October 20, 2009

Mr. Allan Timm and Ed Olson
MPCA VIC Program
520 Lafayette Road
St. Paul, MN 55155-4194

Re: Monthly DPE System Effectiveness Report
MN Bio Business Center, Rochester, MN

Dear Mr. Timm and Mr. Olson:

On behalf of the City of Rochester (City) Administration Department, Landmark Environmental, LLC (Landmark) has prepared this letter to present a status update for the dual phase extraction (DPE) system installed at the above referenced property (Property) as shown in Figure 1.

Introduction

DPE system installation activities were completed on April 4, 2009; however, the system was not started for permanent operation until June 29, 2009. On April 4, 2009, the DPE system was temporarily started to collect emissions and groundwater discharge samples for laboratory analysis to determine whether or not emissions and/or groundwater treatment systems would be required. Voluntary Response Action Plan Addendum #2, submitted to the Minnesota Pollution Control Agency (MPCA) on April 20, 2009, provided information concerning the DPE system and emissions and groundwater discharge results as requested in an email dated April 13, 2009, from Mr. Timm concerning the proposed response actions (RAs) related to the installation of groundwater and emissions treatment systems in connection with the DPE system. The groundwater discharge analytical results exceeded the discharge limit of 2,130 micrograms per liter (ug/L) required by the City of Rochester's Water Reclamation Plant. As a result, a groundwater treatment system consisting of air stripper was installed on June 4, 2009. Based on the Remediation Risk Analysis Spreadsheet (RASS), the emissions analytical results exceeded the site specific chronic risk criteria. To date, the DPE system has been operated without emissions treatment in anticipation of a decrease in emissions concentrations after a couple months of operation at DPE-1. Data from the September 4, 2009, sampling event will be used to see if the initial emissions concentrations decreased to levels below the risk criteria, consequently, eliminating the requirement for emissions treatment. The DPE system well locations and equipment layout are provided in Figures 2 and 3, respectively.

On June 23, 2009, the elevator pit sump was sealed to prevent vapor intrusion into the building and connected to the air stripper to treat accumulating contaminated groundwater. In addition, a secondary containment berm was installed in the doorway of the DPE room, as well as an additional floor sump alarm and floor conductivity meter.

The DPE system has been operating on the source area well, DPE-1, since the system was started on June 29, 2009. Due to high DPE pump inlet vacuum issues and a major DPE pump repair, the system was not operated consistently enough to conduct the first official round of monthly system

monitoring and sampling until September 4, 2009. During this sampling event, Landmark sampled the DPE system emissions and air stripper influent and effluent groundwater discharge, collected system operational data, and measured water levels at the DPE and monitoring wells. This report includes the results from the data collected through the September 4, 2009 sampling event. A system operation and maintenance summary table is included as Table 1.

System Operational Results

Through September 4, 2009, the DPE system removed approximately 883 pounds of total volatile organic compounds (VOCs) and 741 pounds of tetrachloroethene (PCE) in approximately 40 days of system operation (see Figure 4 and Table 2). The concentrations of VOCs decreased from 14,613,880 micrograms per cubic meter (ug/m^3) on April 9, 2009, (the baseline emissions sampling date) to 3,795,092 ug/m3 of total VOCs, a decrease of 74 percent (See Figure 5). PCE concentrations decreased from 11,600,000 ug/m^3 on April 9, 2009, to 3,795,092 ug/m^3, a decrease of 69 percent. Emissions analytical data is provided in Table 3 and system operational data tables and field data sheets are provided in Attachment A. The emissions analytical reports are included in Attachment B.

The MPCA's RASS spreadsheet was used to evaluate the emissions rates from the DPE and air stripper stacks on the Property. The emissions rate of PCE, 61,710 ug per second (ug/s) exceeded the MPCA screening emissions rate (SER) for chronic risk of 16,300 ug/s, and yielded a noncancer hazard index of 0.8 and an Excess Lifetime Cancer Risk (ELCR) of $3.8x10^{-5}$, which exceeded the ELCR limit of 10^{-5}. There SER for acute risk was not exceeded. Emissions from the air stripper did not exceed the SERs for chronic or acute risk. The DPE emissions rates are provided in Table 4 and the RASS spreadsheets are provided in Attachment C.

The cumulative total VOC mass removed from the DPE system groundwater discharge during air stripper operation was 0.17 pounds. The effluent groundwater discharge concentration was 20 ug/L, below the Water Reclamation Plant discharge criteria of 2,130 ug/L of total VOCs. Mass removal data from the groundwater treatment system is provided in Table 5 and the groundwater discharge data is included in Table 6. The groundwater discharge analytical reports are provided in Attachment B.

The groundwater elevation data shows the operation of the DPE system has been effective in lowering the water table at each of the DPE and monitoring wells except for monitoring well MW-20. Figure 6 includes hydrographs of each of the DPE and monitoring wells. The groundwater elevation data is provided in Table 7. The well construction information is provided in Table 8.

Conclusions

After analyzing the data from the DPE and groundwater treatment system, the following conclusions can be made:

- The DPE system is operating as designed and has removed a significant amount of VOCs in a short period of time. During approximately 40 days of operation on extraction well DPE-1, approximately 883 pounds of total VOCs and 741 pounds of PCE were removed from the subsurface.

- DPE-1 emissions concentrations of VOCs and PCE decreased 74 and 69 percent, respectively.
- The emissions concentration for PCE exceeded the MPCA SER for chronic risk, the non-cancer hazard index, and the ELCR.
- The groundwater treatment system is also operating as designed by reducing the groundwater discharge concentrations of VOCs to below the Water Reclamation Plant's discharge criteria.
- DPE system operation at DPE-1 has been effective at lowering the water table at the Property.

Recommendations

To avoid the capital costs and ongoing operation and maintenance costs associated with installing an air emissions treatment system at the Property, Landmark recommends alternating DPE system operation between the following: 1.) continuous operation at a "hot" well (i.e. DPE-1) for a limited amount of time, such as one to two months at a time; and, 2.) sequential operation of all eight DPE wells for a longer duration of time, such as three to six months at a time. On October 15, 2009, the DPE system operation was changed from operating only at DPE-1 to operating sequentially at all eight DPE wells. Landmark recommends operating sequentially at all of the DPE wells for the next three months. At that time, Landmark will change the system operation to again extract only at DPE-1.

Additional monthly system operational, analytical, and fluid level data will be collected to better evaluate the system's effectiveness at accomplishing remedial goals, and to make adjustments as necessary to increase effectiveness. This data will be carefully monitored and analyzed, and system adjustments will be made to maintain efficient mass recovery.

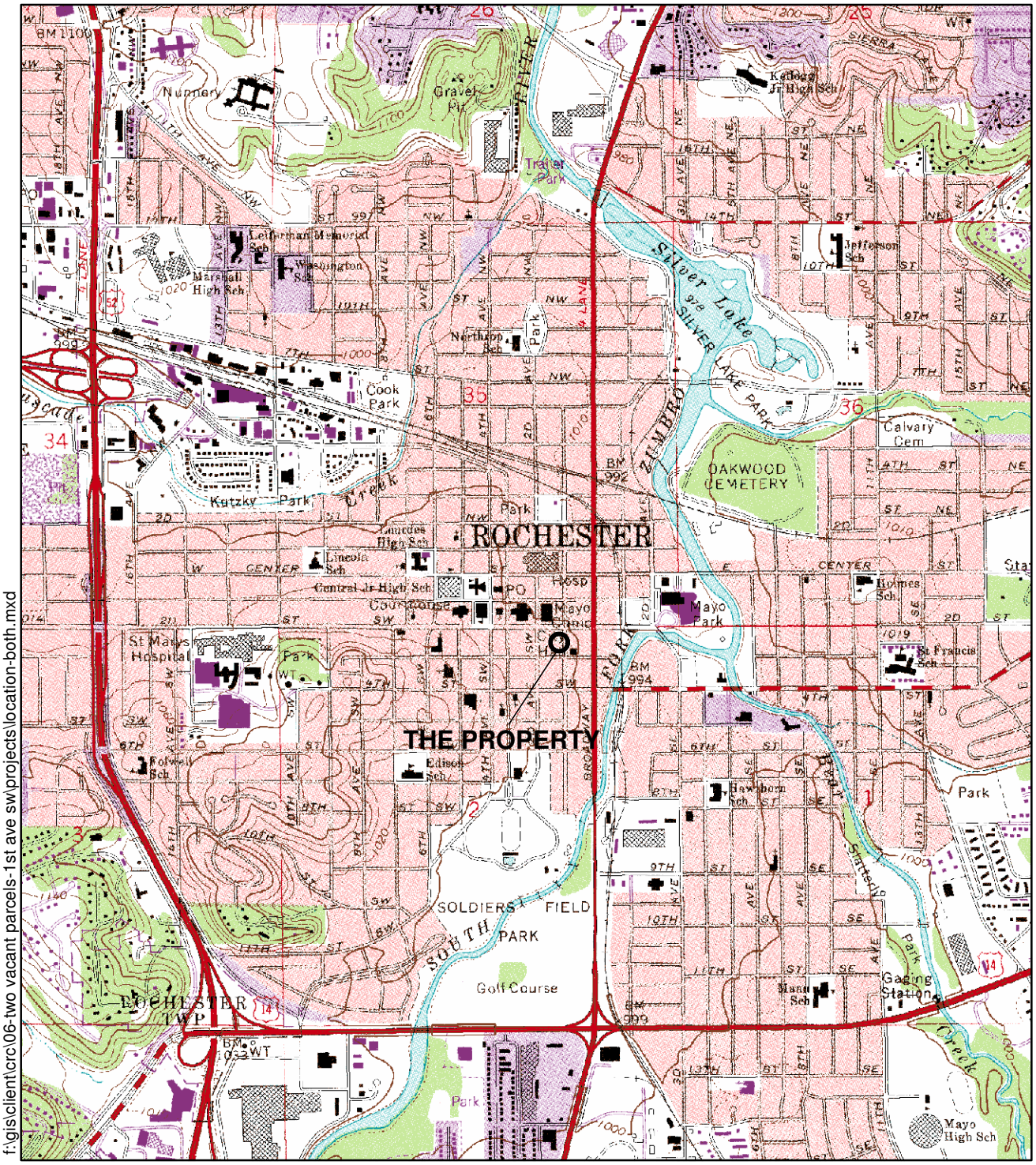
If you have any questions or require additional information, please feel free to contact me at (952) 887-9601, extension 205.

Sincerely,

Jason D. Skramstad, P.E.

Cc: Terry Spaeth, City of Rochester
F:\PROJECTS\Crc-City of Rochester\Monthly System Reports\20091020\20091020 Report.doc

Figures



f:\gis\client\crc\06-two vacant parcels-1st ave sw\projects\location-both.mxd

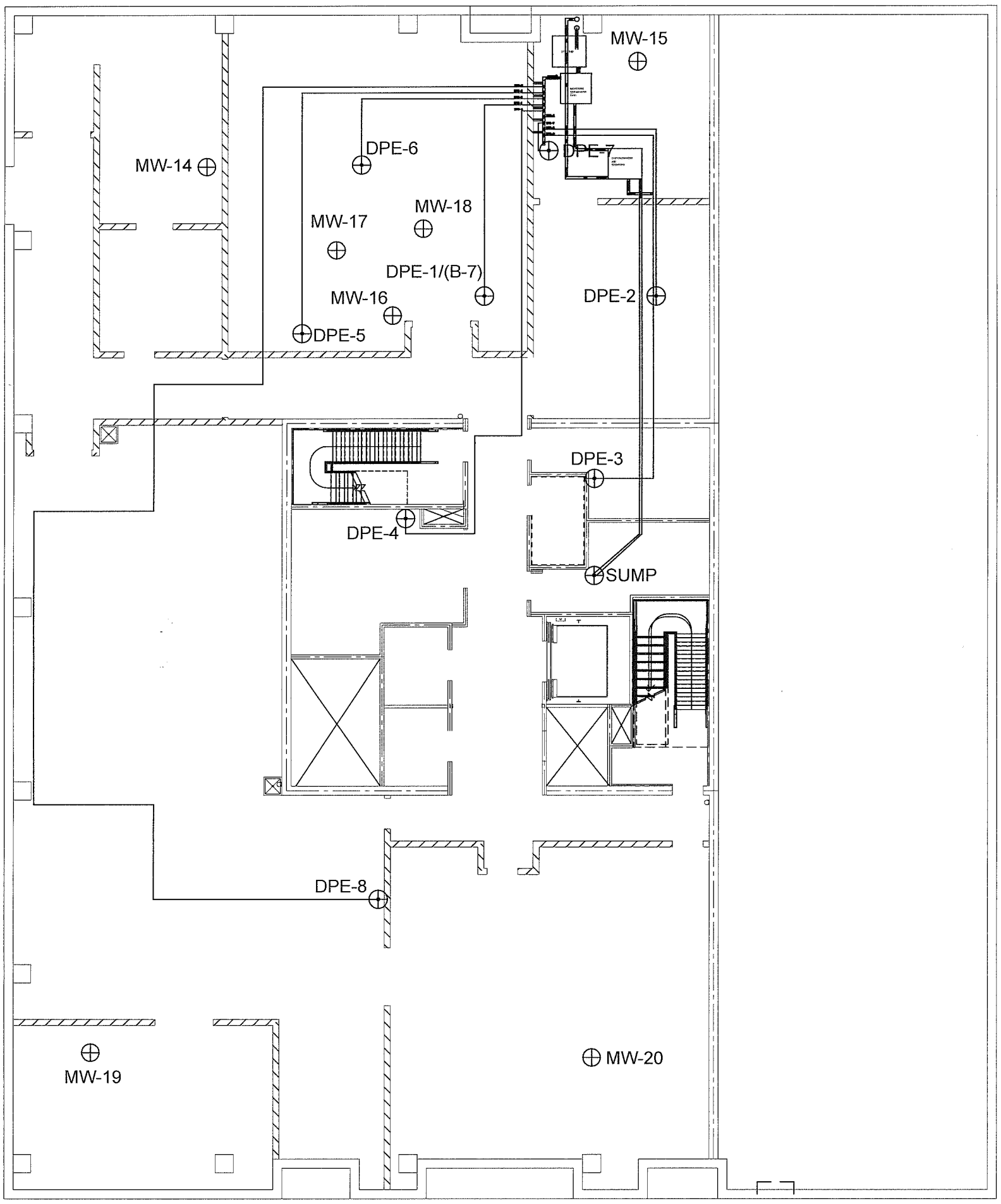
Source: Rochester, Minnesota Topographic Quadrangle, 7.5-Minute Series

N

2,000 1,000 0 2,000 Feet

FIGURE 1

PROPERTY LOCATION MAP
219 and 223 1ST Avenue Southwest
Rochester, Minnesota



BASEMENT FLOOR PLAN

LEGEND

⊕ DPE, Monitoring Well, or Sump Location

——— DPE Piping Location

——— Property Boundary

N

20 feet
SCALE

BASEDRAWINGS PROVIDED BY HGA
F:/Projects/CRC/CAD/Groundwater Data/20090128 Well Locations.dwg

Rev	Date	By	Description

LANDMARK ENVIRONMENTAL, LLC
2042 West 98th Street
Bloomington, MN 55431

FIGURE 2
DPE SYSTEM LAYOUT

221 FIRST AVENUE S.W.
ROCHESTER, MINNESOTA

Landmark Project Number: CRC		
Drawn: JDS	Checked: JDS	Designed: JDS
Scale: .	Date: 7/9/2009	Revision:
Drawing Number: .	Sheet . Of .	Sheets .

AIR STRIPPER AIR EMISSIONS DISCHARGE PIPING TO ATMOSPHERE, IF NECESSARY

DPE SYSTEM AIR EMISSIONS DISCHARGE PIPING TO ATMOSPHERE

DPE SKID

MW-15

AIR/WATER

DPE-8
DPE-4
DPE-5
DPE-6
DPE-1
DPE-2
DPE-3
DPE-7

MOISTURE SEPARATOR SKID

D.P.E. ROOM
017
383 SF
19'-2" x 20'-0"

DPE-7

GROUNDWATER AIR STRIPPER

DPE SYSTEM GROUNDWATER DISCHARGE PIPING TO SANITARY SEWER

DISCHARGE FROM ELEVATOR PIT SUMP

MECHANICAL ROOM

NOTES:

1. Air emissions generated from the DPE system shall be discharge to the atmosphere after treatment. Emissions treatment system piping shall be installed above the basement slab consist of 4-inch SCH 80 PVC pipe.
2. Groundwater generated from the DPE system shall be discharged to the sanitary sewer after treatment by an air stripper. Groundwater treatment system piping shall be installed above the basement slab consist of 2-inch SCH 80 PVC pipe.
3. The groundwater and air emissions treatment systems piping shall be installed and pressure tested as described in the technical specifications and proposed drawings.
4. The groundwater and air emissions treatment systems piping shall be installed as shown on the proposed drawings.
5. DPE and air stripper air emissions each have a dedicated 4-inch diameter galvanized steel riser pipe extending from the DPE Room to the building's second level ceiling, where the piping will exit through the west wall of the building to the atmosphere.

LEGEND

Existing DPE Piping Location

AIR — Proposed Air Emissions Piping Location

WATER — Proposed Groundwater Discharge Piping Location

N

1 in = 3 ft
APPROXIMATE SCALE

BASEDRAWINGS PROVIDED BY HGA
F:/Projects/CRC/CAD/basement planview/20070829 DPE System/20090423 DPE Room.dwg

Rev	Date	By	Description
1	9-19-2008	JDS	RFP-1 FINAL REVISION
2	4-23-09	JDS	GWTS & Emissions TMT

LANDMARK ENVIRONMENTAL, LLC
2042 West 98th Street
Bloomington, MN 55431

FIGURE 3
DPE ROOM LAYOUT

219 AND 223 FIRST AVENUE S.W.
ROCHESTER, MINNESOTA

Landmark Project Number: CRC		
Drawn: JDS	Checked: JDS	Designed: JDS
Scale: 1:3	Date: 7/15/08	Revision: 1
Drawing Number: .	Sheet 1B Of	Sheets 7

FIGURE 4

CUMULATIVE MASS REMOVED
MN Bio Business Center
221 1st Avenue SW
Rochester, Minnesota

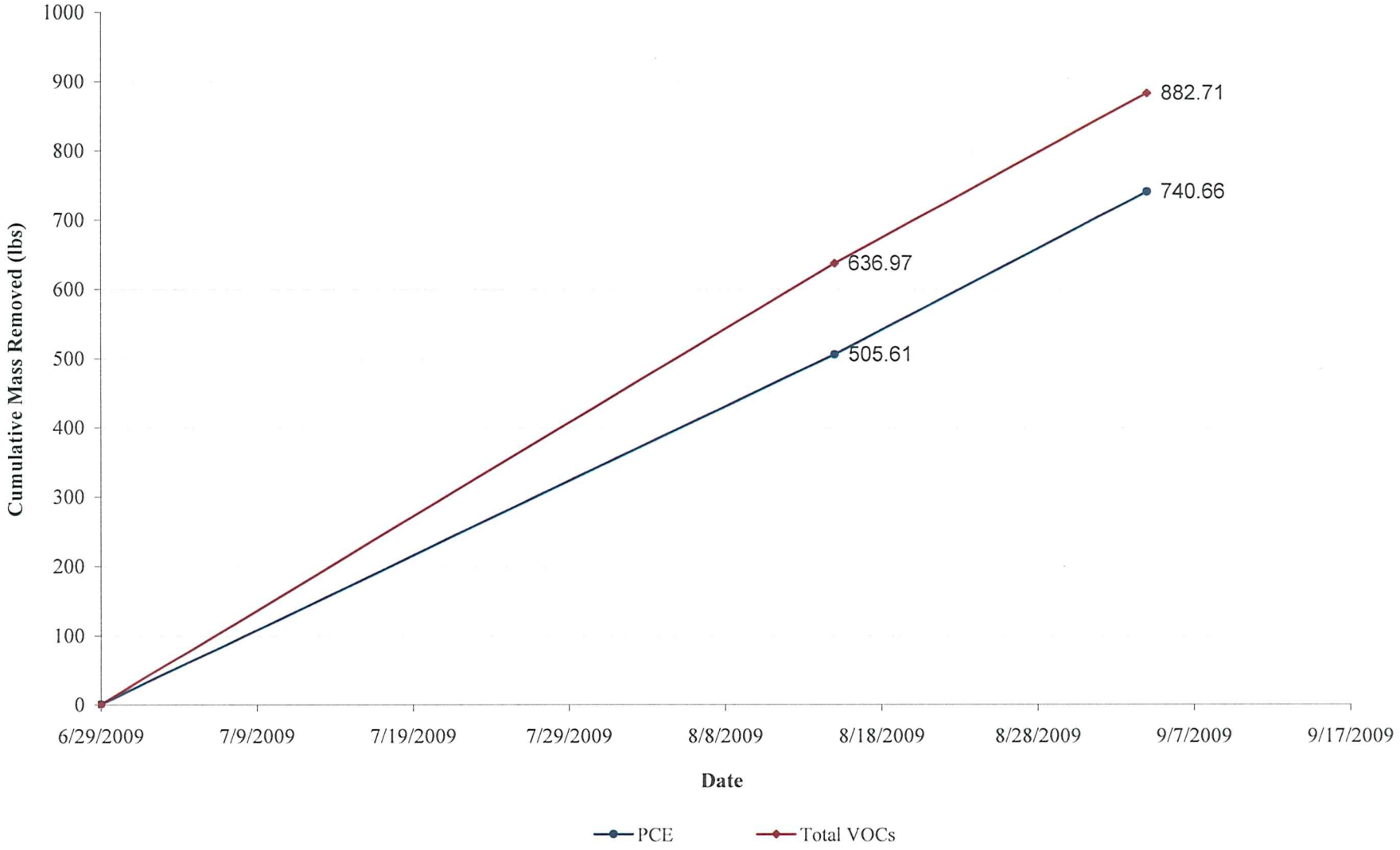


FIGURE 5

DPE EMISSIONS CONCENTRATIONS
MN Bio Business Center
221 1st Avenue SW
Rochester, Minnesota

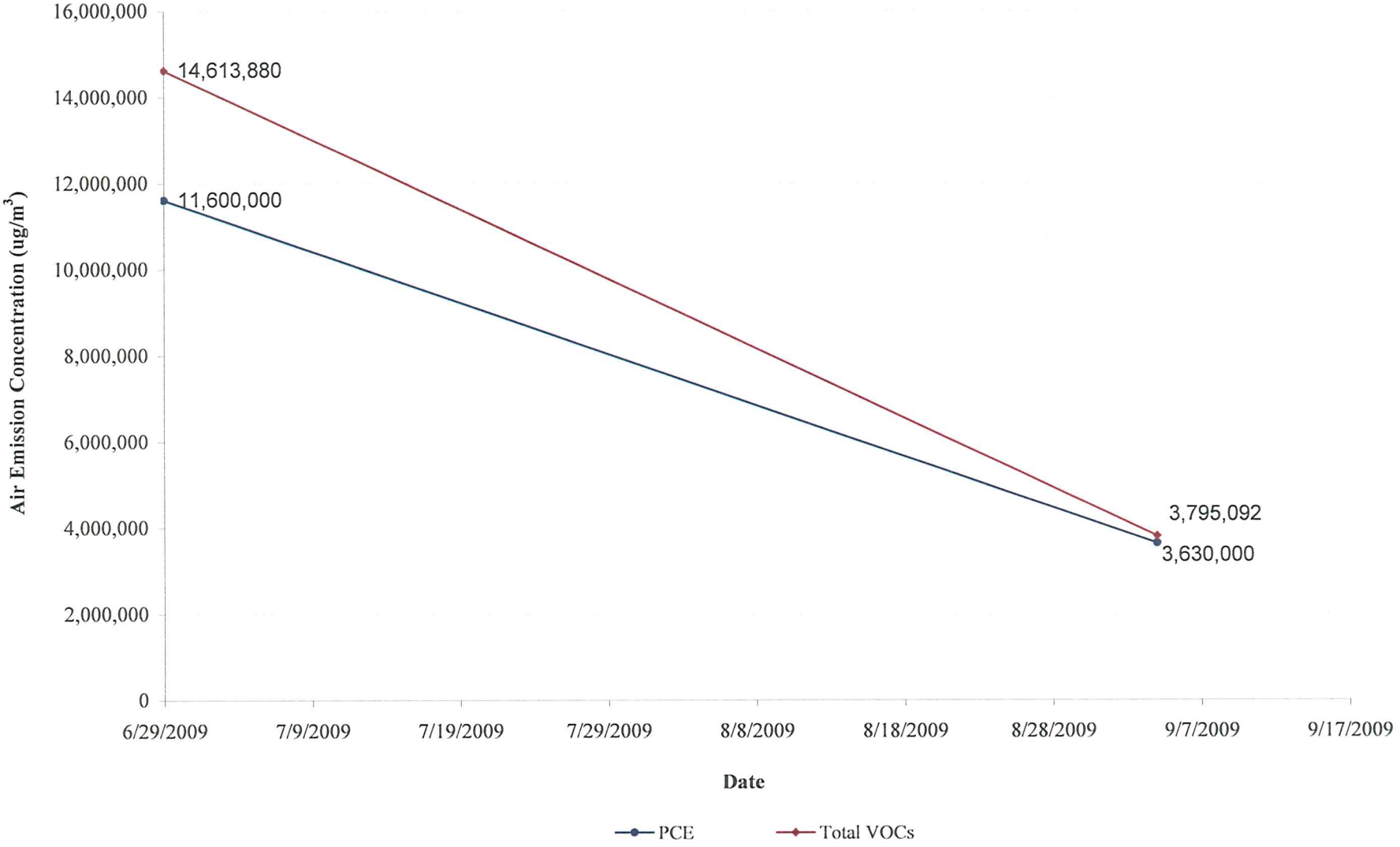
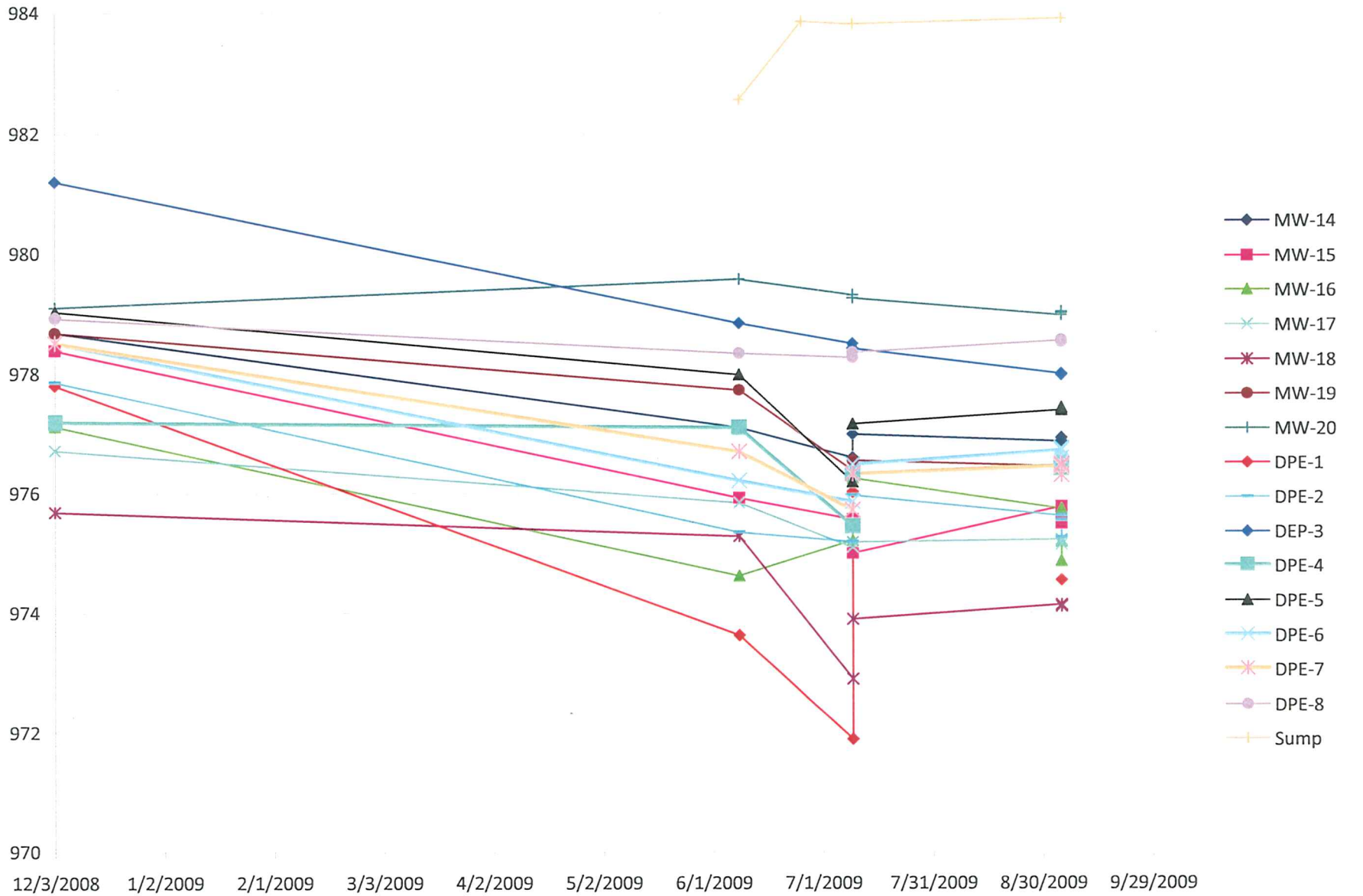


FIGURE 6

MONITORING AND DPE WELL HYDROGRAPHS
MN Bio Business Center
221 1st Avenue SW
Rochester, Minnesota



Tables

TABLE 1

SYSTEM OPERATION AND MAINTENANCE SUMMARY
MN Bio Business Center
221 1st Avenue SW
Rochester, Minnesota

Date	Approximate Time	Sensophone Call Received?	Alarm Condition	DPE System Status	Comments
9-Apr-09	NA	NA	NA	Off	DPE system temporarty startup. **Sampled initial DPE groundwater discharge and air emissions.** System shut down to determine if air emissions and/or groundwater treatment were necessary.
4-Jun-09	NA	NA	NA	Off	Air stripper installed. **Air stripper air emissions and influent and effluent groundwater samples collected.**
5-Jun-09	NA	NA	NA	Off/On	Installed temporary secondary containment around DPE room door way. DPE system left on.
6-Jun-09	19:00	Y	MS High Level	On/Off	
8-Jun-09	NA	NA	NA	Off	Landmark on site to clean MS float switch assembly. DPE system left off per client request until elevator pit drain tile sump can be connected to the air stripper, a permanent secondary containment berm can be installed, and additional floor sump alarm and conductivity meter can be installed.
19-Jun-09	NA	NA	NA	Off	Landmark onsite to monitor elevator pit sump water levels and PID readings.
23-Jun-09	NA	NA	NA	Off	Landmark, SDE, and Muska on site to install permanent secondary containment berm and sump pit flow meter.
25-Jun-09	NA	NA	NA	Off	Landmark and PLC on site to terminate switches to the control panel. Noticed lower trilevel float switch is getting caught on the site tube. PLC to replace MS trilevel float assembly. Pumped 300 gallons of water from elevator drain tile sump through the air stripper. Sump appears to be recharging with water.
29-Jun-09	NA	NA	NA	Off/On	Landmark replaced MS trilevel float assembly. Bottom float still catches on site tube; therefore, Landmark installed JB-welded washers onto float assembly. Also compared flow meter readings with handheld monitor; replaced leaking air stripper hoses; recorded all system data from gauges and control panel. System restarted for permanent operation.
9-Jul-09	NA	NA	NA	On	Landmark onsite to troubleshoot low flowrate and vacuum readings observed remotely, to collect fluid level measurements at each well, to check the vacuum influence from DPE-1 operation at each DPE well head location; collect operational data during operation of DPE-1; to conduct a groundwater recovery test a DPE-1; modified the drop tube at DPE-3; and collected operational data wile operating on DPE-3. Kept system operating on DPE-1. **Sampled groundwater discharge.**
18-Jul-09	NA	No	DPE Pump Motor Fault	On/Off	
20-Jul-09	NA	NA	DPE Pump Motor Fault	Off	Received a call from Paramark stating the DPE was off and there was about 1 quart of oil leaking from the DPE pump.
22-Jul-09	NA	NA	DPE Pump Motor Fault	Off	Landmark onsite to troubleshoot DPE system shut down and determine the source of the oil leak.
24-Jul-09	NA	NA	DPE Pump Motor Fault	Off	Landmark and PLC onsite to remove DPE pump and deliver to John Henry Foster for Repair.

TABLE 1

SYSTEM OPERATION AND MAINTENANCE SUMMARY
MN Bio Business Center
221 1st Avenue SW
Rochester, Minnesota

Date	Approximate Time	Sensophone Call Received?	Alarm Condition	DPE System Status	Comments
11-Aug-09	NA	NA	DPE Pump Motor Fault	Off/On	Landmark and PLC onsite to reinstall repaired DPE pump and restart the system. Landmark installed thermometer to monitor the ambient and max temperature in the DPE room in two different locations. Landmark swept, vacuumed, and mopped the floor several times to prevent dust from passing through the vacuum relief valve and clogging the pump inlet screen. PLC fixed the sensaphone. PLC and Landmark checked flow rate readings with blower curve. DPE system was restarted.
14-Aug-09	13:17	Y	DPE Pump High Inlet Vacuum	On/Off/On	Paramark opened all of the individual DPE well bleed valves and restarted the system.
16-Aug-09	4:34	Y	DPE Pump High Outlet Temperature	On/Off	
17-Aug-09	NA	NA	DPE Pump High Outlet Temperature	Off/On	Paramark checked max room temperature readings and all were OK. Paramark could not restart the DPE system. Landmark onsite to troubleshoot the pump and determined the inlet screen was plugged. Landmark cleaned the inlet screen, replaced the moisture separator filter, and restarted the system. The system was adjusted to run with the DPE pump bleed valve open 5% and the DPE-1 bleed valve open 20%.
18-Aug-09	4:15	Y	DPE Pump High Inlet Vacuum	On/Off	Landmark tried restarting the system remotely, but the system would not operate for more than 30 seconds. A pressure drop was observed while trying to restart the system indicating the moisture separator filter or pump inlet screen was plugged.
20-Aug-09	NA	NA	DPE Pump High Inlet Vacuum	Off/On	Landmark onsite to troubleshoot system shutdown. Landmark verified the shutdown was the result of a plugged pump intake screen. The screen was cleaned with hydrochloric acid and reinstalled. Landmark installed a pipe plug in place of the vacuum relief valve to determine if the material plugging the screen is entering through the vacuum relief valve. Landmark added slits to DPE-1 drop tube to facilitate dewatering of the well. System restarted with DPE-1 bleed air valve opened 50% and pump bleed valve closed.
22-Aug-09	5:30	Y	DPE Pump High Inlet Vacuum	On/Off	
24-Aug-09	NA	NA	DPE Pump High Inlet Vacuum	Off/On	Restarted system remotely. Directed Paramark to open DPE-1 bleed valve 100%.
4-Sep-09	NA	NA	NA	On	Landmark on site to conduct **monthly monitoring and sampling event**, install 1 micron moisture separator filter, and install new pump intake screen.

NA: Not Applicable.
Y: Yes.
N: No.

TABLE 2

MASS REMOVAL FROM DPE EXHAUST
MN Bio Business Center
221 1st Avenue SW
Rochester, Minnesota

Monitoring Period					Total VOCs			PCE		
Start Date	End Date	DPE Pump Hours	Hours Per Period	Total Flow Rate (scfm)	Concentration (ug/m^3)	Pounds Per Period	Cumulative pounds	Concentration (ug/m^3)	Pounds Per Period	Cumulative Pounds
---	6/29/2009	0	0	0	0	0	0	0	0	0
6/29/2009	8/15/2009	478.5	478.5	24.3	14,613,880	636.97	636.97	11,600,000	505.61	505.61
8/15/2009	9/4/2009	957	478.5	36.1	3,795,092	245.74	882.71	3,630,000	235.05	740.66

Notes:

The initial concentrations of total VOCs and PCE used for estimating the mass removed during the first 478.5 hours of system operation, which was estimated to be from, June 29, 2009, through August 15, 2009.

The concentrations of total VOCs and PCE from the September 4, 2009, sampling event were used for estimating the mass removed during the remaining 478.5 hours of system operation, which was estimated to be from August 15, 2009, through September 4, 2009.

TABLE 3

AIR EMISSIONS ANALYTICAL RESULTS
(micrograms per cubic meter)
MN Bio Business Center
221 1st Avenue SW
Rochester, Minnesota

Sample ID	DPE-EFFLUENT-0680	DPE EXHAUST (#842)
Collected Date	09/04/2009 10:19	04/09/2009 19:53
1,1,1-Trichloroethane	127	**4450**
1,1,2,2-Tetrachloroethane	<2.1	<2480
1,1,2-Trichloroethane	<1.6	<1950
1,1,2-Trichlorotrifluoroethane	**153000**	**2940000**
1,1-Dichloroethane	<1.2	<1450
1,1-Dichloroethene	15.0	<1440
1,2,4-Trichlorobenzene	<1.5	<1760
1,2,4-Trimethylbenzene	**10.2**	<4440
1,2-Dibromoethane (EDB)	<2.4	<2840
1,2-Dichlorobenzene	<1.8	<2130
1,2-Dichloroethane	<1.2	<1450
1,2-Dichloropropane	<1.4	<1670
1,3,5-Trimethylbenzene	**5.0**	<4440
1,3-Butadiene	<0.67	<798
1,3-Dichlorobenzene	**6.0**	<2130
1,4-Dichlorobenzene	**8.6**	<2130
2-Butanone (MEK)	**15.8**	<1060
2-Hexanone	<1.2	<1470
2-Propanol	<3.7	<4440
4-Ethyltoluene	**6.0**	<4440
4-Methyl-2-pentanone (MIBK)	<1.2	<1470
Acetone	**7510**	<852
Benzene	**2.3**	<1150
Bromodichloromethane	<2.1	<2480
Bromoform	<3.1	<3730
Bromomethane	<1.2	<1400
Carbon disulfide	**5.9**	<1120
Carbon tetrachloride	<1.9	<2310
Chlorobenzene	<1.4	<1670
Chloroethane	<0.80	<958
Chloroform	**21.5**	<1760
Chloromethane	<0.62	<745
cis-1,2-Dichloroethene	**2620**	**36300**
cis-1,3-Dichloropropene	<1.4	<1630
Cyclohexane	**3.5**	<1210
Dibromochloromethane	<2.5	<3020
Dichlorodifluoromethane	<1.5	**2230**

TABLE 3

AIR EMISSIONS ANALYTICAL RESULTS
(micrograms per cubic meter)
MN Bio Business Center
221 1st Avenue SW
Rochester, Minnesota

Dichlorotetrafluoroethane	<2.1	**3400**
Ethanol	**5.7**	<3370
Ethyl acetate	<1.1	<1300
Ethylbenzene	<1.3	<1560
Hexachloro-1,3-butadiene	<3.3	<3900
m&p-Xylene	**14.2**	<3120
Methylene Chloride	<1.1	<1260
Methyl-tert-butyl ether	<1.1	<1300
Naphthalene	**4.2**	**10100**
n-Heptane	**2.6**	<1470
n-Hexane	**3.4**	<1280
o-Xylene	**4.8**	<1560
Propylene	<0.52	<621
Styrene	<1.3	<1540
Tetrachloroethene	**3630000**	**11600000**
Tetrahydrofuran	**31.1**	<1060
Toluene	**14.4**	<1370
trans-1,2-Dichloroethene	**4.2**	<1440
trans-1,3-Dichloropropene	<1.4	<1630
Trichloroethene	**1640**	**17400**
Trichlorofluoromethane	**2.2**	<1950
Vinyl acetate	**8.7**	<1260
Vinyl chloride	<0.77	<923

Notes:
Bold: parameter detected above the reporting limit.

TABLE 4

RASS EMISSIONS RATES SUMMARY
MN Bio Business Center
221 1st Avenue SW
Rochester, Minnesota

Date	Parameter	Concentration (ug/m^3)	Emissions Rates				
			DPE (ug per sec)	AS (ug per sec)	Site Specific (ug per sec)	SER for Chronic Risk (ug per sec)	SER for Acute Risk (ug per sec)
9/4/2009	Tetrachloroethylene	3,630,000	61710	70	61780	16300	5980000

Notes:
SERs: MPCA Screening Emissions Rates

Table 5

Mass Removal from Groundwater Treatment System
MN Bio Business Center
221 1st Avenue SW
Rochester, Minnesota

Monitoring Period		Hours per Period	Flow Meter Reading (gallons)	Gallons Treated During Period	Average Flow Rate (gpm)	Total VOCs		% Reduction	Mass Removed per Period (lbs)	Cumulative Mass Removed (lbs)	Addition to Emission Rate (lbs/day)
Start Date[1]	End Date					Influent Conc. (ug/L)	Effluent Conc. (ug/L)				
4/9/2009[2]	4/9/2009	2	119	51	0.4	176,343	NA	NA	NA	NA	NA
6/4/2009	6/4/2009[3]	2	192	73	0.6	4,630	8,991	-94	NA	NA	NA
6/4/2009	7/9/2009	264	16,115	15,923	1.0	1,547	479	69	0.14	0.14	0.01
7/9/2009	9/4/2009	1368	38,299	22,184	0.3	191	20	90	0.03	0.17	0.001

Notes:
1. The initial reading of the transfer pump totalizer was 68 gallons.
2. Initial sampling event to determine if groundwater treatment was necessary.
3. Increase in total VOCs was from PVC glue and cement that was used during the construction of the DPE system and air stripper.

TABLE 6

GROUNDWATER DISCHARGE ANALYTICAL RESULTS
(micrograms per liter)
MN Bio Business Center
221 1st Avenue SW
Rochester, Minnesota

Sample ID	AS-Influent	AS-Effluent	AS-INFLUENT	AS-EFFLUENT	AS INFLUENT	AS EFFLUENT[2]	DPE Discharge[1]
Collected Date	09/04/2009 10:55	09/04/2009 10:55	07/09/2009 12:20	07/09/2009 12:25	06/04/2009 17:00	06/04/2009 17:25	04/09/2009 16:35
1,1,1,2-Tetrachloroethane	<1.0	<1.0	<5.0	<1.0	<50.0	<1.0	<5.0
1,1,1-Trichloroethane	<1.0	<1.0	<5.0	<1.0	<50.0	<1.0	29.4
1,1,2,2-Tetrachloroethane	<1.0	<1.0	<5.0	<1.0	<50.0	<1.0	<5.0
1,1,2-Trichloroethane	<4.0	<4.0	<20.0	<4.0	<200	<4.0	<20.0
1,1,2-Trichlorotrifluoroethane	1.2	<1.0	10.4	<1.0	53.7	<1.0	7860
1,1-Dichloroethane	<1.0	<1.0	<5.0	<1.0	<50.0	<1.0	<5.0
1,1-Dichloroethene	<1.0	<1.0	<5.0	<1.0	<50.0	<1.0	<5.0
1,1-Dichloropropene	<1.0	<1.0	<5.0	<1.0	<50.0	<1.0	<5.0
1,2,3-Trichlorobenzene	<1.0	<1.0	<5.0	<1.0	<50.0	<1.0	<5.0
1,2,3-Trichloropropane	<1.0	<1.0	<5.0	<1.0	<50.0	<1.0	<5.0
1,2,4-Trichlorobenzene	<1.0	<1.0	<5.0	<1.0	<50.0	<1.0	<5.0
1,2,4-Trimethylbenzene	<1.0	<1.0	<5.0	<1.0	<50.0	<1.0	26.0
1,2-Dibromo-3-chloropropane	<4.0	<4.0	<20.0	<4.0	<200	<4.0	<20.0
1,2-Dibromoethane (EDB)	<1.0	<1.0	<5.0	<1.0	<50.0	<1.0	<5.0
1,2-Dichlorobenzene	<1.0	<1.0	<5.0	<1.0	<50.0	<1.0	<5.0
1,2-Dichloroethane	<1.0	<1.0	<5.0	<1.0	<50.0	<1.0	<5.0
1,2-Dichloropropane	<1.0	<1.0	<5.0	<1.0	<50.0	<1.0	<5.0
1,3,5-Trimethylbenzene	<1.0	<1.0	<5.0	<1.0	<50.0	<1.0	7.1
1,3-Dichlorobenzene	<1.0	<1.0	<5.0	<1.0	<50.0	<1.0	<5.0
1,3-Dichloropropane	<1.0	<1.0	<5.0	<1.0	<50.0	<1.0	<5.0
1,4-Dichlorobenzene	<1.0	<1.0	<5.0	<1.0	<50.0	<1.0	7.8
2,2-Dichloropropane	<1.0	<1.0	<5.0	<1.0	<50.0	<1.0	<5.0
2-Butanone (MEK)	13.5	19.8	<20.0	82.1	<200	1670	392
2-Chloroethylvinyl ether	<10.0	<10.0	<50.0	<10.0	<1250	<25.0	<50.0
2-Chlorotoluene	<1.0	<1.0	<5.0	<1.0	<50.0	<1.0	51.0
2-Hexanone	<4.0	<4.0	<20.0	<4.0	<200	<4.0	<20.0
2-Methylnaphthalene	<5.0	<5.0	<25.0	<5.0	<250	<5.0	<25.0
4-Chlorotoluene	<1.0	<1.0	<5.0	<1.0	<50.0	<1.0	<5.0
4-Methyl-2-pentanone (MIBK)	<5.0	<5.0	<25.0	<5.0	<250	<5.0	<25.0
Acetone	<10.0	<10.0	<50.0	68.7	<500	987	<50.0
Acrolein	<40.0	<40.0	<200	<40.0	<2000	<40.0	<200
Acrylonitrile	<10.0	<10.0	<50.0	<10.0	<500	<10.0	<50.0
Allyl chloride	<4.0	<4.0	<20.0	<4.0	<200	<4.0	<20.0
Benzene	<1.0	<1.0	<5.0	<1.0	<50.0	<1.0	<5.0
Bromobenzene	<1.0	<1.0	<5.0	<1.0	<50.0	<1.0	<5.0
Bromochloromethane	<1.0	<1.0	<5.0	<1.0	<50.0	<1.0	<5.0
Bromodichloromethane	<4.0	<4.0	<20.0	<4.0	<200	<4.0	<20.0
Bromoform	<8.0	<8.0	<40.0	<8.0	<400	<8.0	<40.0
Bromomethane	<4.0	<4.0	<20.0	<4.0	<200	<4.0	<20.0
Carbon disulfide	<1.0	<1.0	<5.0	<1.0	<50.0	<1.0	<5.0
Carbon tetrachloride	<1.0	<1.0	<5.0	<1.0	<50.0	<1.0	<5.0
Chlorobenzene	<1.0	<1.0	<5.0	<1.0	<50.0	<1.0	<5.0
Chloroethane	<1.0	<1.0	<5.0	<1.0	<50.0	<1.0	<5.0
Chloroform	<1.0	<1.0	<5.0	<1.0	<50.0	<1.0	<5.0
Chloromethane	<1.0	<1.0	63.3	76.4	<50.0	<1.0	<5.0
Chloroprene	<1.0	<1.0	<5.0	<1.0	<50.0	<1.0	<5.0
cis-1,2-Dichloroethene	1.5	<1.0	13.0	<1.0	62.9	<1.0	206
cis-1,3-Dichloropropene	<4.0	<4.0	<20.0	<4.0	<200	<4.0	<20.0
Dibromochloromethane	<1.0	<1.0	<5.0	<1.0	<50.0	<1.0	<5.0
Dibromomethane	<1.0	<1.0	<5.0	<1.0	<50.0	<1.0	<5.0
Dichlorodifluoromethane	<1.0	<1.0	<5.0	<1.0	<50.0	<1.0	<5.0
Dichlorofluoromethane	<1.0	<1.0	<5.0	<1.0	<50.0	<1.0	<5.0
Diethyl ether (Ethyl ether)	<4.0	<4.0	<20.0	<4.0	<200	<4.0	<20.0
Ethylbenzene	<1.0	<1.0	<5.0	<1.0	<50.0	<1.0	<5.0
Hexachloro-1,3-butadiene	<4.0	<4.0	<20.0	<4.0	<200	<4.0	<20.0
Iodomethane	<4.0	<4.0	<20.0	<4.0	<200	<4.0	<20.0
Isopropylbenzene (Cumene)	<1.0	<1.0	<5.0	<1.0	<50.0	<1.0	<5.0
m&p-Xylene	<2.0	<2.0	<10.0	<2.0	<100	<2.0	<10.0
Methylene Chloride	<4.0	<4.0	<20.0	<4.0	<200	<4.0	<20.0
Methyl-tert-butyl ether	<1.0	<1.0	<5.0	<1.0	<50.0	<1.0	<5.0
Naphthalene	<4.0	<4.0	<20.0	<4.0	<200	<4.0	<20.0
n-Butylbenzene	<1.0	<1.0	<5.0	<1.0	<50.0	<1.0	5.0
n-Propylbenzene	<1.0	<1.0	<5.0	<1.0	<50.0	<1.0	<5.0
o-Xylene	<1.0	<1.0	<5.0	<1.0	<50.0	<1.0	<5.0
p-Isopropyltoluene	<1.0	<1.0	<5.0	<1.0	<50.0	<1.0	<5.0
sec-Butylbenzene	<1.0	<1.0	<5.0	<1.0	<50.0	<1.0	<5.0
Styrene	<1.0	<1.0	<5.0	<1.0	<50.0	<1.0	<5.0
tert-Butylbenzene	<1.0	<1.0	<5.0	<1.0	<50.0	<1.0	<5.0
Tetrachloroethene	175	<1.0	1460	<1.0	3970	33.8	167000
Tetrahydrofuran	<10.0	<10.0	<50.0	252	543	6300	600

TABLE 6

GROUNDWATER DISCHARGE ANALYTICAL RESULTS
(micrograms per liter)
MN Bio Business Center
221 1st Avenue SW
Rochester, Minnesota

Sample ID	AS-Influent	AS-Effluent	AS-INFLUENT	AS-EFFLUENT	AS INFLUENT	AS EFFLUENT[2]	DPE Discharge[1]
Collected Date	09/04/2009 10:55	09/04/2009 10:55	07/09/2009 12:20	07/09/2009 12:25	06/04/2009 17:00	06/04/2009 17:25	04/09/2009 16:35
Toluene	<1.0	<1.0	<5.0	<1.0	<50.0	<1.0	<5.0
trans-1,2-Dichloroethene	<1.0	<1.0	<5.0	<1.0	<50.0	<1.0	<5.0
trans-1,3-Dichloropropene	<4.0	<4.0	<20.0	<4.0	<200	<4.0	<20.0
Trichloroethene	<1.0	<1.0	<5.0	<1.0	<50.0	<1.0	**159**
Trichlorofluoromethane	<4.0	<4.0	<20.0	<4.0	<200	<4.0	<20.0
Vinyl acetate	<20.0	<20.0	<100	<20.0	<1000	<20.0	<100
Vinyl chloride	<0.40	<0.40	<2.0	<0.40	<20.0	<0.40	<2.0
Xylene (Total)	<3.0	<3.0	<15.0	<3.0	<150	<3.0	<15.0
Total VOC Concentration	**191.2**	**19.8**	**1,546.7**	**479.2**	**4,566.7**	**8,990.8**	**176,338.3**

Notes:
Bold: parameter detected above the reporting limit.

Bold : Parameter detected above discharge limit of 2,140 ug/L.

[1]: Initial sampling event to determine if groundwater treatment was necessary.

[2]: Increase in VOCs was from PVC glue and cement that was used during the construction of the DPE system and air stripper.

TABLE 7

GROUNDWATER ELEVATIONS
MN Bio Business Center
221 First Avenue SW
Rochester, Minnesota

Well ID	Date Measured	Top of Casing Elevation[1,2]	Depth to Groundwater (feet)	Groundwater Elevation[3]	System Status
MW-14	12/3/2008	989.50	10.82	978.68	pre-system installation
MW-14	6/8/2009	989.50	12.40	977.10	pre-system startup
MW-14	7/9/2009	989.50	12.90	976.60	DPE system on DPE-1
MW-14	7/9/2009	989.50	12.51	976.99	DPE system temporarily off
MW-14	9/4/2009	989.50	12.63	976.87	DPE system on
MW-14	9/4/2009	989.50	12.57	976.93	DPE system on after replacing inlet screen
MW-14	9/4/2009	989.50	12.65	976.85	DPE system on after replacing inlet filter
MW-15	12/3/2008	991.50	13.11	978.39	pre-system installation
MW-15	6/8/2009	991.50	15.58	975.92	pre-system startup
MW-15	7/9/2009	991.50	15.94	975.56	DPE system on DPE-1
MW-15	7/9/2009	991.50	16.51	974.99	DPE system temporarily off
MW-15	9/4/2009	991.50	15.73	975.77	DPE system on
MW-15	9/4/2009	991.50	15.90	975.60	DPE system on after replacing inlet screen
MW-15	9/4/2009	991.50	16.01	975.49	DPE system on after replacing inlet filter
MW-16	12/3/2008	989.44	12.32	977.12	pre-system installation
MW-16	6/8/2009	989.44	14.82	974.62	pre-system startup
MW-16	7/9/2009	989.44	14.23	975.21	DPE system on DPE-1
MW-16	7/9/2009	989.44	13.19	976.25	DPE system temporarily off
MW-16	9/4/2009	989.44	13.70	975.74	DPE system on
MW-16	9/4/2009	989.44	14.25	975.19	DPE system on after replacing inlet screen
MW-16	9/4/2009	989.44	14.58	974.86	DPE system on after replacing inlet filter
MW-17	12/3/2008	989.53	12.81	976.72	pre-system installation
MW-17	6/8/2009	989.53	13.69	975.84	pre-system startup
MW-17	7/9/2009	989.53	14.44	975.09	DPE system on DPE-1
MW-17	7/9/2009	989.53	14.35	975.18	DPE system temporarily off
MW-17	9/4/2009	989.53	14.31	975.22	DPE system on
MW-17	9/4/2009	989.53	14.33	975.20	DPE system on after replacing inlet screen
MW-17	9/4/2009	989.53	14.39	975.14	DPE system on after replacing inlet filter
MW-18	12/3/2008	989.50	13.82	975.68	pre-system installation
MW-18	6/8/2009	989.50	14.22	975.28	pre-system startup
MW-18	7/9/2009	989.50	16.61	972.89	DPE system on DPE-1
MW-18	7/9/2009	989.50	15.61	973.89	DPE system temporarily off
MW-18	9/4/2009	989.50	15.37	974.13	DPE system on
MW-18	9/4/2009	989.50	15.38	974.12	DPE system on after replacing inlet screen
MW-18	9/4/2009	989.50	15.40	974.10	DPE system on after replacing inlet filter

TABLE 7

GROUNDWATER ELEVATIONS
MN Bio Business Center
221 First Avenue SW
Rochester, Minnesota

Well ID	Date Measured	Top of Casing Elevation[1,2]	Depth to Groundwater (feet)	Groundwater Elevation[3]	System Status
MW-19	12/3/2008	991.13	12.45	978.68	pre-system installation
MW-19	6/8/2009	991.13	13.40	977.73	pre-system startup
MW-19	7/9/2009	991.13	14.75	976.38	DPE system on DPE-1
MW-19	7/9/2009	991.13	14.58	976.55	DPE system temporarily off
MW-19	9/4/2009	991.13	14.68	976.45	DPE system on
MW-19	9/4/2009	991.13	14.61	976.52	DPE system on after replacing inlet screen
MW-19	9/4/2009	991.13	14.66	976.47	DPE system on after replacing inlet filter
MW-20	12/3/2008	991.50	12.40	979.10	pre-system installation
MW-20	6/8/2009	991.50	11.93	979.57	pre-system startup
MW-20	7/9/2009	991.50	12.19	979.31	DPE system on DPE-1
MW-20	7/9/2009	991.50	12.24	979.26	DPE system temporarily off
MW-20	9/4/2009	991.50	12.53	978.97	DPE system on
MW-20	9/4/2009	991.50	12.47	979.03	DPE system on after replacing inlet screen
MW-20	9/4/2009	991.50	12.49	979.01	DPE system on after replacing inlet filter
DPE-1	12/3/2008	991.46	13.66	977.80	pre-system installation
DPE-1	6/8/2009	992.40	18.78	973.62	pre-system startup
DPE-1	7/9/2009	992.40	20.51	971.89	DPE system on DPE-1
DPE-1	7/9/2009	992.40	16.38	976.02	DPE system temporarily off
DPE-1	9/4/2009	992.40	na		DPE system on DPE-1
DPE-1	9/4/2009	992.40	na		DPE-1 on after replacing inlet screen
DPE-1	9/4/2009	992.40	17.86	974.54	DPE-1 on after replacing inlet filter
DPE-2	12/3/2008	991.46	13.60	977.86	pre-system installation
DPE-2	6/8/2009	992.80	17.45	975.35	pre-system startup
DPE-2	7/9/2009	992.80	17.61	975.19	DPE system on DPE-1
DPE-2	7/9/2009	992.80	16.83	975.97	DPE system temporarily off
DPE-2	9/4/2009	992.80	17.18	975.62	DPE system on DPE-1
DPE-2	9/4/2009	992.80	17.26	975.54	DPE-1 on after replacing inlet screen
DPE-2	9/4/2009	992.80	17.54	975.26	DPE-1 on after replacing inlet filter
DPE-3	12/3/2008	991.50	10.30	981.20	pre-system installation
DPE-3	6/8/2009	992.48	13.64	978.84	pre-system startup
DPE-3	7/9/2009	992.48	13.98	978.50	DPE system on DPE-1
DPE-3	7/9/2009	992.48	14.06	978.42	DPE system temporarily off
DPE-3	9/4/2009	992.48	14.48	978.00	DPE system on DPE-1
DPE-3	9/4/2009	992.48	14.49	977.99	DPE-1 on after replacing inlet screen
DPE-3	9/4/2009	992.48	14.50	977.98	DPE-1 on after replacing inlet filter

TABLE 7

GROUNDWATER ELEVATIONS
MN Bio Business Center
221 First Avenue SW
Rochester, Minnesota

Well ID	Date Measured	Top of Casing Elevation[1,2]	Depth to Groundwater (feet)	Groundwater Elevation[3]	System Status
DPE-4	12/3/2008	991.39	14.20	977.19	pre-system installation
DPE-4	6/8/2009	992.40	15.30	977.10	pre-system startup
DPE-4	7/9/2009	992.40	16.95	975.45	DPE system on DPE-1
DPE-4	7/9/2009	992.40	16.08	976.32	DPE system temporarily off
DPE-4	9/4/2009	992.40	15.94	976.46	DPE system on DPE-1
DPE-4	9/4/2009	992.40	15.91	976.49	DPE-1 on after replacing inlet screen
DPE-4	9/4/2009	992.40	15.99	976.41	DPE-1 on after replacing inlet filter
DPE-5	12/3/2008	991.47	12.44	979.03	pre-system installation
DPE-5	6/8/2009	992.46	14.48	977.98	pre-system startup
DPE-5	7/9/2009	992.46	16.28	976.18	DPE system on DPE-1
DPE-5	7/9/2009	992.46	15.31	977.15	DPE system temporarily off
DPE-5	9/4/2009	992.46	15.08	977.38	DPE system on DPE-1
DPE-5	9/4/2009	992.46	15.04	977.42	DPE-1 on after replacing inlet screen
DPE-5	9/4/2009	992.46	15.03	977.43	DPE-1 on after replacing inlet filter
DPE-6	12/3/2008	991.44	12.93	978.51	pre-system installation
DPE-6	6/8/2009	992.40	16.19	976.21	pre-system startup
DPE-6	7/9/2009	992.40	16.54	975.86	DPE system on DPE-1
DPE-6	7/9/2009	992.40	15.92	976.48	DPE system temporarily off
DPE-6	9/4/2009	992.40	15.68	976.72	DPE system on DPE-1
DPE-6	9/4/2009	992.40	15.65	976.75	DPE-1 on after replacing inlet screen
DPE-6	9/4/2009	992.40	15.81	976.59	DPE-1 on after replacing inlet filter
DPE-7	12/3/2008	991.47	12.96	978.51	pre-system installation
DPE-7	6/8/2009	993.48	16.78	976.70	pre-system startup
DPE-7	7/9/2009	993.48	17.76	975.72	DPE system on DPE-1
DPE-7	7/9/2009	993.48	17.16	976.32	DPE system temporarily off
DPE-7	9/4/2009	993.48	17.03	976.45	DPE system on DPE-1
DPE-7	9/4/2009	993.48	17.00	976.48	DPE-1 on after replacing inlet screen
DPE-7	9/4/2009	993.48	17.18	976.30	DPE-1 on after replacing inlet filter
DPE-8	12/3/2008	991.48	12.56	978.92	pre-system installation
DPE-8	6/8/2009	992.84	14.50	978.34	pre-system startup
DPE-8	7/9/2009	992.84	14.57	978.27	DPE system on DPE-1
DPE-8	7/9/2009	992.84	14.49	978.35	DPE system temporarily off
DPE-8	9/4/2009	992.84	14.29	978.55	DPE system on DPE-1
DPE-8	9/4/2009	992.84	14.31	978.53	DPE-1 on after replacing inlet screen
DPE-8	9/4/2009	992.84	14.28	978.56	DPE-1 on after replacing inlet filter

TABLE 7

GROUNDWATER ELEVATIONS
MN Bio Business Center
221 First Avenue SW
Rochester, Minnesota

Well ID	Date Measured	Top of Casing Elevation[1,2]	Depth to Groundwater (feet)	Groundwater Elevation[3]	System Status
Elevator Draintile Sump	6/8/2009	989.58	7.00	982.58	pre-system startup
Elevator Draintile Sump	6/25/2009	990.20	6.34	983.86	pre-system startup
Elevator Draintile Sump	7/9/2009	990.20	6.38	983.82	DPE system on DPE-1
Elevator Draintile Sump	9/4/2009	990.20	6.29	983.91	DPE system on DPE-1

Notes:

1. Monitoring well top of casing elevations were surveyed by Adolfson and Peterson on 4/22/08.
2. DPE well top of casing elevations changed during DPE well head installation and were estimated from a basement floor elevation of 989.5 ft and include the distance from the floor to the top of the well seal cover and the distance from the well seal cover to the top of the PVC stickup for collecting water level readings.
3. Elevations are in feet above mean sea level.

TABLE 8

WELL CONSTRUCTION SUMMARY
(elevations are in feet above mean sea level)

MN Bio Business Center
221 First Avenue SW
Rochester, Minnesota

Monitoring Well	Top of Casing Elevation[1,2]	Basement Floor Elevation	Top of Seal Elevation	Top of Filter Pack Elevation	Top of Well Screen Elevation	Bottom of Well Screen Elevation	Screen Interval (feet)	Depth to Bottom of Well (feet)	Bottom of Well Elevation	Well Completion
MW-14	989.50	989.50	989.50	986.00	984.00	974.00	10	17.5	972.00	flush-mounted
MW-15	991.50	989.50	990.50	987.50	985.50	975.50	10	18.0	973.50	stickup
MW-16	989.44	989.50	989.94	985.44	983.44	973.44	10	18.0	971.44	flush-mounted
MW-17	989.53	989.50	989.03	973.53	971.53	966.53	5	25.0	964.53	flush-mounted
MW-18	989.50	989.50	989.25	938.50	936.50	931.50	5	60.0	929.50	flush-mounted
MW-19	991.13	989.50	990.63	984.13	983.13	973.13	10	20.0	971.13	stickup
MW-20	991.50	989.50	992.80	988.80	986.80	976.80	10	16.7	974.80	stickup
DPE-1	992.40	989.50	989.53	984.53	982.53	970.53	12	21.9	970.53	stickup
DPE-2	992.80	989.50	990.28	986.28	984.28	972.28	12	20.5	972.28	stickup
DPE-3	992.48	989.50	990.42	989.42	987.42	975.42	12	17.1	975.42	stickup
DPE-4	992.40	989.50	990.07	987.07	985.07	973.07	12	19.3	973.07	stickup
DPE-5	992.46	989.50	990.32	987.32	986.32	974.32	12	18.1	974.32	stickup
DPE-6	992.40	989.50	989.87	986.87	984.87	972.87	12	19.5	972.87	stickup
DPE-7	993.48	989.50	990.32	984.32	983.32	971.32	12	22.2	971.32	stickup
DPE-8	992.84	989.50	990.84	989.34	987.34	975.34	12	17.5	975.34	stickup

Notes:

1. Monitoring well top of casing elevations were surveyed by Adolfson and Peterson on 4/22/08.
2. DPE well top of casing elevations changed during DPE well head installation and were estimated from a basement floor elevation of 989.5 ft and include the distance from the floor to the top of the well seal cover and the distance from the well seal cover to the top of the PVC stickup for collecting water level readings.
3. Elevations are in feet above mean sea level.

Attachments

Attachment A

Attachment A - Table 1

DPE System Operational Data
MN Bio Business Center
221 1st Avenue SW
Rochester, Minnesota

Date	Time	Extraction Well	DPE Pump Hours	Hours per Period	Flow Rate (scfm)		Estimated Flow Rate (acfm)	DPE Air Flow (scf)	Pump Inlet Vacuum (in. Hg)	Post-MS Vacuum (in. Hg)	DPE Well/Pre-MS Vacuum (in. Hg)		Pre-Manifold Vacuum (in. Hg)	DPE Well Head/Drop Tube Vacuum (in. Hg)	DPE Well Casing Vacuum (in. H_2O)	DPE Pump Outlet Pressure		DPE Pump Outlet Temp. (Deg. F)		DPE Exhaust PID (ppm)	Extraction Well Bleed Valve % Open	DPE Pump Bleed Valve % Open	Comments
					Analog	Field	Analog				Analog	Field				Analog (psi)	Field (in H_2O)	Analog	Field				
6/29/2009	1640	DPE-1	88.0	88.0	20.9	25	134.3	6,000	25.29	NR	24.95	24.50	24	NR	NR	0	0	229	200	NR	0	0	
9/4/2009	805	DPE-1	957.0	869.0	24.3	25	109.5	1,208,000	23.3	9.4	9.66	9.8	9.1	NR	86	0.02	0	307	310	34	100	0	DPE Pump Screen plugged
9/4/2009	946	DPE-1	957.0	0.0	36.1	40	120.5	1,209,000	21.0	21.0	20.43	21.0	20.0	NR	149	0	0	210	248	>4000	100	0	DPE & AS exhaust sampled
9/4/2009	1135	DPE-1	959.0	2.0	27.3	25	117.2	1,212,000	23.0	22.5	22.70	22.5	22.5	NR	>150	0	0	275	270	>4000	30	0	1 micron MS filter installed

Notes:
NR: Not recorded.
NA: Not applicable.

Attachment A - Table 2

Moisture Separator and Sump Operational Data
MN Bio Business Center
221 1st Avenue SW
Rochester, Minnesota

Date	Time	MS Vacuum Valve hours	MS pump Hours	MS Pump Flow Totalizer (gal)		MS Pump Flow Rate (gpm)		MS Pump Pressure (psi)	Elevator Sump Water Flow (gal)		Comments
				Analog	Field	Analog	Field		Analog	Field	
6/29/2009	1640	49	48	8,464	8,473	NR	10.2	NR	300	NR	
9/4/2009	08:05	49	96	38,299	38,213	NP	12.0	21	300	500	

Notes:
NR: Not recorded.
NA: Not applicable.
NP: Not pumping

Attachment A - Table 3

Air Stripper Operational Data
MN Bio Business Center
221 1st Avenue SW
Rochester, Minnesota

Date	Time	AS Blower Hours	AS Discharge Pump Hours	AS Blower Pressure (in. H_2O)	AS Exhaust Pressure (in. H_2O)	AS Discharge Pump Pressure (psi)	AS Exhaust PID (ppm)	Comments
6/29/2009	16:40	54	4	18	12	29	NR	
9/4/2009	8:05	382	34	18	11	0	2140	PID was 180 ppm late in 20 min blower cycle
9/4/2009	9:46	383	34	18	11	31	509	

Notes:
NR: Not recorded.
NA: Not applicable.

Attachment A - Table 4

DPE Well Casing Vacuum Data (in. H_2O)
MN Bio Business Center
221 1st Avenue SW
Rochester, Minnesota

Date	DPE-1	DPE-2	DPE-3	DPE-4	DPE-5	DPE-6	DPE-7	DPE-8
7/9/2009	**129.0**	2.6	0.1	0.1	0.4	1.9	2.4	0.0
8/11/2009	**117.0**	0.0	0.0	0.8	0.0	2.2	2.9	0.0
9/4/2009	**86.0**	NR	NR	NR	NR	NR	NR	NR
9/4/2009	**149.0**	NR	NR	NR	NR	NR	NR	NR
9/4/2009	**>150**	NR	NR	NR	NR	NR	NR	NR

Notes:
Bold indicates the current operating extraction well.

FIELD DATA SHEET

CLIENT NAME: CITY OF ROCHESTER
PROJECT ID: CRC
PROJECT NAME: MN BIO BUSINESS CENTER

DATE: 9/4/09
RECORDED BY: JEC

08:05 - AS system running

2009 SYSTEM STARTUP INFORMATION

Startup Date: 6/29/2009
MS Discharge Totalizer: 68
Sump Discharge Totalizer: 0

NOTES - LEAVE VACUUM RELIEF VALVE SELECTOR SWITCH IN OFF POSITION
LEAVE AIR STRIPPER SELECTOR SWITCHES IN AUTO POSITION

CURRENT OPERATING WELL:

ANALOG PANEL READINGS

DPE PUMP AIR FLOW (SCFM):	24.3 SCFM
DPE WELL VACUUM (IN. HG):	9.66 Hg
DPE PUMP INLET VACUUM (IN. HG):	23.32
DPE PUMP OUTLET PRESSURE (PSI):	0.02
DPE PUMP OUTLET TEMP (DEG. F):	307.4
MS PUMP WATER FLOW (GPM):	0.00

TOTAL PANEL READINGS

DPE VACUUM PUMP (HRS):	957
MS PUMP (HRS):	96
MS VACUUM VALVE (HRS):	49
AIR STRIPPER BLOWER (HRS):	382
AIR STRIPPER PUMP (HRS):	34
DPE AIR FLOW (SCF):	1208000
MS PUMP WATER FLOW (GAL):	38299

Sump Pump Water Flow 300

FIELD MEASUREMENTS

DPE WELL CASING VACUUM (MM HG):	86 H2O
~~DPE WELL HEAD (DROP TUBE) VACUUM (IN. HG):~~	
PRE-MANIFOLD VACUUM (IN. HG):	9.1
DPE WELL (PRE-MS) VACUUM (IN.HG):	9.0
POST-MS VACUUM (IN. HG):	9.4
DPE PUMP AIR FLOW (SCFM):	25
DPE EXHAUST PID CONC. (PPM):	34.0
DPE PUMP OUTLET PRESSURE (PSI): H2O	ND
DPE PUMP OUTLET TEMP (DEG. F):	310

MS PUMP WATER FLOWRATE (WHILE PUMPING) (GPM):	12.0
MS PUMP WATER PRESSURE (WHILE PUMPING) (PSI):	21
MS PUMP FLOW TOTALIZER READING (GAL):	39213
AS EXHAUST PRESSURE (IN. H20):	11
AS DISCHARGE PUMP PRESSURE (WHILE PUMPING) (PSI):	ND
AS BLOWER PRESSURE (IN. H20):	16

ELEVATOR DRAIN TILE SUMP FLOW TOTALIZER (GAL): 00000.5

AS PID Reading → 2140 PID
early in cycle
Late in cycle 180

WATER LEVEL MEASUREMENTS

	Clean to Dirty Ranking	Well Depth below TOC (FT)	Depth to Water below TOC (FT)
MW-14	3	17.5	12.63
MW-15	4	18	15.73
MW-16	10	18	13.70
MW-17	7	25	14.31
MW-18	6	60	15.37
MW-19	1	20	14.68
MW-20	8	16.7	12.53
DPE-1	15	21.9	NA
DPE-2	13	20.5	17.18
DPE-3	14	17.1	14.48
DPE-4	12	19.3	15.94
DPE-5	9	18.1	15.08
DPE-6	5	19.5	15.68
DPE-7	2	22.2	17.03
DPE-8	11	17.5	14.29
Sump	1	7.74	6.29

ambient PID ND while collecting water levels

ALARM CONDITIONS:

MAINTENANCE PERFORMED:

COMMENTS:

FIELD DATA SHEET

CLIENT NAME: CITY OF ROCHESTER
PROJECT ID: CRC
PROJECT NAME: MN BIO BUSINESS CENTER

DATE: 9/4/09
RECORDED BY: JEG

after replacing screen @ DPE inlet

0946

2009 SYSTEM STARTUP INFORMATION

Startup Date: 6/29/2009
MS Discharge Totalizer: 68
Sump Discharge Totalizer: 0

100% @ DPE well 100% closed @ MS

NOTES - LEAVE VACUUM RELIEF VALVE SELECTOR SWITCH IN OFF POSITION
LEAVE AIR STRIPPER SELECTOR SWITCHES IN AUTO POSITION

CURRENT OPERATING WELL:

0946 - 10:15

ANALOG PANEL READINGS

DPE PUMP AIR FLOW (SCFM):	34~~.1~~ 36.1	37.0
DPE WELL VACUUM (IN. HG):	20~~.5~~ 20.43	20.73
DPE PUMP INLET VACUUM (IN. HG):	21.0	21.35
DPE PUMP OUTLET PRESSURE (PSI):	0.00	0.0
DPE PUMP OUTLET TEMP (DEG. F):	210	266
MS PUMP WATER FLOW (GPM):	0.0	0.0

TOTAL PANEL READINGS

DPE VACUUM PUMP (HRS):	957
MS PUMP (HRS):	96
MS VACUUM VALVE (HRS):	49
AIR STRIPPER BLOWER (HRS):	383
AIR STRIPPER PUMP (HRS):	34
DPE AIR FLOW (SCF):	1209000
MS PUMP WATER FLOW (GAL):	38334
	300

FIELD MEASUREMENTS

DPE WELL CASING VACUUM (MM HG):	149" H_2O	7150
~~DPE WELL HEAD (DROP TUBE) VACUUM (IN. HG):~~		
PRE-MANIFOLD VACUUM (IN. HG):	20	20
DPE WELL (PRE-MS) VACUUM (IN.HG):	21	21
POST-MS VACUUM (IN. HG):	21	22
DPE PUMP AIR FLOW (SCFM):	40	40
DPE EXHAUST PID CONC. (PPM):	4,000	4,000
DPE PUMP OUTLET PRESSURE (~~PSI~~): H20	ND	ND
DPE PUMP OUTLET TEMP (DEG. F):	248	265

MS PUMP WATER FLOWRATE (WHILE PUMPING) (GPM): 12
MS PUMP WATER PRESSURE (WHILE PUMPING) (PSI): 21
MS PUMP FLOW TOTALIZER READING (GAL): 39266

AS EXHAUST PRESSURE (IN. H20): 11
AS DISCHARGE PUMP PRESSURE (WHILE PUMPING) (PSI): 31
AS BLOWER PRESSURE (IN. H20): 16

ELEVATOR DRAIN TILE SUMP FLOW TOTALIZER (GAL): X

PID 509

WATER LEVEL MEASUREMENTS

	Clean to Dirty Ranking	Well Depth below TOC (FT)	Depth to Water below TOC (FT)
MW-14	3	17.5	12.57
MW-15	4	18	15.90
MW-16	10	18	14.25
MW-17	7	25	14.33
MW-18	6	60	15.58
MW-19	1	20	~~14.61~~ 14.61
MW-20	8	16.7	12.47
DPE-1	15	21.9	—
DPE-2	13	20.5	17.26
DPE-3	14	17.1	14.49
DPE-4	12	19.3	15.91
DPE-5	9	18.1	15.04
DPE-6	5	19.5	15.65
DPE-7	2	22.2	17.00
DPE-8	11	17.5	14.31
Sump	1	7.74	—

ALARM CONDITIONS:

MAINTENANCE PERFORMED:

COMMENTS:

CAN #0680 DPE Exh @ 10:19

AS exh 10:55
CAN # 842

FIELD DATA SHEET

CLIENT NAME: CITY OF ROCHESTER
PROJECT ID: CRC
PROJECT NAME: MN BIO BUSINESS CENTER

DATE: 9/4/09
RECORDED BY:

New 1 micron Filter

@ 11:35

2009 SYSTEM STARTUP INFORMATION

Startup Date: 6/29/2009
MS Discharge Totalizer: 68
Sump Discharge Totalizer: 0

NOTES - LEAVE VACUUM RELIEF VALVE SELECTOR SWITCH IN OFF POSITION
LEAVE AIR STRIPPER SELECTOR SWITCHES IN AUTO POSITION

CURRENT OPERATING WELL:

ANALOG PANEL READINGS

DPE PUMP AIR FLOW (SCFM):	27.3
DPE WELL VACUUM (IN. HG):	22.7
DPE PUMP INLET VACUUM (IN. HG):	22.99
DPE PUMP OUTLET PRESSURE (PSI):	0
DPE PUMP OUTLET TEMP (DEG. F):	275
MS PUMP WATER FLOW (GPM):	0 —

TOTAL PANEL READINGS

DPE VACUUM PUMP (HRS):	959
MS PUMP (HRS):	96
MS VACUUM VALVE (HRS):	49
AIR STRIPPER BLOWER (HRS):	383
AIR STRIPPER PUMP (HRS):	34
DPE AIR FLOW (SCF):	1212000
MS PUMP WATER FLOW (GAL):	38369 300

FIELD MEASUREMENTS

DPE WELL CASING VACUUM (MM HG):	> 150" H20
~~DPE WELL HEAD (DROP TUBE) VACUUM (IN. HG):~~	~~22.5~~
PRE-MANIFOLD VACUUM (IN. HG):	22.5
DPE WELL (PRE-MS) VACUUM (IN.HG):	22.5
POST-MS VACUUM (IN. HG):	22.5
DPE PUMP AIR FLOW (SCFM):	25
DPE EXHAUST PID CONC. (PPM):	4,000
DPE PUMP OUTLET PRESSURE (PSI):	ND
DPE PUMP OUTLET TEMP (DEG. F):	270

MS PUMP WATER FLOWRATE (WHILE PUMPING) (GPM):
MS PUMP WATER PRESSURE (WHILE PUMPING) (PSI):
MS PUMP FLOW TOTALIZER READING (GAL):

AS EXHAUST PRESSURE (IN. H20):
AS DISCHARGE PUMP PRESSURE (WHILE PUMPING) (PSI):
AS BLOWER PRESSURE (IN. H20):

ELEVATOR DRAIN TILE SUMP FLOW TOTALIZER (GAL):

WATER LEVEL MEASUREMENTS

	Clean to Dirty Ranking	Well Depth below TOC (FT)	Depth to Water below TOC (FT)
MW-14	3	17.5	12.65
MW-15	4	18	~~17.86~~ 16.0
MW-16	10	18	14.58
MW-17	7	25	14.39
MW-18	6	60	15.40
MW-19	1	20	14.66
MW-20	8	16.7	12.49
DPE-1	15	21.9	~17.86
DPE-2	13	20.5	17.54
DPE-3	14	17.1	14.50
DPE-4	12	19.3	15.99
DPE-5	9	18.1	15.03
DPE-6	5	19.5	15.81
DPE-7	2	22.2	17.19
DPE-8	11	17.5	14.28
Sump	1	7.74	X

ALARM CONDITIONS:

MAINTENANCE PERFORMED:

COMMENTS:

Attachment B

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

April 16, 2009

Mr. Jason Skramstad
Landmark Environmental
2042 W. 98th. St.
Minneapolis, MN 55431

RE: Project: CRC
Pace Project No.: 1092723

Dear Mr. Skramstad:
Enclosed are the analytical results for sample(s) received by the laboratory on April 10, 2009. The results relate only to the samples included in this report. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Carolynne Trout

Carolynne Trout

carolynne.trout@pacelabs.com
Project Manager

Enclosures

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

CERTIFICATIONS

Project: CRC
Pace Project No.: 1092723

Minnesota Certification IDs

Wisconsin Certification #: 999407970
Washington Certification #: C754
Tennessee Certification #: 02818
Pennsylvania Certification #: 68-00563
Oregon Certification #: MN200001
North Dakota Certification #: R-036
North Carolina Certification #: 530
New York Certification #: 11647
New Jersey Certification #: MN-002
Montana Certification #: MT CERT0092
Minnesota Certification #: 027-053-137
Maine Certification #: 2007029
Louisiana Certification #: LA080009
Louisiana Certification #: 03086
Kansas Certification #: E-10167
Iowa Certification #: 368
Illinois Certification #: 200011
Florida/NELAP Certification #: E87605
California Certification #: 01155CA
Arizona Certification #: AZ-0014
Alaska Certification #: UST-078

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

SAMPLE SUMMARY

Project: CRC
Pace Project No.: 1092723

Lab ID	Sample ID	Matrix	Date Collected	Date Received
1092723001	**DPE Discharge**	Water	04/09/09 16:35	04/10/09 08:59

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

SAMPLE ANALYTE COUNT

Project: CRC
Pace Project No.: 1092723

Lab ID	Sample ID	Method	Analysts	Analytes Reported
1092723001	**DPE Discharge**	EPA 200.7	IP	1
		EPA 624	CNC, DJT	82

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: CRC
Pace Project No.: 1092723

Sample: DPE Discharge **Lab ID: 1092723001** Collected: 04/09/09 16:35 Received: 04/10/09 08:59 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.7 MET ICP	Analytical Method: EPA 200.7 Preparation Method: EPA 200.7							
Iron	**32500**	ug/L	50.0	1	04/13/09 19:58	04/15/09 12:53	7439-89-6	
624 MSV	Analytical Method: EPA 624							
Acetone	ND	ug/L	50.0	5		04/10/09 23:29	67-64-1	
Acrolein	ND	ug/L	200	5		04/10/09 23:29	107-02-8	
Acrylonitrile	ND	ug/L	50.0	5		04/10/09 23:29	107-13-1	
Allyl chloride	ND	ug/L	20.0	5		04/10/09 23:29	107-05-1	
Benzene	ND	ug/L	5.0	5		04/10/09 23:29	71-43-2	
Bromobenzene	ND	ug/L	5.0	5		04/10/09 23:29	108-86-1	
Bromochloromethane	ND	ug/L	5.0	5		04/10/09 23:29	74-97-5	
Bromodichloromethane	ND	ug/L	20.0	5		04/10/09 23:29	75-27-4	
Bromoform	ND	ug/L	40.0	5		04/10/09 23:29	75-25-2	
Bromomethane	ND	ug/L	20.0	5		04/10/09 23:29	74-83-9	
2-Butanone (MEK)	**392**	ug/L	20.0	5		04/10/09 23:29	78-93-3	
n-Butylbenzene	**5.0**	ug/L	5.0	5		04/10/09 23:29	104-51-8	
sec-Butylbenzene	ND	ug/L	5.0	5		04/10/09 23:29	135-98-8	
tert-Butylbenzene	ND	ug/L	5.0	5		04/10/09 23:29	98-06-6	
Carbon disulfide	ND	ug/L	5.0	5		04/10/09 23:29	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	5		04/10/09 23:29	56-23-5	
Chlorobenzene	ND	ug/L	5.0	5		04/10/09 23:29	108-90-7	
Chloroethane	ND	ug/L	5.0	5		04/10/09 23:29	75-00-3	
2-Chloroethylvinyl ether	ND	ug/L	50.0	5		04/10/09 23:29	110-75-8	
Chloroform	ND	ug/L	5.0	5		04/10/09 23:29	67-66-3	
Chloromethane	ND	ug/L	5.0	5		04/10/09 23:29	74-87-3	
Chloroprene	ND	ug/L	5.0	5		04/10/09 23:29	126-99-8	
2-Chlorotoluene	**51.0**	ug/L	5.0	5		04/10/09 23:29	95-49-8	
4-Chlorotoluene	ND	ug/L	5.0	5		04/10/09 23:29	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	20.0	5		04/10/09 23:29	96-12-8	
Dibromochloromethane	ND	ug/L	5.0	5		04/10/09 23:29	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	5		04/10/09 23:29	106-93-4	
Dibromomethane	ND	ug/L	5.0	5		04/10/09 23:29	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	5		04/10/09 23:29	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	5		04/10/09 23:29	541-73-1	
1,4-Dichlorobenzene	**7.8**	ug/L	5.0	5		04/10/09 23:29	106-46-7	
Dichlorodifluoromethane	ND	ug/L	5.0	5		04/10/09 23:29	75-71-8	
1,1-Dichloroethane	ND	ug/L	5.0	5		04/10/09 23:29	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	5		04/10/09 23:29	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	5		04/10/09 23:29	75-35-4	
cis-1,2-Dichloroethene	**206**	ug/L	5.0	5		04/10/09 23:29	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	5		04/10/09 23:29	156-60-5	
Dichlorofluoromethane	ND	ug/L	5.0	5		04/10/09 23:29	75-43-4	
1,2-Dichloropropane	ND	ug/L	5.0	5		04/10/09 23:29	78-87-5	
1,3-Dichloropropane	ND	ug/L	5.0	5		04/10/09 23:29	142-28-9	
2,2-Dichloropropane	ND	ug/L	5.0	5		04/10/09 23:29	594-20-7	
1,1-Dichloropropene	ND	ug/L	5.0	5		04/10/09 23:29	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	20.0	5		04/10/09 23:29	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	20.0	5		04/10/09 23:29	10061-02-6	

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: CRC
Pace Project No.: 1092723

Sample: DPE Discharge **Lab ID: 1092723001** Collected: 04/09/09 16:35 Received: 04/10/09 08:59 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
624 MSV	Analytical Method: EPA 624							
Diethyl ether (Ethyl ether)	ND	ug/L	20.0	5		04/10/09 23:29	60-29-7	
Ethylbenzene	ND	ug/L	5.0	5		04/10/09 23:29	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	20.0	5		04/10/09 23:29	87-68-3	
2-Hexanone	ND	ug/L	20.0	5		04/10/09 23:29	591-78-6	
Iodomethane	ND	ug/L	20.0	5		04/10/09 23:29	74-88-4	
Isopropylbenzene (Cumene)	ND	ug/L	5.0	5		04/10/09 23:29	98-82-8	
p-Isopropyltoluene	ND	ug/L	5.0	5		04/10/09 23:29	99-87-6	
Methylene Chloride	ND	ug/L	20.0	5		04/10/09 23:29	75-09-2	
2-Methylnaphthalene	ND	ug/L	25.0	5		04/10/09 23:29	91-57-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	5		04/10/09 23:29	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	5.0	5		04/10/09 23:29	1634-04-4	
Naphthalene	ND	ug/L	20.0	5		04/10/09 23:29	91-20-3	
n-Propylbenzene	ND	ug/L	5.0	5		04/10/09 23:29	103-65-1	
Styrene	ND	ug/L	5.0	5		04/10/09 23:29	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	5		04/10/09 23:29	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	5		04/10/09 23:29	79-34-5	
Tetrachloroethene	**167000**	ug/L	1000	1000		04/13/09 15:13	127-18-4	
Tetrahydrofuran	**600**	ug/L	50.0	5		04/10/09 23:29	109-99-9	
Toluene	ND	ug/L	5.0	5		04/10/09 23:29	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	5.0	5		04/10/09 23:29	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	5.0	5		04/10/09 23:29	120-82-1	
1,1,1-Trichloroethane	**29.4**	ug/L	5.0	5		04/10/09 23:29	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	20.0	5		04/10/09 23:29	79-00-5	
Trichloroethene	**159**	ug/L	5.0	5		04/10/09 23:29	79-01-6	
Trichlorofluoromethane	ND	ug/L	20.0	5		04/10/09 23:29	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	5.0	5		04/10/09 23:29	96-18-4	
1,1,2-Trichlorotrifluoroethane	**7860**	ug/L	1000	1000		04/13/09 15:13	76-13-1	L2
1,2,4-Trimethylbenzene	**26.0**	ug/L	5.0	5		04/10/09 23:29	95-63-6	
1,3,5-Trimethylbenzene	**7.1**	ug/L	5.0	5		04/10/09 23:29	108-67-8	
Vinyl acetate	ND	ug/L	100	5		04/10/09 23:29	108-05-4	
Vinyl chloride	ND	ug/L	2.0	5		04/10/09 23:29	75-01-4	
Xylene (Total)	ND	ug/L	15.0	5		04/10/09 23:29	1330-20-7	
m&p-Xylene	ND	ug/L	10.0	5		04/10/09 23:29	1330-20-7	
o-Xylene	ND	ug/L	5.0	5		04/10/09 23:29	95-47-6	
Dibromofluoromethane (S)	95	%	75-125	5		04/10/09 23:29	1868-53-7	
4-Bromofluorobenzene (S)	100	%	75-125	5		04/10/09 23:29	460-00-4	
Toluene-d8 (S)	99	%	75-125	5		04/10/09 23:29	2037-26-5	
1,2-Dichloroethane-d4 (S)	100	%	75-125	5		04/10/09 23:29	17060-07-0	

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QUALITY CONTROL DATA

Project: CRC
Pace Project No.: 1092723

QC Batch: MSV/12048 Analysis Method: EPA 624
QC Batch Method: EPA 624 Analysis Description: 624 MSV
Associated Lab Samples: 1092723001

METHOD BLANK: 605666 Matrix: Water
Associated Lab Samples: 1092723001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	1.0	04/10/09 17:34	
1,1,1-Trichloroethane	ug/L	ND	1.0	04/10/09 17:34	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	04/10/09 17:34	
1,1,2-Trichloroethane	ug/L	ND	4.0	04/10/09 17:34	
1,1,2-Trichlorotrifluoroethane	ug/L	ND	1.0	04/10/09 17:34	
1,1-Dichloroethane	ug/L	ND	1.0	04/10/09 17:34	
1,1-Dichloroethene	ug/L	ND	1.0	04/10/09 17:34	
1,1-Dichloropropene	ug/L	ND	1.0	04/10/09 17:34	
1,2,3-Trichlorobenzene	ug/L	ND	1.0	04/10/09 17:34	
1,2,3-Trichloropropane	ug/L	ND	1.0	04/10/09 17:34	
1,2,4-Trichlorobenzene	ug/L	ND	1.0	04/10/09 17:34	
1,2,4-Trimethylbenzene	ug/L	ND	1.0	04/10/09 17:34	
1,2-Dibromo-3-chloropropane	ug/L	ND	4.0	04/10/09 17:34	
1,2-Dibromoethane (EDB)	ug/L	ND	1.0	04/10/09 17:34	
1,2-Dichlorobenzene	ug/L	ND	1.0	04/10/09 17:34	
1,2-Dichloroethane	ug/L	ND	1.0	04/10/09 17:34	
1,2-Dichloropropane	ug/L	ND	1.0	04/10/09 17:34	
1,3,5-Trimethylbenzene	ug/L	ND	1.0	04/10/09 17:34	
1,3-Dichlorobenzene	ug/L	ND	1.0	04/10/09 17:34	
1,3-Dichloropropane	ug/L	ND	1.0	04/10/09 17:34	
1,4-Dichlorobenzene	ug/L	ND	1.0	04/10/09 17:34	
2,2-Dichloropropane	ug/L	ND	1.0	04/10/09 17:34	
2-Butanone (MEK)	ug/L	ND	4.0	04/10/09 17:34	
2-Chloroethylvinyl ether	ug/L	ND	10.0	04/10/09 17:34	
2-Chlorotoluene	ug/L	ND	1.0	04/10/09 17:34	
2-Hexanone	ug/L	ND	4.0	04/10/09 17:34	
2-Methylnaphthalene	ug/L	ND	5.0	04/10/09 17:34	
4-Chlorotoluene	ug/L	ND	1.0	04/10/09 17:34	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	5.0	04/10/09 17:34	
Acetone	ug/L	ND	10.0	04/10/09 17:34	
Acrolein	ug/L	ND	40.0	04/10/09 17:34	
Acrylonitrile	ug/L	ND	10.0	04/10/09 17:34	
Allyl chloride	ug/L	ND	4.0	04/10/09 17:34	
Benzene	ug/L	ND	1.0	04/10/09 17:34	
Bromobenzene	ug/L	ND	1.0	04/10/09 17:34	
Bromochloromethane	ug/L	ND	1.0	04/10/09 17:34	
Bromodichloromethane	ug/L	ND	4.0	04/10/09 17:34	
Bromoform	ug/L	ND	8.0	04/10/09 17:34	
Bromomethane	ug/L	ND	4.0	04/10/09 17:34	
Carbon disulfide	ug/L	ND	1.0	04/10/09 17:34	
Carbon tetrachloride	ug/L	ND	1.0	04/10/09 17:34	
Chlorobenzene	ug/L	ND	1.0	04/10/09 17:34	
Chloroethane	ug/L	ND	1.0	04/10/09 17:34	

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QUALITY CONTROL DATA

Project: CRC
Pace Project No.: 1092723

METHOD BLANK: 605666 Matrix: Water

Associated Lab Samples: 1092723001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloroform	ug/L	ND	1.0	04/10/09 17:34	
Chloromethane	ug/L	ND	1.0	04/10/09 17:34	
Chloroprene	ug/L	ND	1.0	04/10/09 17:34	
cis-1,2-Dichloroethene	ug/L	ND	1.0	04/10/09 17:34	
cis-1,3-Dichloropropene	ug/L	ND	4.0	04/10/09 17:34	
Dibromochloromethane	ug/L	ND	1.0	04/10/09 17:34	
Dibromomethane	ug/L	ND	1.0	04/10/09 17:34	
Dichlorodifluoromethane	ug/L	ND	1.0	04/10/09 17:34	
Dichlorofluoromethane	ug/L	ND	1.0	04/10/09 17:34	
Diethyl ether (Ethyl ether)	ug/L	ND	4.0	04/10/09 17:34	
Ethylbenzene	ug/L	ND	1.0	04/10/09 17:34	
Hexachloro-1,3-butadiene	ug/L	ND	4.0	04/10/09 17:34	
Iodomethane	ug/L	ND	4.0	04/10/09 17:34	
Isopropylbenzene (Cumene)	ug/L	ND	1.0	04/10/09 17:34	
m&p-Xylene	ug/L	ND	2.0	04/10/09 17:34	
Methyl-tert-butyl ether	ug/L	ND	1.0	04/10/09 17:34	
Methylene Chloride	ug/L	ND	4.0	04/10/09 17:34	
n-Butylbenzene	ug/L	ND	1.0	04/10/09 17:34	
n-Propylbenzene	ug/L	ND	1.0	04/10/09 17:34	
Naphthalene	ug/L	ND	4.0	04/10/09 17:34	
o-Xylene	ug/L	ND	1.0	04/10/09 17:34	
p-Isopropyltoluene	ug/L	ND	1.0	04/10/09 17:34	
sec-Butylbenzene	ug/L	ND	1.0	04/10/09 17:34	
Styrene	ug/L	ND	1.0	04/10/09 17:34	
tert-Butylbenzene	ug/L	ND	1.0	04/10/09 17:34	
Tetrachloroethene	ug/L	ND	1.0	04/10/09 17:34	
Tetrahydrofuran	ug/L	ND	10.0	04/10/09 17:34	
Toluene	ug/L	ND	1.0	04/10/09 17:34	
trans-1,2-Dichloroethene	ug/L	ND	1.0	04/10/09 17:34	
trans-1,3-Dichloropropene	ug/L	ND	4.0	04/10/09 17:34	
Trichloroethene	ug/L	ND	1.0	04/10/09 17:34	
Trichlorofluoromethane	ug/L	ND	4.0	04/10/09 17:34	
Vinyl acetate	ug/L	ND	20.0	04/10/09 17:34	
Vinyl chloride	ug/L	ND	0.40	04/10/09 17:34	
Xylene (Total)	ug/L	ND	3.0	04/10/09 17:34	
1,2-Dichloroethane-d4 (S)	%	103	75-125	04/10/09 17:34	
4-Bromofluorobenzene (S)	%	93	75-125	04/10/09 17:34	
Dibromofluoromethane (S)	%	106	75-125	04/10/09 17:34	
Toluene-d8 (S)	%	101	75-125	04/10/09 17:34	

LABORATORY CONTROL SAMPLE: 605667

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	50	49.6	99	75-129	
1,1,1-Trichloroethane	ug/L	50	46.2	92	73-144	

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QUALITY CONTROL DATA

Project: CRC
Pace Project No.: 1092723

LABORATORY CONTROL SAMPLE: 605667

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,2,2-Tetrachloroethane	ug/L	50	53.0	106	75-125	
1,1,2-Trichloroethane	ug/L	50	49.3	99	75-125	
1,1,2-Trichlorotrifluoroethane	ug/L	50	36.3	73	75-143	L0
1,1-Dichloroethane	ug/L	50	46.7	93	75-135	
1,1-Dichloroethene	ug/L	50	44.8	90	75-133	
1,1-Dichloropropene	ug/L	50	45.1	90	75-131	
1,2,3-Trichlorobenzene	ug/L	50	52.4	105	73-141	
1,2,3-Trichloropropane	ug/L	50	53.2	106	75-126	
1,2,4-Trichlorobenzene	ug/L	50	52.7	105	70-148	
1,2,4-Trimethylbenzene	ug/L	50	51.4	103	75-141	
1,2-Dibromo-3-chloropropane	ug/L	50	55.7	111	64-135	
1,2-Dibromoethane (EDB)	ug/L	50	51.4	103	75-125	SS
1,2-Dichlorobenzene	ug/L	50	50.9	102	75-125	
1,2-Dichloroethane	ug/L	50	52.5	105	75-136	
1,2-Dichloropropane	ug/L	50	47.2	94	75-130	
1,3,5-Trimethylbenzene	ug/L	50	50.3	101	75-141	
1,3-Dichlorobenzene	ug/L	50	51.6	103	75-125	
1,3-Dichloropropane	ug/L	50	50.4	101	75-125	
1,4-Dichlorobenzene	ug/L	50	51.6	103	75-125	
2,2-Dichloropropane	ug/L	50	43.9	88	50-150	
2-Butanone (MEK)	ug/L	50	51.2	102	58-138	
2-Chloroethylvinyl ether	ug/L	125	122	98	50-150	SS
2-Chlorotoluene	ug/L	50	50.5	101	75-132	
2-Hexanone	ug/L	50	50.7	101	65-135	
2-Methylnaphthalene	ug/L	50	60.4	121	62-150	
4-Chlorotoluene	ug/L	50	50.3	101	75-135	
4-Methyl-2-pentanone (MIBK)	ug/L	50	51.8	104	69-137	
Acetone	ug/L	125	160	128	52-141	
Acrolein	ug/L	500	372	74	50-150	
Acrylonitrile	ug/L	500	491	98	75-130	
Allyl chloride	ug/L	50	43.0	86	68-150	
Benzene	ug/L	50	45.9	92	75-125	
Bromobenzene	ug/L	50	51.3	103	75-125	
Bromochloromethane	ug/L	50	48.9	98	75-129	
Bromodichloromethane	ug/L	50	51.1	102	75-142	
Bromoform	ug/L	100	107	107	66-135	
Bromomethane	ug/L	50	43.0	86	57-150	
Carbon disulfide	ug/L	50	40.8	82	65-132	SS
Carbon tetrachloride	ug/L	50	46.9	94	75-148	
Chlorobenzene	ug/L	50	50.2	100	75-125	
Chloroethane	ug/L	50	38.6	77	66-142	
Chloroform	ug/L	50	48.0	96	75-131	
Chloromethane	ug/L	50	37.7	75	52-147	
Chloroprene	ug/L	50	44.6	89	71-147	
cis-1,2-Dichloroethene	ug/L	50	47.2	94	75-126	
cis-1,3-Dichloropropene	ug/L	50	51.7	103	69-150	
Dibromochloromethane	ug/L	50	52.3	105	73-138	
Dibromomethane	ug/L	50	50.6	101	75-127	

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QUALITY CONTROL DATA

Project: CRC
Pace Project No.: 1092723

LABORATORY CONTROL SAMPLE: 605667

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Dichlorodifluoromethane	ug/L	50	36.7	73	50-150	
Dichlorofluoromethane	ug/L	50	48.5	97	75-129	
Diethyl ether (Ethyl ether)	ug/L	50	50.5	101	75-126	
Ethylbenzene	ug/L	50	49.5	99	75-132	
Hexachloro-1,3-butadiene	ug/L	50	49.8	100	75-129	
Iodomethane	ug/L	50	51.3	103	73-150	SS
Isopropylbenzene (Cumene)	ug/L	50	47.6	95	75-142	
m&p-Xylene	ug/L	100	96.3	96	75-131	
Methyl-tert-butyl ether	ug/L	50	52.4	105	75-130	
Methylene Chloride	ug/L	50	45.4	91	71-125	
n-Butylbenzene	ug/L	50	48.5	97	70-148	
n-Propylbenzene	ug/L	50	50.0	100	75-136	
Naphthalene	ug/L	50	55.5	111	69-145	
o-Xylene	ug/L	50	49.4	99	75-129	
p-Isopropyltoluene	ug/L	50	50.5	101	75-132	
sec-Butylbenzene	ug/L	50	49.1	98	75-136	
Styrene	ug/L	50	50.0	100	75-125	
tert-Butylbenzene	ug/L	50	49.2	98	75-135	
Tetrachloroethene	ug/L	50	45.9	92	75-125	
Tetrahydrofuran	ug/L	500	504	101	63-144	
Toluene	ug/L	50	46.7	93	75-125	
trans-1,2-Dichloroethene	ug/L	50	42.9	86	72-135	
trans-1,3-Dichloropropene	ug/L	50	52.3	105	62-150	
Trichloroethene	ug/L	50	47.8	96	75-125	
Trichlorofluoromethane	ug/L	50	41.8	84	67-150	
Vinyl acetate	ug/L	50	49.0	98	55-150	
Vinyl chloride	ug/L	50	40.2	80	63-147	
Xylene (Total)	ug/L	150	146	97	75-130	
1,2-Dichloroethane-d4 (S)	%			96	75-125	
4-Bromofluorobenzene (S)	%			98	75-125	
Dibromofluoromethane (S)	%			101	75-125	
Toluene-d8 (S)	%			101	75-125	

MATRIX SPIKE SAMPLE: 606065

Parameter	Units	1092642002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	20	21.1	105	70-136	
1,1,1-Trichloroethane	ug/L	ND	20	23.5	117	68-150	
1,1,2,2-Tetrachloroethane	ug/L	ND	20	18.1	91	75-125	
1,1,2-Trichloroethane	ug/L	ND	20	19.8	99	75-125	
1,1,2-Trichlorotrifluoroethane	ug/L	ND	20	26.9	135	75-150	
1,1-Dichloroethane	ug/L	ND	20	22.6	113	67-143	
1,1-Dichloroethene	ug/L	ND	20	24.1	120	75-147	
1,1-Dichloropropene	ug/L	ND	20	23.4	117	75-141	
1,2,3-Trichlorobenzene	ug/L	ND	20	19.1	95	71-141	
1,2,3-Trichloropropane	ug/L	ND	20	19.0	95	75-128	
1,2,4-Trichlorobenzene	ug/L	ND	20	18.9	94	61-148	

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QUALITY CONTROL DATA

Project: CRC
Pace Project No.: 1092723

MATRIX SPIKE SAMPLE: 606065

Parameter	Units	1092642002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,2,4-Trimethylbenzene	ug/L	ND	20	21.2	106	65-145	
1,2-Dibromo-3-chloropropane	ug/L	ND	20	18.1	90	64-135	
1,2-Dibromoethane (EDB)	ug/L	ND	20	18.8	94	75-126	SS
1,2-Dichlorobenzene	ug/L	ND	20	19.5	98	75-127	
1,2-Dichloroethane	ug/L	ND	20	20.4	102	70-138	
1,2-Dichloropropane	ug/L	ND	20	19.9	100	75-130	
1,3,5-Trimethylbenzene	ug/L	ND	20	21.2	106	61-150	
1,3-Dichlorobenzene	ug/L	ND	20	20.8	104	75-126	
1,3-Dichloropropane	ug/L	ND	20	19.6	98	75-125	
1,4-Dichlorobenzene	ug/L	ND	20	19.9	100	75-125	
2,2-Dichloropropane	ug/L	ND	20	22.2	111	50-150	
2-Butanone (MEK)	ug/L	ND	20	17.8	89	50-141	
2-Chloroethylvinyl ether	ug/L	ND	50	11.6	23	50-150	P5,SS
2-Chlorotoluene	ug/L	ND	20	20.9	105	75-137	
2-Hexanone	ug/L	ND	20	16.3	81	66-135	
2-Methylnaphthalene	ug/L	ND	20	26.2	131	62-150	
4-Chlorotoluene	ug/L	ND	20	21.0	105	70-144	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	20	17.4	87	62-142	
Acetone	ug/L	ND	50	38.3	77	50-150	
Acrolein	ug/L	ND	200	294	147	50-150	
Acrylonitrile	ug/L	ND	200	186	93	70-135	
Allyl chloride	ug/L	ND	20	21.0	105	50-150	
Benzene	ug/L	ND	20	21.3	106	75-125	
Bromobenzene	ug/L	ND	20	20.5	103	75-125	
Bromochloromethane	ug/L	ND	20	21.7	109	73-137	
Bromodichloromethane	ug/L	ND	20	20.6	103	70-142	
Bromoform	ug/L	ND	40	40.5	101	55-135	
Bromomethane	ug/L	ND	20	19.5	98	50-150	
Carbon disulfide	ug/L	ND	20	21.6	108	50-150	SS
Carbon tetrachloride	ug/L	ND	20	24.1	121	64-150	
Chlorobenzene	ug/L	ND	20	21.6	108	75-125	
Chloroethane	ug/L	ND	20	20.6	103	59-150	
Chloroform	ug/L	ND	20	21.4	107	75-132	
Chloromethane	ug/L	ND	20	19.4	97	52-150	
Chloroprene	ug/L	ND	20	22.7	113	54-150	
cis-1,2-Dichloroethene	ug/L	6.1	20	28.8	114	64-144	
cis-1,3-Dichloropropene	ug/L	ND	20	20.3	101	56-150	
Dibromochloromethane	ug/L	ND	20	20.4	102	60-138	
Dibromomethane	ug/L	ND	20	20.5	103	75-127	
Dichlorodifluoromethane	ug/L	ND	20	28.0	140	50-150	
Dichlorofluoromethane	ug/L	ND	20	23.3	116	74-142	
Diethyl ether (Ethyl ether)	ug/L	ND	20	20.3	101	75-127	
Ethylbenzene	ug/L	ND	20	21.6	108	75-134	
Hexachloro-1,3-butadiene	ug/L	ND	20	21.6	108	63-150	
Iodomethane	ug/L	ND	20	32.6	163	50-150	M0,SS
Isopropylbenzene (Cumene)	ug/L	ND	20	21.8	109	69-147	
m&p-Xylene	ug/L	ND	40	43.7	109	75-133	
Methyl-tert-butyl ether	ug/L	ND	20	20.6	103	73-131	

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QUALITY CONTROL DATA

Project: CRC
Pace Project No.: 1092723

MATRIX SPIKE SAMPLE: 606065

Parameter	Units	1092642002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Methylene Chloride	ug/L	ND	20	20.1	101	68-126	
n-Butylbenzene	ug/L	ND	20	20.9	104	59-150	
n-Propylbenzene	ug/L	ND	20	21.9	110	72-143	
Naphthalene	ug/L	ND	20	20.1	101	57-148	
o-Xylene	ug/L	ND	20	22.2	111	75-131	
p-Isopropyltoluene	ug/L	ND	20	21.9	109	75-137	
sec-Butylbenzene	ug/L	ND	20	21.8	109	75-144	
Styrene	ug/L	ND	20	21.8	109	75-134	
tert-Butylbenzene	ug/L	ND	20	21.3	106	68-150	
Tetrachloroethene	ug/L	ND	20	23.0	115	75-130	
Tetrahydrofuran	ug/L	ND	200	178	89	60-148	
Toluene	ug/L	ND	20	20.6	103	75-125	
trans-1,2-Dichloroethene	ug/L	ND	20	21.8	109	75-145	
trans-1,3-Dichloropropene	ug/L	ND	20	20.6	103	50-150	
Trichloroethene	ug/L	5.9	20	28.8	114	73-132	
Trichlorofluoromethane	ug/L	ND	20	25.9	130	67-150	
Vinyl acetate	ug/L	ND	20	18.4J	92	50-150	
Vinyl chloride	ug/L	ND	20	23.8	119	63-150	
Xylene (Total)	ug/L	ND	60	65.9	110	72-138	
1,2-Dichloroethane-d4 (S)	%				102	75-125	
4-Bromofluorobenzene (S)	%				97	75-125	
Dibromofluoromethane (S)	%				106	75-125	
Toluene-d8 (S)	%				100	75-125	

SAMPLE DUPLICATE: 606066

Parameter	Units	1092617002 Result	Dup Result	RPD	Max RPD	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	ND		30	
1,1,1-Trichloroethane	ug/L	ND	ND		30	
1,1,2,2-Tetrachloroethane	ug/L	ND	ND		30	
1,1,2-Trichloroethane	ug/L	ND	ND		30	
1,1,2-Trichlorotrifluoroethane	ug/L	ND	ND		30	
1,1-Dichloroethane	ug/L	ND	ND		30	
1,1-Dichloroethene	ug/L	ND	ND		30	
1,1-Dichloropropene	ug/L	ND	ND		30	
1,2,3-Trichlorobenzene	ug/L	ND	ND		30	
1,2,3-Trichloropropane	ug/L	ND	ND		30	
1,2,4-Trichlorobenzene	ug/L	ND	ND		30	
1,2,4-Trimethylbenzene	ug/L	ND	ND		30	
1,2-Dibromo-3-chloropropane	ug/L	ND	ND		30	
1,2-Dibromoethane (EDB)	ug/L	ND	ND		30	
1,2-Dichlorobenzene	ug/L	ND	ND		30	
1,2-Dichloroethane	ug/L	ND	ND		30	
1,2-Dichloropropane	ug/L	ND	ND		30	
1,3,5-Trimethylbenzene	ug/L	ND	ND		30	
1,3-Dichlorobenzene	ug/L	ND	ND		30	
1,3-Dichloropropane	ug/L	ND	ND		30	

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QUALITY CONTROL DATA

Project: CRC
Pace Project No.: 1092723

SAMPLE DUPLICATE: 606066

Parameter	Units	1092617002 Result	Dup Result	RPD	Max RPD	Qualifiers
1,4-Dichlorobenzene	ug/L	ND	ND		30	
2,2-Dichloropropane	ug/L	ND	ND		30	
2-Butanone (MEK)	ug/L	ND	ND		30	
2-Chloroethylvinyl ether	ug/L	ND	ND		30	
2-Chlorotoluene	ug/L	ND	ND		30	
2-Hexanone	ug/L	ND	ND		30	
2-Methylnaphthalene	ug/L	ND	ND		30	
4-Chlorotoluene	ug/L	ND	ND		30	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	ND		30	
Acetone	ug/L	27.3	26.1	4	30	
Acrolein	ug/L	ND	ND		30	
Acrylonitrile	ug/L	ND	ND		30	
Allyl chloride	ug/L	ND	ND		30	
Benzene	ug/L	ND	ND		30	
Bromobenzene	ug/L	ND	ND		30	
Bromochloromethane	ug/L	ND	ND		30	
Bromodichloromethane	ug/L	ND	ND		30	
Bromoform	ug/L	ND	ND		30	
Bromomethane	ug/L	ND	ND		30	
Carbon disulfide	ug/L	1.0	.91J		30	
Carbon tetrachloride	ug/L	ND	ND		30	
Chlorobenzene	ug/L	ND	ND		30	
Chloroethane	ug/L	ND	2.3		30	
Chloroform	ug/L	17.1	15.8	8	30	
Chloromethane	ug/L	ND	ND		30	
Chloroprene	ug/L	ND	ND		30	
cis-1,2-Dichloroethene	ug/L	ND	ND		30	
cis-1,3-Dichloropropene	ug/L	ND	ND		30	
Dibromochloromethane	ug/L	ND	ND		30	
Dibromomethane	ug/L	ND	ND		30	
Dichlorodifluoromethane	ug/L	ND	ND		30	
Dichlorofluoromethane	ug/L	ND	ND		30	
Diethyl ether (Ethyl ether)	ug/L	ND	ND		30	
Ethylbenzene	ug/L	ND	ND		30	
Hexachloro-1,3-butadiene	ug/L	ND	ND		30	
Iodomethane	ug/L	ND	ND		30	
Isopropylbenzene (Cumene)	ug/L	ND	ND		30	
m&p-Xylene	ug/L	ND	ND		30	
Methyl-tert-butyl ether	ug/L	ND	ND		30	
Methylene Chloride	ug/L	ND	ND		30	
n-Butylbenzene	ug/L	ND	ND		30	
n-Propylbenzene	ug/L	ND	ND		30	
Naphthalene	ug/L	ND	ND		30	
o-Xylene	ug/L	ND	ND		30	
p-Isopropyltoluene	ug/L	ND	ND		30	
sec-Butylbenzene	ug/L	ND	ND		30	
Styrene	ug/L	ND	ND		30	
tert-Butylbenzene	ug/L	ND	ND		30	

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QUALITY CONTROL DATA

Project: CRC
Pace Project No.: 1092723

SAMPLE DUPLICATE: 606066

Parameter	Units	1092617002 Result	Dup Result	RPD	Max RPD	Qualifiers
Tetrachloroethene	ug/L	ND	ND		30	
Tetrahydrofuran	ug/L	ND	ND		30	
Toluene	ug/L	ND	ND		30	
trans-1,2-Dichloroethene	ug/L	ND	ND		30	
trans-1,3-Dichloropropene	ug/L	ND	ND		30	
Trichloroethene	ug/L	11.4	11.6	2	30	
Trichlorofluoromethane	ug/L	ND	ND		30	
Vinyl acetate	ug/L	ND	ND		30	
Vinyl chloride	ug/L	ND	ND		30	
Xylene (Total)	ug/L	ND	ND		30	
1,2-Dichloroethane-d4 (S)	%	104	106	2		
4-Bromofluorobenzene (S)	%	98	94	4		
Dibromofluoromethane (S)	%	109	107	2		
Toluene-d8 (S)	%	99	96	3		

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QUALITY CONTROL DATA

Project: CRC
Pace Project No.: 1092723

QC Batch: MPRP/15328
QC Batch Method: EPA 200.7
Analysis Method: EPA 200.7
Analysis Description: 200.7 MET
Associated Lab Samples: 1092723001

METHOD BLANK: 606155 Matrix: Water
Associated Lab Samples: 1092723001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Iron	ug/L	ND	50.0	04/15/09 11:24	

LABORATORY CONTROL SAMPLE: 606156

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Iron	ug/L	10000	9150	91	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 606157 606158

Parameter	Units	1092601001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Iron	ug/L	55.1	10000	10000	9430	9330	94	93	70-130	1	30	

MATRIX SPIKE SAMPLE: 606159

Parameter	Units	1092617003 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Iron	ug/L	83.7	10000	9330	92	70-130	

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QUALIFIERS

Project: CRC
Pace Project No.: 1092723

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

Pace Analytical is NELAP accredited. Contact your Pace PM for the current list of accredited analytes.

U - Indicates the compound was analyzed for, but not detected.

ANALYTE QUALIFIERS

L0	Analyte recovery in the laboratory control sample (LCS) was outside QC limits.
L2	Analyte recovery in the laboratory control sample (LCS) was below QC limits. Results may be biased low.
M0	Matrix spike recovery was outside laboratory control limits.
P5	The EPA or method required sample preservation degrades this compound, therefore acceptable recoveries may not be achieved in sample matrix spikes.
SS	This analyte did not meet the secondary source verification criteria for the initial calibration. The reported result should be considered an estimated value.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: CRC
Pace Project No.: 1092723

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
1092723001	**DPE Discharge**	EPA 624	MSV/12048		
1092723001	**DPE Discharge**	EPA 200.7	MPRP/15328	EPA 200.7	ICP/7156

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1126

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

1092723

Page: 1 of 1

1256172

Section A Required Client Information:	Section B Required Project Information:	Section C Invoice Information:
Company: LANDMARK	Report To: JASON SKRAMSTAD	Attention: JASON SKRAMSTAD
Address:	Copy To:	Company Name:
		Address:
Email To: JASON SKRAMSTAD	Purchase Order No.: CRC	Pace Quote Reference:
Phone: Fax:	Project Name: CRC	Pace Project Manager:
Requested Due Date/TAT: [redacted]	Project Number: CRC	Pace Profile #: 21124 # 4

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER

☐ UST ☐ RCRA ☐ OTHER _____

Site Location STATE: MN

Section D Required Client Information

SAMPLE ID
(A-Z, 0-9 / ,-)
Sample IDs MUST BE UNIQUE

Matrix Codes — MATRIX / CODE

Drinking Water	DW
Water	WT
Waste Water	WW
Product	P
Soil/Solid	SL
Oil	OL
Wipe	WP
Air	AR
Tissue	TS
Other	OT

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED: COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	Requested Analysis Filtered (Y/N): EPA 624	EPA 1624	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	DPE DISCHARGE	WT	G			4/9/09	435 pm		4				X						3	1		001
2																						002
3						or	1635															
4																						
5																						
6																						
7																						
8																						
9																						
10																						
11																						
12																						

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
1	[signature]	4/9/09	530 PM	Courier	4/10/09	8 AM				
				[signature]	4/10/09	0859	1.4	Y	Y	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: JASON SKRAMSTAD

SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 4/9/09

ORIGINAL

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

F-ALL-Q-020rev.07, 15-May-2007

Sample Condition Upon Receipt

Pace Analytical

Client Name: LAND MARK   Project # 1092723

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☑ Client ☐ Commercial ☐ Pace Other

Tracking #:

Optional
Proj. Due Date:
Proj. Name:

Custody Seal on Cooler/Box Present: ☐ yes ☑ no   Seals intact: ☐ yes ☑ no

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☑ None ☐ Other   Temp Blank: Yes ✓ No

Thermometer Used ~~80344042~~, 179425   Type of Ice: (Wet) Blue None   ☐ Samples on ice, cooling process has begun

Cooler Temperature 1.4   Biological Tissue is Frozen: Yes No

Temp should be above freezing to 6°C

Date and Initials of person examining contents: [initials] 4/10/09

		Comments:
Chain of Custody Present:	☑Yes ☐No ☐N/A	1.
Chain of Custody Filled Out:	☑Yes ☐No ☐N/A	2.
Chain of Custody Relinquished:	☑Yes ☐No ☐N/A	3.
Sampler Name & Signature on COC:	☑Yes ☐No ☐N/A	4.
Samples Arrived within Hold Time:	☑Yes ☐No ☐N/A	5.
Short Hold Time Analysis (<72hr):	☐Yes ☐No ☑N/A	6.
Rush Turn Around Time Requested:	☑Yes ☐No ☐N/A	7.
Sufficient Volume:	☑Yes ☐No ☐N/A	8.
Correct Containers Used:	☑Yes ☐No ☐N/A	9.
-Pace Containers Used:	☑Yes ☐No ☐N/A	
Containers Intact:	☑Yes ☐No ☐N/A	10.
Filtered volume received for Dissolved tests	☐Yes ☑No ☐N/A	11.
Sample Labels match COC:	☑Yes ☐No ☐N/A	12.
-Includes date/time/ID/Analysis Matrix: WT		
All containers needing acid/base preservation have been checked. Noncompliance are noted in 13.	☑Yes ☐No ☐N/A	13.
All containers needing preservation are found to be in compliance with EPA recommendation.	☑Yes ☐No ☐N/A	
Exceptions: (VOA), Coliform, TOC, Oil and Grease, WI-DRO (water)	☑Yes ☐No	Initial when completed [initials] / Lot # of added preservative
Samples checked for dechlorination:	☐Yes ☐No ☑N/A	14.
Headspace in VOA Vials (>6mm):	☐Yes ☑No ☐N/A	15.
Trip Blank Present:	~~☐Yes ☑No ☐N/A~~ 4/10/09	16. No TB on the COC. SL TB sent w/ the project
Trip Blank Custody Seals Present	☐Yes ☐No ☑N/A	
Pace Trip Blank Lot # (if purchased): —		

Client Notification/ Resolution: Field Data Required? Y / N

Person Contacted: ______   Date/Time: ______

Comments/ Resolution: ______

Project Manager Review: [signature]   **Date:** 4/10/09

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e out of hold, incorrect preservative, out of temp, incorrect containers)

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(612)607-1700

June 10, 2009

Mr. Jason Skramstad
Landmark Environmental
2042 W. 98th. St.
Minneapolis, MN 55431

RE: Project: CRC
Pace Project No.: 1096635

Dear Mr. Skramstad:
Enclosed are the analytical results for sample(s) received by the laboratory on June 05, 2009. The results relate only to the samples included in this report. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Carolynne Trout

carolynne.trout@pacelabs.com
Project Manager

Enclosures

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
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CERTIFICATIONS

Project: CRC
Pace Project No.: 1096635

Minnesota Certification IDs

Wisconsin Certification #: 999407970
Washington Certification #: C754
Tennessee Certification #: 02818
Pennsylvania Certification #: 68-00563
Oregon Certification #: MN200001
North Dakota Certification #: R-036
North Carolina Certification #: 530
New York Certification #: 11647
New Jersey Certification #: MN-002
Montana Certification #: MT CERT0092
Minnesota Certification #: 027-053-137
Maine Certification #: 2007029
Louisiana Certification #: LA080009
Louisiana Certification #: 03086
Kansas Certification #: E-10167
Iowa Certification #: 368
Illinois Certification #: 200011
Florida/NELAP Certification #: E87605
California Certification #: 01155CA
Arizona Certification #: AZ-0014
Alaska Certification #: UST-078

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SAMPLE SUMMARY

Project: CRC
Pace Project No.: 1096635

Lab ID	Sample ID	Matrix	Date Collected	Date Received
1096635001	**AS EFFLUENT**	Water	06/04/09 17:25	06/05/09 16:16
1096635002	**AS INFLUENT**	Water	06/04/09 17:00	06/05/09 16:16
1096635003	**Trip Blank**	Water		06/05/09 16:16

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SAMPLE ANALYTE COUNT

Project: CRC
Pace Project No.: 1096635

Lab ID	Sample ID	Method	Analysts	Analytes Reported
1096635001	**AS EFFLUENT**	EPA 624	CNC	82
1096635002	**AS INFLUENT**	EPA 624	MJH	82
1096635003	**Trip Blank**	EPA 624	CNC	82

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ANALYTICAL RESULTS

Project: CRC
Pace Project No.: 1096635

Sample: AS EFFLUENT **Lab ID: 1096635001** Collected: 06/04/09 17:25 Received: 06/05/09 16:16 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
624 MSV	Analytical Method: EPA 624							
Acetone	**987**	ug/L	500	50		06/09/09 18:47	67-64-1	
Acrolein	ND	ug/L	40.0	1		06/09/09 10:21	107-02-8	
Acrylonitrile	ND	ug/L	10.0	1		06/09/09 10:21	107-13-1	
Allyl chloride	ND	ug/L	4.0	1		06/09/09 10:21	107-05-1	
Benzene	ND	ug/L	1.0	1		06/09/09 10:21	71-43-2	
Bromobenzene	ND	ug/L	1.0	1		06/09/09 10:21	108-86-1	
Bromochloromethane	ND	ug/L	1.0	1		06/09/09 10:21	74-97-5	
Bromodichloromethane	ND	ug/L	4.0	1		06/09/09 10:21	75-27-4	
Bromoform	ND	ug/L	8.0	1		06/09/09 10:21	75-25-2	
Bromomethane	ND	ug/L	4.0	1		06/09/09 10:21	74-83-9	
2-Butanone (MEK)	**1670**	ug/L	200	50		06/09/09 18:47	78-93-3	
n-Butylbenzene	ND	ug/L	1.0	1		06/09/09 10:21	104-51-8	
sec-Butylbenzene	ND	ug/L	1.0	1		06/09/09 10:21	135-98-8	
tert-Butylbenzene	ND	ug/L	1.0	1		06/09/09 10:21	98-06-6	
Carbon disulfide	ND	ug/L	1.0	1		06/09/09 10:21	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		06/09/09 10:21	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		06/09/09 10:21	108-90-7	
Chloroethane	ND	ug/L	1.0	1		06/09/09 10:21	75-00-3	
2-Chloroethylvinyl ether	ND	ug/L	25.0	1		06/09/09 10:21	110-75-8	
Chloroform	ND	ug/L	1.0	1		06/09/09 10:21	67-66-3	
Chloromethane	ND	ug/L	1.0	1		06/09/09 10:21	74-87-3	
Chloroprene	ND	ug/L	1.0	1		06/09/09 10:21	126-99-8	
2-Chlorotoluene	ND	ug/L	1.0	1		06/09/09 10:21	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	1		06/09/09 10:21	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	4.0	1		06/09/09 10:21	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		06/09/09 10:21	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		06/09/09 10:21	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		06/09/09 10:21	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		06/09/09 10:21	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		06/09/09 10:21	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		06/09/09 10:21	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		06/09/09 10:21	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	1		06/09/09 10:21	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		06/09/09 10:21	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		06/09/09 10:21	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		06/09/09 10:21	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		06/09/09 10:21	156-60-5	
Dichlorofluoromethane	ND	ug/L	1.0	1		06/09/09 10:21	75-43-4	
1,2-Dichloropropane	ND	ug/L	1.0	1		06/09/09 10:21	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	1		06/09/09 10:21	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	1		06/09/09 10:21	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	1		06/09/09 10:21	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	4.0	1		06/09/09 10:21	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	4.0	1		06/09/09 10:21	10061-02-6	
Diethyl ether (Ethyl ether)	ND	ug/L	4.0	1		06/09/09 10:21	60-29-7	
Ethylbenzene	ND	ug/L	1.0	1		06/09/09 10:21	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	4.0	1		06/09/09 10:21	87-68-3	

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ANALYTICAL RESULTS

Project: CRC
Pace Project No.: 1096635

Sample: AS EFFLUENT **Lab ID: 1096635001** Collected: 06/04/09 17:25 Received: 06/05/09 16:16 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
624 MSV	Analytical Method: EPA 624							
2-Hexanone	ND	ug/L	4.0	1		06/09/09 10:21	591-78-6	
Iodomethane	ND	ug/L	4.0	1		06/09/09 10:21	74-88-4	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	1		06/09/09 10:21	98-82-8	
p-Isopropyltoluene	ND	ug/L	1.0	1		06/09/09 10:21	99-87-6	
Methylene Chloride	ND	ug/L	4.0	1		06/09/09 10:21	75-09-2	
2-Methylnaphthalene	ND	ug/L	5.0	1		06/09/09 10:21	91-57-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1		06/09/09 10:21	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		06/09/09 10:21	1634-04-4	
Naphthalene	ND	ug/L	4.0	1		06/09/09 10:21	91-20-3	
n-Propylbenzene	ND	ug/L	1.0	1		06/09/09 10:21	103-65-1	
Styrene	ND	ug/L	1.0	1		06/09/09 10:21	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		06/09/09 10:21	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		06/09/09 10:21	79-34-5	
Tetrachloroethene	**33.8**	ug/L	1.0	1		06/09/09 10:21	127-18-4	
Tetrahydrofuran	**6300**	ug/L	500	50		06/09/09 18:47	109-99-9	
Toluene	ND	ug/L	1.0	1		06/09/09 10:21	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		06/09/09 10:21	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		06/09/09 10:21	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		06/09/09 10:21	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	4.0	1		06/09/09 10:21	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		06/09/09 10:21	79-01-6	
Trichlorofluoromethane	ND	ug/L	4.0	1		06/09/09 10:21	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		06/09/09 10:21	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		06/09/09 10:21	76-13-1	
1,2,4-Trimethylbenzene	ND	ug/L	1.0	1		06/09/09 10:21	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	1.0	1		06/09/09 10:21	108-67-8	
Vinyl acetate	ND	ug/L	20.0	1		06/09/09 10:21	108-05-4	
Vinyl chloride	ND	ug/L	0.40	1		06/09/09 10:21	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1		06/09/09 10:21	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	1		06/09/09 10:21	1330-20-7	
o-Xylene	ND	ug/L	1.0	1		06/09/09 10:21	95-47-6	
Dibromofluoromethane (S)	103	%	75-125	1		06/09/09 10:21	1868-53-7	
4-Bromofluorobenzene (S)	112	%	75-125	1		06/09/09 10:21	460-00-4	
Toluene-d8 (S)	96	%	75-125	1		06/09/09 10:21	2037-26-5	
1,2-Dichloroethane-d4 (S)	110	%	75-125	1		06/09/09 10:21	17060-07-0	

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ANALYTICAL RESULTS

Project: CRC
Pace Project No.: 1096635

Sample: AS INFLUENT **Lab ID: 1096635002** Collected: 06/04/09 17:00 Received: 06/05/09 16:16 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
624 MSV	Analytical Method: EPA 624							
Acetone	ND	ug/L	500	50		06/09/09 19:28	67-64-1	
Acrolein	ND	ug/L	2000	50		06/09/09 19:28	107-02-8	
Acrylonitrile	ND	ug/L	500	50		06/09/09 19:28	107-13-1	
Allyl chloride	ND	ug/L	200	50		06/09/09 19:28	107-05-1	
Benzene	ND	ug/L	50.0	50		06/09/09 19:28	71-43-2	
Bromobenzene	ND	ug/L	50.0	50		06/09/09 19:28	108-86-1	
Bromochloromethane	ND	ug/L	50.0	50		06/09/09 19:28	74-97-5	
Bromodichloromethane	ND	ug/L	200	50		06/09/09 19:28	75-27-4	
Bromoform	ND	ug/L	400	50		06/09/09 19:28	75-25-2	
Bromomethane	ND	ug/L	200	50		06/09/09 19:28	74-83-9	
2-Butanone (MEK)	ND	ug/L	200	50		06/09/09 19:28	78-93-3	
n-Butylbenzene	ND	ug/L	50.0	50		06/09/09 19:28	104-51-8	
sec-Butylbenzene	ND	ug/L	50.0	50		06/09/09 19:28	135-98-8	
tert-Butylbenzene	ND	ug/L	50.0	50		06/09/09 19:28	98-06-6	
Carbon disulfide	ND	ug/L	50.0	50		06/09/09 19:28	75-15-0	
Carbon tetrachloride	ND	ug/L	50.0	50		06/09/09 19:28	56-23-5	
Chlorobenzene	ND	ug/L	50.0	50		06/09/09 19:28	108-90-7	
Chloroethane	ND	ug/L	50.0	50		06/09/09 19:28	75-00-3	
2-Chloroethylvinyl ether	ND	ug/L	1250	50		06/09/09 19:28	110-75-8	M0
Chloroform	ND	ug/L	50.0	50		06/09/09 19:28	67-66-3	
Chloromethane	ND	ug/L	50.0	50		06/09/09 19:28	74-87-3	
Chloroprene	ND	ug/L	50.0	50		06/09/09 19:28	126-99-8	
2-Chlorotoluene	ND	ug/L	50.0	50		06/09/09 19:28	95-49-8	
4-Chlorotoluene	ND	ug/L	50.0	50		06/09/09 19:28	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	200	50		06/09/09 19:28	96-12-8	
Dibromochloromethane	ND	ug/L	50.0	50		06/09/09 19:28	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	50.0	50		06/09/09 19:28	106-93-4	
Dibromomethane	ND	ug/L	50.0	50		06/09/09 19:28	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	50.0	50		06/09/09 19:28	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	50.0	50		06/09/09 19:28	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	50.0	50		06/09/09 19:28	106-46-7	
Dichlorodifluoromethane	ND	ug/L	50.0	50		06/09/09 19:28	75-71-8	
1,1-Dichloroethane	ND	ug/L	50.0	50		06/09/09 19:28	75-34-3	
1,2-Dichloroethane	ND	ug/L	50.0	50		06/09/09 19:28	107-06-2	
1,1-Dichloroethene	ND	ug/L	50.0	50		06/09/09 19:28	75-35-4	
cis-1,2-Dichloroethene	**62.9**	ug/L	50.0	50		06/09/09 19:28	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	50.0	50		06/09/09 19:28	156-60-5	
Dichlorofluoromethane	ND	ug/L	50.0	50		06/09/09 19:28	75-43-4	
1,2-Dichloropropane	ND	ug/L	50.0	50		06/09/09 19:28	78-87-5	
1,3-Dichloropropane	ND	ug/L	50.0	50		06/09/09 19:28	142-28-9	
2,2-Dichloropropane	ND	ug/L	50.0	50		06/09/09 19:28	594-20-7	
1,1-Dichloropropene	ND	ug/L	50.0	50		06/09/09 19:28	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	200	50		06/09/09 19:28	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	200	50		06/09/09 19:28	10061-02-6	
Diethyl ether (Ethyl ether)	ND	ug/L	200	50		06/09/09 19:28	60-29-7	
Ethylbenzene	ND	ug/L	50.0	50		06/09/09 19:28	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	200	50		06/09/09 19:28	87-68-3	

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ANALYTICAL RESULTS

Project: CRC
Pace Project No.: 1096635

Sample: AS INFLUENT **Lab ID: 1096635002** Collected: 06/04/09 17:00 Received: 06/05/09 16:16 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
624 MSV	Analytical Method: EPA 624							
2-Hexanone	ND	ug/L	200	50		06/09/09 19:28	591-78-6	
Iodomethane	ND	ug/L	200	50		06/09/09 19:28	74-88-4	
Isopropylbenzene (Cumene)	ND	ug/L	50.0	50		06/09/09 19:28	98-82-8	
p-Isopropyltoluene	ND	ug/L	50.0	50		06/09/09 19:28	99-87-6	
Methylene Chloride	ND	ug/L	200	50		06/09/09 19:28	75-09-2	
2-Methylnaphthalene	ND	ug/L	250	50		06/09/09 19:28	91-57-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	250	50		06/09/09 19:28	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	50.0	50		06/09/09 19:28	1634-04-4	
Naphthalene	ND	ug/L	200	50		06/09/09 19:28	91-20-3	
n-Propylbenzene	ND	ug/L	50.0	50		06/09/09 19:28	103-65-1	
Styrene	ND	ug/L	50.0	50		06/09/09 19:28	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	50.0	50		06/09/09 19:28	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	50.0	50		06/09/09 19:28	79-34-5	
Tetrachloroethene	**3970**	ug/L	50.0	50		06/09/09 19:28	127-18-4	M0
Tetrahydrofuran	**543**	ug/L	500	50		06/09/09 19:28	109-99-9	
Toluene	ND	ug/L	50.0	50		06/09/09 19:28	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	50.0	50		06/09/09 19:28	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	50.0	50		06/09/09 19:28	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	50.0	50		06/09/09 19:28	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	200	50		06/09/09 19:28	79-00-5	
Trichloroethene	ND	ug/L	50.0	50		06/09/09 19:28	79-01-6	
Trichlorofluoromethane	ND	ug/L	200	50		06/09/09 19:28	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	50.0	50		06/09/09 19:28	96-18-4	
1,1,2-Trichlorotrifluoroethane	**53.7**	ug/L	50.0	50		06/09/09 19:28	76-13-1	
1,2,4-Trimethylbenzene	ND	ug/L	50.0	50		06/09/09 19:28	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	50.0	50		06/09/09 19:28	108-67-8	
Vinyl acetate	ND	ug/L	1000	50		06/09/09 19:28	108-05-4	
Vinyl chloride	ND	ug/L	20.0	50		06/09/09 19:28	75-01-4	
Xylene (Total)	ND	ug/L	150	50		06/09/09 19:28	1330-20-7	
m&p-Xylene	ND	ug/L	100	50		06/09/09 19:28	1330-20-7	
o-Xylene	ND	ug/L	50.0	50		06/09/09 19:28	95-47-6	
Dibromofluoromethane (S)	108	%	75-125	50		06/09/09 19:28	1868-53-7	
4-Bromofluorobenzene (S)	104	%	75-125	50		06/09/09 19:28	460-00-4	
Toluene-d8 (S)	98	%	75-125	50		06/09/09 19:28	2037-26-5	
1,2-Dichloroethane-d4 (S)	118	%	75-125	50		06/09/09 19:28	17060-07-0	

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ANALYTICAL RESULTS

Project: CRC
Pace Project No.: 1096635

Sample: Trip Blank **Lab ID: 1096635003** Collected: Received: 06/05/09 16:16 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
624 MSV	Analytical Method: EPA 624							
Acetone	ND	ug/L	10.0	1		06/09/09 01:34	67-64-1	
Acrolein	ND	ug/L	40.0	1		06/09/09 01:34	107-02-8	
Acrylonitrile	ND	ug/L	10.0	1		06/09/09 01:34	107-13-1	
Allyl chloride	ND	ug/L	4.0	1		06/09/09 01:34	107-05-1	
Benzene	ND	ug/L	1.0	1		06/09/09 01:34	71-43-2	
Bromobenzene	ND	ug/L	1.0	1		06/09/09 01:34	108-86-1	
Bromochloromethane	ND	ug/L	1.0	1		06/09/09 01:34	74-97-5	
Bromodichloromethane	ND	ug/L	4.0	1		06/09/09 01:34	75-27-4	
Bromoform	ND	ug/L	8.0	1		06/09/09 01:34	75-25-2	
Bromomethane	ND	ug/L	4.0	1		06/09/09 01:34	74-83-9	
2-Butanone (MEK)	ND	ug/L	4.0	1		06/09/09 01:34	78-93-3	
n-Butylbenzene	ND	ug/L	1.0	1		06/09/09 01:34	104-51-8	
sec-Butylbenzene	ND	ug/L	1.0	1		06/09/09 01:34	135-98-8	
tert-Butylbenzene	ND	ug/L	1.0	1		06/09/09 01:34	98-06-6	
Carbon disulfide	ND	ug/L	1.0	1		06/09/09 01:34	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		06/09/09 01:34	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		06/09/09 01:34	108-90-7	
Chloroethane	ND	ug/L	1.0	1		06/09/09 01:34	75-00-3	
2-Chloroethylvinyl ether	ND	ug/L	25.0	1		06/09/09 01:34	110-75-8	
Chloroform	ND	ug/L	1.0	1		06/09/09 01:34	67-66-3	
Chloromethane	ND	ug/L	1.0	1		06/09/09 01:34	74-87-3	
Chloroprene	ND	ug/L	1.0	1		06/09/09 01:34	126-99-8	
2-Chlorotoluene	ND	ug/L	1.0	1		06/09/09 01:34	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	1		06/09/09 01:34	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	4.0	1		06/09/09 01:34	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		06/09/09 01:34	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		06/09/09 01:34	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		06/09/09 01:34	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		06/09/09 01:34	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		06/09/09 01:34	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		06/09/09 01:34	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		06/09/09 01:34	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	1		06/09/09 01:34	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		06/09/09 01:34	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		06/09/09 01:34	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		06/09/09 01:34	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		06/09/09 01:34	156-60-5	
Dichlorofluoromethane	ND	ug/L	1.0	1		06/09/09 01:34	75-43-4	
1,2-Dichloropropane	ND	ug/L	1.0	1		06/09/09 01:34	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	1		06/09/09 01:34	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	1		06/09/09 01:34	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	1		06/09/09 01:34	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	4.0	1		06/09/09 01:34	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	4.0	1		06/09/09 01:34	10061-02-6	
Diethyl ether (Ethyl ether)	ND	ug/L	4.0	1		06/09/09 01:34	60-29-7	
Ethylbenzene	ND	ug/L	1.0	1		06/09/09 01:34	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	4.0	1		06/09/09 01:34	87-68-3	

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ANALYTICAL RESULTS

Project: CRC
Pace Project No.: 1096635

Sample: Trip Blank **Lab ID: 1096635003** Collected: Received: 06/05/09 16:16 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
624 MSV	Analytical Method: EPA 624							
2-Hexanone	ND	ug/L	4.0	1		06/09/09 01:34	591-78-6	
Iodomethane	ND	ug/L	4.0	1		06/09/09 01:34	74-88-4	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	1		06/09/09 01:34	98-82-8	
p-Isopropyltoluene	ND	ug/L	1.0	1		06/09/09 01:34	99-87-6	
Methylene Chloride	ND	ug/L	4.0	1		06/09/09 01:34	75-09-2	
2-Methylnaphthalene	ND	ug/L	5.0	1		06/09/09 01:34	91-57-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1		06/09/09 01:34	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		06/09/09 01:34	1634-04-4	
Naphthalene	ND	ug/L	4.0	1		06/09/09 01:34	91-20-3	
n-Propylbenzene	ND	ug/L	1.0	1		06/09/09 01:34	103-65-1	
Styrene	ND	ug/L	1.0	1		06/09/09 01:34	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		06/09/09 01:34	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		06/09/09 01:34	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		06/09/09 01:34	127-18-4	
Tetrahydrofuran	ND	ug/L	10.0	1		06/09/09 01:34	109-99-9	
Toluene	ND	ug/L	1.0	1		06/09/09 01:34	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		06/09/09 01:34	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		06/09/09 01:34	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		06/09/09 01:34	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	4.0	1		06/09/09 01:34	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		06/09/09 01:34	79-01-6	
Trichlorofluoromethane	ND	ug/L	4.0	1		06/09/09 01:34	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		06/09/09 01:34	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		06/09/09 01:34	76-13-1	
1,2,4-Trimethylbenzene	ND	ug/L	1.0	1		06/09/09 01:34	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	1.0	1		06/09/09 01:34	108-67-8	
Vinyl acetate	ND	ug/L	20.0	1		06/09/09 01:34	108-05-4	
Vinyl chloride	ND	ug/L	0.40	1		06/09/09 01:34	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1		06/09/09 01:34	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	1		06/09/09 01:34	1330-20-7	
o-Xylene	ND	ug/L	1.0	1		06/09/09 01:34	95-47-6	
Dibromofluoromethane (S)	107	%	75-125	1		06/09/09 01:34	1868-53-7	
4-Bromofluorobenzene (S)	108	%	75-125	1		06/09/09 01:34	460-00-4	
Toluene-d8 (S)	98	%	75-125	1		06/09/09 01:34	2037-26-5	
1,2-Dichloroethane-d4 (S)	118	%	75-125	1		06/09/09 01:34	17060-07-0	

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QUALITY CONTROL DATA

Project: CRC
Pace Project No.: 1096635

QC Batch: MSV/12398 Analysis Method: EPA 624
QC Batch Method: EPA 624 Analysis Description: 624 MSV
Associated Lab Samples: 1096635001, 1096635003

METHOD BLANK: 632412 Matrix: Water
Associated Lab Samples: 1096635001, 1096635003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	1.0	06/09/09 00:53	
1,1,1-Trichloroethane	ug/L	ND	1.0	06/09/09 00:53	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	06/09/09 00:53	
1,1,2-Trichloroethane	ug/L	ND	4.0	06/09/09 00:53	
1,1,2-Trichlorotrifluoroethane	ug/L	ND	1.0	06/09/09 00:53	
1,1-Dichloroethane	ug/L	ND	1.0	06/09/09 00:53	
1,1-Dichloroethene	ug/L	ND	1.0	06/09/09 00:53	
1,1-Dichloropropene	ug/L	ND	1.0	06/09/09 00:53	
1,2,3-Trichlorobenzene	ug/L	ND	1.0	06/09/09 00:53	
1,2,3-Trichloropropane	ug/L	ND	1.0	06/09/09 00:53	
1,2,4-Trichlorobenzene	ug/L	ND	1.0	06/09/09 00:53	
1,2,4-Trimethylbenzene	ug/L	ND	1.0	06/09/09 00:53	
1,2-Dibromo-3-chloropropane	ug/L	ND	4.0	06/09/09 00:53	
1,2-Dibromoethane (EDB)	ug/L	ND	1.0	06/09/09 00:53	
1,2-Dichlorobenzene	ug/L	ND	1.0	06/09/09 00:53	
1,2-Dichloroethane	ug/L	ND	1.0	06/09/09 00:53	
1,2-Dichloropropane	ug/L	ND	1.0	06/09/09 00:53	
1,3,5-Trimethylbenzene	ug/L	ND	1.0	06/09/09 00:53	
1,3-Dichlorobenzene	ug/L	ND	1.0	06/09/09 00:53	
1,3-Dichloropropane	ug/L	ND	1.0	06/09/09 00:53	
1,4-Dichlorobenzene	ug/L	ND	1.0	06/09/09 00:53	
2,2-Dichloropropane	ug/L	ND	1.0	06/09/09 00:53	
2-Butanone (MEK)	ug/L	ND	4.0	06/09/09 00:53	
2-Chloroethylvinyl ether	ug/L	ND	25.0	06/09/09 00:53	
2-Chlorotoluene	ug/L	ND	1.0	06/09/09 00:53	
2-Hexanone	ug/L	ND	4.0	06/09/09 00:53	
2-Methylnaphthalene	ug/L	ND	5.0	06/09/09 00:53	
4-Chlorotoluene	ug/L	ND	1.0	06/09/09 00:53	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	5.0	06/09/09 00:53	
Acetone	ug/L	ND	10.0	06/09/09 00:53	
Acrolein	ug/L	ND	40.0	06/09/09 00:53	
Acrylonitrile	ug/L	ND	10.0	06/09/09 00:53	
Allyl chloride	ug/L	ND	4.0	06/09/09 00:53	
Benzene	ug/L	ND	1.0	06/09/09 00:53	
Bromobenzene	ug/L	ND	1.0	06/09/09 00:53	
Bromochloromethane	ug/L	ND	1.0	06/09/09 00:53	
Bromodichloromethane	ug/L	ND	4.0	06/09/09 00:53	
Bromoform	ug/L	ND	8.0	06/09/09 00:53	
Bromomethane	ug/L	ND	4.0	06/09/09 00:53	
Carbon disulfide	ug/L	ND	1.0	06/09/09 00:53	
Carbon tetrachloride	ug/L	ND	1.0	06/09/09 00:53	
Chlorobenzene	ug/L	ND	1.0	06/09/09 00:53	
Chloroethane	ug/L	ND	1.0	06/09/09 00:53	

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QUALITY CONTROL DATA

Project: CRC
Pace Project No.: 1096635

METHOD BLANK: 632412 Matrix: Water

Associated Lab Samples: 1096635001, 1096635003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloroform	ug/L	ND	1.0	06/09/09 00:53	
Chloromethane	ug/L	ND	1.0	06/09/09 00:53	
Chloroprene	ug/L	ND	1.0	06/09/09 00:53	
cis-1,2-Dichloroethene	ug/L	ND	1.0	06/09/09 00:53	
cis-1,3-Dichloropropene	ug/L	ND	4.0	06/09/09 00:53	
Dibromochloromethane	ug/L	ND	1.0	06/09/09 00:53	
Dibromomethane	ug/L	ND	1.0	06/09/09 00:53	
Dichlorodifluoromethane	ug/L	ND	1.0	06/09/09 00:53	
Dichlorofluoromethane	ug/L	ND	1.0	06/09/09 00:53	
Diethyl ether (Ethyl ether)	ug/L	ND	4.0	06/09/09 00:53	
Ethylbenzene	ug/L	ND	1.0	06/09/09 00:53	
Hexachloro-1,3-butadiene	ug/L	ND	4.0	06/09/09 00:53	
Iodomethane	ug/L	ND	4.0	06/09/09 00:53	
Isopropylbenzene (Cumene)	ug/L	ND	1.0	06/09/09 00:53	
m&p-Xylene	ug/L	ND	2.0	06/09/09 00:53	
Methyl-tert-butyl ether	ug/L	ND	1.0	06/09/09 00:53	
Methylene Chloride	ug/L	ND	4.0	06/09/09 00:53	
n-Butylbenzene	ug/L	ND	1.0	06/09/09 00:53	
n-Propylbenzene	ug/L	ND	1.0	06/09/09 00:53	
Naphthalene	ug/L	ND	4.0	06/09/09 00:53	
o-Xylene	ug/L	ND	1.0	06/09/09 00:53	
p-Isopropyltoluene	ug/L	ND	1.0	06/09/09 00:53	
sec-Butylbenzene	ug/L	ND	1.0	06/09/09 00:53	
Styrene	ug/L	ND	1.0	06/09/09 00:53	
tert-Butylbenzene	ug/L	ND	1.0	06/09/09 00:53	
Tetrachloroethene	ug/L	ND	1.0	06/09/09 00:53	
Tetrahydrofuran	ug/L	ND	10.0	06/09/09 00:53	
Toluene	ug/L	ND	1.0	06/09/09 00:53	
trans-1,2-Dichloroethene	ug/L	ND	1.0	06/09/09 00:53	
trans-1,3-Dichloropropene	ug/L	ND	4.0	06/09/09 00:53	
Trichloroethene	ug/L	ND	1.0	06/09/09 00:53	
Trichlorofluoromethane	ug/L	ND	4.0	06/09/09 00:53	
Vinyl acetate	ug/L	ND	20.0	06/09/09 00:53	
Vinyl chloride	ug/L	ND	0.40	06/09/09 00:53	
Xylene (Total)	ug/L	ND	3.0	06/09/09 00:53	
1,2-Dichloroethane-d4 (S)	%	109	75-125	06/09/09 00:53	
4-Bromofluorobenzene (S)	%	100	75-125	06/09/09 00:53	
Dibromofluoromethane (S)	%	106	75-125	06/09/09 00:53	
Toluene-d8 (S)	%	98	75-125	06/09/09 00:53	

LABORATORY CONTROL SAMPLE: 632413

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	20	19.3	97	75-129	
1,1,1-Trichloroethane	ug/L	20	19.7	98	73-144	

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QUALITY CONTROL DATA

Project: CRC
Pace Project No.: 1096635

LABORATORY CONTROL SAMPLE: 632413

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,2,2-Tetrachloroethane	ug/L	20	20.1	101	75-125	
1,1,2-Trichloroethane	ug/L	20	19.6	98	75-125	
1,1,2-Trichlorotrifluoroethane	ug/L	20	21.6	108	75-143	
1,1-Dichloroethane	ug/L	20	20.0	100	75-135	
1,1-Dichloroethene	ug/L	20	19.6	98	75-133	
1,1-Dichloropropene	ug/L	20	19.4	97	75-131	
1,2,3-Trichlorobenzene	ug/L	20	20.3	102	73-141	
1,2,3-Trichloropropane	ug/L	20	20.2	101	75-126	
1,2,4-Trichlorobenzene	ug/L	20	19.3	96	70-148	
1,2,4-Trimethylbenzene	ug/L	20	19.4	97	75-141	
1,2-Dibromo-3-chloropropane	ug/L	20	20.4	102	64-135	
1,2-Dibromoethane (EDB)	ug/L	20	19.2	96	75-125	
1,2-Dichlorobenzene	ug/L	20	19.5	97	75-125	
1,2-Dichloroethane	ug/L	20	20.8	104	75-136	
1,2-Dichloropropane	ug/L	20	20.3	101	75-130	
1,3,5-Trimethylbenzene	ug/L	20	20.0	100	75-141	
1,3-Dichlorobenzene	ug/L	20	19.1	95	75-125	
1,3-Dichloropropane	ug/L	20	20.0	100	75-125	
1,4-Dichlorobenzene	ug/L	20	18.9	95	75-125	
2,2-Dichloropropane	ug/L	20	18.5	92	50-150	
2-Butanone (MEK)	ug/L	20	19.3	97	58-138	
2-Chloroethylvinyl ether	ug/L	50	49.3	99	50-150	
2-Chlorotoluene	ug/L	20	19.8	99	75-132	
2-Hexanone	ug/L	20	20.0	100	65-135	
2-Methylnaphthalene	ug/L	20	18.3	92	62-150	
4-Chlorotoluene	ug/L	20	19.8	99	75-135	
4-Methyl-2-pentanone (MIBK)	ug/L	20	19.4	97	69-137	
Acetone	ug/L	50	46.7	93	52-141	
Acrolein	ug/L	200	216	108	50-150	
Acrylonitrile	ug/L	200	212	106	75-130	
Allyl chloride	ug/L	20	18.6	93	68-150	
Benzene	ug/L	20	19.7	99	75-125	
Bromobenzene	ug/L	20	19.0	95	75-125	
Bromochloromethane	ug/L	20	20.5	102	75-129	
Bromodichloromethane	ug/L	20	20.3	102	75-142	
Bromoform	ug/L	40	38.9	97	66-135	
Bromomethane	ug/L	20	18.4	92	57-150	
Carbon disulfide	ug/L	20	18.7	94	65-132	
Carbon tetrachloride	ug/L	20	19.9	100	75-148	
Chlorobenzene	ug/L	20	19.0	95	75-125	
Chloroethane	ug/L	20	19.7	99	66-142	
Chloroform	ug/L	20	19.9	100	75-131	
Chloromethane	ug/L	20	20.1	101	52-147	
Chloroprene	ug/L	20	19.9	99	71-147	
cis-1,2-Dichloroethene	ug/L	20	19.6	98	75-126	
cis-1,3-Dichloropropene	ug/L	20	19.8	99	69-150	
Dibromochloromethane	ug/L	20	19.1	95	73-138	
Dibromomethane	ug/L	20	19.9	99	75-127	

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QUALITY CONTROL DATA

Project: CRC
Pace Project No.: 1096635

LABORATORY CONTROL SAMPLE: 632413

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Dichlorodifluoromethane	ug/L	20	23.0	115	50-150	
Dichlorofluoromethane	ug/L	20	20.2	101	75-129	
Diethyl ether (Ethyl ether)	ug/L	20	19.8	99	75-126	
Ethylbenzene	ug/L	20	19.2	96	75-132	
Hexachloro-1,3-butadiene	ug/L	20	20.1	101	75-129	
Iodomethane	ug/L	20	18.5	93	73-150	
Isopropylbenzene (Cumene)	ug/L	20	17.9	90	75-142	
m&p-Xylene	ug/L	40	38.7	97	75-131	
Methyl-tert-butyl ether	ug/L	20	20.5	102	75-130	
Methylene Chloride	ug/L	20	18.9	94	71-125	
n-Butylbenzene	ug/L	20	18.0	90	70-148	
n-Propylbenzene	ug/L	20	19.7	98	75-136	
Naphthalene	ug/L	20	20.4	102	69-145	
o-Xylene	ug/L	20	19.2	96	75-129	
p-Isopropyltoluene	ug/L	20	19.4	97	75-132	
sec-Butylbenzene	ug/L	20	18.6	93	75-136	
Styrene	ug/L	20	19.5	97	75-125	
tert-Butylbenzene	ug/L	20	20.2	101	75-135	
Tetrachloroethene	ug/L	20	18.3	92	75-125	
Tetrahydrofuran	ug/L	200	212	106	63-144	
Toluene	ug/L	20	19.2	96	75-125	
trans-1,2-Dichloroethene	ug/L	20	19.3	97	72-135	
trans-1,3-Dichloropropene	ug/L	20	19.5	97	62-150	
Trichloroethene	ug/L	20	19.2	96	75-125	
Trichlorofluoromethane	ug/L	20	20.8	104	67-150	
Vinyl acetate	ug/L	20	20.3	102	55-150	
Vinyl chloride	ug/L	20	20.5	103	63-147	
Xylene (Total)	ug/L	60	57.9	96	75-130	
1,2-Dichloroethane-d4 (S)	%			107	75-125	
4-Bromofluorobenzene (S)	%			105	75-125	
Dibromofluoromethane (S)	%			99	75-125	
Toluene-d8 (S)	%			101	75-125	

MATRIX SPIKE SAMPLE: 632604

Parameter	Units	1096487004 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	20	19.3	97	70-136	
1,1,1-Trichloroethane	ug/L	ND	20	21.0	105	68-150	
1,1,2,2-Tetrachloroethane	ug/L	ND	20	20.2	101	75-125	
1,1,2-Trichloroethane	ug/L	ND	20	19.6	98	75-125	
1,1,2-Trichlorotrifluoroethane	ug/L	ND	20	25.0	125	75-150	
1,1-Dichloroethane	ug/L	ND	20	21.2	106	67-143	
1,1-Dichloroethene	ug/L	ND	20	20.6	103	75-147	
1,1-Dichloropropene	ug/L	ND	20	20.7	104	75-141	
1,2,3-Trichlorobenzene	ug/L	ND	20	19.6	98	71-141	
1,2,3-Trichloropropane	ug/L	ND	20	19.3	97	75-128	
1,2,4-Trichlorobenzene	ug/L	ND	20	19.5	98	61-148	

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QUALITY CONTROL DATA

Project: CRC
Pace Project No.: 1096635

MATRIX SPIKE SAMPLE: 632604

Parameter	Units	1096487004 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,2,4-Trimethylbenzene	ug/L	ND	20	14.9	75	65-145	
1,2-Dibromo-3-chloropropane	ug/L	ND	20	19.9	100	64-135	
1,2-Dibromoethane (EDB)	ug/L	ND	20	19.1	95	75-126	
1,2-Dichlorobenzene	ug/L	ND	20	19.6	98	75-127	
1,2-Dichloroethane	ug/L	ND	20	20.4	102	70-138	
1,2-Dichloropropane	ug/L	ND	20	19.9	100	75-130	
1,3,5-Trimethylbenzene	ug/L	ND	20	13.7	68	61-150	
1,3-Dichlorobenzene	ug/L	ND	20	19.1	96	75-126	
1,3-Dichloropropane	ug/L	ND	20	19.7	98	75-125	
1,4-Dichlorobenzene	ug/L	ND	20	19.0	95	75-125	
2,2-Dichloropropane	ug/L	ND	20	19.4	97	50-150	
2-Butanone (MEK)	ug/L	ND	20	18.0	90	50-141	
2-Chloroethylvinyl ether	ug/L	ND	50	ND	0	50-150	M0
2-Chlorotoluene	ug/L	ND	20	20.5	103	75-137	
2-Hexanone	ug/L	ND	20	18.2	91	66-135	
2-Methylnaphthalene	ug/L	ND	20	17.6	88	62-150	
4-Chlorotoluene	ug/L	ND	20	19.5	98	70-144	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	20	18.1	91	62-142	
Acetone	ug/L	ND	50	42.6	85	50-150	
Acrolein	ug/L	ND	200	160	80	50-150	
Acrylonitrile	ug/L	ND	200	193	97	70-135	
Allyl chloride	ug/L	ND	20	19.1	95	50-150	
Benzene	ug/L	ND	20	20.5	103	75-125	
Bromobenzene	ug/L	ND	20	19.2	96	75-125	
Bromochloromethane	ug/L	ND	20	20.5	103	73-137	
Bromodichloromethane	ug/L	ND	20	19.7	98	70-142	
Bromoform	ug/L	ND	40	36.1	90	55-135	
Bromomethane	ug/L	ND	20	19.1	96	50-150	
Carbon disulfide	ug/L	ND	20	19.2	96	50-150	
Carbon tetrachloride	ug/L	ND	20	21.7	109	64-150	
Chlorobenzene	ug/L	ND	20	19.4	97	75-125	
Chloroethane	ug/L	ND	20	20.7	103	59-150	
Chloroform	ug/L	ND	20	20.3	101	75-132	
Chloromethane	ug/L	ND	20	21.8	109	52-150	
Chloroprene	ug/L	ND	20	16.1	81	54-150	
cis-1,2-Dichloroethene	ug/L	ND	20	20.4	102	64-144	
cis-1,3-Dichloropropene	ug/L	ND	20	18.9	94	56-150	
Dibromochloromethane	ug/L	ND	20	18.5	92	60-138	
Dibromomethane	ug/L	ND	20	19.0	95	75-127	
Dichlorodifluoromethane	ug/L	ND	20	26.9	134	50-150	
Dichlorofluoromethane	ug/L	ND	20	21.1	105	74-142	
Diethyl ether (Ethyl ether)	ug/L	ND	20	19.7	98	75-127	
Ethylbenzene	ug/L	ND	20	19.0	95	75-134	
Hexachloro-1,3-butadiene	ug/L	ND	20	22.2	111	63-150	
Iodomethane	ug/L	ND	20	19.8	99	50-150	
Isopropylbenzene (Cumene)	ug/L	ND	20	18.2	91	69-147	
m&p-Xylene	ug/L	ND	40	34.6	87	75-133	
Methyl-tert-butyl ether	ug/L	ND	20	19.8	99	73-131	

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QUALITY CONTROL DATA

Project: CRC
Pace Project No.: 1096635

MATRIX SPIKE SAMPLE: 632604

Parameter	Units	1096487004 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Methylene Chloride	ug/L	ND	20	19.4	97	68-126	
n-Butylbenzene	ug/L	ND	20	18.3	91	59-150	
n-Propylbenzene	ug/L	ND	20	20.2	101	72-143	
Naphthalene	ug/L	ND	20	19.4	97	57-148	
o-Xylene	ug/L	ND	20	17.6	88	75-131	
p-Isopropyltoluene	ug/L	ND	20	19.2	96	75-137	
sec-Butylbenzene	ug/L	ND	20	19.5	98	75-144	
Styrene	ug/L	ND	20	12.2	61	75-134	M0
tert-Butylbenzene	ug/L	ND	20	21.6	108	68-150	
Tetrachloroethene	ug/L	ND	20	19.5	98	75-130	
Tetrahydrofuran	ug/L	ND	200	196	98	60-148	
Toluene	ug/L	ND	20	19.1	95	75-125	
trans-1,2-Dichloroethene	ug/L	ND	20	20.2	101	75-145	
trans-1,3-Dichloropropene	ug/L	ND	20	19.4	97	50-150	
Trichloroethene	ug/L	ND	20	19.6	98	73-132	
Trichlorofluoromethane	ug/L	ND	20	23.6	118	67-150	
Vinyl acetate	ug/L	ND	20	17.8J	89	50-150	
Vinyl chloride	ug/L	ND	20	22.5	113	63-150	
Xylene (Total)	ug/L	ND	60	52.2	87	72-138	
1,2-Dichloroethane-d4 (S)	%				107	75-125	
4-Bromofluorobenzene (S)	%				105	75-125	
Dibromofluoromethane (S)	%				103	75-125	
Toluene-d8 (S)	%				100	75-125	

SAMPLE DUPLICATE: 632605

Parameter	Units	1096635001 Result	Dup Result	RPD	Max RPD	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	ND		30	
1,1,1-Trichloroethane	ug/L	ND	ND		30	
1,1,2,2-Tetrachloroethane	ug/L	ND	ND		30	
1,1,2-Trichloroethane	ug/L	ND	ND		30	
1,1,2-Trichlorotrifluoroethane	ug/L	ND	ND		30	
1,1-Dichloroethane	ug/L	ND	ND		30	
1,1-Dichloroethene	ug/L	ND	ND		30	
1,1-Dichloropropene	ug/L	ND	ND		30	
1,2,3-Trichlorobenzene	ug/L	ND	ND		30	
1,2,3-Trichloropropane	ug/L	ND	ND		30	
1,2,4-Trichlorobenzene	ug/L	ND	ND		30	
1,2,4-Trimethylbenzene	ug/L	ND	ND		30	
1,2-Dibromo-3-chloropropane	ug/L	ND	ND		30	
1,2-Dibromoethane (EDB)	ug/L	ND	ND		30	
1,2-Dichlorobenzene	ug/L	ND	ND		30	
1,2-Dichloroethane	ug/L	ND	ND		30	
1,2-Dichloropropane	ug/L	ND	ND		30	
1,3,5-Trimethylbenzene	ug/L	ND	ND		30	
1,3-Dichlorobenzene	ug/L	ND	ND		30	
1,3-Dichloropropane	ug/L	ND	ND		30	

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QUALITY CONTROL DATA

Project: CRC
Pace Project No.: 1096635

SAMPLE DUPLICATE: 632605

Parameter	Units	1096635001 Result	Dup Result	RPD	Max RPD	Qualifiers
1,4-Dichlorobenzene	ug/L	ND	ND		30	
2,2-Dichloropropane	ug/L	ND	ND		30	
2-Butanone (MEK)	ug/L	1670	1580	6	30	
2-Chloroethylvinyl ether	ug/L	ND	ND		30	
2-Chlorotoluene	ug/L	ND	ND		30	
2-Hexanone	ug/L	ND	ND		30	
2-Methylnaphthalene	ug/L	ND	ND		30	
4-Chlorotoluene	ug/L	ND	ND		30	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	ND		30	
Acetone	ug/L	987	970	2	30	
Acrolein	ug/L	ND	ND		30	
Acrylonitrile	ug/L	ND	ND		30	
Allyl chloride	ug/L	ND	ND		30	
Benzene	ug/L	ND	ND		30	
Bromobenzene	ug/L	ND	ND		30	
Bromochloromethane	ug/L	ND	ND		30	
Bromodichloromethane	ug/L	ND	ND		30	
Bromoform	ug/L	ND	ND		30	
Bromomethane	ug/L	ND	ND		30	
Carbon disulfide	ug/L	ND	ND		30	
Carbon tetrachloride	ug/L	ND	ND		30	
Chlorobenzene	ug/L	ND	ND		30	
Chloroethane	ug/L	ND	ND		30	
Chloroform	ug/L	ND	ND		30	
Chloromethane	ug/L	ND	ND		30	
Chloroprene	ug/L	ND	ND		30	
cis-1,2-Dichloroethene	ug/L	ND	ND		30	
cis-1,3-Dichloropropene	ug/L	ND	ND		30	
Dibromochloromethane	ug/L	ND	ND		30	
Dibromomethane	ug/L	ND	ND		30	
Dichlorodifluoromethane	ug/L	ND	ND		30	
Dichlorofluoromethane	ug/L	ND	ND		30	
Diethyl ether (Ethyl ether)	ug/L	ND	ND		30	
Ethylbenzene	ug/L	ND	ND		30	
Hexachloro-1,3-butadiene	ug/L	ND	ND		30	
Iodomethane	ug/L	ND	ND		30	
Isopropylbenzene (Cumene)	ug/L	ND	ND		30	
m&p-Xylene	ug/L	ND	ND		30	
Methyl-tert-butyl ether	ug/L	ND	ND		30	
Methylene Chloride	ug/L	ND	ND		30	
n-Butylbenzene	ug/L	ND	ND		30	
n-Propylbenzene	ug/L	ND	ND		30	
Naphthalene	ug/L	ND	ND		30	
o-Xylene	ug/L	ND	ND		30	
p-Isopropyltoluene	ug/L	ND	ND		30	
sec-Butylbenzene	ug/L	ND	ND		30	
Styrene	ug/L	ND	ND		30	
tert-Butylbenzene	ug/L	ND	ND		30	

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QUALITY CONTROL DATA

Project: CRC
Pace Project No.: 1096635

SAMPLE DUPLICATE: 632605

Parameter	Units	1096635001 Result	Dup Result	RPD	Max RPD	Qualifiers
Tetrachloroethene	ug/L	33.8	33.2	2	30	
Tetrahydrofuran	ug/L	6300	6090	3	30	
Toluene	ug/L	ND	ND		30	
trans-1,2-Dichloroethene	ug/L	ND	ND		30	
trans-1,3-Dichloropropene	ug/L	ND	ND		30	
Trichloroethene	ug/L	ND	ND		30	
Trichlorofluoromethane	ug/L	ND	ND		30	
Vinyl acetate	ug/L	ND	ND		30	
Vinyl chloride	ug/L	ND	ND		30	
Xylene (Total)	ug/L	ND	ND		30	
1,2-Dichloroethane-d4 (S)	%	110	108	2		
4-Bromofluorobenzene (S)	%	112	113	1		
Dibromofluoromethane (S)	%	103	99	4		
Toluene-d8 (S)	%	96	97	1		

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QUALITY CONTROL DATA

Project: CRC
Pace Project No.: 1096635

QC Batch: MSV/12401 Analysis Method: EPA 624
QC Batch Method: EPA 624 Analysis Description: 624 MSV
Associated Lab Samples: 1096635002

METHOD BLANK: 632751 Matrix: Water
Associated Lab Samples: 1096635002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	1.0	06/09/09 16:01	
1,1,1-Trichloroethane	ug/L	ND	1.0	06/09/09 16:01	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	06/09/09 16:01	
1,1,2-Trichloroethane	ug/L	ND	4.0	06/09/09 16:01	
1,1,2-Trichlorotrifluoroethane	ug/L	ND	1.0	06/09/09 16:01	
1,1-Dichloroethane	ug/L	ND	1.0	06/09/09 16:01	
1,1-Dichloroethene	ug/L	ND	1.0	06/09/09 16:01	
1,1-Dichloropropene	ug/L	ND	1.0	06/09/09 16:01	
1,2,3-Trichlorobenzene	ug/L	ND	1.0	06/09/09 16:01	
1,2,3-Trichloropropane	ug/L	ND	1.0	06/09/09 16:01	
1,2,4-Trichlorobenzene	ug/L	ND	1.0	06/09/09 16:01	
1,2,4-Trimethylbenzene	ug/L	ND	1.0	06/09/09 16:01	
1,2-Dibromo-3-chloropropane	ug/L	ND	4.0	06/09/09 16:01	
1,2-Dibromoethane (EDB)	ug/L	ND	1.0	06/09/09 16:01	
1,2-Dichlorobenzene	ug/L	ND	1.0	06/09/09 16:01	
1,2-Dichloroethane	ug/L	ND	1.0	06/09/09 16:01	
1,2-Dichloropropane	ug/L	ND	1.0	06/09/09 16:01	
1,3,5-Trimethylbenzene	ug/L	ND	1.0	06/09/09 16:01	
1,3-Dichlorobenzene	ug/L	ND	1.0	06/09/09 16:01	
1,3-Dichloropropane	ug/L	ND	1.0	06/09/09 16:01	
1,4-Dichlorobenzene	ug/L	ND	1.0	06/09/09 16:01	
2,2-Dichloropropane	ug/L	ND	1.0	06/09/09 16:01	
2-Butanone (MEK)	ug/L	ND	4.0	06/09/09 16:01	
2-Chloroethylvinyl ether	ug/L	ND	25.0	06/09/09 16:01	
2-Chlorotoluene	ug/L	ND	1.0	06/09/09 16:01	
2-Hexanone	ug/L	ND	4.0	06/09/09 16:01	
2-Methylnaphthalene	ug/L	ND	5.0	06/09/09 16:01	
4-Chlorotoluene	ug/L	ND	1.0	06/09/09 16:01	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	5.0	06/09/09 16:01	
Acetone	ug/L	ND	10.0	06/09/09 16:01	
Acrolein	ug/L	ND	40.0	06/09/09 16:01	
Acrylonitrile	ug/L	ND	10.0	06/09/09 16:01	
Allyl chloride	ug/L	ND	4.0	06/09/09 16:01	
Benzene	ug/L	ND	1.0	06/09/09 16:01	
Bromobenzene	ug/L	ND	1.0	06/09/09 16:01	
Bromochloromethane	ug/L	ND	1.0	06/09/09 16:01	
Bromodichloromethane	ug/L	ND	4.0	06/09/09 16:01	
Bromoform	ug/L	ND	8.0	06/09/09 16:01	
Bromomethane	ug/L	ND	4.0	06/09/09 16:01	
Carbon disulfide	ug/L	ND	1.0	06/09/09 16:01	
Carbon tetrachloride	ug/L	ND	1.0	06/09/09 16:01	
Chlorobenzene	ug/L	ND	1.0	06/09/09 16:01	
Chloroethane	ug/L	ND	1.0	06/09/09 16:01	

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QUALITY CONTROL DATA

Project: CRC
Pace Project No.: 1096635

METHOD BLANK: 632751 Matrix: Water

Associated Lab Samples: 1096635002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloroform	ug/L	ND	1.0	06/09/09 16:01	
Chloromethane	ug/L	ND	1.0	06/09/09 16:01	
Chloroprene	ug/L	ND	1.0	06/09/09 16:01	
cis-1,2-Dichloroethene	ug/L	ND	1.0	06/09/09 16:01	
cis-1,3-Dichloropropene	ug/L	ND	4.0	06/09/09 16:01	
Dibromochloromethane	ug/L	ND	1.0	06/09/09 16:01	
Dibromomethane	ug/L	ND	1.0	06/09/09 16:01	
Dichlorodifluoromethane	ug/L	ND	1.0	06/09/09 16:01	
Dichlorofluoromethane	ug/L	ND	1.0	06/09/09 16:01	
Diethyl ether (Ethyl ether)	ug/L	ND	4.0	06/09/09 16:01	
Ethylbenzene	ug/L	ND	1.0	06/09/09 16:01	
Hexachloro-1,3-butadiene	ug/L	ND	4.0	06/09/09 16:01	
Iodomethane	ug/L	ND	4.0	06/09/09 16:01	
Isopropylbenzene (Cumene)	ug/L	ND	1.0	06/09/09 16:01	
m&p-Xylene	ug/L	ND	2.0	06/09/09 16:01	
Methyl-tert-butyl ether	ug/L	ND	1.0	06/09/09 16:01	
Methylene Chloride	ug/L	ND	4.0	06/09/09 16:01	
n-Butylbenzene	ug/L	ND	1.0	06/09/09 16:01	
n-Propylbenzene	ug/L	ND	1.0	06/09/09 16:01	
Naphthalene	ug/L	ND	4.0	06/09/09 16:01	
o-Xylene	ug/L	ND	1.0	06/09/09 16:01	
p-Isopropyltoluene	ug/L	ND	1.0	06/09/09 16:01	
sec-Butylbenzene	ug/L	ND	1.0	06/09/09 16:01	
Styrene	ug/L	ND	1.0	06/09/09 16:01	
tert-Butylbenzene	ug/L	ND	1.0	06/09/09 16:01	
Tetrachloroethene	ug/L	ND	1.0	06/09/09 16:01	
Tetrahydrofuran	ug/L	ND	10.0	06/09/09 16:01	
Toluene	ug/L	ND	1.0	06/09/09 16:01	
trans-1,2-Dichloroethene	ug/L	ND	1.0	06/09/09 16:01	
trans-1,3-Dichloropropene	ug/L	ND	4.0	06/09/09 16:01	
Trichloroethene	ug/L	ND	1.0	06/09/09 16:01	
Trichlorofluoromethane	ug/L	ND	4.0	06/09/09 16:01	
Vinyl acetate	ug/L	ND	20.0	06/09/09 16:01	
Vinyl chloride	ug/L	ND	0.40	06/09/09 16:01	
Xylene (Total)	ug/L	ND	3.0	06/09/09 16:01	
1,2-Dichloroethane-d4 (S)	%	113	75-125	06/09/09 16:01	
4-Bromofluorobenzene (S)	%	107	75-125	06/09/09 16:01	
Dibromofluoromethane (S)	%	106	75-125	06/09/09 16:01	
Toluene-d8 (S)	%	98	75-125	06/09/09 16:01	

LABORATORY CONTROL SAMPLE: 632752

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	50	49.2	98	75-129	
1,1,1-Trichloroethane	ug/L	50	45.0	90	73-144	

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QUALITY CONTROL DATA

Project: CRC
Pace Project No.: 1096635

LABORATORY CONTROL SAMPLE: 632752

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,2,2-Tetrachloroethane	ug/L	50	49.4	99	75-125	
1,1,2-Trichloroethane	ug/L	50	49.2	98	75-125	
1,1,2-Trichlorotrifluoroethane	ug/L	50	46.7	93	75-143	
1,1-Dichloroethane	ug/L	50	46.8	94	75-135	
1,1-Dichloroethene	ug/L	50	44.5	89	75-133	
1,1-Dichloropropene	ug/L	50	45.0	90	75-131	
1,2,3-Trichlorobenzene	ug/L	50	50.1	100	73-141	
1,2,3-Trichloropropane	ug/L	50	49.0	98	75-126	
1,2,4-Trichlorobenzene	ug/L	50	50.3	101	70-148	
1,2,4-Trimethylbenzene	ug/L	50	48.0	96	75-141	
1,2-Dibromo-3-chloropropane	ug/L	50	51.3	103	64-135	
1,2-Dibromoethane (EDB)	ug/L	50	49.5	99	75-125	
1,2-Dichlorobenzene	ug/L	50	48.6	97	75-125	
1,2-Dichloroethane	ug/L	50	50.0	100	75-136	
1,2-Dichloropropane	ug/L	50	48.5	97	75-130	
1,3,5-Trimethylbenzene	ug/L	50	47.9	96	75-141	
1,3-Dichlorobenzene	ug/L	50	46.6	93	75-125	
1,3-Dichloropropane	ug/L	50	50.6	101	75-125	
1,4-Dichlorobenzene	ug/L	50	47.3	95	75-125	
2,2-Dichloropropane	ug/L	50	50.4	101	50-150	
2-Butanone (MEK)	ug/L	50	53.1	106	58-138	
2-Chloroethylvinyl ether	ug/L	125	126	100	50-150	
2-Chlorotoluene	ug/L	50	47.0	94	75-132	
2-Hexanone	ug/L	50	51.4	103	65-135	
2-Methylnaphthalene	ug/L	50	52.8	106	62-150	
4-Chlorotoluene	ug/L	50	47.9	96	75-135	
4-Methyl-2-pentanone (MIBK)	ug/L	50	50.7	101	69-137	
Acetone	ug/L	125	138	111	52-141	
Acrolein	ug/L	500	526	105	50-150	
Acrylonitrile	ug/L	500	519	104	75-130	
Allyl chloride	ug/L	50	44.8	90	68-150	
Benzene	ug/L	50	46.6	93	75-125	
Bromobenzene	ug/L	50	46.9	94	75-125	
Bromochloromethane	ug/L	50	49.8	100	75-129	
Bromodichloromethane	ug/L	50	49.3	99	75-142	
Bromoform	ug/L	100	104	104	66-135	
Bromomethane	ug/L	50	43.0	86	57-150	
Carbon disulfide	ug/L	50	42.1	84	65-132	
Carbon tetrachloride	ug/L	50	45.4	91	75-148	
Chlorobenzene	ug/L	50	47.5	95	75-125	
Chloroethane	ug/L	50	43.5	87	66-142	
Chloroform	ug/L	50	46.5	93	75-131	
Chloromethane	ug/L	50	44.3	89	52-147	
Chloroprene	ug/L	50	45.4	91	71-147	
cis-1,2-Dichloroethene	ug/L	50	46.9	94	75-126	
cis-1,3-Dichloropropene	ug/L	50	50.6	101	69-150	
Dibromochloromethane	ug/L	50	50.0	100	73-138	
Dibromomethane	ug/L	50	49.4	99	75-127	

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QUALITY CONTROL DATA

Project: CRC
Pace Project No.: 1096635

LABORATORY CONTROL SAMPLE: 632752

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Dichlorodifluoromethane	ug/L	50	47.4	95	50-150	
Dichlorofluoromethane	ug/L	50	44.9	90	75-129	
Diethyl ether (Ethyl ether)	ug/L	50	48.9	98	75-126	
Ethylbenzene	ug/L	50	47.7	95	75-132	
Hexachloro-1,3-butadiene	ug/L	50	47.1	94	75-129	
Iodomethane	ug/L	50	45.9	92	73-150	
Isopropylbenzene (Cumene)	ug/L	50	44.1	88	75-142	
m&p-Xylene	ug/L	100	96.1	96	75-131	
Methyl-tert-butyl ether	ug/L	50	50.0	100	75-130	
Methylene Chloride	ug/L	50	46.1	92	71-125	
n-Butylbenzene	ug/L	50	43.9	88	70-148	
n-Propylbenzene	ug/L	50	47.1	94	75-136	
Naphthalene	ug/L	50	52.2	104	69-145	
o-Xylene	ug/L	50	48.3	97	75-129	
p-Isopropyltoluene	ug/L	50	47.1	94	75-132	
sec-Butylbenzene	ug/L	50	44.8	90	75-136	
Styrene	ug/L	50	49.7	99	75-125	
tert-Butylbenzene	ug/L	50	47.5	95	75-135	
Tetrachloroethene	ug/L	50	44.2	88	75-125	
Tetrahydrofuran	ug/L	500	519	104	63-144	
Toluene	ug/L	50	46.8	94	75-125	
trans-1,2-Dichloroethene	ug/L	50	44.6	89	72-135	
trans-1,3-Dichloropropene	ug/L	50	53.8	108	62-150	
Trichloroethene	ug/L	50	45.7	91	75-125	
Trichlorofluoromethane	ug/L	50	46.1	92	67-150	
Vinyl acetate	ug/L	50	51.2	102	55-150	
Vinyl chloride	ug/L	50	44.3	89	63-147	
Xylene (Total)	ug/L	150	144	96	75-130	
1,2-Dichloroethane-d4 (S)	%			102	75-125	
4-Bromofluorobenzene (S)	%			100	75-125	
Dibromofluoromethane (S)	%			101	75-125	
Toluene-d8 (S)	%			100	75-125	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 633330 633331

Parameter	Units	1096635002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1,2-Tetrachloroethane	ug/L	ND	1000	1000	1020	978	102	98	70-136	4	30	
1,1,1-Trichloroethane	ug/L	ND	1000	1000	1060	1000	106	100	68-150	6	30	
1,1,2,2-Tetrachloroethane	ug/L	ND	1000	1000	1070	1080	107	108	75-125	2	30	
1,1,2-Trichloroethane	ug/L	ND	1000	1000	1040	999	104	100	75-125	4	30	
1,1,2-Trichlorotrifluoroethane	ug/L	53.7	1000	1000	1280	1180	123	112	75-150	9	30	
1,1-Dichloroethane	ug/L	ND	1000	1000	1090	1050	109	105	67-143	3	30	
1,1-Dichloroethene	ug/L	ND	1000	1000	1060	994	106	99	75-147	6	30	
1,1-Dichloropropene	ug/L	ND	1000	1000	1080	1000	108	100	75-141	7	30	
1,2,3-Trichlorobenzene	ug/L	ND	1000	1000	952	1010	95	101	71-141	6	30	
1,2,3-Trichloropropane	ug/L	ND	1000	1000	1030	1060	103	106	75-128	3	30	

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QUALITY CONTROL DATA

Project: CRC
Pace Project No.: 1096635

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 633330 633331

Parameter	Units	1096635002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,2,4-Trichlorobenzene	ug/L	ND	1000	1000	947	977	95	98	61-148	3	30	
1,2,4-Trimethylbenzene	ug/L	ND	1000	1000	1020	957	102	96	65-145	6	30	
1,2-Dibromo-3-chloropropane	ug/L	ND	1000	1000	1150	1110	115	111	64-135	3	30	
1,2-Dibromoethane (EDB)	ug/L	ND	1000	1000	1010	975	101	97	75-126	3	30	
1,2-Dichlorobenzene	ug/L	ND	1000	1000	973	960	97	96	75-127	1	30	
1,2-Dichloroethane	ug/L	ND	1000	1000	1150	1100	115	110	70-138	4	30	
1,2-Dichloropropane	ug/L	ND	1000	1000	1050	1010	105	101	75-130	4	30	
1,3,5-Trimethylbenzene	ug/L	ND	1000	1000	1040	994	104	99	61-150	5	30	
1,3-Dichlorobenzene	ug/L	ND	1000	1000	975	936	97	94	75-126	4	30	
1,3-Dichloropropane	ug/L	ND	1000	1000	1040	1040	104	104	75-125	1	30	
1,4-Dichlorobenzene	ug/L	ND	1000	1000	983	943	98	94	75-125	4	30	
2,2-Dichloropropane	ug/L	ND	1000	1000	1130	1060	113	106	50-150	7	30	
2-Butanone (MEK)	ug/L	ND	1000	1000	1040	1110	91	98	50-141	6	30	
2-Chloroethylvinyl ether	ug/L	ND	2500	2500	508J	478J	20	19	50-150		30	M0
2-Chlorotoluene	ug/L	ND	1000	1000	1010	972	101	97	75-137	4	30	
2-Hexanone	ug/L	ND	1000	1000	963	1050	96	105	66-135	8	30	
2-Methylnaphthalene	ug/L	ND	1000	1000	777	952	78	95	62-150	20	30	
4-Chlorotoluene	ug/L	ND	1000	1000	1060	1000	106	100	70-144	6	30	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	1000	1000	933	1020	93	102	62-142	9	30	
Acetone	ug/L	ND	2500	2500	2190	2020	87	81	50-150	8	30	
Acrolein	ug/L	ND	10000	10000	9750	9770	98	98	50-150	0	30	
Acrylonitrile	ug/L	ND	10000	10000	10900	11100	109	111	70-135	1	30	
Allyl chloride	ug/L	ND	1000	1000	863	864	86	86	50-150	0	30	
Benzene	ug/L	ND	1000	1000	1070	1000	107	100	75-125	6	30	
Bromobenzene	ug/L	ND	1000	1000	955	931	95	93	75-125	3	30	
Bromochloromethane	ug/L	ND	1000	1000	1040	1060	104	106	73-137	2	30	
Bromodichloromethane	ug/L	ND	1000	1000	1060	1000	106	100	70-142	5	30	
Bromoform	ug/L	ND	2000	2000	1950	1890	98	95	55-135	3	30	
Bromomethane	ug/L	ND	1000	1000	586	716	59	72	50-150	20	30	
Carbon disulfide	ug/L	ND	1000	1000	895	822	90	82	50-150	9	30	
Carbon tetrachloride	ug/L	ND	1000	1000	1100	1000	110	100	64-150	9	30	
Chlorobenzene	ug/L	ND	1000	1000	986	961	99	96	75-125	3	30	
Chloroethane	ug/L	ND	1000	1000	1120	1020	112	102	59-150	10	30	
Chloroform	ug/L	ND	1000	1000	1100	1030	110	103	75-132	6	30	
Chloromethane	ug/L	ND	1000	1000	1130	1050	113	105	52-150	7	30	
Chloroprene	ug/L	ND	1000	1000	1120	1040	112	104	54-150	7	30	
cis-1,2-Dichloroethene	ug/L	62.9	1000	1000	1110	1060	105	100	64-144	5	30	
cis-1,3-Dichloropropene	ug/L	ND	1000	1000	980	934	98	93	56-150	5	30	
Dibromochloromethane	ug/L	ND	1000	1000	993	974	99	97	60-138	2	30	
Dibromomethane	ug/L	ND	1000	1000	1020	976	102	98	75-127	4	30	
Dichlorodifluoromethane	ug/L	ND	1000	1000	1320	1230	132	123	50-150	7	30	
Dichlorofluoromethane	ug/L	ND	1000	1000	1090	1030	109	103	74-142	6	30	
Diethyl ether (Ethyl ether)	ug/L	ND	1000	1000	1050	1040	105	104	75-127	1	30	
Ethylbenzene	ug/L	ND	1000	1000	1010	962	101	96	75-134	5	30	
Hexachloro-1,3-butadiene	ug/L	ND	1000	1000	1000	1020	100	102	63-150	2	30	
Iodomethane	ug/L	ND	1000	1000	696	790	70	79	50-150	13	30	
Isopropylbenzene (Cumene)	ug/L	ND	1000	1000	940	896	94	90	69-147	5	30	

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QUALITY CONTROL DATA

Project: CRC
Pace Project No.: 1096635

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 633330 633331

Parameter	Units	1096635002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
m&p-Xylene	ug/L	ND	2000	2000	2000	1940	100	97	75-133	3	30	
Methyl-tert-butyl ether	ug/L	ND	1000	1000	1050	1050	105	105	73-131	0	30	
Methylene Chloride	ug/L	ND	1000	1000	1030	994	103	99	68-126	4	30	
n-Butylbenzene	ug/L	ND	1000	1000	970	932	97	93	59-150	4	30	
n-Propylbenzene	ug/L	ND	1000	1000	1040	995	104	100	72-143	5	30	
Naphthalene	ug/L	ND	1000	1000	945	1010	95	101	57-148	7	30	
o-Xylene	ug/L	ND	1000	1000	985	946	98	95	75-131	4	30	
p-Isopropyltoluene	ug/L	ND	1000	1000	1030	973	103	97	75-137	5	30	
sec-Butylbenzene	ug/L	ND	1000	1000	985	934	99	93	75-144	5	30	
Styrene	ug/L	ND	1000	1000	997	965	100	97	75-134	3	30	
tert-Butylbenzene	ug/L	ND	1000	1000	1070	1010	107	101	68-150	6	30	
Tetrachloroethene	ug/L	3970	1000	1000	4720	4470	75	50	75-130	5	30	M0
Tetrahydrofuran	ug/L	543	10000	10000	11700	11900	111	114	60-148	2	30	
Toluene	ug/L	ND	1000	1000	1000	953	100	95	75-125	5	30	
trans-1,2-Dichloroethene	ug/L	ND	1000	1000	1050	972	105	97	75-145	8	30	
trans-1,3-Dichloropropene	ug/L	ND	1000	1000	998	989	100	99	50-150	1	30	
Trichloroethene	ug/L	ND	1000	1000	1020	978	102	98	73-132	4	30	
Trichlorofluoromethane	ug/L	ND	1000	1000	1200	1110	120	111	67-150	8	30	
Vinyl acetate	ug/L	ND	1000	1000	1120	1080	112	108	50-150	4	30	
Vinyl chloride	ug/L	ND	1000	1000	1050	992	105	99	63-150	6	30	
Xylene (Total)	ug/L	ND	3000	3000	2990	2890	100	96	72-138	3	30	
1,2-Dichloroethane-d4 (S)	%						111	109	75-125			
4-Bromofluorobenzene (S)	%						107	104	75-125			
Dibromofluoromethane (S)	%						106	105	75-125			
Toluene-d8 (S)	%						101	100	75-125			

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QUALIFIERS

Project: CRC
Pace Project No.: 1096635

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

Pace Analytical is NELAP accredited. Contact your Pace PM for the current list of accredited analytes.

U - Indicates the compound was analyzed for, but not detected.

ANALYTE QUALIFIERS

M0 Matrix spike recovery was outside laboratory control limits.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: CRC
Pace Project No.: 1096635

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
1096635001	**AS EFFLUENT**	EPA 624	MSV/12398		
1096635003	**Trip Blank**	EPA 624	MSV/12398		
1096635002	**AS INFLUENT**	EPA 624	MSV/12401		

Pace Analytical
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RUSH!

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

126

1096635

Page: 1 of 1

1304520

Section A Required Client Information:

Company: LANDMARK
Address:
Email To: JSkramstad@landmarkeng.com
Phone: Fax:
Requested Due Date/TAT: Std 3-day

Section B Required Project Information:

Report To: LANDMARK
Copy To:
Purchase Order No.: CRC
Project Name:
Project Number:

Section C Invoice Information:

Attention: JASON SKRAMSTAD
Company Name: LANDMARK
Address:
Pace Quote Reference:
Pace Project Manager:
Pace Profile #:

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☒ OTHER MPCA

Site Location STATE: MN

Section D Required Client Information

SAMPLE ID
(A-Z, 0-9 / ,-)
Sample IDs MUST BE UNIQUE

Matrix Codes MATRIX / CODE

Drinking Water	DW
Water	WT
Waste Water	WW
Product	P
Soil/Solid	SL
Oil	OL
Wipe	WP
Air	AR
Tissue	TS
Other	OT

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE END/GRAB DATE	COLLECTED COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	Requested Analysis Filtered (Y/N): EPA 624	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	AS EFFLUENT	WW	G			6/4/09	1725		3				X					Y	X		001
2	AS INFLUENT	WW	G			6/4/09	1700		3				X					Y	X		002
3																					
4																					
5																					
6																					
7																					
8																					
9																					
10																					
11																					
12																					

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
		6/5/09	1618	Pace	6/5	1616	4-2°	Y	Y	Y

Temp In °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

ORIGINAL

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: JASON SKRAMSTAD

SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 6/8/09

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

Sample Condition Upon Receipt

Pace Analytical®

Client Name: Landmark **Project #** 1096635

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☒ Client ☐ Commercial ☐ Pace Other ______

Tracking #: ______

Optional
Proj. Due Date:
Proj. Name:

Custody Seal on Cooler/Box Present: ☐ yes ☒ no **Seals intact:** ☐ yes ☒ no

Packing Material: ☒ Bubble Wrap ☒ Bubble Bags ☐ None ☐ Other ______ Temp Blank: Yes X No ______

Thermometer Used 80344042, (179425) **Type of Ice:** (Wet) Blue None ☐ Samples on ice, cooling process has begun

Cooler Temperature 4.2°c **Biological Tissue is Frozen:** Yes No

Temp should be above freezing to 6°C

Date and Initials of person examining contents: 80 6/5/09

				Comments:
Chain of Custody Present:	☒Yes	☐No	☐N/A	1.
Chain of Custody Filled Out:	☒Yes	☐No	☐N/A	2.
Chain of Custody Relinquished:	☒Yes	☐No	☐N/A	3.
Sampler Name & Signature on COC:	☒Yes	☐No	☐N/A	4.
Samples Arrived within Hold Time:	☒Yes	☐No	☐N/A	5.
Short Hold Time Analysis (<72hr):	☐Yes	☒No	☐N/A	6.
Rush Turn Around Time Requested:	☒Yes	☐No	☐N/A	7.
Sufficient Volume:	☒Yes	☐No	☐N/A	8.
Correct Containers Used:	☒Yes	☐No	☐N/A	9.
-Pace Containers Used:	☒Yes	☐No	☐N/A	
Containers Intact:	☒Yes	☐No	☐N/A	10.
Filtered volume received for Dissolved tests	☐Yes	☒No	☐N/A	11.
Sample Labels match COC:	☒Yes	☐No	☐N/A	12.
-Includes date/time/ID/Analysis Matrix: WT				
All containers needing acid/base preservation have been checked. Noncompliance are noted in 13.	☐Yes	☐No	☒N/A	13.
All containers needing preservation are found to be in compliance with EPA recommendation.	☐Yes	☐No	☒N/A	
Exceptions: (VOA), Coliform, TOC, Oil and Grease, WI-DRO (water)	☒Yes	☐No		Initial when completed 80 / Lot # of added preservative
Samples checked for dechlorination:	☐Yes	☒No	☐N/A	14.
Headspace in VOA Vials (>6mm):	☒Yes	☐No	☐N/A	15. 1 vial of AS influent
Trip Blank Present:	☒Yes	☐No	☐N/A	16.
Trip Blank Custody Seals Present	☒Yes	☐No	☐N/A	
Pace Trip Blank Lot # (if purchased): 052009-1				

Client Notification/ Resolution: Field Data Required? Y / N

Person Contacted: ______ Date/Time: ______

Comments/ Resolution: ______

Project Manager Review: CMO **Date:** 6/5/09

RW 6/5/09 8h

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e out of hold, incorrect preservative, out of temp, incorrect containers)

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

August 24, 2009

Mr. Jason Skramstad
Landmark Environmental
2042 W. 98th. St.
Minneapolis, MN 55431

RE: Project: CRC CITY OF ROCHESTER
Pace Project No.: 1099054

Dear Mr. Skramstad:
Enclosed are the analytical results for sample(s) received by the laboratory on July 10, 2009. The results relate only to the samples included in this report. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Carolynne Trout

Carolynne Trout

carolynne.trout@pacelabs.com
Project Manager

Enclosures

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CERTIFICATIONS

Project: CRC CITY OF ROCHESTER
Pace Project No.: 1099054

Minnesota Certification IDs

Alaska Certification #: UST-078
Wisconsin Certification #: 999407970
California Certification #: 01155CA
Florida/NELAP Certification #: E87605
Illinois Certification #: 200011
Iowa Certification #: 368
Kansas Certification #: E-10167
Louisiana Certification #: 03086
Louisiana Certification #: LA080009
Maine Certification #: 2007029
Minnesota Certification #: 027-053-137
Montana Certification #: MT CERT0092
New Jersey Certification #: MN-002
New York Certification #: 11647
North Carolina Certification #: 530
North Dakota Certification #: R-036
Oregon Certification #: MN200001
Pennsylvania Certification #: 68-00563
Tennessee Certification #: 02818
Washington Certification #: C754
Arizona Certification #: AZ-0014

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SAMPLE SUMMARY

Project: CRC CITY OF ROCHESTER
Pace Project No.: 1099054

Lab ID	Sample ID	Matrix	Date Collected	Date Received
1099054001	**AS-INFLUENT**	Water	07/09/09 12:20	07/10/09 11:06
1099054002	**AS-EFFLUENT**	Water	07/09/09 12:25	07/10/09 11:06

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SAMPLE ANALYTE COUNT

Project: CRC CITY OF ROCHESTER
Pace Project No.: 1099054

Lab ID	Sample ID	Method	Analysts	Analytes Reported
1099054001	**AS-INFLUENT**	EPA 624	CNC, MJH	82
1099054002	**AS-EFFLUENT**	EPA 624	CNC	82

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ANALYTICAL RESULTS

Project: CRC CITY OF ROCHESTER
Pace Project No.: 1099054

Sample: AS-INFLUENT **Lab ID: 1099054001** Collected: 07/09/09 12:20 Received: 07/10/09 11:06 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
624 MSV	Analytical Method: EPA 624							
Acetone	ND	ug/L	50.0	5		07/15/09 04:57	67-64-1	
Acrolein	ND	ug/L	200	5		07/15/09 04:57	107-02-8	
Acrylonitrile	ND	ug/L	50.0	5		07/15/09 04:57	107-13-1	
Allyl chloride	ND	ug/L	20.0	5		07/15/09 04:57	107-05-1	
Benzene	ND	ug/L	5.0	5		07/15/09 04:57	71-43-2	
Bromobenzene	ND	ug/L	5.0	5		07/15/09 04:57	108-86-1	
Bromochloromethane	ND	ug/L	5.0	5		07/15/09 04:57	74-97-5	
Bromodichloromethane	ND	ug/L	20.0	5		07/15/09 04:57	75-27-4	
Bromoform	ND	ug/L	40.0	5		07/15/09 04:57	75-25-2	
Bromomethane	ND	ug/L	20.0	5		07/15/09 04:57	74-83-9	
2-Butanone (MEK)	ND	ug/L	20.0	5		07/15/09 04:57	78-93-3	
n-Butylbenzene	ND	ug/L	5.0	5		07/15/09 04:57	104-51-8	
sec-Butylbenzene	ND	ug/L	5.0	5		07/15/09 04:57	135-98-8	
tert-Butylbenzene	ND	ug/L	5.0	5		07/15/09 04:57	98-06-6	
Carbon disulfide	ND	ug/L	5.0	5		07/15/09 04:57	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	5		07/15/09 04:57	56-23-5	
Chlorobenzene	ND	ug/L	5.0	5		07/15/09 04:57	108-90-7	
Chloroethane	ND	ug/L	5.0	5		07/15/09 04:57	75-00-3	
2-Chloroethylvinyl ether	ND	ug/L	50.0	5		07/15/09 04:57	110-75-8	
Chloroform	ND	ug/L	5.0	5		07/15/09 04:57	67-66-3	
Chloromethane	**63.3**	ug/L	5.0	5		07/15/09 04:57	74-87-3	
Chloroprene	ND	ug/L	5.0	5		07/15/09 04:57	126-99-8	
2-Chlorotoluene	ND	ug/L	5.0	5		07/15/09 04:57	95-49-8	
4-Chlorotoluene	ND	ug/L	5.0	5		07/15/09 04:57	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	20.0	5		07/15/09 04:57	96-12-8	
Dibromochloromethane	ND	ug/L	5.0	5		07/15/09 04:57	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	5		07/15/09 04:57	106-93-4	
Dibromomethane	ND	ug/L	5.0	5		07/15/09 04:57	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	5		07/15/09 04:57	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	5		07/15/09 04:57	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	5		07/15/09 04:57	106-46-7	
Dichlorodifluoromethane	ND	ug/L	5.0	5		07/15/09 04:57	75-71-8	
1,1-Dichloroethane	ND	ug/L	5.0	5		07/15/09 04:57	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	5		07/15/09 04:57	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	5		07/15/09 04:57	75-35-4	
cis-1,2-Dichloroethene	**13.0**	ug/L	5.0	5		07/15/09 04:57	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	5		07/15/09 04:57	156-60-5	
Dichlorofluoromethane	ND	ug/L	5.0	5		07/15/09 04:57	75-43-4	
1,2-Dichloropropane	ND	ug/L	5.0	5		07/15/09 04:57	78-87-5	
1,3-Dichloropropane	ND	ug/L	5.0	5		07/15/09 04:57	142-28-9	
2,2-Dichloropropane	ND	ug/L	5.0	5		07/15/09 04:57	594-20-7	
1,1-Dichloropropene	ND	ug/L	5.0	5		07/15/09 04:57	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	20.0	5		07/15/09 04:57	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	20.0	5		07/15/09 04:57	10061-02-6	
Diethyl ether (Ethyl ether)	ND	ug/L	20.0	5		07/15/09 04:57	60-29-7	
Ethylbenzene	ND	ug/L	5.0	5		07/15/09 04:57	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	20.0	5		07/15/09 04:57	87-68-3	

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ANALYTICAL RESULTS

Project: CRC CITY OF ROCHESTER
Pace Project No.: 1099054

Sample: AS-INFLUENT **Lab ID: 1099054001** Collected: 07/09/09 12:20 Received: 07/10/09 11:06 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
624 MSV	Analytical Method: EPA 624							
2-Hexanone	ND	ug/L	20.0	5		07/15/09 04:57	591-78-6	
Iodomethane	ND	ug/L	20.0	5		07/15/09 04:57	74-88-4	
Isopropylbenzene (Cumene)	ND	ug/L	5.0	5		07/15/09 04:57	98-82-8	
p-Isopropyltoluene	ND	ug/L	5.0	5		07/15/09 04:57	99-87-6	
Methylene Chloride	ND	ug/L	20.0	5		07/15/09 04:57	75-09-2	
2-Methylnaphthalene	ND	ug/L	25.0	5		07/15/09 04:57	91-57-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	5		07/15/09 04:57	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	5.0	5		07/15/09 04:57	1634-04-4	
Naphthalene	ND	ug/L	20.0	5		07/15/09 04:57	91-20-3	
n-Propylbenzene	ND	ug/L	5.0	5		07/15/09 04:57	103-65-1	
Styrene	ND	ug/L	5.0	5		07/15/09 04:57	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	5		07/15/09 04:57	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	5		07/15/09 04:57	79-34-5	
Tetrachloroethene	**1460**	ug/L	10.0	10		07/15/09 15:54	127-18-4	
Tetrahydrofuran	ND	ug/L	50.0	5		07/15/09 04:57	109-99-9	
Toluene	ND	ug/L	5.0	5		07/15/09 04:57	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	5.0	5		07/15/09 04:57	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	5.0	5		07/15/09 04:57	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	5.0	5		07/15/09 04:57	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	20.0	5		07/15/09 04:57	79-00-5	
Trichloroethene	ND	ug/L	5.0	5		07/15/09 04:57	79-01-6	
Trichlorofluoromethane	ND	ug/L	20.0	5		07/15/09 04:57	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	5.0	5		07/15/09 04:57	96-18-4	
1,1,2-Trichlorotrifluoroethane	**10.4**	ug/L	5.0	5		07/15/09 04:57	76-13-1	
1,2,4-Trimethylbenzene	ND	ug/L	5.0	5		07/15/09 04:57	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	5.0	5		07/15/09 04:57	108-67-8	
Vinyl acetate	ND	ug/L	100	5		07/15/09 04:57	108-05-4	
Vinyl chloride	ND	ug/L	2.0	5		07/15/09 04:57	75-01-4	
Xylene (Total)	ND	ug/L	15.0	5		07/15/09 04:57	1330-20-7	
m&p-Xylene	ND	ug/L	10.0	5		07/15/09 04:57	1330-20-7	
o-Xylene	ND	ug/L	5.0	5		07/15/09 04:57	95-47-6	
Dibromofluoromethane (S)	102	%	75-125	5		07/15/09 04:57	1868-53-7	
4-Bromofluorobenzene (S)	94	%	75-125	5		07/15/09 04:57	460-00-4	
Toluene-d8 (S)	98	%	75-125	5		07/15/09 04:57	2037-26-5	
1,2-Dichloroethane-d4 (S)	103	%	75-125	5		07/15/09 04:57	17060-07-0	

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(612)607-1700

ANALYTICAL RESULTS

Project: CRC CITY OF ROCHESTER
Pace Project No.: 1099054

Sample: AS-EFFLUENT **Lab ID: 1099054002** Collected: 07/09/09 12:25 Received: 07/10/09 11:06 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
624 MSV	Analytical Method: EPA 624							
Acetone	**68.7**	ug/L	10.0	1		07/15/09 03:28	67-64-1	
Acrolein	ND	ug/L	40.0	1		07/15/09 03:28	107-02-8	
Acrylonitrile	ND	ug/L	10.0	1		07/15/09 03:28	107-13-1	
Allyl chloride	ND	ug/L	4.0	1		07/15/09 03:28	107-05-1	
Benzene	ND	ug/L	1.0	1		07/15/09 03:28	71-43-2	
Bromobenzene	ND	ug/L	1.0	1		07/15/09 03:28	108-86-1	
Bromochloromethane	ND	ug/L	1.0	1		07/15/09 03:28	74-97-5	
Bromodichloromethane	ND	ug/L	4.0	1		07/15/09 03:28	75-27-4	
Bromoform	ND	ug/L	8.0	1		07/15/09 03:28	75-25-2	
Bromomethane	ND	ug/L	4.0	1		07/15/09 03:28	74-83-9	
2-Butanone (MEK)	**82.1**	ug/L	4.0	1		07/15/09 03:28	78-93-3	
n-Butylbenzene	ND	ug/L	1.0	1		07/15/09 03:28	104-51-8	
sec-Butylbenzene	ND	ug/L	1.0	1		07/15/09 03:28	135-98-8	
tert-Butylbenzene	ND	ug/L	1.0	1		07/15/09 03:28	98-06-6	
Carbon disulfide	ND	ug/L	1.0	1		07/15/09 03:28	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		07/15/09 03:28	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		07/15/09 03:28	108-90-7	
Chloroethane	ND	ug/L	1.0	1		07/15/09 03:28	75-00-3	
2-Chloroethylvinyl ether	ND	ug/L	10.0	1		07/15/09 03:28	110-75-8	
Chloroform	ND	ug/L	1.0	1		07/15/09 03:28	67-66-3	
Chloromethane	**76.4**	ug/L	1.0	1		07/15/09 03:28	74-87-3	
Chloroprene	ND	ug/L	1.0	1		07/15/09 03:28	126-99-8	
2-Chlorotoluene	ND	ug/L	1.0	1		07/15/09 03:28	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	1		07/15/09 03:28	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	4.0	1		07/15/09 03:28	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		07/15/09 03:28	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		07/15/09 03:28	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		07/15/09 03:28	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		07/15/09 03:28	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		07/15/09 03:28	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		07/15/09 03:28	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		07/15/09 03:28	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	1		07/15/09 03:28	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		07/15/09 03:28	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		07/15/09 03:28	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		07/15/09 03:28	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		07/15/09 03:28	156-60-5	
Dichlorofluoromethane	ND	ug/L	1.0	1		07/15/09 03:28	75-43-4	
1,2-Dichloropropane	ND	ug/L	1.0	1		07/15/09 03:28	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	1		07/15/09 03:28	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	1		07/15/09 03:28	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	1		07/15/09 03:28	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	4.0	1		07/15/09 03:28	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	4.0	1		07/15/09 03:28	10061-02-6	
Diethyl ether (Ethyl ether)	ND	ug/L	4.0	1		07/15/09 03:28	60-29-7	
Ethylbenzene	ND	ug/L	1.0	1		07/15/09 03:28	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	4.0	1		07/15/09 03:28	87-68-3	

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ANALYTICAL RESULTS

Project: CRC CITY OF ROCHESTER
Pace Project No.: 1099054

Sample: AS-EFFLUENT **Lab ID: 1099054002** Collected: 07/09/09 12:25 Received: 07/10/09 11:06 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
624 MSV	Analytical Method: EPA 624							
2-Hexanone	ND	ug/L	4.0	1		07/15/09 03:28	591-78-6	
Iodomethane	ND	ug/L	4.0	1		07/15/09 03:28	74-88-4	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	1		07/15/09 03:28	98-82-8	
p-Isopropyltoluene	ND	ug/L	1.0	1		07/15/09 03:28	99-87-6	
Methylene Chloride	ND	ug/L	4.0	1		07/15/09 03:28	75-09-2	
2-Methylnaphthalene	ND	ug/L	5.0	1		07/15/09 03:28	91-57-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1		07/15/09 03:28	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		07/15/09 03:28	1634-04-4	
Naphthalene	ND	ug/L	4.0	1		07/15/09 03:28	91-20-3	
n-Propylbenzene	ND	ug/L	1.0	1		07/15/09 03:28	103-65-1	
Styrene	ND	ug/L	1.0	1		07/15/09 03:28	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		07/15/09 03:28	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		07/15/09 03:28	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		07/15/09 03:28	127-18-4	
Tetrahydrofuran	**252**	ug/L	10.0	1		07/15/09 03:28	109-99-9	
Toluene	ND	ug/L	1.0	1		07/15/09 03:28	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		07/15/09 03:28	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		07/15/09 03:28	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		07/15/09 03:28	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	4.0	1		07/15/09 03:28	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		07/15/09 03:28	79-01-6	
Trichlorofluoromethane	ND	ug/L	4.0	1		07/15/09 03:28	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		07/15/09 03:28	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		07/15/09 03:28	76-13-1	
1,2,4-Trimethylbenzene	ND	ug/L	1.0	1		07/15/09 03:28	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	1.0	1		07/15/09 03:28	108-67-8	
Vinyl acetate	ND	ug/L	20.0	1		07/15/09 03:28	108-05-4	
Vinyl chloride	ND	ug/L	0.40	1		07/15/09 03:28	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1		07/15/09 03:28	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	1		07/15/09 03:28	1330-20-7	
o-Xylene	ND	ug/L	1.0	1		07/15/09 03:28	95-47-6	
Dibromofluoromethane (S)	104	%	75-125	1		07/15/09 03:28	1868-53-7	
4-Bromofluorobenzene (S)	97	%	75-125	1		07/15/09 03:28	460-00-4	
Toluene-d8 (S)	99	%	75-125	1		07/15/09 03:28	2037-26-5	
1,2-Dichloroethane-d4 (S)	102	%	75-125	1		07/15/09 03:28	17060-07-0	

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QUALITY CONTROL DATA

Project: CRC CITY OF ROCHESTER
Pace Project No.: 1099054

QC Batch: MSV/12657 Analysis Method: EPA 624
QC Batch Method: EPA 624 Analysis Description: 624 MSV
Associated Lab Samples: 1099054001, 1099054002

METHOD BLANK: 649692 Matrix: Water
Associated Lab Samples: 1099054001, 1099054002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	1.0	07/15/09 00:53	
1,1,1-Trichloroethane	ug/L	ND	1.0	07/15/09 00:53	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	07/15/09 00:53	
1,1,2-Trichloroethane	ug/L	ND	4.0	07/15/09 00:53	
1,1,2-Trichlorotrifluoroethane	ug/L	ND	1.0	07/15/09 00:53	
1,1-Dichloroethane	ug/L	ND	1.0	07/15/09 00:53	
1,1-Dichloroethene	ug/L	ND	1.0	07/15/09 00:53	
1,1-Dichloropropene	ug/L	ND	1.0	07/15/09 00:53	
1,2,3-Trichlorobenzene	ug/L	ND	1.0	07/15/09 00:53	
1,2,3-Trichloropropane	ug/L	ND	1.0	07/15/09 00:53	
1,2,4-Trichlorobenzene	ug/L	ND	1.0	07/15/09 00:53	
1,2,4-Trimethylbenzene	ug/L	ND	1.0	07/15/09 00:53	
1,2-Dibromo-3-chloropropane	ug/L	ND	4.0	07/15/09 00:53	
1,2-Dibromoethane (EDB)	ug/L	ND	1.0	07/15/09 00:53	
1,2-Dichlorobenzene	ug/L	ND	1.0	07/15/09 00:53	
1,2-Dichloroethane	ug/L	ND	1.0	07/15/09 00:53	
1,2-Dichloropropane	ug/L	ND	1.0	07/15/09 00:53	
1,3,5-Trimethylbenzene	ug/L	ND	1.0	07/15/09 00:53	
1,3-Dichlorobenzene	ug/L	ND	1.0	07/15/09 00:53	
1,3-Dichloropropane	ug/L	ND	1.0	07/15/09 00:53	
1,4-Dichlorobenzene	ug/L	ND	1.0	07/15/09 00:53	
2,2-Dichloropropane	ug/L	ND	1.0	07/15/09 00:53	
2-Butanone (MEK)	ug/L	ND	4.0	07/15/09 00:53	
2-Chloroethylvinyl ether	ug/L	ND	10.0	07/15/09 00:53	
2-Chlorotoluene	ug/L	ND	1.0	07/15/09 00:53	
2-Hexanone	ug/L	ND	4.0	07/15/09 00:53	
2-Methylnaphthalene	ug/L	ND	5.0	07/15/09 00:53	
4-Chlorotoluene	ug/L	ND	1.0	07/15/09 00:53	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	5.0	07/15/09 00:53	
Acetone	ug/L	ND	10.0	07/15/09 00:53	
Acrolein	ug/L	ND	40.0	07/15/09 00:53	
Acrylonitrile	ug/L	ND	10.0	07/15/09 00:53	
Allyl chloride	ug/L	ND	4.0	07/15/09 00:53	
Benzene	ug/L	ND	1.0	07/15/09 00:53	
Bromobenzene	ug/L	ND	1.0	07/15/09 00:53	
Bromochloromethane	ug/L	ND	1.0	07/15/09 00:53	
Bromodichloromethane	ug/L	ND	4.0	07/15/09 00:53	
Bromoform	ug/L	ND	8.0	07/15/09 00:53	
Bromomethane	ug/L	ND	4.0	07/15/09 00:53	
Carbon disulfide	ug/L	ND	1.0	07/15/09 00:53	
Carbon tetrachloride	ug/L	ND	1.0	07/15/09 00:53	
Chlorobenzene	ug/L	ND	1.0	07/15/09 00:53	
Chloroethane	ug/L	ND	1.0	07/15/09 00:53	

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QUALITY CONTROL DATA

Project: CRC CITY OF ROCHESTER
Pace Project No.: 1099054

METHOD BLANK: 649692 Matrix: Water

Associated Lab Samples: 1099054001, 1099054002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloroform	ug/L	ND	1.0	07/15/09 00:53	
Chloromethane	ug/L	ND	1.0	07/15/09 00:53	
Chloroprene	ug/L	ND	1.0	07/15/09 00:53	
cis-1,2-Dichloroethene	ug/L	ND	1.0	07/15/09 00:53	
cis-1,3-Dichloropropene	ug/L	ND	4.0	07/15/09 00:53	
Dibromochloromethane	ug/L	ND	1.0	07/15/09 00:53	
Dibromomethane	ug/L	ND	1.0	07/15/09 00:53	
Dichlorodifluoromethane	ug/L	ND	1.0	07/15/09 00:53	
Dichlorofluoromethane	ug/L	ND	1.0	07/15/09 00:53	
Diethyl ether (Ethyl ether)	ug/L	ND	4.0	07/15/09 00:53	
Ethylbenzene	ug/L	ND	1.0	07/15/09 00:53	
Hexachloro-1,3-butadiene	ug/L	ND	4.0	07/15/09 00:53	
Iodomethane	ug/L	ND	4.0	07/15/09 00:53	
Isopropylbenzene (Cumene)	ug/L	ND	1.0	07/15/09 00:53	
m&p-Xylene	ug/L	ND	2.0	07/15/09 00:53	
Methyl-tert-butyl ether	ug/L	ND	1.0	07/15/09 00:53	
Methylene Chloride	ug/L	ND	4.0	07/15/09 00:53	
n-Butylbenzene	ug/L	ND	1.0	07/15/09 00:53	
n-Propylbenzene	ug/L	ND	1.0	07/15/09 00:53	
Naphthalene	ug/L	ND	4.0	07/15/09 00:53	
o-Xylene	ug/L	ND	1.0	07/15/09 00:53	
p-Isopropyltoluene	ug/L	ND	1.0	07/15/09 00:53	
sec-Butylbenzene	ug/L	ND	1.0	07/15/09 00:53	
Styrene	ug/L	ND	1.0	07/15/09 00:53	
tert-Butylbenzene	ug/L	ND	1.0	07/15/09 00:53	
Tetrachloroethene	ug/L	ND	1.0	07/15/09 00:53	
Tetrahydrofuran	ug/L	ND	10.0	07/15/09 00:53	
Toluene	ug/L	ND	1.0	07/15/09 00:53	
trans-1,2-Dichloroethene	ug/L	ND	1.0	07/15/09 00:53	
trans-1,3-Dichloropropene	ug/L	ND	4.0	07/15/09 00:53	
Trichloroethene	ug/L	ND	1.0	07/15/09 00:53	
Trichlorofluoromethane	ug/L	ND	4.0	07/15/09 00:53	
Vinyl acetate	ug/L	ND	20.0	07/15/09 00:53	
Vinyl chloride	ug/L	ND	0.40	07/15/09 00:53	
Xylene (Total)	ug/L	ND	3.0	07/15/09 00:53	
1,2-Dichloroethane-d4 (S)	%	104	75-125	07/15/09 00:53	
4-Bromofluorobenzene (S)	%	96	75-125	07/15/09 00:53	
Dibromofluoromethane (S)	%	101	75-125	07/15/09 00:53	
Toluene-d8 (S)	%	99	75-125	07/15/09 00:53	

LABORATORY CONTROL SAMPLE: 649693

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	50	49.8	100	75-129	
1,1,1-Trichloroethane	ug/L	50	52.9	106	73-144	

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QUALITY CONTROL DATA

Project: CRC CITY OF ROCHESTER
Pace Project No.: 1099054

LABORATORY CONTROL SAMPLE: 649693

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,2,2-Tetrachloroethane	ug/L	50	48.9	98	75-125	
1,1,2-Trichloroethane	ug/L	50	50.3	101	75-125	
1,1,2-Trichlorotrifluoroethane	ug/L	50	50.1	100	75-143	
1,1-Dichloroethane	ug/L	50	48.6	97	75-135	
1,1-Dichloroethene	ug/L	50	46.5	93	75-133	
1,1-Dichloropropene	ug/L	50	47.9	96	75-131	
1,2,3-Trichlorobenzene	ug/L	50	50.4	101	73-141	
1,2,3-Trichloropropane	ug/L	50	47.8	96	75-126	
1,2,4-Trichlorobenzene	ug/L	50	50.1	100	70-148	
1,2,4-Trimethylbenzene	ug/L	50	51.5	103	75-141	
1,2-Dibromo-3-chloropropane	ug/L	50	49.6	99	64-135	
1,2-Dibromoethane (EDB)	ug/L	50	51.1	102	75-125	
1,2-Dichlorobenzene	ug/L	50	48.8	98	75-125	
1,2-Dichloroethane	ug/L	50	52.9	106	75-136	
1,2-Dichloropropane	ug/L	50	49.1	98	75-130	
1,3,5-Trimethylbenzene	ug/L	50	49.7	99	75-141	
1,3-Dichlorobenzene	ug/L	50	49.0	98	75-125	
1,3-Dichloropropane	ug/L	50	50.9	102	75-125	
1,4-Dichlorobenzene	ug/L	50	48.8	98	75-125	
2,2-Dichloropropane	ug/L	50	48.9	98	50-150	
2-Butanone (MEK)	ug/L	50	46.0	92	58-138	
2-Chloroethylvinyl ether	ug/L	125	132	105	50-150	
2-Chlorotoluene	ug/L	50	48.8	98	75-132	
2-Hexanone	ug/L	50	51.9	104	65-135	
2-Methylnaphthalene	ug/L	50	59.6	119	62-150	
4-Chlorotoluene	ug/L	50	48.8	98	75-135	
4-Methyl-2-pentanone (MIBK)	ug/L	50	51.0	102	69-137	
Acetone	ug/L	125	101	81	52-141	
Acrolein	ug/L	500	609	122	50-150	CH
Acrylonitrile	ug/L	500	501	100	75-130	
Allyl chloride	ug/L	50	47.2	94	68-150	
Benzene	ug/L	50	47.7	95	75-125	
Bromobenzene	ug/L	50	47.6	95	75-125	
Bromochloromethane	ug/L	50	48.7	97	75-129	
Bromodichloromethane	ug/L	50	50.3	101	75-142	
Bromoform	ug/L	100	107	107	66-135	
Bromomethane	ug/L	50	53.8	108	57-150	
Carbon disulfide	ug/L	50	45.9	92	65-132	
Carbon tetrachloride	ug/L	50	51.5	103	75-148	
Chlorobenzene	ug/L	50	50.0	100	75-125	
Chloroethane	ug/L	50	51.9	104	66-142	
Chloroform	ug/L	50	46.8	94	75-131	
Chloromethane	ug/L	50	51.3	103	52-147	
Chloroprene	ug/L	50	50.4	101	71-147	
cis-1,2-Dichloroethene	ug/L	50	47.8	96	75-126	
cis-1,3-Dichloropropene	ug/L	50	52.7	105	69-150	
Dibromochloromethane	ug/L	50	52.5	105	73-138	
Dibromomethane	ug/L	50	50.7	101	75-127	

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QUALITY CONTROL DATA

Project: CRC CITY OF ROCHESTER
Pace Project No.: 1099054

LABORATORY CONTROL SAMPLE: 649693

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Dichlorodifluoromethane	ug/L	50	67.4	135	50-150	
Dichlorofluoromethane	ug/L	50	49.1	98	75-129	
Diethyl ether (Ethyl ether)	ug/L	50	48.9	98	75-126	
Ethylbenzene	ug/L	50	50.7	101	75-132	
Hexachloro-1,3-butadiene	ug/L	50	51.5	103	75-129	
Iodomethane	ug/L	50	63.6	127	73-150	
Isopropylbenzene (Cumene)	ug/L	50	52.1	104	75-142	
m&p-Xylene	ug/L	100	99.4	99	75-131	
Methyl-tert-butyl ether	ug/L	50	50.2	100	75-130	
Methylene Chloride	ug/L	50	46.8	94	71-125	
n-Butylbenzene	ug/L	50	51.0	102	70-148	
n-Propylbenzene	ug/L	50	50.9	102	75-136	
Naphthalene	ug/L	50	53.2	106	69-145	
o-Xylene	ug/L	50	49.3	99	75-129	
p-Isopropyltoluene	ug/L	50	50.5	101	75-132	
sec-Butylbenzene	ug/L	50	50.9	102	75-136	
Styrene	ug/L	50	50.2	100	75-125	
tert-Butylbenzene	ug/L	50	50.7	101	75-135	
Tetrachloroethene	ug/L	50	49.8	100	75-125	
Tetrahydrofuran	ug/L	500	495	99	63-144	
Toluene	ug/L	50	49.7	99	75-125	
trans-1,2-Dichloroethene	ug/L	50	49.4	99	72-135	
trans-1,3-Dichloropropene	ug/L	50	52.3	105	62-150	
Trichloroethene	ug/L	50	50.4	101	75-125	
Trichlorofluoromethane	ug/L	50	56.5	113	67-150	
Vinyl acetate	ug/L	50	50.6	101	55-150	
Vinyl chloride	ug/L	50	51.8	104	63-147	
Xylene (Total)	ug/L	150	149	99	75-130	
1,2-Dichloroethane-d4 (S)	%			105	75-125	
4-Bromofluorobenzene (S)	%			99	75-125	
Dibromofluoromethane (S)	%			100	75-125	
Toluene-d8 (S)	%			101	75-125	

MATRIX SPIKE SAMPLE: 649694

Parameter	Units	1098867005 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	20	19.5	98	70-136	
1,1,1-Trichloroethane	ug/L	ND	20	22.6	113	68-150	
1,1,2,2-Tetrachloroethane	ug/L	ND	20	18.5	92	75-125	
1,1,2-Trichloroethane	ug/L	ND	20	18.8	94	75-125	
1,1,2-Trichlorotrifluoroethane	ug/L	ND	20	24.0	120	75-150	
1,1-Dichloroethane	ug/L	ND	20	20.4	102	67-143	
1,1-Dichloroethene	ug/L	ND	20	20.4	102	75-147	
1,1-Dichloropropene	ug/L	ND	20	21.2	106	75-141	
1,2,3-Trichlorobenzene	ug/L	ND	20	20.1	100	71-141	
1,2,3-Trichloropropane	ug/L	ND	20	17.6	88	75-128	
1,2,4-Trichlorobenzene	ug/L	ND	20	19.8	99	61-148	

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QUALITY CONTROL DATA

Project: CRC CITY OF ROCHESTER
Pace Project No.: 1099054

MATRIX SPIKE SAMPLE: 649694

Parameter	Units	1098867005 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,2,4-Trimethylbenzene	ug/L	ND	20	20.9	105	65-145	
1,2-Dibromo-3-chloropropane	ug/L	ND	20	19.8	99	64-135	
1,2-Dibromoethane (EDB)	ug/L	ND	20	19.6	98	75-126	
1,2-Dichlorobenzene	ug/L	ND	20	20.5	102	75-127	
1,2-Dichloroethane	ug/L	ND	20	20.4	102	70-138	
1,2-Dichloropropane	ug/L	ND	20	20.7	104	75-130	
1,3,5-Trimethylbenzene	ug/L	ND	20	21.0	105	61-150	
1,3-Dichlorobenzene	ug/L	ND	20	20.3	101	75-126	
1,3-Dichloropropane	ug/L	ND	20	18.5	93	75-125	
1,4-Dichlorobenzene	ug/L	ND	20	20.0	100	75-125	
2,2-Dichloropropane	ug/L	ND	20	20.4	102	50-150	
2-Butanone (MEK)	ug/L	5.6	20	22.2	83	50-141	
2-Chloroethylvinyl ether	ug/L	ND	50	ND	0	50-150	P5
2-Chlorotoluene	ug/L	ND	20	21.1	106	75-137	
2-Hexanone	ug/L	ND	20	19.0	95	66-135	
2-Methylnaphthalene	ug/L	ND	20	30.8	154	62-150	M0
4-Chlorotoluene	ug/L	ND	20	20.6	103	70-144	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	20	19.2	96	62-142	
Acetone	ug/L	37.2	50	70.4	66	50-150	
Acrolein	ug/L	ND	200	294	147	50-150	CH
Acrylonitrile	ug/L	ND	200	186	93	70-135	
Allyl chloride	ug/L	ND	20	20.5	103	50-150	
Benzene	ug/L	ND	20	19.9	99	75-125	
Bromobenzene	ug/L	ND	20	19.6	98	75-125	
Bromochloromethane	ug/L	ND	20	18.8	94	73-137	
Bromodichloromethane	ug/L	ND	20	22.6	101	70-142	
Bromoform	ug/L	ND	40	39.8	99	55-135	
Bromomethane	ug/L	ND	20	20.9	105	50-150	
Carbon disulfide	ug/L	ND	20	20.1	100	50-150	
Carbon tetrachloride	ug/L	ND	20	22.4	112	64-150	
Chlorobenzene	ug/L	ND	20	20.3	101	75-125	
Chloroethane	ug/L	ND	20	21.2	106	59-150	
Chloroform	ug/L	26.2	20	45.9	98	75-132	
Chloromethane	ug/L	ND	20	21.6	108	52-150	
Chloroprene	ug/L	ND	20	21.6	108	54-150	
cis-1,2-Dichloroethene	ug/L	ND	20	20.4	102	64-144	
cis-1,3-Dichloropropene	ug/L	ND	20	20.5	103	56-150	
Dibromochloromethane	ug/L	ND	20	20.0	100	60-138	
Dibromomethane	ug/L	ND	20	20.2	101	75-127	
Dichlorodifluoromethane	ug/L	ND	20	30.3	152	50-150	M0
Dichlorofluoromethane	ug/L	ND	20	20.6	103	74-142	
Diethyl ether (Ethyl ether)	ug/L	ND	20	18.3	91	75-127	
Ethylbenzene	ug/L	ND	20	21.1	106	75-134	
Hexachloro-1,3-butadiene	ug/L	ND	20	22.8	114	63-150	
Iodomethane	ug/L	ND	20	28.9	145	50-150	
Isopropylbenzene (Cumene)	ug/L	ND	20	21.7	108	69-147	
m&p-Xylene	ug/L	ND	40	41.6	104	75-133	
Methyl-tert-butyl ether	ug/L	ND	20	18.5	92	73-131	

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QUALITY CONTROL DATA

Project: CRC CITY OF ROCHESTER
Pace Project No.: 1099054

MATRIX SPIKE SAMPLE: 649694

Parameter	Units	1098867005 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Methylene Chloride	ug/L	ND	20	19.1	96	68-126	
n-Butylbenzene	ug/L	ND	20	21.6	108	59-150	
n-Propylbenzene	ug/L	ND	20	21.2	106	72-143	
Naphthalene	ug/L	ND	20	21.7	108	57-148	
o-Xylene	ug/L	ND	20	20.2	101	75-131	
p-Isopropyltoluene	ug/L	ND	20	22.3	112	75-137	
sec-Butylbenzene	ug/L	ND	20	21.4	107	75-144	
Styrene	ug/L	ND	20	20.4	102	75-134	
tert-Butylbenzene	ug/L	ND	20	21.3	106	68-150	
Tetrachloroethene	ug/L	ND	20	21.7	109	75-130	
Tetrahydrofuran	ug/L	ND	200	178	89	60-148	
Toluene	ug/L	ND	20	21.3	104	75-125	
trans-1,2-Dichloroethene	ug/L	ND	20	20.6	103	75-145	
trans-1,3-Dichloropropene	ug/L	ND	20	19.2	96	50-150	
Trichloroethene	ug/L	ND	20	20.5	103	73-132	
Trichlorofluoromethane	ug/L	ND	20	24.9	124	67-150	
Vinyl acetate	ug/L	ND	20	18.7J	94	50-150	
Vinyl chloride	ug/L	ND	20	22.3	112	63-150	
Xylene (Total)	ug/L	ND	60	61.8	103	72-138	
1,2-Dichloroethane-d4 (S)	%				97	75-125	
4-Bromofluorobenzene (S)	%				98	75-125	
Dibromofluoromethane (S)	%				102	75-125	
Toluene-d8 (S)	%				97	75-125	

SAMPLE DUPLICATE: 649845

Parameter	Units	1098837001 Result	Dup Result	RPD	Max RPD	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	ND		30	
1,1,1-Trichloroethane	ug/L	ND	ND		30	
1,1,2,2-Tetrachloroethane	ug/L	ND	ND		30	
1,1,2-Trichloroethane	ug/L	ND	ND		30	
1,1,2-Trichlorotrifluoroethane	ug/L	ND	ND		30	
1,1-Dichloroethane	ug/L	ND	ND		30	
1,1-Dichloroethene	ug/L	ND	ND		30	
1,1-Dichloropropene	ug/L	ND	ND		30	
1,2,3-Trichlorobenzene	ug/L	ND	ND		30	
1,2,3-Trichloropropane	ug/L	ND	ND		30	
1,2,4-Trichlorobenzene	ug/L	ND	ND		30	
1,2,4-Trimethylbenzene	ug/L	ND	ND		30	
1,2-Dibromo-3-chloropropane	ug/L	ND	ND		30	
1,2-Dibromoethane (EDB)	ug/L	ND	ND		30	
1,2-Dichlorobenzene	ug/L	ND	ND		30	
1,2-Dichloroethane	ug/L	ND	ND		30	
1,2-Dichloropropane	ug/L	ND	ND		30	
1,3,5-Trimethylbenzene	ug/L	ND	ND		30	
1,3-Dichlorobenzene	ug/L	ND	ND		30	
1,3-Dichloropropane	ug/L	ND	ND		30	

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QUALITY CONTROL DATA

Project: CRC CITY OF ROCHESTER
Pace Project No.: 1099054

SAMPLE DUPLICATE: 649845

Parameter	Units	1098837001 Result	Dup Result	RPD	Max RPD	Qualifiers
1,4-Dichlorobenzene	ug/L	ND	ND		30	
2,2-Dichloropropane	ug/L	ND	ND		30	
2-Butanone (MEK)	ug/L	ND	ND		30	
2-Chloroethylvinyl ether	ug/L	ND	ND		30	
2-Chlorotoluene	ug/L	ND	ND		30	
2-Hexanone	ug/L	ND	ND		30	
2-Methylnaphthalene	ug/L	ND	ND		30	
4-Chlorotoluene	ug/L	ND	ND		30	
4-Methyl-2-pentanone (MIBK)	ug/L	92.8	91.9	1	30	
Acetone	ug/L	50.1	55.2	10	30	
Acrolein	ug/L	ND	ND		30	
Acrylonitrile	ug/L	ND	ND		30	
Allyl chloride	ug/L	ND	ND		30	
Benzene	ug/L	ND	ND		30	
Bromobenzene	ug/L	ND	ND		30	
Bromochloromethane	ug/L	ND	ND		30	
Bromodichloromethane	ug/L	ND	ND		30	
Bromoform	ug/L	ND	ND		30	
Bromomethane	ug/L	ND	ND		30	
Carbon disulfide	ug/L	8.5	8.5	0	30	
Carbon tetrachloride	ug/L	ND	ND		30	
Chlorobenzene	ug/L	ND	ND		30	
Chloroethane	ug/L	ND	ND		30	
Chloroform	ug/L	ND	ND		30	
Chloromethane	ug/L	ND	ND		30	
Chloroprene	ug/L	ND	ND		30	
cis-1,2-Dichloroethene	ug/L	ND	ND		30	
cis-1,3-Dichloropropene	ug/L	ND	ND		30	
Dibromochloromethane	ug/L	ND	ND		30	
Dibromomethane	ug/L	ND	ND		30	
Dichlorodifluoromethane	ug/L	ND	ND		30	
Dichlorofluoromethane	ug/L	ND	ND		30	
Diethyl ether (Ethyl ether)	ug/L	ND	ND		30	
Ethylbenzene	ug/L	ND	ND		30	
Hexachloro-1,3-butadiene	ug/L	ND	ND		30	
Iodomethane	ug/L	ND	ND		30	
Isopropylbenzene (Cumene)	ug/L	ND	ND		30	
m&p-Xylene	ug/L	ND	ND		30	
Methyl-tert-butyl ether	ug/L	ND	ND		30	
Methylene Chloride	ug/L	ND	ND		30	
n-Butylbenzene	ug/L	ND	ND		30	
n-Propylbenzene	ug/L	ND	ND		30	
Naphthalene	ug/L	ND	ND		30	
o-Xylene	ug/L	ND	ND		30	
p-Isopropyltoluene	ug/L	ND	ND		30	
sec-Butylbenzene	ug/L	ND	ND		30	
Styrene	ug/L	ND	ND		30	
tert-Butylbenzene	ug/L	ND	ND		30	

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QUALITY CONTROL DATA

Project: CRC CITY OF ROCHESTER
Pace Project No.: 1099054

SAMPLE DUPLICATE: 649845

Parameter	Units	1098837001 Result	Dup Result	RPD	Max RPD	Qualifiers
Tetrachloroethene	ug/L	ND	ND		30	
Tetrahydrofuran	ug/L	ND	ND		30	
Toluene	ug/L	ND	ND		30	
trans-1,2-Dichloroethene	ug/L	ND	ND		30	
trans-1,3-Dichloropropene	ug/L	ND	ND		30	
Trichloroethene	ug/L	ND	ND		30	
Trichlorofluoromethane	ug/L	ND	ND		30	
Vinyl acetate	ug/L	ND	ND		30	
Vinyl chloride	ug/L	ND	ND		30	
Xylene (Total)	ug/L	ND	ND		30	
1,2-Dichloroethane-d4 (S)	%	104	103	2		
4-Bromofluorobenzene (S)	%	102	99	4		
Dibromofluoromethane (S)	%	101	95	5		
Toluene-d8 (S)	%	97	102	5		

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QUALIFIERS

Project: CRC CITY OF ROCHESTER
Pace Project No.: 1099054

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

Pace Analytical is NELAP accredited. Contact your Pace PM for the current list of accredited analytes.

U - Indicates the compound was analyzed for, but not detected.

BATCH QUALIFIERS

Batch: MSV/12657

[M5]	A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

ANALYTE QUALIFIERS

CH	The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high.
M0	Matrix spike recovery was outside laboratory control limits.
P5	The EPA or method required sample preservation degrades this compound, therefore acceptable recoveries may not be achieved in sample matrix spikes.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: CRC CITY OF ROCHESTER
Pace Project No.: 1099054

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
1099054001	**AS-INFLUENT**	EPA 624	MSV/12657		
1099054002	**AS-EFFLUENT**	EPA 624	MSV/12657		

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September 11, 2009

Mr. Jason Skramstad
Landmark Environmental
2042 W. 98th. St.
Minneapolis, MN 55431

RE: Project: City Of Rochester CRC
Pace Project No.: 10112008

Dear Mr. Skramstad:
Enclosed are the analytical results for sample(s) received by the laboratory on September 04, 2009. The results relate only to the samples included in this report. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Carolynne Trout

Carolynne Trout

carolynne.trout@pacelabs.com
Project Manager

Enclosures

REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: City Of Rochester CRC
Pace Project No.: 10112008

Minnesota Certification IDs

1700 Elm Street SE, Suite 200 Minneapolis, MN 55414
Alaska Certification #: UST-078
Washington Certification #: C754
Tennessee Certification #: 02818
Pennsylvania Certification #: 68-00563
Oregon Certification #: MN200001
North Dakota Certification #: R-036
North Carolina Certification #: 530
New York Certification #: 11647
New Jersey Certification #: MN-002
Montana Certification #: MT CERT0092
Minnesota Certification #: 027-053-137
Maine Certification #: 2007029
Louisiana Certification #: LA080009
Louisiana Certification #: 03086
Kansas Certification #: E-10167
Iowa Certification #: 368
Illinois Certification #: 200011
Florida/NELAP Certification #: E87605
California Certification #: 01155CA
Arizona Certification #: AZ-0014
Wisconsin Certification #: 999407970

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SAMPLE SUMMARY

Project: City Of Rochester CRC
Pace Project No.: 10112008

Lab ID	Sample ID	Matrix	Date Collected	Date Received
10112008001	**AS-Influent**	Water	09/04/09 10:55	09/04/09 17:05
10112008002	**AS-Effluent**	Water	09/04/09 10:55	09/04/09 17:05

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SAMPLE ANALYTE COUNT

Project: City Of Rochester CRC
Pace Project No.: 10112008

Lab ID	Sample ID	Method	Analysts	Analytes Reported
10112008001	**AS-Influent**	EPA 200.7	IP	1
		EPA 624	CNC	82
10112008002	**AS-Effluent**	EPA 624	CNC	82

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ANALYTICAL RESULTS

Project: City Of Rochester CRC
Pace Project No.: 10112008

Sample: AS-Influent **Lab ID: 10112008001** Collected: 09/04/09 10:55 Received: 09/04/09 17:05 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.7 MET ICP	Analytical Method: EPA 200.7 Preparation Method: EPA 200.7							
Aluminum	ND	ug/L	200	1	09/08/09 20:20	09/09/09 11:11	7429-90-5	
624 MSV	Analytical Method: EPA 624							
Acetone	ND	ug/L	10.0	1		09/10/09 03:20	67-64-1	
Acrolein	ND	ug/L	40.0	1		09/10/09 03:20	107-02-8	
Acrylonitrile	ND	ug/L	10.0	1		09/10/09 03:20	107-13-1	
Allyl chloride	ND	ug/L	4.0	1		09/10/09 03:20	107-05-1	
Benzene	ND	ug/L	1.0	1		09/10/09 03:20	71-43-2	
Bromobenzene	ND	ug/L	1.0	1		09/10/09 03:20	108-86-1	
Bromochloromethane	ND	ug/L	1.0	1		09/10/09 03:20	74-97-5	
Bromodichloromethane	ND	ug/L	4.0	1		09/10/09 03:20	75-27-4	
Bromoform	ND	ug/L	8.0	1		09/10/09 03:20	75-25-2	
Bromomethane	ND	ug/L	4.0	1		09/10/09 03:20	74-83-9	
2-Butanone (MEK)	**13.5**	ug/L	4.0	1		09/10/09 03:20	78-93-3	
n-Butylbenzene	ND	ug/L	1.0	1		09/10/09 03:20	104-51-8	
sec-Butylbenzene	ND	ug/L	1.0	1		09/10/09 03:20	135-98-8	
tert-Butylbenzene	ND	ug/L	1.0	1		09/10/09 03:20	98-06-6	
Carbon disulfide	ND	ug/L	1.0	1		09/10/09 03:20	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		09/10/09 03:20	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		09/10/09 03:20	108-90-7	
Chloroethane	ND	ug/L	1.0	1		09/10/09 03:20	75-00-3	
2-Chloroethylvinyl ether	ND	ug/L	10.0	1		09/10/09 03:20	110-75-8	
Chloroform	ND	ug/L	1.0	1		09/10/09 03:20	67-66-3	
Chloromethane	ND	ug/L	1.0	1		09/10/09 03:20	74-87-3	
Chloroprene	ND	ug/L	1.0	1		09/10/09 03:20	126-99-8	
2-Chlorotoluene	ND	ug/L	1.0	1		09/10/09 03:20	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	1		09/10/09 03:20	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	4.0	1		09/10/09 03:20	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		09/10/09 03:20	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		09/10/09 03:20	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		09/10/09 03:20	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		09/10/09 03:20	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		09/10/09 03:20	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		09/10/09 03:20	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		09/10/09 03:20	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	1		09/10/09 03:20	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		09/10/09 03:20	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		09/10/09 03:20	75-35-4	
cis-1,2-Dichloroethene	**1.5**	ug/L	1.0	1		09/10/09 03:20	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		09/10/09 03:20	156-60-5	
Dichlorofluoromethane	ND	ug/L	1.0	1		09/10/09 03:20	75-43-4	
1,2-Dichloropropane	ND	ug/L	1.0	1		09/10/09 03:20	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	1		09/10/09 03:20	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	1		09/10/09 03:20	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	1		09/10/09 03:20	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	4.0	1		09/10/09 03:20	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	4.0	1		09/10/09 03:20	10061-02-6	

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ANALYTICAL RESULTS

Project: City Of Rochester CRC
Pace Project No.: 10112008

Sample: AS-Influent **Lab ID: 10112008001** Collected: 09/04/09 10:55 Received: 09/04/09 17:05 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
624 MSV	Analytical Method: EPA 624							
Diethyl ether (Ethyl ether)	ND	ug/L	4.0	1		09/10/09 03:20	60-29-7	
Ethylbenzene	ND	ug/L	1.0	1		09/10/09 03:20	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	4.0	1		09/10/09 03:20	87-68-3	
2-Hexanone	ND	ug/L	4.0	1		09/10/09 03:20	591-78-6	
Iodomethane	ND	ug/L	4.0	1		09/10/09 03:20	74-88-4	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	1		09/10/09 03:20	98-82-8	
p-Isopropyltoluene	ND	ug/L	1.0	1		09/10/09 03:20	99-87-6	
Methylene Chloride	ND	ug/L	4.0	1		09/10/09 03:20	75-09-2	
2-Methylnaphthalene	ND	ug/L	5.0	1		09/10/09 03:20	91-57-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1		09/10/09 03:20	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		09/10/09 03:20	1634-04-4	
Naphthalene	ND	ug/L	4.0	1		09/10/09 03:20	91-20-3	
n-Propylbenzene	ND	ug/L	1.0	1		09/10/09 03:20	103-65-1	
Styrene	ND	ug/L	1.0	1		09/10/09 03:20	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		09/10/09 03:20	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		09/10/09 03:20	79-34-5	
Tetrachloroethene	**175**	ug/L	1.0	1		09/10/09 03:20	127-18-4	
Tetrahydrofuran	ND	ug/L	10.0	1		09/10/09 03:20	109-99-9	
Toluene	ND	ug/L	1.0	1		09/10/09 03:20	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		09/10/09 03:20	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		09/10/09 03:20	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		09/10/09 03:20	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	4.0	1		09/10/09 03:20	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		09/10/09 03:20	79-01-6	
Trichlorofluoromethane	ND	ug/L	4.0	1		09/10/09 03:20	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		09/10/09 03:20	96-18-4	
1,1,2-Trichlorotrifluoroethane	**1.2**	ug/L	1.0	1		09/10/09 03:20	76-13-1	
1,2,4-Trimethylbenzene	ND	ug/L	1.0	1		09/10/09 03:20	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	1.0	1		09/10/09 03:20	108-67-8	
Vinyl acetate	ND	ug/L	20.0	1		09/10/09 03:20	108-05-4	
Vinyl chloride	ND	ug/L	0.40	1		09/10/09 03:20	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1		09/10/09 03:20	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	1		09/10/09 03:20	1330-20-7	
o-Xylene	ND	ug/L	1.0	1		09/10/09 03:20	95-47-6	
Dibromofluoromethane (S)	101	%	75-125	1		09/10/09 03:20	1868-53-7	
4-Bromofluorobenzene (S)	99	%	75-125	1		09/10/09 03:20	460-00-4	
Toluene-d8 (S)	95	%	75-125	1		09/10/09 03:20	2037-26-5	
1,2-Dichloroethane-d4 (S)	103	%	75-125	1		09/10/09 03:20	17060-07-0	

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ANALYTICAL RESULTS

Project: City Of Rochester CRC
Pace Project No.: 10112008

Sample: AS-Effluent **Lab ID: 10112008002** Collected: 09/04/09 10:55 Received: 09/04/09 17:05 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
624 MSV	Analytical Method: EPA 624							
Acetone	ND	ug/L	10.0	1		09/08/09 18:37	67-64-1	
Acrolein	ND	ug/L	40.0	1		09/08/09 18:37	107-02-8	M0
Acrylonitrile	ND	ug/L	10.0	1		09/08/09 18:37	107-13-1	
Allyl chloride	ND	ug/L	4.0	1		09/08/09 18:37	107-05-1	L2
Benzene	ND	ug/L	1.0	1		09/08/09 18:37	71-43-2	
Bromobenzene	ND	ug/L	1.0	1		09/08/09 18:37	108-86-1	
Bromochloromethane	ND	ug/L	1.0	1		09/08/09 18:37	74-97-5	
Bromodichloromethane	ND	ug/L	4.0	1		09/08/09 18:37	75-27-4	
Bromoform	ND	ug/L	8.0	1		09/08/09 18:37	75-25-2	
Bromomethane	ND	ug/L	4.0	1		09/08/09 18:37	74-83-9	
2-Butanone (MEK)	**19.8**	ug/L	4.0	1		09/08/09 18:37	78-93-3	
n-Butylbenzene	ND	ug/L	1.0	1		09/08/09 18:37	104-51-8	
sec-Butylbenzene	ND	ug/L	1.0	1		09/08/09 18:37	135-98-8	
tert-Butylbenzene	ND	ug/L	1.0	1		09/08/09 18:37	98-06-6	
Carbon disulfide	ND	ug/L	1.0	1		09/08/09 18:37	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		09/08/09 18:37	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		09/08/09 18:37	108-90-7	
Chloroethane	ND	ug/L	1.0	1		09/08/09 18:37	75-00-3	
2-Chloroethylvinyl ether	ND	ug/L	10.0	1		09/08/09 18:37	110-75-8	P5
Chloroform	ND	ug/L	1.0	1		09/08/09 18:37	67-66-3	
Chloromethane	ND	ug/L	1.0	1		09/08/09 18:37	74-87-3	
Chloroprene	ND	ug/L	1.0	1		09/08/09 18:37	126-99-8	
2-Chlorotoluene	ND	ug/L	1.0	1		09/08/09 18:37	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	1		09/08/09 18:37	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	4.0	1		09/08/09 18:37	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		09/08/09 18:37	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		09/08/09 18:37	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		09/08/09 18:37	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		09/08/09 18:37	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		09/08/09 18:37	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		09/08/09 18:37	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		09/08/09 18:37	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	1		09/08/09 18:37	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		09/08/09 18:37	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		09/08/09 18:37	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		09/08/09 18:37	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		09/08/09 18:37	156-60-5	
Dichlorofluoromethane	ND	ug/L	1.0	1		09/08/09 18:37	75-43-4	
1,2-Dichloropropane	ND	ug/L	1.0	1		09/08/09 18:37	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	1		09/08/09 18:37	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	1		09/08/09 18:37	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	1		09/08/09 18:37	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	4.0	1		09/08/09 18:37	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	4.0	1		09/08/09 18:37	10061-02-6	
Diethyl ether (Ethyl ether)	ND	ug/L	4.0	1		09/08/09 18:37	60-29-7	
Ethylbenzene	ND	ug/L	1.0	1		09/08/09 18:37	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	4.0	1		09/08/09 18:37	87-68-3	

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ANALYTICAL RESULTS

Project: City Of Rochester CRC
Pace Project No.: 10112008

Sample: AS-Effluent **Lab ID: 10112008002** Collected: 09/04/09 10:55 Received: 09/04/09 17:05 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
624 MSV	Analytical Method: EPA 624							
2-Hexanone	ND	ug/L	4.0	1		09/08/09 18:37	591-78-6	
Iodomethane	ND	ug/L	4.0	1		09/08/09 18:37	74-88-4	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	1		09/08/09 18:37	98-82-8	
p-Isopropyltoluene	ND	ug/L	1.0	1		09/08/09 18:37	99-87-6	
Methylene Chloride	ND	ug/L	4.0	1		09/08/09 18:37	75-09-2	
2-Methylnaphthalene	ND	ug/L	5.0	1		09/08/09 18:37	91-57-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1		09/08/09 18:37	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		09/08/09 18:37	1634-04-4	
Naphthalene	ND	ug/L	4.0	1		09/08/09 18:37	91-20-3	
n-Propylbenzene	ND	ug/L	1.0	1		09/08/09 18:37	103-65-1	
Styrene	ND	ug/L	1.0	1		09/08/09 18:37	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		09/08/09 18:37	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		09/08/09 18:37	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		09/08/09 18:37	127-18-4	
Tetrahydrofuran	ND	ug/L	10.0	1		09/08/09 18:37	109-99-9	
Toluene	ND	ug/L	1.0	1		09/08/09 18:37	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		09/08/09 18:37	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		09/08/09 18:37	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		09/08/09 18:37	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	4.0	1		09/08/09 18:37	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		09/08/09 18:37	79-01-6	
Trichlorofluoromethane	ND	ug/L	4.0	1		09/08/09 18:37	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	1		09/08/09 18:37	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	1.0	1		09/08/09 18:37	76-13-1	
1,2,4-Trimethylbenzene	ND	ug/L	1.0	1		09/08/09 18:37	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	1.0	1		09/08/09 18:37	108-67-8	
Vinyl acetate	ND	ug/L	20.0	1		09/08/09 18:37	108-05-4	
Vinyl chloride	ND	ug/L	0.40	1		09/08/09 18:37	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1		09/08/09 18:37	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	1		09/08/09 18:37	1330-20-7	
o-Xylene	ND	ug/L	1.0	1		09/08/09 18:37	95-47-6	
Dibromofluoromethane (S)	101	%	75-125	1		09/08/09 18:37	1868-53-7	
4-Bromofluorobenzene (S)	99	%	75-125	1		09/08/09 18:37	460-00-4	
Toluene-d8 (S)	98	%	75-125	1		09/08/09 18:37	2037-26-5	
1,2-Dichloroethane-d4 (S)	102	%	75-125	1		09/08/09 18:37	17060-07-0	

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QUALITY CONTROL DATA

Project: City Of Rochester CRC
Pace Project No.: 10112008

QC Batch: MSV/12985 Analysis Method: EPA 624
QC Batch Method: EPA 624 Analysis Description: 624 MSV
Associated Lab Samples: 10112008002

METHOD BLANK: 676441 Matrix: Water
Associated Lab Samples: 10112008002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	1.0	09/08/09 15:16	
1,1,1-Trichloroethane	ug/L	ND	1.0	09/08/09 15:16	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	09/08/09 15:16	
1,1,2-Trichloroethane	ug/L	ND	4.0	09/08/09 15:16	
1,1,2-Trichlorotrifluoroethane	ug/L	ND	1.0	09/08/09 15:16	
1,1-Dichloroethane	ug/L	ND	1.0	09/08/09 15:16	
1,1-Dichloroethene	ug/L	ND	1.0	09/08/09 15:16	
1,1-Dichloropropene	ug/L	ND	1.0	09/08/09 15:16	
1,2,3-Trichlorobenzene	ug/L	ND	1.0	09/08/09 15:16	
1,2,3-Trichloropropane	ug/L	ND	1.0	09/08/09 15:16	
1,2,4-Trichlorobenzene	ug/L	ND	1.0	09/08/09 15:16	
1,2,4-Trimethylbenzene	ug/L	ND	1.0	09/08/09 15:16	
1,2-Dibromo-3-chloropropane	ug/L	ND	4.0	09/08/09 15:16	
1,2-Dibromoethane (EDB)	ug/L	ND	1.0	09/08/09 15:16	
1,2-Dichlorobenzene	ug/L	ND	1.0	09/08/09 15:16	
1,2-Dichloroethane	ug/L	ND	1.0	09/08/09 15:16	
1,2-Dichloropropane	ug/L	ND	1.0	09/08/09 15:16	
1,3,5-Trimethylbenzene	ug/L	ND	1.0	09/08/09 15:16	
1,3-Dichlorobenzene	ug/L	ND	1.0	09/08/09 15:16	
1,3-Dichloropropane	ug/L	ND	1.0	09/08/09 15:16	
1,4-Dichlorobenzene	ug/L	ND	1.0	09/08/09 15:16	
2,2-Dichloropropane	ug/L	ND	1.0	09/08/09 15:16	
2-Butanone (MEK)	ug/L	ND	4.0	09/08/09 15:16	
2-Chloroethylvinyl ether	ug/L	ND	10.0	09/08/09 15:16	
2-Chlorotoluene	ug/L	ND	1.0	09/08/09 15:16	
2-Hexanone	ug/L	ND	4.0	09/08/09 15:16	
2-Methylnaphthalene	ug/L	ND	5.0	09/08/09 15:16	
4-Chlorotoluene	ug/L	ND	1.0	09/08/09 15:16	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	5.0	09/08/09 15:16	
Acetone	ug/L	ND	10.0	09/08/09 15:16	
Acrolein	ug/L	ND	40.0	09/08/09 15:16	
Acrylonitrile	ug/L	ND	10.0	09/08/09 15:16	
Allyl chloride	ug/L	ND	4.0	09/08/09 15:16	
Benzene	ug/L	ND	1.0	09/08/09 15:16	
Bromobenzene	ug/L	ND	1.0	09/08/09 15:16	
Bromochloromethane	ug/L	ND	1.0	09/08/09 15:16	
Bromodichloromethane	ug/L	ND	4.0	09/08/09 15:16	
Bromoform	ug/L	ND	8.0	09/08/09 15:16	
Bromomethane	ug/L	ND	4.0	09/08/09 15:16	
Carbon disulfide	ug/L	ND	1.0	09/08/09 15:16	
Carbon tetrachloride	ug/L	ND	1.0	09/08/09 15:16	
Chlorobenzene	ug/L	ND	1.0	09/08/09 15:16	
Chloroethane	ug/L	ND	1.0	09/08/09 15:16	

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QUALITY CONTROL DATA

Project: City Of Rochester CRC
Pace Project No.: 10112008

METHOD BLANK: 676441 Matrix: Water

Associated Lab Samples: 10112008002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloroform	ug/L	ND	1.0	09/08/09 15:16	
Chloromethane	ug/L	ND	1.0	09/08/09 15:16	
Chloroprene	ug/L	ND	1.0	09/08/09 15:16	
cis-1,2-Dichloroethene	ug/L	ND	1.0	09/08/09 15:16	
cis-1,3-Dichloropropene	ug/L	ND	4.0	09/08/09 15:16	
Dibromochloromethane	ug/L	ND	1.0	09/08/09 15:16	
Dibromomethane	ug/L	ND	1.0	09/08/09 15:16	
Dichlorodifluoromethane	ug/L	ND	1.0	09/08/09 15:16	
Dichlorofluoromethane	ug/L	ND	1.0	09/08/09 15:16	
Diethyl ether (Ethyl ether)	ug/L	ND	4.0	09/08/09 15:16	
Ethylbenzene	ug/L	ND	1.0	09/08/09 15:16	
Hexachloro-1,3-butadiene	ug/L	ND	4.0	09/08/09 15:16	
Iodomethane	ug/L	ND	4.0	09/08/09 15:16	
Isopropylbenzene (Cumene)	ug/L	ND	1.0	09/08/09 15:16	
m&p-Xylene	ug/L	ND	2.0	09/08/09 15:16	
Methyl-tert-butyl ether	ug/L	ND	1.0	09/08/09 15:16	
Methylene Chloride	ug/L	ND	4.0	09/08/09 15:16	
n-Butylbenzene	ug/L	ND	1.0	09/08/09 15:16	
n-Propylbenzene	ug/L	ND	1.0	09/08/09 15:16	
Naphthalene	ug/L	ND	4.0	09/08/09 15:16	
o-Xylene	ug/L	ND	1.0	09/08/09 15:16	
p-Isopropyltoluene	ug/L	ND	1.0	09/08/09 15:16	
sec-Butylbenzene	ug/L	ND	1.0	09/08/09 15:16	
Styrene	ug/L	ND	1.0	09/08/09 15:16	
tert-Butylbenzene	ug/L	ND	1.0	09/08/09 15:16	
Tetrachloroethene	ug/L	ND	1.0	09/08/09 15:16	
Tetrahydrofuran	ug/L	ND	10.0	09/08/09 15:16	
Toluene	ug/L	ND	1.0	09/08/09 15:16	
trans-1,2-Dichloroethene	ug/L	ND	1.0	09/08/09 15:16	
trans-1,3-Dichloropropene	ug/L	ND	4.0	09/08/09 15:16	
Trichloroethene	ug/L	ND	1.0	09/08/09 15:16	
Trichlorofluoromethane	ug/L	ND	4.0	09/08/09 15:16	
Vinyl acetate	ug/L	ND	20.0	09/08/09 15:16	
Vinyl chloride	ug/L	ND	0.40	09/08/09 15:16	
Xylene (Total)	ug/L	ND	3.0	09/08/09 15:16	
1,2-Dichloroethane-d4 (S)	%	104	75-125	09/08/09 15:16	
4-Bromofluorobenzene (S)	%	99	75-125	09/08/09 15:16	
Dibromofluoromethane (S)	%	101	75-125	09/08/09 15:16	
Toluene-d8 (S)	%	98	75-125	09/08/09 15:16	

LABORATORY CONTROL SAMPLE: 676442

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	50	51.3	103	75-129	
1,1,1-Trichloroethane	ug/L	50	49.0	98	73-144	

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QUALITY CONTROL DATA

Project: City Of Rochester CRC
Pace Project No.: 10112008

LABORATORY CONTROL SAMPLE: 676442

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,2,2-Tetrachloroethane	ug/L	50	48.5	97	75-125	
1,1,2-Trichloroethane	ug/L	50	49.8	100	75-125	
1,1,2-Trichlorotrifluoroethane	ug/L	50	50.7	101	75-143	
1,1-Dichloroethane	ug/L	50	48.5	97	75-135	
1,1-Dichloroethene	ug/L	50	47.3	95	75-133	
1,1-Dichloropropene	ug/L	50	49.8	100	75-131	
1,2,3-Trichlorobenzene	ug/L	50	52.4	105	73-141	
1,2,3-Trichloropropane	ug/L	50	49.0	98	75-126	
1,2,4-Trichlorobenzene	ug/L	50	53.0	106	70-148	
1,2,4-Trimethylbenzene	ug/L	50	53.4	107	75-141	
1,2-Dibromo-3-chloropropane	ug/L	50	48.0	96	64-135	
1,2-Dibromoethane (EDB)	ug/L	50	49.4	99	75-125	
1,2-Dichlorobenzene	ug/L	50	51.2	102	75-125	
1,2-Dichloroethane	ug/L	50	48.3	97	75-136	
1,2-Dichloropropane	ug/L	50	50.5	101	75-130	
1,3,5-Trimethylbenzene	ug/L	50	53.3	107	75-141	
1,3-Dichlorobenzene	ug/L	50	51.1	102	75-125	
1,3-Dichloropropane	ug/L	50	50.4	101	75-125	
1,4-Dichlorobenzene	ug/L	50	50.3	101	75-125	
2,2-Dichloropropane	ug/L	50	55.7	111	50-150	
2-Butanone (MEK)	ug/L	50	47.0	94	58-138	
2-Chloroethylvinyl ether	ug/L	125	131	104	50-150	
2-Chlorotoluene	ug/L	50	50.8	102	75-132	
2-Hexanone	ug/L	50	52.5	105	65-135	
2-Methylnaphthalene	ug/L	50	60.4	121	62-150	
4-Chlorotoluene	ug/L	50	52.5	105	75-135	
4-Methyl-2-pentanone (MIBK)	ug/L	50	53.7	107	69-137	
Acetone	ug/L	125	131	105	52-141	
Acrolein	ug/L	500	409	82	50-150	SS
Acrylonitrile	ug/L	500	484	97	75-130	
Allyl chloride	ug/L	50	32.2	64	68-150	L0
Benzene	ug/L	50	49.9	100	75-125	
Bromobenzene	ug/L	50	50.4	101	75-125	
Bromochloromethane	ug/L	50	49.1	98	75-129	
Bromodichloromethane	ug/L	50	51.3	103	75-142	
Bromoform	ug/L	100	100	100	66-135	
Bromomethane	ug/L	50	50.9	102	57-150	
Carbon disulfide	ug/L	50	48.9	98	65-132	
Carbon tetrachloride	ug/L	50	49.9	100	75-148	
Chlorobenzene	ug/L	50	50.5	101	75-125	
Chloroethane	ug/L	50	46.0	92	66-142	
Chloroform	ug/L	50	49.0	98	75-131	
Chloromethane	ug/L	50	49.6	99	52-147	
Chloroprene	ug/L	50	50.0	100	71-147	
cis-1,2-Dichloroethene	ug/L	50	49.8	100	75-126	
cis-1,3-Dichloropropene	ug/L	50	53.6	107	69-150	
Dibromochloromethane	ug/L	50	49.9	100	73-138	
Dibromomethane	ug/L	50	51.1	102	75-127	

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QUALITY CONTROL DATA

Project: City Of Rochester CRC
Pace Project No.: 10112008

LABORATORY CONTROL SAMPLE: 676442

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Dichlorodifluoromethane	ug/L	50	51.8	104	50-150	
Dichlorofluoromethane	ug/L	50	49.5	99	75-129	
Diethyl ether (Ethyl ether)	ug/L	50	48.6	97	75-126	
Ethylbenzene	ug/L	50	52.7	105	75-132	
Hexachloro-1,3-butadiene	ug/L	50	52.5	105	75-129	
Iodomethane	ug/L	50	63.3	127	73-150	
Isopropylbenzene (Cumene)	ug/L	50	54.8	110	75-142	
m&p-Xylene	ug/L	100	106	106	75-131	
Methyl-tert-butyl ether	ug/L	50	49.3	99	75-130	
Methylene Chloride	ug/L	50	46.2	92	71-125	
n-Butylbenzene	ug/L	50	54.8	110	70-148	
n-Propylbenzene	ug/L	50	52.4	105	75-136	
Naphthalene	ug/L	50	54.8	110	69-145	
o-Xylene	ug/L	50	53.0	106	75-129	
p-Isopropyltoluene	ug/L	50	54.1	108	75-132	
sec-Butylbenzene	ug/L	50	54.0	108	75-136	
Styrene	ug/L	50	52.6	105	75-125	
tert-Butylbenzene	ug/L	50	51.3	103	75-135	
Tetrachloroethene	ug/L	50	50.8	102	75-125	
Tetrahydrofuran	ug/L	500	480	96	63-144	
Toluene	ug/L	50	50.3	101	75-125	
trans-1,2-Dichloroethene	ug/L	50	49.5	99	72-135	
trans-1,3-Dichloropropene	ug/L	50	54.5	109	62-150	
Trichloroethene	ug/L	50	50.7	101	75-125	
Trichlorofluoromethane	ug/L	50	51.1	102	67-150	
Vinyl acetate	ug/L	50	56.2	112	55-150	
Vinyl chloride	ug/L	50	50.1	100	63-147	
Xylene (Total)	ug/L	150	159	106	75-130	
1,2-Dichloroethane-d4 (S)	%			94	75-125	
4-Bromofluorobenzene (S)	%			101	75-125	
Dibromofluoromethane (S)	%			98	75-125	
Toluene-d8 (S)	%			98	75-125	

MATRIX SPIKE SAMPLE: 676722

Parameter	Units	10112008002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	20	21.2	106	70-136	
1,1,1-Trichloroethane	ug/L	ND	20	22.3	112	68-150	
1,1,2,2-Tetrachloroethane	ug/L	ND	20	19.9	99	75-125	
1,1,2-Trichloroethane	ug/L	ND	20	20.8	104	75-125	
1,1,2-Trichlorotrifluoroethane	ug/L	ND	20	25.0	125	75-150	
1,1-Dichloroethane	ug/L	ND	20	21.1	106	67-143	
1,1-Dichloroethene	ug/L	ND	20	21.1	106	75-147	
1,1-Dichloropropene	ug/L	ND	20	22.1	110	75-141	
1,2,3-Trichlorobenzene	ug/L	ND	20	20.4	102	71-141	
1,2,3-Trichloropropane	ug/L	ND	20	19.9	99	75-128	
1,2,4-Trichlorobenzene	ug/L	ND	20	20.3	101	61-148	

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QUALITY CONTROL DATA

Project: City Of Rochester CRC
Pace Project No.: 10112008

MATRIX SPIKE SAMPLE: 676722

Parameter	Units	10112008002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,2,4-Trimethylbenzene	ug/L	ND	20	22.4	112	65-145	
1,2-Dibromo-3-chloropropane	ug/L	ND	20	19.0	95	64-135	
1,2-Dibromoethane (EDB)	ug/L	ND	20	20.3	102	75-126	
1,2-Dichlorobenzene	ug/L	ND	20	20.9	104	75-127	
1,2-Dichloroethane	ug/L	ND	20	20.9	104	70-138	
1,2-Dichloropropane	ug/L	ND	20	20.8	104	75-130	
1,3,5-Trimethylbenzene	ug/L	ND	20	22.5	113	61-150	
1,3-Dichlorobenzene	ug/L	ND	20	21.2	106	75-126	
1,3-Dichloropropane	ug/L	ND	20	20.5	103	75-125	
1,4-Dichlorobenzene	ug/L	ND	20	20.3	101	75-125	
2,2-Dichloropropane	ug/L	ND	20	20.8	104	50-150	
2-Butanone (MEK)	ug/L	19.8	20	41.6	109	50-141	
2-Chloroethylvinyl ether	ug/L	ND	50	ND	0	50-150	P5
2-Chlorotoluene	ug/L	ND	20	21.8	109	75-137	
2-Hexanone	ug/L	ND	20	19.0	95	66-135	
2-Methylnaphthalene	ug/L	ND	20	19.9	100	62-150	
4-Chlorotoluene	ug/L	ND	20	21.6	108	70-144	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	20	20.0	100	62-142	
Acetone	ug/L	ND	50	48.7	97	50-150	
Acrolein	ug/L	ND	200	350	175	50-150	M0,SS
Acrylonitrile	ug/L	ND	200	198	99	70-135	
Allyl chloride	ug/L	ND	20	19.7	98	50-150	
Benzene	ug/L	ND	20	21.3	107	75-125	
Bromobenzene	ug/L	ND	20	20.8	104	75-125	
Bromochloromethane	ug/L	ND	20	21.2	106	73-137	
Bromodichloromethane	ug/L	ND	20	21.8	109	70-142	
Bromoform	ug/L	ND	40	39.4	98	55-135	
Bromomethane	ug/L	ND	20	24.5	123	50-150	
Carbon disulfide	ug/L	ND	20	21.8	109	50-150	
Carbon tetrachloride	ug/L	ND	20	23.1	116	64-150	
Chlorobenzene	ug/L	ND	20	21.2	106	75-125	
Chloroethane	ug/L	ND	20	23.1	115	59-150	
Chloroform	ug/L	ND	20	21.1	106	75-132	
Chloromethane	ug/L	ND	20	22.1	110	52-150	
Chloroprene	ug/L	ND	20	23.0	115	54-150	
cis-1,2-Dichloroethene	ug/L	ND	20	20.7	104	64-144	
cis-1,3-Dichloropropene	ug/L	ND	20	20.5	103	56-150	
Dibromochloromethane	ug/L	ND	20	19.8	99	60-138	
Dibromomethane	ug/L	ND	20	21.6	108	75-127	
Dichlorodifluoromethane	ug/L	ND	20	26.2	131	50-150	
Dichlorofluoromethane	ug/L	ND	20	22.4	112	74-142	
Diethyl ether (Ethyl ether)	ug/L	ND	20	20.2	101	75-127	
Ethylbenzene	ug/L	ND	20	22.6	113	75-134	
Hexachloro-1,3-butadiene	ug/L	ND	20	21.7	109	63-150	
Iodomethane	ug/L	ND	20	24.7	123	50-150	
Isopropylbenzene (Cumene)	ug/L	ND	20	23.4	117	69-147	
m&p-Xylene	ug/L	ND	40	44.8	112	75-133	
Methyl-tert-butyl ether	ug/L	ND	20	19.9	99	73-131	

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QUALITY CONTROL DATA

Project: City Of Rochester CRC
Pace Project No.: 10112008

MATRIX SPIKE SAMPLE: 676722

Parameter	Units	10112008002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Methylene Chloride	ug/L	ND	20	20.2	101	68-126	
n-Butylbenzene	ug/L	ND	20	22.8	114	59-150	
n-Propylbenzene	ug/L	ND	20	23.5	118	72-143	
Naphthalene	ug/L	ND	20	20.7	104	57-148	
o-Xylene	ug/L	ND	20	21.7	108	75-131	
p-Isopropyltoluene	ug/L	ND	20	22.9	114	75-137	
sec-Butylbenzene	ug/L	ND	20	23.4	117	75-144	
Styrene	ug/L	ND	20	21.7	109	75-134	
tert-Butylbenzene	ug/L	ND	20	22.0	110	68-150	
Tetrachloroethene	ug/L	ND	20	22.6	111	75-130	
Tetrahydrofuran	ug/L	ND	200	195	97	60-148	
Toluene	ug/L	ND	20	21.6	108	75-125	
trans-1,2-Dichloroethene	ug/L	ND	20	21.5	108	75-145	
trans-1,3-Dichloropropene	ug/L	ND	20	20.6	103	50-150	
Trichloroethene	ug/L	ND	20	22.8	114	73-132	
Trichlorofluoromethane	ug/L	ND	20	25.9	129	67-150	
Vinyl acetate	ug/L	ND	20	20.2	101	50-150	
Vinyl chloride	ug/L	ND	20	23.2	116	63-150	
Xylene (Total)	ug/L	ND	60	66.5	111	72-138	
1,2-Dichloroethane-d4 (S)	%				100	75-125	
4-Bromofluorobenzene (S)	%				100	75-125	
Dibromofluoromethane (S)	%				100	75-125	
Toluene-d8 (S)	%				98	75-125	

SAMPLE DUPLICATE: 676721

Parameter	Units	10111960001 Result	Dup Result	RPD	Max RPD	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	<0.50	ND		30	
1,1,1-Trichloroethane	ug/L	<0.50	ND		30	
1,1,2,2-Tetrachloroethane	ug/L	<0.50	ND		30	
1,1,2-Trichloroethane	ug/L	<2.0	ND		30	
1,1,2-Trichlorotrifluoroethane	ug/L	<0.50	ND		30	
1,1-Dichloroethane	ug/L	<0.50	ND		30	
1,1-Dichloroethene	ug/L	<0.50	ND		30	
1,1-Dichloropropene	ug/L	<0.50	ND		30	
1,2,3-Trichlorobenzene	ug/L	<0.50	ND		30	
1,2,3-Trichloropropane	ug/L	<0.50	ND		30	
1,2,4-Trichlorobenzene	ug/L	<0.50	ND		30	
1,2,4-Trimethylbenzene	ug/L	<0.50	ND		30	
1,2-Dibromo-3-chloropropane	ug/L	<2.0	ND		30	
1,2-Dibromoethane (EDB)	ug/L	<0.50	ND		30	
1,2-Dichlorobenzene	ug/L	<0.50	ND		30	
1,2-Dichloroethane	ug/L	<0.50	ND		30	
1,2-Dichloropropane	ug/L	<0.50	ND		30	
1,3,5-Trimethylbenzene	ug/L	<0.50	ND		30	
1,3-Dichlorobenzene	ug/L	<0.50	ND		30	
1,3-Dichloropropane	ug/L	<0.50	ND		30	

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Project: City Of Rochester CRC
Pace Project No.: 10112008

SAMPLE DUPLICATE: 676721

Parameter	Units	10111960001 Result	Dup Result	RPD	Max RPD	Qualifiers
1,4-Dichlorobenzene	ug/L	<0.50	ND		30	
2,2-Dichloropropane	ug/L	<0.50	ND		30	
2-Butanone (MEK)	ug/L	<2.0	ND		30	
2-Chloroethylvinyl ether	ug/L	<5.0	ND		30	
2-Chlorotoluene	ug/L	<0.50	ND		30	
2-Hexanone	ug/L	<2.0	ND		30	
2-Methylnaphthalene	ug/L	<2.5	ND		30	
4-Chlorotoluene	ug/L	<0.50	ND		30	
4-Methyl-2-pentanone (MIBK)	ug/L	<2.5	ND		30	
Acetone	ug/L	<5.0	ND		30	
Acrolein	ug/L	<20.0	ND		30	
Acrylonitrile	ug/L	<5.0	ND		30	
Allyl chloride	ug/L	<2.0	ND		30	
Benzene	ug/L	<0.50	ND		30	
Bromobenzene	ug/L	<0.50	ND		30	
Bromochloromethane	ug/L	<0.50	ND		30	
Bromodichloromethane	ug/L	<2.0	ND		30	
Bromoform	ug/L	<4.0	ND		30	
Bromomethane	ug/L	<2.0	ND		30	
Carbon disulfide	ug/L	<0.50	ND		30	
Carbon tetrachloride	ug/L	<0.50	ND		30	
Chlorobenzene	ug/L	<0.50	ND		30	
Chloroethane	ug/L	<0.50	ND		30	
Chloroform	ug/L	<0.50	ND		30	
Chloromethane	ug/L	<0.50	ND		30	
Chloroprene	ug/L	<0.50	ND		30	
cis-1,2-Dichloroethene	ug/L	<0.50	ND		30	
cis-1,3-Dichloropropene	ug/L	<2.0	ND		30	
Dibromochloromethane	ug/L	<0.50	ND		30	
Dibromomethane	ug/L	<0.50	ND		30	
Dichlorodifluoromethane	ug/L	<0.50	ND		30	
Dichlorofluoromethane	ug/L	<0.50	ND		30	
Diethyl ether (Ethyl ether)	ug/L	<2.0	ND		30	
Ethylbenzene	ug/L	<0.50	ND		30	
Hexachloro-1,3-butadiene	ug/L	<2.0	ND		30	
Iodomethane	ug/L	<2.0	ND		30	
Isopropylbenzene (Cumene)	ug/L	<0.50	ND		30	
m&p-Xylene	ug/L	<1.0	ND		30	
Methyl-tert-butyl ether	ug/L	<0.50	ND		30	
Methylene Chloride	ug/L	<2.0	ND		30	
n-Butylbenzene	ug/L	<0.50	ND		30	
n-Propylbenzene	ug/L	<0.50	ND		30	
Naphthalene	ug/L	<2.0	ND		30	
o-Xylene	ug/L	<0.50	ND		30	
p-Isopropyltoluene	ug/L	<0.50	ND		30	
sec-Butylbenzene	ug/L	<0.50	ND		30	
Styrene	ug/L	<0.50	ND		30	
tert-Butylbenzene	ug/L	<0.50	ND		30	

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QUALITY CONTROL DATA

Project: City Of Rochester CRC
Pace Project No.: 10112008

SAMPLE DUPLICATE: 676721

Parameter	Units	10111960001 Result	Dup Result	RPD	Max RPD	Qualifiers
Tetrachloroethene	ug/L	<0.50	ND		30	
Tetrahydrofuran	ug/L	<5.0	ND		30	
Toluene	ug/L	<0.50	ND		30	
trans-1,2-Dichloroethene	ug/L	<0.50	ND		30	
trans-1,3-Dichloropropene	ug/L	<2.0	ND		30	
Trichloroethene	ug/L	<0.50	ND		30	
Trichlorofluoromethane	ug/L	<2.0	ND		30	
Vinyl acetate	ug/L	<10.0	ND		30	
Vinyl chloride	ug/L	<0.20	ND		30	
Xylene (Total)	ug/L	<1.5	ND		30	
1,2-Dichloroethane-d4 (S)	%	103	102	1		
4-Bromofluorobenzene (S)	%	101	100	2		
Dibromofluoromethane (S)	%	101	99	2		pH
Toluene-d8 (S)	%	98	97	1		

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QUALITY CONTROL DATA

Project: City Of Rochester CRC
Pace Project No.: 10112008

QC Batch: MSV/12996 Analysis Method: EPA 624
QC Batch Method: EPA 624 Analysis Description: 624 MSV
Associated Lab Samples: 10112008001

METHOD BLANK: 677298 Matrix: Water
Associated Lab Samples: 10112008001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	1.0	09/10/09 02:35	
1,1,1-Trichloroethane	ug/L	ND	1.0	09/10/09 02:35	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	09/10/09 02:35	
1,1,2-Trichloroethane	ug/L	ND	4.0	09/10/09 02:35	
1,1,2-Trichlorotrifluoroethane	ug/L	ND	1.0	09/10/09 02:35	
1,1-Dichloroethane	ug/L	ND	1.0	09/10/09 02:35	
1,1-Dichloroethene	ug/L	ND	1.0	09/10/09 02:35	
1,1-Dichloropropene	ug/L	ND	1.0	09/10/09 02:35	
1,2,3-Trichlorobenzene	ug/L	ND	1.0	09/10/09 02:35	
1,2,3-Trichloropropane	ug/L	ND	1.0	09/10/09 02:35	
1,2,4-Trichlorobenzene	ug/L	ND	1.0	09/10/09 02:35	
1,2,4-Trimethylbenzene	ug/L	ND	1.0	09/10/09 02:35	
1,2-Dibromo-3-chloropropane	ug/L	ND	4.0	09/10/09 02:35	
1,2-Dibromoethane (EDB)	ug/L	ND	1.0	09/10/09 02:35	
1,2-Dichlorobenzene	ug/L	ND	1.0	09/10/09 02:35	
1,2-Dichloroethane	ug/L	ND	1.0	09/10/09 02:35	
1,2-Dichloropropane	ug/L	ND	1.0	09/10/09 02:35	
1,3,5-Trimethylbenzene	ug/L	ND	1.0	09/10/09 02:35	
1,3-Dichlorobenzene	ug/L	ND	1.0	09/10/09 02:35	
1,3-Dichloropropane	ug/L	ND	1.0	09/10/09 02:35	
1,4-Dichlorobenzene	ug/L	ND	1.0	09/10/09 02:35	
2,2-Dichloropropane	ug/L	ND	1.0	09/10/09 02:35	
2-Butanone (MEK)	ug/L	ND	4.0	09/10/09 02:35	
2-Chloroethylvinyl ether	ug/L	ND	10.0	09/10/09 02:35	
2-Chlorotoluene	ug/L	ND	1.0	09/10/09 02:35	
2-Hexanone	ug/L	ND	4.0	09/10/09 02:35	
2-Methylnaphthalene	ug/L	ND	5.0	09/10/09 02:35	
4-Chlorotoluene	ug/L	ND	1.0	09/10/09 02:35	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	5.0	09/10/09 02:35	
Acetone	ug/L	ND	10.0	09/10/09 02:35	
Acrolein	ug/L	ND	40.0	09/10/09 02:35	
Acrylonitrile	ug/L	ND	10.0	09/10/09 02:35	
Allyl chloride	ug/L	ND	4.0	09/10/09 02:35	
Benzene	ug/L	ND	1.0	09/10/09 02:35	
Bromobenzene	ug/L	ND	1.0	09/10/09 02:35	
Bromochloromethane	ug/L	ND	1.0	09/10/09 02:35	
Bromodichloromethane	ug/L	ND	4.0	09/10/09 02:35	
Bromoform	ug/L	ND	8.0	09/10/09 02:35	
Bromomethane	ug/L	ND	4.0	09/10/09 02:35	
Carbon disulfide	ug/L	ND	1.0	09/10/09 02:35	
Carbon tetrachloride	ug/L	ND	1.0	09/10/09 02:35	
Chlorobenzene	ug/L	ND	1.0	09/10/09 02:35	
Chloroethane	ug/L	ND	1.0	09/10/09 02:35	

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QUALITY CONTROL DATA

Project: City Of Rochester CRC
Pace Project No.: 10112008

METHOD BLANK: 677298 Matrix: Water

Associated Lab Samples: 10112008001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloroform	ug/L	ND	1.0	09/10/09 02:35	
Chloromethane	ug/L	ND	1.0	09/10/09 02:35	
Chloroprene	ug/L	ND	1.0	09/10/09 02:35	
cis-1,2-Dichloroethene	ug/L	ND	1.0	09/10/09 02:35	
cis-1,3-Dichloropropene	ug/L	ND	4.0	09/10/09 02:35	
Dibromochloromethane	ug/L	ND	1.0	09/10/09 02:35	
Dibromomethane	ug/L	ND	1.0	09/10/09 02:35	
Dichlorodifluoromethane	ug/L	ND	1.0	09/10/09 02:35	
Dichlorofluoromethane	ug/L	ND	1.0	09/10/09 02:35	
Diethyl ether (Ethyl ether)	ug/L	ND	4.0	09/10/09 02:35	
Ethylbenzene	ug/L	ND	1.0	09/10/09 02:35	
Hexachloro-1,3-butadiene	ug/L	ND	4.0	09/10/09 02:35	
Iodomethane	ug/L	ND	4.0	09/10/09 02:35	
Isopropylbenzene (Cumene)	ug/L	ND	1.0	09/10/09 02:35	
m&p-Xylene	ug/L	ND	2.0	09/10/09 02:35	
Methyl-tert-butyl ether	ug/L	ND	1.0	09/10/09 02:35	
Methylene Chloride	ug/L	ND	4.0	09/10/09 02:35	
n-Butylbenzene	ug/L	ND	1.0	09/10/09 02:35	
n-Propylbenzene	ug/L	ND	1.0	09/10/09 02:35	
Naphthalene	ug/L	ND	4.0	09/10/09 02:35	
o-Xylene	ug/L	ND	1.0	09/10/09 02:35	
p-Isopropyltoluene	ug/L	ND	1.0	09/10/09 02:35	
sec-Butylbenzene	ug/L	ND	1.0	09/10/09 02:35	
Styrene	ug/L	ND	1.0	09/10/09 02:35	
tert-Butylbenzene	ug/L	ND	1.0	09/10/09 02:35	
Tetrachloroethene	ug/L	ND	1.0	09/10/09 02:35	
Tetrahydrofuran	ug/L	ND	10.0	09/10/09 02:35	
Toluene	ug/L	ND	1.0	09/10/09 02:35	
trans-1,2-Dichloroethene	ug/L	ND	1.0	09/10/09 02:35	
trans-1,3-Dichloropropene	ug/L	ND	4.0	09/10/09 02:35	
Trichloroethene	ug/L	ND	1.0	09/10/09 02:35	
Trichlorofluoromethane	ug/L	ND	4.0	09/10/09 02:35	
Vinyl acetate	ug/L	ND	20.0	09/10/09 02:35	
Vinyl chloride	ug/L	ND	0.40	09/10/09 02:35	
Xylene (Total)	ug/L	ND	3.0	09/10/09 02:35	
1,2-Dichloroethane-d4 (S)	%	98	75-125	09/10/09 02:35	
4-Bromofluorobenzene (S)	%	96	75-125	09/10/09 02:35	
Dibromofluoromethane (S)	%	98	75-125	09/10/09 02:35	
Toluene-d8 (S)	%	99	75-125	09/10/09 02:35	

LABORATORY CONTROL SAMPLE & LCSD: 677299 677300

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	50	49.9	47.6	100	95	75-129	5	20	
1,1,1-Trichloroethane	ug/L	50	48.8	45.4	98	91	73-144	7	20	

Pace Analytical Services, Inc.
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Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA

Project: City Of Rochester CRC
Pace Project No.: 10112008

LABORATORY CONTROL SAMPLE & LCSD: 677299 677300

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
1,1,2,2-Tetrachloroethane	ug/L	50	46.9	47.5	94	95	75-125	1	20	
1,1,2-Trichloroethane	ug/L	50	49.0	48.5	98	97	75-125	1	20	
1,1,2-Trichlorotrifluoroethane	ug/L	50	48.1	43.2	96	86	75-143	11	20	
1,1-Dichloroethane	ug/L	50	48.0	45.3	96	91	75-135	6	20	
1,1-Dichloroethene	ug/L	50	46.1	42.5	92	85	75-133	8	20	
1,1-Dichloropropene	ug/L	50	48.0	44.1	96	88	75-131	8	20	
1,2,3-Trichlorobenzene	ug/L	50	48.0	48.3	96	97	73-141	1	20	
1,2,3-Trichloropropane	ug/L	50	47.3	46.9	95	94	75-126	1	20	
1,2,4-Trichlorobenzene	ug/L	50	47.4	48.1	95	96	70-148	1	20	
1,2,4-Trimethylbenzene	ug/L	50	50.4	48.4	101	97	75-141	4	20	
1,2-Dibromo-3-chloropropane	ug/L	50	48.2	49.5	96	99	64-135	3	20	
1,2-Dibromoethane (EDB)	ug/L	50	48.3	48.7	97	97	75-125	1	20	
1,2-Dichlorobenzene	ug/L	50	48.1	47.8	96	96	75-125	1	20	
1,2-Dichloroethane	ug/L	50	49.0	46.9	98	94	75-136	4	20	
1,2-Dichloropropane	ug/L	50	50.3	47.1	101	94	75-130	6	20	
1,3,5-Trimethylbenzene	ug/L	50	50.2	47.8	100	96	75-141	5	20	
1,3-Dichlorobenzene	ug/L	50	48.1	46.2	96	92	75-125	4	20	
1,3-Dichloropropane	ug/L	50	49.8	48.8	100	98	75-125	2	20	
1,4-Dichlorobenzene	ug/L	50	46.8	45.6	94	91	75-125	3	20	
2,2-Dichloropropane	ug/L	50	46.8	44.6	94	89	50-150	5	20	
2-Butanone (MEK)	ug/L	50	47.1	47.8	94	96	58-138	2	20	
2-Chloroethylvinyl ether	ug/L	125	134	133	108	106	50-150	1	20	
2-Chlorotoluene	ug/L	50	48.1	46.6	96	93	75-132	3	20	
2-Hexanone	ug/L	50	48.8	50.8	98	102	65-135	4	20	
2-Methylnaphthalene	ug/L	50	50.2	55.9	100	112	62-150	11	20	
4-Chlorotoluene	ug/L	50	49.4	47.1	99	94	75-135	5	20	
4-Methyl-2-pentanone (MIBK)	ug/L	50	51.2	52.4	102	105	69-137	2	20	
Acetone	ug/L	125	117	121	93	97	52-141	4	20	
Acrolein	ug/L	500	453	410	91	82	50-150	10	20	SS
Acrylonitrile	ug/L	500	482	484	96	97	75-130	0	20	
Allyl chloride	ug/L	50	58.9	40.0	118	80	68-150	38	20	R1
Benzene	ug/L	50	48.5	45.7	97	91	75-125	6	20	
Bromobenzene	ug/L	50	48.0	46.2	96	92	75-125	4	20	
Bromochloromethane	ug/L	50	50.9	48.1	102	96	75-129	6	20	
Bromodichloromethane	ug/L	50	50.5	48.4	101	97	75-142	4	20	
Bromoform	ug/L	100	97.0	95.8	97	96	66-135	1	20	
Bromomethane	ug/L	50	45.6	43.2	91	86	57-150	6	20	
Carbon disulfide	ug/L	50	47.3	43.6	95	87	65-132	8	20	
Carbon tetrachloride	ug/L	50	50.1	46.5	100	93	75-148	7	20	
Chlorobenzene	ug/L	50	49.7	47.5	99	95	75-125	4	20	
Chloroethane	ug/L	50	51.2	45.7	102	91	66-142	11	20	
Chloroform	ug/L	50	48.4	45.7	97	91	75-131	6	20	
Chloromethane	ug/L	50	50.6	46.8	101	94	52-147	8	20	
Chloroprene	ug/L	50	50.1	46.0	100	92	71-147	8	20	
cis-1,2-Dichloroethene	ug/L	50	46.9	45.0	94	90	75-126	4	20	
cis-1,3-Dichloropropene	ug/L	50	50.8	48.6	102	97	69-150	4	20	
Dibromochloromethane	ug/L	50	49.4	48.4	99	97	73-138	2	20	
Dibromomethane	ug/L	50	50.6	48.8	101	98	75-127	4	20	

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QUALITY CONTROL DATA

Project: City Of Rochester CRC
Pace Project No.: 10112008

LABORATORY CONTROL SAMPLE & LCSD: 677299 677300

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Dichlorodifluoromethane	ug/L	50	53.9	47.7	108	95	50-150	12	20	
Dichlorofluoromethane	ug/L	50	49.9	45.5	100	91	75-129	9	20	
Diethyl ether (Ethyl ether)	ug/L	50	48.8	47.2	98	94	75-126	3	20	
Ethylbenzene	ug/L	50	51.4	48.5	103	97	75-132	6	20	
Hexachloro-1,3-butadiene	ug/L	50	46.8	45.3	94	91	75-129	3	20	
Iodomethane	ug/L	50	39.2	47.5	78	95	73-150	19	20	
Isopropylbenzene (Cumene)	ug/L	50	52.8	49.6	106	99	75-142	6	20	
m&p-Xylene	ug/L	100	103	96.8	103	97	75-131	6	20	
Methyl-tert-butyl ether	ug/L	50	48.0	47.7	96	95	75-130	1	20	
Methylene Chloride	ug/L	50	46.4	44.3	93	89	71-125	5	20	
n-Butylbenzene	ug/L	50	49.7	47.7	99	95	70-148	4	20	
n-Propylbenzene	ug/L	50	49.2	49.3	98	99	75-136	0	20	
Naphthalene	ug/L	50	51.2	52.2	102	104	69-145	2	20	
o-Xylene	ug/L	50	51.2	48.4	102	97	75-129	6	20	
p-Isopropyltoluene	ug/L	50	50.2	47.8	100	96	75-132	5	20	
sec-Butylbenzene	ug/L	50	50.0	47.7	100	95	75-136	5	20	
Styrene	ug/L	50	51.2	49.6	102	99	75-125	3	20	
tert-Butylbenzene	ug/L	50	49.4	47.2	99	94	75-135	5	20	
Tetrachloroethene	ug/L	50	49.5	45.2	99	90	75-125	9	20	
Tetrahydrofuran	ug/L	500	467	475	93	95	63-144	2	20	
Toluene	ug/L	50	49.7	46.9	99	94	75-125	6	20	
trans-1,2-Dichloroethene	ug/L	50	49.0	45.9	98	92	72-135	7	20	
trans-1,3-Dichloropropene	ug/L	50	52.6	51.2	105	102	62-150	3	20	
Trichloroethene	ug/L	50	50.3	45.5	101	91	75-125	10	20	
Trichlorofluoromethane	ug/L	50	52.3	48.6	105	97	67-150	8	20	
Vinyl acetate	ug/L	50	54.1	53.1	108	106	55-150	2	20	
Vinyl chloride	ug/L	50	49.5	46.3	99	93	63-147	7	20	
Xylene (Total)	ug/L	150	154	145	103	97	75-130	6	20	
1,2-Dichloroethane-d4 (S)	%				100	96	75-125			
4-Bromofluorobenzene (S)	%				99	99	75-125			
Dibromofluoromethane (S)	%				97	97	75-125			
Toluene-d8 (S)	%				100	100	75-125			

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QUALITY CONTROL DATA

Project: City Of Rochester CRC
Pace Project No.: 10112008

QC Batch: MPRP/17173 Analysis Method: EPA 200.7
QC Batch Method: EPA 200.7 Analysis Description: 200.7 MET
Associated Lab Samples: 10112008001

METHOD BLANK: 676605 Matrix: Water
Associated Lab Samples: 10112008001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Aluminum	ug/L	ND	200	09/09/09 10:46	

LABORATORY CONTROL SAMPLE: 676606

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Aluminum	ug/L	10000	9500	95	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 676607 676608

Parameter	Units	10111964001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Aluminum	ug/L	721	10000	10000	11000	11400	103	107	70-130	3	30	

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QUALIFIERS

Project: City Of Rochester CRC
Pace Project No.: 10112008

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

Pace Analytical is NELAP accredited. Contact your Pace PM for the current list of accredited analytes.

U - Indicates the compound was analyzed for, but not detected.

BATCH QUALIFIERS

Batch: MSV/12996

[M5]	A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

ANALYTE QUALIFIERS

L0	Analyte recovery in the laboratory control sample (LCS) was outside QC limits.
L2	Analyte recovery in the laboratory control sample (LCS) was below QC limits. Results may be biased low.
M0	Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.
P5	The EPA or method required sample preservation degrades this compound, therefore acceptable recoveries may not be achieved in sample matrix spikes.
R1	RPD value was outside control limits.
SS	This analyte did not meet the secondary source verification criteria for the initial calibration. The reported result should be considered an estimated value.
pH	Post-analysis pH measurement indicates insufficient VOA sample preservation.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: City Of Rochester CRC
Pace Project No.: 10112008

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
10112008002	**AS-Effluent**	EPA 624	MSV/12985		
10112008001	**AS-Influent**	EPA 200.7	MPRP/17173	EPA 200.7	ICP/7825
10112008001	**AS-Influent**	EPA 624	MSV/12996		

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CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

10/1/2008

Page: of

Section A Required Client Information:	Section B Required Project Information:	Section C Invoice Information:
Company: Landmark Environmental	Report To: Jason Skramstad	Attention: Jason Skramstad
Address: 2042 W. 98th Street	Copy To: Eric Gabrielson	Company Name: Landmark Environmental, LLC
Bloomington, MN 55431		Address: 2042 W. 98th St., Bloomington, MN 55431
Email To: jskramstad@landmarkenv.com	Purchase Order No.:	Pace Quote Reference:
Phone: 952-887-9601, ext 205 / Fax: 952-887-9605	Project Name: City of Rochester	Pace Project Manager: Carolynne Trout
Requested Due Date/TAT: Normal	Project Number: CRC	Pace Profile #:

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER

☐ UST ☐ RCRA ☐ OTHER_____

SITE LOCATION ☐ GA ☐ IL ☐ IN ☐ MI ☐ NC ☐ OH ☐ SC ☐ WI ☐ OTHER___

Section D Required Client Information

SAMPLE ID

One Character per box.
(A-Z, 0-9 / ,-)
Samples IDs MUST BE UNIQUE

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOIL/SOLID	SL
OIL	OL
WIPE	WP
AIR	AR
OTHER	OT
TISSUE	TS

ITEM #	SAMPLE ID	MATRIX CODE	SAMPLE TYPE G=GRAB C=COMP	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE END/GRAB DATE	COLLECTED COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	#OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Filtered (Y/N)	Requested Analysis: EPA 624	Total AL	Pace Project Number / Lab I.D.
1	AS-Influent	W	G	9/4/09	10:55														X	X	001
2	AS-Effluent	W	G	9/4/09	10:55														X		002
3																					
4																					
5																					
6																					
7																					
8																					
5																					
6																					
7																					
8																					

Additional Comments:

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
			J Richardson Pace MN	9/4/09	17:05

SAMPLE CONDITIONS

Temp in °C	Received on Ice	Custody Sealed Cooler	Samples Intact
10.7	(Y/N)	(Y/N)	(Y/N)
	Y/N	Y/N	Y/N
	Y/N	Y/N	Y/N
	Y/N	Y/N	Y/N

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Eric Gabrielson

SIGNATURE of SAMPLER: DATE Signed (MM / DD / YY)

F:\PROJECTS\Crc-City of Rochester\Analytical Reports\coc 9-4-09.XLS

1125

Pace Analytical

Sample Condition Upon Receipt

Client Name: Landmark Project #: 10112008

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☒ Commercial ☐ Pace Other _____

Tracking #: _____

Optional: Proj. Due Date: Proj. Name:

Custody Seal on Cooler/Box Present: ☐ yes ☒ no Seals Intact: ☐ yes ☐ no

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☐ None ☒ Other _____ Temp Blank: Yes ____ No X

Thermometer Used: 80344042 or 179425 Type of Ice: (Wet) Blue None ☐ Samples on ice, cooling process has begun

Cooler Temperature: 10.7 Biological Tissue is Frozen: Yes No

Temp should be above freezing to 6°C Comments:

Date and initials of person examining contents: JR 9-4-09

Chain of Custody Present:	☑Yes ☐No ☐N/A	1.
Chain of Custody Filled Out:	☑Yes ☐No ☐N/A	2.
Chain of Custody Relinquished:	☑Yes ☐No ☐N/A	3.
Sampler Name & Signature on COC:	☐Yes ☑No ☐N/A	4.
Samples Arrived within Hold Time:	☑Yes ☐No ☐N/A	5.
Short Hold Time Analysis (<72hr):	☐Yes ☑No ☐N/A	6.
Rush Turn Around Time Requested:	☐Yes ☑No ☐N/A	7.
Sufficient Volume:	☑Yes ☐No ☐N/A	8.
Correct Containers Used:	☑Yes ☐No ☐N/A	9.
-Pace Containers Used:	☐Yes ☑No ☐N/A	
Containers Intact:	☑Yes ☐No ☐N/A	10.
Filtered volume received for Dissolved tests	☐Yes ☐No ☑N/A	11.
Sample Labels match COC:	☑Yes ☐No ☐N/A	12.
-Includes date/time/ID/Analysis Matrix: WT		
All containers needing acid/base preservation have been checked. Noncompliance are noted in 13.	☐Yes ☐No ☑N/A	13. ☒HNO3 ☐H2SO4 ☐NaOH ☐HCl Samp # AS Influent
All containers needing preservation are found to be in compliance with EPA recommendation.	☐Yes ☐No ☑N/A	
Exceptions: (VOA) Coliform, TOC, Oil and Grease, WI-DRO (water)	☑Yes ☐No	Initial when completed: JR Lot # of added preservative:
Samples checked for dechlorination:	☐Yes ☐No ☑N/A	14.
Headspace in VOA Vials (>6mm):	☐Yes ☑No ☐N/A	15.
Trip Blank Present:	☐Yes ☑No ☐N/A	16.
Trip Blank Custody Seals Present	☐Yes ☐No ☑N/A	
Pace Trip Blank Lot # (if purchased):		

Client Notification/ Resolution: Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: CMO **Date:** 9/8/09

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DENR.

Pace Analytical Services, Inc. 1700 Elm Street SE, Suite 200, Minneapolis, MN 55414

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

September 11, 2009

Mr. Jason Skramstad
Landmark Environmental
2042 W. 98th. St.
Minneapolis, MN 55431

RE: Project: City Of Rochester CRC
Pace Project No.: 10111987

Dear Mr. Skramstad:
Enclosed are the analytical results for sample(s) received by the laboratory on September 04, 2009. The results relate only to the samples included in this report. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Carolynne Trout

Carolynne Trout

carolynne.trout@pacelabs.com
Project Manager

Enclosures

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
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CERTIFICATIONS

Project: City Of Rochester CRC
Pace Project No.: 10111987

Minnesota Certification IDs

1700 Elm Street SE, Suite 200 Minneapolis, MN 55414
Alaska Certification #: UST-078
Washington Certification #: C754
Tennessee Certification #: 02818
Pennsylvania Certification #: 68-00563
Oregon Certification #: MN200001
North Dakota Certification #: R-036
North Carolina Certification #: 530
New York Certification #: 11647
New Jersey Certification #: MN-002
Montana Certification #: MT CERT0092
Minnesota Certification #: 027-053-137
Maine Certification #: 2007029
Louisiana Certification #: LA080009
Louisiana Certification #: 03086
Kansas Certification #: E-10167
Iowa Certification #: 368
Illinois Certification #: 200011
Florida/NELAP Certification #: E87605
California Certification #: 01155CA
Arizona Certification #: AZ-0014
Wisconsin Certification #: 999407970

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SAMPLE SUMMARY

Project: City Of Rochester CRC
Pace Project No.: 10111987

Lab ID	Sample ID	Matrix	Date Collected	Date Received
10111987001	**DPE-EFFLUENT-0680**	Air	09/04/09 10:19	09/04/09 17:05
10111987002	**AS-EFFLUENT-0842**	Air	09/04/09 10:55	09/04/09 17:05

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SAMPLE ANALYTE COUNT

Project: City Of Rochester CRC
Pace Project No.: 10111987

Lab ID	Sample ID	Method	Analysts	Analytes Reported
10111987001	**DPE-EFFLUENT-0680**	TO-15	DB1	60
10111987002	**AS-EFFLUENT-0842**	TO-15	DB1	60

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ANALYTICAL RESULTS

Project: City Of Rochester CRC
Pace Project No.: 10111987

Sample: DPE-EFFLUENT-0680 **Lab ID: 10111987001** Collected: 09/04/09 10:19 Received: 09/04/09 17:05 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15							
Acetone	**7510**	ug/m3	455	947.2		09/10/09 14:15	67-64-1	A3
Benzene	**2.3**	ug/m3	0.96	1.48		09/10/09 03:31	71-43-2	
Bromodichloromethane	ND	ug/m3	2.1	1.48		09/10/09 03:31	75-27-4	
Bromoform	ND	ug/m3	3.1	1.48		09/10/09 03:31	75-25-2	
Bromomethane	ND	ug/m3	1.2	1.48		09/10/09 03:31	74-83-9	
1,3-Butadiene	ND	ug/m3	0.67	1.48		09/10/09 03:31	106-99-0	
2-Butanone (MEK)	**15.8**	ug/m3	0.89	1.48		09/10/09 03:31	78-93-3	
Carbon disulfide	**5.9**	ug/m3	0.93	1.48		09/10/09 03:31	75-15-0	
Carbon tetrachloride	ND	ug/m3	1.9	1.48		09/10/09 03:31	56-23-5	
Chlorobenzene	ND	ug/m3	1.4	1.48		09/10/09 03:31	108-90-7	
Chloroethane	ND	ug/m3	0.80	1.48		09/10/09 03:31	75-00-3	
Chloroform	**21.5**	ug/m3	1.5	1.48		09/10/09 03:31	67-66-3	
Chloromethane	ND	ug/m3	0.62	1.48		09/10/09 03:31	74-87-3	
Cyclohexane	**3.5**	ug/m3	1.0	1.48		09/10/09 03:31	110-82-7	L1
Dibromochloromethane	ND	ug/m3	2.5	1.48		09/10/09 03:31	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/m3	2.4	1.48		09/10/09 03:31	106-93-4	
1,2-Dichlorobenzene	ND	ug/m3	1.8	1.48		09/10/09 03:31	95-50-1	
1,3-Dichlorobenzene	**6.0**	ug/m3	1.8	1.48		09/10/09 03:31	541-73-1	
1,4-Dichlorobenzene	**8.6**	ug/m3	1.8	1.48		09/10/09 03:31	106-46-7	
Dichlorodifluoromethane	ND	ug/m3	1.5	1.48		09/10/09 03:31	75-71-8	
1,1-Dichloroethane	ND	ug/m3	1.2	1.48		09/10/09 03:31	75-34-3	
1,2-Dichloroethane	ND	ug/m3	1.2	1.48		09/10/09 03:31	107-06-2	
1,1-Dichloroethene	**15.0**	ug/m3	1.2	1.48		09/10/09 03:31	75-35-4	
cis-1,2-Dichloroethene	**2620**	ug/m3	767	947.2		09/10/09 14:15	156-59-2	A3
trans-1,2-Dichloroethene	**4.2**	ug/m3	1.2	1.48		09/10/09 03:31	156-60-5	
1,2-Dichloropropane	ND	ug/m3	1.4	1.48		09/10/09 03:31	78-87-5	
cis-1,3-Dichloropropene	ND	ug/m3	1.4	1.48		09/10/09 03:31	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/m3	1.4	1.48		09/10/09 03:31	10061-02-6	
Dichlorotetrafluoroethane	ND	ug/m3	2.1	1.48		09/10/09 03:31	76-14-2	
Ethanol	**5.7**	ug/m3	2.8	1.48		09/10/09 03:31	64-17-5	
Ethyl acetate	ND	ug/m3	1.1	1.48		09/10/09 03:31	141-78-6	
Ethylbenzene	ND	ug/m3	1.3	1.48		09/10/09 03:31	100-41-4	
4-Ethyltoluene	**6.0**	ug/m3	3.7	1.48		09/10/09 03:31	622-96-8	
n-Heptane	**2.6**	ug/m3	1.2	1.48		09/10/09 03:31	142-82-5	
Hexachloro-1,3-butadiene	ND	ug/m3	3.3	1.48		09/10/09 03:31	87-68-3	
n-Hexane	**3.4**	ug/m3	1.1	1.48		09/10/09 03:31	110-54-3	
2-Hexanone	ND	ug/m3	1.2	1.48		09/10/09 03:31	591-78-6	
Methylene Chloride	ND	ug/m3	1.1	1.48		09/10/09 03:31	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/m3	1.2	1.48		09/10/09 03:31	108-10-1	
Methyl-tert-butyl ether	ND	ug/m3	1.1	1.48		09/10/09 03:31	1634-04-4	
Naphthalene	**4.2**	ug/m3	4.0	1.48		09/10/09 03:31	91-20-3	CH
2-Propanol	ND	ug/m3	3.7	1.48		09/10/09 03:31	67-63-0	
Propylene	ND	ug/m3	0.52	1.48		09/10/09 03:31	115-07-1	
Styrene	ND	ug/m3	1.3	1.48		09/10/09 03:31	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/m3	2.1	1.48		09/10/09 03:31	79-34-5	
Tetrachloroethene	**3630000**	ug/m3	42400	30310.4		09/11/09 07:59	127-18-4	A3
Tetrahydrofuran	**31.1**	ug/m3	0.89	1.48		09/10/09 03:31	109-99-9	

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ANALYTICAL RESULTS

Project: City Of Rochester CRC
Pace Project No.: 10111987

Sample: DPE-EFFLUENT-0680 **Lab ID: 10111987001** Collected: 09/04/09 10:19 Received: 09/04/09 17:05 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15							
Toluene	**14.4**	ug/m3	1.1	1.48		09/10/09 03:31	108-88-3	
1,2,4-Trichlorobenzene	ND	ug/m3	1.5	1.48		09/10/09 03:31	120-82-1	
1,1,1-Trichloroethane	**127**	ug/m3	1.6	1.48		09/10/09 03:31	71-55-6	
1,1,2-Trichloroethane	ND	ug/m3	1.6	1.48		09/10/09 03:31	79-00-5	
Trichloroethene	**1640**	ug/m3	1040	947.2		09/10/09 14:15	79-01-6	A3
Trichlorofluoromethane	**2.2**	ug/m3	1.6	1.48		09/10/09 03:31	75-69-4	
1,1,2-Trichlorotrifluoroethane	**153000**	ug/m3	1520	947.2		09/10/09 14:15	76-13-1	A3
1,2,4-Trimethylbenzene	**10.2**	ug/m3	3.7	1.48		09/10/09 03:31	95-63-6	
1,3,5-Trimethylbenzene	**5.0**	ug/m3	3.7	1.48		09/10/09 03:31	108-67-8	
Vinyl acetate	**8.7**	ug/m3	1.1	1.48		09/10/09 03:31	108-05-4	
Vinyl chloride	ND	ug/m3	0.77	1.48		09/10/09 03:31	75-01-4	
m&p-Xylene	**14.2**	ug/m3	2.6	1.48		09/10/09 03:31	1330-20-7	
o-Xylene	**4.8**	ug/m3	1.3	1.48		09/10/09 03:31	95-47-6	

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ANALYTICAL RESULTS

Project: City Of Rochester CRC
Pace Project No.: 10111987

Sample: AS-EFFLUENT-0842 **Lab ID: 10111987002** Collected: 09/04/09 10:55 Received: 09/04/09 17:05 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15							
Acetone	**11.2**	ug/m3	0.64	1.34		09/10/09 10:09	67-64-1	
Benzene	**1.9**	ug/m3	0.87	1.34		09/10/09 10:09	71-43-2	
Bromodichloromethane	ND	ug/m3	1.9	1.34		09/10/09 10:09	75-27-4	
Bromoform	ND	ug/m3	2.8	1.34		09/10/09 10:09	75-25-2	
Bromomethane	ND	ug/m3	1.1	1.34		09/10/09 10:09	74-83-9	
1,3-Butadiene	ND	ug/m3	0.60	1.34		09/10/09 10:09	106-99-0	
2-Butanone (MEK)	**8.8**	ug/m3	0.80	1.34		09/10/09 10:09	78-93-3	
Carbon disulfide	ND	ug/m3	0.84	1.34		09/10/09 10:09	75-15-0	
Carbon tetrachloride	ND	ug/m3	1.7	1.34		09/10/09 10:09	56-23-5	
Chlorobenzene	ND	ug/m3	1.3	1.34		09/10/09 10:09	108-90-7	
Chloroethane	ND	ug/m3	0.72	1.34		09/10/09 10:09	75-00-3	
Chloroform	ND	ug/m3	1.3	1.34		09/10/09 10:09	67-66-3	
Chloromethane	ND	ug/m3	0.56	1.34		09/10/09 10:09	74-87-3	
Cyclohexane	**2.1**	ug/m3	0.91	1.34		09/10/09 10:09	110-82-7	L1
Dibromochloromethane	ND	ug/m3	2.3	1.34		09/10/09 10:09	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/m3	2.1	1.34		09/10/09 10:09	106-93-4	
1,2-Dichlorobenzene	ND	ug/m3	1.6	1.34		09/10/09 10:09	95-50-1	
1,3-Dichlorobenzene	ND	ug/m3	1.6	1.34		09/10/09 10:09	541-73-1	
1,4-Dichlorobenzene	ND	ug/m3	1.6	1.34		09/10/09 10:09	106-46-7	
Dichlorodifluoromethane	ND	ug/m3	1.3	1.34		09/10/09 10:09	75-71-8	
1,1-Dichloroethane	ND	ug/m3	1.1	1.34		09/10/09 10:09	75-34-3	
1,2-Dichloroethane	ND	ug/m3	1.1	1.34		09/10/09 10:09	107-06-2	
1,1-Dichloroethene	ND	ug/m3	1.1	1.34		09/10/09 10:09	75-35-4	
cis-1,2-Dichloroethene	ND	ug/m3	1.1	1.34		09/10/09 10:09	156-59-2	
trans-1,2-Dichloroethene	**2.3**	ug/m3	1.1	1.34		09/10/09 10:09	156-60-5	
1,2-Dichloropropane	ND	ug/m3	1.3	1.34		09/10/09 10:09	78-87-5	
cis-1,3-Dichloropropene	ND	ug/m3	1.2	1.34		09/10/09 10:09	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/m3	1.2	1.34		09/10/09 10:09	10061-02-6	
Dichlorotetrafluoroethane	ND	ug/m3	1.9	1.34		09/10/09 10:09	76-14-2	
Ethanol	**5.1**	ug/m3	2.5	1.34		09/10/09 10:09	64-17-5	
Ethyl acetate	ND	ug/m3	0.98	1.34		09/10/09 10:09	141-78-6	
Ethylbenzene	**3.0**	ug/m3	1.2	1.34		09/10/09 10:09	100-41-4	
4-Ethyltoluene	ND	ug/m3	3.4	1.34		09/10/09 10:09	622-96-8	
n-Heptane	**1.8**	ug/m3	1.1	1.34		09/10/09 10:09	142-82-5	
Hexachloro-1,3-butadiene	ND	ug/m3	2.9	1.34		09/10/09 10:09	87-68-3	
n-Hexane	**2.6**	ug/m3	0.96	1.34		09/10/09 10:09	110-54-3	
2-Hexanone	ND	ug/m3	1.1	1.34		09/10/09 10:09	591-78-6	
Methylene Chloride	**3.0**	ug/m3	0.95	1.34		09/10/09 10:09	75-09-2	
4-Methyl-2-pentanone (MIBK)	**2.0**	ug/m3	1.1	1.34		09/10/09 10:09	108-10-1	
Methyl-tert-butyl ether	ND	ug/m3	0.98	1.34		09/10/09 10:09	1634-04-4	
Naphthalene	**3.7**	ug/m3	3.6	1.34		09/10/09 10:09	91-20-3	CH
2-Propanol	ND	ug/m3	3.4	1.34		09/10/09 10:09	67-63-0	
Propylene	ND	ug/m3	0.47	1.34		09/10/09 10:09	115-07-1	
Styrene	**3.0**	ug/m3	1.2	1.34		09/10/09 10:09	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/m3	1.9	1.34		09/10/09 10:09	79-34-5	
Tetrachloroethene	**16.7**	ug/m3	1.9	1.34		09/10/09 10:09	127-18-4	
Tetrahydrofuran	**7.1**	ug/m3	0.80	1.34		09/10/09 10:09	109-99-9	

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ANALYTICAL RESULTS

Project: City Of Rochester CRC
Pace Project No.: 10111987

Sample: AS-EFFLUENT-0842 **Lab ID: 10111987002** Collected: 09/04/09 10:55 Received: 09/04/09 17:05 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15							
Toluene	**11.9**	ug/m3	1.0	1.34		09/10/09 10:09	108-88-3	
1,2,4-Trichlorobenzene	ND	ug/m3	1.3	1.34		09/10/09 10:09	120-82-1	
1,1,1-Trichloroethane	ND	ug/m3	1.5	1.34		09/10/09 10:09	71-55-6	
1,1,2-Trichloroethane	ND	ug/m3	1.5	1.34		09/10/09 10:09	79-00-5	
Trichloroethene	ND	ug/m3	1.5	1.34		09/10/09 10:09	79-01-6	
Trichlorofluoromethane	ND	ug/m3	1.5	1.34		09/10/09 10:09	75-69-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/m3	2.1	1.34		09/10/09 10:09	76-13-1	
1,2,4-Trimethylbenzene	**3.7**	ug/m3	3.4	1.34		09/10/09 10:09	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/m3	3.4	1.34		09/10/09 10:09	108-67-8	
Vinyl acetate	ND	ug/m3	0.95	1.34		09/10/09 10:09	108-05-4	
Vinyl chloride	ND	ug/m3	0.70	1.34		09/10/09 10:09	75-01-4	
m&p-Xylene	**8.7**	ug/m3	2.4	1.34		09/10/09 10:09	1330-20-7	
o-Xylene	**3.0**	ug/m3	1.2	1.34		09/10/09 10:09	95-47-6	

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QUALITY CONTROL DATA

Project: City Of Rochester CRC
Pace Project No.: 10111987

QC Batch: AIR/9064 Analysis Method: TO-15
QC Batch Method: TO-15 Analysis Description: TO15 MSV AIR Low Level
Associated Lab Samples: 10111987001, 10111987002

METHOD BLANK: 676951 Matrix: Air
Associated Lab Samples: 10111987001, 10111987002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/m3	ND	1.1	09/09/09 14:11	
1,1,2,2-Tetrachloroethane	ug/m3	ND	1.4	09/09/09 14:11	
1,1,2-Trichloroethane	ug/m3	ND	1.1	09/09/09 14:11	
1,1,2-Trichlorotrifluoroethane	ug/m3	ND	1.6	09/09/09 14:11	
1,1-Dichloroethane	ug/m3	ND	0.82	09/09/09 14:11	
1,1-Dichloroethene	ug/m3	ND	0.81	09/09/09 14:11	
1,2,4-Trichlorobenzene	ug/m3	ND	0.99	09/09/09 14:11	
1,2,4-Trimethylbenzene	ug/m3	ND	2.5	09/09/09 14:11	
1,2-Dibromoethane (EDB)	ug/m3	ND	1.6	09/09/09 14:11	
1,2-Dichlorobenzene	ug/m3	ND	1.2	09/09/09 14:11	
1,2-Dichloroethane	ug/m3	ND	0.82	09/09/09 14:11	
1,2-Dichloropropane	ug/m3	ND	0.94	09/09/09 14:11	
1,3,5-Trimethylbenzene	ug/m3	ND	2.5	09/09/09 14:11	
1,3-Butadiene	ug/m3	ND	0.45	09/09/09 14:11	
1,3-Dichlorobenzene	ug/m3	ND	1.2	09/09/09 14:11	
1,4-Dichlorobenzene	ug/m3	ND	1.2	09/09/09 14:11	
2-Butanone (MEK)	ug/m3	ND	0.60	09/09/09 14:11	
2-Hexanone	ug/m3	ND	0.83	09/09/09 14:11	
2-Propanol	ug/m3	ND	2.5	09/09/09 14:11	
4-Ethyltoluene	ug/m3	ND	2.5	09/09/09 14:11	
4-Methyl-2-pentanone (MIBK)	ug/m3	ND	0.83	09/09/09 14:11	
Acetone	ug/m3	ND	0.48	09/09/09 14:11	
Benzene	ug/m3	ND	0.65	09/09/09 14:11	
Bromodichloromethane	ug/m3	ND	1.4	09/09/09 14:11	
Bromoform	ug/m3	ND	2.1	09/09/09 14:11	
Bromomethane	ug/m3	ND	0.79	09/09/09 14:11	
Carbon disulfide	ug/m3	ND	0.63	09/09/09 14:11	
Carbon tetrachloride	ug/m3	ND	1.3	09/09/09 14:11	
Chlorobenzene	ug/m3	ND	0.94	09/09/09 14:11	
Chloroethane	ug/m3	ND	0.54	09/09/09 14:11	
Chloroform	ug/m3	ND	0.99	09/09/09 14:11	
Chloromethane	ug/m3	ND	0.42	09/09/09 14:11	
cis-1,2-Dichloroethene	ug/m3	ND	0.81	09/09/09 14:11	
cis-1,3-Dichloropropene	ug/m3	ND	0.92	09/09/09 14:11	
Cyclohexane	ug/m3	ND	0.68	09/09/09 14:11	
Dibromochloromethane	ug/m3	ND	1.7	09/09/09 14:11	
Dichlorodifluoromethane	ug/m3	ND	1.0	09/09/09 14:11	
Dichlorotetrafluoroethane	ug/m3	ND	1.4	09/09/09 14:11	
Ethanol	ug/m3	ND	1.9	09/09/09 14:11	
Ethyl acetate	ug/m3	ND	0.73	09/09/09 14:11	
Ethylbenzene	ug/m3	ND	0.88	09/09/09 14:11	
Hexachloro-1,3-butadiene	ug/m3	ND	2.2	09/09/09 14:11	
m&p-Xylene	ug/m3	ND	1.8	09/09/09 14:11	

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QUALITY CONTROL DATA

Project: City Of Rochester CRC
Pace Project No.: 10111987

METHOD BLANK: 676951 Matrix: Air

Associated Lab Samples: 10111987001, 10111987002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Methyl-tert-butyl ether	ug/m3	ND	0.73	09/09/09 14:11	
Methylene Chloride	ug/m3	ND	0.71	09/09/09 14:11	
n-Heptane	ug/m3	ND	0.83	09/09/09 14:11	
n-Hexane	ug/m3	ND	0.72	09/09/09 14:11	
Naphthalene	ug/m3	ND	2.7	09/09/09 14:11	
o-Xylene	ug/m3	ND	0.88	09/09/09 14:11	
Propylene	ug/m3	ND	0.35	09/09/09 14:11	
Styrene	ug/m3	ND	0.87	09/09/09 14:11	
Tetrachloroethene	ug/m3	ND	1.4	09/09/09 14:11	
Tetrahydrofuran	ug/m3	ND	0.60	09/09/09 14:11	
Toluene	ug/m3	ND	0.77	09/09/09 14:11	
trans-1,2-Dichloroethene	ug/m3	ND	0.81	09/09/09 14:11	
trans-1,3-Dichloropropene	ug/m3	ND	0.92	09/09/09 14:11	
Trichloroethene	ug/m3	ND	1.1	09/09/09 14:11	
Trichlorofluoromethane	ug/m3	ND	1.1	09/09/09 14:11	
Vinyl acetate	ug/m3	ND	0.71	09/09/09 14:11	
Vinyl chloride	ug/m3	ND	0.52	09/09/09 14:11	

LABORATORY CONTROL SAMPLE: 676952

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/m3	55.5	59.0	106	55-127	
1,1,2,2-Tetrachloroethane	ug/m3	69.8	79.8	114	58-128	
1,1,2-Trichloroethane	ug/m3	55.5	57.0	103	58-126	
1,1,2-Trichlorotrifluoroethane	ug/m3	77.9	57.7	74	49-134	
1,1-Dichloroethane	ug/m3	41.1	36.8	89	52-129	
1,1-Dichloroethene	ug/m3	40.3	41.5	103	50-130	
1,2,4-Trichlorobenzene	ug/m3	75.4	41.6	55	30-150	
1,2,4-Trimethylbenzene	ug/m3	50	40.1	80	53-144	
1,2-Dibromoethane (EDB)	ug/m3	78.1	98.3	126	57-137	
1,2-Dichlorobenzene	ug/m3	61.1	47.2	77	65-140	
1,2-Dichloroethane	ug/m3	41.1	43.7	106	54-125	
1,2-Dichloropropane	ug/m3	50.8	60.2	119	60-125	
1,3,5-Trimethylbenzene	ug/m3	50	42.9	86	54-139	
1,3-Butadiene	ug/m3	22.5	23.9	106	54-125	
1,3-Dichlorobenzene	ug/m3	61.1	73.5	120	62-140	
1,4-Dichlorobenzene	ug/m3	61.1	65.2	107	61-139	
2-Butanone (MEK)	ug/m3	30	23.9	80	47-138	
2-Hexanone	ug/m3	41.6	30.2	73	40-143	
2-Propanol	ug/m3	25	21.4	86	45-149	
4-Ethyltoluene	ug/m3	50	37.7	75	57-139	
4-Methyl-2-pentanone (MIBK)	ug/m3	41.6	29.3	70	54-132	
Acetone	ug/m3	24.1	17.0	71	44-147	
Benzene	ug/m3	32.5	37.1	114	60-125	
Bromodichloromethane	ug/m3	68.1	73.7	108	53-130	

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA

Project: City Of Rochester CRC
Pace Project No.: 10111987

LABORATORY CONTROL SAMPLE: 676952

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Bromoform	ug/m3	105	123	117	55-125	
Bromomethane	ug/m3	39.5	40.5	103	53-132	
Carbon disulfide	ug/m3	31.7	30.3	96	57-150	
Carbon tetrachloride	ug/m3	64	60.4	94	53-125	
Chlorobenzene	ug/m3	46.8	53.1	114	50-136	
Chloroethane	ug/m3	26.8	28.0	104	55-130	
Chloroform	ug/m3	49.6	49.1	99	56-125	
Chloromethane	ug/m3	21	22.4	107	49-127	
cis-1,2-Dichloroethene	ug/m3	40.3	47.0	117	58-127	
cis-1,3-Dichloropropene	ug/m3	46.1	50.6	110	62-135	
Cyclohexane	ug/m3	35	48.9	140	56-135	L1
Dibromochloromethane	ug/m3	86.6	98.9	114	48-132	
Dichlorodifluoromethane	ug/m3	50.3	36.8	73	54-130	
Dichlorotetrafluoroethane	ug/m3	71.1	63.8	90	50-125	
Ethanol	ug/m3	19.2	27.5	143	30-150	
Ethyl acetate	ug/m3	36.6	41.3	113	70-141	
Ethylbenzene	ug/m3	48.7	44.3	91	57-135	
Hexachloro-1,3-butadiene	ug/m3	108	78.6	73	30-150	
m&p-Xylene	ug/m3	92.7	123	133	61-135	
Methyl-tert-butyl ether	ug/m3	36.6	46.4	126	56-130	
Methylene Chloride	ug/m3	35.3	26.6	75	49-127	
n-Heptane	ug/m3	41.7	48.7	117	57-133	
n-Hexane	ug/m3	35.8	36.9	103	55-135	
Naphthalene	ug/m3	53.3	36.6	69	30-150	
o-Xylene	ug/m3	44.1	39.4	89	60-134	
Propylene	ug/m3	17.5	18.2	104	63-147	
Styrene	ug/m3	43.3	34.0	79	58-142	
Tetrachloroethene	ug/m3	71.7	89.7	125	61-132	
Tetrahydrofuran	ug/m3	22.5	18.8	83	67-134	
Toluene	ug/m3	38.3	42.8	112	56-132	
trans-1,2-Dichloroethene	ug/m3	40.3	46.1	114	52-131	
trans-1,3-Dichloropropene	ug/m3	46.1	41.9	91	62-131	
Trichloroethene	ug/m3	54.6	71.5	131	68-150	
Trichlorofluoromethane	ug/m3	57.1	54.8	96	52-142	
Vinyl acetate	ug/m3	35.8	41.7	117	53-136	
Vinyl chloride	ug/m3	26	26.5	102	57-132	

SAMPLE DUPLICATE: 677533

Parameter	Units	10111987002 Result	Dup Result	RPD	Max RPD	Qualifiers
1,1,1-Trichloroethane	ug/m3	ND	ND		25	
1,1,2,2-Tetrachloroethane	ug/m3	ND	ND		25	
1,1,2-Trichloroethane	ug/m3	ND	ND		25	
1,1,2-Trichlorotrifluoroethane	ug/m3	ND	ND		25	
1,1-Dichloroethane	ug/m3	ND	ND		25	
1,1-Dichloroethene	ug/m3	ND	ND		25	
1,2,4-Trichlorobenzene	ug/m3	ND	ND		25	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA

Project: City Of Rochester CRC
Pace Project No.: 10111987

SAMPLE DUPLICATE: 677533

Parameter	Units	10111987002 Result	Dup Result	RPD	Max RPD	Qualifiers
1,2,4-Trimethylbenzene	ug/m3	3.7	3.7	2	25	
1,2-Dibromoethane (EDB)	ug/m3	ND	ND		25	
1,2-Dichlorobenzene	ug/m3	ND	ND		25	
1,2-Dichloroethane	ug/m3	ND	ND		25	
1,2-Dichloropropane	ug/m3	ND	ND		25	
1,3,5-Trimethylbenzene	ug/m3	ND	ND		25	
1,3-Butadiene	ug/m3	ND	ND		25	
1,3-Dichlorobenzene	ug/m3	ND	ND		25	
1,4-Dichlorobenzene	ug/m3	ND	ND		25	
2-Butanone (MEK)	ug/m3	8.8	9.2	5	25	
2-Hexanone	ug/m3	ND	ND		25	
2-Propanol	ug/m3	ND	ND		25	
4-Ethyltoluene	ug/m3	ND	2.8J		25	
4-Methyl-2-pentanone (MIBK)	ug/m3	2.0	2.0	2	25	
Acetone	ug/m3	11.2	11.5	3	25	
Benzene	ug/m3	1.9	2.1	9	25	
Bromodichloromethane	ug/m3	ND	ND		25	
Bromoform	ug/m3	ND	ND		25	
Bromomethane	ug/m3	ND	ND		25	
Carbon disulfide	ug/m3	ND	ND		25	
Carbon tetrachloride	ug/m3	ND	ND		25	
Chlorobenzene	ug/m3	ND	ND		25	
Chloroethane	ug/m3	ND	ND		25	
Chloroform	ug/m3	ND	ND		25	
Chloromethane	ug/m3	ND	ND		25	
cis-1,2-Dichloroethene	ug/m3	ND	ND		25	
cis-1,3-Dichloropropene	ug/m3	ND	ND		25	
Cyclohexane	ug/m3	2.1	2.2	6	25	L1
Dibromochloromethane	ug/m3	ND	ND		25	
Dichlorodifluoromethane	ug/m3	ND	ND		25	
Dichlorotetrafluoroethane	ug/m3	ND	ND		25	
Ethanol	ug/m3	5.1	5.4	4	25	
Ethyl acetate	ug/m3	ND	ND		25	
Ethylbenzene	ug/m3	3.0	3.2	4	25	
Hexachloro-1,3-butadiene	ug/m3	ND	ND		25	
m&p-Xylene	ug/m3	8.7	9.5	9	25	
Methyl-tert-butyl ether	ug/m3	ND	ND		25	
Methylene Chloride	ug/m3	3.0	3.3	9	25	
n-Heptane	ug/m3	1.8	2.2	19	25	
n-Hexane	ug/m3	2.6	2.8	8	25	
Naphthalene	ug/m3	3.7	2.8J		25	CH
o-Xylene	ug/m3	3.0	3.1	3	25	
Propylene	ug/m3	ND	ND		25	
Styrene	ug/m3	3.0	3.0	1	25	
Tetrachloroethene	ug/m3	16.7	18.0	7	25	
Tetrahydrofuran	ug/m3	7.1	7.8	9	25	
Toluene	ug/m3	11.9	13.0	8	25	
trans-1,2-Dichloroethene	ug/m3	2.3	2.5	6	25	

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
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QUALITY CONTROL DATA

Project: City Of Rochester CRC
Pace Project No.: 10111987

SAMPLE DUPLICATE: 677533

Parameter	Units	10111987002 Result	Dup Result	RPD	Max RPD	Qualifiers
trans-1,3-Dichloropropene	ug/m3	ND	ND		25	
Trichloroethene	ug/m3	ND	ND		25	
Trichlorofluoromethane	ug/m3	ND	ND		25	
Vinyl acetate	ug/m3	ND	ND		25	
Vinyl chloride	ug/m3	ND	ND		25	

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QUALIFIERS

Project: City Of Rochester CRC
Pace Project No.: 10111987

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

Pace Analytical is NELAP accredited. Contact your Pace PM for the current list of accredited analytes.

U - Indicates the compound was analyzed for, but not detected.

SAMPLE QUALIFIERS

Sample: 10111987001

[1] The Total Hydrocarbon (THC) pattern occured in the second half of the chromatogram (after toluene).

Sample: 10111987002

[1] The Total Hydrocarbon (THC) pattern is evenly distributed throughout the chromatogram (before and after toluene).

ANALYTE QUALIFIERS

A3	The sample was analyzed by serial dilution.
CH	The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high.
L1	Analyte recovery in the laboratory control sample (LCS) was above QC limits. Results may be biased high.

Pace Analytical Services, Inc.
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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: City Of Rochester CRC
Pace Project No.: 10111987

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
10111987001	**DPE-EFFLUENT-0680**	TO-15	AIR/9064		
10111987002	**AS-EFFLUENT-0842**	TO-15	AIR/9064		

Data File: \\192.168.10.12\chem\10air7.i\090909.b\25232.D
Report Date: 10-Sep-2009 12:28

Pace Analytical Services

TENTATIVELY IDENTIFIED COMPOUNDS

Client Name:
Lab Smp Id: 10111987001
Operator : DB1
Sample Location:
Sample Matrix: AIR
Analysis Type: VOA
Inj Date: 10-SEP-2009 03:31

Client SDG: 090909.b

Sample Date:
Sample Point:
Date Received:
Level: LOW

Number TICs found: 10

CONCENTRATION UNITS:
(ug/L or ug/KG) ppbv

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		Unknown	3.709	63.7	J
2.	75-07-0	Acetaldehyde	4.093	4.81	NJ
3.	141-79-7	3-Penten-2-one, 4-methyl-	9.832	7.54	NJ
4.	127-18-4	Tetrachloroethylene	10.655	60.4	NJ
5.		Unknown	11.068	6.38	J
6.	111-84-2	Nonane	12.150	6.63	NJ
7.	696-29-7	Cyclohexane, (1-methylethyl	13.111	3.91	NJ
8.	95-49-8	Benzene, 1-chloro-2-methyl-	13.662	5.61	NJ
9.	124-18-5	Decane	14.301	7.51	NJ
10.	1120-21-4	Undecane	16.180	5.18	NJ

Data File: \\192.168.10.12\chem\10air7.i\090909.b\25232.D
Report Date: 10-Sep-2009 12:28

Pace Analytical Services

TO15 Analysis (UNIX)

Data file : \\192.168.10.12\chem\10air7.i\090909.b\25232.D
Lab Smp Id: 10111987001
Inj Date : 10-SEP-2009 03:31
Operator : DB1 Inst ID: 10air7.i
Smp Info : Sample 4
Misc Info : 9064
Comment : Volatile Organic COMPOUNDS in Air
Method : \\192.168.10.12\chem\10air7.i\090909.b\TO15_251.m
Meth Date : 10-Sep-2009 09:24 dbrusky Quant Type: ISTD
Cal Date : 08-SEP-2009 15:03 Cal File: 25111.D
Als bottle: 32
Dil Factor: 1.48000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: 10VOA10

Concentration Formula: Amt * DF * Uf * CpndVariable

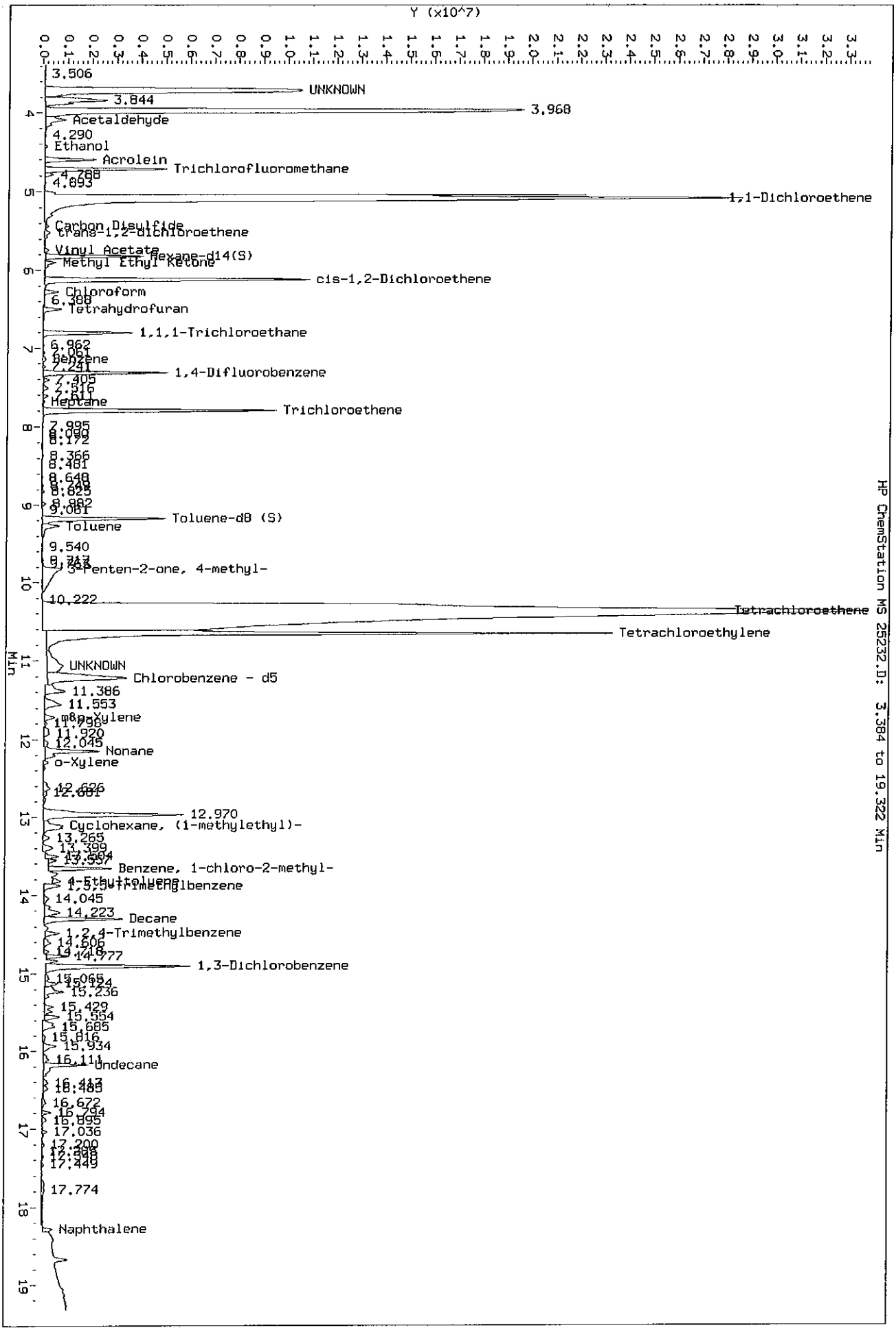
Name	Value	Description
DF	1.480	Dilution Factor
Uf	1.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

	ISTD	RT	AREA	AMOUNT
*	36 1,4-Difluorobenzene	7.320	9988402	10.000
*	53 Chlorobenzene - d5	11.222	14308120	10.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ppbv)	FINAL(ppbv)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
3.709	42995134	43.0450576	63.7	0		0	36
Acetaldehyde				CAS #: 75-07-0			
4.093	3248650	3.25242254	4.81	78	NBS75K.l	62265	36
3-Penten-2-one, 4-methyl-				CAS #: 141-79-7			
9.832	7292721	5.09691030	7.54	90	NBS75K.l	63215	53
Tetrachloroethylene				CAS #: 127-18-4			
10.655	58399595	40.8157002	60.4	98	NBS75K.l	13222	53
Unknown				CAS #:			
11.068	6168570	4.31123703	6.38	0		0	53

Data File: \\192.168.10.12\chem\10air7.i\090909.b\25232.D
Report Date: 10-Sep-2009 12:28

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ppbv)	FINAL(ppbv)	QUAL	LIBRARY	LIB ENTRY	CPND #
Nonane				CAS #: 111-84-2			
12.150	6406077	4.47723189	6.63	81	NBS75K.l	5163	53
Cyclohexane, (1-methylethyl)-				CAS #: 696-29-7			
13.111	3776564	2.63945492	3.91	87	NBS75K.l	4682	53
Benzene, 1-chloro-2-methyl-				CAS #: 95-49-8			
13.662	5422680	3.78993204	5.61	96	NBS75K.l	64870	53
Decane				CAS #: 124-18-5			
14.301	7259576	5.07374523	7.51	91	NBS75K.l	66205	53
Undecane				CAS #: 1120-21-4			
16.180	5008371	3.50036979	5.18	87	NBS75K.l	67318	53


Y (x10^7)
Min
3.506
UNKNOWN
3.844
3.968
Acetaldehyde
4.290
Ethanol
Acrolein
Trichlorofluoromethane
4.788
4.893
1,1-Dichloroethene
Carbon Disulfide
trans-1,2-dichloroethene
Vinyl Acetate
Hexane-d14(S)
Methyl Ethyl Ketone
cis-1,2-Dichloroethene
Chloroform
6.388
Tetrahydrofuran
1,1,1-Trichloroethane
6.962
7.061
Benzene
7.241
1,4-Difluorobenzene
7.405
7.816
7.911
Heptane
Trichloroethene
7.995
8.090
8.172
8.366
8.481
8.648
8.749
8.825
8.982
9.081
Toluene-d8 (S)
Toluene
9.540
9.747
3-Penten-2-one, 4-methyl-
10.222
Tetrachloroethene
Tetrachloroethylene
UNKNOWN
Chlorobenzene - d5
11.386
11.553
m&p-Xylene
11.796
11.920
12.045
Nonane
o-Xylene
12.626
12.681
12.970
Cyclohexane, (1-methylethyl)-
13.265
13.399
13.564
13.597
Benzene, 1-chloro-2-methyl-
4-Ethyltoluene
1,3,5-Trimethylbenzene
14.045
14.223
Decane
1,2,4-Trimethylbenzene
14.506
14.718
14.777
1,3-Dichlorobenzene
15.065
15.124
15.236
15.429
15.564
15.685
15.816
15.934
16.111
Undecane
16.417
16.485
16.672
16.764
16.895
17.036
17.200
17.298
17.449
17.774
Naphthalene
HP ChemStation MS 25232.D: 3.384 to 19.322 Min
Data File: \\192.168.10.12\chem\10air7.i\090909.b\25232.D
Injection Date: 10-SEP-2009 03:31
Instrument: 10air7.i
Client Sample ID:

Data File: \\192.168.10.12\chem\10air7.i\090909.b\25236.D
Report Date: 10-Sep-2009 12:28

Pace Analytical Services

TENTATIVELY IDENTIFIED COMPOUNDS

Client Name:
Lab Smp Id: 10111987002
Operator : DB1
Sample Location:
Sample Matrix: AIR
Analysis Type: VOA
Inj Date: 10-SEP-2009 10:09

Client SDG: 090909.b

Sample Date:
Sample Point:
Date Received:
Level: LOW

Number TICs found: 4

CONCENTRATION UNITS:
(ug/L or ug/KG) ppbv

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		Unknown	3.709	55.8	J
2.	75-37-6	Ethane, 1,1-difluoro-	3.821	5.48	NJ
3.		Unknown	4.093	1.36	J
4.	541-05-9	Cyclotrisiloxane, hexamethy	10.058	1.73	NJ

Data File: \\192.168.10.12\chem\10air7.i\090909.b\25236.D
Report Date: 10-Sep-2009 12:28

Pace Analytical Services

TO15 Analysis (UNIX)

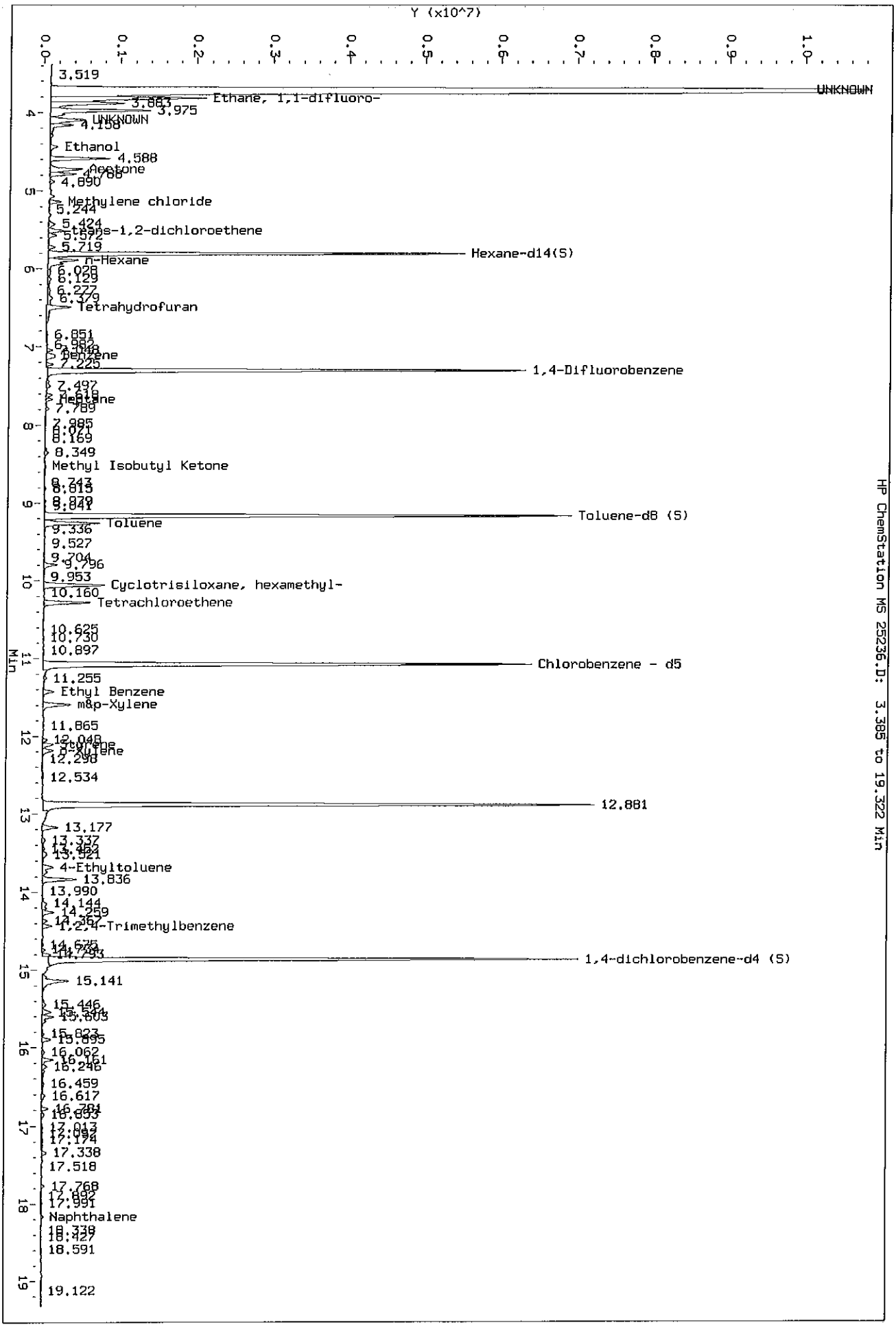
Data file : \\192.168.10.12\chem\10air7.i\090909.b\25236.D
Lab Smp Id: 10111987002
Inj Date : 10-SEP-2009 10:09
Operator : DB1 Inst ID: 10air7.i
Smp Info : Sample 8
Misc Info : 9064
Comment : Volatile Organic COMPOUNDS in Air
Method : \\192.168.10.12\chem\10air7.i\090909.b\TO15_251.m
Meth Date : 10-Sep-2009 09:24 dbrusky Quant Type: ISTD
Cal Date : 08-SEP-2009 15:03 Cal File: 25111.D
Als bottle: 36
Dil Factor: 1.34000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * CpndVariable

Name	Value	Description
DF	1.340	Dilution Factor
Uf	1.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 36 1,4-Difluorobenzene	7.307	12645257	10.000
* 53 Chlorobenzene - d5	11.075	14270688	10.000

	CONCENTRATIONS			QUANT			
RT	AREA	ON-COL(ppbv)	FINAL(ppbv)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
3.709	52657960	41.6424582	55.8	0		0	36
Ethane, 1,1-difluoro-				CAS #: 75-37-6			
3.821	5173455	4.09122182	5.48	91	NBS75K.l	62381	36
Unknown				CAS #:			
4.093	1285154	1.01631303	1.36	0		0	36
Cyclotrisiloxane, hexamethyl-				CAS #: 541-05-9			
10.058	1844962	1.29283296	1.73	90	NBS75K.l	70586	53


Data File: \\192.168.10.12\chem\10air7.i\090909.b\25236.D
Injection Date: 10-SEP-2009 10:09
Instrument: 10air7.i
Client Sample ID:
HP ChemStation MS 25236.D: 3.385 to 19.322 Min
Y (x10^7)
Min
3.519
UNKNOWN
Ethane, 1,1-difluoro-
3.861
3.975
UNKNOWN
4.158
Ethanol
4.588
Acetone
4.788
4.890
Methylene chloride
5.244
5.424
trans-1,2-dichloroethene
5.719
Hexane-d14(S)
n-Hexane
6.028
6.129
6.227
6.379
Tetrahydrofuran
6.851
6.962
7.048
Benzene
7.225
1,4-Difluorobenzene
7.497
7.619
Heptane
7.789
7.985
8.071
8.169
8.349
Methyl Isobutyl Ketone
8.743
8.815
8.879
9.041
Toluene-d8 (S)
Toluene
9.336
9.527
9.704
9.796
9.953
Cyclotrisiloxane, hexamethyl-
10.160
Tetrachloroethene
10.625
10.730
10.897
Chlorobenzene - d5
11.255
Ethyl Benzene
m&p-Xylene
11.865
12.048
Styrene
o-Xylene
12.298
12.534
12.881
13.177
13.337
13.452
13.521
4-Ethyltoluene
13.836
13.990
14.144
14.259
14.362
1,2,4-Trimethylbenzene
14.625
14.795
1,4-dichlorobenzene-d4 (S)
15.141
15.446
15.544
15.603
15.823
15.895
16.062
16.161
16.246
16.459
16.617
16.781
16.893
17.013
17.069
17.174
17.338
17.518
17.768
17.892
17.991
Naphthalene
18.339
18.427
18.591
19.122

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CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

1011987

Page: of

Section A Required Client Information:	Section B Required Project Information:	Section C Invoice Information:
Company: Landmark Environmental	Report To: Jason Skramstad	Attention: Jason Skramstad
Address: 2042 W. 98th Street	Copy To: Eric Gabrielson	Company Name: Landmark Environmental, LLC
Bloomington, MN 55431		Address: 2042 W. 98th St., Bloomington, MN 55431
Email To: jskramstad@landmarkenv.com	Purchase Order No.:	Pace Quote Reference:
Phone: 952-887-9601, ext 205 Fax: 952-887-9605	Project Name: City of Rochester	Pace Project Manager: Carolynne Trout
Requested Due Date/TAT: Normal	Project Number: CRC	Pace Profile #:

REGULATORY AGENCY

NPDES GROUND WATER DRINKING WATER
UST RCRA OTHER

SITE LOCATION: GA IL IN MI NC OH SC WI OTHER

Section D Required Client Information

SAMPLE ID

One Character per box.
(A-Z, 0-9 / ,-)
Samples IDs MUST BE UNIQUE

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOIL/SOLID	SL
OIL	OL
WIPE	WP
AIR	AR
OTHER	OT
TISSUE	TS

ITEM #	SAMPLE ID	MATRIX CODE	SAMPLE TYPE G=GRAB C=COMP	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE END/GRAB DATE	COLLECTED COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	#OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Filtered (Y/N)	Requested Analysis: TO-15	Pace Project Number / Lab I.D.
1	DPE-EFFLUENT-0680	A	G	9/4/09	10:19														X	001
2	AS-EFFLUENT-842	A	G	9/4/09	10:55														X	002
3																				
4																				
5																				
6																				
7																				
8																				

Additional Comments:

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
			Pace MN	9/4/09	1705

SAMPLE CONDITIONS

Temp in °C	Received on Ice	Custody Sealed Cooler	Samples Intact
Am3	Y/N	Y/N	Y/N
	Y/N	Y/N	Y/N
	Y/N	Y/N	Y/N
	Y/N	Y/N	Y/N

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Eric Gabrielson

SIGNATURE of SAMPLER: DATE Signed (MM / DD / YY)

AIR Sample Condition Upon Receipt

Pace Analytical

Client Name: Landmark ENV Project # 1011987

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☑ Client ☐ Commercial ☐ Pace Other_____

Custody Seal on Cooler/Box Present: ☐ yes ☑ no Seals intact: ☐ yes ☐ no

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☑ None ☐ Other_____

Tracking #: N/A

Comments:

Date and Initials of person examining contents: 9/4/09

Chain of Custody Present:	☑Yes ☐No ☐N/A	1.
Chain of Custody Filled Out:	☑Yes ☐No ☐N/A	2.
Chain of Custody Relinquished:	☐Yes ☑No ☐N/A	3.
Sampler Name & Signature on COC:	☑Yes ☐No ☐N/A	4.
Samples Arrived within Hold Time:	☑Yes ☐No ☐N/A	5.
Short Hold Time Analysis (<72hr):	☐Yes ☐No ☑N/A	6.
Rush Turn Around Time Requested:	☐Yes ☑No ☐N/A	7.
Sufficient Volume:	☑Yes ☐No ☐N/A	8.
Correct Containers Used:	☑Yes ☐No ☐N/A	9.
-Pace Containers Used:	☑Yes ☐No ☐N/A	
Containers Intact:	☑Yes ☐No ☐N/A	10.
Media: SUMA		11.
Sample Labels match COC:	☑Yes ☐No ☐N/A	12.

Samples Received: 2 Can's 0 Fcv's

Canisters		Flow Controllers		Stand Alone G		Tedlar Bags	
Sample Number	Can ID	Sample Number	Can ID	Sample Number	Can ID	Sample Number	Can ID
001	0680						
002	0824						

Client Notification/ Resolution: Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: _____ **Date:** 9/8/09

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e out of hold, incorrect preservative, out of temp, incorrect containers)

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

April 22, 2009

Mr. Jason Skramstad
Landmark Environmental
2042 W. 98th. St.
Minneapolis, MN 55431

RE: Project: CRC
Pace Project No.: 1092759

Dear Mr. Skramstad:
Enclosed are the analytical results for sample(s) received by the laboratory on April 10, 2009. The results relate only to the samples included in this report. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Carolynne Trout

carolynne.trout@pacelabs.com
Project Manager

Enclosures

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

CERTIFICATIONS

Project: CRC
Pace Project No.: 1092759

Minnesota Certification IDs

Wisconsin Certification #: 999407970
Washington Certification #: C754
Tennessee Certification #: 02818
Pennsylvania Certification #: 68-00563
Oregon Certification #: MN200001
North Dakota Certification #: R-036
North Carolina Certification #: 530
New York Certification #: 11647
New Jersey Certification #: MN-002
Montana Certification #: MT CERT0092
Minnesota Certification #: 027-053-137
Maine Certification #: 2007029
Louisiana Certification #: LA080009
Louisiana Certification #: 03086
Kansas Certification #: E-10167
Iowa Certification #: 368
Illinois Certification #: 200011
Florida/NELAP Certification #: E87605
California Certification #: 01155CA
Arizona Certification #: AZ-0014
Alaska Certification #: UST-078

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SAMPLE SUMMARY

Project: CRC
Pace Project No.: 1092759

Lab ID	Sample ID	Matrix	Date Collected	Date Received
1092759001	**DPE EXHAUST (#842)**	Air	04/09/09 19:53	04/10/09 08:54

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SAMPLE ANALYTE COUNT

Project: CRC
Pace Project No.: 1092759

Lab ID	Sample ID	Method	Analysts	Analytes Reported
1092759001	**DPE EXHAUST (#842)**	TO-15	AEP	60

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ANALYTICAL RESULTS

Project: CRC
Pace Project No.: 1092759

Sample: DPE EXHAUST (#842) **Lab ID: 1092759001** Collected: 04/09/09 19:53 Received: 04/10/09 08:54 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15							
Acetone	ND	ug/m3	852	1774.08		04/21/09 08:40	67-64-1	
Benzene	ND	ug/m3	1150	1774.08		04/21/09 08:40	71-43-2	
Bromodichloromethane	ND	ug/m3	2480	1774.08		04/21/09 08:40	75-27-4	
Bromoform	ND	ug/m3	3730	1774.08		04/21/09 08:40	75-25-2	
Bromomethane	ND	ug/m3	1400	1774.08		04/21/09 08:40	74-83-9	
1,3-Butadiene	ND	ug/m3	798	1774.08		04/21/09 08:40	106-99-0	
2-Butanone (MEK)	ND	ug/m3	1060	1774.08		04/21/09 08:40	78-93-3	
Carbon disulfide	ND	ug/m3	1120	1774.08		04/21/09 08:40	75-15-0	
Carbon tetrachloride	ND	ug/m3	2310	1774.08		04/21/09 08:40	56-23-5	
Chlorobenzene	ND	ug/m3	1670	1774.08		04/21/09 08:40	108-90-7	
Chloroethane	ND	ug/m3	958	1774.08		04/21/09 08:40	75-00-3	
Chloroform	ND	ug/m3	1760	1774.08		04/21/09 08:40	67-66-3	
Chloromethane	ND	ug/m3	745	1774.08		04/21/09 08:40	74-87-3	
Cyclohexane	ND	ug/m3	1210	1774.08		04/21/09 08:40	110-82-7	
Dibromochloromethane	ND	ug/m3	3020	1774.08		04/21/09 08:40	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/m3	2840	1774.08		04/21/09 08:40	106-93-4	
1,2-Dichlorobenzene	ND	ug/m3	2130	1774.08		04/21/09 08:40	95-50-1	
1,3-Dichlorobenzene	ND	ug/m3	2130	1774.08		04/21/09 08:40	541-73-1	
1,4-Dichlorobenzene	ND	ug/m3	2130	1774.08		04/21/09 08:40	106-46-7	
Dichlorodifluoromethane	**2230**	ug/m3	1770	1774.08		04/21/09 08:40	75-71-8	
1,1-Dichloroethane	ND	ug/m3	1450	1774.08		04/21/09 08:40	75-34-3	
1,2-Dichloroethane	ND	ug/m3	1450	1774.08		04/21/09 08:40	107-06-2	
1,1-Dichloroethene	ND	ug/m3	1440	1774.08		04/21/09 08:40	75-35-4	
cis-1,2-Dichloroethene	**36300**	ug/m3	1440	1774.08		04/21/09 08:40	156-59-2	
trans-1,2-Dichloroethene	ND	ug/m3	1440	1774.08		04/21/09 08:40	156-60-5	
1,2-Dichloropropane	ND	ug/m3	1670	1774.08		04/21/09 08:40	78-87-5	
cis-1,3-Dichloropropene	ND	ug/m3	1630	1774.08		04/21/09 08:40	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/m3	1630	1774.08		04/21/09 08:40	10061-02-6	
Dichlorotetrafluoroethane	**3400**	ug/m3	2480	1774.08		04/21/09 08:40	76-14-2	
Ethanol	ND	ug/m3	3370	1774.08		04/21/09 08:40	64-17-5	SS
Ethyl acetate	ND	ug/m3	1300	1774.08		04/21/09 08:40	141-78-6	
Ethylbenzene	ND	ug/m3	1560	1774.08		04/21/09 08:40	100-41-4	
4-Ethyltoluene	ND	ug/m3	4440	1774.08		04/21/09 08:40	622-96-8	
n-Heptane	ND	ug/m3	1470	1774.08		04/21/09 08:40	142-82-5	
Hexachloro-1,3-butadiene	ND	ug/m3	3900	1774.08		04/21/09 08:40	87-68-3	
n-Hexane	ND	ug/m3	1280	1774.08		04/21/09 08:40	110-54-3	
2-Hexanone	ND	ug/m3	1470	1774.08		04/21/09 08:40	591-78-6	
Methylene Chloride	ND	ug/m3	1260	1774.08		04/21/09 08:40	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/m3	1470	1774.08		04/21/09 08:40	108-10-1	
Methyl-tert-butyl ether	ND	ug/m3	1300	1774.08		04/21/09 08:40	1634-04-4	
Naphthalene	**10100**	ug/m3	4790	1774.08		04/21/09 08:40	91-20-3	L1
2-Propanol	ND	ug/m3	4440	1774.08		04/21/09 08:40	67-63-0	
Propylene	ND	ug/m3	621	1774.08		04/21/09 08:40	115-07-1	
Styrene	ND	ug/m3	1540	1774.08		04/21/09 08:40	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/m3	2480	1774.08		04/21/09 08:40	79-34-5	
Tetrachloroethene	**11600000**	ug/m3	79500	56770.5		04/21/09 19:59	127-18-4	
Tetrahydrofuran	ND	ug/m3	1060	1774.08		04/21/09 08:40	109-99-9	

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ANALYTICAL RESULTS

Project: CRC
Pace Project No.: 1092759

Sample: DPE EXHAUST (#842) **Lab ID: 1092759001** Collected: 04/09/09 19:53 Received: 04/10/09 08:54 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15							
Toluene	ND	ug/m3	1370	1774.08		04/21/09 08:40	108-88-3	
1,2,4-Trichlorobenzene	ND	ug/m3	1760	1774.08		04/21/09 08:40	120-82-1	
1,1,1-Trichloroethane	**4450**	ug/m3	1950	1774.08		04/21/09 08:40	71-55-6	
1,1,2-Trichloroethane	ND	ug/m3	1950	1774.08		04/21/09 08:40	79-00-5	
Trichloroethene	**17400**	ug/m3	1950	1774.08		04/21/09 08:40	79-01-6	
Trichlorofluoromethane	ND	ug/m3	1950	1774.08		04/21/09 08:40	75-69-4	
1,1,2-Trichlorotrifluoroethane	**2940000**	ug/m3	90800	56770.5		04/21/09 19:59	76-13-1	
1,2,4-Trimethylbenzene	ND	ug/m3	4440	1774.08		04/21/09 08:40	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/m3	4440	1774.08		04/21/09 08:40	108-67-8	
Vinyl acetate	ND	ug/m3	1260	1774.08		04/21/09 08:40	108-05-4	
Vinyl chloride	ND	ug/m3	923	1774.08		04/21/09 08:40	75-01-4	
m&p-Xylene	ND	ug/m3	3120	1774.08		04/21/09 08:40	1330-20-7	
o-Xylene	ND	ug/m3	1560	1774.08		04/21/09 08:40	95-47-6	

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QUALITY CONTROL DATA

Project: CRC
Pace Project No.: 1092759

QC Batch: AIR/8422
QC Batch Method: TO-15
Analysis Method: TO-15
Analysis Description: TO15 MSV AIR Low Level
Associated Lab Samples: 1092759001

METHOD BLANK: 608961
Matrix: Air
Associated Lab Samples: 1092759001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/m3	ND	1.1	04/20/09 16:03	
1,1,2,2-Tetrachloroethane	ug/m3	ND	1.4	04/20/09 16:03	
1,1,2-Trichloroethane	ug/m3	ND	1.1	04/20/09 16:03	
1,1,2-Trichlorotrifluoroethane	ug/m3	ND	1.6	04/20/09 16:03	
1,1-Dichloroethane	ug/m3	ND	0.82	04/20/09 16:03	
1,1-Dichloroethene	ug/m3	ND	0.81	04/20/09 16:03	
1,2,4-Trichlorobenzene	ug/m3	ND	0.99	04/20/09 16:03	
1,2,4-Trimethylbenzene	ug/m3	ND	2.5	04/20/09 16:03	
1,2-Dibromoethane (EDB)	ug/m3	ND	1.6	04/20/09 16:03	
1,2-Dichlorobenzene	ug/m3	ND	1.2	04/20/09 16:03	
1,2-Dichloroethane	ug/m3	ND	0.82	04/20/09 16:03	
1,2-Dichloropropane	ug/m3	ND	0.94	04/20/09 16:03	
1,3,5-Trimethylbenzene	ug/m3	ND	2.5	04/20/09 16:03	
1,3-Butadiene	ug/m3	ND	0.45	04/20/09 16:03	
1,3-Dichlorobenzene	ug/m3	ND	1.2	04/20/09 16:03	
1,4-Dichlorobenzene	ug/m3	ND	1.2	04/20/09 16:03	
2-Butanone (MEK)	ug/m3	ND	0.60	04/20/09 16:03	
2-Hexanone	ug/m3	ND	0.83	04/20/09 16:03	
2-Propanol	ug/m3	ND	2.5	04/20/09 16:03	
4-Ethyltoluene	ug/m3	ND	2.5	04/20/09 16:03	
4-Methyl-2-pentanone (MIBK)	ug/m3	ND	0.83	04/20/09 16:03	
Acetone	ug/m3	ND	0.48	04/20/09 16:03	
Benzene	ug/m3	ND	0.65	04/20/09 16:03	
Bromodichloromethane	ug/m3	ND	1.4	04/20/09 16:03	
Bromoform	ug/m3	ND	2.1	04/20/09 16:03	
Bromomethane	ug/m3	ND	0.79	04/20/09 16:03	
Carbon disulfide	ug/m3	ND	0.63	04/20/09 16:03	
Carbon tetrachloride	ug/m3	ND	1.3	04/20/09 16:03	
Chlorobenzene	ug/m3	ND	0.94	04/20/09 16:03	
Chloroethane	ug/m3	ND	0.54	04/20/09 16:03	
Chloroform	ug/m3	ND	0.99	04/20/09 16:03	
Chloromethane	ug/m3	ND	0.42	04/20/09 16:03	
cis-1,2-Dichloroethene	ug/m3	ND	0.81	04/20/09 16:03	
cis-1,3-Dichloropropene	ug/m3	ND	0.92	04/20/09 16:03	
Cyclohexane	ug/m3	ND	0.68	04/20/09 16:03	
Dibromochloromethane	ug/m3	ND	1.7	04/20/09 16:03	
Dichlorodifluoromethane	ug/m3	ND	1.0	04/20/09 16:03	
Dichlorotetrafluoroethane	ug/m3	ND	1.4	04/20/09 16:03	
Ethanol	ug/m3	ND	1.9	04/20/09 16:03	
Ethyl acetate	ug/m3	ND	0.73	04/20/09 16:03	
Ethylbenzene	ug/m3	ND	0.88	04/20/09 16:03	
Hexachloro-1,3-butadiene	ug/m3	ND	2.2	04/20/09 16:03	
m&p-Xylene	ug/m3	ND	1.8	04/20/09 16:03	

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QUALITY CONTROL DATA

Project: CRC
Pace Project No.: 1092759

METHOD BLANK: 608961 Matrix: Air

Associated Lab Samples: 1092759001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Methyl-tert-butyl ether	ug/m3	ND	0.73	04/20/09 16:03	
Methylene Chloride	ug/m3	ND	0.71	04/20/09 16:03	
n-Heptane	ug/m3	ND	0.83	04/20/09 16:03	
n-Hexane	ug/m3	ND	0.72	04/20/09 16:03	
Naphthalene	ug/m3	ND	2.7	04/20/09 16:03	
o-Xylene	ug/m3	ND	0.88	04/20/09 16:03	
Propylene	ug/m3	ND	0.35	04/20/09 16:03	
Styrene	ug/m3	ND	0.87	04/20/09 16:03	
Tetrachloroethene	ug/m3	ND	1.4	04/20/09 16:03	
Tetrahydrofuran	ug/m3	ND	0.60	04/20/09 16:03	
Toluene	ug/m3	ND	0.77	04/20/09 16:03	
trans-1,2-Dichloroethene	ug/m3	ND	0.81	04/20/09 16:03	
trans-1,3-Dichloropropene	ug/m3	ND	0.92	04/20/09 16:03	
Trichloroethene	ug/m3	ND	1.1	04/20/09 16:03	
Trichlorofluoromethane	ug/m3	ND	1.1	04/20/09 16:03	
Vinyl acetate	ug/m3	ND	0.71	04/20/09 16:03	
Vinyl chloride	ug/m3	ND	0.52	04/20/09 16:03	

LABORATORY CONTROL SAMPLE: 608962

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/m3	57.2	62.5	109	55-127	
1,1,2,2-Tetrachloroethane	ug/m3	71.2	91.6	129	58-128	L3
1,1,2-Trichloroethane	ug/m3	56	56.3	100	58-126	
1,1,2-Trichlorotrifluoroethane	ug/m3	76.4	61.4	80	49-134	
1,1-Dichloroethane	ug/m3	41.2	37.1	90	52-129	
1,1-Dichloroethene	ug/m3	40.3	41.5	103	50-130	
1,2,4-Trichlorobenzene	ug/m3	74.7	182	243	30-150	L3
1,2,4-Trimethylbenzene	ug/m3	49.5	75.8	153	53-144	L3
1,2-Dibromoethane (EDB)	ug/m3	81.3	93.2	115	57-137	
1,2-Dichlorobenzene	ug/m3	62.4	102	163	65-140	L1
1,2-Dichloroethane	ug/m3	44.9	46.4	103	54-125	
1,2-Dichloropropane	ug/m3	50.8	56.0	110	60-125	
1,3,5-Trimethylbenzene	ug/m3	49.5	68.8	139	54-139	
1,3-Butadiene	ug/m3	22.7	21.4	94	54-125	
1,3-Dichlorobenzene	ug/m3	64.2	107	167	62-140	L3
1,4-Dichlorobenzene	ug/m3	63	93.5	148	61-139	L1
2-Butanone (MEK)	ug/m3	30.9	29.2	95	47-138	
2-Hexanone	ug/m3	42.1	44.7	106	40-143	
2-Propanol	ug/m3	23.8	21.2	89	45-149	
4-Ethyltoluene	ug/m3	50	67.5	135	57-139	
4-Methyl-2-pentanone (MIBK)	ug/m3	42.5	41.0	96	54-132	
Acetone	ug/m3	24.2	15.8	66	44-147	
Benzene	ug/m3	32.8	32.6	99	60-125	
Bromodichloromethane	ug/m3	68.1	71.8	105	53-130	

Pace Analytical Services, Inc.
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QUALITY CONTROL DATA

Project: CRC
Pace Project No.: 1092759

LABORATORY CONTROL SAMPLE: 608962

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Bromoform	ug/m3	107	133	124	55-125	
Bromomethane	ug/m3	39.9	37.5	94	53-132	
Carbon disulfide	ug/m3	32.6	37.8	116	57-150	
Carbon tetrachloride	ug/m3	64.6	69.6	108	53-125	
Chlorobenzene	ug/m3	46.4	57.5	124	50-136	
Chloroethane	ug/m3	26.6	26.5	100	55-130	
Chloroform	ug/m3	48.5	56.0	116	56-125	
Chloromethane	ug/m3	21	19.6	93	49-127	
cis-1,2-Dichloroethene	ug/m3	41.5	51.4	124	58-127	
cis-1,3-Dichloropropene	ug/m3	48.5	61.7	127	62-135	
Cyclohexane	ug/m3	35.7	39.6	111	56-135	
Dibromochloromethane	ug/m3	91	97.5	107	48-132	
Dichlorodifluoromethane	ug/m3	49.3	48.8	99	54-130	
Dichlorotetrafluoroethane	ug/m3	71.1	59.6	84	50-125	
Ethanol	ug/m3	19.2	7.6	39	30-150	
Ethyl acetate	ug/m3	37.4	51.1	137	70-141	
Ethylbenzene	ug/m3	48.6	59.5	122	57-135	
Hexachloro-1,3-butadiene	ug/m3	106	128	121	30-150	
m&p-Xylene	ug/m3	92.7	102	110	61-135	
Methyl-tert-butyl ether	ug/m3	36.7	38.8	106	56-130	
Methylene Chloride	ug/m3	34.6	21.0	61	49-127	
n-Heptane	ug/m3	42.9	41.8	97	57-133	
n-Hexane	ug/m3	39.1	49.4	126	55-135	
Naphthalene	ug/m3	50.6	128	253	30-150	L1
o-Xylene	ug/m3	45.5	56.3	124	60-134	
Propylene	ug/m3	18.6	20.3	110	63-147	
Styrene	ug/m3	43.3	49.0	113	58-142	
Tetrachloroethene	ug/m3	71.7	82.0	114	61-132	
Tetrahydrofuran	ug/m3	22.5	16.3	72	67-134	
Toluene	ug/m3	39.9	41.4	104	56-132	
trans-1,2-Dichloroethene	ug/m3	41.9	42.1	100	52-131	
trans-1,3-Dichloropropene	ug/m3	48.9	52.3	107	62-131	
Trichloroethene	ug/m3	55.2	65.4	118	68-150	
Trichlorofluoromethane	ug/m3	56	56.6	101	52-142	
Vinyl acetate	ug/m3	36.9	37.7	102	53-136	
Vinyl chloride	ug/m3	26.8	24.9	93	57-132	

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QUALIFIERS

Project: CRC
Pace Project No.: 1092759

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

Pace Analytical is NELAP accredited. Contact your Pace PM for the current list of accredited analytes.

U - Indicates the compound was analyzed for, but not detected.

SAMPLE QUALIFIERS

Sample: 1092759001

[1]	The Total Hydrocarbon (THC) pattern occured in the second half of the chromatogram (after toluene).
[2]	This result is reported from a serial dilution

ANALYTE QUALIFIERS

L1	Analyte recovery in the laboratory control sample (LCS) was above QC limits. Results may be biased high.
L3	Analyte recovery in the laboratory control sample (LCS) exceeded QC limits. Analyte presence below reporting limits in associated samples. Results unaffected by high bias.
SS	This analyte did not meet the secondary source verification criteria for the initial calibration. The reported result should be considered an estimated value.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: CRC
Pace Project No.: 1092759

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
1092759001	**DPE EXHAUST (#842)**	TO-15	AIR/8422		

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CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

1092759

Page: 1 of 1

1256171

Section A
Required Client Information:

Company: LANDMARK
Address:
Email To: jskramstad@landmarkcrc.com
Phone: ✓ Fax:
Requested Due Date/TAT: HOLD

Section B
Required Project Information:

Report To: JASON SKRAMSTAD
Copy To:
Purchase Order No.: CRC
Project Name: CRC
Project Number: CRC

Section C
Invoice Information:

Attention: JASON SKRAMSTAD
Company Name:
Address:
Pace Quote Reference:
Pace Project Manager:
Pace Profile #:

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☒ OTHER MPCA

Site Location STATE: MN

Section D
Required Client Information

SAMPLE ID
(A-Z, 0-9 / ,-)
Sample IDs MUST BE UNIQUE

Matrix Codes
MATRIX / CODE

Drinking Water	DW
Water	WT
Waste Water	WW
Product	P
Soil/Solid	SL
Oil	OL
Wipe	WP
Air	AR
Tissue	TS
Other	OT

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	TO-15	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	DPE EXHAUST (#842)	AR	X			4/9/09	1653		1									X	X		HOLD 001
2																					
3																					
4																					
5																					
6																					
7																					
8																					
9																					
10																					
11																					
12																					

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
HOLD							
Analyze per Jason S. 4/10/09 1600 CMust		4/9/09	830	Courier	4/10/09	800	
				Price	4/10	0854	AMB N N Y

ORIGINAL

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: JASON SKRAMSTAD
SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 4/9/09

Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

Face Analytical

Sample Condition Upon Receipt

Client Name: Landmark

Project # 1092759

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☒ Client ☐ Commercial ☐ Pace Other

Tracking #:

Optional
Proj. Due Date:
Proj. Name:

Custody Seal on Cooler/Box Present: ☐ yes ☒ no Seals intact: ☐ yes ☒ no

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☒ None ☐ Other Temp Blank: Yes No

Thermometer Used ~~80344042, 179425~~ Type of Ice: Wet Blue None ☐ Samples on ice, cooling process has begun

Cooler Temperature AMD Biological Tissue is Frozen: Yes No

Temp should be above freezing to 6°C

Date and ~~initials of person examining~~ contents: 4/6/09

		Comments:
Chain of Custody Present:	☒Yes ☐No ☐N/A	1.
Chain of Custody Filled Out:	☒Yes ☐No ☐N/A	2.
Chain of Custody Relinquished:	☒Yes ☐No ☐N/A	3.
Sampler Name & Signature on COC:	☒Yes ☐No ☐N/A	4.
Samples Arrived within Hold Time:	☒Yes ☐No ☐N/A	5.
Short Hold Time Analysis (<72hr):	☐Yes ☒No ☐N/A	6.
Rush Turn Around Time Requested:	☐Yes ☒No ☐N/A	7.
Sufficient Volume:	☒Yes ☐No ☐N/A	8.
Correct Containers Used:	☒Yes ☐No ☐N/A	9.
-Pace Containers Used:	☒Yes ☐No ☐N/A	
Containers Intact:	☒Yes ☐No ☐N/A	10.
Filtered volume received for Dissolved tests	☐Yes ☐No ☒N/A	11.
Sample Labels match COC:	☒Yes ☐No ☐N/A	12.
-Includes date/time/ID/Analysis Matrix: air can		
All containers needing acid/base preservation have been checked. Noncompliance are noted in 13.	☐Yes ☐No ☒N/A	13.
All containers needing preservation are found to be in compliance with EPA recommendation.	☐Yes ☐No ☒N/A	
Exceptions: VOA,Coliform, TOC, Oil and Grease, WI-DRO (water)	☐Yes ☒No	Initial when completed / Lot # of added preservative
Samples checked for dechlorination:	☐Yes ☐No ☒N/A	14.
Headspace in VOA Vials (>6mm):	☐Yes ☐No ☒N/A	15.
Trip Blank Present:	☐Yes ☐No ☒N/A	16.
Trip Blank Custody Seals Present	☐Yes ☐No ☒N/A	
Pace Trip Blank Lot # (if purchased):		

Client Notification/ Resolution:

Field Data Required? Y / N

Person Contacted: Date/Time:

Comments/ Resolution: 1 can NO FC

Project Manager Review: C Dunt Date: 4/10/09

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e out of hold, incorrect preservative, out of temp, incorrect containers)

Pace Analytical Services, Inc.
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(612)607-1700

June 12, 2009

Mr. Jason Skramstad
Landmark Environmental
2042 W. 98th. St.
Minneapolis, MN 55431

RE: Project: CRC
Pace Project No.: 1096633

Dear Mr. Skramstad:
Enclosed are the analytical results for sample(s) received by the laboratory on June 05, 2009. The results relate only to the samples included in this report. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Carolynne Trout

carolynne.trout@pacelabs.com
Project Manager

Enclosures

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CERTIFICATIONS

Project: CRC
Pace Project No.: 1096633

Minnesota Certification IDs

Wisconsin Certification #: 999407970
Washington Certification #: C754
Tennessee Certification #: 02818
Pennsylvania Certification #: 68-00563
Oregon Certification #: MN200001
North Dakota Certification #: R-036
North Carolina Certification #: 530
New York Certification #: 11647
New Jersey Certification #: MN-002
Montana Certification #: MT CERT0092
Minnesota Certification #: 027-053-137
Maine Certification #: 2007029
Louisiana Certification #: LA080009
Louisiana Certification #: 03086
Kansas Certification #: E-10167
Iowa Certification #: 368
Illinois Certification #: 200011
Florida/NELAP Certification #: E87605
California Certification #: 01155CA
Arizona Certification #: AZ-0014
Alaska Certification #: UST-078

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SAMPLE SUMMARY

Project: CRC
Pace Project No.: 1096633

Lab ID	Sample ID	Matrix	Date Collected	Date Received
1096633001	**AS STACK**	Air	06/04/09 16:33	06/05/09 16:16

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SAMPLE ANALYTE COUNT

Project: CRC
Pace Project No.: 1096633

Lab ID	Sample ID	Method	Analysts	Analytes Reported
1096633001	**AS STACK**	TO-15	DB1	60

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ANALYTICAL RESULTS

Project: CRC
Pace Project No.: 1096633

Sample: AS STACK **Lab ID: 1096633001** Collected: 06/04/09 16:33 Received: 06/05/09 16:16 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15							
Acetone	**913**	ug/m3	266	553.6		06/12/09 11:27	67-64-1	
Benzene	**1.1**	ug/m3	1.1	1.73		06/10/09 19:49	71-43-2	
Bromodichloromethane	ND	ug/m3	2.4	1.73		06/10/09 19:49	75-27-4	
Bromoform	ND	ug/m3	3.6	1.73		06/10/09 19:49	75-25-2	
Bromomethane	ND	ug/m3	1.4	1.73		06/10/09 19:49	74-83-9	
1,3-Butadiene	ND	ug/m3	0.78	1.73		06/10/09 19:49	106-99-0	
2-Butanone (MEK)	**2480**	ug/m3	332	553.6		06/12/09 11:27	78-93-3	
Carbon disulfide	ND	ug/m3	1.1	1.73		06/10/09 19:49	75-15-0	
Carbon tetrachloride	ND	ug/m3	2.2	1.73		06/10/09 19:49	56-23-5	
Chlorobenzene	ND	ug/m3	1.6	1.73		06/10/09 19:49	108-90-7	
Chloroethane	ND	ug/m3	0.93	1.73		06/10/09 19:49	75-00-3	
Chloroform	ND	ug/m3	1.7	1.73		06/10/09 19:49	67-66-3	
Chloromethane	ND	ug/m3	0.73	1.73		06/10/09 19:49	74-87-3	
Cyclohexane	ND	ug/m3	1.2	1.73		06/10/09 19:49	110-82-7	
Dibromochloromethane	ND	ug/m3	2.9	1.73		06/10/09 19:49	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/m3	2.8	1.73		06/10/09 19:49	106-93-4	
1,2-Dichlorobenzene	ND	ug/m3	2.1	1.73		06/10/09 19:49	95-50-1	
1,3-Dichlorobenzene	ND	ug/m3	2.1	1.73		06/10/09 19:49	541-73-1	
1,4-Dichlorobenzene	ND	ug/m3	2.1	1.73		06/10/09 19:49	106-46-7	
Dichlorodifluoromethane	ND	ug/m3	1.7	1.73		06/10/09 19:49	75-71-8	
1,1-Dichloroethane	ND	ug/m3	1.4	1.73		06/10/09 19:49	75-34-3	
1,2-Dichloroethane	ND	ug/m3	1.4	1.73		06/10/09 19:49	107-06-2	
1,1-Dichloroethene	ND	ug/m3	1.4	1.73		06/10/09 19:49	75-35-4	
cis-1,2-Dichloroethene	**166**	ug/m3	1.4	1.73		06/10/09 19:49	156-59-2	
trans-1,2-Dichloroethene	**7.8**	ug/m3	1.4	1.73		06/10/09 19:49	156-60-5	
1,2-Dichloropropane	ND	ug/m3	1.6	1.73		06/10/09 19:49	78-87-5	
cis-1,3-Dichloropropene	ND	ug/m3	1.6	1.73		06/10/09 19:49	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/m3	1.6	1.73		06/10/09 19:49	10061-02-6	
Dichlorotetrafluoroethane	ND	ug/m3	2.4	1.73		06/10/09 19:49	76-14-2	
Ethanol	**22.0**	ug/m3	3.3	1.73		06/10/09 19:49	64-17-5	
Ethyl acetate	ND	ug/m3	1.3	1.73		06/10/09 19:49	141-78-6	
Ethylbenzene	**3.1**	ug/m3	1.5	1.73		06/10/09 19:49	100-41-4	
4-Ethyltoluene	ND	ug/m3	4.3	1.73		06/10/09 19:49	622-96-8	
n-Heptane	**2.8**	ug/m3	1.4	1.73		06/10/09 19:49	142-82-5	
Hexachloro-1,3-butadiene	ND	ug/m3	3.8	1.73		06/10/09 19:49	87-68-3	
n-Hexane	ND	ug/m3	1.2	1.73		06/10/09 19:49	110-54-3	
2-Hexanone	ND	ug/m3	1.4	1.73		06/10/09 19:49	591-78-6	
Methylene Chloride	**6.3**	ug/m3	1.2	1.73		06/10/09 19:49	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/m3	1.4	1.73		06/10/09 19:49	108-10-1	
Methyl-tert-butyl ether	ND	ug/m3	1.3	1.73		06/10/09 19:49	1634-04-4	
Naphthalene	ND	ug/m3	4.7	1.73		06/10/09 19:49	91-20-3	
2-Propanol	**19.7**	ug/m3	4.3	1.73		06/10/09 19:49	67-63-0	
Propylene	ND	ug/m3	0.61	1.73		06/10/09 19:49	115-07-1	
Styrene	**3.5**	ug/m3	1.5	1.73		06/10/09 19:49	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/m3	2.4	1.73		06/10/09 19:49	79-34-5	
Tetrachloroethene	**88300**	ug/m3	775	553.6		06/12/09 11:27	127-18-4	
Tetrahydrofuran	**11500**	ug/m3	332	553.6		06/12/09 11:27	109-99-9	

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ANALYTICAL RESULTS

Project: CRC
Pace Project No.: 1096633

Sample: AS STACK **Lab ID: 1096633001** Collected: 06/04/09 16:33 Received: 06/05/09 16:16 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15							
Toluene	**41.9**	ug/m3	1.3	1.73		06/10/09 19:49	108-88-3	
1,2,4-Trichlorobenzene	ND	ug/m3	1.7	1.73		06/10/09 19:49	120-82-1	
1,1,1-Trichloroethane	**4.8**	ug/m3	1.9	1.73		06/10/09 19:49	71-55-6	
1,1,2-Trichloroethane	ND	ug/m3	1.9	1.73		06/10/09 19:49	79-00-5	
Trichloroethene	**111**	ug/m3	1.9	1.73		06/10/09 19:49	79-01-6	
Trichlorofluoromethane	ND	ug/m3	1.9	1.73		06/10/09 19:49	75-69-4	
1,1,2-Trichlorotrifluoroethane	**2320**	ug/m3	886	553.6		06/12/09 11:27	76-13-1	A3
1,2,4-Trimethylbenzene	**6.0**	ug/m3	4.3	1.73		06/10/09 19:49	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/m3	4.3	1.73		06/10/09 19:49	108-67-8	
Vinyl acetate	ND	ug/m3	1.2	1.73		06/10/09 19:49	108-05-4	
Vinyl chloride	ND	ug/m3	0.90	1.73		06/10/09 19:49	75-01-4	
m&p-Xylene	**10.6**	ug/m3	3.0	1.73		06/10/09 19:49	1330-20-7	
o-Xylene	ND	ug/m3	1.5	1.73		06/10/09 19:49	95-47-6	

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QUALITY CONTROL DATA

Project: CRC
Pace Project No.: 1096633

QC Batch: AIR/8681 Analysis Method: TO-15
QC Batch Method: TO-15 Analysis Description: TO15 MSV AIR Low Level
Associated Lab Samples: 1096633001

METHOD BLANK: 633624 Matrix: Air
Associated Lab Samples: 1096633001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/m3	ND	1.1	06/10/09 17:16	
1,1,2,2-Tetrachloroethane	ug/m3	ND	1.4	06/10/09 17:16	
1,1,2-Trichloroethane	ug/m3	ND	1.1	06/10/09 17:16	
1,1,2-Trichlorotrifluoroethane	ug/m3	ND	1.6	06/10/09 17:16	
1,1-Dichloroethane	ug/m3	ND	0.82	06/10/09 17:16	
1,1-Dichloroethene	ug/m3	ND	0.81	06/10/09 17:16	
1,2,4-Trichlorobenzene	ug/m3	ND	0.99	06/10/09 17:16	
1,2,4-Trimethylbenzene	ug/m3	ND	2.5	06/10/09 17:16	
1,2-Dibromoethane (EDB)	ug/m3	ND	1.6	06/10/09 17:16	
1,2-Dichlorobenzene	ug/m3	ND	1.2	06/10/09 17:16	
1,2-Dichloroethane	ug/m3	ND	0.82	06/10/09 17:16	
1,2-Dichloropropane	ug/m3	ND	0.94	06/10/09 17:16	
1,3,5-Trimethylbenzene	ug/m3	ND	2.5	06/10/09 17:16	
1,3-Butadiene	ug/m3	ND	0.45	06/10/09 17:16	
1,3-Dichlorobenzene	ug/m3	ND	1.2	06/10/09 17:16	
1,4-Dichlorobenzene	ug/m3	ND	1.2	06/10/09 17:16	
2-Butanone (MEK)	ug/m3	ND	0.60	06/10/09 17:16	
2-Hexanone	ug/m3	ND	0.83	06/10/09 17:16	
2-Propanol	ug/m3	ND	2.5	06/10/09 17:16	
4-Ethyltoluene	ug/m3	ND	2.5	06/10/09 17:16	
4-Methyl-2-pentanone (MIBK)	ug/m3	ND	0.83	06/10/09 17:16	
Acetone	ug/m3	ND	0.48	06/10/09 17:16	
Benzene	ug/m3	ND	0.65	06/10/09 17:16	
Bromodichloromethane	ug/m3	ND	1.4	06/10/09 17:16	
Bromoform	ug/m3	ND	2.1	06/10/09 17:16	
Bromomethane	ug/m3	ND	0.79	06/10/09 17:16	
Carbon disulfide	ug/m3	ND	0.63	06/10/09 17:16	
Carbon tetrachloride	ug/m3	ND	1.3	06/10/09 17:16	
Chlorobenzene	ug/m3	ND	0.94	06/10/09 17:16	
Chloroethane	ug/m3	ND	0.54	06/10/09 17:16	
Chloroform	ug/m3	ND	0.99	06/10/09 17:16	
Chloromethane	ug/m3	ND	0.42	06/10/09 17:16	
cis-1,2-Dichloroethene	ug/m3	ND	0.81	06/10/09 17:16	
cis-1,3-Dichloropropene	ug/m3	ND	0.92	06/10/09 17:16	
Cyclohexane	ug/m3	ND	0.68	06/10/09 17:16	
Dibromochloromethane	ug/m3	ND	1.7	06/10/09 17:16	
Dichlorodifluoromethane	ug/m3	ND	1.0	06/10/09 17:16	
Dichlorotetrafluoroethane	ug/m3	ND	1.4	06/10/09 17:16	
Ethanol	ug/m3	ND	1.9	06/10/09 17:16	
Ethyl acetate	ug/m3	ND	0.73	06/10/09 17:16	
Ethylbenzene	ug/m3	ND	0.88	06/10/09 17:16	
Hexachloro-1,3-butadiene	ug/m3	ND	2.2	06/10/09 17:16	
m&p-Xylene	ug/m3	ND	1.8	06/10/09 17:16	

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QUALITY CONTROL DATA

Project: CRC
Pace Project No.: 1096633

METHOD BLANK: 633624 Matrix: Air

Associated Lab Samples: 1096633001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Methyl-tert-butyl ether	ug/m3	ND	0.73	06/10/09 17:16	
Methylene Chloride	ug/m3	ND	0.71	06/10/09 17:16	
n-Heptane	ug/m3	ND	0.83	06/10/09 17:16	
n-Hexane	ug/m3	ND	0.72	06/10/09 17:16	
Naphthalene	ug/m3	ND	2.7	06/10/09 17:16	
o-Xylene	ug/m3	ND	0.88	06/10/09 17:16	
Propylene	ug/m3	ND	0.35	06/10/09 17:16	
Styrene	ug/m3	ND	0.87	06/10/09 17:16	
Tetrachloroethene	ug/m3	ND	1.4	06/10/09 17:16	
Tetrahydrofuran	ug/m3	ND	0.60	06/10/09 17:16	
Toluene	ug/m3	ND	0.77	06/10/09 17:16	
trans-1,2-Dichloroethene	ug/m3	ND	0.81	06/10/09 17:16	
trans-1,3-Dichloropropene	ug/m3	ND	0.92	06/10/09 17:16	
Trichloroethene	ug/m3	ND	1.1	06/10/09 17:16	
Trichlorofluoromethane	ug/m3	ND	1.1	06/10/09 17:16	
Vinyl acetate	ug/m3	ND	0.71	06/10/09 17:16	
Vinyl chloride	ug/m3	ND	0.52	06/10/09 17:16	

LABORATORY CONTROL SAMPLE: 633625

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/m3	57.2	65.3	114	55-127	
1,1,2,2-Tetrachloroethane	ug/m3	71.2	76.2	107	58-128	
1,1,2-Trichloroethane	ug/m3	56	56.4	101	58-126	
1,1,2-Trichlorotrifluoroethane	ug/m3	76.4	66.4	87	49-134	
1,1-Dichloroethane	ug/m3	41.2	40.3	98	52-129	
1,1-Dichloroethene	ug/m3	40.3	45.0	112	50-130	
1,2,4-Trichlorobenzene	ug/m3	74.7	65.1	87	30-150	
1,2,4-Trimethylbenzene	ug/m3	49.5	56.2	114	53-144	
1,2-Dibromoethane (EDB)	ug/m3	81.3	88.0	108	57-137	
1,2-Dichlorobenzene	ug/m3	62.4	70.6	113	65-140	
1,2-Dichloroethane	ug/m3	44.9	47.7	106	54-125	
1,2-Dichloropropane	ug/m3	50.8	60.4	119	60-125	
1,3,5-Trimethylbenzene	ug/m3	49.5	56.8	115	54-139	
1,3-Butadiene	ug/m3	22.7	25.1	110	54-125	
1,3-Dichlorobenzene	ug/m3	64.2	70.4	110	62-140	
1,4-Dichlorobenzene	ug/m3	63	69.5	110	61-139	
2-Butanone (MEK)	ug/m3	30.9	35.0	113	47-138	
2-Hexanone	ug/m3	42.1	45.3	108	40-143	
2-Propanol	ug/m3	23.8	24.3	102	45-149	
4-Ethyltoluene	ug/m3	50	49.1	98	57-139	
4-Methyl-2-pentanone (MIBK)	ug/m3	42.5	43.6	103	54-132	
Acetone	ug/m3	24.2	20.7	86	44-147	
Benzene	ug/m3	32.8	34.9	106	60-125	
Bromodichloromethane	ug/m3	68.1	72.9	107	53-130	

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA

Project: CRC
Pace Project No.: 1096633

LABORATORY CONTROL SAMPLE: 633625

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Bromoform	ug/m3	107	111	103	55-125	
Bromomethane	ug/m3	39.9	46.1	116	53-132	
Carbon disulfide	ug/m3	32.6	43.1	132	57-150	
Carbon tetrachloride	ug/m3	64.6	63.1	98	53-125	
Chlorobenzene	ug/m3	46.4	53.4	115	50-136	
Chloroethane	ug/m3	26.6	31.1	117	55-130	
Chloroform	ug/m3	48.5	56.3	116	56-125	
Chloromethane	ug/m3	21	22.4	107	49-127	
cis-1,2-Dichloroethene	ug/m3	41.5	46.2	111	58-127	
cis-1,3-Dichloropropene	ug/m3	48.5	63.0	130	62-135	
Cyclohexane	ug/m3	35.7	44.4	124	56-135	
Dibromochloromethane	ug/m3	91	90.7	100	48-132	
Dichlorodifluoromethane	ug/m3	49.3	55.0	112	54-130	
Dichlorotetrafluoroethane	ug/m3	71.1	68.9	97	50-125	
Ethanol	ug/m3	19.2	20.0	104	30-150	
Ethyl acetate	ug/m3	37.4	51.1	137	70-141	
Ethylbenzene	ug/m3	48.6	56.0	115	57-135	
Hexachloro-1,3-butadiene	ug/m3	106	94.8	89	30-150	
m&p-Xylene	ug/m3	92.7	103	111	61-135	
Methyl-tert-butyl ether	ug/m3	36.7	41.9	114	56-130	
Methylene Chloride	ug/m3	34.6	32.6	94	49-127	
n-Heptane	ug/m3	42.9	43.2	101	57-133	
n-Hexane	ug/m3	39.1	45.6	117	55-135	
Naphthalene	ug/m3	50.6	50.2	99	30-150	
o-Xylene	ug/m3	45.5	50.3	111	60-134	
Propylene	ug/m3	18.6	22.2	120	63-147	
Styrene	ug/m3	43.3	46.9	108	58-142	
Tetrachloroethene	ug/m3	71.7	79.1	110	61-132	
Tetrahydrofuran	ug/m3	22.5	16.8	75	67-134	
Toluene	ug/m3	39.9	41.3	104	56-132	
trans-1,2-Dichloroethene	ug/m3	41.9	48.3	115	52-131	
trans-1,3-Dichloropropene	ug/m3	48.9	51.9	106	62-131	
Trichloroethene	ug/m3	55.2	71.8	130	68-150	
Trichlorofluoromethane	ug/m3	56	60.5	108	52-142	
Vinyl acetate	ug/m3	36.9	41.0	111	53-136	
Vinyl chloride	ug/m3	26.8	29.0	108	57-132	

SAMPLE DUPLICATE: 633926

Parameter	Units	1096464004 Result	Dup Result	RPD	Max RPD	Qualifiers
1,1,1-Trichloroethane	ug/m3	ND	ND		25	
1,1,2,2-Tetrachloroethane	ug/m3	ND	ND		25	
1,1,2-Trichloroethane	ug/m3	ND	ND		25	
1,1,2-Trichlorotrifluoroethane	ug/m3	ND	ND		25	
1,1-Dichloroethane	ug/m3	ND	ND		25	
1,1-Dichloroethene	ug/m3	ND	ND		25	
1,2,4-Trichlorobenzene	ug/m3	ND	ND		25	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA

Project: CRC
Pace Project No.: 1096633

SAMPLE DUPLICATE: 633926

Parameter	Units	1096464004 Result	Dup Result	RPD	Max RPD	Qualifiers
1,2,4-Trimethylbenzene	ug/m3	33.4	35.0	4	25	
1,2-Dibromoethane (EDB)	ug/m3	ND	ND		25	
1,2-Dichlorobenzene	ug/m3	ND	ND		25	
1,2-Dichloroethane	ug/m3	ND	ND		25	
1,2-Dichloropropane	ug/m3	ND	ND		25	
1,3,5-Trimethylbenzene	ug/m3	11.0	11.7	6	25	
1,3-Butadiene	ug/m3	ND	ND		25	
1,3-Dichlorobenzene	ug/m3	ND	ND		25	
1,4-Dichlorobenzene	ug/m3	ND	ND		25	
2-Butanone (MEK)	ug/m3	4.3	4.6	8	25	
2-Hexanone	ug/m3	ND	ND		25	
2-Propanol	ug/m3	ND	ND		25	
4-Ethyltoluene	ug/m3	8.0	8.6	6	25	
4-Methyl-2-pentanone (MIBK)	ug/m3	ND	ND		25	
Acetone	ug/m3	26.8	26.9	0	25	
Benzene	ug/m3	49.6	53.4	7	25	
Bromodichloromethane	ug/m3	ND	ND		25	
Bromoform	ug/m3	ND	ND		25	
Bromomethane	ug/m3	ND	ND		25	
Carbon disulfide	ug/m3	4.4	4.6	3	25	
Carbon tetrachloride	ug/m3	ND	ND		25	
Chlorobenzene	ug/m3	ND	ND		25	
Chloroethane	ug/m3	ND	ND		25	
Chloroform	ug/m3	ND	ND		25	
Chloromethane	ug/m3	ND	ND		25	
cis-1,2-Dichloroethene	ug/m3	ND	ND		25	
cis-1,3-Dichloropropene	ug/m3	ND	ND		25	
Cyclohexane	ug/m3	67.2	74.5	10	25	
Dibromochloromethane	ug/m3	ND	ND		25	
Dichlorodifluoromethane	ug/m3	ND	ND		25	
Dichlorotetrafluoroethane	ug/m3	ND	ND		25	
Ethanol	ug/m3	ND	3.8J		25	
Ethyl acetate	ug/m3	ND	ND		25	
Ethylbenzene	ug/m3	21.9	23.0	5	25	
Hexachloro-1,3-butadiene	ug/m3	ND	ND		25	
m&p-Xylene	ug/m3	70.0	74.4	6	25	
Methyl-tert-butyl ether	ug/m3	ND	ND		25	
Methylene Chloride	ug/m3	ND	ND		25	
n-Heptane	ug/m3	82.7	88.5	7	25	
n-Hexane	ug/m3	115	123	7	25	
Naphthalene	ug/m3	ND	ND		25	
o-Xylene	ug/m3	28.9	30.3	5	25	
Propylene	ug/m3	ND	ND		25	
Styrene	ug/m3	ND	ND		25	
Tetrachloroethene	ug/m3	16.9	18.4	8	25	
Tetrahydrofuran	ug/m3	ND	ND		25	
Toluene	ug/m3	142	148	5	25	
trans-1,2-Dichloroethene	ug/m3	ND	ND		25	

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QUALITY CONTROL DATA

Project: CRC
Pace Project No.: 1096633

SAMPLE DUPLICATE: 633926

Parameter	Units	1096464004 Result	Dup Result	RPD	Max RPD	Qualifiers
trans-1,3-Dichloropropene	ug/m3	ND	ND		25	
Trichloroethene	ug/m3	ND	ND		25	
Trichlorofluoromethane	ug/m3	ND	ND		25	
Vinyl acetate	ug/m3	ND	ND		25	
Vinyl chloride	ug/m3	ND	ND		25	

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QUALIFIERS

Project: CRC
Pace Project No.: 1096633

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

Pace Analytical is NELAP accredited. Contact your Pace PM for the current list of accredited analytes.

U - Indicates the compound was analyzed for, but not detected.

ANALYTE QUALIFIERS

A3 The sample was analyzed by serial dilution.

Pace Analytical Services, Inc.
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Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: CRC
Pace Project No.: 1096633

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
1096633001	**AS STACK**	TO-15	AIR/8681		

Pace Analytical®
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

1096633

Page: 1 of 1

1290484

Section A Required Client Information:

Company: LANDMARK
Address:
Email To:
Phone: Fax:
Requested Due Date/TAT: STANDARD

Section B Required Project Information:

Report To: JASON STEARNSTOO
Copy To:
Purchase Order No.: CRC
Project Name:
Project Number:

Section C Invoice Information:

Attention: JASON STEARNSTOO
Company Name: LANDMARK
Address:
Pace Quote Reference:
Pace Project Manager:
Pace Profile #:

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☒ OTHER MPCA

Site Location STATE: MN

Section D Required Client Information

SAMPLE ID
(A-Z, 0-9 / ,-)
Sample IDs MUST BE UNIQUE

Matrix Codes MATRIX / CODE

Drinking Water	DW
Water	WT
Waste Water	WW
Product	P
Soil/Solid	SL
Oil	OL
Wipe	WP
Air	AR
Tissue	TS
Other	OT

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE END/GRAB DATE	COLLECTED COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	Analysis Test: TO-15	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	AS STACK	AR	G			6/4/09	1633		1									X			1096633001
2																					
3																					
4																					
5																					
6																					
7																					
8																					
9																					
10																					
11																					
12																					

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
		6/5/09	1616	Pace	6/5	1616	Temp N N Y

ORIGINAL

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: JASON STEARNSTOO

SIGNATURE of SAMPLER: DATE Signed (MM/DD/YY): 6/5/09

Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

Pace Analytical

AIR Sample Condition Upon Receipt

Client Name: LANDMARK Project # 1096633

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☒ Client ☐ Commercial ☐ Pace Other _____

Custody Seal on Cooler/Box Present: ☐ yes ☒ no Seals intact: ☐ yes ☐ no

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☐ None ☒ Other _____

Optional
Proj. Due Date:
Proj. Name:

Tracking #: _____

Comments:

Date and Initials of person examining contents: 6-5-09 IK

Chain of Custody Present:	☒Yes ☐No ☐N/A	1.
Chain of Custody Filled Out:	☒Yes ☐No ☐N/A	2.
Chain of Custody Relinquished:	☒Yes ☐No ☐N/A	3.
Sampler Name & Signature on COC:	☒Yes ☐No ☐N/A	4.
Samples Arrived within Hold Time:	☒Yes ☐No ☐N/A	5.
Short Hold Time Analysis (<72hr):	☐Yes ☒No ☐N/A	6.
Rush Turn Around Time Requested:	☐Yes ☒No ☐N/A	7.
Sufficient Volume:	☒Yes ☐No ☐N/A	8.
Correct Containers Used:	☒Yes ☐No ☐N/A	9.
-Pace Containers Used:	☒Yes ☐No ☐N/A	
Containers Intact:	☒Yes ☐No ☐N/A	10.
Media: AIR (CAN)		11.
Sample Labels match COC:	☒Yes ☐No ☐N/A	12.

Samples Received: 1 CAN

Canisters		Flow Controllers		Stand Alone G		Tedlar Bags	
Sample Number	Can ID	Sample Number	Can ID	Sample Number	Can ID	Sample Number	Can ID
	1211						

Client Notification/ Resolution: Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: _____ **Date:** 6/5/09

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e out of hold, incorrect preservative, out of temp, incorrect containers)

A106 Rev.01 (22May2009)

6-6-09

Attachment C

Site Data Entry Worksheet for Soil Vapor Extraction Systems

Enter site data for up to 5 SVE stacks in yellow cells.

Project Name:		Enter Height of Stack#1 (meters):	Enter Distance from Stack#1 to Nearest Receptor or Property Boundary (in meters, minimum 10):	Enter Measured Gas Flow Rate through Vent Stack#1 (m^3/sec):
MN Bio Business Ctr		8	10	0.02
Date of Emission Test:		**STACK 1**		
09/04/09		**ENTER EMISSION CONCENTRATIONS FOR STACK#1 in Column C**		

Chemical Name	CAS or MPCA#	Emission concentration stack#1 ug/m^3	Gas flow rate through vent stack#1 m^3/sec	Emission rate stack#1 ug/sec	Emission rate stack#1 lb/hr	Emission rate stack#1 tons/year	Total Annual Emissions (tons/year)	Cumulative Emission Rate (ug/sec)
Acetone	67-64-1	7510	1.7000E-02	1.2767E+02	1.0133E-03	4.4381E-03	4.4381E-03	1.2767E+02
Benzene	71-43-2	2.3	1.7000E-02	3.9100E-02	3.1032E-07	1.3592E-06	1.3592E-06	3.9100E-02
Carbon disulfide	75-15-0	5.9	1.7000E-02	1.0030E-01	7.9605E-07	3.4867E-06	3.4867E-06	1.0030E-01
Chloroform	67-66-3	21.5	1.7000E-02	3.6550E-01	2.9008E-06	1.2706E-05	1.2706E-05	3.6550E-01
Cyclohexane	110-82-7	3.5	1.7000E-02	5.9500E-02	4.7223E-07	2.0684E-06	2.0684E-06	5.9500E-02
Dichlorobenzenes	25321-22-6	14.6	1.7000E-02	2.4820E-01	1.9699E-06	8.6280E-06	8.6280E-06	2.4820E-01
Dichloroethene (trans -1,2-)	156-60-5	4.2	1.7000E-02	7.1400E-02	5.6668E-07	2.4820E-06	2.4820E-06	7.1400E-02
Dichloroethylene (1,1-) (Vinylidene chloride)	75-35-4	15	1.7000E-02	2.5500E-01	2.0238E-06	8.8644E-06	8.8644E-06	2.5500E-01
Ethanol	64-17-5	5.7	1.7000E-02	9.6900E-02	7.6906E-07	3.3685E-06	3.3685E-06	9.6900E-02
Hexane	110-54-3	3.4	1.7000E-02	5.7800E-02	4.5874E-07	2.0093E-06	2.0093E-06	5.7800E-02
Naphthalene	91-20-3	4.2	1.7000E-02	7.1400E-02	5.6668E-07	2.4820E-06	2.4820E-06	7.1400E-02
Tetrachloroethylene (Perchloroethylene)	127-18-4	3630000	1.7000E-02	6.1710E+04	4.8977E-01	2.1452E+00	2.1452E+00	6.1710E+04
Toluene	108-88-3	14.4	1.7000E-02	2.4480E-01	1.9429E-06	8.5099E-06	8.5099E-06	2.4480E-01
Trichloro-1,2,2-trifluoroethane, 1,1,2- (Freon 113)	76-13-1	153000	1.7000E-02	2.6010E+03	2.0643E-02	9.0417E-02	9.0417E-02	2.6010E+03
Trichloroethylene	79-01-6	1640	1.7000E-02	2.7880E+01	2.2127E-04	9.6918E-04	9.6918E-04	2.7880E+01
Trichlorofluoromethane (CFC-11)	75-69-4	2.2	1.7000E-02	3.7400E-02	2.9683E-07	1.3001E-06	1.3001E-06	3.7400E-02
Trimethylbenzene, 1,2,4-	95-63-6	10.2	1.7000E-02	1.7340E-01	1.3762E-06	6.0278E-06	6.0278E-06	1.7340E-01
Trimethylbenzene, 1,3,5-	108-67-8	5	1.7000E-02	8.5000E-02	6.7461E-07	2.9548E-06	2.9548E-06	8.5000E-02
Vinyl acetate	108-05-4	8.7	1.7000E-02	1.4790E-01	1.1738E-06	5.1414E-06	5.1414E-06	1.4790E-01
Xylenes	1330-20-7	20	1.7000E-02	3.4000E-01	2.6985E-06	1.1819E-05	1.1819E-05	3.4000E-01
							2.2411E+00	

Site Data Entry Worksheet for Air Stripper Systems

Enter Site Data for up to 5 air strippers in yellow cells.

Site/Project Name: MN Bio Business Ctr
Emission Test Date: 9/4/2009

Enter Height of Stack: (meters)	Enter Distance from Stack to Nearest Receptor or Property Boundary: (in meters, minimum 10)	Air Stripper#1 influent flow rate [IFR] (liter/sec)
8	10	0.40

		Air Stripper #1								
Chemical Name	**CAS or MPCA#**	Influent Groundwater Concentration [IGC] (ug/L)	Effluent Groundwater Concentration [EGC] (ug/L)	Removal Factor [RF] (dimension less)	Emission Rate [ER = IGC*IFR*RF] (ug/sec)	Emission Rate (lbs/hr)	Emissions Rate (tons/yr)	Cumulative Emission Rate (ug/sec)	Total Annual Emissions (lbs/hr)	Total Annual Emissions (tons/year)
Methyl ethyl ketone (2-Butanone)	78-93-3	1.35E+01	1.98E+01	-0.47	-2.52E+00	-2.00E-05	-8.76E-05	-2.52E+00	-2.00E-05	-8.76E-05
Tetrachloroethylene (Perchloroethylene)	127-18-4	1.75E+02	0.00E+00	1.00	7.00E+01	5.56E-04	2.43E-03	7.00E+01	5.56E-04	2.43E-03
Trichlorofluoromethane (CFC-11)	75-69-4	1.20E+00	0.00E+00	1.00	4.80E-01	3.81E-06	1.67E-05	4.80E-01	3.81E-06	1.67E-05

Screening Emission Rates (SERs) and Chronic Risk Summary
Based on site inputs provided on Soil Venting Worksheet and Air Stripper Worksheet

Site/Project Name:
MN Bio Business Ctr
Emission Test Date:
9/4/2009

Chemical Name	CAS # or MPCA #	Chronic Noncancer tox value (ug/m3)	Chronic Cancer tox value (ug/m3)	Annual Disp. Factor ((ug/m3)/g/s)	SER for Chronic Risk (ug/s)	Site Specific Emission Rate (ug/s)	Calculated Conc at Receptor for Chronic Risk (ug/m3)	Site HQ (Noncancer)	ELCR (Cancer)
Acetone	67-64-1	3.00E+04		1230	2.44E+07	1.28E+02	1.57E-01	0.0	
Benzene	71-43-2	3.00E+01	4.55E+00	1230	3.70E+03	3.91E-02	4.81E-05	0.0	1.1E-10
Carbon disulfide	75-15-0	7.00E+02		1230	5.69E+05	1.00E-01	1.23E-04	0.0	
Chloroform	67-66-3	1.00E+02		1230	8.13E+04	3.66E-01	4.50E-04	0.0	
Cyclohexane	110-82-7	6.00E+03		1230	4.88E+06	5.95E-02	7.32E-05	0.0	
Dichlorobenzenes	25321-22-6	8.00E+02	9.09E-01	1230	7.39E+02	2.48E-01	3.05E-04	0.0	3.4E-09
Dichloroethene (trans -1,2-)	156-60-5	6.00E+01		1230	4.88E+04	7.14E-02	8.78E-05	0.0	
Dichloroethylene (1,1-) (Vinylidene chloride)	75-35-4	2.00E+02		1230	1.63E+05	2.55E-01	3.14E-04	0.0	
Ethanol	64-17-5	1.50E+04		1230	1.22E+07	9.69E-02	1.19E-04	0.0	
Hexane	110-54-3	2.00E+03		1230	1.63E+06	5.78E-02	7.11E-05	0.0	
Naphthalene	91-20-3	9.00E+00		1230	7.32E+03	7.14E-02	8.78E-05	0.0	
Tetrachloroethylene (Perchloroethylene)	127-18-4	1.00E+02	2.00E+01	1230	1.63E+04	6.18E+04	7.60E+01	0.8	**3.8E-05**
Toluene	108-88-3	5.00E+03		1230	4.07E+06	2.45E-01	3.01E-04	0.0	
Trichloro-1,2,2-trifluoroethane, 1,1,2- (Freon 113)	76-13-1			1230		2.60E+03	3.20E+00		
Trichloroethylene	79-01-6	6.00E+02	3.03E+00	1230	2.46E+03	2.79E+01	3.43E-02	0.0	1.1E-07
Trichlorofluoromethane (CFC-11)	75-69-4			1230		5.17E-01	6.36E-04		
Trimethylbenzene, 1,2,4-	95-63-6	7.00E+00		1230	5.69E+03	1.73E-01	2.13E-04	0.0	
Trimethylbenzene, 1,3,5 -	108-67-8	6.00E+00		1230	4.88E+03	8.50E-02	1.05E-04	0.0	
Vinyl acetate	108-05-4	2.00E+02		1230	1.63E+05	1.48E-01	1.82E-04	0.0	
Xylenes	1330-20-7	1.00E+02		1230	8.13E+04	3.40E-01	4.18E-04	0.0	
						Additive Risk:		**0.8**	**3.8E-05**

Screening Emission Rates (SERs) and Acute Risk Summary

Based on site inputs provided on Soil Venting Worksheet and Air Stripper Worksheet

Site/Project Name:
MN Bio Business Ctr
Emission Test Date:
9/4/2009

***Bolded chemicals are developmental toxicants. The acute toxic values are ceiling values that should not be exceeded.**

Chemical Name	CAS # or MPCA #	Acute toxcity value (ug/m3)	1-hr Disp. Factor ((ug/m3)/g/s)	SER [acute risk] (ug/s)	Site Emission Rate (ug/s)	Calculated Conc at Receptor for Acute Risk (ug/m3)	Site HQ (Noncancer) for acute risk
Acetone	67-64-1		3343		1.28E+02	1.87E+00	
Benzene	**71-43-2**	**1000**	**3343**	**2.99E+05**	**3.91E-02**	**5.73E-04**	0.0
Carbon disulfide	**75-15-0**	**6000**	**3343**	**1.79E+06**	**1.00E-01**	**1.47E-03**	0.0
Carbon tetrachloride	**56-23-5**	**1900**	**85665**	**2.22E+04**			
Chloroform	**67-66-3**	**150**	**3343**	**4.49E+04**	**3.66E-01**	**5.35E-03**	0.0
Cyclohexane	110-82-7		3343		5.95E-02	8.71E-04	
Dichlorobenzenes	25321-22-6		3343		2.48E-01	3.63E-03	
Dichloroethene (trans -1,2-)	156-60-5		3343		7.14E-02	3.73E-03	
Dichloroethylene (1,1-) (Vinylidene chloride)	75-35-4		3343		2.55E-01	3.73E-03	
Ethanol	64-17-5	180000	3343	5.38E+07	9.69E-02	1.42E-03	0.0
Hexane	110-54-3		3343		5.78E-02	8.46E-04	
Naphthalene	91-20-3	200	3343	5.98E+04	7.14E-02	1.05E-03	0.0
Tetrachloroethylene (Perchloroethylene)	127-18-4	20000	3343	5.98E+06	6.18E+04	9.05E+02	0.0
Toluene	108-88-3	37000	3343	1.11E+07	2.45E-01	3.58E-03	0.0
Trichloro-1,2,2-trifluoroethane, 1,1,2- (Freon 113)	76-13-1		3343		2.60E+03	3.81E+01	
Trichloroethylene	**79-01-6**	**2000**	**3343**	**5.98E+05**	**2.79E+01**	**4.08E-01**	0.0
Trichlorofluoromethane (CFC-11)	75-69-4		3343		5.17E-01	7.58E-03	
Trimethylbenzene, 1,2,4-	95-63-6		85665		1.73E-01	2.54E-03	
Trimethylbenzene, 1,3,5 -	108-67-8		5817		8.50E-02	1.24E-03	
Vinyl acetate	108-05-4		3343		1.48E-01	2.17E-03	
Xylenes	1330-20-7	43000	3343	1.29E+07	3.40E-01	4.98E-03	0.0
					Additive Risk:		**0.0**

Risk Evaluation Summary

RASS Version Used: RASS version number = 20060829 - RASS

This worksheet provides a summary of the results of the chronic and acute risk calculations based on site inputs from the Soil Venting and the Air Stripper worksheets. For both chronic and acute risk, an unacceptable risk is indicated in red if the Hazard Index exceeds 1. For chronic risk, an unacceptable risk is also indicated in red if the additive ELCR exceeds 10-5. This worksheet also indicates if levels of any acute developmental toxicants (which are considered ceiling values and should never be exceeded) pose an unacceptable risk.

CHRONIC RISK SUMMARY	
Number of Compounds with Hazard Quotient >1:	**0**
Number of Compounds with Cancer Risk > 10^{-5}	**1**
Noncancer Hazard Index:	**0.8**
Excess Lifetime Cancer Risk (ELCR):	**3.8E-05**

ACUTE RISK SUMMARY	
Number of Compounds with Hazard Quotient >1:	**0**
Hazard Index:	**0.0**

Ceiling Values Exceeded?	
Arsenic	**NO**
Benzene	**NO**
Carbon disulfide	**NO**
Carbon tetrachloride	**NO**
Cellosolve Acetate	**NO**
Chloroform	**NO**
Ethoxyethanol, 2-	**NO**
Ethylbenzene	**NO**
Ethyl chloride	**NO**
Mercury	**NO**
Methoxyethanol, 2-	**NO**
Propylene oxide	**NO**
Trichloroethylene	**NO**