RCRA FACILITY INVESTIGATION

QUARTERLY PROGRESS REPORT #12
FIRST QUARTER 2004

GM POWERTRAIN – BEDFORD PLANT
105 GM DRIVE
BEDFORD, INDIANA

EPA ID# IND006036099

Prepared For:
General Motors Corporation

APRIL 2004
REF. NO. 13968 (87)
This report is printed on recycled paper.

TABLE OF CONTENTS

LIST OF FIGURES
(Following Text)

LIST OF TABLES
(Following Text)

LIST OF APPENDICES

QUARTERLY PROGRESS REPORT
DISTRIBUTION LIST

U.S. EPA - Waste, Pesticide and Toxins Division, Project Manager	**Peter Ramanauskas (2 copies)**
U.S. EPA – Emergency Response Branch, On-Scene Coordinator	**Brad Stimple**
U.S. EPA – Emergency Response Branch, On-Scene Coordinator	**Ken Rhame**
Tetra Tech EM Inc., U.S. EPA Consultant	**Stacy Delareintrie**
Earth Tech, U.S. EPA Consultant	**John Bassett**
Indiana Department of Environmental Management	**John Gunter (5 copies)**
Indiana State Health Department	**LaNetta Alexander**
Indiana Sate Health Department	**Barbara Gibson**
U.S. Fish and Wildlife Service	**Dan Sparks**
U.S. Fish and Wildlife Service	**Lori Pruitt**
GM WFG Remediation	**Ed Peterson**
GM WFG Remediation	**Cheryl Hiatt**
CRA Project Coordinator	**James McGuigan**
Exponent	**Rick Bodishbaugh**
ENVIRON	**C.Y. Jeng**

1.0 INTRODUCTION

This Quarterly Progress Report is submitted in accordance with the Bedford Performance-Based Corrective Action Agreement (Agreement) between the United States Environmental Protection Agency (U.S. EPA) and General Motors Corporation (GM), executed on March 20, 2001, and modified on October 1, 2002. This report covers the period of the fourth calendar quarter of 2003 for the GM-Powertrain – Bedford Plant (Facility), Bedford, Indiana. Some of the activities conducted as part of the overall RCRA Corrective Action work are being addressed under the CERCLA Removal Action Program, pursuant to the Administrative Order on Consent (AOC) between the U.S. EPA and GM (effective July 31, 2003). These activities are described in more detail within the CERCLA Monthly Progress Reports referred to herein.

The next quarterly progress report, covering the Second Quarter 2004, will be submitted on or before July 15, 2004.

2.0 LIST OF COMPLETED ACTIVITIES

The following documents were prepared and distributed during this quarter:

- a Project Technical Review Presentation was held with U.S. EPA, United States Fish and Wildlife Service (USFWS), and the Indiana Department of Environmental Management (IDEM) on January 7 and 8, 2004;
- a December 2003 Removal Action Monthly Progress Report was submitted to U.S. EPA, USFWS, IDEM, the United States Army Corps of Engineers (ACOE), and the Indiana State Department of Health (ISDH) on January 15, 2004;
- meetings were held with owners of property on and adjacent to the creek and with the general community on January 27 and 28, 2004, respectively. These meetings provided updates on the Corrective Action activities;
- a RCRA Corrective Action Review - Real Estate Meeting was held on February 5, 2004, in Bedford, Indiana;
- the 11th Community Liaison Panel (CLP) meeting was held on February 6, 2004;
- a Geologic/Hydrogeologic Presentation was held with U.S. EPA and IDEM on February 12, 2004;
- a January 2004 Removal Action Monthly Progress Report was submitted to U.S. EPA, USFWS, IDEM, ACOE, and ISDH on February 15, 2004;
- the Habitat Biological Assessment was submitted to USFWS, U.S. EPA and IDEM February 17, 2004;
- the RFI Work Plan: Addendum No. 5 was submitted to the U.S. EPA and IDEM on February 18, 2004;
- the Site Source Control Work Plan: Addendum No. 1 was submitted to the U.S. EPA and IDEM February 18, 2004;
- the Sycamore Ridge Landfill Soil and Waste Removal Construction Report was submitted to the U.S. EPA and IDEM on February 20, 2004;
- responses to U.S. EPA's comments on RFI Addendum Nos. 3 and 4 were submitted on February 23, 2004;
- the final RFI Work Plan Addendum No. 4 regarding the test pit investigations was submitted to U.S. EPA, USFWS, and ISDH on March 3, 2004;
- a draft Biological Assessment was submitted in two parts, habitat impacts of remediation and residual PCB risk calculation, in early March. A meeting was held at the site on March 10 with U.S. EPA, USFWS, and IDEM to discuss the draft

Biological Assessment findings and receive comments. Based on comments received to date, the Biological Assessment is expected to be finalized in May 2004. USFWS has approved the cutting of trees in the Biological Assessment study area, downstream of Parcel 22 to the Peerless Road Bridge, prior to April 15;

- the scope of the Site-wide Ecological Risk Assessment was discussed at the March 10 meeting, and limited comments from U.S. EPA, USFWS, and IDEM were received. Based on this interaction, a draft ERA Problem Formulation is being developed and will be submitted in May, 2004;
- a site tour and presentation was given to U.S. EPA on March 11, 2004;
- a February 2004 Removal Action Monthly Progress Report was submitted to U.S. EPA, USFWS, IDEM, and ISDH on March 15, 2004;
- an aerial thermal imaging survey was conducted during the night of March 21, 2004, of the creek systems and surrounding areas. This thermal imagery will aid in identifying possible previously unidentified spring or seep locations. The information gathered will be used as part of the implementation of RCRA Facility Investigation: Addendum No. 5, once approval is received from the U.S. EPA;
- approval of the RCRA Facility Investigation Work Plan: Addendum No. 3 was received March 22, 2004, from U.S. EPA. The investigative work on the hourly parking lot began on March 30, 2004, and will continue in April 2004;
- the Site Source Control Work Plan: Addendum No. 1 was submitted on February 18, 2004, to the U.S. EPA and IDEM for review and approval. Comments were received from U.S. EPA and IDEM. The cast-in place concrete foundation components of the collection system have been installed in trench 1 located on Parcel 3 and in trench 3 located on Parcel 205;
- additional comments were received from the U.S. EPA on the RFI Work Plan Addendum No. 4. A response to these comments will be submitted in early April 2004;
- the RFI Work Plan: Addendum No. 5 was submitted on February 18, 2004, to the U.S. EPA and IDEM. Comments were received from the U.S. EPA and IDEM. Responses to these comments are currently being drafted and are expected to be submitted in May 2004;
- tree clearing has been completed in the Downstream section approved by USFWS;
- bi-weekly conference calls were held with the U.S. EPA, USFWS, IDEM, and ISDH on March 2, 16, and 30, 2004, to discuss project progress;

- on-Site investigation activities from the RFI Work Plan continued during this reporting period; and
- groundwater sampling activities were conducted during this quarter at several of the monitoring wells installed late last year. However, groundwater samples could not be collected due to insufficient volume and non-stable field parameters. Single well response (slug) tests are also being conducted at each of these new monitoring wells.

GM also continued to evaluate specific sampling requests made by residents in this quarter and collected samples, where appropriate, based on knowledge and location of the property relative to the plant and/or contamination. These analytical results (once validated) have been included in the stream project data packages distributed to the residents and agencies. GM will continue evaluating additional areas requested by residents, and sampling as appropriate on a case-by-case basis, during the next reporting period. Meetings regarding Access Agreements with downstream property owners will continue.

The December 2003, January 2004, and February 2004 CERCLA Removal Action Monthly Progress Reports were submitted during the 1st quarter of 2004.

3.0 SUMMARIES OF ALL CHANGES MADE IN THE RFI DURING THE REPORTING PERIOD

The following changes were made to the RFI during the reporting period.

- The RFI Work Plan Addendum No. 3 (Hourly Parking Lot Investigation).
- The RFI Work Plan Addendum No. 4 (Test Pit Investigation).
- The RFI Work Plan Addendum No. 5 (Dye Tracer Study).

4.0 COMMUNITY RELATIONS

GM is conducting ongoing community relations by maintaining the toll free information telephone number. Individual meetings continue to be arranged to discuss sampling results with individual residents.

Meetings to review project status, both with property owners along the creek as well as with the general public, were held for January 27 and 28, 2004, at the Facility. The meeting minutes are published on the web site at www.BedfordPowertrainCorrective Action.com. The next meetings are scheduled to occur on April 28 and 29, 2004.

One CLP meeting occurred on February 6, 2004. The next regularly scheduled meeting with the Community Liaison Panel (CLP) is set for April 30, 2004. The CLP was formed to provide additional communication avenues for the community and the meetings are currently held at the GM plant every two months. The CLP meeting minutes are posted on the GM website at www.BedfordPowertrainCorrectiveAction.com.

The Information Center is available by appointment through Ms. Becki Akers, GM Communications at the project toll free number 866-223-0856. The repository located at the Bedford Public Library remains open at normal business hours. All data in the repository are also located on the web site listed in the previous paragraph.

5.0 CHANGES IN PERSONNEL DURING THE REPORTING PERIOD

Jeroen Winterink, CRA's current on-Site Oversight Engineer will be transitioning out of the project. His position is being taken over by CRA's Katie Kamm.

6.0 PROJECTED WORK FOR THE NEXT REPORTING PERIOD

Work projected for the next reporting period includes:

- comments received from the agencies regarding RFI Work Plan: Addendum No. 4 and No. 5 will be addressed;
- neighborhood Meeting scheduled for April 28, 2004;
- general Public Information Session scheduled for April 29, 2004;
- community Liaison Panel Meeting scheduled for April 30, 2004;
- Fact Sheet 8 will be distributed in April;
- removal Action activities will continue in the Upstream Parcels;
- ongoing monthly monitoring of groundwater elevations measurements;
- a draft Ecological Risk Assessment Problem Formulation will be submitted for review and comment in May;
- the Biological Assessment for the Indiana Bat will be discussed in April;
- work on the draft Wetland Mitigation Plan is ongoing;
- comments received from the agencies regarding the Site Source Control Work Plan Addendum No. 1 will be addressed;
- the spring and seep control structure construction has begun and will continue;
- implementation of the RFI Work Plan: Addendum No. 4 once approved by U.S. EPA;
- implementation of the RFI Work Plan: Addendum No. 5 once approved by U.S. EPA;
- completion and submittal of the Soil Technical Memorandum;
- preparation of an addendum to the RFI Work Plan for additional soil testing and groundwater investigation (RFI Work Plan Addendum No. 6);
- continued evaluation of RFI soil and groundwater to propose interim measures for various areas of the Facility;
- submittal of the IM Alternatives Review Report; and
- submittal of IM Work Plans for properties along the Western and Northern Tributaries.

7.0 COPIES OF DAILY REPORTS, INSPECTION REPORTS, LABORATORY/MONITORING DATA

Packages of analytical data from any sampling activity have been submitted as they become available, after validation, under separate cover, and will continue to be submitted during the next reporting period.

Validation of the results from additional delineation of Antimony at AOI 22 and PCBs at AOI 18, both of which exceeded the screening criteria, was completed during this reporting period. The analytical results and a sample location figure are attached to this report.

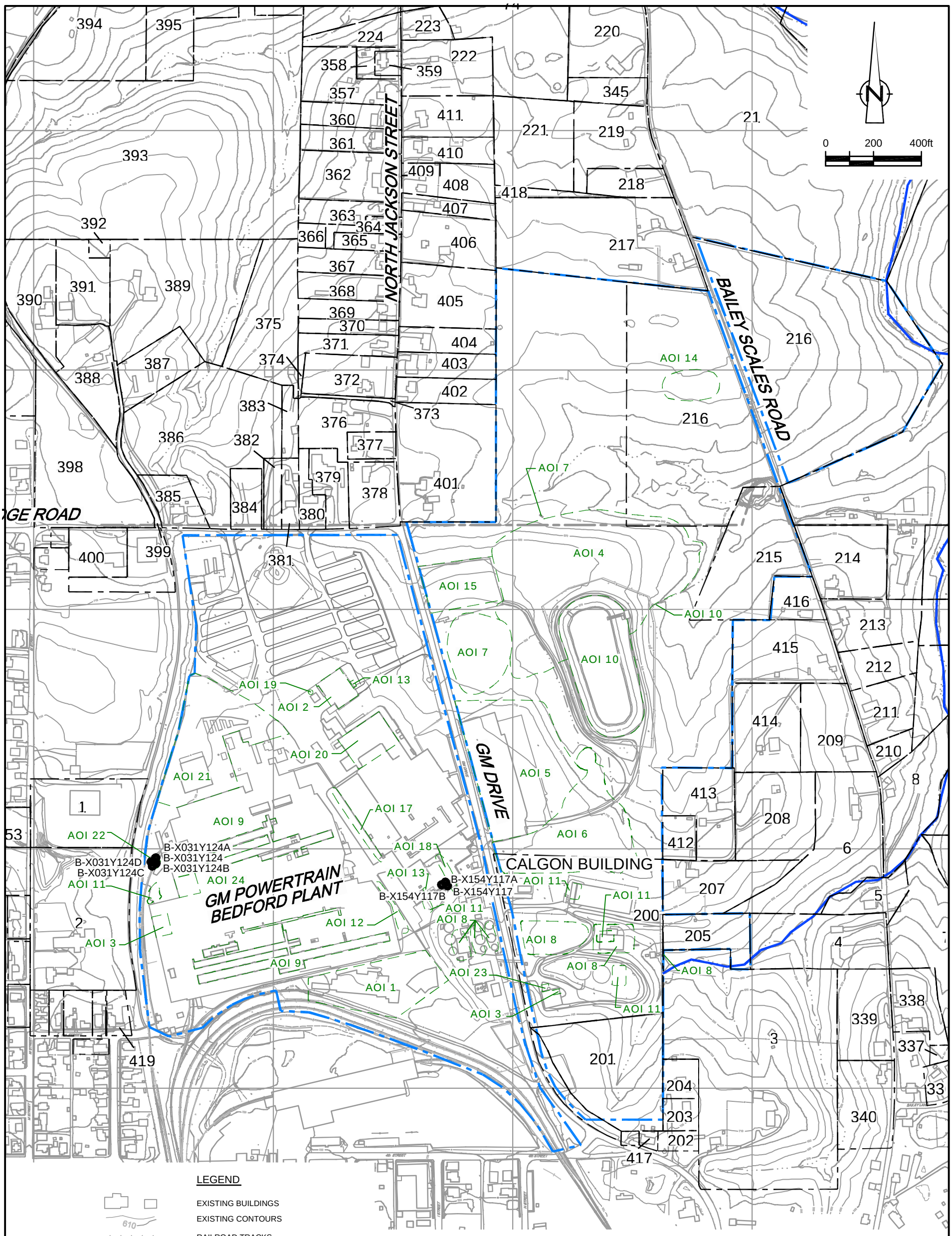

figure 1

RFI INVESTIGATION - ADDITIONAL INVESITGATION
AOIs 18 and 22
GM POWERTRAIN FACILITY
Bedford Indiana

13968-00(087)GN-WA001 APR 06/2004

TABLE 1

ANALYTICAL RESULTS SUMMARY
NOVEMBER 2003

Sample Location:		*B-X031Y124*	*B-X031Y124*	*B-X031Y124*	*B-X031Y124A*	*B-X031Y124A*	*B-X031Y124A*	*B-X031Y124B*	*B-X031Y124B*	*B-X031Y124B*	*B-X031Y124B*	*B-X031Y124C*	*B-X031Y124C*
Sample ID:		*S-110403-JC-001*	*S-110403-JC-002*	*S-110403-JC-003*	*S-110503-JC-004*	*S-110503-JC-005*	*S-110503-JC-006*	*S-110503-JC-007*	*S-110503-JC-008*	*S-110503-JC-009*	*S-110503-JC-010*	*S-110503-JC-011*	*S-110503-JC-012*
Sample Date:		*11/4/2003*	*11/4/2003*	*11/4/2003*	*11/5/2003*	*11/5/2003*	*11/5/2003*	*11/5/2003*	*11/5/2003*	*11/5/2003*	*11/5/2003*	*11/5/2003*	*11/5/2003*
Sample Depth:		*(0-2)*	*(6-8)*	*(32-33)*	*(0-2)*	*(6-8)*	*(30-32)*	*(0-2)*	*(0-2)*	*(6-8)*	*(32-34)*	*(0-2)*	*(6-8)*
									Duplicate				
Parameters	***Units***												
Volatiles													
1,1,1-Trichloroethane	ug/kg	ND (4.4)	ND (4.9)	ND (5.3)	ND (4.9)	ND (7.4)	ND (4.8)	ND (6.0)	ND (4.6)	ND (7.0)	ND (6.0)	ND (5.5)	ND (5.2)
1,1,2,2-Tetrachloroethane	ug/kg	ND (4.4)	ND (4.9)	ND (5.3)	ND (4.9)	ND (7.4)	ND (4.8)	ND (6.0)	ND (4.6)	ND (7.0) UJ	ND (6.0)	ND (5.5)	ND (5.2)
1,1,2-Trichloroethane	ug/kg	ND (4.4)	ND (4.9)	ND (5.3)	ND (4.9)	ND (7.4)	ND (4.8)	ND (6.0)	ND (4.6)	ND (7.0)	ND (6.0)	ND (5.5)	ND (5.2)
1,1-Dichloroethane	ug/kg	ND (4.4)	ND (4.9)	ND (5.3)	ND (4.9)	ND (7.4)	ND (4.8)	ND (6.0)	ND (4.6)	ND (7.0)	ND (6.0)	ND (5.5)	ND (5.2)
1,1-Dichloroethene	ug/kg	ND (4.4)	ND (4.9)	ND (5.3)	ND (4.9)	ND (7.4)	ND (4.8)	ND (6.0)	ND (4.6)	ND (7.0)	ND (6.0)	ND (5.5)	ND (5.2)
1,2,4-Trichlorobenzene	ug/kg	ND (4.4)	ND (4.9)	ND (5.3)	ND (4.9)	ND (7.4)	ND (4.8)	ND (6.0) UJ	ND (4.6) UJ	ND (7.0)	ND (6.0)	ND (5.5)	ND (5.2)
1,2-Dibromo-3-chloropropane (DBCP)	ug/kg	ND (8.8)	ND (9.9)	ND (11)	ND (9.7)	ND (15)	ND (9.5)	ND (12) UJ	ND (9.3) UJ	ND (14)	ND (12)	ND (11)	ND (10)
1,2-Dibromoethane (Ethylene Dibromide)	ug/kg	ND (4.4)	ND (4.9)	ND (5.3)	ND (4.9)	ND (7.4)	ND (4.8)	ND (6.0)	ND (4.6)	ND (7.0)	ND (6.0)	ND (5.5)	ND (5.2)
1,2-Dichlorobenzene	ug/kg	ND (4.4)	ND (4.9)	ND (5.3)	ND (4.9)	ND (7.4)	ND (4.8)	ND (6.0) UJ	ND (4.6) UJ	ND (7.0)	ND (6.0)	ND (5.5)	ND (5.2)
1,2-Dichloroethane	ug/kg	ND (4.4)	ND (4.9)	ND (5.3)	ND (4.9)	ND (7.4)	ND (4.8)	ND (6.0)	ND (4.6)	ND (7.0)	ND (6.0)	ND (5.5)	ND (5.2)
1,2-Dichloropropane	ug/kg	ND (4.4)	ND (4.9)	ND (5.3)	ND (4.9)	ND (7.4)	ND (4.8)	ND (6.0)	ND (4.6)	ND (7.0)	ND (6.0)	ND (5.5)	ND (5.2)
1,3-Dichlorobenzene	ug/kg	ND (4.4)	ND (4.9)	ND (5.3)	ND (4.9)	ND (7.4)	ND (4.8)	ND (6.0) UJ	ND (4.6) UJ	ND (7.0)	ND (6.0)	ND (5.5)	ND (5.2)
1,4-Dichlorobenzene	ug/kg	ND (4.4)	ND (4.9)	ND (5.3)	ND (4.9)	ND (7.4)	ND (4.8)	ND (6.0) UJ	ND (4.6) UJ	ND (7.0)	ND (6.0)	ND (5.5)	ND (5.2)
2-Butanone (Methyl Ethyl Ketone)	ug/kg	ND (18) UJ	ND (20) UJ	ND (21) UJ	ND (19)	ND (30)	ND (19)	ND (24)	ND (19)	ND (28)	ND (24)	ND (22)	ND (21)
2-Hexanone	ug/kg	ND (18)	ND (20)	ND (21)	ND (19)	ND (30)	ND (19)	ND (24)	ND (19)	ND (28)	ND (24)	ND (22)	ND (21)
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	ug/kg	ND (18)	ND (20)	ND (21)	ND (19)	ND (30)	ND (19)	ND (24)	ND (19)	ND (28)	ND (24)	ND (22)	ND (21)
Acetone	ug/kg	ND (18) UJ	8.4 J	ND (21) UJ	ND (19) UJ	ND (30) UJ	ND (19) UJ	ND (24) UJ	ND (19) UJ	ND (28)	ND (24) UJ	ND (22) UJ	ND (21) UJ
Benzene	ug/kg	ND (4.4)	ND (4.9)	ND (5.3)	ND (4.9)	0.78 J	ND (4.8)	0.66 J	ND (4.6)	ND (7.0)	ND (6.0)	ND (5.5)	ND (5.2)
Bromodichloromethane	ug/kg	ND (4.4)	ND (4.9)	ND (5.3)	ND (4.9)	ND (7.4)	ND (4.8)	ND (6.0)	ND (4.6)	ND (7.0)	ND (6.0)	ND (5.5)	ND (5.2)
Bromoform	ug/kg	ND (4.4)	ND (4.9)	ND (5.3)	ND (4.9)	ND (7.4)	ND (4.8)	ND (6.0)	ND (4.6)	ND (7.0)	ND (6.0)	ND (5.5)	ND (5.2)
Bromomethane (Methyl Bromide)	ug/kg	ND (4.4)	ND (4.9)	ND (5.3)	ND (4.9)	ND (7.4)	ND (4.8)	ND (6.0)	ND (4.6)	ND (7.0)	ND (6.0)	ND (5.5)	ND (5.2)
Carbon disulfide	ug/kg	ND (4.4)	ND (4.9)	ND (5.3)	ND (4.9)	ND (7.4)	ND (4.8)	ND (6.0)	ND (4.6)	ND (7.0)	ND (6.0)	ND (5.5)	ND (5.2)
Carbon tetrachloride	ug/kg	ND (4.4)	ND (4.9)	ND (5.3)	ND (4.9) UJ	ND (7.4) UJ	ND (4.8) UJ	ND (6.0) UJ	ND (4.6) UJ	ND (7.0)	ND (6.0) UJ	ND (5.5) UJ	ND (5.2) UJ
Chlorobenzene	ug/kg	ND (4.4)	ND (4.9)	ND (5.3)	ND (4.9)	ND (7.4)	ND (4.8)	ND (6.0)	ND (4.6)	ND (7.0)	ND (6.0)	ND (5.5)	ND (5.2)
Chloroethane	ug/kg	ND (4.4)	ND (4.9)	ND (5.3)	ND (4.9)	ND (7.4)	ND (4.8)	ND (6.0)	ND (4.6)	ND (7.0)	ND (6.0)	ND (5.5)	ND (5.2)
Chloroform (Trichloromethane)	ug/kg	ND (4.4)	ND (4.9)	ND (5.3)	ND (4.9)	ND (7.4)	ND (4.8)	ND (6.0)	ND (4.6)	ND (7.0)	ND (6.0)	ND (5.5)	ND (5.2)
Chloromethane (Methyl Chloride)	ug/kg	ND (4.4)	ND (4.9)	ND (5.3)	ND (4.9)	ND (7.4)	ND (4.8)	ND (6.0)	ND (4.6)	ND (7.0)	ND (6.0)	ND (5.5)	ND (5.2)
cis-1,2-Dichloroethene	ug/kg	ND (2.2)	ND (2.5)	ND (2.7)	ND (2.4)	ND (3.7)	ND (2.4)	ND (3.0)	ND (2.3)	ND (3.5)	ND (3.0)	ND (2.7)	ND (2.6)
cis-1,3-Dichloropropene	ug/kg	ND (4.4)	ND (4.9)	ND (5.3)	ND (4.9)	ND (7.4)	ND (4.8)	ND (6.0)	ND (4.6)	ND (7.0)	ND (6.0)	ND (5.5)	ND (5.2)
Cyclohexane	ug/kg	ND (8.8)	ND (9.9)	ND (11)	ND (9.7)	ND (15)	ND (9.5)	ND (12)	ND (9.3)	ND (14)	ND (12)	ND (11)	ND (10)
Dibromochloromethane	ug/kg	ND (4.4)	ND (4.9)	ND (5.3)	ND (4.9)	ND (7.4)	ND (4.8)	ND (6.0)	ND (4.6)	ND (7.0)	ND (6.0)	ND (5.5)	ND (5.2)
Dichlorodifluoromethane (CFC-12)	ug/kg	ND (4.4)	ND (4.9)	ND (5.3)	ND (4.9) UJ	ND (7.4) UJ	ND (4.8) UJ	ND (6.0) UJ	ND (4.6) UJ	ND (7.0)	ND (6.0) UJ	ND (5.5) UJ	ND (5.2) UJ
Ethylbenzene	ug/kg	ND (4.4)	ND (4.9)	ND (5.3)	ND (4.9)	ND (7.4)	ND (4.8)	ND (6.0)	ND (4.6)	ND (7.0)	ND (6.0)	ND (5.5)	ND (5.2)
Isopropylbenzene	ug/kg	ND (4.4)	ND (4.9)	ND (5.3)	ND (4.9)	ND (7.4)	ND (4.8)	ND (6.0)	ND (4.6)	ND (7.0)	ND (6.0)	ND (5.5)	ND (5.2)
Methyl acetate	ug/kg	ND (8.8)	ND (9.9)	ND (11)	ND (9.7)	ND (15)	ND (9.5)	ND (12)	ND (9.3)	ND (14)	ND (12)	ND (11)	ND (10)
Methyl cyclohexane	ug/kg	ND (8.8)	ND (9.9)	ND (11)	ND (9.7)	ND (15)	ND (9.5)	ND (12)	ND (9.3)	ND (14)	ND (12)	ND (11)	ND (10)
Methyl Tert Butyl Ether	ug/kg	ND (18)	ND (20)	ND (21)	ND (19)	ND (30)	ND (19)	ND (24)	ND (19)	ND (28)	ND (24)	ND (22)	ND (21)
Methylene chloride	ug/kg	1.3 J	ND (4.9)	ND (5.3)	ND (4.9)	1.6 J	ND (4.8)	1.7 J	ND (4.6)	ND (7.0)	ND (6.0)	ND (5.5)	ND (5.2)
Styrene	ug/kg	ND (4.4)	ND (4.9)	ND (5.3)	ND (4.9)	ND (7.4)	ND (4.8)	ND (6.0)	ND (4.6)	ND (7.0)	ND (6.0)	ND (5.5)	ND (5.2)
Tetrachloroethene	ug/kg	ND (4.4)	ND (4.9)	ND (5.3)	ND (4.9)	ND (7.4)	ND (4.8)	ND (6.0)	ND (4.6)	ND (7.0)	ND (6.0)	ND (5.5)	ND (5.2)
Toluene	ug/kg	ND (4.4)	ND (4.9)	ND (5.3)	ND (4.9)	0.76 J	ND (4.8)	0.73 J	ND (4.6)	ND (7.0)	ND (6.0)	ND (5.5)	ND (5.2)
trans-1,2-Dichloroethene	ug/kg	ND (2.2)	ND (2.5)	ND (2.7)	ND (2.4)	ND (3.7)	ND (2.4)	ND (3.0)	ND (2.3)	ND (3.5)	ND (3.0)	ND (2.7)	ND (2.6)
trans-1,3-Dichloropropene	ug/kg	ND (4.4)	ND (4.9)	ND (5.3)	ND (4.9)	ND (7.4)	ND (4.8)	ND (6.0)	ND (4.6)	ND (7.0)	ND (6.0)	ND (5.5)	ND (5.2)
Trichloroethene	ug/kg	ND (4.4)	ND (4.9)	ND (5.3)	ND (4.9)	ND (7.4)	ND (4.8)	ND (6.0)	ND (4.6)	ND (7.0)	ND (6.0)	ND (5.5)	ND (5.2)
Trichlorofluoromethane (CFC-11)	ug/kg	ND (4.4)	ND (4.9)	ND (5.3)	ND (4.9) UJ	ND (7.4) UJ	ND (4.8) UJ	ND (6.0) UJ	ND (4.6) UJ	ND (7.0) UJ	ND (6.0) UJ	ND (5.5) UJ	ND (5.2) UJ
Trifluorotrichloroethane (Freon 113)	ug/kg	ND (4.4)	ND (4.9)	ND (5.3)	ND (4.9)	ND (7.4)	ND (4.8)	ND (6.0)	ND (4.6)	ND (7.0)	ND (6.0)	ND (5.5)	ND (5.2)
Vinyl chloride	ug/kg	ND (4.4)	ND (4.9)	ND (5.3)	ND (4.9)	ND (7.4)	ND (4.8)	ND (6.0)	ND (4.6)	ND (7.0)	ND (6.0)	ND (5.5)	ND (5.2)
Xylene (total)	ug/kg	ND (4.4)	ND (4.9)	ND (5.3)	ND (4.9)	ND (7.4)	ND (4.8)	ND (6.0)	ND (4.6)	ND (7.0)	ND (6.0)	ND (5.5)	ND (5.2)
Semi-volatiles													
2,2'-oxybis(1-Chloropropane) (bis(2-chloroisopropyl) ether)	ug/kg	ND (350)	ND (390)	ND (410)	ND (1400)	ND (370)	ND (380)	ND (360)	ND (370)	ND (370)	ND (420)	ND (350)	ND (3700)
2,4,5-Trichlorophenol	ug/kg	ND (350)	ND (390)	ND (410)	ND (1400)	ND (370)	ND (380)	ND (360)	ND (370)	ND (370) UJ	ND (420)	ND (350)	ND (3700)
2,4,6-Trichlorophenol	ug/kg	ND (350)	ND (390)	ND (410)	ND (1400)	ND (370)	ND (380)	ND (360)	ND (370)	ND (370) UJ	ND (420)	ND (350)	ND (3700)
2,4-Dichlorophenol	ug/kg	ND (350)	ND (390)	ND (410)	ND (1400)	ND (370)	ND (380)	ND (360)	ND (370)	ND (370) UJ	ND (420)	ND (350)	ND (3700)
2,4-Dimethylphenol	ug/kg	ND (350)	ND (390)	ND (410)	ND (1400)	ND (370)	ND (380)	ND (360)	ND (370)	ND (370) UJ	ND (420)	ND (350)	ND (3700)
2,4-Dinitrophenol	ug/kg	ND (1700)	ND (1900)	ND (2000)	ND (7000)	ND (1800)	ND (1900) UJ	ND (1800)	ND (1800)	ND (1800) UJ	ND (2000) UJ	ND (1700)	ND (18000)
2,4-Dinitrotoluene	ug/kg	ND (350)	ND (390)	ND (410)	ND (1400)	ND (370)	ND (380)	ND (360)	ND (370)	ND (370)	ND (420)	ND (350)	ND (3700)
2,6-Dinitrotoluene	ug/kg	ND (350)	ND (390)	ND (410)	ND (1400)	ND (370)	ND (380)	ND (360)	ND (370)	ND (370)	ND (420)	ND (350)	ND (3700)
2-Chloronaphthalene	ug/kg	ND (350)	ND (390)	ND (410)	ND (1400)	ND (370)	ND (380)	ND (360)	ND (370)	ND (370)	ND (420)	ND (350)	ND (3700)
2-Chlorophenol	ug/kg	ND (350)	ND (390)	ND (410)	ND (1400)	ND (370)	ND (380)	ND (360)	ND (370)	ND (370) UJ	ND (420)	ND (350)	ND (3700)

TABLE 1

ANALYTICAL RESULTS SUMMARY
NOVEMBER 2003

Sample Location:		*B-X031Y124*	*B-X031Y124*	*B-X031Y124*	*B-X031Y124A*	*B-X031Y124A*	*B-X031Y124A*	*B-X031Y124B*	*B-X031Y124B*	*B-X031Y124B*	*B-X031Y124B*	*B-X031Y124C*	*B-X031Y124C*
Sample ID:		*S-110403-JC-001*	*S-110403-JC-002*	*S-110403-JC-003*	*S-110503-JC-004*	*S-110503-JC-005*	*S-110503-JC-006*	*S-110503-JC-007*	*S-110503-JC-008*	*S-110503-JC-009*	*S-110503-JC-010*	*S-110503-JC-011*	*S-110503-JC-012*
Sample Date:		*11/4/2003*	*11/4/2003*	*11/4/2003*	*11/5/2003*	*11/5/2003*	*11/5/2003*	*11/5/2003*	*11/5/2003*	*11/5/2003*	*11/5/2003*	*11/5/2003*	*11/5/2003*
Sample Depth:		*(0-2)*	*(6-8)*	*(32-33)*	*(0-2)*	*(6-8)*	*(30-32)*	*(0-2)*	*(0-2)*	*(6-8)*	*(32-34)*	*(0-2)*	*(6-8)*
									Duplicate				
Parameters	***Units***												
2-Methylnaphthalene	ug/kg	ND (350)	ND (390)	ND (410)	ND (1400)	ND (370)	ND (380)	ND (360)	ND (370)	ND (370)	ND (420)	ND (350)	ND (3700)
2-Methylphenol	ug/kg	ND (350)	ND (390)	ND (410)	ND (1400)	ND (370)	ND (380)	ND (360)	ND (370)	ND (370) UJ	ND (420)	ND (350)	ND (3700)
2-Nitroaniline	ug/kg	ND (1700)	ND (1900)	ND (2000)	ND (7000)	ND (1800)	ND (1900)	ND (1800)	ND (1800)	ND (1800)	ND (2000)	ND (1700)	ND (18000)
2-Nitrophenol	ug/kg	ND (350)	ND (390)	ND (410)	ND (1400)	ND (370)	ND (380)	ND (360)	ND (370)	ND (370) UJ	ND (420)	ND (350)	ND (3700)
3,3'-Dichlorobenzidine	ug/kg	ND (1700) UJ	ND (1900)	ND (2000)	ND (7000)	ND (1800)	ND (1900)	ND (1800)	ND (1800)	ND (1800)	ND (2000)	ND (1700)	ND (18000)
3-Nitroaniline	ug/kg	ND (1700)	ND (1900)	ND (2000)	ND (7000)	ND (1800)	ND (1900)	ND (1800)	ND (1800)	ND (1800)	ND (2000)	ND (1700)	ND (18000)
4,6-Dinitro-2-methylphenol	ug/kg	ND (1700) UJ	ND (1900)	ND (2000) UJ	ND (7000)	ND (1800)	ND (1900) UJ	ND (1800)	ND (1800)	ND (1800) UJ	ND (2000) UJ	ND (1700)	ND (18000)
4-Bromophenyl phenyl ether	ug/kg	ND (350)	ND (390)	ND (410)	ND (1400)	ND (370)	ND (380)	ND (360)	ND (370)	ND (370)	ND (420)	ND (350)	ND (3700)
4-Chloro-3-methylphenol	ug/kg	ND (350)	ND (390)	ND (410)	ND (1400)	ND (370)	ND (380)	ND (360)	ND (370)	ND (370) UJ	ND (420)	ND (350)	ND (3700)
4-Chloroaniline	ug/kg	ND (350)	ND (390)	ND (410)	ND (1400)	ND (370)	ND (380)	ND (360)	ND (370)	ND (370)	ND (420)	ND (350)	ND (3700)
4-Chlorophenyl phenyl ether	ug/kg	ND (350)	ND (390)	ND (410)	ND (1400)	ND (370)	ND (380)	ND (360)	ND (370)	ND (370)	ND (420)	ND (350)	ND (3700)
4-Methylphenol	ug/kg	ND (350)	ND (390)	ND (410)	ND (1400)	ND (370)	ND (380)	ND (360)	ND (370)	ND (370) UJ	ND (420)	ND (350)	ND (3700)
4-Nitroaniline	ug/kg	ND (1700)	ND (1900) UJ	ND (2000)	ND (7000)	ND (1800)	ND (1900)	ND (1800)	ND (1800)	ND (1800)	ND (2000)	ND (1700)	ND (18000)
4-Nitrophenol	ug/kg	ND (1700)	ND (1900)	ND (2000)	ND (7000)	ND (1800)	ND (1900) UJ	ND (1800)	ND (1800)	ND (1800) UJ	ND (2000) UJ	ND (1700)	ND (18000)
Acenaphthene	ug/kg	ND (350)	ND (390)	ND (410)	ND (1400)	ND (370)	ND (380)	ND (360)	ND (370)	ND (370)	ND (420)	130 J	ND (3700)
Acenaphthylene	ug/kg	ND (350)	ND (390)	ND (410)	ND (1400)	ND (370)	ND (380)	ND (360)	ND (370)	ND (370)	ND (420)	ND (350)	ND (3700)
Acetophenone	ug/kg	ND (350)	ND (390)	ND (410)	ND (1400)	ND (370)	ND (380)	ND (360)	ND (370)	ND (370)	ND (420)	ND (350)	ND (3700)
Anthracene	ug/kg	65 J	64 J	ND (410)	ND (1400)	ND (370)	ND (380)	22 J	ND (370)	ND (370)	ND (420)	260 J	ND (3700)
Atrazine	ug/kg	ND (350)	ND (390)	ND (410)	ND (1400)	ND (370)	ND (380)	ND (360)	ND (370)	ND (370)	ND (420)	ND (350)	ND (3700)
Benzaldehyde	ug/kg	ND (350)	ND (390)	ND (410)	ND (1400)	ND (370)	ND (380)	ND (360)	ND (370)	ND (370)	ND (420)	ND (350)	ND (3700)
Benzo(a)anthracene	ug/kg	110 J	50 J	ND (410)	75 J	ND (370)	ND (380)	72 J	37 J	ND (370)	ND (420)	380	ND (3700)
Benzo(a)pyrene	ug/kg	66 J	52 J	ND (410)	100 J	ND (370)	ND (380)	90 J	39 J	ND (370)	ND (420)	390	ND (3700)
Benzo(b)fluoranthene	ug/kg	220 J	160 J	ND (410)	130 J	ND (370)	ND (380)	96 J	46 J	ND (370)	ND (420)	480	ND (3700)
Benzo(g,h,i)perylene	ug/kg	61 J	40 J	ND (410)	ND (1400)	ND (370)	ND (380)	82 J	25 J	ND (370)	ND (420)	190 J	ND (3700)
Benzo(k)fluoranthene	ug/kg	130 J	110 J	ND (410)	ND (1400)	ND (370)	ND (380)	61 J	26 J	ND (370)	ND (420)	310 J	ND (3700)
Biphenyl	ug/kg	ND (350)	ND (390)	ND (410)	ND (1400)	ND (370)	ND (380)	ND (360)	ND (370)	ND (370)	ND (420)	ND (350)	ND (3700)
bis(2-Chloroethoxy)methane	ug/kg	ND (350)	ND (390)	ND (410)	ND (1400)	ND (370)	ND (380)	ND (360)	ND (370)	ND (370)	ND (420)	ND (350)	ND (3700)
bis(2-Chloroethyl)ether	ug/kg	ND (350)	ND (390)	ND (410)	ND (1400)	ND (370)	ND (380)	ND (360)	ND (370)	ND (370)	ND (420)	ND (350)	ND (3700)
bis(2-Ethylhexyl)phthalate	ug/kg	ND (350) UJ	84 J	ND (410)	ND (1400)	ND (370)	ND (380)	ND (360)	ND (370)	ND (370)	ND (420)	ND (350)	ND (3700)
Butyl benzylphthalate	ug/kg	ND (350) UJ	ND (390)	ND (410)	ND (1400)	ND (370)	ND (380)	ND (360)	ND (370)	ND (370)	ND (420)	ND (350)	ND (3700)
Caprolactam	ug/kg	ND (350)	ND (390)	ND (410)	ND (1400)	ND (370)	ND (380)	ND (360)	ND (370)	ND (370)	ND (420)	ND (350)	ND (3700)
Carbazole	ug/kg	ND (350)	ND (390) UJ	ND (410)	ND (1400)	ND (370)	ND (380)	ND (360)	ND (370)	ND (370)	ND (420)	140 J	ND (3700)
Chrysene	ug/kg	140 J	71 J	ND (410)	95 J	ND (370)	ND (380)	80 J	40 J	ND (370)	ND (420)	410	ND (3700)
Dibenz(a,h)anthracene	ug/kg	ND (350) UJ	87 J	ND (410)	ND (1400)	ND (370)	ND (380)	ND (360)	ND (370)	ND (370)	ND (420)	ND (350)	ND (3700)
Dibenzofuran	ug/kg	ND (350)	ND (390)	ND (410)	ND (1400)	ND (370)	ND (380)	ND (360)	ND (370)	ND (370)	ND (420)	59 J	ND (3700)
Diethyl phthalate	ug/kg	ND (350)	ND (390)	ND (410)	ND (1400)	ND (370)	ND (380) UJ	ND (360)	ND (370)	ND (370)	ND (420) UJ	ND (350)	ND (3700)
Dimethyl phthalate	ug/kg	ND (350)	ND (390)	ND (410)	ND (1400)	ND (370)	ND (380)	ND (360)	ND (370)	ND (370)	ND (420)	ND (350)	ND (3700)
Di-n-butylphthalate	ug/kg	ND (350)	ND (390) U	ND (410) U	ND (1400)	ND (370)	ND (380)	ND (360)	ND (370)	ND (370)	ND (420)	ND (350)	ND (3700)
Di-n-octyl phthalate	ug/kg	ND (350) UJ	ND (390)	ND (410)	ND (1400)	ND (370)	ND (380)	ND (360)	ND (370)	ND (370)	ND (420)	ND (350)	ND (3700)
Fluoranthene	ug/kg	300 J	140 J	ND (410)	120 J	ND (370)	ND (380)	120 J	61 J	ND (370)	ND (420)	1400	ND (3700)
Fluorene	ug/kg	ND (350)	ND (390)	ND (410)	ND (1400)	ND (370)	ND (380)	ND (360)	ND (370)	ND (370)	ND (420)	120 J	ND (3700)

TABLE 1

ANALYTICAL RESULTS SUMMARY
NOVEMBER 2003

Sample Location:		*B-X031Y124*	*B-X031Y124*	*B-X031Y124*	*B-X031Y124A*	*B-X031Y124A*	*B-X031Y124A*	*B-X031Y124B*	*B-X031Y124B*	*B-X031Y124B*	*B-X031Y124B*	*B-X031Y124C*	*B-X031Y124C*
Sample ID:		*S-110403-JC-001*	*S-110403-JC-002*	*S-110403-JC-003*	*S-110503-JC-004*	*S-110503-JC-005*	*S-110503-JC-006*	*S-110503-JC-007*	*S-110503-JC-008*	*S-110503-JC-009*	*S-110503-JC-010*	*S-110503-JC-011*	*S-110503-JC-012*
Sample Date:		*11/4/2003*	*11/4/2003*	*11/4/2003*	*11/5/2003*	*11/5/2003*	*11/5/2003*	*11/5/2003*	*11/5/2003*	*11/5/2003*	*11/5/2003*	*11/5/2003*	*11/5/2003*
Sample Depth:		*(0-2)*	*(6-8)*	*(32-33)*	*(0-2)*	*(6-8)*	*(30-32)*	*(0-2)*	*(0-2)*	*(6-8)*	*(32-34)*	*(0-2)*	*(6-8)*
									Duplicate				
Parameters	***Units***												
Hexachlorobenzene	ug/kg	ND (350)	ND (390)	ND (410)	ND (1400)	ND (370)	ND (380)	ND (360)	ND (370)	ND (370)	ND (420)	ND (350)	ND (3700)
Hexachlorobutadiene	ug/kg	ND (350)	ND (390)	ND (410)	ND (1400)	ND (370)	ND (380)	ND (360)	ND (370)	ND (370)	ND (420)	ND (350)	ND (3700)
Hexachlorocyclopentadiene	ug/kg	ND (1700) UJ	ND (1900)	ND (2000) UJ	ND (7000)	ND (1800)	ND (1900) UJ	ND (1800)	ND (1800)	ND (1800)	ND (2000) UJ	ND (1700)	ND (18000)
Hexachloroethane	ug/kg	ND (350)	ND (390)	ND (410)	ND (1400)	ND (370)	ND (380)	ND (360)	ND (370)	ND (370)	ND (420)	ND (350)	ND (3700)
Indeno(1,2,3-cd)pyrene	ug/kg	100 J	100 J	ND (410)	ND (1400)	ND (370)	ND (380)	54 J	25 J	ND (370)	ND (420)	190 J	ND (3700)
Isophorone	ug/kg	ND (350)	ND (390)	ND (410)	ND (1400)	ND (370)	ND (380)	ND (360)	ND (370)	ND (370)	ND (420)	ND (350)	ND (3700)
Naphthalene	ug/kg	ND (350)	ND (390)	ND (410)	ND (1400)	ND (370)	ND (380)	ND (360)	ND (370)	ND (370)	ND (420)	ND (350)	ND (3700)
Nitrobenzene	ug/kg	ND (350)	ND (390)	ND (410)	ND (1400)	ND (370)	ND (380)	ND (360)	ND (370)	ND (370)	ND (420)	ND (350)	ND (3700)
N-Nitrosodi-n-propylamine	ug/kg	ND (350)	ND (390)	ND (410)	ND (1400)	ND (370)	ND (380)	ND (360)	ND (370)	ND (370)	ND (420)	ND (350)	ND (3700)
N-Nitrosodiphenylamine	ug/kg	ND (350)	ND (390)	ND (410)	ND (1400)	ND (370)	ND (380)	ND (360)	ND (370)	ND (370)	ND (420)	ND (350)	ND (3700)
Pentachlorophenol	ug/kg	ND (350)	ND (390)	ND (410)	ND (1400)	ND (370)	ND (380)	ND (360)	ND (370)	ND (370) UJ	ND (420)	ND (350)	ND (3700)
Phenanthrene	ug/kg	130 J	90 J	ND (410)	ND (1400)	ND (370)	ND (380)	87 J	54 J	ND (370)	ND (420)	1300	ND (3700)
Phenol	ug/kg	ND (350)	ND (390)	ND (410)	ND (1400)	ND (370)	ND (380)	ND (360)	ND (370)	ND (370) UJ	ND (420)	ND (350)	ND (3700)
Pyrene	ug/kg	240 J	76 J	ND (410)	88 J	ND (370)	ND (380)	110 J	37 J	ND (370)	ND (420)	760 J	ND (3700)
Metals													
Aluminum	mg/kg	2090	4470	5890 J	5760	4910	4250	4620	3440	6130	6610	2650	4870
Antimony	mg/kg	ND (6.3)	ND (7.1)	ND (7.4)	ND (6.5)	1.0 J	ND (7.0)	0.32 J	0.59 J	ND (6.7)	ND (7.6)	ND (6.4)	1.1 J
Arsenic	mg/kg	3.6	3.6	6.8	2.9	4.7	2.0	4.8	4.5	1.3	4.5	1.4	4.5
Barium	mg/kg	19.5 J	34.9	42.1 J	45.5	59.0	70.7	49.7	35.4	57.8	85.8	21.7	36.3
Beryllium	mg/kg	0.19 J	0.34 J	1.6 J	0.64	0.33 J	0.69	ND (0.55) U	0.32 J	0.37 J	1.6	ND (0.54) U	ND (0.57) U
Cadmium	mg/kg	0.35 J	0.31 J	0.95	0.32 J	0.41 J	3.7	0.48 J	0.33 J	0.23 J	1.0	0.21 J	0.33 J
Chromium Total	mg/kg	5.3	10.9	13.9 J	8.4	11.8	6.8	8.5	6.4	5.0	12.5	5.4	9.8
Cobalt	mg/kg	2.5 J	3.0 J	12.0 J	3.5 J	8.5	5.2 J	2.3 J	3.0 J	0.88 J	10.3	1.8 J	3.3 J
Copper	mg/kg	27.3	12.4	18.9	44.8	8.1	5.7	22.2	15.5	1.8 J	18.7	47.9	20.8
Cyanide (amenable)	mg/kg	ND (0.53)	ND (0.59)	0.12 J	ND (0.55)	ND (0.56)	ND (0.58)	ND (0.55)	0.13 J	0.13 J	ND (0.64)	0.22 J	ND (0.57)
Cyanide (total)	mg/kg	0.12 J	ND (0.59)	0.12 J	ND (0.55)	ND (0.56)	ND (0.58)	ND (0.55)	0.13 J	0.13 J	ND (0.64)	0.34 J	ND (0.57)
Iron	mg/kg	14800	8080	30400 J	8200	11300	8240	10200	9110	3190	21700	4030	14500
Lead	mg/kg	15.3	10.0	14.9 J	16.6	28.1	6.0	42.3	40.6	1.3	8.6	10.6	36.6
Manganese	mg/kg	134	714	113 J	91.6	792	266	263	402	804	109	69.5	235
Mercury	mg/kg	0.031 J	0.023 J	0.031 J	0.063 J	0.026 J	0.066 J	0.029 J	0.031 J	ND (0.11)	0.052 J	ND (0.11)	0.032 J
Nickel	mg/kg	6.0	8.5	42.6 J	21.7	5.9	14.0	4.4	10.5	1.9 J	36.7	7.2	6.2
Selenium	mg/kg	ND (0.53)	ND (0.59)	ND (0.62)	ND (0.55)	ND (0.56)	ND (0.58)	ND (0.55)	ND (0.56)	ND (0.56)	0.56 J	ND (0.54)	ND (0.57)
Silver	mg/kg	ND (1.1)	ND (1.2)	ND (1.2)	ND (1.1)	ND (1.1)	ND (1.2)	ND (1.1)	ND (1.1)	ND (1.1)	ND (1.3)	ND (1.1)	ND (1.1)
Thallium	mg/kg	ND (1.1)	ND (1.2)	ND (1.2)	0.65 J	0.88 J	0.88 J	0.47 J	0.63 J	0.48 J	0.86 J	ND (1.1)	0.53 J
Vanadium	mg/kg	7.3	11.2	24.1 J	12.8	12.6	8.4	13.4	9.4	3.8 J	14.8	4.6 J	13.4
Zinc	mg/kg	27.9	31.7	83.4 J	54.6	42.6	40.8	55.7	47.3	16.4	68.1	25.2	44.5
PCBs													
Aroclor-1016 (PCB-1016)	ug/kg	ND (35)	ND (39)	ND (41)	ND (36)	ND (37)	ND (38)	ND (36)	ND (37)	ND (37)	ND (42)	ND (35)	ND (37)
Aroclor-1221 (PCB-1221)	ug/kg	ND (35)	ND (39)	ND (41)	ND (36)	ND (37)	ND (38)	ND (36)	ND (37)	ND (37)	ND (42)	ND (35)	ND (37)
Aroclor-1232 (PCB-1232)	ug/kg	ND (35)	ND (39)	ND (41)	ND (36)	ND (37)	ND (38)	ND (36)	ND (37)	ND (37)	ND (42)	ND (35)	ND (37)
Aroclor-1242 (PCB-1242)	ug/kg	ND (35)	ND (39)	ND (41)	ND (36)	ND (37)	ND (38)	ND (36)	ND (37)	ND (37)	ND (42)	ND (35)	ND (37)
Aroclor-1248 (PCB-1248)	ug/kg	ND (35)	ND (39)	ND (41)	28 J	ND (37)	ND (38)	44	ND (37)	ND (37)	ND (42)	7.3 J	ND (37)
Aroclor-1254 (PCB-1254)	ug/kg	ND (35)	ND (39)	ND (41)	ND (36)	ND (37)	ND (38)	ND (36)	ND (37)	ND (37)	ND (42)	ND (35)	ND (37)
Aroclor-1260 (PCB-1260)	ug/kg	ND (35)	ND (39)	ND (41)	18 J	ND (37)	ND (38)	22 J	ND (37)	ND (37)	ND (42)	ND (35)	ND (37)
Sum of detected PCBs (ND=0)	ug/kg	0	0	0	46 J	0	0	66 J	0	0	0	7.3 J	0
General Chemistry													
Total Solids	%	94.8	84.2	80.8	91.7	88.7	85.9	90.7	89.7	89.4	78.6	93.3	88.2

Notes:

U Non-detect at associated value.

J Estimated.

UJ Non-detect at associated value. The associated value is estimated.

TABLE 1

ANALYTICAL RESULTS SUMMARY
NOVEMBER 2003

Sample Location:		*B-X031Y124C*	*B-X031Y124D*	*B-X031Y124D*	*B-X031Y124D*	*B-X154Y117*	*B-X154Y117*	*B-X154Y117*	*B-X154Y117A*	*B-X154Y117A*	*B-X154Y117A*	*B-X154Y117B*	*B-X154Y117B*	*B-X154Y117B*	*B-X154Y117B*
Sample ID:		*S-110503-JC-013*	*S-110603-JC-014*	*S-110603-JC-015*	*S-110603-JC-016*	*S-111203-JC-024*	*S-111203-JC-025*	*S-111203-JC-026*	*S-111203-JC-021*	*S-111203-JC-022*	*S-111203-JC-023*	*S-111003-JC-017*	*S-111003-JC-018*	*S-111003-JC-019*	*S-111003-JC-020*
Sample Date:		*11/5/2003*	*11/6/2003*	*11/6/2003*	*11/6/2003*	*11/12/2003*	*11/12/2003*	*11/12/2003*	*11/12/2003*	*11/12/2003*	*11/12/2003*	*11/10/2003*	*11/10/2003*	*11/10/2003*	*11/10/2003*
Sample Depth:		*(32-33)*	*(0-2)*	*(6-8)*	*(30-32)*	*(0-2)*	*(6-8)*	*(24-25)*	*(0-2)*	*(6-8)*	*(24-25)*	*(0-2)*	*(6-8)*	*(6-8)*	*(24-25)*
														Duplicate	
Parameters	***Units***														
Volatiles															
1,1,1-Trichloroethane	ug/kg	ND (6.9)	ND (5.3)	ND (6.2)	ND (6.3)	ND (4.5)	ND (6.5)	ND (6.3)	ND (260)	ND (6.0)	ND (6.9)	ND (4.8)	ND (6.5)	ND (5.9)	ND (6.6)
1,1,2,2-Tetrachloroethane	ug/kg	ND (6.9)	ND (5.3)	ND (6.2)	ND (6.3)	ND (4.5)	ND (6.5)	ND (6.3)	ND (260)	ND (6.0)	ND (6.9)	ND (4.8)	ND (6.5)	ND (5.9)	ND (6.6)
1,1,2-Trichloroethane	ug/kg	ND (6.9)	ND (5.3)	ND (6.2)	ND (6.3)	ND (4.5)	ND (6.5)	ND (6.3)	ND (260)	ND (6.0)	ND (6.9)	ND (4.8)	ND (6.5)	ND (5.9)	ND (6.6)
1,1-Dichloroethane	ug/kg	ND (6.9)	ND (5.3)	ND (6.2)	ND (6.3)	ND (4.5)	ND (6.5)	ND (6.3)	ND (260)	ND (6.0)	ND (6.9)	ND (4.8)	ND (6.5)	ND (5.9)	ND (6.6)
1,1-Dichloroethene	ug/kg	ND (6.9)	ND (5.3)	ND (6.2)	ND (6.3)	ND (4.5)	ND (6.5)	ND (6.3)	ND (260)	ND (6.0)	ND (6.9)	ND (4.8)	ND (6.5)	ND (5.9)	ND (6.6)
1,2,4-Trichlorobenzene	ug/kg	ND (6.9)	ND (5.3) UJ	ND (6.2)	ND (6.3)	ND (4.5)	ND (6.5)	ND (6.3)	ND (260)	ND (6.0)	ND (6.9)	ND (4.8)	ND (6.5)	ND (5.9)	ND (6.6)
1,2-Dibromo-3-chloropropane (DBCP)	ug/kg	ND (14)	ND (11) UJ	ND (12)	ND (13)	ND (8.9)	ND (13)	ND (13)	ND (530)	ND (12)	ND (14)	ND (9.6)	ND (13)	ND (12)	ND (13)
1,2-Dibromoethane (Ethylene Dibromide)	ug/kg	ND (6.9)	ND (5.3)	ND (6.2)	ND (6.3)	ND (4.5)	ND (6.5)	ND (6.3)	ND (260)	ND (6.0)	ND (6.9)	ND (4.8)	ND (6.5)	ND (5.9)	ND (6.6)
1,2-Dichlorobenzene	ug/kg	ND (6.9)	ND (5.3) UJ	ND (6.2)	ND (6.3)	ND (4.5)	ND (6.5)	ND (6.3)	ND (260)	ND (6.0)	ND (6.9)	ND (4.8)	ND (6.5)	ND (5.9)	ND (6.6)
1,2-Dichloroethane	ug/kg	ND (6.9)	ND (5.3)	ND (6.2)	ND (6.3)	ND (4.5)	ND (6.5)	ND (6.3)	ND (260)	ND (6.0)	ND (6.9)	ND (4.8)	ND (6.5)	ND (5.9)	ND (6.6)
1,2-Dichloropropane	ug/kg	ND (6.9)	ND (5.3)	ND (6.2)	ND (6.3)	ND (4.5)	ND (6.5)	ND (6.3)	ND (260)	ND (6.0)	ND (6.9)	ND (4.8)	ND (6.5)	ND (5.9)	ND (6.6)
1,3-Dichlorobenzene	ug/kg	ND (6.9)	ND (5.3) UJ	ND (6.2)	ND (6.3)	ND (4.5)	ND (6.5)	ND (6.3)	ND (260)	ND (6.0)	ND (6.9)	ND (4.8)	ND (6.5)	ND (5.9)	ND (6.6)
1,4-Dichlorobenzene	ug/kg	ND (6.9)	ND (5.3) UJ	ND (6.2)	ND (6.3)	ND (4.5)	ND (6.5)	ND (6.3)	ND (260)	ND (6.0)	ND (6.9)	ND (4.8)	ND (6.5)	ND (5.9)	ND (6.6)
2-Butanone (Methyl Ethyl Ketone)	ug/kg	ND (28)	ND (21)	ND (25)	ND (25)	ND (18)	ND (26)	ND (25)	ND (1100)	ND (24)	ND (27)	ND (19) UJ	ND (26) UJ	ND (24) UJ	ND (27) UJ
2-Hexanone	ug/kg	ND (28)	ND (21)	ND (25)	ND (25)	ND (18)	ND (26)	ND (25)	ND (1100)	ND (24)	ND (27)	ND (19)	ND (26)	ND (24)	ND (27)
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	ug/kg	ND (28)	ND (21)	ND (25)	ND (25)	ND (18)	ND (26)	ND (25)	ND (1100)	ND (24)	ND (27)	ND (19)	ND (26)	ND (24)	ND (27)
Acetone	ug/kg	ND (28) UJ	ND (21) UJ	ND (25) UJ	ND (25) UJ	ND (18) UJ	ND (26) UJ	12 J	340 J	11 J	17 J	ND (19) UJ	13 J	13 J	12 J
Benzene	ug/kg	ND (6.9)	ND (5.3)	ND (6.2)	ND (6.3)	ND (4.5)	ND (6.5)	ND (6.3)	ND (260)	ND (6.0)	ND (6.9)	0.54 J	ND (6.5)	ND (5.9)	ND (6.6)
Bromodichloromethane	ug/kg	ND (6.9)	ND (5.3)	ND (6.2)	ND (6.3)	ND (4.5)	ND (6.5)	ND (6.3)	ND (260)	ND (6.0)	ND (6.9)	ND (4.8)	ND (6.5)	ND (5.9)	ND (6.6)
Bromoform	ug/kg	ND (6.9)	ND (5.3)	ND (6.2)	ND (6.3)	ND (4.5)	ND (6.5)	ND (6.3)	ND (260)	ND (6.0)	ND (6.9)	ND (4.8)	ND (6.5)	ND (5.9)	ND (6.6)
Bromomethane (Methyl Bromide)	ug/kg	ND (6.9)	ND (5.3)	ND (6.2)	ND (6.3)	ND (4.5)	ND (6.5)	ND (6.3)	ND (260)	ND (6.0)	ND (6.9)	ND (4.8)	ND (6.5)	ND (5.9)	ND (6.6)
Carbon disulfide	ug/kg	ND (6.9)	ND (5.3)	ND (6.2)	ND (6.3)	ND (4.5)	ND (6.5)	ND (6.3)	ND (260)	ND (6.0)	ND (6.9)	ND (4.8)	ND (6.5)	ND (5.9)	ND (6.6)
Carbon tetrachloride	ug/kg	ND (6.9) UJ	ND (5.3) UJ	ND (6.2) UJ	ND (6.3) UJ	ND (4.5)	ND (6.5)	ND (6.3)	ND (260)	ND (6.0)	ND (6.9)	ND (4.8)	ND (6.5)	ND (5.9)	ND (6.6)
Chlorobenzene	ug/kg	ND (6.9)	ND (5.3)	ND (6.2)	ND (6.3)	ND (4.5)	ND (6.5)	ND (6.3)	ND (260)	ND (6.0)	ND (6.9)	ND (4.8)	ND (6.5)	ND (5.9)	ND (6.6)
Chloroethane	ug/kg	ND (6.9)	ND (5.3)	ND (6.2)	ND (6.3)	ND (4.5)	ND (6.5)	ND (6.3)	ND (260)	ND (6.0)	ND (6.9)	ND (4.8)	ND (6.5)	ND (5.9)	ND (6.6)
Chloroform (Trichloromethane)	ug/kg	ND (6.9)	ND (5.3)	ND (6.2)	ND (6.3)	ND (4.5)	ND (6.5)	ND (6.3)	ND (260)	ND (6.0)	ND (6.9)	ND (4.8)	ND (6.5)	ND (5.9)	ND (6.6)
Chloromethane (Methyl Chloride)	ug/kg	ND (6.9)	ND (5.3)	ND (6.2)	ND (6.3)	ND (4.5)	ND (6.5)	ND (6.3)	ND (260)	ND (6.0)	ND (6.9)	ND (4.8)	ND (6.5)	ND (5.9)	ND (6.6)
cis-1,2-Dichloroethene	ug/kg	ND (3.4)	ND (2.7)	ND (3.1)	ND (3.1)	ND (2.2)	ND (3.3)	ND (3.1)	63 J	ND (3.0)	ND (3.4)	ND (2.4)	ND (3.2)	ND (3.0)	ND (3.3)
cis-1,3-Dichloropropene	ug/kg	ND (6.9)	ND (5.3)	ND (6.2)	ND (6.3)	ND (4.5)	ND (6.5)	ND (6.3)	ND (260)	ND (6.0)	ND (6.9)	ND (4.8)	ND (6.5)	ND (5.9)	ND (6.6)
Cyclohexane	ug/kg	ND (14)	ND (11)	ND (12)	ND (13)	ND (8.9)	ND (13)	ND (13)	ND (530)	ND (12)	ND (14)	ND (9.6)	ND (13)	ND (12)	ND (13)
Dibromochloromethane	ug/kg	ND (6.9)	ND (5.3)	ND (6.2)	ND (6.3)	ND (4.5)	ND (6.5)	ND (6.3)	ND (260)	ND (6.0)	ND (6.9)	ND (4.8)	ND (6.5)	ND (5.9)	ND (6.6)
Dichlorodifluoromethane (CFC-12)	ug/kg	ND (6.9) UJ	ND (5.3) UJ	ND (6.2) UJ	ND (6.3) UJ	ND (4.5)	ND (6.5)	ND (6.3)	ND (260)	ND (6.0)	ND (6.9)	ND (4.8)	ND (6.5)	ND (5.9)	ND (6.6)
Ethylbenzene	ug/kg	ND (6.9)	ND (5.3)	ND (6.2)	ND (6.3)	ND (4.5)	ND (6.5)	ND (6.3)	ND (260)	ND (6.0)	ND (6.9)	ND (4.8)	ND (6.5)	ND (5.9)	ND (6.6)
Isopropylbenzene	ug/kg	ND (6.9)	ND (5.3)	ND (6.2)	ND (6.3)	ND (4.5)	ND (6.5)	ND (6.3)	ND (260)	ND (6.0)	ND (6.9)	ND (4.8)	ND (6.5)	ND (5.9)	ND (6.6)
Methyl acetate	ug/kg	ND (14)	ND (11)	ND (12)	ND (13)	ND (8.9)	ND (13)	ND (13)	ND (530)	ND (12)	ND (14)	ND (9.6)	ND (13)	ND (12)	ND (13)
Methyl cyclohexane	ug/kg	ND (14)	ND (11)	ND (12)	ND (13)	ND (8.9)	ND (13)	ND (13)	ND (530)	ND (12)	ND (14)	0.72 J	ND (13)	ND (12)	ND (13)
Methyl Tert Butyl Ether	ug/kg	ND (28)	ND (21)	ND (25)	ND (25)	ND (18)	ND (26)	ND (25)	ND (1100)	ND (24)	ND (27)	ND (19)	ND (26)	ND (24)	ND (27)
Methylene chloride	ug/kg	ND (6.9)	ND (5.3)	ND (6.2)	ND (6.3)	ND (4.5)	ND (6.5) U	ND (6.3) U	ND (260)	ND (6.0)	ND (6.9) U	ND (4.8)	ND (6.5)	ND (5.9)	ND (6.6)
Styrene	ug/kg	ND (6.9)	ND (5.3)	ND (6.2)	ND (6.3)	ND (4.5)	ND (6.5)	ND (6.3)	ND (260)	ND (6.0)	ND (6.9)	ND (4.8)	ND (6.5)	ND (5.9)	ND (6.6)
Tetrachloroethene	ug/kg	ND (6.9)	ND (5.3)	ND (6.2)	ND (6.3)	ND (4.5)	ND (6.5)	ND (6.3)	1100	ND (6.0)	ND (6.9)	0.67 J	ND (6.5)	ND (5.9)	ND (6.6)
Toluene	ug/kg	ND (6.9)	ND (5.3)	ND (6.2)	ND (6.3)	ND (4.5)	ND (6.5)	ND (6.3)	26 J	ND (6.0)	ND (6.9)	0.88 J	ND (6.5)	ND (5.9)	ND (6.6)
trans-1,2-Dichloroethene	ug/kg	ND (3.4)	ND (2.7)	ND (3.1)	ND (3.1)	ND (2.2)	ND (3.3)	ND (3.1)	ND (130)	ND (3.0)	ND (3.4)	ND (2.4)	ND (3.2)	ND (3.0)	ND (3.3)
trans-1,3-Dichloropropene	ug/kg	ND (6.9)	ND (5.3)	ND (6.2)	ND (6.3)	ND (4.5)	ND (6.5)	ND (6.3)	ND (260)	ND (6.0)	ND (6.9)	ND (4.8)	ND (6.5)	ND (5.9)	ND (6.6)
Trichloroethene	ug/kg	ND (6.9)	ND (5.3)	ND (6.2)	ND (6.3)	ND (4.5)	ND (6.5)	ND (6.3)	210 J	ND (6.0)	ND (6.9)	ND (4.8)	ND (6.5)	ND (5.9)	ND (6.6)
Trichlorofluoromethane (CFC-11)	ug/kg	ND (6.9) UJ	ND (5.3) UJ	ND (6.2) UJ	ND (6.3) UJ	ND (4.5)	ND (6.5)	ND (6.3)	ND (260)	ND (6.0)	ND (6.9)	ND (4.8)	ND (6.5)	ND (5.9)	ND (6.6)
Trifluorotrichloroethane (Freon 113)	ug/kg	ND (6.9)	ND (5.3)	ND (6.2)	ND (6.3)	ND (4.5)	ND (6.5)	ND (6.3)	ND (260)	ND (6.0)	ND (6.9)	ND (4.8)	ND (6.5)	ND (5.9)	ND (6.6)
Vinyl chloride	ug/kg	ND (6.9)	ND (5.3)	ND (6.2)	ND (6.3)	ND (4.5)	ND (6.5)	ND (6.3)	ND (260)	ND (6.0)	ND (6.9)	ND (4.8)	ND (6.5)	ND (5.9)	ND (6.6)
Xylene (total)	ug/kg	ND (6.9)	ND (5.3)	ND (6.2)	ND (6.3)	ND (4.5)	ND (6.5)	ND (6.3)	ND (260)	ND (6.0)	ND (6.9)	ND (4.8)	ND (6.5)	ND (5.9)	ND (6.6)
Semi-volatiles															
2,2'-oxybis(1-Chloropropane) (bis(2-chloroisopropyl) ether)	ug/kg	ND (430)	ND (350)	ND (420)	ND (420)	ND (380)	ND (450)	ND (450)	ND (380)	ND (400)	ND (430)	ND (370)	ND (410)	ND (410)	ND (410)
2,4,5-Trichlorophenol	ug/kg	ND (430)	ND (350)	ND (420)	ND (420)	ND (380)	ND (450)	ND (450)	ND (380)	ND (400)	ND (430)	ND (370)	ND (410)	ND (410)	ND (410)
2,4,6-Trichlorophenol	ug/kg	ND (430)	ND (350)	ND (420)	ND (420)	ND (380)	ND (450)	ND (450)	ND (380)	ND (400)	ND (430)	ND (370)	ND (410)	ND (410)	ND (410)
2,4-Dichlorophenol	ug/kg	ND (430)	ND (350)	ND (420)	ND (420)	ND (380)	ND (450)	ND (450)	ND (380)	ND (400)	ND (430)	ND (370)	ND (410)	ND (410)	ND (410)
2,4-Dimethylphenol	ug/kg	ND (430)	ND (350)	ND (420)	ND (420)	ND (380)	ND (450)	ND (450)	ND (380)	ND (400)	ND (430)	ND (370)	ND (410)	ND (410)	ND (410)
2,4-Dinitrophenol	ug/kg	ND (2100) UJ	ND (1700)	ND (2000)	ND (2100)	ND (1800)	ND (2200)	ND (2200)	ND (1800)	ND (2000)	ND (2100)	ND (1800)	ND (2000)	ND (2000)	ND (2000)
2,4-Dinitrotoluene	ug/kg	ND (430)	ND (350)	ND (420)	ND (420)	ND (380)	ND (450)	ND (450)	ND (380)	ND (400)	ND (430)	ND (370)	ND (410)	ND (410)	ND (410)
2,6-Dinitrotoluene	ug/kg	ND (430)	ND (350)	ND (420)	ND (420)	ND (380)	ND (450)	ND (450)	ND (380)	ND (400)	ND (430)	ND (370)	ND (410)	ND (410)	ND (410)
2-Chloronaphthalene	ug/kg	ND (430)	ND (350)	ND (420)	ND (420)	ND (380)	ND (450)	ND (450)	ND (380)	ND (400)	ND (430)	ND (370)	ND (410)	ND (410)	ND (410)
2-Chlorophenol	ug/kg	ND (430)	ND (350)	ND (420)	ND (420)	ND (380)	ND (450)	ND (450)	ND (380)	ND (400)	ND (430)	ND (370)	ND (410)	ND (410)	ND (410)

TABLE 1

ANALYTICAL RESULTS SUMMARY
NOVEMBER 2003

Sample Location:		*B-X031Y124C*	*B-X031Y124D*	*B-X031Y124D*	*B-X031Y124D*	*B-X154Y117*	*B-X154Y117*	*B-X154Y117*	*B-X154Y117A*	*B-X154Y117A*	*B-X154Y117A*	*B-X154Y117B*	*B-X154Y117B*	*B-X154Y117B*	*B-X154Y117B*
Sample ID:		*S-110503-JC-013*	*S-110603-JC-014*	*S-110603-JC-015*	*S-110603-JC-016*	*S-111203-JC-024*	*S-111203-JC-025*	*S-111203-JC-026*	*S-111203-JC-021*	*S-111203-JC-022*	*S-111203-JC-023*	*S-111003-JC-017*	*S-111003-JC-018*	*S-111003-JC-019*	*S-111003-JC-020*
Sample Date:		*11/5/2003*	*11/6/2003*	*11/6/2003*	*11/6/2003*	*11/12/2003*	*11/12/2003*	*11/12/2003*	*11/12/2003*	*11/12/2003*	*11/12/2003*	*11/10/2003*	*11/10/2003*	*11/10/2003*	*11/10/2003*
Sample Depth:		*(32-33)*	*(0-2)*	*(6-8)*	*(30-32)*	*(0-2)*	*(6-8)*	*(24-25)*	*(0-2)*	*(6-8)*	*(24-25)*	*(0-2)*	*(6-8)*	*(6-8)*	*(24-25)*
														Duplicate	
Parameters	***Units***														
2-Methylnaphthalene	ug/kg	ND (430)	ND (350)	ND (420)	ND (420)	ND (380)	ND (450)	ND (450)	ND (380)	ND (400)	ND (430)	ND (370)	ND (410)	ND (410)	ND (410)
2-Methylphenol	ug/kg	ND (430)	ND (350)	ND (420)	ND (420)	ND (380)	ND (450)	ND (450)	ND (380)	ND (400)	ND (430)	ND (370)	ND (410)	ND (410)	ND (410)
2-Nitroaniline	ug/kg	ND (2100)	ND (1700)	ND (2000)	ND (2100)	ND (1800)	ND (2200)	ND (2200)	ND (1800)	ND (2000)	ND (2100)	ND (1800)	ND (2000)	ND (2000)	ND (2000)
2-Nitrophenol	ug/kg	ND (430)	ND (350)	ND (420)	ND (420)	ND (380)	ND (450)	ND (450)	ND (380)	ND (400)	ND (430)	ND (370)	ND (410)	ND (410)	ND (410)
3,3'-Dichlorobenzidine	ug/kg	ND (2100)	ND (1700)	ND (2000)	ND (2100)	ND (1800)	ND (2200)	ND (2200)	ND (1800)	ND (2000)	ND (2100)	ND (1800)	ND (2000) UJ	ND (2000) UJ	ND (2000)
3-Nitroaniline	ug/kg	ND (2100)	ND (1700)	ND (2000)	ND (2100)	ND (1800)	ND (2200)	ND (2200)	ND (1800)	ND (2000)	ND (2100)	ND (1800)	ND (2000)	ND (2000)	ND (2000)
4,6-Dinitro-2-methylphenol	ug/kg	ND (2100) UJ	ND (1700)	ND (2000)	ND (2100)	ND (1800)	ND (2200)	ND (2200)	ND (1800)	ND (2000)	ND (2100)	ND (1800)	ND (2000)	ND (2000)	ND (2000)
4-Bromophenyl phenyl ether	ug/kg	ND (430)	ND (350)	ND (420)	ND (420)	ND (380)	ND (450)	ND (450)	ND (380)	ND (400)	ND (430)	ND (370)	ND (410)	ND (410)	ND (410)
4-Chloro-3-methylphenol	ug/kg	ND (430)	ND (350)	ND (420)	ND (420)	ND (380)	ND (450)	ND (450)	ND (380)	ND (400)	ND (430)	ND (370)	ND (410)	ND (410)	ND (410)
4-Chloroaniline	ug/kg	ND (430)	ND (350)	ND (420)	ND (420)	ND (380)	ND (450)	ND (450)	ND (380)	ND (400)	ND (430)	ND (370)	ND (410)	ND (410)	ND (410)
4-Chlorophenyl phenyl ether	ug/kg	ND (430)	ND (350)	ND (420)	ND (420)	ND (380)	ND (450)	ND (450)	ND (380)	ND (400)	ND (430)	ND (370)	ND (410)	ND (410)	ND (410)
4-Methylphenol	ug/kg	ND (430)	ND (350)	ND (420)	ND (420)	ND (380)	ND (450)	ND (450)	ND (380)	ND (400)	ND (430)	ND (370)	ND (410)	ND (410)	ND (410)
4-Nitroaniline	ug/kg	ND (2100)	ND (1700)	ND (2000)	ND (2100)	ND (1800)	ND (2200)	ND (2200)	ND (1800)	ND (2000)	ND (2100)	ND (1800)	ND (2000)	ND (2000)	ND (2000)
4-Nitrophenol	ug/kg	ND (2100) UJ	ND (1700)	ND (2000)	ND (2100)	ND (1800) UJ	ND (2200) UJ	ND (2200) UJ	ND (1800)	ND (2000) UJ	ND (2100)	ND (1800)	ND (2000)	ND (2000)	ND (2000)
Acenaphthene	ug/kg	ND (430)	ND (350)	ND (420)	ND (420)	ND (380)	ND (450)	ND (450)	ND (380)	ND (400)	ND (430)	ND (370)	ND (410)	ND (410)	ND (410)
Acenaphthylene	ug/kg	ND (430)	ND (350)	ND (420)	ND (420)	ND (380)	ND (450)	ND (450)	ND (380)	ND (400)	ND (430)	74 J	ND (410)	ND (410)	ND (410)
Acetophenone	ug/kg	ND (430)	ND (350)	ND (420)	ND (420)	ND (380)	ND (450)	ND (450)	ND (380)	ND (400)	ND (430)	ND (370)	ND (410)	ND (410)	ND (410)
Anthracene	ug/kg	ND (430)	ND (350)	ND (420)	ND (420)	ND (380)	ND (450)	ND (450)	72 J	ND (400)	ND (430)	73 J	ND (410)	130 J	ND (410)
Atrazine	ug/kg	ND (430)	ND (350)	ND (420)	ND (420)	ND (380)	ND (450)	ND (450)	ND (380)	ND (400)	ND (430)	ND (370)	ND (410)	ND (410)	ND (410)
Benzaldehyde	ug/kg	ND (430)	ND (350)	ND (420)	ND (420)	ND (380)	ND (450)	ND (450)	ND (380)	ND (400)	ND (430)	ND (370)	ND (410)	ND (410)	ND (410)
Benzo(a)anthracene	ug/kg	ND (430)	22 J	ND (420)	ND (420)	21 J	80 J	ND (450)	80 J	ND (400)	ND (430)	40 J	ND (410) UJ	ND (410) UJ	ND (410)
Benzo(a)pyrene	ug/kg	ND (430)	23 J	ND (420)	ND (420)	33 J	98 J	ND (450)	98 J	24 J	ND (430)	84 J	110 J	110 J	ND (410)
Benzo(b)fluoranthene	ug/kg	ND (430)	29 J	ND (420)	ND (420)	31 J	110 J	ND (450)	190 J	32 J	ND (430)	110 J	110 J	130 J	ND (410)
Benzo(g,h,i)perylene	ug/kg	ND (430)	ND (350)	ND (420)	ND (420)	29 J	70 J	ND (450)	89 J	ND (400)	ND (430)	88 J	ND (410)	ND (410)	ND (410)
Benzo(k)fluoranthene	ug/kg	ND (430)	ND (350)	ND (420)	ND (420)	ND (380)	35 J	ND (450)	130 J	ND (400)	ND (430)	30 J	ND (410)	120 J	ND (410)
Biphenyl	ug/kg	ND (430)	ND (350)	ND (420)	ND (420)	ND (380)	ND (450)	ND (450)	ND (380)	ND (400)	ND (430)	ND (370)	ND (410)	ND (410)	ND (410)
bis(2-Chloroethoxy)methane	ug/kg	ND (430)	ND (350)	ND (420)	ND (420)	ND (380)	ND (450)	ND (450)	ND (380)	ND (400)	ND (430)	ND (370)	ND (410)	ND (410)	ND (410)
bis(2-Chloroethyl)ether	ug/kg	ND (430)	ND (350)	ND (420)	ND (420)	ND (380)	ND (450)	ND (450)	ND (380)	ND (400)	ND (430)	ND (370)	ND (410)	ND (410)	ND (410)
bis(2-Ethylhexyl)phthalate	ug/kg	ND (430)	ND (350)	ND (420)	ND (420)	ND (380)	ND (450)	ND (450)	ND (380)	ND (400)	ND (430)	ND (370)	ND (410) UJ	ND (410) UJ	ND (410)
Butyl benzylphthalate	ug/kg	ND (430)	ND (350)	ND (420)	ND (420)	ND (380)	ND (450)	ND (450)	ND (380)	ND (400)	ND (430)	ND (370)	ND (410) UJ	ND (410) UJ	ND (410)
Caprolactam	ug/kg	ND (430)	ND (350)	ND (420)	ND (420)	ND (380)	ND (450)	ND (450)	ND (380)	ND (400)	ND (430)	ND (370)	ND (410)	ND (410)	ND (410)
Carbazole	ug/kg	ND (430)	ND (350)	ND (420)	ND (420)	ND (380)	ND (450)	ND (450)	ND (380)	ND (400)	ND (430)	ND (370)	ND (410)	ND (410)	ND (410)
Chrysene	ug/kg	ND (430)	34 J	ND (420)	ND (420)	27 J	100 J	ND (450)	120 J	33 J	ND (430)	71 J	ND (410) UJ	28 J	ND (410)
Dibenz(a,h)anthracene	ug/kg	ND (430)	ND (350)	ND (420)	ND (420)	ND (380)	ND (450)	ND (450)	82 J	ND (400)	ND (430)	25 J	ND (410)	ND (410)	ND (410)
Dibenzofuran	ug/kg	ND (430)	ND (350)	ND (420)	ND (420)	ND (380)	ND (450)	ND (450)	ND (380)	ND (400)	ND (430)	70 J	ND (410)	ND (410)	ND (410)
Diethyl phthalate	ug/kg	ND (430) UJ	ND (350)	ND (420)	ND (420)	ND (380)	ND (450)	ND (450)	ND (380)	ND (400)	ND (430)	ND (370)	ND (410)	ND (410)	ND (410)
Dimethyl phthalate	ug/kg	ND (430)	ND (350)	ND (420)	ND (420)	ND (380)	ND (450)	ND (450)	ND (380)	ND (400)	ND (430)	ND (370)	ND (410)	ND (410)	ND (410)
Di-n-butylphthalate	ug/kg	ND (430)	ND (350)	ND (420)	ND (420)	ND (380)	ND (450)	ND (450)	ND (380)	ND (400)	65 J	ND (370)	96 J	95 J	ND (410)
Di-n-octyl phthalate	ug/kg	ND (430)	ND (350)	ND (420)	ND (420)	ND (380)	ND (450)	ND (450)	ND (380)	ND (400)	ND (430)	ND (370)	ND (410)	ND (410)	ND (410)
Fluoranthene	ug/kg	ND (430)	28 J	ND (420)	ND (420)	49 J	220 J	ND (450)	220 J	40 J	ND (430)	63 J	140 J	150 J	ND (410)
Fluorene	ug/kg	ND (430)	ND (350)	ND (420)	ND (420)	ND (380)	ND (450)	ND (450)	ND (380)	ND (400)	ND (430)	ND (370)	ND (410)	ND (410)	ND (410)

TABLE 1

ANALYTICAL RESULTS SUMMARY
NOVEMBER 2003

Sample Location:		*B-X031Y124C*	*B-X031Y124D*	*B-X031Y124D*	*B-X031Y124D*	*B-X154Y117*	*B-X154Y117*	*B-X154Y117*	*B-X154Y117A*	*B-X154Y117A*	*B-X154Y117A*	*B-X154Y117B*	*B-X154Y117B*	*B-X154Y117B*	*B-X154Y117B*
Sample ID:		*S-110503-JC-013*	*S-110603-JC-014*	*S-110603-JC-015*	*S-110603-JC-016*	*S-111203-JC-024*	*S-111203-JC-025*	*S-111203-JC-026*	*S-111203-JC-021*	*S-111203-JC-022*	*S-111203-JC-023*	*S-111003-JC-017*	*S-111003-JC-018*	*S-111003-JC-019*	*S-111003-JC-020*
Sample Date:		*11/5/2003*	*11/6/2003*	*11/6/2003*	*11/6/2003*	*11/12/2003*	*11/12/2003*	*11/12/2003*	*11/12/2003*	*11/12/2003*	*11/12/2003*	*11/10/2003*	*11/10/2003*	*11/10/2003*	*11/10/2003*
Sample Depth:		*(32-33)*	*(0-2)*	*(6-8)*	*(30-32)*	*(0-2)*	*(6-8)*	*(24-25)*	*(0-2)*	*(6-8)*	*(24-25)*	*(0-2)*	*(6-8)*	*(6-8)* *Duplicate*	*(24-25)*
Parameters	***Units***														
Hexachlorobenzene	ug/kg	ND (430)	ND (350)	ND (420)	ND (420)	ND (380)	ND (450)	ND (450)	ND (380)	ND (400)	ND (430)	ND (370)	ND (410)	ND (410)	ND (410)
Hexachlorobutadiene	ug/kg	ND (430)	ND (350)	ND (420)	ND (420)	ND (380)	ND (450)	ND (450)	ND (380)	ND (400)	ND (430)	ND (370)	ND (410)	ND (410)	ND (410)
Hexachlorocyclopentadiene	ug/kg	ND (2100) UJ	ND (1700)	ND (2000)	ND (2100)	ND (1800)	ND (2200)	ND (2200)	ND (1800) UJ	ND (2000) UJ	ND (2100) UJ	ND (1800)	ND (2000)	ND (2000)	ND (2000)
Hexachloroethane	ug/kg	ND (430)	ND (350)	ND (420)	ND (420)	ND (380)	ND (450)	ND (450)	ND (380)	ND (400)	ND (430)	ND (370)	ND (410)	ND (410)	ND (410)
Indeno(1,2,3-cd)pyrene	ug/kg	ND (430)	ND (350)	ND (420)	ND (420)	26 J	58 J	ND (450)	130 J	ND (400)	ND (430)	72 J	ND (410)	95 J	ND (410)
Isophorone	ug/kg	ND (430)	ND (350)	ND (420)	ND (420)	ND (380)	ND (450)	ND (450)	ND (380)	ND (400)	ND (430)	ND (370)	ND (410)	ND (410)	ND (410)
Naphthalene	ug/kg	ND (430)	ND (350)	ND (420)	ND (420)	ND (380)	ND (450)	ND (450)	ND (380)	ND (400)	ND (430)	ND (370)	ND (410)	ND (410)	ND (410)
Nitrobenzene	ug/kg	ND (430)	ND (350)	ND (420)	ND (420)	ND (380)	ND (450)	ND (450)	ND (380)	ND (400)	ND (430)	ND (370)	ND (410)	ND (410)	ND (410)
N-Nitrosodi-n-propylamine	ug/kg	ND (430)	ND (350)	ND (420)	ND (420)	ND (380)	ND (450)	ND (450)	ND (380)	ND (400)	ND (430)	ND (370)	ND (410)	ND (410)	ND (410)
N-Nitrosodiphenylamine	ug/kg	ND (430)	ND (350)	ND (420)	ND (420)	ND (380)	ND (450)	ND (450)	ND (380)	ND (400)	ND (430)	ND (370)	ND (410)	ND (410)	ND (410)
Pentachlorophenol	ug/kg	ND (430)	ND (350)	ND (420)	ND (420)	ND (380)	ND (450)	ND (450)	ND (380)	ND (400)	ND (430)	ND (370)	ND (410)	ND (410)	ND (410)
Phenanthrene	ug/kg	ND (430)	31 J	ND (420)	ND (420)	28 J	110 J	ND (450)	140 J	35 J	ND (430)	100 J	130 J	140 J	ND (410)
Phenol	ug/kg	ND (430)	ND (350)	ND (420)	ND (420)	ND (380)	ND (450)	ND (450)	ND (380)	ND (400)	ND (430)	ND (370)	ND (410)	ND (410)	ND (410)
Pyrene	ug/kg	ND (430)	29 J	ND (420)	ND (420)	47 J	210 J	ND (450)	180 J	34 J	ND (430)	61 J	ND (410) UJ	34 J	ND (410)
Metals															
Aluminum	mg/kg	8850	1290	12500	7360	6770	13700	4950	633	9760	6500	6920	7800	4540	8050
Antimony	mg/kg	ND (7.8)	ND (6.3)	0.41 J	0.26 J	ND (6.9) UJ	1.1 J	ND (8.1) UJ	ND (6.9) UJ	1.6 J	0.56 J	ND (6.7) UJ	0.75 J	0.95 J	0.28 J
Arsenic	mg/kg	1.5	1.3	8.1	4.3	3.9	5.7	5.9	2.3	7.8	4.0	11.1	4.8	5.3	6.7
Barium	mg/kg	15.6 J	6.3 J	53.3	64.9	31.9	41.8	13.5 J	14.9 J	57.7	25.0 J	121	45.3	43.1	58.1
Beryllium	mg/kg	0.84	ND (0.52)	ND (0.63) U	1.7	0.21 J	0.85	2.7	ND (0.58) U	0.60 J	1.1	0.097 J	0.32 J	0.27 J	3.8
Cadmium	mg/kg	0.88	0.049 J	0.31 J	1.2	0.22 J	0.17 J	0.42 J	0.84	0.49 J	0.37 J	0.99	0.37 J	0.50 J	0.68
Chromium Total	mg/kg	11.4	2.4	15.7	13.3	213 J	28.6 J	11.2 J	5.1 J	19.3 J	26.9 J	248 J	13.4 J	15.0 J	44.2 J
Cobalt	mg/kg	8.4	1.9 J	4.9 J	12.0	346	3.4 J	12.3	0.80 J	4.2 J	9.8	7.4	3.3 J	3.2 J	36.8
Copper	mg/kg	10.9	3.7	13.4	26.1	30.1	53.7	17.5	16.3	41.0	14.0	86.7	24.5	24.7	17.7
Cyanide (amenable)	mg/kg	ND (0.65)	ND (0.52)	ND (0.63)	ND (0.64)	ND (0.57)	ND (0.68)	ND (0.68)	ND (0.58)	ND (0.61)	ND (0.65)	ND (0.56)	ND (0.62)	ND (0.62)	ND (0.63)
Cyanide (total)	mg/kg	ND (0.65)	ND (0.52)	ND (0.63)	ND (0.64)	ND (0.57)	ND (0.68)	ND (0.68)	ND (0.58)	ND (0.61)	ND (0.65)	ND (0.56)	ND (0.62)	ND (0.62)	ND (0.63)
Iron	mg/kg	8960	2830	19300	24400	11600	29500	12800	3370	26200	17300	14500	15400	15100	29100
Lead	mg/kg	10.7	2.9	23.5	14.5	28.1 J	15.4 J	12.0 J	21.0 J	73.6 J	13.7 J	213 J	33.9 J	39.4 J	36.8 J
Manganese	mg/kg	221	34.7	263	177	98.4 J	53.7 J	308 J	69.6 J	198 J	408 J	464 J	68.2 J	152 J	1170 J
Mercury	mg/kg	0.11 J	ND (0.10)	0.17	0.025 J	0.23	0.039 J	0.12 J	0.042 J	0.049 J	0.053 J	1.1	0.043 J	0.048 J	0.027 J
Nickel	mg/kg	20.4	2.4 J	10.1	39.9	35.1	22.1	55.8	3.0 J	10.8	27.3	26.2	7.1	6.0	65.4
Selenium	mg/kg	ND (0.65)	ND (0.52)	0.82	0.74	ND (0.57)	0.63 J	ND (0.68)	ND (0.58)	ND (0.61)	ND (0.65)	2.5	ND (0.62)	ND (0.62)	ND (0.63)
Silver	mg/kg	ND (1.3)	ND (1.0)	ND (1.3)	ND (1.3)	ND (1.1)	ND (1.4)	ND (1.4)	ND (1.2)	ND (1.2)	ND (1.3)	0.33 J	ND (1.2)	ND (1.2)	ND (1.3)
Thallium	mg/kg	0.71 J	ND (1.0)	0.92 J	ND (1.3)	2.0	ND (1.4)	0.61 J	ND (1.2)	ND (1.2)	ND (1.3)	1.1	ND (1.2)	ND (1.2)	ND (1.3)
Vanadium	mg/kg	11.3	4.3 J	25.4	22.3	18.6	30.8	14.0	3.7 J	29.7	25.3	15.4	21.7	20.0	35.9
Zinc	mg/kg	45.2	25.5	53.5	73.8	43.1 J	111 J	46.5 J	80.4 J	96.4 J	43.8 J	241 J	73.7 J	81.6 J	88.5 J
PCBs															
Aroclor-1016 (PCB-1016)	ug/kg	ND (43)	ND (35)	ND (42)	ND (42)	ND (38)	ND (45)	ND (45)	ND (38)	ND (40) UJ	ND (43)	ND (37)	ND (41)	ND (41)	ND (41)
Aroclor-1221 (PCB-1221)	ug/kg	ND (43)	ND (35)	ND (42)	ND (42)	ND (38)	ND (45)	ND (45)	ND (38)	ND (40) UJ	ND (43)	ND (37)	ND (41)	ND (41)	ND (41)
Aroclor-1232 (PCB-1232)	ug/kg	ND (43)	ND (35)	ND (42)	ND (42)	ND (38)	ND (45)	ND (45)	ND (38)	ND (40) UJ	ND (43)	ND (37)	ND (41)	ND (41)	ND (41)
Aroclor-1242 (PCB-1242)	ug/kg	ND (43)	ND (35)	ND (42)	ND (42)	ND (38)	ND (45)	ND (45)	ND (38)	ND (40) UJ	ND (43)	ND (37)	ND (41)	ND (41)	ND (41)
Aroclor-1248 (PCB-1248)	ug/kg	ND (43)	ND (35)	ND (42)	ND (42)	79	ND (45)	ND (45)	19 J	ND (40) UJ	ND (43)	18 J	ND (41)	ND (41)	ND (41)
Aroclor-1254 (PCB-1254)	ug/kg	ND (43)	ND (35)	ND (42)	ND (42)	ND (38)	ND (45)	ND (45)	ND (38)	ND (40) UJ	ND (43)	ND (37)	ND (41)	ND (41)	ND (41)
Aroclor-1260 (PCB-1260)	ug/kg	ND (43)	ND (35)	ND (42)	ND (42)	ND (38)	ND (45)	ND (45)	ND (38)	ND (40) UJ	ND (43)	ND (37)	ND (41)	ND (41)	ND (41)
Sum of detected PCBs (ND=0)	ug/kg	0	0	0	0	79	0	0	19 J	0	0	18 J	0	0	0
General Chemistry															
Total Solids	%	76.9	95.6	79.0	78.0	87.4	73.7	74.0	86.7	81.8	77.4	89.5	80.3	80.9	79.7

Non-detect at associated value.
Estimated.
Non-detect at associated value. The associated value is estimated.

APPENDIX A

BOREHOLE LOGS

DRAFT

STRATIGRAPHIC AND INSTRUMENTATION LOG (BEDROCK)

PROJECT NAME: GM BEDFORD RFI
PROJECT NUMBER: 013968
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: BEDFORD, INDIANA
DRILLING CONTRACTOR: RDNP

HOLE DESIGNATION: B-X031Y124
DATE COMPLETED: 4 November 2003
DRILLING METHOD: GEOPROBE
FIELD PERSONNEL: J. CLOSE

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft AMSL	BOREHOLE	RUN NUMBER	CORE RECOVERY %	RQD %
	GROUND SURFACE	721.5				
0	Asphalt	721.1				
	GRAVEL (FILL)					
2						
		718.5				
4	SM- SILTY SAND, fine grained, poorly graded, dark brown, loose, damp					
6	- fine to medium grained, cohesive with silt, tan at 6.0ft BGS					
8						
10		711.3				
	CL-CLAY, trace silt, stiff, low plasticity, brown, damp					
12						
14						
16						
			BENTONITE SEAL			
18	- brown / tan to strong brown, hard at 17.9ft BGS					
20	- off-white to gray at 20.0ft BGS - strong brown at 20.5ft BGS					
22						
24						
26	- very hard at 25.6ft BGS					
	- coarse gravel (possible chert) at 27.2ft BGS					
28						
30						
32						
		688.3				
34	BEDROCK					
		687.5				
	END OF BOREHOLE @ 34.0ft BGS					

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS ( )

BEDROCK LOG 20040316_13968.GPJ CRA_CORP.GDT 6/4/04

DRAFT

STRATIGRAPHIC AND INSTRUMENTATION LOG (BEDROCK)

PROJECT NAME: GM BEDFORD RFI
PROJECT NUMBER: 013968
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: BEDFORD, INDIANA
DRILLING CONTRACTOR: RDNP

HOLE DESIGNATION: B-X031Y124A
DATE COMPLETED: 5 November 2003
DRILLING METHOD: GEOPROBE
FIELD PERSONNEL: J. CLOSE

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft AMSL
	GROUND SURFACE	721.6
0	Asphalt	721.2
2	GM/SM SILTY SAND & GRAVEL (FILL), little silt, medium grained, poorly graded, loose, off-white, dry	718.6
4	SM-SILTY SAND, medium to fine grained, well graded, loose, dark brown to black, dry	717.6
6	CL/ML CLAY & SILT, cohesive, dense, damp	
	- rock/ coarse gravel, at 6.8ft BGS	714.7
8	SM-SILTY SAND, medium graded, poorly graded, firm	
10		710.8
12	CL-CLAY, trace coarse sand, poorly graded, low plasticity, dense, brown, damp	
14	- gravel, strong brown at 13.8ft BGS - gravel at 14.5ft BGS	
16	- brown to strong brown at 16.0ft BGS - coarse gravel at 16.9ft BGS	
18		
20		
22	- increase of fine gravel content at 23.0ft BGS	
24		
26		
28	- pale green at 27.9ft BGS	
		693.0
30	SC-CLAYEY SAND, cohesive, medium to coarse sand, well graded, soft, strong brown, damp	692.6
	CL-CLAY, low plasticity, dense, strong brown, damp	
32	- coarse gravel at 31.5ft BGS	689.6
	- tan / pale yellow at 31.6ft BGS	689.2
	BEDROCK	
34	END OF BOREHOLE @ 32.4ft BGS	

BOREHOLE: BENTONITE SEAL

RUN NUMBER | CORE RECOVERY % | RQD %

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS

BEDROCK LOG 20040316_13968.GPJ CRA_CORP.GDT 6/4/04

DRAFT

STRATIGRAPHIC AND INSTRUMENTATION LOG (BEDROCK)

PROJECT NAME: GM BEDFORD RFI
PROJECT NUMBER: 013968
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: BEDFORD, INDIANA
DRILLING CONTRACTOR: RDNP

HOLE DESIGNATION: B-X031Y124B
DATE COMPLETED: 5 November 2003
DRILLING METHOD: GEOPROBE
FIELD PERSONNEL: J. CLOSE

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft AMSL	BOREHOLE	RUN NUMBER	CORE RECOVERY %	RQD %
	GROUND SURFACE	721.7				
	Asphalt	721.3				
	GW/SW SAND & GRAVEL (FILL), trace silt, medium to coarse sand, fine gravel, loose					
	SM-SILTY SAND, trace coarse gravel, fine to medium grained, loose, dark brown to black, dry - gravel at 4.0ft BGS	718.7				
	GM-GRAVEL, sand and silt, fine to coarse sand, fine gravel, loose, tan, dry	714.7				
	CL-CLAY, little silt, low plasticity, dense, brown, damp to moist - hard at 11.5ft BGS	711.5				
	- coarse gravel at 15.5ft BGS - strong brown, fine gravel at 16.5ft BGS		BENTONITE SEAL			
	- coarse gravel at 20.5ft BGS - pale yellow & pale blue with strong brown at 21.0ft BGS					
	- coarse gravel at 29.8ft BGS - pale yellow & pale green with strong brown at 30.4ft BGS					
	BEDROCK	688.2				
	END OF BOREHOLE @ 34.0ft BGS	687.7				

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS (oval)

BEDROCK LOG 20040316_13968.GPJ CRA_CORP.GDT 6/4/04

DRAFT

STRATIGRAPHIC AND INSTRUMENTATION LOG (BEDROCK)

PROJECT NAME: GM BEDFORD RFI
PROJECT NUMBER: 013968
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: BEDFORD, INDIANA
DRILLING CONTRACTOR: RDNP

HOLE DESIGNATION: B-X031Y124C
DATE COMPLETED: 5 November 2003
DRILLING METHOD: GEOPROBE
FIELD PERSONNEL: J. CLOSE

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft AMSL	BOREHOLE	RUN NUMBER	CORE RECOVERY %	RQD %
	GROUND SURFACE	721.5				
0	Asphalt	721.1				
2	GW/SW GRAVEL & SAND (FILL), medium grained, poorly graded, loose, off-white, dry					
		718.5				
4	SM-SILTY SAND, fine to medium grained, well graded, loose, dark brown to black, dry					
6						
		714.5				
8	GM-GRAVEL,some silt, trace medium to coarse grained sand, fine gravel, loose, gray, moist					
		712.5				
10	CL-CLAY, medium to low plasticity, dense, medium brown to olive green,					
12	- brown at 12.0ft BGS					
14	- coarse gravel at 15.0ft BGS					
16			BENTONITE SEAL			
18	- brown to strong brown at 18.5ft BGS					
20						
22	- dark strong brown at 22.0ft BGS					
24	- fine gravel at 23.8ft BGS - yellow - olive green at 24.0ft BGS					
26	- back to strong brown at 26.0ft BGS					
28						
30						
32	- pale blue/tan to pale yellow at 31.0ft BGS					
	BEDROCK	688.5				
34	END OF BOREHOLE @ 33.3ft BGS	688.2				

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS

BEDROCK LOG 20040316_13968.GPJ CRA_CORP.GDT 6/4/04

DRAFT

STRATIGRAPHIC AND INSTRUMENTATION LOG (BEDROCK)

PROJECT NAME: GM BEDFORD RFI
PROJECT NUMBER: 013968
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: BEDFORD, INDIANA
DRILLING CONTRACTOR: RDNP

HOLE DESIGNATION: B-X031Y124D
DATE COMPLETED: 6 November 2003
DRILLING METHOD: GEOPROBE
FIELD PERSONNEL: J. CLOSE

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft AMSL	BOREHOLE	RUN NUMBER	CORE RECOVERY %	RQD %
	GROUND SURFACE	721.1				
0	Asphalt	720.7				
2	GW/SW GRAVEL & SAND (FILL), fine to coarse grained sand, fine gravel, damp					
4	SW-SAND, fine to medium grained, well graded, loose, dark brown to black, damp	718.1				
6	CL-CLAY, low plasticity, cohesive, firm, brown, damp	715.4				
8						
10						
12						
14	- stiff at 13.6ft BGS					
16	- transition to strong brown at 16.0ft BGS		BENTONITE SEAL			
18						
20	- trace fine gravel at 18.9ft BGS					
22	- dark strong brown at 22.4ft BGS					
24	- transition to pale yellow/pale green at 23.0ft BGS - transition to dark strong brown at 24.3ft BGS					
26	- trace fine gravel at 27.0ft BGS					
28						
30	- some coarse sand, fine gravel at 30.6ft BGS					
32	- transition to pale yellow at 31.5ft BGS BEDROCK	689.1				
34	END OF BOREHOLE @ 32.9ft BGS	688.2				

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS (○)

BEDROCK LOG 20040316_13968.GPJ CRA_CORP.GDT 6/4/04

DRAFT

STRATIGRAPHIC AND INSTRUMENTATION LOG (BEDROCK)

PROJECT NAME: GM BEDFORD RFI
PROJECT NUMBER: 013968
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: BEDFORD, INDIANA
DRILLING CONTRACTOR: RDNP

HOLE DESIGNATION: B-X154Y117
DATE COMPLETED: 12 November 2003
DRILLING METHOD: GEOPROBE
FIELD PERSONNEL: J. CLOSE

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft AMSL	BOREHOLE	RUN NUMBER	CORE RECOVERY %	RQD %
	GROUND SURFACE	724.7				
0	Rip Rap (Limestone)	724.3				
	CL-CLAY, cohesive, soft to firm, low plasticity, brown, damp					
2						
4						
6	- transition to strong brown at 6.0ft BGS					
	- cobbles at 7.0ft BGS					
8						
10						
		714.1				
	SW/GP-SAND & GRAVEL, medium to coarse grained, well graded, fine grained gravel, loose, dark gray to black, wet	713.2				
12	SC-CLAYEY SAND, medium to coarse sand, cohesive, firm, olive green, damp to moist	711.7	BENTONITE SEAL			
14	SM-SILTY SAND, some silt, medium to coarse grained, dense, dark brown, moist					
		709.7				
16	CL-CLAY, cohesive, soft to firm, low plasticity, olive green, damp					
	- dark gray to black at 15.5ft BGS					
18						
20						
	- strong brown, firm, dry at 20.5ft BGS					
22						
24						
		699.7				
	BEDROCK (LIMESTONE)	699.4				
26	END OF BOREHOLE @ 25.3ft BGS					
28						
30						
32						
34						

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS (oval)

BEDROCK LOG 20040316_13968.GPJ CRA_CORP.GDT 6/4/04

DRAFT

STRATIGRAPHIC AND INSTRUMENTATION LOG (BEDROCK)

PROJECT NAME: GM BEDFORD RFI
PROJECT NUMBER: 013968
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: BEDFORD, INDIANA
DRILLING CONTRACTOR: RDNP

HOLE DESIGNATION: B-X154Y117A
DATE COMPLETED: 12 November 2003
DRILLING METHOD: GEOPROBE
FIELD PERSONNEL: J. CLOSE

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft AMSL	BOREHOLE	RUN NUMBER	CORE RECOVERY %	RQD %
	GROUND SURFACE	724.7				
	CONCRETE PAD					
	SM/SP- SAND (FILL), some silt, fine to medium grained, well graded, loose, tan to dark gray, damp	723.9				
4	CL-CLAY, cohesive, low plasticity, firm, strong brown, damp	720.7				
	- soft at 7.5ft BGS					
12	SW-SAND, fine to medium grained, well graded, loose, tan to light brown, wet	712.7	BENTONITE SEAL			
18	CL-CLAY, cohesive, low plasticity, firm, strong brown, damp	706.7				
24	BEDROCK (LIMESTONE)	699.7				
26	END OF BOREHOLE @ 25.3ft BGS	699.4				

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS

BEDROCK LOG 20040316_13968.GPJ CRA_CORP.GDT 6/4/04

DRAFT

STRATIGRAPHIC AND INSTRUMENTATION LOG (BEDROCK)

PROJECT NAME: GM BEDFORD RFI
PROJECT NUMBER: 013968
CLIENT: GENERAL MOTORS CORPORATION
LOCATION: BEDFORD, INDIANA
DRILLING CONTRACTOR: RDNP

HOLE DESIGNATION: B-X154Y117B
DATE COMPLETED: 10 November 2003
DRILLING METHOD: GEOPROBE
FIELD PERSONNEL: J. CLOSE

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft AMSL	BOREHOLE	RUN NUMBER	CORE RECOVERY %	RQD %
	GROUND SURFACE	724.6				
	CONCRETE PAD					
	SM-SAND (FILL), some silt, fine to coarse grained, well graded, loose, tan to dark brown, damp	723.8				
2						
4	- wet at 3.7ft BGS					
	ML-SILT, little medium to coarse grained sand, dense, dark gray, damp to moist	719.6				
6						
8	- fine grained at 7.8ft BGS					
10						
	SW/GP-SAND & GRAVEL, medium to coarse grained sand, well graded, loose, dark brown, wet	714.1	BENTONITE SEAL			
12						
14						
	SW-SAND, trace fine gravel, fine to coarse grained, well graded, medium gray, wet	710.4				
	SW/GP-SAND & GRAVEL, medium to coarse grained sand, well graded, loose, rust, wet	709.6				
16						
18						
	CL-CLAY, cohesive, firm, low plasticity, olive green to dark gray, moist	706.2				
20						
22						
24						
	BEDROCK (LIMESTONE)	699.6				
	END OF BOREHOLE @ 25.4ft BGS	699.2				
26						
28						
30						
32						
34						

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS ⬭

BEDROCK LOG 20040316_13968.GPJ CRA_CORP.GDT 6/4/04