RCRA FACILITY INVESTIGATION

QUARTERLY PROGRESS REPORT #15 FOURTH QUARTER 2004

GM POWERTRAIN – BEDFORD FACILITY 105 GM DRIVE BEDFORD, INDIANA

EPA ID# IND006036099

Prepared For: General Motors Corporation

JANUARY 2005 REF. NO. 13968 (132) This report is printed on recycled paper.

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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 2004 for the GM Powertrain – Bedford Facility (Facility), Bedford, Indiana. Some of the activities conducted as part of the overall Resource Conservation and Recovery Act (RCRA) Corrective Action (CA) work are being addressed under the CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act) 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 First Quarter 2005, will be submitted on or before April 15, 2005.

2.0 <u>LIST OF COMPLETED ACTIVITIES</u>

The following documents were prepared and distributed during this quarter:

- On October 5, 2004, the Addendum No. 1 to the Quality Assurance Project Plan (QAPP) was sent the U.S. EPA and Indiana Department of Environmental Management (IDEM) for approval. This addendum refers to the on-Site laboratory for verification soil PCB samples.
- On October 7 and 8, 2004, 4th quarter 2004 low-flow sampling was completed, pursuant to the Site Source Control (SSC) Work Plan (final, validated results are attached as Table 1).
- Conference calls were held with the U.S. EPA, United States Fish and Wildlife Services (USFWS), IDEM, and Indiana State Health Department (ISHD) on October 12, November 9 and 30, and December 15, 2004, to discuss project progress.
- The 14th Quarterly Progress Report, covering July, August, and September 2004, was submitted to the U.S. EPA on October 15, 2004.
- The Ecological Risk Assessment Problem Formulation was submitted to the U.S. EPA, following a conference call on October 12, 2004, regarding the Ecological Risk Assessment.
- On October 20 and 21, 2004, the 3rd quarter 2004 high-flow sampling was completed, pursuant to the SSC Work Plan (final, validated results are attached as Table 2). No other qualifying event occurred for the 4th quarter high-flow sampling.
- A Conference call with the U.S. EPA and IDEM was held on October 21, 2004, to discuss the format for the October 27 & 28, 2004, public meetings.
- Water levels from all existing groundwater monitoring wells and piezometers were collected on October 25 and November 22, 2004.
- An on-Site meeting with the U.S. EPA and IDEM was held October 28, 2004, to discuss the design of additional controls in the construction of the SSC system in the area north of AOI 4 and east of the stormwater lagoon.
- Final, validated soil analytical results from the completed test pits, as per the RCRA Facility Investigation (RFI) Work Plan Addendum No. 4, were submitted to the U.S. EPA and IDEM on October 21, 2004.
- During the October 12, 2004, bi-weekly conference call, the U.S. EPA approved RFI Work Plan Addendum No. 7 (AOI 21). The initial drilling for the Work Plan was

completed during this reporting period. Soil samples were submitted to STL in North Canton, Ohio for analysis.

- Comments regarding the Western and Northern Tributary Interim Measures (IM) were received from the U.S. EPA on October 14, 2004. Responses to these comments were sent to the U.S. EPA (via email) on October 26, 2004; it identified additional field and design activities to be completed as part of the Northern Tributary IM Work Plan. The Western Tributary IM Work Plan was approved by the U.S. EPA during the December 15, 2004 bi-weekly conference call.
- ENTACT mobilized to the site during November 2004. ENTACT was awarded the Contract for the work associated with Downstream Parcels Removal Action Work Plan from Broomsage Road, downstream to the end of the cleanup area.
- The draft East Plant Area IM Work Plan and a letter proposing the re-use of soil materials with low-level PCBs (≤25 mg/kg) as backfill and grading fill (AOC Proposal Letter) was submitted to the U.S. EPA for review on November 9, 2004.
- Comments were received from the U.S. EPA on November 5, 2004, regarding RFI Work Plan: Addendum No. 6. Responses to these comments are being prepared.
- The consolidated Health and Safety Plan, covering activities both on-Site and off-Site was submitted to the U.S. EPA on November 16, 2004.
- The SSC Work Plan: Addendum No. 3 was submitted to the U.S. EPA on November 17, 2004.
- The final Proposed Modification to the Ambient Air Quality Monitoring Plan (AAQMP) was submitted to the U.S. EPA on November 23, 2004. The Modification to the Ambient Air Quality Monitoring Plan was approved by the U.S. EPA on November 30, 2004.
- Final results from RFI Work Plan Addenda No. 5 and 6 were submitted to the U.S. EPA on November 24, 2004.
- The final RFI Work Plan: Addendum No. 7 was submitted to the U.S. EPA on November 24, 2004. This submittal included preliminary results of the initial investigative drilling program. The Work Plan outlined four areas that required further investigation. Preliminary results indicate that Areas 1, 2 and 3 were adequately defined in all directions. The investigative borings at Area 4 are ongoing to define the apparent random contamination of fill materials. Once Area 4 is defined, Site-specific risk assessment will be required for all areas to any potential future activities.
- On December 9, 2004, a meeting was held at the U.S. EPA's Chicago office, regarding the AOC Proposal Letter and the draft East Plant Area IM Work Plan.

During the meeting the U.S. EPA, IDEM, and GM agreed that the Corrective Action activities for the East Plant Area of the Bedford Facility would be separated from the overall site and follow a formal RCRA Corrective Measures Study (CMS) process complete with an opportunity for public comment on the final remedy for the East Plant Area. The remaining portion of the site will be addressed under a separate CMS/Final Remedy decision.

- During this reporting period, Swallets #1, 2, and 3 were broken out in order to remove potential contaminated materials. The excavation for the original Swallet #1 continued in an westerly direction to the location of the current haul road in the area. This new location was named as Swallet #1A.
- Three additional swallets were identified along the creek system during this reporting period. Swallets #4 and 5 were identified along Tributary 3 on Parcel 15 and Swallet #1B was identified approximately twenty feet downstream of the original Swallet #1.
- On December 10, 2004, a qualitative dye trace was completed at Swallet #1A. A small quantity of Rhodamine WT was injected at the swallet and visual observations were made downstream at the locations of the springs where dye had appeared during previous dye traces. Visual presence of the dye appeared at these springs within approximately 1.5 hours after injection.
- On December 16, 2004, the draft Environmental Indicator (EI) CA 725 Report: Determination of Current Human Exposures Under Control was submitted to the U.S. EPA. Consistent with the Agreement, the EI CA 725 Report is to be finalized by January 30, 2005.

GM also continued to evaluate specific sampling requests did we this quarter 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 to U.S. EPA and IDEM. 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 issues with Access Agreements with the remaining downstream creek property owner who has not signed an access agreement will continue.

The September 2004, October 2004, and November 2004 CERCLA Removal Action Monthly Progress Reports were submitted during the 4th quarter of 2004.

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3.0 SUMMARIES OF ALL CHANGES MADE IN THE CORRECTIVE ACTION (CA) DURING THE REPORTING PERIOD

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

- The Quality Assurance Project Plan (QAPP): Addendum No. 1;
- The Quarterly Progress Report #14: Third Quarter 2004;
- The RFI Work Plan Addendum No. 4 Final Sample Results;
- The Response to Comments for the Northern and Western Tributary IM Work Plans;
- The draft East Plant Area IM Work Plan;
- The consolidated Health and Safety Plan;
- The RFI Work Plan Addendum No. 5 Final Sample Results;
- The RFI Work Plan Addendum No. 6 Final Sample Results;
- The RFI Work Plan: Addendum No. 7;
- The RFI Work Plan: Addendum No. 7 Preliminary Sample Results; and
- The draft Environmental Indicator (EI) CA 725 Report: Determination of Current Human Exposures Under Control.

4.0 <u>COMMUNITY RELATIONS</u>

GM continues to maintain the toll free information telephone number. Individual meetings continue to be arranged to discuss sampling results with individual residents.

Quarterly meetings to review project status, both with the neighbors along the creek and around the plant, as well as with the general public, were held for this quarter on October 27 and 28, 2004, at the Facility. The public meeting format was changed at the October 2004 meetings to an availability session style. This gave neighbors and the general public an opportunity to talk one-on-one with GM representatives and various Federal and State agencies. The next meetings are scheduled to occur on February 16 and 17, 2005, and will be a hybrid of the traditional presentation format and the new availability session format.

Fact Sheet 9 was issued on October 28, 2004. The next Fact Sheet is expected to be issued in February 2005.

One CLP meeting occurred in this quarter on October 29, 2004. The next regularly scheduled meeting with the Community Liaison Panel (CLP) is set for January 21, 2004. The CLP was formed to provide additional communication avenues for the community and the meetings have been held at the GM plant approximately every two months. The CLP voted in the last meeting to make the meeting frequency once per quarter going forward. The CLP meeting minutes are posted on the GM website at <u>www.BedfordPowertrainCorrectiveAction.com</u>.

The Information Center, located at the plant lobby, 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 aforementioned web site.

5.0 <u>CHANGES IN PERSONNEL DURING THE REPORTING PERIOD</u>

CRA has assigned an additional full-time on-Site Health and Safety Officer, Brian Stewart. The additional Health and Safety Officer, Brian Stewart, is currently on-Site daily during construction activities.

ENTACT was awarded the Contract for the work associated with Downstream Parcels Removal Action Work Plan from Broomsage Road, downstream to the end of the cleanup area.

6.0 **PROJECTED WORK FOR THE NEXT REPORTING PERIOD**

Work projected for the next reporting period includes:

- Continue the soil investigation pursuant to the RFI Work Plan Addendum No. 7;
- Schedule and complete the sewer inspection at Parcel 400, pursuant to the RFI Work Plan Addendum No. 5;
- Conduct a neighborhood meeting; scheduled for February 16, 2005;
- Conduct a general public information session; scheduled for February 17, 2005;
- Conduct a Community Liaison Panel Meeting; scheduled for January 21, 2005;
- Prepare and distribute Fact Sheet 10; currently projected to be in February 2005;
- Continue with Removal Action activities in the upstream and downstream parcels;
- Continue monthly monitoring of groundwater elevations measurements;
- Continue the evaluation of RFI soil and groundwater;
- Submit an IM Work Plan for the areas west of GM Drive to U.S. EPA and IDEM for review;
- Submit response the comments for the RFI Work Plan: Addendum No. 6;
- Implement the IM Work Plan for properties along the Western Tributary;
- Submit a modified IM Work Plan for the Northern Tributary;
- Submit the Ecological Risk Assessment to the U.S. EPA for review;
- Work with the U.S. EPA to finalize the EI CA 725 Report prior to the January 30, 2005 deadline;
- Submit the RFI Work Plan: Addendum No. 8 for the additional dye trace studies in the AOI 4 and AOI 6 areas. These studies are to be performed during the next quarter to support the CMS for the East Plant Area;
- Submit the RFI Work Plan: Addendum No. 9 for additional geological investigations. These investigations will be performed during the next quarter to support the CMS in the East Plant Area; and
- Develop and submit the CMS for the East Plant Area for U.S. EPA review.

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.

Area of Interest: Sample Location: Sample ID: Sample Date:		A004 NA004 Spring A SW-100804-JN-5259 10/8/2004	A004 NA004 Spring B SW-100804-JN-5260 10/8/2004	A004 NA004 Spring C SW-100804-JN-5262 10/8/2004	A004 NA004 Spring D SW-100804-JN-5264 10/8/2004	A004 NA004 Spring D SW-100804-JN-5265 10/8/2004 Dunlicate	A004 NA004 Spring E SW-100804-JN-5266 10/8/2004	A004 NA004 Spring F SW-100804-JN-5267 10/8/2004	A004 NA004 Spring G SW-100804-JN-5268 10/8/2004	A004 NA004 Sump A SW-100804-JN-5261 10/8/2004	A004 NA004 Sump B SW-100804-JN-5263 10/8/2004
Parameters	Units					Dupitente					
Field Parameters											
Conductivity Field	mS/cm	1.333	1.433	1.474	1.522	1.522	1.457	1.242	1.236	1.5331	1.019
Dissolved Oxygen, Field	mg/L	0.07	-0.01	0.07	0.26	0.22	0.07	0.03	0.00	-0.03	0.02
ORP, Field	millivolts	-95.3	-100.4	-98.0	-126.8	-129.1	-64.3	-63.8	6.0	13.5	7.7
pH Field	s.u.	7.23	7.73	7.50	7.60	7.58	7.56	7.67	7.67	7.63	7.89
Temperature	Deg C	18.38	16.90	17.91	17.54	17.51	17.99	18.25	16.95	17.71	17.69
Turbidity (Field)	NTU	18.10	41.30	94.00	36.50	36.80	330.00	249.00	394.00	112.00	86.30
PCBs											
Aroclor-1016 (PCB-1016)	ug/L	ND (2.0)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)
Aroclor-1221 (PCB-1221)	ug/L	ND (2.0)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)
Aroclor-1232 (PCB-1232)	ug/L	ND (4.0)	ND (0.40)	ND (0.40)	ND (0.40)	ND (0.40)	ND (0.40)	ND (0.40)	ND (0.40)	ND (0.40)	ND (0.40)
Aroclor-1242 (PCB-1242)	ug/L	12	ND (0.20)	2.0	2.9	1.8	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)
Aroclor-1248 (PCB-1248)	ug/L	ND (2.0)	0.47	ND (0.20)	ND (0.20)	ND (0.20)	0.46	0.80	2.6	3.3	0.94
Aroclor-1254 (PCB-1254)	ug/L	ND (2.0)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)
Aroclor-1260 (PCB-1260)	ug/L	ND (2.0)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)
Total PCBs (ND=0)	ug/L	12	0.47	2	2.9	1.8	0.46	0.8	2.6	3.3	0.94
PCBs (Dissolved)											
Aroclor-1016 (PCB-1016) (Dissolved)	ug/L	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)				
Aroclor-1221 (PCB-1221) (Dissolved)	ug/L	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)				
Aroclor-1232 (PCB-1232) (Dissolved)	ug/L	ND (0.40)	ND (0.40)	ND (0.40)	ND (0.40)	ND (0.40)	ND (0.40)				
Aroclor-1242 (PCB-1242) (Dissolved)	ug/L	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)				
Aroclor-1248 (PCB-1248) (Dissolved)	ug/L	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)				
Aroclor-1254 (PCB-1254) (Dissolved)	ug/L	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)				
Aroclor-1260 (PCB-1260) (Dissolved)	ug/L	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)				
Total PCBs (Dissolved) (ND=0)	ug/L	0	0	0	0	0	0	0	0	0	0

Area of Interest: Sample Location: Sample ID: Sample Date:		A004 Wet Well 3 SW-100804-JN-5269 10/8/2004	A010 Eastern Seep Area 01 SW-100804-JN-5270 10/8/2004	P003 SPRING_1590 SW-100804-JN-5271 10/8/2004	P003 Wet Well 1 SW-100704-JN-5255 10/7/2004	P003 Wet Well 1 SW-100704-JN-5256 10/7/2004 Duplicate	P003 Wet Well 2 SW-100704-JN-5257 10/7/2004	P008 8-3 SW-100704-JN-5258 10/7/2004	P021 SPRING_021-004 SW-100704-JN-5254 10/7/2004	P022 Spring Well 1 SW-100704-JN-5253 10/7/2004
Parameters	Units									
Field Parameters										
Conductivity Field	mS/cm	1.333	1.540	0.948	1.178	1.178	1.094	0.858	0.831	0.725
Dissolved Oxygen, Field	mg/L	0.03	0.05	0.04	1.50	1.49	0.42	0.35	1.84	6.82
ORP, Field	millivolts	-78.4	-72.9	53.1	20.2	20.0	101.8	122.2	119.2	146.0
pH Field	s.u.	7.63	7.77	8.00	8.05	8.04	8.27	8.54	8.04	7.89
Temperature	Deg C	17.91	17.02	15.32	18.61	18.61	17.42	18.52	19.31	13.68
Turbidity (Field)	NTU	112.00	99.80	16.70	28.50	26.90	23.40	18.70	26.10	170.00
PCBs										
Aroclor-1016 (PCB-1016)	ug/L	ND (4.0)	ND (20)	ND (0.20)	ND (4.0)	ND (4.0)	ND (1.0)	ND (0.20)	ND (40)	ND (0.20)
Aroclor-1221 (PCB-1221)	ug/L	ND (4.0)	ND (20)	ND (0.20)	ND (4.0)	ND (4.0)	ND (1.0)	ND (0.20)	ND (40)	ND (0.20)
Aroclor-1232 (PCB-1232)	ug/L	31	ND (40)	ND (0.40)	ND (8.0)	ND (8.0)	ND (2.0)	ND (0.40)	ND (80)	ND (0.40)
Aroclor-1242 (PCB-1242)	ug/L	ND (4.0)	160	ND (0.20)	ND (4.0)	ND (4.0)	ND (1.0)	ND (0.20)	250	ND (0.20)
Aroclor-1248 (PCB-1248)	ug/L	ND (4.0)	ND (20)	ND (0.20)	27	20	5.2	0.36	ND (40)	ND (0.20)
Aroclor-1254 (PCB-1254)	ug/L	ND (4.0)	ND (20)	ND (0.20)	ND (4.0)	ND (4.0)	ND (1.0)	ND (0.20)	ND (40)	ND (0.20)
Aroclor-1260 (PCB-1260)	ug/L	ND (4.0)	ND (20)	ND (0.20)	ND (4.0)	ND (4.0)	ND (1.0)	ND (0.20)	ND (40)	ND (0.20)
Total PCBs (ND=0)	ug/L	31	160	0	27	20	5.2	0.36	250	0
PCBs (Dissolved)										
Aroclor-1016 (PCB-1016) (Dissolved)	ug/L	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)
Aroclor-1221 (PCB-1221) (Dissolved)	ug/L	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)
Aroclor-1232 (PCB-1232) (Dissolved)	ug/L	ND (0.40)	ND (0.40)	ND (0.40)	ND (0.40)	ND (0.40)	ND (0.40)	ND (0.40)	ND (0.40)	ND (0.40)
Aroclor-1242 (PCB-1242) (Dissolved)	ug/L	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)
Aroclor-1248 (PCB-1248) (Dissolved)	ug/L	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	0.21	ND (0.20)
Aroclor-1254 (PCB-1254) (Dissolved)	ug/L	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)
Aroclor-1260 (PCB-1260) (Dissolved)	ug/L	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)
Total PCBs (Dissolved) (ND=0)	ug/L	0	0	0	0	0	0	0	0.21	0

Area of Interest: Sample Location: Sample ID: Sample Date:		A004 NA004 Spring A SW-102104-JN-5291 10/21/2004 (orig)	A004 NA004 Spring A SW-102104-JN-5292 10/21/2004 Duplicate	A004 NA004 Spring B SW-102104-JN-5293 10/21/2004 (orig)	A004 NA004 Spring C SW-102104-JN-5295 10/21/2004 (orig)	A004 NA004 Spring D SW-102104-JN-5297 10/21/2004 (orig)	A004 NA004 Spring D SW-102104-JN-5298 10/21/2004 Duplicate	A004 NA004 Spring E SW-102104-JN-5299 10/21/2004 (orig)	A004 NA004 Spring F SW-102104-JN-5300 10/21/2004 (orig)	A004 NA004 Spring G SW-102104-JN-5301 10/21/2004 (orig)	A004 NA004 Spring H SW-102104-JN-5304 10/21/2004 (orig)
Parameters	Units										
Field Parameters											
Conductivity Field	mS/cm	1.360	1.361	1.259	0.881	1.328	1.328	1.260	1.194	1.165	1.049
Dissolved Oxygen, Field	mg/L	0.54	0.51	1.13	1.31	0.49	0.45	0.61	0.73	0.72	1.71
ORP, Field	millivolts	-66.5	-67.8	-43.2	8.3	-47.6	-48.2	-10.7	-22.7	-11.6	66.8
pH Field	s.u.	7.37	7.33	7.52	7.35	7.09	7.02	7.16	7.12	7.21	7.28
Temperature	Deg C	16.36	16.38	16.19	15.56	14.93	14.93	15.83	14.96	15.27	15.60
Turbidity (Field)	NTU	24.60	24.10	7.72	3.06	5.49	5.44	3.98	9.08	405.00	12.6
PCBs											
Aroclor-1016 (PCB-1016)	ug/L	ND (2.0)	ND (2.0)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (100)
Aroclor-1221 (PCB-1221)	ug/L	ND (2.0)	ND (2.0)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (100)
Aroclor-1232 (PCB-1232)	ug/L	ND (4.0)	ND (4.0)	ND (0.40)	ND (0.40)	2.9	3.0	ND (0.40)	ND (0.40)	ND (0.40)	ND (200)
Aroclor-1242 (PCB-1242)	ug/L	15	14	ND (0.20)	2.3	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (100)
Aroclor-1248 (PCB-1248)	ug/L	ND (2.0)	ND (2.0)	0.77	ND (0.20)	ND (0.20)	ND (0.20)	0.64	3.2	3.5	790
Aroclor-1254 (PCB-1254)	ug/L	ND (2.0)	ND (2.0)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (100)
Aroclor-1260 (PCB-1260)	ug/L	ND (2.0)	ND (2.0)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	0.32	ND (0.20)	ND (100)
Total PCBs (ND=0)	ug/L	15	14	0.77	2.3	2.9	3	0.64	3.52	3.5	790
PCBs (Dissolved)											
Aroclor-1016 (PCB-1016) (Dissolved)	ug/L	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)
Aroclor-1221 (PCB-1221) (Dissolved)	ug/L	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)
Aroclor-1232 (PCB-1232) (Dissolved)	ug/L	ND (0.40)	ND (0.40)	ND (0.40)	ND (0.40)	ND (0.40)	ND (0.40)	ND (0.40)	ND (0.40)	ND (0.40)	ND (0.40)
Aroclor-1242 (PCB-1242) (Dissolved)	ug/L	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)
Aroclor-1248 (PCB-1248) (Dissolved)	ug/L	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)
Aroclor-1254 (PCB-1254) (Dissolved)	ug/L	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)
Aroclor-1260 (PCB-1260) (Dissolved)	ug/L	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)
Total PCBs (Dissolved) (ND=0)	ug/L	0	0	0	0	0	0	0	0	0	0

Area of Interest: Sample Location: Sample ID: Sample Date:		A004 NA004 Sump A SW-102104-JN-5294 10/21/2004 (orig)	A004 NA004 Sump B SW-102104-JN-5296 10/21/2004 (orig)	A004 Wet Well 3 5W-102104-JN-5302 10/21/2004 (orig)	A004 P401 NAO14/P401 Spring SW-102104-JN-5290 10/21/2004 (orig)	A010 Eastern Seep Area 01 SW-102104-JN-5303 10/21/2004 (orig)	P003 SEEP_001 SW-102104-JN-5288 10/21/2004 (orig)	P003 SPRING_1590 SW-102104-JN-5285 10/21/2004 (orig)	P003 Wet Well 1 SW-102104-JN-5287 10/21/2004 (orig)	P003 Wet Well 2 5W-102104-JN-5289 10/21/2004 (orig)	P008 8-1 SW-102004-JN-5284 10/20/2004 (orig)
Parameters	Units										
Field Parameters											
Conductivity Field	mS/cm	1.468	0.731	0.849	0.853	0.531	0.636	0.793	0.582	0.802	0.814
Dissolved Oxygen, Field	mg/L	0.94	1.89	1.87	2.88	1.91	7.69	6.92	7.23	7.02	7.19
ORP, Field	millivolts	67.7	35.4	56.0	-72.7	82.0	163.8	223.0	160.3	159.7	235.2
pH Field	s.u.	7.34	7.23	7.44	7.15	7.16	7.43	6.93	7.47	7.40	7.49
Temperature	Deg C	15.95	14.63	15.35	17.30	15.66	14.35	14.04	15.80	16.23	16.39
Turbidity (Field)	NTU	6.09	3.04	4.32	157.00	1.26	571.00	6.82	30.70	180.00	7.17
PCBs											
Aroclor-1016 (PCB-1016)	ug/L	ND (1.0)	ND (0.20)	ND (0.20)	ND (0.20)	ND (10)	ND (0.20)	ND (0.20)	ND (0.20)	ND (1.0)	ND (0.20)
Aroclor-1221 (PCB-1221)	ug/L	ND (1.0)	ND (0.20)	ND (0.20)	ND (0.20)	ND (10)	ND (0.20)	ND (0.20)	ND (0.20)	ND (1.0)	ND (0.20)
Aroclor-1232 (PCB-1232)	ug/L	ND (2.0)	ND (0.40)	ND (0.40)	ND (0.40)	ND (20)	ND (0.40)	ND (0.40)	ND (0.40)	ND (2.0)	ND (0.40)
Aroclor-1242 (PCB-1242)	ug/L	ND (1.0)	ND (0.20)	0.22 J	ND (0.20)	ND (10)	ND (0.20)	ND (0.20)	ND (0.20)	ND (1.0)	ND (0.20)
Aroclor-1248 (PCB-1248)	ug/L	7.0	ND (0.20)	ND (0.20)	ND (0.20)	53	0.43	ND (0.20)	4.1	8.4	ND (0.20)
Aroclor-1254 (PCB-1254)	ug/L	ND (1.0)	ND (0.20)	ND (0.20)	ND (0.20)	ND (10)	ND (0.20)	ND (0.20)	ND (0.20)	ND (1.0)	ND (0.20)
Aroclor-1260 (PCB-1260)	ug/L	ND (1.0)	ND (0.20)	ND (0.20)	ND (0.20)	ND (10)	ND (0.20)	ND (0.20)	ND (0.20)	ND (1.0)	ND (0.20)
Total PCBs (ND=0)	ug/L	7	0	0.22 J	0	53	0.43	0	4.1	8.4	0
PCBs (Dissolved)											
Aroclor-1016 (PCB-1016) (Dissolved)	ug/L	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)
Aroclor-1221 (PCB-1221) (Dissolved)	ug/L	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)
Aroclor-1232 (PCB-1232) (Dissolved)	ug/L	ND (0.40)	ND (0.40)	ND (0.40)	ND (0.40)	ND (0.40)	ND (0.40)	ND (0.40)	ND (0.40)	ND (0.40)	ND (0.40)
Aroclor-1242 (PCB-1242) (Dissolved)	ug/L	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)
Aroclor-1248 (PCB-1248) (Dissolved)	ug/L	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)
Aroclor-1254 (PCB-1254) (Dissolved)	ug/L	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)
Aroclor-1260 (PCB-1260) (Dissolved)	ug/L	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)
Total PCBs (Dissolved) (ND=0)	ug/L	0	0	0	0	0	0	0	0	0	0

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Area of Interest: Sample Location: Sample ID: Sample Date:		P008 8-3 SW-102004-JN-5283 10/20/2004 (orig)	P011 11-2A SW-102004-JN-5282 10/20/2004 (orig)	P011 11-3 SW-102004-JN-5281 10/20/2004 (orig)	P020 SPRING_020-002 SW-102004-JN-5277 10/20/2004 (orig)	P020/P296 SPRING_009 SW-102004-JN-5276 10/20/2004 (orig)	P021 SPRING_018 SW-102004-JN-5280 10/20/2004 (orig)	P021 SPRING_021-002 SW-102004-JN-5279 10/20/2004 (orig)	P021 SPRING_021-004 SW-102004-JN-5278 10/20/2004 (orig)	P022 Spring Well 1 SW-102004-JN-5274 10/20/2004 (orig)	P022 Spring Well 1 SW-102004-JN-5275 10/20/2004 Duplicate
Parameters	Units										
Field Parameters											
Conductivity Field	mS/cm	0.818	0.674	0.966	0.623	0.633	0.687	0.690	0.689	0.756	0.756
Dissolved Oxygen, Field	mg/L	6.95	7.13	8.42	8.28	7.74	8.09	7.42	5.69	8.22	8.20
ORP, Field	millivolts	234.6	219.7	210.5	239.2	225.7	201.2	203.6	216.7	244.8	244.8
pH Field	s.u.	7.49	7.46	7.62	7.43	7.22	7.54	7.63	7.40	6.97	6.97
Temperature	Deg C	16.97	14.69	14.94	14.37	14.59	14.97	14.97	15.94	13.87	13.87
Turbidity (Field)	NTU	4.10	4.99	14.90	4.16	9.34	12.50	16.50	8.38	21.30	21.20
PCBs											
Aroclor-1016 (PCB-1016)	ug/L	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (2.0)	ND (0.40)	ND (0.20)	ND (0.20)
Aroclor-1221 (PCB-1221)	ug/L	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (2.0)	ND (0.40)	ND (0.20)	ND (0.20)
Aroclor-1232 (PCB-1232)	ug/L	ND (0.40)	ND (0.40)	ND (0.40)	ND (0.40)	ND (0.40)	ND (0.40)	ND (4.0)	ND (0.80)	ND (0.40)	ND (0.40)
Aroclor-1242 (PCB-1242)	ug/L	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	2.0	25	4.8	ND (0.20)	ND (0.20)
Aroclor-1248 (PCB-1248)	ug/L	0.43	ND (0.20)	1.7	ND (0.20)	ND (0.20)	ND (0.20)	ND (2.0)	ND (0.40)	ND (0.20)	ND (0.20)
Aroclor-1254 (PCB-1254)	ug/L	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (2.0)	ND (0.40)	ND (0.20)	ND (0.20)
Aroclor-1260 (PCB-1260)	ug/L	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (2.0)	ND (0.40)	ND (0.20)	ND (0.20)
Total PCBs (ND=0)	ug/L	0.43	0	1.7	0	0	2	25	4.8	0	0
PCBs (Dissolved)											
Aroclor-1016 (PCB-1016) (Dissolved)	ug/L	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)
Aroclor-1221 (PCB-1221) (Dissolved)	ug/L	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)
Aroclor-1232 (PCB-1232) (Dissolved)	ug/L	ND (0.40)	ND (0.40)	ND (0.40)	ND (0.40)	ND (0.40)	ND (0.40)	ND (0.40)	ND (0.40)	ND (0.40)	ND (0.40)
Aroclor-1242 (PCB-1242) (Dissolved)	ug/L	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)
Aroclor-1248 (PCB-1248) (Dissolved)	ug/L	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)
Aroclor-1254 (PCB-1254) (Dissolved)	ug/L	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)
Aroclor-1260 (PCB-1260) (Dissolved)	ug/L	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)
Total PCBs (Dissolved) (ND=0)	ug/L	0	0	0	0	0	0	0	0	0	0

Area of Interest:		P027	P038	P384/P386	
Sample Location:		SPRING_1469	SPRING_021	Seep 5013	
Sample ID:		SW-102004-JN-5273	SW-102004-JN-5272	SW-102104-JN-5286	
Sample Date:		10/20/2004	10/20/2004	10/21/2004	
		(orig)	(orig)	(orig)	
Parameters	Units				
Field Parameters					
Conductivity Field	mS/cm	0.198	0.550	0.804	
Dissolved Oxygen, Field	mg/L	8.73	7.27	6.71	
ORP, Field	millivolts	220.5	213.1	214.3	
pH Field	s.u.	7.41	6.85	7.17	
Temperature	Deg C	13.18	14.54	15.45	
Turbidity (Field)	NTU	10.84	5.45	3.17	
PCBs					
Aroclor-1016 (PCB-1016)	ug/L	ND (0.20)	ND (0.20)	ND (0.20)	
Aroclor-1221 (PCB-1221)	ug/L	ND (0.20)	ND (0.20)	ND (0.20)	
Aroclor-1232 (PCB-1232)	ug/L	ND (0.40)	ND (0.40)	ND (0.40)	
Aroclor-1242 (PCB-1242)	ug/L	ND (0.20)	ND (0.20)	ND (0.20)	
Aroclor-1248 (PCB-1248)	ug/L	ND (0.20)	ND (0.20)	0.33	
Aroclor-1254 (PCB-1254)	ug/L	ND (0.20)	ND (0.20)	ND (0.20)	
Aroclor-1260 (PCB-1260)	ug/L	ND (0.20)	ND (0.20)	ND (0.20)	
Total PCBs (ND=0)	ug/L	0	0	0.33	
PCBs (Dissolved)					
Aroclor-1016 (PCB-1016) (Dissolved)	ug/L	ND (0.20)	ND (0.20)	ND (0.20)	
Aroclor-1221 (PCB-1221) (Dissolved)	ug/L	ND (0.20)	ND (0.20)	ND (0.20)	
Aroclor-1232 (PCB-1232) (Dissolved)	ug/L	ND (0.40)	ND (0.40)	ND (0.40)	
Aroclor-1242 (PCB-1242) (Dissolved)	ug/L	ND (0.20)	ND (0.20)	ND (0.20)	
Aroclor-1248 (PCB-1248) (Dissolved)	ug/L	ND (0.20)	ND (0.20)	ND (0.20)	
Aroclor-1254 (PCB-1254) (Dissolved)	ug/L	ND (0.20)	ND (0.20)	ND (0.20)	
Aroclor-1260 (PCB-1260) (Dissolved)	ug/L	ND (0.20)	ND (0.20)	ND (0.20)	
Total PCBs (Dissolved) (ND=0)	ug/L	0	0	0	