



JOHN ENGLER, Governor

DEPARTMENT OF ENVIRONMENTAL QUALITY*"Better Service for a Better Environment"*

HOLLISTER BUILDING, PO BOX 30473, LANSING MI 48909-7973

INTERNET: www.deq.state.mi.us

RUSSELL J. HARDING, Director

REPLY TO:
ENVIRONMENTAL RESPONSE DIVISION
SAGINAW BAY DISTRICT OFFICE
SUITE 1
503 N EUCLID AVE
BAY CITY MI 48706-2965

F
27626
- 869.91
874.20

February 18, 2000

Mr. G. Brent Lange
Delphi Automotive Systems Corporation
3900 Holland Road
Saginaw, Michigan 48601-9494

Ms. Cheryl Hiatt
General Motors Corporation
Argonaut "A" - 1004H
485 West Milwaukee Avenue
Detroit, Michigan 48202

Mr. Edward Peterson
Remediation and Liability Management Company, Inc.
Argonaut "A" - 1004H
485 West Milwaukee Avenue
Detroit, Michigan 48202

Dear Mr. Lange, Ms. Hiatt, and Mr. Peterson:

SUBJECT: Delphi Automotive Systems Corporation, Plant 2, Saginaw, Michigan

The Department of Environmental Quality (DEQ), Environmental Response Division (ERD), has conducted an initial review of the Remedial Investigation Report (Report) dated August 1999 for the Delphi Steering Gear Plant 2, submitted by BBL, Inc., on August 20, 1999. The August 13, 1999 cover letter from Ms. Cheryl Hiatt, indicated that Delphi Automotive Systems, LLC (Delphi) now has the responsibility for all environmental issues at Delphi facilities due to the transfer of assets from General Motors (GM) to Delphi. The letter also indicates that the peninsula property has been transferred to Remediation and Liability Management Company, (REALM), a subsidiary of GM. Please be aware that the transfer of property and/or assets does not negate GM's liability for the contamination at this facility. Therefore, this and all future correspondence will be addressed to the three parties: Delphi, GM, and REALM. Failure by one party to address the contamination in accordance with Part 201, Environmental Remediation, of the Natural Resources and Environmental Protection Act (NREPA), 1994 PA 451, as amended (Part 201) will not absolve the other parties of the need to comply with Part 201.

The work plan for this Report was approved on November 24, 1997, for the entire Plant 2 facility. The Report was intended to encompass the investigations conducted by both BBL and Harding Lawson Associates (HLA), formerly ABB, and to incorporate data from the investigations conducted by BBL for the adjacent GM SMI facility and Conestoga-Rovers & Associates (CRA) for both the GM SMI and Plant 2 facilities. As indicated in a letter from the ERD dated November 17, 1997, the review of the HLA remedial investigation reports for

February 18, 2000

Tanks 1-10, Tanks 9 and 10, and Tanks 13 and 14 would be completed during the review of the BBL site-wide Report. As of this date, the ERD has not received the final reports for Tanks 1-10 and Tanks 13 and 14. In addition, this Report excludes most of the data collected in the peninsula area and indicates an investigation report would be submitted separately. As of this date, the ERD has not received a report for the peninsula portion of the Plant 2 facility. Without all the pertinent data for this facility, the ERD cannot complete our review of this Report. This Report is not approved at this time.

Initial technical comments on this Report are contained in the attached DEQ interoffice memorandum. These comments are subject to modification based on the submittal and the ERD's review of the remaining investigation data and reports. In general, it does not appear that the SPPP and LNAPL have been delineated. Additional investigation is also needed to address the hydrology and contaminant migration.

The SPPP and LNAPL recovery systems need to be evaluated for their effectiveness in capturing and removing the free product inside and outside of Plant 2. A monitoring plan for this interim response, which includes scheduled evaluations, is required. The monitoring plan must include wells/piezometers along the perimeters of the known plume to monitor potential expansion of the plume. A final monitoring plan for the entire facility must be included in the remedial action plan (RAP).

This Report indicates the plant foundation is acting as containment and that the collection systems and sewers are creating an inward gradient inside the plant. This Report also indicates the following:

- There has been an outward gradient at the southeast corner and the eastern wall.
- There is potential for migration along subsurface utilities in the storm sewer network which bisects known areas of contamination and the discharges to the WWTF.
- There is potential for the backfill associated with storm sewers to act as a preferential pathway off-site.
- There is potential for off-site migration of site contaminants in the untreated discharge within the storm sewer network and in areas in the southeast corner of the site.
- Groundwater is being intercepted by the subsurface utilities and groundwater is flowing towards the utilities below and adjacent to the Plant 2 building.

The remedial investigation and the RAP must address all of these issues. A RAP for this site must include compliance with discharge requirements for the City of Saginaw's POTW. A copy of the Conditions to Evaluate in Assessing Compliance with Part 201 Clean Criteria Worksheet is enclosed. All of the exposure pathways identified on this sheet must be addressed in the remedial investigation and the RAP.

The results of any previous investigations will not reflect the current conditions of the property due to on-going releases at this facility. As has been brought to GM and Delphi's attention many times over the last several years, the day-to-day handling of wastes in the southeastern portion of the plant site has continued to cause releases to the environment. This issue has been raised during the November 19, 1996 meeting, the November 17, 1997 Klann/Hiatt on-site visit, the December 9, 1997 Klann/Seamans on-site visit, the November 5 and 6, 1998 Markley/Seamans on-site visit, and several telephone conversations. This issue has also been

SUBJECT: Delphi Automotive Systems Corporation, Plant 2

Page -3-

February 18, 2000

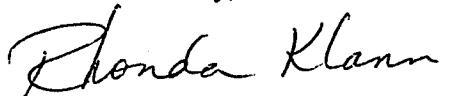
documented through photos taken on December 9, 1997. Oil from equipment, containers, and roll-offs stored on bare ground, has overflowed or spilled to the ground. Oil released during transfer of the filtration, and grinding wastes from the small hoppers to the roll-off boxes, runs off the cement pad onto bare ground. A final RAP for this site must document the current conditions of this site and must address source control.

All information and determinations presented by the ERD in this letter are based on information currently known to DEQ staff. Additional work will be required as a result of the above mentioned comments. Additional review comments may arise upon review of the data generated by the above mentioned comments. The discovery of new information regarding environmental conditions or regulated substances at the facility that is not known to the ERD as of the date of this letter may result in a request by the ERD for additional response actions.

A schedule for submittal of the additional reports and requested information must be submitted to the ERD. This schedule must be coordinated and agreed upon by the three parties involved. A written response is needed by March 10, 2000, indicating GM, Delphi, and REALM's intent to proceed with remedial investigations and a remedial action plan for the Plant 2 facility. That letter must include a date for submittal of the HLA reports and the peninsula reports. A long-term schedule for submittal and implementation of a RAP must also be developed. At one time, GM had tentatively approached the DEQ about a Consent Agreement for this facility. If GM, Delphi, and REALM are interested, a Consent Agreement could still be considered.

The ERD would like to meet with Delphi, GM, and REALM within the next two months to discuss the long-term plans and outstanding issues regarding this facility. The type of RAP proposed and the future use of this facility will play a large role in what additional investigation is needed. To arrange the meeting, or if you have questions, please contact Ms. Rhonda Klann, ERD, Project Manager, at 517-686-8025, extension 8302, or you may contact me.

Sincerely,


acting for Brenda J. Brouillet
District Supervisor
Environmental Response Division
517-686-8025, Ext. 8300

Enclosures: Copy of DEQ Corrected Lab Report
Cleanup Criteria Worksheet
Interoffice Memorandum of February 18, 2000

cc/enc: Mr. Dave Seamans, Delphi
Mr. Scott Saroff, BBL, Inc.
Mr. Craig Keilty, HLA

cc/memorandum only: Mr. Kyle Jones, Delphi Legal
Mr. Tony Thrubis, GM Legal
Mr. George Kapp, Saginaw POTW
Mr. Ken Hozak, DEQ
Mr. Rick Roberts, DEQ

INTEROFFICE COMMUNICATION

February 18, 2000

TO: Brenda Brouillet, Saginaw Bay District Supervisor
Environmental Response Division (ERD)

FROM: Rhonda Klann, ERD, Saginaw Bay District

SUBJECT: GM Delphi Plant 2 Technical Review Comments for the August 1999 Report
Remedial Investigation Report, Delphi Automotive Systems Corporation,
Plant 2 Property

1. The HLA reports for the Tanks 13 and 14 and Tanks 1 through 10 have not been submitted. This report excludes some of the data collected in the peninsula area. This report indicates a separate report will be submitted for that area. This review cannot be completed without the submittal of those reports. These comments are initial comments only and will be modified when the additional data is submitted.
2. The results of any previous investigations will not reflect the current conditions of the property due to on-going releases at this facility. As has been brought to GM and Delphi's attention many times over the last several years, the day-to-day handling of wastes in the southeastern portion of the plant site has continued to cause releases to the environment, in violation of Part 201. This issue has been raised during meetings (11-19-96), on-site visits, (11-17-97 Klann/Hiatt; 12-9-97 Klann/Seamans; 11-5/6-98 Markley/Seamans), telephone conversations (12-8-97), and is documented through pictures (12-9-97). Oil from equipment, containers, and roll-offs, stored on bare ground has overflowed or spilled to the ground. Oil released during transfer of the filtration, and grinding wastes from the small hoppers to the roll-off boxes, runs off the cement pad onto bare ground. A final RAP for this site must document the current conditions of this site and must address source control.
3. Page 4-42 references oil found in a sewer in the tank farm area. Details, including the location, date, actions taken, sewer line connections, etc., must be provided. Page 1-5 indicates that there is underground piping from the tank farm into the plant. The piping must be identified on the underground utility map (Figure 6).
4. Figures in the Report should include both BBL and HLA data when the area represented would have data from both companies. Figures 15, 16, and 17 are examples.
5. MW-166WT and MW-159WT are located on the Plant 2 property, but data from those wells is not provided in this Report. Footnote 17 on Figures 18 and 19 indicate that additional groundwater analytical data is available around the LNAPL area on both the Plant 2 and SMI properties. Any analytical data or free product information from all wells in this area must be provided. That data is pertinent to this facility.
6. Soil samples were to be taken from the soil borings SB-328 and SB-335 located near the wet well and diversion chamber. Those borings/wells were put in as part of both the LNAPL investigation and Plant 2 RI. The soil analytical data is not included in this Report.

7. On-going monitoring results for the piezometers and monitor wells with the potential for free product is not included in the Report. The need for this type of monitoring was discussed by telephone with Klann/Seamans/Keilty/Lonergan on May 1, 1998.
8. The status of the disposal for the wastes generated from the collection systems must be provided. It is our understanding that the MW-1 recovered liquid is disposed of as TSCA waste, and that liquids from one of the collection systems goes to the on-site WWTF. The liquids from the other two collection systems had been stored on-site in drums. The ERD has no indication that the drummed liquids have been properly disposed. Confirmation of when these liquids will be disposed is needed.
9. The 29 above ground storage tanks referenced on page 1-6 must be located on the site map and the contents specified. Additional investigations may be needed around these tanks.
10. Page 2-12 references a "Supplemental Investigation in the Area of Underground Storage Tanks 9 and 10 (HLA, 1998c)". The reference "HLA, 1998c" is not for Tanks 9 and 10, but is for Tanks 13 and 14. Please clarify if there is a 1998 HLA report for Tanks 9 and 10.
11. Page 4-52 indicates that TCE and 1,2-dichloroethene were not present in soil samples from SB98-110S1. However, the analytical tables and figures indicate that low levels were detected. This must be evaluated.
12. BBL has used the generic industrial criteria as the initial screening tool for this report. Even if this facility is closed using the industrial criteria, residential criteria must be met at all property boundaries and contamination cannot migrate off-site above the residential criteria in the future. Therefore, the initial screening must also consider the residential criteria.
13. BBL compared groundwater results to the direct contact criteria for PCBs only if the PCBs samples were filtered. This is an acceptable evaluation for the groundwater direct contact criteria only, however, if both filtered and unfiltered PCB data are not available from a location, then the criteria must be compared to the unfiltered PCB data. If the unfiltered PCB data exceeds the direct contact criteria, then GM/Delphi/REALM may choose to obtain filtered samples from that area. The drinking water and GSI criteria must be compared with unfiltered PCB results.
14. BBL did not consider the GSI pathway in the initial screening nor did they provide a reason for excluding this pathway. Due to the proximity of the Saginaw River, the wetland areas, and the sewer lines, it is necessary to consider GSI as an exposure pathway.
15. Pages 4-68 and 5-13 discuss the utility line backfill as a migration pathway. BBL has identified sewers below 6' in depth as potential migration pathways. However, groundwater inside the plant is 3.8 to 8.9' below ground level (bgl) and is 4.1 to 9.8' bgl outside the plant. In addition, SPPP and LNAPL have been found at shallower elevations. Utility lines shown by CRA on Figure 6 that go through the foundation wall that intersect the shallowest groundwater or SPPP must be considered as migration pathways.
16. The criteria for data evaluation, as outlined on page 4-68, indicates that a buried utility will not be investigated unless it intersects the site boundary in a hydraulically downgradient area. There is also a need to investigate the areas where utilities and the associated backfill exit the property in the north or west direction (clay areas without groundwater), since any

liquid material leaving the site would follow the sewer or backfill regardless of the downgradient direction. For example, Figure 9 and page 5-3 indicate the 42" abandoned line, the sewer exiting the west side of the Plant have created major depressions in the clay surface. This is also particularly important in the Tank 13 and 14 area, between the two plants, and in the southwest corner of the facility.

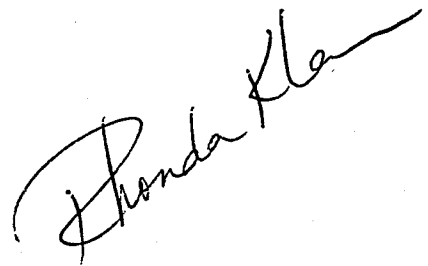
17. Page 4-68 indicates that the data evaluation of the sewer lines will only occur where the sewer lines are adjacent to or run through the SPPP/LNAPL areas. There are however, other areas of the site such as the wet well, which have groundwater contamination. Sewers and/or backfill that transect or run adjacent to other contaminated areas of the site must be investigated.
18. Clarification is needed regarding the assessment on page 5-14, that the detections of PCBs in the Diversion Chamber "are related to former releases identified within and/or adjacent to the main manufacturing building". Specifically, what releases have been identified and are the former releases continuing to cause PCB concerns in the Diversion Chamber. ERD believes that there is a need to compare the sewer lines that travel through the areas of SPPP/LNAPL with the sewer lines that are going to the Diversion Chamber or the WWTF. ERD also believes that there is a need to sample the pre-treated wastewater for PCBs. There is also a concern that there may be PCBs in the auxiliary waste lines and in groundwater migrating into the sewers that aren't being removed at the WWTF. The HLA quarterly reports indicate that PCBs have been detected in the groundwater collected from the MW-6 and MW-11. This possibility should be investigated.
19. Page 5-15 references the 30" sewer identified during the LNAPL investigation that was completed by BBL for the GM SMI facility. Page 5-21 states that the sewer contains LNAPL and that the location and/or source of the sewer has not been identified. Attempts to jet the sewer by GM SMI personnel and to identify the source of the sewer line were unsuccessful. Page 5-3 also indicates the 30" sewer is a possible reason for a depression in the clay surface east of the Delphi plant. The sewer and the backfill must be investigated, the location and the source identified, and interim response actions taken to remove any oil and/or sludge from this abandoned line.
20. The groundwater model has not been reviewed at this time. Only a general discussion of the model and findings were provided in this Report. In order to complete our review, the model package (electronically and in text form), including the version of MODFLOW, input data tables, model results, sensitivity analysis, etc., must be submitted. Verification of the model must be based on actual field data. When the complete facility data package and all the modeling data have been submitted, the model will be referred to the Land and Water Management Division (LWMD) of the DEQ for review. Additional information may be requested based on that review.
21. The area included in Figure 26, the underground utilities and water table comparison map, should be extended to the south to address the whole facility.
22. Page 5-26 indicates that there is the potential of off-site migration of contamination within the sewer system network and/or in the southeast corner of the site. Investigation is needed to define any contaminants leaving the site in concentrations that exceed the residential criteria and/or the City's POTW regulations.

23. The boring log for SB97-103 noted a solvent/gas odor and sheen. A monitor well is needed at that location to evaluate the presence of NAPL.
24. The ecological assessment summary on page 5-22 states that there could be exposure by small animals to the shallow soils in the southern portion of the site. Surficial soil samples will be needed in the southern and southwestern portions of the site to complete an ecological assessment of the area. The ecological assessment must also consider off-site migration of contaminants into the wet areas to the west of the peninsula and south of the plant.
25. Surficial soil samples are needed on the unpaved areas to the south of plant and in the peninsula to adequately assess the direct contact and other exposure pathways.
26. Page 1-8 of the Report identified areas of potential concern that had not been identified previously. These areas need to be adequately investigated. The previously undocumented underground storage tank near the powerhouse and the four other tanks and their associated piping must be located on the site map. It was unclear from the text whether the 2 stacked tanks still exist or if they are historical. A copy of the 1971 Factory Insurance Association Map showing the tanks must be submitted. The footnote on Figure 2 references a new tank northeast of the security booth. Is this tank an additional tank or the same as the previously undocumented tank in the vicinity of the Power House? All existing underground tanks must be brought into compliance with Part 211 of NREPA, if applicable. Existing aboveground tanks must be brought into compliance with the 1992 Michigan Flammable and Combustible Liquid Rules, if applicable.
27. Previously it was indicated that the Switch House and the electrical substation southwest of the plant did not belong to Plant 2. Page 1-6 indicates it is part of the Plant 2 facility. Investigation, including monitor wells, is needed around this potential source area.
28. Page 4-49 says Tanks 13 and 14 and Chip House are not the source of the chlorinated solvents in this area, however, a source has not been identified. HLA's report is needed to complete the review of this area, but the contamination does not appear to be defined. This area is adjacent to the current and former hazardous waste storage area. Potential migration along the sewer trenches in this area, particularly the 12" and the abandoned 42" sewers must be investigated. These sewers are in the area of the highest contamination.
29. The summary on page 5-18 indicates the SPPP plume has been defined. Page 5-19 states it is unclear whether the SPPP detected at PZ-35 is an extension of the SPPP detected at PZ-1, or if it is a separate isolated accumulation. Data was not provided to support the isolation of the PZ-35 plume. In addition, the SPPP plume has not been defined to the north of PZ-35, north and east of PZ-18, or north of the Assembly Basement. Previous hand auger borings near the assembly basement were not successful in determining if SPPP was present. PZ-29 may not be representative of the conditions immediately north of the Assembly Basement due to its location between the Assembly Line Basement wall and the exterior foundation. There are several major sewer lines that penetrate the exterior foundation wall in this area. The LNAPL plume on Figure 24 comes almost to the edge of the Plant 2 building in this area. Monitor wells are required for determining the extent of this plume, both inside and outside the plant. Fingerprints of the LNAPL and the SPPP plume need to be compared. The HLA investigation report for this area is needed in order to complete this review.

30. Additional wells to the east of MW98-113WT and southeast of MW-112WT are needed to delineate the LNAPL plume at the southwest corner. MW98-113WT had product, but has not been included in the monitoring reported on Table 13 or in the bailing program. Recovery of free product is required by Part 201. Figure 3 in Appendix F shows a "Former Waste Oil Collector Area" near the location of MW98-112WT that has not been shown on other site maps. Information regarding the former waste oil collector area must be submitted.
31. The area around the former chemical storage area, west of PZ-25, east of PZ-34, and north of the foundation wall needs additional investigation to delineate the SPPP plume. The HLA report for this area is needed to complete this review. The former chemical storage area also needs to be investigated as a potential source for chlorinated solvents.
32. The SPPP plume needs further definition along the south foundation wall west of PZ-14, between PZ-13 and MW-16, between PZ-8 and the plume around tanks 5-7, and between PZ-13 and plume around MW-1. The HLA reports for these areas are needed to complete the review.
33. Corrections are needed for these statements. Page 4-56 indicates that PZ-18 does not contain measurable thickness of SPPP, however page 4-57 states that PZ-18 does have product. Figure 24 also includes PZ-18 in the free product plume. Page 4-57 states that PB-2 (assume this is PZ-2) does not contain SPPP, however page 4-56 states that PZ-2 does have product.
34. The groundwater flow direction south of the plant is to the south and southwest on Figures 13 and 14. Clustered monitor wells are needed to adequately evaluate groundwater contamination and the potential for chlorinated solvents in these areas. Wells are needed in the area south of the plant, around the Switch House, and along the southern and eastern property boundaries. MW97-106WT, MW-142WT and MW-129WT must be augmented with deeper wells to evaluate the potential for chlorinated compounds.
35. The Report does not substantiate the statements on page 5-15 and 5-16 that the TCE detected in groundwater from PZ-5 and MW-156WT is not related to an inside source. Page 5-17 suggests that the source of TCE in the peninsula may be from the Plant 2 property, however no explanation is given as to possible sources.
36. The monitor wells installed by GM SMI for the LNAPL investigation were screened to determine the presence of the LNAPL plume. Those wells may not be properly screened to define a chlorinated solvent plume. Wells placed at the base of the saturated zone are needed in the area east of the Plant 2 building.
37. Additional static water levels must be taken to determine the effect of capping the Greenpoint Landfill on the groundwater flow direction.
38. The Report indicates that DNAPL is potentially present at SB-22, SB-23, and SB-34 in the Tanks 13 and 14 area and at PZ-23 in tanks 9 and 10 area from 16 - 18'. Wells are needed in these areas to determine if DNAPL is present in the clay and to evaluate migration of that DNAPL into nearby utility trenches and sewer lines.
39. Clarification is needed for the statement on page 4-53: "Analytical results from upgradient groundwater monitoring wells on the SMI Plant and Plant 2 Properties indicate that there

may be off-site sources of both inorganic constituents and organic compounds impacting on-site groundwater...."

40. A large discrepancy was noted between the split-sample results for 1,2-Dichloroethene from MW98-110S1. The BBL results were significantly higher than the DEQ results. The DEQ lab checked their records and discovered an error in reporting these results. The corrected DEQ result is in the same range as the BBL result. The DEQ lab also verified all other VOC sample results from that sample run and did not identify any other problems. A comparison between BBL and DEQ data for the VOCs found no other significant differences.
41. The SPPP and LNAPL recovery systems need to be evaluated for their effectiveness in capturing and removing the free product inside and outside of Plant 2. A monitoring plan with scheduled evaluations is required. The monitoring plan must include wells/piezometers along the perimeters of the known plume to monitor potential expansion of the plume.
42. This Report indicates the plant foundation is acting as containment and that the collection systems are creating an inward gradient inside the plant. This Report also indicates that there has been an outward gradient at the southeast corner and the eastern wall. There is potential for migration along subsurface utilities in the storm sewer network which bisects known areas of contamination and the discharges to the WWTF. There is potential for the backfill associated with storm sewers to act as a preferential pathway off-site. There is potential for off-site migration of site contaminants in the untreated discharge within the storm sewer network and in areas in the southeast corner of the site. Groundwater is being intercepted by the subsurface utilities and groundwater is flowing towards the utilities below and adjacent to the plant 2 building. The remedial investigation and the remedial action plan (RAP) must address all of these issues. A RAP for this site must include compliance with discharge requirements for the City of Saginaw WWTP.



**Conditions to Evaluate in Assessing Compliance with Part 201
Cleanup Criteria
WORKSHEET**

For each condition, assess relative to *generic residential* criteria and statute obligations, then record information by checking appropriate box(es) and record conclusions as WC (Within Criteria or Guideshet Parameters) or AN (Action Needed). Provide brief rationale for conclusions.

Facility/Name: _____

Conclusions & Rationale:

Concentrated Hazardous Substance Sources:

1. Abandoned substances that are being dispersed or may be dispersed in the future.

- A. ☐ Containerized hazardous substances present. ☐ Free phase liquids present.
☐ Other sources (soils/gw "hot spots," etc.) present; type: _____
☐ Sources related to post June 5, 1995 releases present. ☐ Party proposing plan subject to Sec. 14.

B. Containerized hazardous substances.

Free phase liquids.

Source from post June 5, 1995 releases.

Analysis of source controls.

_____	_____
_____	_____
AN	Sec. 18(8) requires of all RAPs.

Risks due to Groundwater Contamination:

2. Drinking water usage

3. Dermal exposures such as by utility workers

4. Indoor air hazards (chronic/systemic)

5. Hazards to surface waters

Risks due to Soil Contamination:

6. Hazards due to direct contact (ingestion, dermal)

7. Ambient air inhalation hazards

8. Indoor air inhalation hazards

9. Injury to drinking water use of aquifer

10. Risk from contact (utility work) with GW

11. Causes GW to be hazardous to SW

12. Polluted soil runoff to surface water

Risks due to Contamination of Surface Water Sediments:

13. Aquatic flora/fauna/food chain hazards

Other Risks:

14. Acute toxic impacts & physical hazards

15. Ecological & aesthetics

By: _____ Date: _____



MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
ENVIRONMENTAL LABORATORY (517) 335-9800

P.O. Box 30270
Lansing, MI 48909

Report To: Environmental Response Div.
District #8 Headquarters
503 N. Euclid Ave, Suite 1
Bay City, Mi 48706-2965
Attn: RHONDA KLANN
Total: \$4,320.00

Lab Work Order # 9811054
Work Site ID: GM DELPHI PLANT 2
Matrix: Water
Received: 11/6/1998
Client: ER_BAY
Reported: 12/4/1998
Number of Samples: 16

Revised report due to error on volatiles for sample 98-11-054-16

This is an original report:

Date: _____

RECEIVED
FEB 08 2000
MDEQ-ERD
SAGINAW-BAY

MDEQ ENVIRONMENTAL LABORATORY
ANALYTICAL REPORT

Work Order #: 9811054-01POX

Date Collected: 11/5/1998

Test Code: WPS

Date Analyzed: 11/10/1998 by BUCHNER

Test Name: 8260 Plus - Water

Sample ID: 104 WT

CAS #	COMPOUND	RESULTS ug/L	REMARK	REPORTING LIMIT	DILUTION FACTOR
75-71-8	Dichlorodifluoromethane	ND		5	1
74-87-3	Chloromethane	ND		5	1
75-01-4	Vinyl chloride	ND		5	1
74-83-9	Bromomethane	ND		5	1
75-00-3	Chloroethane	ND		5	1
75-69-4	Trichlorofluoromethane	ND		5	1
67-64-1	Acetone	ND		25	1
60-29-7	Diethyl ether	ND		10	1
75-35-4	1,1-Dichloroethylene	ND		1	1
74-88-4	Methyl iodide	ND		1	1
107-13-1	Acrylonitrile	ND		5	1
75-09-2	Methylene chloride	ND		5	1
75-15-0	Carbon disulfide	ND		5	1
156-60-5	trans-1,2-Dichloroethylene	ND		1	1
1634-04-4	Methyltertbutylether (MTBE)	ND		5	1
75-34-3	1,1-Dichloroethane	ND		1	1
78-93-3	2-Butanone (MEK)	ND		5	1
156-59-2	cis-1,2-Dichloroethylene	1.8		1	1
67-66-3	Chloroform	ND		1	1
74-97-5	Bromochloromethane	ND		1	1
71-55-6	1,1,1-Trichloroethane	ND		1	1
107-06-2	1,2-Dichloroethane	ND		1	1
71-43-2	Benzene	4.6		1	1
56-23-5	Carbon tetrachloride	ND		1	1
78-87-5	1,2-Dichloropropane	ND		1	1
79-01-6	Trichloroethylene	1.6		1	1
74-95-3	Dibromomethane	ND		1	1
75-27-4	Bromodichloromethane	ND		1	1
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5	1
10061-01-5	cis-1,3-Dichloropropene	ND		1	1
10061-02-6	trans-1,3-Dichloropropene	ND		1	1
108-88-3	Toluene	ND		1	1
79-00-5	1,1,2-Trichloroethane	ND		1	1
591-78-6	2-Hexanone	ND		5	1
124-48-1	Dibromochloromethane	ND		1	1

MDEQ ENVIRONMENTAL LABORATORY
ANALYTICAL REPORT

CAS #	COMPOUND	RESULTS ug/L	REMARK	REPORTING LIMIT	DILUTION FACTOR
106-93-4	1,2-Dibromoethane	ND		1	1
127-18-4	Tetrachloroethene	ND		1	1
108-90-7	Chlorobenzene	7.3		1	1
630-20-6	1,1,1,2-Tetrachloroethane	ND		1	1
100-41-4	Ethylbenzene	ND		1	1
108383,106423	m & p-Xylene	ND		2	1
75-25-2	Bromoform	ND		1	1
100-42-5	Styrene	ND		1	1
95-47-6	o-Xylene	ND		1	1
79-34-5	1,1,2,2-Tetrachloroethane	ND		1	1
96-18-4	1,2,3-Trichloropropane	ND		1	1
110-57-6	trans-1,4-Dichloro-2-butene	ND		1	1
98-82-8	Isopropylbenzene	ND		1	1
103-65-1	n-Propylbenzene	ND		1	1
108-67-8	1,3,5-Trimethylbenzene	ND		1	1
95-63-6	1,2,4-Trimethylbenzene	ND		1	1
541-73-1	1,3-Dichlorobenzene	ND		1	1
106-46-7	1,4-Dichlorobenzene	3.1		1	1
95-50-1	1,2-Dichlorobenzene	ND		1	1
67-72-1	Hexachloroethane	ND		1	1
96-12-8	1,2-Dibromo-3-chloropropane	ND		5	1
120-82-1	1,2,4-Trichlorobenzene	ND		5	1
91-20-3	Naphthalene	ND		5	1
91-57-6	2-Methylnaphthalene	ND		5	1

ND = not detected at the specified reporting limit. NM = not measured.

Reference method is 8260/624.

USEPA Methods 8260 and 624 are used to quantitate volatile organic compounds that have boiling points below 200°C.

2-Methylnaphthalene and naphthalene are compounds with boiling points above 200°C and are better suited to quantitation by USEPA Methods 8270 or 625 as semivolatile organic compounds.

MDEQ ENVIRONMENTAL LABORATORY
ANALYTICAL REPORT

Work Order #: 9811054-02POX

Date Collected: 11/5/1998

Test Code: WPS

Date Analyzed: 11/10/1998 by BUCHNER

Test Name: 8260 Plus - Water

Sample ID: 104 SL

CAS #	COMPOUND	RESULTS ug/L	REMARK	REPORTING LIMIT	DILUTION FACTOR
75-71-8	Dichlorodifluoromethane	ND		5	1
74-87-3	Chloromethane	ND		5	1
75-01-4	Vinyl chloride	2300	DL	500	100
74-83-9	Bromomethane	ND		5	1
75-00-3	Chloroethane	ND		5	1
75-69-4	Trichlorofluoromethane	ND		5	1
67-64-1	Acetone	ND		25	1
60-29-7	Diethyl ether	ND		10	1
75-35-4	1,1-Dichloroethylene	5.6		1	1
74-88-4	Methyl iodide	ND		1	1
107-13-1	Acrylonitrile	ND		5	1
75-09-2	Methylene chloride	ND		5	1
75-15-0	Carbon disulfide	ND		5	1
156-60-5	trans-1,2-Dichloroethylene	15		1	1
1634-04-4	Methyltertbutylether (MTBE)	ND		5	1
75-34-3	1,1-Dichloroethane	ND		1	1
78-93-3	2-Butanone (MEK)	ND		5	1
156-59-2	cis-1,2-Dichloroethylene	4500	DL	100	100
67-66-3	Chloroform	ND		1	1
74-97-5	Bromochloromethane	ND		1	1
71-55-6	1,1,1-Trichloroethane	ND		1	1
107-06-2	1,2-Dichloroethane	ND		1	1
71-43-2	Benzene	1.7		1	1
56-23-5	Carbon tetrachloride	ND		1	1
78-87-5	1,2-Dichloropropane	ND		1	1
79-01-6	Trichloroethylene	ND		1	1
74-95-3	Dibromomethane	ND		1	1
75-27-4	Bromodichloromethane	ND		1	1
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5	1
10061-01-5	cis-1,3-Dichloropropene	ND		1	1
10061-02-6	trans-1,3-Dichloropropene	ND		1	1
108-88-3	Toluene	9.2		1	1
79-00-5	1,1,2-Trichloroethane	ND		1	1
591-78-6	2-Hexanone	ND		5	1
124-48-1	Dibromochloromethane	ND		1	1
106-93-4	1,2-Dibromoethane	ND		1	1

MDEQ ENVIRONMENTAL LABORATORY
ANALYTICAL REPORT

CAS #	COMPOUND	RESULTS ug/L	REMARK	REPORTING LIMIT	DILUTION FACTOR
127-18-4	Tetrachloroethene	ND		1	1
108-90-7	Chlorobenzene	190		1	1
630-20-6	1,1,1,2-Tetrachloroethane	ND		1	1
100-41-4	Ethylbenzene	13		1	1
108383,106423	m & p-Xylene	2.7		2	1
75-25-2	Bromoform	ND		1	1
100-42-5	Styrene	ND		1	1
95-47-6	o-Xylene	2.1		1	1
79-34-5	1,1,2,2-Tetrachloroethane	ND		1	1
96-18-4	1,2,3-Trichloropropane	ND		1	1
110-57-6	trans-1,4-Dichloro-2-butene	ND		1	1
98-82-8	Isopropylbenzene	1.8		1	1
103-65-1	n-Propylbenzene	3.9		1	1
108-67-8	1,3,5-Trimethylbenzene	ND		1	1
95-63-6	1,2,4-Trimethylbenzene	ND		1	1
541-73-1	1,3-Dichlorobenzene	ND		1	1
106-46-7	1,4-Dichlorobenzene	17		1	1
95-50-1	1,2-Dichlorobenzene	18		1	1
67-72-1	Hexachloroethane	ND		1	1
96-12-8	1,2-Dibromo-3-chloropropane	ND		5	1
120-82-1	1,2,4-Trichlorobenzene	ND		5	1
91-20-3	Naphthalene	ND		5	1
91-57-6	2-Methylnaphthalene	ND		5	1

ND = not detected at the specified reporting limit. NM = not measured.

Reference method is 8260/624.

USEPA Methods 8260 and 624 are used to quantitate volatile organic compounds that have boiling points below 200°C. 2-Methylnaphthalene and naphthalene are compounds with boiling points above 200°C and are better suited to quantitation by USEPA Methods 8270 or 625 as semivolatile organic compounds.

MDEQ ENVIRONMENTAL LABORATORY
ANALYTICAL REPORT

Work Order #: 9811054-03POX

Date Collected: 11/5/1998

Test Code: WPS

Date Analyzed: 11/10/1998 by BUCHNER

Test Name: 8260 Plus - Water

Sample ID: 105 SL

CAS #	COMPOUND	RESULTS ug/L	REMARK	REPORTING LIMIT	DILUTION FACTOR
75-71-8	Dichlorodifluoromethane	ND		5	1
74-87-3	Chloromethane	ND		5	1
75-01-4	Vinyl chloride	ND		5	1
74-83-9	Bromomethane	ND		5	1
75-00-3	Chloroethane	ND		5	1
75-69-4	Trichlorofluoromethane	ND		5	1
67-64-1	Acetone	ND		25	1
60-29-7	Diethyl ether	ND		10	1
75-35-4	1,1-Dichloroethylene	ND		1	1
74-88-4	Methyl iodide	ND		1	1
107-13-1	Acrylonitrile	ND		5	1
75-09-2	Methylene chloride	ND		5	1
75-15-0	Carbon disulfide	ND		5	1
156-60-5	trans-1,2-Dichloroethylene	ND		1	1
1634-04-4	Methyltertbutylether (MTBE)	ND		5	1
75-34-3	1,1-Dichloroethane	ND		1	1
78-93-3	2-Butanone (MEK)	ND		5	1
156-59-2	cis-1,2-Dichloroethylene	ND		1	1
67-66-3	Chloroform	ND		1	1
74-97-5	Bromochloromethane	ND		1	1
71-55-6	1,1,1-Trichloroethane	ND		1	1
107-06-2	1,2-Dichloroethane	ND		1	1
71-43-2	Benzene	ND		1	1
56-23-5	Carbon tetrachloride	ND		1	1
78-87-5	1,2-Dichloropropane	ND		1	1
79-01-6	Trichloroethylene	ND		1	1
74-95-3	Dibromomethane	ND		1	1
75-27-4	Bromodichloromethane	ND		1	1
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5	1
10061-01-5	cis-1,3-Dichloropropene	ND		1	1
10061-02-6	trans-1,3-Dichloropropene	ND		1	1
108-88-3	Toluene	ND		1	1
79-00-5	1,1,2-Trichloroethane	ND		1	1
591-78-6	2-Hexanone	ND		5	1
124-48-1	Dibromochloromethane	ND		1	1
106-93-4	1,2-Dibromoethane	ND		1	1

MDEQ ENVIRONMENTAL LABORATORY
ANALYTICAL REPORT

CAS #	COMPOUND	RESULTS ug/L	REMARK	REPORTING LIMIT	DILUTION FACTOR
127-18-4	Tetrachloroethene	ND		1	1
108-90-7	Chlorobenzene	ND		1	1
630-20-6	1,1,1,2-Tetrachloroethane	ND		1	1
100-41-4	Ethylbenzene	ND		1	1
108383,106423	m & p-Xylene	ND		2	1
75-25-2	Bromoform	ND		1	1
100-42-5	Styrene	ND		1	1
95-47-6	o-Xylene	ND		1	1
79-34-5	1,1,2,2-Tetrachloroethane	ND		1	1
96-18-4	1,2,3-Trichloropropane	ND		1	1
110-57-6	trans-1,4-Dichloro-2-butene	ND		1	1
98-82-8	Isopropylbenzene	ND		1	1
103-65-1	n-Propylbenzene	ND		1	1
108-67-8	1,3,5-Trimethylbenzene	ND		1	1
95-63-6	1,2,4-Trimethylbenzene	ND		1	1
541-73-1	1,3-Dichlorobenzene	ND		1	1
106-46-7	1,4-Dichlorobenzene	ND		1	1
95-50-1	1,2-Dichlorobenzene	ND		1	1
67-72-1	Hexachloroethane	ND		1	1
96-12-8	1,2-Dibromo-3-chloropropane	ND		5	1
120-82-1	1,2,4-Trichlorobenzene	ND		5	1
91-20-3	Naphthalene	ND		5	1
91-57-6	2-Methylnaphthalene	ND		5	1

ND = not detected at the specified reporting limit. NM = not measured.

Reference method is 8260/624.

USEPA Methods 8260 and 624 are used to quantitate volatile organic compounds that have boiling points below 200°C. 2-Methylnaphthalene and naphthalene are compounds with boiling points above 200°C and are better suited to quantitation by USEPA Methods 8270 or 625 as semivolatile organic compounds.

MDEQ ENVIRONMENTAL LABORATORY
ANALYTICAL REPORT

Work Order #: 9811054-04POX

Date Collected: 11/5/1998	Test Code: WPS
Date Analyzed: 11/10/1998 by BUCHNER	Test Name: 8260 Plus - Water
	Sample ID: 105 WT

CAS #	COMPOUND	RESULTS ug/L	REMARK	REPORTING LIMIT	DILUTION FACTOR
75-71-8	Dichlorodifluoromethane	ND		5	1
74-87-3	Chloromethane	ND		5	1
75-01-4	Vinyl chloride	ND		5	1
74-83-9	Bromomethane	ND		5	1
75-00-3	Chloroethane	ND		5	1
75-69-4	Trichlorofluoromethane	ND		5	1
67-64-1	Acetone	ND		25	1
60-29-7	Diethyl ether	ND		10	1
75-35-4	1,1-Dichloroethylene	ND		1	1
74-88-4	Methyl iodide	ND		1	1
107-13-1	Acrylonitrile	ND		5	1
75-09-2	Methylene chloride	ND		5	1
75-15-0	Carbon disulfide	ND		5	1
156-60-5	trans-1,2-Dichloroethylene	ND		1	1
1634-04-4	Methyltertbutylether (MTBE)	ND		5	1
75-34-3	1,1-Dichloroethane	ND		1	1
78-93-3	2-Butanone (MEK)	ND		5	1
156-59-2	cis-1,2-Dichloroethylene	ND		1	1
67-66-3	Chloroform	ND		1	1
74-97-5	Bromochloromethane	ND		1	1
71-55-6	1,1,1-Trichloroethane	ND		1	1
107-06-2	1,2-Dichloroethane	ND		1	1
71-43-2	Benzene	ND		1	1
56-23-5	Carbon tetrachloride	ND		1	1
78-87-5	1,2-Dichloropropane	ND		1	1
79-01-6	Trichloroethylene	ND		1	1
74-95-3	Dibromomethane	ND		1	1
75-27-4	Bromodichloromethane	ND		1	1
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5	1
10061-01-5	cis-1,3-Dichloropropene	ND		1	1
10061-02-6	trans-1,3-Dichloropropene	ND		1	1
108-88-3	Toluene	ND		1	1
79-00-5	1,1,2-Trichloroethane	ND		1	1
591-78-6	2-Hexanone	ND		5	1
124-48-1	Dibromochloromethane	ND		1	1
106-93-4	1,2-Dibromoethane	ND		1	1

MDEQ ENVIRONMENTAL LABORATORY
ANALYTICAL REPORT

CAS #	COMPOUND	RESULTS ug/L	REMARK	REPORTING LIMIT	DILUTION FACTOR
127-18-4	Tetrachloroethene	ND		1	1
108-90-7	Chlorobenzene	ND		1	1
630-20-6	1,1,1,2-Tetrachloroethane	ND		1	1
100-41-4	Ethylbenzene	ND		1	1
108383,106423	m & p-Xylene	ND		2	1
75-25-2	Bromoform	ND		1	1
100-42-5	Styrene	ND		1	1
95-47-6	o-Xylene	ND		1	1
79-34-5	1,1,2,2-Tetrachloroethane	ND		1	1
96-18-4	1,2,3-Trichloropropane	ND		1	1
110-57-6	trans-1,4-Dichloro-2-butene	ND		1	1
98-82-8	Isopropylbenzene	ND		1	1
103-65-1	n-Propylbenzene	ND		1	1
108-67-8	1,3,5-Trimethylbenzene	ND		1	1
95-63-6	1,2,4-Trimethylbenzene	ND		1	1
541-73-1	1,3-Dichlorobenzene	ND		1	1
106-46-7	1,4-Dichlorobenzene	ND		1	1
95-50-1	1,2-Dichlorobenzene	ND		1	1
67-72-1	Hexachloroethane	ND		1	1
96-12-8	1,2-Dibromo-3-chloropropane	ND		5	1
120-82-1	1,2,4-Trichlorobenzene	ND		5	1
91-20-3	Naphthalene	ND		5	1
91-57-6	2-Methylnaphthalene	ND		5	1

ND = not detected at the specified reporting limit. NM = not measured.

Reference method is 8260/624.

USEPA Methods 8260 and 624 are used to quantitate volatile organic compounds that have boiling points below 200°C.

2-Methylnaphthalene and naphthalene are compounds with boiling points above 200°C and are better suited to quantitation by USEPA Methods 8270 or 625 as semivolatile organic compounds.

MDEQ ENVIRONMENTAL LABORATORY
ANALYTICAL REPORT

Work Order #: 9811054-05ON

Date Collected: 11/5/1998
Date Extracted: 11/12/1998 by SW-4137
Date Analyzed: 11/18/1998 by BRONSONJ

Test Code: PCB
Test Name: PCB in Water
Sample ID: 108 WT

CAS #	COMPOUND	RESULTS ug/L	REMARK	REPORTING LIMIT	DILUTION FACTOR
53469-21-9	Aroclor 1242 (PCB)	ND		0.1	1
11097-69-1	Aroclor 1254 (PCB)	ND		0.1	1
11096-82-5	Aroclor 1260 (PCB)	ND		0.1	1
12674-11-2	Aroclor 1016 (PCB)	ND		0.1	1
11104-28-2	Aroclor 1221 (PCB)	ND		0.1	1
11141-16-5	Aroclor 1232 (PCB)	ND		0.1	1
12672-29-6	Aroclor 1248 (PCB)	ND		0.1	1
37324-23-5	Aroclor 1262 (PCB)	ND		0.1	1
11100-14-4	Aroclor 1268 (PCB)	ND		0.1	1

ND = not detected at the specified reporting limit.

NM = not measured.

Reference method is 8082/608.

MDEQ ENVIRONMENTAL LABORATORY
ANALYTICAL REPORT

Work Order #: 9811054-05POX

Date Collected: 11/5/1998

Test Code: WPS

Date Analyzed: 11/10/1998 by BUCHNER

Test Name: 8260 Plus - Water

Sample ID: 108 WT

CAS #	COMPOUND	RESULTS ug/L	REMARK	REPORTING LIMIT	DILUTION FACTOR
75-71-8	Dichlorodifluoromethane	ND		5	1
74-87-3	Chloromethane	ND		5	1
75-01-4	Vinyl chloride	ND		5	1
74-83-9	Bromomethane	ND		5	1
75-00-3	Chloroethane	ND		5	1
75-69-4	Trichlorofluoromethane	ND		5	1
67-64-1	Acetone	ND		25	1
60-29-7	Diethyl ether	ND		10	1
75-35-4	1,1-Dichloroethylene	ND		1	1
74-88-4	Methyl iodide	ND		1	1
107-13-1	Acrylonitrile	ND		5	1
75-09-2	Methylene chloride	ND		5	1
75-15-0	Carbon disulfide	ND		5	1
156-60-5	trans-1,2-Dichloroethylene	ND		1	1
1634-04-4	Methyltertbutylether (MTBE)	ND		5	1
75-34-3	1,1-Dichloroethane	ND		1	1
78-93-3	2-Butanone (MEK)	ND		5	1
156-59-2	cis-1,2-Dichloroethylene	ND		1	1
67-66-3	Chloroform	ND		1	1
74-97-5	Bromochloromethane	ND		1	1
71-55-6	1,1,1-Trichloroethane	ND		1	1
107-06-2	1,2-Dichloroethane	ND		1	1
71-43-2	Benzene	ND		1	1
56-23-5	Carbon tetrachloride	ND		1	1
78-87-5	1,2-Dichloropropane	ND		1	1
79-01-6	Trichloroethylene	ND		1	1
74-95-3	Dibromomethane	ND		1	1
75-27-4	Bromodichloromethane	ND		1	1
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5	1
10061-01-5	cis-1,3-Dichloropropene	ND		1	1
10061-02-6	trans-1,3-Dichloropropene	ND		1	1
108-88-3	Toluene	ND		1	1
79-00-5	1,1,2-Trichloroethane	ND		1	1
591-78-6	2-Hexanone	ND		5	1
124-48-1	Dibromochloromethane	ND		1	1
106-93-4	1,2-Dibromoethane	ND		1	1

MDEQ ENVIRONMENTAL LABORATORY
ANALYTICAL REPORT

CAS #	COMPOUND	RESULTS ug/L	REMARK	REPORTING LIMIT	DILUTION FACTOR
127-18-4	Tetrachloroethene	ND		1	1
108-90-7	Chlorobenzene	1.1		1	1
630-20-6	1,1,1,2-Tetrachloroethane	ND		1	1
100-41-4	Ethylbenzene	ND		1	1
108383,106423	m & p-Xylene	ND		2	1
75-25-2	Bromoform	ND		1	1
100-42-5	Styrene	ND		1	1
95-47-6	o-Xylene	ND		1	1
79-34-5	1,1,2,2-Tetrachloroethane	ND		1	1
96-18-4	1,2,3-Trichloropropane	ND		1	1
110-57-6	trans-1,4-Dichloro-2-butene	ND		1	1
98-82-8	Isopropylbenzene	ND		1	1
103-65-1	n-Propylbenzene	ND		1	1
108-67-8	1,3,5-Trimethylbenzene	ND		1	1
95-63-6	1,2,4-Trimethylbenzene	ND		1	1
541-73-1	1,3-Dichlorobenzene	ND		1	1
106-46-7	1,4-Dichlorobenzene	ND		1	1
95-50-1	1,2-Dichlorobenzene	ND		1	1
67-72-1	Hexachloroethane	ND		1	1
96-12-8	1,2-Dibromo-3-chloropropane	ND		5	1
120-82-1	1,2,4-Trichlorobenzene	ND		5	1
91-20-3	Naphthalene	ND		5	1
91-57-6	2-Methylnaphthalene	ND		5	1

ND = not detected at the specified reporting limit. NM = not measured.

Reference method is 8260/624.

USEPA Methods 8260 and 624 are used to quantitate volatile organic compounds that have boiling points below 200°C.

2-Methylnaphthalene and naphthalene are compounds with boiling points above 200°C and are better suited to quantitation by USEPA Methods 8270 or 625 as semivolatile organic compounds.

MDEQ ENVIRONMENTAL LABORATORY
ANALYTICAL REPORT

Work Order #: 9811054-06ON

Date Collected: 11/5/1998
Date Extracted: 11/12/1998 by SW-4137
Date Analyzed: 11/18/1998 by BRONSONJ

Test Code: PCB
Test Name: PCB in Water
Sample ID: 108 SL

CAS #	COMPOUND	RESULTS ug/L	REMARK	REPORTING LIMIT	DILUTION FACTOR
53469-21-9	Aroclor 1242 (PCB)	ND		0.1	1
11097-69-1	Aroclor 1254 (PCB)	ND		0.1	1
11096-82-5	Aroclor 1260 (PCB)	ND		0.1	1
12674-11-2	Aroclor 1016 (PCB)	ND		0.1	1
11104-28-2	Aroclor 1221 (PCB)	ND		0.1	1
11141-16-5	Aroclor 1232 (PCB)	ND		0.1	1
12672-29-6	Aroclor 1248 (PCB)	ND		0.1	1
37324-23-5	Aroclor 1262 (PCB)	ND		0.1	1
11100-14-4	Aroclor 1268 (PCB)	ND		0.1	1

ND = not detected at the specified reporting limit.

NM = not measured.

Reference method is 8082/608.

MDEQ ENVIRONMENTAL LABORATORY
ANALYTICAL REPORT

Work Order #: 9811054-06POX

Date Collected: 11/5/1998

Test Code: WPS

Date Analyzed: 11/10/1998 by BUCHNER

Test Name: 8260 Plus - Water

Sample ID: 108 SL

CAS #	COMPOUND	RESULTS ug/L	REMARK	REPORTING LIMIT	DILUTION FACTOR
75-71-8	Dichlorodifluoromethane	ND		5	1
74-87-3	Chloromethane	ND		5	1
75-01-4	Vinyl chloride	2200	DL	500	100
74-83-9	Bromomethane	ND		5	1
75-00-3	Chloroethane	ND		5	1
75-69-4	Trichlorofluoromethane	ND		5	1
67-64-1	Acetone	ND		25	1
60-29-7	Diethyl ether	ND		10	1
75-35-4	1,1-Dichloroethylene	2.8		1	1
74-88-4	Methyl iodide	ND		1	1
107-13-1	Acrylonitrile	ND		5	1
75-09-2	Methylene chloride	ND		5	1
75-15-0	Carbon disulfide	ND		5	1
156-60-5	trans-1,2-Dichloroethylene	12		1	1
1634-04-4	Methyltertbutylether (MTBE)	ND		5	1
75-34-3	1,1-Dichloroethane	ND		1	1
78-93-3	2-Butanone (MEK)	ND		5	1
156-59-2	cis-1,2-Dichloroethylene	3400	DL	100	100
67-66-3	Chloroform	ND		1	1
74-97-5	Bromochloromethane	ND		1	1
71-55-6	1,1,1-Trichloroethane	ND		1	1
107-06-2	1,2-Dichloroethane	ND		1	1
71-43-2	Benzene	1.3		1	1
56-23-5	Carbon tetrachloride	ND		1	1
78-87-5	1,2-Dichloropropane	ND		1	1
79-01-6	Trichloroethylene	ND		1	1
74-95-3	Dibromomethane	ND		1	1
75-27-4	Bromodichloromethane	ND		1	1
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5	1
10061-01-5	cis-1,3-Dichloropropene	ND		1	1
10061-02-6	trans-1,3-Dichloropropene	ND		1	1
108-88-3	Toluene	ND		1	1
79-00-5	1,1,2-Trichloroethane	ND		1	1
591-78-6	2-Hexanone	ND		5	1
124-48-1	Dibromochloromethane	ND		1	1
106-93-4	1,2-Dibromoethane	ND		1	1

MDEQ ENVIRONMENTAL LABORATORY
ANALYTICAL REPORT

CAS #	COMPOUND	RESULTS ug/L	REMARK	REPORTING LIMIT	DILUTION FACTOR
127-18-4	Tetrachloroethene	ND		1	1
108-90-7	Chlorobenzene	2.7		1	1
630-20-6	1,1,1,2-Tetrachloroethane	ND		1	1
100-41-4	Ethylbenzene	ND		1	1
108383,106423	m & p-Xylene	ND		2	1
75-25-2	Bromoform	ND		1	1
100-42-5	Styrene	ND		1	1
95-47-6	o-Xylene	ND		1	1
79-34-5	1,1,2,2-Tetrachloroethane	ND		1	1
96-18-4	1,2,3-Trichloropropane	ND		1	1
110-57-6	trans-1,4-Dichloro-2-butene	ND		1	1
98-82-8	Isopropylbenzene	ND		1	1
103-65-1	n-Propylbenzene	ND		1	1
108-67-8	1,3,5-Trimethylbenzene	ND		1	1
95-63-6	1,2,4-Trimethylbenzene	ND		1	1
541-73-1	1,3-Dichlorobenzene	ND		1	1
106-46-7	1,4-Dichlorobenzene	ND		1	1
95-50-1	1,2-Dichlorobenzene	ND		1	1
67-72-1	Hexachloroethane	ND		1	1
96-12-8	1,2-Dibromo-3-chloropropane	ND		5	1
120-82-1	1,2,4-Trichlorobenzene	ND		5	1
91-20-3	Naphthalene	ND		5	1
91-57-6	2-Methylnaphthalene	ND		5	1

ND = not detected at the specified reporting limit. NM = not measured.

Reference method is 8260/624.

USEPA Methods 8260 and 624 are used to quantitate volatile organic compounds that have boiling points below 200°C.

2-Methylnaphthalene and naphthalene are compounds with boiling points above 200°C and are better suited to quantitation by USEPA Methods 8270 or 625 as semivolatile organic compounds.

MDEQ ENVIRONMENTAL LABORATORY
ANALYTICAL REPORT

Work Order #: 9811054-07ON

Date Collected: 11/5/1998	Test Code: PCB
Date Extracted: 11/12/1998 by SW-4137	Test Name: PCB in Water
Date Analyzed: 11/18/1998 by BRONSONJ	Sample ID: 109 WT

CAS #	COMPOUND	RESULTS ug/L	REMARK	REPORTING LIMIT	DILUTION FACTOR
53469-21-9	Aroclor 1242 (PCB)	ND		0.1	1
11097-69-1	Aroclor 1254 (PCB)	ND		0.1	1
11096-82-5	Aroclor 1260 (PCB)	ND		0.1	1
12674-11-2	Aroclor 1016 (PCB)	ND		0.1	1
11104-28-2	Aroclor 1221 (PCB)	ND		0.1	1
11141-16-5	Aroclor 1232 (PCB)	ND		0.1	1
12672-29-6	Aroclor 1248 (PCB)	ND		0.1	1
37324-23-5	Aroclor 1262 (PCB)	ND		0.1	1
11100-14-4	Aroclor 1268 (PCB)	ND		0.1	1

ND = not detected at the specified reporting limit.

NM = not measured.

Reference method is 8082/608.

MDEQ ENVIRONMENTAL LABORATORY
ANALYTICAL REPORT

Work Order #: 9811054-07POX

Date Collected: 11/5/1998	Test Code: WPS
Date Analyzed: 11/10/1998 by BUCHNER	Test Name: 8260 Plus - Water
	Sample ID: 109 WT

CAS #	COMPOUND	RESULTS ug/L	REMARK	REPORTING LIMIT	DILUTION FACTOR
75-71-8	Dichlorodifluoromethane	ND		5	1
74-87-3	Chloromethane	ND		5	1
75-01-4	Vinyl chloride	49		5	1
74-83-9	Bromomethane	ND		5	1
75-00-3	Chloroethane	ND		5	1
75-69-4	Trichlorofluoromethane	ND		5	1
67-64-1	Acetone	ND		25	1
60-29-7	Diethyl ether	ND		10	1
75-35-4	1,1-Dichloroethylene	ND		1	1
74-88-4	Methyl iodide	ND		1	1
107-13-1	Acrylonitrile	ND		5	1
75-09-2	Methylene chloride	ND		5	1
75-15-0	Carbon disulfide	ND		5	1
156-60-5	trans-1,2-Dichloroethylene	ND		1	1
1634-04-4	Methyltertbutylether (MTBE)	ND		5	1
75-34-3	1,1-Dichloroethane	ND		1	1
78-93-3	2-Butanone (MEK)	ND		5	1
156-59-2	cis-1,2-Dichloroethylene	12		1	1
67-66-3	Chloroform	ND		1	1
74-97-5	Bromochloromethane	ND		1	1
71-55-6	1,1,1-Trichloroethane	ND		1	1
107-06-2	1,2-Dichloroethane	ND		1	1
71-43-2	Benzene	6.2		1	1
56-23-5	Carbon tetrachloride	ND		1	1
78-87-5	1,2-Dichloropropane	ND		1	1
79-01-6	Trichloroethylene	ND		1	1
74-95-3	Dibromomethane	ND		1	1
75-27-4	Bromodichloromethane	ND		1	1
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5	1
10061-01-5	cis-1,3-Dichloropropene	ND		1	1
10061-02-6	trans-1,3-Dichloropropene	ND		1	1
108-88-3	Toluene	1.4		1	1
79-00-5	1,1,2-Trichloroethane	ND		1	1
591-78-6	2-Hexanone	ND		5	1
124-48-1	Dibromochloromethane	ND		1	1
106-93-4	1,2-Dibromoethane	ND		1	1

MDEQ ENVIRONMENTAL LABORATORY
ANALYTICAL REPORT

CAS #	COMPOUND	RESULTS ug/L	REMARK	REPORTING LIMIT	DILUTION FACTOR
127-18-4	Tetrachloroethene	ND		1	1
108-90-7	Chlorobenzene	63		1	1
630-20-6	1,1,1,2-Tetrachloroethane	ND		1	1
100-41-4	Ethylbenzene	ND		1	1
108383,106423	m & p-Xylene	1.3		2	1
75-25-2	Bromoform	ND		1	1
100-42-5	Styrene	ND		1	1
95-47-6	o-Xylene	ND		1	1
79-34-5	1,1,2,2-Tetrachloroethane	ND		1	1
96-18-4	1,2,3-Trichloropropane	ND		1	1
110-57-6	trans-1,4-Dichloro-2-butene	ND		1	1
98-82-8	Isopropylbenzene	2.6		1	1
103-65-1	n-Propylbenzene	3.2		1	1
108-67-8	1,3,5-Trimethylbenzene	ND		1	1
95-63-6	1,2,4-Trimethylbenzene	ND		1	1
541-73-1	1,3-Dichlorobenzene	ND		1	1
106-46-7	1,4-Dichlorobenzene	16		1	1
95-50-1	1,2-Dichlorobenzene	ND		1	1
67-72-1	Hexachloroethane	ND		1	1
96-12-8	1,2-Dibromo-3-chloropropane	ND		5	1
120-82-1	1,2,4-Trichlorobenzene	ND		5	1
91-20-3	Naphthalene	ND		5	1
91-57-6	2-Methylnaphthalene	ND		5	1

ND = not detected at the specified reporting limit. NM = not measured.

Reference method is 8260/624.

USEPA Methods 8260 and 624 are used to quantitate volatile organic compounds that have boiling points below 200°C.

2-Methylnaphthalene and naphthalene are compounds with boiling points above 200°C and are better suited to quantitation by USEPA Methods 8270 or 625 as semivolatile organic compounds.

MDEQ ENVIRONMENTAL LABORATORY
ANALYTICAL REPORT

Work Order #: 9811054-08ON

Date Collected: 11/5/1998

Test Code: PCB

Date Extracted: 11/12/1998 by SW-4137

Test Name: PCB in Water

Date Analyzed: 11/18/1998 by BRONSONJ

Sample ID: 109 SL

CAS #	COMPOUND	RESULTS ug/L	REMARK	REPORTING LIMIT	DILUTION FACTOR
53469-21-9	Aroclor 1242 (PCB)	ND		0.1	1
11097-69-1	Aroclor 1254 (PCB)	ND		0.1	1
11096-82-5	Aroclor 1260 (PCB)	ND		0.1	1
12674-11-2	Aroclor 1016 (PCB)	ND		0.1	1
11104-28-2	Aroclor 1221 (PCB)	ND		0.1	1
11141-16-5	Aroclor 1232 (PCB)	ND		0.1	1
12672-29-6	Aroclor 1248 (PCB)	ND		0.1	1
37324-23-5	Aroclor 1262 (PCB)	ND		0.1	1
11100-14-4	Aroclor 1268 (PCB)	ND		0.1	1

ND = not detected at the specified reporting limit.

NM = not measured.

Reference method is 8082/608.

MDEQ ENVIRONMENTAL LABORATORY
ANALYTICAL REPORT

Work Order #: 9811054-08POX

Date Collected: 11/5/1998	Test Code: WPS
Date Analyzed: 11/10/1998 by BUCHNER	Test Name: 8260 Plus - Water
	Sample ID: 109 SL

CAS #	COMPOUND	RESULTS ug/L	REMARK	REPORTING LIMIT	DILUTION FACTOR
75-71-8	Dichlorodifluoromethane	ND		5	1
74-87-3	Chloromethane	ND		5	1
75-01-4	Vinyl chloride	7400	DL	500	100
74-83-9	Bromomethane	ND		5	1
75-00-3	Chloroethane	ND		5	1
75-69-4	Trichlorofluoromethane	ND		5	1
67-64-1	Acetone	ND		25	1
60-29-7	Diethyl ether	ND		10	1
75-35-4	1,1-Dichloroethylene	3.4		1	1
74-88-4	Methyl iodide	ND		1	1
107-13-1	Acrylonitrile	ND		5	1
75-09-2	Methylene chloride	ND		5	1
75-15-0	Carbon disulfide	ND		5	1
156-60-5	trans-1,2-Dichloroethylene	15		1	1
1634-04-4	Methyltertbutylether (MTBE)	ND		5	1
75-34-3	1,1-Dichloroethane	ND		1	1
78-93-3	2-Butanone (MEK)	ND		5	1
156-59-2	cis-1,2-Dichloroethylene	4700	DL	100	100
67-66-3	Chloroform	ND		1	1
74-97-5	Bromochloromethane	ND		1	1
71-55-6	1,1,1-Trichloroethane	ND		1	1
107-06-2	1,2-Dichloroethane	ND		1	1
71-43-2	Benzene	6.3		1	1
56-23-5	Carbon tetrachloride	ND		1	1
78-87-5	1,2-Dichloropropane	ND		1	1
79-01-6	Trichloroethylene	ND		1	1
74-95-3	Dibromomethane	ND		1	1
75-27-4	Bromodichloromethane	ND		1	1
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5	1
10061-01-5	cis-1,3-Dichloropropene	ND		1	1
10061-02-6	trans-1,3-Dichloropropene	ND		1	1
108-88-3	Toluene	26		1	1
79-00-5	1,1,2-Trichloroethane	ND		1	1
591-78-6	2-Hexanone	ND		5	1
124-48-1	Dibromochloromethane	ND		1	1
106-93-4	1,2-Dibromoethane	ND		1	1

MDEQ ENVIRONMENTAL LABORATORY
ANALYTICAL REPORT

CAS #	COMPOUND	RESULTS ug/L	REMARK	REPORTING LIMIT	DILUTION FACTOR
127-18-4	Tetrachloroethene	ND		1	1
108-90-7	Chlorobenzene	65		1	1
630-20-6	1,1,1,2-Tetrachloroethane	ND		1	1
100-41-4	Ethylbenzene	15		1	1
108383,106423	m & p-Xylene	6.2		2	1
75-25-2	Bromoform	ND		1	1
100-42-5	Styrene	ND		1	1
95-47-6	o-Xylene	4.6		1	1
79-34-5	1,1,2,2-Tetrachloroethane	ND		1	1
96-18-4	1,2,3-Trichloropropane	ND		1	1
110-57-6	trans-1,4-Dichloro-2-butene	ND		1	1
98-82-8	Isopropylbenzene	ND		1	1
103-65-1	n-Propylbenzene	ND		1	1
108-67-8	1,3,5-Trimethylbenzene	ND		1	1
95-63-6	1,2,4-Trimethylbenzene	ND		1	1
541-73-1	1,3-Dichlorobenzene	ND		1	1
106-46-7	1,4-Dichlorobenzene	4.4		1	1
95-50-1	1,2-Dichlorobenzene	ND		1	1
67-72-1	Hexachloroethane	ND		1	1
96-12-8	1,2-Dibromo-3-chloropropane	ND		5	1
120-82-1	1,2,4-Trichlorobenzene	ND		5	1
91-20-3	Naphthalene	ND		5	1
91-57-6	2-Methylnaphthalene	ND		5	1

ND = not detected at the specified reporting limit. NM = not measured.

Reference method is 8260/624.

USEPA Methods 8260 and 624 are used to quantitate volatile organic compounds that have boiling points below 200°C.

2-Methylnaphthalene and naphthalene are compounds with boiling points above 200°C and are better suited to quantitation by USEPA Methods 8270 or 625 as semivolatile organic compounds.

MDEQ ENVIRONMENTAL LABORATORY
ANALYTICAL REPORT

Work Order #: 9811054-09ON

Date Collected: 11/5/1998	Test Code: PCB
Date Extracted: 11/12/1998 by SW-4137	Test Name: PCB in Water
Date Analyzed: 11/18/1998 by BRONSONJ	Sample ID: 109 SL DUPLICATE

CAS #	COMPOUND	RESULTS ug/L	REMARK	REPORTING LIMIT	DILUTION FACTOR
53469-21-9	Aroclor 1242 (PCB)	ND		0.1	1
11097-69-1	Aroclor 1254 (PCB)	ND		0.1	1
11096-82-5	Aroclor 1260 (PCB)	ND		0.1	1
12674-11-2	Aroclor 1016 (PCB)	ND		0.1	1
11104-28-2	Aroclor 1221 (PCB)	ND		0.1	1
11141-16-5	Aroclor 1232 (PCB)	ND		0.1	1
12672-29-6	Aroclor 1248 (PCB)	ND		0.1	1
37324-23-5	Aroclor 1262 (PCB)	ND		0.1	1
11100-14-4	Aroclor 1268 (PCB)	ND		0.1	1

ND = not detected at the specified reporting limit.

NM = not measured.

Reference method is 8082/608.

MDEQ ENVIRONMENTAL LABORATORY
ANALYTICAL REPORT

Work Order #: 9811054-09POX

Date Collected: 11/5/1998

Test Code: WPS

Date Analyzed: 11/10/1998 by BUCHNER

Test Name: 8260 Plus - Water

Sample ID: 109 SL DUPLICATE

CAS #	COMPOUND	RESULTS ug/L	REMARK	REPORTING LIMIT	DILUTION FACTOR
75-71-8	Dichlorodifluoromethane	ND		5	1
74-87-3	Chloromethane	ND		5	1
75-01-4	Vinyl chloride	7800	DL	500	100
74-83-9	Bromomethane	ND		5	1
75-00-3	Chloroethane	ND		5	1
75-69-4	Trichlorofluoromethane	ND		5	1
67-64-1	Acetone	ND		25	1
60-29-7	Diethyl ether	ND		10	1
75-35-4	1,1-Dichloroethylene	2.3		1	1
74-88-4	Methyl iodide	ND		1	1
107-13-1	Acrylonitrile	ND		5	1
75-09-2	Methylene chloride	ND		5	1
75-15-0	Carbon disulfide	ND		5	1
156-60-5	trans-1,2-Dichloroethylene	11		1	1
1634-04-4	Methyltertbutylether (MTBE)	ND		5	1
75-34-3	1,1-Dichloroethane	ND		1	1
78-93-3	2-Butanone (MEK)	ND		5	1
156-59-2	cis-1,2-Dichloroethylene	5100	DL	100	100
67-66-3	Chloroform	ND		1	1
74-97-5	Bromochloromethane	ND		1	1
71-55-6	1,1,1-Trichloroethane	ND		1	1
107-06-2	1,2-Dichloroethane	ND		1	1
71-43-2	Benzene	6.4		1	1
56-23-5	Carbon tetrachloride	ND		1	1
78-87-5	1,2-Dichloropropane	ND		1	1
79-01-6	Trichloroethylene	ND		1	1
74-95-3	Dibromomethane	ND		1	1
75-27-4	Bromodichloromethane	ND		1	1
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5	1
10061-01-5	cis-1,3-Dichloropropene	ND		1	1
10061-02-6	trans-1,3-Dichloropropene	ND		1	1
108-88-3	Toluene	24		1	1
79-00-5	1,1,2-Trichloroethane	ND		1	1
591-78-6	2-Hexanone	ND		5	1
124-48-1	Dibromochloromethane	ND		1	1
106-93-4	1,2-Dibromoethane	ND		1	1

MDEQ ENVIRONMENTAL LABORATORY
ANALYTICAL REPORT

CAS #	COMPOUND	RESULTS ug/L	REMARK	REPORTING LIMIT	DILUTION FACTOR
127-18-4	Tetrachloroethene	ND		1	1
108-90-7	Chlorobenzene	72		1	1
630-20-6	1,1,1,2-Tetrachloroethane	ND		1	1
100-41-4	Ethylbenzene	14		1	1
108383,106423	m & p-Xylene	6.0		2	1
75-25-2	Bromoform	ND		1	1
100-42-5	Styrene	ND		1	1
95-47-6	o-Xylene	4.3		1	1
79-34-5	1,1,2,2-Tetrachloroethane	ND		1	1
96-18-4	1,2,3-Trichloropropane	ND		1	1
110-57-6	trans-1,4-Dichloro-2-butene	ND		1	1
98-82-8	Isopropylbenzene	ND		1	1
103-65-1	n-Propylbenzene	1.0		1	1
108-67-8	1,3,5-Trimethylbenzene	ND		1	1
95-63-6	1,2,4-Trimethylbenzene	ND		1	1
541-73-1	1,3-Dichlorobenzene	ND		1	1
106-46-7	1,4-Dichlorobenzene	5.1		1	1
95-50-1	1,2-Dichlorobenzene	ND		1	1
67-72-1	Hexachloroethane	ND		1	1
96-12-8	1,2-Dibromo-3-chloropropane	ND		5	1
120-82-1	1,2,4-Trichlorobenzene	ND		5	1
91-20-3	Naphthalene	ND		5	1
91-57-6	2-Methylnaphthalene	ND		5	1

ND = not detected at the specified reporting limit. NM = not measured.

Reference method is 8260/624.

USEPA Methods 8260 and 624 are used to quantitate volatile organic compounds that have boiling points below 200°C. 2-Methylnaphthalene and naphthalene are compounds with boiling points above 200°C and are better suited to quantitation by USEPA Methods 8270 or 625 as semivolatile organic compounds.

MDEQ ENVIRONMENTAL LABORATORY
ANALYTICAL REPORT

Work Order #: 9811054-100N

Date Collected: 11/6/1998
Date Extracted: 11/12/1998 by SW-4137
Date Analyzed: 11/18/1998 by BRONSONJ

Test Code: PCB
Test Name: PCB in Water
Sample ID: MW 114

CAS #	COMPOUND	RESULTS ug/L	REMARK	REPORTING LIMIT	DILUTION FACTOR
53469-21-9	Aroclor 1242 (PCB)	ND		0.1	1
11097-69-1	Aroclor 1254 (PCB)	ND		0.1	1
11096-82-5	Aroclor 1260 (PCB)	ND		0.1	1
12674-11-2	Aroclor 1016 (PCB)	ND		0.1	1
11104-28-2	Aroclor 1221 (PCB)	ND		0.1	1
11141-16-5	Aroclor 1232 (PCB)	ND		0.1	1
12672-29-6	Aroclor 1248 (PCB)	ND		0.1	1
37324-23-5	Aroclor 1262 (PCB)	ND		0.1	1
11100-14-4	Aroclor 1268 (PCB)	ND		0.1	1

ND = not detected at the specified reporting limit.

NM = not measured.

Reference method is 8082/608.

MDEQ ENVIRONMENTAL LABORATORY
ANALYTICAL REPORT

Work Order #: 9811054-10POX

Date Collected: 11/6/1998

Test Code: WPS

Date Analyzed: 11/10/1998 by BUCHNER

Test Name: 8260 Plus - Water

Sample ID: MW 114

CAS #	COMPOUND	RESULTS ug/L	REMARK	REPORTING LIMIT	DILUTION FACTOR
75-71-8	Dichlorodifluoromethane	ND		5	1
74-87-3	Chloromethane	ND		5	1
75-01-4	Vinyl chloride	ND		5	1
74-83-9	Bromomethane	ND		5	1
75-00-3	Chloroethane	ND		5	1
75-69-4	Trichlorofluoromethane	ND		5	1
67-64-1	Acetone	ND		25	1
60-29-7	Diethyl ether	ND		10	1
75-35-4	1,1-Dichloroethylene	ND		1	1
74-88-4	Methyl iodide	ND		1	1
107-13-1	Acrylonitrile	ND		5	1
75-09-2	Methylene chloride	ND		5	1
75-15-0	Carbon disulfide	ND		5	1
156-60-5	trans-1,2-Dichloroethylene	ND		1	1
1634-04-4	Methyltertbutylether (MTBE)	ND		5	1
75-34-3	1,1-Dichloroethane	ND		1	1
78-93-3	2-Butanone (MEK)	ND		5	1
156-59-2	cis-1,2-Dichloroethylene	ND		1	1
67-66-3	Chloroform	ND		1	1
74-97-5	Bromochloromethane	ND		1	1
71-55-6	1,1,1-Trichloroethane	ND		1	1
107-06-2	1,2-Dichloroethane	ND		1	1
71-43-2	Benzene	ND		1	1
56-23-5	Carbon tetrachloride	ND		1	1
78-87-5	1,2-Dichloropropane	ND		1	1
79-01-6	Trichloroethylene	ND		1	1
74-95-3	Dibromomethane	ND		1	1
75-27-4	Bromodichloromethane	ND		1	1
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5	1
10061-01-5	cis-1,3-Dichloropropene	ND		1	1
10061-02-6	trans-1,3-Dichloropropene	ND		1	1
108-88-3	Toluene	ND		1	1
79-00-5	1,1,2-Trichloroethane	ND		1	1
591-78-6	2-Hexanone	ND		5	1
124-48-1	Dibromochloromethane	ND		1	1
106-93-4	1,2-Dibromoethane	ND		1	1

MDEQ ENVIRONMENTAL LABORATORY
ANALYTICAL REPORT

CAS #	COMPOUND	RESULTS ug/L	REMARK	REPORTING LIMIT	DILUTION FACTOR
127-18-4	Tetrachloroethene	ND		1	1
108-90-7	Chlorobenzene	ND		1	1
630-20-6	1,1,1,2-Tetrachloroethane	ND		1	1
100-41-4	Ethylbenzene	ND		1	1
108383,106423	m & p-Xylene	ND		2	1
75-25-2	Bromoform	ND		1	1
100-42-5	Styrene	ND		1	1
95-47-6	o-Xylene	ND		1	1
79-34-5	1,1,2,2-Tetrachloroethane	ND		1	1
96-18-4	1,2,3-Trichloropropane	ND		1	1
110-57-6	trans-1,4-Dichloro-2-butene	ND		1	1
98-82-8	Isopropylbenzene	ND		1	1
103-65-1	n-Propylbenzene	ND		1	1
108-67-8	1,3,5-Trimethylbenzene	ND		1	1
95-63-6	1,2,4-Trimethylbenzene	ND		1	1
541-73-1	1,3-Dichlorobenzene	ND		1	1
106-46-7	1,4-Dichlorobenzene	ND		1	1
95-50-1	1,2-Dichlorobenzene	ND		1	1
67-72-1	Hexachloroethane	ND		1	1
96-12-8	1,2-Dibromo-3-chloropropane	ND		5	1
120-82-1	1,2,4-Trichlorobenzene	ND		5	1
91-20-3	Naphthalene	ND		5	1
91-57-6	2-Methylnaphthalene	ND		5	1

ND = not detected at the specified reporting limit. NM = not measured.

Reference method is 8260/624.

USEPA Methods 8260 and 624 are used to quantitate volatile organic compounds that have boiling points below 200°C.

2-Methylnaphthalene and naphthalene are compounds with boiling points above 200°C and are better suited to quantitation by USEPA Methods 8270 or 625 as semivolatile organic compounds.

MDEQ ENVIRONMENTAL LABORATORY
ANALYTICAL REPORT

Work Order #: 9811054-11ON

Date Collected: 11/6/1998	Test Code: PCB
Date Extracted: 11/12/1998 by SW-4137	Test Name: PCB in Water
Date Analyzed: 11/18/1998 by BRONSONJ	Sample ID: MW 115

CAS #	COMPOUND	RESULTS ug/L	REMARK	REPORTING LIMIT	DILUTION FACTOR
53469-21-9	Aroclor 1242 (PCB)	ND		0.1	1
11097-69-1	Aroclor 1254 (PCB)	ND		0.1	1
11096-82-5	Aroclor 1260 (PCB)	ND		0.1	1
12674-11-2	Aroclor 1016 (PCB)	ND		0.1	1
11104-28-2	Aroclor 1221 (PCB)	ND		0.1	1
11141-16-5	Aroclor 1232 (PCB)	ND		0.1	1
12672-29-6	Aroclor 1248 (PCB)	ND		0.1	1
37324-23-5	Aroclor 1262 (PCB)	ND		0.1	1
11100-14-4	Aroclor 1268 (PCB)	ND		0.1	1

ND = not detected at the specified reporting limit.

NM = not measured.

Reference method is 8082/608.

MDEQ ENVIRONMENTAL LABORATORY
ANALYTICAL REPORT

Work Order #: 9811054-11POX

Date Collected: 11/6/1998	Test Code: WPS
Date Analyzed: 11/10/1998 by BUCHNER	Test Name: 8260 Plus - Water
	Sample ID: MW 115

CAS #	COMPOUND	RESULTS ug/L	REMARK	REPORTING LIMIT	DILUTION FACTOR
75-71-8	Dichlorodifluoromethane	ND		5	1
74-87-3	Chloromethane	ND		5	1
75-01-4	Vinyl chloride	ND		5	1
74-83-9	Bromomethane	ND		5	1
75-00-3	Chloroethane	ND		5	1
75-69-4	Trichlorofluoromethane	ND		5	1
67-64-1	Acetone	ND		25	1
60-29-7	Diethyl ether	ND		10	1
75-35-4	1,1-Dichloroethylene	ND		1	1
74-88-4	Methyl iodide	ND		1	1
107-13-1	Acrylonitrile	ND		5	1
75-09-2	Methylene chloride	ND		5	1
75-15-0	Carbon disulfide	ND		5	1
156-60-5	trans-1,2-Dichloroethylene	ND		1	1
1634-04-4	Methyltertbutylether (MTBE)	ND		5	1
75-34-3	1,1-Dichloroethane	ND		1	1
78-93-3	2-Butanone (MEK)	ND		5	1
156-59-2	cis-1,2-Dichloroethylene	ND		1	1
67-66-3	Chloroform	ND		1	1
74-97-5	Bromochloromethane	ND		1	1
71-55-6	1,1,1-Trichloroethane	ND		1	1
107-06-2	1,2-Dichloroethane	ND		1	1
71-43-2	Benzene	ND		1	1
56-23-5	Carbon tetrachloride	ND		1	1
78-87-5	1,2-Dichloropropane	ND		1	1
79-01-6	Trichloroethylene	ND		1	1
74-95-3	Dibromomethane	ND		1	1
75-27-4	Bromodichloromethane	ND		1	1
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5	1
10061-01-5	cis-1,3-Dichloropropene	ND		1	1
10061-02-6	trans-1,3-Dichloropropene	ND		1	1
108-88-3	Toluene	ND		1	1
79-00-5	1,1,2-Trichloroethane	ND		1	1
591-78-6	2-Hexanone	ND		5	1
124-48-1	Dibromochloromethane	ND		1	1
106-93-4	1,2-Dibromoethane	ND		1	1

MDEQ ENVIRONMENTAL LABORATORY
ANALYTICAL REPORT

CAS #	COMPOUND	RESULTS ug/L	REMARK	REPORTING LIMIT	DILUTION FACTOR
127-18-4	Tetrachloroethene	ND		1	1
108-90-7	Chlorobenzene	ND		1	1
630-20-6	1,1,1,2-Tetrachloroethane	ND		1	1
100-41-4	Ethylbenzene	ND		1	1
108383,106423	m & p-Xylene	ND		2	1
75-25-2	Bromoform	ND		1	1
100-42-5	Styrene	ND		1	1
95-47-6	o-Xylene	ND		1	1
79-34-5	1,1,2,2-Tetrachloroethane	ND		1	1
96-18-4	1,2,3-Trichloropropane	ND		1	1
110-57-6	trans-1,4-Dichloro-2-butene	ND		1	1
98-82-8	Isopropylbenzene	ND		1	1
103-65-1	n-Propylbenzene	ND		1	1
108-67-8	1,3,5-Trimethylbenzene	ND		1	1
95-63-6	1,2,4-Trimethylbenzene	ND		1	1
541-73-1	1,3-Dichlorobenzene	ND		1	1
106-46-7	1,4-Dichlorobenzene	ND		1	1
95-50-1	1,2-Dichlorobenzene	ND		1	1
67-72-1	Hexachloroethane	ND		1	1
96-12-8	1,2-Dibromo-3-chloropropane	ND		5	1
120-82-1	1,2,4-Trichlorobenzene	ND		5	1
91-20-3	Naphthalene	ND		5	1
91-57-6	2-Methylnaphthalene	ND		5	1

ND = not detected at the specified reporting limit. NM = not measured.

Reference method is 8260/624.

USEPA Methods 8260 and 624 are used to quantitate volatile organic compounds that have boiling points below 200°C.

2-Methylnaphthalene and naphthalene are compounds with boiling points above 200°C and are better suited to quantitation by USEPA Methods 8270 or 625 as semivolatile organic compounds.

MDEQ ENVIRONMENTAL LABORATORY
ANALYTICAL REPORT

Work Order #: 9811054-12ON

Date Collected: 11/6/1998	Test Code: PCB
Date Extracted: 11/12/1998 by SW-4137	Test Name: PCB in Water
Date Analyzed: 11/18/1998 by BRONSONJ	Sample ID: 106 WT

CAS #	COMPOUND	RESULTS ug/L	REMARK	REPORTING LIMIT	DILUTION FACTOR
53469-21-9	Aroclor 1242 (PCB)	ND		0.1	1
11097-69-1	Aroclor 1254 (PCB)	ND		0.1	1
11096-82-5	Aroclor 1260 (PCB)	ND		0.1	1
12674-11-2	Aroclor 1016 (PCB)	0.25	J	0.1	1
11104-28-2	Aroclor 1221 (PCB)	ND		0.1	1
11141-16-5	Aroclor 1232 (PCB)	ND		0.1	1
12672-29-6	Aroclor 1248 (PCB)	ND		0.1	1
37324-23-5	Aroclor 1262 (PCB)	ND		0.1	1
11100-14-4	Aroclor 1268 (PCB)	ND		0.1	1

J= VERY DEGRADED PCB PATTERN

ND = not detected at the specified reporting limit.

NM = not measured.

Reference method is 8082/608.

MDEQ ENVIRONMENTAL LABORATORY
ANALYTICAL REPORT

Work Order #: 9811054-12POX

Date Collected: 11/6/1998	Test Code: WPS
Date Analyzed: 11/10/1998 by BUCHNER	Test Name: 8260 Plus - Water
	Sample ID: 106 WT

CAS #	COMPOUND	RESULTS ug/L	REMARK	REPORTING LIMIT	DILUTION FACTOR
75-71-8	Dichlorodifluoromethane	ND		5	1
74-87-3	Chloromethane	ND		5	1
75-01-4	Vinyl chloride	ND		5	1
74-83-9	Bromomethane	ND		5	1
75-00-3	Chloroethane	ND		5	1
75-69-4	Trichlorofluoromethane	ND		5	1
67-64-1	Acetone	ND		25	1
60-29-7	Diethyl ether	ND		10	1
75-35-4	1,1-Dichloroethylene	ND		1	1
74-88-4	Methyl iodide	ND		1	1
107-13-1	Acrylonitrile	ND		5	1
75-09-2	Methylene chloride	ND		5	1
75-15-0	Carbon disulfide	ND		5	1
156-60-5	trans-1,2-Dichloroethylene	ND		1	1
1634-04-4	Methyltertbutylether (MTBE)	ND		5	1
75-34-3	1,1-Dichloroethane	ND		1	1
78-93-3	2-Butanone (MEK)	ND		5	1
156-59-2	cis-1,2-Dichloroethylene	ND		1	1
67-66-3	Chloroform	ND		1	1
74-97-5	Bromochloromethane	ND		1	1
71-55-6	1,1,1-Trichloroethane	ND		1	1
107-06-2	1,2-Dichloroethane	ND		1	1
71-43-2	Benzene	1.6		1	1
56-23-5	Carbon tetrachloride	ND		1	1
78-87-5	1,2-Dichloropropane	ND		1	1
79-01-6	Trichloroethylene	ND		1	1
74-95-3	Dibromomethane	ND		1	1
75-27-4	Bromodichloromethane	ND		1	1
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5	1
10061-01-5	cis-1,3-Dichloropropene	ND		1	1
10061-02-6	trans-1,3-Dichloropropene	ND		1	1
108-88-3	Toluene	ND		1	1
79-00-5	1,1,2-Trichloroethane	ND		1	1
591-78-6	2-Hexanone	ND		5	1
124-48-1	Dibromochloromethane	ND		1	1
106-93-4	1,2-Dibromoethane	ND		1	1

MDEQ ENVIRONMENTAL LABORATORY
ANALYTICAL REPORT

CAS #	COMPOUND	RESULTS ug/L	REMARK	REPORTING LIMIT	DILUTION FACTOR
127-18-4	Tetrachloroethene	ND		1	1
108-90-7	Chlorobenzene	ND		1	1
630-20-6	1,1,1,2-Tetrachloroethane	ND		1	1
100-41-4	Ethylbenzene	ND		1	1
108383,106423	m & p-Xylene	ND		2	1
75-25-2	Bromoform	ND		1	1
100-42-5	Styrene	ND		1	1
95-47-6	o-Xylene	ND		1	1
79-34-5	1,1,2,2-Tetrachloroethane	ND		1	1
96-18-4	1,2,3-Trichloropropane	ND		1	1
110-57-6	trans-1,4-Dichloro-2-butene	ND		1	1
98-82-8	Isopropylbenzene	ND		1	1
103-65-1	n-Propylbenzene	ND		1	1
108-67-8	1,3,5-Trimethylbenzene	ND		1	1
95-63-6	1,2,4-Trimethylbenzene	ND		1	1
541-73-1	1,3-Dichlorobenzene	ND		1	1
106-46-7	1,4-Dichlorobenzene	ND		1	1
95-50-1	1,2-Dichlorobenzene	ND		1	1
67-72-1	Hexachloroethane	ND		1	1
96-12-8	1,2-Dibromo-3-chloropropane	ND		5	1
120-82-1	1,2,4-Trichlorobenzene	ND		5	1
91-20-3	Naphthalene	ND		5	1
91-57-6	2-Methylnaphthalene	ND		5	1

ND = not detected at the specified reporting limit. NM = not measured.

Reference method is 8260/624.

USEPA Methods 8260 and 624 are used to quantitate volatile organic compounds that have boiling points below 200°C.

2-Methylnaphthalene and naphthalene are compounds with boiling points above 200°C and are better suited to quantitation by USEPA Methods 8270 or 625 as semivolatile organic compounds.