	0.92 <	1.2 <	1.2 <	1.4 <	1.4 <	1.4 <	1.4 <	1.1 <	1.1 <	1.3 <	1.1 <
Cobalt	UG/L	1.3 U	1.3 U	1.3 <	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	4.6 U	4.6 U	4.6 U	4.6 U	4.6 U	4.6 U
Copper	UG/L	2.5 <	3 <	3 <	1.4 U	1.4 U	1.4 U	1.5 <	1.5 <	5.2 <	5.2 <	6.1 <	6.1 <	1.4 U	1.4 U	1.4 U	1.4 U	4.3 <	2.9 <
Iron	UG/L	256 <	280 <	280 <	130 <	130 <	130 <	188 <	188 <	139 <	139 <	217 <	217 <	314 <	314 <	218 <	218 <	120 <	186 <
Lead	UG/L	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Magnesium	UG/L	10000 <	9840 <	9840 <	11200 <	11200 <	11200 <	11300 <	11300 <	11600 <	11600 <	11900 <	11900 <	11600 <	11600 <	11700 <	11700 <	11300 <	11300 <
Manganese	UG/L	30.8 <	36.7 <	36.7 <	19.3 <	19.3 <	19.3 <	23.7 <	23.7 <	17.8 <	17.8 <	20.5 <	20.5 <	18.9 <	18.9 <	21.6 <	21.6 <	17.1 <	20.7 <
Mercury	UG/L	0.4 <	0.42 <	0.42 <	0.14 <	0.14 <	0.14 <	0.19 <	0.19 <	0.15 <	0.15 <	0.18 <	0.18 <	0.15 <	0.15 <	0.17 <	0.17 <	0.15 <	0.13 <
Molybdenum	UG/L	5.5 <	4.2 <	4.2 <	2.6 U	2.6 U	2.6 U	3.5 <	3.5 <	2.6 <	2.6 <	2.6 U	2.6 U	10.1 U	10.1 U	10.1 U	10.1 U	10.1 U	10.1 U
Nickel	UG/L	3.8 <	2.8 <	2.8 <	1.6 U	1.6 U	1.6 U	2.1 <	2.1 <	1.8 <	1.8 <	1.7 <	1.7 <	2.2 <	2.2 <	1.6 U	1.6 U	1.6 U	1.6 U
Potassium	UG/L	2020 <	2100 <	2100 <	1710 <	1710 <	1710 <	1740 <	1740 <	1810 <	1810 <	1860 <	1860 <	2020 <	2020 <	2010 <	2010 <	1880 <	1900 <
Selenium	UG/L	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	4.1 <	4.1 <	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U
Silica	UG/L	7160 <	7060 <	7060 <	7400 <	7400 <	7400 <	7420 <	7420 <	7410 <	7410 <	7700 <	7700 <	7500 <	7500 <	7110 <	7110 <	6750 <	6810 <
Silver	UG/L	1 <	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U
Sodium	UG/L	9910 <	9610 <	9610 <	7720 <	7720 <	7720 <	7800 <	7800 <	12000 <	12000 <	12100 <	12100 <	14000 <	14000 <	16400 <	16400 <	13000 <	13800 <
Thallium	UG/L	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	4.2 <	4.2 <	4.8 <	4.8 <	3.8 U	3.8 U	7.4 <	7.4 <	3.8 U	3.8 U
Vanadium	UG/L	1.3 <	1.2 <	1.2 <	0.7 U	0.7 U	0.7 U	0.76 <	0.76 <	1.1 <	1.1 <	0.78 <	0.78 <	0.7 U	0.7 U	0.89 <	0.89 <	0.7 U	0.73 <
Zinc	UG/L	8.7 <	28.9 <	28.9 <	9.1 <	9.1 <	9.1 <	5.6 <	5.6 <	7.9 <	7.9 <	9.7 <	9.7 <	13.7 <	13.7 <	6.4 <	6.4 <	10 <	7.2 <

Appendix C Brunner Daily Samples

Inorganics	Up/Downstream	Date Collected	3-Sep-97		4-Sep-97		5-Sep-97		5-Sep-97		5-Sep-97		8-Sep-97	
			Sample ID	Up	Down	Up	Down	Up	Down	Up	Down	Up	Down	
Aluminum	UG/L	FB0911	163 <	2 U	285 <	208 <	189 <	131 <	108 <	2 U	2 U	291 <	139 <	218 <
Antimony	UG/L		2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Arsenic	UG/L		3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U
Barium	UG/L		46.7 <	46.7 <	46.7 <	49.1 <	47.5 <	48.1 <	47.3 <	49.8 <	50.3 <	50.3 <	44.2 <	45.8 <
Beryllium	UG/L		0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Boron	UG/L		92.5 <	92.5 <	109 <	174 <	135 <	135 <	119 <	122 <	120 <	120 <	164 <	156 <
Cadmium	UG/L		0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.57 <	0.57 <	0.4 U	0.4 U
Calcium	UG/L		45800 <	45800 <	44400 <	47300 <	45900 <	47200 <	47800 <	47900 <	48200 <	48200 <	44100 <	44900 <
Chromium	UG/L		1.3 <	1.3 <	1.3 <	1.1 <	2.5 <	0.94 <	0.8 U	0.87 <	1.6 <	1.6 <	7.3 <	4.8 <
Cobalt	UG/L		1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
Copper	UG/L		2.4 <	2.4 <	2.4 <	2.5 <	3.9 <	4.7 <	4.8 <	4.4 <	5.5 <	5.5 <	2.3 <	1.7 <
Iron	UG/L		141 <	141 <	229 <	147 <	202 <	98.6 <	102 <	258 <	265 <	265 <	151 <	173 <
Lead	UG/L		2 U	2 U	2 U	2.5 <	3.2 <	3 <	2 U	2 U	2 <	2 <	2 U	2 U
Magnesium	UG/L		11900 <	11900 <	11600 <	12400 <	12100 <	12300 <	12400 <	12500 <	12500 <	12500 <	11400 <	11800 <
Manganese	UG/L		18 <	18 <	22.1 <	16.2 <	20.9 <	14.7 <	15.4 <	22.2 <	22.2 <	22.2 <	22.3 <	20.9 <
Mercury	UG/L		0.13 <	0.13 <	0.17 <	0.16 <	0.18 <	0.11 <	0.11 <	0.17 <	0.17 <	0.17 <	0.25 <	0.18 <
Molybdenum	UG/L		2.6 U	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U	5.3 <	5.4 <
Nickel	UG/L		1.8 <	1.8 <	2.3 <	1.6 U	1.9 <	1.7 <	1.6 U	2.6 <	1.9 <	1.9 <	3.6 <	2.6 <
Potassium	UG/L		1730 <	1730 <	1730 <	1740 <	1700 <	1810 <	1780 <	1920 <	1910 <	1910 <	1640 <	1690 <
Selenium	UG/L		3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	4.3 <
Silica	UG/L		7150 <	7150 <	7220 <	7190 <	6780 <	6970 <	6990 <	7450 <	7800 <	7800 <	6450 <	6700 <
Silver	UG/L		0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U
Sodium	UG/L		7500 <	7500 <	7460 <	11400 <	9260 <	13100 <	13000 <	15100 <	15200 <	15200 <	8550 <	8850 <
Thallium	UG/L		3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	5.4 <	3.8 U
Vanadium	UG/L		0.7 U	0.7 U	1.2 <	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	1.4 <	1 <
Zinc	UG/L		7.1 <	7.1 <	5.8 <	5.4 <	6.5 <	10.5 <	10.8 <	13.2 <	8.4 <	8.4 <	8.5 <	8.8 <

Appendix C Brunner Daily Samples

Up/Downstream	Date Collected	Up	Down	Up	Down	Up	Down	Up	Down	Up	Down
Sample ID											
Inorganics											
Aluminum	UG/L	10-Sep-97 FB0951	10-Sep-97 FA0951	11-Sep-97 FB0961	11-Sep-97 FA0961	12-Sep-97 FB0971	12-Sep-97 FA0971	15-Sep-97 FB0981	15-Sep-97 FA0981	17-Sep-97 FB0991	17-Sep-97 FA0991
Antimony	UG/L	224 <	413 <	2 U	2 U	173 <	212 <	213 <	102 <	81.8 <	161 <
Arsenic	UG/L	5.1 <	3.6 <	3.1 U	3.4 <	5.4 <	3.2 <	3.1 U	3.1 U	2 U	2 U
Barium	UG/L	45.2 <	48.1 <	46 <	45.9 <	44.1 <	44.3 <	43.5 <	42.8 <	44.3 <	44 <
Beryllium	UG/L	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Boron	UG/L	266 <	1170 <	64 <	68 <	126 <	78.9 <	110 <	46.7 <	112 <	94.1 <
Cadmium	UG/L	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
Calcium	UG/L	43200 <	43600 <	43100 <	43300 <	44400 <	43500 <	43800 <	44100 <	44600 <	43800 <
Chromium	UG/L	1.1 <	2.7 <	1.2 <	1.4 <	0.83 <	1.1 <	1.2 <	0.8 U	0.8 U	0.84 <
Cobalt	UG/L	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
Copper	UG/L	7.2 <	9.5 <	6.4 <	5 <	5.8 <	5.6 <	4.8 <	4.4 <	5.8 <	5.2 <
Iron	UG/L	163 <	241 <	167 <	271 <	148 <	191 <	215 <	114 <	96.4 <	175 <
Lead	UG/L	2 U	2 U	5.2 <	2 U	2 U	2.2 <	2 U	2 U	2 U	2 U
Magnesium	UG/L	10800 <	11000 <	11300 <	11300 <	11500 <	11400 <	11200 <	11300 <	12300 <	12100 <
Manganese	UG/L	19.3 <	24.5 <	21.5 <	24.3 <	17.3 <	21.8 <	24.7 <	18.5 <	16.4 <	19.9 <
Mercury	UG/L	0.23 <	0.2 <	0.18 <	0.27 <	0.17 <	0.25 <	0.23 <	0.13 <	0.17 <	0.18 <
Molybdenum	UG/L	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U	2.6 <	3.4 <	4.3 <	2.6 U
Nickel	UG/L	1.6 <	1.9 <	1.6 U	1.6 U	1.6 U	3.2 <	3.8 <	1.6 U	1.6 U	1.6 U
Potassium	UG/L	1780 <	1860 <	1800 <	1740 <	1700 <	1750 <	1680 <	1740 <	1850 <	1870 <
Selenium	UG/L	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U
Silica	UG/L	6920 <	8150 <	6640 <	6790 <	6960 <	6770 <	6710 <	6220 <	6710 <	6690 <
Silver	UG/L	0.7 U	0.7 U	0.7 U	0.82 <	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U
Sodium	UG/L	7190 <	8210 <	7050 <	7070 <	6990 <	6970 <	6450 <	6480 <	7360 <	7360 <
Thallium	UG/L	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
Vanadium	-UG/L	1.5 <	1.2 <	1.1 <	1.6 <	0.99 <	0.81 <	0.86 <	0.79 <	0.84 <	0.7 <
Zinc	UG/L	15.7 <	17.5 <	13.5 <	9.8 <	10.2 <	14.4 <	9.6 <	6.6 <	8.5 <	9.5 <

Appendix C
Brunner Daily Samples

	Up/Downstream	Up	Down	Up	Down	Up	Down	Up	Down	Up	Down
	Date Collected	18-Sep-97	18-Sep-97	19-Sep-97	19-Sep-97	22-Sep-97	22-Sep-97	24-Sep-97	24-Sep-97	24-Sep-97	24-Sep-97
	Sample ID	FB1001	FA1001	FB1011	FA1011	FB1021	FA1021	FD1031-FR	FB1031	FC1031-FR	FA1031
Inorganics	UG/L	150 <	207 <	54.6 <	105 <	116 <	104 <	412 <	308 <	291 <	346 <
Aluminum	UG/L	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.7 <	2 U	2 U
Antimony	UG/L	3.1 U	4.1 <	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U
Arsenic	UG/L	44.8 <	44.6 <	42.9 <	41.6 <	43 <	42.3 <	29 <	29.5 <	31.6 <	31.3 <
Barium	UG/L	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Beryllium	UG/L	50.8 <	80.2 <	40.1 <	54.4 <	33.4 <	33.3 <	25.3 <	32.4 <	37.8 <	49.6 <
Boron	UG/L	0.4 U	0.4 U	0.46 <	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
Cadmium	UG/L	44300 <	44000 <	44400 <	42500 <	45400 <	45600 <	25300 <	26400 <	27700 <	27700 <
Calcium	UG/L	0.8 U	0.97 <	0.93 <	1.1 <	2 <	1.6 <	0.9 <	0.8 U	0.8 U	0.99 <
Chromium	UG/L	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.4 <	1.5 <	1.3 U	1.7 <
Cobalt	UG/L	3.4 <	4.3 <	4 <	4.6 <	3.9 <	3.6 <	12.6 <	7.7 <	10.8 <	9.1 <
Copper	UG/L	157 <	205 <	102 <	137 <	112 <	130 <	431 <	302 <	326 <	427 <
Iron	UG/L	2 U	2 U	2 U	2 U	2.5 <	2 U	2.5 <	2.6 <	3.7 <	2.1 <
Lead	UG/L	11900 <	11800 <	11600 <	11200 <	11800 <	11600 <	4530 <	4610 <	5070 <	4980 <
Magnesium	UG/L	20.1 <	20.4 <	19.6 <	20.8 <	17.4 <	20.2 <	86.1 <	83.6 <	94.8 <	96.3 <
Manganese	UG/L	0.24 <	0.24 <	0.24 <	0.18 <	0.28 <	0.28 <	1.7 <	2.6 <	1.8 <	2.1 <
Mercury	UG/L	2.6 U	2.6 U	2.6 U	2.6 U	10.1 U	10.1 U	5.7 <	5.5 <	6.7 <	8.4 <
Molybdenum	UG/L	2.6 <	2.7 <	2.2 <	1.9 <	2.7 <	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U
Nickel	UG/L	1760 <	1780 <	1720 <	1700 <	1760 <	1690 <	1590 <	1520 <	1670 <	1640 <
Potassium	UG/L	3.1 U	4.4 <	3.1 U	5 <	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U
Selenium	UG/L	6590 <	6690 <	6280 <	6130 <	6240 <	6040 <	3960 <	3810 <	3880 <	3940 <
Silica	UG/L	0.7 U	0.7 U	0.7 U	0.7 U	0.82 <	1.4 <	0.7 U	0.7 U	0.7 U	0.7 U
Silver	UG/L	6930 <	6910 <	6600 <	6480 <	6990 <	6900 <	3230 <	3140 <	3490 <	3360 <
Sodium	UG/L	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	7.6 <	7.6 <	7.1 <	9.1 <
Thallium	UG/L	0.7 U	0.7 U	0.7 U	1 <	0.7 <	0.7 U	1.7 <	1.5 <	1.5 <	1.8 <
Vanadium	UG/L	8.7 <	8.7 <	8.4 <	9.6 <	31.8 <	8.3 <	44 <	38.8 <	38.5 <	38.9 <
Zinc	UG/L										

Appendix C Brunner Daily Samples

Inorganics	Up/Downstream Date Collected	25-Sep-97		26-Sep-97		29-Sep-97		1-Oct-97		1-Oct-97		2-Oct-97	
	Sample ID	Up	Down	Up	Down	Up	Down	Up	Down	Up	Down	Up	Down
Aluminum	UG/L	225 <	260 <	216 <	303 <	137 <	166 <	65.3 <	64.7 <	95.4 <	81.4 <	2 U	2 U
Antimony	UG/L	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Arsenic	UG/L	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U
Barium	UG/L	41 <	39.3 <	44.6 <	45.3 <	45.5 <	46.8 <	33.2 <	37.1 <	33.9 <	34.6 <	33.9 <	34.6 <
Beryllium	UG/L	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Boron	UG/L	48.3 <	480 <	40.3 <	46.1 <	30.7 <	43.7 <	83.5 <	112 <	55.9 <	84.3 <	55.9 <	84.3 <
Cadmium	UG/L	2.5 U	2.5 U	2.5 U	2.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
Calcium	UG/L	39900 <	37600 <	50000 <	50900 <	46500 <	48800 <	39500 <	43800 <	39900 <	41900 <	39900 <	41900 <
Chromium	UG/L	1.8 <	2.6 <	0.87 <	1 <	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	2 <	0.8 U	2 <
Cobalt	UG/L	4.6 U	4.6 U	4.6 U	4.6 U	1.3 U	1.3 U	4.6 U	4.6 U	4.6 U	4.6 U	4.6 U	4.6 U
Copper	UG/L	8.4 <	15.1 <	7.1 <	5.5 <	8.3 <	11.7 <	2.8 <	3.9 <	2.3 <	2.6 <	2.3 <	2.6 <
Iron	UG/L	331 <	360 <	228 <	248 <	146 <	187 <	50 <	62.4 <	78.8 <	87.8 <	78.8 <	87.8 <
Lead	UG/L	2 U	3.1 <	2 U	2.2 <	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Magnesium	UG/L	7490 <	6810 <	10900 <	11000 <	11200 <	12100 <	9790 <	10900 <	10100 <	10500 <	10100 <	10500 <
Manganese	UG/L	26.1 <	31.8 <	21.7 <	25.4 <	22.3 <	27.1 <	15.9 <	20.2 <	15.5 <	17.5 <	15.5 <	17.5 <
Mercury	UG/L	0.41 <	0.57 <	0.28 <	0.27 <	0.25 <	0.2 <	0.11 <	0.11 <	0.13 <	0.1 <	0.13 <	0.1 <
Molybdenum	UG/L	13.8 U	13.8 U	13.8 U	13.8 U	2.6 U	3.6 <	2.7 <	4.6 <	3.8 <	5.3 <	3.8 <	5.3 <
Nickel	UG/L	8.9 U	8.9 U	8.9 U	8.9 U	1.6 U	1.6 U	8.9 U	8.9 U	8.9 U	9 <	8.9 U	9 <
Potassium	UG/L	1880 <	1840 <	1890 <	1920 <	1760 <	1860 <	1400 <	1650 <	1470 <	1490 <	1470 <	1490 <
Selenium	UG/L	3.5 <	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U
Silica	UG/L	5280 <	5220 <	6720 <	7060 <	7020 <	7090 <	5310 <	5840 <	5530 <	5700 <	5530 <	5700 <
Silver	UG/L	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U
Sodium	UG/L	4870 <	4990 <	6830 <	7000 <	6880 <	7080 <	5360 <	6070 <	5510 <	5750 <	5510 <	5750 <
Thallium	UG/L	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	4.7 <	4.7 <	4.7 <	4.7 <
Vanadium	UG/L	3.6 U	3.6 U	3.6 U	3.6 U	0.7 U	0.89 <	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U
Zinc	UG/L	18.7 <	24.2 <	11.3 <	10 <	10.9 <	10.1 <	6.5 <	8.5 <	7.1 <	5.6 <	7.1 <	5.6 <

Appendix C Brunner Weekly Samples

	Up/Downstream	Up	Down	Up	Down	Up	Down	Up	Down
	Date Collected	25-Mar-97	25-Mar-97	1-Apr-97	1-Apr-97	8-Apr-97	8-Apr-97	15-Apr-97	15-Apr-97
	Sample ID	FB1171	FA1171	FB1181	FA1187	FB1191	FA1197	FB1401	FA1401
Inorganics	UG/L	132 U	78.1 U	131 <	148 <	102 <	108 <	78.5 <	69.4 <
Aluminum	UG/L	2.3 U	2.3 U	2.3 U	2.3 U	2.3 <	2.3 U	2.3 U	2.3 U
Antimony	UG/L	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U	3.9 <	2.8 U	2.8 U
Arsenic	UG/L	36.9 =	35.5 =	39 <	40.3 <	36.9 <	35.7 <	43 <	40.3 <
Barium	UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Beryllium	UG/L	87.6 =	123 =	124 <	175 <	64.9 <	94.9 <	81.1 <	86.7 <
Boron	UG/L	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
Cadmium	UG/L	42200 =	39900 =	43500 <	44800 <	41200 <	39900 <	44400 <	41400 <
Calcium	UG/L	0.6 R	0.6 R	0.65 <	0.6 U	0.78 <	0.69 <	0.8 U	0.8 U
Chromium	UG/L	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U	0.95 <	1.4 <	1.3 U
Cobalt	UG/L	3.7 =	1.9 =	3.3 <	2.7 <	3.7 <	2 <	3 <	2.3 <
Copper	UG/L	123 =	84 =	142 <	149 <	116 <	81.6 <	82.3 <	82.6 <
Iron	UG/L	1.7 U	1.7 U	1.7 U	1.9 <	2.5 <	1.7 U	2.1 U	2.1 U
Lead	UG/L	9430 =	8830 =	10300 <	10500 <	10000 <	9610 <	11700 <	10700 <
Magnesium	UG/L	28 =	26.6 =	30.2 <	31.7 <	28 <	27.2 <	37.4 <	36.9 <
Manganese	UG/L	0.16 =	0.15 =	0.24 <	0.2 <	0.16 <	0.12 <	0.19 <	0.17 <
Mercury	UG/L	3.2 U	4.3 U	2.2 U	2.2 U	2.2 U	2.6 <	2.2 U	2.2 U
Molybdenum	UG/L	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.8 U	1.8 U
Nickel	UG/L	1460 =	1340 =	1460 <	1460 <	1390 <	1330 <	1550 <	1430 <
Potassium	UG/L	3.2 U	3.2 U	3.2 U	3.2 U	3.2 U	3.2 U	3.5 U	3.5 U
Selenium	UG/L	5640 =	4770 =	5690 <	5490 <	5070 <	4810 <	5600 <	5030 <
Silica	UG/L	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U	1.3 U	1.3 U
Silver	UG/L	4910 J	4590 J	5500 <	5650 <	5300 <	5130 <	6150 <	5660 <
Sodium	UG/L	4.7 =	5 =	4.2 <	3.5 U	3.5 U	3.5 U	4.5 U	4.5 U
Thallium	UG/L	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1 <	0.7 U
Vanadium	UG/L	11.4 J	8.3 J	14.7 <	11 <	29 <	12.6 <	12.3 <	8.7 <
Zinc	UG/L								

Appendix C
Brunner Weekly Samples

Misc - Antons	Up/Downstream	Up	Down	Up	Down	Up	Down	Up	Down
	Date Collected	25-Mar-97	25-Mar-97	1-Apr-97	1-Apr-97	8-Apr-97	8-Apr-97	15-Apr-97	15-Apr-97
	Sample ID	FB1176	FA1177	FB1186	FA1183	FB1196	FA1193	FB1406	FA1405
	Alkalinity	129 =	129 =	141 <	119 <	124 <	131 <	120 <	132 <
	Bromide	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
	Chloride	8.2 =	8.1 =	8.2 <	8.5 <	8 <	8 <	7.9 <	7.8 <
	Fluoride	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
	Orthophosphate	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
	Sulfate	24 =	23.6 =	26 <	26 <	27.6 <	27.3 <	25.8 <	25.5 <
	Suspended Solids	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 <
Misc - Phenol	Up/Downstream	Up	Down	Up	Down	Up	Down	Up	Down
	Date Collected	25-Mar-97	25-Mar-97	1-Apr-97	1-Apr-97	8-Apr-97	8-Apr-97	15-Apr-97	15-Apr-97
	Sample ID	FB1172	FA1175	FB1182	FA1186	FB1192	FA1196	FB1402	FA1402
Miscellaneous	Phenol	10 U	10 U	11 U	10 U	10 U	10 U	10 U	10 U
	Up/Downstream	Up	Down	Up	Down	Up	Down	Up	Down
	Date Collected	25-Mar-97	25-Mar-97	1-Apr-97	1-Apr-97	8-Apr-97	8-Apr-97	15-Apr-97	15-Apr-97
	Sample ID	FB1177	FA1174	FB1187	FA1187	FB1197	FA1197	FB1407	FA1406
	Ammonia	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Kjeldahl Nitrogen	MG/L	0.1 =	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.14 <	0.12 <
	Nitrate/Nitrite (as N)	1.4 =	1.3 =	2.1 <	1.8 <	2.1 <	2 <	1.7 <	1.9 <
	Total Phosphate as Phosphorus	0.091 =	0.084 =	0.14 <	0.094 <	0.12 <	0.11 <	0.1 <	0.11 <
Miscellaneous - BOD	Up/Downstream	Up	Down	Up	Down	Up	Down	Up	Down
	Date Collected	25-Mar-97	25-Mar-97	1-Apr-97	1-Apr-97	8-Apr-97	8-Apr-97	15-Apr-97	15-Apr-97
	Sample ID	FB1175	FA1173	FB1185	FA1182	FB1195	FA1192	FB1405	FA1404
Biochemical Oxygen Demand (BOD)	MG/L	1 U	1 U	1 U	1 U	1 <	1 U	2 <	2 <

Appendix C
Brunner Weekly Samples

Pesticide/PCBs	Up/Downstream	25-Mar-97				1-Apr-97				8-Apr-97				15-Apr-97			
		Date Collected	Up	Down	Sample ID	Up	Down	Up	Down	Up	Down	Up	Down	Up	Down	Up	Down
4,4'-DDD	UG/L	FB1174	0.1 U	0.1 U	FA1176	FB1184	FA1185	FB1194	FA1195	FB1404	FA1407						
4,4'-DDE	UG/L		0.1 U	0.1 U		0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U						
4,4'-DDT	UG/L		0.1 U	0.1 U		0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U						
Aldrin	UG/L		0.052 U	0.052 U		0.054 U	0.052 U	0.052 U	0.052 U	0.051 U	0.052 U						
Dieldrin	UG/L		0.1 U	0.1 U		0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U						
Endosulfan I	UG/L		0.052 U	0.052 U		0.054 U	0.052 U	0.052 U	0.052 U	0.051 U	0.052 U						
Endosulfan II	UG/L		0.1 U	0.1 U		0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U						
Endosulfan sulfate	UG/L		0.1 U	0.1 U		0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U						
Endrin	UG/L		0.1 U	0.1 U		0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U						
Endrin aldehyde	UG/L		0.1 U	0.1 U		0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U						
Endrin ketone	UG/L		0.1 U	0.1 U		0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U						
Heptachlor	UG/L		0.052 U	0.052 U		0.054 U	0.052 U	0.052 U	0.052 U	0.051 U	0.052 U						
Heptachlor epoxide	UG/L		0.052 U	0.052 U		0.054 U	0.052 U	0.052 U	0.052 U	0.051 U	0.052 U						
Lindane	UG/L		0.052 U	0.052 U		0.054 U	0.052 U	0.052 U	0.052 U	0.051 U	0.052 U						
Methoxychlor	UG/L		0.52 U	0.52 U		0.54 U	0.52 U	0.52 U	0.52 U	0.51 U	0.52 U						
PCB-1016	UG/L		1 U	1 U		1.1 U	1 U	1 U	1 U	1 U	1 U						
PCB-1221	UG/L		2.1 U	2.1 U		2.2 U	2.1 U	2.1 U	2.1 U	2 U	2.1 U						
PCB-1232	UG/L		1 U	1 U		1.1 U	1 U	1 U	1 U	1 U	1 U						
PCB-1242	UG/L		1 U	1 U		1.1 U	1 U	1 U	1 U	1 U	1 U						
PCB-1248	UG/L		1 U	1 U		1.1 U	1 U	1 U	1 U	1 U	1 U						
PCB-1254	UG/L		1 U	1 U		1.1 U	1 U	1 U	1 U	1 U	1 U						
PCB-1260	UG/L		1 U	1 U		1.1 U	1 U	1 U	1 U	1 U	1 U						
Toxaphene	UG/L		5.2 U	5.2 U		5.4 U	5.2 U	5.2 U	5.2 U	5.1 U	5.2 U						
alpha-BHC	UG/L		0.052 U	0.052 U		0.054 U	0.052 U	0.052 U	0.052 U	0.051 U	0.052 U						
alpha-Chlordane	UG/L		0.052 U	0.052 U		0.054 U	0.052 U	0.052 U	0.052 U	0.051 U	0.052 U						
beta-BHC	UG/L		0.052 U	0.052 U		0.054 U	0.052 U	0.052 U	0.052 U	0.051 U	0.052 U						
delta-BHC	UG/L		0.052 U	0.052 U		0.054 U	0.052 U	0.052 U	0.052 U	0.051 U	0.052 U						
gamma-Chlordane	UG/L		0.052 U	0.052 U		0.054 U	0.052 U	0.052 U	0.052 U	0.051 U	0.052 U						

Appendix C
Brunner Weekly Samples

Radiological	Up/Downstream	25-Mar-97		1-Apr-97		8-Apr-97		15-Apr-97	
		Sample ID	Date Collected	Up	Down	Up	Down	Up	Down
Alpha activity	PCI/L	FB1174	FA1176	FB1184	FA1185	FB1194	FA1195	FB1404	FA1407
Americium-241	PCI/L	6.36 =	6.01 =	5.17	5.67	4.62	5.47	6.6	0.6 U
Beta activity	PCI/L	0.43 U	0.2 U	0.45 J	0.23 J	0.69 J	0.41 U	0.6 U	5.68
Cesium-137	PCI/L	6.21 =	3.2 J	5.73	3.2 J	2.96 J	6.99	5.68	1.24 U
Cobalt-60	PCI/L	1.63 U	-0.73 U	-1.69 U	-0.09 U	-2.69 U	0.08 U	1.24 U	1.09 U
Neptunium-237	PCI/L	-0.27 U	-0.37 U	-0.2 U	1.08 U	0.13 U	1.33 U		
Plutonium-238	PCI/L	0.42 U	0.24 U	0.14 U	0.12 U	0.06 U			
Plutonium-239	PCI/L	3.81 =	0.5 U	0.24 U	0.62 U	0.53 U			
Protactinium-233	PCI/L	1.57 =	0.16 U	0.05 U	0.06 U	0.19 U			
Thorium-228	PCI/L	1.55 U	2.43 U	0.9 U	2.67 U	-1.95 U	-0.18 U	-0.79 U	
Thorium-230	PCI/L	0.25 J	0.1 U	0.33 J	0.36 J	0.04 U	0.08 U	0.09 U	
Thorium-232	PCI/L	0.54 J	0.63 J	1.23	0.79 J	1.15	0.31 U	0.41 J	
Uranium-234	PCI/L	0.12 U	0.05 U	0.24 U	0.22 U	0.04 U	0.47 J	0.05 U	
Uranium-235	PCI/L	2.16 =	2.16 =	2.13	1.45	1.43	1.76	1.61	
Uranium-238	PCI/L	0.37 J	0.31 J	0.06 U	0.08 U	0 J	0 J	0.06 U	
	PCI/L	5.07 =	4.56 =	3.01	3.75	3.01	3.25	3.08	

Appendix C

Brunner Weekly Samples

Up/Downstream	Up	Down	Up	Down	Up	Down	Up	Down
Date Collected	25-Mar-97	25-Mar-97	1-Apr-97	1-Apr-97	8-Apr-97	8-Apr-97	15-Apr-97	15-Apr-97
Sample ID	FB1172	FA1175	FB1182	FA1186	FB1192	FA1196	FB1402	FA1402
Semivolatile Organics	UG/L	10 U	11 U	10 U	10 U	10 U	10 U	10 U
1,2,4-Trichlorobenzene	UG/L	10 U	11 U	10 U	10 U	10 U	10 U	10 U
1,2-Dichlorobenzene	UG/L	10 U	11 U	10 U	10 U	10 U	10 U	10 U
1,3-Dichlorobenzene	UG/L	10 U	11 U	10 U	10 U	10 U	10 U	10 U
1,4-Dichlorobenzene	UG/L	10 U	11 U	10 U	10 U	10 U	10 U	10 U
2,4,5-Trichlorophenol	UG/L	50 U	55 U	50 U	50 U	50 U	50 U	50 U
2,4,6-Trichlorophenol	UG/L	10 U	11 U	10 U	10 U	10 U	10 U	10 U
2,4-Dichlorophenol	UG/L	10 U	11 U	10 U	10 U	10 U	10 U	10 U
2,4-Dimethylphenol	UG/L	10 U	11 U	10 U	10 U	10 U	10 U	10 U
2,4-Dinitrophenol	UG/L	50 U	55 U	50 U	50 U	50 U	50 U	50 U
2,4-Dinitrotoluene	UG/L	10 U	11 U	10 U	10 U	10 U	10 U	10 U
2,6-Dinitrotoluene	UG/L	10 U	11 U	10 U	10 U	10 U	10 U	10 U
2-Chloronaphthalene	UG/L	10 U	11 U	10 U	10 U	10 U	10 U	10 U
2-Chlorophenol	UG/L	10 U	11 U	10 U	10 U	10 U	10 U	10 U
2-Methyl-4,6-dinitrophenol	UG/L	50 U	55 U	50 U	50 U	50 U	50 U	50 U
2-Methylnaphthalene	UG/L	10 U	11 U	10 U	10 U	10 U	10 U	10 U
2-Methylphenol	UG/L	10 U	11 U	10 U	10 U	10 U	10 U	10 U
2-Nitrobenzenamine	UG/L	50 U	55 U	50 U	50 U	50 U	50 U	50 U
2-Nitrophenol	UG/L	10 U	11 U	10 U	10 U	10 U	10 U	10 U
3,3'-Dichlorobenzidine	UG/L	20 UJ	22 U	20 U	20 U	20 U	20 U	20 U
3-Nitrobenzenamine	UG/L	50 U	55 U	50 U	50 U	50 U	50 U	50 U
4-Bromophenyl phenyl ether	UG/L	10 U	11 U	10 U	10 U	10 U	10 U	10 U
4-Chloro-3-methylphenol	UG/L	10 U	11 U	10 U	10 U	10 U	10 U	10 U
4-Chlorobenzenamine	UG/L	10 U	11 U	10 U	10 U	10 U	10 U	10 U
4-Chlorophenyl phenyl ether	UG/L	10 U	11 U	10 U	10 U	10 U	10 U	10 U
4-Methylphenol	UG/L	10 U	11 U	10 U	10 U	10 U	10 U	10 U
4-Nitrobenzenamine	UG/L	50 U	55 U	50 U	50 U	50 U	50 U	50 U
4-Nitrophenol	UG/L	50 U	55 U	50 U	50 U	50 U	50 U	50 U
Acenaphthene	UG/L	10 U	11 U	10 U	10 U	10 U	10 U	10 U
Acenaphthylene	UG/L	10 U	11 U	10 U	10 U	10 U	10 U	10 U
Anthracene	UG/L	10 U	11 U	10 U	10 U	10 U	10 U	10 U
Benz(a)anthracene	UG/L	10 U	11 U	10 U	10 U	10 U	10 U	10 U
Benzenemethanol	UG/L	10 U	11 U	10 U	10 U	10 U	10 U	10 U
Benzo(a)pyrene	UG/L	10 U	11 U	10 U	10 U	10 U	10 U	10 U
Benzo(b)fluoranthene	UG/L	10 U	11 U	10 U	10 U	10 U	10 U	10 U
Benzo(ghi)perylene	UG/L	10 U	11 U	10 U	10 U	10 U	10 U	10 U
Benzo(k)fluoranthene	UG/L	10 U	11 U	10 U	10 U	10 U	10 U	10 U
Benzoic acid	UG/L	50 U	55 U	50 U	50 U	50 U	50 U	50 U
Bis(2-chloroethoxy)methane	UG/L	10 U	11 U	10 U	10 U	10 U	10 U	10 U
Bis(2-chloroethyl) ether	UG/L	10 U	11 U	10 U	10 U	10 U	10 U	10 U

Appendix C
Brunner Weekly Samples

	Up/Downstream	Date Collected		Sample ID	25-Mar-97		1-Apr-97		8-Apr-97		15-Apr-97	
		Up	Down		Up	Down	Up	Down	Up	Down	Up	Down
Semivolatle Organics		FB1172	FA1175		FB1182	FA1186	FB1192	FA1196	FB1402	FA1402		
Bis(2-chloroisopropyl) ether	UG/L	10 U	10 U		11 U	10 U	10 U	10 U	10 U	10 U		
Bis(2-ethylhexyl)phthalate	UG/L	10 U	10 U		11 U	10 U	10 U	10 U	10 U	10 U		
Butyl benzyl phthalate	UG/L	10 U	10 U		11 U	10 U	10 U	10 U	10 U	10 U		
Carbazole	UG/L	10 U	10 U		11 U	10 U	10 U	10 U	10 U	10 U		
Chrysene	UG/L	10 U	10 U		11 U	10 U	10 U	10 U	10 U	10 U		
Di-n-butyl phthalate	UG/L	10 U	10 U		11 U	10 U	10 U	10 U	10 U	10 U		
Di-n-octylphthalate	UG/L	10 U	10 U		11 U	10 U	10 U	10 U	10 U	10 U		
Dibenz(a,h)anthracene	UG/L	10 U	10 U		11 U	10 U	10 U	10 U	10 U	10 U		
Dibenzofuran	UG/L	10 U	10 U		11 U	10 U	10 U	10 U	10 U	10 U		
Diethyl phthalate	UG/L	10 U	10 U		11 U	10 U	10 U	10 U	10 U	10 U		
Dimethyl phthalate	UG/L	10 U	10 U		11 U	10 U	10 U	10 U	10 U	10 U		
Fluoranthene	UG/L	10 U	10 U		11 U	10 U	10 U	10 U	10 U	10 U		
Fluorene	UG/L	10 U	10 U		11 U	10 U	10 U	10 U	10 U	10 U		
Hexachlorobenzene	UG/L	10 U	10 U		11 U	10 U	10 U	10 U	10 U	10 U		
Hexachlorobutadiene	UG/L	10 U	10 U		11 U	10 U	10 U	10 U	10 U	10 U		
Hexachlorocyclopentadiene	UG/L	10 U	10 U		11 U	10 U	10 U	10 U	10 U	10 U		
Hexachloroethane	UG/L	10 U	10 U		11 U	10 U	10 U	10 U	10 U	10 U		
Indeno(1,2,3-cd)pyrene	UG/L	10 U	10 U		11 U	10 U	10 U	10 U	10 U	10 U		
Isophorone	UG/L	10 U	10 U		11 U	10 U	10 U	10 U	10 U	10 U		
N-Nitroso-di-n-propylamine	UG/L	10 U	10 U		11 U	10 U	10 U	10 U	10 U	10 U		
N-Nitrosodiphenylamine	UG/L	10 U	10 U		11 U	10 U	10 U	10 U	10 U	10 U		
Naphthalene	UG/L	10 U	10 U		11 U	10 U	10 U	10 U	10 U	10 U		
Nitrobenzene	UG/L	10 U	10 U		11 U	10 U	10 U	10 U	10 U	10 U		
Pentachlorophenol	UG/L	50 U	50 U		55 U	50 U	50 U	50 U	50 U	50 U		
Phenanthrene	UG/L	10 U	10 U		11 U	10 U	10 U	10 U	10 U	10 U		
Pyrene	UG/L	10 U	10 U		11 U	10 U	10 U	10 U	10 U	10 U		

Appendix C

Brunner Weekly Samples

	Up/Downstream	Up	Down	Up	Down	Up	Down	Up	Down
	Date Collected	22-Apr-97	22-Apr-97	29-Apr-97	29-Apr-97	6-May-97	6-May-97	13-May-97	13-May-97
	Sample ID	FB1201	FA1207	FB1211	FA1217	FB1221	FA1227	FB1411	FA1411
Inorganics	UG/L	625 <	706 <	497 =	532 =	125 =	139 =	250 =	361 =
Aluminum	UG/L	2.3 U	2.3 U	2.8 U	2.4 U	2.3 U	2.3 U	2.3 U	2.3 U
Antimony	UG/L	2.8 U	2.8 U	2.8 U	3.1 =	2.8 U	2.8 U	2.8 U	2.8 U
Arsenic	UG/L	42.6 <	40 <	39.9 =	40.5 =	44.3 =	44.6 =	30.6 =	32.4 =
Barium	UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Beryllium	UG/L	49.9 <	51.8 <	62.7 =	57.8 =	52.8 =	90.5 =	53.6 U	71.4 U
Boron	UG/L	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
Cadmium	UG/L	40500 <	37700 <	40300 =	39800 =	46200 =	46600 =	29400 =	30500 =
Calcium	UG/L	0.85 <	1.3 <	0.8 U	0.8 U	0.8 U	0.8 U	1.1 =	1.7 =
Chromium	UG/L	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
Cobalt	UG/L	2.5 <	2.2 <	3 U	3.1 =	2.9 U	2.5 U	4.5 U	6.3 =
Copper	UG/L	510 <	561 <	452 =	514 =	142 =	177 =	308 =	453 =
Iron	UG/L	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.4 =	2.1 U	2.1 U
Lead	UG/L	8260 <	7450 <	7950 =	7500 =	10400 =	10200 =	6540 =	6590 =
Magnesium	UG/L	51.5 <	52.6 <	56.6 =	63.5 =	36.6 =	40.9 =	45.2 =	51.1 =
Manganese	UG/L	0.35 <	0.4 <	0.34 J	0.52 J	0.27 =	0.3 =	0.33 =	0.43 =
Mercury	UG/L	2.2 U	3 <	2.9 =	3.3 =	2.2 U	2.2 U	2.2 U	2.6 =
Molybdenum	UG/L	1.8 U	1.8 U	1.8 U	2 =	1.8 U	1.8 U	1.8 U	1.8 U
Nickel	UG/L	1860 <	1770 <	1590 =	1610 =	1650 =	1610 =	1270 =	1460 =
Potassium	UG/L	3.5 U	3.5 U	3.5 U	3.5 U	3.5 U	3.5 U	3.5 U	3.5 U
Selenium	UG/L	8270 <	8190 <	6950 =	6900 =	6690 =	6600 =	4620 =	4830 =
Silica	UG/L	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
Silver	UG/L	5100 <	4570 <	4910 =	4500 =	5580 =	5400 =	3710 =	3700 =
Sodium	UG/L	4.5 U	4.5 U	4.5 U	4.5 U	5.2 U	5.3 U	4.5 U	4.5 U
Thallium	UG/L	1.5 <	1.8 <	1.3 U	1.5 U	0.7 U	0.7 U	0.7 U	1.3 =
Vanadium	UG/L	21.9 <	20.7 <	26.2 U	27.7 U	12.9 U	12.8 U	22.3 U	20.8 U
Zinc	UG/L								

Appendix C
Brunner Weekly Samples

Misc - Anions	Up/Downstream	Up	Down	Up	Down	Up	Down	Up	Down
	Date Collected	22-Apr-97	22-Apr-97	29-Apr-97	29-Apr-97	6-May-97	6-May-97	13-May-97	13-May-97
	Sample ID	FB1206	FA1203	FB1216	FA1213	FB1226	FA1223	FB1416	FA1415
	Alkalinity	109 <	104 <	121 =	106 =	125 =	117 =	87.8 =	95.8 =
	Bromide	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
	Chloride	6.6 <	6.3 <	6.3 =	5.5 =	8.2 =	8 =	5.3 =	5.4 =
	Fluoride	0.5 U	0.5 U	0.25 U	0.25 U	0.5 U	0.5 U	0.5 U	0.5 U
	Orthophosphate	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
	Sulfate	20.6 <	21 <	19 =	18 =	22.6 =	24.1 =	17.5 =	17.2 =
	Suspended Solids	5 U	12 <	5 U	9.8 =	7 =	9.7 =	10 =	13 =
Misc - Phenol	Up/Downstream	Up	Down	Up	Down	Up	Down	Up	Down
	Date Collected	22-Apr-97	22-Apr-97	29-Apr-97	29-Apr-97	6-May-97	6-May-97	13-May-97	13-May-97
	Sample ID	FB1202	FA1206	FB1212	FA1216	FB1222	FA1226	FB1412	FA1412
	Phenol	11 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Miscellaneous	Up/Downstream	Up	Down	Up	Down	Up	Down	Up	Down
	Date Collected	22-Apr-97	22-Apr-97	29-Apr-97	29-Apr-97	6-May-97	6-May-97	13-May-97	13-May-97
	Sample ID	FB1207	FA1207	FB1217	FA1214	FB1227	FA1224	FB1417	FA1416
	Ammonia	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 =
	Kjel/dahl Nitrogen	0.31 <	0.25 <	0.1 U	0.13 =	0.13 =	0.11 =	0.29 =	0.36 =
	Nitrate/Nitrite (as N)	2.1 <	2 <	0.1 U	2 =	1.6 =	1.4 =	1.4 =	0.95 =
	Total Phosphate as Phosphorus	0.088 <	0.096 <	0.11 =	0.11 =	0.096 =	0.087 =	0.1 J	0.12 J
Miscellaneous - BOD	Up/Downstream	Up	Down	Up	Down	Up	Down	Up	Down
	Date Collected	22-Apr-97	22-Apr-97	29-Apr-97	29-Apr-97	6-May-97	6-May-97	13-May-97	13-May-97
	Sample ID	FB1205	FA1202	FB1215	FA1212	FB1225	FA1222	FB1415	FA1414
	Biochemical Oxygen Demand (BOD)	2 <	2 <	1 =	1 =	1 U	1 U	1 =	1 =

Appendix C
Brunner Weekly Samples

	Up/Downstream	Up	Down	Up	Down	Up	Down	Up	Down
	Date Collected	22-Apr-97	22-Apr-97	29-Apr-97	29-Apr-97	6-May-97	6-May-97	13-May-97	13-May-97
	Sample ID	FB1204	FA1205	FB1214	FA1215	FB1224	FA1225	FB1414	FA1417
Pesticide/PCBs	UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
4,4'-DDD	UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
4,4'-DDE	UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
4,4'-DDT	UG/L	0.052 U	0.052 U	0.051 U	0.051 U	0.052 UJ	0.052 UJ	0.051 U	0.051 U
Aldrin	UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Dieldrin	UG/L	0.052 U	0.052 U	0.051 U	0.051 U	0.052 U	0.052 U	0.051 U	0.051 U
Endosulfan I	UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Endosulfan II	UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Endosulfan sulfate	UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Endrin	UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Endrin aldehyde	UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U
Endrin ketone	UG/L	0.052 U	0.052 U	0.051 U	0.051 U	0.052 UJ	0.052 UJ	0.051 U	0.051 U
Heptachlor	UG/L	0.052 U	0.052 U	0.051 U	0.051 U	0.052 UJ	0.052 UJ	0.051 U	0.051 U
Heptachlor epoxide	UG/L	0.052 U	0.052 U	0.051 U	0.051 U	0.052 UJ	0.052 UJ	0.051 U	0.051 U
Lindane	UG/L	0.52 U	0.52 U	0.51 U	0.51 U	0.52 UJ	0.52 UJ	0.51 U	0.51 U
Methoxychlor	UG/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
PCB-1016	UG/L	2.1 U	2.1 U	2 U	2 U	2.1 U	2.1 U	2 U	2 U
PCB-1221	UG/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
PCB-1232	UG/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
PCB-1242	UG/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
PCB-1248	UG/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
PCB-1254	UG/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
PCB-1260	UG/L	5.2 U	5.2 U	5.1 U	5.1 U	5.2 U	5.2 U	5.1 U	5.1 U
Toxaphene	UG/L	0.052 U	0.052 U	0.051 U	0.051 U	0.052 U	0.052 U	0.051 U	0.051 U
alpha-BHC	UG/L	0.052 U	0.052 U	0.051 U	0.051 U	0.052 U	0.052 U	0.051 U	0.051 U
alpha-Chlordane	UG/L	0.052 U	0.052 U	0.051 U	0.051 U	0.052 U	0.052 U	0.051 U	0.051 U
beta-BHC	UG/L	0.052 U	0.052 U	0.051 U	0.051 U	0.052 U	0.052 U	0.051 U	0.051 U
delta-BHC	UG/L	0.052 U	0.052 U	0.051 U	0.051 U	0.052 U	0.052 U	0.051 U	0.051 U
gamma-Chlordane	UG/L	0.052 U	0.052 U	0.051 U	0.051 U	0.052 U	0.052 U	0.051 U	0.051 U

Appendix C
Brunner Weekly Samples

	Up/Downstream Date Collected	Sample ID	22-Apr-97		29-Apr-97		6-May-97		13-May-97	
			Up	Down	Up	Down	Up	Down	Up	Down
Radlological										
Alpha activity		FB1204	9.85	11.89	7.91	8.5	5.69	7.1	7.64	5.92
Americium-241	PCI/L									FA1417
Beta activity	PCI/L		0.25 U	0.17 U	0.74 J	0.31 U	0.2 J	0.16 U	0.71 J	0.35 J
Cesium-137	PCI/L		7.35	8.34	5.86	5.92	3.77	5.05	7.07	6.44
Cobalt-60	PCI/L		0.38 U	1.84 U	0.34 U	-2.62 U	-0.56 U	-0.99 U	0.35 U	0.33 U
Neptunium-237	PCI/L		0.63 U	1.11 U	0.43 U	0.6 U	1.69 U	-0.36 U	-0.05 U	0.56 U
Plutonium-238	PCI/L		0.07 U	0.23 U	0.14 U	0.19 U	0.29 J	0.15 U	0.08 U	0.52 J
Plutonium-239	PCI/L		0.03 U	0.37 U	0.04 U	0.72 U	0.29 U	0.72 U	0.24 U	0.11 U
Protactinium-233	PCI/L		0.07 U	0.34 U	0.14 U	0.14 U	0.12 U	0.08 U	0 J	0.05 U
Thorium-228	PCI/L		-0.82 U	0.17 U	-2.09 U	1.7 U	-1.14 U	-0.72 U	-0.9 U	-0.78 U
Thorium-230	PCI/L		0.06 U	0.13 U	0.24 J	0.09 U	0.22 J	0.24 J	0.09 U	0.13 U
Thorium-232	PCI/L		0.88	0.7 J	0.4 J	0.39 J	0.29 J	0.56	0.51 J	0.55 J
Uranium-234	PCI/L		0 J	0 J	0.04 U	0.04 U	0 J	0.08 U	0 J	0.04 U
Uranium-235	PCI/L		2.65	3.4	2.94	3.4	1.88	2.39	2.65	1.5
Uranium-238	PCI/L		0.22 U	0.31 J	0.24 U	0.42 J	0.26 J	0.17 U	0.12 U	0.19 U
	PCI/L		5.38	6.81	5.37	4.98	4.65	5.96	2.83	2.43

Appendix C Brunner Weekly Samples

Up/Downstream	Up	Down	Up	Down	Up	Down	Up	Down
Date Collected	22-Apr-97	22-Apr-97	29-Apr-97	29-Apr-97	6-May-97	6-May-97	13-May-97	13-May-97
Sample ID	FB1202	FA1206	FB1212	FA1216	FB1222	FA1226	FB1412	FA1412
Semivolatle Organics	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,2,4-Trichlorobenzene	11 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,2-Dichlorobenzene	11 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,3-Dichlorobenzene	11 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,4-Dichlorobenzene	11 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2,4,5-Trichlorophenol	55 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
2,4,6-Trichlorophenol	11 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2,4-Dichlorophenol	11 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2,4-Dimethylphenol	11 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2,4-Dinitrophenol	55 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
2,4-Dinitrotoluene	11 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2,6-Dinitrotoluene	11 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Chloronaphthalene	11 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Chlorophenol	11 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Methyl-4,6-dinitrophenol	55 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
2-Methylnaphthalene	11 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Methylphenol	11 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Nitrobenzenamine	55 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
2-Nitrophenol	11 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
3,3'-Dichlorobenzidine	22 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U
3-Nitrobenzenamine	55 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
4-Bromophenyl phenyl ether	11 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Chloro-3-methylphenol	11 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Chlorobenzenamine	11 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Chlorophenyl phenyl ether	11 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Methylphenol	11 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Nitrobenzenamine	55 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
4-Nitrophenol	55 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Acenaphthene	11 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Acenaphthylene	11 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Anthracene	11 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benz(a)anthracene	11 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzenemethanol	11 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(a)pyrene	11 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(b)fluoranthene	11 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(ghi)perylene	11 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(k)fluoranthene	11 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzoic acid	55 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Bis(2-chloroethoxy)methane	11 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Bis(2-chloroethyl) ether	11 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U

Appendix C
Brunner Weekly Samples

Up/Downstream	Up	Down	Up	Down	Up	Down	Up	Down
Date Collected	22-Apr-97	22-Apr-97	29-Apr-97	29-Apr-97	6-May-97	6-May-97	13-May-97	13-May-97
Sample ID	FB1202	FA1206	FB1212	FA1216	FB1222	FA1226	FB1412	FA1412
Semivolatle Organics	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Bis(2-chloroisopropyl) ether	11 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Bis(2-ethylhexyl)phthalate	11 U	10 U	230 =	10 U	10 U	10 U	10 U	10 U
Butyl benzyl phthalate	11 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Carbazole	11 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chrysene	11 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Di-n-butyl phthalate	11 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Di-n-octylphthalate	11 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibenz(a,h)anthracene	11 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibenzofuran	11 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Diethyl phthalate	11 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dimethyl phthalate	11 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Fluoranthene	11 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Fluorene	11 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Hexachlorobenzene	11 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Hexachlorobutadiene	11 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Hexachlorocyclopentadiene	11 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Hexachloroethane	11 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Indeno(1,2,3-cd)pyrene	11 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Isophorone	11 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
N-Nitroso-di-n-propylamine	11 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
N-Nitrosodiphenylamine	11 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Naphthalene	11 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Nitrobenzene	11 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Pentachlorophenol	55 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Phenanthrene	11 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Pyrene	11 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U

Appendix C

Brunner Weekly Samples

Inorganics	Up/Downstream Date Collected	Sample ID	20-May-97		27-May-97		3-Jun-97		3-Jun-97		10-Jun-97	
			Up	Down	Up	Down	Up	Down	Up	Down	Up	Down
Aluminum	UG/L	FB1231	123 J	FA1237	FB1241	FA1247	FB1251	FA1257	FB1421	FA1426		
Antimony	UG/L	2.3 U	2.3 U	134 J	135 <	186 J	159 <	282 <	157 =	209 =		
Arsenic	UG/L	2.8 U	2.8 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U		
Barium	UG/L	46.5 =	46.3 =	2.8 U	3 <	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U		
Beryllium	UG/L	0.1 U	0.1 U	0.1 U	43.5 <	44.4 =	40.9 <	42.6 <	42.2 =	42.2 =		
Boron	UG/L	138 =	223 =	0.1 U	0.1 U	0.1 U	0.31 <	0.18 <	0.45 U	0.21 U		
Cadmium	UG/L	0.4 U	0.4 U	223 =	26.6 <	32.3 =	72.4 <	174 <	29.2 U	39.7 U		
Calcium	UG/L	44400 =	43800 =	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U		
Chromium	UG/L	0.8 U	0.8 U	43800 =	44500 <	45100 =	45000 <	47700 <	44900 =	45800 =		
Cobalt	UG/L	1.3 U	0.8 U	0.8 U	0.8 U	0.8 R	0.8 U	1.2 <	1.8 =	1.8 =		
Copper	UG/L	2.4 U	1.3 U	1.3 U	1.3 U	1.3 U	1.4 <	1.5 <	1.3 U	1.3 U		
Iron	UG/L	128 =	2.3 U	2.7 U	3.7 <	2.7 U	6.4 <	5.1 <	3.7 =	5.2 =		
Lead	UG/L	2.1 U	130 =	230 =	185 <	230 =	276 <	313 <	217 =	272 =		
Magnesium	UG/L	11900 =	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	5.5 =		
Manganese	UG/L	37.3 =	11700 =	9870 =	10100 <	9870 =	9180 <	9370 <	9170 =	9120 =		
Mercury	UG/L	0.25 =	35 =	43.8 =	39.5 <	43.8 =	43.7 <	47.8 <	40.8 =	45.8 =		
Molybdenum	UG/L	2.2 U	0.31 =	0.33 =	0.37 <	0.33 =	0.25 <	0.36 <	0.22 =	0.25 =		
Nickel	UG/L	2.1 U	2.2 U	2.2 U	2.6 <	2.2 U	4.9 <	4.8 <	2.2 U	3.5 U		
Potassium	UG/L	1660 =	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	2.4 =	1.8 U		
Selenium	UG/L	3.5 U	1650 =	1730 J	1710 <	1730 J	1550 <	1630 <	1590 =	1590 =		
Silica	UG/L	5770 =	3.5 U	4.4 =	3.5 U	4.4 =	3.5 U	3.5 U	3.5 U	3.5 U		
Silver	UG/L	1.3 U	5670 =	6370 =	6200 <	6370 =	6360 <	7160 <	6480 =	6620 =		
Sodium	UG/L	6600 =	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U		
Thallium	UG/L	4.5 U	6460 =	5560 J	5650 <	5560 J	5350 <	5610 <	5650 =	5440 =		
Vanadium	UG/L	1.2 U	4.5 U	5.3 =	4.5 U	5.3 =	5.9 <	4.5 U	4.5 U	4.5 U		
Zinc	UG/L	9.4 U	1.2 U	0.83 <	0.83 <	0.83 =	1.2 <	1.2 <	0.7 U	0.7 U		
	UG/L		7.6 U	9.2 =	9 <	9.2 =	18.6 <	20.2 <	11.8 =	13.4 =		

Appendix C
Brunner Weekly Samples

Misc - Anions	Up/Downstream	Up	Down	Up	Down	Up	Down	Up	Down
	Date Collected	20-May-97	20-May-97	27-May-97	27-May-97	3-Jun-97	3-Jun-97	10-Jun-97	10-Jun-97
	Sample ID	FB1236	FA1233	FB1246	FA1243	FB1256	FA1253	FB1424	FA1424
	MG/L	125 =	128 =	120 =	122 =	128 <	132 <	134 =	135 =
	Bromide	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
	Chloride	8.6 =	8.8 =	7.4 =	7.5 =	8.1 <	8.3 <	8 =	7.9 =
	Fluoride	0.25 U	0.25 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
	Orthophosphate	0.26 =	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
	Sulfate	29.3 =	28.6 =	24.1 =	24.4 =	22 <	22.6 <	22.3 =	22.1 =
	Suspended Solids	8 =	7 =	8 =	10 =	5 <	6 <	5 U	5 U
Misc - Phenol	Up/Downstream	Up	Down	Up	Down	Up	Down	Up	Down
	Date Collected	20-May-97	20-May-97	27-May-97	27-May-97	3-Jun-97	3-Jun-97	10-Jun-97	10-Jun-97
Phenol	Sample ID	FB1232	FA1236	FB1242	FA1246	FB1252	FA1256	FB1427	FA1421
	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Miscellaneous	Up/Downstream	Up	Down	Up	Down	Up	Down	Up	Down
	Date Collected	20-May-97	20-May-97	27-May-97	27-May-97	3-Jun-97	3-Jun-97	10-Jun-97	10-Jun-97
	Sample ID	FB1237	FA1237	FB1247	FA1247	FB1257	FA1257	FB1425	FA1426
	MG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 =	0.1 U
	Kjeldahl Nitrogen	0.14 =	0.1 U	0.1 U	0.1 U	0.15 <	0.1 U	0.18 =	0.15 =
	Nitrate/Nitrite (as N)	1.5 =	2.5 =	3.9 =	3.2 =	1.7 <	1.8 <	2 =	2.1 =
	Total Phosphate as Phosphorus	0.14 =	0.13 =	0.099 =	0.13 =	0.1 <	0.091 <	0.11 =	0.1 =
Miscellaneous - BOD	Up/Downstream	Up	Down	Up	Down	Up	Down	Up	Down
	Date Collected	20-May-97	20-May-97	27-May-97	27-May-97	3-Jun-97	3-Jun-97	10-Jun-97	10-Jun-97
	Sample ID	FB1235	FA1232	FB1245	FA1242	FB1255	FA1252	FB1423	FA1423
Biochemical Oxygen Demand (BOD)	MG/L	1 UJ	1 UJ	159 =	29 =	1 <	1 <	1 =	1 =

Appendix C
Brunner Weekly Samples

	Up/Downstream	Up	Down	Up	Down	Up	Down	Up	Down
	Date Collected	20-May-97	20-May-97	27-May-97	27-May-97	3-Jun-97	3-Jun-97	10-Jun-97	10-Jun-97
	Sample ID	FB1234	FA1235	FB1244	FA1245	FB1254	FA1255	FB1426	FA1427
Pesticide/PCBs	UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
4,4'-DDD	UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
4,4'-DDE	UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
4,4'-DDT	UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Aldrin	UG/L	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U
Dieldrin	UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Endosulfan I	UG/L	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U
Endosulfan II	UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Endosulfan sulfate	UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Endrin	UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Endrin aldehyde	UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Endrin ketone	UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Heptachlor	UG/L	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U
Heptachlor epoxide	UG/L	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U
Lindane	UG/L	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U
Methoxychlor	UG/L	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U
PCB-1016	UG/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
PCB-1221	UG/L	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U
PCB-1232	UG/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
PCB-1242	UG/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
PCB-1248	UG/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
PCB-1254	UG/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
PCB-1260	UG/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Toxaphene	UG/L	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U
alpha-BHC	UG/L	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U
alpha-Chlordane	UG/L	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U
beta-BHC	UG/L	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U
delta-BHC	UG/L	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U
gamma-Chlordane	UG/L	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U

Appendix C
Brunner Weekly Samples

	Up/Downstream	20-May-97		27-May-97		3-Jun-97		10-Jun-97	
		Up	Down	Up	Down	Up	Down	Up	Down
Radiological	Sample ID	FB1234	FA1235	FB1244	FA1245	FB1254	FA1255	FB1426	FA1427
Alpha activity	PCI/L	4.31	5.04	7.19	7.42	6.12	8.23	8.93	8.2
Americium-241	PCI/L	0.71	0.54 J	0.3 J	0.16 U	-0.04 U	12.4 J	0.35 J	0.35 J
Beta activity	PCI/L	4.6	3.3 J	5.74	4.66	3.72	4.61	7.19	7.65
Cesium-137	PCI/L	0.62 U	2.63 U	0.09 U	-1.26 U	0.13 U	-3.64 U	1.39 U	0.57 U
Cobalt-60	PCI/L	1.08 U	0.83 U	0.2 U	-1.42 U	2.37 U	0.39 U	2.18 U	0.5 U
Neptunium-237	PCI/L	0.67 J	0.23 U	0.15 U	0.11 U	0.2 J	0.12 U	0.14 U	0.28 J
Plutonium-238	PCI/L	-0.58 U	-1.03 U	0.47 U	1.07 J	0.4 U	-0.13 U	-0.55 U	0.02 U
Plutonium-239	PCI/L	0.19 U	0.12 U	0.29 J	0.4 J	0.15 U	0.19 U	0.03 U	0.21 J
Protactinium-233	PCI/L	1.6 U	-3.5 U	-1.29 U	-2.94 U	-1.5 U	-1.82 U	0.8 U	-0.89 U
Thorium-228	PCI/L	0.1 U	0.06 U	0.14 U	0.09 U	0.2 U	0.21 U	0.02 U	0.08 U
Thorium-230	PCI/L	0.57	0.79 J	0.32 J	0.55	1.27 J	1.75	0.32 J	0.69 J
Thorium-232	PCI/L	0.1 U	0 J	0.27 J	0.18 U	0.1 U	0.26 J	0.19 U	0.04 U
Uranium-234	PCI/L	1.22	2.02	3.07	3.49	2.91	3.1	1.97	3.19
Uranium-235	PCI/L	0.23 J	0.12 U	0.24 J	0.29 J	0.75	0.29 J	0.1 U	0.22 U
Uranium-238	PCI/L	2.52	2.97	5.34	5.67	5.79	6.55	6.12	6.05

Appendix C
Brunner Weekly Samples

Up/Downstream	Up	Down	Up	Down	Up	Down	Up	Down
Date Collected	20-May-97	20-May-97	27-May-97	27-May-97	3-Jun-97	3-Jun-97	10-Jun-97	10-Jun-97
Sample ID	FB1232	FA1236	FB1242	FA1246	FB1252	FA1256	FB1427	FA1421
Semivolatile Organics	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,2,4-Trichlorobenzene	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,2-Dichlorobenzene	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,3-Dichlorobenzene	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,4-Dichlorobenzene	UG/L	50 U	50 U	50 U	50 U	50 U	50 U	50 U
2,4,5-Trichlorophenol	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2,4,6-Trichlorophenol	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2,4-Dichlorophenol	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2,4-Dimethylphenol	UG/L	50 U	50 U	50 U	50 U	50 U	50 U	50 U
2,4-Dinitrophenol	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2,4-Dinitrotoluene	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2,6-Dinitrotoluene	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Chloronaphthalene	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Chlorophenol	UG/L	50 U	50 U	50 U	50 U	50 U	50 U	50 U
2-Methyl-4,6-dinitrophenol	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Methylnaphthalene	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Methylphenol	UG/L	50 U	50 U	50 U	50 U	50 U	50 U	50 U
2-Nitrobenzenamine	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Nitrophenol	UG/L	20 U	20 U	20 U	20 U	20 U	20 U	20 U
3,3'-Dichlorobenzidine	UG/L	50 U	50 U	50 U	50 U	50 U	50 U	50 U
3-Nitrobenzenamine	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Bromophenyl phenyl ether	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Chloro-3-methylphenol	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Chlorobenzenamine	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Chlorophenyl phenyl ether	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Methylphenol	UG/L	50 U	50 U	50 U	50 U	50 U	50 U	50 U
4-Nitrobenzenamine	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Nitrophenol	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Acenaphthene	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Acenaphthylene	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Anthracene	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benz(a)anthracene	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzenemethanol	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(a)pyrene	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(b)fluoranthene	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(ghi)perylene	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(k)fluoranthene	UG/L	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Benzoic acid	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Bis(2-chloroethoxy)methane	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Bis(2-chloroethyl) ether	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U

Appendix C
Brunner Weekly Samples

	Up/Downstream Date Collected	Up	Down	Up	Down	Up	Down	Up	Down
	Sample ID	20-May-97	20-May-97	27-May-97	27-May-97	3-Jun-97	3-Jun-97	10-Jun-97	10-Jun-97
Semivolatile Organics		FB1232	FA1236	FB1242	FA1246	FB1252	FA1256	FB1427	FA1421
Bis(2-chloroisopropyl) ether	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Bis(2-ethylhexyl)phthalate	UG/L	10 U	10 U	3 J	10 U	2 J	6 J	1 B, J	2 B, J
Butyl benzyl phthalate	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Carbazole	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chrysene	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Di-n-butyl phthalate	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	1 J
Di-n-octylphthalate	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibenz(a,h)anthracene	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibenzofuran	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Diethyl phthalate	UG/L	2 J	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dimethyl phthalate	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Fluoranthene	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Fluorene	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Hexachlorobenzene	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Hexachlorobutadiene	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Hexachlorocyclopentadiene	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Hexachloroethane	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Indeno(1,2,3-cd)pyrene	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Isophorone	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
N-Nitroso-di-n-propylamine	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
N-Nitrosodiphenylamine	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Naphthalene	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Nitrobenzene	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Pentachlorophenol	UG/L	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Phenanthrene	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Pyrene	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U

Appendix C

Brunner Weekly Samples

	Up/Downstream	Up	Down	Up	Down	Up	Down	Up	Down
	Date Collected	17-Jun-97	17-Jun-97	24-Jun-97	24-Jun-97	24-Jun-97	24-Jun-97	1-Jul-97	1-Jul-97
	Sample ID	FB1271	FA1277	FD1261-FR	FB1261	FC1267-FR	FA1267	FB1281	FA1287
Inorganics	UG/L	250 <	253 <	139 J	83 J	120 J	206 J	449 <	852 <
Aluminum	UG/L	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U
Antimony	UG/L	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	4.6 <	2.8 U
Arsenic	UG/L	44 <	47.7 <	42.5 =	42.3 =	42.9 =	44.6 =	35 <	35 <
Barium	UG/L	0.26 <	0.26 <	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.24 <
Beryllium	UG/L	48.1 <	52.9 <	53.4 =	53.9 =	87.4 =	96.2 =	29.1 <	39.5 <
Boron	UG/L	0.43 <	0.4 U	0.75 J	0.8 J	0.4 J	0.49 J	0.4 U	0.4 U
Cadmium	UG/L	45600 <	50100 <	50000 =	50100 =	50300 =	49400 =	32500 <	29200 <
Calcium	UG/L	2.2 <	0.8 U	2 UJ	1.7 UJ	1.6 UJ	1.7 UJ	0.93 <	2.1 <
Chromium	UG/L	1.3 U	1.5 <	1.3 U	1.3 U	1.3 U	1.3 U	1.7 <	1.3 U
Cobalt	UG/L	3.2 <	5.6 <	2.6 U	6.9 =	2.6 U	2.3 =	7.9 <	8.5 <
Copper	UG/L	313 <	342 <	189 J	202 J	187 J	206 J	681 <	1080 <
Iron	UG/L	3.7 <	5.8 <	14.4 J	3.7 J	2.1 U	2.1 U	4.9 <	10.5 <
Lead	UG/L	9110 <	9880 <	10500 =	10500 =	10400 =	10200 =	5030 <	4420 <
Magnesium	UG/L	40 <	48.2 <	39 =	39 =	43 =	41.7 =	71.8 <	92.7 <
Manganese	UG/L	0.2 <	0.38 <	0.1 U	0.1 U	0.13 J	0.11 J	0.76 <	1.1 <
Mercury	UG/L	2.2 U	2.9 <	2.2 U	2.2 U	2.2 U	2.2 U	3.9 <	2.4 <
Molybdenum	UG/L	5.4 <	85.5 <	2.1 =	1.8 U	1.8 U	1.8 U	1.8 U	1.9 <
Nickel	UG/L	1700 <	1850 <	1620 =	1620 =	1620 =	1660 =	1860 <	2020 <
Potassium	UG/L	3.5 U	3.5 U	3.5 U	3.5 U	3.5 U	3.5 U	3.5 U	3.7 <
Selenium	UG/L	6700 <	4710 <	7640 J	7490 J	7340 J	7560 J	5650 <	6450 <
Silica	UG/L	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
Silver	UG/L	5000 <	5370 <	5730 =	5790 =	5570 =	5650 =	2800 <	2430 <
Sodium	UG/L	4.5 U	4.8 <	4.5 U	4.5 U	4.5 U	4.5 U	4.5 U	5.6 <
Thallium	UG/L	0.7 U	1.1 <	0.7 U	0.93 =	0.7 U	0.75 =	1.3 <	2.2 <
Vanadium	UG/L	18.1 <	27.6 <	9.6 =	10 =	7.3 =	9.4 =	24 <	28.8 <
Zinc	UG/L								

Appendix C
Brunner Weekly Samples

Misc - Anions	Up/Downstream	Up	Down	Up	Down	Up	Down	Up	Down
	Date Collected	17-Jun-97	17-Jun-97	24-Jun-97	24-Jun-97	24-Jun-97	24-Jun-97	1-Jul-97	1-Jul-97
	Sample ID	FB1276	FA1273	FD1266-FR	FB1266	FC1263-FR	FA1263	FB1286	FA1283
	MG/L	129 <	130 <	129 =	129 =	131 =	134 =	85.8 <	81.2 <
	Alkalinity	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
	Bromide	8.3 <	8.1 <	10.5 =	10.9 =	8.6 =	8.8 =	4.1 <	3.6 <
	Chloride	0.25 U	0.25 U	0.3 =	0.29 =	0.28 =	0.26 =	0.5 U	0.5 U
	Fluoride	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
Orthophosphate	MG/L	23.3 <	23.7 <	27.2 =	27 =	26 =	26.4 =	13 <	12.2 <
	Sulfate	5 U	7 <	5 U	5 U	5 U	5 U	11.3 <	34.3 <
	Suspended Solids								
Misc - Phenol	Up/Downstream	Up	Down	Up	Up	Down	Down	Up	Down
	Date Collected	17-Jun-97	17-Jun-97	24-Jun-97	24-Jun-97	24-Jun-97	24-Jun-97	1-Jul-97	1-Jul-97
	Sample ID	FB1272	FA1276	FD1262-FR	FB1262	FC1266-FR	FA1266	FB1282	FA1286
Phenol	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Miscellaneous	Up/Downstream	Up	Down	Up	Up	Down	Down	Up	Down
	Date Collected	17-Jun-97	17-Jun-97	24-Jun-97	24-Jun-97	24-Jun-97	24-Jun-97	1-Jul-97	1-Jul-97
	Sample ID	FB1277	FA1277	FD1267-FR	FB1261	FC1264-FR	FA1267	FB1283	FA1287
	MG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
	Ammonia	0.1 U	0.1 U	0.1 U	0.22 =	0.1 U	0.12 =	0.36 <	0.45 <
	Kjeldahl Nitrogen	2.2 <	1.9 <	1.8 =	1.5 =	1.7 =	1.7 =	1 <	1.1 <
	Nitrate/Nitrite (as N)	0.11 <	0.11 <	0.13 =	0.13 =	0.12 =	0.12 =	0.14 <	0.18 <
	Total Phosphate as Phosphorus								
Miscellaneous - BOD	Up/Downstream	Up	Down	Up	Up	Down	Down	Up	Down
	Date Collected	17-Jun-97	17-Jun-97	24-Jun-97	24-Jun-97	24-Jun-97	24-Jun-97	1-Jul-97	1-Jul-97
	Sample ID	FB1275	FA1272	FD1265-FR	FB1265	FC1262-FR	FA1262	FB1285	FA1282
Biochemical Oxygen Demand (BOD)	MG/L	1 U	1 U	1 =	1 =	1 =	1 =	1 <	1 <

Appendix C

Brunner Weekly Samples

	Up/Downstream	Up	Down	Up	Down	Up	Down	Up	Down
	Date Collected	17-Jun-97	24-Jun-97	24-Jun-97	24-Jun-97	24-Jun-97	24-Jun-97	1-Jul-97	1-Jul-97
	Sample ID	FB1274	FA1275	FD1264-FR	FB1264	FC1265-FR	FA1265	FB1284	FA1285
Pesticide/PCBs	UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
4,4'-DDD	UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
4,4'-DDE	UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
4,4'-DDT	UG/L	0.051 U	0.051 U	0.052 U	0.052 U	0.052 U	0.052 U	0.051 U	0.051 U
Aldrin	UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Dieldrin	UG/L	0.051 U	0.051 U	0.052 U	0.052 U	0.052 U	0.052 U	0.051 U	0.051 U
Endosulfan I	UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Endosulfan II	UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Endosulfan sulfate	UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Endrin	UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Endrin aldehyde	UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Endrin ketone	UG/L	0.051 U	0.051 U	0.052 U	0.052 U	0.052 U	0.052 U	0.051 U	0.051 U
Heptachlor	UG/L	0.051 U	0.051 U	0.052 U	0.052 U	0.052 U	0.052 U	0.051 U	0.051 U
Heptachlor epoxide	UG/L	0.051 U	0.051 U	0.052 U	0.052 U	0.052 U	0.052 U	0.051 U	0.051 U
Lindane	UG/L	0.051 U	0.051 U	0.052 U	0.052 U	0.052 U	0.052 U	0.051 U	0.051 U
Methoxychlor	UG/L	0.51 U	0.51 U	0.52 U	0.52 U	0.52 U	0.52 U	0.51 U	0.51 U
PCB-1016	UG/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
PCB-1221	UG/L	2 U	2 U	2.1 U	2.1 U	2.1 U	2.1 U	2 U	2 U
PCB-1232	UG/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
PCB-1242	UG/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
PCB-1248	UG/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
PCB-1254	UG/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
PCB-1260	UG/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Toxaphene	UG/L	5.1 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.1 U	5.1 U
alpha-BHC	UG/L	0.051 U	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U	0.051 U	0.051 U
alpha-Chlordane	UG/L	0.051 U	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U	0.051 U	0.051 U
beta-BHC	UG/L	0.051 U	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U	0.051 U	0.051 U
delta-BHC	UG/L	0.051 U	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U	0.051 U	0.051 U
gamma-Chlordane	UG/L	0.051 U	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U	0.051 U	0.051 U

Appendix C
Brunner Weekly Samples

	Up/Downstream Date Collected	Up 17-Jun-97	Down 17-Jun-97	Up 24-Jun-97	Down 24-Jun-97	Up 24-Jun-97	Down 24-Jun-97	Up 1-Jul-97	Down 1-Jul-97
Radiological	Sample ID	FB1274	FA1275	FD1264-FR	FB1264	FC1265-FR	FA1265	FB1284	FA1285
Alpha activity	PCI/L	6.29	8.33	5.65	4.32	2.95 J	4.45	5.85	7.16
Americium-241	PCI/L	0.66 J	0.44 J	0.75 J	0.58 J	0.3 J	0.57 J	0.84 J	0.23 J
Beta activity	PCI/L	4.31 J	6.43	6.62	5.77	5.48	5.41	6.06	7.51
Cesium-137	PCI/L	-1.48 U	-0.97 U	1.96 U	-0.02 U	-1.01 U	1.05 U	0.79 U	-0.85 U
Cobalt-60	PCI/L	1.81 U	-0.66 U	1.9 U	1.51 U	-0.1 U	-2 U	-0.16 U	0.9 U
Neptunium-237	PCI/L	0.39 J	0.15 U	0.24 J	0.69 J	0.05 U	0.51 J	0.25 U	0.1 U
Plutonium-238	PCI/L	-0.44 U	0.19 U	-0.18 U	-0.68 U	-0.74 U	0.18 U	-0.9 U	-0.32 U
Plutonium-239	PCI/L	0.26 U	0.23 U	0.19 J	0.82 J	0.42 J	0.58 J	0.06 U	0 J
Protactinium-233	PCI/L	-0.12 U	0.81 U	-0.53 U	0 U	-0.35 U	1.95 U	0.78 U	-1.57 U
Thorium-228	PCI/L	0.12 U	0.25 U	0.1 U	0.13 U	0.14 U	0 J	0 J	0.31 J
Thorium-230	PCI/L	0.82	1.2	0.92	0.83	0.93	0.8	3.09	1.71
Thorium-232	PCI/L	0.06 U	0.06 U	0.15 U	0.17 U	0.47	0.22 J	0.16 U	0.43 J
Uranium-234	PCI/L	2.52	2.77	2.03	2.59	1.95	2.1	2.65	2.46
Uranium-235	PCI/L	0.19 U	0.27 U	0.32 J	0.12 U	0.11 U	0.3 J	0.3 U	0.13 U
Uranium-238	PCI/L	5.5	7.66	3.79	3.92	3.61	4.18	2.7	2.87

Appendix C
Brunner Weekly Samples

Up/Downstream	Up	Down	Up	Down	Up	Down	Up	Down
Date Collected	17-Jun-97	17-Jun-97	24-Jun-97	24-Jun-97	24-Jun-97	24-Jun-97	1-Jul-97	1-Jul-97
Sample ID	FB1272	FA1276	FD1262-FR	FB1262	FC1266-FR	FA1266	FB1282	FA1286
Semivolatile Organics	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,2,4-Trichlorobenzene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,2-Dichlorobenzene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,3-Dichlorobenzene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,4-Dichlorobenzene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2,4,5-Trichlorophenol	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
2,4,6-Trichlorophenol	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2,4-Dichlorophenol	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2,4-Dimethylphenol	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2,4-Dinitrophenol	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
2,4-Dinitrotoluene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2,6-Dinitrotoluene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Chloronaphthalene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Chlorophenol	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Methyl-4,6-dinitrophenol	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
2-Methylnaphthalene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Methylphenol	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Nitrobenzenamine	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
2-Nitrophenol	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
3,3'-Dichlorobenzidine	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U
3-Nitrobenzenamine	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
4-Bromophenyl phenyl ether	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Chloro-3-methylphenol	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Chlorobenzenamine	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Chlorophenyl phenyl ether	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Methylphenol	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Nitrobenzenamine	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
4-Nitrophenol	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Acenaphthene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Acenaphthylene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Anthracene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benz(a)anthracene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzenemethanol	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(a)pyrene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(b)fluoranthene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(ghi)perylene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(k)fluoranthene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzoic acid	50 U	1 J	50 U	50 U	50 U	50 U	50 U	50 U
Bis(2-chloroethoxy)methane	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Bis(2-chloroethyl) ether	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U

Appendix C
Brunner Weekly Samples

Up/Downstream	Up	Down	Up	Down	Up	Down	Up	Down
Date Collected	17-Jun-97	17-Jun-97	24-Jun-97	24-Jun-97	24-Jun-97	24-Jun-97	1-Jul-97	1-Jul-97
Sample ID	FB1272	FA1276	FD1262-FR	FB1262	FC1266-FR	FA1266	FB1282	FA1286
Semivolatile Organics								
Bis(2-chloroisopropyl) ether	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Bis(2-ethylhexyl)phthalate	3 B, J	6 B, J	17 U	10 U	10 U	10 U	2 B, J	3 B, J
Butyl benzyl phthalate	10 U	10 U	5 J	5 J	10 U	10 U	10 U	10 U
Carbazole	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chrysene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Di-n-butyl phthalate	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Di-n-octylphthalate	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibenz(a,h)anthracene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibenzofuran	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Diethyl phthalate	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dimethyl phthalate	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Fluoranthene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Fluorene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Hexachlorobenzene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Hexachlorobutadiene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Hexachlorocyclopentadiene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Hexachloroethane	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Indeno(1,2,3-cd)pyrene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Isophorone	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
N-Nitroso-di-n-propylamine	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
N-Nitrosodiphenylamine	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Naphthalene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Nitrobenzene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Pentachlorophenol	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Phenanthrene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Pyrene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U

Appendix C

Brunner Weekly Samples

	Up/Downstream	Up	Down	Up	Down	Up	Down	Up	Down
	Date Collected	8-Jul-97	15-Jul-97	15-Jul-97	15-Jul-97	22-Jul-97	22-Jul-97	29-Jul-97	29-Jul-97
	Sample ID	FB1431	FB1291	FA1297	FA1301	FA1307	FA1311	FA1317	
Inorganics	UG/L	132 <	229 <	2 U	402 <	60.2 <	114 <	149 <	
Aluminum	UG/L	2.3 U	3.1 <	3.1 U	2 U	2 U	4.4 <	3.3 <	
Antimony	UG/L	2.8 U	46.3 <	46.7 <	3.1 U	3.1 U	3.1 U	4.4 <	
Arsenic	UG/L	44.9 <	0.3 U	0.3 U	42.6 <	45.3 <	45 <	44.9 <	
Barium	UG/L	0.1 U	174 <	186 <	0.2 U	0.2 U	0.2 U	0.2 U	
Beryllium	UG/L	96.1 <	0.4 U	0.4 U	99.5 <	182 <	88.9 <	66.3 <	
Boron	UG/L	0.51 <	46200 <	45600 <	0.4 U	0.4 U	0.4 U	0.4 U	
Cadmium	UG/L	46100 <	0.8 U	1.5 <	40400 <	43000 <	45800 <	45200 <	
Calcium	UG/L	3.1 <	1.3 U	1.3 U	2.4 <	2.8 <	2 <	2.5 <	
Chromium	UG/L	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 <	1.3 U	
Cobalt	UG/L	5.7 <	1.3 U	2.1 <	9.1 <	8.7 <	7 <	6.2 <	
Copper	UG/L	131 <	120 <	287 <	137 <	175 <	181 <	219 <	
Iron	UG/L	2.1 U	2 U	2 U	2.1 <	2.5 <	2 U	2 U	
Lead	UG/L	10900 <	10800 <	10600 <	10300 <	11000 <	9820 <	9540 <	
Magnesium	UG/L	33.1 <	27.2 <	32.4 <	24.2 <	27.5 <	26.6 <	29.2 <	
Manganese	UG/L	0.27 <	0.22 <	0.42 <	0.22 <	0.27 <	0.29 <	0.28 <	
Mercury	UG/L	2.2 U	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U	2.9 <	
Molybdenum	UG/L	1.9 <	1.6 U	2 <	1.6 U	3 <	1.6 U	1.6 U	
Nickel	UG/L	1640 <	1610 <	1660 <	1590 <	1720 <	1650 <	1660 <	
Potassium	UG/L	3.5 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	
Selenium	UG/L	7150 <	6940 <	7810 <	6360 <	6670 <	6920 <	6700 <	
Silica	UG/L	1.3 U	1.1 <	1 <	1.8 U	2.9 <	1.6 <	1.6 <	
Silver	UG/L	6050 <	6610 <	6390 <	6410 <	6810 <	6500 <	6290 <	
Sodium	UG/L	4.5 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	
Thallium	UG/L	1.1 <	0.79 <	0.79 <	0.89 <	0.97 <	1.6 <	2.4 <	
Vanadium	UG/L	8.2 <	6.7 <	6 <	7 <	8.3 <	10 <	10 <	
Zinc	UG/L								

Appendix C
Brunner Weekly Samples

Misc - Anions	Up/Downstream	Up	Down	Up	Down	Up	Down	Up	Down
	Date Collected	8-Jul-97	8-Jul-97	15-Jul-97	15-Jul-97	22-Jul-97	22-Jul-97	29-Jul-97	29-Jul-97
	Sample ID	FB1436	FA1435	FB1296	FA1293	FB1306	FA1303	FB1316	FA1313
	MG/L	125 <	129 <	110 <	110 <	99.6 <	95.4 <	114 <	117 <
	Bromide	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
	Chloride	9.8 <	9.6 <	11 <	10.6 <	10.5 <	11.3 <	10.1 <	9.6 <
Orthophosphate	MG/L	0.5 U	0.5 U	0.25 U	0.25 U	0.5 U	0.5 U	0.5 U	0.5 U
	MG/L	0.3 <	0.56 <	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
	MG/L	29 <	29 <	30.6 <	29.6 <	29 <	29.3 <	30.2 <	29.5 <
	MG/L	5 <	44 <	13 <	17 <	5 U	5 U	6 <	8 <
	Suspended Solids								
Misc - Phenol	Up/Downstream	Up	Down	Up	Down	Up	Down	Up	Down
	Date Collected	8-Jul-97	8-Jul-97	15-Jul-97	15-Jul-97	22-Jul-97	22-Jul-97	29-Jul-97	29-Jul-97
Phenol	Sample ID	FB1432	FA1432	FB1292	FA1296	FB1302	FA1306	FB1312	FA1316
	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Miscellaneous	Up/Downstream	Up	Down	Up	Down	Up	Down	Up	Down
	Date Collected	8-Jul-97	8-Jul-97	15-Jul-97	15-Jul-97	22-Jul-97	22-Jul-97	29-Jul-97	29-Jul-97
	Sample ID	FB1437	FA1436	FB1297	FA1297	FB1307	FA1307	FB1317	FA1317
	MG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
	Kjeldahl Nitrogen	0.1 U	0.1 U	0.1 U	0.1 U	0.16 <	0.18 <	0.28 <	0.18 <
Nitrate/Nitrite (as N)	MG-N/L	1.8 <	1.8 <	1.8 <	1.1 <	1.5 <	1.8 <	1.1 <	1.8 <
	MG/L	0.18 <	0.17 <	0.25 <	0.14 <	0.15 <	0.15 <	0.091 <	0.091 <
	Total Phosphate as Phosphorus								
Miscellaneous - BOD	Up/Downstream	Up	Down	Up	Down	Up	Down	Up	Down
	Date Collected	8-Jul-97	8-Jul-97	15-Jul-97	15-Jul-97	22-Jul-97	22-Jul-97	29-Jul-97	29-Jul-97
Biochemical Oxygen Demand (BOD)	Sample ID	FB1435	FA1434	FB1295	FA1292	FB1305	FA1302	FB1315	FA1312
	MG/L	2 <	2 <	2 <	1 <	2 <	2 <	1 <	2 <

Appendix C
Brunner Weekly Samples

	Up/Downstream	Up	Down	Up	Down	Up	Down	Up	Down
	Date Collected	8-Jul-97	15-Jul-97	22-Jul-97	29-Jul-97	8-Jul-97	15-Jul-97	22-Jul-97	29-Jul-97
	Sample ID	FB1434	FB1294	FB1304	FB1305	FB1314	FA1315		
Pesticide/PCBs	UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U		
4,4'-DDD	UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U		
4,4'-DDE	UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U		
4,4'-DDT	UG/L	0.051 U	0.051 U	0.052 U	0.051 U	0.051 U	0.051 U		
Aldrin	UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U		
Dieldrin	UG/L	0.051 U	0.051 U	0.052 U	0.051 U	0.051 U	0.051 U		
Endosulfan I	UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U		
Endosulfan II	UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U		
Endosulfan sulfate	UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U		
Endrin	UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U		
Endrin aldehyde	UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U		
Endrin ketone	UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U		
Heptachlor	UG/L	0.051 U	0.051 U	0.052 U	0.051 U	0.051 U	0.051 U		
Heptachlor epoxide	UG/L	0.051 U	0.051 U	0.052 U	0.051 U	0.051 U	0.051 U		
Lindane	UG/L	0.051 U	0.051 U	0.052 U	0.051 U	0.051 U	0.051 U		
Methoxychlor	UG/L	0.51 U	0.51 U	0.52 U	0.51 U	0.51 U	0.51 U		
PCB-1016	UG/L	1 U	1 U	1 U	1 U	1 U	1 U		
PCB-1221	UG/L	2 U	2 U	2.1 U	2 U	2 U	2 U		
PCB-1232	UG/L	1 U	1 U	1 U	1 U	1 U	1 U		
PCB-1242	UG/L	1 U	1 U	1 U	1 U	1 U	1 U		
PCB-1248	UG/L	1 U	1 U	1 U	1 U	1 U	1 U		
PCB-1254	UG/L	1 U	1 U	1 U	1 U	1 U	1 U		
PCB-1260	UG/L	1 U	1 U	1 U	1 U	1 U	1 U		
Toxaphene	UG/L	5.1 U	5.1 U	5.2 U	5.1 U	5.1 U	5.1 U		
alpha-BHC	UG/L	0.051 U	0.051 U	0.052 U	0.051 U	0.051 U	0.051 U		
alpha-Chlordane	UG/L	0.051 U	0.051 U	0.052 U	0.051 U	0.051 U	0.051 U		
beta-BHC	UG/L	0.051 U	0.051 U	0.052 U	0.051 U	0.051 U	0.051 U		
delta-BHC	UG/L	0.051 U	0.051 U	0.052 U	0.051 U	0.051 U	0.051 U		
gamma-Chlordane	UG/L	0.051 U	0.051 U	0.052 U	0.051 U	0.051 U	0.051 U		

Appendix C
Brunner Weekly Samples

	Up/Downstream Date Collected	Up	Down	Up	Down	Up	Down	Up	Down
Radlological	Sample ID	8-Jul-97	8-Jul-97	15-Jul-97	15-Jul-97	22-Jul-97	22-Jul-97	29-Jul-97	29-Jul-97
Alpha activity	PCI/L	FB1434	FA1437	FB1294	FA1295	FB1304	FA1305	FB1314	FA1315
Americium-241	PCI/L	5.55	7.51	6.02	6.98	5.65	8.28	8.98	10.69
Beta activity	PCI/L	15.94	15.7	0.73 J	-0.02 U	0.15 U	0.53 J	0.94 J	0.12 U
Cesium-137	PCI/L	4.78	5.68	6.27	5.95	3.61	6.64	6.12	4.58
Cobalt-60	PCI/L	-0.12 U	-1.24 U	1.13 U	-1.78 U	0.72 U	-0.78 U	0.73 U	0.93 U
Neptunium-237	PCI/L	0.13 U	-1.43 U	-0.55 U	-0.62 U	0.48 U	-1.1 U	2.07 J	2.77 U
Plutonium-238	PCI/L	0.15 U	0.22 J	1.04 J	0.31 J	0.33 J	0.32 J	0.28 J	0.15 J
Plutonium-239	PCI/L	-0.13 U	-0.7 U	1.03 U	-0.84 U	0.08 U	0.41 U	0.2 U	-0.11 U
Protactinium-233	PCI/L	0.24 J	0.44 J	0 J	0.25 U	0.25 J	0.09 U	0.27 J	0.18 J
Thorium-228	PCI/L	-0.48 U	-2.42 U	0.94 U	0.26 U	-3.22 U	-0.84 U	-0.15 U	0.45 U
Thorium-230	PCI/L	0.14 U	0 J	0.19 J	0.05 U	0.13 U	0.14 U	0.18 U	0.05 U
Thorium-232	PCI/L	0.74 J	0.62 J	0.97	0.63	0.19 U	0.47 J	1.79	1.36
Uranium-234	PCI/L	0 J	0.19 U	0.14 U	0.23 J	0.13 U	0 J	-0.01 U	0.05 U
Uranium-235	PCI/L	1.57	1.99	2.54	2.21	1.62	1.77	2.98	3.5
Uranium-238	PCI/L	0.48 J	0.26 J	0.35 J	0.16 U	0.29 J	0.15 U	0.18 U	0.23 J
	PCI/L	2.77	3.33	4.07	4.13	3.35	3.68	6.19	6.88

Appendix C
Brunner Weekly Samples

Up/Downstream	Up	Down	Up	Down	Up	Down	Up	Down
Date Collected	8-Jul-97	8-Jul-97	15-Jul-97	15-Jul-97	22-Jul-97	22-Jul-97	29-Jul-97	29-Jul-97
Sample ID	FB1432	FA1432	FB1292	FA1296	FB1302	FA1306	FB1312	FA1316
Semivolatile Organics	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,2,4-Trichlorobenzene	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,2-Dichlorobenzene	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,3-Dichlorobenzene	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,4-Dichlorobenzene	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2,4,5-Trichlorophenol	UG/L	50 U	50 U	50 U	50 U	50 U	50 U	50 U
2,4,6-Trichlorophenol	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2,4-Dichlorophenol	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2,4-Dimethylphenol	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2,4-Dinitrophenol	UG/L	50 U	50 U	50 U	50 U	50 U	50 U	50 U
2,4-Dinitrotoluene	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2,6-Dinitrotoluene	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Chloronaphthalene	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Chlorophenol	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Methyl-4,6-dinitrophenol	UG/L	50 U	50 U	50 U	50 U	50 U	50 U	50 U
2-Methylnaphthalene	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Methylphenol	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Nitrobenzenamine	UG/L	50 U	50 U	50 U	50 U	50 U	50 U	50 U
2-Nitrophenol	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
3,3'-Dichlorobenzidine	UG/L	20 U	20 U	20 U	20 U	20 U	20 U	20 U
3-Nitrobenzenamine	UG/L	50 U	50 U	50 U	50 U	50 U	50 U	50 U
4-Bromophenyl phenyl ether	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Chloro-3-methylphenol	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Chlorobenzenamine	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Chlorophenyl phenyl ether	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Methylphenol	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Nitrobenzenamine	UG/L	50 U	50 U	50 U	50 U	50 U	50 U	50 U
4-Nitrophenol	UG/L	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Acenaphthene	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Acenaphthylene	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Anthracene	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benz(a)anthracene	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzenemethanol	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(a)pyrene	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(b)fluoranthene	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(g,h,i)perylene	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(k)fluoranthene	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzoic acid	UG/L	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Bis(2-chloroethoxy)methane	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Bis(2-chloroethyl) ether	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U

Appendix C
Brunner Weekly Samples

	Up/Downstream Date Collected	Up	Down	Up	Down	Up	Down	Up	Down
	Sample ID	8-Jul-97	8-Jul-97	15-Jul-97	15-Jul-97	22-Jul-97	22-Jul-97	29-Jul-97	29-Jul-97
Semivolatile Organics									
Bis(2-chloroisopropyl) ether	UG/L	FB1432	10 U	10 U	10 U	FB1302	10 U	10 U	FA1316
Bis(2-ethylhexyl)phthalate	UG/L	4 B, J	10 B	4 B, J	5 B, J	4 B, J	15 B	10 U	10 U
Butyl benzyl phthalate	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Carbazole	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chrysene	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Di-n-butyl phthalate	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Di-n-octylphthalate	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibenz(a,h)anthracene	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibenzofuran	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Diethyl phthalate	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dimethyl phthalate	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Fluoranthene	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Fluorene	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Hexachlorobenzene	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Hexachlorobutadiene	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Hexachlorocyclopentadiene	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Hexachloroethane	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Indeno(1,2,3-cd)pyrene	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Isophorone	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
N-Nitroso-di-n-propylamine	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
N-Nitrosodiphenylamine	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Naphthalene	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Nitrobenzene	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Pentachlorophenol	UG/L	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Phenanthrene	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Pyrene	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U

Appendix C
Brunner Weekly Samples

	Up/Downstream	Up	Down	Up	Down	Up	Down	Up	Down
	Date Collected	5-Aug-97	12-Aug-97	12-Aug-97	12-Aug-97	26-Aug-97	26-Aug-97	26-Aug-97	2-Sep-97
	Sample ID	FB1441	FB1321	FA1327	FA1331	FA1337	FA1341	FA1347	
Inorganics	UG/L	329 <	184 <	203 <	143 <	183 <	117 <	165 <	
Aluminum	UG/L	3.1 <	2 U	2 U	2 U	2 U	2 U	2 U	
Antimony	UG/L	3.5 <	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	4 <	
Arsenic	UG/L	44 <	47.6 <	46.6 <	47 <	47.4 <	46.1 <	45.6 <	
Barium	UG/L	0.2 U	0.3 U	0.3 U	0.2 U	0.2 U	0.3 U	0.3 U	
Beryllium	UG/L	103 <	85.8 <	78.4 <	91.1 <	102 <	42.3 <	36.2 <	
Boron	UG/L	2.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	
Cadmium	UG/L	40300 <	46300 <	45800 <	45800 <	46800 <	44400 <	43100 <	
Calcium	UG/L	3.7 U	1.3 <	0.8 U	0.93 <	1.6 <	1.4 <	1.3 <	
Chromium	UG/L	4.6 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	
Cobalt	UG/L	4.2 U	2.4 <	2.2 <	2.8 <	3.9 <	2.6 <	2.6 <	
Copper	UG/L	300 <	174 <	226 <	118 <	174 <	85.7 <	171 <	
Iron	UG/L	4.8 <	2 U	2 U	2 U	2 U	2 U	2 U	
Lead	UG/L	9670 <	11000 <	10900 <	11200 <	11500 <	11700 <	11300 <	
Magnesium	UG/L	25 <	20.2 <	23.4 <	17.1 <	21.3 <	15.7 <	20.8 <	
Manganese	UG/L	0.39 <	0.17 <	0.21 <	0.11 <	0.11 <	0.13 <	0.14 <	
Mercury	UG/L	13.8 U	5.3 <	2.6 U	2.6 U	2.6 U	2.6 U	2.6 <	
Molybdenum	UG/L	8.9 U	1.9 <	1.6 U	1.6 U	1.6 U	1.6 U	2 <	
Nickel	UG/L	1480 <	1670 <	1650 <	1760 <	1830 <	1640 <	1630 <	
Potassium	UG/L	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	
Selenium	UG/L	6510 <	7470 <	7320 <	6950 <	7120 <	6700 <	6480 <	
Silica	UG/L	2 <	0.7 U	0.7 U	0.7 U	0.7 <	0.7 U	0.7 U	
Silver	UG/L	6530 <	7080 <	6870 <	10700 <	11200 <	7550 <	7480 <	
Sodium	UG/L	3.8 U	3.8 U	3.8 U	4.6 <	3.8 U	3.8 U	3.8 U	
Thallium	UG/L	3.6 U	0.7 U	0.7 U	0.75 <	0.98 <	0.7 U	1 <	
Vanadium	UG/L	10 <	7.1 <	5 <	5.4 <	7 <	5.5 <	4.3 <	
Zinc	UG/L								

Appendix C Brunner Weekly Samples

Misc - Anions	Up/Downstream	Up	Down	Up	Down	Up	Down	Up	Down
	Date Collected	5-Aug-97	5-Aug-97	12-Aug-97	12-Aug-97	26-Aug-97	26-Aug-97	2-Sep-97	2-Sep-97
	Sample ID	FB1446	FA1445			FB1336	FA1333	FB1346	FA1343
	Alkalinity	116 <	127 <			126 <	124 <	125 <	123 <
	Bromide	0.25 U	0.25 U			0.25 U	0.25 U	0.25 U	0.25 U
	Chloride	9.3 <	8.2 <			10.7 <	10.5 <	8.6 <	9 <
	Fluoride	0.5 U	0.5 U			0.25 U	0.25 U	0.5 U	0.5 U
	Orthophosphate	0.26 <	0.25 U			0.39 <	0.34 <	0.34 <	0.29 <
Sulfate	MG/L	30.9 <	27.3 <			39.7 <	40.2 <	30.8 <	30.9 <
	MG/L	8 <	16 <			5 <	5 U	5 <	9 <
	Suspended Solids								
Misc - Phenol	Up/Downstream	Up	Down	Up	Down	Up	Down	Up	Down
	Date Collected	5-Aug-97	5-Aug-97	12-Aug-97	12-Aug-97	26-Aug-97	26-Aug-97	2-Sep-97	2-Sep-97
	Sample ID	FB1442	FA1442			FB1332	FA1336	FB1342	FA1346
Phenol	UG/L	10 U	10 U			10 U	10 U	10 U	10 U
Miscellaneous	Up/Downstream	Up	Down	Up	Down	Up	Down	Up	Down
	Date Collected	5-Aug-97	5-Aug-97	12-Aug-97	12-Aug-97	26-Aug-97	26-Aug-97	2-Sep-97	2-Sep-97
	Sample ID	FB1447	FA1446			FB1337	FA1337	FB1347	FA1347
	Ammonia	0.1 U	0.1 U			0.1 U	0.12 <	0.11 <	0.1 U
	Kjeldahl Nitrogen	0.1 U	0.1 U			0.1 U	0.1 U	0.1 U	0.1 U
	Nitrate/Nitrite (as N)	1.8 <	1.4 <			1.5 <	1.5 <	1.5 <	1.1 <
	Total Phosphate as Phosphorus	0.12 <	0.11 <			0.17 <	0.17 <	0.15 <	0.15 <
Miscellaneous - BOD	Up/Downstream	Up	Down	Up	Down	Up	Down	Up	Down
	Date Collected	5-Aug-97	5-Aug-97	12-Aug-97	12-Aug-97	26-Aug-97	26-Aug-97	2-Sep-97	2-Sep-97
	Sample ID	FB1445	FA1444			FB1335	FA1332	FB1345	FA1342
Biochemical Oxygen Demand (BOD)	MG/L	2 <	3 <			1 <	1 <	1 <	2 <

Appendix C
Brunner Weekly Samples

	Up/Downstream Date Collected	Sample ID	5-Aug-97		12-Aug-97		26-Aug-97		2-Sep-97	
			Up	Down	Up	Down	Up	Down	Up	Down
Pesticide/PCBs										
4,4'-DDD		UG/L	0.1 U	0.1 U			0.1 U	0.11 U	0.1 U	0.1 U
4,4'-DDE		UG/L	0.1 U	0.1 U			0.1 U	0.11 U	0.1 U	0.1 U
4,4'-DDT		UG/L	0.1 U	0.1 U			0.1 U	0.11 U	0.1 U	0.1 U
Aldrin		UG/L	0.05 U	0.05 U			0.052 U	0.056 U	0.052 U	0.052 U
Dieldrin		UG/L	0.1 U	0.1 U			0.1 U	0.11 U	0.1 U	0.1 U
Endosulfan I		UG/L	0.05 U	0.05 U			0.052 U	0.056 U	0.052 U	0.052 U
Endosulfan II		UG/L	0.1 U	0.1 U			0.1 U	0.11 U	0.1 U	0.1 U
Endosulfan sulfate		UG/L	0.1 U	0.1 U			0.1 U	0.11 U	0.1 U	0.1 U
Endrin		UG/L	0.1 U	0.1 U			0.1 U	0.11 U	0.1 U	0.1 U
Endrin aldehyde		UG/L	0.1 U	0.1 U			0.1 U	0.11 U	0.1 U	0.1 U
Endrin ketone		UG/L	0.1 U	0.1 U			0.1 U	0.11 U	0.1 U	0.1 U
Heptachlor		UG/L	0.05 U	0.05 U			0.052 U	0.056 U	0.052 U	0.052 U
Heptachlor epoxide		UG/L	0.05 U	0.05 U			0.052 U	0.056 U	0.052 U	0.052 U
Lindane		UG/L	0.05 U	0.05 U			0.052 U	0.056 U	0.052 U	0.052 U
Methoxychlor		UG/L	0.5 U	0.5 U			0.52 U	0.56 U	0.52 U	0.52 U
PCB-1016		UG/L	1 U	1 U			1 U	1.1 U	1 U	1 U
PCB-1221		UG/L	2 U	2 U			2.1 U	2.2 U	2.1 U	2.1 U
PCB-1232		UG/L	1 U	1 U			1 U	1.1 U	1 U	1 U
PCB-1242		UG/L	1 U	1 U			1 U	1.1 U	1 U	1 U
PCB-1248		UG/L	1 U	1 U			1 U	1.1 U	1 U	1 U
PCB-1254		UG/L	1 U	1 U			1 U	1.1 U	1 U	1 U
PCB-1260		UG/L	1 U	1 U			1 U	1.1 U	1 U	1 U
Toxaphene		UG/L	5 U	5 U			5.2 U	5.6 U	5.2 U	5.2 U
alpha-BHC		UG/L	0.05 U	0.05 U			0.052 U	0.056 U	0.052 U	0.052 U
alpha-Chlordane		UG/L	0.05 U	0.05 U			0.052 U	0.056 U	0.052 U	0.052 U
beta-BHC		UG/L	0.05 U	0.05 U			0.052 U	0.056 U	0.052 U	0.052 U
delta-BHC		UG/L	0.05 U	0.05 U			0.052 U	0.056 U	0.052 U	0.052 U
gamma-Chlordane		UG/L	0.05 U	0.05 U			0.052 U	0.056 U	0.052 U	0.052 U

Appendix C
Brunner Weekly Samples

Up/Downstream	Up	Down	Up	Down	Up	Down	Up	Down
Date Collected	5-Aug-97	5-Aug-97	12-Aug-97	12-Aug-97	26-Aug-97	26-Aug-97	2-Sep-97	2-Sep-97
Sample ID	FB1444	FA1447			FB1334	FA1335	FB1344	FA1345
Radiological	PCI/L	PCI/L						
Alpha activity	5.51	7.85	6	5.7	6.52	6.08	4.6	5.48
Americium-241	0.12 U	0.29 U	-0.04 U	6.69 J	0.31 J	0.57 J	0.21 U	0.92 J
Beta activity	5.57	6.5	4.23	5.58	7.13	4.78	5.04	4.61
Cesium-137	0.27 U	2.74 U	-0.83 U	2.04 U	0.2 U	-0.96 U	1.73 U	2.14 U
Cobalt-60	1.69 J	-0.88 U	0.23 U	1.6 U	-0.85 U	-0.36 U	0.58 U	1.37 U
Neptunium-237	0.12 U	0.32 J	0.08 U	0.17 U	0.03 U	0.24 J	0.12 J	0.07 U
Plutonium-238	-0.31 U	-0.23 U	0.43 U	0.05 U	-0.12 U	0.05 U	-0.12 U	-0.21 U
Plutonium-239	0.12 U	0 J	0.2 J	0.09 U	0.07 U	0.12 U	0.03 U	0 J
Protactinium-233	1.58 U	-5.66 U	0.37 U	-1.47 U	-1.02 U	-0.27 U	-1.51 U	-0.53 U
Thorium-228	0.16 J	2.55	0.26 J	0 J	0 J	0 J	0 J	0.08 U
Thorium-230	0.36 J	3.09	0.55	0.2 J	0.19 J	0.34 J	0.21 J	0.47
Thorium-232	0 J	2.76	0.08 U	0.05 U	0 J	0.1 U	0.04 U	0.12 U
Uranium-234	2.08	2.04	2.13	2.3	3.01	2.14	1.96	2.85
Uranium-235	0.45 J	0.31 J	0.15 U	0.34 J	0.15 U	0.11 U	0.45 J	0.06 U
Uranium-238	4.93	3.26	3.55	3.03	3.52	4.21	3.45	2.68

Appendix C Brunner Weekly Samples

Up/Downstream	Up	Down	Up	Down	Up	Down	Up	Down
Date Collected	5-Aug-97	12-Aug-97	26-Aug-97	26-Aug-97	2-Sep-97	2-Sep-97	26-Aug-97	2-Sep-97
Sample ID	FB1442	FA1442	FB1332	FA1336	FB1342	FA1346	FB1332	FA1336
Semivolatile Organics	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,2,4-Trichlorobenzene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,2-Dichlorobenzene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,3-Dichlorobenzene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,4-Dichlorobenzene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2,4,5-Trichlorophenol	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
2,4,6-Trichlorophenol	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2,4-Dichlorophenol	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2,4-Dimethylphenol	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2,4-Dinitrophenol	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
2,4-Dinitrotoluene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2,6-Dinitrotoluene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Chloronaphthalene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Chlorophenol	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Methyl-4,6-dinitrophenol	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
2-Methyl-4,6-dinitrophenol	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Methylphenol	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Nitrobenzenamine	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
2-Nitrophenol	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
3,3'-Dichlorobenzidine	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U
3-Nitrobenzenamine	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
4-Bromophenyl phenyl ether	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Chloro-3-methylphenol	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Chlorobenzenamine	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Chlorophenyl phenyl ether	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Methylphenol	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Nitrobenzenamine	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
4-Nitrophenol	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Acenaphthene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Acenaphthylene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Anthracene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benz(a)anthracene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzenemethanol	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(a)pyrene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(b)fluoranthene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(g,h,i)perylene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(k)fluoranthene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzoic acid	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Bis(2-chloroethoxy)methane	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Bis(2-chloroethyl) ether	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U

Appendix C
Brunner Weekly Samples

	Up/Downstream	Up	Down	Up	Down	Up	Down	Up	Down
	Date Collected	5-Aug-97	5-Aug-97	12-Aug-97	12-Aug-97	26-Aug-97	26-Aug-97	2-Sep-97	2-Sep-97
	Sample ID	FB1442	FA1442			FB1332	FA1336	FB1342	FA1346
Semivolatle Organics	UG/L	10 U	10 U			10 U	10 U	10 U	10 U
Bis(2-chloroisopropyl) ether	UG/L	5 B, J	7 B, J			4 B, J	5 B, J	4 J	4 J
Bis(2-ethylhexyl)phthalate	UG/L	10 U	10 U			10 U	10 U	10 U	10 U
Butyl benzyl phthalate	UG/L	10 U	10 U			10 U	10 U	10 U	10 U
Carbazole	UG/L	10 U	10 U			10 U	10 U	10 U	10 U
Chrysene	UG/L	2 J	2 J			2 B, J	2 B, J	10 U	10 U
Di-n-butyl phthalate	UG/L	10 U	10 U			10 U	10 U	10 U	10 U
Di-n-octylphthalate	UG/L	10 U	10 U			10 U	10 U	10 U	10 U
Dibenz(a,h)anthracene	UG/L	10 U	10 U			10 U	10 U	10 U	10 U
Dibenzofuran	UG/L	10 U	10 U			10 U	10 U	10 U	10 U
Diethyl phthalate	UG/L	10 U	10 U			10 U	10 U	10 U	10 U
Dimethyl phthalate	UG/L	10 U	10 U			10 U	10 U	10 U	10 U
Fluoranthene	UG/L	10 U	10 U			10 U	10 U	10 U	10 U
Fluorene	UG/L	10 U	10 U			10 U	10 U	10 U	10 U
Hexachlorobenzene	UG/L	10 U	10 U			10 U	10 U	10 U	10 U
Hexachlorobutadiene	UG/L	10 U	10 U			10 U	10 U	10 U	10 U
Hexachlorocyclopentadiene	UG/L	10 U	10 U			10 U	10 U	10 U	10 U
Hexachloroethane	UG/L	10 U	10 U			10 U	10 U	10 U	10 U
Indeno(1,2,3-cd)pyrene	UG/L	10 U	10 U			10 U	10 U	10 U	10 U
Isophorone	UG/L	10 U	10 U			10 U	10 U	10 U	10 U
N-Nitroso-di-n-propylamine	UG/L	10 U	10 U			10 U	10 U	10 U	10 U
N-Nitrosodiphenylamine	UG/L	10 U	10 U			10 U	10 U	10 U	10 U
Naphthalene	UG/L	10 U	10 U			10 U	10 U	10 U	10 U
Nitrobenzene	UG/L	10 U	10 U			10 U	10 U	10 U	10 U
Pentachlorophenol	UG/L	50 U	50 U			50 U	50 U	50 U	50 U
Phenanthrene	UG/L	10 U	10 U			10 U	10 U	10 U	10 U
Pyrene	UG/L	10 U	10 U			10 U	10 U	10 U	10 U

Appendix C

Brunner Weekly Samples

	Up/Downstream	Up	Down	Up	Down	Up	Down	Up	Down
	Date Collected	9-Sep-97	16-Sep-97	23-Sep-97	16-Sep-97	23-Sep-97	23-Sep-97	23-Sep-97	23-Sep-97
	Sample ID	FB1451	FB1351	FD1361-FR	FA1357	FD1361-FR	FB1361	FC1367-FR	FA1367
Inorganics	UG/L	544 <	134 <	180 <	2 U	107 <	97.2 <	218 <	456 <
Aluminum	UG/L	2 U	2 U	2 U	2 U	2.2 <	2 U	2 U	2 U
Antimony	UG/L	4.3 <	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.4 <
Arsenic	UG/L	40.9 <	44.8 <	44.2 <	44.2 <	43.6 <	42.9 <	45.2 <	43.5 <
Barium	UG/L	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Beryllium	UG/L	88.3 <	102 <	202 <	202 <	108 <	93.9 <	73.6 <	85.6 <
Boron	UG/L	0.48 <	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
Cadmium	UG/L	33500 <	45600 <	44800 <	44800 <	46000 <	45600 <	47300 <	44400 <
Calcium	UG/L	1.9 <	1.6 <	2.6 <	2.6 <	1.9 <	1.4 <	1.7 <	2.4 <
Chromium	UG/L	1.8 <	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
Cobalt	UG/L	7.5 <	4.5 <	5.5 <	5.5 <	1.4 U	1.6 <	3.3 <	1.4 U
Copper	UG/L	659 <	153 <	196 <	196 <	96.9 <	129 <	295 <	373 <
Iron	UG/L	2.1 <	2.5 <	2 U	2 U	2 U	2.9 <	2 U	2 U
Lead	UG/L	7600 <	12100 <	11600 <	11600 <	12100 <	11900 <	12300 <	11500 <
Magnesium	UG/L	74 <	18.6 <	19.6 <	19.6 <	15.6 <	16.6 <	24.9 <	27 <
Manganese	UG/L	1.2 <	0.19 <	0.42 <	0.42 <	0.13 <	0.15 <	0.16 <	0.35 <
Mercury	UG/L	3.3 <	2.6 U	2.6 U	2.6 U	10.1 U	10.1 U	10.1 U	10.1 U
Molybdenum	UG/L	2.7 <	1.7 <	3.8 <	3.8 <	1.6 U	1.6 U	1.6 U	1.6 U
Nickel	UG/L	1980 <	1790 <	1760 <	1760 <	1780 <	1690 <	1780 <	1760 <
Potassium	UG/L	3.1 U	3.7 <	3.8 <	3.8 <	3.1 U	3.1 U	5.1 <	4.1 <
Selenium	UG/L	5700 <	7170 <	6870 <	6870 <	6850 <	6380 <	6740 <	7320 <
Silica	UG/L	0.74 <	0.7 U	0.7 U	0.7 U	2 <	0.94 <	1.1 <	0.7 U
Silver	UG/L	5320 <	7480 <	6980 <	6980 <	7330 <	7250 <	7420 <	7040 <
Sodium	UG/L	5.6 <	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
Thallium	UG/L	2.5 <	0.83 <	0.76 <	0.76 <	0.75 <	1.2 <	1.1 <	0.88 <
Vanadium	UG/L	28.7 <	14.3 <	18.8 <	18.8 <	6.6 <	5.5 <	6.3 <	15.9 <
Zinc	UG/L								

Appendix C Brunner Weekly Samples

Misc - Anions	Up/Downstream	Up	Down	Up	Down	Up	Down	Up	Down
	Date Collected	9-Sep-97	9-Sep-97	16-Sep-97	16-Sep-97	23-Sep-97	23-Sep-97	23-Sep-97	23-Sep-97
	Sample ID	FB1456	FA1457	FB1356	FA1353	FD1366-FR	FB1366	FC1363-FR	FA1363
	Alkalinity	83.5 <	85.5 <	120 <	122 <	122 <	130 <	121 <	125 <
	Bromide	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
	Chloride	5.9 <	6.1 <	9.9 <	8.4 <	7.5 <	7.4 <	7.4 <	7.4 <
	Fluoride	0.5 U	0.5 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
Orthophosphate	MG/L	0.32 <	0.25 <	0.39 <	0.35 <	0.37 <	0.38 <	0.35 <	0.36 <
	MG/L	27.2 <	28.8 <	38.8 <	33.1 <	33.3 <	33.5 <	33.5 <	33.4 <
Sulfate	MG/L	27 <	50 <	7.7 <	8.3 <	6 <	5 U	7.1 <	10.8 <
Suspended Solids	MG/L								
Misc - Phenol	Up/Downstream	Up	Down	Up	Down	Up	Down	Up	Down
	Date Collected	9-Sep-97	9-Sep-97	16-Sep-97	16-Sep-97	23-Sep-97	23-Sep-97	23-Sep-97	23-Sep-97
Phenol	Sample ID	FB1452	FA1451	FB1352	FA1356	FD1362-FR	FB1362	FC1366-FR	FA1366
	UG/L	11 U	10 U	10 U	10 U	11 U	11 U	10 U	10 U
Miscellaneous	Up/Downstream	Up	Down	Up	Down	Up	Down	Up	Down
	Date Collected	9-Sep-97	9-Sep-97	16-Sep-97	16-Sep-97	23-Sep-97	23-Sep-97	23-Sep-97	23-Sep-97
	Sample ID	FB1457	FA1455	FB1357	FA1357	FD1367-FR	FB1367	FC1367-FR	FA1367
	Ammonia	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
	Kjeldahl Nitrogen	0.24 <	0.48 <	0.1 U	0.1 U	0.12 <	0.1 U	0.11 <	0.1 U
	Nitrate/Nitrite (as N)	1.6 <	1.8 <	1.6 <	1.6 <	1.4 <	1.4 <	1.4 <	1.6 <
	Total Phosphate as Phosphorus	0.16 <	0.18 <	0.18 <	0.19 <	0.2 <	0.21 <	0.2 <	0.23 <
Miscellaneous - BOD	Up/Downstream	Up	Down	Up	Down	Up	Down	Up	Down
	Date Collected	9-Sep-97	9-Sep-97	16-Sep-97	16-Sep-97	23-Sep-97	23-Sep-97	23-Sep-97	23-Sep-97
Biochemical Oxygen Demand (BOD)	Sample ID	FB1455	FA1453	FB1355	FA1352	FD1365-FR	FB1365	FC1362-FR	FA1362
	MG/L	2 <	2 <	3 <	3 <	1 U	1 U	1 U	1 U

Appendix C
Brunner Weekly Samples

	Up/Downstream	Up	Down	Up	Down	Up	Down	Up	Down
	Date Collected	9-Sep-97	16-Sep-97	23-Sep-97	9-Sep-97	16-Sep-97	23-Sep-97	9-Sep-97	23-Sep-97
	Sample ID	FB1454	FB1354	FD1364-FR	FA1355	FB1364	FC1365-FR	FA1365	
Pesticide/PCBs	UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	
4,4'-DDD	UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	
4,4'-DDE	UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	
4,4'-DDT	UG/L	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.052 U	0.052 U	
Aldrin	UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	
Dieldrin	UG/L	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.052 U	0.052 U	
Endosulfan I	UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	
Endosulfan II	UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	
Endosulfan sulfate	UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	
Endrin	UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	
Endrin aldehyde	UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	
Endrin ketone	UG/L	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.052 U	0.052 U	
Heptachlor	UG/L	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.052 U	0.052 U	
Heptachlor epoxide	UG/L	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.052 U	0.052 U	
Lindane	UG/L	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.052 U	0.052 U	
Methoxychlor	UG/L	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.052 U	0.052 U	
PCB-1016	UG/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	
PCB-1221	UG/L	2 U	2 U	2 U	2 U	2 U	2.1 U	2.1 U	
PCB-1232	UG/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	
PCB-1242	UG/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	
PCB-1248	UG/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	
PCB-1254	UG/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	
PCB-1260	UG/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	
Toxaphene	UG/L	5.1 U	5.1 U	5.1 U	5.1 U	5.1 U	5.2 U	5.2 U	
alpha-BHC	UG/L	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.052 U	0.052 U	
alpha-Chlordane	UG/L	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.052 U	0.052 U	
beta-BHC	UG/L	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.052 U	0.052 U	
delta-BHC	UG/L	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.052 U	0.052 U	
gamma-Chlordane	UG/L	0.051 U	0.051 U	0.051 U	0.051 U	0.051 U	0.052 U	0.052 U	

Appendix C
Brunner Weekly Samples

	Up/Downstream	9-Sep-97		16-Sep-97		23-Sep-97		23-Sep-97	
		Up	Down	Up	Down	Up	Down	Up	Down
	Date Collected								
Radiological	Sample ID								
Alpha activity	PCI/L								
Americium-241	FB1454	4.22	9.01	5.39	4.91	4.33	3.47	3.29	4.73 J
Beta activity	PCI/L	0.32 U	0.88 J	0.48 J	0.09 U	0.65 J	0.37 U	0.33 U	0.69 J
Cesium-137	PCI/L	7.07	7.46	2.8 J	2.54 J	4.52	4.4	3.94	5.75 J
Cobalt-60	PCI/L	0.2 U	3.83 J	0.4 U	-1.88 U	-0.7 U	0.49 U	-0.04 U	3.22 J
Neptunium-237	PCI/L	0.2 U	2.17 U	-0.53 U	1.73 U	-0.25 U	2.5 J	-2.4 U	-1.65 U
Plutonium-238	PCI/L	0.19 J	0.22 J	0.31 J	0.17 J	0.03 U	0.06 U	0.22 J	0.1 U
Plutonium-239	PCI/L	-0.09 U	0.31 U	0.01 U	-0.03 U	0.06 U	0.28 U	0.04 U	0.19 U
Protactinium-233	PCI/L	0 J	0.14 U	0.07 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U
Thorium-228	PCI/L	0.69 U	0.1 U	-1.31 U	-2.28 U	-0.19 U	0.55 U	-2.2 U	-0.8 U
Thorium-230	PCI/L	0.1 U	0.21 U	0 J	0.11 U	0.12 U	0.2 U	0.23 U	0 U
Thorium-232	PCI/L	0.26 J	0.85	0.09 U	0.94	0.47 J	0.33 J	0.84	0.09 U
Uranium-234	PCI/L	0.05 U	0.16 U	0.09 U	0 J	0 J	0 J	0.08 U	0.05 U
Uranium-235	PCI/L	1.67	1.72	1.22	1.89	1.66	1.96	1.69	2.13
Uranium-238	PCI/L	0.05 U	-0.01 U	0.06 U	0.18 U	0.05 U	0.08 U	0.05 U	0.1 U
	PCI/L	1.79	2.04	1.66	1.71	2.24	2.32	2.88	2.68

Appendix C

Brunner Weekly Samples

Up/Downstream	Up	Down	Up	Down	Up	Down	Up	Down
Date Collected	9-Sep-97	9-Sep-97	16-Sep-97	16-Sep-97	23-Sep-97	23-Sep-97	23-Sep-97	23-Sep-97
Sample ID	FB1452	FA1451	FB1352	FA1356	FD1362-FR	FB1362	FC1366-FR	FA1366
Semivolatile Organics	UG/L	10 U	10 U	10 U	11 U	11 U	10 U	10 U
1,2,4-Trichlorobenzene	UG/L	11 U	10 U	10 U	11 U	11 U	10 U	10 U
1,2-Dichlorobenzene	UG/L	11 U	10 U	10 U	11 U	11 U	10 U	10 U
1,3-Dichlorobenzene	UG/L	11 U	10 U	10 U	11 U	11 U	10 U	10 U
1,4-Dichlorobenzene	UG/L	11 U	10 U	10 U	11 U	11 U	10 U	10 U
2,4,5-Trichlorophenol	UG/L	55 U	50 U	50 U	55 U	55 U	50 U	50 U
2,4,6-Trichlorophenol	UG/L	11 U	10 U	10 U	11 U	11 U	10 U	10 U
2,4-Dichlorophenol	UG/L	11 U	10 U	10 U	11 U	11 U	10 U	10 U
2,4-Dimethylphenol	UG/L	11 U	10 U	10 U	11 U	11 U	10 U	10 U
2,4-Dinitrophenol	UG/L	55 U	50 U	50 U	55 U	55 U	50 U	50 U
2,4-Dinitrotoluene	UG/L	11 U	10 U	10 U	11 U	11 U	10 U	10 U
2,6-Dinitrotoluene	UG/L	11 U	10 U	10 U	11 U	11 U	10 U	10 U
2-Chloronaphthalene	UG/L	11 U	10 U	10 U	11 U	11 U	10 U	10 U
2-Chlorophenol	UG/L	11 U	10 U	10 U	11 U	11 U	10 U	10 U
2-Methyl-4,6-dinitrophenol	UG/L	55 U	50 U	50 U	55 U	55 U	50 U	50 U
2-Methylnaphthalene	UG/L	11 U	10 U	10 U	11 U	11 U	10 U	10 U
2-Methylphenol	UG/L	11 U	10 U	10 U	11 U	11 U	10 U	10 U
2-Nitrobenzenamine	UG/L	55 U	50 U	50 U	55 U	55 U	50 U	50 U
2-Nitrophenol	UG/L	11 U	10 U	10 U	11 U	11 U	10 U	10 U
3,3'-Dichlorobenzidine	UG/L	22 U	20 U	20 U	22 U	22 U	20 U	20 U
3-Nitrobenzenamine	UG/L	55 U	50 U	50 U	55 U	55 U	50 U	50 U
4-Bromophenyl phenyl ether	UG/L	11 U	10 U	10 U	11 U	11 U	10 U	10 U
4-Chloro-3-methylphenol	UG/L	11 U	10 U	10 U	11 U	11 U	10 U	10 U
4-Chlorobenzenamine	UG/L	11 U	10 U	10 U	11 U	11 U	10 U	10 U
4-Chlorophenyl phenyl ether	UG/L	11 U	10 U	10 U	11 U	11 U	10 U	10 U
4-Methylphenol	UG/L	11 U	10 U	10 U	11 U	11 U	10 U	10 U
4-Nitrobenzenamine	UG/L	55 U	50 U	50 U	55 U	55 U	50 U	50 U
4-Nitrophenol	UG/L	55 U	50 U	50 U	55 U	55 U	50 U	50 U
Acenaphthene	UG/L	11 U	10 U	10 U	11 U	11 U	10 U	10 U
Acenaphthylene	UG/L	11 U	10 U	10 U	11 U	11 U	10 U	10 U
Anthracene	UG/L	11 U	10 U	10 U	11 U	11 U	10 U	10 U
Benz(a)anthracene	UG/L	11 U	10 U	10 U	11 U	11 U	10 U	10 U
Benzenemethanol	UG/L	11 U	10 U	10 U	11 U	11 U	10 U	10 U
Benzo(a)pyrene	UG/L	11 U	10 U	10 U	11 U	11 U	10 U	10 U
Benzo(b)fluoranthene	UG/L	11 U	10 U	10 U	11 U	11 U	10 U	10 U
Benzo(ghi)perylene	UG/L	11 U	10 U	10 U	11 U	11 U	10 U	10 U
Benzo(k)fluoranthene	UG/L	11 U	10 U	10 U	11 U	11 U	10 U	10 U
Benzoic acid	UG/L	55 U	50 U	50 U	55 U	55 U	50 U	50 U
Bis(2-chloroethoxy)methane	UG/L	11 U	10 U	10 U	11 U	11 U	10 U	10 U
Bis(2-chloroethyl) ether	UG/L	11 U	10 U	10 U	11 U	11 U	10 U	10 U

Appendix C
Brunner Weekly Samples

	Up/Downstream Date Collected	Sample ID	9-Sep-97		16-Sep-97		23-Sep-97		16-Sep-97		23-Sep-97		23-Sep-97	
			Up	Down	Up	Down	Up	Down	Up	Down	Up	Down	Up	Down
Semivolatle Organics														
Bis(2-chloroisopropyl) ether		FB1452	11 U	10 U	10 U	10 U	11 U	10 U	11 U	10 U	11 U	10 U	11 U	10 U
Bis(2-ethylhexyl)phthalate		6 B, J												
Butyl benzyl phthalate		UG/L	11 U	10 U	10 U	10 U	11 U	10 U	11 U	10 U	11 U	10 U	11 U	10 U
Carbazole		UG/L	11 U	10 U	10 U	10 U	11 U	10 U	11 U	10 U	11 U	10 U	11 U	10 U
Chrysene		UG/L	11 U	10 U	10 U	10 U	11 U	10 U	11 U	10 U	11 U	10 U	11 U	10 U
Di-n-butyl phthalate		UG/L	11 U	10 U	10 U	10 U	11 U	10 U	11 U	10 U	11 U	10 U	11 U	10 U
Di-n-octylphthalate		UG/L	11 U	10 U	10 U	10 U	11 U	10 U	11 U	10 U	11 U	10 U	11 U	10 U
Dibenz(a,h)anthracene		UG/L	11 U	10 U	10 U	10 U	11 U	10 U	11 U	10 U	11 U	10 U	11 U	10 U
Dibenzofuran		UG/L	11 U	10 U	10 U	10 U	11 U	10 U	11 U	10 U	11 U	10 U	11 U	10 U
Diethyl phthalate		UG/L	11 U	10 U	10 U	10 U	11 U	10 U	11 U	10 U	11 U	10 U	11 U	10 U
Dimethyl phthalate		UG/L	11 U	10 U	10 U	10 U	11 U	10 U	11 U	10 U	11 U	10 U	11 U	10 U
Fluoranthene		UG/L	11 U	10 U	10 U	10 U	11 U	10 U	11 U	10 U	11 U	10 U	11 U	10 U
Fluorene		UG/L	11 U	10 U	10 U	10 U	11 U	10 U	11 U	10 U	11 U	10 U	11 U	10 U
Hexachlorobenzene		UG/L	11 U	10 U	10 U	10 U	11 U	10 U	11 U	10 U	11 U	10 U	11 U	10 U
Hexachlorobutadiene		UG/L	11 U	10 U	10 U	10 U	11 U	10 U	11 U	10 U	11 U	10 U	11 U	10 U
Hexachlorocyclopentadiene		UG/L	11 U	10 U	10 U	10 U	11 U	10 U	11 U	10 U	11 U	10 U	11 U	10 U
Hexachloroethane		UG/L	11 U	10 U	10 U	10 U	11 U	10 U	11 U	10 U	11 U	10 U	11 U	10 U
Indeno(1,2,3-cd)pyrene		UG/L	11 U	10 U	10 U	10 U	11 U	10 U	11 U	10 U	11 U	10 U	11 U	10 U
Isophorone		UG/L	11 U	10 U	10 U	10 U	11 U	10 U	11 U	10 U	11 U	10 U	11 U	10 U
N-Nitroso-di-n-propylamine		UG/L	11 U	10 U	10 U	10 U	11 U	10 U	11 U	10 U	11 U	10 U	11 U	10 U
N-Nitrosodiphenylamine		UG/L	11 U	10 U	10 U	10 U	11 U	10 U	11 U	10 U	11 U	10 U	11 U	10 U
Naphthalene		UG/L	11 U	10 U	10 U	10 U	11 U	10 U	11 U	10 U	11 U	10 U	11 U	10 U
Nitrobenzene		UG/L	11 U	10 U	10 U	10 U	11 U	10 U	11 U	10 U	11 U	10 U	11 U	10 U
Pentachlorophenol		UG/L	55 U	50 U	50 U	50 U	55 U	50 U	55 U	50 U	55 U	50 U	55 U	50 U
Phenanthrene		UG/L	11 U	10 U	10 U	10 U	11 U	10 U	11 U	10 U	11 U	10 U	11 U	10 U
Pyrene		UG/L	11 U	10 U	10 U	10 U	11 U	10 U	11 U	10 U	11 U	10 U	11 U	10 U

Appendix C
Brunner Weekly Samples

	Up/Downstream	Up	Down
	Date Collected	30-Sep-97	30-Sep-97
	Sample ID	FB1371	FA1377
Inorganics	UG/L	114 <	269 <
Aluminum	UG/L	2 U	2 U
Antimony	UG/L	3.1 U	3.1 U
Arsenic	UG/L	45.1 <	45.3 <
Barium	UG/L	0.2 U	0.2 U
Beryllium	UG/L	105 <	143 <
Boron	UG/L	0.4 U	0.4 U
Cadmium	UG/L	46400 <	46800 <
Calcium	UG/L	0.8 U	1.5 <
Chromium	UG/L	1.3 U	1.3 U
Cobalt	UG/L	6 <	7.2 <
Copper	UG/L	137 <	248 <
Iron	UG/L	2 U	2 U
Lead	UG/L	11900 <	12000 <
Magnesium	UG/L	21.5 <	33.4 <
Manganese	UG/L	0.29 <	0.74 <
Mercury	UG/L	3.5 <	6.2 <
Molybdenum	UG/L	1.6 U	1.6 U
Nickel	UG/L	1870 <	1860 <
Potassium	UG/L	3.1 U	3.1 U
Selenium	UG/L	6840 <	7260 <
Silica	UG/L	0.7 U	0.7 <
Silver	UG/L	6970 <	6960 <
Sodium	UG/L	3.8 U	3.8 U
Thallium	UG/L	1.2 <	0.94 <
Vanadium	UG/L	10.9 <	10.6 <
Zinc	UG/L		

Appendix C
Brunner Weekly Samples

	Up/Downstream	Up	Down
Misc - Anions	Date Collected	30-Sep-97	30-Sep-97
Alkalinity	Sample ID	FB1376	FA1373
Bromide	MG/L	127 <	123 <
Chloride	MG/L	0.25 U	0.25 U
Fluoride	MG/L	8 <	8 <
Orthophosphate	MG/L	0.25 U	0.26 <
Sulfate	MG/L	0.41 <	0.38 <
Suspended Solids	MG/L	33 <	33.2 <
	MG/L	5 <	21 <
	Up/Downstream	Up	Down
Misc - Phenol	Date Collected	30-Sep-97	30-Sep-97
Phenol	Sample ID	FB1372	FA1376
	UG/L	10 U	10 U
	Up/Downstream	Up	Down
Miscellaneous	Date Collected	30-Sep-97	30-Sep-97
Ammonia	Sample ID	FB1377	FA1377
Kjeldahl Nitrogen	MG/L	0.1 U	0.1 U
Nitrate/Nitrite (as N)	MG/L	0.1 U	0.1 U
Total Phosphate as Phosphorus	MG-N/L	1.5 <	1.5 <
	MG/L	0.19 <	0.18 <
	Up/Downstream	Up	Down
Miscellaneous - BOD	Date Collected	30-Sep-97	30-Sep-97
Biochemical Oxygen Demand (BOD)	Sample ID	FB1375	FA1372
	MG/L	1 U	1 U

Appendix C
Brunner Weekly Samples

	Up/Downstream	Up	Down
	Date Collected	30-Sep-97	30-Sep-97
Pesticide/PCBs	Sample ID	FB1374	FA1375
4,4'-DDD	UG/L	0.1 U	0.1 U
4,4'-DDE	UG/L	0.1 U	0.1 U
4,4'-DDT	UG/L	0.1 U	0.1 U
Aldrin	UG/L	0.051 U	0.052 U
Dieldrin	UG/L	0.1 U	0.1 U
Endosulfan I	UG/L	0.051 U	0.052 U
Endosulfan II	UG/L	0.1 U	0.1 U
Endosulfan sulfate	UG/L	0.1 U	0.1 U
Endrin	UG/L	0.1 U	0.1 U
Endrin aldehyde	UG/L	0.1 U	0.1 U
Endrin ketone	UG/L	0.1 U	0.1 U
Heptachlor	UG/L	0.051 U	0.052 U
Heptachlor epoxide	UG/L	0.051 U	0.052 U
Lindane	UG/L	0.051 U	0.052 U
Methoxychlor	UG/L	0.51 U	0.52 U
PCB-1016	UG/L	1 U	1 U
PCB-1221	UG/L	2 U	2.1 U
PCB-1232	UG/L	1 U	1 U
PCB-1242	UG/L	1 U	1 U
PCB-1248	UG/L	1 U	1 U
PCB-1254	UG/L	1 U	1 U
PCB-1260	UG/L	1 U	1 U
Toxaphene	UG/L	5.1 U	5.2 U
alpha-BHC	UG/L	0.051 U	0.052 U
alpha-Chlordane	UG/L	0.051 U	0.052 U
beta-BHC	UG/L	0.051 U	0.052 U
delta-BHC	UG/L	0.051 U	0.052 U
gamma-Chlordane	UG/L	0.051 U	0.052 U

Appendix C
Brunner Weekly Samples

	Up/Downstream	Up	Down
	Date Collected	30-Sep-97	30-Sep-97
Radiological	Sample ID	FB1374	FA1375
Alpha activity	PCI/L	6.13	6.2
Americium-241	PCI/L	0.63 J	0.4 J
Beta activity	PCI/L	4.95	5.58
Cesium-137	PCI/L	3.91 J	1.24 U
Cobalt-60	PCI/L	1.74 U	1.96 J
Neptunium-237	PCI/L	0.13 J	0.13 U
Plutonium-238	PCI/L	0.21 U	0.44 U
Plutonium-239	PCI/L	0.06 U	0.09 U
Protactinium-233	PCI/L	-1.58 U	-1.63 U
Thorium-228	PCI/L	0.2 J	0.1 U
Thorium-230	PCI/L	0.24 J	0.15 U
Thorium-232	PCI/L	0.24 J	0 J
Uranium-234	PCI/L	2.02	2.12
Uranium-235	PCI/L	0.14 U	0.05 U
Uranium-238	PCI/L	2.94	3.76

Appendix C
Brunner Weekly Samples

	Up/Downstream	Up	Down
	Date Collected	30-Sep-97	30-Sep-97
	Sample ID	FB1372	FA1376
Semivolatle Organics	UG/L	10 U	10 U
1,2,4-Trichlorobenzene	UG/L	10 U	10 U
1,2-Dichlorobenzene	UG/L	10 U	10 U
1,3-Dichlorobenzene	UG/L	10 U	10 U
1,4-Dichlorobenzene	UG/L	10 U	10 U
2,4,5-Trichlorophenol	UG/L	50 U	50 U
2,4,6-Trichlorophenol	UG/L	10 U	10 U
2,4-Dichlorophenol	UG/L	10 U	10 U
2,4-Dimethylphenol	UG/L	10 U	10 U
2,4-Dinitrophenol	UG/L	50 U	50 U
2,4-Dinitrotoluene	UG/L	10 U	10 U
2,6-Dinitrotoluene	UG/L	10 U	10 U
2-Chloronaphthalene	UG/L	10 U	10 U
2-Chlorophenol	UG/L	10 U	10 U
2-Methyl-4,6-dinitrophenol	UG/L	50 U	50 U
2-Methylnaphthalene	UG/L	10 U	10 U
2-Methylphenol	UG/L	10 U	10 U
2-Nitrobenzenamine	UG/L	50 U	50 U
2-Nitrophenol	UG/L	10 U	10 U
3,3'-Dichlorobenzidine	UG/L	20 U	20 U
3-Nitrobenzenamine	UG/L	50 U	50 U
4-Bromophenyl phenyl ether	UG/L	10 U	10 U
4-Chloro-3-methylphenol	UG/L	10 U	10 U
4-Chlorobenzenamine	UG/L	10 U	10 U
4-Chlorophenyl phenyl ether	UG/L	10 U	10 U
4-Methylphenol	UG/L	10 U	10 U
4-Nitrobenzenamine	UG/L	50 U	50 U
4-Nitrophenol	UG/L	50 U	50 U
Acenaphthene	UG/L	10 U	10 U
Acenaphthylene	UG/L	10 U	10 U
Anthracene	UG/L	10 U	10 U
Benz(a)anthracene	UG/L	10 U	10 U
Benzenemethanol	UG/L	10 U	10 U
Benzo(a)pyrene	UG/L	10 U	10 U
Benzo(b)fluoranthene	UG/L	10 U	10 U
Benzo(ghi)perylene	UG/L	10 U	10 U
Benzo(k)fluoranthene	UG/L	10 U	10 U
Benzoic acid	UG/L	50 U	50 U
Bis(2-chloroethoxy)methane	UG/L	10 U	10 U
Bis(2-chloroethyl) ether	UG/L	10 U	10 U

Appendix C
Brunner Weekly Samples

	Up/Downstream	Up	Down
	Date Collected	30-Sep-97	30-Sep-97
	Sample ID	FB1372	FA1376
Semivolatile Organics	UG/L	10 U	10 U
Bis(2-chloroisopropyl) ether	UG/L	10 U	10 U
Bis(2-ethylhexyl)phthalate	UG/L	10 U	10 U
Butyl benzyl phthalate	UG/L	10 U	10 U
Carbazole	UG/L	10 U	10 U
Chrysene	UG/L	10 U	10 U
Di-n-butyl phthalate	UG/L	10 U	10 U
Di-n-octylphthalate	UG/L	10 U	10 U
Dibenz(a,h)anthracene	UG/L	10 U	10 U
Dibenzofuran	UG/L	10 U	10 U
Diethyl phthalate	UG/L	10 U	10 U
Dimethyl phthalate	UG/L	10 U	10 U
Fluoranthene	UG/L	10 U	10 U
Fluorene	UG/L	10 U	10 U
Hexachlorobenzene	UG/L	10 U	10 U
Hexachlorobutadiene	UG/L	10 U	10 U
Hexachlorocyclopentadiene	UG/L	10 U	10 U
Hexachloroethane	UG/L	10 U	10 U
Indeno(1,2,3-cd)pyrene	UG/L	10 U	10 U
Isophorone	UG/L	10 U	10 U
N-Nitroso-di-n-propylamine	UG/L	10 U	10 U
N-Nitrosodiphenylamine	UG/L	10 U	10 U
Naphthalene	UG/L	10 U	10 U
Nitrobenzene	UG/L	10 U	10 U
Pentachlorophenol	UG/L	50 U	50 U
Phenanthrene	UG/L	10 U	10 U
Pyrene	UG/L	10 U	10 U

APPENDIX D

PHASE II TREATMENT WATER SAMPLE DATA

Appendix D
Phase II Treatment Water Samples

	Tank	TANK		TANK		TANK	
	Date Collected	29-Apr-97		29-Apr-97		29-Apr-97	
	Influent	FV2012		FW2026		FX2031	
	Effluent	FV1017		FW1021		FX1033	
Inorganics/ POTW Permit Limits	Units	Result	Qual	Result	Qual	Result	Qual
Arsenic/ 1500 UG/L	UG/L	2.8	U	2.8	U	2.8	U
		2.8	U	2.8	U	2.8	U
Cadmium/ 110 UG/L	UG/L	0.4	U	0.4	U	0.4	U
		0.4	U	0.4	U	0.4	U
Chromium/ 1500 UG/L	UG/L	0.8	U	0.8	U	0.93	
		0.8	U	0.8	U	0.8	U
Copper / 1500 UG/L	UG/L	5.2		3.5		4.9	
		3.2		1.9		1.5	
Iron / 4000 UG/L	UG/L	210		194		211	
		218		90.6		90.4	
Lead / 690 UG/L	UG/L	7.7		6.6		6.8	
		2.1	U	2.1	U	2.1	U
Manganese/ 2000 UG/L	UG/L	3		3		3.2	
		5.7		3.3		3.9	
Mercury / 35 UG/L	UG/L	0.72		0.76		0.7	
		0.18		0.17		0.27	
Nickel / 1500 UG/L	UG/L	11.5		11.5		12.3	
		9.5		9.9		9.7	
Selenium / 1000 UG/L	UG/L	3.5	U	3.5	U	3.5	U
		3.5	U	3.5	U	3.5	U
Silver / 500 UG/L	UG/L	1.3	U	1.3	U	1.3	U
		1.3	U	1.3	U	1.3	U
Zinc / 2500 UG/L	UG/L	114		149		194	
		45.3		35.5		44.3	

Appendix D
Phase II Treatment Water Samples

	Tank	TANK		TANK		TANK	
Date Collected		29-Apr-97		29-Apr-97		29-Apr-97	
	Influent	FV2014		FW2021		FX2033	
	Effluent	FV1012		FW1023		FX1036	
Miscellaneous / POTW Permit Limits	Units	Result	Qual	Result	Qual	Result	Qual
Cyanide / 1200 UG/L	UG/L	5	U	5	U	5	U
		10	U	5	U	5	U
	Tank	TANK		TANK		TANK	
Date Collected		29-Apr-97		29-Apr-97		29-Apr-97	
	Influent	FV2018		FW2028		FX2035	
	Effluent	FV1016		FW1028		FX1032	
Miscellaneous / POTW Permit Limits	Units	Result	Qual	Result	Qual	Result	Qual
Total Suspended Solids (TSS)	MG/L	5	U	5	U	10.6	
Monthly = 200 MG/L, Daily = 300 MG/L		5	U	5	U	5	U
	Tank	TANK		TANK		TANK	
Date Collected		29-Apr-97		29-Apr-97		29-Apr-97	
	Influent	FV2011		FW2024		FX2038	
	Effluent	FV1015		FW1024		FX1038	
Miscellaneous / POTW Permit Limits	Units	Result	Qual	Result	Qual	Result	Qual
Oil & Grease /	MG/L	1	U	1.8		1	U
Monthly = 50 MG/L, Daily = 100 MG/L		1	U	1	U	1	U
	Tank	TANK		TANK		TANK	
Date Collected		29-Apr-97		29-Apr-97		29-Apr-97	
	Influent	FV2011		FW2021		FX2031	
	Effluent	FV1011		FW1021		FX1031	
Miscellaneous / POTW Permit Limits	Units	Result	Qual	Result	Qual	Result	Qual
pH - Field Measurement / >6 < 9	UG/L	7.69		7.69		7.69	
		7.86		7.85		7.86	

Appendix D
Phase II Treatment Water Samples

	Tank	TANK		TANK		TANK	
Date Collected		29-Apr-97		29-Apr-97		29-Apr-97	
	Influent	FV2015		FW2023		FX2037	
	Effluent	FV1013		FW1026		FX1035	
Miscellaneous / POTW Permit Limits	Units	Result	Qual	Result	Qual	Result	Qual
Phenol /	UG/L	5	U	5	U	5	U
Monthly = 5000 UG/L,		5	U	5	U	5	U
Daily = 10,000 UG/L							
	Tank	TANK		TANK		TANK	
Date Collected		29-Apr-97		29-Apr-97		29-Apr-97	
	Influent	FV2015		FW2023		FX2037	
	Effluent	FV1013		FW1026		FX1035	
Miscellaneous / POTW Permit Limits	Units	Result	Qual	Result	Qual	Result	Qual
Total Kjeldahl Nitrogen (TKN) /	MG/L	0.1	U	0.11		0.1	U
Monthly = 45.0 MG/L, daily = 90.0 MG/L		0.14		0.35		0.1	U
	Tank	TANK		TANK		TANK	
Date Collected		29-Apr-97		29-Apr-97		29-Apr-97	
	Influent	FV2017		FW2027		FX2036	
	Effluent	FV1018		FW1025		FX1031	
Miscellaneous / POTW Permit Limits	Units	Result	Qual	Result	Qual	Result	Qual
Biochemical Oxygen Demand (BOD) /	MG/L	1		1		1	
Monthly = 200 MG/L, Daily = 300 MG/L		1		1		1	

Appendix D
Phase II Treatment Water Samples

	Tank	TANK		TANK		TANK	
	Date Collected	29-Apr-97		29-Apr-97		29-Apr-97	
	Influent	FV2013		FW2025		FX2032	
	Effluent	FV1011		FW1022		FX1037	
Radiological (DCG pCi/L)*	Units	Result	Qual	Result	Qual	Result	Qual
Alpha activity -	pCi/L	3.48		4.37		6.65	
		1.59	J	2.98		3.44	
Americium-241 - 30	pCi/L	0.64	J	0.67	J	0.21	J
		0.67	J	0.3	J	0.4	J
Beta activity	pCi/L	7.8		7.16		6.61	
		5.31		6.26		6.75	
Cesium-137 - 3000	pCi/L	-0.08	U	0.78	U	-0.26	U
		-0.4	U	0.53	U	1.88	J
Cobalt-60 - 5000	pCi/L	-0.91	U	-0.54	U	-1.92	U
		0.86	U	0.86	U	-0.41	U
Neptunium-237 - 30	pCi/L	0.16	J	0.12	U	0.04	U
		0.11	U	0.11	U	0.04	U
Plutonium-238 - 40	pCi/L	0.48	U	0.61	U	-0.26	U
		0.03	U	0.24	U	0.28	U
Plutonium-239 - 30	pCi/L	0.04	U	0.16	J	0.22	J
		0.08	U	0.04	U	0.17	U
Protactinium-233 - 40,000	pCi/L	0.17	U	-0.5	U	0.07	U
		-2.25	U	2.2	U	-1.45	U
Thorium-228 - 400	pCi/L	0.04	U	0.04	U	0	J
		0	J	0.16	U	0.19	J
Thorium-230 - 300	pCi/L	0.3	J	0.4		0.68	
		0.29	J	0.46	J	0.42	J
Thorium-232 - 50	pCi/L	0.09	U	0.12	U	0.04	U
		0.08	U	-0.04	U	0.14	U
Uranium-234 - 500	pCi/L	1.39		1.46		1.26	
		1.43		1.93		1.43	
Uranium-235 - 600	pCi/L	0.05	U	0.12	U	0.06	U
		0	J	0.19	U	0.06	U
Uranium-238 - 600	pCi/L	0.59		1.27		0.94	
		1.47		0.96		1.29	
Effluent, Sum of Ratios **		0.037		0.028		0.038	
* Derived concentration guides as specified in DOE Order 5400.5							
** For a mixture of radionuclides, the sum of the ratios of the measured concentration of each radionuclide to its corresponding DCG must not exceed one.							
(Industrial & Commercial Users Waste Water Discharge Permit 6-96, Appendix B)							

Appendix D
Phase II Treatment Water Samples

	Tank	TANK		TANK		TANK	
Date Collected		29-Apr-97		29-Apr-97		29-Apr-97	
	Influent	FV2016		FW2022		FX2034	
	Effluent	FV1014		FW1027		FX1034	
Volatile Organics/ POTW Permit Limits	Units	Result	Qual	Result	Qual	Result	Qual
Benzene /	UG/L	5	U	5	U	5	U
Monthly = 870 UG/L, Daily = 1740 UG/L		5	U	5	U	5	U
Toluene /	UG/L	5	U	5	U	5	U
Monthly = 5350 UG/L, Daily = 10,700 UG/L		5	U	5	U	5	U

Appendix D
Phase II Treatment Water Sample Results

	Tank	TANK	
	Date Collected	29-May-97	
	Influent Sample ID	FZ2091	
	Effluent Sample ID	FZ1091	
Inorganics/ POTW Permit Limits	Units	Result	Qual
Arsenic / 1500 UG/L	UG/L	2.8	U
		2.8	U
Cadmium / 110 UG/L	UG/L	0.4	U
		0.4	U
Chromium / 1500 UG/L	UG/L	1.2	
		0.8	U
Copper / 1500 UG/L	UG/L	3	
		1.4	
Iron / 4000 UG/L	UG/L	341	
		218	
Lead / 690 UG/L	UG/L	25.1	
		3.1	
Manganese / 2000 UG/L	UG/L	5.2	
		7.6	
Mercury / 35 UG/L	UG/L	0.69	
		0.22	
Nickel / 1500 UG/L	UG/L	21.1	
		5.1	
Selenium / 1000 UG/L	UG/L	3.5	U
		3.5	U
Silver / 500 UG/L	UG/L	1.3	U
		1.3	U
Zinc / 2500 UG/L	UG/L	199	
		17.1	
*NA - Analysis not performed/required			

Appendix D
Phase II Treatment Water Sample Results

	Tank	TANK	
Date Collected		29-May-97	
Influent Sample ID		FZ2094	
Effluent Sample ID		FZ1094	
Miscellaneous / POTW Permit Limits	Units	Result	Qual
Phenol /	UG/L	5	U
Monthly = 5000 UG/L, Daily = 10,000 UG/L		5	U
	Tank	TANK	
Date Collected		29-May-97	
Influent Sample ID		FZ2094	
Effluent Sample ID		FZ1094	
Miscellaneous / POTW Permit Limits	Units	Result	Qual
Total Kjeldahl Nitrogen (TKN) /	MG/L	0.1	U
Monthly = 45.0 MG/L, Daily = 90.0 MG/L		0.23	
	Tank	TANK	
Date Collected		29-May-97	
Influent Sample ID		FZ2091	
Effluent Sample ID		FZ1091	
Miscellaneous / POTW Permit Limits	Units	Result	Qual
pH - Field Measurement / > 6 9	pH	7.63	
		7.91	
	Tank	TANK	
Date Collected		29-May-97	
Influent Sample ID		FZ2096	
Effluent Sample ID		FZ1096	
Miscellaneous/ POTW Permit Limits	Units	Result	Qual
Biochemical Oxygen Demand (BOD) /	MG/L	1	
Monthly = 200 MG/L, Daily = 300 MG/L		1	
NA - Analysis not performed/required			

Appendix D
Phase II Treatment Water Sample Results

	Tank	TANK	
Date Collected		29-May-97	
Influent Sample ID		FZ2097	
Effluent Sample ID		FZ1097	
Miscellaneous/POTW Permit Limits	Units	Result	Qual
Total Suspended Solids (TSS) /	MG/L	9	
Monthly = 200 MG/L, Daily = 300 MG/L		8	
	Tank	TANK	
Date Collected		29-May-97	
Influent Sample ID		FZ2095	
Effluent Sample ID		FZ1095	
Miscellaneous / POTW Permit Limits	Units	Result	Qual
Oil & Grease /	MG/L	2.8	
Monthly = 50 MG/L, Daily = 100 MG/L		3.3	
	Tank	TANK	
Date Collected		29-May-97	
Influent Sample ID		FZ2098	
Effluent Sample ID		FZ1098	
Miscellaneous / POTW Permit Limits	Units	Result	Qual
Cyanide / 1200 UG/L	UG/L	5	U
		10	U
NA - Analysis not performed/required			

Appendix D
Phase II Treatment Water Sample Results

	Tank	TANK	
	Date Collected	29-May-97	
	Influent Sample ID	FZ2092	
	Effluent Sample ID	FZ1092	
Radiological (DCG - pCi/L)*	Units	Result	Qual
Alpha activity	pCi/L	5.33	
		5.37	
Americium-241 - 30	pCi/L	0.41	U
		0.05	U
Beta activity	pCi/L	7.24	
		7.09	
Cesium-137 - 3000	pCi/L	0.93	U
		-3.05	U
Cobalt-60 - 5000	pCi/L	1.18	U
		1.09	U
Neptunium-237 - 30	pCi/L	0.22	U
		0.25	U
Plutonium-238 - 40	pCi/L	-1.25	U
		-1.55	U
Plutonium-239 - 30	pCi/L	0.23	J
		-0.01	U
Protactinium-233 - 40,000	pCi/L	-4.15	U
		2.75	U
Thorium-228 - 400	pCi/L	0	J
		0.12	U
Thorium-230 - 300	pCi/L	0.74	
		0.5	
Thorium-232 - 50	pCi/L	0.22	J
		0.04	U
Uranium-234 - 500	pCi/L	1.46	
		2.01	
Uranium-235 - 600	pCi/L	0.42	J
		0.26	U
Uranium-238 - 600	pCi/L	1.34	
		2.34	
Effluent, Sum of Ratios**		-0.019	
* Derived concentration guides as specified in DOE Order 5400.5			
** For a mixture of radionuclides, the sum of the ratios of the measured concentration of each radionuclide to it corresponding DCG must not exceed one.			
(Industrial & Commercial Users Waste Water Discharge Permit 6-96)			

Appendix D
Phase II Treatment Water Sample Results

	Tank	TANK	
	Date Collected	29-May-97	
	Influent Sample ID	FZ2093	
	Effluent Sample ID	FZ1093	
Volatile Organics	Units	Result	Qual
1,1,1-Trichloroethane	UG/L	NA	
		NA	
1,1,2,2-Tetrachloroethane	UG/L	NA	
		NA	
1,1,2-Trichloroethane	UG/L	NA	
		NA	
1,1-Dichloroethane	UG/L	NA	
		NA	
1,1-Dichloroethene	UG/L	NA	
		NA	
1,2-Dichloroethane	UG/L	NA	
		NA	
1,2-Dichloropropane	UG/L	NA	
		NA	
2-Butanone	UG/L	NA	
		NA	
2-Hexanone	UG/L	NA	
		NA	
4-Methyl-2-pentanone	UG/L	NA	
		NA	
Acetone	UG/L	NA	
		NA	
Benzene	UG/L		5 U
Monthly = 870 UG/L, Daily = 1740 UG/L			5 U
Bromodichloromethane	UG/L	NA	
		NA	
Bromoform	UG/L	NA	
		NA	
Bromomethane	UG/L	NA	
		NA	
Carbon disulfide	UG/L	NA	
		NA	
Carbon tetrachloride	UG/L	NA	
		NA	
NA - Analysis not performed/required			

Appendix D
Phase II Treatment Water Sample Results

	Tank	TANK	
	Date Collected	29-May-97	
	Influent Sample ID	FZ2093	
	Effluent Sample ID	FZ1093	
Volatile Organics	Units	Result	Qual
Chlorobenzene	UG/L	NA	
		NA	
Chloroethane	UG/L	NA	
		NA	
Chloroform	UG/L	NA	
		NA	
Chloromethane	UG/L	NA	
		NA	
Dibromochloromethane	UG/L	NA	
		NA	
Ethylbenzene	UG/L	NA	
		NA	
Methylene chloride	UG/L	NA	
		NA	
Styrene	UG/L	NA	
		NA	
Tetrachloroethene	UG/L	NA	
		NA	
Toluene	UG/L		5 U
Monthly = 5350 UG/L, Daily = 10,700 UG/L			5 U
Trichloroethene	UG/L	NA	
		NA	
Vinyl acetate	UG/L	NA	
		NA	
Vinyl chloride	UG/L	NA	
		NA	
cis-1,3-Dichloropropene	UG/L	NA	
		NA	
trans-1,3-Dichloropropene	UG/L	NA	
		NA	

Appendix D
Phase II Treatment Water Sample Results

	Tank	TANK	
	Date Collected	6-Jun-97	
	Influent Sample ID	FY2041	
	Effluent Sample ID	FY1041	
Inorganics/ POTW Permit Limits	Units	Result	Qual
Arsenic / 1500 UG/L	UG/L	2.8	U
		2.8	U
Cadmium / 110 UG/L	UG/L	0.4	U
		0.4	U
Chromium / 1500 UG/L	UG/L	4.3	
		1.1	
Copper / 1500 UG/L	UG/L	25.4	
		1	
Iron / 4000 UG/L	UG/L	892	
		645	
Lead / 690 UG/L	UG/L	46.7	
		2.1	U
Manganese / 2000 UG/L	UG/L	8.7	
		23.2	
Mercury / 35 UG/L	UG/L	1.1	
		0.63	
Nickel / 1500 UG/L	UG/L	30.3	
		3.1	
Selenium / 1000 UG/L	UG/L	3.5	U
		3.5	U
Silver / 500 UG/L	UG/L	1.3	U
		1.3	U
Zinc / 2500 UG/L	UG/L	922	
		80.7	
*NA - Analysis not performed/required			

Appendix D
Phase II Treatment Water Sample Results

	Tank	TANK	
Date Collected		6-Jun-97	
Influent Sample ID		NA	
Effluent Sample ID		NA	
Miscellaneous / POTW Permit Limits	Units	Result	Qual
Phenol /	UG/L	NA	
Monthly = 5000 UG/L, Daily = 10,000 UG/L		NA	
	Tank	TANK	
Date Collected		6-Jun-97	
Influent Sample ID		NA	
Effluent Sample ID		NA	
Miscellaneous / POTW Permit Limits	Units	Result	Qual
Total Kjeldahl Nitrogen (TKN) /	MG/L	NA	
Monthly = 45.0 MG/L, Daily = 90.0 MG/L		NA	
	Tank	TANK	
Date Collected		6-Jun-97	
Influent Sample ID		FY2041	
Effluent Sample ID		FY1041	
Miscellaneous / POTW Permit Limits	Units	Result	Qual
pH - Field Measurement / > 6 9	pH	7.76	
		8.05	
	Tank	TANK	
Date Collected		6-Jun-97	
Influent Sample ID		NA	
Effluent Sample ID		NA	
Miscellaneous/ POTW Permit Limits	Units	Result	Qual
Biochemical Oxygen Demand (BOD) /	MG/L	NA	
Monthly = 200 MG/L, Daily = 300 MG/L		NA	
NA - Analysis not performed/required			

Appendix D
Phase II Treatment Water Sample Results

	Tank	TANK	
	Date Collected	17-Jun-97	
	Influent Sample ID	FY2051	
	Effluent Sample ID	FY1051	
Inorganics/ POTW Permit Limits	Units	Result	Qual
Arsenic / 1500 UG/L	UG/L	NA	
		NA	
Cadmium / 110 UG/L	UG/L	NA	
		NA	
Chromium / 1500 UG/L	UG/L	NA	
		NA	
Copper / 1500 UG/L	UG/L	NA	
		NA	
Iron / 4000 UG/L	UG/L	NA	
		NA	
Lead / 690 UG/L	UG/L	NA	
		NA	
Manganese / 2000 UG/L	UG/L	NA	
		NA	
Mercury / 35 UG/L	UG/L	0.47	J
		0.69	J
Nickel / 1500 UG/L	UG/L	NA	
		NA	
Selenium / 1000 UG/L	UG/L	NA	
		NA	
Silver / 500 UG/L	UG/L	NA	
		NA	
Zinc / 2500 UG/L	UG/L	NA	
		NA	
*NA - Analysis not performed/required			

Appendix D
Phase II Treatment Water Sample Results

	Tank	TANK	
Date Collected		17-Jun-97	
Influent Sample ID		NA	
Effluent Sample ID		NA	
Miscellaneous / POTW Permit Limits	Units	Result	Qual
Phenol /	UG/L	NA	
Monthly = 5000 UG/L, Daily = 10,000 UG/L		NA	
	Tank	TANK	
Date Collected		17-Jun-97	
Influent Sample ID		NA	
Effluent Sample ID		NA	
Miscellaneous / POTW Permit Limits	Units	Result	Qual
Total Kjeldahl Nitrogen (TKN) /	MG/L	NA	
Monthly = 45.0 MG/L, Daily = 90.0 MG/L		NA	
	Tank	TANK	
Date Collected		17-Jun-97	
Influent Sample ID		FY2051	
Effluent Sample ID		FY1051	
Miscellaneous / POTW Permit Limits	Units	Result	Qual
pH - Field Measurement / > 6 9	pH	7.86	
		8.04	
	Tank	TANK	
Date Collected		17-Jun-97	
Influent Sample ID		NA	
Effluent Sample ID		NA	
Miscellaneous/ POTW Permit Limits	Units	Result	Qual
Biochemical Oxygen Demand (BOD) /	MG/L	NA	
Monthly = 200 MG/L, Daily = 300 MG/L		NA	
NA - Analysis not performed/required			

Appendix D
Phase II Treatment Water Sample Results

	Tank	TANK	
	Date Collected	7-Jul-97	
	Influent Sample ID	FZ2082	
	Effluent Sample ID	FZ1080	
Inorganics/ POTW Permit Limits	Units	Result	Qual
Arsenic / 1500 UG/L	UG/L	2.8	U
		2.8	U
Cadmium / 110 UG/L	UG/L	0.42	
		0.4	U
Chromium / 1500 UG/L	UG/L	2.5	
		1.8	
Copper / 1500 UG/L	UG/L	4.5	
		2.9	
Iron / 4000 UG/L	UG/L	658	
		622	
Lead / 690 UG/L	UG/L	4.2	
		2.1	U
Manganese / 2000 UG/L	UG/L	8.8	
		13.9	
Mercury / 35 UG/L	UG/L	3.8	
		2.2	
Nickel / 1500 UG/L	UG/L	1.8	U
		1.8	U
Selenium / 1000 UG/L	UG/L	3.5	U
		3.5	U
Silver / 500 UG/L	UG/L	1.3	U
		1.3	U
Zinc / 2500 UG/L	UG/L	19	
		20.6	
*NA - Analysis not performed/required			

Appendix D
Phase II Treatment Water Sample Results

	Tank	TANK	
Date Collected		7-Jul-97	
Influent Sample ID		FZ2085	
Effluent Sample ID		FZ1088	
Miscellaneous / POTW Permit Limits	Units	Result	Qual
Phenol /	UG/L	5	U
Monthly = 5000 UG/L, Daily = 10,000 UG/L		11	U
	Tank	TANK	
Date Collected		7-Jul-97	
Influent Sample ID		FZ2085	
Effluent Sample ID		FZ1085	
Miscellaneous / POTW Permit Limits	Units	Result	Qual
Total Kjeldahl Nitrogen (TKN) /	MG/L	0.1	U
Monthly = 45.0 MG/L, Daily = 90.0 MG/L		0.1	U
	Tank	TANK	
Date Collected		7-Jul-97	
Influent Sample ID		NA	
Effluent Sample ID		NA	
Miscellaneous / POTW Permit Limits	Units	Result	Qual
pH - Field Measurement / > 6 9	pH	NA	NA
		NA	NA
	Tank	TANK	
Date Collected		7-Jul-97	
Influent Sample ID		FZ2080	
Effluent Sample ID		FZ1083	
Miscellaneous/ POTW Permit Limits	Units	Result	Qual
Biochemical Oxygen Demand (BOD) /	MG/L	1	
Monthly = 200 MG/L, Daily = 300 MG/L		1	
NA - Analysis not performed/required			

Appendix D
Phase II Treatment Water Sample Results

	Tank	TANK	
Date Collected		7-Jul-97	
Influent Sample ID		FZ2080	
Effluent Sample ID		FZ1083	
Miscellaneous/POTW Permit Limits	Units	Result	Qual
Total Suspended Solids (TSS) /	MG/L	8	
Monthly = 200 MG/L, Daily = 300 MG/L		260	
	Tank	TANK	
Date Collected		7-Jul-97	
Influent Sample ID		FZ2084	
Effluent Sample ID		FZ1084	
Miscellaneous / POTW Permit Limits	Units	Result	Qual
Oil & Grease /	MG/L	1	U
Monthly = 50 MG/L, Daily = 100 MG/L		1	U
	Tank	TANK	
Date Collected		7-Jul-97	
Influent Sample ID		FZ2087	
Effluent Sample ID		FZ1089	
Miscellaneous / POTW Permit Limits	Units	Result	Qual
Cyanide / 1200 UG/L	UG/L	10	U
		5	U
NA - Analysis not performed/required			

Appendix D
Phase II Treatment Water Sample Results

	Tank	TANK	
	Date Collected	7-Jul-97	
	Influent Sample ID	FZ2086	
	Effluent Sample ID	FZ1081	
Radiological (DCG - pCi/L)*	Units	Result	Qual
Alpha activity	pCi/L	15.37	
		9.47	
Americium-241 - 30	pCi/L	0.8	J
		0.97	
Beta activity	pCi/L	9.82	
		7.14	
Cesium-137 - 3000	pCi/L	0.9	U
		-0.35	U
Cobalt-60 - 5000	pCi/L	-0.96	U
		-0.34	U
Neptunium-237 - 30	pCi/L	0.78	J
		0.25	U
Plutonium-238 - 40	pCi/L	1.19	U
		0.08	U
Plutonium-239 - 30	pCi/L	0.26	U
		0.44	J
Protactinium-233 - 40,000	pCi/L	-3.43	U
		1.47	U
Thorium-228 - 400	pCi/L	-0.05	U
		0.18	U
Thorium-230 - 300	pCi/L	0.42	J
		0.87	
Thorium-232 - 50	pCi/L	0.24	J
		0	J
Uranium-234 - 500	pCi/L	5.96	
		6.17	
Uranium-235 - 600	pCi/L	0.44	J
		0.19	U
Uranium-238 - 600	pCi/L	6.08	
		6.64	
Effluent, Sum of Ratios**		0.049	
* Derived concentration guides as specified in DOE Order 5400.5			
** For a mixture of radionuclides, the sum of the ratios of the measured concentration of each radionuclide to it corresponding DCG must not exceed one. (Industrial & Commercial Users Waste Water Discharge Permit 6-96)			

Appendix D
Phase II Treatment Water Sample Results

	Tank	TANK
Date Collected	7-Jul-97	
Influent Sample ID	FZ208A	
Effluent Sample ID	FZ108A	
Pesticide/PCBs	Units	Result Qual
4,4'-DDD	UG/L	0.11 U
		0.11 U
4,4'-DDE	UG/L	0.11 U
		0.11 U
4,4'-DDT	UG/L	0.11 U
		0.11 U
Aldrin	UG/L	0.054 U
		0.054 U
Dieldrin	UG/L	0.11 U
		0.11 U
Endosulfan I	UG/L	0.054 U
		0.054 U
Endosulfan II	UG/L	0.11 U
		0.11 U
Endosulfan sulfate	UG/L	0.11 U
		0.11 U
Endrin	UG/L	0.11 U
		0.11 U
Endrin aldehyde	UG/L	0.11 U
		0.11 U
Endrin ketone	UG/L	0.11 U
		0.11 U
Heptachlor	UG/L	0.054 U
		0.054 U
Heptachlor epoxide	UG/L	0.054 U
		0.054 U
Lindane	UG/L	0.054 U
		0.054 U
Methoxychlor	UG/L	0.54 U
		0.54 U
PCB-1016	UG/L	1.1 U
		1.1 U
PCB-1221	UG/L	2.2 U

Appendix D
Phase II Treatment Water Sample Results

	Tank	TANK	
	Date Collected	7-Jul-97	
	Influent Sample ID	FZ208A	
	Effluent Sample ID	FZ108A	
Pesticide/PCBs	Units	Result	Qual
PCB-1232	UG/L	1.1	U
		1.1	U
PCB-1242	UG/L	1.1	U
		1.1	U
PCB-1248	UG/L	1.1	U
		1.1	U
PCB-1254	UG/L	1.1	U
		1.1	U
PCB-1260	UG/L	1.1	U
		1.1	U
Toxaphene	UG/L	5.4	U
		5.4	U
alpha-BHC	UG/L	0.054	U
		0.054	U
alpha-Chlordane	UG/L	0.054	U
		0.054	U
beta-BHC	UG/L	0.054	U
		0.054	U
delta-BHC	UG/L	0.054	U
		0.054	U
gamma-Chlordane	UG/L	0.054	U
		0.054	U

Appendix D
Phase II Treatment Water Sample Results

	Tank	TANK	
Date Collected		7-Jul-97	
Influent Sample ID		FZ2089	
Effluent Sample ID		FZ1088	
Semivolatile Organics	Units	Result	Qual
1,2,4-Trichlorobenzene	UG/L	11	U
		11	U
1,2-Dichlorobenzene	UG/L	11	U
		11	U
1,3-Dichlorobenzene	UG/L	11	U
		11	U
1,4-Dichlorobenzene	UG/L	11	U
		11	U
2,4,5-Trichlorophenol	UG/L	55	U
		55	U
2,4,6-Trichlorophenol	UG/L	11	U
		11	U
2,4-Dichlorophenol	UG/L	11	U
		11	U
2,4-Dimethylphenol	UG/L	11	U
		11	U
2,4-Dinitrophenol	UG/L	55	U
		55	U
2,4-Dinitrotoluene	UG/L	11	U
		11	U
2,6-Dinitrotoluene	UG/L	11	U
		11	U
2-Chloronaphthalene	UG/L	11	U
		11	U
2-Chlorophenol	UG/L	11	U
		11	U
2-Methyl-4,6-dinitrophenol	UG/L	55	U
		55	U
2-Methylnaphthalene	UG/L	11	U
		11	U
2-Methylphenol	UG/L	11	U
		11	U
2-Nitrobenzenamine	UG/L	55	U
		55	U

Appendix D
Phase II Treatment Water Sample Results

	Tank	TANK	
Date Collected		7-Jul-97	
Sample ID		FZ2089	
Effluent Sample ID		FZ1088	
Semivolatile Organics	Units	Result	Qual
2-Nitrophenol	UG/L	11	U
		11	U
3,3'-Dichlorobenzidine	UG/L	22	U
		22	U
3-Nitrobenzenamine	UG/L	55	U
		55	U
4-Bromophenyl phenyl ether	UG/L	11	U
		11	U
4-Chloro-3-methylphenol	UG/L	11	U
		11	U
4-Chlorobenzenamine	UG/L	11	U
		11	U
4-Chlorophenyl phenyl ether	UG/L	11	U
		11	U
4-Methylphenol	UG/L	11	U
		11	U
4-Nitrobenzenamine	UG/L	55	U
		55	U
4-Nitrophenol	UG/L	55	U
		2	J
Acenaphthene	UG/L	11	U
		11	U
Acenaphthylene	UG/L	11	U
		11	U
Anthracene	UG/L	11	U
		11	U
Benz(a)anthracene	UG/L	11	U
		11	U
Benzenemethanol	UG/L	11	U
		11	U
Benzo(a)pyrene	UG/L	11	U
		11	U

Appendix D
Phase II Treatment Water Sample Results

	Tank	TANK	
Date Collected		7-Jul-97	
Influent Sample ID		FZ2089	
Effluent Sample ID		FZ1088	
Semivolatile Organics	Units	Result	Qual
		11	U
Benzo(g,h,i)perylene	UG/L	11	U
		11	U
Benzo(k)fluoranthene	UG/L	11	U
		11	U
Benzoic acid	UG/L	55	U
		55	U
Bis(2-chloroethoxy)methane	UG/L	11	U
		11	U
Bis(2-chloroethyl) ether	UG/L	11	U
		11	U
Bis(2-chloroisopropyl) ether	UG/L	11	U
		11	U
Bis(2-ethylhexyl)phthalate	UG/L	3	B, J
		2	B, J
Butyl benzyl phthalate	UG/L	11	U
		11	U
Carbazole	UG/L	11	U
		11	U
Chrysene	UG/L	11	U
		11	U
Di-n-butyl phthalate	UG/L	11	U
		11	U
Di-n-octylphthalate	UG/L	11	U
		11	U
Dibenz(a,h)anthracene	UG/L	11	U
		11	U
Dibenzofuran	UG/L	11	U
		11	U
Diethyl phthalate	UG/L	11	U
		11	U
Dimethyl phthalate	UG/L	11	U
		11	U
Fluoranthene	UG/L	11	U
		11	U

Appendix D
Phase II Treatment Water Sample Results

	Tank	TANK	
Date Collected		7-Jul-97	
Influent Sample ID		FZ2089	
Effluent Sample ID		FZ1088	
Semivolatile Organics	Units	Result	Qual
Fluorene	UG/L	11	U
		11	U
Hexachlorobenzene	UG/L	11	U
		11	U
Hexachlorobutadiene	UG/L	11	U
		11	U
Hexachlorocyclopentadiene	UG/L	11	U
		11	U
Hexachloroethane	UG/L	11	U
		11	U
Indeno(1,2,3-cd)pyrene	UG/L	11	U
		11	U
Isophorone	UG/L	11	U
		11	U
N-Nitroso-di-n-propylamine	UG/L	11	U
		11	U
N-Nitrosodiphenylamine	UG/L	11	U
		11	U
Naphthalene	UG/L	11	U
		11	U
Nitrobenzene	UG/L	11	U
		11	U
Pentachlorophenol	UG/L	55	U
		1	J
Phenanthrene	UG/L	11	U
		11	U
Pyrene	UG/L	11	U
		11	U
Phenol	UG/L	11	U
		11	U

Appendix D
Phase II Treatment Water Sample Results

	Tank	TANK	
Date Collected		7-Jul-97	
Influent Sample ID		FZ2088	
Effluent Sample ID		FZ1087	
Volatile Organics	Units	Result	Qual
1,1,1-Trichloroethane	UG/L	5	U
		5	U
1,1,2,2-Tetrachloroethane	UG/L	5	U
		5	U
1,1,2-Trichloroethane	UG/L	5	U
		5	U
1,1-Dichloroethane	UG/L	5	U
		5	U
1,1-Dichloroethene	UG/L	5	U
		5	U
1,2-Dichloroethane	UG/L	5	U
		5	U
1,2-Dichloropropane	UG/L	5	U
		5	U
2-Butanone	UG/L	10	U
		10	U
2-Hexanone	UG/L	10	U
		10	U
4-Methyl-2-pentanone	UG/L	10	U
		10	U
Acetone	UG/L	10	U
		10	U
Benzene	UG/L	5	U
Monthly = 870 UG/L, Daily = 1740 UG/L		5	U
Bromodichloromethane	UG/L	5	U
		5	U
Bromoform	UG/L	5	U
		5	U
Bromomethane	UG/L	10	U
		10	U
Carbon disulfide	UG/L	5	U
		5	U
Carbon tetrachloride	UG/L	5	U
		5	U
NA - Analysis not performed/required			

Appendix D
Phase II Treatment Water Sample Results

	Tank	TANK
Date Collected	7-Jul-97	
Influent Sample ID	FZ2088	
Effluent Sample ID	FZ1087	
Volatile Organics	Units	Result Qual
Chlorobenzene	UG/L	5 U
		5 U
Chloroethane	UG/L	10 U
		10 U
Chloroform	UG/L	5 U
		5 U
Chloromethane	UG/L	10 U
		10 U
Dibromochloromethane	UG/L	5 U
		5 U
Ethylbenzene	UG/L	5 U
		5 U
Methylene chloride	UG/L	4 B, J
		4 B, J
Styrene	UG/L	5 U
		5 U
Tetrachloroethene	UG/L	5 U
		5 U
Toluene	UG/L	5 U
Monthly = 5350 UG/L, Daily = 10,700 UG/L		5 U
Trichloroethene	UG/L	5 U
		5 U
Vinyl acetate	UG/L	10 U
		10 U
Vinyl chloride	UG/L	10 U
		10 U
cis-1,3-Dichloropropene	UG/L	5 U
		5 U
trans-1,3-Dichloropropene	UG/L	5 U
		5 U

Appendix D
Phase II Treatment Water Sample Results

	Tank	TANK	
	Date Collected	7-Jul-97	
	Influent Sample ID	FZ2083	
	Effluent Sample ID	FZ1082	
Volatile Organics	Units	Result	Qual
1,1,1-Trichloroethane	UG/L	NA	
		NA	
1,1,2,2-Tetrachloroethane	UG/L	NA	
		NA	
1,1,2-Trichloroethane	UG/L	NA	
		NA	
1,1-Dichloroethane	UG/L	NA	
		NA	
1,1-Dichloroethene	UG/L	NA	
		NA	
1,2-Dichloroethane	UG/L	NA	
		NA	
1,2-Dichloropropane	UG/L	NA	
		NA	
2-Butanone	UG/L	NA	
		NA	
2-Hexanone	UG/L	NA	
		NA	
4-Methyl-2-pentanone	UG/L	NA	
		NA	
Acetone	UG/L	NA	
		NA	
Benzene	UG/L		5 U
Monthly = 870 UG/L, Daily = 1740 UG/L			5 U
Bromodichloromethane	UG/L	NA	
		NA	
Bromoform	UG/L	NA	
		NA	
Bromomethane	UG/L	NA	
		NA	
Carbon disulfide	UG/L	NA	
		NA	
Carbon tetrachloride	UG/L	NA	
		NA	
NA - Analysis not performed/required			

Appendix D
Phase II Treatment Water Sample Results

	Tank	TANK	
	Date Collected	7-Jul-97	
	Influent Sample ID	FZ2083	
	Effluent Sample ID	FZ1082	
Volatile Organics	Units	Result	Qual
Chlorobenzene	UG/L	NA	
		NA	
Chloroethane	UG/L	NA	
		NA	
Chloroform	UG/L	NA	
		NA	
Chloromethane	UG/L	NA	
		NA	
Dibromochloromethane	UG/L	NA	
		NA	
Ethylbenzene	UG/L	NA	
		NA	
Methylene chloride	UG/L	NA	
		NA	
Styrene	UG/L	NA	
		NA	
Tetrachloroethene	UG/L	NA	
		NA	
Toluene	UG/L		5 U
Monthly = 5350 UG/L, Daily = 10,700 UG/L			5 U
Trichloroethene	UG/L	NA	
		NA	
Vinyl acetate	UG/L	NA	
		NA	
Vinyl chloride	UG/L	NA	
		NA	
cis-1,3-Dichloropropene	UG/L	NA	
		NA	
trans-1,3-Dichloropropene	UG/L	NA	
		NA	

Appendix D
Phase II Treatment Water Sample Results

	Tank	TANK	
	Date Collected	11-Jul-97	
	Influent Sample ID	FY2061	
	Effluent Sample ID	FY1061	
Inorganics/ POTW Permit Limits	Units	Result	Qual
Arsenic / 1500 UG/L	UG/L	NA*	
		NA	
Cadmium / 110 UG/L	UG/L	NA	
		NA	
Chromium / 1500 UG/L	UG/L	NA	
		NA	
Copper / 1500 UG/L	UG/L	NA	
		NA	
Iron / 4000 UG/L	UG/L	NA	
		NA	
Lead / 690 UG/L	UG/L	NA	
		NA	
Manganese / 2000 UG/L	UG/L	NA	
		NA	
Mercury / 35 UG/L	UG/L	1.3	
		1.6	
Nickel / 1500 UG/L	UG/L	NA	
		NA	
Selenium / 1000 UG/L	UG/L	NA	
		NA	
Silver / 500 UG/L	UG/L	NA	
		NA	
Zinc / 2500 UG/L	UG/L	NA	
		NA	
*NA - Analysis not performed/required			

Appendix D
Phase II Treatment Water Sample Results

	Tank	TANK	
	Date Collected	23-Jul-97	
	Influent Sample ID	FY2071	
	Effluent Sample ID	FY1071	
Inorganics/ POTW Permit Limits	Units	Result	Qual
Arsenic / 1500 UG/L	UG/L	NA	
		NA	
Cadmium / 110 UG/L	UG/L	NA	
		NA	
Chromium / 1500 UG/L	UG/L	NA	
		NA	
Copper / 1500 UG/L	UG/L	NA	
		NA	
Iron / 4000 UG/L	UG/L	NA	
		NA	
Lead / 690 UG/L	UG/L	NA	
		NA	
Manganese / 2000 UG/L	UG/L	NA	
		NA	
Mercury / 35 UG/L	UG/L	16.3	
		15.7	
Nickel / 1500 UG/L	UG/L	NA	
		NA	
Selenium / 1000 UG/L	UG/L	NA	
		NA	
Silver / 500 UG/L	UG/L	NA	
		NA	
Zinc / 2500 UG/L	UG/L	NA	
		NA	
*NA - Analysis not performed/required			

Appendix D
Phase II Treatment Water Sample Results

	Tank	TANK	
Date Collected		23-Jul-97	
Influent Sample ID		NA	
Effluent Sample ID		NA	
Miscellaneous / POTW Permit Limits	Units	Result	Qual
Phenol /	UG/L	NA	
Monthly = 5000 UG/L, Daily = 10,000 UG/L		NA	
	Tank	TANK	
Date Collected		23-Jul-97	
Influent Sample ID		NA	
Effluent Sample ID		NA	
Miscellaneous / POTW Permit Limits	Units	Result	Qual
Total Kjeldahl Nitrogen (TKN) /	MG/L	NA	
Monthly = 45.0 MG/L, Daily = 90.0 MG/L		NA	
	Tank	TANK	
Date Collected		23-Jul-97	
Influent Sample ID		FY2071	
Effluent Sample ID		FY1071	
Miscellaneous / POTW Permit Limits	Units	Result	Qual
pH - Field Measurement / > 6 9	pH	8.39	
		8.27	
	Tank	TANK	
Date Collected		23-Jul-97	
Influent Sample ID		NA	
Effluent Sample ID		NA	
Miscellaneous/ POTW Permit Limits	Units	Result	Qual
Biochemical Oxygen Demand (BOD) /	MG/L	NA	
Monthly = 200 MG/L, Daily = 300 MG/L		NA	
NA - Analysis not performed/required			

Appendix D
Phase II Treatment Water Sample Results

	Tank	TANK	
	Date Collected	24-Jul-97	
	Influent Sample ID	FZ2101	
	Effluent Sample ID	FZ1101	
Inorganics/ POTW Permlt Limits	Units	Result	Qual
Arsenic / 1500 UG/L	UG/L	NA	
		NA	
Cadmium / 110 UG/L	UG/L	NA	
		NA	
Chromium / 1500 UG/L	UG/L	NA	
		NA	
Copper / 1500 UG/L	UG/L	NA	
		NA	
Iron / 4000 UG/L	UG/L	NA	
		NA	
Lead / 690 UG/L	UG/L	NA	
		NA	
Manganese / 2000 UG/L	UG/L	NA	
		NA	
Mercury / 35 UG/L	UG/L	12.4	
		12.3	
Nickel / 1500 UG/L	UG/L	NA	
		NA	
Selenium / 1000 UG/L	UG/L	NA	
		NA	
Silver / 500 UG/L	UG/L	NA	
		NA	
Zinc / 2500 UG/L	UG/L	NA	
		NA	
*NA - Analysis not performed/required			

Appendix D
Phase II Treatment Water Sample Results

	Tank	TANK	
Date Collected		24-Jul-97	
Influent Sample ID		NA	
Effluent Sample ID		NA	
Miscellaneous / POTW Permit Limits	Units	Result	Qual
Phenol /	UG/L	NA	
Monthly = 5000 UG/L, Daily = 10,000 UG/L		NA	
	Tank	TANK	
Date Collected		24-Jul-97	
Influent Sample ID		NA	
Effluent Sample ID		NA	
Miscellaneous / POTW Permit Limits	Units	Result	Qual
Total Kjeldahl Nitrogen (TKN) /	MG/L	NA	
Monthly = 45.0 MG/L, Daily = 90.0 MG/L		NA	
	Tank	TANK	
Date Collected		24-Jul-97	
Influent Sample ID		FZ2101	
Effluent Sample ID		FZ1101	
Miscellaneous / POTW Permit Limits	Units	Result	Qual
pH - Field Measurement / > 6 9	pH	8.08	
		8.09	
	Tank	TANK	
Date Collected		24-Jul-97	
Influent Sample ID		NA	
Effluent Sample ID		NA	
Miscellaneous/ POTW Permit Limits	Units	Result	Qual
Biochemical Oxygen Demand (BOD) /	MG/L	NA	
Monthly = 200 MG/L, Daily = 300 MG/L		NA	
NA - Analysis not performed/required			

Appendix D
Phase II Treatment Water Sample Results

	Tank	TANK	
Date Collected		28-Jul-97	
Influent Sample ID			
Effluent Sample ID		FY1081	
Miscellaneous/POTW Permit Limits	Units	Result	Qual
Total Suspended Solids (TSS) /	MG/L	NA*	
Monthly = 200 MG/L, Daily = 300 MG/L		15	
	Tank	TANK	
Date Collected		28-Jul-97	
Influent Sample ID		NA	
Effluent Sample ID		NA	
Miscellaneous / POTW Permit Limits	Units	Result	Qual
Oil & Grease /	MG/L	NA	
Monthly = 50 MG/L, Daily = 100 MG/L		NA	
	Tank	TANK	
Date Collected		28-Jul-97	
Influent Sample ID		NA	
Effluent Sample ID		NA	
Miscellaneous / POTW Permit Limits	Units	Result	Qual
Cyanide / 1200 UG/L	UG/L	NA	
		NA	
NA - Analysis not performed/required			

Appendix D
Phase II Treatment Water Sample Results

	Tank	TANK	
	Date Collected	21-Aug-97	
	Influent Sample ID	FZ1125	
	Effluent Sample ID	FZ2127	
Inorganics/ POTW Permit Limits	Units	Result	Qual
Arsenic / 1500 UG/L	UG/L	3.9	
		3.1	U
Cadmium / 110 UG/L	UG/L	0.4	U
		0.4	U
Chromium / 1500 UG/L	UG/L	3.3	
		2.8	
Copper / 1500 UG/L	UG/L	14	
		7.4	
Iron / 4000 UG/L	UG/L	2290	
		1270	
Lead / 690 UG/L	UG/L	26.9	
		2	U
Manganese / 2000 UG/L	UG/L	37.7	
		29.6	
Mercury / 35 UG/L	UG/L	7.3	
		3.1	
Nickel / 1500 UG/L	UG/L	27	
		5.3	
Selenium / 1000 UG/L	UG/L	3.1	U
		3.1	U
Silver / 500 UG/L	UG/L	1.1	
		0.88	
Zinc / 2500 UG/L	UG/L	140	
		19.4	
*NA - Analysis not performed/required			

Appendix D
Phase II Treatment Water Sample Results

	Tank	TANK	
Date Collected		21-Aug-97	
Influent Sample ID		FZ1128	
Effluent Sample ID		FZ2128	
Radiological (DCG - pCi/L)*	Units	Result	Qual
Alpha activity	pCi/L	10.95	
		11.14	
Americium-241 - 30	pCi/L	-0.13	U
		0.32	U
Beta activity	pCi/L	6.43	
		6.54	
Cesium-137 - 3000	pCi/L	1.04	U
		1.05	U
Cobalt-60 - 5000	pCi/L	0.26	U
		0.01	U
Neptunium-237 - 30	pCi/L	0.18	J
		0.04	U
Plutonium-238 - 40	pCi/L	-0.14	U
		0.5	U
Plutonium-239 - 30	pCi/L	0.14	U
		0.07	U
Protactinium-233 - 40,000	pCi/L	0.36	U
		2.07	U
Thorium-228 - 400	pCi/L	0.09	U
		0.3	J
Thorium-230 - 300	pCi/L	0.49	J
		0.48	J
Thorium-232 - 50	pCi/L	0.04	U
		0.18	U
Uranium-234 - 500	pCi/L	5.61	
		4.74	
Uranium-235 - 600	pCi/L	0.5	J
		0.19	U
Uranium-238 - 600	pCi/L	5.64	
		3.52	
<i>Effluent, Sum of Ratios**</i>		0.049	
* Derived concentration guides as specified in DOE Order 5400.5			
** For a mixture of radionuclides, the sum of the ratios of the measured concentration of each radionuclide to its corresponding DCG must not exceed one. (Industrial & Commercial Users Waste Water Discharge Permit 6-96)			

Appendix D
Phase II Treatment Water Sample Results

	Tank	TANK	
Date Collected		21-Aug-97	
Influent Sample ID		FZ1126	
Effluent Sample ID		FZ2122	
Volatile Organics	Units	Result	Qual
1,1,1-Trichloroethane	UG/L	NA	
		NA	
1,1,2,2-Tetrachloroethane	UG/L	NA	
		NA	
1,1,2-Trichloroethane	UG/L	NA	
		NA	
1,1-Dichloroethane	UG/L	NA	
		NA	
1,1-Dichloroethene	UG/L	NA	
		NA	
1,2-Dichloroethane	UG/L	NA	
		NA	
1,2-Dichloropropane	UG/L	NA	
		NA	
2-Butanone	UG/L	NA	
		NA	
2-Hexanone	UG/L	NA	
		NA	
4-Methyl-2-pentanone	UG/L	NA	
		NA	
Acetone	UG/L	NA	
		NA	
Benzene	UG/L		5 U
Monthly = 870 UG/L, Daily = 1740 UG/L			5 U
Bromodichloromethane	UG/L	NA	
		NA	
Bromoform	UG/L	NA	
		NA	
Bromomethane	UG/L	NA	
		NA	
Carbon disulfide	UG/L	NA	
		NA	
Carbon tetrachloride	UG/L	NA	
		NA	
NA - Analysis not performed/required			

Appendix D
Phase II Treatment Water Sample Results

	Tank	TANK	
Date Collected		21-Aug-97	
Influent Sample ID		FZ1121	
Effluent Sample ID		FZ2123	
Miscellaneous/POTW Permit Limits	Units	Result	Qual
Total Suspended Solids (TSS) /	MG/L	59	
Monthly = 200 MG/L, Daily = 300 MG/L		23	
	Tank	TANK	
Date Collected		21-Aug-97	
Influent Sample ID		FZ1120	
Effluent Sample ID		FZ2124	
Miscellaneous / POTW Permit Limits	Units	Result	Qual
Oil & Grease /	MG/L	15.2	
Monthly = 50 MG/L, Daily = 100 MG/L		73	
	Tank	TANK	
Date Collected		21-Aug-97	
Influent Sample ID		FZ1129	
Effluent Sample ID		FZ2125	
Miscellaneous / POTW Permit Limits	Units	Result	Qual
Cyanide / 1200 UG/L	UG/L	5	U
		10	U
NA - Analysis not performed/required			

Appendix D
Phase II Treatment Water Sample Results

	Tank	TANK	
	Date Collected	29-Aug-97	
	Influent Sample ID		
	Effluent Sample ID	NA	
Miscellaneous/POTW Permit Limits	Units	Result	Qual
Total Suspended Solids (TSS) /	MG/L	NA	
Monthly = 200 MG/L, Daily = 300 MG/L		NA	
	Tank	TANK	
	Date Collected	29-Aug-97	
	Influent Sample ID		
	Effluent Sample ID	FY1091	
Miscellaneous / POTW Permit Limits	Units	Result	Qual
Oil & Grease /	MG/L	NA	
Monthly = 50 MG/L, Daily = 100 MG/L		1	U
	Tank	TANK	
	Date Collected	29-Aug-97	
	Influent Sample ID		
	Effluent Sample ID	NA	
Miscellaneous / POTW Permit Limits	Units	Result	Qual
Cyanide / 1200 UG/L	UG/L	NA	
		NA	
NA - Analysis not performed/required			

Appendix D
Phase II Treatment Water Sample Results

	Tank	TANK		
	Date Collected	26-Sep-97		
	Influent Sample ID	FY2101		
	Effluent Sample ID	FY1101		
Inorganics/ POTW Permit Limits	Units	Result	Qual	
Arsenic / 1500 UG/L	UG/L	NA		
		NA		
Cadmium / 110 UG/L	UG/L	NA		
		NA		
Chromium / 1500 UG/L	UG/L	NA		
		NA		
Copper / 1500 UG/L	UG/L	NA		
		NA		
Iron / 4000 UG/L	UG/L	NA		
		NA		
Lead / 690 UG/L	UG/L	NA		
		NA		
Manganese / 2000 UG/L	UG/L	NA		
		NA		
Mercury / 35 UG/L	UG/L	1.6		
		3.5		
Nickel / 1500 UG/L	UG/L	NA		
		NA		
Selenium / 1000 UG/L	UG/L	NA		
		NA		
Silver / 500 UG/L	UG/L	NA		
		NA		
Zinc / 2500 UG/L	UG/L	NA		
		NA		
*NA - Analysis not performed/required				

Appendix D
Phase II Treatment Water Sample Results

	Tank	TANK	
Date Collected		6-Oct-97	
Influent Sample ID		FZ2133	
Effluent Sample ID		FZ1134	
Miscellaneous / POTW Permit Limits	Units	Result	Qual
Phenol /	UG/L	5	U
Monthly = 5000 UG/L, Daily = 10,000 UG/L		5	U
	Tank	TANK	
Date Collected		6-Oct-97	
Influent Sample ID		FZ2133	
Effluent Sample ID		FZ1134	
Miscellaneous / POTW Permit Limits	Units	Result	Qual
Total Kjeldahl Nitrogen (TKN) /	MG/L	0.21	
Monthly = 45.0 MG/L, Daily = 90.0 MG/L		0.19	
	Tank	TANK	
Date Collected		6-Oct-97	
Influent Sample ID		FZ2131	
Effluent Sample ID		FZ1137	
Miscellaneous / POTW Permit Limits	Units	Result	Qual
pH - Field Measurement / > 6 9	pH	7.92	
		8.02	
	Tank	TANK	
Date Collected		6-Oct-97	
Influent Sample ID		FZ2135	
Effluent Sample ID		FZ1135	
Miscellaneous/ POTW Permit Limits	Units	Result	Qual
Biochemical Oxygen Demand (BOD) /	MG/L	1	
Monthly = 200 MG/L, Daily = 300 MG/L		1	
NA - Analysis not performed/required			

Appendix D
Phase II Treatment Water Sample Results

	Tank	TANK	
Date Collected		6-Oct-97	
Influent Sample ID		FZ2135	
Effluent Sample ID		FZ1135	
Miscellaneous/POTW Permit Limits	Units	Result	Qual
Total Suspended Solids (TSS) /	MG/L	19	
Monthly = 200 MG/L, Daily = 300 MG/L		21	
	Tank	TANK	
Date Collected		6-Oct-97	
Influent Sample ID		FZ2134	
Effluent Sample ID		FZ113A	
Miscellaneous / POTW Permit Limits	Units	Result	Qual
Oil & Grease /	MG/L	1	U
Monthly = 50 MG/L, Daily = 100 MG/L		7.9	
	Tank	TANK	
Date Collected		6-Oct-97	
Influent Sample ID		FZ2137	
Effluent Sample ID		FZ1136	
Miscellaneous / POTW Permit Limits	Units	Result	Qual
Cyanide / 1200 UG/L	UG/L	2.5	U
		5	U
NA - Analysis not performed/required			

Appendix D
Phase II Treatment Water Sample Results

	Tank	TANK	
Date Collected		6-Oct-97	
Influent Sample ID		FZ2131	
Effluent Sample ID		FZ1133	
Radiological (DCG - pCi/L)*	Units	Result	Qual
Alpha activity	pCi/L	18.91	
		19.03	
Americium-241 - 30	pCi/L	0.89	J
		0.46	J
Beta activity	pCi/L	9.62	
		9.84	
Cesium-137 - 3000	pCi/L	-1.15	U
		2.28	U
Cobalt-60 - 5000	pCi/L	-2	U
		-0.68	U
Neptunium-237 - 30	pCi/L	0.12	U
		0.17	J
Plutonium-238 - 40	pCi/L	0.13	U
		-0.03	U
Plutonium-239 - 30	pCi/L	0.08	U
		0.03	U
Protactinium-233 - 40,000	pCi/L	-0.83	U
		1.24	U
Thorium-228 - 400	pCi/L	0.19	U
		0.29	J
Thorium-230 - 300	pCi/L	0.29	J
		0.53	J
Thorium-232 - 50	pCi/L	0.05	U
		0.14	U
Uranium-234 - 500	pCi/L	10.48	
		11.32	
Uranium-235 - 600	pCi/L	0.74	
		0.18	U
Uranium-238 - 600	pCi/L	10.43	
		11.79	
<i>Effluent, Sum of Ratios**</i>		0.07	
* Derived concentration guides as specified in DOE			
<i>Order 5400.5</i>			
** For a mixture of radionuclides, the sum of the ratios			
of the measured concentration of each radionuclide			
to it corresponding DCG must not exceed one.			
(Industrial & Commercial Users Waste Water			
Discharge Permit 6-96)			

Appendix D
Phase II Treatment Water Sample Results

	Tank	TANK	
	Date Collected	6-Oct-97	
	Influent Sample ID	FZ2132	
	Effluent Sample ID	FZ1132	
Volatile Organics	Units	Result	Qual
1,1,1-Trichloroethane	UG/L	NA	
		NA	
1,1,2,2-Tetrachloroethane	UG/L	NA	
		NA	
1,1,2-Trichloroethane	UG/L	NA	
		NA	
1,1-Dichloroethane	UG/L	NA	
		NA	
1,1-Dichloroethene	UG/L	NA	
		NA	
1,2-Dichloroethane	UG/L	NA	
		NA	
1,2-Dichloropropane	UG/L	NA	
		NA	
2-Butanone	UG/L	NA	
		NA	
2-Hexanone	UG/L	NA	
		NA	
4-Methyl-2-pentanone	UG/L	NA	
		NA	
Acetone	UG/L	NA	
		NA	
Benzene	UG/L		5 U
Monthly = 870 UG/L, Daily = 1740 UG/L			5 U
Bromodichloromethane	UG/L	NA	
		NA	
Bromoform	UG/L	NA	
		NA	
Bromomethane	UG/L	NA	
		NA	
Carbon disulfide	UG/L	NA	
		NA	
Carbon tetrachloride	UG/L	NA	
		NA	
NA - Analysis not performed/required			

Appendix D
Phase II Treatment Water Sample Results

	Tank	TANK	
	Date Collected	6-Oct-97	
	Influent Sample ID	FZ2132	
	Effluent Sample ID	FZ1132	
Volatile Organics	Units	Result	Qual
Chlorobenzene	UG/L	NA	
		NA	
Chloroethane	UG/L	NA	
		NA	
Chloroform	UG/L	NA	
		NA	
Chloromethane	UG/L	NA	
		NA	
Dibromochloromethane	UG/L	NA	
		NA	
Ethylbenzene	UG/L	NA	
		NA	
Methylene chloride	UG/L	NA	
		NA	
Styrene	UG/L	NA	
		NA	
Tetrachloroethene	UG/L	NA	
		NA	
Toluene	UG/L		5 U
Monthly = 5350 UG/L, Daily = 10,700 UG/L			5 U
Trichloroethene	UG/L	NA	
		NA	
Vinyl acetate	UG/L	NA	
		NA	
Vinyl chloride	UG/L	NA	
		NA	
cis-1,3-Dichloropropene	UG/L	NA	
		NA	
trans-1,3-Dichloropropene	UG/L	NA	
		NA	

Appendix D
Phase II Treatment Water Sample Results

	Tank	TANK	
	Date Collected	17-Oct-97	
	Influent Sample ID	NA	
	Effluent Sample ID	FY1111	
Inorganics/ POTW Permit Limits	Units	Result	Qual
Arsenic / 1500 UG/L	UG/L	NA	
		NA	
Cadmium / 110 UG/L	UG/L	NA	
		NA	
Chromium / 1500 UG/L	UG/L	NA	
		NA	
Copper / 1500 UG/L	UG/L	NA	
		NA	
Iron / 4000 UG/L	UG/L	NA	
		NA	
Lead / 690 UG/L	UG/L	NA	
		NA	
Manganese / 2000 UG/L	UG/L	NA	
		NA	
Mercury / 35 UG/L	UG/L	NA	
		0.41	
Nickel / 1500 UG/L	UG/L	NA	
		NA	
Selenium / 1000 UG/L	UG/L	NA	
		NA	
Silver / 500 UG/L	UG/L	NA	
		NA	
Zinc / 2500 UG/L	UG/L	NA	
		NA	
*NA - Analysis not performed/required			

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