URS

July 10, 2003

Mr. Michael F. Zamiarski, P.E.
New York State Department of Environmental Conservation
Division of Environmental Remediation, Region 8
Bureau of Spill Prevention and Response
6274 East Avon–Lima Road
Avon, New York 14414-9514

RE: NYSDEC Spill No. 0070556 (Investigative Work Plan – Supplemental Phase II); River View Commons Apartment Complex – (185-425 Mount Hope Avenue); Rochester (c- Monroe County) – Report Submission

Dear Mr. Zamiarski:

URS is submitting the attached two copies of the report documenting the field and office efforts performed during the execution of the above referenced work plan. The report follows the scope of work in the work plan submitted to NYSDEC on April 8, 2003 and your recommended modifications received by URS via e-mail on April 28, 2003.

This work is submitted on behalf of our client, Winn Development, as follow up work to the original Phase I and Phase II efforts of Day Environmental.

On behalf of our client we would ask for your expeditious review of this report and should you have any questions or concerns about its contents, URS is than willing to sit down with NYSDEC to discuss the items.

Very truly yours,

URS Corporation

Thomas J. Lawson, P.E.
Vice President

Enclosure

cc: Kristina Rogers – Winn Development w/ attachment (4)
File – 11172966 (R-1)

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PHASE II REPORT
ENVIRONMENTAL SITE ASSESSMENT

OF

RIVER PARK COMMONS
APARTMENT COMPLEX
ROCHESTER, NEW YORK

Prepared For:

WINN DEVELOPMENT
ROCHESTER, NEW YORK

Prepared by:

URS CORPORATION
BUILDING 1
781 ELMGROVE ROAD
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TABLE OF CONTENTS

FIGURES

TABLES

APPENDICES

PHASE II REPORT
SUPPLEMENTAL ENVIRONMENTAL SITE ASSESSMENT
OF
RIVER PARK COMMONS APARTMENT COMPLEX
ROCHESTER, NEW YORK

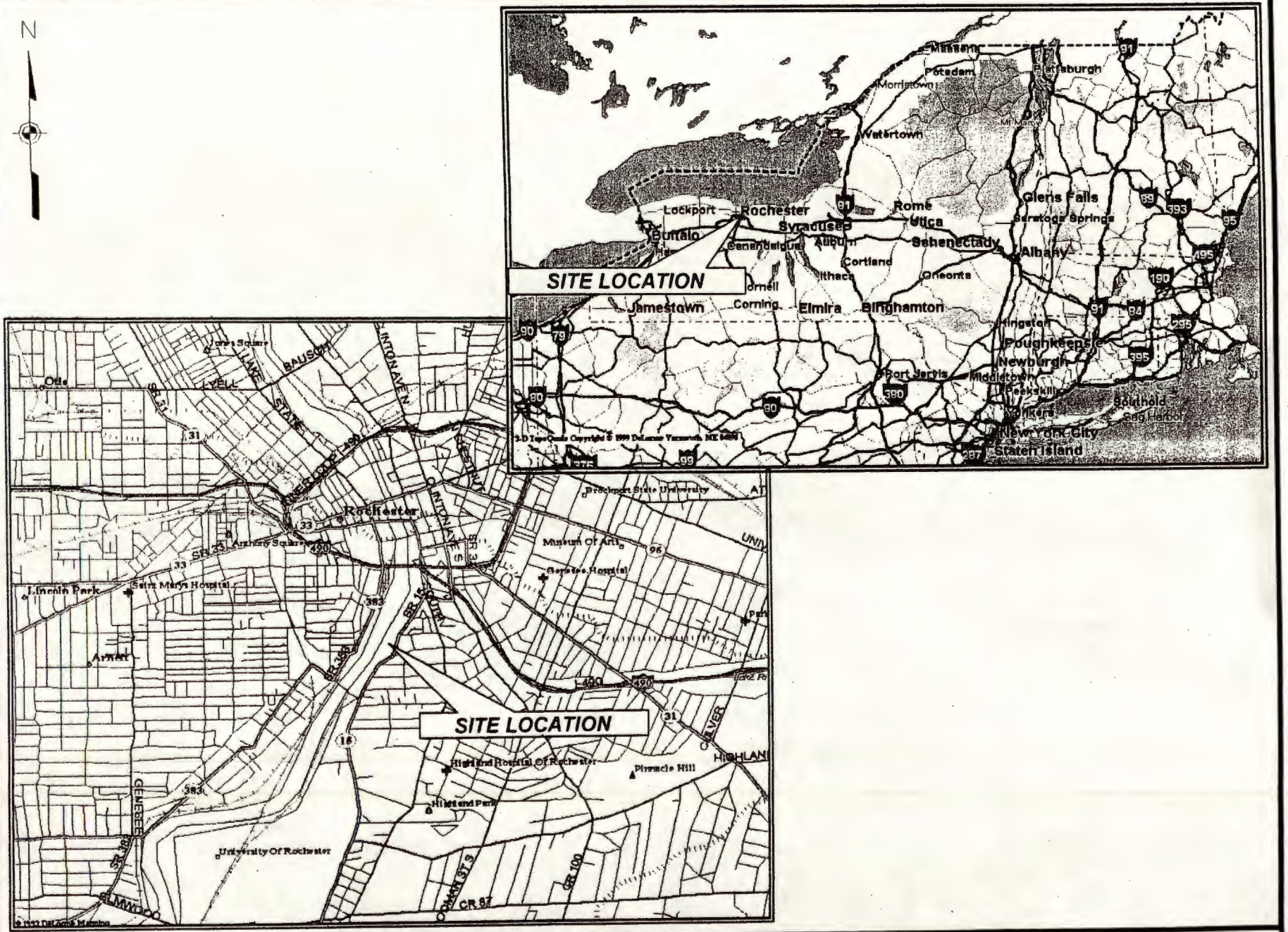
1.0 INTRODUCTION

In accordance with recommendations in the report prepared by URS Corporation (URS), titled *Review of Phase I & II ESAs of 151– 435 Mt. Hope Ave. & 562 Ford St. by Day Environmental,* dated February, 2003, URS has conducted a Supplemental Phase II Environmental Site Assessment (ESA) for Winn Development (Winn). This Supplemental Phase II ESA addresses the concerns outlined by the New York State Department of Environmental Conservation (NYSDEC) with respect to the River Park Commons apartment complex at 185-425 Mount Hope Avenue in Rochester, New York. A site location map is presented in Figure 1–1, and a site plan is presented in Figure 1–2. This report presents the results of the Supplemental Phase II ESA, which was conducted in accordance with URS's work plan of April 8, 2003 (modified by the NYSDEC via e-mail on April 28, 2003), Appendix A.

1.1 Purpose

In the fall of 2000, Day Environmental, Inc. (Day) was contracted by the City of Rochester, New York to conduct a Phase I ESA and a Phase II ESA of the parcels located at 151-435 Mount Hope Avenue and 562 Ford Street. Day's Phase II ESA report identified petroleum contamination on the northern and southern portions of the study area. Subsequently the NYSDEC was notified about the petroleum contamination, and assigned a spill number (#0070556) to the site. This spill number encompasses the entire study area of Day's Phase II ESA, which comprises several parcels. An apartment complex (River Park Commons, 185-425 Mt. Hope Ave.) is a component of the "Spill Site" and for the focus of this report will be referred as the Parcel of Concern (POC).

The purpose of this Supplemental Phase II ESA was to evaluate the environmental impacts cited in Day's Phase II ESA. Specifically, the intent was to investigate potential contamination in the POC's subsurface so that Winn can make informed decisions relative to the future use/value of the POC and any environmental concerns that may require remediation or otherwise impair the usefulness of the site.



URS	SITE LOCATION MAP WINN DEVELOPMENT ROCHESTER - PHASE II ESA	FIGURE 1-1

1.2 Detailed Scope of Services

The work performed during this ESA was in accordance with URS's work plan of April 8, 2003 (NYSDEC modified), and included the following tasks:

- Installation of soil borings at selected locations around the site to obtain soil samples for laboratory analysis;
- Collection of soil samples during drilling activities for laboratory analysis;
- Installation of monitoring wells at select boring locations;
- Collection of groundwater samples from the recently installed monitoring wells/soil borings for laboratory analyses;
- A survey to determine horizontal location and elevation of all the monitoring wells/soil borings in the Spill Site;
- Collection of groundwater elevation data and preparation of a groundwater contour map; and,
- Preparation of a summary report describing the field investigations and results.

2.0 SITE DESCRIPTION

2.1 Location and Current Use

The POC, which is currently owned by Genesee Gateway Houses, Inc., is located at 185-425 Mount Hope Avenue, Rochester, New York (Figure 1–1). The 9.5–acre parcel contains a high rise apartment building (185 Mt. Hope Ave.) and two (2) four-story apartment buildings (195-425 Mt. Hope Ave.), surface parking and landscaping (Figure 1–2). In addition to housing tenants, the high rise building is used to accommodate rental, security and maintenance offices for the whole complex. The POC is located in a heavily developed area within the City of Rochester and is zoned "residential". The adjoining properties to the north, south and west are parklands, with the Genesee River beyond the western parkland. The POC is bordered to the east by Mount Hope Avenue, beyond which are various commercial and residential properties.

2.2 Site Background

Based on information provided to URS during its review of Day's Phase I ESA, between 1892 and 1972 the POC was used as a railroad switchyard for the Lehigh Valley Railroad, with ancillary buildings/shops. Additionally, a portion of the property was also part of an Erie Canal "canal feeder". This canal was filled during the 1960's. By 1975, the railroad switchyard and ancillary buildings/facilities were removed and the present apartment complex was built. The existing facility has been an apartment complex since its construction in 1975.

The adjacent properties to the north and south were generally commercial in use and consisted of several retail petroleum stations. This is the likely source of the petroleum contamination identified in Day's phase II ESA.

3.0 PREVIOUS INVESTIGATIONS

3.1 Day Environmental's Phase I & II ESAs

Day published a Phase I ESA of the Spill Site on October 24, 2000 and a Phase II ESA on October 2000, under contract with the City of Rochester. URS reviewed these ESAs at Winn's request and in February, 2003, issued the following comments:

3.1.1 Impacts to the POC:

- There are two (2) primary areas of petroleum contamination located adjacent to the northern and southern ends of the POC. The soil along the southern border has petroleum volatile organic compounds (VOCs) at concentrations as high as 17.8 milligram per kilogram (mg/kg) (170 times NYSDEC guidance). Petroleum VOCs were also detected in the groundwater along the southern border, at concentrations as high as 6.7 mg/L for benzene (6,700 times NYSDEC guidance). The soil along the northern border contained petroleum VOCs at concentrations as high as 7.3 mg/kg (73 times NYSDEC guidance) and petroleum semivolatile organic compounds (SVOCs) as high as 4.2 mg/kg (4 times NYSDEC guidance). Petroleum VOCs (m, p-Xylene) were also detected in the groundwater along the northern border, at concentrations as high as 2.6 milligram per liter (mg/L) (512 times NYSDEC guidance).

- These areas of impact are believed to be sourced from the neighboring parcels to the north and south, from past operations of petroleum bulk storage (PBS) facilities (i.e. gas stations) that were located on these neighboring parcels. These neighboring properties are owned by the City of Rochester and are not part of the proposed purchase of the POC.

- RCRA metals were detected in the soil and groundwater of the POC, at concentrations below or slightly above NYSDEC criteria. The metals detected were most likely the result of generally historic industrial use, past operations of the rail yard that was located on the POC and may also represent general background conditions for this urban location.

3.1.2 Current Regulatory Concerns for the POC:

- Day's investigations included both the POC and the adjacent City of Rochester-owned parcels to the north and south. The NYSDEC Spill number (#0070556) is related to the petroleum contamination identified on the south and north parcels owned by the city. As such, the remediation of these two areas would be the responsibility of the City of Rochester.

- Additional delineation and documentation of the off-site sourced petroleum contamination would be necessary to quantify what responsibility the City of Rochester has regarding the contamination on the POC.

- The metals detected in the soils on the POC are not at concentrations that would be a regulatory concern. Therefore, no regulatory responsibility or action appears to be related to the POC. This issue should be clarified with the NYSDEC.

3.2 Additional Phase II ESAs

URS has learned that since the publication of Day's Phase II ESA report of October 2000, additional Phase II ESAs have occurred in the northern and southern ends of the Spill Site. These additional Phase II ESAs involved supplemental soil borings and monitoring well installation/sampling. Evidence of these ESAs was exhibited in six (6) monitoring wells observed at the Spill Site that were not cited in Day's October 2000 Phase II ESA report. For discussion purposes, URS labeled these six (6) additional wells concurrent with Day's initial number system (MW-9 through MW-14). URS was not given copies of this information from the additional Phase II ESAs, but was given access to this data at the NYSDEC Region 8 office.

4.0 URS PHASE II INVESTIGATION AND RESULTS

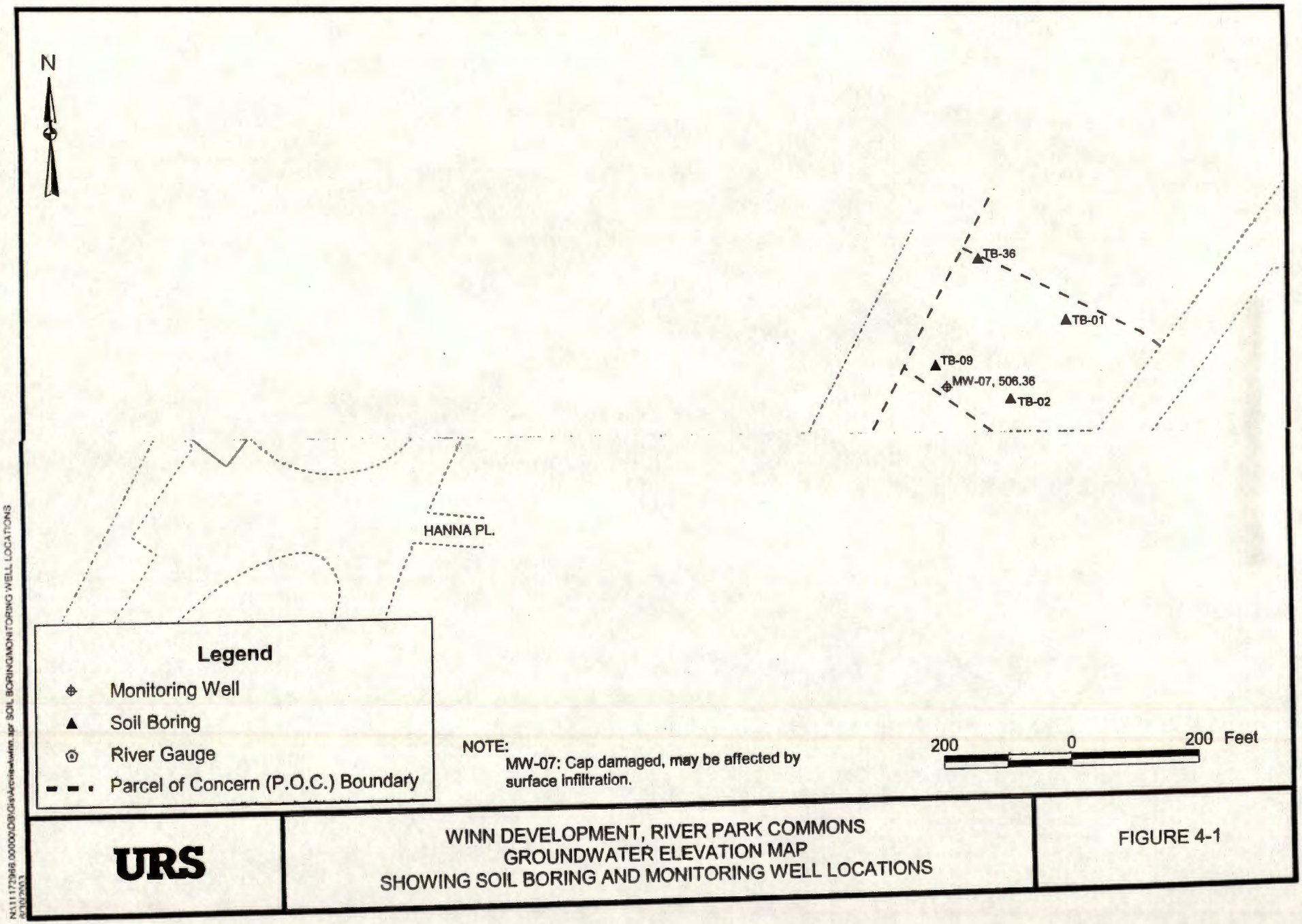
4.1 Site Investigation Activities

Between May 27, 2003 and June 10, 2003, URS conducted a Phase II field investigation at the site. As indicated previously (Section 1.2), this investigation included soil borings, sampling/analysis, monitoring well installation and groundwater characterization. These activities are described below.

4.1.1 Soil Borings

On May 27 through 29, 2003, a soil investigation, conducted in general accordance with procedures detailed within the April 8, 2003 Work Plan (NYSDEC modified), was performed to obtain soil samples for laboratory analyses in order to identify the presence and extent of potential impacts to the subsurface soil, which may have been the result of historical or current operations. Six (6) soil borings (SB-01, SB-02 and URS-1 to URS-4) were installed in the POC. Soil boring locations and sample collection depths were selected based on information obtained during Day's site investigation conducted on November 22, 2001. The locations of URS-1 and URS-2 were selected to further delineate the petroleum contamination along the southern border of the POC. The locations of URS-3 and URS-4 were selected to further delineate the petroleum contamination along the northern end of the POC. The locations of SB-01 and SB-02 were selected to authenticate the extent of petroleum contamination, cited as high total petroleum hydrocarbon detections, at boring locations TB-30 and TB-31 of Day's Phase II ESA. The locations of the above–referenced borings are shown in Figure 4-1.

Soil borings URS-1 through URS-4 were completed by Nothnagle Drilling, Inc. (Nothnagle) using a CME-85 drill rig to advance the 4.25-inch hollow stem augers and perform continuous split spoon sampling, to a depth ranging from 16 to 20 feet below ground surface (BGS). Soil borings SB-01 and SB-02 were completed by Nothnagle using a CME-85 drill rig to advance a 2.5–inch diameter, 4–foot long, Macrocore® sampler, to a depth of 16 feet BGS.



N:\11172988.00000\08\GisArcview\winn.apr SOIL BORING/MONITORING WELL LOCATIONS
4/30/2003

URS	WINN DEVELOPMENT, RIVER PARK COMMONS GROUNDWATER ELEVATION MAP SHOWING SOIL BORING AND MONITORING WELL LOCATIONS	FIGURE 4-1

The downhole sampling tools were decontaminated between each use, by washing with an Alconox® solution with potable water rinse and/or steam cleaned with a high pressure-hot water power washer. The soil samples were logged by a URS geologist to develop a geologic profile. Each split spoon/Macrocore® sample was visually examined, classified according to the Unified Soil Classification System (USCS), inspected for signs of contamination and sampled for headspace analysis using a RAE Systems model MiniRAE 2000 photoionization detector (PID). Details on the subsurface description are outlined in Section 4.2. Results from the headspace analyses and detailed geologic profiles for each boring were recorded on boring logs, included in Appendix B.

Six (6) soil samples (i.e. one per boring) were collected from the interval exhibiting the most contamination (i.e. highest PID reading, etc.), or just above the groundwater, and submitted for laboratory analyses. All waste generated during boring/sampling activities was containerized on-site in 55-gallon DOT drums pending laboratory results.

Soil samples collected for laboratory analyses were placed in pre-cleaned sample containers supplied by the analytical laboratory. The sample containers were labeled with a unique sample identification number and maintained at approximately 4°C in dedicated ice chests. A chain-of-custody (COC) form was maintained and accompanied the sample containers to Columbia Analytical Services, Inc. (CAS), in Rochester, New York. At the lab, the soil samples were analyzed for VOCs by USEPA Method 8260B TCL+STARS and SVOCs by USEPA Method 8270C Full (B/C+Acids+STARS+20 TICS). Copies of COCs are provided in Appendix C. A summary of the soil-sampling program is provided in Table 4-1.

4.1.2 Groundwater Investigation

As part of the environmental investigation at the POC, the groundwater underlying the site was evaluated to obtain information regarding its physical and chemical nature. A groundwater investigation, conducted in general accordance with procedures presented within the April 8, 2003 Work Plan (NYSDEC modified), was performed to obtain groundwater samples for laboratory analyses in order to identify the presence and extent of potential groundwater impacts at the POC and to determine the groundwater flow direction beneath the site. To accomplish this, soil borings URS-1 to URS-4 were completed as groundwater monitoring wells. The groundwater-sampling program is presented in Table 4-2. The locations of the monitoring wells are illustrated in Figure 4-1.

Table 4-1
Soil Sampling Program
River Park Commons Apartment Complex
Rochester, New York

Area of Potential Concern Description	Soil Sampling Location	Soil Sample Identification	Chemical Analysis[1]
Petroleum Contamination Along the Site's Southern Border	URS-1		VOCs and SVOCs
	URS-2		
Petroleum Contamination Along the Site's North End	URS-3		
	URS-4		
High TPH Detections from Soil Collected at the Center of the Site	SB-1		
	SB-2		

[1]Chemical Analyses
VOCs – Volatile Organic Compounds (EPA Method 8260B TCL + STARS)
SVOCs – Semi-Volatile Organic Compounds (EPA Method 8270 Full [B/N+Acids+STARS+20 TICS])

Following the completion of the soil borings to a depth of at least 5-feet below the groundwater surface (i.e. about 16 to 20 feet BGS), a 10-foot length of 2-inch ID, Schedule 40, No. 10 slot, PVC well screen flush threaded to a 2-inch ID, Schedule 40, PVC riser was placed in the borehole. Type 00N silica sand was then placed around the screen to a depth of 1.5-feet above the top-of-screen. A 3-foot thick bentonite slurry seal was installed above the sandpack and the remainder of the hole was backfilled with a cement/bentonite grout to surface grade. Each monitoring well was secured with a locking, expandable J-plug inside a steel flush mounted curb box. Monitoring well construction detail logs are included in Appendix D.

Upon completion, each monitoring well was developed via surging with a drill mounted surge block and purged with a drill mounted surge pump until a minimum five (5) well volumes were removed. After each volume was purged, a water quality meter was used to determine the purge water's temperature, conductivity, turbidity and pH. This process continued until the minimum volume was removed, the aforementioned parameters had stabilized relative to three (3) prior continuous readings and the turbidity was less than or equal to 50 NTUs or had stabilized relative to three (3) prior continuous readings, depending on the turbidity encountered during the purging process. The purgewater generated during development was placed in 55-gallon DOT drums pending URS's review of laboratory reports to determine the proper disposal method. Development details are outlined in Appendix E, Well Development Records.

In accordance with the NYSDEC's suggestions regarding the April 8, 2003 work plan, URS collected groundwater from SB-02 because it exhibited evidence of petroleum contamination. The groundwater from SB-02 was collected on May 29, 2003 in the following manner:

- Immediately upon removal of the last Macrocore® sampler from the borehole, Nothnagle inserted a 10-foot length of 1-inch ID, Schedule 40, No. 10 slot, PVC well screen flush threaded to a 1-inch ID, Schedule 40, PVC riser.

- Upon insertion of the PVC screen and riser, the groundwater was collected via peristaltic pump and dedicated poly/silicone tubing. The collection involved the immediate pumping of the groundwater into the laboratory supplied sample container.

- No field measurements were collected due to the excessive sediment in SB-02's groundwater clogging the dedicated tubing after sample collection.

On June 5, 2003, URS returned to the POC to continue groundwater sampling. Groundwater samples were collected from URS-1 through URS-4 using a low-flow collection method via a down-hole pump through disposable poly tubing. This method involved purging the well at an extremely low rate and checking the effluent for pH, temperature, conductivity, dissolved oxygen and turbidity, at periodic intervals. The sample was collected once these parameters had stabilized within three (3) intervals.

Groundwater samples collected for laboratory analysis were placed in laboratory-supplied sample containers. All samples were labeled with a unique sample identification number and maintained at approximately 4°C in designated ice chests. The samples were delivered to CAS, in Rochester, New York, for analysis within the allowable holding times. A COC record form was maintained and accompanied the samples during transport. At the lab, the groundwater samples from SB-02 was analyzed for SVOCs by USEPA Method 8270C Full (B/C+Acids+STARS+20 TICS). The remaining groundwater samples were analyzed for VOCs by USEPA Method 8260B TCL+STARS and SVOCs by USEPA Method 8270C Full (B/C+Acids+STARS+20 TICS). All groundwater samples collected were turbid (>100 NTUs). Field observations gathered during the groundwater collection efforts are included in Appendix F.

All purge water generated during sampling activities was containerized on-site in 55-gallon DOT drums pending laboratory results.

All the monitoring wells at the Spill Site, including the wells URS did not install (MW-1 to MW-14), were surveyed by URS on June 10, 2003, to determine their location and elevation relative to mean sea level. The well survey included determining the elevation of the top of the PVC casing at each well with respect to mean sea level, and locating the wells with respect to the site buildings. In addition to the monitoring wells, two (2) points along the eastern wall of the Genesee River (R-1 and R-2) were surveyed for location and elevation. Groundwater/riverwater depths in each well/river survey point were determined with an electronic water level indicator during the monitoring well survey event. The groundwater/riverwater depth data was used in conjunction with the survey data to determine the water elevation in each well/river survey point. Details on the depth to water data and the groundwater flow at the site are in Section 4.2.4.

4.2 Results of Investigation

4.2.1 Site Geology

The site is located at approximately 554 feet above mean sea level and is generally level. Boring logs generated during this investigation indicate that the overburden at the site is approximately 20' feet thick. Soil borings installed on the POC indicate three (3) different types of materials between 0 and 20 feet BGS. These materials, from the surface down, are described below. Detailed geologic logs are included in Appendix B.

- Fill – The POC is underlain by a sand and gravel fill layer (under 0.3 feet of asphalt at borings SB-01, SB-02, URS-3 and URS-4) varying in thickness from 2 to 13 feet with an average thickness of about 8.2 feet across the site. The material is brown with dark staining at borings URS-1 (6-10 feet BGS) and URS-4 (6-10 feet BGS), medium dense to loose, well–graded, dry to wet and exhibited PID readings above background at boring URS-1 (46 PPM at 8-10 feet BGS), based on field work done during the indicated times.

- Till (Silt and Sand) – This layer ranges from 3 to 14 feet in thickness, and averages about 9.4 feet across the site. This unit is typically medium brown to reddish gray in color, and consists predominantly of silt and fine sand with trace to some fine to coarse gravel, grading towards fine to coarse sand and gravel with trace to some silt. This unit is medium dense, moist to wet and exhibited PID readings above background at borings SB-02 (7.2 PPM at 8-12 feet BGS) and URS-1 (245 PPM at 10-12 feet BGS).

- Bedrock – This layer was encountered at borings URS-2 and URS-3, at depths of 18 and 19.5 feet BGS respectively.

4.2.2 Soil Analytical

The analytical results were compared to guidance values from attachments in the December 20, 2000 NYSDEC memo titled "Determination of Soil Cleanup Levels", which was developed as guidance for residential clean–up goals. Laboratory results for the soil samples analyzed are summarized in Table 4–3. Soil samples collected from borings URS-3 and URS-4 were labeled in the field MW-3 and MW-4 respectively and are identified as such in the laboratory report and COC only. A detailed laboratory report is included in Appendix G.

- **VOC and SVOC Data:** As seen in Table 4–3, Only one sample location, URS-1, contained VOCs above NYSDEC guidance values. VOCs in URS-1 ranged from 1,400 micrograms per kilogram (ug/kg) of isopropylbenzene to 28,000 ug/kg of 1,2,4–trimethylbenzene. No SVOCs were detected above NYSDEC guidance values in URS-1. URS-1 is located adjacent to the southern City of Rochester parcel where petroleum contamination was identified by Day.

  The only other location in which VOCs or SVOCs were detected was SB-02, collected from the middle of the property. Several VOCs and one SVOC were detected in SB-02 but at concentrations *well below* State Guidance Values.

4.2.3 Groundwater Analytical

The analytical results were compared to the NYSDEC's Technical and Operational Guidance Series (TOGS) memorandum #1.1.1 "Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations" for Class GA groundwater, which was developed as guidance for contaminants in freshwater groundwater. Laboratory results for the groundwater samples analyzed are summarized in Table 4–4. A detailed laboratory report is included in Appendix G.

- **VOC and SVOC Data:** As seen in Table 4–4, VOCs were only detected in URS-1. All of the six VOCs detected in URS-1 were reported in concentrations above the NYSDEC TOGS guidance values. VOC concentrations ranged from 94 micrograms per liter (ug/L) of 1,3,5-trimethylbenzene to 841 ug/L of total xylenes. Two SVOCs (2-methylnaphthalene and naphthalene) were also detected in URS-1. Naphthalene was reported at a concentration (89 ug/L) that exceeded its NYSDEC guidance value. No other VOCs or SVOCs were detected in the other three groundwater wells installed in this investigation. However, a grab sample was collected from boring SB-02. One SVOC, phenanthrene, was detected in SB-02 at a concentration (1,900 ug/L) that exceeded its respective NYSDEC guidance value. The detection limits from the SB-02 analysis were greater than their respective TOGS guidance values due to the excessive silt in the sample collected, resulting in a significantly smaller sample volume than the analysis recommends, see Appendix G, Page 2 of the Case Narrative, Laboratory Reports.

TABLE 4-3
SUMMARY OF DETECTED ORGANIC COMPOUNDS IN SOIL
WINN DEVELOPMENT, JUNE 2003 SAMPLING
(Units in ug/kg)

Parameter	NYSDEC Guidance Value	URS-1	URS-2	URS-3	URS-4	SB-1	SB-2
Volatiles							
sec-Butylbenzene	10000	1600	<6.2	<5.7	<6.4	<6.0	38
n-Butylbenzene	10000	2500	<6.2	<5.7	<6.4	<6.0	43
Ethylbenzene	5500	3000	<6.2	<5.7	<6.4	<6.0	<11
Isopropylbenzene	2300	1400	<6.2	<5.7	<6.4	<6.0	<11
p-Isopropyltoluene	10000	2400	<6.2	<5.7	<6.4	<6.0	<11
Naphthalene	13000	11000	<6.2	<5.7	<6.4	<6.0	21
n-Propylbenzene	3700	2700	<6.2	<5.7	<6.4	<6.0	<11
1,3,5-Trimethylbenzene	3300	9400	<6.2	<5.7	<6.4	<6.0	<11
1,2,4-Trimethylbenzene	10000	28000	<6.2	<5.7	<6.4	<6.0	28
o-Xylene	1200	1400	<6.2	<5.7	<6.4	<6.0	<11
m,p-Xylene	1200	15000	<6.2	<5.7	<6.4	<6.0	<11
Semivolatiles							
2-Methylnaphthalene	36400*	2100	<410	<370	<420	<370	<3600
Naphthalene	13000	750	<410	<370	<420	<370	<3600
Phenanthrene	50000	<360	<410	<370	<420	<370	4300

Note: NYSDEC guidance values obtained from attachements in NYSDEC Memo titled *"Determination of Soil Cleanup Levels"*, December 20, 2000. Any sample results exceeding the guidance value are shaded.

* Guidance value obtained from TAGM #4046. No value was provided in 12/20/00 NYSDEC Memo.

TABLE 4-4
SUMMARY OF DETECTED ORGANIC COMPOUNDS IN GROUNDWATER
WINN DEVELOPMENT, JUNE 2003 SAMPLING
(Units in ug/L)

Parameter	NYSDEC Guidance Value	URS-1	URS-2	URS-3	URS-4	SB-2W
Volatiles						
Ethylbenzene	5	190*	<5.0	<5.0	<5.0	NA
Naphthalene	10	140*	<5.0	<5.0	<5.0	NA
1,3,5-Trimethylbenzene	5	94*	<5.0	<5.0	<5.0	NA
1,2,4-Trimethylbenzene	5	340*	<5.0	<5.0	<5.0	NA
o-Xylene	5	31*	<5.0	<5.0	<5.0	NA
m,p-Xylene	5	810*	<5.0	<5.0	<5.0	NA
Semivolatiles						
2-Methylnaphthalene	50*	25	<9.7	<9.5	<9.4	<890
Naphthalene	10	89*	<9.7	<9.5	<9.4	<890
Phenanthrene	50	<10	<9.7	<9.5	<9.4	1900

Note: NYSDEC guidance values obtained from TOGS 1.1.1, June 1998. Any sample results exceeding the guidance value are shaded.

* Guidance value obtained from TAGM #4046, Groundwater Criteria, January 1994. No TOGS 1.1.1 value was provided.

NA = Not analyzed

4.2.4 Site Hydrogeology

Depth to water data, collected during the monitoring well survey event, suggests that the local groundwater depth ranged from 7.36 to 16.11 feet BGS; depth to water along the River ranged from 1.56 to 5.51 feet BGS (see Table 4-5). Evidence of light non-aqueous phase liquid (LNAPL) was discovered in MW-4, during the depth to water data collection event. Evidence of LNAPL was not encountered in the remaining wells surveyed, including MW-11 (5 feet west of MW-4).

Well MW-7, located north of the POC was discovered to have an exposed riser pipe and was missing an outer well cap/casing. This would allow surface water to infiltrate the well, influencing the groundwater elevation at MW-7.

Depth to surface water in the Genesee River was also measured at points R-1 and R-2. The depth of the Genesee River was approximately 512 feet above mean sea level (amsl). With the exception of MW-7, groundwater elevations within the three wells closest to the Genesee River (MW-08, MW-13 and URS-1) range from 504.30 feet amsl to 504.45 feet amsl (see Table 4-5). This would represent a drop of nearly 8 feet of water elevation in a horizontal distance of approximately 80 feet. Additionally, groundwater elevations on the site vary greatly within wells and areas of the site. This would indicate that groundwater elevations are greatly influenced by subsurface features such as buried former building foundations and the former "feeder canal" bed. Because of this variability and apparent unpredictability of subsurface features, site specific groundwater flow direction could not be determined for the POC or adjacent properties.

It should be noted however, that in general the highest groundwater elevations (excluding MW-7, which is damaged) are on the southern portion of the study area while the lowest groundwater elevations are on the northern portion of the study area. This *may* indicate a northerly flow of groundwater. Additionally, the surface water elevation of the River is higher than the groundwater. Current data suggests that the retaining wall along the River might be serving as an aquitard, reducing the River's influence on adjacent groundwater elevations. The exact depth of the River wall and the material it is embedded in is not presently known.

The groundwater elevations are shown in Figure 4-1.

Table 4-5
Winn Development, River Park Commons
Water Level Data/Grounwater Elevations

DATE: 6/10/03 **TAKEN BY:** Kevin J. McGovern

Monitoring Well ID	Time	Depth to Water from TOC (ft)	Elevation of TOC (ft amsl)	Groundwater Elevation (ft amsl)	Notes	Monitoring Well ID	Time	Depth to Water from TOC (ft)	Elevation of TOC (ft amsl)	Groundwater Elevation (ft amsl)	Notes
MW-1	7:52	14.60	513.66	499.06		URS-1	8:47	11.49	514.85	503.36	
MW-2	7:58	12.49	512.18	499.69		URS-2	9:24	9.75	514.05	504.30	
MW-3	8:20	NA	NA	NA	Cannot get inner PVC cap open	URS-3	8:27	13.81	511.08	497.27	
MW-4	8:42	11.81	516.52	504.71	LNAPL (Product) in Well	URS-4	8:23	7.36	510.73	503.37	
MW-5	8:34	7.85	511.43	503.58							
MW-6	8:34	7.44	510.75	503.31							
MW-7	7:48	9.96	516.32	506.36	Broken Flush Mount Casing, Exposed PVC Riser						
MW-8	9:28	9.28	513.73	504.45							
MW-9	8:13	13.21	513.76	500.55							
MW-10	8:05	14.32	511.93	497.61							
MW-11	8:57	12.70	516.25	503.55							
MW-12	9:05	13.40	518.21	504.81							
MW-13	9:17	14.38	518.82	504.44							
MW-14	9:11	16.11	520.23	504.12							
R-1*	7:45	1.56	513.78	512.22							
R-2*	9:20	5.51	517.78	512.27							

* - Water Level from Top of Survey Mark Along River Wall

5.0 CONCLUSIONS AND RECOMMENDATIONS

5.1 Conclusions

Based on the results of the investigation performed, the following conclusions can be made:

- Only one sample location, URS-1, contained VOCs in soils above NYSDEC guidance ranging from 1,400 micrograms per kilogram (ug/kg) of isopropylbenzene to 28,000 ug/kg of 1,2,4–trimethylbenzene. No SVOCs were detected above NYSDEC guidance values in URS-1. URS-1 is located adjacent to the southern City of Rochester parcel where petroleum contamination has been identified by Day. The only other location in which VOC or SVOCs were detected in soil was in SB-02, but at concentrations *well below* State Guidance Values.

- VOCs were only detected in groundwater from monitoring well URS-1. All of the six (6) VOCs detected in URS-1 were reported at concentrations above the NYSDEC TOGS guidance values and ranged from 94 ug/L of 1,3,5-trimethylbenzene to 841 ug/L of total xylenes. Two (2) SVOCs were also detected in URS-1 although only naphthalene was reported at concentration (89 ug/L) that exceeded its NYSDEC guidance values. No other VOCs or SVOCs were detected in the other three groundwater wells installed in this investigation. However, a grab water sample was collected from boring SB-02. One (1) SVOC, phenanthrene, was detected in SB-02 groundwater at a concentration (1,900 ug/L) exceeding its respective NYSDEC guidance value.

- Groundwater elevations vary greatly within wells and areas of the site. This would indicate that groundwater elevations are greatly influenced by subsurface features such as buried former building foundations and the former "feeder canal" bed. Because of this variability and apparent unpredictability of subsurface features, groundwater flow direction was not determined for the POC or adjacent properties. However, in general the highest groundwater elevations (excluding MW-7, which is damaged) are on the southern portion of the study area while the lowest groundwater elevations are on the northern portion of the study area. This *may* indicate a northerly flow of groundwater.

5.2 Recommendations

Although soil and groundwater exceedances do exist on the POC, it is the opinion of URS that no additional sampling or remedial activities, with respect to the POC, are required at this time with regard to the area around the north and south property lines. Contamination detected in URS-1 at the south property line during field investigations is not believed to have its' source on the POC. This premise is based on historical operations on the property south of the POC, and free product floating in well MW-4 at the time groundwater levels were taken by URS on June 10, 2003. Along the north property line, URS-3 and URS-4 detected no contamination at the time of their installation, and there is no known historical business that might have been a source of contamination i.e. underground tank.

However, based on a comparison of the concentrations of compounds detected in both the past and current Phase II investigations to the 'Construction Worker Receptor' criteria (cited in the February 23, 1998 NYSDEC memo title "Guidelines for Petroleum Spill Site Inactivation"), a soil management plan should be developed and implemented for any future excavation on site along the northern and southern property lines and in the general area around SB-2. This recommended soil management plan would be used along the northern and southern property lines until such time as the parcels north and south of the POC are remediated and approved by NYSDEC. The soil management plan should also be used when any future excavation in the area around SB-2 exceeds a depth of six (6) feet below existing grade. The following summarizes URS's reasoning for the conclusion:

- Groundwater wells in the northern, and likely downgradient, border of the POC did not contain detectable concentrations of VOCs or SVOCs.

- Although monitoring well URS-1 contains both VOC exceedances in soil and VOC and SVOC exceedances in groundwater, the supporting information would indicate that this contamination is resultant from the petroleum release on the adjacent property, as previously identified. This is concluded primarily from the historical review of past operations which did not identify a likely source of petroleum contamination on the POC but did identify a source on the adjacent property (retail gasoline station). Additionally, a petroleum release on the adjacent property has already been identified to the south and groundwater elevations have indicated a likely flow of groundwater from the south to the north.

- An additional groundwater exceedance was identified in SB-02, in the center of the property. Only one compound (the SVOC phenanthrene) was identified in SB-02 and it was reported at a concentration above

its respective NYSDEC guidance value. Because the groundwater is generally greater than 8 feet below grade and groundwater is not used for drinking water in the area, the potential exposure to this compound is limited and represents a di-minimus condition on the site.

- Only one other location (other than URS-1) contained detectable concentrations of SVOCs or VOCs in soil. Soil boring SB-02 contained several VOCs and one SVOC. However, the detected concentrations were *well below* the State Guidance Values.

6.0 LIMITATIONS AND EXCEPTIONS

URS' conclusions and recommendations are based on conditions that existed on the property between May 27, 2003 and July 1, 2003. Past and present conditions that could not be observed were established based on documents and accounts of personnel interviewed. URS cannot attest to the completeness of accuracy of these accounts and documents.

This report was prepared by URS expressly and exclusively for use by Winn Development. Except where specifically stated to the contrary, the information contained herein was provided to URS by others and has not been verified independently or otherwise examined to determine its accuracy, completeness, or feasibility. In addition, URS may have had to rely upon the assumptions, especially as to future conditions and events. Accordingly, neither URS nor any person acting on its behalf (a) makes any warranty or representation, whether expressed or implied, concerning the usefulness of the information contained in this report, or (b) assumes liabilities with respect to the use of or for damages resulting from the use of any information contained in this ESA report. Further, URS cannot promise that any assumed conditions will come to pass.

No one is authorized to rely on this report for any purpose, except to the extent that such reliance is specifically authorized in writing by URS. Any person who intends to take action, which is in any way related to or affected by the information contained herein, should independently verify all such information. The report speaks only as of the date issued.

It would be extremely expensive, and perhaps not possible, to conduct an investigation which would ensure the detection of environmental impacts at the POC which now are, or in the future might be, considered hazardous. This investigation does not guarantee that URS discovered all the environmental impacts at the POC. Similarly, a property which, in fact, is unaffected by environmental impacts at the time of the assessment may later, due to natural phenomena or other intervention, become contaminated.

Except where stated to be the contrary, the ESA has been prepared solely based on readily available visual observation. Except where stated to be the contrary, no demolition or removal by URS has been accomplished to reveal hidden conditions. No testing such as the testing of materials, equipment, or systems has been performed to verify current conditions or to predict future conditions.

Future regulatory modifications, agency interpretation, or policy changes may affect the compliance status of the property.

7.0 SIGNATURE PAGE

Author: Kevin J. McGovern has a Bachelor's Degree in Geology with over 9 years of professional geology and environmental experience with responsibilities which include Phase I and II environmental site assessments (ESAs). Mr. McGovern has performed site walkover and report writing for Phase I and II ESAs performed for various retail, industrial and commercial properties. Additionally, Mr. McGovern has performed/supervised soil remediation, groundwater characterization, asbestos inspections, O&M on groundwater treatment systems, groundwater modeling, CADD design, updating SPCC plans and supervising UST closures.

Author's Signature:

Kevin J. McGovern, P.G. Date 7/10/03

Reviewer: Mark Colmerauer, Senior Geologist, has been completing environmental assessments and remediation programs since 1992. Mr. Colmerauer's responsibilities include technical review and project management of Due Diligence work completed in URS's Buffalo, New York office. His experience includes petroleum site remediation, PCB remediation, RCRA facility investigations, brownfield redevelopment as well as asbestos inspection and management planning.

Reviewer's Signature:

Mark Colmerauer (m) 7/11/03

Mark Colmerauer Date

Principal in Charge: Thomas J. Lawson, PE has a Bachelor's Degree in Civil Engineering with over 30 years of overall environmental engineering experience. Mr. Lawson's responsibilities have included environmental evaluations, design, permitting, construction, and management. He is familiar with State and Federal environmental regulations with expertise in evaluations, assessments, design, report writing, management, and public participation in the industrial, municipal, and governmental sectors. He has particular strength in wastewater treatment, liquid bulk storage, testing of underground storage tanks, hazardous waste, solid waste (landfilling and recycling), and environmental assessments and audits. Varied experience in air pollution, permitting, sludge incineration, infectious waste, recycling and composting.

Principal–In–Charge's Signature:

Thomas J. Lawson 7/11/03

Thomas J. Lawson, PE Date

8.0 REFERENCES

Day Environmental, Inc., 2000. *Phase I Environmental Site Assessment Report, 151-435 Mount Hope Avenue and 562 Ford Street, Rochester, New York.* October 24, 2000.

Day Environmental, Inc., 2000. *Phase II Environmental Study Data Package, 151-435 Mount Hope Avenue and 562 Ford Street, Rochester, New York.* October 2000.

APPENDIX A
SUPPLEMENTAL PHASE II ESA WORK PLAN

URS

April 8, 2003

Mr. Michael F. Zamiarski, P.E.
New York State Department of Environmental Conservation
Division of Environmental Remediation, Region 8
Bureau of Spill Prevention and Response
6274 East Avon-Lima Rd.
Avon, NY 14414-9519

Re: **NYSDEC Spill #0070556 (Investigative Work Plan-Supplemental Phase II);**
Riverview Commons Apartment Complex-
(185-425 Mt. Hope Avenue);
Rochester (C), Monroe County

Dear Mr Zamiarski:

URS Corporation (URS), on behalf of Winn Development, submits the following Investigative Work Plan for the afore referenced property. The Plan is a follow-up to URS' joint meeting with the New York State Department of Conservation (NYSDEC) and Winn Development on March 11, 2003. It is meant to address the issues of concern in the above identified spill report. By undertaking this investigative effort Winn Development would expect that upon its' completion, the NYSDEC could issue a closure letter for the issues of concern.

There were three (3) physical areas of concern discussed during the meeting. Petroleum contamination was the issue for all three (3) areas. Specifically the areas were as follows:

- Petroleum contamination along the northern and southern boundaries of the Parcel of Concern (POC); and,
- Petroleum contamination at Day Environmental's boring locations TB-30 and TB-31, as exhibited by the high Total Petroleum Hydrocarbon (TPH) detections in the soil samples collected from these locations.

It should be noted that, particularly with regard to the area around TB-30 and TB-31, there are no regulatory cleanup criteria based on TPH. Also, Winn Development has no plans to significantly alter the present pavement (asphalt/concrete) configuration nor footprints of the buildings. Essentially, this area is staying capped.

URS will address these concerns by conducting the following:

URS Corporation
Building 1, 761 Ellingrove Road
Rochester, NY 14624
Tel: 585.426.2120
Fax: 585.426.2161

URS

1. SOIL INVESTIGATION

As part of the environmental investigation at the Riverview Commons Apartment Complex (the Site), a soil investigation will be performed to obtain soil samples for laboratory analyses in order to identify the presence and extent of potential impacts to the subsurface soil. Soil borings SB-1, SB-2 and URS-1 through URS-4 will be completed using a drill rig to advance the sampling tools via a hollow stem auger. The sampling tools used by the drill rig to sample and install the borings will be decontaminated between each use, using an Alconox® solution with potable water rinse or steam cleaning over a decontamination pad.

Locations and sample collection depths, for borings URS-1 through URS-4 (which will be completed as monitoring wells), were selected to accommodate the monitoring wells that will be installed upon their completion. Locations and sample collection depths, for borings SB-1 and SB-2, were selected to accommodate the concerns voiced during the above-mentioned meeting between URS the NYSDEC and Winn Development, with respect to the high TPH concentrations at Day Environmental borings TB-30 and TB-31. The locations of the monitoring wells/borings are illustrated in the attached figure. Please note that the proposed locations of these monitoring wells/borings are subject to field conditions (i.e. overhead/underground utilities, accessibility, etc.). Information obtained from the collection of soil samples and laboratory analyses will be used to obtain an understanding of subsurface conditions.

Each soil boring will be advanced to at least 5-feet below the groundwater elevation or refusal. A continuous soil sample core will be obtained from each soil boring to develop a geologic profile. The cores will be visually examined, and samples will be collected from each soil core for headspace analysis using a photoionization detector (PID).

One (1) soil sample will be collected from each boring for laboratory analyses, using laboratory supplied sample containers, from the interval with the highest PID reading or the interval exhibiting the most contamination. If there are no conditions present that would warrant taking a sample at a particular location then the sample will be collected in the vadose zone, just above the groundwater elevation. Immediately upon collection of the laboratory samples, SB-1 and SB-2 will be backfilled with bentonite to a depth of six (6) inches below ground surface and sealed with either an asphalt cold patch or cement grout, depending on the surface material encountered at each location. A summary of the soil sampling program, including soil borings, sample collection and analytical parameters, is provided in Table 1.

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Table 1
Soil Sampling Program
Riverview Commons Apartment Complex
Rochester, New York

Area of Potential Concern Description	Soil Sampling Location	Soil Sample Identification	Chemical Analysis[1]
Petroleum Contamination Along the Site's Southern Border	URS-1		VOCs and SVOCs
	URS-2		
Petroleum Contamination Along the Site's North End	URS-3		
	URS-4		
High TPH Detections from Soil Collected at the Center of the Site	SB-1		
	SB-2		

[1]Chemical Analyses
VOCs - Volatile Organic Compounds (EPA Method 8260B TCL + STARS)
SVOCs - Semi-Volatile Organic Compounds (EPA Method 8270 Full, B/N + Acids)

2. GROUNDWATER INVESTIGATION

The groundwater underlying the Site will be evaluated to obtain information regarding its physical and chemical nature. A groundwater investigation will be performed to obtain groundwater samples for laboratory analyses in order to identify the presence and extent of potential groundwater impacts at the Subject Property and to determine the hydraulic gradient beneath the Site. A total of four (4) (URS1-4) groundwater monitoring wells will be installed at the Site to sample groundwater. The well locations were selected to determine if groundwater has been negatively impacted and to aid in the determination of the hydraulic gradient at the Site. The locations of the monitoring wells are illustrated in the attached figure.

Potentiometric head distribution across the Site will be determined based on groundwater elevation measurements (normalized elevation levels). Information obtained from the collection of the groundwater samples and subsequent sample analyses will be used to obtain an understanding of the groundwater quality underlying the Site. The intended groundwater sampling program is presented in Table 2.

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Table 2
Groundwater Sampling Program
Riverview Commons Apartment Complex
Rochester, New York

Sampling Point I.D.	Area of Potential Concern	Chemical Analyses[1]
URS-1	Petroleum Contamination Along the Site's Southern Border	VOCs and SVOCs
URS-2		
URS-3	Petroleum Contamination Along the Site's North End	
URS-4		

[1]Chemical Analyses
VOCs – Volatile Organic Compounds (EPA Method 8260B TCL + STARS)
SVOCs – Semi-Volatile Organic Compounds (EPA Method 8270 Full, B/N + Acids)

Borings URS-1 through URS-4 will be completed as monitoring wells. A borehole with an 8-inch diameter will be opened to a depth of at least 5-feet below the groundwater elevation, or refusal, using a hollow stem auger. A 10-foot length of 2-inch ID, Schedule 40, No. 10 slot, PVC well screen flush threaded to a 2-inch ID, Schedule 40, PVC riser will be placed in the borehole. The screen will be placed such that the groundwater elevation will be 3 to 5-feet below the top of the screen. Type 00N silica sand will be then placed around the screen to a depth of 1-foot above the top-of-screen. A 3-foot thick bentonite slurry seal will be installed above the sandpack and grout will be installed from the bentonite slurry to surface grade. Each monitoring well will be secured with a locking expandable J-plug inside a steel flush mounted curb box.

Upon completion, each monitoring well will be developed via surging with a drill mounted surge block and purged with a drill mounted surge pump until a minimum five (5) well volumes are removed. After each volume is purged, a water quality meter will be used to determine the purge water's turbidity, temperature, conductivity and pH. This process continues until the aforementioned parameters have stabilized relative to three (3) prior continuous readings or until turbidity is less than 50 NTUs.

After the monitoring wells are installed, they will be surveyed, along with the pre-existing monitoring wells (both on-site and on the neighboring parcels to the north and south), to determine their location and elevation relative to a common datum. URS hopes to gain approval from the City of Rochester to obtain water level readings from these offsite wells. The well survey will include determining the elevation of the top of the inner casing at each well with respect to a common datum, and locating the wells with respect to surrounding features. The survey data will be used in the generation of the hydraulic gradient map.

URS

Forty-eight (48) hours after development of the newly installed monitoring wells, depth to water (DTW) data will be collected from all the monitoring wells at the Site and from the monitoring wells on the neighboring parcels to the north and south (via an electronic water level indicator). The groundwater level data will be used in conjunction with the survey data to generate the hydrogeologic gradient maps.

Upon completion of the DTW collection event, URS will conduct groundwater sampling. One groundwater sample will be collected from each of the newly installed monitoring wells (URS-1 through URS-4) via low flow sampling. Low-flow sampling involves the use of a submersible pump to purge the well water at a rate of approximately 100 ml/min. During well purging, field parameters (i.e., pH, conductivity, temperature, DO, etc.) will be collected at intervals of approximately five (5) minutes; sampling of the groundwater will commence when these parameters have stabilized (±2%) for three (3) consecutive readings. The rationale for choosing the low-flow sampling technique is that the volume of purgewater generated is substantially less than if standard purging techniques were employed, it will minimize agitation (volatilization) of the groundwater collected and it will minimize drawdown via purgewater flow regulation. Groundwater samples collected for laboratory analysis will be placed in laboratory-supplied sample containers.

3. WASTE GENERATION/HANDLING

All waste generated during this investigation will be placed in 55-gallon DOT drums, separated by solid waste (i.e., soil cuttings, used PPE, etc.) and liquid waste (i.e., purgewater, decon water, etc.), and staged on-site pending URS's review of laboratory reports to determine the proper disposal method. Once the proper disposal method had been selected, URS will return to the site to supervise and document the removal of the above-mentioned DOT drums by others.

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4. GENERAL PROTOCOLS FOR SAMPLE COLLECTION, DELIVERY AND ANALYSIS

All samples will be labeled with a unique sample identification number and maintained at approximately 4°C in designated ice chests. The samples will be delivered to a New York State approved lab within the allowable holding times. Once at the lab, the laboratory will analyze the samples and forward the results to URS within 10 to 15 business days from receipt of the samples (standard turn-around-time). A sample chain-of-custody (COC) record form will be maintained and accompanied the samples during transport.

Please Note: All sampling will be performed in accordance with applicable local, state and federal regulations/guidelines.

Quality assurance/quality control (QA/QC) samples will be analyzed for specific parameters to evaluate how representative the data is. The following QA/QC sample analyses will be conducted:

- Trip blanks (VOCs) water only;
- Method blanks (determined by lab); and
- Surrogate (spike) recovery (determined by lab).

5. REPORT GENERATION

Upon receipt of the laboratory data, URS will generate an investigation report that will include the following:

- A description of the subsurface encountered;
- Field observations documented during URS' investigation;
- A groundwater contour map of the Site and neighboring parcels to the north and south, illustrating groundwater flow along the northern and southern borders of the Site;
- A comparison of the laboratory results against applicable cleanup criteria; and,
- Recommendations based on URS' interpretation of the data generated from this investigation.

This report will be forwarded to the NYSDEC for Winn Development. Assuming this investigative work effort addresses the petroleum issue in the three (3) areas of concern Winn Development would anticipate a closure letter from the NYSDEC.

URS, on behalf of Winn Development will notify the NYSDEC three (3) business days prior to the start of the above-mentioned work.

Even though URS will install soil borings and collect soil samples from locations SB-1 and SB-2, URS would like to state the following:

- No VOCs or SVOCs were detected at these locations, at concentrations above their respective NYSDEC cleanup criteria;
- The TPH encountered is as a depth of 4' to 8' below ground surface;
- The TPH detected does not consist of light petroleum distillates; and,
- A common remedial approach for this area could be to overlay the contaminated soil with "clean fill" and cap it. Such is the current state of this area (4' to 8' below asphalt/concrete).

URS is prepared to initiate the preceding investigative work effort on the afore referenced property upon NYSDEC's approval of this work plan.

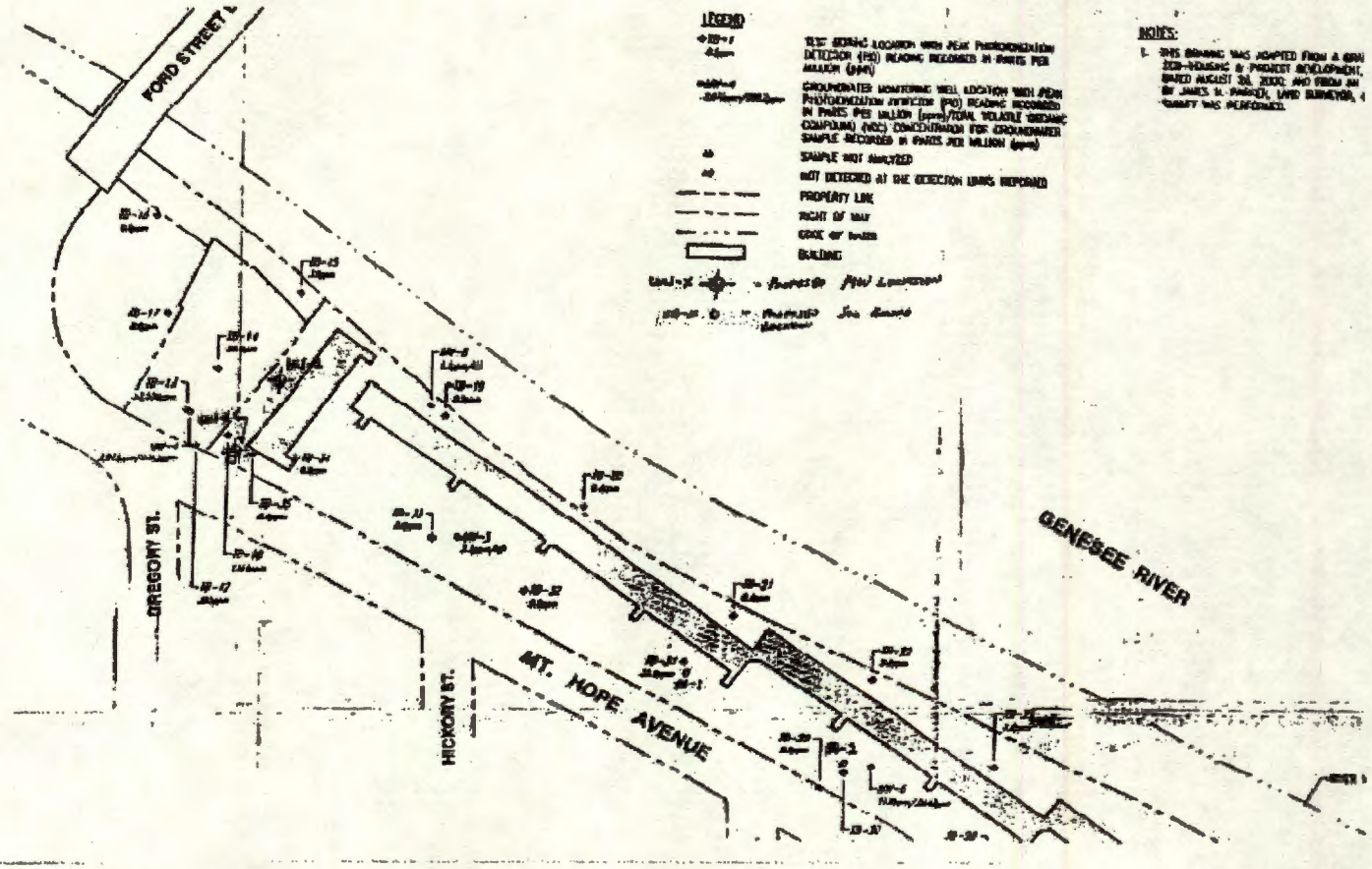
Very Truly Yours,

URS Corporation

Thomas J. Lawson, P.E.
Vice President

KJM/kjm

cc: Kristina L. Rogers – Winn Development
Kevin J. McGovern, P.G. – URS/ Rochester
Mark Colmerauer – URS/ Buffalo
Robert A. Holmes, P.E. – URS/ Rochester
File (11172966 C-7)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HICKORY ST.
MT. HOPE AVENUE
GENESEE RIVER
LEGEND
PROPERTY LINE
BUILDING
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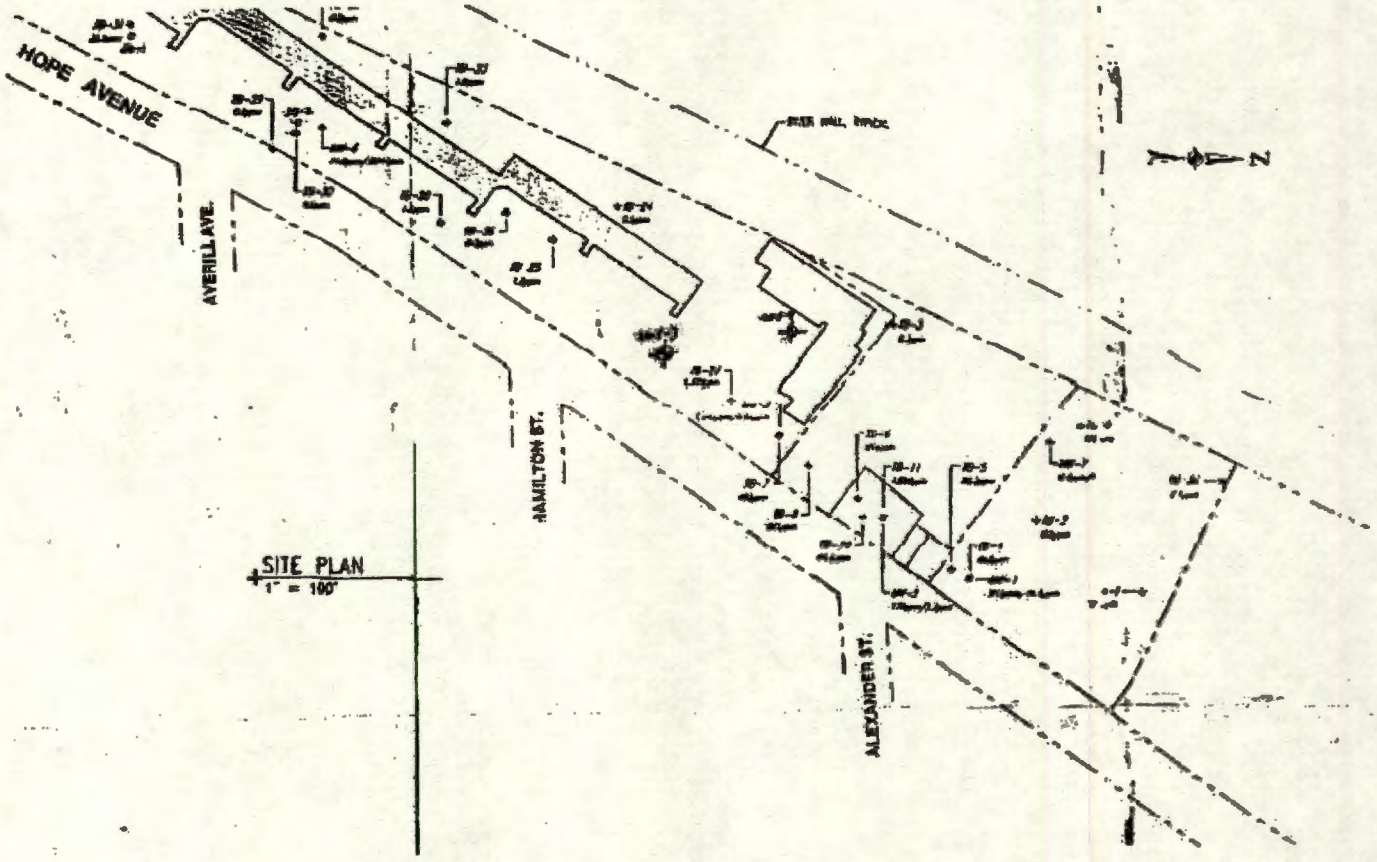

SITE PLAN
1" = 100'

APPENDIX B
GEOPROBE®/BORING LOGS

URS Corporation

TEST BORING LOG

PROJECT:	River Park Commons, Supp. PH II ESA
CLIENT:	Winn Development
BORING CONTRACTOR:	Nothnagle Drilling, Inc.
GROUNDWATER:	9' BGS

DATE	TIME	LEVEL	TYPE

	CAS.	SAMPLER	CORE	TUBE
TYPE		MacroCore		
DIA.		2"		
WT.				
FALL				

* Headspace Analysis via PID (PPM)

BORING NO:	SB-1
SHEET:	1 of 1
JOB NO.:	11172966.20000
BORING LOCATION:	See Site Plan
GROUND ELEVATION:	See Site Plan
DATE STARTED:	05/29/03
DATE FINISHED:	05/29/03
DRILLER:	Steve Loranty
GEOLOGIST:	Kevin J. McGovern, P.G.
REVIEWED BY:	

DEPTH FEET	SAMPLE STRATA	"S" NO.	"N" NO.	BLOWS PER 6"	REC% RQD%	DESCRIPTION COLOR	CONSISTENCY HARDNESS	MATERIAL DESCRIPTION	USCS	PPM*	REMARKS
1		1	MC		75%	Black / Brown	Hard / Loose	0'-0.2': Asphalt 0.2'-3': FILL, silt, sand & gravel		0.5	Dry No Odor
3											
4						Dk. Gray		3'-4': SILT, little clay & fine gravel & coarse sand	ML		
5		2**	MC		100%	Tan w/ Gray Mottling		4'-8.9': Silty fine SAND	SM	0.4	
10		3	MC		63%	Tan	Medium Dense	8.9'-14': Fine to coarse SAND & angular GRAVEL little silt	SW/ GW	0.4	Wet No odor
14		4	MC		80%					0.3	
15						Reddish Gray		14'-16': SILT, some to little clay, little fine angular gravel & coarse sand	ML		
								End of Boring @ 16' BGS			
18											
20											
25											
30											
35											

Comments: Boring advanced with a truck mounted CME 85

** Sample taken for the following analyses: VOCs (8260B TCL + STARS) and SVOCs (8270 Full B/N + Acids & STARS + 20 TICS)

PROJECT NO.	11172966.20000
BORING NO.	**SB-1**

URS Corporation

TEST BORING LOG

PROJECT:	River Park Commons, Supp. PH II ESA
CLIENT:	Winn Development
BORING CONTRACTOR:	Nothnagle Drilling, Inc.
GROUNDWATER:	11' BGS

DATE	TIME	LEVEL	TYPE

	CAS.	SAMPLER	CORE	TUBE
TYPE		MacroCore		
DIA.		2"		
WT.				
FALL				

* Headspace Analysis via PID (PPM)

BORING NO:	SB-2
SHEET:	1 of 1
JOB NO.:	11172966.20000
BORING LOCATION:	See Site Plan
GROUND ELEVATION:	See Site Plan
DATE STARTED:	05/29/03
DATE FINISHED:	05/29/03
DRILLER:	Steve Loranty
GEOLOGIST:	Kevin J. McGovern, P.G.
REVIEWED BY:	

DEPTH FEET	SAMPLE STRATA	"S" NO.	"N" NO.	BLOWS PER 6"	REC% RQD%	DESCRIPTION COLOR	CONSISTENCY HARDNESS	MATERIAL DESCRIPTION	USCS	PPM*	REMARKS
1						Black	Hard	0'-0.3': Asphalt			Dry/ Moist
2		1	MC		80%	Olive	Loose	0.3'-2': FILL, silt, sand & gravel		0.6	No Odor
								2'-7': Silty fine SAND	SM		Slight to
5		2	MC		75%	Dark Staining				6.9	Strong Petroleum Odor
7								7'-16': Fine to coarse SAND & GRAVEL, some-little silt	SW/ GW		
10		3**	MC		90%	Minor Staining	Medium Dense			7.2	Wet
						Reddish Gray				0.9	No odor
15		4	MC		75%						
16								End of Boring @ 16' BGS			
20											
25											
30											
35											

Comments: Boring advanced with a truck mounted CME 85

** Sample taken for the following analyses: VOCs (8260B TCL + STARS) and SVOCs (8270 Full B/N + Acids & STARS + 20 TICS)

PROJECT NO.	11172966.20000
BORING NO.	SB-2

URS Corporation

TEST BORING LOG

PROJECT:	River Park Commons, Supp. PH II ESA
CLIENT:	Winn Development
BORING CONTRACTOR:	Nothnagle Drilling, Inc.
GROUNDWATER:	12' BGS

	CAS.	SAMPLER	CORE	TUBE
TYPE	HSA	Split spoon		
DIA.	4.25"	2"		
WT.		140#		
FALL		30"		

* Headspace Analysis via PID (PPM)

DATE	TIME	LEVEL	TYPE

BORING NO:	URS-1
SHEET:	1 of 1
JOB NO.:	11172966.20000
BORING LOCATION:	See Site Plan
GROUND ELEVATION:	See Site Plan
DATE STARTED:	05/29/03
DATE FINISHED:	05/29/03
DRILLER:	Steve Loranty
GEOLOGIST:	Kevin J. McGovern, P.G.
REVIEWED BY:	

DEPTH FEET	SAMPLE STRATA	"S" NO.	"N" NO.	BLOWS PER 6"	REC% RQD%	DESCRIPTION COLOR	CONSISTENCY HARDNESS	MATERIAL DESCRIPTION	USCS	PPM*	REMARKS
1		1	8	1 3 / 5 6	55%	Dark Brown to Black	Loose to Medium Dense	0'-1': TOPSOIL		1.3	Dry No Odor
								1'-4': FILL, fine to medium sand & silt, little fine angular gravel			
		2	14	2 3 / 11 1	25%					3.2	
4											
5								4'-6': VOID			
6											
		3	12	5 6 / 6 6	10%	Dark Stained	Medium Dense	6'-10': FILL, fine to medium sand & silt, little fine angular gravel		51.7	Strong Petroleum Odor
		4	9	6 5 / 4 6	10%					46.0	
10											
		5**	17	7 8 / 9 10	30%	Medium Gray to Gray Brown		10'-14': Silty fine SAND, some to little fine-coarse angular gravel, little coarse sand	SM	245.0	
		6	25	6 12 / 13 27	90%					11.0	Wet Pet-Odor
14											
15		7	23	14 13 / 10 14	95%			14'-17.5': Clayey SILT, little medium-fine angular gravel & fine sand	ML	2.7	No Odor
								- 16'-17.5': f sand laminations, no gravel			
		8	29	7 11 / 18 18	80%			17.5'-18': Coarse-fine GRAVEL, some silt	GW	0.7	
18											
		9	25	4 13 / 12 11	55%			18'-20': Medium to fine SAND & angular GRAVEL little silt & coarse sand & gravel	GW/ SW	0.5	
20											
								End of Boring @ 20' BGS			
25											
30											
35											

Comments: Boring advanced with a truck mounted CME 85

** Sample taken for the following analyses: VOCs (8260B TCL + STARS) and SVOCs (8270 Full B/N + Acids & STARS + 20 TICS)

PROJECT NO.	11172966.20000
BORING NO.	URS-1

URS Corporation

TEST BORING LOG

BORING NO:	URS-2
SHEET:	1 of 1
JOB NO.:	11172966.20000
BORING LOCATION:	See Site Plan
GROUND ELEVATION:	See Site Plan
DATE STARTED:	05/28/03
DATE FINISHED:	05/28/03
DRILLER:	Steve Loranty
GEOLOGIST:	Kevin J. McGovern, P.G.
REVIEWED BY:	

PROJECT: River Park Commons, Supp. PH II ESA
CLIENT: Winn Development
BORING CONTRACTOR: Nothnagle Drilling, Inc.
GROUNDWATER: 11' BGS

DATE	TIME	LEVEL	TYPE

	CAS.	SAMPLER	CORE	TUBE
TYPE	HSA	Split spoon		
DIA.	4.25"	2"		
WT.		140#		
FALL		30"		

* Headspace Analysis via PID (PPM)

DEPTH FEET	STRATA	SAMPLE "S" NO.	SAMPLE "N" NO.	BLOWS PER 6"	REC% RQD%	DESCRIPTION COLOR	CONSISTENCY HARDNESS	MATERIAL DESCRIPTION	USCS	PPM*	REMARKS
1		1	10	2 3 / 7 3	70%	Dk. Brown Reddish to Yellow Brown	Loose to Very Loose	0'-1': TOPSOIL		0.2	Damp/Moist No Odor
		2	4	1 2 / 2 2	65%			1'-9.5': FILL, Fine to coarse sand some fine to medium angular gravel, little-some silt		0.1	
5		3	5	1 2 / 3 3	70%			- silt, some fine sand, little fine gravel		0.0	
		4**	3	1 1 / 2 6	50%			- some clay, no gravel		0.1	
		5	3	1 1 / 2 7	55%					0.1	
10		6	16	1 7 / 9 9	65%	Reddish to Grayish Brown	Medium Dense to Dense	9.5'-10': Medium to fine SAND, some silt & med to fine angular gravel, little-trace coarse sand	SW	0.1	Wet No Odor
		7	26	7 9 / 17 22	75%			10'-13': SILT, little fine angular gravel & coarse sand, trace fine sand & clay (Till)	ML	0.2	
15		8	29	11 12 / 17 22	55%	Medium Brown		13'-18': SILT & fine to coarse SAND & angular GRAVEL	SW/ ML	0.1	
		9	52	14 21 / 31 46	75%					0.1	
18											
19		10	NA	22	100/1	10%	Gray	Hard	18'-18.5': Weathered BEDROCK		NA
20								Top of Rock @ 18.5' BGS, End of Boring			
25											
30											
35											

Comments: Boring advanced with a truck mounted CME 85
** Sample taken for the following analyses: VOCs (8260B TCL + STARS) and SVOCs (8270 Full B/N + Acids & STARS + 20 TICS)

PROJECT NO. 11172966.20000
BORING NO. **URS-2**

URS Corporation

TEST BORING LOG

PROJECT:	River Park Commons, Supp. PH II ESA
CLIENT:	Winn Development
BORING CONTRACTOR:	Nothnagle Drilling, Inc.
GROUNDWATER:	14' BGS

DATE	TIME	LEVEL	TYPE

	CAS.	SAMPLER	CORE	TUBE
TYPE	HSA	Split spoon		
DIA.	4.25"	2"		
WT.		140#		
FALL		30"		

* Headspace Analysis via PID (PPM)

BORING NO:	URS-3
SHEET:	1 of 1
JOB NO.:	11172966.20000
BORING LOCATION:	See Site Plan
GROUND ELEVATION:	See Site Plan
DATE STARTED:	05/27/03
DATE FINISHED:	05/27/03
DRILLER:	Steve Loranty
GEOLOGIST:	Kevin J. McGovern, P.G.
REVIEWED BY:	

DEPTH FEET	STRATA	SAMPLE "S" NO.	SAMPLE "N" NO.	BLOWS PER 6"	REC% RQD%	COLOR	CONSISTENCY HARDNESS	MATERIAL DESCRIPTION	USCS	PPM*	REMARKS
1		1	25	14 / 11 / 12	35%	Black	Hard	0'-0.2': Asphalt		0.3	Dry No Odor
						Medium Brown	Medium Dense to Loose	0.2'-11.7': FILL, Fine to coarse sand & fine to medium gravel (some cobbles in soil cuttings) - cobbles present, had to auger through - No Recovery - some C&D debris, little silt			
5		2	11	6 / 5 / 6 / 3	0%					NA	
		3**	10	2 / 7 / 3 / 10	50%					0.4	
		4	60	12 / 32 / 28 / 36	75%		Very Dense to Dense			0.4	Wet No Odor
10		5	49	11 / 32 / 17 / 12	65%					0.1	
12		6	30	5 / 15 / 15 / 17	55%	Reddish Brown	Dense to Medium Dense	11.7'-19.5': Medium to fine SAND, some to little medium-fine angular gravel, little-trace coarse sand (Till)	SW	0.3	
15		7	29	6 / 19 / 10 / 22	60%					0.2	
		8	35	6 / 18 / 17 / 22	80%					0.1	
		9	35	5 / 18 / 17 / 17	80%					0.3	
20								19.5'-20': Weathered BEDROCK			
								Top of Rock @ 20' BGS, End of Boring			
25											
30											
35											

Comments: Boring advanced with a truck mounted CME 85

** Sample taken for the following analyses: VOCs (8260B TCL + STARS) and SVOCs (8270 Full B/N + Acids & STARS + 20 TICS)

PROJECT NO.	11172966.20000
BORING NO.	URS-3

URS Corporation

TEST BORING LOG

PROJECT:	River Park Commons, Supp. PH II ESA
CLIENT:	Winn Development
BORING CONTRACTOR:	Nothnagle Drilling, Inc.
GROUNDWATER:	12' BGS

BORING NO:	URS-4
SHEET:	1 of 1
JOB NO.:	11172966.20000
BORING LOCATION:	See Map
GROUND ELEVATION:	
DATE STARTED:	05/27/03
DATE FINISHED:	05/27/03
DRILLER:	Steve Loranty
GEOLOGIST:	Kevin J. McGovern, P.G.
REVIEWED BY:	

DATE	TIME	LEVEL	TYPE

TYPE	CAS.	SAMPLER	CORE	TUBE
DIA.	4.25"	2"		
WT.		140#		
FALL		30"		

* Headspace Analysis via PID (PPM)

DEPTH FEET	SAMPLE STRATA	"S" NO.	"N" NO.	BLOWS PER 6"	REC% RQD%	DESCRIPTION COLOR	CONSISTENCY HARDNESS	MATERIAL DESCRIPTION	USCS	PPM*	REMARKS
1		1	25	19 12 / 13 13	50%	Black / Medium Brown	Hard / Medium Dense to Loose	0'-0.3': Asphalt		1.0	Dry No Odor
								0.3'-13': FILL, Fine to coarse sand & fine to medium angular gravel, little silt		0.3	
		2	10	5 5 / 5 6	15%			- No gravel or coarse sand			
5		3	4	1 2 / 2 4	0%		Very Loose	- No Recovery		NA	
		4**	3	2 2 / 1 1	10%	Dark Staining		- Fine sand & silt & fine angular gravel		0.2	Slight Odor
		5	3	1 1 / 2 3	10%			- No gravel		0.2	
10		6	3	1 2 / 1 2	5%	Dark Gray		- No silt, (wood chips)		0.1	Wet No Odor
13		7	40	3 19 / 21 23	30%		Dense to Very Dense	13'-14': Coarse-fine angular GRAVEL	GW	0.6	
14											
15		8	55	18 27 / 28 42	15%	Reddish Brown		14'-16': Med to fine SAND, some-little med to fine angular gravel, little-trace coarse sand (Till)	SW	0.3	
16								Terminated Boring at 16' BGS			
20											
25											
30											
35											

Comments: Boring advanced with a truck mounted CME 85

** Sample taken for the following analyses: VOCs (8260B TCL + STARS) and SVOCs (8270 Full B/N + Acids & STARS + 20 TICS)

PROJECT NO.	11172966.20000
BORING NO.	URS-4

APPENDIX C
CHAIN OF CUSTODY FORMS

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CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

SR #

CAS Contact

One Mustard St., Suite 250 • Rochester, NY 14609-0859 • (585) 288-5380 • 800-695-7222 x11 • FAX (585) 288-8475 PAGE 1 OF 1

Project Name: ... Development	Project Number: 11172966.2000
Project Manager: ... Lawson	Report CC: Kevin J. McGovern
Company/Address: UKS Corporation / Bldg. 1, 781 Elmgrove Rd., Rochester, NY 14624	
Phone #: (585) 426-2120	FAX#: (585) 426-2161
Sampler's Signature: [signature]	Sampler's Printed Name: Kevin J. McGovern

ANALYSIS REQUESTED *(Include Method Number and Container Preservative)*

PRESERVATIVE: 8 (GC/MS VOA's); 8 (8260B); 8 (8270)

Analysis columns: NUMBER OF CONTAINERS; GC/MS VOA's ☒8260 ☐624 ☐CLP TCL + STARS; GC/MS SVOA's ☐8270 ☐625 ☐CLP; GC VOA's ☐8021 ☐601/602; PESTICIDES ☐8081 ☐608 ☐CLP; PCB's ☐8082 ☐608 ☐CLP; METALS, TOTAL (List in comments below); METALS, DISSOLVED (List in comments below); 8260B TCL + STARS; 8270 Full Base/Neutrals + 20 TICs + STARS

Preservative Key
0. NONE
1. HCL
2. HNO_3
3. H_2SO_4
4. NaOH
5. Zn. Acetate
6. MeOH
7. $NaHSO_4$
8. Other ICE

CLIENT SAMPLE ID	FOR OFFICE USE ONLY LAB ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NUMBER OF CONTAINERS	8260B TCL + STARS	8270 Full B/N + 20 TICs + STARS	REMARKS/ ALTERNATE DESCRIPTION
MW-3		5/27/03	15:00	Soil	2	X	X	
MW-4		↓	10:14	↓	↓	X	X	

SPECIAL INSTRUCTIONS/COMMENTS
Metals

See QAPP ☐

TURNAROUND REQUIREMENTS
___ RUSH (SURCHARGES APPLY)
___ 24 hr ___ 48 hr ___ 5 day
X STANDARD
REQUESTED FAX DATE: 6/11/03
REQUESTED REPORT DATE: 6/18/03

REPORT REQUIREMENTS
X I. Results Only
___ II. Results + QC Summaries (LCS, DUP, MS/MSD as required)
___ III. Results + QC and Calibration Summaries
___ IV. Data Validation Report with Raw Data
___ V. Specialized Forms / Custom Report
Edata ___ Yes ___ No

INVOICE INFORMATION
05-19349
PO#: Tom Lawson
BILL TO: UKS Corp, Bldg 1, 781 Elmgrove Rd., Rochester, NY 14624
SUBMISSION #:

SAMPLE RECEIPT: CONDITION/COOLER TEMP: _____ CUSTODY SEALS: Y N

RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY
Signature: [signature]	Signature: Joni Janson	Signature	Signature	Signature	Signature
Printed Name: Kevin J. McGovern	Printed Name: Joni Janson	Printed Name	Printed Name	Printed Name	Printed Name
Firm: UKS	Firm: CAS	Firm	Firm	Firm	Firm
Date/Time: 5/27/03, 17:23	Date/Time: 5/27/03	Date/Time	Date/Time	Date/Time	Date/Time

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CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

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SR #

CAS Contact

Project Name: IRWIN DEVELOPMENT	Project Number: 11172966.20000
Project Manager: TOM LAWSON	Report CC: KEVIN J. McGOVERN
Company/Address: UNS CORPORATION / BLDG. 1	
781 ELMGROVE RD.	
ROCHESTER, NY 14624	
Phone #: (585) 426-2120	FAX#: (585) 426-2161
Sampler's Signature:	Sampler's Printed Name: KEVIN J. McGOVERN

ANALYSIS REQUESTED (Include Method Number and Container Preservative)

PRESERVATIVE: 8 8

CLIENT SAMPLE ID	FOR OFFICE USE ONLY LAB ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NUMBER OF CONTAINERS	GC/MS VOA's ☐ 8260 ☐ 624 ☐ CLP	GC/MS SVOA's ☐ 8270 ☐ 625 ☐ CLP	GC VOA's ☐ 8021 ☐ 601/602	PESTICIDES ☐ 8081 ☐ 608 ☐ CLP	PCB's ☐ 8082 ☐ 608 ☐ CLP	METALS, TOTAL (List in comments below)	METALS, DISSOLVED (List in comments below)	8260 TCL + STARS	8270 TCL + STARS + 20 TICS + 5 STARS	REMARKS/ ALTERNATE DESCRIPTION
UNS-2		5/28/03	11:50	SOIL	2								X	X	

Preservative Key
0. NONE
1. HCL
2. HNO_3
3. H_2SO_4
4. NaOH
5. Zn. Acetate
6. MeOH
7. $NaHSO_4$
6. Other ICE

SPECIAL INSTRUCTIONS/COMMENTS
Metals

See QAPP ☐

TURNAROUND REQUIREMENTS
____ RUSH (SURCHARGES APPLY)
____ 24 hr ____ 48 hr ____ 5 day
X STANDARD
REQUESTED FAX DATE: 6/12/03
REQUESTED REPORT DATE: 6/18/03

REPORT REQUIREMENTS
X I. Results Only
____ II. Results + QC Summaries (LCS, DUP, MS/MSD as required)
____ III. Results + QC and Calibration Summaries
____ IV. Data Validation Report with Raw Data
____ V. Specialized Forms / Custom Report
Edata ____ Yes ____ No

INVOICE INFORMATION
05-19349
PO#: TOM LAWSON
BILL TO: UNS CORP
BLDG 1, 781 ELMGROVE
ROCHESTER, NY 14624
SUBMISSION #:

SAMPLE RECEIPT: CONDITION/COOLER TEMP: _____ CUSTODY SEALS: Y N

RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY
Signature:	Signature:	Signature:	Signature:	Signature:	Signature:
Printed Name: KEVIN J. McGOVERN	Printed Name: BRIAN COLLIER	Printed Name:	Printed Name:	Printed Name:	Printed Name:
Firm: UNS	Firm: UNS	Firm:	Firm:	Firm:	Firm:
Date/Time: 5/28/03, 17:15	Date/Time: 5/28/03 1715	Date/Time:	Date/Time:	Date/Time:	Date/Time:

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SR #

CAS Contact

Project Name: WING J. MCGINNIS	Project Number: 11172966.20000
Project Manager: TOM LAWSON	Report CC: KEVIN J. MCGINNIS
Company/Address: URS CORP / BLDG 2 701 EXCHANGE RD. ROCHESTER, NY 14624	
Phone #: (585) 426-6120	FAX#: (585) 426-2161
Sampler's Signature:	Sampler's Printed Name: KEVIN J. MCGINNIS

ANALYSIS REQUESTED (Include Method Number and Container Preservative)

PRESERVATIVE: 8 8

CLIENT SAMPLE ID	FOR OFFICE USE ONLY LAB ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NUMBER OF CONTAINERS	GC/MS VOA's ☐ 8260 ☐ 624 ☐ CLP	GC/MS SVOA's ☐ 8270 ☐ 625 ☐ CLP	GC VOA's ☐ 8021 ☐ 601/602	PESTICIDES ☐ 8081 ☐ 608 ☐ CLP	PCB's ☐ 8082 ☐ 608 ☐ CLP	METALS, TOTAL (List in comments below)	METALS, DISSOLVED (List in comments below)	8260 TCL + STARS	8270 Full Acid/Base/N + 20 TICs + STARS	REMARKS/ ALTERNATE DESCRIPTION
URS-1		5/29/03	09:45	SOIL	2							X	X		
SB-1		↓	13:40	↓	↓							X	X		
SB-2			14:22									X	X		
SB-2W			14:30	GW	1								X		

Preservative Key
0. NONE
1. HCL
2. HNO_3
3. H_2SO_4
4. NaOH
5. Zn. Acetate
6. MeOH
7. $NaHSO_4$
8. Other _____

SPECIAL INSTRUCTIONS/COMMENTS
Metals
BATCH BY PO# SEQUENCE IN MATRIX

See QAPP ☐

TURNAROUND REQUIREMENTS
___ RUSH (SURCHARGES APPLY)
___ 24 hr ___ 48 hr ___ 5 day
X STANDARD
REQUESTED FAX DATE: 6/13/03
REQUESTED REPORT DATE: 6/18/03

REPORT REQUIREMENTS
X I. Results Only
___ II. Results + QC Summaries (LCS, DUP, MS/MSD as required)
___ III. Results + QC and Calibration Summaries
___ IV. Data Validation Report with Raw Data
___ V. Specialized Forms / Custom Report
Edata ___ Yes ___ No

INVOICE INFORMATION
05-19349
PO# TOM LAWSON
BILL TO: URS CORP
BLDG 2, 701 EXCHANGE RD
ROCH, NY 14624
SUBMISSION #:

SAMPLE RECEIPT: CONDITION/COOLER TEMP: _____ CUSTODY SEALS: Y N

RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY
Signature:	Signature:	Signature:	Signature:	Signature:	Signature:
Printed Name: KEVIN J. MCGINNIS	Printed Name: HEATHER LOUGH	Printed Name:	Printed Name:	Printed Name:	Printed Name:
Firm: URS	Firm: CAS	Firm:	Firm:	Firm:	Firm:
5/29/03, 15:37					

CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

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SR #

CAS Contact

Project Name: Wynn Development	Project Number: 11172966.2000
Project Manager: Tim Lawson	Report CC: Kevin J McGovern
Company/Address: URS Corporation / Bldg 1. 781 Elmgrove Rd Rochester, NY 14624	
Phone #: (585) 426-2120	FAX#: (585) 426-2161
Sampler's Signature: [signature]	Sampler's Printed Name: Kevin J. McGovern

ANALYSIS REQUESTED (Include Method Number and Container Preservative)

Preservative Key: 0. NONE 1. HCL 2. HNO_3 3. H_2SO_4 4. NaOH 5. Zn. Acetate 6. MeOH 7. $NaHSO_4$ 8. Other ICE

CLIENT SAMPLE ID	FOR OFFICE USE ONLY LAB ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NUMBER OF CONTAINERS	GC/MS VOA's ☐ 8260 ☐ 624 ☐ CLP	GC/MS SVOA's ☐ 8270 ☐ 625 ☐ CLP	GC VOA's ☐ 8021 ☐ 601/602	PESTICIDES ☐ 8081 ☐ 608 ☐ CLP	PCB's ☐ 8082 ☐ 608 ☐ CLP	METALS, TOTAL (List in comments below)	METALS, DISSOLVED (List in comments below)	8260 TCL + STARS	8270 Full (B/N + Acids) + STARS + 20 TICs						REMARKS/ ALTERNATE DESCRIPTION
PRESERVATIVE													1	8						
URS-4	[illegible]	6/5/03	08:55	GW	2								X	X						
URS-3	[illegible]	↓	10:00	↓									X	X						
URS-2	[illegible]	↓	11:25	↓									X	X						
Trip Blank	[illegible]	—	—	—	1								X							
URS-1	[illegible]	6/5/03	12:25	↓	2								X	X						

SPECIAL INSTRUCTIONS/COMMENTS
Metals

See QAPP ☐

TURNAROUND REQUIREMENTS
___ RUSH (SURCHARGES APPLY)
___ 24 hr ___ 48 hr ___ 5 day
X STANDARD
REQUESTED FAX DATE: 6/20/03
REQUESTED REPORT DATE: 6/24/03

REPORT REQUIREMENTS
X I. Results Only
___ II. Results + QC Summaries (LCS, DUP, MS/MSD as required)
___ III. Results + QC and Calibration Summaries
___ IV. Data Validation Report with Raw Data
___ V. Specialized Forms / Custom Report
Edata ___ Yes ___ No

INVOICE INFORMATION
05-19349
PO#: Tim Lawson
BILL TO: URS Corp
Bldg 1, 781 Elmgrove Rd
Rochester, NY 14624
SUBMISSION #:

SAMPLE RECEIPT: CONDITION/COOLER TEMP: ________ CUSTODY SEALS: Y N

RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY
Signature: [signature] Kevin J McGovern	Signature: [signature]	Signature	Signature	Signature	Signature
Printed Name: URS	Printed Name: [illegible]	Printed Name	Printed Name	Printed Name	Printed Name
Firm	Firm: CAS	Firm	Firm	Firm	Firm
Date/Time	Date/Time	Date/Time	Date/Time	Date/Time	Date/Time

APPENDIX D
MONITORING WELL CONSTRUCTION DETAILS

DRILLING SUMMARY

Geologist:
Kevin J. McGovern, P.G.

Drilling Company:
Nothnagle Drilling, Inc.

Driller:
Steve Loranty

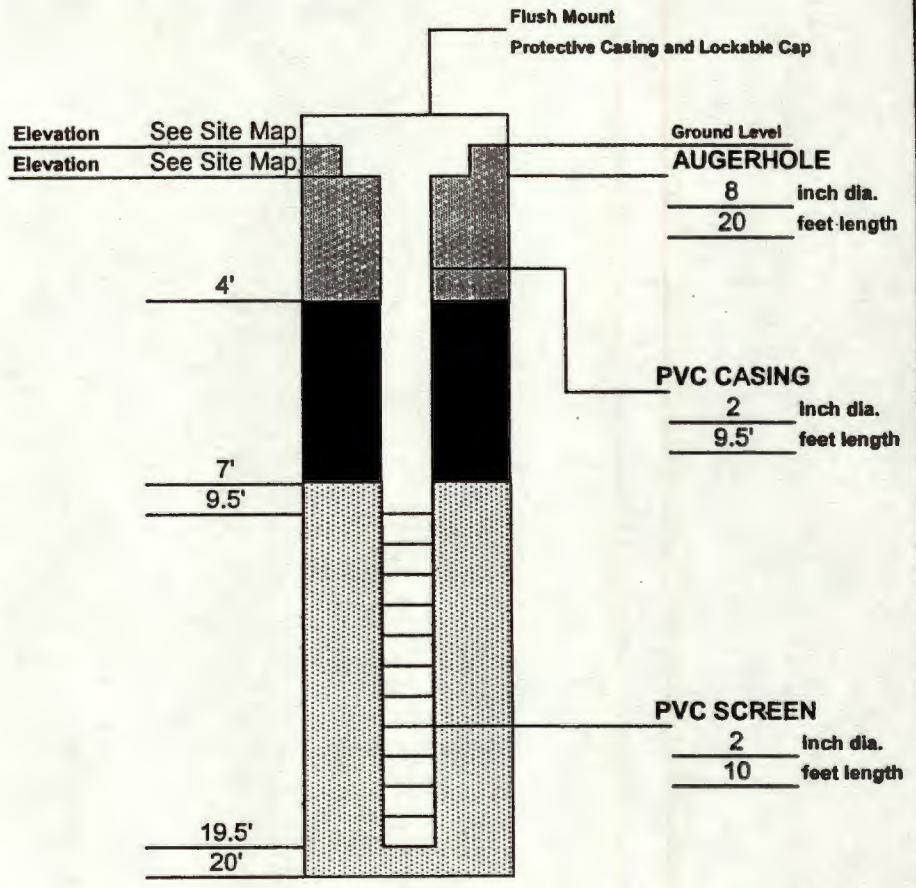
Rig Make/Model:
CME-85 / 4.25" ID HSA

Date:
5/29/03

GEOLOGIC LOG

Depth(ft.)	Description
0'-10'	FILL
10'-14'	Silty f SAND, some-little cmf gravel (Till)
14'-17.5'	Clayey SILT, little mf gravel & f sand (Till)
17.5'-18'	cmf GRAVEL, some silt (Till)
18'-20'	mf SAND & GRAVEL, little silt & c sand & gravel (Till)

DEPTH



WELL DESIGN

CASING MATERIAL	SCREEN MATERIAL	FILTER MATERIAL
Surface: 8" Dia Flush Mount Roadbox	**Type:** 2" SCH 40 PVC	**Type:** 00N Sand **Setting:** 20'-7'
Monitor: 2" SCH 40 PVC	**Slot Size:** 0.010"	**SEAL MATERIAL** **Type:** Bentonite **Setting:** 7'-4' **Type:** Concrete/ Bentonite Grout **Setting:** 4'-0'

COMMENTS:

A detailed geologic profile is included in the boring log for URS-1

LEGEND

- Cement/Bentonite Grout
- Bentonite Seal
- Silica Sandpack

Client: Winn Development	**Location: Rochester, New York**	**Project No.: 11172966.20000**
URS Corporation	**MONITORING WELL CONSTRUCTION DETAILS**	**Well Number: URS-1**

DRILLING SUMMARY

Geologist:
Kevin J. McGovern, P.G.

Drilling Company:
Nothnagle Drilling, Inc.

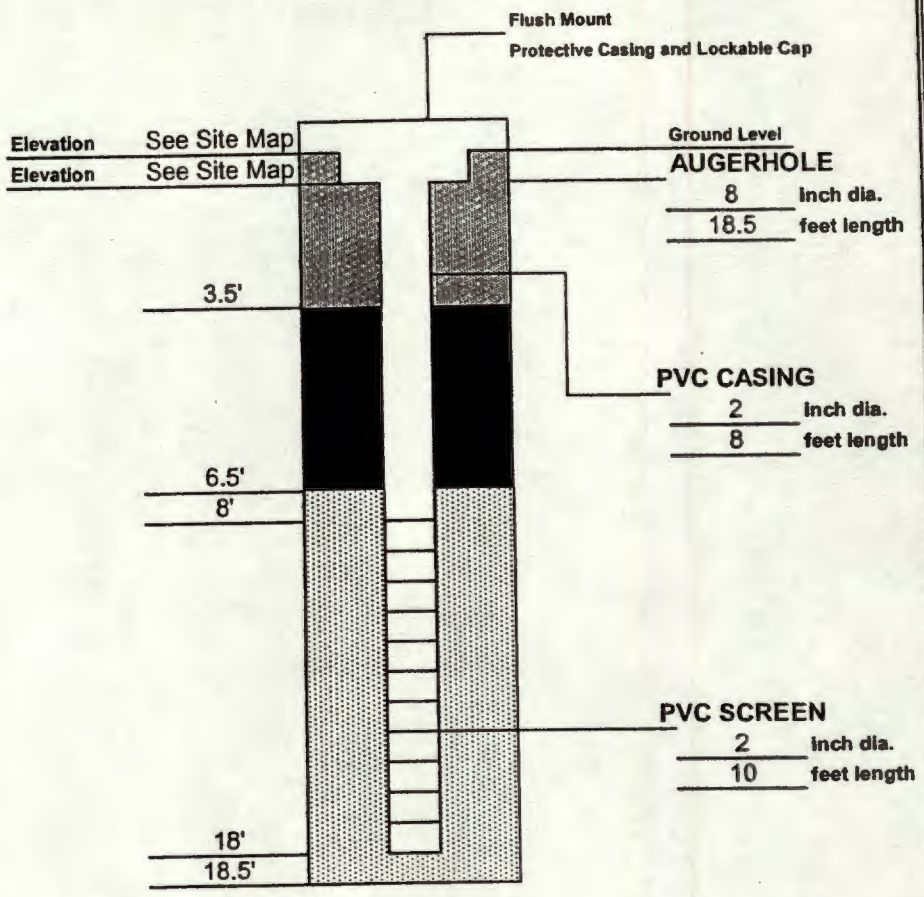
Driller:
Steve Loranty

Rig Make/Model:
CME-85 / 4.25" ID HSA

Date:
5/28/03

GEOLOGIC LOG

Depth(ft.)	Description
0'-9.5'	FILL
9.5'-10'	mf SAND, some silt & mf gravel, little-trace c sand (Till)
10'-13'	SILT, little f gravel & c sand trace f sand & clay
13'-18'	SILT & cmf SAND & GRAVEL (Till)
18'-18.5'	Weathered BEDROCK



WELL DESIGN

CASING MATERIAL	SCREEN MATERIAL	FILTER MATERIAL
Surface: 8" Dia Flush Mount Roadbox	**Type:** 2" SCH 40 PVC	**Type:** 00N Sand **Setting:** 18.5'-6.5'
Monitor: 2" SCH 40 PVC	**Slot Size:** 0.010"	**SEAL MATERIAL** **Type:** Bentonite **Setting:** 6.5'-3.5' **Type:** Concrete/ Bentonite Grout **Setting:** 3.5'-0'

COMMENTS:

A detailed geologic profile is included in the boring log for URS-2

LEGEND

- Cement/Bentonite Grout
- Bentonite Seal
- Silica Sandpack

Client: Winn Development	**Location:** Rochester, New York	**Project No.:** 11172966.20000
URS Corporation	MONITORING WELL CONSTRUCTION DETAILS	**Well Number:** URS-2

DRILLING SUMMARY

Geologist:
Kevin J. McGovern, P.G.

Drilling Company:
Nothnagle Drilling, Inc.

Driller:
Steve Loranty

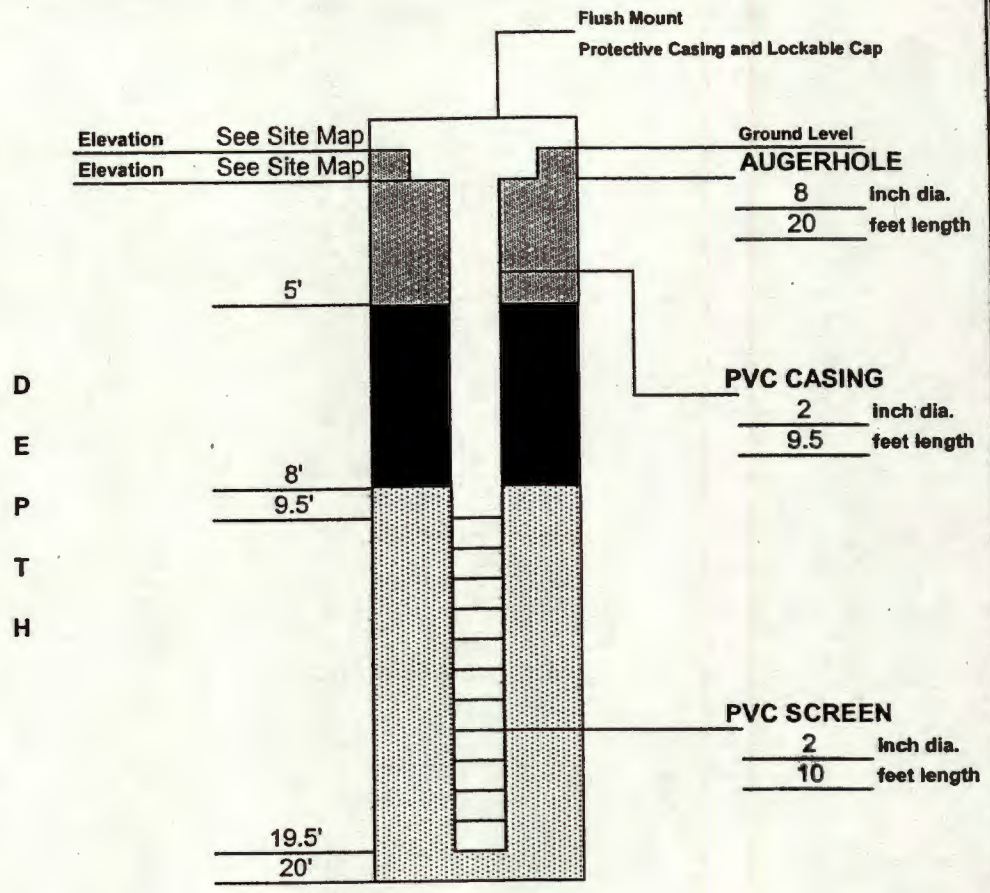
Rig Make/Model:
CME-85 / 4.25" ID HSA

Date:
5/27/03

GEOLOGIC LOG

Depth(ft.)	Description
0'-11.7'	FILL
11.7'-19.5'	mf SAND, some-little mf gravel, little-trace c sand (Till)
19.5'-20'	Weathered BEDROCK

WELL DESIGN



CASING MATERIAL	SCREEN MATERIAL	FILTER MATERIAL
Surface: 8" Dia Flush Mount Roadbox	**Type:** 2" SCH 40 PVC	**Type:** 00N Sand **Setting:** 20'-8'
Monitor: 2" SCH 40 PVC	**Slot Size:** 0.010"	**SEAL MATERIAL** **Type:** Bentonite **Setting:** 8'-5' **Type:** Concrete/ Bentonite Grout **Setting:** 5'-0'

COMMENTS:

A detailed geologic profile is included in the boring log for URS-3

LEGEND

- Cement/Bentonite Grout
- Bentonite Seal
- Silica Sandpack

Client: Winn Development	**Location: Rochester, New York**	**Project No.: 11172966.20000**
URS Corporation	**MONITORING WELL CONSTRUCTION DETAILS**	**Well Number: URS-3**

DRILLING SUMMARY

Geologist:
Kevin J. McGovern, P.G.

Drilling Company:
Nothnagle Drilling, Inc.

Driller:
Steve Loranty

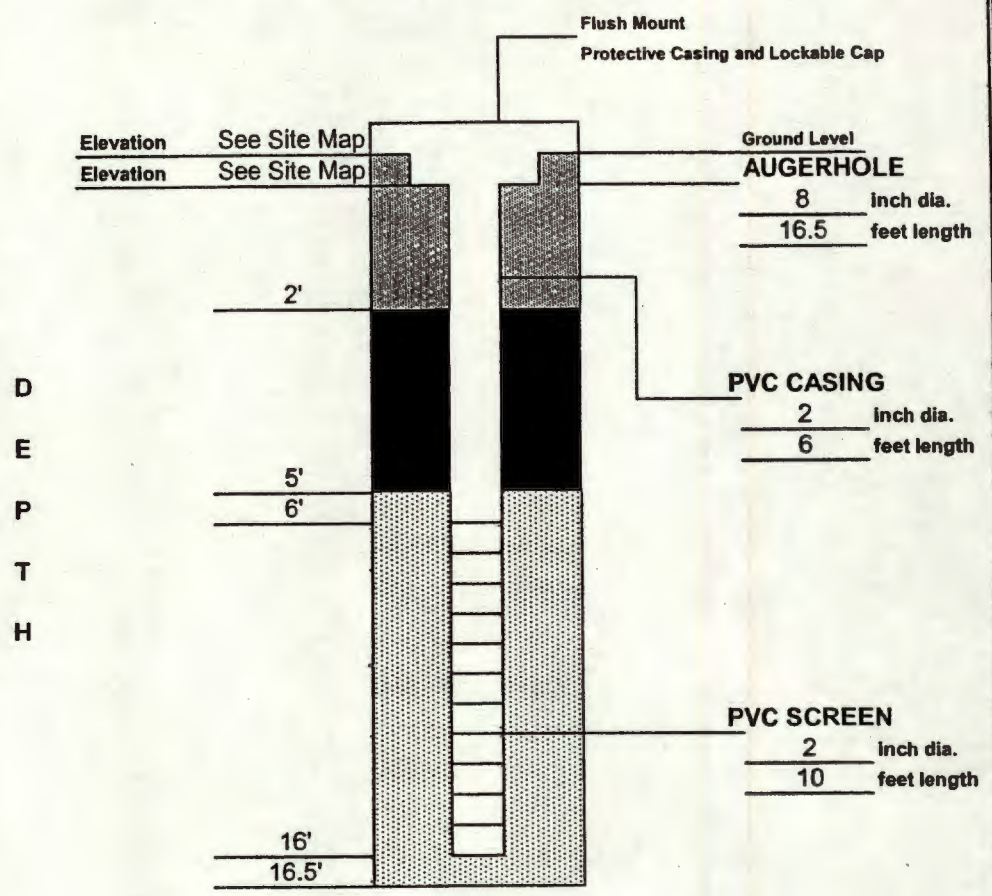
Rig Make/Model:
CME-85 / 4.25" ID HSA

Date:
5/27/03

GEOLOGIC LOG

Depth(ft.)	Description
0'-13'	FILL
13'-14'	cmf GRAVEL
14'-16'	mf SAND, some-little mf gravel, little-trace c sand (Till)

WELL DESIGN



CASING MATERIAL	SCREEN MATERIAL	FILTER MATERIAL
Surface: 8" Dia Flush Mount Roadbox	**Type:** 2" SCH 40 PVC	**Type:** 00N Sand **Setting:** 16.5'-5'
Monitor: 2" SCH 40 PVC	**Slot Size:** 0.010"	**SEAL MATERIAL** **Type:** Bentonite **Setting:** 5'-2' **Type:** Concrete/ Bentonite Grout **Setting:** 2'-0'

COMMENTS:

A detailed geologic profile is included in the boring log for URS-4

LEGEND

- Cement/Bentonite Grout
- Bentonite Seal
- Silica Sandpack

Client: Winn Development	**Location: Rochester, New York**	**Project No.: 11172966.20000**
URS Corporation	**MONITORING WELL CONSTRUCTION DETAILS**	**Well Number: URS-4**

APPENDIX E
WELL DEVELOPMENT RECORDS

WELL DEVELOPMENT LOG

URS

PROJECT TITLE: Winn Development, Supp PH II ESA WELL NO.: URS-1

PROJECT NO.: 11172966.20000

STAFF: Kevin J. McGovern

DATE(S): 5/29/03

			WELL ID.	VOL. (GAL/FT)
1. TOTAL CASING AND SCREEN LENGTH (FT.)	=	19.5	1"	0.04
2. WATER LEVEL BELOW TOP OF CASING (FT.)	=	12.00	2"	0.17
3. NUMBER OF FEET STANDING WATER (#1 - #2)	=	7.5	3"	0.38
4. VOLUME OF WATER/FOOT OF CASING (GAL.)	=	0.17	4"	0.66
5. VOLUME OF WATER IN CASING (GAL.)(#3 x #4)	=	1.3	5"	1.04
6. VOLUME OF WATER TO REMOVE (GAL.)(#5 x 5)	=	6.4	6"	1.50
7. VOLUME OF WATER ACTUALLY REMOVED (GAL.)	=	8.0	8"	2.60

OR
$V=0.0408 \times (\text{CASING DIAMETER})^2$

	ACCUMULATED VOLUME PURGED (GALLONS)											
PARAMETERS	Initial	2.0	4.0	6.0	8.0							
TEMPERATURE (°C)	23.7	25.6	26.2	27.6	28.5							
pH	7.52	7.33	7.34	7.38	7.40							
COND. (Us/cm)	1280	1370	1450	1460	1440							
DO (mg/l)	6.92	7.21	6.99	7.31	7.26							
ORP (mV)	122	113	108	103	99							
TURBIDITY (NTU)	>999	>999	>999	>999	>999							
APPEARANCE	Brown	Brown	Brown	Brown	Brown							
TIME	10:39	10:44	10:49	10:54	10:59							

COMMENTS: Surged well w/ decontaminated surgeblock operated by CME-85 truck mounded drill rig.
Purged well w/ decontaminated hose connected to pump mounted on CME-85 drill rig and pumped into labeled 55-gallon DOT drums and stored on site pending lab results.
Petroleum odor in purgewater, 0 PPM PID reading in wellhead.

WELL DEVELOPMENT LOG

URS

PROJECT TITLE: Winn Development, Supp PH II ESA WELL NO.: URS-2

PROJECT NO.: 11172966.20000

STAFF: Kevin J. McGovern

DATE(S): 5/28/03

			WELL ID.	VOL. (GAL/FT)
1. TOTAL CASING AND SCREEN LENGTH (FT.)	=	18.0	1"	0.04
2. WATER LEVEL BELOW TOP OF CASING (FT.)	=	10.80	2"	0.17
3. NUMBER OF FEET STANDING WATER (#1 - #2)	=	7.2	3"	0.38
4. VOLUME OF WATER/FOOT OF CASING (GAL.)	=	0.17	4"	0.66
5. VOLUME OF WATER IN CASING (GAL.)(#3 x #4)	=	1.2	5"	1.04
6. VOLUME OF WATER TO REMOVE (GAL.)(#5 x 5)	=	6.1	6"	1.50
7. VOLUME OF WATER ACTUALLY REMOVED (GAL.)	=	8.0	8"	2.60

OR

$V=0.0408 \times (\text{CASING DIAMETER})^2$

	ACCUMULATED VOLUME PURGED (GALLONS)										
PARAMETERS	Initial	2.0	4.0	6.0	8.0						
TEMPERATURE (°C)	NA*	17.3	17.2	17.1	17.2						
pH	NA*	7.44	7.49	7.57	7.52						
COND. (Us/cm)	NA*	1470	1477	1440	1450						
DO (mg/l)	NA*	8.51	8.79	9.03	9.20						
ORP (mV)	NA*	133	127	125	121						
TURBIDITY (NTU)	NA*	>999	>999	>999	>999						
APPEARANCE	NA*	Tan	Tan	Tan	Tan						
TIME	14:56	10:44	10:49	10:54	10:59						

COMMENTS: Surged well w/ decontaminated surgeblock operated by CME-85 truck mounded drill rig.
Purged well w/ decontaminated hose connected to pump mounted on CME-85 drill rig and pumped into labeled 55-gallon DOT drums and stored on site pending lab results.
* Rain/Lightning/Hail after surging and before purging

WELL DEVELOPMENT LOG

URS

PROJECT TITLE: Winn Development, Supp PH II ESA WELL NO.: URS-3

PROJECT NO.: 11172966.20000

STAFF: Kevin J. McGovern

DATE(S): 5/28/03

			WELL ID.	VOL. (GAL/FT)
1. TOTAL CASING AND SCREEN LENGTH (FT.)	=	19.5	1"	0.04
2. WATER LEVEL BELOW TOP OF CASING (FT.)	=	13.65	2"	0.17
3. NUMBER OF FEET STANDING WATER (#1 - #2)	=	5.9	3"	0.38
4. VOLUME OF WATER/FOOT OF CASING (GAL.)	=	0.17	4"	0.66
5. VOLUME OF WATER IN CASING (GAL.)(#3 x #4)	=	1.0	5"	1.04
6. VOLUME OF WATER TO REMOVE (GAL.)(#5 x 5)	=	5.0	6"	1.50
7. VOLUME OF WATER ACTUALLY REMOVED (GAL.)	=	12.0	8"	2.60

OR

$V=0.0408 \times (\text{CASING DIAMETER})^2$

	ACCUMULATED VOLUME PURGED (GALLONS)										
PARAMETERS	Initial	2.0	4.0	6.0	8.0	10.0	12.0				
TEMPERATURE (°C)	15.8	16.5	17.8	18.4	18.6	18.8	18.7				
pH	5.74	6.38	6.87	7.30	7.39	7.45	7.45				
COND. (Us/cm)	1500	3560	4200	4320	4340	4320	4330				
DO (mg/l)	9.01	9.17	9.06	9.15	9.29	9.44	9.35				
ORP (mV)	180	136	108	90	79	64	57				
TURBIDITY (NTU)	>999	>999	>999	645	>999	647	910				
APPEARANCE	Brown	Brown	Brown	Tan	Tan	Tan	Tan				
TIME	8:36	8:40	8:45	8:50	8:55	9:00	9:05				

COMMENTS: Surged well w/ decontaminated surgeblock operated by CME-85 truck mounded drill rig.
Purged well w/ decontaminated hose connected to pump mounted on CME-85 drill rig and pumped into labeled 55-gallon DOT drums and stored on site pending lab results.

WELL DEVELOPMENT LOG

URS

PROJECT TITLE: Winn Development, Supp PH II ESA WELL NO.: URS-3

PROJECT NO.: 11172966.20000

STAFF: Kevin J. McGovern

DATE(S): 5/27/03

			WELL ID.	VOL. (GAL/FT)
1. TOTAL CASING AND SCREEN LENGTH (FT.)	=	16.5	1"	0.04
2. WATER LEVEL BELOW TOP OF CASING (FT.)	=	12.00	2"	0.17
3. NUMBER OF FEET STANDING WATER (#1 - #2)	=	4.5	3"	0.38
4. VOLUME OF WATER/FOOT OF CASING (GAL.)	=	0.17	4"	0.66
5. VOLUME OF WATER IN CASING (GAL.)(#3 x #4)	=	0.8	5"	1.04
6. VOLUME OF WATER TO REMOVE (GAL.)(#5 x 5)	=	3.8	6"	1.50
7. VOLUME OF WATER ACTUALLY REMOVED (GAL.)	=	8.0	8"	2.60

OR
$V=0.0408 \times (\text{CASING DIAMETER})^2$

	ACCUMULATED VOLUME PURGED (GALLONS)										
PARAMETERS	Initial	4.0	5.0	5.5	6.0	7.0	8.0				
TEMPERATURE (°C)	20.7	222.0	23.4	24.3	24.8	25.1	25.0				
pH	6.50	6.93	7.37	7.57	7.63	7.67	7.63				
COND. (Us/cm)	3160	3220	3190	3160	3110	3060	3040				
DO (mg/l)	7.92	8.03	7.99	7.82	7.87	8.27	8.21				
ORP (mV)	55	-1	26	47	65	80	39				
TURBIDITY (NTU)	>999	>999	>999	951	419	109	33				
APPEARANCE	Brown	Brown	Brown	Brown	Tan	Tan	Clear				
TIME	8:36	8:40	8:45	8:50	8:55	9:00	9:05				

COMMENTS: Surged well w/ decontaminated surgeblock operated by CME-85 truck mounded drill rig. Purged well w/ decontaminated hose connected to pump mounted on CME-85 drill rig and pumped into labeled 55-gallon DOT drums and stored on site pending lab results.

APPENDIX F
GROUNDWATER SAMPLING LOGS

WELL PURGING AND SAMPLING LOG

URS

PROJECT TITLE: River Park Commons, Supp. PH II ESA

WELL NO.: SB-2W

PROJECT NO.: 11172966.20000

TIMES: START PURGE- NA*

STAFF: Kevin J. McGovern

END PURGE- NA*

DATE(S): 05/29/03

SAMPLE- 14:30

PURGING METHOD: GeoTech Series Peristaltic Pump with dedicated HDPE/silicone tubing

SAMPLING METHOD: GeoTech Series Peristaltic Pump with dedicated HDPE/silicone tubing

SCREENED INTERVAL OF WELL FROM CONSTRUCTION LOG (depths below top of riser) = approximately 16'-6'

1. WELL DEPTH- BELOW TOP OF RISER (BTOR) (FEET)	=	16.00	NOTE: (#1-#2) should equal (#3+#4)
2. WATER LEVEL- BELOW TOP OF RISER (FEET)	=	7.55	
3. NUMBER OF FEET STANDING WATER-UNSCREENED INTERVAL	=	0.00	
4. NUMBER OF FEET STANDING WATER-SCREENED INTERVAL	=	8.45	
5. VOLUME OF WATER-UNSCREENED INTERVAL (#3 X 0.17) (GAL.)	=	0.00	WELL I.D. 1" / VOL. (GAL/FT) 0.04
6. VOLUME OF WATER-SCREENED INTERVAL (#4 X 0.17) (GAL.)	=	0.34	
7. POTENTIALLY STAGNANT WELL WATER VOLUME (#5 + #6) (GAL.)	=	0.34	
8. VOLUME OF WATER TO PURGE WITH PUMP (#7 x 5) (GAL.)	=	NA*	
9. VOLUME OF WATER TO PURGE WITH BAILER ([#1 - #2] x 0.17) (GAL.)	=	NA*	
10. TOTAL VOLUME OF WATER TO BE REMOVED (#8 + #9) (GAL.)	=	NA*	
11. VOLUME OF WATER ACTUALLY REMOVED (GAL.)	=	0.3	

PARAMETERS	WELL VOLUMES PURGED (TOTAL GALLONS PURGED)								INSTRUMENT I.D./ DESCRIPTION
	PUMP PURGE						BAILER		
	0 (init.)	1 ( )	2 ( )	3 ( )	4 ( )	5 ( )	6 ( )	SAMPLE	
pH								NA*	Horiba U-22 Water Quality Checker
COND. (µS)								NA*	Horiba U-22 Water Quality Checker
DO (mg/l)								NA*	Horiba U-22 Water Quality Checker
TEMPERATURE (°C)								NA*	Horiba U-22 Water Quality Checker
TURBIDITY (NTU)								>999** NA*	Horiba U-22 Water Quality Checker
ORP [Eh] (millivolts)								NA*	Horiba U-22 Water Quality Checker
WATER LEVEL (BTOR-feet)								7.55	Heron
TIME								14:30	Watch

COMMENTS: -Spotty sheen in sample water - Sample parameters: SVOCs (EPA 8270 Full, B/N + Acids + STARS + 20 TICS)

* NA-No water quality field measurements taken, collected sample immediately upon insertion of the 1" PVC riser/screen. Tubing clogged with sediment immediately after sample collection.

** - Estimated Guess

-QA/QC: None

LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: 11172966.20000 **Site:** River Park Commons **Well #:** URS-1

Date: 6/5/03 **Sampling Personnel:** Kevin McGovern **Company:** URS Corporation

Purging/ Sampling Device: Grundfos Redi-Flo 2 Submersible Pump **Tubing Type:** HDPE **Pump Inlet:** 18.5'

Measuring Point: Below Top of Riser **Initial Depth to Water (ft):** 11.10 **Depth to Well Bottom (ft):** 19.50 **Well Diameter:** 2" **Screen Length (ft):** 10

Casing: 2" SCH 40 PVC **Vol. in 1 Well Casing (liters):** 5.18 **Estimated Purge Volume (liters):** 11.4

Sample ID: URS-1 **Sample Time:** 12:25 **QA/QC:** None

Sample Parameters: VOCs (8260B TCL + STARS) & SVOCs (8270 Full, B/N + Acids + STARS + 20 TICS)

Comments: No Sheen, Petroleum Odor in Purgewater

PURGE PARAMETERS

TIME	pH	TEMP (°C)	COND. (µmhos)	DISS. O_2 (mg/l)	TURB. (NTU)	Eh (mV)	FLOW RATE (ml/min.)	DEPTH TO WATER (btor)	Comments
12:05	6.94	11.7	1400	4.35	>999	-89	400	11.50	Brown
12:10	6.57	12.9	1330	0.38	>999	-88	400	11.80	Brown
12:15	6.58	14.0	1300	0.00	>999	-89	400	11.80	Brown
12:20	6.59	15.6	1280	0.00	>999	-92	400	11.80	Brown
Tolerance:	0.1	—	3%	10%	10%	+ or - 10	—		

Information: WATER VOLUMES–0.75 inch diameter well = 87 ml/ft; 1 inch diameter well = 154 ml/ft; 2 inch diameter well = 617 ml/ft; 4 inch diameter well = 2470 ml/ft ($vol_{cyl} = \pi r^2 h$)

LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: 11172966.20000 **Site:** River Park Commons **Well #:** URS-2

Date: 6/5/03 **Sampling Personnel:** Kevin McGovern **Company:** URS Corporation

Purging/ Sampling Device: Grundfos Redi-Flo 2 Submersible Pump **Tubing Type:** HDPE **Pump Inlet:** 16.5'

Measuring Point: Below Top of Riser **Initial Depth to Water (ft):** 8.78 **Depth to Well Bottom (ft):** 18.00 **Well Diameter:** 2" **Screen Length (ft):** 10

Casing: 2" SCH 40 PVC **Vol. in 1 Well Casing (liters):** 5.69 **Estimated Purge Volume (liters):** 15.1

Sample ID: URS-2 **Sample Time:** 11:25 **QA/QC:** None

Sample Parameters: VOCs (8260B TCL + STARS) & SVOCs (8270 Full, B/N + Acids + STARS + 20 TICS)

Comments:

PURGE PARAMETERS

TIME	pH	TEMP (°C)	COND. (µmhos)	DISS. O_2 (mg/l)	TURB. (NTU)	Eh (mV)	FLOW RATE (ml/min.)	DEPTH TO WATER (btor)	Comments
11:03	7.36	12.3	927	6.76	>999	79	600	9.50	Brown
11:08	6.80	11.9	922	4.64	>999	75	600	9.61	Brown
11:13	6.66	14.0	978	3.08	>999	77	600	9.63	Brown
11:18	6.60	14.8	974	3.06	>999	79	600	9.70	Brown
11:23	6.58	15.7	974	3.03	>999	83	600	9.70	Brown
Tolerance:	0.1	---	3%	10%	10%	+ or - 10	---		

Information: WATER VOLUMES--0.75 inch diameter well = 87 ml/ft; 1 inch diameter well = 154 ml/ft; 2 inch diameter well = 617 ml/ft; 4 inch diameter well = 2470 ml/ft ($vol_{cy} = \pi r^2 h$)

LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: 11172966.20000 **Site:** River Park Commons **Well #:** URS-3

Date: 6/5/03 **Sampling Personnel:** Kevin McGovern **Company:** URS Corporation

Purging/ Sampling Device: Grundfos Redi-Flo 2 Submersible Pump **Tubing Type:** HDPE **Pump Inlet:** 18'

Measuring Point: Below Top of Riser **Initial Depth to Water (ft):** 13.63 **Depth to Well Bottom (ft):** 19.50 **Well Diameter:** 2" **Screen Length (ft):** 10

Casing: 2" SCH 40 PVC **Vol. in 1 Well Casing (liters):** 3.62 **Estimated Purge Volume (liters):** 11.4

Sample ID: URS-3 **Sample Time:** 10:00 **QA/QC:** None

Sample Parameters: VOCs (8260B TCL + STARS) & SVOCs (8270 Full, B/N + Acids + STARS + 20 TICS)

Comments: Spotty Sheen in Purgewater

PURGE PARAMETERS

TIME	pH	TEMP (°C)	COND. (µmhos)	DISS. O_2 (mg/l)	TURB. (NTU)	Eh (mV)	FLOW RATE (ml/min.)	DEPTH TO WATER (btor)	Comments
9:40	6.92	11.8	4340	4.51	>999	-58	550	13.82	Brown
9:45	6.49	12.0	4360	0.79	>999	-78	550	13.95	Brown
9:50	6.44	12.4	4370	0.15	900	-81	550	14.23	Brown
9:55	6.45	12.9	4365	0.20	900	-90	550	14.33	Brown
Tolerance:	0.1	---	3%	10%	10%	+ or - 10	---		

Information: WATER VOLUMES--0.75 inch diameter well = 87 ml/ft; 1 inch diameter well = 154 ml/ft; 2 inch diameter well = 617 ml/ft; 4 inch diameter well = 2470 ml/ft ($vol_w = \pi r^2 h$)

LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: 11172966.20000 **Site:** River Park Commons **Well #:** URS-4

Date: 6/5/03 **Sampling Personnel:** Kevin McGovern **Company:** URS Corporation

Purging/ Sampling Device: Grundfos Redi-Flo 2 Submersible Pump **Tubing Type:** HDPE **Pump Inlet:** 18'

Measuring Point: Below Top of Riser **Initial Depth to Water (ft):** 7.15 **Depth to Well Bottom (ft):** 16.00 **Well Diameter:** 2" **Screen Length (ft):** 10

Casing: 2" SCH 40 PVC **Vol. in 1 Well Casing (liters):** 5.46 **Estimated Purge Volume (liters):** 11.4

Sample ID: URS-4 **Sample Time:** 8:55 **QA/QC:** None

Sample Parameters: VOCs (8260B TCL + STARS) & SVOCs (8270 Full, B/N + Acids + STARS + 20 TICS)

Comments:

PURGE PARAMETERS

TIME	pH	TEMP (°C)	COND. (µmhos)	DISS. O_2 (mg/l)	TURB. (NTU)	Eh (mV)	FLOW RATE (ml/min.)	DEPTH TO WATER (btor)	Comments
8:35	6.63	11.7	4100	4.18	767	-101	440	7.50	Brown
8:40	6.29	12.6	4110	0.69	501	-113	440	7.82	Tan
8:45	6.27	14.5	4030	0.44	220	-106	440	8.25	Pale Tan
8:50	6.28	15.2	4060	0.38	207	-104	440	8.29	Pale Tan
8:55	6.30	15.6	3970	0.23	207	-109	440	8.30	Pale Tan
Tolerance:	0.1	---	3%	10%	10%	+ or - 10	---		

Information: WATER VOLUMES--0.75 inch diameter well = 67 ml/ft; 1 inch diameter well = 154 ml/ft; 2 inch diameter well = 617 ml/ft; 4 inch diameter well = 2470 ml/ft ($vol_{cyl} = \pi r^2 h$)

APPENDIX G
LABORATORY REPORTS

Columbia Analytical Services inc.

A FULL SERVICE ENVIRONMENTAL LABORATORY

June 19, 2003

Mr. Tom Lawson
URS Corporation
BLDG-1 781 Elmgrove Rd.
Rochester, NY 14624

PROJECT:WINN DEVELOPMENT 11172966.20000
Submission #:R2317016

Dear Mr. Lawson

Enclosed are the analytical results of the analyses requested. All data has been reviewed prior to report submission. Should you have any questions please contact me at (585) 288-5380.

Thank you for letting us provide this service.

Sincerely,

COLUMBIA ANALYTICAL SERVICES

Mark Wilson
Client Service Manager

Enc.

RECEIVED

Columbia Analytical Services Inc.

1 Mustard ST.
Suite 250
Rochester, NY 14609
(585) 288-5380

THIS IS AN ANALYTICAL TEST REPORT FOR:

Client : URS Corporation
Project Reference: WINN DEVELOPMENT 11172966.20000
Lab Submission # : R2317016
Project Manager : Mark Wilson
Reported : 06/17/03

Report Contains a total of 71 pages

This package has been reviewed by Columbia Analytical Services' QA Department/Laboratory Director to comply with NELAC standards prior to report submittal. Michael K. Perry

CASE NARRATIVE

COMPANY: URS Corporation
Winn Development 11172966.20000
SUBMISSION #: R2317016

URS soil and water samples were collected on 05/13/03 and received at CAS on 05/15/03 in good condition. All coolers were received at a temperature between 0 to 6 degrees C.

VOLATILE ORGANICS

Soil samples were analyzed for Volatile Organics by SW-846 Method 8260B.

Several samples required dilutions to bring target compounds within the calibration range of the method.

All initial and continuing calibrations were compliant.

All blank spike recoveries and matrix spike recoveries were within QC limits. All RPD were within limits.

All Surrogate Standard recoveries were within QC limits.

All Internal Standard areas were within QC limits except for IS4 in samples MW-4 and SB-2. Both samples were reanalyzed to confirm this QC outlier.

All samples were analyzed within the required holding times.

No other analytical or QC problems were encountered with these analyses.

SEMIVOLATILE ORGANICS

Soil and water samples were analyzed for the Target Compound List (TCL) of Semivolatile Organics by SW-846 Method 8270C.

Due to solids content in sample SB-2W, difficulty was encountered during sample extraction. The extraction was limited to one per acid and base neutral fraction, and centrifugation was necessary to separate the organic from aqueous layer. Additionally due to high levels of hydrocarbons present, a dilution was necessary prior to sample analysis.

All initial and continuing calibrations were compliant.

All matrix spike recoveries were within limits. All RPD were within limits.

All blank spike recoveries were within QC limits.

All samples were analyzed within the required holding times.

No other analytical or QC problems were encountered with these analyses.

Columbia Analytical Services Inc.

his report contains analytical results for the following samples:

Submission #: R2317016

Lab ID	Client ID
644266	MW-3
644267	MW-4
644693	URS-2
645051	URS-1
645052	SB-1
645053	SB-2
645056	SB-2W

Columbia Analytical Services INC.

An Employee - Owned Company

Effective 6/12/2003

ORGANIC QUALIFIERS

U - Indicates compound was analyzed for but not detected. The sample quantitation limit must be corrected for dilution and for percent moisture.

J - Indicates an estimated value. The flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed, or when the mass spectral data indicate the presence of a compound that meets the identification criteria but the result is less than the sample quantitation limit but greater than zero.

N - Indicates presumptive evidence of a compound. This flag is only used for tentatively identified compounds, where the identification is based on a mass spectral library search.

P - This flag is used for a pesticide/Aroclor target analyte when there is a greater than 25% difference for detected concentrations between the two GC columns. The lower of the two values is reported on Form I and flagged with a "P".

C - This flag applies to pesticide results where the identification has been confirmed by GC/MS.

B - This flag is used when the analyte is found in the associated blank as well as in the sample.

E - This flag identifies compounds whose concentrations exceed the calibration range of the instrument for that specific analysis.

D - This flag identifies all compounds identified in an analysis at a secondary dilution factor. If a sample or extract is re-analyzed at a higher dilution factor, as in the "E" flag above, the "DL" suffix is appended to the sample number on the Form I for the diluted sample, and ALL concentration values reported on that Form I are flagged with the "D" flag.

A - This flag indicates that a TIC is a suspected aldol-condensation product.

X - As specified in Case Narrative.

* - This flag identifies compounds associated with a quality control parameter which exceeds laboratory limits.

CAS/Rochester Lab ID # for State Certifications

Army Corp of Engineers Validated
Delaware Accredited
Connecticut ID # PH0556
Florida ID # E87674
Massachusetts ID # M-NY032
Navy Facilities Engineering Service Center Approved
Nebraska Accredited
NELAP Accredited
New York ID # 10145
New Jersey ID # NY004
New Hampshire ID # 294100 A/B
Pennsylvania Registration 68-786
Rhode Island ID # 158
South Carolina ID #91012
West Virginia ID # 292

Columbia Analytical Services INC.
An Employee - Owned Company

ACCREDITED IN ACCORDANCE WITH nelac

Service Quality Ethics ACIL 2002 SEAL OF EXCELLENCE PROGRAM Environmental

Effective 6/12/2003

INORGANIC QUALIFIERS

C (Concentration) qualifier –

- B - if the reported value was obtained from a reading that was less than the Contract Required Detection Limit (CRDL) but was greater than or equal to the Instrument Detection Limit (IDL).
- U - if the analyte was analyzed for, but not detected

Q qualifier - Specified entries and their meanings are as follows:

- D - Spike was diluted out
- E - The reported value is estimated because of the presence of interference.
- J - Estimated Value
- M - Duplicate injection precision not met.
- N - Spiked sample recovery not within control limits.
- S - The reported value was determined by the Method of Standard Additions (MSA).
- W - Post-digestion spike for Furnace AA Analysis is out of control limits (85-115), while sample absorbance is less than 50% of spike absorbance.
- * - Duplicate analysis not within control limits.
- + - Correlation coefficient for the MSA is less than 0.995.

M (Method) qualifier:

- "P" for ICP
- "A" for Flame AA
- "F" for Furnace AA
- "PM" for ICP when Microwave Digestion is used
- "AM" for Flame AA when Microwave Digestion is used
- "FM" for Furnace M when Microwave Digestion is used
- "CV" for Manual Cold Vapor AA
- "AV" for Automated Cold Vapor AA
- "CA" for Midi-Distillation Spectrophotometric
- "AS" for Semi-Automated Spectrophotometric
- "C" for Manual Spectrophotometric
- "T" for Titrimetric
- " " where no data has been entered
- "NR" if the analyte is not required to be analyzed.

CAS/Rochester Lab ID # for State Certifications

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Nebraska Accredited
NELAP Accredited
New York ID # 10145
New Jersey ID # NY004
New Hampshire ID # 294100 A/B
Pennsylvania Registration 68-786
Rhode Island ID # 158
South Carolina ID #91012
West Virginia ID # 292

COLUMBIA ANALYTICAL SERVICES

Reported: 06/17/03

JRS Corporation
Project Reference: WINN DEVELOPMENT 11172966.20000
Client Sample ID : MW-3

Date Sampled : 05/27/03 Order #: 644266 Sample Matrix: SOIL/SEDIMENT
Date Received: 05/27/03 Submission #: R2317016

ANALYTE	METHOD	PQL	RESULT	DRY WEIGHT UNITS	DATE ANALYZED	TIME ANALYZED	DILUTION
PERCENT SOLIDS	160.0	1.0	88.3	%	06/05/03	10:00	1.0

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B TCL/TANK
Reported: 06/17/03

URS Corporation
Project Reference: WINN DEVELOPMENT 11172966.20000
Client Sample ID : MW-3

Date Sampled : 05/27/03 **Order #:** 644266 **Sample Matrix:** SOIL/SEDIMENT
Date Received: 05/27/03 **Submission #:** R2317016 **Percent Solid:** 88.3

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 05/28/03			
ANALYTICAL DILUTION: 1.00			Dry Weight
ACETONE	20	23 U	UG/KG
BENZENE	5.0	5.7 U	UG/KG
BROMODICHLOROMETHANE	5.0	5.7 U	UG/KG
BROMOFORM	5.0	5.7 U	UG/KG
BROMOMETHANE	5.0	5.7 U	UG/KG
2-BUTANONE (MEK)	10	11 U	UG/KG
SEC-BUTYLBENZENE	5.0	5.7 U	UG/KG
N-BUTYLBENZENE	5.0	5.7 U	UG/KG
TERT-BUTYLBENZENE	5.0	5.7 U	UG/KG
CARBON DISULFIDE	10	11 U	UG/KG
CARBON TETRACHLORIDE	5.0	5.7 U	UG/KG
CHLOROBENZENE	5.0	5.7 U	UG/KG
CHLOROETHANE	5.0	5.7 U	UG/KG
CHLOROFORM	5.0	5.7 U	UG/KG
CHLOROMETHANE	5.0	5.7 U	UG/KG
DIBROMOCHLOROMETHANE	5.0	5.7 U	UG/KG
1,1-DICHLOROETHANE	5.0	5.7 U	UG/KG
1,2-DICHLOROETHANE	5.0	5.7 U	UG/KG
1,1-DICHLOROETHENE	5.0	5.7 U	UG/KG
CIS-1,2-DICHLOROETHENE	5.0	5.7 U	UG/KG
TRANS-1,2-DICHLOROETHENE	5.0	5.7 U	UG/KG
1,2-DICHLOROPROPANE	5.0	5.7 U	UG/KG
CIS-1,3-DICHLOROPROPENE	5.0	5.7 U	UG/KG
TRANS-1,3-DICHLOROPROPENE	5.0	5.7 U	UG/KG
METHYL-TERT-BUTYL-ETHER	5.0	5.7 U	UG/KG
ETHYLBENZENE	5.0	5.7 U	UG/KG
2-HEXANONE	10	11 U	UG/KG
ISOPROPYL BENZENE	5.0	5.7 U	UG/KG
P-ISOPROPYLTOLUENE	5.0	5.7 U	UG/KG
METHYLENE CHLORIDE	5.0	5.7 U	UG/KG
NAPHTHALENE	5.0	5.7 U	UG/KG
4-METHYL-2-PENTANONE (MIBK)	10	11 U	UG/KG
N-PROPYLBENZENE	5.0	5.7 U	UG/KG
STYRENE	5.0	5.7 U	UG/KG
1,1,2,2-TETRACHLOROETHANE	5.0	5.7 U	UG/KG
TETRACHLOROETHENE	5.0	5.7 U	UG/KG
TOLUENE	5.0	5.7 U	UG/KG
1,1,1-TRICHLOROETHANE	5.0	5.7 U	UG/KG
1,1,2-TRICHLOROETHANE	5.0	5.7 U	UG/KG
TRICHLOROETHENE	5.0	5.7 U	UG/KG
1,3,5-TRIMETHYLBENZENE	5.0	5.7 U	UG/KG
1,2,4-TRIMETHYLBENZENE	5.0	5.7 U	UG/KG
VINYL CHLORIDE	5.0	5.7 U	UG/KG
O-XYLENE	5.0	5.7 U	UG/KG

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B TCL/TANK
Reported: 06/17/03

URS Corporation
Project Reference: WINN DEVELOPMENT 11172966.20000
Client Sample ID : MW-3

Date Sampled : 05/27/03 **Order #:** 644266 **Sample Matrix:** SOIL/SEDIMENT
Date Received: 05/27/03 **Submission #:** R2317016 **Percent Solid:** 88.3

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 05/28/03			
ANALYTICAL DILUTION: 1.00			Dry Weight
M+P-XYLENE	5.0	5.7 U	UG/KG

SURROGATE RECOVERIES	QC LIMITS		
4-BROMOFLUOROBENZENE	(68 - 128 %)	86	%
TOLUENE-D8	(83 - 117 %)	106	%
DIBROMOFLUOROMETHANE	(72 - 123 %)	99	%

COLUMBIA ANALYTICAL SERVICES

EXTRACTABLE ORGANICS
METHOD 8270C SEMIVOLATILES
Reported: 06/17/03

URS Corporation
Project Reference: WINN DEVELOPMENT 11172966.20000
Client Sample ID : MW-3

Date Sampled : 05/27/03 Order #: 644266 Sample Matrix: SOIL/SEDIMENT
Date Received: 05/27/03 Submission #: R2317016 Percent Solid: 88.3

ANALYTE	PQL	RESULT	UNITS
DATE EXTRACTED : 05/30/03			
DATE ANALYZED : 06/05/03			
ANALYTICAL DILUTION: 1.00			Dry Weight
ACENAPHTHENE	330	370 U	UG/KG
ACENAPHTHYLENE	330	370 U	UG/KG
ANTHRACENE	330	370 U	UG/KG
BENZO(A)ANTHRACENE	330	370 U	UG/KG
BENZO(A)PYRENE	330	370 U	UG/KG
BENZO(B)FLUORANTHENE	330	370 U	UG/KG
BENZO(G,H,I)PERYLENE	330	370 U	UG/KG
BENZO(K)FLUORANTHENE	330	370 U	UG/KG
BENZYL ALCOHOL	330	370 U	UG/KG
BUTYL BENZYL PHTHALATE	330	370 U	UG/KG
DI-N-BUTYLPHTHALATE	330	370 U	UG/KG
CARBAZOLE	330	370 U	UG/KG
INDENO(1,2,3-CD)PYRENE	330	370 U	UG/KG
4-CHLOROANILINE	330	370 U	UG/KG
BIS(-2-CHLOROETHOXY)METHANE	330	370 U	UG/KG
BIS(2-CHLOROETHYL)ETHER	330	370 U	UG/KG
2-CHLORONAPHTHALENE	330	370 U	UG/KG
2-CHLOROPHENOL	330	370 U	UG/KG
2,2'-OXYBIS(1-CHLOROPROPANE)	330	370 U	UG/KG
CHRYSENE	330	370 U	UG/KG
DIBENZO(A,H)ANTHRACENE	330	370 U	UG/KG
DIBENZOFURAN	330	370 U	UG/KG
1,3-DICHLOROBENZENE	330	370 U	UG/KG
1,2-DICHLOROBENZENE	330	370 U	UG/KG
1,4-DICHLOROBENZENE	330	370 U	UG/KG
3,3'-DICHLOROBENZIDINE	330	370 U	UG/KG
2,4-DICHLOROPHENOL	330	370 U	UG/KG
DIETHYLPHTHALATE	330	370 U	UG/KG
DIMETHYL PHTHALATE	330	370 U	UG/KG
2,4-DIMETHYLPHENOL	330	370 U	UG/KG
2,4-DINITROPHENOL	1700	1900 U	UG/KG
2,4-DINITROTOLUENE	330	370 U	UG/KG
2,6-DINITROTOLUENE	330	370 U	UG/KG
BIS(2-ETHYLHEXYL)PHTHALATE	330	370 U	UG/KG
FLUORANTHENE	330	370 U	UG/KG
FLUORENE	330	370 U	UG/KG
HEXACHLOROBENZENE	330	370 U	UG/KG
HEXACHLOROBUTADIENE	330	370 U	UG/KG
HEXACHLOROCYCLOPENTADIENE	330	370 U	UG/KG
HEXACHLOROETHANE	330	370 U	UG/KG
ISOPHORONE	330	370 U	UG/KG
2-METHYLNAPHTHALENE	330	370 U	UG/KG
4,6-DINITRO-2-METHYLPHENOL	1700	1900 U	UG/KG

COLUMBIA ANALYTICAL SERVICES

EXTRACTABLE ORGANICS
METHOD 8270C SEMIVOLATILES
Reported: 06/17/03

URS Corporation
Project Reference: WINN DEVELOPMENT 11172966.20000
Client Sample ID : MW-3

Date Sampled : 05/27/03 **Order #:** 644266 **Sample Matrix:** SOIL/SEDIMENT
Date Received: 05/27/03 **Submission #:** R2317016 **Percent Solid:** 88.3

DATE EXTRACTED : 05/30/03
DATE ANALYZED : 06/05/03
ANALYTICAL DILUTION: 1.00

ANALYTE	PQL	RESULT	UNITS
			Dry Weight
4-CHLORO-3-METHYLPHENOL	330	370 U	UG/KG
2-METHYLPHENOL	330	370 U	UG/KG
3+4-METHYLPHENOL	330	370 U	UG/KG
NAPHTHALENE	330	370 U	UG/KG
2-NITROANILINE	1700	1900 U	UG/KG
3-NITROANILINE	1700	1900 U	UG/KG
4-NITROANILINE	1700	1900 U	UG/KG
NITROBENZENE	330	370 U	UG/KG
2-NITROPHENOL	330	370 U	UG/KG
4-NITROPHENOL	1700	1900 U	UG/KG
N-NITROSODIMETHYLAMINE	330	370 U	UG/KG
N-NITROSODIPHENYLAMINE	330	370 U	UG/KG
DI-N-OCTYL PHTHALATE	330	370 U	UG/KG
PENTACHLOROPHENOL	1700	1900 U	UG/KG
PHENANTHRENE	330	370 U	UG/KG
PHENOL	330	370 U	UG/KG
4-BROMOPHENYL-PHENYLETHER	330	370 U	UG/KG
4-CHLOROPHENYL-PHENYLETHER	330	370 U	UG/KG
N-NITROSO-DI-N-PROPYLAMINE	330	370 U	UG/KG
PYRENE	330	370 U	UG/KG
1,2,4-TRICHLOROBENZENE	330	370 U	UG/KG
2,4,6-TRICHLOROPHENOL	330	370 U	UG/KG
2,4,5-TRICHLOROPHENOL	330	370 U	UG/KG

SURROGATE RECOVERIES	QC LIMITS		
TERPHENYL-d14	(19 - 145 %)	105	%
NITROBENZENE-d5	(18 - 130 %)	72	%
PHENOL-d6	(10 - 125 %)	78	%
2-FLUOROBIPHENYL	(23 - 130 %)	72	%
2-FLUOROPHENOL	(13 - 130 %)	68	%
2,4,6-TRIBROMOPHENOL	(23 - 131 %)	86	%

COLUMBIA ANALYTICAL SERVICES

Reported: 06/17/03

URS Corporation
Project Reference: WINN DEVELOPMENT 11172966.20000
(ient Sample ID : MW-4

D=te Sampled : 05/27/03 Order #: 644267 Sample Matrix: SOIL/SEDIMENT
I—te Received: 05/27/03 Submission #: R2317016

NALYTE	METHOD	PQL	RESULT	DRY WEIGHT UNITS	DATE ANALYZED	TIME ANALYZED	DILUTION
PERCENT SOLIDS	160.0	1.0	78.3	%	06/05/03	10:00	1.0

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B TCL/TANK
Reported: 06/17/03

URS Corporation
Project Reference: WINN DEVELOPMENT 11172966.20000
Client Sample ID : MW-4

Date Sampled : 05/27/03 Order #: 644267 Sample Matrix: SOIL/SEDIMENT
Date Received: 05/27/03 Submission #: R2317016 Percent Solid: 78.3

DATE ANALYZED : 05/28/03
ANALYTICAL DILUTION: 1.00

ANALYTE	PQL	RESULT	UNITS
			Dry Weight
ACETONE	20	26 U	UG/KG
BENZENE	5.0	6.4 U	UG/KG
BROMODICHLOROMETHANE	5.0	6.4 U	UG/KG
BROMOFORM	5.0	6.4 U	UG/KG
BROMOMETHANE	5.0	6.4 U	UG/KG
2-BUTANONE (MEK)	10	13 U	UG/KG
SEC-BUTYLBENZENE	5.0	6.4 U	UG/KG
N-BUTYLBENZENE	5.0	6.4 U	UG/KG
TERT-BUTYLBENZENE	5.0	6.4 U	UG/KG
CARBON DISULFIDE	10	13 U	UG/KG
CARBON TETRACHLORIDE	5.0	6.4 U	UG/KG
CHLOROBENZENE	5.0	6.4 U	UG/KG
CHLOROETHANE	5.0	6.4 U	UG/KG
CHLOROFORM	5.0	6.4 U	UG/KG
CHLOROMETHANE	5.0	6.4 U	UG/KG
DIBROMOCHLOROMETHANE	5.0	6.4 U	UG/KG
1,1-DICHLOROETHANE	5.0	6.4 U	UG/KG
1,2-DICHLOROETHANE	5.0	6.4 U	UG/KG
1,1-DICHLOROETHENE	5.0	6.4 U	UG/KG
CIS-1,2-DICHLOROETHENE	5.0	6.4 U	UG/KG
TRANS-1,2-DICHLOROETHENE	5.0	6.4 U	UG/KG
1,2-DICHLOROPROPANE	5.0	6.4 U	UG/KG
CIS-1,3-DICHLOROPROPENE	5.0	6.4 U	UG/KG
TRANS-1,3-DICHLOROPROPENE	5.0	6.4 U	UG/KG
METHYL-TERT-BUTYL-ETHER	5.0	6.4 U	UG/KG
ETHYLBENZENE	5.0	6.4 U	UG/KG
2-HEXANONE	10	13 U	UG/KG
ISOPROPYL BENZENE	5.0	6.4 U	UG/KG
P-ISOPROPYLTOLUENE	5.0	6.4 U	UG/KG
METHYLENE CHLORIDE	5.0	6.4 U	UG/KG
NAPHTHALENE	5.0	6.4 U	UG/KG
4-METHYL-2-PENTANONE (MIBK)	10	13 U	UG/KG
N-PROPYLBENZENE	5.0	6.4 U	UG/KG
STYRENE	5.0	6.4 U	UG/KG
1,1,2,2-TETRACHLOROETHANE	5.0	6.4 U	UG/KG
TETRACHLOROETHENE	5.0	6.4 U	UG/KG
TOLUENE	5.0	6.4 U	UG/KG
1,1,1-TRICHLOROETHANE	5.0	6.4 U	UG/KG
1,1,2-TRICHLOROETHANE	5.0	6.4 U	UG/KG
TRICHLOROETHENE	5.0	6.4 U	UG/KG
1,3,5-TRIMETHYLBENZENE	5.0	6.4 U	UG/KG
1,2,4-TRIMETHYLBENZENE	5.0	6.4 U	UG/KG
VINYL CHLORIDE	5.0	6.4 U	UG/KG
O-XYLENE	5.0	6.4 U	UG/KG

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B TCL/TANK
Reported: 06/17/03

URS Corporation
Project Reference: WINN DEVELOPMENT 11172966.20000
Client Sample ID : MW-4

Date Sampled : 05/27/03 Order #: 644267 Sample Matrix: SOIL/SEDIMENT
Date Received: 05/27/03 Submission #: R2317016 Percent Solid: 78.3

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 05/28/03			
ANALYTICAL DILUTION: 1.00			Dry Weight
M+P-XYLENE	5.0	6.4 U	UG/KG

SURROGATE RECOVERIES	QC LIMITS		
4-BROMOFLUOROBENZENE	(68 - 128 %)	81	%
TOLUENE-D8	(83 - 117 %)	114	%
DIBROMOFLUOROMETHANE	(72 - 123 %)	101	%

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B TCL/TANK
Reported: 06/17/03

URS Corporation
Project Reference: WINN DEVELOPMENT 11172966.20000
Client Sample ID : MW-4

Date Sampled : 05/27/03 Order #: 644267 Sample Matrix: SOIL/SEDIMENT
Date Received: 05/27/03 Submission #: R2317016 Percent Solid: 78.3

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 05/30/03			
ANALYTICAL DILUTION: 1.00			Dry Weight
ACETONE	20	26 U	UG/KG
BENZENE	5.0	6.4 U	UG/KG
BROMODICHLOROMETHANE	5.0	6.4 U	UG/KG
BROMOFORM	5.0	6.4 U	UG/KG
BROMOMETHANE	5.0	6.4 U	UG/KG
2-BUTANONE (MEK)	10	13 U	UG/KG
SEC-BUTYLBENZENE	5.0	6.4 U	UG/KG
N-BUTYLBENZENE	5.0	6.4 U	UG/KG
TERT-BUTYLBENZENE	5.0	6.4 U	UG/KG
CARBON DISULFIDE	10	13 U	UG/KG
CARBON TETRACHLORIDE	5.0	6.4 U	UG/KG
CHLOROBENZENE	5.0	6.4 U	UG/KG
CHLOROETHANE	5.0	6.4 U	UG/KG
CHLOROFORM	5.0	6.4 U	UG/KG
CHLOROMETHANE	5.0	6.4 U	UG/KG
DIBROMOCHLOROMETHANE	5.0	6.4 U	UG/KG
1,1-DICHLOROETHANE	5.0	6.4 U	UG/KG
1,2-DICHLOROETHANE	5.0	6.4 U	UG/KG
1,1-DICHLOROETHENE	5.0	6.4 U	UG/KG
CIS-1,2-DICHLOROETHENE	5.0	6.4 U	UG/KG
TRANS-1,2-DICHLOROETHENE	5.0	6.4 U	UG/KG
1,2-DICHLOROPROPANE	5.0	6.4 U	UG/KG
CIS-1,3-DICHLOROPROPENE	5.0	6.4 U	UG/KG
TRANS-1,3-DICHLOROPROPENE	5.0	6.4 U	UG/KG
METHYL-TERT-BUTYL-ETHER	5.0	6.4 U	UG/KG
ETHYLBENZENE	5.0	6.4 U	UG/KG
2-HEXANONE	10	13 U	UG/KG
ISOPROPYL BENZENE	5.0	6.4 U	UG/KG
P-ISOPROPYLTOLUENE	5.0	6.4 U	UG/KG
METHYLENE CHLORIDE	5.0	6.4 U	UG/KG
NAPHTHALENE	5.0	6.4 U	UG/KG
4-METHYL-2-PENTANONE (MIBK)	10	13 U	UG/KG
N-PROPYLBENZENE	5.0	6.4 U	UG/KG
STYRENE	5.0	6.4 U	UG/KG
1,1,2,2-TETRACHLOROETHANE	5.0	6.4 U	UG/KG
TETRACHLOROETHENE	5.0	6.4 U	UG/KG
TOLUENE	5.0	6.4 U	UG/KG
1,1,1-TRICHLOROETHANE	5.0	6.4 U	UG/KG
1,1,2-TRICHLOROETHANE	5.0	6.4 U	UG/KG
TRICHLOROETHENE	5.0	6.4 U	UG/KG
1,3,5-TRIMETHYLBENZENE	5.0	6.4 U	UG/KG
1,2,4-TRIMETHYLBENZENE	5.0	6.4 U	UG/KG
VINYL CHLORIDE	5.0	6.4 U	UG/KG
O-XYLENE	5.0	6.4 U	UG/KG

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B TCL/TANK
Reported: 06/17/03

URS Corporation
Project Reference: WINN DEVELOPMENT 11172966.20000
Client Sample ID : MW-4

Date Sampled : 05/27/03 Order #: 644267 Sample Matrix: SOIL/SEDIMENT
Date Received: 05/27/03 Submission #: R2317016 Percent Solid: 78.3

ANALYTE		PQL	RESULT	UNITS
DATE ANALYZED	: 05/30/03			
ANALYTICAL DILUTION:	1.00			Dry Weight
M+P-XYLENE		5.0	6.4 U	UG/KG
SURROGATE RECOVERIES	QC LIMITS			
4-BROMOFLUOROBENZENE	(68 - 128 %)		76	%
TOLUENE-D8	(83 - 117 %)		117	%
DIBROMOFLUOROMETHANE	(72 - 123 %)		102	%

COLUMBIA ANALYTICAL SERVICES

EXTRACTABLE ORGANICS
METHOD 8270C SEMIVOLATILES
Reported: 06/17/03

URS Corporation
Project Reference: WINN DEVELOPMENT 11172966.20000
Client Sample ID : MW-4

Date Sampled : 05/27/03 **Order #:** 644267 **Sample Matrix:** SOIL/SEDIMENT
Date Received: 05/27/03 **Submission #:** R2317016 **Percent Solid:** 78.3

ANALYTE	PQL	RESULT	UNITS
DATE EXTRACTED : 05/30/03			
DATE ANALYZED : 06/05/03			
ANALYTICAL DILUTION: 1.00			Dry Weight
ACENAPHTHENE	330	420 U	UG/KG
ACENAPHTHYLENE	330	420 U	UG/KG
ANTHRACENE	330	420 U	UG/KG
BENZO(A)ANTHRACENE	330	420 U	UG/KG
BENZO(A)PYRENE	330	420 U	UG/KG
BENZO(B)FLUORANTHENE	330	420 U	UG/KG
BENZO(G,H,I)PERYLENE	330	420 U	UG/KG
BENZO(K)FLUORANTHENE	330	420 U	UG/KG
BENZYL ALCOHOL	330	420 U	UG/KG
BUTYL BENZYL PHTHALATE	330	420 U	UG/KG
DI-N-BUTYLPHTHALATE	330	420 U	UG/KG
CARBAZOLE	330	420 U	UG/KG
INDENO(1,2,3-CD)PYRENE	330	420 U	UG/KG
4-CHLOROANILINE	330	420 U	UG/KG
BIS(-2-CHLOROETHOXY)METHANE	330	420 U	UG/KG
BIS(2-CHLOROETHYL)ETHER	330	420 U	UG/KG
2-CHLORONAPHTHALENE	330	420 U	UG/KG
2-CHLOROPHENOL	330	420 U	UG/KG
2,2'-OXYBIS(1-CHLOROPROPANE)	330	420 U	UG/KG
CHRYSENE	330	420 U	UG/KG
DIBENZO(A,H)ANTHRACENE	330	420 U	UG/KG
DIBENZOFURAN	330	420 U	UG/KG
1,3-DICHLOROBENZENE	330	420 U	UG/KG
1,2-DICHLOROBENZENE	330	420 U	UG/KG
1,4-DICHLOROBENZENE	330	420 U	UG/KG
3,3'-DICHLOROBENZIDINE	330	420 U	UG/KG
2,4-DICHLOROPHENOL	330	420 U	UG/KG
DIETHYLPHTHALATE	330	420 U	UG/KG
DIMETHYL PHTHALATE	330	420 U	UG/KG
2,4-DIMETHYLPHENOL	330	420 U	UG/KG
2,4-DINITROPHENOL	1700	2200 U	UG/KG
2,4-DINITROTOLUENE	330	420 U	UG/KG
2,6-DINITROTOLUENE	330	420 U	UG/KG
BIS(2-ETHYLHEXYL)PHTHALATE	330	420 U	UG/KG
FLUORANTHENE	330	420 U	UG/KG
FLUORENE	330	420 U	UG/KG
HEXACHLOROBENZENE	330	420 U	UG/KG
HEXACHLOROBUTADIENE	330	420 U	UG/KG
HEXACHLOROCYCLOPENTADIENE	330	420 U	UG/KG
HEXACHLOROETHANE	330	420 U	UG/KG
ISOPHORONE	330	420 U	UG/KG
2-METHYLNAPHTHALENE	330	420 U	UG/KG
4,6-DINITRO-2-METHYLPHENOL	1700	2200 U	UG/KG

COLUMBIA ANALYTICAL SERVICES

EXTRACTABLE ORGANICS
METHOD 8270C SEMIVOLATILES
Reported: 06/17/03

URS Corporation
Project Reference: WINN DEVELOPMENT 11172966.20000
Client Sample ID : MW-4

)ate Sampled : 05/27/03 **Order #:** 644267 **Sample Matrix:** SOIL/SEDIMENT
)ate Received: 05/27/03 **Submission #:** R2317016 **Percent Solid:** 78.3

ANALYTE	PQL	RESULT	UNITS
DATE EXTRACTED : 05/30/03			
DATE ANALYZED : 06/05/03			
ANALYTICAL DILUTION: 1.00			Dry Weight
4-CHLORO-3-METHYLPHENOL	330	420 U	UG/KG
2-METHYLPHENOL	330	420 U	UG/KG
3+4-METHYLPHENOL	330	420 U	UG/KG
NAPHTHALENE	330	420 U	UG/KG
2-NITROANILINE	1700	2200 U	UG/KG
3-NITROANILINE	1700	2200 U	UG/KG
4-NITROANILINE	1700	2200 U	UG/KG
NITROBENZENE	330	420 U	UG/KG
2-NITROPHENOL	330	420 U	UG/KG
4-NITROPHENOL	1700	2200 U	UG/KG
N-NITROSODIMETHYLAMINE	330	420 U	UG/KG
N-NITROSODIPHENYLAMINE	330	420 U	UG/KG
DI-N-OCTYL PHTHALATE	330	420 U	UG/KG
PENTACHLOROPHENOL	1700	2200 U	UG/KG
PHENANTHRENE	330	420 U	UG/KG
PHENOL	330	420 U	UG/KG
4-BROMOPHENYL-PHENYLETHER	330	420 U	UG/KG
4-CHLOROPHENYL-PHENYLETHER	330	420 U	UG/KG
N-NITROSO-DI-N-PROPYLAMINE	330	420 U	UG/KG
PYRENE	330	420 U	UG/KG
1,2,4-TRICHLOROBENZENE	330	420 U	UG/KG
2,4,6-TRICHLOROPHENOL	330	420 U	UG/KG
2,4,5-TRICHLOROPHENOL	330	420 U	UG/KG

SURROGATE RECOVERIES	QC LIMITS		
TERPHENYL-d14	(19 - 145 %)	94	%
NITROBENZENE-d5	(18 - 130 %)	76	%
PHENOL-d6	(10 - 125 %)	86	%
2-FLUOROBIPHENYL	(23 - 130 %)	78	%
2-FLUOROPHENOL	(13 - 130 %)	74	%
2,4,6-TRIBROMOPHENOL	(23 - 131 %)	98	%

COLUMBIA ANALYTICAL SERVICES

Reported: 06/17/03

URS Corporation
Project Reference: WINN DEVELOPMENT 11172966.20000
Client Sample ID : URS-2

Date Sampled : 05/28/03 Order #: 644693 Sample Matrix: SOIL/SEDIMENT
Date Received: 05/28/03 Submission #: R2317016

ANALYTE	METHOD	PQL	RESULT	DRY WEIGHT UNITS	DATE ANALYZED	TIME ANALYZED	DILUTION
PERCENT SOLIDS	160.0	1.0	80.1	%	06/09/03	09:45	1.0

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B TCL/TANK
Reported: 06/17/03

URS Corporation
Project Reference: WINN DEVELOPMENT 11172966.20000
Client Sample ID : URS-2

Date Sampled : 05/28/03 Order #: 644693 Sample Matrix: SOIL/SEDIMENT
Date Received: 05/28/03 Submission #: R2317016 Percent Solid: 80.1

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 05/30/03			
ANALYTICAL DILUTION: 1.00			Dry Weight
ACETONE	20	25 U	UG/KG
BENZENE	5.0	6.2 U	UG/KG
BROMODICHLOROMETHANE	5.0	6.2 U	UG/KG
BROMOFORM	5.0	6.2 U	UG/KG
BROMOMETHANE	5.0	6.2 U	UG/KG
2-BUTANONE (MEK)	10	12 U	UG/KG
SEC-BUTYLBENZENE	5.0	6.2 U	UG/KG
N-BUTYLBENZENE	5.0	6.2 U	UG/KG
TERT-BUTYLBENZENE	5.0	6.2 U	UG/KG
CARBON DISULFIDE	10	12 U	UG/KG
CARBON TETRACHLORIDE	5.0	6.2 U	UG/KG
CHLOROBENZENE	5.0	6.2 U	UG/KG
CHLOROETHANE	5.0	6.2 U	UG/KG
CHLOROFORM	5.0	6.2 U	UG/KG
CHLOROMETHANE	5.0	6.2 U	UG/KG
DIBROMOCHLOROMETHANE	5.0	6.2 U	UG/KG
1,1-DICHLOROETHANE	5.0	6.2 U	UG/KG
1,2-DICHLOROETHANE	5.0	6.2 U	UG/KG
1,1-DICHLOROETHENE	5.0	6.2 U	UG/KG
CIS-1,2-DICHLOROETHENE	5.0	6.2 U	UG/KG
TRANS-1,2-DICHLOROETHENE	5.0	6.2 U	UG/KG
1,2-DICHLOROPROPANE	5.0	6.2 U	UG/KG
CIS-1,3-DICHLOROPROPENE	5.0	6.2 U	UG/KG
TRANS-1,3-DICHLOROPROPENE	5.0	6.2 U	UG/KG
METHYL-TERT-BUTYL-ETHER	5.0	6.2 U	UG/KG
ETHYLBENZENE	10	12 U	UG/KG
2-HEXANONE	5.0	6.2 U	UG/KG
ISOPROPYL BENZENE	5.0	6.2 U	UG/KG
P-ISOPROPYLTOLUENE	5.0	6.2 U	UG/KG
METHYLENE CHLORIDE	5.0	6.2 U	UG/KG
NAPHTHALENE	10	12 U	UG/KG
4-METHYL-2-PENTANONE (MIBK)	5.0	6.2 U	UG/KG
N-PROPYLBENZENE	5.0	6.2 U	UG/KG
STYRENE	5.0	6.2 U	UG/KG
1,1,2,2-TETRACHLOROETHANE	5.0	6.2 U	UG/KG
TETRACHLOROETHENE	5.0	6.2 U	UG/KG
TOLUENE	5.0	6.2 U	UG/KG
1,1,1-TRICHLOROETHANE	5.0	6.2 U	UG/KG
1,1,2-TRICHLOROETHANE	5.0	6.2 U	UG/KG
TRICHLOROETHENE	5.0	6.2 U	UG/KG
1,3,5-TRIMETHYLBENZENE	5.0	6.2 U	UG/KG
1,2,4-TRIMETHYLBENZENE	5.0	6.2 U	UG/KG
VINYL CHLORIDE	5.0	6.2 U	UG/KG

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B TCL/TANK
Reported: 06/17/03

URS Corporation
Project Reference: WINN DEVELOPMENT 11172966.20000
Client Sample ID : URS-2

Date Sampled : 05/28/03 Order #: 644693 Sample Matrix: SOIL/SEDIMENT
Date Received: 05/28/03 Submission #: R2317016 Percent Solid: 80.1

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 05/30/03			
ANALYTICAL DILUTION: 1.00			Dry Weight
M+P-XYLENE	5.0	6.2 U	UG/KG

SURROGATE RECOVERIES	QC LIMITS		
4-BROMOFLUOROBENZENE	(68 - 128 %)	93	%
TOLUENE-D8	(83 - 117 %)	99	%
DIBROMOFLUOROMETHANE	(72 - 123 %)	100	%

COLUMBIA ANALYTICAL SERVICES

EXTRACTABLE ORGANICS
METHOD 8270C SEMIVOLATILES
Reported: 06/17/03

URS Corporation
Project Reference: WINN DEVELOPMENT 11172966.20000
Client Sample ID : URS-2

Date Sampled : 05/28/03 Order #: 644693 Sample Matrix: SOIL/SEDIMENT
Date Received: 05/28/03 Submission #: R2317016 Percent Solid: 80.1

ANALYTE	PQL	RESULT	UNITS
DATE EXTRACTED : 05/30/03			
DATE ANALYZED : 06/05/03			
ANALYTICAL DILUTION: 1.00			Dry Weight
ACENAPHTHENE	330	410 U	UG/KG
ACENAPHTHYLENE	330	410 U	UG/KG
ANTHRACENE	330	410 U	UG/KG
BENZO(A)ANTHRACENE	330	410 U	UG/KG
BENZO(A)PYRENE	330	410 U	UG/KG
BENZO(B)FLUORANTHENE	330	410 U	UG/KG
BENZO(G,H,I)PERYLENE	330	410 U	UG/KG
BENZO(K)FLUORANTHENE	330	410 U	UG/KG
BENZYL ALCOHOL	330	410 U	UG/KG
BUTYL BENZYL PHTHALATE	330	410 U	UG/KG
DI-N-BUTYLPHTHALATE	330	410 U	UG/KG
CARBAZOLE	330	410 U	UG/KG
INDENO(1,2,3-CD)PYRENE	330	410 U	UG/KG
4-CHLOROANILINE	330	410 U	UG/KG
BIS(-2-CHLOROETHOXY)METHANE	330	410 U	UG/KG
BIS(2-CHLOROETHYL)ETHER	330	410 U	UG/KG
2-CHLORONAPHTHALENE	330	410 U	UG/KG
2-CHLOROPHENOL	330	410 U	UG/KG
2,2'-OXYBIS(1-CHLOROPROPANE)	330	410 U	UG/KG
CHRYSENE	330	410 U	UG/KG
DIBENZO(A,H)ANTHRACENE	330	410 U	UG/KG
DIBENZOFURAN	330	410 U	UG/KG
1,3-DICHLOROBENZENE	330	410 U	UG/KG
1,2-DICHLOROBENZENE	330	410 U	UG/KG
1,4-DICHLOROBENZENE	330	410 U	UG/KG
3,3'-DICHLOROBENZIDINE	330	410 U	UG/KG
2,4-DICHLOROPHENOL	330	410 U	UG/KG
DIETHYLPHTHALATE	330	410 U	UG/KG
DIMETHYL PHTHALATE	330	410 U	UG/KG
2,4-DIMETHYLPHENOL	330	410 U	UG/KG
2,4-DINITROPHENOL	1700	2100 U	UG/KG
2,4-DINITROTOLUENE	330	410 U	UG/KG
2,6-DINITROTOLUENE	330	410 U	UG/KG
BIS(2-ETHYLHEXYL)PHTHALATE	330	410 U	UG/KG
FLUORANTHENE	330	410 U	UG/KG
FLUORENE	330	410 U	UG/KG
HEXACHLOROBENZENE	330	410 U	UG/KG
HEXACHLOROBUTADIENE	330	410 U	UG/KG
HEXACHLOROCYCLOPENTADIENE	330	410 U	UG/KG
HEXACHLOROETHANE	330	410 U	UG/KG
ISOPHORONE	330	410 U	UG/KG
2-METHYLNAPHTHALENE	330	410 U	UG/KG
2-METHYLPHENOL	1700	2100 U	UG/KG

COLUMBIA ANALYTICAL SERVICES

EXTRACTABLE ORGANICS
METHOD 8270C SEMIVOLATILES
Reported: 06/17/03

URS Corporation
Project Reference: WINN DEVELOPMENT 11172966.20000
Client Sample ID : URS-2

Date Sampled : 05/28/03 **Order #:** 644693 **Sample Matrix:** SOIL/SEDIMENT
Date Received: 05/28/03 **Submission #:** R2317016 **Percent Solid:** 80.1

ANALYTE	PQL	RESULT	UNITS
DATE EXTRACTED : 05/30/03			
DATE ANALYZED : 06/05/03			
ANALYTICAL DILUTION: 1.00			Dry Weight
4-CHLORO-3-METHYLPHENOL	330	410 U	UG/KG
2-METHYLPHENOL	330	410 U	UG/KG
3+4-METHYLPHENOL	330	410 U	UG/KG
NAPHTHALENE	330	410 U	UG/KG
2-NITROANILINE	1700	2100 U	UG/KG
3-NITROANILINE	1700	2100 U	UG/KG
4-NITROANILINE	1700	2100 U	UG/KG
NITROBENZENE	330	410 U	UG/KG
2-NITROPHENOL	330	410 U	UG/KG
4-NITROPHENOL	1700	2100 U	UG/KG
N-NITROSODIMETHYLAMINE	330	410 U	UG/KG
N-NITROSODIPHENYLAMINE	330	410 U	UG/KG
DI-N-OCTYL PHTHALATE	330	410 U	UG/KG
PENTACHLOROPHENOL	1700	2100 U	UG/KG
PHENANTHRENE	330	410 U	UG/KG
PHENOL	330	410 U	UG/KG
4-BROMOPHENYL-PHENYLETHER	330	410 U	UG/KG
4-CHLOROPHENYL-PHENYLETHER	330	410 U	UG/KG
N-NITROSO-DI-N-PROPYLAMINE	330	410 U	UG/KG
PYRENE	330	410 U	UG/KG
1,2,4-TRICHLOROBENZENE	330	410 U	UG/KG
2,4,6-TRICHLOROPHENOL	330	410 U	UG/KG
2,4,5-TRICHLOROPHENOL	330	410 U	UG/KG

SURROGATE RECOVERIES	QC LIMITS		
TERPHENYL-d14	(19 - 145 %)	101	%
NITROBENZENE-d5	(18 - 130 %)	72	%
PHENOL-d6	(10 - 125 %)	74	%
2-FLUOROBIPHENYL	(23 - 130 %)	68	%
2-FLUOROPHENOL	(13 - 130 %)	59	%
2,4,6-TRIBROMOPHENOL	(23 - 131 %)	71	%

COLUMBIA ANALYTICAL SERVICES

Reported: 06/17/03

URS Corporation
Project Reference: WINN DEVELOPMENT 11172966.20000
Client Sample ID : URS-1

Date Sampled : 05/29/03
Date Received: 05/29/03

Order #: 645051
Submission #: R2317016

Sample Matrix: SOIL/SEDIMENT

ANALYTE	METHOD	PQL	RESULT	DRY WEIGHT UNITS	DATE ANALYZED	TIME ANALYZED	DILUTION
PERCENT SOLIDS	160.0	1.0	92.9	%	06/09/03	09:45	1.0

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B TCL/TANK
Reported: 06/17/03

URS Corporation
Project Reference: WINN DEVELOPMENT 11172966.20000
Client Sample ID : URS-1

Date Sampled : 05/29/03 **Order #:** 645051 **Sample Matrix:** SOIL/SEDIMENT
Date Received: 05/29/03 **Submission #:** R2317016 **Percent Solid:** 92.9

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 06/12/03			
ANALYTICAL DILUTION: 250.00			Dry Weight
ACETONE	20	5400 U	UG/KG
BENZENE	5.0	1300 U	UG/KG
BROMODICHLOROMETHANE	5.0	1300 U	UG/KG
BROMOFORM	5.0	1300 U	UG/KG
BROMOMETHANE	5.0	1300 U	UG/KG
2-BUTANONE (MEK)	10	2700 U	UG/KG
SEC-BUTYLBENZENE	5.0	1600	UG/KG
N-BUTYLBENZENE	5.0	2500	UG/KG
TERT-BUTYLBENZENE	5.0	1300 U	UG/KG
CARBON DISULFIDE	10	2700 U	UG/KG
CARBON TETRACHLORIDE	5.0	1300 U	UG/KG
CHLOROBENZENE	5.0	1300 U	UG/KG
CHLOROETHANE	5.0	1300 U	UG/KG
CHLOROFORM	5.0	1300 U	UG/KG
CHLOROMETHANE	5.0	1300 U	UG/KG
DIBROMOCHLOROMETHANE	5.0	1300 U	UG/KG
1,1-DICHLOROETHANE	5.0	1300 U	UG/KG
1,2-DICHLOROETHANE	5.0	1300 U	UG/KG
1,1-DICHLOROETHENE	5.0	1300 U	UG/KG
CIS-1,2-DICHLOROETHENE	5.0	1300 U	UG/KG
TRANS-1,2-DICHLOROETHENE	5.0	1300 U	UG/KG
1,2-DICHLOROPROPANE	5.0	1300 U	UG/KG
CIS-1,3-DICHLOROPROPENE	5.0	1300 U	UG/KG
TRANS-1,3-DICHLOROPROPENE	5.0	1300 U	UG/KG
METHYL-TERT-BUTYL-ETHER	5.0	3000	UG/KG
ETHYLBENZENE	10	2700 U	UG/KG
2-HEXANONE	5.0	1400	UG/KG
ISOPROPYL BENZENE	5.0	2400	UG/KG
P-ISOPROPYLTOLUENE	5.0	1300 U	UG/KG
METHYLENE CHLORIDE	5.0	11000	UG/KG
NAPHTHALENE	10	2700 U	UG/KG
4-METHYL-2-PENTANONE (MIBK)	5.0	2700	UG/KG
N-PROPYLBENZENE	5.0	1300 U	UG/KG
STYRENE	5.0	1300 U	UG/KG
1,1,2,2-TETRACHLOROETHANE	5.0	1300 U	UG/KG
TETRACHLOROETHENE	5.0	1300 U	UG/KG
TOLUENE	5.0	1300 U	UG/KG
1,1,1-TRICHLOROETHANE	5.0	1300 U	UG/KG
1,1,2-TRICHLOROETHANE	5.0	1300 U	UG/KG
TRICHLOROETHENE	5.0	9400	UG/KG
1,3,5-TRIMETHYLBENZENE	5.0	28000	UG/KG
1,2,4-TRIMETHYLBENZENE	5.0	1300 U	UG/KG
VINYL CHLORIDE	5.0	1400	UG/KG

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B TCL/TANK
Reported: 06/17/03

URS Corporation
Project Reference: WINN DEVELOPMENT 11172966.20000
Client Sample ID : URS-1

Date Sampled : 05/29/03 **Order #:** 645051 **Sample Matrix:** SOIL/SEDIMENT
Date Received: 05/29/03 **Submission #:** R2317016 **Percent Solid:** 92.9

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 06/12/03			
ANALYTICAL DILUTION: 250.00			Dry Weight
M+P-XYLENE	5.0	15000	UG/KG

SURROGATE RECOVERIES	QC LIMITS		
4-BROMOFLUOROBENZENE	(68 - 128 %)	90	%
TOLUENE-D8	(83 - 117 %)	99	%
DIBROMOFLUOROMETHANE	(72 - 123 %)	103	%

COLUMBIA ANALYTICAL SERVICES

EXTRACTABLE ORGANICS
METHOD 8270C SEMIVOLATILES
Reported: 06/17/03

URS Corporation
Project Reference: WINN DEVELOPMENT 11172966.20000
Client Sample ID : URS-1

Date Sampled : 05/29/03 Order #: 645051 Sample Matrix: SOIL/SEDIMENT
Date Received: 05/29/03 Submission #: R2317016 Percent Solid: 92.9

ANALYTE	PQL	RESULT	UNITS
DATE EXTRACTED : 06/02/03			
DATE ANALYZED : 06/05/03			
ANALYTICAL DILUTION: 1.00			Dry Weight
ACENAPHTHENE	330	360 U	UG/KG
ACENAPHTHYLENE	330	360 U	UG/KG
ANTHRACENE	330	360 U	UG/KG
BENZO(A)ANTHRACENE	330	360 U	UG/KG
BENZO(A)PYRENE	330	360 U	UG/KG
BENZO(B)FLUORANTHENE	330	360 U	UG/KG
BENZO(G,H,I)PERYLENE	330	360 U	UG/KG
BENZO(K)FLUORANTHENE	330	360 U	UG/KG
BENZYL ALCOHOL	330	360 U	UG/KG
BUTYL BENZYL PHTHALATE	330	360 U	UG/KG
DI-N-BUTYLPHTHALATE	330	360 U	UG/KG
CARBAZOLE	330	360 U	UG/KG
INDENO(1,2,3-CD)PYRENE	330	360 U	UG/KG
4-CHLOROANILINE	330	360 U	UG/KG
BIS(-2-CHLOROETHOXY)METHANE	330	360 U	UG/KG
BIS(2-CHLOROETHYL)ETHER	330	360 U	UG/KG
2-CHLORONAPHTHALENE	330	360 U	UG/KG
2-CHLOROPHENOL	330	360 U	UG/KG
2,2'-OXYBIS(1-CHLOROPROPANE)	330	360 U	UG/KG
CHRYSENE	330	360 U	UG/KG
DIBENZO(A,H)ANTHRACENE	330	360 U	UG/KG
DIBENZOFURAN	330	360 U	UG/KG
1,3-DICHLOROBENZENE	330	360 U	UG/KG
1,2-DICHLOROBENZENE	330	360 U	UG/KG
1,4-DICHLOROBENZENE	330	360 U	UG/KG
3,3'-DICHLOROBENZIDINE	330	360 U	UG/KG
2,4-DICHLOROPHENOL	330	360 U	UG/KG
DIETHYLPHTHALATE	330	360 U	UG/KG
DIMETHYL PHTHALATE	330	360 U	UG/KG
2,4-DIMETHYLPHENOL	330	360 U	UG/KG
2,4-DINITROPHENOL	1700	1800 U	UG/KG
2,4-DINITROTOLUENE	330	360 U	UG/KG
2,6-DINITROTOLUENE	330	360 U	UG/KG
BIS(2-ETHYLHEXYL)PHTHALATE	330	360 U	UG/KG
FLUORANTHENE	330	360 U	UG/KG
FLUORENE	330	360 U	UG/KG
HEXACHLOROBENZENE	330	360 U	UG/KG
HEXACHLOROBUTADIENE	330	360 U	UG/KG
HEXACHLOROCYCLOPENTADIENE	330	360 U	UG/KG
HEXACHLOROETHANE	330	360 U	UG/KG
ISOPHORONE	330	360 U	UG/KG
2-METHYLNAPHTHALENE	330	2100	UG/KG
4,6-DINITRO-2-METHYLPHENOL	1700	1800 U	UG/KG

COLUMBIA ANALYTICAL SERVICES

EXTRACTABLE ORGANICS
METHOD 8270C SEMIVOLATILES
Reported: 06/17/03

URS Corporation
Project Reference: WINN DEVELOPMENT 11172966.20000
Client Sample ID : URS-1

Date Sampled : 05/29/03 **Order #:** 645051 **Sample Matrix:** SOIL/SEDIMENT
Date Received: 05/29/03 **Submission #:** R2317016 **Percent Solid:** 92.9

ANALYTE	PQL	RESULT	UNITS
DATE EXTRACTED : 06/02/03			
DATE ANALYZED : 06/05/03			
ANALYTICAL DILUTION: 1.00			Dry Weight
4-CHLORO-3-METHYLPHENOL	330	360 U	UG/KG
2-METHYLPHENOL	330	360 U	UG/KG
3+4-METHYLPHENOL	330	360 U	UG/KG
NAPHTHALENE	330	750	UG/KG
2-NITROANILINE	1700	1800 U	UG/KG
3-NITROANILINE	1700	1800 U	UG/KG
4-NITROANILINE	1700	1800 U	UG/KG
NITROBENZENE	330	360 U	UG/KG
2-NITROPHENOL	330	360 U	UG/KG
4-NITROPHENOL	1700	1800 U	UG/KG
N-NITROSODIMETHYLAMINE	330	360 U	UG/KG
N-NITROSODIPHENYLAMINE	330	360 U	UG/KG
DI-N-OCTYL PHTHALATE	330	360 U	UG/KG
PENTACHLOROPHENOL	1700	1800 U	UG/KG
PHENANTHRENE	330	360 U	UG/KG
PHENOL	330	360 U	UG/KG
4-BROMOPHENYL-PHENYLETHER	330	360 U	UG/KG
4-CHLOROPHENYL-PHENYLETHER	330	360 U	UG/KG
N-NITROSO-DI-N-PROPYLAMINE	330	360 U	UG/KG
PYRENE	330	360 U	UG/KG
1,2,4-TRICHLOROBENZENE	330	360 U	UG/KG
2,4,6-TRICHLOROPHENOL	330	360 U	UG/KG
2,4,5-TRICHLOROPHENOL	330	360 U	UG/KG

SURROGATE RECOVERIES	QC LIMITS		
TERPHENYL-d14	(19 - 145 %)	105	%
NITROBENZENE-d5	(18 - 130 %)	83	%
PHENOL-d6	(10 - 125 %)	96	%
2-FLUOROBIPHENYL	(23 - 130 %)	84	%
2-FLUOROPHENOL	(13 - 130 %)	85	%
2,4,6-TRIBROMOPHENOL	(23 - 131 %)	100	%

COLUMBIA ANALYTICAL SERVICES

Reported: 06/17/03

URS Corporation
Project Reference: WINN DEVELOPMENT 11172966.20000
Client Sample ID : SB-1

Date Sampled : 05/29/03 Order #: 645052 Sample Matrix: SOIL/SEDIMENT
Date Received: 05/29/03 Submission #: R2317016

ANALYTE	METHOD	PQL	RESULT	DRY WEIGHT UNITS	DATE ANALYZED	TIME ANALYZED	DILUTION
PERCENT SOLIDS	160.0	1.0	83.2	%	06/09/03	09:45	1.0

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B TCL/TANK
Reported: 06/17/03

URS Corporation
Project Reference: WINN DEVELOPMENT 11172966.20000
Client Sample ID : SB-1

Date Sampled : 05/29/03 **Order #:** 645052 **Sample Matrix:** SOIL/SEDIMENT
Date Received: 05/29/03 **Submission #:** R2317016 **Percent Solid:** 83.2

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 06/05/03			
ANALYTICAL DILUTION: 1.00			Dry Weight
ACETONE	20	24 U	UG/KG
BENZENE	5.0	6.0 U	UG/KG
BROMODICHLOROMETHANE	5.0	6.0 U	UG/KG
BROMOFORM	5.0	6.0 U	UG/KG
BROMOMETHANE	5.0	6.0 U	UG/KG
2-BUTANONE (MEK)	10	12 U	UG/KG
SEC-BUTYLBENZENE	5.0	6.0 U	UG/KG
N-BUTYLBENZENE	5.0	6.0 U	UG/KG
TERT-BUTYLBENZENE	5.0	6.0 U	UG/KG
CARBON DISULFIDE	10	12 U	UG/KG
CARBON TETRACHLORIDE	5.0	6.0 U	UG/KG
CHLOROBENZENE	5.0	6.0 U	UG/KG
CHLOROETHANE	5.0	6.0 U	UG/KG
CHLOROFORM	5.0	6.0 U	UG/KG
CHLOROMETHANE	5.0	6.0 U	UG/KG
DIBROMOCHLOROMETHANE	5.0	6.0 U	UG/KG
1,1-DICHLOROETHANE	5.0	6.0 U	UG/KG
1,2-DICHLOROETHANE	5.0	6.0 U	UG/KG
1,1-DICHLOROETHENE	5.0	6.0 U	UG/KG
CIS-1,2-DICHLOROETHENE	5.0	6.0 U	UG/KG
TRANS-1,2-DICHLOROETHENE	5.0	6.0 U	UG/KG
1,2-DICHLOROPROPANE	5.0	6.0 U	UG/KG
CIS-1,3-DICHLOROPROPENE	5.0	6.0 U	UG/KG
TRANS-1,3-DICHLOROPROPENE	5.0	6.0 U	UG/KG
METHYL-TERT-BUTYL-ETHER	5.0	6.0 U	UG/KG
ETHYLBENZENE	5.0	6.0 U	UG/KG
2-HEXANONE	10	12 U	UG/KG
ISOPROPYL BENZENE	5.0	6.0 U	UG/KG
P-ISOPROPYLTOLUENE	5.0	6.0 U	UG/KG
METHYLENE CHLORIDE	5.0	6.0 U	UG/KG
NAPHTHALENE	5.0	6.0 U	UG/KG
4-METHYL-2-PENTANONE (MIBK)	10	12 U	UG/KG
N-PROPYLBENZENE	5.0	6.0 U	UG/KG
STYRENE	5.0	6.0 U	UG/KG
1,1,2,2-TETRACHLOROETHANE	5.0	6.0 U	UG/KG
TETRACHLOROETHENE	5.0	6.0 U	UG/KG
TOLUENE	5.0	6.0 U	UG/KG
1,1,1-TRICHLOROETHANE	5.0	6.0 U	UG/KG
1,1,2-TRICHLOROETHANE	5.0	6.0 U	UG/KG
TRICHLOROETHENE	5.0	6.0 U	UG/KG
1,3,5-TRIMETHYLBENZENE	5.0	6.0 U	UG/KG
1,2,4-TRIMETHYLBENZENE	5.0	6.0 U	UG/KG
VINYL CHLORIDE	5.0	6.0 U	UG/KG
O-XYLENE	5.0	6.0 U	UG/KG

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B TCL/TANK
Reported: 06/17/03

URS Corporation
Project Reference: WINN DEVELOPMENT 11172966.20000
Client Sample ID : SB-1

Date Sampled : 05/29/03 **Order #:** 645052 **Sample Matrix:** SOIL/SEDIMENT
Date Received: 05/29/03 **Submission #:** R2317016 **Percent Solid:** 83.2

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 06/05/03			
ANALYTICAL DILUTION: 1.00			Dry Weight
M+P-XYLENE	5.0	6.0 U	UG/KG

SURROGATE RECOVERIES	QC LIMITS		
4-BROMOFLUOROBENZENE	(68 - 128 %)	91	%
TOLUENE-D8	(83 - 117 %)	102	%
DIBROMOFLUOROMETHANE	(72 - 123 %)	97	%

COLUMBIA ANALYTICAL SERVICES

EXTRACTABLE ORGANICS
METHOD 8270C SEMIVOLATILES
Reported: 06/17/03

URS Corporation
Project Reference: WINN DEVELOPMENT 11172966.20000
Client Sample ID : SB-1

Date Sampled : 05/29/03 **Order #:** 645052 **Sample Matrix:** SOIL/SEDIMENT
Date Received: 05/29/03 **Submission #:** R2317016 **Percent Solid:** 83.2

ANALYTE	PQL	RESULT	UNITS
DATE EXTRACTED : 06/02/03			
DATE ANALYZED : 06/05/03			
ANALYTICAL DILUTION: 1.00			Dry Weight
ACENAPHTHENE	330	400 U	UG/KG
ACENAPHTHYLENE	330	400 U	UG/KG
ANTHRACENE	330	400 U	UG/KG
BENZO(A)ANTHRACENE	330	400 U	UG/KG
BENZO(A)PYRENE	330	400 U	UG/KG
BENZO(B)FLUORANTHENE	330	400 U	UG/KG
BENZO(G,H,I)PERYLENE	330	400 U	UG/KG
BENZO(K)FLUORANTHENE	330	400 U	UG/KG
BENZYL ALCOHOL	330	400 U	UG/KG
BUTYL BENZYL PHTHALATE	330	400 U	UG/KG
DI-N-BUTYLPHTHALATE	330	400 U	UG/KG
CARBAZOLE	330	400 U	UG/KG
INDENO(1,2,3-CD)PYRENE	330	400 U	UG/KG
4-CHLOROANILINE	330	400 U	UG/KG
BIS(-2-CHLOROETHOXY)METHANE	330	400 U	UG/KG
BIS(2-CHLOROETHYL)ETHER	330	400 U	UG/KG
2-CHLORONAPHTHALENE	330	400 U	UG/KG
2-CHLOROPHENOL	330	400 U	UG/KG
2,2'-OXYBIS(1-CHLOROPROPANE)	330	400 U	UG/KG
CHRYSENE	330	400 U	UG/KG
DIBENZO(A,H)ANTHRACENE	330	400 U	UG/KG
DIBENZOFURAN	330	400 U	UG/KG
1,3-DICHLOROBENZENE	330	400 U	UG/KG
1,2-DICHLOROBENZENE	330	400 U	UG/KG
1,4-DICHLOROBENZENE	330	400 U	UG/KG
3,3'-DICHLOROBENZIDINE	330	400 U	UG/KG
2,4-DICHLOROPHENOL	330	400 U	UG/KG
DIETHYLPHTHALATE	330	400 U	UG/KG
DIMETHYL PHTHALATE	330	400 U	UG/KG
2,4-DIMETHYLPHENOL	330	400 U	UG/KG
2,4-DINITROPHENOL	1700	2000 U	UG/KG
2,4-DINITROTOLUENE	330	400 U	UG/KG
2,6-DINITROTOLUENE	330	400 U	UG/KG
BIS(2-ETHYLHEXYL)PHTHALATE	330	400 U	UG/KG
FLUORANTHENE	330	400 U	UG/KG
FLUORENE	330	400 U	UG/KG
HEXACHLOROBENZENE	330	400 U	UG/KG
HEXACHLOROBUTADIENE	330	400 U	UG/KG
HEXACHLOROCYCLOPENTADIENE	330	400 U	UG/KG
HEXACHLOROETHANE	330	400 U	UG/KG
ISOPHORONE	330	400 U	UG/KG
2-METHYLNAPHTHALENE	330	400 U	UG/KG
4,6-DINITRO-2-METHYLPHENOL	1700	2000 U	UG/KG

COLUMBIA ANALYTICAL SERVICES

EXTRACTABLE ORGANICS
METHOD 8270C SEMIVOLATILES
Reported: 06/17/03

URS Corporation
Project Reference: WINN DEVELOPMENT 11172966.20000
Client Sample ID : SB-1

Date Sampled : 05/29/03 **Order #:** 645052 **Sample Matrix:** SOIL/SEDIMENT
Date Received: 05/29/03 **Submission #:** R2317016 **Percent Solid:** 83.2

ANALYTE	PQL	RESULT	UNITS
DATE EXTRACTED : 06/02/03			
DATE ANALYZED : 06/05/03			
ANALYTICAL DILUTION: 1.00			Dry Weight
4-CHLORO-3-METHYLPHENOL	330	400 U	UG/KG
2-METHYLPHENOL	330	400 U	UG/KG
3+4-METHYLPHENOL	330	400 U	UG/KG
NAPHTHALENE	330	400 U	UG/KG
2-NITROANILINE	1700	2000 U	UG/KG
3-NITROANILINE	1700	2000 U	UG/KG
4-NITROANILINE	1700	2000 U	UG/KG
NITROBENZENE	330	400 U	UG/KG
2-NITROPHENOL	330	400 U	UG/KG
4-NITROPHENOL	1700	2000 U	UG/KG
N-NITROSODIMETHYLAMINE	330	400 U	UG/KG
N-NITROSODIPHENYLAMINE	330	400 U	UG/KG
DI-N-OCTYL PHTHALATE	330	400 U	UG/KG
PENTACHLOROPHENOL	1700	2000 U	UG/KG
PHENANTHRENE	330	400 U	UG/KG
PHENOL	330	400 U	UG/KG
4-BROMOPHENYL-PHENYLETHER	330	400 U	UG/KG
4-CHLOROPHENYL-PHENYLETHER	330	400 U	UG/KG
N-NITROSO-DI-N-PROPYLAMINE	330	400 U	UG/KG
PYRENE	330	400 U	UG/KG
1,2,4-TRICHLOROBENZENE	330	400 U	UG/KG
2,4,6-TRICHLOROPHENOL	330	400 U	UG/KG
2,4,5-TRICHLOROPHENOL	330	400 U	UG/KG

SURROGATE RECOVERIES	QC LIMITS		
TERPHENYL-d14	(19 - 145 %)	105	%
NITROBENZENE-d5	(18 - 130 %)	75	%
PHENOL-d6	(10 - 125 %)	87	%
2-FLUOROBIPHENYL	(23 - 130 %)	73	%
2-FLUOROPHENOL	(13 - 130 %)	76	%
2,4,6-TRIBROMOPHENOL	(23 - 131 %)	89	%

COLUMBIA ANALYTICAL SERVICES

Reported: 06/17/03

URS Corporation
Project Reference: WINN DEVELOPMENT 11172966.20000
Client Sample ID : SB-2

Date Sampled : 05/29/03 Order #: 645053 Sample Matrix: SOIL/SEDIMENT
Date Received: 05/29/03 Submission #: R2317016

ANALYTE	METHOD	PQL	RESULT	DRY WEIGHT UNITS	DATE ANALYZED	TIME ANALYZED	DILUTION
PERCENT SOLIDS	160.0	1.0	92.5	%	06/09/03	09:45	1.0

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B TCL/TANK
Reported: 06/17/03

URS Corporation
Project Reference: WINN DEVELOPMENT 11172966.20000
Client Sample ID : SB-2

Date Sampled : 05/29/03 Order #: 645053 Sample Matrix: SOIL/SEDIMENT
Date Received: 05/29/03 Submission #: R2317016 Percent Solid: 92.5

DATE ANALYZED : 06/05/03
ANALYTICAL DILUTION: 2.00

ANALYTE	PQL	RESULT	UNITS
			Dry Weight
ACETONE	20	43 U	UG/KG
BENZENE	5.0	11 U	UG/KG
BROMODICHLOROMETHANE	5.0	11 U	UG/KG
BROMOFORM	5.0	11 U	UG/KG
BROMOMETHANE	5.0	11 U	UG/KG
2-BUTANONE (MEK)	10	22 U	UG/KG
SEC-BUTYLBENZENE	5.0	38	UG/KG
N-BUTYLBENZENE	5.0	43	UG/KG
TERT-BUTYLBENZENE	5.0	11 U	UG/KG
CARBON DISULFIDE	10	22 U	UG/KG
CARBON TETRACHLORIDE	5.0	11 U	UG/KG
CHLOROBENZENE	5.0	11 U	UG/KG
CHLOROETHANE	5.0	11 U	UG/KG
CHLOROFORM	5.0	11 U	UG/KG
CHLOROMETHANE	5.0	11 U	UG/KG
DIBROMOCHLOROMETHANE	5.0	11 U	UG/KG
1,1-DICHLOROETHANE	5.0	11 U	UG/KG
1,2-DICHLOROETHANE	5.0	11 U	UG/KG
1,1-DICHLOROETHENE	5.0	11 U	UG/KG
CIS-1,2-DICHLOROETHENE	5.0	11 U	UG/KG
TRANS-1,2-DICHLOROETHENE	5.0	11 U	UG/KG
1,2-DICHLOROPROPANE	5.0	11 U	UG/KG
CIS-1,3-DICHLOROPROPENE	5.0	11 U	UG/KG
TRANS-1,3-DICHLOROPROPENE	5.0	11 U	UG/KG
METHYL-TERT-BUTYL-ETHER	5.0	11 U	UG/KG
ETHYLBENZENE	5.0	11 U	UG/KG
2-HEXANONE	10	22 U	UG/KG
ISOPROPYL BENZENE	5.0	11 U	UG/KG
P-ISOPROPYLTOLUENE	5.0	11 U	UG/KG
METHYLENE CHLORIDE	5.0	11 U	UG/KG
NAPHTHALENE	5.0	11 U	UG/KG
4-METHYL-2-PENTANONE (MIBK)	10	22 U	UG/KG
N-PROPYLBENZENE	5.0	11 U	UG/KG
STYRENE	5.0	11 U	UG/KG
1,1,2,2-TETRACHLOROETHANE	5.0	11 U	UG/KG
TETRACHLOROETHENE	5.0	11 U	UG/KG
TOLUENE	5.0	11 U	UG/KG
1,1,1-TRICHLOROETHANE	5.0	11 U	UG/KG
1,1,2-TRICHLOROETHANE	5.0	11 U	UG/KG
TRICHLOROETHENE	5.0	11 U	UG/KG
1,3,5-TRIMETHYLBENZENE	5.0	11 U	UG/KG
1,2,4-TRIMETHYLBENZENE	5.0	28	UG/KG
VINYL CHLORIDE	5.0	11 U	UG/KG
O-XYLENE	5.0	11 U	UG/KG

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B TCL/TANK
Reported: 06/17/03

URS Corporation
Project Reference: WINN DEVELOPMENT 11172966.20000
Client Sample ID : SB-2

ate Sampled : 05/29/03 **Order #:** 645053 **Sample Matrix:** SOIL/SEDIMENT
Date Received: 05/29/03 **Submission #:** R2317016 **Percent Solid:** 92.5

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 06/05/03			
ANALYTICAL DILUTION: 2.00			Dry Weight
M+P-XYLENE	5.0	11 U	UG/KG

SURROGATE RECOVERIES	QC LIMITS		
4-BROMOFLUOROBENZENE	(68 - 128 %)	77	%
OLUENE-D8	(83 - 117 %)	111	%
IBROMOFLUOROMETHANE	(72 - 123 %)	101	%

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B TCL/TANK
Reported: 06/17/03

URS Corporation
Project Reference: WINN DEVELOPMENT 11172966.20000
Client Sample ID : SB-2

ate Sampled : 05/29/03 **Order #:** 645053 **Sample Matrix:** SOIL/SEDIMENT
Date Received: 05/29/03 **Submission #:** R2317016 **Percent Solid:** 92.5

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 06/06/03			
ANALYTICAL DILUTION: 2.00			Dry Weight
ACETONE	20	43 U	UG/KG
BENZENE	5.0	11 U	UG/KG
ROMODICHLOROMETHANE	5.0	11 U	UG/KG
BROMOFORM	5.0	11 U	UG/KG
BROMOMETHANE	5.0	11 U	UG/KG
-BUTANONE (MEK)	10	22 U	UG/KG
EC-BUTYLBENZENE	5.0	35	UG/KG
N-BUTYLBENZENE	5.0	32	UG/KG
ERT-BUTYLBENZENE	5.0	11 U	UG/KG
ARBON DISULFIDE	10	22 U	UG/KG
CARBON TETRACHLORIDE	5.0	11 U	UG/KG
CHLOROBENZENE	5.0	11 U	UG/KG
HLOROETHANE	5.0	11 U	UG/KG
CHLOROFORM	5.0	11 U	UG/KG
CHLOROMETHANE	5.0	11 U	UG/KG
IBROMOCHLOROMETHANE	5.0	11 U	UG/KG
,1-DICHLOROETHANE	5.0	11 U	UG/KG
1,2-DICHLOROETHANE	5.0	11 U	UG/KG
,1-DICHLOROETHENE	5.0	11 U	UG/KG
IS-1,2-DICHLOROETHENE	5.0	11 U	UG/KG
TRANS-1,2-DICHLOROETHENE	5.0	11 U	UG/KG
,2-DICHLOROPROPANE	5.0	11 U	UG/KG
IS-1,3-DICHLOROPROPENE	5.0	11 U	UG/KG
TRANS-1,3-DICHLOROPROPENE	5.0	11 U	UG/KG
METHYL-TERT-BUTYL-ETHER	5.0	11 U	UG/KG
THYLBENZENE	5.0	11 U	UG/KG
-HEXANONE	10	22 U	UG/KG
ISOPROPYL BENZENE	5.0	11 U	UG/KG
-ISOPROPYLTOLUENE	5.0	11 U	UG/KG
METHYLENE CHLORIDE	5.0	11 U	UG/KG
NAPHTHALENE	5.0	21	UG/KG
4-METHYL-2-PENTANONE (MIBK)	10	22 U	UG/KG
N-PROPYLBENZENE	5.0	11 U	UG/KG
STYRENE	5.0	11 U	UG/KG
1,1,2,2-TETRACHLOROETHANE	5.0	11 U	UG/KG
ETRACHLOROETHENE	5.0	11 U	UG/KG
TOLUENE	5.0	11 U	UG/KG
1,1,1-TRICHLOROETHANE	5.0	11 U	UG/KG
1,1,2-TRICHLOROETHANE	5.0	11 U	UG/KG
TRICHLOROETHENE	5.0	11 U	UG/KG
1,3,5-TRIMETHYLBENZENE	5.0	11 U	UG/KG
1,2,4-TRIMETHYLBENZENE	5.0	26	UG/KG
VINYL CHLORIDE	5.0	11 U	UG/KG
O-XYLENE	5.0	11 U	UG/KG

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B TCL/TANK
Reported: 06/17/03

URS Corporation
Project Reference: WINN DEVELOPMENT 11172966.20000
Client Sample ID : SB-2

ate Sampled : 05/29/03 Order #: 645053 Sample Matrix: SOIL/SEDIMENT
Date Received: 05/29/03 Submission #: R2317016 Percent Solid: 92.5

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 06/06/03			
ANALYTICAL DILUTION: 2.00			Dry Weight
M+P-XYLENE	5.0	11 U	UG/KG

SURROGATE RECOVERIES	QC LIMITS		
4-BROMOFLUOROBENZENE	(68 - 128 %)	76	%
OLUENE-D8	(83 - 117 %)	108	%
IBROMOFLUOROMETHANE	(72 - 123 %)	101	%

COLUMBIA ANALYTICAL SERVICES

EXTRACTABLE ORGANICS
METHOD 8270C SEMIVOLATILES
Reported: 06/17/03

URS Corporation
Project Reference: WINN DEVELOPMENT 11172966.20000
Client Sample ID : SB-2

Date Sampled : 05/29/03 **Order #:** 645053 **Sample Matrix:** SOIL/SEDIMENT
Date Received: 05/29/03 **Submission #:** R2317016 **Percent Solid:** 92.5

ANALYTE	PQL	RESULT	UNITS
DATE EXTRACTED : 06/02/03			
DATE ANALYZED : 06/06/03			
ANALYTICAL DILUTION: 10.00			Dry Weight
ACENAPHTHENE	330	3600 U	UG/KG
ACENAPHTHYLENE	330	3600 U	UG/KG
ANTHRACENE	330	3600 U	UG/KG
BENZO(A)ANTHRACENE	330	3600 U	UG/KG
BENZO(A)PYRENE	330	3600 U	UG/KG
BENZO(B)FLUORANTHENE	330	3600 U	UG/KG
BENZO(G,H,I)PERYLENE	330	3600 U	UG/KG
BENZO(K)FLUORANTHENE	330	3600 U	UG/KG
BENZYL ALCOHOL	330	3600 U	UG/KG
BUTYL BENZYL PHTHALATE	330	3600 U	UG/KG
DI-N-BUTYLPHTHALATE	330	3600 U	UG/KG
CARBAZOLE	330	3600 U	UG/KG
INDENO(1,2,3-CD)PYRENE	330	3600 U	UG/KG
4-CHLOROANILINE	330	3600 U	UG/KG
BIS(-2-CHLOROETHOXY)METHANE	330	3600 U	UG/KG
BIS(2-CHLOROETHYL)ETHER	330	3600 U	UG/KG
2-CHLORONAPHTHALENE	330	3600 U	UG/KG
2-CHLOROPHENOL	330	3600 U	UG/KG
2,2'-OXYBIS(1-CHLOROPROPANE)	330	3600 U	UG/KG
CHRYSENE	330	3600 U	UG/KG
DIBENZO(A,H)ANTHRACENE	330	3600 U	UG/KG
DIBENZOFURAN	330	3600 U	UG/KG
1,3-DICHLOROBENZENE	330	3600 U	UG/KG
1,2-DICHLOROBENZENE	330	3600 U	UG/KG
1,4-DICHLOROBENZENE	330	3600 U	UG/KG
3,3'-DICHLOROBENZIDINE	330	3600 U	UG/KG
2,4-DICHLOROPHENOL	330	3600 U	UG/KG
DIETHYLPHTHALATE	330	3600 U	UG/KG
DIMETHYL PHTHALATE	330	3600 U	UG/KG
2,4-DIMETHYLPHENOL	330	3600 U	UG/KG
2,4-DINITROPHENOL	1700	18000 U	UG/KG
2,4-DINITROTOLUENE	330	3600 U	UG/KG
2,6-DINITROTOLUENE	330	3600 U	UG/KG
BIS(2-ETHYLHEXYL)PHTHALATE	330	3600 U	UG/KG
FLUORANTHENE	330	3600 U	UG/KG
FLUORENE	330	3600 U	UG/KG
HEXACHLOROBENZENE	330	3600 U	UG/KG
HEXACHLOROBUTADIENE	330	3600 U	UG/KG
HEXACHLOROCYCLOPENTADIENE	330	3600 U	UG/KG
HEXACHLOROETHANE	330	3600 U	UG/KG
ISOPHORONE	330	3600 U	UG/KG
2-METHYLNAPHTHALENE	330	3600 U	UG/KG
4,6-DINITRO-2-METHYLPHENOL	1700	18000 U	UG/KG

COLUMBIA ANALYTICAL SERVICES

EXTRACTABLE ORGANICS
METHOD 8270C SEMIVOLATILES
Reported: 06/17/03

URS Corporation
Project Reference: WINN DEVELOPMENT 11172966.20000
Client Sample ID : SB-2

Date Sampled : 05/29/03 Order #: 645053 Sample Matrix: SOIL/SEDIMENT
Date Received: 05/29/03 Submission #: R2317016 Percent Solid: 92.5

ANALYTE	PQL	RESULT	UNITS
DATE EXTRACTED : 06/02/03			
DATE ANALYZED : 06/06/03			
ANALYTICAL DILUTION: 10.00			Dry Weight
4-CHLORO-3-METHYLPHENOL	330	3600 U	UG/KG
2-METHYLPHENOL	330	3600 U	UG/KG
3+4-METHYLPHENOL	330	3600 U	UG/KG
NAPHTHALENE	330	3600 U	UG/KG
2-NITROANILINE	1700	18000 U	UG/KG
3-NITROANILINE	1700	18000 U	UG/KG
4-NITROANILINE	1700	18000 U	UG/KG
NITROBENZENE	330	3600 U	UG/KG
2-NITROPHENOL	330	3600 U	UG/KG
4-NITROPHENOL	1700	18000 U	UG/KG
N-NITROSODIMETHYLAMINE	330	3600 U	UG/KG
N-NITROSODIPHENYLAMINE	330	3600 U	UG/KG
DI-N-OCTYL PHTHALATE	330	3600 U	UG/KG
PENTACHLOROPHENOL	1700	18000 U	UG/KG
PHENANTHRENE	330	4300	UG/KG
PHENOL	330	3600 U	UG/KG
4-BROMOPHENYL-PHENYLETHER	330	3600 U	UG/KG
4-CHLOROPHENYL-PHENYLETHER	330	3600 U	UG/KG
N-NITROSO-DI-N-PROPYLAMINE	330	3600 U	UG/KG
PYRENE	330	3600 U	UG/KG
1,2,4-TRICHLOROBENZENE	330	3600 U	UG/KG
2,4,6-TRICHLOROPHENOL	330	3600 U	UG/KG
2,4,5-TRICHLOROPHENOL	330	3600 U	UG/KG

SURROGATE RECOVERIES	QC LIMITS		
TERPHENYL-d14	(19 - 145 %)	110	%
NITROBENZENE-d5	(18 - 130 %)	84	%
PHENOL-d6	(10 - 125 %)	88	%
2-FLUOROBIPHENYL	(23 - 130 %)	103	%
2-FLUOROPHENOL	(13 - 130 %)	74	%
2,4,6-TRIBROMOPHENOL	(23 - 131 %)	53	%

COLUMBIA ANALYTICAL SERVICES

EXTRACTABLE ORGANICS
METHOD 8270C SEMIVOLATILES
Reported: 06/17/03

URS Corporation
Project Reference: WINN DEVELOPMENT 11172966.20000
Client Sample ID : SB-2W

Date Sampled : 05/29/03 Order #: 645056 Sample Matrix: WATER
Date Received: 05/29/03 Submission #: R2317016 Analytical Run 91806

ANALYTE	PQL	RESULT	UNITS
DATE EXTRACTED : 06/02/03			
DATE ANALYZED : 06/10/03			
ANALYTICAL DILUTION: 89.30			
ACENAPHTHENE	10	890 U	UG/L
ACENAPHTHYLENE	10	890 U	UG/L
ANTHRACENE	10	890 U	UG/L
BENZO(A)ANTHRACENE	10	890 U	UG/L
BENZO(A)PYRENE	10	890 U	UG/L
BENZO(B)FLUORANTHENE	10	890 U	UG/L
BENZO(G,H,I)PERYLENE	10	890 U	UG/L
BENZO(K)FLUORANTHENE	10	890 U	UG/L
BENZYL ALCOHOL	10	890 U	UG/L
BUTYL BENZYL PHTHALATE	10	890 U	UG/L
DI-N-BUTYLPHTHALATE	10	890 U	UG/L
CARBAZOLE	10	890 U	UG/L
INDENO(1,2,3-CD)PYRENE	10	890 U	UG/L
4-CHLOROANILINE	10	890 U	UG/L
BIS(-2-CHLOROETHOXY)METHANE	10	890 U	UG/L
BIS(2-CHLOROETHYL)ETHER	10	890 U	UG/L
2-CHLORONAPHTHALENE	10	890 U	UG/L
2-CHLOROPHENOL	10	890 U	UG/L
2,2'-OXYBIS(1-CHLOROPROPANE)	10	890 U	UG/L
CHRYSENE	10	890 U	UG/L
DIBENZO(A,H)ANTHRACENE	10	890 U	UG/L
DIBENZOFURAN	10	890 U	UG/L
1,3-DICHLOROBENZENE	10	890 U	UG/L
1,2-DICHLOROBENZENE	10	890 U	UG/L
1,4-DICHLOROBENZENE	10	890 U	UG/L
3,3'-DICHLOROBENZIDINE	10	890 U	UG/L
2,4-DICHLOROPHENOL	10	890 U	UG/L
DIETHYLPHTHALATE	10	890 U	UG/L
DIMETHYL PHTHALATE	10	890 U	UG/L
2,4-DIMETHYLPHENOL	10	890 U	UG/L
2,4-DINITROPHENOL	50	4500 U	UG/L
2,4-DINITROTOLUENE	10	890 U	UG/L
2,6-DINITROTOLUENE	10	890 U	UG/L
BIS(2-ETHYLHEXYL)PHTHALATE	10	890 U	UG/L
FLUORANTHENE	10	890 U	UG/L
FLUORENE	10	890 U	UG/L
HEXACHLOROBENZENE	10	890 U	UG/L
HEXACHLOROBUTADIENE	10	890 U	UG/L
HEXACHLOROCYCLOPENTADIENE	10	890 U	UG/L
HEXACHLOROETHANE	10	890 U	UG/L
ISOPHORONE	10	890 U	UG/L
2-METHYLNAPHTHALENE	10	890 U	UG/L
4,6-DINITRO-2-METHYLPHENOL	50	4500 U	UG/L

COLUMBIA ANALYTICAL SERVICES

EXTRACTABLE ORGANICS
METHOD 8270C SEMIVOLATILES
Reported: 06/17/03

URS Corporation
Project Reference: WINN DEVELOPMENT 11172966.20000
Client Sample ID : SB-2W

ate Sampled : 05/29/03 Order #: 645056 Sample Matrix: WATER
Date Received: 05/29/03 Submission #: R2317016 Analytical Run 91806

ANALYTE	PQL	RESULT	UNITS
DATE EXTRACTED : 06/02/03			
DATE ANALYZED : 06/10/03			
ANALYTICAL DILUTION: 89.30			
4-CHLORO-3-METHYLPHENOL	10	890 U	UG/L
-METHYLPHENOL	10	890 U	UG/L
3+4-METHYLPHENOL	10	890 U	UG/L
NAPHTHALENE	10	890 U	UG/L
-NITROANILINE	50	4500 U	UG/L
-NITROANILINE	50	4500 U	UG/L
4-NITROANILINE	50	4500 U	UG/L
NITROBENZENE	10	890 U	UG/L
-NITROPHENOL	10	890 U	UG/L
4-NITROPHENOL	50	4500 U	UG/L
N-NITROSODIMETHYLAMINE	10	890 U	UG/L
N-NITROSODIPHENYLAMINE	10	890 U	UG/L
DI-N-OCTYL PHTHALATE	10	890 U	UG/L
PENTACHLOROPHENOL	50	4500 U	UG/L
PHENANTHRENE	10	1900	UG/L
PHENOL	10	890 U	UG/L
4-BROMOPHENYL-PHENYLETHER	10	890 U	UG/L
-CHLOROPHENYL-PHENYLETHER	10	890 U	UG/L
N-NITROSO-DI-N-PROPYLAMINE	10	890 U	UG/L
PYRENE	10	890 U	UG/L
1,2,4-TRICHLOROBENZENE	10	890 U	UG/L
2,4,6-TRICHLOROPHENOL	10	890 U	UG/L
2,4,5-TRICHLOROPHENOL	10	890 U	UG/L

SURROGATE RECOVERIES	QC LIMITS		
TERPHENYL-d14	(23 - 139 %)	D	%
NITROBENZENE-d5	(22 - 130 %)	D	%
PHENOL-d6	(10 - 130 %)	D	%
2-FLUOROBIPHENYL	(27 - 130 %)	D	%
2-FLUOROPHENOL	(10 - 130 %)	D	%
2,4,6-TRIBROMOPHENOL	(10 - 149 %)	D	%

VOLATILE ORGANICS
METHOD: 8260B TCL/TANK

LABORATORY CONTROL SAMPLE SUMMARY

REFERENCE ORDER #: 648614 ANALYTICAL RUN # : 91964

ANALYTE	TRUE VALUE	% RECOVERY	QC LIMITS
DATE ANALYZED : 5/28/2003			
ANALYTICAL DILUTION: 1.0			
ACETONE	20.0	104	50 - 150
BENZENE	20.0	98	70 - 130
BROMODICHLOROMETHANE	20.0	96	70 - 130
BROMOFORM	20.0	100	70 - 130
BROMOMETHANE	20.0	96	50 - 150
2-BUTANONE (MEK)	20.0	88	50 - 150
SEC-BUTYLBENZENE	20.0	94	70 - 130
N-BUTYLBENZENE	20.0	91	70 - 130
TERT-BUTYLBENZENE	20.0	94	70 - 130
CARBON DISULFIDE	20.0	91	70 - 130
CARBON TETRACHLORIDE	20.0	89	70 - 130
CHLOROBENZENE	20.0	98	70 - 130
CHLOROETHANE	20.0	91	70 - 130
CHLOROFORM	20.0	94	70 - 130
CHLOROMETHANE	20.0	96	70 - 130
DIBROMOCHLOROMETHANE	20.0	102	70 - 130
1,1-DICHLOROETHANE	20.0	94	70 - 130
1,2-DICHLOROETHANE	20.0	100	70 - 130
1,1-DICHLOROETHENE	20.0	86	70 - 130
CIS-1,2-DICHLOROETHENE	20.0	98	70 - 130
TRANS-1,2-DICHLOROETHENE	20.0	75	70 - 130
1,2-DICHLOROPROPANE	20.0	100	70 - 130
CIS-1,3-DICHLOROPROPENE	20.0	104	70 - 130
TRANS-1,3-DICHLOROPROPENE	20.0	101	70 - 130
ETHYL-TERT-BUTYL-ETHER	20.0	86	70 - 130
ETHYLBENZENE	20.0	94	70 - 130
2-HEXANONE	20.0	87	70 - 130
ISOPROPYL BENZENE	20.0	90	70 - 130
P-ISOPROPYLTOLUENE	20.0	91	70 - 130
METHYLENE CHLORIDE	20.0	96	70 - 130
NAPHTHALENE	20.0	123	50 - 150
4-METHYL-2-PENTANONE (MIBK)	20.0	87	70 - 130
N-PROPYLBENZENE	20.0	97	70 - 130
STYRENE	20.0	94	70 - 130
1,1,2,2-TETRACHLOROETHANE	20.0	106	70 - 130
TETRACHLOROETHENE	20.0	91	70 - 130
TOLUENE	20.0	100	70 - 130
1,1,1-TRICHLOROETHANE	20.0	85	70 - 130
1,1,2-TRICHLOROETHANE	20.0	107	70 - 130
TRICHLOROETHENE	20.0	94	70 - 130
1,3,5-TRIMETHYLBENZENE	20.0	100	70 - 130

)' 'JMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD: 8260B TCL/TANK

: BORATORY CONTROL SAMPLE SUMMARY

REFERENCE ORDER #: 648614 ANALYTICAL RUN # : 91964

ANALYTE	TRUE VALUE	% RECOVERY	QC LIMITS
) TE ANALYZED : 5/28/2003			
ALYTICAL DILUTION: 1.0			
,2,4-TRIMETHYLBENZENE	20.0	95	70 - 130
INYL CHLORIDE	20.0	100	70 - 130
O-XYLENE	20.0	88	70 - 130
"+P-XYLENE	40.0	94	70 - 130

)' JMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD: 8260B TCL/TANK

: BORATORY CONTROL SAMPLE SUMMARY

REFERENCE ORDER #: 648615 ANALYTICAL RUN # : 91964

ANALYTE	TRUE VALUE	% RECOVERY	QC LIMITS
) TE ANALYZED : 6/ 5/2003			
ALYTICAL DILUTION: 1.0			
CETONE	20.0	110	50 - 150
ENZENE	20.0	74	70 - 130
BROMODICHLOROMETHANE	20.0	74	70 - 130
ROMOFORM	20.0	78	70 - 130
ROMOMETHANE	20.0	86	50 - 150
2-BUTANONE (MEK)	20.0	86	50 - 150
SEC-BUTYLBENZENE	20.0	75	70 - 130
-BUTYLBENZENE	20.0	76	70 - 130
ERT-BUTYLBENZENE	20.0	80	70 - 130
CARBON DISULFIDE	20.0	91	70 - 130
ARBON TETRACHLORIDE	20.0	72	70 - 130
HLOROBENZENE	20.0	80	70 - 130
CHLOROETHANE	20.0	71	70 - 130
HLOROFORM	20.0	78	70 - 130
HLOROMETHANE	20.0	74	70 - 130
DIBROMOCHLOROMETHANE	20.0	81	70 - 130
1,1-DICHLOROETHANE	20.0	80	70 - 130
,2-DICHLOROETHANE	20.0	70	70 - 130
1,1-DICHLOROETHENE	20.0	75	70 - 130
CIS-1,2-DICHLOROETHENE	20.0	77	70 - 130
RANS-1,2-DICHLOROETHENE	20.0	80	70 - 130
,2-DICHLOROPROPANE	20.0	70	70 - 130
CIS-1,3-DICHLOROPROPENE	20.0	79	70 - 130
RANS-1,3-DICHLOROPROPENE	20.0	78	70 - 130
ETHYL-TERT-BUTYL-ETHER	20.0	78	70 - 130
ETHYLBENZENE	20.0	80	70 - 130
2-HEXANONE	20.0	92	70 - 130
SOPROPYL BENZENE	20.0	75	70 - 130
P-ISOPROPYLTOLUENE	20.0	81	70 - 130
METHYLENE CHLORIDE	20.0	81	70 - 130
APHTHALENE	20.0	90	50 - 150
-METHYL-2-PENTANONE (MIBK)	20.0	85	70 - 130
N-PROPYLBENZENE	20.0	83	70 - 130
TYRENE	20.0	77	70 - 130
,1,2,2-TETRACHLOROETHANE	20.0	79	70 - 130
TETRACHLOROETHENE	20.0	86	70 - 130
TOLUENE	20.0	85	70 - 130
,1,1-TRICHLOROETHANE	20.0	71	70 - 130
1,1,2-TRICHLOROETHANE	20.0	82	70 - 130
TRICHLOROETHENE	20.0	77	70 - 130
,3,5-TRIMETHYLBENZENE	20.0	84	70 - 130

UMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD: 8260B TCL/TANK

BORATORY CONTROL SAMPLE SUMMARY

REFERENCE ORDER #: 648615 ANALYTICAL RUN # : 91964

ANALYTE	TRUE VALUE	% RECOVERY	QC LIMITS
TE ANALYZED : 6/ 5/2003			
ALYTICAL DILUTION: 1.0			
,2,4-TRIMETHYLBENZENE	20.0	79	70 - 130
INYL CHLORIDE	20.0	80	70 - 130
O-XYLENE	20.0	77	70 - 130
"+P-XYLENE	40.0	81	70 - 130

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD: 8260B TCL/TANK

LABORATORY CONTROL SAMPLE SUMMARY

REFERENCE ORDER #: 648616 ANALYTICAL RUN # : 91964

ANALYTE	TRUE VALUE	% RECOVERY	QC LIMITS
DATE ANALYZED : 6/ 6/2003			
ANALYTICAL DILUTION: 1.0			
ACETONE	20.0	96	50 - 150
BENZENE	20.0	84	70 - 130
BROMODICHLOROMETHANE	20.0	85	70 - 130
BROMOFORM	20.0	87	70 - 130
BROMOMETHANE	20.0	94	50 - 150
2-BUTANONE (MEK)	20.0	100	50 - 150
SEC-BUTYLBENZENE	20.0	82	70 - 130
N-BUTYLBENZENE	20.0	87	70 - 130
TERT-BUTYLBENZENE	20.0	88	70 - 130
CARBON DISULFIDE	20.0	103	70 - 130
CARBON TETRACHLORIDE	20.0	82	70 - 130
CHLOROBENZENE	20.0	91	70 - 130
CHLOROETHANE	20.0	90	70 - 130
CHLOROFORM	20.0	85	70 - 130
CHLOROMETHANE	20.0	79	70 - 130
DIBROMOCHLOROMETHANE	20.0	90	70 - 130
1,1-DICHLOROETHANE	20.0	81	70 - 130
1,2-DICHLOROETHANE	20.0	80	70 - 130
1,1-DICHLOROETHENE	20.0	82	70 - 130
CIS-1,2-DICHLOROETHENE	20.0	92	70 - 130
TRANS-1,2-DICHLOROETHENE	20.0	80	70 - 130
1,2-DICHLOROPROPANE	20.0	83	70 - 130
CIS-1,3-DICHLOROPROPENE	20.0	87	70 - 130
TRANS-1,3-DICHLOROPROPENE	20.0	91	70 - 130
METHYL-TERT-BUTYL-ETHER	20.0	88	70 - 130
ETHYLBENZENE	20.0	89	70 - 130
2-HEXANONE	20.0	95	70 - 130
ISOPROPYL BENZENE	20.0	83	70 - 130
P-ISOPROPYLTOLUENE	20.0	87	70 - 130
METHYLENE CHLORIDE	20.0	90	70 - 130
NAPHTHALENE	20.0	113	50 - 150
4-METHYL-2-PENTANONE (MIBK)	20.0	86	70 - 130
N-PROPYLBENZENE	20.0	91	70 - 130
STYRENE	20.0	87	70 - 130
1,1,2,2-TETRACHLOROETHANE	20.0	89	70 - 130
TETRACHLOROETHENE	20.0	88	70 - 130
TOLUENE	20.0	90	70 - 130
1,1,1-TRICHLOROETHANE	20.0	83	70 - 130
1,1,2-TRICHLOROETHANE	20.0	92	70 - 130
TRICHLOROETHENE	20.0	87	70 - 130
1,3,5-TRIMETHYLBENZENE	20.0	89	70 - 130

OLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD: 8260B TCL/TANK

LABORATORY CONTROL SAMPLE SUMMARY

F FERENCE ORDER #: 648616 ANALYTICAL RUN # : 91964

ANALYTE	TRUE VALUE	% RECOVERY	QC LIMITS
DATE ANALYZED : 6/ 6/2003			
ALYTICAL DILUTION: 1.0			
1,2,4-TRIMETHYLBENZENE	20.0	87	70 - 130
INYL CHLORIDE	20.0	86	70 - 130
-XYLENE	20.0	87	70 - 130
M+P-XYLENE	40.0	93	70 - 130

VOLATILE ORGANICS
METHOD: 8260B TCL/TANK

LABORATORY CONTROL SAMPLE SUMMARY

REFERENCE ORDER #: 648617 ANALYTICAL RUN # : 91964

ANALYTE	TRUE VALUE	% RECOVERY	QC LIMITS
DATE ANALYZED : 6/12/2003			
ANALYTICAL DILUTION: 1.0			
ACETONE	20.0	108	50 - 150
BENZENE	20.0	91	70 - 130
BROMODICHLOROMETHANE	20.0	89	70 - 130
BROMOFORM	20.0	91	70 - 130
BROMOMETHANE	20.0	86	50 - 150
2-BUTANONE (MEK)	20.0	90	50 - 150
SEC-BUTYLBENZENE	20.0	95	70 - 130
N-BUTYLBENZENE	20.0	87	70 - 130
TERT-BUTYLBENZENE	20.0	94	70 - 130
CARBON DISULFIDE	20.0	91	70 - 130
CARBON TETRACHLORIDE	20.0	87	70 - 130
CHLOROBENZENE	20.0	93	70 - 130
CHLOROETHANE	20.0	83	70 - 130
CHLOROFORM	20.0	87	70 - 130
CHLOROMETHANE	20.0	86	70 - 130
DIBROMOCHLOROMETHANE	20.0	92	70 - 130
1,1-DICHLOROETHANE	20.0	82	70 - 130
1,2-DICHLOROETHANE	20.0	86	70 - 130
1,1-DICHLOROETHENE	20.0	81	70 - 130
CIS-1,2-DICHLOROETHENE	20.0	88	70 - 130
TRANS-1,2-DICHLOROETHENE	20.0	82	70 - 130
1,2-DICHLOROPROPANE	20.0	88	70 - 130
CIS-1,3-DICHLOROPROPENE	20.0	90	70 - 130
TRANS-1,3-DICHLOROPROPENE	20.0	84	70 - 130
ETHYL-TERT-BUTYL-ETHER	20.0	82	70 - 130
ETHYLBENZENE	20.0	95	70 - 130
2-HEXANONE	20.0	94	70 - 130
ISOPROPYL BENZENE	20.0	92	70 - 130
P-ISOPROPYLTOLUENE	20.0	91	70 - 130
METHYLENE CHLORIDE	20.0	82	70 - 130
NAPHTHALENE	20.0	96	50 - 150
4-METHYL-2-PENTANONE (MIBK)	20.0	100	70 - 130
N-PROPYLBENZENE	20.0	98	70 - 130
STYRENE	20.0	96	70 - 130
1,1,2,2-TETRACHLOROETHANE	20.0	81	70 - 130
TETRACHLOROETHENE	20.0	93	70 - 130
TOLUENE	20.0	98	70 - 130
1,1,1-TRICHLOROETHANE	20.0	83	70 - 130
1,1,2-TRICHLOROETHANE	20.0	96	70 - 130
TRICHLOROETHENE	20.0	96	70 - 130
1,3,5-TRIMETHYLBENZENE	20.0	94	70 - 130

)" JMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD: 8260B TCL/TANK

L. BORATORY CONTROL SAMPLE SUMMARY

REFERENCE ORDER #: 648617 ANALYTICAL RUN # : 91964

ANALYTE	TRUE VALUE	% RECOVERY	QC LIMITS
D. TE ANALYZED : 6/12/2003			
AL.ALYTICAL DILUTION: 1.0			
,2,4-TRIMETHYLBENZENE	20.0	94	70 - 130
INYL CHLORIDE	20.0	83	70 - 130
O-XYLENE	20.0	95	70 - 130
"+P-XYLENE	40.0	95	70 - 130

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B TCL/TANK
Reported: 06/17/03

Project Reference:
Client Sample ID : METHOD BLANK

Date Sampled : **Order #:** 648607 **Sample Matrix:** SOIL/SEDIMENT
Date Received: **Submission #:** **Percent Solid:** 100

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 05/28/03			
ANALYTICAL DILUTION: 1.00			Dry Weight
ACETONE	20	20 U	UG/KG
BENZENE	5.0	5.0 U	UG/KG
BROMODICHLOROMETHANE	5.0	5.0 U	UG/KG
BROMOFORM	5.0	5.0 U	UG/KG
BROMOMETHANE	5.0	5.0 U	UG/KG
2-BUTANONE (MEK)	10	10 U	UG/KG
SEC-BUTYLBENZENE	5.0	5.0 U	UG/KG
N-BUTYLBENZENE	5.0	5.0 U	UG/KG
TERT-BUTYLBENZENE	5.0	5.0 U	UG/KG
CARBON DISULFIDE	10	10 U	UG/KG
CARBON TETRACHLORIDE	5.0	5.0 U	UG/KG
CHLOROBENZENE	5.0	5.0 U	UG/KG
CHLOROETHANE	5.0	5.0 U	UG/KG
CHLOROFORM	5.0	5.0 U	UG/KG
CHLOROMETHANE	5.0	5.0 U	UG/KG
DIBROMOCHLOROMETHANE	5.0	5.0 U	UG/KG
1,1-DICHLOROETHANE	5.0	5.0 U	UG/KG
1,2-DICHLOROETHANE	5.0	5.0 U	UG/KG
1,1-DICHLOROETHENE	5.0	5.0 U	UG/KG
CIS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/KG
TRANS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/KG
1,2-DICHLOROPROPANE	5.0	5.0 U	UG/KG
CIS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/KG
TRANS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/KG
METHYL-TERT-BUTYL-ETHER	5.0	5.0 U	UG/KG
ETHYLBENZENE	5.0	5.0 U	UG/KG
2-HEXANONE	10	10 U	UG/KG
ISOPROPYL BENZENE	5.0	5.0 U	UG/KG
P-ISOPROPYLTOLUENE	5.0	5.0 U	UG/KG
METHYLENE CHLORIDE	5.0	5.0 U	UG/KG
NAPHTHALENE	5.0	5.0 U	UG/KG
4-METHYL-2-PENTANONE (MIBK)	10	10 U	UG/KG
N-PROPYLBENZENE	5.0	5.0 U	UG/KG
STYRENE	5.0	5.0 U	UG/KG
1,1,2,2-TETRACHLOROETHANE	5.0	5.0 U	UG/KG
TETRACHLOROETHENE	5.0	5.0 U	UG/KG
TOLUENE	5.0	5.0 U	UG/KG
1,1,1-TRICHLOROETHANE	5.0	5.0 U	UG/KG
1,1,2-TRICHLOROETHANE	5.0	5.0 U	UG/KG
TRICHLOROETHENE	5.0	5.0 U	UG/KG
1,3,5-TRIMETHYLBENZENE	5.0	5.0 U	UG/KG
1,2,4-TRIMETHYLBENZENE	5.0	5.0 U	UG/KG
VINYL CHLORIDE	5.0	5.0 U	UG/KG
O-XYLENE	5.0	5.0 U	UG/KG
M,P-XYLENE	5.0	5.0 U	UG/KG

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B TCL/TANK
Reported: 06/17/03

Project Reference:
Client Sample ID : METHOD BLANK

Date Sampled : **Order #:** 648607 **Sample Matrix:** SOIL/SEDIMENT
Date Received: **Submission #:** **Percent Solid:** 100

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 05/28/03			
ANALYTICAL DILUTION: 1.00			Dry Weight

SURROGATE RECOVERIES	QC LIMITS		
4-BROMOFLUOROBENZENE	(68 - 128 %)	91	%
TOLUENE-D8	(83 - 117 %)	101	%
DIBROMOFLUOROMETHANE	(72 - 123 %)	97	%

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B TCL/TANK
Reported: 06/17/03

Project Reference:
Client Sample ID : METHOD BLANK

Date Sampled : **Order #:** 648608 **Sample Matrix:** SOIL/SEDIMENT
Date Received: **Submission #:** **Percent Solid:** 100

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 05/30/03			
ANALYTICAL DILUTION: 1.00			Dry Weight
ACETONE	20	20 U	UG/KG
BENZENE	5.0	5.0 U	UG/KG
BROMODICHLOROMETHANE	5.0	5.0 U	UG/KG
BROMOFORM	5.0	5.0 U	UG/KG
BROMOMETHANE	5.0	5.0 U	UG/KG
2-BUTANONE (MEK)	10	10 U	UG/KG
SEC-BUTYLBENZENE	5.0	5.0 U	UG/KG
N-BUTYLBENZENE	5.0	5.0 U	UG/KG
TERT-BUTYLBENZENE	5.0	5.0 U	UG/KG
CARBON DISULFIDE	10	10 U	UG/KG
CARBON TETRACHLORIDE	5.0	5.0 U	UG/KG
CHLOROBENZENE	5.0	5.0 U	UG/KG
CHLOROETHANE	5.0	5.0 U	UG/KG
CHLOROFORM	5.0	5.0 U	UG/KG
CHLOROMETHANE	5.0	5.0 U	UG/KG
DIBROMOCHLOROMETHANE	5.0	5.0 U	UG/KG
1,1-DICHLOROETHANE	5.0	5.0 U	UG/KG
1,2-DICHLOROETHANE	5.0	5.0 U	UG/KG
1,1-DICHLOROETHENE	5.0	5.0 U	UG/KG
CIS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/KG
TRANS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/KG
1,2-DICHLOROPROPANE	5.0	5.0 U	UG/KG
CIS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/KG
TRANS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/KG
METHYL-TERT-BUTYL-ETHER	5.0	5.0 U	UG/KG
ETHYLBENZENE	5.0	5.0 U	UG/KG
2-HEXANONE	10	10 U	UG/KG
ISOPROPYL BENZENE	5.0	5.0 U	UG/KG
P-ISOPROPYLTOLUENE	5.0	5.0 U	UG/KG
METHYLENE CHLORIDE	5.0	5.0 U	UG/KG
NAPHTHALENE	5.0	5.0 U	UG/KG
4-METHYL-2-PENTANONE (MIBK)	10	10 U	UG/KG
N-PROPYLBENZENE	5.0	5.0 U	UG/KG
STYRENE	5.0	5.0 U	UG/KG
1,1,2,2-TETRACHLOROETHANE	5.0	5.0 U	UG/KG
TETRACHLOROETHENE	5.0	5.0 U	UG/KG
TOLUENE	5.0	5.0 U	UG/KG
1,1,1-TRICHLOROETHANE	5.0	5.0 U	UG/KG
1,1,2-TRICHLOROETHANE	5.0	5.0 U	UG/KG
TRICHLOROETHENE	5.0	5.0 U	UG/KG
1,3,5-TRIMETHYLBENZENE	5.0	5.0 U	UG/KG
1,2,4-TRIMETHYLBENZENE	5.0	5.0 U	UG/KG
VINYL CHLORIDE	5.0	5.0 U	UG/KG
O-XYLENE	5.0	5.0 U	UG/KG
M+P-XYLENE	5.0	5.0 U	UG/KG

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B TCL/TANK
Reported: 06/17/03

Project Reference:
Client Sample ID : METHOD BLANK

Date Sampled :
Date Received:
Order #: 648608
Submission #:
Sample Matrix: SOIL/SEDIMENT
Percent Solid: 100

ANALYTE		PQL	RESULT	UNITS
DATE ANALYZED	: 05/30/03			
ANALYTICAL DILUTION:	1.00			Dry Weight

SURROGATE RECOVERIES	QC LIMITS	RESULT	UNITS
4-BROMOFLUOROBENZENE	(68 - 128 %)	92	%
TOLUENE-D8	(83 - 117 %)	98	%
DIBROMOFLUOROMETHANE	(72 - 123 %)	95	%

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B TCL/TANK
Reported: 06/17/03

Project Reference:
Client Sample ID : METHOD BLANK

Date Sampled : Order #: 648609 Sample Matrix: SOIL/SEDIMENT
Date Received: Submission #: Percent Solid: 100

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 06/05/03			
ANALYTICAL DILUTION: 1.00			Dry Weight
ACETONE	20	20 U	UG/KG
BENZENE	5.0	5.0 U	UG/KG
BROMODICHLOROMETHANE	5.0	5.0 U	UG/KG
BROMOFORM	5.0	5.0 U	UG/KG
BROMOMETHANE	5.0	5.0 U	UG/KG
2-BUTANONE (MEK)	10	10 U	UG/KG
SEC-BUTYLBENZENE	5.0	5.0 U	UG/KG
N-BUTYLBENZENE	5.0	5.0 U	UG/KG
TERT-BUTYLBENZENE	5.0	5.0 U	UG/KG
CARBON DISULFIDE	10	10 U	UG/KG
CARBON TETRACHLORIDE	5.0	5.0 U	UG/KG
CHLOROBENZENE	5.0	5.0 U	UG/KG
CHLOROETHANE	5.0	5.0 U	UG/KG
CHLOROFORM	5.0	5.0 U	UG/KG
CHLOROMETHANE	5.0	5.0 U	UG/KG
DIBROMOCHLOROMETHANE	5.0	5.0 U	UG/KG
1,1-DICHLOROETHANE	5.0	5.0 U	UG/KG
1,2-DICHLOROETHANE	5.0	5.0 U	UG/KG
1,1-DICHLOROETHENE	5.0	5.0 U	UG/KG
CIS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/KG
TRANS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/KG
1,2-DICHLOROPROPANE	5.0	5.0 U	UG/KG
CIS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/KG
TRANS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/KG
METHYL-TERT-BUTYL-ETHER	5.0	5.0 U	UG/KG
ETHYLBENZENE	5.0	5.0 U	UG/KG
2-HEXANONE	10	10 U	UG/KG
ISOPROPYL BENZENE	5.0	5.0 U	UG/KG
P-ISOPROPYLTOLUENE	5.0	5.0 U	UG/KG
METHYLENE CHLORIDE	5.0	5.0 U	UG/KG
NAPHTHALENE	5.0	5.0 U	UG/KG
4-METHYL-2-PENTANONE (MIBK)	10	10 U	UG/KG
N-PROPYLBENZENE	5.0	5.0 U	UG/KG
STYRENE	5.0	5.0 U	UG/KG
1,1,2,2-TETRACHLOROETHANE	5.0	5.0 U	UG/KG
TETRACHLOROETHENE	5.0	5.0 U	UG/KG
TOLUENE	5.0	5.0 U	UG/KG
1,1,1-TRICHLOROETHANE	5.0	5.0 U	UG/KG
1,1,2-TRICHLOROETHANE	5.0	5.0 U	UG/KG
TRICHLOROETHENE	5.0	5.0 U	UG/KG
1,3,5-TRIMETHYLBENZENE	5.0	5.0 U	UG/KG
1,2,4-TRIMETHYLBENZENE	5.0	5.0 U	UG/KG
VINYL CHLORIDE	5.0	5.0 U	UG/KG
O-XYLENE	5.0	5.0 U	UG/KG
M+P-XYLENE	5.0	5.0 U	UG/KG

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B TCL/TANK
Reported: 06/17/03

Project Reference:
Client Sample ID : METHOD BLANK

Date Sampled : **Order #:** 648609 **Sample Matrix:** SOIL/SEDIMENT
Date Received: **Submission #:** **Percent Solid:** 100

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 06/05/03			
ANALYTICAL DILUTION: 1.00			Dry Weight

SURROGATE RECOVERIES	QC LIMITS		
4-BROMOFLUOROBENZENE	(68 - 128 %)	94	%
TOLUENE-D8	(83 - 117 %)	101	%
DIBROMOFLUOROMETHANE	(72 - 123 %)	99	%

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B TCL/TANK
Reported: 06/17/03

Project Reference:
Client Sample ID : METHOD BLANK

Date Sampled : **Order #:** 648610 **Sample Matrix:** SOIL/SEDIMENT
Date Received: **Submission #:** **Percent Solid:** 100

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 06/06/03			
ANALYTICAL DILUTION: 1.00			Dry Weight
ACETONE	20	20 U	UG/KG
BENZENE	5.0	5.0 U	UG/KG
BROMODICHLOROMETHANE	5.0	5.0 U	UG/KG
BROMOFORM	5.0	5.0 U	UG/KG
BROMOMETHANE	5.0	5.0 U	UG/KG
2-BUTANONE (MEK)	10	10 U	UG/KG
SEC-BUTYLBENZENE	5.0	5.0 U	UG/KG
N-BUTYLBENZENE	5.0	5.0 U	UG/KG
TERT-BUTYLBENZENE	5.0	5.0 U	UG/KG
CARBON DISULFIDE	10	10 U	UG/KG
CARBON TETRACHLORIDE	5.0	5.0 U	UG/KG
CHLOROBENZENE	5.0	5.0 U	UG/KG
CHLOROETHANE	5.0	5.0 U	UG/KG
CHLOROFORM	5.0	5.0 U	UG/KG
CHLOROMETHANE	5.0	5.0 U	UG/KG
DIBROMOCHLOROMETHANE	5.0	5.0 U	UG/KG
1,1-DICHLOROETHANE	5.0	5.0 U	UG/KG
1,2-DICHLOROETHANE	5.0	5.0 U	UG/KG
1,1-DICHLOROETHENE	5.0	5.0 U	UG/KG
CIS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/KG
TRANS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/KG
1,2-DICHLOROPROPANE	5.0	5.0 U	UG/KG
CIS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/KG
TRANS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/KG
METHYL-TERT-BUTYL-ETHER	5.0	5.0 U	UG/KG
ETHYLBENZENE	5.0	5.0 U	UG/KG
2-HEXANONE	10	10 U	UG/KG
ISOPROPYL BENZENE	5.0	5.0 U	UG/KG
P-ISOPROPYLTOLUENE	5.0	5.0 U	UG/KG
METHYLENE CHLORIDE	5.0	5.0 U	UG/KG
NAPHTHALENE	5.0	5.0 U	UG/KG
4-METHYL-2-PENTANONE (MIBK)	10	10 U	UG/KG
N-PROPYLBENZENE	5.0	5.0 U	UG/KG
STYRENE	5.0	5.0 U	UG/KG
1,1,2,2-TETRACHLOROETHANE	5.0	5.0 U	UG/KG
TETRACHLOROETHENE	5.0	5.0 U	UG/KG
TOLUENE	5.0	5.0 U	UG/KG
1,1,1-TRICHLOROETHANE	5.0	5.0 U	UG/KG
1,1,2-TRICHLOROETHANE	5.0	5.0 U	UG/KG
TRICHLOROETHENE	5.0	5.0 U	UG/KG
1,3,5-TRIMETHYLBENZENE	5.0	5.0 U	UG/KG
1,2,4-TRIMETHYLBENZENE	5.0	5.0 U	UG/KG
VINYL CHLORIDE	5.0	5.0 U	UG/KG
O-XYLENE	5.0	5.0 U	UG/KG
M+P-XYLENE	5.0	5.0 U	UG/KG

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B TCL/TANK
Reported: 06/17/03

Project Reference:
Client Sample ID : METHOD BLANK

Date Sampled :	**Order #:** 648610	**Sample Matrix:** SOIL/SEDIMENT
Date Received:	**Submission #:**	**Percent Solid:** 100

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 06/06/03			
ANALYTICAL DILUTION: 1.00			Dry Weight

SURROGATE RECOVERIES	QC LIMITS		
4-BROMOFLUOROBENZENE	(68 - 128 %)	90	%
TOLUENE-D8	(83 - 117 %)	99	%
DIBROMOFLUOROMETHANE	(72 - 123 %)	103	%

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B TCL/TANK
Reported: 06/17/03

Project Reference:
Client Sample ID : METHOD BLANK

Date Sampled : Order #: 648611 Sample Matrix: SOIL/SEDIMENT
Date Received: Submission #: Percent Solid: 100

DATE ANALYZED : 06/12/03
ANALYTICAL DILUTION: 125.00

ANALYTE	PQL	RESULT	UNITS
			Dry Weight
ACETONE	20	2500 U	UG/KG
BENZENE	5.0	630 U	UG/KG
BROMODICHLOROMETHANE	5.0	630 U	UG/KG
BROMOFORM	5.0	630 U	UG/KG
BROMOMETHANE	5.0	630 U	UG/KG
2-BUTANONE (MEK)	10	1300 U	UG/KG
SEC-BUTYLBENZENE	5.0	630 U	UG/KG
N-BUTYLBENZENE	5.0	630 U	UG/KG
TERT-BUTYLBENZENE	5.0	630 U	UG/KG
CARBON DISULFIDE	10	1300 U	UG/KG
CARBON TETRACHLORIDE	5.0	630 U	UG/KG
CHLOROBENZENE	5.0	630 U	UG/KG
CHLOROETHANE	5.0	630 U	UG/KG
CHLOROFORM	5.0	630 U	UG/KG
CHLOROMETHANE	5.0	630 U	UG/KG
DIBROMOCHLOROMETHANE	5.0	630 U	UG/KG
1,1-DICHLOROETHANE	5.0	630 U	UG/KG
1,2-DICHLOROETHANE	5.0	630 U	UG/KG
1,1-DICHLOROETHENE	5.0	630 U	UG/KG
CIS-1,2-DICHLOROETHENE	5.0	630 U	UG/KG
TRANS-1,2-DICHLOROETHENE	5.0	630 U	UG/KG
1,2-DICHLOROPROPANE	5.0	630 U	UG/KG
CIS-1,3-DICHLOROPROPENE	5.0	630 U	UG/KG
TRANS-1,3-DICHLOROPROPENE	5.0	630 U	UG/KG
METHYL-TERT-BUTYL-ETHER	5.0	630 U	UG/KG
ETHYLBENZENE	5.0	630 U	UG/KG
2-HEXANONE	10	1300 U	UG/KG
ISOPROPYL BENZENE	5.0	630 U	UG/KG
P-ISOPROPYLTOLUENE	5.0	630 U	UG/KG
METHYLENE CHLORIDE	5.0	630 U	UG/KG
NAPHTHALENE	5.0	630 U	UG/KG
4-METHYL-2-PENTANONE (MIBK)	10	1300 U	UG/KG
N-PROPYLBENZENE	5.0	630 U	UG/KG
STYRENE	5.0	630 U	UG/KG
1,1,2,2-TETRACHLOROETHANE	5.0	630 U	UG/KG
TETRACHLOROETHENE	5.0	630 U	UG/KG
TOLUENE	5.0	630 U	UG/KG
1,1,1-TRICHLOROETHANE	5.0	630 U	UG/KG
1,1,2-TRICHLOROETHANE	5.0	630 U	UG/KG
TRICHLOROETHENE	5.0	630 U	UG/KG
1,3,5-TRIMETHYLBENZENE	5.0	630 U	UG/KG
1,2,4-TRIMETHYLBENZENE	5.0	630 U	UG/KG
VINYL CHLORIDE	5.0	630 U	UG/KG
O-XYLENE	5.0	630 U	UG/KG
M+P-XYLENE	5.0	630 U	UG/KG

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B TCL/TANK
Reported: 06/17/03

Project Reference:
Client Sample ID : METHOD BLANK

Date Sampled :
Date Received:
Order #: 648611
Submission #:
Sample Matrix: SOIL/SEDIMENT
Percent Solid: 100

ANALYTE		PQL	RESULT	UNITS
DATE ANALYZED	: 06/12/03			
ANALYTICAL DILUTION:	125.00			Dry Weight

SURROGATE RECOVERIES	QC LIMITS		
4-BROMOFLUOROBENZENE	(68 - 128 %)	109	%
TOLUENE-D8	(83 - 117 %)	109	%
DIBROMOFLUOROMETHANE	(72 - 123 %)	105	%

COLUMBIA ANALYTICAL SERVICES

QUALITY CONTROL SUMMARY LABORATORY CONTROL SAMPLE
SOIL/SEDIMENT

Spiked Order No. : 646888

Client ID:

Test: 8270C SEMIVOLATILES

Analytical Units: UG/KG

Run Number : 91687

ANALYTE	SPIKE ADDED	SAMPLE CONCENT.	BLANK SPIKE		QC LIMITS
			FOUND	% REC.	REC.
ACENAPHTHENE	3330	0	3400	102	42 - 130
2-CHLOROPHENOL	3330	0	2990	90	27 - 130
1,4-DICHLOROBENZENE	3330	0	2740	82	31 - 130
2,4-DINITROTOLUENE	3330	0	3790	114	45 - 135
4-CHLORO-3-METHYLPHENO	3330	0	3460	104	31 - 130
4-NITROPHENOL	3330	0	3580	108	23 - 130
PENTACHLOROPHENOL	3330	0	3380	102	27 - 130
PHENOL	3330	0	2950	89	27 - 130
N-NITROSO-DI-N-PROPYLA	3330	0	3100	93	44 - 130
PYRENE	3330	0	3740	112	35 - 130
1,2,4-TRICHLOROBENZENE	3330	0	2900	87	46 - 130

LI[illegible]BIA ANALYTICAL SERVICES

A[illegible]TY CONTROL SUMMARY: LABORATORY CONTROL SAMPLE
SOIL/SEDIMENT

Spiked Order No. : 645600

Dup Spiked Order No. : 645601

Client ID:

Test: 8270C SEMIVOLATILES

Analytical Units: UG/KG

Run Number : 91545

			BLANK SPIKE		BLANK SPIKE DUP.			QC LIMITS	
ANALYTE	SPIKE ADDED	SAMPLE CONCENT.	FOUND	% REC.	FOUND	% REC.	RPD	RPD	REC.
ACENAPHTHENE	3300	0	3130	94	3300	99	5	30	42 - 130
2-CHLOROPHENOL	3300	0	2720	82	2890	87	6	30	27 - 130
1,4-DICHLOROBENZENE	3300	0	2550	77	2760	83	8	30	31 - 130
2,4-DINITROTOLUENE	3300	0	3410	102	3590	108	5	30	45 - 135
4-CHLORO-3-METHYLPHENO	3300	0	3030	91	3270	98	8	30	31 - 130
4-NITROPHENOL	3300	0	3170	95	3410	102	7	30	23 - 130
PENTACHLOROPHENOL	3300	0	3180	95	3420	103	7	30	27 - 130
PHENOL	3300	0	2680	80	2850	86	6	30	27 - 130
N-NITROSO-DI-N-PROPYLA	3300	0	2400	72	2570	77	7	30	44 - 130
PYRENE	3300	0	3340	100	3540	106	6	30	35 - 130
1,2,4-TRICHLOROBENZENE	3300	0	2730	82	2820	85	3	30	46 - 130

COLUMBIA ANALYTICAL SERVICES

EXTRACTABLE ORGANICS
METHOD 8270C SEMIVOLATILES
Reported: 06/17/03

Project Reference:
Client Sample ID : METHOD BLANK

Date Sampled : **Order #:** 646887 **Sample Matrix:** SOIL/SEDIMENT
Date Received: **Submission #:** **Percent Solid:** 100

ANALYTE	PQL	RESULT	UNITS
DATE EXTRACTED : 06/02/03			
DATE ANALYZED : 06/05/03			
ANALYTICAL DILUTION: 1.00			Dry Weight
ACENAPHTHENE	330	330 U	UG/KG
ACENAPHTHYLENE	330	330 U	UG/KG
ANTHRACENE	330	330 U	UG/KG
BENZO(A)ANTHRACENE	330	330 U	UG/KG
BENZO(A)PYRENE	330	330 U	UG/KG
BENZO(B)FLUORANTHENE	330	330 U	UG/KG
BENZO(G,H,I)PERYLENE	330	330 U	UG/KG
BENZO(K)FLUORANTHENE	330	330 U	UG/KG
BENZYL ALCOHOL	330	330 U	UG/KG
BUTYL BENZYL PHTHALATE	330	330 U	UG/KG
DI-N-BUTYLPHTHALATE	330	330 U	UG/KG
CARBAZOLE	330	330 U	UG/KG
INDENO(1,2,3-CD)PYRENE	330	330 U	UG/KG
4-CHLOROANILINE	330	330 U	UG/KG
BIS(-2-CHLOROETHOXY)METHANE	330	330 U	UG/KG
BIS(2-CHLOROETHYL)ETHER	330	330 U	UG/KG
2-CHLORONAPHTHALENE	330	330 U	UG/KG
2-CHLOROPHENOL	330	330 U	UG/KG
2,2'-OXYBIS(1-CHLOROPROPANE)	330	330 U	UG/KG
CHRYSENE	330	330 U	UG/KG
DIBENZO(A,H)ANTHRACENE	330	330 U	UG/KG
DIBENZOFURAN	330	330 U	UG/KG
1,3-DICHLOROBENZENE	330	330 U	UG/KG
1,2-DICHLOROBENZENE	330	330 U	UG/KG
1,4-DICHLOROBENZENE	330	330 U	UG/KG
3,3'-DICHLOROBENZIDINE	330	330 U	UG/KG
2,4-DICHLOROPHENOL	330	330 U	UG/KG
DIETHYLPHTHALATE	330	330 U	UG/KG
DIMETHYL PHTHALATE	330	330 U	UG/KG
2,4-DIMETHYLPHENOL	330	330 U	UG/KG
2,4-DINITROPHENOL	1700	1700 U	UG/KG
2,4-DINITROTOLUENE	330	330 U	UG/KG
2,6-DINITROTOLUENE	330	330 U	UG/KG
BIS(2-ETHYLHEXYL)PHTHALATE	330	330 U	UG/KG
FLUORANTHENE	330	330 U	UG/KG
FLUORENE	330	330 U	UG/KG
HEXACHLOROBENZENE	330	330 U	UG/KG
HEXACHLOROBUTADIENE	330	330 U	UG/KG
HEXACHLOROCYCLOPENTADIENE	330	330 U	UG/KG
HEXACHLOROETHANE	330	330 U	UG/KG
ISOPHORONE	330	330 U	UG/KG
2-METHYLNAPHTHALENE	330	330 U	UG/KG
4,6-DINITRO-2-METHYLPHENOL	1700	1700 U	UG/KG
4-CHLORO-3-METHYLPHENOL	330	330 U	UG/KG

COLUMBIA ANALYTICAL SERVICES

EXTRACTABLE ORGANICS
METHOD 8270C SEMIVOLATILES
Reported: 06/17/03

Project Reference:
Client Sample ID : METHOD BLANK

Date Sampled :
Date Received:
Order #: 646887
Submission #:
Sample Matrix: SOIL/SEDIMENT
Percent Solid: 100

ANALYTE	PQL	RESULT	UNITS
DATE EXTRACTED : 06/02/03			
DATE ANALYZED : 06/05/03			
ANALYTICAL DILUTION: 1.00			Dry Weight
2-METHYLPHENOL	330	330 U	UG/KG
3+4-METHYLPHENOL	330	330 U	UG/KG
NAPHTHALENE	330	330 U	UG/KG
2-NITROANILINE	1700	1700 U	UG/KG
3-NITROANILINE	1700	1700 U	UG/KG
4-NITROANILINE	1700	1700 U	UG/KG
NITROBENZENE	330	330 U	UG/KG
2-NITROPHENOL	330	330 U	UG/KG
4-NITROPHENOL	1700	1700 U	UG/KG
N-NITROSODIMETHYLAMINE	330	330 U	UG/KG
N-NITROSODIPHENYLAMINE	330	330 U	UG/KG
DI-N-OCTYL PHTHALATE	330	330 U	UG/KG
PENTACHLOROPHENOL	1700	1700 U	UG/KG
PHENANTHRENE	330	330 U	UG/KG
PHENOL	330	330 U	UG/KG
4-BROMOPHENYL-PHENYLETHER	330	330 U	UG/KG
4-CHLOROPHENYL-PHENYLETHER	330	330 U	UG/KG
N-NITROSO-DI-N-PROPYLAMINE	330	330 U	UG/KG
PYRENE	330	330 U	UG/KG
1,2,4-TRICHLOROBENZENE	330	330 U	UG/KG
2,4,6-TRICHLOROPHENOL	330	330 U	UG/KG
2,4,5-TRICHLOROPHENOL	330	330 U	UG/KG

SURROGATE RECOVERIES	QC LIMITS		
TERPHENYL-d14	(19 - 145 %)	104	%
NITROBENZENE-d5	(18 - 130 %)	66	%
PHENOL-d6	(10 - 125 %)	76	%
2-FLUOROBIPHENYL	(23 - 130 %)	73	%
2-FLUOROPHENOL	(13 - 130 %)	66	%
2,4,6-TRIBROMOPHENOL	(23 - 131 %)	85	%

COLUMBIA ANALYTICAL SERVICES

EXTRACTABLE ORGANICS
METHOD 8270C SEMIVOLATILES
Reported: 06/17/03

Project Reference:
Client Sample ID : METHOD BLANK

Date Sampled : **Order #:** 645599 **Sample Matrix:** SOIL/SEDIMENT
Date Received: **Submission #:** **Percent Solid:** 100

ANALYTE	PQL	RESULT	UNITS
DATE EXTRACTED : 05/30/03			
DATE ANALYZED : 06/04/03			
ANALYTICAL DILUTION: 1.00			Dry Weight
ACENAPHTHENE	330	330 U	UG/KG
ACENAPHTHYLENE	330	330 U	UG/KG
ANTHRACENE	330	330 U	UG/KG
BENZO(A)ANTHRACENE	330	330 U	UG/KG
BENZO(A)PYRENE	330	330 U	UG/KG
BENZO(B)FLUORANTHENE	330	330 U	UG/KG
BENZO(G,H,I)PERYLENE	330	330 U	UG/KG
BENZO(K)FLUORANTHENE	330	330 U	UG/KG
BENZYL ALCOHOL	330	330 U	UG/KG
BUTYL BENZYL PHTHALATE	330	330 U	UG/KG
DI-N-BUTYLPHTHALATE	330	330 U	UG/KG
CARBAZOLE	330	330 U	UG/KG
INDENO(1,2,3-CD)PYRENE	330	330 U	UG/KG
4-CHLOROANILINE	330	330 U	UG/KG
BIS(-2-CHLOROETHOXY)METHANE	330	330 U	UG/KG
BIS(2-CHLOROETHYL)ETHER	330	330 U	UG/KG
2-CHLORONAPHTHALENE	330	330 U	UG/KG
2-CHLOROPHENOL	330	330 U	UG/KG
2,2'-OXYBIS(1-CHLOROPROPANE)	330	330 U	UG/KG
CHRYSENE	330	330 U	UG/KG
DIBENZO(A,H)ANTHRACENE	330	330 U	UG/KG
DIBENZOFURAN	330	330 U	UG/KG
1,3-DICHLOROBENZENE	330	330 U	UG/KG
1,2-DICHLOROBENZENE	330	330 U	UG/KG
1,4-DICHLOROBENZENE	330	330 U	UG/KG
3,3'-DICHLOROBENZIDINE	330	330 U	UG/KG
2,4-DICHLOROPHENOL	330	330 U	UG/KG
DIETHYLPHTHALATE	330	330 U	UG/KG
DIMETHYL PHTHALATE	330	330 U	UG/KG
2,4-DIMETHYLPHENOL	330	330 U	UG/KG
2,4-DINITROPHENOL	1700	1700 U	UG/KG
2,4-DINITROTOLUENE	330	330 U	UG/KG
2,6-DINITROTOLUENE	330	330 U	UG/KG
BIS(2-ETHYLHEXYL)PHTHALATE	330	330 U	UG/KG
FLUORANTHENE	330	330 U	UG/KG
FLUORENE	330	330 U	UG/KG
HEXACHLOROBENZENE	330	330 U	UG/KG
HEXACHLOROBUTADIENE	330	330 U	UG/KG
HEXACHLOROCYCLOPENTADIENE	330	330 U	UG/KG
HEXACHLOROETHANE	330	330 U	UG/KG
ISOPHORONE	330	330 U	UG/KG
2-METHYLNAPHTHALENE	330	330 U	UG/KG
4,6-DINITRO-2-METHYLPHENOL	1700	1700 U	UG/KG
4-CHLORO-3-METHYLPHENOL	330	330 U	UG/KG

COLUMBIA ANALYTICAL SERVICES

EXTRACTABLE ORGANICS
METHOD 8270C SEMIVOLATILES
Reported: 06/17/03

Project Reference:
Client Sample ID : METHOD BLANK

Date Sampled : Order #: 645599 Sample Matrix: SOIL/SEDIMENT
Date Received: Submission #: Percent Solid: 100

ANALYTE	PQL	RESULT	UNITS
DATE EXTRACTED : 05/30/03			
DATE ANALYZED : 06/04/03			
ANALYTICAL DILUTION: 1.00			Dry Weight
2-METHYLPHENOL	330	330 U	UG/KG
3+4-METHYLPHENOL	330	330 U	UG/KG
NAPHTHALENE	330	330 U	UG/KG
2-NITROANILINE	1700	1700 U	UG/KG
3-NITROANILINE	1700	1700 U	UG/KG
4-NITROANILINE	1700	1700 U	UG/KG
NITROBENZENE	330	330 U	UG/KG
2-NITROPHENOL	330	330 U	UG/KG
4-NITROPHENOL	1700	1700 U	UG/KG
N-NITROSODIMETHYLAMINE	330	330 U	UG/KG
N-NITROSODIPHENYLAMINE	330	330 U	UG/KG
DI-N-OCTYL PHTHALATE	330	330 U	UG/KG
PENTACHLOROPHENOL	1700	1700 U	UG/KG
PHENANTHRENE	330	330 U	UG/KG
PHENOL	330	330 U	UG/KG
4-BROMOPHENYL-PHENYLETHER	330	330 U	UG/KG
4-CHLOROPHENYL-PHENYLETHER	330	330 U	UG/KG
N-NITROSO-DI-N-PROPYLAMINE	330	330 U	UG/KG
PYRENE	330	330 U	UG/KG
1,2,4-TRICHLOROBENZENE	330	330 U	UG/KG
2,4,6-TRICHLOROPHENOL	330	330 U	UG/KG
2,4,5-TRICHLOROPHENOL	330	330 U	UG/KG

SURROGATE RECOVERIES	QC LIMITS		
TERPHENYL-d14	(19 - 145 %)	107	%
NITROBENZENE-d5	(18 - 130 %)	57	%
PHENOL-d6	(10 - 125 %)	72	%
2-FLUOROBIPHENYL	(23 - 130 %)	67	%
2-FLUOROPHENOL	(13 - 130 %)	61	%
2,4,6-TRIBROMOPHENOL	(23 - 131 %)	92	%

Analytical Services Inc. Employee - Owned Company www.caslab.com

One Mustard St., Suite 250 • Rochester, NY 14609-0859 • (585) 288-5380 • 800-695-7222 x11 • FAX (585) 288-8475 PAGE 1 OF 1 | CAS Contact

Project Name: Winn Development
Project Number: 11172966.2000
Project Manager: Tom Lawson
Report CC: Kevin J. McGovern
Company/Address: URS Corporation / Bldg. 1, 781 Elmgrove Rd., Rochester, NY 14624
Phone #: (585) 426-2120
FAX#: (585) 426-2161
Sampler's Signature: [signature]
Sampler's Printed Name: Kevin J. McGovern

ANALYSIS REQUESTED (Include Method Number and Container Preservative)

PRESERVATIVE: GC/MS VOA's: 8; 8260B TCL + 5 TICs: 8; 8270 Full BN + Acids + 20 TICs - 5 EAs: 8

CLIENT SAMPLE ID	FOR OFFICE USE ONLY LAB ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NUMBER OF CONTAINERS	GC/MS VOA's ☒ 8260 ☐ 624 ☐ CLP TCL + 5 TICs	GC/MS SVOA's ☐ 8270 ☐ 625 ☐ CLP	GC VOA's ☐ 8021 ☐ CLP	PESTICIDES ☐ 8081 ☐ 608 ☐ CLP	PCB's ☐ 8082 ☐ 608 ☐ CLP	METALS, TOTAL (List in comments below)	METALS, DISSOLVED (List in comments below)	8260B TCL + 5 TICs	8270 Full BN + Acids + 20 TICs - 5 EAs						REMARKS/ ALTERNATE DESCRIPTION
MW-3	644266	5/27/03	15:00	Soil	2								X	X						
MW-4	67	↓	10:14	↓	↓								X	X						

Preservative Key: 0. NONE 1. HCL 2. HNO_3 3. H_2SO_4 4. NaOH 5. Zn. Acetate 6. MeOH 7. $NaHSO_4$ 8. Other ICE

SPECIAL INSTRUCTIONS/COMMENTS
Metals

See QAPP ☐

TURNAROUND REQUIREMENTS
___ RUSH (SURCHARGES APPLY)
___ 24 hr ___ 48 hr ___ 5 day
X STANDARD
REQUESTED FAX DATE: 6/11/03
REQUESTED REPORT DATE: 6/18/03

REPORT REQUIREMENTS
X I. Results Only
___ II. Results + QC Summaries (LCS, DUP, MS/MSD as required)
___ III. Results + QC and Calibration Summaries
___ IV. Data Validation Report with Raw Data
___ V. Specialized Forms / Custom Report
Edata ___ Yes ___ No

INVOICE INFORMATION
C5-19349
PO#: Tom Lawson
BILL TO: URS Corp, Bldg. 1, 781 Elmgrove Rd, Rochester, NY 14624
SUBMISSION #: R2317016

SAMPLE RECEIPT: CONDITION/COOLER TEMP: ___ CUSTODY SEALS: Y N

	RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY
Signature	[signature]	Jon Janson				
Printed Name	Kevin J. McGovern	Jon Janson				
Firm	URS	CAS				
Date/Time	5/27/03, 17:23	5/27/03 17:23				

Distribution: White - Return to Originator; Yellow - Lab Copy; Pink - Retained by Client

SCOC-1102-08

Cooler Receipt And Preservation Check Form

Project/Client URS Submission Number B23-17016.

Cooler received on 5-28-03 by: ME COURIER: CAS UPS FEDEX CD&L (CLIENT)

1.	Were custody seals on outside of cooler?	YES	(NO)			
2.	Were custody papers properly filled out (ink, signed, etc.)?	(YES)	NO			
3.	Did all bottles arrive in good condition (unbroken)?	(YES)	NO			
4.	Did any VOA vials have significant air bubbles?	YES	NO	(N/A)		
5.	Were **Ice or Ice packs** present?	YES	(NO)			
6.	Where did the bottles originate?	(CAS/ROC,)	CLIENT			
7.	Temperature of cooler(s) upon receipt:	5°				
	Is the temperature within 0° - 6° C?:	(Yes)	Yes	Yes	Yes	Yes
	If No, Explain Below	No	No	No	No	No

Date/Time Temperatures Taken: 5-28-03 @ 8:03

Thermometer ID: 161 or (IR GUN) Reading From: Temp Blank or (Sample Bottle)

If out of Temperature, Client Approval to Run Samples _____

Cooler Breakdown: Date: 5/28/03 by: YMV

1.	Were all bottle labels complete (*i.e.* analysis, preservation, etc.)?	(YES)	NO
2.	Did all bottle labels and tags agree with custody papers?	(YES)	NO
3.	Were correct containers used for the tests indicated?	(YES)	NO
4.	Air Samples: Cassettes / Tubes Intact Canisters Pressurized Tedlar® Bags Inflated		(N/A)

Explain any discrepancies: _____

		YES	NO	Sample I.D.	Reagent	Vol. Added
pH	Reagent					
12	NaOH					
2	HNO_3					
2	H_2SO_4					
Residual Chlorine (+/-)	for TCN & Phenol					
5-9**	P/PCBs (608 only)					

YES = All samples OK NO = Samples were preserved at lab as listed PC OK to adjust pH _____

**If pH adjustment is required, use NaOH and/or H_2SO_4

VOC Vial pH Verification (Tested after Analysis) Following Samples Exhibited pH > 2				

Other Comments:

Air Toxics Ltd. Services INC.
Employee - Owned Company
www.caslab.com

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CAS Contact

Project Name: WINN DEVELOPMENT
Project Number: 11172966.20000
Project Manager: TOM LAWSON
Report CC: KEVIN T. McGOVERN
Company/Address: URS CORPORATION / BLDG. 1
781 ELMGROVE RD.
ROCHESTER, NY 14624
Phone #: (585) 426-2170
FAX#: (585) 426-2161
Sampler's Signature:
Sampler's Printed Name: KEVIN T. McGOVERN

ANALYSIS REQUESTED (Include Method Number and Container Preservative)

PRESERVATIVE

CLIENT SAMPLE ID	FOR OFFICE USE ONLY LAB ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NUMBER OF CONTAINERS	GC/MS VOA's ☐ 8260 ☐ 624 ☐ CLP	GC/MS SVOA's ☐ 8270 ☐ 625 ☐ CLP	GC VOA's ☐ 8021 ☐ 601/602	PESTICIDES ☐ 8081 ☐ 608 ☐ CLP	PCB's ☐ 8082 ☐ 608 ☐ CLP	METALS, TOTAL (List in comments below)	METALS, DISSOLVED (List in comments below)	8260 TCL + STARS	8270 Full B/N+Acids + 20 TICs + STARS						REMARKS/ ALTERNATE DESCRIPTION
URS-2	64693	5/28/03	11:30	SOIL	2							X	X	X						

Preservative Key
0. NONE
1. HCL
2. HNO_3
3. H_2SO_4
4. NaOH
5. Zn. Acetate
6. MeOH
7. $NaHSO_4$
8. Other ICE

SPECIAL INSTRUCTIONS/COMMENTS
Metals
- please batch PO# but separate by matrix.

☐ QAPP

TURNAROUND REQUIREMENTS
___ RUSH (SURCHARGES APPLY)
___ 24 hr ___ 48 hr ___ 5 day
X STANDARD
REQUESTED FAX DATE: 6/12/03
REQUESTED REPORT DATE: 6/18/03

REPORT REQUIREMENTS
X I. Results Only
___ II. Results + QC Summaries (LCS, DUP, MS/MSD as required)
___ III. Results + QC and Calibration Summaries
___ IV. Data Validation Report with Raw Data
___ V. Specialized Forms / Custom Report
Edata ... Yes ... No

INVOICE INFORMATION
05-19349
PO# TOM LAWSON
BILL TO: URS Corp
Bldg 1, 781 Elmgrove
Rochester, NY 14624
SUBMISSION #: 17016

SAMPLE RECEIPT: CONDITION/COOLER TEMP: _____ CUSTODY SEALS: Y N

RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY
Signature	Signature	Signature	Signature	Signature	Signature
Printed Name: KEVIN T. McGOVERN	Printed Name: Brian Collier	Printed Name	Printed Name	Printed Name	Printed Name
Firm: URS	Firm: CAS	Firm	Firm	Firm	Firm
Date/Time: 5/28/03, 17:15	Date/Time: 5/29/03 1715	Date/Time	Date/Time	Date/Time	Date/Time

Distribution: White - Return to Originator; Yellow - Lab Copy; Pink - Retained by Client

SCOC-1102-08

Cooler Receipt And Preservation Check Form

Project/Client URS Submission Number K2-17016

Cooler received on 5/28/03 by: BL COURIER: CAS UPS FEDEX CD&L (CLIENT)

1.	Were custody seals on outside of cooler?			YES	(NO)	
2.	Were custody papers properly filled out (ink, signed, etc.)?			(YES)	NO	
3.	Did all bottles arrive in good condition (unbroken)?			(YES)	NO	
4.	Did any VOA vials have significant air bubbles?			YES	NO	(N/A)
5.	Were **Ice or Ice packs** present?			(YES)	NO	
6.	Where did the bottles originate?			(CAS/ROC, CLIENT)		
7.	Temperature of cooler(s) upon receipt:	2°				
	Is the temperature within 0° - 6° C?:	(Yes)	Yes	Yes	Yes	Yes
	If No, Explain Below	No	No	No	No	No

Date/Time Temperatures Taken: 5/28/03 17:20

Thermometer ID: 161 or (IR GUN) Reading From: Temp Blank or (Sample Bottle)

If out of Temperature, Client Approval to Run Samples _____

Cooler Breakdown: Date: 5/29/03 by: [illegible]

1.	Were all bottle labels complete (*i.e.* analysis, preservation, etc.)?	(YES)	NO
2.	Did all bottle labels and tags agree with custody papers?	(YES)	NO
3.	Were correct containers used for the tests indicated?	(YES)	NO
4.	Air Samples: Cassettes / Tubes Intact Canisters Pressurized Tedlar® Bags Inflated		(N/A)

Explain any discrepancies: _____

		YES	NO	Sample I.D.	Reagent	Vol. Added
pH	Reagent					
12	NaOH					
2	HNO_3					
2	H_2SO_4					
Residual Chlorine (+/-)	for TCN & Phenol					
5-9**	P/PCBs (608 only)					

YES = All samples OK NO = Samples were preserved at lab as listed PC OK to adjust pH _____

**If pH adjustment is required, use NaOH and/or H_2SO_4

VOC Vial pH Verification (Tested after Analysis) Following Samples Exhibited pH > 2				

Other Comments:

Analytical Services, Inc.
Employee - Owned Company
www.caslab.com

CHAIN OF CUSTODY / LABORATORY ANALYTICAL SERVICES REQUEST FORM

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CAS Contact

Project Name: WINN DEVELOPMENT
Project Number: 11172926.2000
Project Manager: TOM LAWSON
Report CC: KEVIN J. McGRANN
Company/Address: URS CORP / BLDG 1, 781 ELMGROVE RD, ROCHESTER, NY 14624
Phone #: (585) 426-2120
FAX#: (585) 426-2161
Sampler's Signature:
Sampler's Printed Name: KEVIN J. McGRANN

ANALYSIS REQUESTED (Include Method Number and Container Preservative)

CLIENT SAMPLE ID	FOR OFFICE USE ONLY LAB ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NUMBER OF CONTAINERS	PRESERVATIVE	GC/MS VOA's 8260 624 CLP	GC/MS SVOA's 8270 625 CLP	GC VOA's 8021 601/602	PESTICIDES 8081 608 CLP	PCB's 8082 608 CLP	METALS, TOTAL (List in comments below)	METALS, DISSOLVED (List in comments below)	8260 TCL + STARS	8270 plus ACIDS B/N +20 TICs + STARS	REMARKS/ ALTERNATE DESCRIPTION
URS-1	645051	5/29/03	09:45	SOIL	2									X	X	
SB-1	52		13:40											X	X	
SB-2	53		14:22											X	X	
SB-2W	56		14:30	GW	1										X	

Preservative Key
0. NONE
1. HCL
2. HNO_3
3. H_2SO_4
4. NaOH
5. Zn. Acetate
6. MeOH
7. $NaHSO_4$
8. Other

SPECIAL INSTRUCTIONS/COMMENTS
Metals
BATCH BY PO #
SEPARATE BY MATRIX

See QAPP

TURNAROUND REQUIREMENTS
___ RUSH (SURCHARGES APPLY)
___ 24 hr ___ 48 hr ___ 5 day
X STANDARD
REQUESTED FAX DATE: 6/13/03
REQUESTED REPORT DATE: 6/18/03

REPORT REQUIREMENTS
X I. Results Only
___ II. Results + QC Summaries (LCS, DUP, MS/MSD as required)
___ III. Results + QC and Calibration Summaries
___ IV. Data Validation Report with Raw Data
___ V. Specialized Forms / Custom Report
Edata ___ Yes ___ No

INVOICE INFORMATION
05-19349
PO#: TOM LAWSON
BILL TO: URS CORP
BLDG 1, 781 ELMGROVE RD
ROCH, NY 14624
SUBMISSION #: 12317016

SAMPLE RECEIPT: CONDITION/COOLER TEMP: _____ CUSTODY SEALS: Y N

RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY
Signature	Signature	Signature	Signature	Signature	Signature
Printed Name: KEVIN J. McGRANN	Printed Name: HEATHER LOVEJOY	Printed Name	Printed Name	Printed Name	Printed Name
Firm: URS	Firm: CAS	Firm	Firm	Firm	Firm
Date/Time: 5/29/03, 15:37	Date/Time: 5/29/03 15:37	Date/Time	Date/Time	Date/Time	Date/Time

Distribution: White - Return to Originator; Yellow - Lab Copy; Pink - Retained by Client

SCOC-1102-08

Cooler Receipt And Preservation Check Form

Project/Client CCS Submission Number 23-17016

Cooler received on 5/29/03 by: [illegible] COURIER: CAS UPS FEDEX CD&L (CLIENT)

1.	Were custody seals on outside of cooler?			YES	(NO)	
2.	Were custody papers properly filled out (ink, signed, etc.)?			(YES)	NO	
3.	Did all bottles arrive in good condition (unbroken)?			(YES)	NO	
4.	Did any VOA vials have significant air bubbles?			YES	NO	(N/A)
5.	Were **Ice** or **Ice packs** present?			(YES)	NO	
6.	Where did the bottles originate?			(CAS/ROC)	CLIENT	
7.	Temperature of cooler(s) upon receipt:	6°				
	Is the temperature within 0° - 6° C?:	(Yes)	Yes	Yes	Yes	Yes
	If No, Explain Below	No	No	No	No	No

Date/Time Temperatures Taken: 5/29/03 1540

Thermometer ID: 161 or (IR GUN) Reading From: Temp Blank or (Sample Bottle)

If out of Temperature, Client Approval to Run Samples _____

Cooler Breakdown: Date: 5/30/03 by: VMK

1.	Were all bottle labels complete (*i.e.* analysis, preservation, etc.)?	(YES)	NO
2.	Did all bottle labels and tags agree with custody papers?	(YES)	NO
3.	Were correct containers used for the tests indicated?	(YES)	NO
4.	Air Samples: Cassettes / Tubes Intact Canisters Pressurized Tedlar® Bags Inflated		(N/A)

Explain any discrepancies: _____

		YES	NO	Sample I.D.	Reagent	Vol. Added
pH	Reagent					
12	NaOH					
2	HNO_3					
2	H_2SO_4					
Residual Chlorine (+/-)	for TCN & Phenol					
5-9**	P/PCBs (608 only)					

YES = All samples OK NO = Samples were preserved at lab as listed PC OK to adjust pH _____

**If pH adjustment is required, use NaOH and/or H_2SO_4

VOC Vial pH Verification (Tested after Analysis) Following Samples Exhibited pH > 2				

Other Comments:

Columbia Analytical Services inc.

A FULL SERVICE ENVIRONMENTAL LABORATORY

June 24, 2003

Mr. Tom Lawson
URS Corporation
BLDG-1 781 Elmgrove Rd.
Rochester, NY 14624

PROJECT:WINN DEVELOPMENT
Submission #:R2317157

Dear Mr. Lawson

Enclosed are the analytical results of the analyses requested. All data has been reviewed prior to report submission. Should you have any questions please contact me at (585) 288-5380.

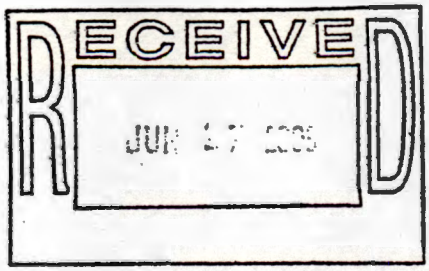
Thank you for letting us provide this service.

Sincerely,

COLUMBIA ANALYTICAL SERVICES

Mark Wilson
Client Service Manager

Enc.



Columbia Analytical Services, Inc.

1 Mustard ST.
Suite 250
Rochester, NY 14609
(585) 288-5380

THIS IS AN ANALYTICAL TEST REPORT FOR:

Client : URS Corporation
Project Reference: WINN DEVELOPMENT
Lab Submission # : R2317157
Project Manager : Mark Wilson
Reported : 06/24/03

Report Contains a total of 35 pages

This package has been reviewed by Columbia Analytical Services' QA Department/Laboratory Director to comply with NELAC standards prior to report submittal. Michael Perry

Columbia Analytical Services Inc.

CASE NARRATIVE

This report contains analytical results for the following samples:

Submission #: R2317157

Lab ID	Client ID
646875	URS-4
646876	URS-3
646877	URS-2
646878	URS-1
646879	TRIP BLANK

All samples were received in good condition unless otherwise noted on the cooler receipt and preservation check form located at the end of this report.

All samples were preserved in accordance with approved analytical methods.

All samples have been analyzed by the approved methods cited on the analytical results pages.

All holding times and associated QC were within limits.

No analytical or QC problems were encountered.

All sampling activities performed by CAS personnel have been in accordance with "CAS Field Procedures and Measurements Manual" or by client specifications.

Columbia Analytical Services INC.

An Employee - Owned Company

Effective 6/12/2003

ORGANIC QUALIFIERS

U - Indicates compound was analyzed for but not detected. The sample quantitation limit must be corrected for dilution and for percent moisture.

J - Indicates an estimated value. The flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed, or when the mass spectral data indicate the presence of a compound that meets the identification criteria but the result is less than the sample quantitation limit but greater than zero.

N - Indicates presumptive evidence of a compound. This flag is only used for tentatively identified compounds, where the identification is based on a mass spectral library search.

P - This flag is used for a pesticide/Aroclor target analyte when there is a greater than 25% difference for detected concentrations between the two GC columns. The lower of the two values is reported on Form I and flagged with a "P".

C - This flag applies to pesticide results where the identification has been confirmed by GC/MS.

B - This flag is used when the analyte is found in the associated blank as well as in the sample.

E - This flag identifies compounds whose concentrations exceed the calibration range of the instrument for that specific analysis.

D - This flag identifies all compounds identified in an analysis at a secondary dilution factor. If a sample or extract is re-analyzed at a higher dilution factor, as in the "E" flag above, the "DL" suffix is appended to the sample number on the Form I for the diluted sample, and ALL concentration values reported on that Form I are flagged with the "D" flag.

A - This flag indicates that a TIC is a suspected aldol-condensation product.

X - As specified in Case Narrative.

* - This flag identifies compounds associated with a quality control parameter which exceeds laboratory limits.

CAS/Rochester Lab ID # for State Certifications

Army Corp of Engineers Validated
Delaware Accredited
Connecticut ID # PH0556
Florida ID # E87674
Massachusetts ID # M-NY032
Navy Facilities Engineering Service Center Approved
Nebraska Accredited
NELAP Accredited
New York ID # 10145
New Jersey ID # NY004
New Hampshire ID # 294100 A/B
Pennsylvania Registration 68-786
Rhode Island ID # 158
South Carolina ID #91012
West Virginia ID # 292

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B TCL/TANK
Reported: 06/24/03

URS Corporation
Project Reference: WINN DEVELOPMENT
Client Sample ID : URS-4

ate Sampled : 06/05/03 **Order #:** 646875 **Sample Matrix:** WATER
ate Received: 06/05/03 **Submission #:** R2317157 **Analytical Run** 91951

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 06/12/03			
ANALYTICAL DILUTION: 1.00			
ACETONE	20	20 U	UG/L
BENZENE	5.0	5.0 U	UG/L
BROMODICHLOROMETHANE	5.0	5.0 U	UG/L
BROMOFORM	5.0	5.0 U	UG/L
BROMOMETHANE	5.0	5.0 U	UG/L
2-BUTANONE (MEK)	10	10 U	UG/L
SEC-BUTYLBENZENE	5.0	5.0 U	UG/L
N-BUTYLBENZENE	5.0	5.0 U	UG/L
TERT-BUTYLBENZENE	5.0	5.0 U	UG/L
CARBON DISULFIDE	10	10 U	UG/L
CARBON TETRACHLORIDE	5.0	5.0 U	UG/L
CHLOROBENZENE	5.0	5.0 U	UG/L
CHLOROETHANE	5.0	5.0 U	UG/L
CHLOROFORM	5.0	5.0 U	UG/L
CHLOROMETHANE	5.0	5.0 U	UG/L
DIBROMOCHLOROMETHANE	5.0	5.0 U	UG/L
1,1-DICHLOROETHANE	5.0	5.0 U	UG/L
1,2-DICHLOROETHANE	5.0	5.0 U	UG/L
1,1-DICHLOROETHENE	5.0	5.0 U	UG/L
CIS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/L
TRANS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/L
1,2-DICHLOROPROPANE	5.0	5.0 U	UG/L
CIS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/L
TRANS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/L
METHYL-TERT-BUTYL-ETHER	5.0	5.0 U	UG/L
ETHYLBENZENE	5.0	5.0 U	UG/L
2-HEXANONE	10	10 U	UG/L
ISOPROPYL BENZENE	5.0	5.0 U	UG/L
P-ISOPROPYLTOLUENE	5.0	5.0 U	UG/L
METHYLENE CHLORIDE	5.0	5.0 U	UG/L
NAPHTHALENE	5.0	5.0 U	UG/L
4-METHYL-2-PENTANONE (MIBK)	10	10 U	UG/L
N-PROPYLBENZENE	5.0	5.0 U	UG/L
STYRENE	5.0	5.0 U	UG/L
1,1,2,2-TETRACHLOROETHANE	5.0	5.0 U	UG/L
TETRACHLOROETHENE	5.0	5.0 U	UG/L
TOLUENE	5.0	5.0 U	UG/L
1,1,1-TRICHLOROETHANE	5.0	5.0 U	UG/L
1,1,2-TRICHLOROETHANE	5.0	5.0 U	UG/L
TRICHLOROETHENE	5.0	5.0 U	UG/L
1,3,5-TRIMETHYLBENZENE	5.0	5.0 U	UG/L
1,2,4-TRIMETHYLBENZENE	5.0	5.0 U	UG/L
VINYL CHLORIDE	5.0	5.0 U	UG/L
O-XYLENE	5.0	5.0 U	UG/L

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B TCL/TANK
Reported: 06/24/03

URS Corporation
Project Reference: WINN DEVELOPMENT
Client Sample ID : URS-4

Date Sampled : 06/05/03 **Order #:** 646875 **Sample Matrix:** WATER
Date Received: 06/05/03 **Submission #:** R2317157 **Analytical Run** 91951

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 06/12/03			
ANALYTICAL DILUTION: 1.00			
M+P-XYLENE	5.0	5.0 U	UG/L

SURROGATE RECOVERIES	QC LIMITS		
4-BROMOFLUOROBENZENE	(83 - 118 %)	104	%
TOLUENE-D8	(91 - 113 %)	110	%
DIBROMOFLUOROMETHANE	(87 - 115 %)	102	%

COLUMBIA ANALYTICAL SERVICES

EXTRACTABLE ORGANICS
METHOD 8270C SEMIVOLATILES
Reported: 06/24/03

URS Corporation
Project Reference: WINN DEVELOPMENT
Client Sample ID : URS-4

ate Sampled : 06/05/03 **Order #:** 646875 **Sample Matrix:** WATER
ate Received: 06/05/03 **Submission #:** R2317157 **Analytical Run** 91860

ANALYTE	PQL	RESULT	UNITS
DATE EXTRACTED : 06/09/03			
DATE ANALYZED : 06/11/03			
ANALYTICAL DILUTION: 0.94			
ACENAPHTHENE	10	9.4 U	UG/L
CENAPHTHYLENE	10	9.4 U	UG/L
NTHRACENE	10	9.4 U	UG/L
BENZO(A)ANTHRACENE	10	9.4 U	UG/L
ENZO(A)PYRENE	10	9.4 U	UG/L
ENZO(B)FLUORANTHENE	10	9.4 U	UG/L
BENZO(G,H,I)PERYLENE	10	9.4 U	UG/L
ENZO(K)FLUORANTHENE	10	9.4 U	UG/L
ENZYL ALCOHOL	10	9.4 U	UG/L
BUTYL BENZYL PHTHALATE	10	9.4 U	UG/L
DI-N-BUTYLPHTHALATE	10	9.4 U	UG/L
ARBAZOLE	10	9.4 U	UG/L
NDENO(1,2,3-CD)PYRENE	10	9.4 U	UG/L
4-CHLOROANILINE	10	9.4 U	UG/L
IS(-2-CHLOROETHOXY)METHANE	10	9.4 U	UG/L
IS(2-CHLOROETHYL)ETHER	10	9.4 U	UG/L
2-CHLORONAPHTHALENE	10	9.4 U	UG/L
-CHLOROPHENOL	10	9.4 U	UG/L
,2'-OXYBIS(1-CHLOROPROPANE)	10	9.4 U	UG/L
CHRYSENE	10	9.4 U	UG/L
DIBENZO(A,H)ANTHRACENE	10	9.4 U	UG/L
IBENZOFURAN	10	9.4 U	UG/L
,3-DICHLOROBENZENE	10	9.4 U	UG/L
1,2-DICHLOROBENZENE	10	9.4 U	UG/L
,4-DICHLOROBENZENE	10	9.4 U	UG/L
,3'-DICHLOROBENZIDINE	10	9.4 U	UG/L
2,4-DICHLOROPHENOL	10	9.4 U	UG/L
IETHYLPHTHALATE	10	9.4 U	UG/L
IMETHYL PHTHALATE	10	9.4 U	UG/L
2,4-DIMETHYLPHENOL	10	9.4 U	UG/L
2,4-DINITROPHENOL	50	47 U	UG/L
2,4-DINITROTOLUENE	10	9.4 U	UG/L
2,6-DINITROTOLUENE	10	9.4 U	UG/L
BIS(2-ETHYLHEXYL)PHTHALATE	10	9.4 U	UG/L
FLUORANTHENE	10	9.4 U	UG/L
FLUORENE	10	9.4 U	UG/L
HEXACHLOROBENZENE	10	9.4 U	UG/L
HEXACHLOROBUTADIENE	10	9.4 U	UG/L
HEXACHLOROCYCLOPENTADIENE	10	9.4 U	UG/L
HEXACHLOROETHANE	10	9.4 U	UG/L
ISOPHORONE	10	9.4 U	UG/L
2-METHYLNAPHTHALENE	10	9.4 U	UG/L
4,6-DINITRO-2-METHYLPHENOL	50	47 U	UG/L

COLUMBIA ANALYTICAL SERVICES

EXTRACTABLE ORGANICS
METHOD 8270C SEMIVOLATILES
Reported: 06/24/03

URS Corporation
Project Reference: WINN DEVELOPMENT
Client Sample ID : URS-4

Date Sampled : 06/05/03 **Order #:** 646875 **Sample Matrix:** WATER
Date Received: 06/05/03 **Submission #:** R2317157 **Analytical Run** 91860

ANALYTE	PQL	RESULT	UNITS
DATE EXTRACTED : 06/09/03			
DATE ANALYZED : 06/11/03			
ANALYTICAL DILUTION: 0.94			
4-CHLORO-3-METHYLPHENOL	10	9.4 U	UG/L
2-METHYLPHENOL	10	9.4 U	UG/L
3+4-METHYLPHENOL	10	9.4 U	UG/L
NAPHTHALENE	10	9.4 U	UG/L
2-NITROANILINE	50	47 U	UG/L
3-NITROANILINE	50	47 U	UG/L
4-NITROANILINE	50	47 U	UG/L
NITROBENZENE	10	9.4 U	UG/L
2-NITROPHENOL	10	9.4 U	UG/L
4-NITROPHENOL	50	47 U	UG/L
N-NITROSODIMETHYLAMINE	10	9.4 U	UG/L
N-NITROSODIPHENYLAMINE	10	9.4 U	UG/L
DI-N-OCTYL PHTHALATE	10	9.4 U	UG/L
PENTACHLOROPHENOL	50	47 U	UG/L
PHENANTHRENE	10	9.4 U	UG/L
PHENOL	10	9.4 U	UG/L
4-BROMOPHENYL-PHENYLETHER	10	9.4 U	UG/L
4-CHLOROPHENYL-PHENYLETHER	10	9.4 U	UG/L
N-NITROSO-DI-N-PROPYLAMINE	10	9.4 U	UG/L
PYRENE	10	9.4 U	UG/L
1,2,4-TRICHLOROBENZENE	10	9.4 U	UG/L
2,4,6-TRICHLOROPHENOL	10	9.4 U	UG/L
2,4,5-TRICHLOROPHENOL	10	9.4 U	UG/L

SURROGATE RECOVERIES	QC LIMITS		
TERPHENYL-d14	(23 - 139 %)	85	%
NITROBENZENE-d5	(22 - 130 %)	81	%
PHENOL-d6	(10 - 130 %)	33	%
2-FLUOROBIPHENYL	(27 - 130 %)	79	%
2-FLUOROPHENOL	(10 - 130 %)	48	%
2,4,6-TRIBROMOPHENOL	(10 - 149 %)	97	%

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

647875

Lab Name: CAS-ROCH Contract: URS

Lab Code: 10145 Case No.: R317157 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: 646875 0.94

Sample wt/vol: 1060 (g/ml) ML Lab File ID: BW603.D

Level: (low/med) LOW Date Received: _____

% Moisture: _____ decanted: (Y/N) N Date Extracted: 6/9/03

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 6/11/03

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7

Number TICs found: 4

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	unknown alcohol	8.36	9	J
2. 000143-07-7	Dodecanoic acid	12.10	5	JN
3.	unknown amide	19.55	8	J
4.	unknown amide	22.47	4	J

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B TCL/TANK
Reported: 06/24/03

URS Corporation
Project Reference: WINN DEVELOPMENT
Client Sample ID : URS-3

Date Sampled : 06/05/03 **Order #:** 646876 **Sample Matrix:** WATER
Date Received: 06/05/03 **Submission #:** R2317157 **Analytical Run** 91951

DATE ANALYZED : 06/12/03
ANALYTICAL DILUTION: 1.00

ANALYTE	PQL	RESULT	UNITS
ACETONE	20	20 U	UG/L
BENZENE	5.0	5.0 U	UG/L
BROMODICHLOROMETHANE	5.0	5.0 U	UG/L
BROMOFORM	5.0	5.0 U	UG/L
BROMOMETHANE	5.0	5.0 U	UG/L
2-BUTANONE (MEK)	10	10 U	UG/L
SEC-BUTYLBENZENE	5.0	5.0 U	UG/L
N-BUTYLBENZENE	5.0	5.0 U	UG/L
TERT-BUTYLBENZENE	5.0	5.0 U	UG/L
CARBON DISULFIDE	10	10 U	UG/L
CARBON TETRACHLORIDE	5.0	5.0 U	UG/L
CHLOROBENZENE	5.0	5.0 U	UG/L
CHLOROETHANE	5.0	5.0 U	UG/L
CHLOROFORM	5.0	5.0 U	UG/L
CHLOROMETHANE	5.0	5.0 U	UG/L
DIBROMOCHLOROMETHANE	5.0	5.0 U	UG/L
1,1-DICHLOROETHANE	5.0	5.0 U	UG/L
1,2-DICHLOROETHANE	5.0	5.0 U	UG/L
1,1-DICHLOROETHENE	5.0	5.0 U	UG/L
CIS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/L
TRANS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/L
1,2-DICHLOROPROPANE	5.0	5.0 U	UG/L
CIS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/L
TRANS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/L
METHYL-TERT-BUTYL-ETHER	5.0	5.0 U	UG/L
ETHYLBENZENE	5.0	5.0 U	UG/L
2-HEXANONE	10	10 U	UG/L
ISOPROPYL BENZENE	5.0	5.0 U	UG/L
P-ISOPROPYLTOLUENE	5.0	5.0 U	UG/L
METHYLENE CHLORIDE	5.0	5.0 U	UG/L
NAPHTHALENE	5.0	5.0 U	UG/L
4-METHYL-2-PENTANONE (MIBK)	10	10 U	UG/L
N-PROPYLBENZENE	5.0	5.0 U	UG/L
STYRENE	5.0	5.0 U	UG/L
1,1,2,2-TETRACHLOROETHANE	5.0	5.0 U	UG/L
TETRACHLOROETHENE	5.0	5.0 U	UG/L
TOLUENE	5.0	5.0 U	UG/L
1,1,1-TRICHLOROETHANE	5.0	5.0 U	UG/L
1,1,2-TRICHLOROETHANE	5.0	5.0 U	UG/L
TRICHLOROETHENE	5.0	5.0 U	UG/L
1,3,5-TRIMETHYLBENZENE	5.0	5.0 U	UG/L
1,2,4-TRIMETHYLBENZENE	5.0	5.0 U	UG/L
VINYL CHLORIDE	5.0	5.0 U	UG/L
O-XYLENE	5.0	5.0 U	UG/L

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B TCL/TANK
Reported: 06/24/03

URS Corporation
Project Reference: WINN DEVELOPMENT
Client Sample ID : URS-3

Date Sampled : 06/05/03 **Order #:** 646876 **Sample Matrix:** WATER
Date Received: 06/05/03 **Submission #:** R2317157 **Analytical Run** 91951

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 06/12/03			
ANALYTICAL DILUTION: 1.00			
M+P-XYLENE	5.0	5.0 U	UG/L

SURROGATE RECOVERIES	QC LIMITS		
4-BROMOFLUOROBENZENE	(83 - 118 %)	105	%
TOLUENE-D8	(91 - 113 %)	105	%
DIBROMOFLUOROMETHANE	(87 - 115 %)	101	%

COLUMBIA ANALYTICAL SERVICES

EXTRACTABLE ORGANICS
METHOD 8270C SEMIVOLATILES
Reported: 06/24/03

URS Corporation
Project Reference: WINN DEVELOPMENT
Client Sample ID : URS-3

Date Sampled : 06/05/03 **Order #:** 646876 **Sample Matrix:** WATER
Date Received: 06/05/03 **Submission #:** R2317157 **Analytical Run** 91860

ANALYTE	PQL	RESULT	UNITS
DATE EXTRACTED : 06/09/03			
DATE ANALYZED : 06/11/03			
ANALYTICAL DILUTION: 0.95			
ACENAPHTHENE	10	9.5 U	UG/L
ACENAPHTHYLENE	10	9.5 U	UG/L
ANTHRACENE	10	9.5 U	UG/L
BENZO(A)ANTHRACENE	10	9.5 U	UG/L
BENZO(A)PYRENE	10	9.5 U	UG/L
BENZO(B)FLUORANTHENE	10	9.5 U	UG/L
BENZO(G,H,I)PERYLENE	10	9.5 U	UG/L
BENZO(K)FLUORANTHENE	10	9.5 U	UG/L
BENZYL ALCOHOL	10	9.5 U	UG/L
BUTYL BENZYL PHTHALATE	10	9.5 U	UG/L
DI-N-BUTYLPHTHALATE	10	9.5 U	UG/L
CARBAZOLE	10	9.5 U	UG/L
INDENO(1,2,3-CD)PYRENE	10	9.5 U	UG/L
4-CHLOROANILINE	10	9.5 U	UG/L
BIS(-2-CHLOROETHOXY)METHANE	10	9.5 U	UG/L
BIS(2-CHLOROETHYL)ETHER	10	9.5 U	UG/L
2-CHLORONAPHTHALENE	10	9.5 U	UG/L
2-CHLOROPHENOL	10	9.5 U	UG/L
2,2'-OXYBIS(1-CHLOROPROPANE)	10	9.5 U	UG/L
CHRYSENE	10	9.5 U	UG/L
DIBENZO(A,H)ANTHRACENE	10	9.5 U	UG/L
DIBENZOFURAN	10	9.5 U	UG/L
1,3-DICHLOROBENZENE	10	9.5 U	UG/L
1,2-DICHLOROBENZENE	10	9.5 U	UG/L
1,4-DICHLOROBENZENE	10	9.5 U	UG/L
3,3'-DICHLOROBENZIDINE	10	9.5 U	UG/L
2,4-DICHLOROPHENOL	10	9.5 U	UG/L
DIETHYLPHTHALATE	10	9.5 U	UG/L
DIMETHYL PHTHALATE	10	9.5 U	UG/L
2,4-DIMETHYLPHENOL	10	9.5 U	UG/L
2,4-DINITROPHENOL	50	48 U	UG/L
2,4-DINITROTOLUENE	10	9.5 U	UG/L
2,6-DINITROTOLUENE	10	9.5 U	UG/L
BIS(2-ETHYLHEXYL)PHTHALATE	10	9.5 U	UG/L
FLUORANTHENE	10	9.5 U	UG/L
FLUORENE	10	9.5 U	UG/L
HEXACHLOROBENZENE	10	9.5 U	UG/L
HEXACHLOROBUTADIENE	10	9.5 U	UG/L
HEXACHLOROCYCLOPENTADIENE	10	9.5 U	UG/L
HEXACHLOROETHANE	10	9.5 U	UG/L
ISOPHORONE	10	9.5 U	UG/L
2-METHYLNAPHTHALENE	10	9.5 U	UG/L
4,6-DINITRO-2-METHYLPHENOL	50	48 U	UG/L

COLUMBIA ANALYTICAL SERVICES

EXTRACTABLE ORGANICS
METHOD 8270C SEMIVOLATILES
Reported: 06/24/03

URS Corporation
Project Reference: WINN DEVELOPMENT
Client Sample ID : URS-3

ate Sampled : 06/05/03 **Order #:** 646876 **Sample Matrix:** WATER
ate Received: 06/05/03 **Submission #:** R2317157 **Analytical Run** 91860

ANALYTE	PQL	RESULT	UNITS
DATE EXTRACTED : 06/09/03			
DATE ANALYZED : 06/11/03			
ANALYTICAL DILUTION: 0.95			
4-CHLORO-3-METHYLPHENOL	10	9.5 U	UG/L
:-METHYLPHENOL	10	9.5 U	UG/L
+4-METHYLPHENOL	10	9.5 U	UG/L
NAPHTHALENE	10	9.5 U	UG/L
?-NITROANILINE	50	48 U	UG/L
:-NITROANILINE	50	48 U	UG/L
4-NITROANILINE	50	48 U	UG/L
NITROBENZENE	10	9.5 U	UG/L
?-NITROPHENOL	10	9.5 U	UG/L
4-NITROPHENOL	50	48 U	UG/L
N-NITROSODIMETHYLAMINE	10	9.5 U	UG/L
N-NITROSODIPHENYLAMINE	10	9.5 U	UG/L
DI-N-OCTYL PHTHALATE	10	9.5 U	UG/L
PENTACHLOROPHENOL	50	48 U	UG/L
PHENANTHRENE	10	9.5 U	UG/L
PHENOL	10	9.5 U	UG/L
4-BROMOPHENYL-PHENYLETHER	10	9.5 U	UG/L
4-CHLOROPHENYL-PHENYLETHER	10	9.5 U	UG/L
N-NITROSO-DI-N-PROPYLAMINE	10	9.5 U	UG/L
PYRENE	10	9.5 U	UG/L
1,2,4-TRICHLOROBENZENE	10	9.5 U	UG/L
2,4,6-TRICHLOROPHENOL	10	9.5 U	UG/L
2,4,5-TRICHLOROPHENOL	10	9.5 U	UG/L

SURROGATE RECOVERIES	QC LIMITS		
TERPHENYL-d14	(23 - 139 %)	94	%
NITROBENZENE-d5	(22 - 130 %)	77	%
PHENOL-d6	(10 - 130 %)	36	%
2-FLUOROBIPHENYL	(27 - 130 %)	85	%
2-FLUOROPHENOL	(10 - 130 %)	50	%
2,4,6-TRIBROMOPHENOL	(10 - 149 %)	105	%

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
646876

Lab Name: CAS-ROCH Contract: URS

Lab Code: 10145 Case No.: R317157 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: 646876 0.95

Sample wt/vol: 1050 (g/ml) ML Lab File ID: BW604.D

Level: (low/med) LOW Date Received: _____

% Moisture: _____ decanted: (Y/N) N Date Extracted: 6/9/03

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 6/11/03

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7

Number TICs found: 4

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	006180-61-6	1-Propanol, 3-phenoxy-	8.36	16	JN
2.		unknown acid	12.10	5	J
3.	000301-02-0	9-Octadecenamide, (Z)-	19.56	16	JN
4.		unknown amide	22.48	8	J

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B TCL/TANK
Reported: 06/24/03

URS Corporation
Project Reference: WINN DEVELOPMENT
Client Sample ID : URS-2

Date Sampled : 06/05/03 **Order #:** 646877 **Sample Matrix:** WATER
Date Received: 06/05/03 **Submission #:** R2317157 **Analytical Run** 91951

DATE ANALYZED : 06/12/03
ANALYTICAL DILUTION: 1.00

ANALYTE	PQL	RESULT	UNITS
ACETONE	20	20 U	UG/L
BENZENE	5.0	5.0 U	UG/L
BROMODICHLOROMETHANE	5.0	5.0 U	UG/L
BROMOFORM	5.0	5.0 U	UG/L
BROMOMETHANE	5.0	5.0 U	UG/L
2-BUTANONE (MEK)	10	10 U	UG/L
SEC-BUTYLBENZENE	5.0	5.0 U	UG/L
N-BUTYLBENZENE	5.0	5.0 U	UG/L
TERT-BUTYLBENZENE	5.0	5.0 U	UG/L
CARBON DISULFIDE	10	10 U	UG/L
CARBON TETRACHLORIDE	5.0	5.0 U	UG/L
CHLOROBENZENE	5.0	5.0 U	UG/L
CHLOROETHANE	5.0	5.0 U	UG/L
CHLOROFORM	5.0	5.0 U	UG/L
CHLOROMETHANE	5.0	5.0 U	UG/L
DIBROMOCHLOROMETHANE	5.0	5.0 U	UG/L
1,1-DICHLOROETHANE	5.0	5.0 U	UG/L
1,2-DICHLOROETHANE	5.0	5.0 U	UG/L
1,1-DICHLOROETHENE	5.0	5.0 U	UG/L
CIS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/L
TRANS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/L
1,2-DICHLOROPROPANE	5.0	5.0 U	UG/L
CIS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/L
TRANS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/L
METHYL-TERT-BUTYL-ETHER	5.0	5.0 U	UG/L
ETHYLBENZENE	5.0	5.0 U	UG/L
2-HEXANONE	10	10 U	UG/L
ISOPROPYL BENZENE	5.0	5.0 U	UG/L
P-ISOPROPYLTOLUENE	5.0	5.0 U	UG/L
METHYLENE CHLORIDE	5.0	5.0 U	UG/L
NAPHTHALENE	5.0	5.0 U	UG/L
4-METHYL-2-PENTANONE (MIBK)	10	10 U	UG/L
N-PROPYLBENZENE	5.0	5.0 U	UG/L
STYRENE	5.0	5.0 U	UG/L
1,1,2,2-TETRACHLOROETHANE	5.0	5.0 U	UG/L
TETRACHLOROETHENE	5.0	5.0 U	UG/L
TOLUENE	5.0	5.0 U	UG/L
1,1,1-TRICHLOROETHANE	5.0	5.0 U	UG/L
1,1,2-TRICHLOROETHANE	5.0	5.0 U	UG/L
TRICHLOROETHENE	5.0	5.0 U	UG/L
1,3,5-TRIMETHYLBENZENE	5.0	5.0 U	UG/L
1,2,4-TRIMETHYLBENZENE	5.0	5.0 U	UG/L
VINYL CHLORIDE	5.0	5.0 U	UG/L
O-XYLENE	5.0	5.0 U	UG/L

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B TCL/TANK
Reported: 06/24/03

URS Corporation
Project Reference: WINN DEVELOPMENT
Client Sample ID : URS-2

Date Sampled : 06/05/03 **Order #:** 646877 **Sample Matrix:** WATER
Date Received: 06/05/03 **Submission #:** R2317157 **Analytical Run** 91951

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 06/12/03			
ANALYTICAL DILUTION: 1.00			
M+P-XYLENE	5.0	5.0 U	UG/L

SURROGATE RECOVERIES	QC LIMITS		
4-BROMOFLUOROBENZENE	(83 - 118 %)	101	%
TOLUENE-D8	(91 - 113 %)	107	%
DIBROMOFLUOROMETHANE	(87 - 115 %)	106	%

COLUMBIA ANALYTICAL SERVICES

EXTRACTABLE ORGANICS
METHOD 8270C SEMIVOLATILES
Reported: 06/24/03

URS Corporation
Project Reference: WINN DEVELOPMENT
Client Sample ID : URS-2

Date Sampled : 06/05/03 **Order #:** 646877 **Sample Matrix:** WATER
Date Received: 06/05/03 **Submission #:** R2317157 **Analytical Run** 91860

DATE EXTRACTED : 06/09/03
DATE ANALYZED : 06/11/03
ANALYTICAL DILUTION: 0.97

ANALYTE	PQL	RESULT	UNITS
ACENAPHTHENE	10	9.7 U	UG/L
ACENAPHTHYLENE	10	9.7 U	UG/L
ANTHRACENE	10	9.7 U	UG/L
BENZO(A)ANTHRACENE	10	9.7 U	UG/L
BENZO(A)PYRENE	10	9.7 U	UG/L
BENZO(B)FLUORANTHENE	10	9.7 U	UG/L
BENZO(G,H,I)PERYLENE	10	9.7 U	UG/L
BENZO(K)FLUORANTHENE	10	9.7 U	UG/L
BENZYL ALCOHOL	10	9.7 U	UG/L
BUTYL BENZYL PHTHALATE	10	9.7 U	UG/L
DI-N-BUTYLPHTHALATE	10	9.7 U	UG/L
CARBAZOLE	10	9.7 U	UG/L
INDENO(1,2,3-CD)PYRENE	10	9.7 U	UG/L
4-CHLOROANILINE	10	9.7 U	UG/L
BIS(-2-CHLOROETHOXY)METHANE	10	9.7 U	UG/L
BIS(2-CHLOROETHYL)ETHER	10	9.7 U	UG/L
2-CHLORONAPHTHALENE	10	9.7 U	UG/L
2-CHLOROPHENOL	10	9.7 U	UG/L
2,2'-OXYBIS(1-CHLOROPROPANE)	10	9.7 U	UG/L
CHRYSENE	10	9.7 U	UG/L
DIBENZO(A,H)ANTHRACENE	10	9.7 U	UG/L
DIBENZOFURAN	10	9.7 U	UG/L
1,3-DICHLOROBENZENE	10	9.7 U	UG/L
1,2-DICHLOROBENZENE	10	9.7 U	UG/L
1,4-DICHLOROBENZENE	10	9.7 U	UG/L
3,3'-DICHLOROBENZIDINE	10	9.7 U	UG/L
2,4-DICHLOROPHENOL	10	9.7 U	UG/L
DIETHYLPHTHALATE	10	9.7 U	UG/L
DIMETHYL PHTHALATE	10	9.7 U	UG/L
2,4-DIMETHYLPHENOL	10	9.7 U	UG/L
2,4-DINITROPHENOL	50	49 U	UG/L
2,4-DINITROTOLUENE	10	9.7 U	UG/L
2,6-DINITROTOLUENE	10	9.7 U	UG/L
BIS(2-ETHYLHEXYL)PHTHALATE	10	9.7 U	UG/L
FLUORANTHENE	10	9.7 U	UG/L
FLUORENE	10	9.7 U	UG/L
HEXACHLOROBENZENE	10	9.7 U	UG/L
HEXACHLOROBUTADIENE	10	9.7 U	UG/L
HEXACHLOROCYCLOPENTADIENE	10	9.7 U	UG/L
HEXACHLOROETHANE	10	9.7 U	UG/L
ISOPHORONE	10	9.7 U	UG/L
2-METHYLNAPHTHALENE	10	9.7 U	UG/L
4,6-DINITRO-2-METHYLPHENOL	50	49 U	UG/L

COLUMBIA ANALYTICAL SERVICES

EXTRACTABLE ORGANICS
METHOD 8270C SEMIVOLATILES
Reported: 06/24/03

URS Corporation
Project Reference: WINN DEVELOPMENT
Client Sample ID : URS-2

ate Sampled : 06/05/03 **Order #:** 646877 **Sample Matrix:** WATER
_ate Received: 06/05/03 **Submission #:** R2317157 **Analytical Run** 91860

_ANALYTE	PQL	RESULT	UNITS
DATE EXTRACTED : 06/09/03			
DATE ANALYZED : 06/11/03			
ANALYTICAL DILUTION: 0.97			
4-CHLORO-3-METHYLPHENOL	10	9.7 U	UG/L
-METHYLPHENOL	10	9.7 U	UG/L
+4-METHYLPHENOL	10	9.7 U	UG/L
NAPHTHALENE	10	9.7 U	UG/L
:-NITROANILINE	50	49 U	UG/L
-NITROANILINE	50	49 U	UG/L
4-NITROANILINE	50	49 U	UG/L
NITROBENZENE	10	9.7 U	UG/L
:-NITROPHENOL	10	9.7 U	UG/L
4-NITROPHENOL	50	49 U	UG/L
N-NITROSODIMETHYLAMINE	10	9.7 U	UG/L
N-NITROSODIPHENYLAMINE	10	9.7 U	UG/L
DI-N-OCTYL PHTHALATE	10	9.7 U	UG/L
PENTACHLOROPHENOL	50	49 U	UG/L
PHENANTHRENE	10	9.7 U	UG/L
PHENOL	10	9.7 U	UG/L
4-BROMOPHENYL-PHENYLETHER	10	9.7 U	UG/L
4-CHLOROPHENYL-PHENYLETHER	10	9.7 U	UG/L
N-NITROSO-DI-N-PROPYLAMINE	10	9.7 U	UG/L
PYRENE	10	9.7 U	UG/L
1,2,4-TRICHLOROBENZENE	10	9.7 U	UG/L
2,4,6-TRICHLOROPHENOL	10	9.7 U	UG/L
2,4,5-TRICHLOROPHENOL	10	9.7 U	UG/L

SURROGATE RECOVERIES	QC LIMITS		
TERPHENYL-d14	(23 - 139 %)	88	%
NITROBENZENE-d5	(22 - 130 %)	83	%
PHENOL-d6	(10 - 130 %)	39	%
2-FLUOROBIPHENYL	(27 - 130 %)	87	%
2-FLUOROPHENOL	(10 - 130 %)	56	%
2,4,6-TRIBROMOPHENOL	(10 - 149 %)	100	%

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
646877

Lab Name: CAS-ROCH Contract: URS

Lab Code: 10145 Case No.: R317157 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 646877 0.97

Sample wt/vol: 1030 (g/ml) ML Lab File ID: BW605.D

Level: (low/med) LOW Date Received:

% Moisture: decanted: (Y/N) N Date Extracted: 6/9/03

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 6/11/03

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7

Number TICs found: 3 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	unknown	12.10	4	J
2.	unknown amide	19.55	24	J
3.	unknown amide	22.47	11	J

COLUMBIA ANALYTICAL SERVICES

EXTRACTABLE ORGANICS
METHOD 8270C SEMIVOLATILES
Reported: 06/24/03

URS Corporation
Project Reference: WINN DEVELOPMENT
Client Sample ID : URS-1

Date Sampled : 06/05/03 **Order #:** 646878 **Sample Matrix:** WATER
Date Received: 06/05/03 **Submission #:** R2317157 **Analytical Run** 91860

DATE EXTRACTED : 06/09/03
DATE ANALYZED : 06/11/03
ANALYTICAL DILUTION: 1.00

ANALYTE	PQL	RESULT	UNITS
ACENAPHTHENE	10	10 U	UG/L
ACENAPHTHYLENE	10	10 U	UG/L
ANTHRACENE	10	10 U	UG/L
BENZO(A)ANTHRACENE	10	10 U	UG/L
BENZO(A)PYRENE	10	10 U	UG/L
BENZO(B)FLUORANTHENE	10	10 U	UG/L
BENZO(G,H,I)PERYLENE	10	10 U	UG/L
BENZO(K)FLUORANTHENE	10	10 U	UG/L
BENZYL ALCOHOL	10	10 U	UG/L
BUTYL BENZYL PHTHALATE	10	10 U	UG/L
DI-N-BUTYLPHTHALATE	10	10 U	UG/L
CARBAZOLE	10	10 U	UG/L
INDENO(1,2,3-CD)PYRENE	10	10 U	UG/L
4-CHLOROANILINE	10	10 U	UG/L
BIS(-2-CHLOROETHOXY)METHANE	10	10 U	UG/L
BIS(2-CHLOROETHYL)ETHER	10	10 U	UG/L
2-CHLORONAPHTHALENE	10	10 U	UG/L
2-CHLOROPHENOL	10	10 U	UG/L
2,2'-OXYBIS(1-CHLOROPROPANE)	10	10 U	UG/L
CHRYSENE	10	10 U	UG/L
DIBENZO(A,H)ANTHRACENE	10	10 U	UG/L
DIBENZOFURAN	10	10 U	UG/L
1,3-DICHLOROBENZENE	10	10 U	UG/L
1,2-DICHLOROBENZENE	10	10 U	UG/L
1,4-DICHLOROBENZENE	10	10 U	UG/L
3,3'-DICHLOROBENZIDINE	10	10 U	UG/L
2,4-DICHLOROPHENOL	10	10 U	UG/L
DIETHYLPHTHALATE	10	10 U	UG/L
DIMETHYL PHTHALATE	10	10 U	UG/L
2,4-DIMETHYLPHENOL	10	10 U	UG/L
2,4-DINITROPHENOL	50	50 U	UG/L
2,4-DINITROTOLUENE	10	10 U	UG/L
2,6-DINITROTOLUENE	10	10 U	UG/L
BIS(2-ETHYLHEXYL)PHTHALATE	10	10 U	UG/L
FLUORANTHENE	10	10 U	UG/L
FLUORENE	10	10 U	UG/L
HEXACHLOROBENZENE	10	10 U	UG/L
HEXACHLOROBUTADIENE	10	10 U	UG/L
HEXACHLOROCYCLOPENTADIENE	10	10 U	UG/L
HEXACHLOROETHANE	10	10 U	UG/L
ISOPHORONE	10	10 U	UG/L
2-METHYLNAPHTHALENE	10	25	UG/L
4,6-DINITRO-2-METHYLPHENOL	50	50 U	UG/L

COLUMBIA ANALYTICAL SERVICES

EXTRACTABLE ORGANICS
METHOD 8270C SEMIVOLATILES
Reported: 06/24/03

URS Corporation
Project Reference: WINN DEVELOPMENT
Client Sample ID : URS-1

ate Sampled : 06/05/03 **Order #:** 646878 **Sample Matrix:** WATER
ate Received: 06/05/03 **Submission #:** R2317157 **Analytical Run** 91860

ANALYTE	PQL	RESULT	UNITS
DATE EXTRACTED : 06/09/03			
DATE ANALYZED : 06/11/03			
ANALYTICAL DILUTION: 1.00			
4-CHLORO-3-METHYLPHENOL	10	10 U	UG/L
-METHYLPHENOL	10	10 U	UG/L
+4-METHYLPHENOL	10	10 U	UG/L
NAPHTHALENE	10	89	UG/L
-NITROANILINE	50	50 U	UG/L
-NITROANILINE	50	50 U	UG/L
4-NITROANILINE	50	50 U	UG/L
NITROBENZENE	10	10 U	UG/L
-NITROPHENOL	10	10 U	UG/L
4-NITROPHENOL	50	50 U	UG/L
N-NITROSODIMETHYLAMINE	10	10 U	UG/L
-NITROSODIPHENYLAMINE	10	10 U	UG/L
DI-N-OCTYL PHTHALATE	10	10 U	UG/L
PENTACHLOROPHENOL	50	50 U	UG/L
PHENANTHRENE	10	10 U	UG/L
PHENOL	10	10 U	UG/L
4-BROMOPHENYL-PHENYLETHER	10	10 U	UG/L
4-CHLOROPHENYL-PHENYLETHER	10	10 U	UG/L
N-NITROSO-DI-N-PROPYLAMINE	10	10 U	UG/L
PYRENE	10	10 U	UG/L
1,2,4-TRICHLOROBENZENE	10	10 U	UG/L
2,4,6-TRICHLOROPHENOL	10	10 U	UG/L
2,4,5-TRICHLOROPHENOL	10	10 U	UG/L

SURROGATE RECOVERIES	QC LIMITS		
TERPHENYL-d14	(23 - 139 %)	89	%
NITROBENZENE-d5	(22 - 130 %)	76	%
PHENOL-d6	(10 - 130 %)	37	%
2-FLUOROBIPHENYL	(27 - 130 %)	82	%
2-FLUOROPHENOL	(10 - 130 %)	52	%
2,4,6-TRIBROMOPHENOL	(10 - 149 %)	104	%

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
646878

Lab Name: CAS-ROCH Contract: URS

Lab Code: 10145 Case No.: R317157 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: 646878 1.0

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BW606.D

Level: (low/med) LOW Date Received: _____

% Moisture: _____ decanted: (Y/N) N Date Extracted: 6/9/03

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 6/11/03

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7

Number TICs found: 26 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 000611-14-3	Benzene, 1-ethyl-2-methyl-	4.89	51	JN
2. 000622-96-8	Benzene, 1-ethyl-4-methyl-	5.09	25	JN
3.	unknown	5.71	15	J
4.	unknown	5.74	12	J
5.	unknown	5.85	12	J
6.	unknown	5.91	14	J
7.	unknown	6.20	13	J
8.	unknown	6.28	12	J
9.	unknown	6.46	12	J
10.	unknown	7.22	17	J
11.	unknown	7.33	21	J
12.	unknown	7.51	14	J
13.	unknown	8.04	12	J
14.	unknown	8.18	23	J
15.	unknown	8.42	20	J
16. 000083-33-0	1H-Inden-1-one, 2,3-dihydro-	8.97	12	JN
17.	unknown	9.09	17	J
18.	unknown	9.45	52	J
19.	unknown	9.62	16	J
20. 000603-79-2	Benzoic acid, 2,3-dimethyl-	9.71	13	JN
21. 000499-06-9	Benzoic acid, 3,5-dimethyl-	10.40	95	JN
22.	unknown	11.14	16	J
23.	unknown acid	11.30	16	J
24.	unknown	11.49	13	J
25. 000143-07-7	Dodecanoic acid	12.14	15	JN
26. 000301-02-0	9-Octadecenamide, (Z)-	19.56	12	JN

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B TCL/TANK
Reported: 06/24/03

URS Corporation
Project Reference: WINN DEVELOPMENT
Client Sample ID : URS-1

Date Sampled : 06/05/03 **Order #:** 646878 **Sample Matrix:** WATER
Date Received: 06/05/03 **Submission #:** R2317157 **Analytical Run** 91951

DATE ANALYZED : 06/12/03
ANALYTICAL DILUTION: 2.50

ANALYTE	PQL	RESULT	UNITS
ACETONE	20	50 U	UG/L
BENZENE	5.0	13 U	UG/L
BROMODICHLOROMETHANE	5.0	13 U	UG/L
BROMOFORM	5.0	13 U	UG/L
BROMOMETHANE	5.0	13 U	UG/L
2-BUTANONE (MEK)	10	25 U	UG/L
SEC-BUTYLBENZENE	5.0	13 U	UG/L
N-BUTYLBENZENE	5.0	13 U	UG/L
TERT-BUTYLBENZENE	5.0	13 U	UG/L
CARBON DISULFIDE	10	25 U	UG/L
CARBON TETRACHLORIDE	5.0	13 U	UG/L
CHLOROBENZENE	5.0	13 U	UG/L
CHLOROETHANE	5.0	13 U	UG/L
CHLOROFORM	5.0	13 U	UG/L
CHLOROMETHANE	5.0	13 U	UG/L
DIBROMOCHLOROMETHANE	5.0	13 U	UG/L
1,1-DICHLOROETHANE	5.0	13 U	UG/L
1,2-DICHLOROETHANE	5.0	13 U	UG/L
1,1-DICHLOROETHENE	5.0	13 U	UG/L
CIS-1,2-DICHLOROETHENE	5.0	13 U	UG/L
TRANS-1,2-DICHLOROETHENE	5.0	13 U	UG/L
1,2-DICHLOROPROPANE	5.0	13 U	UG/L
CIS-1,3-DICHLOROPROPENE	5.0	13 U	UG/L
TRANS-1,3-DICHLOROPROPENE	5.0	13 U	UG/L
METHYL-TERT-BUTYL-ETHER	5.0	13 U	UG/L
ETHYLBENZENE	5.0	190	UG/L
2-HEXANONE	10	25 U	UG/L
ISOPROPYL BENZENE	5.0	27	UG/L
P-ISOPROPYLTOLUENE	5.0	13 U	UG/L
METHYLENE CHLORIDE	5.0	13 U	UG/L
NAPHTHALENE	5.0	140	UG/L
4-METHYL-2-PENTANONE (MIBK)	10	25 U	UG/L
N-PROPYLBENZENE	5.0	27	UG/L
STYRENE	5.0	13 U	UG/L
1,1,2,2-TETRACHLOROETHANE	5.0	13 U	UG/L
TETRACHLOROETHENE	5.0	13 U	UG/L
TOLUENE	5.0	13 U	UG/L
1,1,1-TRICHLOROETHANE	5.0	13 U	UG/L
1,1,2-TRICHLOROETHANE	5.0	13 U	UG/L
TRICHLOROETHENE	5.0	13 U	UG/L
1,3,5-TRIMETHYLBENZENE	5.0	94	UG/L
1,2,4-TRIMETHYLBENZENE	5.0	340	UG/L
VINYL CHLORIDE	5.0	13 U	UG/L
O-XYLENE	5.0	31	UG/L

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B TCL/TANK
Reported: 06/24/03

URS Corporation
Project Reference: WINN DEVELOPMENT
Client Sample ID : URS-1

)ate Sampled : 06/05/03 **Order #:** 646878 **Sample Matrix:** WATER
)ate Received: 06/05/03 **Submission #:** R2317157 **Analytical Run** 91951

ANALYTE		PQL	RESULT	UNITS
DATE ANALYZED : 06/12/03				
ANALYTICAL DILUTION: 2.50				
M+P-XYLENE		5.0	810	UG/L
SURROGATE RECOVERIES	QC LIMITS			
4-BROMOFLUOROBENZENE	(83 - 118 %)		107	%
TOLUENE-D8	(91 - 113 %)		110	%
)IBROMOFLUOROMETHANE	(87 - 115 %)		106	%

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B TCL/TANK
Reported: 06/24/03

URS Corporation
Project Reference: WINN DEVELOPMENT
Client Sample ID : TRIP BLANK

Date Sampled : 06/05/03 **Order #:** 646879 **Sample Matrix:** WATER
Date Received: 06/05/03 **Submission #:** R2317157 **Analytical Run** 91951

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 06/12/03			
ANALYTICAL DILUTION: 1.00			
ACETONE	20	20 U	UG/L
BENZENE	5.0	5.0 U	UG/L
BROMODICHLOROMETHANE	5.0	5.0 U	UG/L
BROMOFORM	5.0	5.0 U	UG/L
BROMOMETHANE	5.0	5.0 U	UG/L
2-BUTANONE (MEK)	10	10 U	UG/L
SEC-BUTYLBENZENE	5.0	5.0 U	UG/L
N-BUTYLBENZENE	5.0	5.0 U	UG/L
TERT-BUTYLBENZENE	5.0	5.0 U	UG/L
CARBON DISULFIDE	10	10 U	UG/L
CARBON TETRACHLORIDE	5.0	5.0 U	UG/L
CHLOROBENZENE	5.0	5.0 U	UG/L
CHLOROETHANE	5.0	5.0 U	UG/L
CHLOROFORM	5.0	5.0 U	UG/L
CHLOROMETHANE	5.0	5.0 U	UG/L
DIBROMOCHLOROMETHANE	5.0	5.0 U	UG/L
1,1-DICHLOROETHANE	5.0	5.0 U	UG/L
1,2-DICHLOROETHANE	5.0	5.0 U	UG/L
1,1-DICHLOROETHENE	5.0	5.0 U	UG/L
CIS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/L
TRANS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/L
1,2-DICHLOROPROPANE	5.0	5.0 U	UG/L
CIS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/L
TRANS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/L
METHYL-TERT-BUTYL-ETHER	5.0	5.0 U	UG/L
ETHYLBENZENE	5.0	5.0 U	UG/L
2-HEXANONE	10	10 U	UG/L
ISOPROPYL BENZENE	5.0	5.0 U	UG/L
P-ISOPROPYLTOLUENE	5.0	5.0 U	UG/L
METHYLENE CHLORIDE	5.0	5.0 U	UG/L
NAPHTHALENE	5.0	5.0 U	UG/L
4-METHYL-2-PENTANONE (MIBK)	10	10 U	UG/L
N-PROPYLBENZENE	5.0	5.0 U	UG/L
STYRENE	5.0	5.0 U	UG/L
1,1,2,2-TETRACHLOROETHANE	5.0	5.0 U	UG/L
TETRACHLOROETHENE	5.0	5.0 U	UG/L
TOLUENE	5.0	5.0 U	UG/L
1,1,1-TRICHLOROETHANE	5.0	5.0 U	UG/L
1,1,2-TRICHLOROETHANE	5.0	5.0 U	UG/L
TRICHLOROETHENE	5.0	5.0 U	UG/L
1,3,5-TRIMETHYLBENZENE	5.0	5.0 U	UG/L
1,2,4-TRIMETHYLBENZENE	5.0	5.0 U	UG/L
VINYL CHLORIDE	5.0	5.0 U	UG/L
O-XYLENE	5.0	5.0 U	UG/L

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B TCL/TANK
Reported: 06/24/03

URS Corporation
Project Reference: WINN DEVELOPMENT
Client Sample ID : TRIP BLANK

Date Sampled : 06/05/03 **Order #:** 646879 **Sample Matrix:** WATER
Date Received: 06/05/03 **Submission #:** R2317157 **Analytical Run** 91951

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 06/12/03			
ANALYTICAL DILUTION: 1.00			
M+P-XYLENE	5.0	5.0 U	UG/L

SURROGATE RECOVERIES	QC LIMITS		
4-BROMOFLUOROBENZENE	(83 - 118 %)	100	%
TOLUENE-D8	(91 - 113 %)	106	%
DIBROMOFLUOROMETHANE	(87 - 115 %)	106	%

OLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD: 8260B TCL/TANK

LABORATORY CONTROL SAMPLE SUMMARY

REFERENCE ORDER #: 648563 ANALYTICAL RUN # : 91951

ANALYTE	TRUE VALUE	% RECOVERY	QC LIMITS
DATE ANALYZED : 06/12/2003			
ANALYTICAL DILUTION: 1.0			
ACETONE	20.0	107	50 - 150
BENZENE	20.0	98	70 - 130
BROMODICHLOROMETHANE	20.0	95	70 - 130
BROMOFORM	20.0	96	70 - 130
BROMOMETHANE	20.0	67	50 - 150
2-BUTANONE (MEK)	20.0	76	50 - 150
SEC-BUTYLBENZENE	20.0	108	70 - 130
T-BUTYLBENZENE	20.0	103	70 - 130
TERT-BUTYLBENZENE	20.0	111	70 - 130
CARBON DISULFIDE	20.0	106	70 - 130
CARBON TETRACHLORIDE	20.0	106	70 - 130
CHLOROBENZENE	20.0	103	70 - 130
CHLOROETHANE	20.0	94	70 - 130
CHLOROFORM	20.0	102	70 - 130
CHLOROMETHANE	20.0	118	70 - 130
DIBROMOCHLOROMETHANE	20.0	101	70 - 130
1,1-DICHLOROETHANE	20.0	98	70 - 130
1,2-DICHLOROETHANE	20.0	99	70 - 130
1,1-DICHLOROETHENE	20.0	99	70 - 130
CIS-1,2-DICHLOROETHENE	20.0	94	70 - 130
TRANS-1,2-DICHLOROETHENE	20.0	90	70 - 130
1,2-DICHLOROPROPANE	20.0	92	70 - 130
CIS-1,3-DICHLOROPROPENE	20.0	93	70 - 130
TRANS-1,3-DICHLOROPROPENE	20.0	96	70 - 130
METHYL-TERT-BUTYL-ETHER	20.0	95	50 - 150
ETHYLBENZENE	20.0	104	70 - 130
2-HEXANONE	20.0	96	70 - 130
ISOPROPYL BENZENE	20.0	106	70 - 130
P-ISOPROPYLTOLUENE	20.0	108	70 - 130
METHYLENE CHLORIDE	20.0	97	70 - 130
NAPHTHALENE	20.0	88	50 - 150
4-METHYL-2-PENTANONE (MIBK)	20.0	90	70 - 130
N-PROPYLBENZENE	20.0	106	70 - 130
STYRENE	20.0	104	70 - 130
1,1,2,2-TETRACHLOROETHANE	20.0	70	70 - 130
TETRACHLOROETHENE	20.0	104	70 - 130
TOLUENE	20.0	106	70 - 130
1,1,1-TRICHLOROETHANE	20.0	94	70 - 130
1,1,2-TRICHLOROETHANE	20.0	96	70 - 130
TRICHLOROETHENE	20.0	114	70 - 130
1,3,5-TRIMETHYLBENZENE	20.0	105	70 - 130

DIUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD: 8260B TCL/TANK

LABORATORY CONTROL SAMPLE SUMMARY

REFERENCE ORDER #: 648563 ANALYTICAL RUN # : 91951

ANALYTE	TRUE VALUE	% RECOVERY	QC LIMITS
DATE ANALYZED : 06/12/2003			
ANALYTICAL DILUTION: 1.0			
1,2,4-TRIMETHYLBENZENE	20.0	106	70 - 130
VINYL CHLORIDE	20.0	96	70 - 130
O-XYLENE	20.0	103	70 - 130
M+P-XYLENE	40.0	104	70 - 130

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B TCL/TANK
Reported: 06/24/03

Project Reference:
Client Sample ID : METHOD BLANK

Date Sampled : **Order #:** 648562 **Sample Matrix:** WATER
Date Received: **Submission #:** **Analytical Run** 91951

DATE ANALYZED : 06/12/03
ANALYTICAL DILUTION: 1.00

ANALYTE	PQL	RESULT	UNITS
ACETONE	20	20 U	UG/L
BENZENE	5.0	5.0 U	UG/L
BROMODICHLOROMETHANE	5.0	5.0 U	UG/L
BROMOFORM	5.0	5.0 U	UG/L
BROMOMETHANE	5.0	5.0 U	UG/L
2-BUTANONE (MEK)	10	10 U	UG/L
SEC-BUTYLBENZENE	5.0	5.0 U	UG/L
N-BUTYLBENZENE	5.0	5.0 U	UG/L
TERT-BUTYLBENZENE	5.0	5.0 U	UG/L
CARBON DISULFIDE	10	10 U	UG/L
CARBON TETRACHLORIDE	5.0	5.0 U	UG/L
CHLOROBENZENE	5.0	5.0 U	UG/L
CHLOROETHANE	5.0	5.0 U	UG/L
CHLOROFORM	5.0	5.0 U	UG/L
CHLOROMETHANE	5.0	5.0 U	UG/L
DIBROMOCHLOROMETHANE	5.0	5.0 U	UG/L
1,1-DICHLOROETHANE	5.0	5.0 U	UG/L
1,2-DICHLOROETHANE	5.0	5.0 U	UG/L
1,1-DICHLOROETHENE	5.0	5.0 U	UG/L
CIS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/L
TRANS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/L
1,2-DICHLOROPROPANE	5.0	5.0 U	UG/L
CIS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/L
TRANS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/L
METHYL-TERT-BUTYL-ETHER	5.0	5.0 U	UG/L
ETHYLBENZENE	5.0	5.0 U	UG/L
2-HEXANONE	10	10 U	UG/L
ISOPROPYL BENZENE	5.0	5.0 U	UG/L
P-ISOPROPYLTOLUENE	5.0	5.0 U	UG/L
METHYLENE CHLORIDE	5.0	5.0 U	UG/L
NAPHTHALENE	5.0	5.0 U	UG/L
4-METHYL-2-PENTANONE (MIBK)	10	10 U	UG/L
N-PROPYLBENZENE	5.0	5.0 U	UG/L
STYRENE	5.0	5.0 U	UG/L
1,1,2,2-TETRACHLOROETHANE	5.0	5.0 U	UG/L
TETRACHLOROETHENE	5.0	5.0 U	UG/L
TOLUENE	5.0	5.0 U	UG/L
1,1,1-TRICHLOROETHANE	5.0	5.0 U	UG/L
1,1,2-TRICHLOROETHANE	5.0	5.0 U	UG/L
TRICHLOROETHENE	5.0	5.0 U	UG/L
1,3,5-TRIMETHYLBENZENE	5.0	5.0 U	UG/L
1,2,4-TRIMETHYLBENZENE	5.0	5.0 U	UG/L
VINYL CHLORIDE	5.0	5.0 U	UG/L
O-XYLENE	5.0	5.0 U	UG/L
M+P-XYLENE	5.0	5.0 U	UG/L

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B TCL/TANK
Reported: 06/24/03

Project Reference:
Client Sample ID : METHOD BLANK

Date Sampled : **Order #:** 648562 **Sample Matrix:** WATER
Date Received: **Submission #:** **Analytical Run** 91951

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 06/12/03			
ANALYTICAL DILUTION: 1.00			

SURROGATE RECOVERIES	QC LIMITS		
4-BROMOFLUOROBENZENE	(83 - 118 %)	107	%
TOLUENE-D8	(91 - 113 %)	108	%
DIBROMOFLUOROMETHANE	(87 - 115 %)	104	%

JA TY CONTROL SUMMARY: LABORATORY CONTROL SAMPLE
WATER

Spiked Order No. : 647955

Dup Spiked Order No. : 647956

Client ID:

Test: 8270C SEMIVOLATILES

Analytical Units: UG/L

Run Number : 91860

			BLANK SPIKE		BLANK SPIKE DUP.				QC LIMITS
ANALYTE	SPIKE ADDED	SAMPLE CONCENT.	FOUND	% REC.	FOUND	% REC.	RPD	RPD	REC.
ACENAPHTHENE	100	0	100	100	99.0	99	1	30	49 - 116
2-CHLOROPHENOL	100	0	92.0	92	88.0	88	4	30	26 - 120
1,4-DICHLOROBENZENE	100	0	68.0	68	63.0	63	8	30	25 - 130
2,4-DINITROTOLUENE	100	0	100	100	100	100	0	30	59 - 116
4-CHLORO-3-METHYLPHENO	100	0	96.0	96	99.0	99	3	30	31 - 130
4-NITROPHENOL	100	0	62.0	62	58.0	58	7	30	10 - 130
PENTACHLOROPHENOL	100	0	130	130	120	120	8	30	26 - 131
PHENOL	100	0	44.0	44	43.0	43	2	30	10 - 130
N-NITROSO-DI-N-PROPYLA	100	0	85.0	85	83.0	83	2	30	43 - 115
PYRENE	100	0	89.0	89	90.0	90	1	30	60 - 130
1,2,4-TRICHLOROBENZENE	100	0	71.0	71	67.0	67	6	30	34 - 130

COLUMBIA ANALYTICAL SERVICES

EXTRACTABLE ORGANICS
METHOD 8270C SEMIVOLATILES
Reported: 06/24/03

Project Reference:
Client Sample ID : METHOD BLANK

Date Sampled : **Order #:** 647954 **Sample Matrix:** WATER
Date Received: **Submission #:** **Analytical Run** 91860

ANALYTE	PQL	RESULT	UNITS
DATE EXTRACTED : 06/09/03			
DATE ANALYZED : 06/10/03			
ANALYTICAL DILUTION: 1.00			
ACENAPHTHENE	10	10 U	UG/L
ACENAPHTHYLENE	10	10 U	UG/L
ANTHRACENE	10	10 U	UG/L
BENZO(A)ANTHRACENE	10	10 U	UG/L
BENZO(A)PYRENE	10	10 U	UG/L
BENZO(B)FLUORANTHENE	10	10 U	UG/L
BENZO(G,H,I)PERYLENE	10	10 U	UG/L
BENZO(K)FLUORANTHENE	10	10 U	UG/L
BENZYL ALCOHOL	10	10 U	UG/L
BUTYL BENZYL PHTHALATE	10	10 U	UG/L
DI-N-BUTYLPHTHALATE	10	2.3 J	UG/L
CARBAZOLE	10	10 U	UG/L
INDENO(1,2,3-CD)PYRENE	10	10 U	UG/L
4-CHLOROANILINE	10	10 U	UG/L
BIS(-2-CHLOROETHOXY)METHANE	10	10 U	UG/L
BIS(2-CHLOROETHYL)ETHER	10	10 U	UG/L
2-CHLORONAPHTHALENE	10	10 U	UG/L
2-CHLOROPHENOL	10	10 U	UG/L
2,2'-OXYBIS(1-CHLOROPROPANE)	10	10 U	UG/L
CHRYSENE	10	10 U	UG/L
DIBENZO(A,H)ANTHRACENE	10	10 U	UG/L
DIBENZOFURAN	10	10 U	UG/L
1,3-DICHLOROBENZENE	10	10 U	UG/L
1,2-DICHLOROBENZENE	10	10 U	UG/L
1,4-DICHLOROBENZENE	10	10 U	UG/L
3,3'-DICHLOROBENZIDINE	10	10 U	UG/L
2,4-DICHLOROPHENOL	10	10 U	UG/L
DIETHYLPHTHALATE	10	10 U	UG/L
DIMETHYL PHTHALATE	10	10 U	UG/L
2,4-DIMETHYLPHENOL	10	10 U	UG/L
2,4-DINITROPHENOL	50	50 U	UG/L
2,4-DINITROTOLUENE	10	10 U	UG/L
2,6-DINITROTOLUENE	10	10 U	UG/L
BIS(2-ETHYLHEXYL)PHTHALATE	10	10 U	UG/L
FLUORANTHENE	10	10 U	UG/L
FLUORENE	10	10 U	UG/L
HEXACHLOROBENZENE	10	10 U	UG/L
HEXACHLOROBUTADIENE	10	10 U	UG/L
HEXACHLOROCYCLOPENTADIENE	10	10 U	UG/L
HEXACHLOROETHANE	10	10 U	UG/L
ISOPHORONE	10	10 U	UG/L
2-METHYLNAPHTHALENE	10	10 U	UG/L
4,6-DINITRO-2-METHYLPHENOL	50	50 U	UG/L
4-CHLORO-3-METHYLPHENOL	10	10 U	UG/L

COLUMBIA ANALYTICAL SERVICES

EXTRACTABLE ORGANICS
METHOD 8270C SEMIVOLATILES
Reported: 06/24/03

Project Reference:
Client Sample ID : METHOD BLANK

Date Sampled : **Order #:** 647954 **Sample Matrix:** WATER
Date Received: **Submission #:** **Analytical Run** 91860

ANALYTE	PQL	RESULT	UNITS
DATE EXTRACTED : 06/09/03			
DATE ANALYZED : 06/10/03			
ANALYTICAL DILUTION: 1.00			
2-METHYLPHENOL	10	10 U	UG/L
3+4-METHYLPHENOL	10	10 U	UG/L
NAPHTHALENE	10	10 U	UG/L
2-NITROANILINE	50	50 U	UG/L
3-NITROANILINE	50	50 U	UG/L
4-NITROANILINE	50	50 U	UG/L
NITROBENZENE	10	10 U	UG/L
2-NITROPHENOL	10	10 U	UG/L
4-NITROPHENOL	50	50 U	UG/L
N-NITROSODIMETHYLAMINE	10	10 U	UG/L
N-NITROSODIPHENYLAMINE	10	10 U	UG/L
DI-N-OCTYL PHTHALATE	10	10 U	UG/L
PENTACHLOROPHENOL	50	50 U	UG/L
PHENANTHRENE	10	10 U	UG/L
PHENOL	10	10 U	UG/L
4-BROMOPHENYL-PHENYLETHER	10	10 U	UG/L
4-CHLOROPHENYL-PHENYLETHER	10	10 U	UG/L
N-NITROSO-DI-N-PROPYLAMINE	10	10 U	UG/L
PYRENE	10	10 U	UG/L
1,2,4-TRICHLOROBENZENE	10	10 U	UG/L
2,4,6-TRICHLOROPHENOL	10	10 U	UG/L
2,4,5-TRICHLOROPHENOL	10	10 U	UG/L

SURROGATE RECOVERIES	QC LIMITS		
TERPHENYL-d14	(23 - 139 %)	92	%
NITROBENZENE-d5	(22 - 130 %)	76	%
PHENOL-d6	(10 - 130 %)	35	%
2-FLUOROBIPHENYL	(27 - 130 %)	77	%
2-FLUOROPHENOL	(10 - 130 %)	53	%
2,4,6-TRIBROMOPHENOL	(10 - 149 %)	107	%

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SBLK1

Lab Name: CAS-ROCH Contract: URS

Lab Code: 10145 Case No.: R317157 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: 647954 1.0

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BW580.D

Level: (low/med) LOW Date Received: _____

% Moisture: _____ decanted: (Y/N) N Date Extracted: 6/9/03

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 6/10/03

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 6

Number TICs found: 2

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	unknown	3.90	5	J
2.	unknown	4.09	6	J

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Employee - Owned Company
www.caslab.com
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CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

SR #

CAS Contact

Project Name: URS Development	Project Number: 11172966.2000
Project Manager: Tom Lawson	Report CC: Kevin J. McGovern
Company/Address: URS Corporation / Bldg 1, 781 Elmgrove Rd., Rochester, NY 14624	
Phone #: (585) 426-2120	FAX#: (585) 426-2161
Sampler's Signature: [signature]	Sampler's Printed Name: Kevin J. McGovern

ANALYSIS REQUESTED (Include Method Number and Container Preservative)

Preservative Key: 0. NONE 1. HCL 2. HNO_3 3. H_2SO_4 4. NaOH 5. Zn. Acetate 6. MeOH 7. $NaHSO_4$ 8. Other: ICE

CLIENT SAMPLE ID	FOR OFFICE USE ONLY LAB ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NUMBER OF CONTAINERS	GC/MS VOA's ☐ 8260 ☐ 624 ☐ CLP	GC/MS SVOA's ☐ 8270 ☐ 625 ☐ CLP	GC VOA's ☐ 8021 ☐ 601/602	PESTICIDES ☐ 8081 ☐ 608 ☐ CLP	PCB's ☐ 8082 ☐ 608 ☐ CLP	METALS, TOTAL (List in comments below)	METALS, DISSOLVED (List in comments below)	8260B TCL + STARS	8270 Full B/N + Acids + STARS + 20 TICs					REMARKS/ ALTERNATE DESCRIPTION
PRESERVATIVE													1	9					
URS-4	646875	6/5/03	08:55	GW	2								X	X					
URS-3	76	↓	10:00	↓									X	X					
URS-2	77	↓	11:25	↓									X	X					
Trip Blank	79	—	—	—	1								X						
URS-1	78	6/5/03	12:25	↓	2								X	X					

SPECIAL INSTRUCTIONS/COMMENTS
Metals

856 5136

See QAPP ☐

TURNAROUND REQUIREMENTS
___ RUSH (SURCHARGES APPLY)
___ 24 hr ___ 48 hr ___ 5 day
X STANDARD
REQUESTED FAX DATE: 6/20/03
REQUESTED REPORT DATE: 6/24/03

REPORT REQUIREMENTS
X I. Results Only
___ II. Results + QC Summaries (LCS, DUP, MS/MSD as required)
___ III. Results + QC and Calibration Summaries
___ IV. Data Validation Report with Raw Data
___ V. Specialized Forms / Custom Report
Edata ___ Yes ___ No

INVOICE INFORMATION
05-19349
PO#: Tom Lawson
BILL TO: URS Corp, Bldg 1, 781 Elmgrove Rd, Rochester, NY 14624
SUBMISSION #: R2317157

SAMPLE RECEIPT: CONDITION/COOLER TEMP: ______ CUSTODY SEALS: Y N

RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY
Signature: [signature]	Signature: [signature]	Signature	Signature	Signature	Signature
Printed Name: Kevin J. McGovern	Printed Name: Heather Lovejoy	Printed Name	Printed Name	Printed Name	Printed Name
Firm: URS	Firm: CAS	Firm	Firm	Firm	Firm
Date/Time: 6/5/03, 14:55	Date/Time: 6/5/03 1455	Date/Time	Date/Time	Date/Time	Date/Time

Cooler Receipt And Preservation Check Form

Project/Client URS Submission Number 02-17157

Cooler received on 6/5/03 by: CMD COURIER: CAS UPS FEDEX CD&L (CLIENT)

1.	Were custody seals on outside of cooler?			YES	(NO)	
2.	Were custody papers properly filled out (ink, signed, etc.)?			(YES)	NO	
3.	Did all bottles arrive in good condition (unbroken)?			(YES)	NO	
4.	Did any VOA vials have significant air bubbles?			YES	(NO)	N/A
5.	Were **Ice** or **Ice packs** present?			(YES)	NO	
6.	Where did the bottles originate?			(CAS/ROC,)	CLIENT	
7.	Temperature of cooler(s) upon receipt:	5°				
	Is the temperature within 0° - 6° C?:	(Yes)	Yes	Yes	Yes	Yes
	If No, Explain Below	No	No	No	No	No

Date/Time Temperatures Taken: 6/5/03 1505

Thermometer ID: 161 or (IR GUN) Reading From: Temp Blank or (Sample Bottle)

If out of Temperature, Client Approval to Run Samples _____

Cooler Breakdown: Date: 6/5/03 by: CMD

1.	Were all bottle labels complete (*i.e.* analysis, preservation, etc.)?	(YES)	NO
2.	Did all bottle labels and tags agree with custody papers?	(YES)	NO
3.	Were correct containers used for the tests indicated?	(YES)	NO
4.	Air Samples: Cassettes / Tubes Intact Canisters Pressurized Tedlar® Bags Inflated		(N/A)

Explain any discrepancies: _____

		YES	NO	Sample I.D.	Reagent	Vol. Added
pH	Reagent					
12	NaOH					
2	HNO_3					
2	H_2SO_4					
Residual Chlorine (+/-)	for TCN & Phenol					
5-9**	P/PCBs (608 only)					

YES = All samples OK NO = Samples were preserved at lab as listed PC OK to adjust pH _____

**If pH adjustment is required, use NaOH and/or H_2SO_4

VOC Vial pH Verification (Tested after Analysis) Following Samples Exhibited pH > 2				

Other Comments: