Supplemental Monitoring Report

Union Station Property
Seattle, Washington

December 2, 1996

Prepared for

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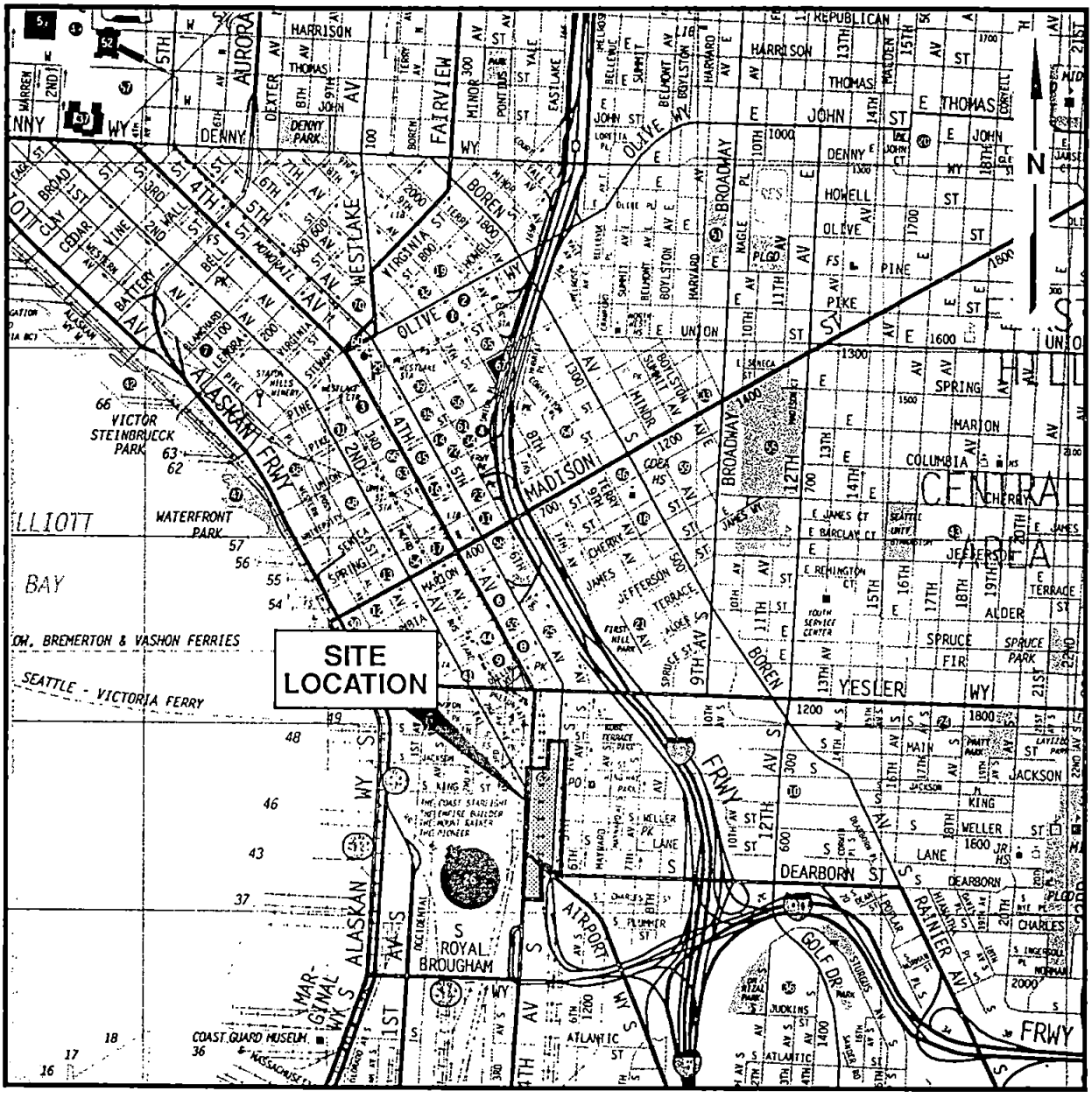
1.0 INTRODUCTION

This report presents well installation and environmental monitoring data collected during activities supplemental to the *Focused Remedial Investigation and Feasibility Study (RI/FS), Union Station Property* (Landau Associates and Hart Crowser Inc. 1996). Supplemental monitoring was accomplished in conjunction with Nitze-Stagen's application for a prospective purchaser agreement. The Union Station Property is located in Seattle, Washington as shown on Figure 1-1.

Activities described in this report include:

- Installation of four additional monitoring wells (Section 2)
- Elevation survey results of monitoring wells (Section 2)
- Soil and groundwater sampling (Section 3)
- Chemical analysis data of soil and groundwater samples (Section 4).

Supplemental monitoring activities were requested by the Washington State Department of Ecology (Ecology) following review of the draft Union Station property monitoring plan submitted on September 27, 1996 (Landau Associates 1996a). The approach identified in the draft monitoring plan was modified to incorporate Ecology changes (Landau Associates 1996b). The revised well installation and sampling approach was approved by Ecology on October 23, 1996.



Vicinity Map

Figure 1-1

2.0 MONITORING WELL INSTALLATION

Four monitoring wells were installed in the shallow groundwater zone at the approximate locations shown on Figure 2-1. The purpose of installing MW-104 and MW-105 was to provide additional groundwater information in the area shown by earlier studies to be an area of preferential groundwater discharge from the northern portion of the property. The purpose of installing MW-106 was to provide additional and recent data to the west of the former Vulcan Foundry. The purpose of installing MW-107 was to collect soil and groundwater samples to characterize conditions on the property south of Airport Way South.

2.1 MONITORING WELL CONSTRUCTION

The monitoring plan (Landau Associates 1996a) provided monitoring well design information. The as-built monitoring well construction logs are presented in Appendix A.

Monitoring wells were drilled and installed on November 7 and 8, 1996 using 8.25- inch inside diameter (ID) hollow-stem auger drilling equipment operated by Cascade Drilling Inc., a subcontractor to Landau Associates. Prior to drilling each monitoring well, all downhole drilling equipment and the portion of the rig near the borehole were cleaned using a high-pressure, hot-water washer. Wells were constructed using 4 inch ID PVC well pipe, a 0.010 slotted screen 10 ft in length, and a No. 20-40 filter pack. The bottom of the well screen was placed near the base of the shallow groundwater zone. Soil residuals were drummed and managed at the site.

2.2 OBSERVATIONS OF SOIL CONDITIONS DURING DRILLING

Soil conditions observed during drilling are summarized in the monitoring well logs presented in Appendix A.

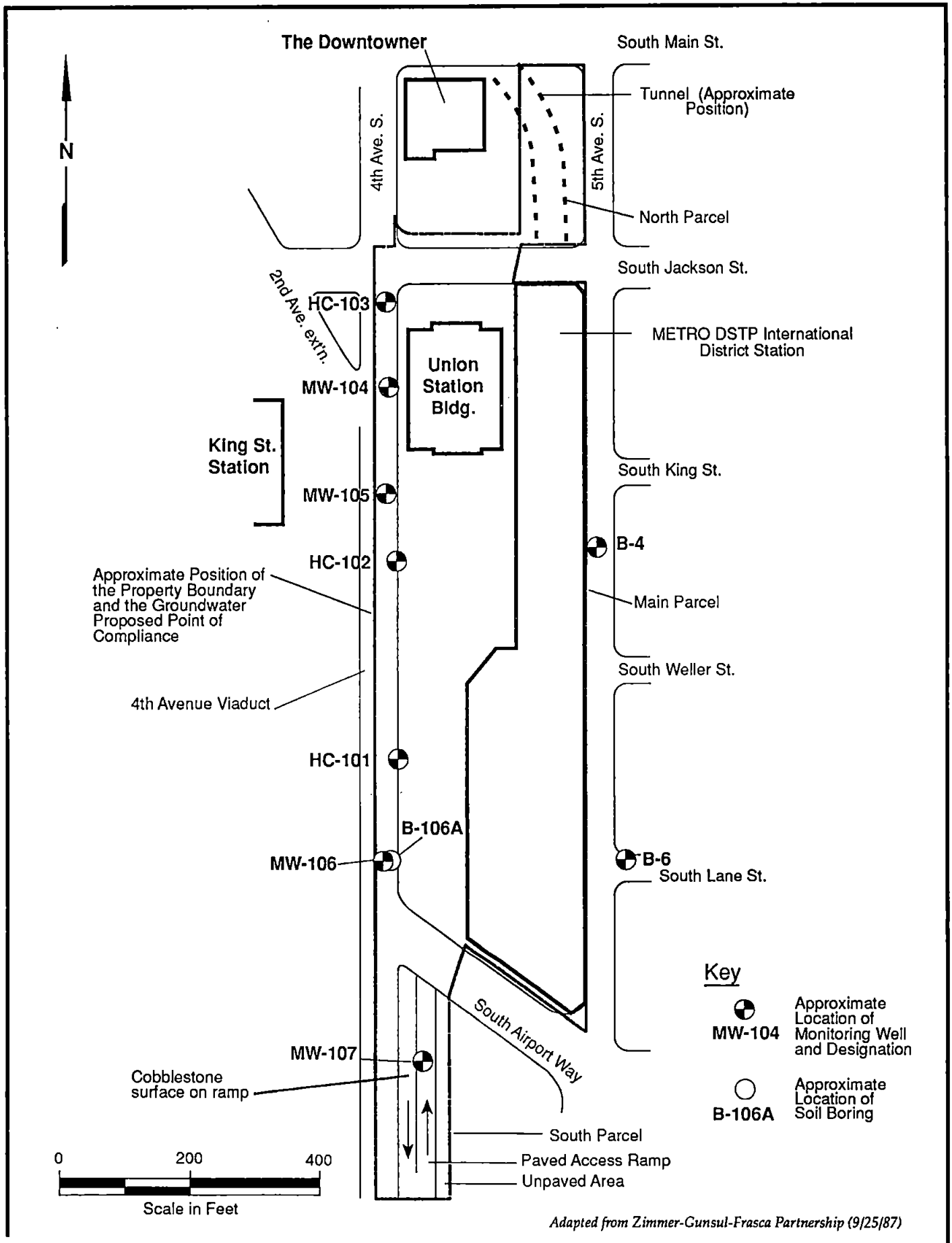
During drilling activities at MW-106 a buried piling or log was encountered at a depth of approximately 7 ft. The boring location was moved approximately 10 ft to the east and redrilled. The completed well is designated MW-106. The location of the first hole is designated B-106A for the purpose of distinguishing the completed monitoring well and the partial boring. No evidence of treated wood was observed in the wood fragments recovered.

2.3 MONITORING WELL DEVELOPMENT

Following construction, each well was developed to remove soil and suspended material introduced during the drilling process and to help stabilize aquifer groundwater conditions prior to groundwater sampling. As described in the monitoring plan, due to the significant component of fine soil in the shallow fill material, monitoring wells were developed by flushing, rather than surging, to minimize long term suspension of fine soil which could result in turbid samples. The recharge rate of wells was slow; therefore, the wells were developed to the extent practicable within the schedule of field activities.

2.4 SURVEY OF REFERENCE ELEVATIONS

The reference elevations for new and existing monitoring network wells were surveyed based on the City of Seattle datum to assure that the water level measurements from new and existing wells could be compared to a common elevation reference. Horizontal coordinates (northing and easting) using a local datum were also included. The survey was conducted by Bush, Roed & Hitchings, Inc. as a subconsultant to Landau Associates. The survey report is presented in Appendix B.



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Union Station Property Plan Map

Figure 2-1

3.0 ENVIRONMENTAL SAMPLING

Samples of soil and groundwater were collected and analyzed. This section summarizes sample collection methods and identifies conditions different than those outlined in the monitoring plan.

3.1 SOIL SAMPLING

Soil samples were collected during drilling of monitoring wells using a decontaminated split barrel sampler driven into undisturbed soil ahead of the auger bit. Soil samples from MW-107 were submitted to the laboratory for analysis and the results are presented in this report. Soil samples from MW-104, MW-105, and MW-106 were submitted to the laboratory to be archived and were not analyzed.

Soil sample compositing plans were described in Landau Associates (1996b) and approved by Ecology (1996). Soil samples from all wells were collected at approximately 5-ft intervals and were composited to provide three soil samples for chemical analysis representative of:

- The upper 15 ft of the fill soil material, designated sample interval A
- The fill material below 15 ft (generally to a depth of 22 to 28 ft), designated sample interval B
- The upper portion of the former tide flat silt below the fill material, designated sample interval C.

Compositing was conducted by blending approximately equal amounts of material from samples within the sample interval. Portions of the blended material were placed in laboratory sample jars. The samples for volatile organic chemicals were collected directly from the shallowest depth sample within the depth interval of the composite sample and not from blended material. Quality assurance samples were collected following guidance in the monitoring plan including a field duplicate soil sample of MW-107A, which was identified as MW-207A. The archived volatile organic soil sample for the 0- to 15-ft composite from MW-106 was collected from the location now designated B-106A.

Soil sample MW-107C was analyzed for physical soil characteristics. Soil data sheets are included in Appendix C.

3.2 GROUNDWATER SAMPLING

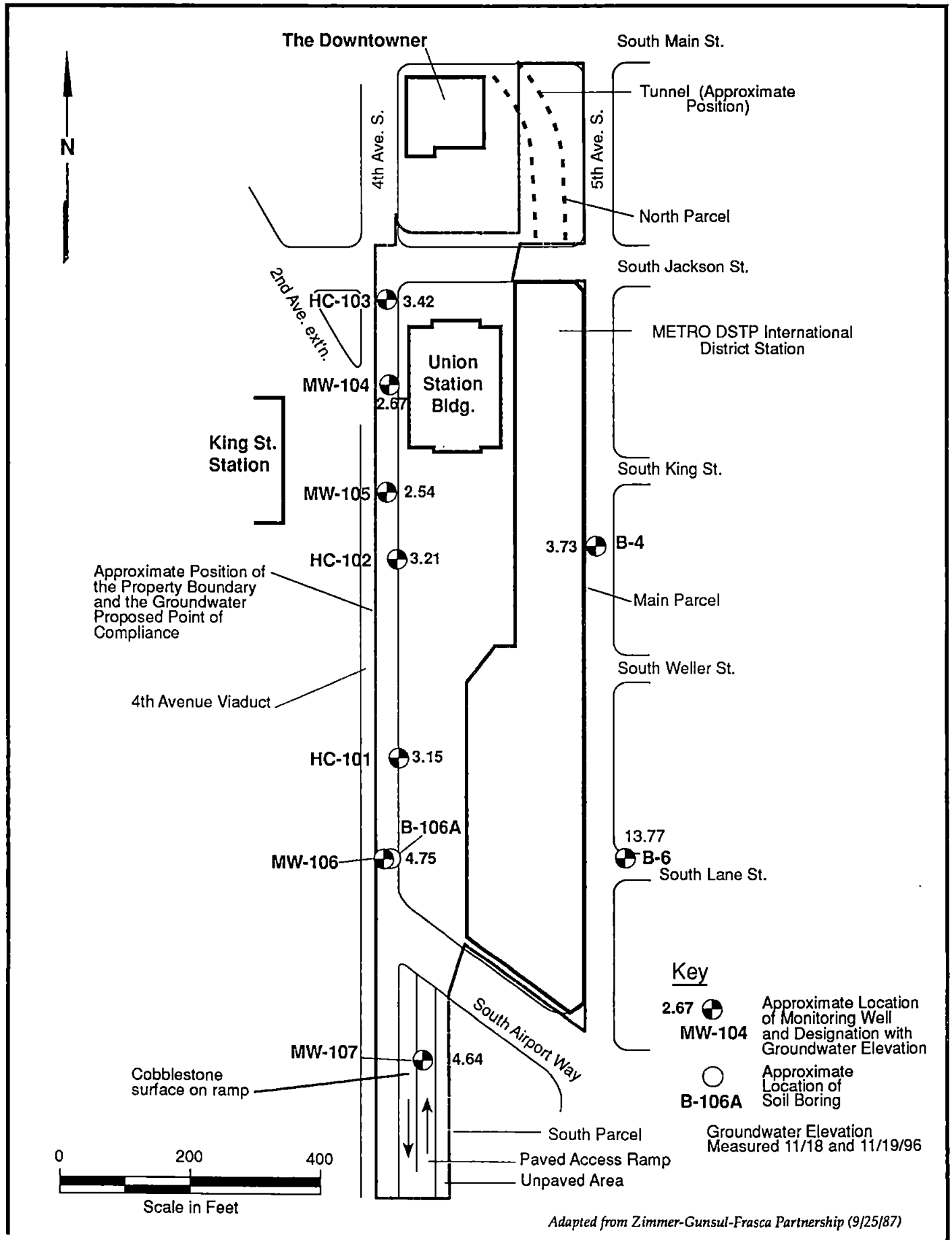
3.2.1 GROUNDWATER ELEVATION MEASUREMENT

Groundwater elevations were measured on November 18 and 19, 1996 prior to sampling and are presented in Table 3-1 and shown on Figure 3-1. The weather during the measurement and sampling was overcast and raining or snowing. Groundwater elevation data continue to indicate groundwater flow generally to the west/northwest similar to interpretations based on 1986 data presented in the focused RI/FS.

3.2.2 SAMPLING METHODS

Sampling of nine monitoring wells was conducted about 1 week after installation of new wells MW-104, MW-105, MW-106, and MW-107. Quality assurance samples identified in the monitoring plan, including one field duplicate sample collected from MW-105 and designated MW-205, were collected.

The shallow depth of groundwater along the western edge of the property allowed well purging and sampling to be accomplished using peristaltic pump equipment with dedicated tubing as described in the monitoring plan. The groundwater depth at wells B-4 and B-6 precluded using peristaltic pump equipment; accordingly, wells were purged using an air lift pump and sampled using disposable bailers. Groundwater residuals were managed by discharging water to the ground surface on the property or the storm sewer for wells B-4 and B-6. Well B-4, located in the middle of 5th Avenue S., recharged very slowly; the amount of water that recharged to the well was sufficient only for analysis of volatile organic compounds, WTPH-G, WTPH-D (extended), semivolatile organic compounds, cyanide and metals. No analyses for herbicides, pesticides, PCBs, and conventionals were accomplished at B-4. Sample preservation and handling followed procedures identified in the monitoring plan. A summary of conditions observed during groundwater sampling is included in Appendix C.



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Union Station Property Plan Map with Groundwater Elevations

Figure 3-1

TABLE 3-1
UNION STATION
GROUNDWATER ELEVATIONS

Well	Northing	Easting	Ground Elevation	Reference Elevation (1)	Depth To Groundwater (2)	Groundwater Elevation
B-4	1886.32	1994.74	36.80	36.59	32.86	**3.73**
B-6	1406.35	2033.29	34.30	34.18	20.41	**13.77**
HC-101	1583.27	1695.87	8.80	8.47	5.32	**3.15**
HC-102	1837.46	1700.69	9.30	9.16	5.95	**3.21**
HC-103	2253.46	1687.23	10.50	9.92 (3)	6.50	**3.42**
MW-104	2129.61	1680.95	10.40	10.00	7.33	**2.67**
MW-105	1935.69	1676.29	9.50	8.92	6.38	**2.54**
MW-106	1422.63	1662.65	9.50	9.07	4.32	**4.75**
MW-107	1048.59	1728.86	13.30	12.57	7.93	**4.64**

(1) Well pipe elevation.
(2) Groundwater depths for wells B-4, B-6, HC-101, and HC-102 were measured on November 18, 1996; wells HC-103, MW-104, MW-105, MW-106 and MW-107 were measured on November 19, 1996.
(3) Elevation surveyed at north rim of well case (10.51ft) because well locked at time of survey. Depth from well case rim to PVC is 0.59 ft. Elevation reference at PVC pipe is 9.92 ft.

Survey data provided by Bush, Roed, & Hitchings, Inc.
All elevations City of Seattle datum.

4.0 CHEMICAL AND PHYSICAL TEST RESULTS

Soil and groundwater samples were submitted to Analytical Resources, Inc., a subcontractor to Landau Associates, for physical and chemical analyses. Samples were analyzed for the parameters specified in the monitoring plan. A review of the data was accomplished for quality assurance and shows that with the exception of two constituents (vinyl acetate in soil and 2-chlorovinylether in groundwater, which were rejected) the data are acceptable for the screening purposes intended. Laboratory reports are presented in Appendix C.

4.1 SOIL RESULTS

No evidence of NAPL was observed during the drilling of the four new monitoring wells. Table 4-1 presents chemical test results for soil samples collected from MW-107 located on the southern portion of the Union Station property. The soil analysis results are generally similar to the soil results from the main parcel with volatile, semivolatile, and metals being detected. The concentrations measured are within the range of concentrations previously measured at the main parcel. No pesticides, PCBs, or herbicides were detected in soil samples.

4.2 GROUNDWATER RESULTS

Table 4-2 presents chemical test results for groundwater. The groundwater samples show no evidence of NAPL in any on-property well sampled. Cyanide, petroleum hydrocarbons, volatile organic compounds, and semivolatile organic compounds were detected in both upgradient and on-property monitoring wells at levels within the range of previously detected levels. No pesticides, PCBs, or herbicides were detected in groundwater samples.

Groundwater samples from wells MW-104 and MW-105 indicate levels of some carcinogenic PAH in excess of surface water criteria. These wells were developed by flushing and were purged and sampled using a peristaltic pump to minimize the amount of particulates in the samples. Because of the project schedule, however, the wells were sampled 1 week after installation. The sample results indicate concentrations of CPAH up to 14 times the aqueous solubility; therefore, it is likely that the detected CPAH are associated with particulates present in the samples. The measured total suspended solids and turbidity of 90 mg/L and 58 NTU for MW-104; 135 mg/L and

200 NTU for MW-105 support this explanation. Prior to any future sampling of these wells, we recommend additional development and at least 1 day delay between purging and sampling.

Gasoline was detected in wells HC-101, MW-104, MW-105, and B-4 at concentrations greater than surface water criteria (1 ppm). HC-101, MW-105, and B-4 also contained benzene at concentrations greater than the proposed groundwater level. Free product was also observed by the laboratory in the sample from well B-4. No free product was observed in the field. The source of the gasoline is unknown but its presence in the upgradient well indicates an off-property source.

Arsenic was detected in wells HC-101, MW-104, MW-106, MW-107, and B-6 at concentrations in excess of surface water criteria but, as in the May 1996 sampling round, the highest concentration was found in well B-6, upgradient of the property.

TABLE 4-1
SOIL ANALYTICAL DATA
UNION STATION PROJECT SEATTLE, WA

ANALYTE:	MW-107A Q735A/E 11/7/96	MW-207A (a) Q735D 11/7/96	MW-107B Q735B/F 11/7/96	MW-107C Q735C 11/7/96
TOTAL METALS (mg/kg-dry)				
Antimony	0.1 U	0.1 U	0.1 U	0.2 U
Arsenic	4.6	4.4	4.3	8
Beryllium	0.4	0.4	0.4	0.4
Cadmium	0.3	0.3	0.3 U	0.4
Chromium	61.8	61.2	64.8	23.3
Copper	37.6	39.2	32.1	32.7
Iron	31100 J	32100 J	28700 J	22800 J
Lead	33	28	6.4	3.8
Mercury	0.24	0.22	0.07	0.07 U
Nickel	67	68	82	19
Selenium	0.7 U	0.6 U	0.7 U	0.7 U
Silver	0.4 U	0.4 U	0.4 U	0.5 U
Thallium	0.7	0.6	0.7 U	0.7 U
Zinc	82.9 U	83.9 U	59.0 U	41.5 U
VOLATILES (ug/kg) (b)				
Chloromethane	2.4 U	NA	2.8 U	2.9 U
Bromomethane	2.4 U	NA	2.8 U	2.9 U
Vinyl Chloride	2.4 U	NA	2.8 U	2.9 U
Chloroethane	2.4 U	NA	2.8 U	2.9 U
Methylene Chloride	2.4 U	NA	7.6 U	6.6 U
Acetone	36 U	NA	72 B	85 B
Carbon Disulfide	1.2 U	NA	1.4 U	45
1,1-Dichloroethene	1.2 U	NA	1.4 U	1.4 U
1,1-Dichloroethane	1.2 U	NA	1.4 U	1.4 U
trans-1,2-Dichloroethene	1.2 U	NA	1.4 U	1.4 U
cis-1,2-Dichloroethene	1.2 U	NA	1.4 U	1.4 U
Chloroform	1.2 U	NA	1.4 U	1.4 U
1,2-Dichloroethane	1.2 U	NA	1.4 U	1.4 U
2-Butanone	6.0 U	NA	11	18
1,1,1-Trichloroethane	1.2 U	NA	1.4 U	1.4 U
Carbon Tetrachloride	1.2 U	NA	1.4 U	1.4 U
Vinyl Acetate	R	NA	R	R
Bromodichloromethane	1.2 U	NA	1.4 U	1.4 U
1,2-Dichloropropane	1.2 U	NA	1.4 U	1.4 U
cis-1,3-Dichloropropene	1.2 U	NA	1.4 U	1.4 U
Trichloroethene	1.2 U	NA	1.4 U	1.4 U
Dibromochloromethane	1.2 U	NA	1.4 U	1.4 U
1,1,2-Trichloroethane	1.2 U	NA	1.4 U	1.4 U
Benzene	1.2 UJ	NA	8.8 J	1.4 UJ
trans-1,3-Dichloropropene	1.2 U	NA	1.4 U	1.4 U
2-Chloroethylvinylether	6.0 U	NA	6.9 U	7.2 U
Bromoform	1.2 U	NA	1.4 U	1.4 U
4-Methyl-2-Pentanone	6.0 U	NA	6.9 U	7.2 U
2-Hexanone	6.0 U	NA	6.9 U	7.2 U
Tetrachloroethene	1.2 U	NA	1.4 U	1.4 U
1,1,2,2-Tetrachloroethane	1.2 U	NA	1.4 U	1.4 U
Toluene	1.2 U	NA	1.8 U	1.4 U
Chlorobenzene	1.2 UJ	NA	1.4 UJ	1.4 UJ
Ethylbenzene	1.2 U	NA	120	1.4 U
Styrene	1.2 U	NA	1.4 U	1.4 U
Trichlorofluoromethane	2.4 U	NA	2.8 U	2.9 U
1,1,2-Trichlorotrifluoroethane	2.4 U	NA	2.8 U	2.9 U
m,p-Xylene	1.2 U	NA	36	1.4 U
o-Xylene	1.2 U	NA	11	1.4 U
1,2-Dichlorobenzene	1.2 U	NA	1.4 U	1.4 U
1,3-Dichlorobenzene	1.2 U	NA	1.4 U	1.4 U
1,4-Dichlorobenzene	1.2 U	NA	1.4 U	1.4 U
Acrolein	60 U	NA	69 U	72 U

TABLE 4-1
SOIL ANALYTICAL DATA
UNION STATION PROJECT SEATTLE, WA

ANALYTE:	MW-107A Q735A/E 11/7/96	MW-207A (a) Q735D 11/7/96	MW-107B Q735B/F 11/7/96	MW-107C Q735C 11/7/96
Methyl Iodide	1.2 U	NA	1.4 U	1.4 U
Bromoethane	2.4 U	NA	2.8 U	2.9 U
Acrylonitrile	6.0 U	NA	6.9 U	7.2 U
1,1-Dichloropropene	1.2 U	NA	1.4 U	1.4 U
Dibromomethane	1.2 U	NA	1.4 U	1.4 U
1,1,1,2-Tetrachloroethane	1.2 U	NA	1.4 U	1.4 U
1,2-Dibromo-3-chloropropane	6.0 U	NA	6.9 U	7.2 U
1,2,3-Trichloropropane	1.2 U	NA	1.4 U	1.4 U
trans-1,4-Dichloro-2-butene	6.0 U	NA	6.9 U	7.2 U
1,3,5-Trimethylbenzene	1.2 U	NA	24	1.4 U
1,2,4-Trimethylbenzene	1.2 U	NA	22	1.4 U
Hexachlorobutadiene	6.0 U	NA	6.9 U	7.2 U
Ethylene Dibromide	1.2 U	NA	1.4 U	1.4 U
Bromochloromethane	1.2 U	NA	1.4 U	1.4 U
2,2-Dichloropropane	1.2 U	NA	1.4 U	1.4 U
1,3-Dichloropropane	1.2 U	NA	1.4 U	1.4 U
Isopropylbenzene	1.2 U	NA	11	1.4 U
n-Propylbenzene	1.2 U	NA	3.8	1.4 U
Bromobenzene	1.2 U	NA	1.4 U	1.4 U
2-Chlorotoluene	1.2 U	NA	1.4 U	1.4 U
4-Chlorotoluene	1.2 U	NA	1.4 U	1.4 U
tert-Butylbenzene	1.2 U	NA	1.4 U	1.4 U
sec-Butylbenzene	1.2 U	NA	1.4 U	1.4 U
4-Isopropyltoluene	1.2 U	NA	4.2	1.4 U
n-Butylbenzene	1.2 U	NA	1.4 U	1.4 U
1,2,4-Trichlorobenzene	6.0 UJ	NA	6.9 UJ	7.2 UJ
Naphthalene	6.0 UJ	NA	730 J	7.2 UJ
1,2,3-Trichlorobenzene	6.0 UJ	NA	6.9 UJ	7.2 UJ
SEMIVOLATILES (ug/kg)				
Phenol	180 U	180 U	180 U	200 U
Bis-(2-Chloroethyl) Ether	180 U	180 U	180 U	200 U
2-Chloro-phenol	91 U	91 U	91 U	99 U
1,3-Dichlorobenzene	91 U	91 U	91 U	99 U
1,4-Dichlorobenzene	91 U	91 U	91 U	99 U
Benzyl Alcohol	450 U	460 U	460 U	500 U
1,2-Dichlorobenzene	91 U	91 U	91 U	99 U
2-Methylphenol	180 U	180 U	180 U	200 U
2,2'-Oxybis(1-Chloropropane)	91 U	91 U	91 U	99 U
4-Methylphenol	91 U	91 U	91 U	99 U
N-Nitroso-Di-N-Propylamine	180 U	180 U	180 U	200 U
Hexachloroethane	180 U	180 U	180 U	200 U
Nitrobenzene	91 U	91 U	91 U	99 U
Isophorone	91 U	91 U	91 U	99 U
2-Nitrophenol	450 U	460 U	460 U	500 U
2,4-Dimethylphenol	270 U	270 U	270 U	300 U
Benzoic Acid	910 U	910 U	910 U	990 U
bis (2-Chloroethoxy) Methane	91 U	91 U	91 U	99 U
2,4-Dichlorophenol	270 U	270 U	270 U	300 U
1,2,4-Tri-chlorobenzene	91 U	91 U	91 U	99 U
Naphthalene	4200 J	2800 J	4000 J	99 UJ
4-Chloroaniline	270 U	270 U	270 U	300 U
Hexachlorobutadiene	180 U	180 U	180 U	200 U
4-Chloro-3-methylphenol	180 U	180 U	180 U	200 U
2-Methylnaphthalene	1700	1400	460	99 U
Hexachlorocyclopentadiene	450 U	460 U	460 U	500 U
2,4,6-Trichlorophenol	450 U	460 U	460 U	500 U
2,4,5-Trichlorophenol	450 U	460 U	460 U	500 U
2-Chloronaphthalene	91 U	91 U	91 U	99 U
2-Nitroaniline	450 U	460 U	460 U	500 U

TABLE 4-1
SOIL ANALYTICAL DATA
UNION STATION PROJECT SEATTLE, WA

ANALYTE:	MW-107A Q735A/E 11/7/96	MW-207A (a) Q735D 11/7/96	MW-107B Q735B/F 11/7/96	MW-107C Q735C 11/7/96
Dimethylphthalate	91 U	91 U	91 U	99 U
Acenaphthylene	370	490	91 U	99 U
3-Nitroaniline	540 U	550 U	550 U	590 U
Acenaphthene	3100	2500	600	99 U
2,4-Dinitrophenol	910 U	910 U	910 U	990 U
4-Nitrophenol	450 U	460 U	460 U	500 U
Dibenzofuran	390	400	91 U	99 U
2,6-Dinitrotoluene	450 U	460 U	460 U	500 U
2,4-Dinitrotoluene	450 U	460 U	460 U	500 U
Diethylphthalate	91 U	91 U	91 U	99 U
4-Chlorophenyl-phenylether	91 U	91 U	91 U	99 U
Fluorene	2000	1800	180	99 U
4-Nitroaniline	450 U	460 U	460 U	500 U
4,6-Dinitro-2-Methylphenol	910 U	910 U	910 U	990 U
N-Nitrosodiphenylamine	91 U	91 U	91 U	99 U
4-Bromophenyl-phenylether	91 U	91 U	91 U	99 U
Hexachlorobenzene	91 U	91 U	91 U	99 U
Pentachlorophenol	450 U	460 U	460 U	500 U
Phenanthrene	11000	12000	130	99 U
Carbazole	93	99	91 U	99 U
Anthracene	2200	2800	91 U	99 U
Di-n-Butylphthalate	91 U	91 U	91 U	99 U
Fluoranthene	3800 J	5700 J	91 UJ	99 UJ
Pyrene	5600 J	6200 J	91 UJ	99 UJ
Butylbenzylphthalate	91 U	91 U	91 U	99 U
3,3'-Dichlorobenzidine	450 U	460 U	460 U	500 U
Benzo(a)anthracene	1800	2200	91 U	99 U
bis(2-Ethylhexyl)phthalate	98	91 U	91 U	150
Chrysene	1600	2100	91 U	99 U
Di-n-Octyl phthalate	91 U	91 U	91 U	99 U
Benzo(b)fluoranthene	700	920	91 U	99 U
Benzo(k)fluoranthene	1200	1500	91 U	99 U
Benzo(a)pyrene	1700	1900	91 U	99 U
Indeno(1,2,3-cd)pyrene	920	770	91 U	99 U
Dibenz(a,h)anthracene	120 J	270 J	91 UJ	99 UJ
Benzo(g,h,i)perylene	680	760	91 U	99 U
TOTAL PETROLEUM HYDROCARBONS (mg/kg)				
TPH - HCID (Gasoline)	NA	NA	NA	NA
TPH - HCID (Diesel)	NA	NA	NA	NA
TPH - HCID (Motor Oil)	NA	NA	NA	NA
PESTICIDES/PCBs (ug/kg)				
alpha-BHC	2.3 U	2.3 U	2.3 U	2.5 U
beta-BHC	2.3 U	2.3 U	2.3 U	2.5 U
delta-BHC	2.3 U	2.3 U	2.3 U	2.5 U
gamma-BHC (Lindane)	2.3 U	2.3 U	2.3 U	2.5 U
Heptachlor	2.3 U	2.3 U	2.3 U	2.5 U
Aldrin	2.3 U	2.3 U	2.3 U	2.5 U
Heptachlor Epoxide	2.3 U	2.3 U	2.3 U	2.5 U
Endosulfan I	2.3 U	2.3 U	2.3 U	2.5 U
Dieldrin	4.5 U	4.6 U	4.6 U	5.0 U
4,4'-DDE	4.5 U	4.6 U	4.6 U	5.0 U
Endrin	4.5 U	4.6 U	4.6 U	5.0 U
Endosulfan II	4.5 U	4.6 U	4.6 U	5.0 U
4,4'-DDD	4.5 U	4.6 U	4.6 U	5.0 U
Endosulfan Sulfate	4.5 U	4.6 U	4.6 U	5.0 U
4,4'-DDT	4.5 U	4.6 U	4.6 U	5.0 U
Methoxychlor	23 U	23 U	23 U	25 U
Endrin Ketone	4.5 U	4.6 U	4.6 U	5.0 U

TABLE 4-1
SOIL ANALYTICAL DATA
UNION STATION PROJECT SEATTLE, WA

ANALYTE:	MW-107A Q735A/E 11/7/96	MW-207A (a) Q735D 11/7/96	MW-107B Q735B/F 11/7/96	MW-107C Q735C 11/7/96
Endrin Aldehyde	4.5 U	4.6 U	4.6 U	5.0 U
gamma Chlordane	2.3 U	2.3 U	2.3 U	2.5 U
alpha Chlordane	2.3 U	2.3 U	2.3 U	2.5 U
Toxaphene	230 U	230 U	230 U	250 U
Aroclor 1016	45 U	46 U	46 U	50 U
Aroclor 1242	45 U	46 U	46 U	50 U
Aroclor 1248	45 U	46 U	46 U	50 U
Aroclor 1254	45 U	46 U	46 U	50 U
Aroclor 1260	45 U	46 U	46 U	50 U
Aroclor 1221	91 U	91 U	91 U	99 U
Aroclor 1232	45 U	46 U	46 U	50 U
HERBICIDES (ug/kg)				
2,4,5-TP (Silvex)	11 U	12 U	12 U	12 U
2,4,5-T	23 U	23 U	23 U	25 U
Dinoseb	23 U	23 U	23 U	25 U
Dicamba	23 U	23 U	23 U	25 U
2,4-D	46 U	46 U	46 U	50 U
2,4-DB	230 U	230 U	230 U	250 U
Dalapon	28 U	28 U	28 U	30 U
MCPA	57000 U	58000 U	58000 U	62000 U
Dichloroprop	46 U	46 U	46 U	50 U
CONVENTIONAL PARAMETERS				
Total Solids (percent)	71.9	73.0	72.5	66.8
Total Organic Carbon (percent)	0.96	0.86	0.27	0.99

(a) Sample MW-207A is a field duplicate of sample MW-107A.

(b) For analysis of volatile organic compounds, discrete samples were collected at 5.0 ft and 18.0 ft BGS and identified as samples MW-107-A-5.0 and MW-107-B-18.0, respectively.

U Indicates the compound was undetected at the listed concentration.

NA Not analyzed

R The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

J The analyte was positively identified; the associated numerial value is the approximate concentration of the analyte in the sample.

UJ The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

B Indicates possible/probable blank contamination. Flagged when the analyte is detected in the sample as well as the method blank.

TABLE 4-2
GROUNDWATER ANALYTICAL DATA
UNION STATION PROJECT SEATTLE, WA

ANALYTE:	HC-101 Q829C 11/18/96	HC-102 Q829B 11/18/96	HC-103 Q838D 11/19/96	MW-104 Q838C 11/19/96	MW-105 Q838B 11/19/96	MW-205 (a) Q838E 11/19/96	MW-106 Q838A 11/19/96	MW-107 Q838F 11/19/96	B-4 (up gradient) Q829D 11/18/96	B-6 (up gradient) Q829A 11/18/96
DISSOLVED METALS (mg/L)										
Antimony	0.001 U	0.001 U	0.001 U	0.001 U	0.005 U	0.005 U	0.005 U	0.005 U	0.002	0.001 U
Arsenic	0.012	0.003	0.001 U	0.009	0.005 U	0.005 U	0.005	0.007	0.002	0.014
Beryllium	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Cadmium	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.029	0.002 U
Chromium	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Copper	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.003	0.002 U
Lead	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U	0.001 U	0.001 U
Mercury	0.0001 UJ	0.0001 UJ	0.0001 UJ	0.0001 UJ	0.0001 UJ	0.0001 UJ	0.0001 UJ	0.0001 UJ	0.0001 UJ	0.0001 UJ
Nickel	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01	0.01 U
Selenium	0.001 U	0.001 U	0.001 U	0.001 U	0.005 U	0.005 U	0.005 U	0.005 U	0.001 U	0.001 U
Silver	0.003 U	0.003 U	0.003 U	0.003 U	0.003 U	0.003 U	0.003 U	0.003 U	0.003 U	0.003 U
Thallium	0.001 U	0.001 U	0.001 U	0.001 U	0.005 U	0.005 U	0.005 U	0.005 U	0.001 U	0.001 U
Zinc	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.037	0.004 U
VOLATILES (ug/L)										
Chloromethane	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Bromomethane	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Vinyl Chloride	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Chloroethane	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Methylene Chloride	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Acetone	5.0 U	5.0 U	5.0 U	5.0 U	16	15	19	7.5	29	7.1
Carbon Disulfide	1.0 U	1.0 U	1.0 U	1.0 U	1.0	1.2	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.1	1.6	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Butanone	5.0 U	5.0 U	5.0 U	5.0 U	32	39	11	5.0 U	5.0 U	5.0 U
1,1,1-Trichloroethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon Tetrachloride	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl Acetate	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Bromodichloromethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dibromochloromethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Benzene	87	1.0 U	1.0 U	16	160	190	1.0 U	2.8	100	1.0 U
trans-1,3-Dichloropropene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Chloroethylvinylether	R	R	R	R	R	R	R	R	R	R
Bromoform	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4-Methyl-2-Pentanone	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U

TABLE 4-2
GROUNDWATER ANALYTICAL DATA
UNION STATION PROJECT SEATTLE, WA

ANALYTE:	HC-101 Q829C 11/18/96	HC-102 Q829B 11/18/96	HC-103 Q838D 11/19/96	MW-104 Q838C 11/19/96	MW-105 Q838B 11/19/96	MW-205 (a) Q838E 11/19/96	MW-106 Q838A 11/19/96	MW-107 Q838F 11/19/96	B-4 (up gradient) Q829D 11/18/96	B-6 (up gradient) Q829A 11/18/96
2-Hexanone	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Tetrachloroethene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	33 J	1.0 UJ	1.0 UJ	5.7 J	190 J	390 J	1.0 UJ	6.2 J	4.7 J	1.0 UJ
Chlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	220 J	1.0 UJ	1.0 UJ	32 J	96 J	120 J	1.0 UJ	33 J	170 J	1.0 UJ
Styrene	1.0 U	1.0 U	1.0 U	1.0 U	53	57	1.0 U	1.0 U	1.0 U	1.0 U
Trichlorofluoromethane	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
1,1,2-Trichlorotrifluoroethane	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
m,p-Xylene	140	1.0 U	1.0 U	26	220	240	1.0 U	26	5.7	1.0 U
o-Xylene	68	1.0 U	1.0 U	18	130	140	1.0 U	15	6.9	1.0 U
1,2-Dichlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Acrolein	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Methyl Iodide	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoethane	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Acrylonitrile	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1-Dichloropropene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dibromomethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,1,2-Tetrachloroethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromo-3-chloropropane	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2,3-Trichloropropane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,4-Dichloro-2-butene	5.0 U	5.0 U	10 U	10 U	10 U	10 U	10 U	10 U	5.0 U	5.0 U
1,3,5-Trimethylbenzene	19	1.0 U	1.0 U	11	38	43	1.2	1.0 U	11	1.0 U
1,2,4-Trimethylbenzene	49	1.0 U	1.0 U	40	88	99	1.2	13	19	1.0 U
Hexachlorobutadiene	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Ethylene Dibromide	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromochloromethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2,2-Dichloropropane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichloropropane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Isopropylbenzene	11	1.0 U	1.0 U	5.9	9.3	11	1.0 U	2.0	6.8	1.0 U
n-Propylbenzene	1.4	1.0 U	1.0 U	1.0 U	1.5	1.9	1.0 U	1.0 U	1.3	1.0 U
Bromobenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Chlorotoluene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4-Chlorotoluene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
tert-Butylbenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
sec-Butylbenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4-Isopropyltoluene	17	1.0 U	1.0 U	4.0	5.9	6.9	1.4	1.0	2.4	1.0 U
n-Butylbenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trichlorobenzene	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Naphthalene	2900 J	21 J	340 UJ	2500 J	160 J	8000 J	94 J	1300 J	5800 J	5.0 UJ
1,2,3-Trichlorobenzene	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.1 U	5.0 U	5.0 U	5.0 U

TABLE 4-2
GROUNDWATER ANALYTICAL DATA
UNION STATION PROJECT SEATTLE, WA

ANALYTE:	HC-101 Q829C 11/18/96	HC-102 Q829B 11/18/96	HC-103 Q838D 11/19/96	MW-104 Q838C 11/19/96	MW-105 Q838B 11/19/96	MW-205 (a) Q838E 11/19/96	MW-106 Q838A 11/19/96	MW-107 Q838F 11/19/96	B-4 (up gradient) Q829D 11/18/96	B-6 (up gradient) Q829A 11/18/96
SEMIVOLATILES (ug/L)										
Phenol	2.0 U	2.0 U	2.0 U	2.0 U	10 J	10 J	2.0 U	2.0 U	20 U	2.0 U
Bis-(2-Chloroethyl) Ether	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	20 U	2.0 U
2-Chloro-phenol	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U
1,3-Dichlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U
1,4-Dichlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U
Benzyl Alcohol	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	51 U	5.0 U
1,2-Dichlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U
2-Methylphenol	2.0 U	2.0 U	2.0 U	2.0 U	20 J	21 J	2.0 U	2.0 U	20 U	2.0 U
2,2'-Oxybis(1-Chloropropane)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U
4-Methylphenol	68	1.0 U	1.0 U	1.0 U	40 J	43 J	7.6	1.0 U	10 U	1.0 U
N-Nitroso-Di-N-Propylamine	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	20 U	2.0 U
Hexachloroethane	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	20 U	2.0 U
Nitrobenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U
Isophorone	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U
2-Nitrophenol	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	51 U	5.0 U
2,4-Dimethylphenol	3.0 U	3.0 U	3.0 U	3.0 U	300 U	300 U	3.0 U	3.0 U	31 U	3.0 U
Benzoic Acid	15	10 U	10 U	10 U	10 U	10 U	10 U	10 U	100 U	10 U
bis (2-Chloroethoxy) Methane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U
2,4-Dichlorophenol	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	31 U	3.0 U
1,2,4-Tri-chlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U
Naphthalene	1200	11	3.0 U	1800	7900 J	7700 J	62	830	5000	1.0 U
4-Chloroaniline	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	31.0 U	3.0 U
Hexachlorobutadiene	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	20.0 U	2.0 U
4-Chloro-3-methylphenol	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	20.0 U	2.0 U
2-Methylnaphthalene	170	1.7	1.0 U	210	350 J	350 J	18	80	810	1.0 U
Hexachlorocyclopentadiene	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	51 U	5.0 U
2,4,6-Trichlorophenol	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	51 U	5.0 U
2,4,5-Trichlorophenol	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	51 U	5.0 U
2-Chloronaphthalene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U
2-Nitroaniline	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	51 U	5.0 U
Dimethylphthalate	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U
Acenaphthylene	1.0 U	1.0 U	1.0 U	6.1	270 J	270 J	1.0 U	1.0 U	10 U	1.0 U
3-Nitroaniline	6.0 U	6.0 U	6.0 U	6.0 U	6.0 U	6.0 U	6.0 U	6.0 U	61 U	6.0 U
Acenaphthene	100	14	1.0 U	190	69 J	69 J	18	45	360	1.0 U
2,4-Dinitrophenol	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	100 U	10 U
4-Nitrophenol	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	51 U	5.0 U
Dibenzofuran	6.2	1.0 U	1.0 U	42	57 J	57 J	1.0 U	1.7	30	1.0 U
2,6-Dinitrotoluene	7.0 U	6.7 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	70 U	6.7 U
2,4-Dinitrotoluene	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	51 U	5.0 U
Diethylphthalate	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U
4-Chlorophenyl-phenylether	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U
Fluorene	36	3.3	1.0 U	57	64 J	66 J	5.5	10	140	1.0 U
4-Nitroaniline	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	51 U	5.0 U

TABLE 4-2
GROUNDWATER ANALYTICAL DATA
UNION STATION PROJECT SEATTLE, WA

ANALYTE:	HC-101 Q829C 11/18/96	HC-102 Q829B 11/18/96	HC-103 Q838D 11/19/96	MW-104 Q838C 11/19/96	MW-105 Q838B 11/19/96	MW-205 (a) Q838E 11/19/96	MW-106 Q838A 11/19/96	MW-107 Q838F 11/19/96	B-4 (up gradient) Q829D 11/18/96	B-6 (up gradient) Q829A 11/18/96
4,6-Dinitro-2-Methylphenol	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	100 U	10 U
N-Nitrosodiphenylamine	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U
4-Bromophenyl-phenylether	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U
Hexachlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U
Pentachlorophenol	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	51 U	5.0 U
Phenanthrene	47	4.1	1.0 U	78	130 J	120 J	8.3	8.9	160	1.0 U
Carbazole	8.2	1.0 U	1.0 U	74	200 J	210 J	1.0 U	4.2	27	1.0 U
Anthracene	5.2	1.0 U	1.0 U	12	17 J	15 J	1.5	1.0 U	24	1.0 U
Di-n-Butylphthalate	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U
Fluoranthene	5.8	1.0 U	1.0 U	11	18 J	19 J	1.7	1.0 U	26	1.0 U
Pyrene	5.0	1.0 U	1.0 U	9.7	18 J	19 J	2.4	1.0 U	31	1.0 U
Butylbenzylphthalate	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U
3,3'-Dichlorobenzidine	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	51 U	5.0 U
Benzo(a)anthracene	1.0 U	1.0 U	1.0 U	1.5	3.4 J	3.8 J	1.0 U	1.0 U	10 U	1.0 U
bis(2-Ethylhexyl)phthalate	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.1 J	1.0 U	1.0 U	10 U	1.0 U
Chrysene	1.0 U	1.0 U	1.0 U	1.8	4.0 J	4.2 J	1.0 U	1.0 U	10 U	1.0 U
Di-n-Octyl phthalate	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U
Benzo(b)fluoranthene	1.0 U	1.0 U	1.0 U	1.0 U	2.3 J	2.3 J	1.0 U	1.0 U	10 U	1.0 U
Benzo(k)fluoranthene	1.0 U	1.0 U	1.0 U	1.0 U	2.8 J	3.1 J	1.0 U	1.0 U	10 U	1.0 U
Benzo(a)pyrene	1.0 U	1.0 U	1.0 U	1.4	4.1 J	4.5 J	1.0 U	1.0 U	10 U	1.0 U
Indeno(1,2,3-cd)pyrene	1.0 U	1.0 U	1.0 U	1.0 U	2.8 J	2.9 J	1.0 U	1.0 U	10 U	1.0 U
Dibenz(a,h)anthracene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U
Benzo(g,h,i)perylene	1.0 U	1.0 U	1.0 U	1.0	3.0 J	3.1 J	1.0 U	1.0 U	10 U	1.0 U
TOTAL PETROLEUM HYDROCARBONS (mg/L)										
TPH - HCID (Gasoline)	5.8 J	0.25 U	0.25 U	1.8 J	11 J	10 J	0.25 U	0.86 J	3.6 J	0.25 U
TPH - HCID (Diesel)	3.4	0.25 U	0.25 U	5.1	16	17	0.78	1.7	13	0.25 U
TPH - HCID (Motor Oil)	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	5.0 U	0.50 U
PESTICIDES/PCBs (ug/L)										
alpha-BHC	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	NA	0.050 U
beta-BHC	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	NA	0.050 U
delta-BHC	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	NA	0.050 U
gamma-BHC (Lindane)	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	NA	0.050 U
Heptachlor	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	NA	0.050 U
Aldrin	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	NA	0.050 U
Heptachlor Epoxide	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	NA	0.050 U
Endosulfan I	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	NA	0.050 U
Dieldrin	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	NA	0.10 U
4,4'-DDE	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	NA	0.10 U
Endrin	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	NA	0.10 U
Endosulfan II	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	NA	0.10 U
4,4'-DDD	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	NA	0.10 U
Endosulfan Sulfate	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	NA	0.10 U

TABLE 4-2
GROUNDWATER ANALYTICAL DATA
UNION STATION PROJECT SEATTLE, WA

ANALYTE:	HC-101 Q829C 11/18/96	HC-102 Q829B 11/18/96	HC-103 Q838D 11/19/96	MW-104 Q838C 11/19/96	MW-105 Q838B 11/19/96	MW-205 (a) Q838E 11/19/96	MW-106 Q838A 11/19/96	MW-107 Q838F 11/19/96	B-4 (up gradient) Q829D 11/18/96	B-6 (up gradient) Q829A 11/18/96
4,4'-DDT	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	NA	0.10 U
Methoxychlor	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	NA	0.50 U
Endrin Ketone	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	NA	0.10 U
Endrin Aldehyde	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	NA	0.10 U
gamma Chlordane	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	NA	0.050 U
alpha Chlordane	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	NA	0.050 U
Toxaphene	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	NA	5.0 U
Aroclor 1016	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	1.0 U
Aroclor 1242	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	1.0 U
Aroclor 1248	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	1.0 U
Aroclor 1254	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	1.0 U
Aroclor 1260	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	1.0 U
Aroclor 1221	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	NA	2.0 U
Aroclor 1232	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	1.0 U
HERBICIDES (ug/L)										
2,4,5-TP (Silvex)	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	NA	0.25 U
2,4,5-T	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	NA	0.50 U
Dinoseb	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	NA	0.50 U
Dicamba	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	NA	0.50 U
2,4-D	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	1.0 U
2,4-DB	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	6.7 U	5.0 U	5.0 U	NA	5.0 U
Dalapon	3.1 U	0.60 U	0.60 U	0.60 U	8.6 U	6.8 U	5.3 U	0.60 U	NA	0.60 U
MCPA	1200 U	1200 U	1200 U	1200 U	1300 U	1200 U	6500 U	1200 U	NA	1200 U
Dichloroprop	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.5 U	1.0 U	NA	1.0 U
CONVENTIONAL PARAMETERS										
Total Dissolved Solids (mg/L)	1100	570	320	1000	4200	4300	14000	5300	NA	860
Total Suspended Solids (mg/L)	46	3.7	32	90	140	130	200	200	NA	72
Turbidity (NTU)	110	10	6.9	58	210	190	220	110	NA	34
Total Cyanide (mg/L)	0.009	0.012	0.005	0.045	0.005	0.005	< 0.004 U	< 0.004 U	0.018	< 0.004 U

(a) Sample MW-205 is a field duplicate of sample MW-105.

U Indicates the compound was undetected at the listed concentration.

NA Not analyzed due to insufficient sample.

R The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

J The analyte was positively identified; the associated numerial value is the approximate concentration of the analyte in the sample.

UJ The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

5.0 REFERENCES

Landau Associates, Inc. and Hart Crowser. 1996. *Focused Remedial Investigation and Feasibility Study, Union Station, Seattle, Washington*. July 1.

Landau Associates. 1996a. *Draft Monitoring Plan, Union Station Property, Seattle, Washington*. September 27.

Landau Associates, Inc. 1996b. Letter to Ecology regarding Union Station property monitoring plan dated October 22.

Ecology. 1996. Letter to Landau Associates regarding installation and sampling approval of new monitoring wells dated October 23, 1996.

APPENDIX A

Monitoring Well Logs

APPENDIX A
MONITORING WELL LOGS

This appendix presents a soil classification key and as-built monitoring well records. The soil log portion of the monitoring well diagram summarizes observed soil conditions during drilling.

Soil Classification System

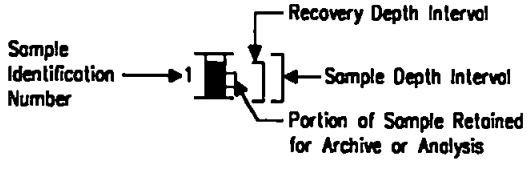
MAJOR DIVISIONS			GRAPHIC SYMBOL	USCS LETTER SYMBOL (1)	TYPICAL DESCRIPTIONS (2)(3)
COARSE-GRAINED SOIL (More than 50% of material is larger than No.200 sieve size)	GRAVEL AND GRAVELLY SOIL (More than 50% of coarse fraction retained on No.4 sieve)	CLEAN GRAVEL (Little or no fines)		GW	Well-graded gravel; gravel/sand mixture(s); little or no fines
				GP	Poorly graded gravel; gravel/sand mixture(s); little or no fines
		GRAVEL WITH FINES (Appreciable amount of fines)		GM	Silty gravel; gravel/sand/silt mixture(s)
				GC	Clayey gravel; gravel/sand/clay mixture(s)
	SAND AND SANDY SOIL (More than 50% of coarse fraction passed through No.4 sieve)	CLEAN SAND (Little or no fines)		SW	Well-graded sand; gravelly sand; little or no fines
				SP	Poorly graded sand; gravelly sand; little or no fines
		SAND WITH FINES (Appreciable amount of fines)		SM	Silty sand; sand/silt mixture(s)
				SC	Clayey sand; sand/clay mixture(s)
FINE-GRAINED SOIL (More than 50% of material is smaller than No.200 sieve size)	SILT AND CLAY (Liquid Limit less than 50)			ML	Inorganic silt and very fine sand; rock flour; silty or clayey fine sand or clayey silt with slight plasticity
				CL	Inorganic clay of low to medium plasticity; gravelly clay; sandy clay; silty clay; lean clay
				OL	Organic silt; organic, silty clay of low plasticity
	SILT AND CLAY (Liquid Limit greater than 50)			MH	Inorganic silt; micaceous or diatomaceous fine sand or silty soil
				CH	Inorganic clay of high plasticity; fat clay
				OH	Organic clay of medium to high plasticity; organic silt
	HIGHLY ORGANIC SOIL			PT	Peat; humus; swamp soil with high organic content
	OTHER			AC	Pavement; Asphalt or Concrete

Notes:
1. USCS letter symbols correspond to the symbols used by the Unified Soil Classification System and ASTM Classification methods. Dual letter symbols (e.g., SM-SP) for a sand or gravel indicate a soil with an estimated 5-15% fines. Multiple letter symbols (e.g.,ML/CL) indicate borderline or multiple soil classifications.
2. Soil classifications are based on the general approach presented in the *Standard Practice for Description and Identification of Soils (Visual-Manual Procedure)*, as outlined in ASTM D2488. Where laboratory index testing has been conducted, soil classifications are based on the *Standard Test Method for Classification of Soils for Engineering Purposes*, as outlined in ASTM D2487.
3. Soil description terminology is based on visual estimates (in the absence of laboratory test data) of the percentages of each soil type and is defined as follows:

Primary Constituent:	>50%	– "GRAVEL," "SAND," "SILT," "CLAY," etc.
Secondary Constituents:	>30% and ≤50%	– "very gravelly," "very sandy," "very silty," etc.
	>15% and ≤30%	– "gravelly," "sandy," "silty," etc.
Additional Constituents:	>5% and ≤15%	– "with gravel," "with sand," "with silt," etc.
	≤5%	– "trace gravel," "trace sand," "trace silt," etc., or not noted.

Key

SAMPLE NUMBER & INTERVAL



TEST DATA

Code	Description

SAMPLER TYPE

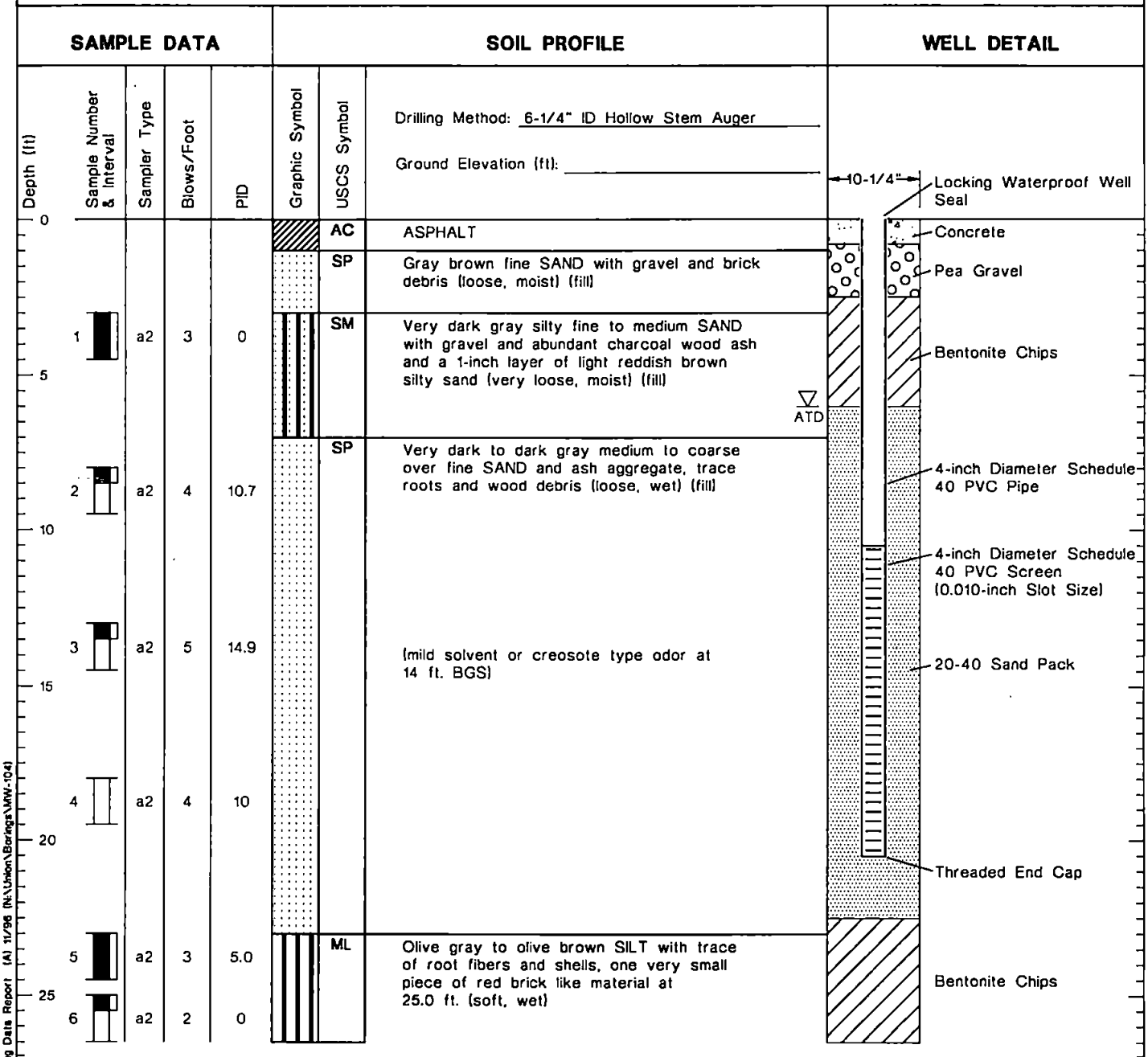
Code	Description
a	3.25-inch O.D., 2.42-inch I.D. Split Spoon Sampler
b	2.00-inch O.D., 1.50-inch I.D. Split Spoon Sampler
c	Shelby Tube
d	Grab Sample
e	3.00-inch I.D. Core Barrel Sampler
1	300-lb Hammer, 30-inch Drop
2	140-lb Hammer, 30-inch Drop
3	Pushed
4	350-lb. Hammer, 30-inch Drop

OTHER

▽ ATD	Approximate Water Elevation At Time of Drilling (ATD) or On Date Noted

Soil Classification System and Key | Figure A-1

Monitoring Well MW-104



Boring Completed 11/08/96
Total Depth = 26.5 ft.

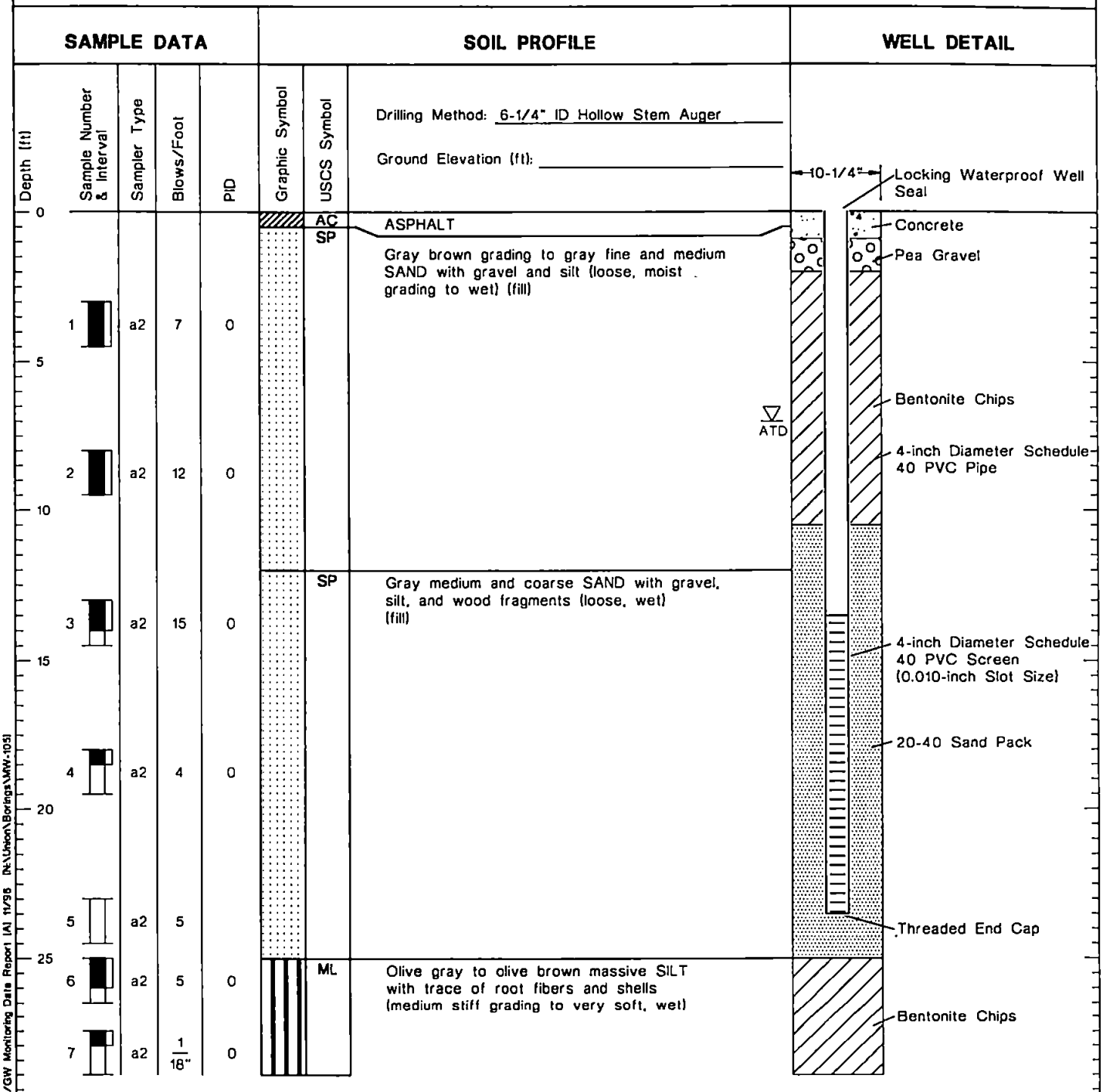
Well Completed 11/08/96
Elevation at Top of Well Casing = -1.0 ft.
Elevation at Top of PVC Casing = -1.0 ft.

Notes: 1. Stratigraphic contacts are based on field interpretations and are approximate. Refer to the text for an explanation of subsurface conditions.
2. Refer to "Soil Classification System and Key" figure for explanation of graphics and symbols.

Boring and Monitoring Well MW-104

Figure A-2
(1 of 1)

Monitoring Well MW-105



Boring Completed 11/08/96
Total Depth = 29.0 ft.

Well Completed 11/08/96
Elevation at Top of Well Casing = -1.0 ft.
Elevation at Top of PVC Casing = -1.0 ft.

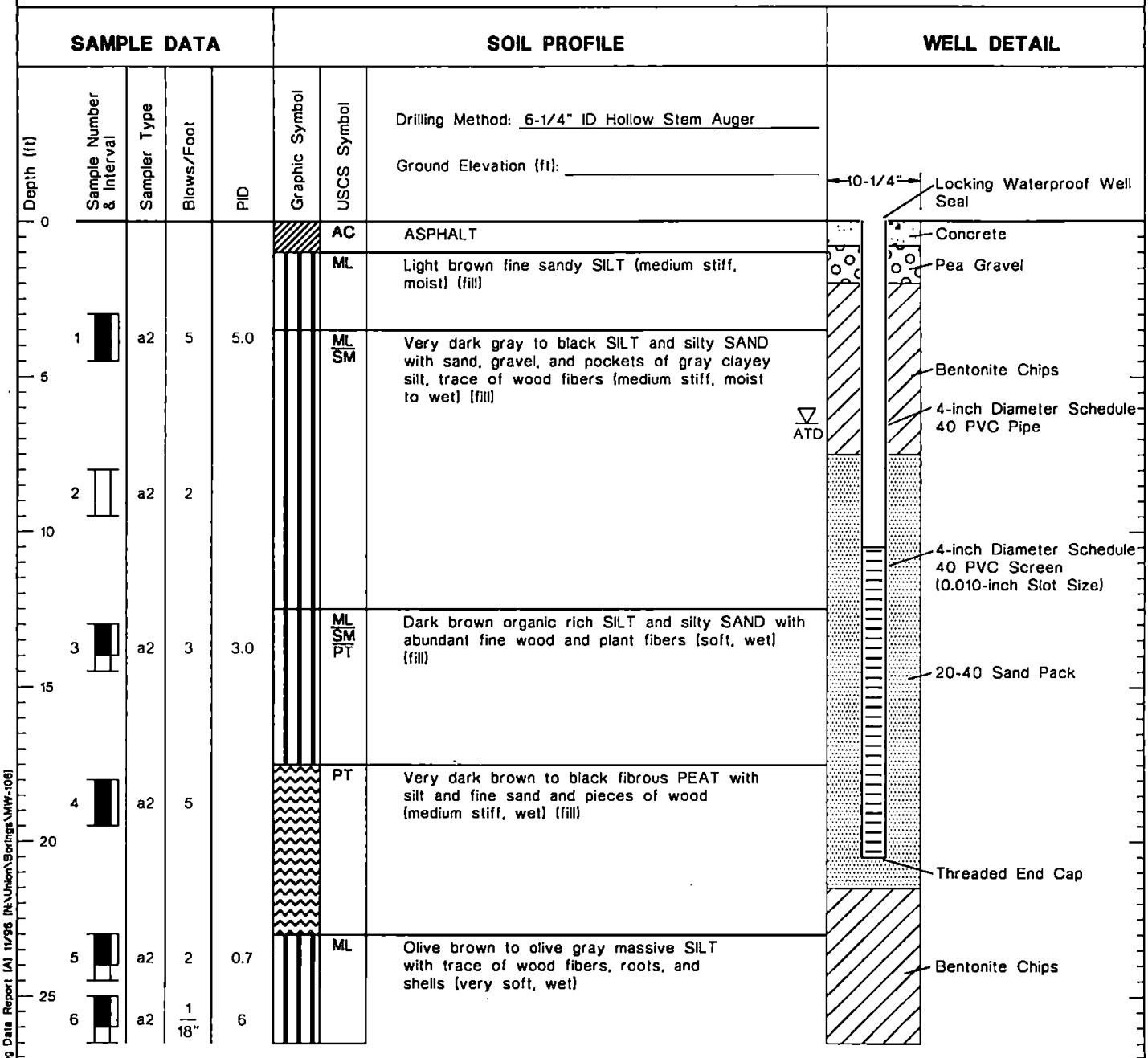
Notes: 1. Stratigraphic contacts are based on field interpretations and are approximate. Refer to the text for an explanation of subsurface conditions.
2. Refer to "Soil Classification System and Key" figure for explanation of graphics and symbols.

273008.29 Merten & Brown/Union Station/GW Monitoring Data Report (A) 11/96 [N:\Union\Borings\MW-105]

Boring and Monitoring Well MW-105

Figure A-3
(1 of 1)

Monitoring Well MW-106



Boring Completed 11/08/96
Total Depth = 26.5 ft.

Well Completed 11/08/96
Elevation at Top of Well Casing = -1.0 ft.
Elevation at Top of PVC Casing = -1.0 ft.

Notes: 1. Stratigraphic contacts are based on field interpretations and are approximate. Refer to the text for an explanation of subsurface conditions.
2. Refer to "Soil Classification System and Key" figure for explanation of graphics and symbols.

273008.29 Marten & Brown/Union Station/GW Monitoring Data Report (A) 11/96 (N:\Union\Borings\MW-106)

Boring and Monitoring Well MW-106

Figure A-4
(1 of 1)

Boring B-106A

Depth (ft)	Sample Number & Interval	Sampler Type	Blows/Foot	PID	Graphic Symbol	USCS Symbol	SOIL PROFILE
							Drilling Method: 6-1/4" ID Hollow Stem Auger Ground Elevation (ft): _____
0						AC	ASPHALT
						SP	Gray-brown fine and medium SAND with gravel and silt pockets (medium dense, moist) (fill)
	1	a2	15	1.0			
5	2	a2	6	0		ML/CL	Gray clayey SILT with trace of plant material and wood debris (medium stiff, moist) (fill)
							Drilling refusal on a buried piling at 7.0 ft. Trace of wood piling does not appear to be treated.
10							Boring Completed 11/07/96 Total Depth = 7.0 ft.
15							
20							
25							
30							

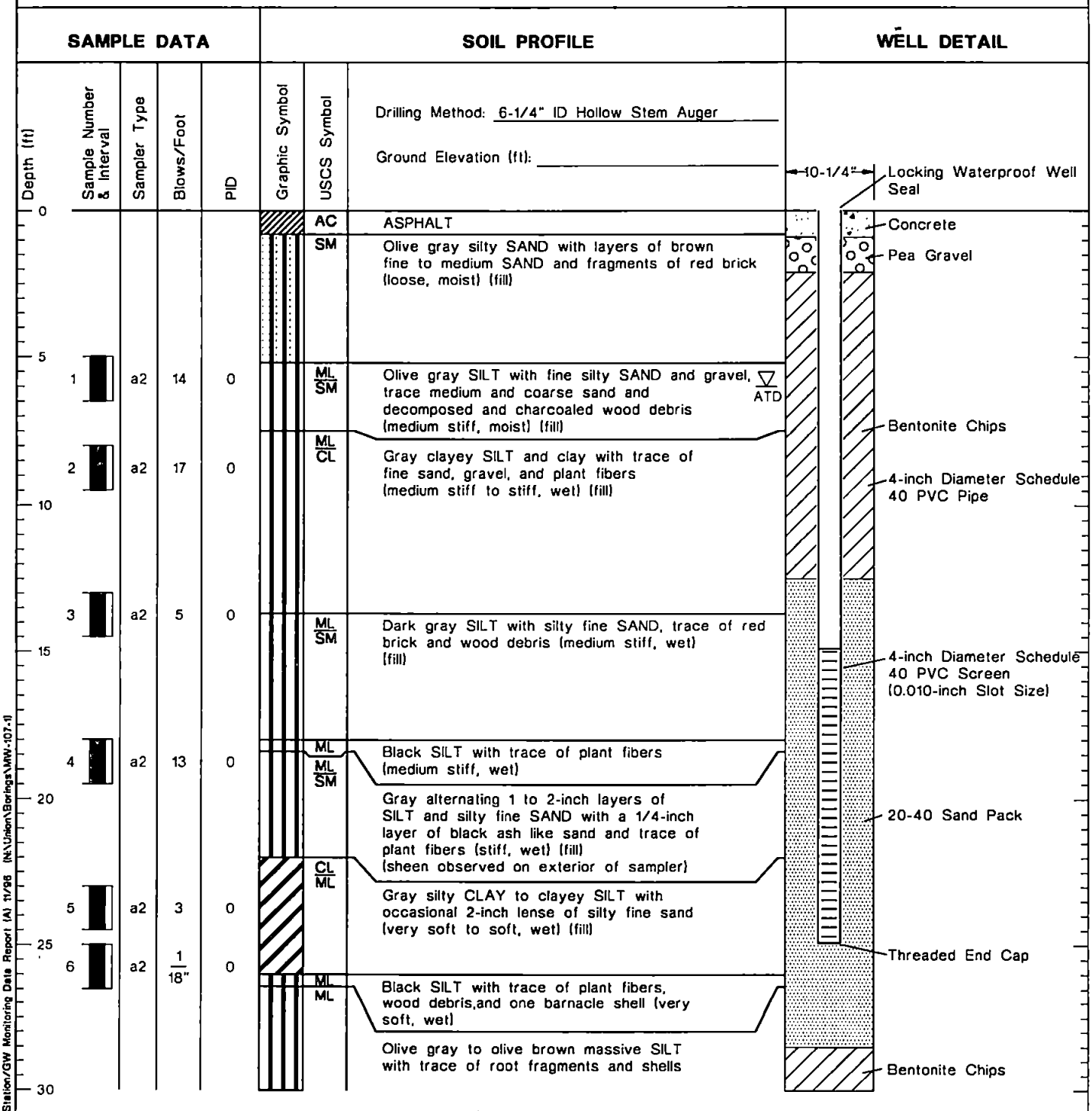
Notes: 1. Stratigraphic contacts are based on field interpretations and are approximate. Refer to the text for an explanation of subsurface conditions.
2. Refer to "Soil Classification System and Key" figure for explanation of graphics and symbols.

273008.29 Marlen & Brown/Union Station/GW Monitoring Data Report (A) 11/96 (N:\Union\Borings\B-106A)

Boring B-106A

Figure A-5
(1 of 1)

Monitoring Well MW-107



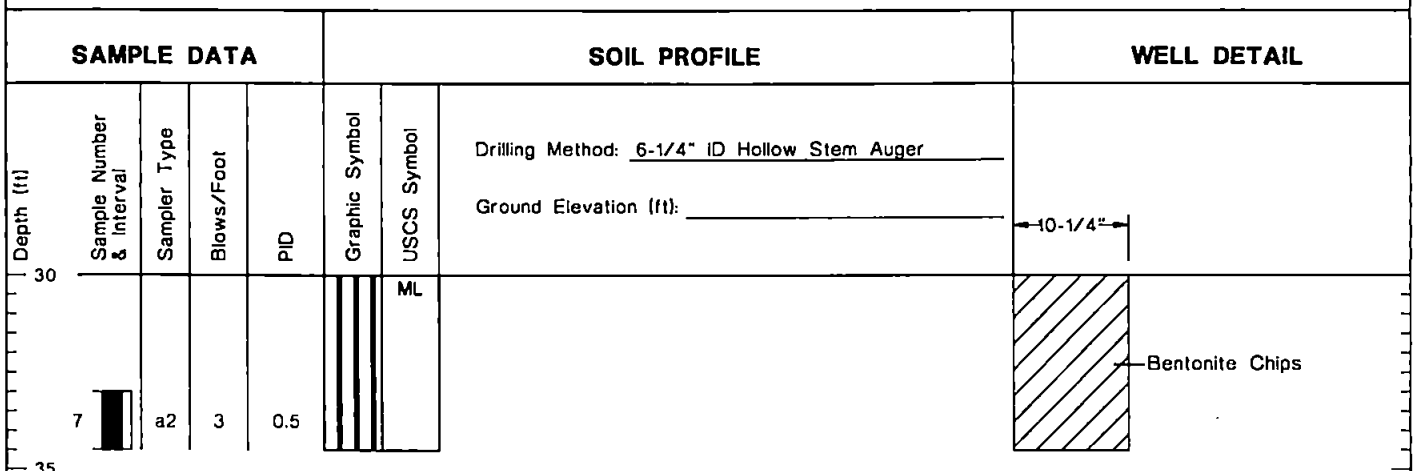
(Continued Next Page)

Notes:
1. Stratigraphic contacts are based on field interpretations and are approximate. Refer to the text for an explanation of subsurface conditions.
2. Refer to "Soil Classification System and Key" figure for explanation of graphics and symbols.

Boring and Monitoring Well MW-107

Figure A-6 (1 of 2)

Monitoring Well MW-107



Boring Completed 11/07/96
Total Depth = 34.5 ft.

Well Completed 11/07/96
Elevation at Top of Well Casing = -1.0 ft.
Elevation at Top of PVC Casing = -1.0 ft.

Notes:
1. Stratigraphic contacts are based on field interpretations and are approximate. Refer to the text for an explanation of subsurface conditions.
2. Refer to "Soil Classification System and Key" figure for explanation of graphics and symbols.

Boring and Monitoring Well MW-107

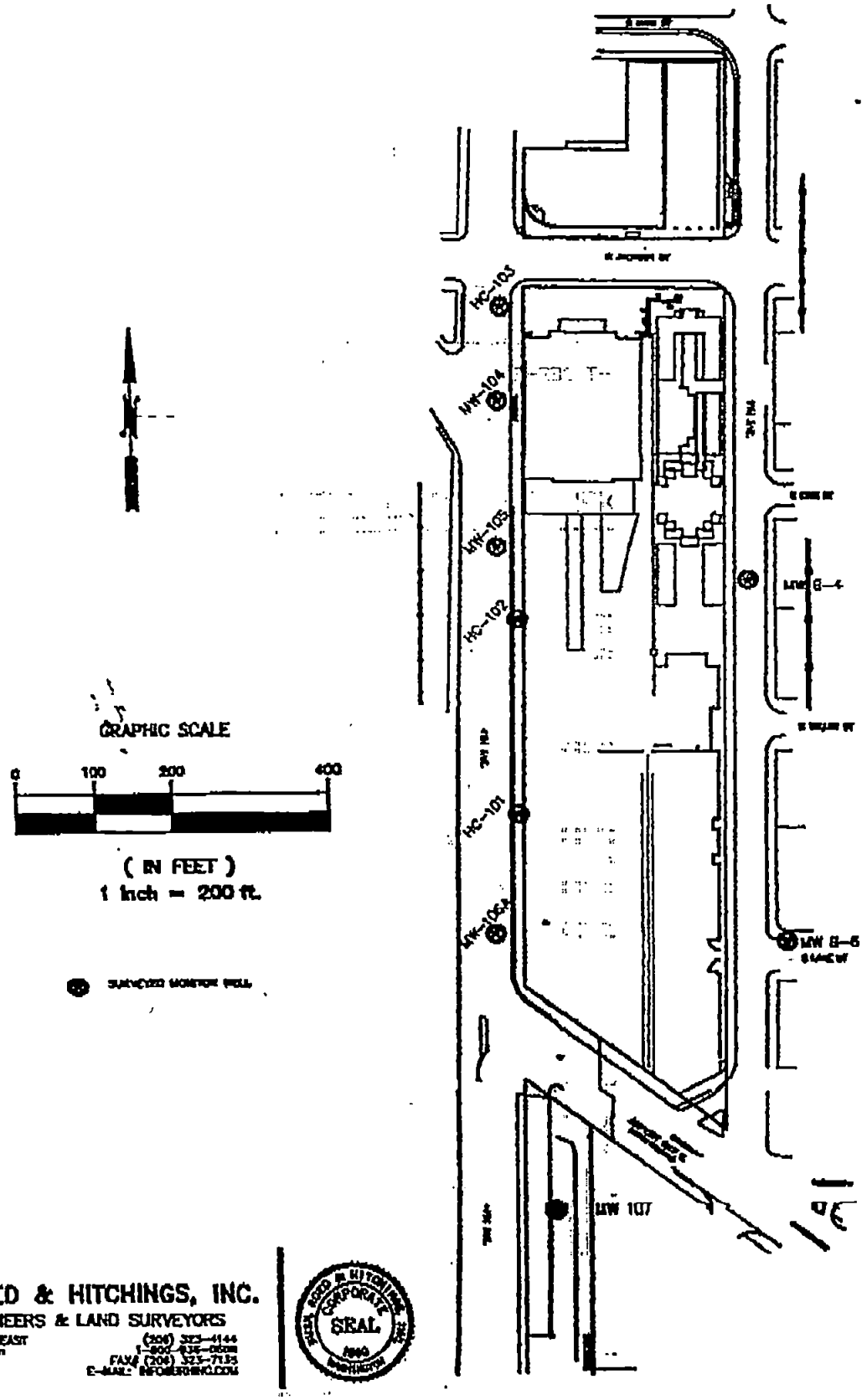
Figure A-6
(2 of 2)

APPENDIX B

Bush, Roed & Hitchings Survey Data

11-13-96

MONITOR WELL LOCATION SKETCH



BUSH, ROED & HITCHINGS, INC.
CIVIL ENGINEERS & LAND SURVEYORS
2009 MINOR AVE. EAST
SEATTLE, Washington
98102-3613
(206) 323-4144
1-800-936-0606
FAX# (206) 323-7135
E-MAIL: INFO@BRHINC.COM

WELL #	NORTHING	EASTING	WELL PIPE ELEVATION	GROUND ELEVATION
B-4	1886.32	1994.74	36.59	36.80
B-6	1406.35	2033.29	34.18	34.30
MW-107	1048.59	1728.86	12.57	13.30
HC-103	2253.46	1687.23	*10.51	10.50
MW-104	2129.61	1680.95	10.00	10.40
MW-105	1935.69	1676.29	8.92	9.50
HC-102	1837.46	1700.69	9.16	9.30
HC-101	1583.27	1695.87	8.47	8.80
MW-106A	1422.63	1662.65	9.07	9.50

* ELEVATION TAKEN AT NORTH RIM OF WELL CASE

ALL ELEVATIONS CITY OF SEATTLE DATUM

APPENDIX C

Laboratory Analytical Data

APPENDIX C

LABORATORY ANALYTICAL DATA

This appendix presents a summary of conditions observed during groundwater sampling on November 18 and 19, 1996 and laboratory data reports for soil and groundwater from Analytical Resources, Inc., of Seattle, Washington. The summary of conditions observed during groundwater sampling is presented below.

HC-101 Flush-mounted monument casing located at the former track level below the 4th Avenue viaduct. Pressure noted on well seal. Water had slight effervescence. Water translucent(1) and slightly yellow color. Mild aromatic solvent-like odor. Measured for NAPL with interface probe, none present.

HC-102 Flush-mounted monument casing located at the former track level below the 4th Avenue viaduct. Groundwater was clear(1) with sparse fine flakes of black material. Measured for NAPL with interface probe, none present.

HC-103 Flush-mounted monument casing located at the former track level below the 4th Avenue viaduct. Groundwater had faint gray color, low to moderate turbidity(1), and trace of floating dark particulates. Measured for NAPL with interface probe, none present.

MW-104 Flush-mounted monument casing located at the former track level below the 4th Avenue viaduct. Groundwater light gray color with low to moderate turbidity(1). Measured for NAPL with interface probe, none present.

MW-105 Flush-mounted monument casing located at the former track level below the 4th Avenue viaduct. Groundwater light gray color with low to moderate turbidity(1) and faint solvent odor. Measured for NAPL with interface probe, none present.

MW-106 Flush-mounted monument casing located at the former track level below the 4th Avenue viaduct. Groundwater light gray color with low to moderate turbidity(1) and faint solvent odor. Measured for NAPL with interface probe, none present.

MW-107 Flush-mounted monument casing located on access ramp south of S. Airport Way. Groundwater light gray color with low to moderate turbidity(1). Sweet aromatic solvent-like odor. Measured for NAPL with interface probe, none present.

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(1) Turbidity and total suspended solids were also measured by the laboratory.

B-4 Flush-mounted monument located in southbound lane of 5th Avenue S. Well constructed with a non-watertight cap/seal. Well very slow to recharge following purging. Moderate to high turbidity in groundwater sample. Measured for NAPL with interface probe, none present. The laboratory noted a visible sheen on one of the groundwater samples from well B-4.

B-6 Flush-mounted monument located near curb at intersection of 5th Avenue S. and S. Lane St. Well monument top plate missing. Grass growing in annulus around well pipe. Well constructed with a non-watertight seal. Groundwater had low to medium turbidity(1). Measured for NAPL with interface probe, none present.

(1) Turbidity and total suspended solids were also measured by the laboratory.

Analytical Resources, Incorporated
Analytical Chemists and Consultants

November 25, 1996

Mr. Brian F. Butler
Landau Associates, Inc.
P.O. Box 1029
Edmonds, WA 98020

RE: Project No. 273008.29 Union Station Ground Water Sampling
ARI Job No. Q829 and Q838

Dear Mr. Butler:

Please find enclosed analytical results and chain of custody documentation (COC No. 4487 and 4490) for the project referenced above. Analytical Resources, Inc. (ARI) accepted ten ground water samples and a VOA trip blank between November 18, and November 19, 1996. I have included a cross correlation between the client field identification and the laboratory tracking numbers in order to assist you with your data review. The samples were received intact with no discrepancies on the COC.

The laboratory completed the analysis for priority pollutant metals following US EPA Methods 6010/7000s, volatile organic compounds (VOC) following US EPA Method 8260, semivolatile organic compounds (SVOC) following US EPA Method 8270, pesticide/PCB-Aroclors following US EPA Method 8081/CLP, herbicides following US EPA Method 8151, and select general chemistry parameters, as requested.

Prior to analysis the laboratory selected sample **MW-107-11/19/96** as the project specific quality control reference sample, based on the COC request. The spike recovery for mercury was below the laboratories recommended recovery limit of 75%. No additional corrective action was initiated because the samples were on a rush delivery schedule and the mercury recovery was only marginally below (-2%) the recommended recovery range.

The following samples required a dilution and re analysis due to the presence of target analytes, which were detected above the calibrated linear range of the instrument detectors.

HC-101-11/18/96 B-4-11/18/96 MW-105-11/19/96
MW-104-11/19/96 HC-103-11/19/96 MW-205-11/19/96 MW-107-11/19/96

Both the initial analysis results and the dilute re analysis results have been included for your review. Prior to sample analysis the laboratory noted that there was limited sample volume associated with **B-4-11/18/96** and that the TPH sample aliquot had a noticeable oil sheen. The oil sheen was not apparent on the SVOC sample aliquot. Each aliquot was extracted separately, according to the COC request and the sample container labels. The laboratory was unable to confirm a pattern match for diesel fuel, motor oil, transformer oil, and hydraulic fluid.

As always, a copy of this report and the supporting data will remain on file with ARI. If you have any questions or require additional information, please contact me at your convenience.

Sincerely,

ANALYTICAL RESOURCES, INC.

Bryan D. Anderson

Bryan D. Anderson
Project Manager
E-Mail address:
bryan@arilabs.com

Enclosures
cc: File: Q829 and Q838

BDA/bda

Analytical Resources, Incorporated
Analytical Chemists and Consultants

ORGANICS ANALYSIS
DATA REPORTING QUALIFIERS

U Indicates the compound was undetected at the listed concentration.

J Indicates an estimated value when the value is less than the calculated detection limit.

NR Indicates the surrogate recovery cannot be reported due to matrix interference.

E Indicates value reported exceeds the linear range of the detector. Sample dilution required.

S Indicates no value reported due to saturation of the detector. Sample dilution required.

Y The analyte may be present at or below the listed concentration, but in the opinion of the analyst, confirmation was inadequate.

NA Indicates compound not analyzed for.

M Indicates an estimated value of analyte detected and confirmed by analyst with low spectral match parameters.

B Indicates possible/probable blank contamination. Flagged when the analyte is detected in the sample as well as the method blank.

333 Ninth Avenue North • Seattle WA 98109-5187 • 206-621-6490 • 206-621-7523 fax

ANALYTICAL
RESOURCES
INCORPORATED

SAMPLE DELIVERY GROUP (SDG)
TRAFFIC REPORT (TR) COVER SHEET

Lab Name: ANALYTICAL RESOURCES INC. Project: 273008.29

Lab Code: ARI Case No: Union Station

Client Code: LA-BB ARI Job No: Q829

SDG No/first sample in SDG: B-6 11/18/96 Sample Receipt Date: 11/18/96

SDG No/last sample in SDG: B-4 11/18/96 Sample Receipt Date: 11/18/96

	Sample Numbers	ARI Lab ID	ARI LIMS ID	Matrix	SAMPLE DATE
1	B-6 11/18/96	Q829A	96-19678	Water	11/18/96
2	HC-102 11/18/96	Q829B	96-19679	Water	11/18/96
3	HC-101 11/18/96	Q829C	96-19680	Water	11/18/96
4	B-4 11/18/96	Q829D	96-19681	Water	11/18/96

Bryan D. Anderson
Project Manager

11/25/96
Date

ANALYTICAL
RESOURCES
INCORPORATED

SAMPLE DELIVERY GROUP (SDG)
TRAFFIC REPORT (TR) COVER SHEET

Lab Name: ANALYTICAL RESOURCES INC. Project: 273008.29

Lab Code: ARI Case No: Union Station

Client Code: LA-BB ARI Job No: Q838

SDG No/first sample in SDG: MW-106-11/19/96 Sample Receipt Date: 11/19/96

SDG No/last sample in SDG: Trip Blank Sample Receipt Date: 11/19/96

	Sample Numbers	ARI Lab ID	ARI LIMS ID	Matrix	SAMPLE DATE
1	MW-106-11/19/96	Q838A	96-19774	Water	11/19/96
2	MW-105-11/19/96	Q838B	96-19775	Water	11/19/96
3	MW-104-11/19/96	Q838C	96-19776	Water	11/19/96
4	HC-103-11/19/96	Q838D	96-19777	Water	11/19/96
5	MW-205-11/19/96	Q838E	96-19778	Water	11/19/96
6	MW-107-11/19/96	Q838F	96-19779	Water	11/19/96
7	Trip Blank	Q838G	96-19780	Water	11/14/96

Bryan D. Anderson
Project Manager

11/25/96
Date

LANDAU ASSOCIATES, INC.
Edmonds, WA (206) 778-0907
FAX (206)778-6409

Chain-of-Custody Record

No. 4487

Date 11/18/96

Page 1 of

Project Union Station Job No. 27300.8.29

Client

Project Location Union Station

Sampler's Name Ken Chapnit

Testing Parameters

Turnaround Time
☐ Standard
☒ Accelerated

Sample Number	Date	Time	Matrix	No. of Containers	Diss. C.P. Metals	Cyanide	VOC	Semi VOC	Pest / PCBs	Herbicides	TPH-HCID/D+	Turbidity	Total Suspended Solids	Total Dissolved Solids	Observations/Comments
B-6-11/18/96	11/18/96	1250	Water	12	X	X	X	X	X	X	X	X	X	X	
B-4-11/18/96	↓	1345	↓	6	X	X	X	X			X				1) Rush turn around time
HC-102-11/18/96		1530		12	X	X	X	X	X	X	X	X	X	X	2) Results to attn: Brian Butler at Landau Assoc
HC-103-11/18/96		1635		12	X	X	X	X	X	X	X	X	X	X	
HCL															
															Per Brian Butler WTPH-D extended to include motor oil, hydraulic, & Transformer oil.

Special Shipment/Handling or Storage Requirements Store in a Cooler with ice

Method of Shipment ~~Store in a HCL~~ Hand Delivered

Relinquished by	Received by	Relinquished by	Received by
Signature: Ken Chapnit	Signature: Jan Fellows	Signature:	Signature:
Printed Name: Ken Chapnit	Printed Name: JAN FELLOWS	Printed Name:	Printed Name:
Company: Landau Assoc.	Company: A.T.F.	Company:	Company:
Date: 11/15/96 Time: 1723	Date: 11/18/96 Time: 17:23	Date: Time:	Date: Time:

3/91

WHITE COPY - Project File YELLOW COPY - Laboratory PINK COPY - Client Representative

LANDAU ASSOCIATES, INC.
Edmonds, WA (206) 778-0907
FAX (206)778-6409

Chain-of-Custody Record

No. 1490

Date 11/19/96
Page 1 of 1

Project Union Station Job No. 27300829

Client

Project Location Union Station

Sampler's Name Ken Chaput

Turnaround Time
☐ Standard
☑ Accelerated

Sample Number	Date	Time	Matrix	No. of Containers	Testing Parameters: Diss. P.P. Metals	Cyanide	VOC	Semi VOC	Pest / PCBs	Herbicides	WTPH-HCID; D&G	Turbidity	TSS	TDS	Observations/Comments
MW-106-11/19/96	11/19/96	1645	Water	12	X	X	X	X	X	X	X	X	X	X	1) Rush turn Around time
MW-105-11/19/96	↓	1535	↓	12	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	2) Results to Attn: Brian Butler at Landau Assoc
MW-104-11/19/96		1435		12											
HC-103-11/19/96		1345		12											Per Brian Butler WTPH-D extended to include motor oil, hydraulic oil, and transformer oil
MW-205-11/19/96		11:00		12											
MW-107-11/19/96		10:00		12											
MW-107-11/19/96 MS		10:00		12											
MW-107-11/19/96 MSD	↓	10:00	↓	12	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	
Trip Blank		–		2			X								

Special Shipment/Handling or Storage Requirements: Store in a cooler with Ice

Method of Shipment: Hand Delivered

Relinquished by	Received by	Relinquished by	Received by
Signature: Ken Chaput	Signature: Mary Lou Fox	Signature:	Signature:
Printed Name: Ken Chaput	Printed Name: Mary Lou Fox	Printed Name:	Printed Name:
Company: Landau Assoc Inc	Company: AGF	Company:	Company:
Date: 11/19/96 Time: 1800	Date: 11/20/96 Time: 0700	Date: Time:	Date: Time:

3/91

WHITE COPY - Project File YELLOW COPY - Laboratory PINK COPY - Client Representative

ANALYTICAL
RESOURCES
INCORPORATED

INORGANIC ANALYSIS DATA SHEET
DISSOLVED METALS

Sample No: B-6 11/18/96

Lab Sample ID: Q829A
LIMS ID: 96-19678
Matrix: Water

QC Report No: Q829-Landau Associates, Inc.
Project: Union Station
273008.29
Date Sampled: 11/18/96
Date Received: 11/18/96

Data Release Authorized:
Reported: 11/22/96

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	mg/L
7000	11/19/96	7041	11/20/96	7440-36-0	Antimony	0.001	0.001 U
7000	11/19/96	7060	11/21/96	7440-38-2	Arsenic	0.001	0.014
6010	11/19/96	6010	11/20/96	7440-41-7	Beryllium	0.001	0.001 U
6010	11/19/96	6010	11/20/96	7440-43-9	Cadmium	0.002	0.002 U
6010	11/19/96	6010	11/20/96	7440-47-3	Chromium	0.005	0.005 U
6010	11/19/96	6010	11/20/96	7440-50-8	Copper	0.002	0.002 U
7000	11/19/96	7421	11/20/96	7439-92-1	Lead	0.001	0.001 U
7470	11/19/96	7470	11/19/96	7439-97-6	Mercury	0.0001	0.0001 U
6010	11/19/96	6010	11/20/96	7440-02-0	Nickel	0.01	0.01 U
7000	11/19/96	7740	11/20/96	7782-49-2	Selenium	0.001	0.001 U
6010	11/19/96	6010	11/20/96	7440-22-4	Silver	0.003	0.003 U
7000	11/19/96	7841	11/20/96	7440-28-0	Thallium	0.001	0.001 U
6010	11/19/96	6010	11/20/96	7440-66-6	Zinc	0.004	0.004 U

U Analyte undetected at given RL

RL Reporting Limit

ANALYTICAL
RESOURCES
INCORPORATED

INORGANIC ANALYSIS DATA SHEET
DISSOLVED METALS

Sample No: HC-102 11/18/96

Lab Sample ID: Q829B
LIMS ID: 96-19679
Matrix: Water

QC Report No: Q829-Landau Associates, Inc.
Project: Union Station
273008.29
Date Sampled: 11/18/96
Date Received: 11/18/96

Data Release Authorized:
Reported: 11/22/96

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	mg/L
7000	11/19/96	7041	11/20/96	7440-36-0	Antimony	0.001	0.001 U
7000	11/19/96	7060	11/21/96	7440-38-2	Arsenic	0.001	0.003
6010	11/19/96	6010	11/20/96	7440-41-7	Beryllium	0.001	0.001 U
6010	11/19/96	6010	11/20/96	7440-43-9	Cadmium	0.002	0.002 U
6010	11/19/96	6010	11/20/96	7440-47-3	Chromium	0.005	0.005 U
6010	11/19/96	6010	11/20/96	7440-50-8	Copper	0.002	0.002 U
7000	11/19/96	7421	11/20/96	7439-92-1	Lead	0.001	0.001 U
7470	11/19/96	7470	11/19/96	7439-97-6	Mercury	0.0001	0.0001 U
6010	11/19/96	6010	11/20/96	7440-02-0	Nickel	0.01	0.01 U
7000	11/19/96	7740	11/20/96	7782-49-2	Selenium	0.001	0.001 U
6010	11/19/96	6010	11/20/96	7440-22-4	Silver	0.003	0.003 U
7000	11/19/96	7841	11/20/96	7440-28-0	Thallium	0.001	0.001 U
6010	11/19/96	6010	11/20/96	7440-66-6	Zinc	0.004	0.004 U

U Analyte undetected at given RL

RL Reporting Limit

ANALYTICAL
RESOURCES
INCORPORATED

INORGANIC ANALYSIS DATA SHEET
DISSOLVED METALS

Sample No: HC-101 11/18/96

Lab Sample ID: Q829C
LIMS ID: 96-19680
Matrix: Water

QC Report No: Q829-Landau Associates, Inc.
Project: Union Station
273008.29
Date Sampled: 11/18/96
Date Received: 11/18/96

Data Release Authorized:
Reported: 11/22/96

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	mg/L
7000	11/19/96	7041	11/20/96	7440-36-0	Antimony	0.001	0.001 U
7000	11/19/96	7060	11/21/96	7440-38-2	Arsenic	0.001	0.012
6010	11/19/96	6010	11/20/96	7440-41-7	Beryllium	0.001	0.001 U
6010	11/19/96	6010	11/20/96	7440-43-9	Cadmium	0.002	0.002 U
6010	11/19/96	6010	11/20/96	7440-47-3	Chromium	0.005	0.005 U
6010	11/19/96	6010	11/20/96	7440-50-8	Copper	0.002	0.002 U
7000	11/19/96	7421	11/20/96	7439-92-1	Lead	0.001	0.001 U
7470	11/19/96	7470	11/19/96	7439-97-6	Mercury	0.0001	0.0001 U
6010	11/19/96	6010	11/20/96	7440-02-0	Nickel	0.01	0.01 U
7000	11/19/96	7740	11/20/96	7782-49-2	Selenium	0.001	0.001 U
6010	11/19/96	6010	11/20/96	7440-22-4	Silver	0.003	0.003 U
7000	11/19/96	7841	11/20/96	7440-28-0	Thallium	0.001	0.001 U
6010	11/19/96	6010	11/20/96	7440-66-6	Zinc	0.004	0.004 U

U Analyte undetected at given RL

RL Reporting Limit

ANALYTICAL
RESOURCES
INCORPORATED

INORGANIC ANALYSIS DATA SHEET
DISSOLVED METALS

Sample No: B-4 11/18/96

Lab Sample ID: Q829D
LIMS ID: 96-19681
Matrix: Water

QC Report No: Q829-Landau Associates, Inc.
Project: Union Station
273008.29
Date Sampled: 11/18/96
Date Received: 11/18/96

Data Release Authorized:
Reported: 11/22/96

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	mg/L
7000	11/19/96	7041	11/20/96	7440-36-0	Antimony	0.001	0.002
7000	11/19/96	7060	11/21/96	7440-38-2	Arsenic	0.001	0.002
6010	11/19/96	6010	11/20/96	7440-41-7	Beryllium	0.001	0.001 U
6010	11/19/96	6010	11/20/96	7440-43-9	Cadmium	0.002	0.029
6010	11/19/96	6010	11/20/96	7440-47-3	Chromium	0.005	0.005 U
6010	11/19/96	6010	11/20/96	7440-50-8	Copper	0.002	0.003
7000	11/19/96	7421	11/21/96	7439-92-1	Lead	0.001	0.001 U
7470	11/19/96	7470	11/19/96	7439-97-6	Mercury	0.0001	0.0001 U
6010	11/19/96	6010	11/20/96	7440-02-0	Nickel	0.01	0.01
7000	11/19/96	7740	11/20/96	7782-49-2	Selenium	0.001	0.001 U
6010	11/19/96	6010	11/20/96	7440-22-4	Silver	0.003	0.003 U
7000	11/19/96	7841	11/20/96	7440-28-0	Thallium	0.001	0.001 U
6010	11/19/96	6010	11/20/96	7440-66-6	Zinc	0.004	0.037

U Analyte undetected at given RL

RL Reporting Limit

ANALYTICAL
RESOURCES
INCORPORATED

INORGANIC ANALYSIS DATA SHEET
DISSOLVED METALS

Sample No: Method Blank

Lab Sample ID: Q829MB
LIMS ID: 96-19678
Matrix: Water

QC Report No: Q829-Landau Associates, Inc.
Project: Union Station
273008.29
Date Sampled: NA
Date Received: NA

Data Release Authorized:
Reported: 11/22/96

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	mg/L
7000	11/19/96	7041	11/20/96	7440-36-0	Antimony	0.001	0.001 U
7000	11/19/96	7060	11/21/96	7440-38-2	Arsenic	0.001	0.001 U
6010	11/19/96	6010	11/20/96	7440-41-7	Beryllium	0.001	0.001 U
6010	11/19/96	6010	11/20/96	7440-43-9	Cadmium	0.002	0.002 U
6010	11/19/96	6010	11/20/96	7440-47-3	Chromium	0.005	0.005 U
6010	11/19/96	6010	11/20/96	7440-50-8	Copper	0.002	0.002 U
7000	11/19/96	7421	11/20/96	7439-92-1	Lead	0.001	0.001 U
7470	11/19/96	7470	11/19/96	7439-97-6	Mercury	0.0001	0.0001 U
6010	11/19/96	6010	11/20/96	7440-02-0	Nickel	0.01	0.01 U
7000	11/19/96	7740	11/20/96	7782-49-2	Selenium	0.001	0.001 U
6010	11/19/96	6010	11/20/96	7440-22-4	Silver	0.003	0.003 U
7000	11/19/96	7841	11/20/96	7440-28-0	Thallium	0.001	0.001 U
6010	11/19/96	6010	11/20/96	7440-66-6	Zinc	0.004	0.004 U

U Analyte undetected at given RL

RL Reporting Limit

ANALYTICAL
RESOURCES
INCORPORATED

INORGANIC ANALYSIS DATA SHEET
DISSOLVED METALS

Sample No: MW-106-11/19/96

Lab Sample ID: Q838A
LIMS ID: 96-19774
Matrix: Water

QC Report No: Q838-Landau Associates, Inc.
Project: Union Station
273008.29
Date Sampled: 11/19/96
Date Received: 11/19/96

Data Release Authorized:
Reported: 11/25/96

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	mg/L
7000	11/20/96	7041	11/20/96	7440-36-0	Antimony	0.005	0.005 U
7000	11/20/96	7060	11/21/96	7440-38-2	Arsenic	0.005	0.005
6010	11/20/96	6010	11/20/96	7440-41-7	Beryllium	0.001	0.001 U
6010	11/20/96	6010	11/20/96	7440-43-9	Cadmium	0.002	0.002 U
6010	11/20/96	6010	11/20/96	7440-47-3	Chromium	0.005	0.005 U
6010	11/20/96	6010	11/20/96	7440-50-8	Copper	0.002	0.002 U
7000	11/20/96	7421	11/20/96	7439-92-1	Lead	0.001	0.001 U
7470	11/20/96	7470	11/20/96	7439-97-6	Mercury	0.0001	0.0001 U
6010	11/20/96	6010	11/20/96	7440-02-0	Nickel	0.01	0.01 U
7000	11/20/96	7740	11/20/96	7782-49-2	Selenium	0.005	0.005 U
6010	11/20/96	6010	11/20/96	7440-22-4	Silver	0.003	0.003 U
7000	11/20/96	7841	11/20/96	7440-28-0	Thallium	0.005	0.005 U
6010	11/20/96	6010	11/20/96	7440-66-6	Zinc	0.004	0.004 U

U Analyte undetected at given RL

RL Reporting Limit

ANALYTICAL
RESOURCES
INCORPORATED

INORGANIC ANALYSIS DATA SHEET
DISSOLVED METALS

Sample No: MW-105-11/19/96

Lab Sample ID: Q838B
LIMS ID: 96-19775
Matrix: Water

QC Report No: Q838-Landau Associates, Inc.
Project: Union Station
273008.29
Date Sampled: 11/19/96
Date Received: 11/19/96

Data Release Authorized:
Reported: 11/25/96

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	mg/L
7000	11/20/96	7041	11/20/96	7440-36-0	Antimony	0.005	0.005 U
7000	11/20/96	7060	11/21/96	7440-38-2	Arsenic	0.005	0.005 U
6010	11/20/96	6010	11/20/96	7440-41-7	Beryllium	0.001	0.001 U
6010	11/20/96	6010	11/20/96	7440-43-9	Cadmium	0.002	0.002 U
6010	11/20/96	6010	11/20/96	7440-47-3	Chromium	0.005	0.005 U
6010	11/20/96	6010	11/20/96	7440-50-8	Copper	0.002	0.002 U
7000	11/20/96	7421	11/20/96	7439-92-1	Lead	0.001	0.001 U
7470	11/20/96	7470	11/20/96	7439-97-6	Mercury	0.0001	0.0001 U
6010	11/20/96	6010	11/20/96	7440-02-0	Nickel	0.01	0.01 U
7000	11/20/96	7740	11/20/96	7782-49-2	Selenium	0.005	0.005 U
6010	11/20/96	6010	11/20/96	7440-22-4	Silver	0.003	0.003 U
7000	11/20/96	7841	11/20/96	7440-28-0	Thallium	0.005	0.005 U
6010	11/20/96	6010	11/20/96	7440-66-6	Zinc	0.004	0.004 U

U Analyte undetected at given RL

RL Reporting Limit

ANALYTICAL
RESOURCES
INCORPORATED

INORGANIC ANALYSIS DATA SHEET
DISSOLVED METALS

Sample No: MW-104-11/19/96

Lab Sample ID: Q838C
LIMS ID: 96-19776
Matrix: Water

QC Report No: Q838-Landau Associates, Inc.
Project: Union Station
273008.29
Date Sampled: 11/19/96
Date Received: 11/19/96

Data Release Authorized:
Reported: 11/25/96

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	mg/L
7000	11/20/96	7041	11/20/96	7440-36-0	Antimony	0.001	0.001 U
7000	11/20/96	7060	11/21/96	7440-38-2	Arsenic	0.001	0.009
6010	11/20/96	6010	11/20/96	7440-41-7	Beryllium	0.001	0.001 U
6010	11/20/96	6010	11/20/96	7440-43-9	Cadmium	0.002	0.002 U
6010	11/20/96	6010	11/20/96	7440-47-3	Chromium	0.005	0.005 U
6010	11/20/96	6010	11/20/96	7440-50-8	Copper	0.002	0.002 U
7000	11/20/96	7421	11/20/96	7439-92-1	Lead	0.001	0.001 U
7470	11/20/96	7470	11/20/96	7439-97-6	Mercury	0.0001	0.0001 U
6010	11/20/96	6010	11/20/96	7440-02-0	Nickel	0.01	0.01 U
7000	11/20/96	7740	11/20/96	7782-49-2	Selenium	0.001	0.001 U
6010	11/20/96	6010	11/20/96	7440-22-4	Silver	0.003	0.003 U
7000	11/20/96	7841	11/20/96	7440-28-0	Thallium	0.001	0.001 U
6010	11/20/96	6010	11/20/96	7440-66-6	Zinc	0.004	0.004 U

U Analyte undetected at given RL

RL Reporting Limit

ANALYTICAL
RESOURCES
INCORPORATED

INORGANIC ANALYSIS DATA SHEET
DISSOLVED METALS

Sample No: HC-103-11/19/96

Lab Sample ID: Q838D
LIMS ID: 96-19777
Matrix: Water

QC Report No: Q838-Landau Associates, Inc.
Project: Union Station
273008.29
Date Sampled: 11/19/96
Date Received: 11/19/96

Data Release Authorized:
Reported: 11/25/96

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	mg/L
7000	11/20/96	7041	11/20/96	7440-36-0	Antimony	0.001	0.001 U
7000	11/20/96	7060	11/21/96	7440-38-2	Arsenic	0.001	0.001 U
6010	11/20/96	6010	11/20/96	7440-41-7	Beryllium	0.001	0.001 U
6010	11/20/96	6010	11/20/96	7440-43-9	Cadmium	0.002	0.002 U
6010	11/20/96	6010	11/20/96	7440-47-3	Chromium	0.005	0.005 U
6010	11/20/96	6010	11/20/96	7440-50-8	Copper	0.002	0.002 U
7000	11/20/96	7421	11/20/96	7439-92-1	Lead	0.001	0.001 U
7470	11/20/96	7470	11/20/96	7439-97-6	Mercury	0.0001	0.0001 U
6010	11/20/96	6010	11/20/96	7440-02-0	Nickel	0.01	0.01 U
7000	11/20/96	7740	11/20/96	7782-49-2	Selenium	0.001	0.001 U
6010	11/20/96	6010	11/20/96	7440-22-4	Silver	0.003	0.003 U
7000	11/20/96	7841	11/20/96	7440-28-0	Thallium	0.001	0.001 U
6010	11/20/96	6010	11/20/96	7440-66-6	Zinc	0.004	0.004 U

U Analyte undetected at given RL

RL Reporting Limit

ANALYTICAL
RESOURCES
INCORPORATED

INORGANIC ANALYSIS DATA SHEET
DISSOLVED METALS

Sample No: MW-205-11/19/96

Lab Sample ID: Q838E
LIMS ID: 96-19778
Matrix: Water

QC Report No: Q838-Landau Associates, Inc.
Project: Union Station
273008.29
Date Sampled: 11/19/96
Date Received: 11/19/96

Data Release Authorized:
Reported: 11/25/96

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	mg/L
7000	11/20/96	7041	11/20/96	7440-36-0	Antimony	0.005	0.005 U
7000	11/20/96	7060	11/21/96	7440-38-2	Arsenic	0.005	0.005 U
6010	11/20/96	6010	11/20/96	7440-41-7	Beryllium	0.001	0.001 U
6010	11/20/96	6010	11/20/96	7440-43-9	Cadmium	0.002	0.002 U
6010	11/20/96	6010	11/20/96	7440-47-3	Chromium	0.005	0.005 U
6010	11/20/96	6010	11/20/96	7440-50-8	Copper	0.002	0.002 U
7000	11/20/96	7421	11/21/96	7439-92-1	Lead	0.005	0.005 U
7470	11/20/96	7470	11/20/96	7439-97-6	Mercury	0.0001	0.0001 U
6010	11/20/96	6010	11/20/96	7440-02-0	Nickel	0.01	0.01 U
7000	11/20/96	7740	11/20/96	7782-49-2	Selenium	0.005	0.005 U
6010	11/20/96	6010	11/20/96	7440-22-4	Silver	0.003	0.003 U
7000	11/20/96	7841	11/20/96	7440-28-0	Thallium	0.005	0.005 U
6010	11/20/96	6010	11/20/96	7440-66-6	Zinc	0.004	0.004 U

U Analyte undetected at given RL

RL Reporting Limit

ANALYTICAL
RESOURCES
INCORPORATED

INORGANIC ANALYSIS DATA SHEET
DISSOLVED METALS

Sample No: MW-107-11/19/96

Lab Sample ID: Q838F
LIMS ID: 96-19779
Matrix: Water

QC Report No: Q838-Landau Associates, Inc.
Project: Union Station
273008.29
Date Sampled: 11/19/96
Date Received: 11/19/96

Data Release Authorized:
Reported: 11/25/96

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	mg/L
7000	11/20/96	7041	11/20/96	7440-36-0	Antimony	0.005	0.005 U
7000	11/20/96	7060	11/21/96	7440-38-2	Arsenic	0.005	0.007
6010	11/20/96	6010	11/20/96	7440-41-7	Beryllium	0.001	0.001 U
6010	11/20/96	6010	11/20/96	7440-43-9	Cadmium	0.002	0.002 U
6010	11/20/96	6010	11/20/96	7440-47-3	Chromium	0.005	0.005 U
6010	11/20/96	6010	11/20/96	7440-50-8	Copper	0.002	0.002 U
7000	11/20/96	7421	11/20/96	7439-92-1	Lead	0.001	0.001 U
7470	11/20/96	7470	11/20/96	7439-97-6	Mercury	0.0001	0.0001 U
6010	11/20/96	6010	11/20/96	7440-02-0	Nickel	0.01	0.01 U
7000	11/20/96	7740	11/20/96	7782-49-2	Selenium	0.005	0.005 U
6010	11/20/96	6010	11/20/96	7440-22-4	Silver	0.003	0.003 U
7000	11/20/96	7841	11/20/96	7440-28-0	Thallium	0.005	0.005 U
6010	11/20/96	6010	11/20/96	7440-66-6	Zinc	0.004	0.004 U

U Analyte undetected at given RL

RL Reporting Limit

ANALYTICAL
RESOURCES
INCORPORATED

INORGANIC ANALYSIS DATA SHEET
DISSOLVED METALS

Sample No: Method Blank

Lab Sample ID: Q838MB
LIMS ID: 96-19774
Matrix: Water

QC Report No: Q838-Landau Associates, Inc.
Project: Union Station
273008.29
Date Sampled: NA
Date Received: NA

Data Release Authorized:
Reported: 11/25/96

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	mg/L
7000	11/20/96	7041	11/20/96	7440-36-0	Antimony	0.001	0.001 U
7000	11/20/96	7060	11/21/96	7440-38-2	Arsenic	0.001	0.001 U
6010	11/20/96	6010	11/20/96	7440-41-7	Beryllium	0.001	0.001 U
6010	11/20/96	6010	11/20/96	7440-43-9	Cadmium	0.002	0.002 U
6010	11/20/96	6010	11/20/96	7440-47-3	Chromium	0.005	0.005 U
6010	11/20/96	6010	11/20/96	7440-50-8	Copper	0.002	0.002 U
7000	11/20/96	7421	11/20/96	7439-92-1	Lead	0.001	0.001 U
7470	11/20/96	7470	11/20/96	7439-97-6	Mercury	0.0001	0.0001 U
6010	11/20/96	6010	11/20/96	7440-02-0	Nickel	0.01	0.01 U
7000	11/20/96	7740	11/20/96	7782-49-2	Selenium	0.001	0.001 U
6010	11/20/96	6010	11/20/96	7440-22-4	Silver	0.003	0.003 U
7000	11/20/96	7841	11/20/96	7440-28-0	Thallium	0.001	0.001 U
6010	11/20/96	6010	11/20/96	7440-66-6	Zinc	0.004	0.004 U

U Analyte undetected at given RL

RL Reporting Limit

ANALYTICAL
RESOURCES
INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS

Lab Sample ID: Q838F
LIMS ID: 96-19779
Matrix: Water

Data Release Authorized:
Reported: 11/25/96

Sample No: MW-107-11/19/96
QC Report No: Q838-Landau Associates, Inc.
Project: Union Station
273008.29
Date Received: 11/19/96

MATRIX DUPLICATE QUALITY CONTROL REPORT

Analyte	Sample mg/L	Duplicate mg/L	RPD	Control Limit	Q
Antimony	0.005 U	0.005 U	0.0%	+/- 0.005	L
Arsenic	0.007	0.008	13.3%	+/- 0.005	L
Beryllium	0.001 U	0.001 U	0.0%	+/- 0.001	L
Cadmium	0.002 U	0.002 U	0.0%	+/- 0.002	L
Chromium	0.005 U	0.005 U	0.0%	+/- 0.005	L
Copper	0.002 U	0.002 U	0.0%	+/- 0.002	L
Lead	0.001 U	0.001 U	0.0%	+/- 0.001	L
Mercury	0.0001 U	0.0001 U	0.0%	+/- 0.0001	L
Nickel	0.01 U	0.01 U	0.0%	+/- 0.01	L
Selenium	0.005 U	0.005 U	0.0%	+/- 0.005	L
Silver	0.003 U	0.003 U	0.0%	+/- 0.003	L
Thallium	0.005 U	0.005 U	0.0%	+/- 0.005	L
Zinc	0.004 U	0.004 U	0.0%	+/- 0.004	L

'Q' codes: * = control limit not met
L = RPD not valid, alternate limit = detection limit

ANALYTICAL
RESOURCES
INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS

Lab Sample ID: Q838F
LIMS ID: 96-19779
Matrix: Water

Data Release Authorized:
Reported: 11/25/96

Sample No: MW-107-11/19/96
QC Report No: Q838-Landau Associates, Inc.
Project: Union Station
273008.29
Date Received: 11/19/96

MATRIX SPIKE QUALITY CONTROL REPORT

Analyte	Sample mg/L	Spike mg/L	Spike Added	% Recovery	Q
Antimony	0.005 U	0.090	0.100	90.0%	
Arsenic	0.007	0.098	0.100	91.0%	
Beryllium	0.001 U	0.047	0.050	94.0%	
Cadmium	0.002 U	0.088	0.100	88.0%	
Chromium	0.005 U	0.241	0.250	96.4%	
Copper	0.002 U	0.101	0.100	101%	
Lead	0.001 U	0.105	0.100	105%	
Mercury	0.0001 U	0.0007	0.0010	70.0%	N
Nickel	0.01 U	0.47	0.50	94.0%	
Selenium	0.005 U	0.086	0.100	86.0%	
Silver	0.003 U	0.206	0.250	82.4%	
Thallium	0.005 U	0.102	0.100	102%	
Zinc	0.004 U	0.482	0.500	96.4%	

'Q' codes:
N = control limit not met
H = %R not applicable, sample concentration too high
* = RPD control limit not met
NA = Not applicable - analyte not spiked

Control Limits:
Percent Recovery: 75-125%
RPD: +/-20%

ANALYTICAL
RESOURCES
INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS

Sample No: HC-101 11/18/96

Lab Sample ID: Q829C
LIMS ID: 96-19680
Matrix: Water
Data Release Authorized: MP
Reported: 11/20/96

QC Report No: Q829-Landau Associates, Inc.
Project: Union Station
273008.29
Date Sampled: 11/18/96
Date Received: 11/18/96

Instrument: FINN3
Date Analyzed: 11/18/96

Sample Amount: 5.00 mL
Purge Volume: 5.0 mL

CAS Number	Analyte	ug/L
74-87-3	Chloromethane	2.0 U
74-83-9	Bromomethane	2.0 U
75-01-4	Vinyl Chloride	2.0 U
75-00-3	Chloroethane	2.0 U
75-09-2	Methylene Chloride	2.0 U
67-64-1	Acetone	5.0 U
75-15-0	Carbon Disulfide	1.0 U
75-35-4	1,1-Dichloroethene	1.0 U
75-34-3	1,1-Dichloroethane	1.0 U
156-60-5	trans-1,2-Dichloroethene	1.0 U
156-59-2	cis-1,2-Dichloroethene	1.0 U
67-66-3	Chloroform	1.0 U
107-06-2	1,2-Dichloroethane	1.0 U
78-93-3	2-Butanone	5.0 U
71-55-6	1,1,1-Trichloroethane	1.0 U
56-23-5	Carbon Tetrachloride	1.0 U
108-05-4	Vinyl Acetate	5.0 U
75-27-4	Bromodichloromethane	1.0 U
78-87-5	1,2-Dichloropropane	1.0 U
10061-01-5	cis-1,3-Dichloropropene	1.0 U
79-01-6	Trichloroethene	1.0 U
124-48-1	Dibromochloromethane	1.0 U
79-00-5	1,1,2-Trichloroethane	1.0 U
71-43-2	**Benzene**	**87**
10061-02-6	trans-1,3-Dichloropropene	1.0 U
110-75-8	2-Chloroethylvinylether	5.0 U
75-25-2	Bromoform	1.0 U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0 U
591-78-6	2-Hexanone	5.0 U
127-18-4	Tetrachloroethene	1.0 U
79-34-5	1,1,2,2-Tetrachloroethane	1.0 U
108-88-3	**Toluene**	**33**
108-90-7	Chlorobenzene	1.0 U
100-41-4	**Ethylbenzene**	**240 E**
100-42-5	Styrene	1.0 U
75-69-4	Trichlorofluoromethane	2.0 U
76-13-1	1,1,2-Trichlorotrifluoroethane	2.0 U
	m,p-Xylene	**140**

ANALYTICAL
RESOURCES
INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS

Sample No: B-6 11/18/96

Lab Sample ID: Q829A
LIMS ID: 96-19678
Matrix: Water
Data Release Authorized: [signature]
Reported: 11/20/96

QC Report No: Q829-Landau Associates, Inc.
Project: Union Station
273008.29
Date Sampled: 11/18/96
Date Received: 11/18/96

Instrument: FINN3
Date Analyzed: 11/18/96

Sample Amount: 5.00 mL
Purge Volume: 5.0 mL

CAS Number	Analyte	ug/L
74-87-3	Chloromethane	2.0 U
74-83-9	Bromomethane	2.0 U
75-01-4	Vinyl Chloride	2.0 U
75-00-3	Chloroethane	2.0 U
75-09-2	Methylene Chloride	2.0 U
67-64-1	**Acetone**	**7.1**
75-15-0	Carbon Disulfide	1.0 U
75-35-4	1,1-Dichloroethene	1.0 U
75-34-3	1,1-Dichloroethane	1.0 U
156-60-5	trans-1,2-Dichloroethene	1.0 U
156-59-2	cis-1,2-Dichloroethene	1.0 U
67-66-3	Chloroform	1.0 U
107-06-2	1,2-Dichloroethane	1.0 U
78-93-3	2-Butanone	5.0 U
71-55-6	1,1,1-Trichloroethane	1.0 U
56-23-5	Carbon Tetrachloride	1.0 U
108-05-4	Vinyl Acetate	5.0 U
75-27-4	Bromodichloromethane	1.0 U
78-87-5	1,2-Dichloropropane	1.0 U
10061-01-5	cis-1,3-Dichloropropene	1.0 U
79-01-6	Trichloroethene	1.0 U
124-48-1	Dibromochloromethane	1.0 U
79-00-5	1,1,2-Trichloroethane	1.0 U
71-43-2	Benzene	1.0 U
10061-02-6	trans-1,3-Dichloropropene	1.0 U
110-75-8	2-Chloroethylvinylether	5.0 U
75-25-2	Bromoform	1.0 U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0 U
591-78-6	2-Hexanone	5.0 U
127-18-4	Tetrachloroethene	1.0 U
79-34-5	1,1,2,2-Tetrachloroethane	1.0 U
108-88-3	Toluene	1.0 U
108-90-7	Chlorobenzene	1.0 U
100-41-4	Ethylbenzene	1.0 U
100-42-5	Styrene	1.0 U
75-69-4	Trichlorofluoromethane	2.0 U
76-13-1	1,1,2-Trichlorotrifluoroethane	2.0 U
	m,p-Xylene	1.0 U

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS

ANALYTICAL RESOURCES INCORPORATED

Sample No: B-6 11/18/96

Lab Sample ID: Q829A
LIMS ID: 96-19678
Matrix: Water
Data Release Authorized: MF
Reported: 11/20/96

QC Report No: Q829-Landau Associates, Inc.
Project: Union Station
273008.29
Date Sampled: 11/18/96
Date Received: 11/18/96

Instrument: FINN3
Date Analyzed: 11/18/96

Sample Amount: 5.00 mL
Purge Volume: 5.0 mL

CAS Number	Analyte	ug/L
95-47-6	O-Xylene	1.0 U
95-50-1	1,2-Dichlorobenzene	1.0 U
541-73-1	1,3-Dichlorobenzene	1.0 U
106-46-7	1,4-Dichlorobenzene	1.0 U
107-02-8	Acrolein	50 U
74-88-4	Methyl Iodide	1.0 U
74-96-4	Bromoethane	2.0 U
107-13-1	Acrylonitrile	5.0 U
563-58-6	1,1-Dichloropropene	1.0 U
74-95-3	Dibromomethane	1.0 U
630-20-6	1,1,1,2-Tetrachloroethane	1.0 U
96-12-8	1,2-Dibromo-3-chloropropane	5.0 U
96-18-4	1,2,3-Trichloropropane	1.0 U
110-57-6	trans-1,4-Dichloro-2-butene	5.0 U
108-67-8	1,3,5-Trimethylbenzene	1.0 U
95-63-6	1,2,4-Trimethylbenzene	1.0 U
87-68-3	Hexachlorobutadiene	5.0 U
106-93-4	Ethylene Dibromide	1.0 U
74-97-5	Bromochloromethane	1.0 U
590-20-7	2,2-Dichloropropane	1.0 U
142-28-9	1,3-Dichloropropane	1.0 U
98-82-8	Isopropylbenzene	1.0 U
103-65-1	n-Propylbenzene	1.0 U
108-86-1	Bromobenzene	1.0 U
95-49-8	2-Chlorotoluene	1.0 U
106-43-4	4-Chlorotoluene	1.0 U
98-06-6	tert-Butylbenzene	1.0 U
135-98-8	sec-Butylbenzene	1.0 U
99-87-6	4-Isopropyltoluene	1.0 U
104-51-8	n-Butylbenzene	1.0 U
120-82-1	1,2,4-Trichlorobenzene	5.0 U
91-20-3	Naphthalene	5.0 U
87-61-6	1,2,3-Trichlorobenzene	5.0 U

Volatile Surrogate Recovery	
d4-1,2-Dichloroethane	98.7%
d8-Toluene	98.9%
Bromofluorobenzene	97.8%
d4-1,2-Dichlorobenzene	95.0%

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS

ANALYTICAL RESOURCES INCORPORATED

Sample No: HC-102 11/18/96

Lab Sample ID: Q829B
LIMS ID: 96-19679
Matrix: Water
Data Release Authorized: MF
Reported: 11/20/96

QC Report No: Q829-Landau Associates, Inc.
Project: Union Station
273008.29
Date Sampled: 11/18/96
Date Received: 11/18/96

Instrument: FINN3
Date Analyzed: 11/19/96

Sample Amount: 5.00 mL
Purge Volume: 5.0 mL

CAS Number	Analyte	ug/L
74-87-3	Chloromethane	2.0 U
74-83-9	Bromomethane	2.0 U
75-01-4	Vinyl Chloride	2.0 U
75-00-3	Chloroethane	2.0 U
75-09-2	Methylene Chloride	2.0 U
67-64-1	Acetone	5.0 U
75-15-0	Carbon Disulfide	1.0 U
75-35-4	1,1-Dichloroethene	1.0 U
75-34-3	1,1-Dichloroethane	1.0 U
156-60-5	trans-1,2-Dichloroethene	1.0 U
156-59-2	cis-1,2-Dichloroethene	1.0 U
67-66-3	Chloroform	1.0 U
107-06-2	1,2-Dichloroethane	1.0 U
78-93-3	2-Butanone	5.0 U
71-55-6	1,1,1-Trichloroethane	1.0 U
56-23-5	Carbon Tetrachloride	1.0 U
108-05-4	Vinyl Acetate	5.0 U
75-27-4	Bromodichloromethane	1.0 U
78-87-5	1,2-Dichloropropane	1.0 U
10061-01-5	cis-1,3-Dichloropropene	1.0 U
79-01-6	Trichloroethene	1.0 U
124-48-1	Dibromochloromethane	1.0 U
79-00-5	1,1,2-Trichloroethane	1.0 U
71-43-2	Benzene	1.0 U
10061-02-6	trans-1,3-Dichloropropene	1.0 U
110-75-8	2-Chloroethylvinylether	5.0 U
75-25-2	Bromoform	1.0 U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0 U
591-78-6	2-Hexanone	5.0 U
127-18-4	Tetrachloroethene	1.0 U
79-34-5	1,1,2,2-Tetrachloroethane	1.0 U
108-88-3	Toluene	1.0 U
108-90-7	Chlorobenzene	1.0 U
100-41-4	Ethylbenzene	1.0 U
100-42-5	Styrene	1.0 U
75-69-4	Trichlorofluoromethane	2.0 U
76-13-1	1,1,2-Trichlorotrifluoroethane	2.0 U
	m,p-Xylene	1.0 U

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS

ANALYTICAL RESOURCES INCORPORATED

Sample No: HC-102 11/18/96

Lab Sample ID: Q829B
LIMS ID: 96-19679
Matrix: Water
Data Release Authorized: MP
Reported: 11/20/96

QC Report No: Q829-Landau Associates, Inc.
Project: Union Station
273008.29
Date Sampled: 11/18/96
Date Received: 11/18/96

Instrument: FINN3
Date Analyzed: 11/19/96

Sample Amount: 5.00 mL
Purge Volume: 5.0 mL

CAS Number	Analyte	ug/L
95-47-6	O-Xylene	1.0 U
95-50-1	1,2-Dichlorobenzene	1.0 U
541-73-1	1,3-Dichlorobenzene	1.0 U
106-46-7	1,4-Dichlorobenzene	1.0 U
107-02-8	Acrolein	50 U
74-88-4	Methyl Iodide	1.0 U
74-96-4	Bromoethane	2.0 U
107-13-1	Acrylonitrile	5.0 U
563-58-6	1,1-Dichloropropene	1.0 U
74-95-3	Dibromomethane	1.0 U
630-20-6	1,1,1,2-Tetrachloroethane	1.0 U
96-12-8	1,2-Dibromo-3-chloropropane	5.0 U
96-18-4	1,2,3-Trichloropropane	1.0 U
110-57-6	trans-1,4-Dichloro-2-butene	5.0 U
108-67-8	1,3,5-Trimethylbenzene	1.0 U
95-63-6	1,2,4-Trimethylbenzene	1.0 U
87-68-3	Hexachlorobutadiene	5.0 U
106-93-4	Ethylene Dibromide	1.0 U
74-97-5	Bromochloromethane	1.0 U
590-20-7	2,2-Dichloropropane	1.0 U
142-28-9	1,3-Dichloropropane	1.0 U
98-82-8	Isopropylbenzene	1.0 U
103-65-1	n-Propylbenzene	1.0 U
108-86-1	Bromobenzene	1.0 U
95-49-8	2-Chlorotoluene	1.0 U
106-43-4	4-Chlorotoluene	1.0 U
98-06-6	tert-Butylbenzene	1.0 U
135-98-8	sec-Butylbenzene	1.0 U
99-87-6	4-Isopropyltoluene	1.0 U
104-51-8	n-Butylbenzene	1.0 U
120-82-1	1,2,4-Trichlorobenzene	5.0 U
91-20-3	**Naphthalene**	**21**
87-61-6	1,2,3-Trichlorobenzene	5.0 U

Volatile Surrogate Recovery	
d4-1,2-Dichloroethane	101%
d8-Toluene	96.9%
Bromofluorobenzene	100%
d4-1,2-Dichlorobenzene	100%

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS

ANALYTICAL RESOURCES INCORPORATED

Sample No: HC-101 11/18/96

Lab Sample ID: Q829C
LIMS ID: 96-19680
Matrix: Water
Data Release Authorized: [signature]
Reported: 11/20/96

QC Report No: Q829-Landau Associates, Inc.
Project: Union Station
273008.29
Date Sampled: 11/18/96
Date Received: 11/18/96

Instrument: FINN3
Date Analyzed: 11/18/96

Sample Amount: 5.00 mL
Purge Volume: 5.0 mL

CAS Number	Analyte	ug/L
95-47-6	**O-Xylene**	**68**
95-50-1	1,2-Dichlorobenzene	1.0 U
541-73-1	1,3-Dichlorobenzene	1.0 U
106-46-7	1,4-Dichlorobenzene	1.0 U
107-02-8	Acrolein	50 U
74-88-4	Methyl Iodide	1.0 U
74-96-4	Bromoethane	2.0 U
107-13-1	Acrylonitrile	5.0 U
563-58-6	1,1-Dichloropropene	1.0 U
74-95-3	Dibromomethane	1.0 U
630-20-6	1,1,1,2-Tetrachloroethane	1.0 U
96-12-8	1,2-Dibromo-3-chloropropane	5.0 U
96-18-4	1,2,3-Trichloropropane	1.0 U
110-57-6	trans-1,4-Dichloro-2-butene	5.0 U
108-67-8	**1,3,5-Trimethylbenzene**	**19**
95-63-6	**1,2,4-Trimethylbenzene**	**49**
87-68-3	Hexachlorobutadiene	5.0 U
106-93-4	Ethylene Dibromide	1.0 U
74-97-5	Bromochloromethane	1.0 U
590-20-7	2,2-Dichloropropane	1.0 U
142-28-9	1,3-Dichloropropane	1.0 U
98-82-8	**Isopropylbenzene**	**11**
103-65-1	**n-Propylbenzene**	**1.4**
108-86-1	Bromobenzene	1.0 U
95-49-8	2-Chlorotoluene	1.0 U
106-43-4	4-Chlorotoluene	1.0 U
98-06-6	tert-Butylbenzene	1.0 U
135-98-8	sec-Butylbenzene	1.0 U
99-87-6	**4-Isopropyltoluene**	**17**
104-51-8	n-Butylbenzene	1.0 U
120-82-1	1,2,4-Trichlorobenzene	5.0 U
91-20-3	**Naphthalene**	**2100 E**
87-61-6	1,2,3-Trichlorobenzene	5.0 U

Volatile Surrogate Recovery	
d4-1,2-Dichloroethane	100%
d8-Toluene	102%
Bromofluorobenzene	95.4%
d4-1,2-Dichlorobenzene	93.5%

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS

ANALYTICAL RESOURCES INCORPORATED

Sample No: HC-101 11/18/96
DILUTION

Lab Sample ID: Q829C-DL
LIMS ID: 96-19680
Matrix: Water
Data Release Authorized: RSF
Reported: 11/20/96

QC Report No: Q829-Landau Associates, Inc.
Project: Union Station
273008.29
Date Sampled: 11/18/96
Date Received: 11/18/96

Instrument: FINN3
Date Analyzed: 11/19/96

Sample Amount: 0.10 mL
Purge Volume: 5.0 mL

CAS Number	Analyte	ug/L
74-87-3	Chloromethane	100 U
74-83-9	Bromomethane	100 U
75-01-4	Vinyl Chloride	100 U
75-00-3	Chloroethane	100 U
75-09-2	Methylene Chloride	100 U
67-64-1	Acetone	250 U
75-15-0	Carbon Disulfide	50 U
75-35-4	1,1-Dichloroethene	50 U
75-34-3	1,1-Dichloroethane	50 U
156-60-5	trans-1,2-Dichloroethene	50 U
156-59-2	cis-1,2-Dichloroethene	50 U
67-66-3	Chloroform	50 U
107-06-2	1,2-Dichloroethane	50 U
78-93-3	2-Butanone	250 U
71-55-6	1,1,1-Trichloroethane	50 U
56-23-5	Carbon Tetrachloride	50 U
108-05-4	Vinyl Acetate	250 U
75-27-4	Bromodichloromethane	50 U
78-87-5	1,2-Dichloropropane	50 U
10061-01-5	cis-1,3-Dichloropropene	50 U
79-01-6	Trichloroethene	50 U
124-48-1	Dibromochloromethane	50 U
79-00-5	1,1,2-Trichloroethane	50 U
71-43-2	**Benzene**	**96**
10061-02-6	trans-1,3-Dichloropropene	50 U
110-75-8	2-Chloroethylvinylether	250 U
75-25-2	Bromoform	50 U
108-10-1	4-Methyl-2-Pentanone (MIBK)	250 U
591-78-6	2-Hexanone	250 U
127-18-4	Tetrachloroethene	50 U
79-34-5	1,1,2,2-Tetrachloroethane	50 U
108-88-3	Toluene	50 U
108-90-7	Chlorobenzene	50 U
100-41-4	**Ethylbenzene**	**220**
100-42-5	Styrene	50 U
75-69-4	Trichlorofluoromethane	100 U
76-13-1	1,1,2-Trichlorotrifluoroethane	100 U
	m,p-Xylene	**140**

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS

ANALYTICAL RESOURCES INCORPORATED

Sample No: HC-101 11/18/96
DILUTION

Lab Sample ID: Q829C-DL
LIMS ID: 96-19680
Matrix: Water
Data Release Authorized: MP
Reported: 11/20/96

QC Report No: Q829-Landau Associates, Inc.
Project: Union Station
273008.29
Date Sampled: 11/18/96
Date Received: 11/18/96

Instrument: FINN3
Date Analyzed: 11/19/96

Sample Amount: 0.10 mL
Purge Volume: 5.0 mL

CAS Number	Analyte	ug/L
95-47-6	O-Xylene	67
95-50-1	1,2-Dichlorobenzene	50 U
541-73-1	1,3-Dichlorobenzene	50 U
106-46-7	1,4-Dichlorobenzene	50 U
107-02-8	Acrolein	2500 U
74-88-4	Methyl Iodide	50 U
74-96-4	Bromoethane	100 U
107-13-1	Acrylonitrile	250 U
563-58-6	1,1-Dichloropropene	50 U
74-95-3	Dibromomethane	50 U
630-20-6	1,1,1,2-Tetrachloroethane	50 U
96-12-8	1,2-Dibromo-3-chloropropane	250 U
96-18-4	1,2,3-Trichloropropane	50 U
110-57-6	trans-1,4-Dichloro-2-butene	250 U
108-67-8	1,3,5-Trimethylbenzene	50 U
95-63-6	1,2,4-Trimethylbenzene	50 U
87-68-3	Hexachlorobutadiene	250 U
106-93-4	Ethylene Dibromide	50 U
74-97-5	Bromochloromethane	50 U
590-20-7	2,2-Dichloropropane	50 U
142-28-9	1,3-Dichloropropane	50 U
98-82-8	Isopropylbenzene	50 U
103-65-1	n-Propylbenzene	50 U
108-86-1	Bromobenzene	50 U
95-49-8	2-Chlorotoluene	50 U
106-43-4	4-Chlorotoluene	50 U
98-06-6	tert-Butylbenzene	50 U
135-98-8	sec-Butylbenzene	50 U
99-87-6	4-Isopropyltoluene	50 U
104-51-8	n-Butylbenzene	50 U
120-82-1	1,2,4-Trichlorobenzene	250 U
91-20-3	Naphthalene	2900
87-61-6	1,2,3-Trichlorobenzene	250 U

Volatile Surrogate Recovery	
d4-1,2-Dichloroethane	98.7%
d8-Toluene	96.9%
Bromofluorobenzene	99.5%
d4-1,2-Dichlorobenzene	99.1%

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS

ANALYTICAL RESOURCES INCORPORATED

Sample No: B-4 11/18/96

Lab Sample ID: Q829D
LIMS ID: 96-19681
Matrix: Water
Data Release Authorized: MP
Reported: 11/20/96

QC Report No: Q829-Landau Associates, Inc.
Project: Union Station
273008.29
Date Sampled: 11/18/96
Date Received: 11/18/96

Instrument: FINN3
Date Analyzed: 11/19/96

Sample Amount: 5.00 mL
Purge Volume: 5.0 mL

CAS Number	Analyte	ug/L
74-87-3	Chloromethane	2.0 U
74-83-9	Bromomethane	2.0 U
75-01-4	Vinyl Chloride	2.0 U
75-00-3	Chloroethane	2.0 U
75-09-2	Methylene Chloride	2.0 U
67-64-1	**Acetone**	**29**
75-15-0	Carbon Disulfide	1.0 U
75-35-4	1,1-Dichloroethene	1.0 U
75-34-3	1,1-Dichloroethane	1.0 U
156-60-5	trans-1,2-Dichloroethene	1.0 U
156-59-2	cis-1,2-Dichloroethene	1.0 U
67-66-3	Chloroform	1.0 U
107-06-2	1,2-Dichloroethane	1.0 U
78-93-3	2-Butanone	5.0 U
71-55-6	1,1,1-Trichloroethane	1.0 U
56-23-5	Carbon Tetrachloride	1.0 U
108-05-4	Vinyl Acetate	5.0 U
75-27-4	Bromodichloromethane	1.0 U
78-87-5	1,2-Dichloropropane	1.0 U
10061-01-5	cis-1,3-Dichloropropene	1.0 U
79-01-6	Trichloroethene	1.0 U
124-48-1	Dibromochloromethane	1.0 U
79-00-5	1,1,2-Trichloroethane	1.0 U
71-43-2	**Benzene**	**100**
10061-02-6	trans-1,3-Dichloropropene	1.0 U
110-75-8	2-Chloroethylvinylether	5.0 U
75-25-2	Bromoform	1.0 U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0 U
591-78-6	2-Hexanone	5.0 U
127-18-4	Tetrachloroethene	1.0 U
79-34-5	1,1,2,2-Tetrachloroethane	1.0 U
108-88-3	**Toluene**	**4.7**
108-90-7	Chlorobenzene	1.0 U
100-41-4	**Ethylbenzene**	**170**
100-42-5	Styrene	1.0 U
75-69-4	Trichlorofluoromethane	2.0 U
76-13-1	1,1,2-Trichlorotrifluoroethane	2.0 U
	m,p-Xylene	**5.7**

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS

ANALYTICAL RESOURCES INCORPORATED

Sample No: B-4 11/18/96

Lab Sample ID: Q829D
LIMS ID: 96-19681
Matrix: Water
Data Release Authorized:
Reported: 11/20/96

QC Report No: Q829-Landau Associates, Inc.
Project: Union Station
273008.29
Date Sampled: 11/18/96
Date Received: 11/18/96

Instrument: FINN3
Date Analyzed: 11/19/96

Sample Amount: 5.00 mL
Purge Volume: 5.0 mL

CAS Number	Analyte	ug/L
95-47-6	**O-Xylene**	6.9
95-50-1	1,2-Dichlorobenzene	1.0 U
541-73-1	1,3-Dichlorobenzene	1.0 U
106-46-7	1,4-Dichlorobenzene	1.0 U
107-02-8	Acrolein	50 U
74-88-4	Methyl Iodide	1.0 U
74-96-4	Bromoethane	2.0 U
107-13-1	Acrylonitrile	5.0 U
563-58-6	1,1-Dichloropropene	1.0 U
74-95-3	Dibromomethane	1.0 U
630-20-6	1,1,1,2-Tetrachloroethane	1.0 U
96-12-8	1,2-Dibromo-3-chloropropane	5.0 U
96-18-4	1,2,3-Trichloropropane	1.0 U
110-57-6	trans-1,4-Dichloro-2-butene	5.0 U
108-67-8	**1,3,5-Trimethylbenzene**	**11**
95-63-6	**1,2,4-Trimethylbenzene**	**19**
87-68-3	Hexachlorobutadiene	5.0 U
106-93-4	Ethylene Dibromide	1.0 U
74-97-5	Bromochloromethane	1.0 U
590-20-7	2,2-Dichloropropane	1.0 U
142-28-9	1,3-Dichloropropane	1.0 U
98-82-8	**Isopropylbenzene**	**6.8**
103-65-1	**n-Propylbenzene**	**1.3**
108-86-1	Bromobenzene	1.0 U
95-49-8	2-Chlorotoluene	1.0 U
106-43-4	4-Chlorotoluene	1.0 U
98-06-6	tert-Butylbenzene	1.0 U
135-98-8	sec-Butylbenzene	1.0 U
99-87-6	**4-Isopropyltoluene**	**2.4**
104-51-8	n-Butylbenzene	1.0 U
120-82-1	1,2,4-Trichlorobenzene	5.0 U
91-20-3	**Naphthalene**	**2900 E**
87-61-6	1,2,3-Trichlorobenzene	5.0 U

Volatile Surrogate Recovery	
d4-1,2-Dichloroethane	100%
d8-Toluene	98.9%
Bromofluorobenzene	96.6%
d4-1,2-Dichlorobenzene	90.4%

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS
Page 1 of 2

ANALYTICAL RESOURCES INCORPORATED

Sample No: B-4 11/18/96
DILUTION

Lab Sample ID: Q829D-DL
LIMS ID: 96-19681
Matrix: Water
Data Release Authorized: MA
Reported: 11/20/96

QC Report No: Q829-Landau Associates, Inc.
Project: Union Station
273008.29
Date Sampled: 11/18/96
Date Received: 11/18/96

Instrument: FINN3
Date Analyzed: 11/19/96

Sample Amount: 0.050 mL
Purge Volume: 5.0 mL

CAS Number	Analyte	ug/L
74-87-3	Chloromethane	200 U
74-83-9	Bromomethane	200 U
75-01-4	Vinyl Chloride	200 U
75-00-3	Chloroethane	200 U
75-09-2	Methylene Chloride	200 U
67-64-1	Acetone	500 U
75-15-0	Carbon Disulfide	100 U
75-35-4	1,1-Dichloroethene	100 U
75-34-3	1,1-Dichloroethane	100 U
156-60-5	trans-1,2-Dichloroethene	100 U
156-59-2	cis-1,2-Dichloroethene	100 U
67-66-3	Chloroform	100 U
107-06-2	1,2-Dichloroethane	100 U
78-93-3	2-Butanone	500 U
71-55-6	1,1,1-Trichloroethane	100 U
56-23-5	Carbon Tetrachloride	100 U
108-05-4	Vinyl Acetate	500 U
75-27-4	Bromodichloromethane	100 U
78-87-5	1,2-Dichloropropane	100 U
10061-01-5	cis-1,3-Dichloropropene	100 U
79-01-6	Trichloroethene	100 U
124-48-1	Dibromochloromethane	100 U
79-00-5	1,1,2-Trichloroethane	100 U
71-43-2	**Benzene**	**110**
10061-02-6	trans-1,3-Dichloropropene	100 U
110-75-8	2-Chloroethylvinylether	500 U
75-25-2	Bromoform	100 U
108-10-1	4-Methyl-2-Pentanone (MIBK)	500 U
591-78-6	2-Hexanone	500 U
127-18-4	Tetrachloroethene	100 U
79-34-5	1,1,2,2-Tetrachloroethane	100 U
108-88-3	Toluene	100 U
108-90-7	Chlorobenzene	100 U
100-41-4	**Ethylbenzene**	**150**
100-42-5	Styrene	100 U
75-69-4	Trichlorofluoromethane	200 U
76-13-1	1,1,2-Trichlorotrifluoroethane	200 U
	m,p-Xylene	100 U

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS

ANALYTICAL RESOURCES INCORPORATED

Sample No: B-4 11/18/96
DILUTION

Lab Sample ID: Q829D-DL
LIMS ID: 96-19681
Matrix: Water
Data Release Authorized: DBP
Reported: 11/20/96

QC Report No: Q829-Landau Associates, Inc.
Project: Union Station
273008.29
Date Sampled: 11/18/96
Date Received: 11/18/96

Instrument: FINN3
Date Analyzed: 11/19/96

Sample Amount: 0.050 mL
Purge Volume: 5.0 mL

CAS Number	Analyte	ug/L
95-47-6	O-Xylene	100 U
95-50-1	1,2-Dichlorobenzene	100 U
541-73-1	1,3-Dichlorobenzene	100 U
106-46-7	1,4-Dichlorobenzene	100 U
107-02-8	Acrolein	5000 U
74-88-4	Methyl Iodide	100 U
74-96-4	Bromoethane	200 U
107-13-1	Acrylonitrile	500 U
563-58-6	1,1-Dichloropropene	100 U
74-95-3	Dibromomethane	100 U
630-20-6	1,1,1,2-Tetrachloroethane	100 U
96-12-8	1,2-Dibromo-3-chloropropane	500 U
96-18-4	1,2,3-Trichloropropane	100 U
110-57-6	trans-1,4-Dichloro-2-butene	500 U
108-67-8	1,3,5-Trimethylbenzene	100 U
95-63-6	1,2,4-Trimethylbenzene	100 U
87-68-3	Hexachlorobutadiene	500 U
106-93-4	Ethylene Dibromide	100 U
74-97-5	Bromochloromethane	100 U
590-20-7	2,2-Dichloropropane	100 U
142-28-9	1,3-Dichloropropane	100 U
98-82-8	Isopropylbenzene	100 U
103-65-1	n-Propylbenzene	100 U
108-86-1	Bromobenzene	100 U
95-49-8	2-Chlorotoluene	100 U
106-43-4	4-Chlorotoluene	100 U
98-06-6	tert-Butylbenzene	100 U
135-98-8	sec-Butylbenzene	100 U
99-87-6	4-Isopropyltoluene	100 U
104-51-8	n-Butylbenzene	100 U
120-82-1	1,2,4-Trichlorobenzene	500 U
91-20-3	**Naphthalene**	**5800**
87-61-6	1,2,3-Trichlorobenzene	500 U

Volatile Surrogate Recovery	
d4-1,2-Dichloroethane	99.4%
d8-Toluene	98.1%
Bromofluorobenzene	98.1%
d4-1,2-Dichlorobenzene	98.1%

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS

ANALYTICAL RESOURCES INCORPORATED

Sample No: Method Blank

Lab Sample ID: 111896MB
LIMS ID: 96-19678
Matrix: Water
Data Release Authorized: RBF
Reported: 11/20/96

QC Report No: Q829-Landau Associates, Inc.
Project: Union Station
273008.29
Date Sampled: NA
Date Received: NA

Instrument: FINN3
Date Analyzed: 11/18/96

Sample Amount: 5.00 mL
Purge Volume: 5.0 mL

CAS Number	Analyte	ug/L
74-87-3	Chloromethane	2.0 U
74-83-9	Bromomethane	2.0 U
75-01-4	Vinyl Chloride	2.0 U
75-00-3	Chloroethane	2.0 U
75-09-2	Methylene Chloride	2.0 U
67-64-1	Acetone	5.0 U
75-15-0	Carbon Disulfide	1.0 U
75-35-4	1,1-Dichloroethene	1.0 U
75-34-3	1,1-Dichloroethane	1.0 U
156-60-5	trans-1,2-Dichloroethene	1.0 U
156-59-2	cis-1,2-Dichloroethene	1.0 U
67-66-3	Chloroform	1.0 U
107-06-2	1,2-Dichloroethane	1.0 U
78-93-3	2-Butanone	5.0 U
71-55-6	1,1,1-Trichloroethane	1.0 U
56-23-5	Carbon Tetrachloride	1.0 U
108-05-4	Vinyl Acetate	5.0 U
75-27-4	Bromodichloromethane	1.0 U
78-87-5	1,2-Dichloropropane	1.0 U
10061-01-5	cis-1,3-Dichloropropene	1.0 U
79-01-6	Trichloroethene	1.0 U
124-48-1	Dibromochloromethane	1.0 U
79-00-5	1,1,2-Trichloroethane	1.0 U
71-43-2	Benzene	1.0 U
10061-02-6	trans-1,3-Dichloropropene	1.0 U
110-75-8	2-Chloroethylvinylether	5.0 U
75-25-2	Bromoform	1.0 U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0 U
591-78-6	2-Hexanone	5.0 U
127-18-4	Tetrachloroethene	1.0 U
79-34-5	1,1,2,2-Tetrachloroethane	1.0 U
108-88-3	Toluene	1.0 U
108-90-7	Chlorobenzene	1.0 U
100-41-4	Ethylbenzene	1.0 U
100-42-5	Styrene	1.0 U
75-69-4	Trichlorofluoromethane	2.0 U
76-13-1	1,1,2-Trichlorotrifluoroethane	2.0 U
	m,p-Xylene	1.0 U

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS

ANALYTICAL RESOURCES INCORPORATED

Sample No: Method Blank

Lab Sample ID: 111896MB
LIMS ID: 96-19678
Matrix: Water
Data Release Authorized:
Reported: 11/20/96

QC Report No: Q829-Landau Associates, Inc.
Project: Union Station
273008.29
Date Sampled: NA
Date Received: NA

Instrument: FINN3
Date Analyzed: 11/18/96

Sample Amount: 5.00 mL
Purge Volume: 5.0 mL

CAS Number	Analyte	ug/L
95-47-6	O-Xylene	1.0 U
95-50-1	1,2-Dichlorobenzene	1.0 U
541-73-1	1,3-Dichlorobenzene	1.0 U
106-46-7	1,4-Dichlorobenzene	1.0 U
107-02-8	Acrolein	50 U
74-88-4	Methyl Iodide	1.0 U
74-96-4	Bromoethane	2.0 U
107-13-1	Acrylonitrile	5.0 U
563-58-6	1,1-Dichloropropene	1.0 U
74-95-3	Dibromomethane	1.0 U
630-20-6	1,1,1,2-Tetrachloroethane	1.0 U
96-12-8	1,2-Dibromo-3-chloropropane	5.0 U
96-18-4	1,2,3-Trichloropropane	1.0 U
110-57-6	trans-1,4-Dichloro-2-butene	5.0 U
108-67-8	1,3,5-Trimethylbenzene	1.0 U
95-63-6	1,2,4-Trimethylbenzene	1.0 U
87-68-3	Hexachlorobutadiene	5.0 U
106-93-4	Ethylene Dibromide	1.0 U
74-97-5	Bromochloromethane	1.0 U
590-20-7	2,2-Dichloropropane	1.0 U
142-28-9	1,3-Dichloropropane	1.0 U
98-82-8	Isopropylbenzene	1.0 U
103-65-1	n-Propylbenzene	1.0 U
108-86-1	Bromobenzene	1.0 U
95-49-8	2-Chlorotoluene	1.0 U
106-43-4	4-Chlorotoluene	1.0 U
98-06-6	tert-Butylbenzene	1.0 U
135-98-8	sec-Butylbenzene	1.0 U
99-87-6	4-Isopropyltoluene	1.0 U
104-51-8	n-Butylbenzene	1.0 U
120-82-1	1,2,4-Trichlorobenzene	5.0 U
91-20-3	Naphthalene	5.0 U
87-61-6	1,2,3-Trichlorobenzene	5.0 U

Volatile Surrogate Recovery	
d4-1,2-Dichloroethane	98.6%
d8-Toluene	101%
Bromofluorobenzene	101%
d4-1,2-Dichlorobenzene	97.0%

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS

ANALYTICAL RESOURCES INCORPORATED

Sample No: Method Blank

Lab Sample ID: 111996MB
LIMS ID: 96-19681
Matrix: Water
Data Release Authorized: BSF
Reported: 11/20/96

QC Report No: Q829-Landau Associates, Inc.
Project: Union Station
273008.29
Date Sampled: NA
Date Received: NA

Instrument: FINN3
Date Analyzed: 11/19/96

Sample Amount: 5.00 mL
Purge Volume: 5.0 mL

CAS Number	Analyte	ug/L
74-87-3	Chloromethane	2.0 U
74-83-9	Bromomethane	2.0 U
75-01-4	Vinyl Chloride	2.0 U
75-00-3	Chloroethane	2.0 U
75-09-2	Methylene Chloride	2.0 U
67-64-1	Acetone	5.0 U
75-15-0	Carbon Disulfide	1.0 U
75-35-4	1,1-Dichloroethene	1.0 U
75-34-3	1,1-Dichloroethane	1.0 U
156-60-5	trans-1,2-Dichloroethene	1.0 U
156-59-2	cis-1,2-Dichloroethene	1.0 U
67-66-3	Chloroform	1.0 U
107-06-2	1,2-Dichloroethane	1.0 U
78-93-3	2-Butanone	5.0 U
71-55-6	1,1,1-Trichloroethane	1.0 U
56-23-5	Carbon Tetrachloride	1.0 U
108-05-4	Vinyl Acetate	5.0 U
75-27-4	Bromodichloromethane	1.0 U
78-87-5	1,2-Dichloropropane	1.0 U
10061-01-5	cis-1,3-Dichloropropene	1.0 U
79-01-6	Trichloroethene	1.0 U
124-48-1	Dibromochloromethane	1.0 U
79-00-5	1,1,2-Trichloroethane	1.0 U
71-43-2	Benzene	1.0 U
10061-02-6	trans-1,3-Dichloropropene	1.0 U
110-75-8	2-Chloroethylvinylether	5.0 U
75-25-2	Bromoform	1.0 U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0 U
591-78-6	2-Hexanone	5.0 U
127-18-4	Tetrachloroethene	1.0 U
79-34-5	1,1,2,2-Tetrachloroethane	1.0 U
108-88-3	Toluene	1.0 U
108-90-7	Chlorobenzene	1.0 U
100-41-4	Ethylbenzene	1.0 U
100-42-5	Styrene	1.0 U
75-69-4	Trichlorofluoromethane	2.0 U
76-13-1	1,1,2-Trichlorotrifluoroethane	2.0 U
	m,p-Xylene	1.0 U

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS

ANALYTICAL RESOURCES INCORPORATED

Sample No: Method Blank

Lab Sample ID: 111996MB
LIMS ID: 96-19681
Matrix: Water
Data Release Authorized: MF
Reported: 11/20/96

QC Report No: Q829-Landau Associates, Inc.
Project: Union Station
273008.29
Date Sampled: NA
Date Received: NA

Instrument: FINN3
Date Analyzed: 11/19/96

Sample Amount: 5.00 mL
Purge Volume: 5.0 mL

CAS Number	Analyte	ug/L
95-47-6	O-Xylene	1.0 U
95-50-1	1,2-Dichlorobenzene	1.0 U
541-73-1	1,3-Dichlorobenzene	1.0 U
106-46-7	1,4-Dichlorobenzene	1.0 U
107-02-8	Acrolein	50 U
74-88-4	Methyl Iodide	1.0 U
74-96-4	Bromoethane	2.0 U
107-13-1	Acrylonitrile	5.0 U
563-58-6	1,1-Dichloropropene	1.0 U
74-95-3	Dibromomethane	1.0 U
630-20-6	1,1,1,2-Tetrachloroethane	1.0 U
96-12-8	1,2-Dibromo-3-chloropropane	5.0 U
96-18-4	1,2,3-Trichloropropane	1.0 U
110-57-6	trans-1,4-Dichloro-2-butene	5.0 U
108-67-8	1,3,5-Trimethylbenzene	1.0 U
95-63-6	1,2,4-Trimethylbenzene	1.0 U
87-68-3	Hexachlorobutadiene	5.0 U
106-93-4	Ethylene Dibromide	1.0 U
74-97-5	Bromochloromethane	1.0 U
590-20-7	2,2-Dichloropropane	1.0 U
142-28-9	1,3-Dichloropropane	1.0 U
98-82-8	Isopropylbenzene	1.0 U
103-65-1	n-Propylbenzene	1.0 U
108-86-1	Bromobenzene	1.0 U
95-49-8	2-Chlorotoluene	1.0 U
106-43-4	4-Chlorotoluene	1.0 U
98-06-6	tert-Butylbenzene	1.0 U
135-98-8	sec-Butylbenzene	1.0 U
99-87-6	4-Isopropyltoluene	1.0 U
104-51-8	n-Butylbenzene	1.0 U
120-82-1	1,2,4-Trichlorobenzene	5.0 U
91-20-3	Naphthalene	5.0 U
87-61-6	1,2,3-Trichlorobenzene	5.0 U

Volatile Surrogate Recovery	
d4-1,2-Dichloroethane	99.6%
d8-Toluene	97.5%
Bromofluorobenzene	102%
d4-1,2-Dichlorobenzene	99.6%

ANALYTICAL
RESOURCES
INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by GC/MS

Lab Sample ID: Q829SB
LIMS ID: 96-19678
Matrix: Water
Data Release Authorized: DAP
Reported: 11/20/96
Date Analyzed: 11/18/96
Instrument: FINN3

QC Report No: Q829-Landau Associates, Inc.
Project: Union Station
273008.29
Date Received: 11/18/96

LABORATORY CONTROL SAMPLE CONSTITUENT	SPIKE VALUE	SPIKE AMT	% RECOVERY
Chloromethane	41.4	50.0	82.8%
Bromomethane	46.4	50.0	92.8%
Vinyl Chloride	48.0	50.0	96.0%
Chloroethane	53.5	50.0	107%
Methylene Chloride	54.4	50.0	109%
Acetone	255.	250	102%
Carbon Disulfide	47.9	50.0	95.8%
1,1-Dichloroethene	50.9	50.0	102%
1,1-Dichloroethane	55.3	50.0	111%
trans-1,2-Dichloroethene	53.9	50.0	108%
cis-1,2-Dichloroethene	54.2	50.0	108%
Chloroform	55.4	50.0	111%
1,2-Dichloroethane	53.2	50.0	106%
2-Butanone	254.	250	102%
1,1,1-Trichloroethane	55.6	50.0	111%
Carbon Tetrachloride	57.4	50.0	115%
Vinyl Acetate	50.0	50.0	100%
Bromodichloromethane	55.1	50.0	110%
1,2-Dichloropropane	57.3	50.0	115%
cis-1,3-Dichloropropene	56.7	50.0	113%
Trichloroethene	55.2	50.0	110%
Dibromochloromethane	54.7	50.0	109%
1,1,2-Trichloroethane	54.9	50.0	110%
Benzene	54.9	50.0	110%
trans-1,3-Dichloropropene	57.6	50.0	115%
2-Chloroethylvinylether	29.2	50.0	58.4%
Bromoform	55.3	50.0	111%
4-Methyl-2-Pentanone (MIBK)	253.	250	101%
2-Hexanone	239.	250	95.6%
Tetrachloroethene	56.2	50.0	112%
1,1,2,2-Tetrachloroethane	53.4	50.0	107%
Toluene	56.6	50.0	113%
Chlorobenzene	55.1	50.0	110%
Ethylbenzene	57.0	50.0	114%
Styrene	55.1	50.0	110%
Trichlorofluoromethane	49.8	50.0	99.6%
1,1,2-Trichlorotrifluoroethane	53.9	50.0	108%
m,p-Xylene	113.	100	113%
O-Xylene	56.0	50.0	112%

Reported in ug/L

ORGANICS ANALYSIS DATA SHEET
Volatiles by GC/MS

ANALYTICAL RESOURCES INCORPORATED

Lab Sample ID: Q829SB
LIMS ID: 96-19678
Matrix: Water
Data Release Authorized: MC
Reported: 11/20/96
Date Analyzed: 11/18/96
Instrument: FINN3

QC Report No: Q829-Landau Associates, Inc.
Project: Union Station
273008.29
Date Received: 11/18/96

LABORATORY CONTROL SAMPLE CONSTITUENT	SPIKE VALUE	SPIKE AMT	% RECOVERY
1,2-Dichlorobenzene	55.5	50.0	111%
1,3-Dichlorobenzene	57.5	50.0	115%
1,4-Dichlorobenzene	57.1	50.0	114%
Acrolein	586.	250	234%
Methyl Iodide	58.4	50.0	117%
Bromoethane	47.9	50.0	95.8%
Acrylonitrile	43.9	50.0	87.8%
1,1-Dichloropropene	57.7	50.0	115%
Dibromomethane	55.4	50.0	111%
1,1,1,2-Tetrachloroethane	54.7	50.0	109%
1,2-Dibromo-3-chloropropane	54.6	50.0	109%
1,2,3-Trichloropropane	53.5	50.0	107%
trans-1,4-Dichloro-2-butene	39.0	50.0	78.0%
1,3,5-Trimethylbenzene	55.9	50.0	112%
1,2,4-Trimethylbenzene	56.7	50.0	113%
Hexachlorobutadiene	57.9	50.0	116%
Ethylene Dibromide	56.6	50.0	113%
Bromochloromethane	56.1	50.0	112%
2,2-Dichloropropane	57.5	50.0	115%
1,3-Dichloropropane	53.4	50.0	107%
Isopropylbenzene	63.5	50.0	127%
n-Propylbenzene	55.1	50.0	110%
Bromobenzene	56.4	50.0	113%
2-Chlorotoluene	54.4	50.0	109%
4-Chlorotoluene	58.6	50.0	117%
tert-Butylbenzene	54.8	50.0	110%
sec-Butylbenzene	55.1	50.0	110%
4-Isopropyltoluene	57.7	50.0	115%
n-Butylbenzene	56.0	50.0	112%
1,2,4-Trichlorobenzene	54.7	50.0	109%
Naphthalene	53.3	50.0	107%
1,2,3-Trichlorobenzene	52.8	50.0	106%

Spike Blank Surrogate Recovery	
d4-1,2-Dichloroethane	97.8%
d8-Toluene	99.5%
Bromofluorobenzene	100%
d4-1,2-Dichlorobenzene	100%

Reported in ug/L

ORGANICS ANALYSIS DATA SHEET
Volatiles by GC/MS

ANALYTICAL RESOURCES INCORPORATED

Lab Sample ID: Q829SB
LIMS ID: 96-19681
Matrix: Water
Data Release Authorized: MH
Reported: 11/20/96
Date Analyzed: 11/19/96
Instrument: FINN3

QC Report No: Q829-Landau Associates, Inc.
Project: Union Station
273008.29
Date Received: 11/18/96

LABORATORY CONTROL SAMPLE CONSTITUENT	SPIKE VALUE	SPIKE AMT	% RECOVERY
Chloromethane	37.0	50.0	74.0%
Bromomethane	47.2	50.0	94.4%
Vinyl Chloride	41.9	50.0	83.8%
Chloroethane	47.6	50.0	95.2%
Methylene Chloride	52.3	50.0	105%
Acetone	252.	250	101%
Carbon Disulfide	57.4	50.0	115%
1,1-Dichloroethene	47.3	50.0	94.6%
1,1-Dichloroethane	53.8	50.0	108%
trans-1,2-Dichloroethene	51.9	50.0	104%
cis-1,2-Dichloroethene	54.7	50.0	109%
Chloroform	56.0	50.0	112%
1,2-Dichloroethane	53.2	50.0	106%
2-Butanone	250.	250	100%
1,1,1-Trichloroethane	56.0	50.0	112%
Carbon Tetrachloride	54.5	50.0	109%
Vinyl Acetate	52.2	50.0	104%
Bromodichloromethane	56.3	50.0	113%
1,2-Dichloropropane	56.6	50.0	113%
cis-1,3-Dichloropropene	55.6	50.0	111%
Trichloroethene	54.5	50.0	109%
Dibromochloromethane	56.0	50.0	112%
1,1,2-Trichloroethane	54.5	50.0	109%
Benzene	54.8	50.0	110%
trans-1,3-Dichloropropene	54.4	50.0	109%
2-Chloroethylvinylether	33.4	50.0	66.8%
Bromoform	55.5	50.0	111%
4-Methyl-2-Pentanone (MIBK)	249.	250	99.6%
2-Hexanone	256.	250	102%
Tetrachloroethene	55.2	50.0	110%
1,1,2,2-Tetrachloroethane	56.7	50.0	113%
Toluene	56.2	50.0	112%
Chlorobenzene	55.7	50.0	111%
Ethylbenzene	55.8	50.0	112%
Styrene	54.5	50.0	109%
Trichlorofluoromethane	44.5	50.0	89.0%
1,1,2-Trichlorotrifluoroethane	55.5	50.0	111%
m,p-Xylene	113.	100	113%
O-Xylene	55.9	50.0	112%

Reported in ug/L

ORGANICS ANALYSIS DATA SHEET
Volatiles by GC/MS

ANALYTICAL RESOURCES INCORPORATED

Lab Sample ID: Q829SB
LIMS ID: 96-19681
Matrix: Water
Data Release Authorized: MP
Reported: 11/20/96
Date Analyzed: 11/19/96
Instrument: FINN3

QC Report No: Q829-Landau Associates, Inc.
Project: Union Station
273008.29
Date Received: 11/18/96

LABORATORY CONTROL SAMPLE CONSTITUENT	SPIKE VALUE	SPIKE AMT	% RECOVERY
1,2-Dichlorobenzene	57.7	50.0	115%
1,3-Dichlorobenzene	56.5	50.0	113%
1,4-Dichlorobenzene	56.7	50.0	113%
Acrolein	571.	250	228%
Methyl Iodide	53.5	50.0	107%
Bromoethane	54.1	50.0	108%
Acrylonitrile	50.0	50.0	100%
1,1-Dichloropropene	54.8	50.0	110%
Dibromomethane	55.2	50.0	110%
1,1,1,2-Tetrachloroethane	54.3	50.0	109%
1,2-Dibromo-3-chloropropane	54.3	50.0	109%
1,2,3-Trichloropropane	53.6	50.0	107%
trans-1,4-Dichloro-2-butene	50.4	50.0	101%
1,3,5-Trimethylbenzene	58.4	50.0	117%
1,2,4-Trimethylbenzene	56.3	50.0	113%
Hexachlorobutadiene	59.1	50.0	118%
Ethylene Dibromide	53.1	50.0	106%
Bromochloromethane	55.8	50.0	112%
2,2-Dichloropropane	55.3	50.0	111%
1,3-Dichloropropane	53.8	50.0	108%
Isopropylbenzene	64.6	50.0	129%
n-Propylbenzene	57.3	50.0	115%
Bromobenzene	58.4	50.0	117%
2-Chlorotoluene	52.9	50.0	106%
4-Chlorotoluene	59.8	50.0	120%
tert-Butylbenzene	58.2	50.0	116%
sec-Butylbenzene	55.6	50.0	111%
4-Isopropyltoluene	60.7	50.0	121%
n-Butylbenzene	58.1	50.0	116%
1,2,4-Trichlorobenzene	58.9	50.0	118%
Naphthalene	57.5	50.0	115%
1,2,3-Trichlorobenzene	57.5	50.0	115%

Spike Blank Surrogate Recovery	
d4-1,2-Dichloroethane	103%
d8-Toluene	98.6%
Bromofluorobenzene	101%
d4-1,2-Dichlorobenzene	103%

Reported in ug/L

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS

Sample No: MW-106-11/19/96

Lab Sample ID: Q838A
LIMS ID: 96-19774
Matrix: Water
Data Release Authorized: MM
Reported: 11/25/96

QC Report No: Q838-Landau Associates, Inc.
Project: Union Station
273008.29
Date Sampled: 11/19/96
Date Received: 11/19/96

Instrument: FINN1
Date Analyzed: 11/21/96

Sample Amount: 5.00 mL
Purge Volume: 5.0 mL

CAS Number	Analyte	ug/L
74-87-3	Chloromethane	2.0 U
74-83-9	Bromomethane	2.0 U
75-01-4	Vinyl Chloride	2.0 U
75-00-3	Chloroethane	2.0 U
75-09-2	Methylene Chloride	2.0 U
67-64-1	**Acetone**	19
75-15-0	Carbon Disulfide	1.0 U
75-35-4	1,1-Dichloroethene	1.0 U
75-34-3	1,1-Dichloroethane	1.0 U
156-60-5	trans-1,2-Dichloroethene	1.0 U
156-59-2	cis-1,2-Dichloroethene	1.0 U
67-66-3	**Chloroform**	1.6
107-06-2	1,2-Dichloroethane	1.0 U
78-93-3	**2-Butanone**	11
71-55-6	1,1,1-Trichloroethane	1.0 U
56-23-5	Carbon Tetrachloride	1.0 U
108-05-4	Vinyl Acetate	5.0 U
75-27-4	Bromodichloromethane	1.0 U
78-87-5	1,2-Dichloropropane	1.0 U
10061-01-5	cis-1,3-Dichloropropene	1.0 U
79-01-6	Trichloroethene	1.0 U
124-48-1	Dibromochloromethane	1.0 U
79-00-5	1,1,2-Trichloroethane	1.0 U
71-43-2	Benzene	1.0 U
10061-02-6	trans-1,3-Dichloropropene	1.0 U
110-75-8	2-Chloroethylvinylether	10 Y
75-25-2	Bromoform	1.0 U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0 U
591-78-6	2-Hexanone	5.0 U
127-18-4	Tetrachloroethene	1.0 U
79-34-5	1,1,2,2-Tetrachloroethane	1.0 U
108-88-3	Toluene	1.0 U
108-90-7	Chlorobenzene	1.0 U
100-41-4	Ethylbenzene	1.0 U
100-42-5	Styrene	1.0 U
75-69-4	Trichlorofluoromethane	2.0 U
76-13-1	1,1,2-Trichlorotrifluoroethane	2.0 U
	m,p-Xylene	1.0 U

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS

ANALYTICAL RESOURCES INCORPORATED

Sample No: MW-106-11/19/96

Lab Sample ID: Q838A
LIMS ID: 96-19774
Matrix: Water
Data Release Authorized: MP
Reported: 11/25/96

QC Report No: Q838-Landau Associates, Inc.
Project: Union Station
273008.29
Date Sampled: 11/19/96
Date Received: 11/19/96

Instrument: FINN1
Date Analyzed: 11/21/96

Sample Amount: 5.00 mL
Purge Volume: 5.0 mL

CAS Number	Analyte	ug/L
95-47-6	O-Xylene	1.0 U
95-50-1	1,2-Dichlorobenzene	1.0 U
541-73-1	1,3-Dichlorobenzene	1.0 U
106-46-7	1,4-Dichlorobenzene	1.0 U
107-02-8	Acrolein	50 U
74-88-4	Methyl Iodide	1.0 U
74-96-4	Bromoethane	2.0 U
107-13-1	Acrylonitrile	5.0 U
563-58-6	1,1-Dichloropropene	1.0 U
74-95-3	Dibromomethane	1.0 U
630-20-6	1,1,1,2-Tetrachloroethane	1.0 U
96-12-8	1,2-Dibromo-3-chloropropane	5.0 U
96-18-4	1,2,3-Trichloropropane	1.0 U
110-57-6	trans-1,4-Dichloro-2-butene	10 Y
108-67-8	**1,3,5-Trimethylbenzene**	**1.2**
95-63-6	**1,2,4-Trimethylbenzene**	**1.2**
87-68-3	Hexachlorobutadiene	5.0 U
106-93-4	Ethylene Dibromide	1.0 U
74-97-5	Bromochloromethane	1.0 U
590-20-7	2,2-Dichloropropane	1.0 U
142-28-9	1,3-Dichloropropane	1.0 U
98-82-8	Isopropylbenzene	1.0 U
103-65-1	n-Propylbenzene	1.0 U
108-86-1	Bromobenzene	1.0 U
95-49-8	2-Chlorotoluene	1.0 U
106-43-4	4-Chlorotoluene	1.0 U
98-06-6	tert-Butylbenzene	1.0 U
135-98-8	sec-Butylbenzene	1.0 U
99-87-6	**4-Isopropyltoluene**	**1.4**
104-51-8	n-Butylbenzene	1.0 U
120-82-1	1,2,4-Trichlorobenzene	5.0 U
91-20-3	**Naphthalene**	**94**
87-61-6	1,2,3-Trichlorobenzene	5.1 Y

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	107%
d8-Toluene	97.1%
Bromofluorobenzene	99.3%
d4-1,2-Dichlorobenzene	102%

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS

ANALYTICAL RESOURCES INCORPORATED

Sample No: MW-105-11/19/96

Lab Sample ID: Q838B
LIMS ID: 96-19775
Matrix: Water
Data Release Authorized: JAP
Reported: 11/25/96

QC Report No: Q838-Landau Associates, Inc.
Project: Union Station
273008.29
Date Sampled: 11/19/96
Date Received: 11/19/96

Instrument: FINN1
Date Analyzed: 11/20/96

Sample Amount: 5.00 mL
Purge Volume: 5.0 mL

CAS Number	Analyte	ug/L
74-87-3	Chloromethane	2.0 U
74-83-9	Bromomethane	2.0 U
75-01-4	Vinyl Chloride	2.0 U
75-00-3	Chloroethane	2.0 U
75-09-2	Methylene Chloride	2.0 U
67-64-1	**Acetone**	**16**
75-15-0	**Carbon Disulfide**	**1.0**
75-35-4	1,1-Dichloroethene	1.0 U
75-34-3	1,1-Dichloroethane	1.0 U
156-60-5	trans-1,2-Dichloroethene	1.0 U
156-59-2	cis-1,2-Dichloroethene	1.0 U
67-66-3	Chloroform	1.0 U
107-06-2	1,2-Dichloroethane	1.0 U
78-93-3	**2-Butanone**	**32**
71-55-6	1,1,1-Trichloroethane	1.0 U
56-23-5	Carbon Tetrachloride	1.0 U
108-05-4	Vinyl Acetate	5.0 U
75-27-4	Bromodichloromethane	1.0 U
78-87-5	1,2-Dichloropropane	1.0 U
10061-01-5	cis-1,3-Dichloropropene	1.0 U
79-01-6	Trichloroethene	1.0 U
124-48-1	Dibromochloromethane	1.0 U
79-00-5	1,1,2-Trichloroethane	1.0 U
71-43-2	**Benzene**	**160**
10061-02-6	trans-1,3-Dichloropropene	1.0 U
110-75-8	2-Chloroethylvinylether	10 Y
75-25-2	Bromoform	1.0 U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0 U
591-78-6	2-Hexanone	5.0 U
127-18-4	Tetrachloroethene	1.0 U
79-34-5	1,1,2,2-Tetrachloroethane	1.0 U
108-88-3	**Toluene**	**190**
108-90-7	Chlorobenzene	1.0 U
100-41-4	**Ethylbenzene**	**96**
100-42-5	**Styrene**	**53**
75-69-4	Trichlorofluoromethane	2.0 U
76-13-1	1,1,2-Trichlorotrifluoroethane	2.0 U
	m,p-Xylene	**220**

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS

ANALYTICAL RESOURCES INCORPORATED

Sample No: MW-105-11/19/96

Lab Sample ID: Q838B
LIMS ID: 96-19775
Matrix: Water
Data Release Authorized: MB
Reported: 11/25/96

QC Report No: Q838-Landau Associates, Inc.
Project: Union Station
273008.29
Date Sampled: 11/19/96
Date Received: 11/19/96

Instrument: FINN1
Date Analyzed: 11/20/96

Sample Amount: 5.00 mL
Purge Volume: 5.0 mL

CAS Number	Analyte	ug/L
95-47-6	**O-Xylene**	**130**
95-50-1	1,2-Dichlorobenzene	1.0 U
541-73-1	1,3-Dichlorobenzene	1.0 U
106-46-7	1,4-Dichlorobenzene	1.0 U
107-02-8	Acrolein	50 U
74-88-4	Methyl Iodide	1.0 U
74-96-4	Bromoethane	2.0 U
107-13-1	Acrylonitrile	5.0 U
563-58-6	1,1-Dichloropropene	1.0 U
74-95-3	Dibromomethane	1.0 U
630-20-6	1,1,1,2-Tetrachloroethane	1.0 U
96-12-8	1,2-Dibromo-3-chloropropane	5.0 U
96-18-4	1,2,3-Trichloropropane	1.0 U
110-57-6	trans-1,4-Dichloro-2-butene	10 Y
108-67-8	**1,3,5-Trimethylbenzene**	**38**
95-63-6	**1,2,4-Trimethylbenzene**	**88**
87-68-3	Hexachlorobutadiene	5.0 U
106-93-4	Ethylene Dibromide	1.0 U
74-97-5	Bromochloromethane	1.0 U
590-20-7	2,2-Dichloropropane	1.0 U
142-28-9	1,3-Dichloropropane	1.0 U
98-82-8	**Isopropylbenzene**	**9.3**
103-65-1	**n-Propylbenzene**	**1.5**
108-86-1	Bromobenzene	1.0 U
95-49-8	2-Chlorotoluene	1.0 U
106-43-4	4-Chlorotoluene	1.0 U
98-06-6	tert-Butylbenzene	1.0 U
135-98-8	sec-Butylbenzene	1.0 U
99-87-6	**4-Isopropyltoluene**	**5.9**
104-51-8	n-Butylbenzene	1.0 U
120-82-1	1,2,4-Trichlorobenzene	5.0 U
91-20-3	**Naphthalene**	**160**
87-61-6	1,2,3-Trichlorobenzene	5.0 U

Volatile Surrogate Recovery	
d4-1,2-Dichloroethane	91.1%
d8-Toluene	94.4%
Bromofluorobenzene	99.1%
d4-1,2-Dichlorobenzene	103%

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS

ANALYTICAL RESOURCES INCORPORATED

Sample No: MW-104-11/19/96

Lab Sample ID: Q838C
LIMS ID: 96-19776
Matrix: Water
Data Release Authorized: MP
Reported: 11/25/96

QC Report No: Q838-Landau Associates, Inc.
Project: Union Station
273008.29
Date Sampled: 11/19/96
Date Received: 11/19/96

Instrument: FINN1
Date Analyzed: 11/20/96

Sample Amount: 5.00 mL
Purge Volume: 5.0 mL

CAS Number	Analyte	ug/L
74-87-3	Chloromethane	2.0 U
74-83-9	Bromomethane	2.0 U
75-01-4	Vinyl Chloride	2.0 U
75-00-3	Chloroethane	2.0 U
75-09-2	Methylene Chloride	2.0 U
67-64-1	Acetone	5.0 U
75-15-0	Carbon Disulfide	1.0 U
75-35-4	1,1-Dichloroethene	1.0 U
75-34-3	1,1-Dichloroethane	1.0 U
156-60-5	trans-1,2-Dichloroethene	1.0 U
156-59-2	cis-1,2-Dichloroethene	1.0 U
67-66-3	Chloroform	1.0 U
107-06-2	1,2-Dichloroethane	1.0 U
78-93-3	2-Butanone	5.0 U
71-55-6	1,1,1-Trichloroethane	1.0 U
56-23-5	Carbon Tetrachloride	1.0 U
108-05-4	Vinyl Acetate	5.0 U
75-27-4	Bromodichloromethane	1.0 U
78-87-5	1,2-Dichloropropane	1.0 U
10061-01-5	cis-1,3-Dichloropropene	1.0 U
79-01-6	Trichloroethene	1.0 U
124-48-1	Dibromochloromethane	1.0 U
79-00-5	1,1,2-Trichloroethane	1.0 U
71-43-2	**Benzene**	**16**
10061-02-6	trans-1,3-Dichloropropene	1.0 U
110-75-8	2-Chloroethylvinylether	10 Y
75-25-2	Bromoform	1.0 U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0 U
591-78-6	2-Hexanone	5.0 U
127-18-4	Tetrachloroethene	1.0 U
79-34-5	1,1,2,2-Tetrachloroethane	1.0 U
108-88-3	**Toluene**	**5.7**
108-90-7	Chlorobenzene	1.0 U
100-41-4	**Ethylbenzene**	**32**
100-42-5	Styrene	1.0 U
75-69-4	Trichlorofluoromethane	2.0 U
76-13-1	1,1,2-Trichlorotrifluoroethane	2.0 U
	m,p-Xylene	**26**

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS

ANALYTICAL RESOURCES INCORPORATED

Sample No: MW-104-11/19/96

Lab Sample ID: Q838C
LIMS ID: 96-19776
Matrix: Water
Data Release Authorized:
Reported: 11/25/96

QC Report No: Q838-Landau Associates, Inc.
Project: Union Station
273008.29
Date Sampled: 11/19/96
Date Received: 11/19/96

Instrument: FINN1
Date Analyzed: 11/20/96

Sample Amount: 5.00 mL
Purge Volume: 5.0 mL

CAS Number	Analyte	ug/L
95-47-6	**O-Xylene**	**18**
95-50-1	1,2-Dichlorobenzene	1.0 U
541-73-1	1,3-Dichlorobenzene	1.0 U
106-46-7	1,4-Dichlorobenzene	1.0 U
107-02-8	Acrolein	50 U
74-88-4	Methyl Iodide	1.0 U
74-96-4	Bromoethane	2.0 U
107-13-1	Acrylonitrile	5.0 U
563-58-6	1,1-Dichloropropene	1.0 U
74-95-3	Dibromomethane	1.0 U
630-20-6	1,1,1,2-Tetrachloroethane	1.0 U
96-12-8	1,2-Dibromo-3-chloropropane	5.0 U
96-18-4	1,2,3-Trichloropropane	1.0 U
110-57-6	trans-1,4-Dichloro-2-butene	10 Y
108-67-8	**1,3,5-Trimethylbenzene**	**11**
95-63-6	**1,2,4-Trimethylbenzene**	**40**
87-68-3	Hexachlorobutadiene	5.0 U
106-93-4	Ethylene Dibromide	1.0 U
74-97-5	Bromochloromethane	1.0 U
590-20-7	2,2-Dichloropropane	1.0 U
142-28-9	1,3-Dichloropropane	1.0 U
98-82-8	**Isopropylbenzene**	**5.9**
103-65-1	n-Propylbenzene	1.0 U
108-86-1	Bromobenzene	1.0 U
95-49-8	2-Chlorotoluene	1.0 U
106-43-4	4-Chlorotoluene	1.0 U
98-06-6	tert-Butylbenzene	1.0 U
135-98-8	sec-Butylbenzene	1.0 U
99-87-6	**4-Isopropyltoluene**	**4.0**
104-51-8	n-Butylbenzene	1.0 U
120-82-1	1,2,4-Trichlorobenzene	5.0 U
91-20-3	**Naphthalene**	**770 E**
87-61-6	1,2,3-Trichlorobenzene	5.0 U

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	98.0%
d8-Toluene	93.5%
Bromofluorobenzene	97.8%
d4-1,2-Dichlorobenzene	99.4%

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS

ANALYTICAL RESOURCES INCORPORATED

Sample No: MW-104-11/19/96
DILUTION

Lab Sample ID: Q838C-DL
LIMS ID: 96-19776
Matrix: Water
Data Release Authorized: MP
Reported: 11/25/96

QC Report No: Q838-Landau Associates, Inc.
Project: Union Station
273008.29
Date Sampled: 11/19/96
Date Received: 11/19/96

Instrument: FINN1
Date Analyzed: 11/21/96

Sample Amount: 0.25 mL
Purge Volume: 5.0 mL

CAS Number	Analyte	ug/L
74-87-3	Chloromethane	40 U
74-83-9	Bromomethane	40 U
75-01-4	Vinyl Chloride	40 U
75-00-3	Chloroethane	40 U
75-09-2	Methylene Chloride	40 U
67-64-1	Acetone	100 U
75-15-0	Carbon Disulfide	20 U
75-35-4	1,1-Dichloroethene	20 U
75-34-3	1,1-Dichloroethane	20 U
156-60-5	trans-1,2-Dichloroethene	20 U
156-59-2	cis-1,2-Dichloroethene	20 U
67-66-3	Chloroform	20 U
107-06-2	1,2-Dichloroethane	20 U
78-93-3	2-Butanone	100 U
71-55-6	1,1,1-Trichloroethane	20 U
56-23-5	Carbon Tetrachloride	20 U
108-05-4	Vinyl Acetate	100 U
75-27-4	Bromodichloromethane	20 U
78-87-5	1,2-Dichloropropane	20 U
10061-01-5	cis-1,3-Dichloropropene	20 U
79-01-6	Trichloroethene	20 U
124-48-1	Dibromochloromethane	20 U
79-00-5	1,1,2-Trichloroethane	20 U
71-43-2	Benzene	20 U
10061-02-6	trans-1,3-Dichloropropene	20 U
110-75-8	2-Chloroethylvinylether	200 Y
75-25-2	Bromoform	20 U
108-10-1	4-Methyl-2-Pentanone (MIBK)	100 U
591-78-6	2-Hexanone	100 U
127-18-4	Tetrachloroethene	20 U
79-34-5	1,1,2,2-Tetrachloroethane	20 U
108-88-3	Toluene	20 U
108-90-7	Chlorobenzene	20 U
100-41-4	**Ethylbenzene**	**25**
100-42-5	Styrene	20 U
75-69-4	Trichlorofluoromethane	40 U
76-13-1	1,1,2-Trichlorotrifluoroethane	40 U
	m,p-Xylene	**22**

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS

ANALYTICAL RESOURCES INCORPORATED

Sample No: MW-104-11/19/96
DILUTION

Lab Sample ID: Q838C-DL
LIMS ID: 96-19776
Matrix: Water
Data Release Authorized: MM
Reported: 11/25/96

QC Report No: Q838-Landau Associates, Inc.
Project: Union Station
273008.29
Date Sampled: 11/19/96
Date Received: 11/19/96

Instrument: FINN1
Date Analyzed: 11/21/96

Sample Amount: 0.25 mL
Purge Volume: 5.0 mL

CAS Number	Analyte	ug/L
95-47-6	O-Xylene	20 U
95-50-1	1,2-Dichlorobenzene	20 U
541-73-1	1,3-Dichlorobenzene	20 U
106-46-7	1,4-Dichlorobenzene	20 U
107-02-8	Acrolein	1000 U
74-88-4	Methyl Iodide	20 U
74-96-4	Bromoethane	40 U
107-13-1	Acrylonitrile	100 U
563-58-6	1,1-Dichloropropene	20 U
74-95-3	Dibromomethane	20 U
630-20-6	1,1,1,2-Tetrachloroethane	20 U
96-12-8	1,2-Dibromo-3-chloropropane	100 U
96-18-4	1,2,3-Trichloropropane	20 U
110-57-6	trans-1,4-Dichloro-2-butene	200 Y
108-67-8	**1,3,5-Trimethylbenzene**	**21**
95-63-6	**1,2,4-Trimethylbenzene**	**31**
87-68-3	Hexachlorobutadiene	100 U
106-93-4	Ethylene Dibromide	20 U
74-97-5	Bromochloromethane	20 U
590-20-7	2,2-Dichloropropane	20 U
142-28-9	1,3-Dichloropropane	20 U
98-82-8	Isopropylbenzene	20 U
103-65-1	n-Propylbenzene	20 U
108-86-1	Bromobenzene	20 U
95-49-8	2-Chlorotoluene	20 U
106-43-4	4-Chlorotoluene	20 U
98-06-6	tert-Butylbenzene	20 U
135-98-8	sec-Butylbenzene	20 U
99-87-6	4-Isopropyltoluene	20 U
104-51-8	n-Butylbenzene	20 U
120-82-1	1,2,4-Trichlorobenzene	100 U
91-20-3	**Naphthalene**	**2500**
87-61-6	1,2,3-Trichlorobenzene	100 U

Volatile Surrogate Recovery	
d4-1,2-Dichloroethane	106%
d8-Toluene	95.9%
Bromofluorobenzene	97.7%
d4-1,2-Dichlorobenzene	102%

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS

ANALYTICAL RESOURCES INCORPORATED

Sample No: HC-103-11/19/96

Lab Sample ID: Q838D
LIMS ID: 96-19777
Matrix: Water
Data Release Authorized: MP
Reported: 11/25/96

QC Report No: Q838-Landau Associates, Inc.
Project: Union Station
273008.29
Date Sampled: 11/19/96
Date Received: 11/19/96

Instrument: FINN1
Date Analyzed: 11/20/96

Sample Amount: 5.00 mL
Purge Volume: 5.0 mL

CAS Number	Analyte	ug/L
74-87-3	Chloromethane	2.0 U
74-83-9	Bromomethane	2.0 U
75-01-4	Vinyl Chloride	2.0 U
75-00-3	Chloroethane	2.0 U
75-09-2	Methylene Chloride	2.0 U
67-64-1	Acetone	5.0 U
75-15-0	Carbon Disulfide	1.0 U
75-35-4	1,1-Dichloroethene	1.0 U
75-34-3	1,1-Dichloroethane	1.0 U
156-60-5	trans-1,2-Dichloroethene	1.0 U
156-59-2	cis-1,2-Dichloroethene	1.0 U
67-66-3	Chloroform	1.0 U
107-06-2	1,2-Dichloroethane	1.0 U
78-93-3	2-Butanone	5.0 U
71-55-6	1,1,1-Trichloroethane	1.0 U
56-23-5	Carbon Tetrachloride	1.0 U
108-05-4	Vinyl Acetate	5.0 U
75-27-4	Bromodichloromethane	1.0 U
78-87-5	1,2-Dichloropropane	1.0 U
10061-01-5	cis-1,3-Dichloropropene	1.0 U
79-01-6	Trichloroethene	1.0 U
124-48-1	Dibromochloromethane	1.0 U
79-00-5	1,1,2-Trichloroethane	1.0 U
71-43-2	Benzene	1.0 U
10061-02-6	trans-1,3-Dichloropropene	1.0 U
110-75-8	2-Chloroethylvinylether	10 Y
75-25-2	Bromoform	1.0 U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0 U
591-78-6	2-Hexanone	5.0 U
127-18-4	Tetrachloroethene	1.0 U
79-34-5	1,1,2,2-Tetrachloroethane	1.0 U
108-88-3	Toluene	1.0 U
108-90-7	Chlorobenzene	1.0 U
100-41-4	Ethylbenzene	1.0 U
100-42-5	Styrene	1.0 U
75-69-4	Trichlorofluoromethane	2.0 U
76-13-1	1,1,2-Trichlorotrifluoroethane	2.0 U
	m,p-Xylene	1.0 U

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS

ANALYTICAL RESOURCES INCORPORATED

Sample No: HC-103-11/19/96

Lab Sample ID: Q838D
LIMS ID: 96-19777
Matrix: Water
Data Release Authorized: MF
Reported: 11/25/96

QC Report No: Q838-Landau Associates, Inc.
Project: Union Station
273008.29
Date Sampled: 11/19/96
Date Received: 11/19/96

Instrument: FINN1
Date Analyzed: 11/20/96

Sample Amount: 5.00 mL
Purge Volume: 5.0 mL

CAS Number	Analyte	ug/L
95-47-6	O-Xylene	1.0 U
95-50-1	1,2-Dichlorobenzene	1.0 U
541-73-1	1,3-Dichlorobenzene	1.0 U
106-46-7	1,4-Dichlorobenzene	1.0 U
107-02-8	Acrolein	50 U
74-88-4	Methyl Iodide	1.0 U
74-96-4	Bromoethane	2.0 U
107-13-1	Acrylonitrile	5.0 U
563-58-6	1,1-Dichloropropene	1.0 U
74-95-3	Dibromomethane	1.0 U
630-20-6	1,1,1,2-Tetrachloroethane	1.0 U
96-12-8	1,2-Dibromo-3-chloropropane	5.0 U
96-18-4	1,2,3-Trichloropropane	1.0 U
110-57-6	trans-1,4-Dichloro-2-butene	10 Y
108-67-8	1,3,5-Trimethylbenzene	1.0 U
95-63-6	1,2,4-Trimethylbenzene	1.0 U
87-68-3	Hexachlorobutadiene	5.0 U
106-93-4	Ethylene Dibromide	1.0 U
74-97-5	Bromochloromethane	1.0 U
590-20-7	2,2-Dichloropropane	1.0 U
142-28-9	1,3-Dichloropropane	1.0 U
98-82-8	Isopropylbenzene	1.0 U
103-65-1	n-Propylbenzene	1.0 U
108-86-1	Bromobenzene	1.0 U
95-49-8	2-Chlorotoluene	1.0 U
106-43-4	4-Chlorotoluene	1.0 U
98-06-6	tert-Butylbenzene	1.0 U
135-98-8	sec-Butylbenzene	1.0 U
99-87-6	4-Isopropyltoluene	1.0 U
104-51-8	n-Butylbenzene	1.0 U
120-82-1	1,2,4-Trichlorobenzene	5.0 U
91-20-3	Naphthalene	340 Y
87-61-6	1,2,3-Trichlorobenzene	5.0 U

Volatile Surrogate Recovery	
d4-1,2-Dichloroethane	99.7%
d8-Toluene	95.6%
Bromofluorobenzene	99.2%
d4-1,2-Dichlorobenzene	102%

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS

ANALYTICAL RESOURCES INCORPORATED

Sample No: HC-103-11/19/96
DILUTION

Lab Sample ID: Q838D-DL
LIMS ID: 96-19777
Matrix: Water
Data Release Authorized: MM
Reported: 11/25/96

QC Report No: Q838-Landau Associates, Inc.
Project: Union Station
273008.29
Date Sampled: 11/19/96
Date Received: 11/19/96

Instrument: FINN1
Date Analyzed: 11/21/96

Sample Amount: 1.0 mL
Purge Volume: 5.0 mL

CAS Number	Analyte	ug/L
74-87-3	Chloromethane	10 U
74-83-9	Bromomethane	10 U
75-01-4	Vinyl Chloride	10 U
75-00-3	Chloroethane	10 U
75-09-2	Methylene Chloride	10 U
67-64-1	Acetone	25 U
75-15-0	Carbon Disulfide	5.0 U
75-35-4	1,1-Dichloroethene	5.0 U
75-34-3	1,1-Dichloroethane	5.0 U
156-60-5	trans-1,2-Dichloroethene	5.0 U
156-59-2	cis-1,2-Dichloroethene	5.0 U
67-66-3	Chloroform	5.0 U
107-06-2	1,2-Dichloroethane	5.0 U
78-93-3	2-Butanone	25 U
71-55-6	1,1,1-Trichloroethane	5.0 U
56-23-5	Carbon Tetrachloride	5.0 U
108-05-4	Vinyl Acetate	25 U
75-27-4	Bromodichloromethane	5.0 U
78-87-5	1,2-Dichloropropane	5.0 U
10061-01-5	cis-1,3-Dichloropropene	5.0 U
79-01-6	Trichloroethene	5.0 U
124-48-1	Dibromochloromethane	5.0 U
79-00-5	1,1,2-Trichloroethane	5.0 U
71-43-2	Benzene	5.0 U
10061-02-6	trans-1,3-Dichloropropene	5.0 U
110-75-8	2-Chloroethylvinylether	50 Y
75-25-2	Bromoform	5.0 U
108-10-1	4-Methyl-2-Pentanone (MIBK)	25 U
591-78-6	2-Hexanone	25 U
127-18-4	Tetrachloroethene	5.0 U
79-34-5	1,1,2,2-Tetrachloroethane	5.0 U
108-88-3	Toluene	5.0 U
108-90-7	Chlorobenzene	5.0 U
100-41-4	Ethylbenzene	5.0 U
100-42-5	Styrene	5.0 U
75-69-4	Trichlorofluoromethane	10 U
76-13-1	1,1,2-Trichlorotrifluoroethane	10 U
	m,p-Xylene	5.0 U

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS

ANALYTICAL RESOURCES INCORPORATED

Sample No: HC-103-11/19/96
DILUTION

Lab Sample ID: Q838D-DL
LIMS ID: 96-19777
Matrix: Water
Data Release Authorized:
Reported: 11/25/96

QC Report No: Q838-Landau Associates, Inc.
Project: Union Station
273008.29
Date Sampled: 11/19/96
Date Received: 11/19/96

Instrument: FINN1
Date Analyzed: 11/21/96

Sample Amount: 1.0 mL
Purge Volume: 5.0 mL

CAS Number	Analyte	ug/L
95-47-6	O-Xylene	5.0 U
95-50-1	1,2-Dichlorobenzene	5.0 U
541-73-1	1,3-Dichlorobenzene	5.0 U
106-46-7	1,4-Dichlorobenzene	5.0 U
107-02-8	Acrolein	250 U
74-88-4	Methyl Iodide	5.0 U
74-96-4	Bromoethane	10 U
107-13-1	Acrylonitrile	25 U
563-58-6	1,1-Dichloropropene	5.0 U
74-95-3	Dibromomethane	5.0 U
630-20-6	1,1,1,2-Tetrachloroethane	5.0 U
96-12-8	1,2-Dibromo-3-chloropropane	25 U
96-18-4	1,2,3-Trichloropropane	5.0 U
110-57-6	trans-1,4-Dichloro-2-butene	50 Y
108-67-8	1,3,5-Trimethylbenzene	5.0 U
95-63-6	1,2,4-Trimethylbenzene	5.0 U
87-68-3	Hexachlorobutadiene	25 U
106-93-4	Ethylene Dibromide	5.0 U
74-97-5	Bromochloromethane	5.0 U
590-20-7	2,2-Dichloropropane	5.0 U
142-28-9	1,3-Dichloropropane	5.0 U
98-82-8	Isopropylbenzene	5.0 U
103-65-1	n-Propylbenzene	5.0 U
108-86-1	Bromobenzene	5.0 U
95-49-8	2-Chlorotoluene	5.0 U
106-43-4	4-Chlorotoluene	5.0 U
98-06-6	tert-Butylbenzene	5.0 U
135-98-8	sec-Butylbenzene	5.0 U
99-87-6	4-Isopropyltoluene	5.0 U
104-51-8	n-Butylbenzene	5.0 U
120-82-1	1,2,4-Trichlorobenzene	25 U
91-20-3	Naphthalene	65 Y
87-61-6	1,2,3-Trichlorobenzene	25 U

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	107%
d8-Toluene	97.4%
Bromofluorobenzene	98.9%
d4-1,2-Dichlorobenzene	103%

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS

ANALYTICAL RESOURCES INCORPORATED

Sample No: MW-205-11/19/96

Lab Sample ID: Q838E
LIMS ID: 96-19778
Matrix: Water
Data Release Authorized: MP
Reported: 11/25/96

QC Report No: Q838-Landau Associates, Inc.
Project: Union Station
273008.29
Date Sampled: 11/19/96
Date Received: 11/19/96

Instrument: FINN1
Date Analyzed: 11/20/96

Sample Amount: 5.00 mL
Purge Volume: 5.0 mL

CAS Number	Analyte	ug/L
74-87-3	Chloromethane	2.0 U
74-83-9	Bromomethane	2.0 U
75-01-4	Vinyl Chloride	2.0 U
75-00-3	Chloroethane	2.0 U
75-09-2	Methylene Chloride	2.0 U
67-64-1	**Acetone**	**15**
75-15-0	**Carbon Disulfide**	**1.2**
75-35-4	1,1-Dichloroethene	1.0 U
75-34-3	1,1-Dichloroethane	1.0 U
156-60-5	trans-1,2-Dichloroethene	1.0 U
156-59-2	cis-1,2-Dichloroethene	1.0 U
67-66-3	**Chloroform**	**1.1**
107-06-2	1,2-Dichloroethane	1.0 U
78-93-3	**2-Butanone**	**39**
71-55-6	1,1,1-Trichloroethane	1.0 U
56-23-5	Carbon Tetrachloride	1.0 U
108-05-4	Vinyl Acetate	5.0 U
75-27-4	Bromodichloromethane	1.0 U
78-87-5	1,2-Dichloropropane	1.0 U
10061-01-5	cis-1,3-Dichloropropene	1.0 U
79-01-6	Trichloroethene	1.0 U
124-48-1	Dibromochloromethane	1.0 U
79-00-5	1,1,2-Trichloroethane	1.0 U
71-43-2	**Benzene**	**190**
10061-02-6	trans-1,3-Dichloropropene	1.0 U
110-75-8	2-Chloroethylvinylether	10 Y
75-25-2	Bromoform	1.0 U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0 U
591-78-6	2-Hexanone	5.0 U
127-18-4	Tetrachloroethene	1.0 U
79-34-5	1,1,2,2-Tetrachloroethane	1.0 U
108-88-3	**Toluene**	**220 E**
108-90-7	Chlorobenzene	1.0 U
100-41-4	**Ethylbenzene**	**120**
100-42-5	**Styrene**	**57**
75-69-4	Trichlorofluoromethane	2.0 U
76-13-1	1,1,2-Trichlorotrifluoroethane	2.0 U
	m,p-Xylene	**240**

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS

ANALYTICAL RESOURCES INCORPORATED

Sample No: MW-205-11/19/96

Lab Sample ID: Q838E
LIMS ID: 96-19778
Matrix: Water
Data Release Authorized: MM
Reported: 11/25/96

QC Report No: Q838-Landau Associates, Inc.
Project: Union Station
273008.29
Date Sampled: 11/19/96
Date Received: 11/19/96

Instrument: FINN1
Date Analyzed: 11/20/96

Sample Amount: 5.00 mL
Purge Volume: 5.0 mL

CAS Number	Analyte	ug/L
95-47-6	O-Xylene	140
95-50-1	1,2-Dichlorobenzene	1.0 U
541-73-1	1,3-Dichlorobenzene	1.0 U
106-46-7	1,4-Dichlorobenzene	1.0 U
107-02-8	Acrolein	50 U
74-88-4	Methyl Iodide	1.0 U
74-96-4	Bromoethane	2.0 U
107-13-1	Acrylonitrile	5.0 U
563-58-6	1,1-Dichloropropene	1.0 U
74-95-3	Dibromomethane	1.0 U
630-20-6	1,1,1,2-Tetrachloroethane	1.0 U
96-12-8	1,2-Dibromo-3-chloropropane	5.0 U
96-18-4	1,2,3-Trichloropropane	1.0 U
110-57-6	trans-1,4-Dichloro-2-butene	10 Y
108-67-8	1,3,5-Trimethylbenzene	43
95-63-6	1,2,4-Trimethylbenzene	99
87-68-3	Hexachlorobutadiene	5.0 U
106-93-4	Ethylene Dibromide	1.0 U
74-97-5	Bromochloromethane	1.0 U
590-20-7	2,2-Dichloropropane	1.0 U
142-28-9	1,3-Dichloropropane	1.0 U
98-82-8	Isopropylbenzene	11
103-65-1	n-Propylbenzene	1.9
108-86-1	Bromobenzene	1.0 U
95-49-8	2-Chlorotoluene	1.0 U
106-43-4	4-Chlorotoluene	1.0 U
98-06-6	tert-Butylbenzene	1.0 U
135-98-8	sec-Butylbenzene	1.0 U
99-87-6	4-Isopropyltoluene	6.9
104-51-8	n-Butylbenzene	1.0 U
120-82-1	1,2,4-Trichlorobenzene	5.0 U
91-20-3	Naphthalene	1500 E
87-61-6	1,2,3-Trichlorobenzene	5.0 U

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	101%
d8-Toluene	99.2%
Bromofluorobenzene	98.4%
d4-1,2-Dichlorobenzene	103%

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS

ANALYTICAL RESOURCES INCORPORATED

Sample No: MW-205-11/19/96
DILUTION

Lab Sample ID: Q838E-DL
LIMS ID: 96-19778
Matrix: Water
Data Release Authorized: MM
Reported: 11/25/96

QC Report No: Q838-Landau Associates, Inc.
Project: Union Station
273008.29
Date Sampled: 11/19/96
Date Received: 11/19/96

Instrument: FINN1
Date Analyzed: 11/21/96

Sample Amount: 0.10 mL
Purge Volume: 5.0 mL

CAS Number	Analyte	ug/L
74-87-3	Chloromethane	100 U
74-83-9	Bromomethane	100 U
75-01-4	Vinyl Chloride	100 U
75-00-3	Chloroethane	100 U
75-09-2	Methylene Chloride	100 U
67-64-1	Acetone	250 U
75-15-0	Carbon Disulfide	50 U
75-35-4	1,1-Dichloroethene	50 U
75-34-3	1,1-Dichloroethane	50 U
156-60-5	trans-1,2-Dichloroethene	50 U
156-59-2	cis-1,2-Dichloroethene	50 U
67-66-3	Chloroform	50 U
107-06-2	1,2-Dichloroethane	50 U
78-93-3	2-Butanone	250 U
71-55-6	1,1,1-Trichloroethane	50 U
56-23-5	Carbon Tetrachloride	50 U
108-05-4	Vinyl Acetate	250 U
75-27-4	Bromodichloromethane	50 U
78-87-5	1,2-Dichloropropane	50 U
10061-01-5	cis-1,3-Dichloropropene	50 U
79-01-6	Trichloroethene	50 U
124-48-1	Dibromochloromethane	50 U
79-00-5	1,1,2-Trichloroethane	50 U
71-43-2	**Benzene**	**770**
10061-02-6	trans-1,3-Dichloropropene	50 U
110-75-8	2-Chloroethylvinylether	500 Y
75-25-2	Bromoform	50 U
108-10-1	4-Methyl-2-Pentanone (MIBK)	250 U
591-78-6	2-Hexanone	250 U
127-18-4	Tetrachloroethene	50 U
79-34-5	1,1,2,2-Tetrachloroethane	50 U
108-88-3	**Toluene**	**390**
108-90-7	Chlorobenzene	50 U
100-41-4	**Ethylbenzene**	**180**
100-42-5	Styrene	50 U
75-69-4	Trichlorofluoromethane	100 U
76-13-1	1,1,2-Trichlorotrifluoroethane	100 U
	m,p-Xylene	**350**

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS

ANALYTICAL RESOURCES INCORPORATED

Sample No: MW-205-11/19/96
DILUTION

Lab Sample ID: Q838E-DL
LIMS ID: 96-19778
Matrix: Water
Data Release Authorized: DLP
Reported: 11/25/96

QC Report No: Q838-Landau Associates, Inc.
Project: Union Station
273008.29
Date Sampled: 11/19/96
Date Received: 11/19/96

Instrument: FINN1
Date Analyzed: 11/21/96

Sample Amount: 0.10 mL
Purge Volume: 5.0 mL

CAS Number	Analyte	ug/L	
95-47-6	**O-Xylene**	**170**	
95-50-1	1,2-Dichlorobenzene	50	U
541-73-1	1,3-Dichlorobenzene	50	U
106-46-7	1,4-Dichlorobenzene	50	U
107-02-8	Acrolein	2500	U
74-88-4	Methyl Iodide	50	U
74-96-4	Bromoethane	100	U
107-13-1	Acrylonitrile	250	U
563-58-6	1,1-Dichloropropene	50	U
74-95-3	Dibromomethane	50	U
630-20-6	1,1,1,2-Tetrachloroethane	50	U
96-12-8	1,2-Dibromo-3-chloropropane	250	U
96-18-4	1,2,3-Trichloropropane	50	U
110-57-6	trans-1,4-Dichloro-2-butene	500	Y
108-67-8	**1,3,5-Trimethylbenzene**	**58**	
95-63-6	**1,2,4-Trimethylbenzene**	**93**	
87-68-3	Hexachlorobutadiene	250	U
106-93-4	Ethylene Dibromide	50	U
74-97-5	Bromochloromethane	50	U
590-20-7	2,2-Dichloropropane	50	U
142-28-9	1,3-Dichloropropane	50	U
98-82-8	Isopropylbenzene	50	U
103-65-1	n-Propylbenzene	50	U
108-86-1	Bromobenzene	50	U
95-49-8	2-Chlorotoluene	50	U
106-43-4	4-Chlorotoluene	50	U
98-06-6	tert-Butylbenzene	50	U
135-98-8	sec-Butylbenzene	50	U
99-87-6	4-Isopropyltoluene	50	U
104-51-8	n-Butylbenzene	50	U
120-82-1	1,2,4-Trichlorobenzene	250	U
91-20-3	**Naphthalene**	**8000**	
87-61-6	1,2,3-Trichlorobenzene	250	U

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	105%
d8-Toluene	97.8%
Bromofluorobenzene	95.9%
d4-1,2-Dichlorobenzene	101%

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS

ANALYTICAL RESOURCES INCORPORATED

Sample No: MW-107-11/19/96

Lab Sample ID: Q838F
LIMS ID: 96-19779
Matrix: Water
Data Release Authorized: MP
Reported: 11/25/96

QC Report No: Q838-Landau Associates, Inc.
Project: Union Station
273008.29
Date Sampled: 11/19/96
Date Received: 11/19/96

Instrument: FINN1
Date Analyzed: 11/20/96

Sample Amount: 5.00 mL
Purge Volume: 5.0 mL

CAS Number	Analyte	ug/L
74-87-3	Chloromethane	2.0 U
74-83-9	Bromomethane	2.0 U
75-01-4	Vinyl Chloride	2.0 U
75-00-3	Chloroethane	2.0 U
75-09-2	Methylene Chloride	2.0 U
67-64-1	**Acetone**	**7.5**
75-15-0	Carbon Disulfide	1.0 U
75-35-4	1,1-Dichloroethene	1.0 U
75-34-3	1,1-Dichloroethane	1.0 U
156-60-5	trans-1,2-Dichloroethene	1.0 U
156-59-2	cis-1,2-Dichloroethene	1.0 U
67-66-3	Chloroform	1.0 U
107-06-2	1,2-Dichloroethane	1.0 U
78-93-3	2-Butanone	5.0 U
71-55-6	1,1,1-Trichloroethane	1.0 U
56-23-5	Carbon Tetrachloride	1.0 U
108-05-4	Vinyl Acetate	5.0 U
75-27-4	Bromodichloromethane	1.0 U
78-87-5	1,2-Dichloropropane	1.0 U
10061-01-5	cis-1,3-Dichloropropene	1.0 U
79-01-6	Trichloroethene	1.0 U
124-48-1	Dibromochloromethane	1.0 U
79-00-5	1,1,2-Trichloroethane	1.0 U
71-43-2	**Benzene**	**2.8**
10061-02-6	trans-1,3-Dichloropropene	1.0 U
110-75-8	2-Chloroethylvinylether	10 Y
75-25-2	Bromoform	1.0 U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0 U
591-78-6	2-Hexanone	5.0 U
127-18-4	Tetrachloroethene	1.0 U
79-34-5	1,1,2,2-Tetrachloroethane	1.0 U
108-88-3	**Toluene**	**6.2**
108-90-7	Chlorobenzene	1.0 U
100-41-4	**Ethylbenzene**	**33**
100-42-5	Styrene	1.0 U
75-69-4	Trichlorofluoromethane	2.0 U
76-13-1	1,1,2-Trichlorotrifluoroethane	2.0 U
	m,p-Xylene	**26**

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS

ANALYTICAL RESOURCES INCORPORATED

Sample No: MW-107-11/19/96

Lab Sample ID: Q838F
LIMS ID: 96-19779
Matrix: Water
Data Release Authorized:
Reported: 11/25/96

QC Report No: Q838-Landau Associates, Inc.
Project: Union Station
273008.29
Date Sampled: 11/19/96
Date Received: 11/19/96

Instrument: FINN1
Date Analyzed: 11/20/96

Sample Amount: 5.00 mL
Purge Volume: 5.0 mL

CAS Number	Analyte	ug/L
95-47-6	**O-Xylene**	**15**
95-50-1	1,2-Dichlorobenzene	1.0 U
541-73-1	1,3-Dichlorobenzene	1.0 U
106-46-7	1,4-Dichlorobenzene	1.0 U
107-02-8	Acrolein	50 U
74-88-4	Methyl Iodide	1.0 U
74-96-4	Bromoethane	2.0 U
107-13-1	Acrylonitrile	5.0 U
563-58-6	1,1-Dichloropropene	1.0 U
74-95-3	Dibromomethane	1.0 U
630-20-6	1,1,1,2-Tetrachloroethane	1.0 U
96-12-8	1,2-Dibromo-3-chloropropane	5.0 U
96-18-4	1,2,3-Trichloropropane	1.0 U
110-57-6	trans-1,4-Dichloro-2-butene	10 Y
108-67-8	1,3,5-Trimethylbenzene	1.0 U
95-63-6	**1,2,4-Trimethylbenzene**	**13**
87-68-3	Hexachlorobutadiene	5.0 U
106-93-4	Ethylene Dibromide	1.0 U
74-97-5	Bromochloromethane	1.0 U
590-20-7	2,2-Dichloropropane	1.0 U
142-28-9	1,3-Dichloropropane	1.0 U
98-82-8	**Isopropylbenzene**	**2.0**
103-65-1	n-Propylbenzene	1.0 U
108-86-1	Bromobenzene	1.0 U
95-49-8	2-Chlorotoluene	1.0 U
106-43-4	4-Chlorotoluene	1.0 U
98-06-6	tert-Butylbenzene	1.0 U
135-98-8	sec-Butylbenzene	1.0 U
99-87-6	**4-Isopropyltoluene**	**1.0**
104-51-8	n-Butylbenzene	1.0 U
120-82-1	1,2,4-Trichlorobenzene	5.0 U
91-20-3	**Naphthalene**	**630 E**
87-61-6	1,2,3-Trichlorobenzene	5.0 U

Volatile Surrogate Recovery	
d4-1,2-Dichloroethane	99.4%
d8-Toluene	97.8%
Bromofluorobenzene	99.7%
d4-1,2-Dichlorobenzene	97.2%

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS

ANALYTICAL RESOURCES INCORPORATED

Sample No: MW-107-11/19/96
DILUTION

Lab Sample ID: Q838F-DL
LIMS ID: 96-19779
Matrix: Water
Data Release Authorized: MP
Reported: 11/25/96

QC Report No: Q838-Landau Associates, Inc.
Project: Union Station
273008.29
Date Sampled: 11/19/96
Date Received: 11/19/96

Instrument: FINN1
Date Analyzed: 11/21/96

Sample Amount: 0.25 mL
Purge Volume: 5.0 mL

CAS Number	Analyte	ug/L
74-87-3	Chloromethane	40 U
74-83-9	Bromomethane	40 U
75-01-4	Vinyl Chloride	40 U
75-00-3	Chloroethane	40 U
75-09-2	Methylene Chloride	40 U
67-64-1	Acetone	100 U
75-15-0	Carbon Disulfide	20 U
75-35-4	1,1-Dichloroethene	20 U
75-34-3	1,1-Dichloroethane	20 U
156-60-5	trans-1,2-Dichloroethene	20 U
156-59-2	cis-1,2-Dichloroethene	20 U
67-66-3	Chloroform	20 U
107-06-2	1,2-Dichloroethane	20 U
78-93-3	2-Butanone	100 U
71-55-6	1,1,1-Trichloroethane	20 U
56-23-5	Carbon Tetrachloride	20 U
108-05-4	Vinyl Acetate	100 U
75-27-4	Bromodichloromethane	20 U
78-87-5	1,2-Dichloropropane	20 U
10061-01-5	cis-1,3-Dichloropropene	20 U
79-01-6	Trichloroethene	20 U
124-48-1	Dibromochloromethane	20 U
79-00-5	1,1,2-Trichloroethane	20 U
71-43-2	Benzene	20 U
10061-02-6	trans-1,3-Dichloropropene	20 U
110-75-8	2-Chloroethylvinylether	200 Y
75-25-2	Bromoform	20 U
108-10-1	4-Methyl-2-Pentanone (MIBK)	100 U
591-78-6	2-Hexanone	100 U
127-18-4	Tetrachloroethene	20 U
79-34-5	1,1,2,2-Tetrachloroethane	20 U
108-88-3	Toluene	20 U
108-90-7	Chlorobenzene	20 U
100-41-4	**Ethylbenzene**	24
100-42-5	Styrene	20 U
75-69-4	Trichlorofluoromethane	40 U
76-13-1	1,1,2-Trichlorotrifluoroethane	40 U
	m,p-Xylene	20 U

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS

ANALYTICAL RESOURCES INCORPORATED

Sample No: MW-107-11/19/96
DILUTION

Lab Sample ID: Q838F-DL
LIMS ID: 96-19779
Matrix: Water
Data Release Authorized: MM
Reported: 11/25/96

QC Report No: Q838-Landau Associates, Inc.
Project: Union Station
273008.29
Date Sampled: 11/19/96
Date Received: 11/19/96

Instrument: FINN1
Date Analyzed: 11/21/96

Sample Amount: 0.25 mL
Purge Volume: 5.0 mL

CAS Number	Analyte	ug/L
95-47-6	O-Xylene	20 U
95-50-1	1,2-Dichlorobenzene	20 U
541-73-1	1,3-Dichlorobenzene	20 U
106-46-7	1,4-Dichlorobenzene	20 U
107-02-8	Acrolein	1000 U
74-88-4	Methyl Iodide	20 U
74-96-4	Bromoethane	40 U
107-13-1	Acrylonitrile	100 U
563-58-6	1,1-Dichloropropene	20 U
74-95-3	Dibromomethane	20 U
630-20-6	1,1,1,2-Tetrachloroethane	20 U
96-12-8	1,2-Dibromo-3-chloropropane	100 U
96-18-4	1,2,3-Trichloropropane	20 U
110-57-6	trans-1,4-Dichloro-2-butene	200 Y
108-67-8	1,3,5-Trimethylbenzene	20 U
95-63-6	1,2,4-Trimethylbenzene	20 U
87-68-3	Hexachlorobutadiene	100 U
106-93-4	Ethylene Dibromide	20 U
74-97-5	Bromochloromethane	20 U
590-20-7	2,2-Dichloropropane	20 U
142-28-9	1,3-Dichloropropane	20 U
98-82-8	Isopropylbenzene	20 U
103-65-1	n-Propylbenzene	20 U
108-86-1	Bromobenzene	20 U
95-49-8	2-Chlorotoluene	20 U
106-43-4	4-Chlorotoluene	20 U
98-06-6	tert-Butylbenzene	20 U
135-98-8	sec-Butylbenzene	20 U
99-87-6	4-Isopropyltoluene	20 U
104-51-8	n-Butylbenzene	20 U
120-82-1	1,2,4-Trichlorobenzene	100 U
91-20-3	**Naphthalene**	1300
87-61-6	1,2,3-Trichlorobenzene	100 U

Volatile Surrogate Recovery	
d4-1,2-Dichloroethane	106%
d8-Toluene	98.1%
Bromofluorobenzene	94.7%
d4-1,2-Dichlorobenzene	104%

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS

ANALYTICAL RESOURCES INCORPORATED

Sample No: Trip Blank

Lab Sample ID: Q838G
LIMS ID: 96-19780
Matrix: Water
Data Release Authorized: PMP
Reported: 11/25/96

QC Report No: Q838-Landau Associates, Inc.
Project: Union Station
273008.29
Date Sampled: 11/14/96
Date Received: 11/19/96

Instrument: FINN1
Date Analyzed: 11/20/96

Sample Amount: 5.00 mL
Purge Volume: 5.0 mL

CAS Number	Analyte	ug/L
74-87-3	Chloromethane	2.0 U
74-83-9	Bromomethane	2.0 U
75-01-4	Vinyl Chloride	2.0 U
75-00-3	Chloroethane	2.0 U
75-09-2	Methylene Chloride	2.0 U
67-64-1	Acetone	5.0 U
75-15-0	Carbon Disulfide	1.0 U
75-35-4	1,1-Dichloroethene	1.0 U
75-34-3	1,1-Dichloroethane	1.0 U
156-60-5	trans-1,2-Dichloroethene	1.0 U
156-59-2	cis-1,2-Dichloroethene	1.0 U
67-66-3	Chloroform	1.0 U
107-06-2	1,2-Dichloroethane	1.0 U
78-93-3	2-Butanone	5.0 U
71-55-6	1,1,1-Trichloroethane	1.0 U
56-23-5	Carbon Tetrachloride	1.0 U
108-05-4	Vinyl Acetate	5.0 U
75-27-4	Bromodichloromethane	1.0 U
78-87-5	1,2-Dichloropropane	1.0 U
10061-01-5	cis-1,3-Dichloropropene	1.0 U
79-01-6	Trichloroethene	1.0 U
124-48-1	Dibromochloromethane	1.0 U
79-00-5	1,1,2-Trichloroethane	1.0 U
71-43-2	Benzene	1.0 U
10061-02-6	trans-1,3-Dichloropropene	1.0 U
110-75-8	2-Chloroethylvinylether	10 Y
75-25-2	Bromoform	1.0 U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0 U
591-78-6	2-Hexanone	5.0 U
127-18-4	Tetrachloroethene	1.0 U
79-34-5	1,1,2,2-Tetrachloroethane	1.0 U
108-88-3	Toluene	1.0 U
108-90-7	Chlorobenzene	1.0 U
100-41-4	Ethylbenzene	1.0 U
100-42-5	Styrene	1.0 U
75-69-4	Trichlorofluoromethane	2.0 U
76-13-1	1,1,2-Trichlorotrifluoroethane	2.0 U
	m,p-Xylene	1.0 U

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS

ANALYTICAL RESOURCES INCORPORATED

Sample No: Trip Blank

Lab Sample ID: Q838G
LIMS ID: 96-19780
Matrix: Water
Data Release Authorized:
Reported: 11/25/96

QC Report No: Q838-Landau Associates, Inc.
Project: Union Station
273008.29
Date Sampled: 11/14/96
Date Received: 11/19/96

Instrument: FINN1
Date Analyzed: 11/20/96

Sample Amount: 5.00 mL
Purge Volume: 5.0 mL

CAS Number	Analyte	ug/L
95-47-6	O-Xylene	1.0 U
95-50-1	1,2-Dichlorobenzene	1.0 U
541-73-1	1,3-Dichlorobenzene	1.0 U
106-46-7	1,4-Dichlorobenzene	1.0 U
107-02-8	Acrolein	50 U
74-88-4	Methyl Iodide	1.0 U
74-96-4	Bromoethane	2.0 U
107-13-1	Acrylonitrile	5.0 U
563-58-6	1,1-Dichloropropene	1.0 U
74-95-3	Dibromomethane	1.0 U
630-20-6	1,1,1,2-Tetrachloroethane	1.0 U
96-12-8	1,2-Dibromo-3-chloropropane	5.0 U
96-18-4	1,2,3-Trichloropropane	1.0 U
110-57-6	trans-1,4-Dichloro-2-butene	10 Y
108-67-8	1,3,5-Trimethylbenzene	1.0 U
95-63-6	1,2,4-Trimethylbenzene	1.0 U
87-68-3	Hexachlorobutadiene	5.0 U
106-93-4	Ethylene Dibromide	1.0 U
74-97-5	Bromochloromethane	1.0 U
590-20-7	2,2-Dichloropropane	1.0 U
142-28-9	1,3-Dichloropropane	1.0 U
98-82-8	Isopropylbenzene	1.0 U
103-65-1	n-Propylbenzene	1.0 U
108-86-1	Bromobenzene	1.0 U
95-49-8	2-Chlorotoluene	1.0 U
106-43-4	4-Chlorotoluene	1.0 U
98-06-6	tert-Butylbenzene	1.0 U
135-98-8	sec-Butylbenzene	1.0 U
99-87-6	4-Isopropyltoluene	1.0 U
104-51-8	n-Butylbenzene	1.0 U
120-82-1	1,2,4-Trichlorobenzene	5.0 U
91-20-3	Naphthalene	5.0 U
87-61-6	1,2,3-Trichlorobenzene	5.0 U

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	107%
d8-Toluene	95.2%
Bromofluorobenzene	93.5%
d4-1,2-Dichlorobenzene	105%

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS

ANALYTICAL RESOURCES INCORPORATED

Sample No: Method Blank

Lab Sample ID: 112196MB
LIMS ID: 96-19774
Matrix: Water
Data Release Authorized:
Reported: 11/25/96

QC Report No: Q838-Landau Associates, Inc.
Project: Union Station
273008.29
Date Sampled: NA
Date Received: NA

Instrument: FINN1
Date Analyzed: 11/21/96

Sample Amount: 5.00 mL
Purge Volume: 5.0 mL

CAS Number	Analyte	ug/L
74-87-3	Chloromethane	2.0 U
74-83-9	Bromomethane	2.0 U
75-01-4	Vinyl Chloride	2.0 U
75-00-3	Chloroethane	2.0 U
75-09-2	Methylene Chloride	2.0 U
67-64-1	Acetone	5.0 U
75-15-0	Carbon Disulfide	1.0 U
75-35-4	1,1-Dichloroethene	1.0 U
75-34-3	1,1-Dichloroethane	1.0 U
156-60-5	trans-1,2-Dichloroethene	1.0 U
156-59-2	cis-1,2-Dichloroethene	1.0 U
67-66-3	Chloroform	1.0 U
107-06-2	1,2-Dichloroethane	1.0 U
78-93-3	2-Butanone	5.0 U
71-55-6	1,1,1-Trichloroethane	1.0 U
56-23-5	Carbon Tetrachloride	1.0 U
108-05-4	Vinyl Acetate	5.0 U
75-27-4	Bromodichloromethane	1.0 U
78-87-5	1,2-Dichloropropane	1.0 U
10061-01-5	cis-1,3-Dichloropropene	1.0 U
79-01-6	Trichloroethene	1.0 U
124-48-1	Dibromochloromethane	1.0 U
79-00-5	1,1,2-Trichloroethane	1.0 U
71-43-2	Benzene	1.0 U
10061-02-6	trans-1,3-Dichloropropene	1.0 U
110-75-8	2-Chloroethylvinylether	10 Y
75-25-2	Bromoform	1.0 U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0 U
591-78-6	2-Hexanone	5.0 U
127-18-4	Tetrachloroethene	1.0 U
79-34-5	1,1,2,2-Tetrachloroethane	1.0 U
108-88-3	Toluene	1.0 U
108-90-7	Chlorobenzene	1.0 U
100-41-4	Ethylbenzene	1.0 U
100-42-5	Styrene	1.0 U
75-69-4	Trichlorofluoromethane	2.0 U
76-13-1	1,1,2-Trichlorotrifluoroethane	2.0 U
	m,p-Xylene	1.0 U

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS

ANALYTICAL RESOURCES INCORPORATED

Sample No: Method Blank

Lab Sample ID: 112196MB
LIMS ID: 96-19774
Matrix: Water
Data Release Authorized: MM
Reported: 11/25/96

QC Report No: Q838-Landau Associates, Inc.
Project: Union Station
273008.29
Date Sampled: NA
Date Received: NA

Instrument: FINN1
Date Analyzed: 11/21/96

Sample Amount: 5.00 mL
Purge Volume: 5.0 mL

CAS Number	Analyte	ug/L
95-47-6	O-Xylene	1.0 U
95-50-1	1,2-Dichlorobenzene	1.0 U
541-73-1	1,3-Dichlorobenzene	1.0 U
106-46-7	1,4-Dichlorobenzene	1.0 U
107-02-8	Acrolein	50 U
74-88-4	Methyl Iodide	1.0 U
74-96-4	Bromoethane	2.0 U
107-13-1	Acrylonitrile	5.0 U
563-58-6	1,1-Dichloropropene	1.0 U
74-95-3	Dibromomethane	1.0 U
630-20-6	1,1,1,2-Tetrachloroethane	1.0 U
96-12-8	1,2-Dibromo-3-chloropropane	5.0 U
96-18-4	1,2,3-Trichloropropane	1.0 U
110-57-6	trans-1,4-Dichloro-2-butene	10 Y
108-67-8	1,3,5-Trimethylbenzene	1.0 U
95-63-6	1,2,4-Trimethylbenzene	1.0 U
87-68-3	Hexachlorobutadiene	5.0 U
106-93-4	Ethylene Dibromide	1.0 U
74-97-5	Bromochloromethane	1.0 U
590-20-7	2,2-Dichloropropane	1.0 U
142-28-9	1,3-Dichloropropane	1.0 U
98-82-8	Isopropylbenzene	1.0 U
103-65-1	n-Propylbenzene	1.0 U
108-86-1	Bromobenzene	1.0 U
95-49-8	2-Chlorotoluene	1.0 U
106-43-4	4-Chlorotoluene	1.0 U
98-06-6	tert-Butylbenzene	1.0 U
135-98-8	sec-Butylbenzene	1.0 U
99-87-6	4-Isopropyltoluene	1.0 U
104-51-8	n-Butylbenzene	1.0 U
120-82-1	1,2,4-Trichlorobenzene	5.0 U
91-20-3	Naphthalene	5.0 U
87-61-6	1,2,3-Trichlorobenzene	5.0 U

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	106%
d8-Toluene	96.6%
Bromofluorobenzene	97.4%
d4-1,2-Dichlorobenzene	104%

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS

ANALYTICAL RESOURCES INCORPORATED

Sample No: Method Blank

Lab Sample ID: 112096MB
LIMS ID: 96-19775
Matrix: Water
Data Release Authorized: MP
Reported: 11/25/96

QC Report No: Q838-Landau Associates, Inc.
Project: Union Station
273008.29
Date Sampled: NA
Date Received: NA

Instrument: FINN1
Date Analyzed: 11/20/96

Sample Amount: 5.00 mL
Purge Volume: 5.0 mL

CAS Number	Analyte	ug/L
74-87-3	Chloromethane	2.0 U
74-83-9	Bromomethane	2.0 U
75-01-4	Vinyl Chloride	2.0 U
75-00-3	Chloroethane	2.0 U
75-09-2	Methylene Chloride	2.0 U
67-64-1	Acetone	5.0 U
75-15-0	Carbon Disulfide	1.0 U
75-35-4	1,1-Dichloroethene	1.0 U
75-34-3	1,1-Dichloroethane	1.0 U
156-60-5	trans-1,2-Dichloroethene	1.0 U
156-59-2	cis-1,2-Dichloroethene	1.0 U
67-66-3	Chloroform	1.0 U
107-06-2	1,2-Dichloroethane	1.0 U
78-93-3	2-Butanone	5.0 U
71-55-6	1,1,1-Trichloroethane	1.0 U
56-23-5	Carbon Tetrachloride	1.0 U
108-05-4	Vinyl Acetate	5.0 U
75-27-4	Bromodichloromethane	1.0 U
78-87-5	1,2-Dichloropropane	1.0 U
10061-01-5	cis-1,3-Dichloropropene	1.0 U
79-01-6	Trichloroethene	1.0 U
124-48-1	Dibromochloromethane	1.0 U
79-00-5	1,1,2-Trichloroethane	1.0 U
71-43-2	Benzene	1.0 U
10061-02-6	trans-1,3-Dichloropropene	1.0 U
110-75-8	2-Chloroethylvinylether	10 Y
75-25-2	Bromoform	1.0 U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0 U
591-78-6	2-Hexanone	5.0 U
127-18-4	Tetrachloroethene	1.0 U
79-34-5	1,1,2,2-Tetrachloroethane	1.0 U
108-88-3	Toluene	1.0 U
108-90-7	Chlorobenzene	1.0 U
100-41-4	Ethylbenzene	1.0 U
100-42-5	Styrene	1.0 U
75-69-4	Trichlorofluoromethane	2.0 U
76-13-1	1,1,2-Trichlorotrifluoroethane	2.0 U
	m,p-Xylene	1.0 U

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS

ANALYTICAL RESOURCES INCORPORATED

Sample No: Method Blank

Lab Sample ID: 112096MB
LIMS ID: 96-19775
Matrix: Water
Data Release Authorized: MP
Reported: 11/25/96

QC Report No: Q838-Landau Associates, Inc.
Project: Union Station
273008.29
Date Sampled: NA
Date Received: NA

Instrument: FINN1
Date Analyzed: 11/20/96

Sample Amount: 5.00 mL
Purge Volume: 5.0 mL

CAS Number	Analyte	ug/L
95-47-6	O-Xylene	1.0 U
95-50-1	1,2-Dichlorobenzene	1.0 U
541-73-1	1,3-Dichlorobenzene	1.0 U
106-46-7	1,4-Dichlorobenzene	1.0 U
107-02-8	Acrolein	50 U
74-88-4	Methyl Iodide	1.0 U
74-96-4	Bromoethane	2.0 U
107-13-1	Acrylonitrile	5.0 U
563-58-6	1,1-Dichloropropene	1.0 U
74-95-3	Dibromomethane	1.0 U
630-20-6	1,1,1,2-Tetrachloroethane	1.0 U
96-12-8	1,2-Dibromo-3-chloropropane	5.0 U
96-18-4	1,2,3-Trichloropropane	1.0 U
110-57-6	trans-1,4-Dichloro-2-butene	10 Y
108-67-8	1,3,5-Trimethylbenzene	1.0 U
95-63-6	1,2,4-Trimethylbenzene	1.0 U
87-68-3	Hexachlorobutadiene	5.0 U
106-93-4	Ethylene Dibromide	1.0 U
74-97-5	Bromochloromethane	1.0 U
590-20-7	2,2-Dichloropropane	1.0 U
142-28-9	1,3-Dichloropropane	1.0 U
98-82-8	Isopropylbenzene	1.0 U
103-65-1	n-Propylbenzene	1.0 U
108-86-1	Bromobenzene	1.0 U
95-49-8	2-Chlorotoluene	1.0 U
106-43-4	4-Chlorotoluene	1.0 U
98-06-6	tert-Butylbenzene	1.0 U
135-98-8	sec-Butylbenzene	1.0 U
99-87-6	4-Isopropyltoluene	1.0 U
104-51-8	n-Butylbenzene	1.0 U
120-82-1	1,2,4-Trichlorobenzene	5.0 U
91-20-3	Naphthalene	5.0 U
87-61-6	1,2,3-Trichlorobenzene	5.0 U

Volatile Surrogate Recovery	
d4-1,2-Dichloroethane	103%
d8-Toluene	94.3%
Bromofluorobenzene	95.0%
d4-1,2-Dichlorobenzene	102%

ANALYTICAL
RESOURCES
INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by GC/MS

Lab Sample ID: Q838F
LIMS ID: 96-19779
Matrix: Water

Sample No: MW-107-11/19/96
QC Report No: Q838-Landau Associates, Inc.
Project: Union Station
273008.29
Date Received: 11/19/96

Data Release Authorized: [signature]
Reported: 11/25/96

MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY
Date Analyzed: 11/21/96

CONSTITUENT	SAMPLE VALUE	SPIKE VALUE	SPIKE AMT	% RECOVERY	RPD
MATRIX SPIKE					
Chloromethane	< 2.0	1120	1000	112%	
Bromomethane	< 2.0	933	1000	93.3%	
Vinyl Chloride	< 2.0	1150	1000	115%	
Chloroethane	< 2.0	870	1000	87.0%	
Methylene Chloride	< 2.0	984	1000	98.4%	
Acetone	7.5	5560	5000	111%	
Carbon Disulfide	< 1.0	790	1000	79.0%	
1,1-Dichloroethene	< 1.0	909	1000	90.9%	
1,1-Dichloroethane	< 1.0	1000	1000	100%	
trans-1,2-Dichloroethene	< 1.0	948	1000	94.8%	
cis-1,2-Dichloroethene	< 1.0	1040	1000	104%	
Chloroform	< 1.0	1020	1000	102%	
1,2-Dichloroethane	< 1.0	984	1000	98.4%	
2-Butanone	< 5.0	5490	5000	110%	
1,1,1-Trichloroethane	< 1.0	1010	1000	101%	
Carbon Tetrachloride	< 1.0	999	1000	99.9%	
Vinyl Acetate	< 5.0	988	1000	98.8%	
Bromodichloromethane	< 1.0	1030	1000	103%	
1,2-Dichloropropane	< 1.0	1030	1000	103%	
cis-1,3-Dichloropropene	< 1.0	1010	1000	101%	
Trichloroethene	< 1.0	959	1000	95.9%	
Dibromochloromethane	< 1.0	1020	1000	102%	
1,1,2-Trichloroethane	< 1.0	1030	1000	103%	
Benzene	2.8	1010	1000	101%	
trans-1,3-Dichloropropene	< 1.0	997	1000	99.7%	
2-Chloroethylvinylether	< 10.0	166	1000	16.6%	
Bromoform	< 1.0	1040	1000	104%	
4-Methyl-2-Pentanone (MIBK)	< 5.0	5320	5000	106%	
2-Hexanone	< 5.0	5410	5000	108%	
Tetrachloroethene	< 1.0	974	1000	97.4%	
1,1,2,2-Tetrachloroethane	< 1.0	1120	1000	112%	
Toluene	6.2	1020	1000	101%	
Chlorobenzene	< 1.0	1010	1000	101%	
Ethylbenzene	33.2	1030	1000	99.7%	
Styrene	< 1.0	1030	1000	103%	
Trichlorofluoromethane	< 2.0	782	1000	78.2%	

Reported in ug/L

ANALYTICAL
RESOURCES
INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by GC/MS

Lab Sample ID: Q838F
LIMS ID: 96-19779
Matrix: Water

Sample No: MW-107-11/19/96
QC Report No: Q838-Landau Associates, Inc.
Project: Union Station
273008.29
Date Received: 11/19/96

Data Release Authorized: MAP
Reported: 11/25/96

MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY
Date Analyzed: 11/21/96

CONSTITUENT	SAMPLE VALUE	SPIKE VALUE	SPIKE AMT	% RECOVERY	RPD
MATRIX SPIKE					
1,1,2-Trichlorotrifluoroethane	< 2.0	763	1000	76.3%	
m,p-Xylene	26.0	2010	2000	99.2%	
O-Xylene	14.7	1020	1000	101%	
1,2-Dichlorobenzene	< 1.0	981	1000	98.1%	
1,3-Dichlorobenzene	< 1.0	961	1000	96.1%	
1,4-Dichlorobenzene	< 1.0	974	1000	97.4%	
Acrolein	< 50.0	10200	5000	204%	
Methyl Iodide	< 1.0	924	1000	92.4%	
Bromoethane	< 2.0	851	1000	85.1%	
Acrylonitrile	< 5.0	944	1000	94.4%	
1,1-Dichloropropene	< 1.0	997	1000	99.7%	
Dibromomethane	< 1.0	1020	1000	102%	
1,1,1,2-Tetrachloroethane	< 1.0	1010	1000	101%	
1,2-Dibromo-3-chloropropane	< 5.0	1000	1000	100%	
1,2,3-Trichloropropane	< 1.0	1010	1000	101%	
trans-1,4-Dichloro-2-butene	< 10.0	953	1000	95.3%	
1,3,5-Trimethylbenzene	< 1.0	971	1000	97.1%	
1,2,4-Trimethylbenzene	12.9	977	1000	96.4%	
Hexachlorobutadiene	< 5.0	816	1000	81.6%	
Ethylene Dibromide	< 1.0	1010	1000	101%	
Bromochloromethane	< 1.0	1040	1000	104%	
2,2-Dichloropropane	< 1.0	917	1000	91.7%	
1,3-Dichloropropane	< 1.0	1020	1000	102%	
Isopropylbenzene	2.0	1080	1000	108%	
n-Propylbenzene	< 1.0	945	1000	94.5%	
Bromobenzene	< 1.0	1000	1000	100%	
2-Chlorotoluene	< 1.0	887	1000	88.7%	
4-Chlorotoluene	< 1.0	1030	1000	103%	
tert-Butylbenzene	< 1.0	977	1000	97.7%	
sec-Butylbenzene	< 1.0	929	1000	92.9%	
4-Isopropyltoluene	1.0	955	1000	95.4%	
n-Butylbenzene	< 1.0	894	1000	89.4%	
1,2,4-Trichlorobenzene	< 5.0	1000	1000	100%	
Naphthalene	632.	2130	1000	150%	
1,2,3-Trichlorobenzene	< 5.0	1010	1000	101%	

Reported in ug/L

ANALYTICAL
RESOURCES
INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by GC/MS

Lab Sample ID: Q838F
LIMS ID: 96-19779
Matrix: Water

Sample No: MW-107-11/19/96
QC Report No: Q838-Landau Associates, Inc.
Project: Union Station
273008.29
Date Received: 11/19/96

Data Release Authorized: MBP
Reported: 11/25/96

MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY
Date Analyzed: 11/21/96

CONSTITUENT	SAMPLE VALUE	SPIKE VALUE	SPIKE AMT	% RECOVERY	RPD
MATRIX SPIKE DUPLICATE					
Chloromethane	< 2.0	1170	1000	117%	4.4%
Bromomethane	< 2.0	926	1000	92.6%	0.8%
Vinyl Chloride	< 2.0	1110	1000	111%	3.5%
Chloroethane	< 2.0	866	1000	86.6%	0.5%
Methylene Chloride	< 2.0	1040	1000	104%	5.5%
Acetone	7.5	5280	5000	105%	5.6%
Carbon Disulfide	< 1.0	829	1000	82.9%	4.8%
1,1-Dichloroethene	< 1.0	946	1000	94.6%	4.0%
1,1-Dichloroethane	< 1.0	1070	1000	107%	6.8%
trans-1,2-Dichloroethene	< 1.0	1010	1000	101%	6.3%
cis-1,2-Dichloroethene	< 1.0	1100	1000	110%	5.6%
Chloroform	< 1.0	1110	1000	111%	8.5%
1,2-Dichloroethane	< 1.0	1040	1000	104%	5.5%
2-Butanone	< 5.0	5600	5000	112%	2.0%
1,1,1-Trichloroethane	< 1.0	1080	1000	108%	6.7%
Carbon Tetrachloride	< 1.0	1100	1000	110%	9.6%
Vinyl Acetate	< 5.0	966	1000	96.6%	2.3%
Bromodichloromethane	< 1.0	1080	1000	108%	4.7%
1,2-Dichloropropane	< 1.0	1090	1000	109%	5.7%
cis-1,3-Dichloropropene	< 1.0	1060	1000	106%	4.8%
Trichloroethene	< 1.0	1020	1000	102%	6.2%
Dibromochloromethane	< 1.0	1100	1000	110%	7.5%
1,1,2-Trichloroethane	< 1.0	1100	1000	110%	6.6%
Benzene	2.8	1070	1000	107%	6.0%
trans-1,3-Dichloropropene	< 1.0	1070	1000	107%	7.1%
2-Chloroethylvinylether	< 10.0	202	1000	20.2%	20%
Bromoform	< 1.0	1120	1000	112%	7.4%
4-Methyl-2-Pentanone (MIBK)	< 5.0	5590	5000	112%	5.1%
2-Hexanone	< 5.0	5710	5000	114%	5.2%
Tetrachloroethene	< 1.0	1030	1000	103%	5.6%
1,1,2,2-Tetrachloroethane	< 1.0	1200	1000	120%	6.9%
Toluene	6.2	1080	1000	107%	5.4%
Chlorobenzene	< 1.0	1070	1000	107%	5.8%
Ethylbenzene	33.2	1090	1000	106%	6.1%
Styrene	< 1.0	1080	1000	108%	4.7%
Trichlorofluoromethane	< 2.0	822	1000	82.2%	5.0%

Reported in ug/L

ORGANICS ANALYSIS DATA SHEET
Volatiles by GC/MS

ANALYTICAL RESOURCES INCORPORATED

Lab Sample ID: Q838F
LIMS ID: 96-19779
Matrix: Water

Sample No: MW-107-11/19/96
QC Report No: Q838-Landau Associates, Inc.
Project: Union Station
273008.29
Date Received: 11/19/96

Data Release Authorized: DAP
Reported: 11/25/96

MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY
Date Analyzed: 11/21/96

CONSTITUENT	SAMPLE VALUE	SPIKE VALUE	SPIKE AMT	% RECOVERY	RPD
MATRIX SPIKE DUPLICATE					
1,1,2-Trichlorotrifluoroethane	< 2.0	838	1000	83.8%	9.4%
m,p-Xylene	26.0	2170	2000	107%	7.6%
O-Xylene	14.7	1090	1000	108%	7.2%
1,2-Dichlorobenzene	< 1.0	1050	1000	105%	6.8%
1,3-Dichlorobenzene	< 1.0	1040	1000	104%	7.9%
1,4-Dichlorobenzene	< 1.0	1040	1000	104%	6.6%
Acrolein	< 50.0	9780	5000	196%	4.0%
Methyl Iodide	< 1.0	929	1000	92.9%	0.5%
Bromoethane	< 2.0	899	1000	89.9%	5.5%
Acrylonitrile	< 5.0	934	1000	93.4%	1.1%
1,1-Dichloropropene	< 1.0	1040	1000	104%	4.2%
Dibromomethane	< 1.0	1070	1000	107%	4.8%
1,1,1,2-Tetrachloroethane	< 1.0	1070	1000	107%	5.8%
1,2-Dibromo-3-chloropropane	< 5.0	1090	1000	109%	8.6%
1,2,3-Trichloropropane	< 1.0	1080	1000	108%	6.7%
trans-1,4-Dichloro-2-butene	< 10.0	1010	1000	101%	5.8%
1,3,5-Trimethylbenzene	< 1.0	1040	1000	104%	6.9%
1,2,4-Trimethylbenzene	12.9	1060	1000	105%	8.5%
Hexachlorobutadiene	< 5.0	959	1000	95.9%	16%
Ethylene Dibromide	< 1.0	1070	1000	107%	5.8%
Bromochloromethane	< 1.0	1080	1000	108%	3.8%
2,2-Dichloropropane	< 1.0	994	1000	99.4%	8.1%
1,3-Dichloropropane	< 1.0	1080	1000	108%	5.7%
Isopropylbenzene	2.0	1160	1000	116%	7.3%
n-Propylbenzene	< 1.0	1010	1000	101%	6.6%
Bromobenzene	< 1.0	1080	1000	108%	7.7%
2-Chlorotoluene	< 1.0	1060	1000	106%	18%
4-Chlorotoluene	< 1.0	1010	1000	101%	2.0%
tert-Butylbenzene	< 1.0	1190	1000	119%	20%
sec-Butylbenzene	< 1.0	1020	1000	102%	9.3%
4-Isopropyltoluene	1.0	1040	1000	104%	8.6%
n-Butylbenzene	< 1.0	994	1000	99.4%	11%
1,2,4-Trichlorobenzene	< 5.0	1060	1000	106%	5.8%
Naphthalene	632.	2120	1000	149%	0.5%
1,2,3-Trichlorobenzene	< 5.0	1030	1000	103%	2.0%

Reported in ug/L

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS

ANALYTICAL RESOURCES INCORPORATED

Sample No: MW-107-11/19/96
MATRIX SPIKE

Lab Sample ID: Q838F-MS
LIMS ID: 96-19779
Matrix: Water
Data Release Authorized: MP
Reported: 11/25/96

QC Report No: Q838-Landau Associates, Inc.
Project: Union Station
273008.29
Date Sampled: 11/19/96
Date Received: 11/19/96

Instrument: FINN1
Date Analyzed: 11/21/96

Sample Amount: 0.25 mL
Purge Volume: 5.0 mL

CAS Number	Analyte	ug/L
74-87-3	Chloromethane	---
74-83-9	Bromomethane	---
75-01-4	Vinyl Chloride	---
75-00-3	Chloroethane	---
75-09-2	Methylene Chloride	---
67-64-1	Acetone	---
75-15-0	Carbon Disulfide	---
75-35-4	1,1-Dichloroethene	---
75-34-3	1,1-Dichloroethane	---
156-60-5	trans-1,2-Dichloroethene	---
156-59-2	cis-1,2-Dichloroethene	---
67-66-3	Chloroform	---
107-06-2	1,2-Dichloroethane	---
78-93-3	2-Butanone	---
71-55-6	1,1,1-Trichloroethane	---
56-23-5	Carbon Tetrachloride	---
108-05-4	Vinyl Acetate	---
75-27-4	Bromodichloromethane	---
78-87-5	1,2-Dichloropropane	---
10061-01-5	cis-1,3-Dichloropropene	---
79-01-6	Trichloroethene	---
124-48-1	Dibromochloromethane	---
79-00-5	1,1,2-Trichloroethane	---
71-43-2	Benzene	---
10061-02-6	trans-1,3-Dichloropropene	---
110-75-8	2-Chloroethylvinylether	---
75-25-2	Bromoform	---
108-10-1	4-Methyl-2-Pentanone (MIBK)	---
591-78-6	2-Hexanone	---
127-18-4	Tetrachloroethene	---
79-34-5	1,1,2,2-Tetrachloroethane	---
108-88-3	Toluene	---
108-90-7	Chlorobenzene	---
100-41-4	Ethylbenzene	---
100-42-5	Styrene	---
75-69-4	Trichlorofluoromethane	---
76-13-1	1,1,2-Trichlorotrifluoroethane	---
	m,p-Xylene	---

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS

ANALYTICAL RESOURCES INCORPORATED

Sample No: MW-107-11/19/96
MATRIX SPIKE

Lab Sample ID: Q838F-MS
LIMS ID: 96-19779
Matrix: Water
Data Release Authorized: MSP
Reported: 11/25/96

QC Report No: Q838-Landau Associates, Inc.
Project: Union Station
273008.29
Date Sampled: 11/19/96
Date Received: 11/19/96

Instrument: FINN1
Date Analyzed: 11/21/96

Sample Amount: 0.25 mL
Purge Volume: 5.0 mL

CAS Number	Analyte	ug/L
95-47-6	O-Xylene	---
95-50-1	1,2-Dichlorobenzene	---
541-73-1	1,3-Dichlorobenzene	---
106-46-7	1,4-Dichlorobenzene	---
107-02-8	Acrolein	---
74-88-4	Methyl Iodide	---
74-96-4	Bromoethane	---
107-13-1	Acrylonitrile	---
563-58-6	1,1-Dichloropropene	---
74-95-3	Dibromomethane	---
630-20-6	1,1,1,2-Tetrachloroethane	---
96-12-8	1,2-Dibromo-3-chloropropane	---
96-18-4	1,2,3-Trichloropropane	---
110-57-6	trans-1,4-Dichloro-2-butene	---
108-67-8	1,3,5-Trimethylbenzene	---
95-63-6	1,2,4-Trimethylbenzene	---
87-68-3	Hexachlorobutadiene	---
106-93-4	Ethylene Dibromide	---
74-97-5	Bromochloromethane	---
590-20-7	2,2-Dichloropropane	---
142-28-9	1,3-Dichloropropane	---
98-82-8	Isopropylbenzene	---
103-65-1	n-Propylbenzene	---
108-86-1	Bromobenzene	---
95-49-8	2-Chlorotoluene	---
106-43-4	4-Chlorotoluene	---
98-06-6	tert-Butylbenzene	---
135-98-8	sec-Butylbenzene	---
99-87-6	4-Isopropyltoluene	---
104-51-8	n-Butylbenzene	---
120-82-1	1,2,4-Trichlorobenzene	---
91-20-3	Naphthalene	---
87-61-6	1,2,3-Trichlorobenzene	---

Volatile Surrogate Recovery	
d4-1,2-Dichloroethane	100%
d8-Toluene	102%
Bromofluorobenzene	102%
d4-1,2-Dichlorobenzene	101%

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS

ANALYTICAL RESOURCES INCORPORATED

Sample No: MW-107-11/19/96 SPIKE DUPLICATE

Lab Sample ID: Q838F-MSD
LIMS ID: 96-19779
Matrix: Water
Data Release Authorized: JBP
Reported: 11/25/96

QC Report No: Q838-Landau Associates, Inc.
Project: Union Station 273008.29
Date Sampled: 11/19/96
Date Received: 11/19/96

Instrument: FINN1
Date Analyzed: 11/21/96

Sample Amount: 0.25 mL
Purge Volume: 5.0 mL

CAS Number	Analyte	ug/L
74-87-3	Chloromethane	---
74-83-9	Bromomethane	---
75-01-4	Vinyl Chloride	---
75-00-3	Chloroethane	---
75-09-2	Methylene Chloride	---
67-64-1	Acetone	---
75-15-0	Carbon Disulfide	---
75-35-4	1,1-Dichloroethene	---
75-34-3	1,1-Dichloroethane	---
156-60-5	trans-1,2-Dichloroethene	---
156-59-2	cis-1,2-Dichloroethene	---
67-66-3	Chloroform	---
107-06-2	1,2-Dichloroethane	---
78-93-3	2-Butanone	---
71-55-6	1,1,1-Trichloroethane	---
56-23-5	Carbon Tetrachloride	---
108-05-4	Vinyl Acetate	---
75-27-4	Bromodichloromethane	---
78-87-5	1,2-Dichloropropane	---
10061-01-5	cis-1,3-Dichloropropene	---
79-01-6	Trichloroethene	---
124-48-1	Dibromochloromethane	---
79-00-5	1,1,2-Trichloroethane	---
71-43-2	Benzene	---
10061-02-6	trans-1,3-Dichloropropene	---
110-75-8	2-Chloroethylvinylether	---
75-25-2	Bromoform	---
108-10-1	4-Methyl-2-Pentanone (MIBK)	---
591-78-6	2-Hexanone	---
127-18-4	Tetrachloroethene	---
79-34-5	1,1,2,2-Tetrachloroethane	---
108-88-3	Toluene	---
108-90-7	Chlorobenzene	---
100-41-4	Ethylbenzene	---
100-42-5	Styrene	---
75-69-4	Trichlorofluoromethane	---
76-13-1	1,1,2-Trichlorotrifluoroethane	---
	m,p-Xylene	---

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS

ANALYTICAL RESOURCES INCORPORATED

Sample No: MW-107-11/19/96
SPIKE DUPLICATE

Lab Sample ID: Q838F-MSD
LIMS ID: 96-19779
Matrix: Water
Data Release Authorized: MSP
Reported: 11/25/96

QC Report No: Q838-Landau Associates, Inc.
Project: Union Station
273008.29
Date Sampled: 11/19/96
Date Received: 11/19/96

Instrument: FINN1
Date Analyzed: 11/21/96

Sample Amount: 0.25 mL
Purge Volume: 5.0 mL

CAS Number	Analyte	ug/L
95-47-6	O-Xylene	---
95-50-1	1,2-Dichlorobenzene	---
541-73-1	1,3-Dichlorobenzene	---
106-46-7	1,4-Dichlorobenzene	---
107-02-8	Acrolein	---
74-88-4	Methyl Iodide	---
74-96-4	Bromoethane	---
107-13-1	Acrylonitrile	---
563-58-6	1,1-Dichloropropene	---
74-95-3	Dibromomethane	---
630-20-6	1,1,1,2-Tetrachloroethane	---
96-12-8	1,2-Dibromo-3-chloropropane	---
96-18-4	1,2,3-Trichloropropane	---
110-57-6	trans-1,4-Dichloro-2-butene	---
108-67-8	1,3,5-Trimethylbenzene	---
95-63-6	1,2,4-Trimethylbenzene	---
87-68-3	Hexachlorobutadiene	---
106-93-4	Ethylene Dibromide	---
74-97-5	Bromochloromethane	---
590-20-7	2,2-Dichloropropane	---
142-28-9	1,3-Dichloropropane	---
98-82-8	Isopropylbenzene	---
103-65-1	n-Propylbenzene	---
108-86-1	Bromobenzene	---
95-49-8	2-Chlorotoluene	---
106-43-4	4-Chlorotoluene	---
98-06-6	tert-Butylbenzene	---
135-98-8	sec-Butylbenzene	---
99-87-6	4-Isopropyltoluene	---
104-51-8	n-Butylbenzene	---
120-82-1	1,2,4-Trichlorobenzene	---
91-20-3	Naphthalene	---
87-61-6	1,2,3-Trichlorobenzene	---

Volatile Surrogate Recovery	
d4-1,2-Dichloroethane	102%
d8-Toluene	102%
Bromofluorobenzene	102%
d4-1,2-Dichlorobenzene	101%

ANALYTICAL
RESOURCES
INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by GC/MS

Lab Sample ID: Q838SB
LIMS ID: 96-19774
Matrix: Water
Data Release Authorized: MB/
Reported: 11/25/96
Date Analyzed: 11/21/96
Instrument: FINN1

QC Report No: Q838-Landau Associates, Inc.
Project: Union Station
273008.29
Date Received: 11/19/96

LABORATORY CONTROL SAMPLE CONSTITUENT	SPIKE VALUE	SPIKE AMT	% RECOVERY
Chloromethane	53.7	50.0	107%
Bromomethane	48.9	50.0	97.8%
Vinyl Chloride	52.9	50.0	106%
Chloroethane	46.6	50.0	93.2%
Methylene Chloride	45.9	50.0	91.8%
Acetone	261.	250	104%
Carbon Disulfide	40.0	50.0	80.0%
1,1-Dichloroethene	44.3	50.0	88.6%
1,1-Dichloroethane	47.0	50.0	94.0%
trans-1,2-Dichloroethene	45.4	50.0	90.8%
cis-1,2-Dichloroethene	47.8	50.0	95.6%
Chloroform	47.7	50.0	95.4%
1,2-Dichloroethane	46.0	50.0	92.0%
2-Butanone	252.	250	101%
1,1,1-Trichloroethane	46.3	50.0	92.6%
Carbon Tetrachloride	46.7	50.0	93.4%
Vinyl Acetate	45.8	50.0	91.6%
Bromodichloromethane	47.9	50.0	95.8%
1,2-Dichloropropane	48.4	50.0	96.8%
cis-1,3-Dichloropropene	48.8	50.0	97.6%
Trichloroethene	46.9	50.0	93.8%
Dibromochloromethane	48.9	50.0	97.8%
1,1,2-Trichloroethane	47.7	50.0	95.4%
Benzene	47.7	50.0	95.4%
trans-1,3-Dichloropropene	47.4	50.0	94.8%
2-Chloroethylvinylether	34.9	50.0	69.8%
Bromoform	49.9	50.0	99.8%
4-Methyl-2-Pentanone (MIBK)	260.	250	104%
2-Hexanone	263.	250	105%
Tetrachloroethene	47.6	50.0	95.2%
1,1,2,2-Tetrachloroethane	48.8	50.0	97.6%
Toluene	47.7	50.0	95.4%
Chlorobenzene	47.5	50.0	95.0%
Ethylbenzene	48.1	50.0	96.2%
Styrene	48.2	50.0	96.4%
Trichlorofluoromethane	41.8	50.0	83.6%
1,1,2-Trichlorotrifluoroethane	43.2	50.0	86.4%
m,p-Xylene	95.7	100	95.7%
O-Xylene	47.8	50.0	95.6%

Reported in ug/L

ORGANICS ANALYSIS DATA SHEET
Volatiles by GC/MS

ANALYTICAL RESOURCES INCORPORATED

Lab Sample ID: Q838SB
LIMS ID: 96-19774
Matrix: Water
Data Release Authorized: MP
Reported: 11/25/96
Date Analyzed: 11/21/96
Instrument: FINN1

QC Report No: Q838-Landau Associates, Inc.
Project: Union Station
273008.29
Date Received: 11/19/96

LABORATORY CONTROL SAMPLE CONSTITUENT	SPIKE VALUE	SPIKE AMT	% RECOVERY
1,2-Dichlorobenzene	47.4	50.0	94.8%
1,3-Dichlorobenzene	47.4	50.0	94.8%
1,4-Dichlorobenzene	47.9	50.0	95.8%
Acrolein	487.	250	195%
Methyl Iodide	45.7	50.0	91.4%
Bromoethane	43.2	50.0	86.4%
Acrylonitrile	48.1	50.0	96.2%
1,1-Dichloropropene	47.8	50.0	95.6%
Dibromomethane	48.4	50.0	96.8%
1,1,1,2-Tetrachloroethane	46.7	50.0	93.4%
1,2-Dibromo-3-chloropropane	49.9	50.0	99.8%
1,2,3-Trichloropropane	47.7	50.0	95.4%
trans-1,4-Dichloro-2-butene	50.8	50.0	102%
1,3,5-Trimethylbenzene	46.7	50.0	93.4%
1,2,4-Trimethylbenzene	48.0	50.0	96.0%
Hexachlorobutadiene	47.3	50.0	94.6%
Ethylene Dibromide	46.9	50.0	93.8%
Bromochloromethane	47.9	50.0	95.8%
2,2-Dichloropropane	46.3	50.0	92.6%
1,3-Dichloropropane	48.2	50.0	96.4%
Isopropylbenzene	52.6	50.0	105%
n-Propylbenzene	46.7	50.0	93.4%
Bromobenzene	47.9	50.0	95.8%
2-Chlorotoluene	47.9	50.0	95.8%
4-Chlorotoluene	45.4	50.0	90.8%
tert-Butylbenzene	53.7	50.0	107%
sec-Butylbenzene	46.8	50.0	93.6%
4-Isopropyltoluene	48.7	50.0	97.4%
n-Butylbenzene	47.5	50.0	95.0%
1,2,4-Trichlorobenzene	49.9	50.0	99.8%
Naphthalene	51.5	50.0	103%
1,2,3-Trichlorobenzene	50.3	50.0	101%

Spike Blank Surrogate Recovery	
d4-1,2-Dichloroethane	99.5%
d8-Toluene	99.7%
Bromofluorobenzene	102%
d4-1,2-Dichlorobenzene	101%

Reported in ug/L

ORGANICS ANALYSIS DATA SHEET
Volatiles by GC/MS

ANALYTICAL RESOURCES INCORPORATED

Lab Sample ID: Q838SB
LIMS ID: 96-19775
Matrix: Water
Data Release Authorized: MBF
Reported: 11/25/96
Date Analyzed: 11/20/96
Instrument: FINN1

QC Report No: Q838-Landau Associates, Inc.
Project: Union Station
273008.29
Date Received: 11/19/96

LABORATORY CONTROL SAMPLE CONSTITUENT	SPIKE VALUE	SPIKE AMT	% RECOVERY
Chloromethane	21.2	50.0	42.4%
Bromomethane	44.8	50.0	89.6%
Vinyl Chloride	25.3	50.0	50.6%
Chloroethane	46.1	50.0	92.2%
Methylene Chloride	46.4	50.0	92.8%
Acetone	314.	250	126%
Carbon Disulfide	50.4	50.0	101%
1,1-Dichloroethene	42.9	50.0	85.8%
1,1-Dichloroethane	46.6	50.0	93.2%
trans-1,2-Dichloroethene	46.2	50.0	92.4%
cis-1,2-Dichloroethene	47.8	50.0	95.6%
Chloroform	47.7	50.0	95.4%
1,2-Dichloroethane	48.5	50.0	97.0%
2-Butanone	264.	250	106%
1,1,1-Trichloroethane	45.2	50.0	90.4%
Carbon Tetrachloride	45.9	50.0	91.8%
Vinyl Acetate	50.8	50.0	102%
Bromodichloromethane	49.3	50.0	98.6%
1,2-Dichloropropane	50.2	50.0	100%
cis-1,3-Dichloropropene	51.5	50.0	103%
Trichloroethene	48.2	50.0	96.4%
Dibromochloromethane	50.2	50.0	100%
1,1,2-Trichloroethane	48.5	50.0	97.0%
Benzene	46.6	50.0	93.2%
trans-1,3-Dichloropropene	51.6	50.0	103%
2-Chloroethylvinylether	20.4	50.0	40.8%
Bromoform	48.9	50.0	97.8%
4-Methyl-2-Pentanone (MIBK)	256.	250	102%
2-Hexanone	265.	250	106%
Tetrachloroethene	49.6	50.0	99.2%
1,1,2,2-Tetrachloroethane	49.2	50.0	98.4%
Toluene	48.4	50.0	96.8%
Chlorobenzene	47.7	50.0	95.4%
Ethylbenzene	49.1	50.0	98.2%
Styrene	49.4	50.0	98.8%
Trichlorofluoromethane	44.5	50.0	89.0%
1,1,2-Trichlorotrifluoroethane	60.0	50.0	120%
m,p-Xylene	96.3	100	96.3%
O-Xylene	48.5	50.0	97.0%

Reported in ug/L

ORGANICS ANALYSIS DATA SHEET
Volatiles by GC/MS

ANALYTICAL RESOURCES INCORPORATED

Lab Sample ID: Q838SB
LIMS ID: 96-19775
Matrix: Water
Data Release Authorized: PBP
Reported: 11/25/96
Date Analyzed: 11/20/96
Instrument: FINN1

QC Report No: Q838-Landau Associates, Inc.
Project: Union Station
273008.29
Date Received: 11/19/96

LABORATORY CONTROL SAMPLE CONSTITUENT	SPIKE VALUE	SPIKE AMT	% RECOVERY
1,2-Dichlorobenzene	49.6	50.0	99.2%
1,3-Dichlorobenzene	50.9	50.0	102%
1,4-Dichlorobenzene	51.0	50.0	102%
Acrolein	665.	250	266%
Methyl Iodide	51.8	50.0	104%
Bromoethane	53.1	50.0	106%
Acrylonitrile	56.7	50.0	113%
1,1-Dichloropropene	49.2	50.0	98.4%
Dibromomethane	50.7	50.0	101%
1,1,1,2-Tetrachloroethane	47.3	50.0	94.6%
1,2-Dibromo-3-chloropropane	57.5	50.0	115%
1,2,3-Trichloropropane	49.5	50.0	99.0%
trans-1,4-Dichloro-2-butene	47.8	50.0	95.6%
1,3,5-Trimethylbenzene	50.2	50.0	100%
1,2,4-Trimethylbenzene	50.3	50.0	101%
Hexachlorobutadiene	60.5	50.0	121%
Ethylene Dibromide	49.6	50.0	99.2%
Bromochloromethane	46.9	50.0	93.8%
2,2-Dichloropropane	47.2	50.0	94.4%
1,3-Dichloropropane	48.6	50.0	97.2%
Isopropylbenzene	55.5	50.0	111%
n-Propylbenzene	48.9	50.0	97.8%
Bromobenzene	49.3	50.0	98.6%
2-Chlorotoluene	55.6	50.0	111%
4-Chlorotoluene	44.2	50.0	88.4%
tert-Butylbenzene	50.1	50.0	100%
sec-Butylbenzene	50.2	50.0	100%
4-Isopropyltoluene	52.6	50.0	105%
n-Butylbenzene	53.1	50.0	106%
1,2,4-Trichlorobenzene	63.0	50.0	126%
Naphthalene	70.7	50.0	141%
1,2,3-Trichlorobenzene	67.6	50.0	135%

Spike Blank Surrogate Recovery	
d4-1,2-Dichloroethane	98.1%
d8-Toluene	98.9%
Bromofluorobenzene	99.6%
d4-1,2-Dichlorobenzene	102%

Reported in ug/L

ORGANICS ANALYSIS DATA SHEET
Volatiles by GC/MS

ANALYTICAL RESOURCES INCORPORATED

Lab Sample ID: Q838SB
LIMS ID: 96-19776
Matrix: Water
Data Release Authorized: ABP
Reported: 11/25/96
Date Analyzed: 11/21/96
Instrument: FINN1

QC Report No: Q838-Landau Associates, Inc.
Project: Union Station
273008.29
Date Received: 11/19/96

LABORATORY CONTROL SAMPLE CONSTITUENT	SPIKE VALUE	SPIKE AMT	% RECOVERY
Chloromethane	53.4	50.0	107%
Bromomethane	65.4	50.0	131%
Vinyl Chloride	52.4	50.0	105%
Chloroethane	66.8	50.0	134%
Methylene Chloride	51.1	50.0	102%
Acetone	289.	250	116%
Carbon Disulfide	50.3	50.0	101%
1,1-Dichloroethene	52.5	50.0	105%
1,1-Dichloroethane	52.3	50.0	105%
trans-1,2-Dichloroethene	51.8	50.0	104%
cis-1,2-Dichloroethene	53.3	50.0	107%
Chloroform	51.6	50.0	103%
1,2-Dichloroethane	53.6	50.0	107%
2-Butanone	274.	250	110%
1,1,1-Trichloroethane	51.9	50.0	104%
Carbon Tetrachloride	52.0	50.0	104%
Vinyl Acetate	57.5	50.0	115%
Bromodichloromethane	53.8	50.0	108%
1,2-Dichloropropane	55.3	50.0	111%
cis-1,3-Dichloropropene	55.9	50.0	112%
Trichloroethene	53.4	50.0	107%
Dibromochloromethane	54.1	50.0	108%
1,1,2-Trichloroethane	50.4	50.0	101%
Benzene	50.0	50.0	100%
trans-1,3-Dichloropropene	56.2	50.0	112%
2-Chloroethylvinylether	28.4	50.0	56.8%
Bromoform	51.0	50.0	102%
4-Methyl-2-Pentanone (MIBK)	275.	250	110%
2-Hexanone	284.	250	114%
Tetrachloroethene	50.7	50.0	101%
1,1,2,2-Tetrachloroethane	51.0	50.0	102%
Toluene	51.8	50.0	104%
Chlorobenzene	49.8	50.0	99.6%
Ethylbenzene	52.0	50.0	104%
Styrene	51.9	50.0	104%
Trichlorofluoromethane	58.5	50.0	117%
1,1,2-Trichlorotrifluoroethane	56.9	50.0	114%
m,p-Xylene	101.	100	101%
O-Xylene	50.6	50.0	101%

Reported in ug/L

ORGANICS ANALYSIS DATA SHEET
Volatiles by GC/MS

ANALYTICAL RESOURCES INCORPORATED

Lab Sample ID: Q838SB
LIMS ID: 96-19776
Matrix: Water
Data Release Authorized: JBP
Reported: 11/25/96
Date Analyzed: 11/21/96
Instrument: FINN1

QC Report No: Q838-Landau Associates, Inc.
Project: Union Station
273008.29
Date Received: 11/19/96

LABORATORY CONTROL SAMPLE CONSTITUENT	SPIKE VALUE	SPIKE AMT	% RECOVERY
1,2-Dichlorobenzene	50.9	50.0	102%
1,3-Dichlorobenzene	51.7	50.0	103%
1,4-Dichlorobenzene	51.9	50.0	104%
Acrolein	597.	250	239%
Methyl Iodide	56.6	50.0	113%
Bromoethane	52.5	50.0	105%
Acrylonitrile	56.8	50.0	114%
1,1-Dichloropropene	56.1	50.0	112%
Dibromomethane	54.5	50.0	109%
1,1,1,2-Tetrachloroethane	49.6	50.0	99.2%
1,2-Dibromo-3-chloropropane	56.6	50.0	113%
1,2,3-Trichloropropane	51.9	50.0	104%
trans-1,4-Dichloro-2-butene	48.2	50.0	96.4%
1,3,5-Trimethylbenzene	52.5	50.0	105%
1,2,4-Trimethylbenzene	52.6	50.0	105%
Hexachlorobutadiene	50.8	50.0	102%
Ethylene Dibromide	53.6	50.0	107%
Bromochloromethane	51.6	50.0	103%
2,2-Dichloropropane	47.7	50.0	95.4%
1,3-Dichloropropane	52.9	50.0	106%
Isopropylbenzene	59.2	50.0	118%
n-Propylbenzene	50.8	50.0	102%
Bromobenzene	51.8	50.0	104%
2-Chlorotoluene	56.8	50.0	114%
4-Chlorotoluene	48.6	50.0	97.2%
tert-Butylbenzene	52.0	50.0	104%
sec-Butylbenzene	51.1	50.0	102%
4-Isopropyltoluene	52.8	50.0	106%
n-Butylbenzene	51.4	50.0	103%
1,2,4-Trichlorobenzene	62.1	50.0	124%
Naphthalene	108.	50.0	216%
1,2,3-Trichlorobenzene	69.1	50.0	138%

Spike Blank Surrogate Recovery	
d4-1,2-Dichloroethane	99.9%
d8-Toluene	99.0%
Bromofluorobenzene	100%
d4-1,2-Dichlorobenzene	100%

Reported in ug/L

ANALYTICAL
RESOURCES
INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by GC/MS
Page 1 of 2

Sample No: B-6 11/18/96

Lab Sample ID: Q829A
LIMS ID: 96-19678
Matrix: Water
Data Release Authorized: MF
Reported: 11/20/96

QC Report No: Q829-Landau Associates, Inc.
Project: Union Station
273008.29
Date Sampled: 11/18/96
Date Received: 11/18/96

Date extracted: 11/19/96
Date analyzed: 11/19/96
Instrument: FINN2

Sample Amount: 500 mL
Final Extract Volume: 0.5 mL
Dilution Factor: 1:1

CAS Number	Analyte	ug/L
108-95-2	Phenol	2.0 U
111-44-4	Bis-(2-Chloroethyl) Ether	2.0 U
95-57-8	2-Chlorophenol	1.0 U
541-73-1	1,3-Dichlorobenzene	1.0 U
106-46-7	1,4-Dichlorobenzene	1.0 U
100-51-6	Benzyl Alcohol	5.0 U
95-50-1	1,2-Dichlorobenzene	1.0 U
95-48-7	2-Methylphenol	2.0 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	1.0 U
106-44-5	4-Methylphenol	1.0 U
621-64-7	N-Nitroso-Di-N-Propylamine	2.0 U
67-72-1	Hexachloroethane	2.0 U
98-95-3	Nitrobenzene	1.0 U
78-59-1	Isophorone	1.0 U
88-75-5	2-Nitrophenol	5.0 U
105-67-9	2,4-Dimethylphenol	3.0 U
65-85-0	Benzoic Acid	10 U
111-91-1	bis(2-Chloroethoxy) Methane	1.0 U
120-83-2	2,4-Dichlorophenol	3.0 U
120-82-1	1,2,4-Trichlorobenzene	1.0 U
91-20-3	Naphthalene	1.0 U
106-47-8	4-Chloroaniline	3.0 U
87-68-3	Hexachlorobutadiene	2.0 U
59-50-7	4-Chloro-3-methylphenol	2.0 U
91-57-6	2-Methylnaphthalene	1.0 U
77-47-4	Hexachlorocyclopentadiene	5.0 U
88-06-2	2,4,6-Trichlorophenol	5.0 U
95-95-4	2,4,5-Trichlorophenol	5.0 U
91-58-7	2-Chloronaphthalene	1.0 U
88-74-4	2-Nitroaniline	5.0 U
131-11-3	Dimethylphthalate	1.0 U
208-96-8	Acenaphthylene	1.0 U
99-09-2	3-Nitroaniline	6.0 U
83-32-9	Acenaphthene	1.0 U
51-28-5	2,4-Dinitrophenol	10 U
100-02-7	4-Nitrophenol	5.0 U
132-64-9	Dibenzofuran	1.0 U
606-20-2	2,6-Dinitrotoluene	6.7 Y

ANALYTICAL
RESOURCES
INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by GC/MS

Sample No: B-6 11/18/96

Lab Sample ID: Q829A
LIMS ID: 96-19678
Matrix: Water
Data Release Authorized: MBP
Reported: 11/20/96

QC Report No: Q829-Landau Associates, Inc.
Project: Union Station
273008.29
Date Sampled: 11/18/96
Date Received: 11/18/96

Date extracted: 11/19/96
Date analyzed: 11/19/96
Instrument: FINN2

Sample Amount: 500 mL
Final Extract Volume: 0.5 mL
Dilution Factor: 1:1

CAS Number	Analyte	ug/L
121-14-2	2,4-Dinitrotoluene	5.0 U
84-66-2	Diethylphthalate	1.0 U
7005-72-3	4-Chlorophenyl-phenylether	1.0 U
86-73-7	Fluorene	1.0 U
100-01-6	4-Nitroaniline	5.0 U
534-52-1	4,6-Dinitro-2-Methylphenol	10 U
86-30-6	N-Nitrosodiphenylamine	1.0 U
101-55-3	4-Bromophenyl-phenylether	1.0 U
118-74-1	Hexachlorobenzene	1.0 U
87-86-5	Pentachlorophenol	5.0 U
85-01-8	Phenanthrene	1.0 U
86-74-8	Carbazole	1.0 U
120-12-7	Anthracene	1.0 U
84-74-2	Di-n-Butylphthalate	1.0 U
206-44-0	Fluoranthene	1.0 U
129-00-0	Pyrene	1.0 U
85-68-7	Butylbenzylphthalate	1.0 U
91-94-1	3,3'-Dichlorobenzidine	5.0 U
56-55-3	Benzo(a)anthracene	1.0 U
117-81-7	bis(2-Ethylhexyl)phthalate	1.0 U
218-01-9	Chrysene	1.0 U
117-84-0	Di-n-Octyl phthalate	1.0 U
205-99-2	Benzo(b)fluoranthene	1.0 U
207-08-9	Benzo(k)fluoranthene	1.0 U
50-32-8	Benzo(a)pyrene	1.0 U
193-39-5	Indeno(1,2,3-cd)pyrene	1.0 U
53-70-3	Dibenz(a,h)anthracene	1.0 U
191-24-2	Benzo(g,h,i)perylene	1.0 U

Semivolatiles Surrogate Recovery

d5-Nitrobenzene	76.2%	d5-Phenol	41.9%
2-Fluorobiphenyl	68.6%	2-Fluorophenol	52.7%
d14-p-Terphenyl	102%	2,4,6-Tribromophenol	96.7%
d4-1,2-Dichlorobenzene	66.2%	d4-2-Chlorophenol	72.2%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by GC/MS

Sample No: HC-102 11/18/96

Lab Sample ID: Q829B
LIMS ID: 96-19679
Matrix: Water
Data Release Authorized: MP
Reported: 11/20/96

QC Report No: Q829-Landau Associates, Inc.
Project: Union Station
273008.29
Date Sampled: 11/18/96
Date Received: 11/18/96

Date extracted: 11/19/96
Date analyzed: 11/19/96
Instrument: FINN2

Sample Amount: 500 mL
Final Extract Volume: 0.5 mL
Dilution Factor: 1:1

CAS Number	Analyte	ug/L
108-95-2	Phenol	2.0 U
111-44-4	Bis-(2-Chloroethyl) Ether	2.0 U
95-57-8	2-Chlorophenol	1.0 U
541-73-1	1,3-Dichlorobenzene	1.0 U
106-46-7	1,4-Dichlorobenzene	1.0 U
100-51-6	Benzyl Alcohol	5.0 U
95-50-1	1,2-Dichlorobenzene	1.0 U
95-48-7	2-Methylphenol	2.0 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	1.0 U
106-44-5	4-Methylphenol	1.0 U
621-64-7	N-Nitroso-Di-N-Propylamine	2.0 U
67-72-1	Hexachloroethane	2.0 U
98-95-3	Nitrobenzene	1.0 U
78-59-1	Isophorone	1.0 U
88-75-5	2-Nitrophenol	5.0 U
105-67-9	2,4-Dimethylphenol	3.0 U
65-85-0	Benzoic Acid	10 U
111-91-1	bis(2-Chloroethoxy) Methane	1.0 U
120-83-2	2,4-Dichlorophenol	3.0 U
120-82-1	1,2,4-Trichlorobenzene	1.0 U
91-20-3	**Naphthalene**	**11**
106-47-8	4-Chloroaniline	3.0 U
87-68-3	Hexachlorobutadiene	2.0 U
59-50-7	4-Chloro-3-methylphenol	2.0 U
91-57-6	**2-Methylnaphthalene**	**1.7**
77-47-4	Hexachlorocyclopentadiene	5.0 U
88-06-2	2,4,6-Trichlorophenol	5.0 U
95-95-4	2,4,5-Trichlorophenol	5.0 U
91-58-7	2-Chloronaphthalene	1.0 U
88-74-4	2-Nitroaniline	5.0 U
131-11-3	Dimethylphthalate	1.0 U
208-96-8	Acenaphthylene	1.0 U
99-09-2	3-Nitroaniline	6.0 U
83-32-9	**Acenaphthene**	**14**
51-28-5	2,4-Dinitrophenol	10 U
100-02-7	4-Nitrophenol	5.0 U
132-64-9	Dibenzofuran	1.0 U
606-20-2	2,6-Dinitrotoluene	6.7 Y

ANALYTICAL
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INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by GC/MS

Sample No: HC-102 11/18/96

Lab Sample ID: Q829B
LIMS ID: 96-19679
Matrix: Water
Data Release Authorized: DAP
Reported: 11/20/96

QC Report No: Q829-Landau Associates, Inc.
Project: Union Station
273008.29
Date Sampled: 11/18/96
Date Received: 11/18/96

Date extracted: 11/19/96
Date analyzed: 11/19/96
Instrument: FINN2

Sample Amount: 500 mL
Final Extract Volume: 0.5 mL
Dilution Factor: 1:1

CAS Number	Analyte	ug/L
121-14-2	2,4-Dinitrotoluene	5.0 U
84-66-2	Diethylphthalate	1.0 U
7005-72-3	4-Chlorophenyl-phenylether	1.0 U
86-73-7	**Fluorene**	**3.3**
100-01-6	4-Nitroaniline	5.0 U
534-52-1	4,6-Dinitro-2-Methylphenol	10 U
86-30-6	N-Nitrosodiphenylamine	1.0 U
101-55-3	4-Bromophenyl-phenylether	1.0 U
118-74-1	Hexachlorobenzene	1.0 U
87-86-5	Pentachlorophenol	5.0 U
85-01-8	**Phenanthrene**	**4.1**
86-74-8	Carbazole	1.0 U
120-12-7	Anthracene	1.0 U
84-74-2	Di-n-Butylphthalate	1.0 U
206-44-0	Fluoranthene	1.0 U
129-00-0	Pyrene	1.0 U
85-68-7	Butylbenzylphthalate	1.0 U
91-94-1	3,3'-Dichlorobenzidine	5.0 U
56-55-3	Benzo(a)anthracene	1.0 U
117-81-7	bis(2-Ethylhexyl)phthalate	1.0 U
218-01-9	Chrysene	1.0 U
117-84-0	Di-n-Octyl phthalate	1.0 U
205-99-2	Benzo(b)fluoranthene	1.0 U
207-08-9	Benzo(k)fluoranthene	1.0 U
50-32-8	Benzo(a)pyrene	1.0 U
193-39-5	Indeno(1,2,3-cd)pyrene	1.0 U
53-70-3	Dibenz(a,h)anthracene	1.0 U
191-24-2	Benzo(g,h,i)perylene	1.0 U

Semivolatiles Surrogate Recovery

d5-Nitrobenzene	73.3%	d5-Phenol	44.1%
2-Fluorobiphenyl	69.0%	2-Fluorophenol	60.5%
d14-p-Terphenyl	82.0%	2,4,6-Tribromophenol	82.3%
d4-1,2-Dichlorobenzene	69.5%	d4-2-Chlorophenol	76.7%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by GC/MS

Sample No: HC-101 11/18/96

Lab Sample ID: Q829C
LIMS ID: 96-19680
Matrix: Water
Data Release Authorized: MM
Reported: 11/20/96

QC Report No: Q829-Landau Associates, Inc.
Project: Union Station
273008.29
Date Sampled: 11/18/96
Date Received: 11/18/96

Date extracted: 11/19/96
Date analyzed: 11/19/96
Instrument: FINN2

Sample Amount: 500 mL
Final Extract Volume: 0.5 mL
Dilution Factor: 1:1

CAS Number	Analyte	ug/L
108-95-2	Phenol	2.0 U
111-44-4	Bis-(2-Chloroethyl) Ether	2.0 U
95-57-8	2-Chlorophenol	1.0 U
541-73-1	1,3-Dichlorobenzene	1.0 U
106-46-7	1,4-Dichlorobenzene	1.0 U
100-51-6	Benzyl Alcohol	5.0 U
95-50-1	1,2-Dichlorobenzene	1.0 U
95-48-7	2-Methylphenol	2.0 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	1.0 U
106-44-5	**4-Methylphenol**	**120 E**
621-64-7	N-Nitroso-Di-N-Propylamine	2.0 U
67-72-1	Hexachloroethane	2.0 U
98-95-3	Nitrobenzene	1.0 U
78-59-1	Isophorone	1.0 U
88-75-5	2-Nitrophenol	5.0 U
105-67-9	2,4-Dimethylphenol	3.0 U
65-85-0	**Benzoic Acid**	**15**
111-91-1	bis(2-Chloroethoxy) Methane	1.0 U
120-83-2	2,4-Dichlorophenol	3.0 U
120-82-1	1,2,4-Trichlorobenzene	1.0 U
91-20-3	**Naphthalene**	**550 E**
106-47-8	4-Chloroaniline	3.0 U
87-68-3	Hexachlorobutadiene	2.0 U
59-50-7	4-Chloro-3-methylphenol	2.0 U
91-57-6	**2-Methylnaphthalene**	**190 E**
77-47-4	Hexachlorocyclopentadiene	5.0 U
88-06-2	2,4,6-Trichlorophenol	5.0 U
95-95-4	2,4,5-Trichlorophenol	5.0 U
91-58-7	2-Chloronaphthalene	1.0 U
88-74-4	2-Nitroaniline	5.0 U
131-11-3	Dimethylphthalate	1.0 U
208-96-8	Acenaphthylene	1.0 U
99-09-2	3-Nitroaniline	6.0 U
83-32-9	**Acenaphthene**	**95 E**
51-28-5	2,4-Dinitrophenol	10 U
100-02-7	4-Nitrophenol	5.0 U
132-64-9	**Dibenzofuran**	**6.2**
606-20-2	2,6-Dinitrotoluene	7.0 Y

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by GC/MS

Sample No: HC-101 11/18/96

Lab Sample ID: Q829C
LIMS ID: 96-19680
Matrix: Water
Data Release Authorized: MP
Reported: 11/20/96

QC Report No: Q829-Landau Associates, Inc.
Project: Union Station
273008.29
Date Sampled: 11/18/96
Date Received: 11/18/96

Date extracted: 11/19/96
Date analyzed: 11/19/96
Instrument: FINN2

Sample Amount: 500 mL
Final Extract Volume: 0.5 mL
Dilution Factor: 1:1

CAS Number	Analyte	ug/L
121-14-2	2,4-Dinitrotoluene	5.0 U
84-66-2	Diethylphthalate	1.0 U
7005-72-3	4-Chlorophenyl-phenylether	1.0 U
86-73-7	**Fluorene**	**36**
100-01-6	4-Nitroaniline	5.0 U
534-52-1	4,6-Dinitro-2-Methylphenol	10 U
86-30-6	N-Nitrosodiphenylamine	1.0 U
101-55-3	4-Bromophenyl-phenylether	1.0 U
118-74-1	Hexachlorobenzene	1.0 U
87-86-5	Pentachlorophenol	5.0 U
85-01-8	**Phenanthrene**	**47**
86-74-8	**Carbazole**	**8.2**
120-12-7	**Anthracene**	**5.2**
84-74-2	Di-n-Butylphthalate	1.0 U
206-44-0	**Fluoranthene**	**5.8**
129-00-0	**Pyrene**	**5.0**
85-68-7	Butylbenzylphthalate	1.0 U
91-94-1	3,3'-Dichlorobenzidine	5.0 U
56-55-3	Benzo(a)anthracene	1.0 U
117-81-7	bis(2-Ethylhexyl)phthalate	1.0 U
218-01-9	Chrysene	1.0 U
117-84-0	Di-n-Octyl phthalate	1.0 U
205-99-2	Benzo(b)fluoranthene	1.0 U
207-08-9	Benzo(k)fluoranthene	1.0 U
50-32-8	Benzo(a)pyrene	1.0 U
193-39-5	Indeno(1,2,3-cd)pyrene	1.0 U
53-70-3	Dibenz(a,h)anthracene	1.0 U
191-24-2	Benzo(g,h,i)perylene	1.0 U

Semivolatiles Surrogate Recovery

4	d5-Nitrobenzene	93.9%	d5-Phenol	41.8%
	2-Fluorobiphenyl	71.1%	2-Fluorophenol	57.3%
	d14-p-Terphenyl	96.7%	2,4,6-Tribromophenol	105%
	d4-1,2-Dichlorobenzene	62.0%	d4-2-Chlorophenol	73.7%

ANALYTICAL
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ORGANICS ANALYSIS DATA SHEET
Semivolatiles by GC/MS

Lab Sample ID: Q829C-DL
LIMS ID: 96-19680
Matrix: Water
Data Release Authorized: MM
Reported: 11/20/96

Sample No: HC-101 11/18/96 DILUTION
QC Report No: Q829-Landau Associates, Inc.
Project: Union Station 273008.29
Date Sampled: 11/18/96
Date Received: 11/18/96

Date extracted: 11/19/96
Date analyzed: 11/20/96
Instrument: NT1

Sample Amount: 500 mL
Final Extract Volume: 0.5 mL
Dilution Factor: 1:50

CAS Number	Analyte	ug/L
108-95-2	Phenol	100 U
111-44-4	Bis-(2-Chloroethyl) Ether	100 U
95-57-8	2-Chlorophenol	50 U
541-73-1	1,3-Dichlorobenzene	50 U
106-46-7	1,4-Dichlorobenzene	50 U
100-51-6	Benzyl Alcohol	250 U
95-50-1	1,2-Dichlorobenzene	50 U
95-48-7	2-Methylphenol	100 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	50 U
106-44-5	**4-Methylphenol**	**68**
621-64-7	N-Nitroso-Di-N-Propylamine	100 U
67-72-1	Hexachloroethane	100 U
98-95-3	Nitrobenzene	50 U
78-59-1	Isophorone	50 U
88-75-5	2-Nitrophenol	250 U
105-67-9	2,4-Dimethylphenol	150 U
65-85-0	Benzoic Acid	500 U
111-91-1	bis(2-Chloroethoxy) Methane	50 U
120-83-2	2,4-Dichlorophenol	150 U
120-82-1	1,2,4-Trichlorobenzene	50 U
91-20-3	**Naphthalene**	**1,200**
106-47-8	4-Chloroaniline	150 U
87-68-3	Hexachlorobutadiene	100 U
59-50-7	4-Chloro-3-methylphenol	100 U
91-57-6	**2-Methylnaphthalene**	**170**
77-47-4	Hexachlorocyclopentadiene	250 U
88-06-2	2,4,6-Trichlorophenol	250 U
95-95-4	2,4,5-Trichlorophenol	250 U
91-58-7	2-Chloronaphthalene	50 U
88-74-4	2-Nitroaniline	250 U
131-11-3	Dimethylphthalate	50 U
208-96-8	Acenaphthylene	50 U
99-09-2	3-Nitroaniline	300 U
83-32-9	**Acenaphthene**	**100**
51-28-5	2,4-Dinitrophenol	500 U
100-02-7	4-Nitrophenol	250 U
132-64-9	Dibenzofuran	50 U
606-20-2	2,6-Dinitrotoluene	250 U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by GC/MS

Sample No: HC-101 11/18/96 DILUTION
QC Report No: Q829-Landau Associates, Inc.
Project: Union Station 273008.29
Date Sampled: 11/18/96
Date Received: 11/18/96

Lab Sample ID: Q829C-DL
LIMS ID: 96-19680
Matrix: Water
Data Release Authorized: 11/14
Reported: 11/20/96

Date extracted: 11/19/96
Date analyzed: 11/20/96
Instrument: NT1

Sample Amount: 500 mL
Final Extract Volume: 0.5 mL
Dilution Factor: 1:50

CAS Number	Analyte	ug/L
121-14-2	2,4-Dinitrotoluene	250 U
84-66-2	Diethylphthalate	50 U
7005-72-3	4-Chlorophenyl-phenylether	50 U
86-73-7	Fluorene	50 U
100-01-6	4-Nitroaniline	250 U
534-52-1	4,6-Dinitro-2-Methylphenol	500 U
86-30-6	N-Nitrosodiphenylamine	50 U
101-55-3	4-Bromophenyl-phenylether	50 U
118-74-1	Hexachlorobenzene	50 U
87-86-5	Pentachlorophenol	250 U
85-01-8	Phenanthrene	50 U
86-74-8	Carbazole	50 U
120-12-7	Anthracene	50 U
84-74-2	Di-n-Butylphthalate	50 U
206-44-0	Fluoranthene	50 U
129-00-0	Pyrene	50 U
85-68-7	Butylbenzylphthalate	50 U
91-94-1	3,3'-Dichlorobenzidine	250 U
56-55-3	Benzo(a)anthracene	50 U
117-81-7	bis(2-Ethylhexyl)phthalate	50 U
218-01-9	Chrysene	50 U
117-84-0	Di-n-Octyl phthalate	50 U
205-99-2	Benzo(b)fluoranthene	50 U
207-08-9	Benzo(k)fluoranthene	50 U
50-32-8	Benzo(a)pyrene	50 U
193-39-5	Indeno(1,2,3-cd)pyrene	50 U
53-70-3	Dibenz(a,h)anthracene	50 U
191-24-2	Benzo(g,h,i)perylene	50 U

Semivolatiles Surrogate Recovery

d5-Nitrobenzene	D	d5-Phenol	D
2-Fluorobiphenyl	D	2-Fluorophenol	D
d14-p-Terphenyl	D	2,4,6-Tribromophenol	D
d4-1,2-Dichlorobenzene	D	d4-2-Chlorophenol	D

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by GC/MS
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Sample No: B-4 11/18/96

Lab Sample ID: Q829D
LIMS ID: 96-19681
Matrix: Water
Data Release Authorized: MM
Reported: 11/20/96

QC Report No: Q829-Landau Associates, Inc.
Project: Union Station
273008.29
Date Sampled: 11/18/96
Date Received: 11/18/96

Date extracted: 11/19/96
Date analyzed: 11/19/96
Instrument: FINN2

Sample Amount: 490 mL
Final Extract Volume: 0.5 mL
Dilution Factor: 1:10

CAS Number	Analyte	ug/L
108-95-2	Phenol	20 U
111-44-4	Bis-(2-Chloroethyl) Ether	20 U
95-57-8	2-Chlorophenol	10 U
541-73-1	1,3-Dichlorobenzene	10 U
106-46-7	1,4-Dichlorobenzene	10 U
100-51-6	Benzyl Alcohol	51 U
95-50-1	1,2-Dichlorobenzene	10 U
95-48-7	2-Methylphenol	20 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	10 U
106-44-5	4-Methylphenol	10 U
621-64-7	N-Nitroso-Di-N-Propylamine	20 U
67-72-1	Hexachloroethane	20 U
98-95-3	Nitrobenzene	10 U
78-59-1	Isophorone	10 U
88-75-5	2-Nitrophenol	51 U
105-67-9	2,4-Dimethylphenol	31 U
65-85-0	Benzoic Acid	100 U
111-91-1	bis(2-Chloroethoxy) Methane	10 U
120-83-2	2,4-Dichlorophenol	31 U
120-82-1	1,2,4-Trichlorobenzene	10 U
91-20-3	**Naphthalene**	**3,200 E**
106-47-8	4-Chloroaniline	31 U
87-68-3	Hexachlorobutadiene	20 U
59-50-7	4-Chloro-3-methylphenol	20 U
91-57-6	**2-Methylnaphthalene**	**810**
77-47-4	Hexachlorocyclopentadiene	51 U
88-06-2	2,4,6-Trichlorophenol	51 U
95-95-4	2,4,5-Trichlorophenol	51 U
91-58-7	2-Chloronaphthalene	10 U
88-74-4	2-Nitroaniline	51 U
131-11-3	Dimethylphthalate	10 U
208-96-8	Acenaphthylene	10 U
99-09-2	3-Nitroaniline	61 U
83-32-9	**Acenaphthene**	**360**
51-28-5	2,4-Dinitrophenol	100 U
100-02-7	4-Nitrophenol	51 U
132-64-9	**Dibenzofuran**	**30**
606-20-2	2,6-Dinitrotoluene	70 Y

ANALYTICAL
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ORGANICS ANALYSIS DATA SHEET
Semivolatiles by GC/MS

Sample No: B-4 11/18/96

Lab Sample ID: Q829D
LIMS ID: 96-19681
Matrix: Water
Data Release Authorized: AMP
Reported: 11/20/96

QC Report No: Q829-Landau Associates, Inc.
Project: Union Station
273008.29
Date Sampled: 11/18/96
Date Received: 11/18/96

Date extracted: 11/19/96
Date analyzed: 11/19/96
Instrument: FINN2

Sample Amount: 490 mL
Final Extract Volume: 0.5 mL
Dilution Factor: 1:10

CAS Number	Analyte	ug/L
121-14-2	2,4-Dinitrotoluene	51 U
84-66-2	Diethylphthalate	10 U
7005-72-3	4-Chlorophenyl-phenylether	10 U
86-73-7	**Fluorene**	**140**
100-01-6	4-Nitroaniline	51 U
534-52-1	4,6-Dinitro-2-Methylphenol	100 U
86-30-6	N-Nitrosodiphenylamine	10 U
101-55-3	4-Bromophenyl-phenylether	10 U
118-74-1	Hexachlorobenzene	10 U
87-86-5	Pentachlorophenol	51 U
85-01-8	**Phenanthrene**	**160**
86-74-8	**Carbazole**	**27**
120-12-7	**Anthracene**	**24**
84-74-2	Di-n-Butylphthalate	10 U
206-44-0	**Fluoranthene**	**26**
129-00-0	**Pyrene**	**31**
85-68-7	Butylbenzylphthalate	10 U
91-94-1	3,3'-Dichlorobenzidine	51 U
56-55-3	Benzo(a)anthracene	10 U
117-81-7	bis(2-Ethylhexyl)phthalate	10 U
218-01-9	Chrysene	10 U
117-84-0	Di-n-Octyl phthalate	10 U
205-99-2	Benzo(b)fluoranthene	10 U
207-08-9	Benzo(k)fluoranthene	10 U
50-32-8	Benzo(a)pyrene	10 U
193-39-5	Indeno(1,2,3-cd)pyrene	10 U
53-70-3	Dibenz(a,h)anthracene	10 U
191-24-2	Benzo(g,h,i)perylene	10 U

Semivolatiles Surrogate Recovery

d5-Nitrobenzene	65.1%	d5-Phenol	37.3%
2-Fluorobiphenyl	82.9%	2-Fluorophenol	59.4%
d14-p-Terphenyl	85.4%	2,4,6-Tribromophenol	69.7%
d4-1,2-Dichlorobenzene	71.1%	d4-2-Chlorophenol	68.1%

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by GC/MS

ANALYTICAL RESOURCES INCORPORATED

Lab Sample ID: Q829D-DL
LIMS ID: 96-19681
Matrix: Water
Data Release Authorized: MM
Reported: 11/20/96

Sample No: B-4 11/18/96 DILUTION
QC Report No: Q829-Landau Associates, Inc.
Project: Union Station 273008.29
Date Sampled: 11/18/96
Date Received: 11/18/96

Date extracted: 11/19/96
Date analyzed: 11/19/96
Instrument: FINN2

Sample Amount: 490 mL
Final Extract Volume: 0.5 mL
Dilution Factor: 1:200

CAS Number	Analyte	ug/L
108-95-2	Phenol	410 U
111-44-4	Bis-(2-Chloroethyl) Ether	410 U
95-57-8	2-Chlorophenol	200 U
541-73-1	1,3-Dichlorobenzene	200 U
106-46-7	1,4-Dichlorobenzene	200 U
100-51-6	Benzyl Alcohol	1,000 U
95-50-1	1,2-Dichlorobenzene	200 U
95-48-7	2-Methylphenol	410 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	200 U
106-44-5	4-Methylphenol	200 U
621-64-7	N-Nitroso-Di-N-Propylamine	410 U
67-72-1	Hexachloroethane	410 U
98-95-3	Nitrobenzene	200 U
78-59-1	Isophorone	200 U
88-75-5	2-Nitrophenol	1,000 U
105-67-9	2,4-Dimethylphenol	610 U
65-85-0	Benzoic Acid	2,000 U
111-91-1	bis(2-Chloroethoxy) Methane	200 U
120-83-2	2,4-Dichlorophenol	610 U
120-82-1	1,2,4-Trichlorobenzene	200 U
91-20-3	**Naphthalene**	**5,000**
106-47-8	4-Chloroaniline	610 U
87-68-3	Hexachlorobutadiene	410 U
59-50-7	4-Chloro-3-methylphenol	410 U
91-57-6	**2-Methylnaphthalene**	**680**
77-47-4	Hexachlorocyclopentadiene	1,000 U
88-06-2	2,4,6-Trichlorophenol	1,000 U
95-95-4	2,4,5-Trichlorophenol	1,000 U
91-58-7	2-Chloronaphthalene	200 U
88-74-4	2-Nitroaniline	1,000 U
131-11-3	Dimethylphthalate	200 U
208-96-8	Acenaphthylene	200 U
99-09-2	3-Nitroaniline	1,200 U
83-32-9	**Acenaphthene**	**330**
51-28-5	2,4-Dinitrophenol	2,000 U
100-02-7	4-Nitrophenol	1,000 U
132-64-9	Dibenzofuran	200 U
606-20-2	2,6-Dinitrotoluene	1,400 Y

ANALYTICAL
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ORGANICS ANALYSIS DATA SHEET
Semivolatiles by GC/MS

Lab Sample ID: Q829D-DL
LIMS ID: 96-19681
Matrix: Water
Data Release Authorized:
Reported: 11/20/96

Sample No: B-4 11/18/96
DILUTION
QC Report No: Q829-Landau Associates, Inc.
Project: Union Station
273008.29
Date Sampled: 11/18/96
Date Received: 11/18/96

Date extracted: 11/19/96
Date analyzed: 11/19/96
Instrument: FINN2

Sample Amount: 490 mL
Final Extract Volume: 0.5 mL
Dilution Factor: 1:200

CAS Number	Analyte	ug/L
121-14-2	2,4-Dinitrotoluene	1,000 U
84-66-2	Diethylphthalate	200 U
7005-72-3	4-Chlorophenyl-phenylether	200 U
86-73-7	Fluorene	200 U
100-01-6	4-Nitroaniline	1,000 U
534-52-1	4,6-Dinitro-2-Methylphenol	2,000 U
86-30-6	N-Nitrosodiphenylamine	200 U
101-55-3	4-Bromophenyl-phenylether	200 U
118-74-1	Hexachlorobenzene	200 U
87-86-5	Pentachlorophenol	1,000 U
85-01-8	Phenanthrene	200 U
86-74-8	Carbazole	200 U
120-12-7	Anthracene	200 U
84-74-2	Di-n-Butylphthalate	200 U
206-44-0	Fluoranthene	200 U
129-00-0	Pyrene	200 U
85-68-7	Butylbenzylphthalate	200 U
91-94-1	3,3'-Dichlorobenzidine	1,000 U
56-55-3	Benzo(a)anthracene	200 U
117-81-7	bis(2-Ethylhexyl)phthalate	200 U
218-01-9	Chrysene	200 U
117-84-0	Di-n-Octyl phthalate	200 U
205-99-2	Benzo(b)fluoranthene	200 U
207-08-9	Benzo(k)fluoranthene	200 U
50-32-8	Benzo(a)pyrene	200 U
193-39-5	Indeno(1,2,3-cd)pyrene	200 U
53-70-3	Dibenz(a,h)anthracene	200 U
191-24-2	Benzo(g,h,i)perylene	200 U

Semivolatiles Surrogate Recovery

d5-Nitrobenzene	D	d5-Phenol	D
2-Fluorobiphenyl	D	2-Fluorophenol	D
d14-p-Terphenyl	D	2,4,6-Tribromophenol	D
d4-1,2-Dichlorobenzene	D	d4-2-Chlorophenol	D

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by GC/MS

Sample No: Method Blank

Lab Sample ID: Q829MB
LIMS ID: 96-19678
Matrix: Water
Data Release Authorized:
Reported: 11/20/96

QC Report No: Q829-Landau Associates, Inc.
Project: Union Station
273008.29
Date Sampled: NA
Date Received: NA

Date extracted: 11/19/96
Date analyzed: 11/19/96
Instrument: FINN2

Sample Amount: 500 mL
Final Extract Volume: 0.5 mL
Dilution Factor: 1:1

CAS Number	Analyte	ug/L
108-95-2	Phenol	2.0 U
111-44-4	Bis-(2-Chloroethyl) Ether	2.0 U
95-57-8	2-Chlorophenol	1.0 U
541-73-1	1,3-Dichlorobenzene	1.0 U
106-46-7	1,4-Dichlorobenzene	1.0 U
100-51-6	Benzyl Alcohol	5.0 U
95-50-1	1,2-Dichlorobenzene	1.0 U
95-48-7	2-Methylphenol	2.0 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	1.0 U
106-44-5	4-Methylphenol	1.0 U
621-64-7	N-Nitroso-Di-N-Propylamine	2.0 U
67-72-1	Hexachloroethane	2.0 U
98-95-3	Nitrobenzene	1.0 U
78-59-1	Isophorone	1.0 U
88-75-5	2-Nitrophenol	5.0 U
105-67-9	2,4-Dimethylphenol	3.0 U
65-85-0	Benzoic Acid	10 U
111-91-1	bis(2-Chloroethoxy) Methane	1.0 U
120-83-2	2,4-Dichlorophenol	3.0 U
120-82-1	1,2,4-Trichlorobenzene	1.0 U
91-20-3	Naphthalene	1.0 U
106-47-8	4-Chloroaniline	3.0 U
87-68-3	Hexachlorobutadiene	2.0 U
59-50-7	4-Chloro-3-methylphenol	2.0 U
91-57-6	2-Methylnaphthalene	1.0 U
77-47-4	Hexachlorocyclopentadiene	5.0 U
88-06-2	2,4,6-Trichlorophenol	5.0 U
95-95-4	2,4,5-Trichlorophenol	5.0 U
91-58-7	2-Chloronaphthalene	1.0 U
88-74-4	2-Nitroaniline	5.0 U
131-11-3	Dimethylphthalate	1.0 U
208-96-8	Acenaphthylene	1.0 U
99-09-2	3-Nitroaniline	6.0 U
83-32-9	Acenaphthene	1.0 U
51-28-5	2,4-Dinitrophenol	10 U
100-02-7	4-Nitrophenol	5.0 U
132-64-9	Dibenzofuran	1.0 U
606-20-2	2,6-Dinitrotoluene	6.7 Y

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by GC/MS

Sample No: Method Blank

Lab Sample ID: Q829MB
LIMS ID: 96-19678
Matrix: Water
Data Release Authorized: AH
Reported: 11/20/96

QC Report No: Q829-Landau Associates, Inc.
Project: Union Station
273008.29
Date Sampled: NA
Date Received: NA

Date extracted: 11/19/96
Date analyzed: 11/19/96
Instrument: FINN2

Sample Amount: 500 mL
Final Extract Volume: 0.5 mL
Dilution Factor: 1:1

CAS Number	Analyte	ug/L
121-14-2	2,4-Dinitrotoluene	5.0 U
84-66-2	Diethylphthalate	1.0 U
7005-72-3	4-Chlorophenyl-phenylether	1.0 U
86-73-7	Fluorene	1.0 U
100-01-6	4-Nitroaniline	5.0 U
534-52-1	4,6-Dinitro-2-Methylphenol	10 U
86-30-6	N-Nitrosodiphenylamine	1.0 U
101-55-3	4-Bromophenyl-phenylether	1.0 U
118-74-1	Hexachlorobenzene	1.0 U
87-86-5	Pentachlorophenol	5.0 U
85-01-8	Phenanthrene	1.0 U
86-74-8	Carbazole	1.0 U
120-12-7	Anthracene	1.0 U
84-74-2	Di-n-Butylphthalate	1.0 U
206-44-0	Fluoranthene	1.0 U
129-00-0	Pyrene	1.0 U
85-68-7	Butylbenzylphthalate	1.0 U
91-94-1	3,3'-Dichlorobenzidine	5.0 U
56-55-3	Benzo(a)anthracene	1.0 U
117-81-7	bis(2-Ethylhexyl)phthalate	1.0 U
218-01-9	Chrysene	1.0 U
117-84-0	Di-n-Octyl phthalate	1.0 U
205-99-2	Benzo(b)fluoranthene	1.0 U
207-08-9	Benzo(k)fluoranthene	1.0 U
50-32-8	Benzo(a)pyrene	1.0 U
193-39-5	Indeno(1,2,3-cd)pyrene	1.0 U
53-70-3	Dibenz(a,h)anthracene	1.0 U
191-24-2	Benzo(g,h,i)perylene	1.0 U

Semivolatiles Surrogate Recovery

d5-Nitrobenzene	84.2%	d5-Phenol	49.6%
2-Fluorobiphenyl	77.9%	2-Fluorophenol	57.1%
d14-p-Terphenyl	86.8%	2,4,6-Tribromophenol	40.5%
d4-1,2-Dichlorobenzene	76.2%	d4-2-Chlorophenol	80.5%

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ORGANICS ANALYSIS DATA SHEET
Semivolatiles by GC/MS

Lab Sample ID: Q829SB
LIMS ID: 96-19678
Matrix: Water

QC Report No: Q829-Landau Associates, Inc.
Project: Union Station
273008.29

Data Release Authorized: MF
Reported: 11/20/96

LABORATORY CONTROL SAMPLE
Date extracted: 11/19/96
Date analyzed: 11/19/96

CONSTITUENT	SPIKE VALUE	SPIKE ADDED	% RECOVERY
Phenol	23.3	37.5	62.1%
2-Chlorophenol	37.2	37.5	99.2%
1,4-Dichlorobenzene	23.7	25.0	94.8%
N-Nitroso-Di-N-Propylamine	18.4	25.0	73.6%
1,2,4-Trichlorobenzene	20.7	25.0	82.8%
4-Chloro-3-methylphenol	44.4	37.5	118%
Acenaphthene	21.5	25.0	86.0%
4-Nitrophenol	25.4	37.5	67.7%
2,4-Dinitrotoluene	30.7	25.0	123%
Pentachlorophenol	41.2	37.5	110%
Pyrene	21.0	25.0	84.0%

Lab Control Surrogate Recovery

d5-Nitrobenzene	95.6%	d5-Phenol	63.4%
2-Fluorobiphenyl	86.9%	2-Fluorophenol	81.6%
d14-p-Terphenyl	84.9%	2,4,6-Tribromophenol	90.7%
d4-1,2-Dichlorobenzene	84.9%	d4-2-Chlorophenol	98.0%

Reported in Total ug/L

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Semivolatiles by GC/MS

Sample No: MW-106-11/19/96

Lab Sample ID: Q838A
LIMS ID: 96-19774
Matrix: Water
Data Release Authorized: MF
Reported: 11/21/96

QC Report No: Q838-Landau Associates, Inc.
Project: Union Station
273008.29
Date Sampled: 11/19/96
Date Received: 11/19/96

Date extracted: 11/20/96
Date analyzed: 11/20/96
Instrument: NT1

Sample Amount: 500 mL
Final Extract Volume: 0.5 mL
Dilution Factor: 1:1

CAS Number	Analyte	ug/L
108-95-2	Phenol	2.0 U
111-44-4	Bis-(2-Chloroethyl) Ether	2.0 U
95-57-8	2-Chlorophenol	1.0 U
541-73-1	1,3-Dichlorobenzene	1.0 U
106-46-7	1,4-Dichlorobenzene	1.0 U
100-51-6	Benzyl Alcohol	5.0 U
95-50-1	1,2-Dichlorobenzene	1.0 U
95-48-7	2-Methylphenol	2.0 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	1.0 U
106-44-5	**4-Methylphenol**	**7.6**
621-64-7	N-Nitroso-Di-N-Propylamine	2.0 U
67-72-1	Hexachloroethane	2.0 U
98-95-3	Nitrobenzene	1.0 U
78-59-1	Isophorone	1.0 U
88-75-5	2-Nitrophenol	5.0 U
105-67-9	2,4-Dimethylphenol	3.0 U
65-85-0	Benzoic Acid	10 U
111-91-1	bis(2-Chloroethoxy) Methane	1.0 U
120-83-2	2,4-Dichlorophenol	3.0 U
120-82-1	1,2,4-Trichlorobenzene	1.0 U
91-20-3	**Naphthalene**	**62**
106-47-8	4-Chloroaniline	3.0 U
87-68-3	Hexachlorobutadiene	2.0 U
59-50-7	4-Chloro-3-methylphenol	2.0 U
91-57-6	**2-Methylnaphthalene**	**18**
77-47-4	Hexachlorocyclopentadiene	5.0 U
88-06-2	2,4,6-Trichlorophenol	5.0 U
95-95-4	2,4,5-Trichlorophenol	5.0 U
91-58-7	2-Chloronaphthalene	1.0 U
88-74-4	2-Nitroaniline	5.0 U
131-11-3	Dimethylphthalate	1.0 U
208-96-8	Acenaphthylene	1.0 U
99-09-2	3-Nitroaniline	6.0 U
83-32-9	**Acenaphthene**	**18**
51-28-5	2,4-Dinitrophenol	10 U
100-02-7	4-Nitrophenol	5.0 U
132-64-9	Dibenzofuran	1.0 U
606-20-2	2,6-Dinitrotoluene	5.0 U

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Sample No: MW-106-11/19/96

Lab Sample ID: Q838A
LIMS ID: 96-19774
Matrix: Water
Data Release Authorized: MP
Reported: 11/21/96

QC Report No: Q838-Landau Associates, Inc.
Project: Union Station
273008.29
Date Sampled: 11/19/96
Date Received: 11/19/96

Date extracted: 11/20/96
Date analyzed: 11/20/96
Instrument: NT1

Sample Amount: 500 mL
Final Extract Volume: 0.5 mL
Dilution Factor: 1:1

CAS Number	Analyte	ug/L
121-14-2	2,4-Dinitrotoluene	5.0 U
84-66-2	Diethylphthalate	1.0 U
7005-72-3	4-Chlorophenyl-phenylether	1.0 U
86-73-7	**Fluorene**	**5.5**
100-01-6	4-Nitroaniline	5.0 U
534-52-1	4,6-Dinitro-2-Methylphenol	10 U
86-30-6	N-Nitrosodiphenylamine	1.0 U
101-55-3	4-Bromophenyl-phenylether	1.0 U
118-74-1	Hexachlorobenzene	1.0 U
87-86-5	Pentachlorophenol	5.0 U
85-01-8	**Phenanthrene**	**8.3**
86-74-8	Carbazole	1.0 U
120-12-7	**Anthracene**	**1.5**
84-74-2	Di-n-Butylphthalate	1.0 U
206-44-0	**Fluoranthene**	**1.7**
129-00-0	**Pyrene**	**2.4**
85-68-7	Butylbenzylphthalate	1.0 U
91-94-1	3,3'-Dichlorobenzidine	5.0 U
56-55-3	Benzo(a)anthracene	1.0 U
117-81-7	bis(2-Ethylhexyl)phthalate	1.0 U
218-01-9	Chrysene	1.0 U
117-84-0	Di-n-Octyl phthalate	1.0 U
205-99-2	Benzo(b)fluoranthene	1.0 U
207-08-9	Benzo(k)fluoranthene	1.0 U
50-32-8	Benzo(a)pyrene	1.0 U
193-39-5	Indeno(1,2,3-cd)pyrene	1.0 U
53-70-3	Dibenz(a,h)anthracene	1.0 U
191-24-2	Benzo(g,h,i)perylene	1.0 U

Semivolatiles Surrogate Recovery

d5-Nitrobenzene	71.4%	d5-Phenol	38.9%
2-Fluorobiphenyl	66.4%	2-Fluorophenol	56.5%
d14-p-Terphenyl	89.1%	2,4,6-Tribromophenol	70.5%
d4-1,2-Dichlorobenzene	59.6%	d4-2-Chlorophenol	57.5%

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Semivolatiles by GC/MS

Sample No: MW-105-11/19/96

Lab Sample ID: Q838B
LIMS ID: 96-19775
Matrix: Water
Data Release Authorized: BBJ
Reported: 11/21/96

QC Report No: Q838-Landau Associates, Inc.
Project: Union Station
273008.29
Date Sampled: 11/19/96
Date Received: 11/19/96

Date extracted: 11/20/96
Date analyzed: 11/20/96
Instrument: NT1

Sample Amount: 500 mL
Final Extract Volume: 0.5 mL
Dilution Factor: 1:1

CAS Number	Analyte	ug/L
108-95-2	**Phenol**	**10**
111-44-4	Bis-(2-Chloroethyl) Ether	2.0 U
95-57-8	2-Chlorophenol	1.0 U
541-73-1	1,3-Dichlorobenzene	1.0 U
106-46-7	1,4-Dichlorobenzene	1.0 U
100-51-6	Benzyl Alcohol	5.0 U
95-50-1	1,2-Dichlorobenzene	1.0 U
95-48-7	**2-Methylphenol**	**20**
108-60-1	2,2'-Oxybis(1-Chloropropane)	1.0 U
106-44-5	**4-Methylphenol**	**40**
621-64-7	N-Nitroso-Di-N-Propylamine	2.0 U
67-72-1	Hexachloroethane	2.0 U
98-95-3	Nitrobenzene	1.0 U
78-59-1	Isophorone	1.0 U
88-75-5	2-Nitrophenol	5.0 U
105-67-9	**2,4-Dimethylphenol**	**560 E**
65-85-0	Benzoic Acid	10 U
111-91-1	bis(2-Chloroethoxy) Methane	1.0 U
120-83-2	2,4-Dichlorophenol	3.0 U
120-82-1	1,2,4-Trichlorobenzene	1.0 U
91-20-3	**Naphthalene**	**5,900 E**
106-47-8	4-Chloroaniline	3.0 U
87-68-3	Hexachlorobutadiene	2.0 U
59-50-7	4-Chloro-3-methylphenol	2.0 U
91-57-6	**2-Methylnaphthalene**	**580 E**
77-47-4	Hexachlorocyclopentadiene	5.0 U
88-06-2	2,4,6-Trichlorophenol	5.0 U
95-95-4	2,4,5-Trichlorophenol	5.0 U
91-58-7	2-Chloronaphthalene	1.0 U
88-74-4	2-Nitroaniline	5.0 U
131-11-3	Dimethylphthalate	1.0 U
208-96-8	**Acenaphthylene**	**240 E**
99-09-2	3-Nitroaniline	6.0 U
83-32-9	**Acenaphthene**	**69**
51-28-5	2,4-Dinitrophenol	10 U
100-02-7	4-Nitrophenol	5.0 U
132-64-9	**Dibenzofuran**	**57**
606-20-2	2,6-Dinitrotoluene	5.0 U

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Semivolatiles by GC/MS

Sample No: MW-105-11/19/96

Lab Sample ID: Q838B
LIMS ID: 96-19775
Matrix: Water
Data Release Authorized: ABF
Reported: 11/21/96

QC Report No: Q838-Landau Associates, Inc.
Project: Union Station
273008.29
Date Sampled: 11/19/96
Date Received: 11/19/96

Date extracted: 11/20/96
Date analyzed: 11/20/96
Instrument: NT1

Sample Amount: 500 mL
Final Extract Volume: 0.5 mL
Dilution Factor: 1:1

CAS Number	Analyte	ug/L
121-14-2	2,4-Dinitrotoluene	5.0 U
84-66-2	Diethylphthalate	1.0 U
7005-72-3	4-Chlorophenyl-phenylether	1.0 U
86-73-7	Fluorene	64
100-01-6	4-Nitroaniline	5.0 U
534-52-1	4,6-Dinitro-2-Methylphenol	10 U
86-30-6	N-Nitrosodiphenylamine	1.0 U
101-55-3	4-Bromophenyl-phenylether	1.0 U
118-74-1	Hexachlorobenzene	1.0 U
87-86-5	Pentachlorophenol	5.0 U
85-01-8	Phenanthrene	100 E
86-74-8	Carbazole	200 E
120-12-7	Anthracene	17
84-74-2	Di-n-Butylphthalate	1.0 U
206-44-0	Fluoranthene	18
129-00-0	Pyrene	18
85-68-7	Butylbenzylphthalate	1.0 U
91-94-1	3,3'-Dichlorobenzidine	5.0 U
56-55-3	Benzo(a)anthracene	3.4
117-81-7	bis(2-Ethylhexyl)phthalate	1.0 U
218-01-9	Chrysene	4.0
117-84-0	Di-n-Octyl phthalate	1.0 U
205-99-2	Benzo(b)fluoranthene	2.3
207-08-9	Benzo(k)fluoranthene	2.8
50-32-8	Benzo(a)pyrene	4.1
193-39-5	Indeno(1,2,3-cd)pyrene	2.8
53-70-3	Dibenz(a,h)anthracene	1.0 U
191-24-2	Benzo(g,h,i)perylene	3.0

Semivolatiles Surrogate Recovery

d5-Nitrobenzene	165%	d5-Phenol	47.7%
2-Fluorobiphenyl	81.2%	2-Fluorophenol	68.2%
d14-p-Terphenyl	92.3%	2,4,6-Tribromophenol	101%
d4-1,2-Dichlorobenzene	70.0%	d4-2-Chlorophenol	71.5%

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ORGANICS ANALYSIS DATA SHEET
Semivolatiles by GC/MS

Sample No: MW-105-11/19/96
DILUTION
Lab Sample ID: Q838B-DL
QC Report No: Q838-Landau Associates, Inc.
LIMS ID: 96-19775
Project: Union Station
Matrix: Water
273008.29
Data Release Authorized: MP
Date Sampled: 11/19/96
Reported: 11/21/96
Date Received: 11/19/96

Date extracted: 11/20/96
Sample Amount: 500 mL
Date analyzed: 11/21/96
Final Extract Volume: 0.5 mL
Instrument: NT1
Dilution Factor: 1:100

CAS Number	Analyte	ug/L
108-95-2	Phenol	200 U
111-44-4	Bis-(2-Chloroethyl) Ether	200 U
95-57-8	2-Chlorophenol	100 U
541-73-1	1,3-Dichlorobenzene	100 U
106-46-7	1,4-Dichlorobenzene	100 U
100-51-6	Benzyl Alcohol	500 U
95-50-1	1,2-Dichlorobenzene	100 U
95-48-7	2-Methylphenol	200 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	100 U
106-44-5	4-Methylphenol	100 U
621-64-7	N-Nitroso-Di-N-Propylamine	200 U
67-72-1	Hexachloroethane	200 U
98-95-3	Nitrobenzene	100 U
78-59-1	Isophorone	100 U
88-75-5	2-Nitrophenol	500 U
105-67-9	2,4-Dimethylphenol	300 U
65-85-0	Benzoic Acid	1,000 U
111-91-1	bis(2-Chloroethoxy) Methane	100 U
120-83-2	2,4-Dichlorophenol	300 U
120-82-1	1,2,4-Trichlorobenzene	100 U
91-20-3	**Naphthalene**	**7,900**
106-47-8	4-Chloroaniline	300 U
87-68-3	Hexachlorobutadiene	200 U
59-50-7	4-Chloro-3-methylphenol	200 U
91-57-6	**2-Methylnaphthalene**	**350**
77-47-4	Hexachlorocyclopentadiene	500 U
88-06-2	2,4,6-Trichlorophenol	500 U
95-95-4	2,4,5-Trichlorophenol	500 U
91-58-7	2-Chloronaphthalene	100 U
88-74-4	2-Nitroaniline	500 U
131-11-3	Dimethylphthalate	100 U
208-96-8	**Acenaphthylene**	**270**
99-09-2	3-Nitroaniline	600 U
83-32-9	Acenaphthene	100 U
51-28-5	2,4-Dinitrophenol	1,000 U
100-02-7	4-Nitrophenol	500 U
132-64-9	Dibenzofuran	100 U
606-20-2	2,6-Dinitrotoluene	500 U

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Semivolatiles by GC/MS

Lab Sample ID: Q838B-DL
LIMS ID: 96-19775
Matrix: Water
Data Release Authorized:
Reported: 11/21/96

Sample No: MW-105-11/19/96
DILUTION
QC Report No: Q838-Landau Associates, Inc.
Project: Union Station
273008.29
Date Sampled: 11/19/96
Date Received: 11/19/96

Date extracted: 11/20/96
Date analyzed: 11/21/96
Instrument: NT1

Sample Amount: 500 mL
Final Extract Volume: 0.5 mL
Dilution Factor: 1:100

CAS Number	Analyte	ug/L
121-14-2	2,4-Dinitrotoluene	500 U
84-66-2	Diethylphthalate	100 U
7005-72-3	4-Chlorophenyl-phenylether	100 U
86-73-7	Fluorene	100 U
100-01-6	4-Nitroaniline	500 U
534-52-1	4,6-Dinitro-2-Methylphenol	1,000 U
86-30-6	N-Nitrosodiphenylamine	100 U
101-55-3	4-Bromophenyl-phenylether	100 U
118-74-1	Hexachlorobenzene	100 U
87-86-5	Pentachlorophenol	500 U
85-01-8	**Phenanthrene**	**130**
86-74-8	**Carbazole**	**200**
120-12-7	Anthracene	100 U
84-74-2	Di-n-Butylphthalate	100 U
206-44-0	Fluoranthene	100 U
129-00-0	Pyrene	100 U
85-68-7	Butylbenzylphthalate	100 U
91-94-1	3,3'-Dichlorobenzidine	500 U
56-55-3	Benzo(a)anthracene	100 U
117-81-7	bis(2-Ethylhexyl)phthalate	100 U
218-01-9	Chrysene	100 U
117-84-0	Di-n-Octyl phthalate	100 U
205-99-2	Benzo(b)fluoranthene	100 U
207-08-9	Benzo(k)fluoranthene	100 U
50-32-8	Benzo(a)pyrene	100 U
193-39-5	Indeno(1,2,3-cd)pyrene	100 U
53-70-3	Dibenz(a,h)anthracene	100 U
191-24-2	Benzo(g,h,i)perylene	100 U

Semivolatiles Surrogate Recovery

d5-Nitrobenzene	D	d5-Phenol	D
2-Fluorobiphenyl	D	2-Fluorophenol	D
d14-p-Terphenyl	D	2,4,6-Tribromophenol	D
d4-1,2-Dichlorobenzene	D	d4-2-Chlorophenol	D

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ORGANICS ANALYSIS DATA SHEET
Semivolatiles by GC/MS
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Sample No: MW-104-11/19/96

Lab Sample ID: Q838C
LIMS ID: 96-19776
Matrix: Water
Data Release Authorized:
Reported: 11/21/96

QC Report No: Q838-Landau Associates, Inc.
Project: Union Station
273008.29
Date Sampled: 11/19/96
Date Received: 11/19/96

Date extracted: 11/20/96
Date analyzed: 11/20/96
Instrument: NT1

Sample Amount: 500 mL
Final Extract Volume: 0.5 mL
Dilution Factor: 1:1

CAS Number	Analyte	ug/L
108-95-2	Phenol	2.0 U
111-44-4	Bis-(2-Chloroethyl) Ether	2.0 U
95-57-8	2-Chlorophenol	1.0 U
541-73-1	1,3-Dichlorobenzene	1.0 U
106-46-7	1,4-Dichlorobenzene	1.0 U
100-51-6	Benzyl Alcohol	5.0 U
95-50-1	1,2-Dichlorobenzene	1.0 U
95-48-7	2-Methylphenol	2.0 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	1.0 U
106-44-5	4-Methylphenol	1.0 U
621-64-7	N-Nitroso-Di-N-Propylamine	2.0 U
67-72-1	Hexachloroethane	2.0 U
98-95-3	Nitrobenzene	1.0 U
78-59-1	Isophorone	1.0 U
88-75-5	2-Nitrophenol	5.0 U
105-67-9	2,4-Dimethylphenol	3.0 U
65-85-0	Benzoic Acid	10 U
111-91-1	bis(2-Chloroethoxy) Methane	1.0 U
120-83-2	2,4-Dichlorophenol	3.0 U
120-82-1	1,2,4-Trichlorobenzene	1.0 U
91-20-3	**Naphthalene**	**1,300 E**
106-47-8	4-Chloroaniline	3.0 U
87-68-3	Hexachlorobutadiene	2.0 U
59-50-7	4-Chloro-3-methylphenol	2.0 U
91-57-6	**2-Methylnaphthalene**	**230 E**
77-47-4	Hexachlorocyclopentadiene	5.0 U
88-06-2	2,4,6-Trichlorophenol	5.0 U
95-95-4	2,4,5-Trichlorophenol	5.0 U
91-58-7	2-Chloronaphthalene	1.0 U
88-74-4	2-Nitroaniline	5.0 U
131-11-3	Dimethylphthalate	1.0 U
208-96-8	**Acenaphthylene**	**6.1**
99-09-2	3-Nitroaniline	6.0 U
83-32-9	**Acenaphthene**	**170 E**
51-28-5	2,4-Dinitrophenol	10 U
100-02-7	4-Nitrophenol	5.0 U
132-64-9	**Dibenzofuran**	**42**
606-20-2	2,6-Dinitrotoluene	5.0 U

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by GC/MS

ANALYTICAL RESOURCES INCORPORATED

Sample No: MW-104-11/19/96

Lab Sample ID: Q838C
LIMS ID: 96-19776
Matrix: Water
Data Release Authorized: *DBP*
Reported: 11/21/96

QC Report No: Q838-Landau Associates, Inc.
Project: Union Station
273008.29
Date Sampled: 11/19/96
Date Received: 11/19/96

Date extracted: 11/20/96
Date analyzed: 11/20/96
Instrument: NT1

Sample Amount: 500 mL
Final Extract Volume: 0.5 mL
Dilution Factor: 1:1

CAS Number	Analyte	ug/L
121-14-2	2,4-Dinitrotoluene	5.0 U
84-66-2	Diethylphthalate	1.0 U
7005-72-3	4-Chlorophenyl-phenylether	1.0 U
86-73-7	**Fluorene**	57
100-01-6	4-Nitroaniline	5.0 U
534-52-1	4,6-Dinitro-2-Methylphenol	10 U
86-30-6	N-Nitrosodiphenylamine	1.0 U
101-55-3	4-Bromophenyl-phenylether	1.0 U
118-74-1	Hexachlorobenzene	1.0 U
87-86-5	Pentachlorophenol	5.0 U
85-01-8	**Phenanthrene**	78
86-74-8	**Carbazole**	74
120-12-7	**Anthracene**	12
84-74-2	Di-n-Butylphthalate	1.0 U
206-44-0	**Fluoranthene**	11
129-00-0	**Pyrene**	9.7
85-68-7	Butylbenzylphthalate	1.0 U
91-94-1	3,3'-Dichlorobenzidine	5.0 U
56-55-3	**Benzo(a)anthracene**	1.5
117-81-7	bis(2-Ethylhexyl)phthalate	1.0 U
218-01-9	**Chrysene**	1.8
117-84-0	Di-n-Octyl phthalate	1.0 U
205-99-2	Benzo(b)fluoranthene	1.0 U
207-08-9	Benzo(k)fluoranthene	1.0 U
50-32-8	**Benzo(a)pyrene**	1.4
193-39-5	Indeno(1,2,3-cd)pyrene	1.0 U
53-70-3	Dibenz(a,h)anthracene	1.0 U
191-24-2	**Benzo(g,h,i)perylene**	1.0

Semivolatiles Surrogate Recovery

d5-Nitrobenzene	98.1%	d5-Phenol	44.4%
2-Fluorobiphenyl	77.3%	2-Fluorophenol	62.0%
d14-p-Terphenyl	92.8%	2,4,6-Tribromophenol	82.7%
d4-1,2-Dichlorobenzene	71.2%	d4-2-Chlorophenol	67.3%

ANALYTICAL
RESOURCES
INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by GC/MS

Sample No: MW-104-11/19/96
DILUTION

Lab Sample ID: Q838C-DL
LIMS ID: 96-19776
Matrix: Water
Data Release Authorized: MP
Reported: 11/21/96

QC Report No: Q838-Landau Associates, Inc.
Project: Union Station
273008.29
Date Sampled: 11/19/96
Date Received: 11/19/96

Date extracted: 11/20/96
Date analyzed: 11/21/96
Instrument: NT1

Sample Amount: 500 mL
Final Extract Volume: 0.5 mL
Dilution Factor: 1:50

CAS Number	Analyte	ug/L
108-95-2	Phenol	100 U
111-44-4	Bis-(2-Chloroethyl) Ether	100 U
95-57-8	2-Chlorophenol	50 U
541-73-1	1,3-Dichlorobenzene	50 U
106-46-7	1,4-Dichlorobenzene	50 U
100-51-6	Benzyl Alcohol	250 U
95-50-1	1,2-Dichlorobenzene	50 U
95-48-7	2-Methylphenol	100 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	50 U
106-44-5	4-Methylphenol	50 U
621-64-7	N-Nitroso-Di-N-Propylamine	100 U
67-72-1	Hexachloroethane	100 U
98-95-3	Nitrobenzene	50 U
78-59-1	Isophorone	50 U
88-75-5	2-Nitrophenol	250 U
105-67-9	2,4-Dimethylphenol	150 U
65-85-0	Benzoic Acid	500 U
111-91-1	bis(2-Chloroethoxy) Methane	50 U
120-83-2	2,4-Dichlorophenol	150 U
120-82-1	1,2,4-Trichlorobenzene	50 U
91-20-3	**Naphthalene**	**1,800**
106-47-8	4-Chloroaniline	150 U
87-68-3	Hexachlorobutadiene	100 U
59-50-7	4-Chloro-3-methylphenol	100 U
91-57-6	**2-Methylnaphthalene**	**210**
77-47-4	Hexachlorocyclopentadiene	250 U
88-06-2	2,4,6-Trichlorophenol	250 U
95-95-4	2,4,5-Trichlorophenol	250 U
91-58-7	2-Chloronaphthalene	50 U
88-74-4	2-Nitroaniline	250 U
131-11-3	Dimethylphthalate	50 U
208-96-8	Acenaphthylene	50 U
99-09-2	3-Nitroaniline	300 U
83-32-9	**Acenaphthene**	**190**
51-28-5	2,4-Dinitrophenol	500 U
100-02-7	4-Nitrophenol	250 U
132-64-9	Dibenzofuran	50 U
606-20-2	2,6-Dinitrotoluene	250 U

ANALYTICAL
RESOURCES
INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by GC/MS

Lab Sample ID: Q838C-DL
LIMS ID: 96-19776
Matrix: Water
Data Release Authorized: *MP*
Reported: 11/21/96

Sample No: MW-104-11/19/96
DILUTION
QC Report No: Q838-Landau Associates, Inc.
Project: Union Station
273008.29
Date Sampled: 11/19/96
Date Received: 11/19/96

Date extracted: 11/20/96
Date analyzed: 11/21/96
Instrument: NT1

Sample Amount: 500 mL
Final Extract Volume: 0.5 mL
Dilution Factor: 1:50

CAS Number	Analyte	ug/L
121-14-2	2,4-Dinitrotoluene	250 U
84-66-2	Diethylphthalate	50 U
7005-72-3	4-Chlorophenyl-phenylether	50 U
86-73-7	**Fluorene**	**57**
100-01-6	4-Nitroaniline	250 U
534-52-1	4,6-Dinitro-2-Methylphenol	500 U
86-30-6	N-Nitrosodiphenylamine	50 U
101-55-3	4-Bromophenyl-phenylether	50 U
118-74-1	Hexachlorobenzene	50 U
87-86-5	Pentachlorophenol	250 U
85-01-8	**Phenanthrene**	**90**
86-74-8	**Carbazole**	**68**
120-12-7	Anthracene	50 U
84-74-2	Di-n-Butylphthalate	50 U
206-44-0	Fluoranthene	50 U
129-00-0	Pyrene	50 U
85-68-7	Butylbenzylphthalate	50 U
91-94-1	3,3'-Dichlorobenzidine	250 U
56-55-3	Benzo(a)anthracene	50 U
117-81-7	bis(2-Ethylhexyl)phthalate	50 U
218-01-9	Chrysene	50 U
117-84-0	Di-n-Octyl phthalate	50 U
205-99-2	Benzo(b)fluoranthene	50 U
207-08-9	Benzo(k)fluoranthene	50 U
50-32-8	Benzo(a)pyrene	50 U
193-39-5	Indeno(1,2,3-cd)pyrene	50 U
53-70-3	Dibenz(a,h)anthracene	50 U
191-24-2	Benzo(g,h,i)perylene	50 U

Semivolatiles Surrogate Recovery

d5-Nitrobenzene	D	d5-Phenol	D
2-Fluorobiphenyl	D	2-Fluorophenol	D
d14-p-Terphenyl	D	2,4,6-Tribromophenol	D
d4-1,2-Dichlorobenzene	D	d4-2-Chlorophenol	D

ANALYTICAL
RESOURCES
INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by GC/MS

Sample No: HC-103-11/19/96

Lab Sample ID: Q838D
LIMS ID: 96-19777
Matrix: Water
Data Release Authorized: NT
Reported: 11/21/96

QC Report No: Q838-Landau Associates, Inc.
Project: Union Station
273008.29
Date Sampled: 11/19/96
Date Received: 11/19/96

Date extracted: 11/20/96
Date analyzed: 11/20/96
Instrument: NT1

Sample Amount: 500 mL
Final Extract Volume: 0.5 mL
Dilution Factor: 1:1

CAS Number	Analyte	ug/L
108-95-2	Phenol	2.0 U
111-44-4	Bis-(2-Chloroethyl) Ether	2.0 U
95-57-8	2-Chlorophenol	1.0 U
541-73-1	1,3-Dichlorobenzene	1.0 U
106-46-7	1,4-Dichlorobenzene	1.0 U
100-51-6	Benzyl Alcohol	5.0 U
95-50-1	1,2-Dichlorobenzene	1.0 U
95-48-7	2-Methylphenol	2.0 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	1.0 U
106-44-5	4-Methylphenol	1.0 U
621-64-7	N-Nitroso-Di-N-Propylamine	2.0 U
67-72-1	Hexachloroethane	2.0 U
98-95-3	Nitrobenzene	1.0 U
78-59-1	Isophorone	1.0 U
88-75-5	2-Nitrophenol	5.0 U
105-67-9	2,4-Dimethylphenol	3.0 U
65-85-0	Benzoic Acid	10 U
111-91-1	bis(2-Chloroethoxy) Methane	1.0 U
120-83-2	2,4-Dichlorophenol	3.0 U
120-82-1	1,2,4-Trichlorobenzene	1.0 U
91-20-3	Naphthalene	3.0 Y
106-47-8	4-Chloroaniline	3.0 U
87-68-3	Hexachlorobutadiene	2.0 U
59-50-7	4-Chloro-3-methylphenol	2.0 U
91-57-6	2-Methylnaphthalene	1.0 U
77-47-4	Hexachlorocyclopentadiene	5.0 U
88-06-2	2,4,6-Trichlorophenol	5.0 U
95-95-4	2,4,5-Trichlorophenol	5.0 U
91-58-7	2-Chloronaphthalene	1.0 U
88-74-4	2-Nitroaniline	5.0 U
131-11-3	Dimethylphthalate	1.0 U
208-96-8	Acenaphthylene	1.0 U
99-09-2	3-Nitroaniline	6.0 U
83-32-9	Acenaphthene	1.0 U
51-28-5	2,4-Dinitrophenol	10 U
100-02-7	4-Nitrophenol	5.0 U
132-64-9	Dibenzofuran	1.0 U
606-20-2	2,6-Dinitrotoluene	5.0 U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by GC/MS

Sample No: HC-103-11/19/96

Lab Sample ID: Q838D
LIMS ID: 96-19777
Matrix: Water
Data Release Authorized: DH
Reported: 11/21/96

QC Report No: Q838-Landau Associates, Inc.
Project: Union Station
273008.29
Date Sampled: 11/19/96
Date Received: 11/19/96

Date extracted: 11/20/96
Date analyzed: 11/20/96
Instrument: NT1

Sample Amount: 500 mL
Final Extract Volume: 0.5 mL
Dilution Factor: 1:1

CAS Number	Analyte	ug/L
121-14-2	2,4-Dinitrotoluene	5.0 U
84-66-2	Diethylphthalate	1.0 U
7005-72-3	4-Chlorophenyl-phenylether	1.0 U
86-73-7	Fluorene	1.0 U
100-01-6	4-Nitroaniline	5.0 U
534-52-1	4,6-Dinitro-2-Methylphenol	10 U
86-30-6	N-Nitrosodiphenylamine	1.0 U
101-55-3	4-Bromophenyl-phenylether	1.0 U
118-74-1	Hexachlorobenzene	1.0 U
87-86-5	Pentachlorophenol	5.0 U
85-01-8	Phenanthrene	1.0 U
86-74-8	Carbazole	1.0 U
120-12-7	Anthracene	1.0 U
84-74-2	Di-n-Butylphthalate	1.0 U
206-44-0	Fluoranthene	1.0 U
129-00-0	Pyrene	1.0 U
85-68-7	Butylbenzylphthalate	1.0 U
91-94-1	3,3'-Dichlorobenzidine	5.0 U
56-55-3	Benzo(a)anthracene	1.0 U
117-81-7	bis(2-Ethylhexyl)phthalate	1.0 U
218-01-9	Chrysene	1.0 U
117-84-0	Di-n-Octyl phthalate	1.0 U
205-99-2	Benzo(b)fluoranthene	1.0 U
207-08-9	Benzo(k)fluoranthene	1.0 U
50-32-8	Benzo(a)pyrene	1.0 U
193-39-5	Indeno(1,2,3-cd)pyrene	1.0 U
53-70-3	Dibenz(a,h)anthracene	1.0 U
191-24-2	Benzo(g,h,i)perylene	1.0 U

Semivolatiles Surrogate Recovery

d5-Nitrobenzene	74.2%	d5-Phenol	41.4%
2-Fluorobiphenyl	68.5%	2-Fluorophenol	62.5%
d14-p-Terphenyl	95.2%	2,4,6-Tribromophenol	89.3%
d4-1,2-Dichlorobenzene	64.4%	d4-2-Chlorophenol	70.5%

ANALYTICAL
RESOURCES
INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by GC/MS

Lab Sample ID: Q838D-R
LIMS ID: 96-19777
Matrix: Water
Data Release Authorized: NBP
Reported: 11/21/96

Sample No: HC-103-11/19/96 REANALYSIS
QC Report No: Q838-Landau Associates, Inc.
Project: Union Station 273008.29
Date Sampled: 11/19/96
Date Received: 11/19/96

Date extracted: 11/20/96
Date analyzed: 11/21/96
Instrument: NT1

Sample Amount: 500 mL
Final Extract Volume: 0.5 mL
Dilution Factor: 1:1

CAS Number	Analyte	ug/L
108-95-2	Phenol	2.0 U
111-44-4	Bis-(2-Chloroethyl) Ether	2.0 U
95-57-8	2-Chlorophenol	1.0 U
541-73-1	1,3-Dichlorobenzene	1.0 U
106-46-7	1,4-Dichlorobenzene	1.0 U
100-51-6	Benzyl Alcohol	5.0 U
95-50-1	1,2-Dichlorobenzene	1.0 U
95-48-7	2-Methylphenol	2.0 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	1.0 U
106-44-5	4-Methylphenol	1.0 U
621-64-7	N-Nitroso-Di-N-Propylamine	2.0 U
67-72-1	Hexachloroethane	2.0 U
98-95-3	Nitrobenzene	1.0 U
78-59-1	Isophorone	1.0 U
88-75-5	2-Nitrophenol	5.0 U
105-67-9	2,4-Dimethylphenol	3.0 U
65-85-0	Benzoic Acid	10 U
111-91-1	bis(2-Chloroethoxy) Methane	1.0 U
120-83-2	2,4-Dichlorophenol	3.0 U
120-82-1	1,2,4-Trichlorobenzene	1.0 U
91-20-3	Naphthalene	1.0 U
106-47-8	4-Chloroaniline	3.0 U
87-68-3	Hexachlorobutadiene	2.0 U
59-50-7	4-Chloro-3-methylphenol	2.0 U
91-57-6	2-Methylnaphthalene	1.0 U
77-47-4	Hexachlorocyclopentadiene	5.0 U
88-06-2	2,4,6-Trichlorophenol	5.0 U
95-95-4	2,4,5-Trichlorophenol	5.0 U
91-58-7	2-Chloronaphthalene	1.0 U
88-74-4	2-Nitroaniline	5.0 U
131-11-3	Dimethylphthalate	1.0 U
208-96-8	Acenaphthylene	1.0 U
99-09-2	3-Nitroaniline	6.0 U
83-32-9	Acenaphthene	1.0 U
51-28-5	2,4-Dinitrophenol	10 U
100-02-7	4-Nitrophenol	5.0 U
132-64-9	Dibenzofuran	1.0 U
606-20-2	2,6-Dinitrotoluene	5.0 U

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by GC/MS

ANALYTICAL RESOURCES INCORPORATED

Lab Sample ID: Q838D-R
LIMS ID: 96-19777
Matrix: Water
Data Release Authorized: MM
Reported: 11/21/96

Sample No: HC-103-11/19/96 REANALYSIS
QC Report No: Q838-Landau Associates, Inc.
Project: Union Station 273008.29
Date Sampled: 11/19/96
Date Received: 11/19/96

Date extracted: 11/20/96
Date analyzed: 11/21/96
Instrument: NT1

Sample Amount: 500 mL
Final Extract Volume: 0.5 mL
Dilution Factor: 1:1

CAS Number	Analyte	ug/L
121-14-2	2,4-Dinitrotoluene	5.0 U
84-66-2	Diethylphthalate	1.0 U
7005-72-3	4-Chlorophenyl-phenylether	1.0 U
86-73-7	Fluorene	1.0 U
100-01-6	4-Nitroaniline	5.0 U
534-52-1	4,6-Dinitro-2-Methylphenol	10 U
86-30-6	N-Nitrosodiphenylamine	1.0 U
101-55-3	4-Bromophenyl-phenylether	1.0 U
118-74-1	Hexachlorobenzene	1.0 U
87-86-5	Pentachlorophenol	5.0 U
85-01-8	Phenanthrene	1.0 U
86-74-8	Carbazole	1.0 U
120-12-7	Anthracene	1.0 U
84-74-2	Di-n-Butylphthalate	1.0 U
206-44-0	Fluoranthene	1.0 U
129-00-0	Pyrene	1.0 U
85-68-7	Butylbenzylphthalate	1.0 U
91-94-1	3,3'-Dichlorobenzidine	5.0 U
56-55-3	Benzo(a)anthracene	1.0 U
117-81-7	bis(2-Ethylhexyl)phthalate	1.0 U
218-01-9	Chrysene	1.0 U
117-84-0	Di-n-Octyl phthalate	1.0 U
205-99-2	Benzo(b)fluoranthene	1.0 U
207-08-9	Benzo(k)fluoranthene	1.0 U
50-32-8	Benzo(a)pyrene	1.0 U
193-39-5	Indeno(1,2,3-cd)pyrene	1.0 U
53-70-3	Dibenz(a,h)anthracene	1.0 U
191-24-2	Benzo(g,h,i)perylene	1.0 U

Semivolatiles Surrogate Recovery

d5-Nitrobenzene	55.9%	d5-Phenol	34.7%
2-Fluorobiphenyl	49.7%	2-Fluorophenol	48.3%
d14-p-Terphenyl	67.0%	2,4,6-Tribromophenol	53.4%
d4-1,2-Dichlorobenzene	50.8%	d4-2-Chlorophenol	58.4%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by GC/MS

Sample No: MW-205-11/19/96

Lab Sample ID: Q838E
LIMS ID: 96-19778
Matrix: Water
Data Release Authorized: DH
Reported: 11/21/96

QC Report No: Q838-Landau Associates, Inc.
Project: Union Station
273008.29
Date Sampled: 11/19/96
Date Received: 11/19/96

Date extracted: 11/20/96
Date analyzed: 11/20/96
Instrument: NT1

Sample Amount: 500 mL
Final Extract Volume: 0.5 mL
Dilution Factor: 1:1

CAS Number	Analyte	ug/L
108-95-2	**Phenol**	**10**
111-44-4	Bis-(2-Chloroethyl) Ether	2.0 U
95-57-8	2-Chlorophenol	1.0 U
541-73-1	1,3-Dichlorobenzene	1.0 U
106-46-7	1,4-Dichlorobenzene	1.0 U
100-51-6	Benzyl Alcohol	5.0 U
95-50-1	1,2-Dichlorobenzene	1.0 U
95-48-7	**2-Methylphenol**	**21**
108-60-1	2,2'-Oxybis(1-Chloropropane)	1.0 U
106-44-5	**4-Methylphenol**	**43**
621-64-7	N-Nitroso-Di-N-Propylamine	2.0 U
67-72-1	Hexachloroethane	2.0 U
98-95-3	Nitrobenzene	1.0 U
78-59-1	Isophorone	1.0 U
88-75-5	2-Nitrophenol	5.0 U
105-67-9	**2,4-Dimethylphenol**	**650 E**
65-85-0	Benzoic Acid	10 U
111-91-1	bis(2-Chloroethoxy) Methane	1.0 U
120-83-2	2,4-Dichlorophenol	3.0 U
120-82-1	1,2,4-Trichlorobenzene	1.0 U
91-20-3	**Naphthalene**	**6,400 E**
106-47-8	4-Chloroaniline	3.0 U
87-68-3	Hexachlorobutadiene	2.0 U
59-50-7	4-Chloro-3-methylphenol	2.0 U
91-57-6	**2-Methylnaphthalene**	**640 E**
77-47-4	Hexachlorocyclopentadiene	5.0 U
88-06-2	2,4,6-Trichlorophenol	5.0 U
95-95-4	2,4,5-Trichlorophenol	5.0 U
91-58-7	2-Chloronaphthalene	1.0 U
88-74-4	2-Nitroaniline	5.0 U
131-11-3	Dimethylphthalate	1.0 U
208-96-8	**Acenaphthylene**	**240 E**
99-09-2	3-Nitroaniline	6.0 U
83-32-9	**Acenaphthene**	**69**
51-28-5	2,4-Dinitrophenol	10 U
100-02-7	4-Nitrophenol	5.0 U
132-64-9	**Dibenzofuran**	**57**
606-20-2	2,6-Dinitrotoluene	5.0 U

ANALYTICAL
RESOURCES
INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by GC/MS

Sample No: MW-205-11/19/96

Lab Sample ID: Q838E
LIMS ID: 96-19778
Matrix: Water
Data Release Authorized: MP
Reported: 11/21/96

QC Report No: Q838-Landau Associates, Inc.
Project: Union Station
273008.29
Date Sampled: 11/19/96
Date Received: 11/19/96

Date extracted: 11/20/96
Date analyzed: 11/20/96
Instrument: NT1

Sample Amount: 500 mL
Final Extract Volume: 0.5 mL
Dilution Factor: 1:1

CAS Number	Analyte	ug/L
121-14-2	2,4-Dinitrotoluene	5.0 U
84-66-2	Diethylphthalate	1.0 U
7005-72-3	4-Chlorophenyl-phenylether	1.0 U
86-73-7	**Fluorene**	66
100-01-6	4-Nitroaniline	5.0 U
534-52-1	4,6-Dinitro-2-Methylphenol	10 U
86-30-6	N-Nitrosodiphenylamine	1.0 U
101-55-3	4-Bromophenyl-phenylether	1.0 U
118-74-1	Hexachlorobenzene	1.0 U
87-86-5	Pentachlorophenol	5.0 U
85-01-8	**Phenanthrene**	100 E
86-74-8	**Carbazole**	200 E
120-12-7	**Anthracene**	15
84-74-2	Di-n-Butylphthalate	1.0 U
206-44-0	**Fluoranthene**	19
129-00-0	**Pyrene**	19
85-68-7	Butylbenzylphthalate	1.0 U
91-94-1	3,3'-Dichlorobenzidine	5.0 U
56-55-3	**Benzo(a)anthracene**	3.8
117-81-7	**bis(2-Ethylhexyl)phthalate**	1.1
218-01-9	**Chrysene**	4.2
117-84-0	Di-n-Octyl phthalate	1.0 U
205-99-2	**Benzo(b)fluoranthene**	2.3
207-08-9	**Benzo(k)fluoranthene**	3.1
50-32-8	**Benzo(a)pyrene**	4.5
193-39-5	**Indeno(1,2,3-cd)pyrene**	2.9
53-70-3	Dibenz(a,h)anthracene	1.0 U
191-24-2	**Benzo(g,h,i)perylene**	3.1

Semivolatiles Surrogate Recovery

d5-Nitrobenzene	182%	d5-Phenol	49.9%
2-Fluorobiphenyl	80.3%	2-Fluorophenol	71.4%
d14-p-Terphenyl	96.5%	2,4,6-Tribromophenol	114%
d4-1,2-Dichlorobenzene	66.9%	d4-2-Chlorophenol	74.9%

ANALYTICAL
RESOURCES
INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by GC/MS
Page 1 of 2

Lab Sample ID: Q838E-DL
LIMS ID: 96-19778
Matrix: Water
Data Release Authorized: MP
Reported: 11/21/96

Sample No: MW-205-11/19/96
DILUTION
QC Report No: Q838-Landau Associates, Inc.
Project: Union Station
273008.29
Date Sampled: 11/19/96
Date Received: 11/19/96

Date extracted: 11/20/96
Date analyzed: 11/21/96
Instrument: NT1

Sample Amount: 500 mL
Final Extract Volume: 0.5 mL
Dilution Factor: 1:100

CAS Number	Analyte	ug/L
108-95-2	Phenol	200 U
111-44-4	Bis-(2-Chloroethyl) Ether	200 U
95-57-8	2-Chlorophenol	100 U
541-73-1	1,3-Dichlorobenzene	100 U
106-46-7	1,4-Dichlorobenzene	100 U
100-51-6	Benzyl Alcohol	500 U
95-50-1	1,2-Dichlorobenzene	100 U
95-48-7	2-Methylphenol	200 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	100 U
106-44-5	4-Methylphenol	100 U
621-64-7	N-Nitroso-Di-N-Propylamine	200 U
67-72-1	Hexachloroethane	200 U
98-95-3	Nitrobenzene	100 U
78-59-1	Isophorone	100 U
88-75-5	2-Nitrophenol	500 U
105-67-9	2,4-Dimethylphenol	300 U
65-85-0	Benzoic Acid	1,000 U
111-91-1	bis(2-Chloroethoxy) Methane	100 U
120-83-2	2,4-Dichlorophenol	300 U
120-82-1	1,2,4-Trichlorobenzene	100 U
91-20-3	**Naphthalene**	**7,700**
106-47-8	4-Chloroaniline	300 U
87-68-3	Hexachlorobutadiene	200 U
59-50-7	4-Chloro-3-methylphenol	200 U
91-57-6	**2-Methylnaphthalene**	**350**
77-47-4	Hexachlorocyclopentadiene	500 U
88-06-2	2,4,6-Trichlorophenol	500 U
95-95-4	2,4,5-Trichlorophenol	500 U
91-58-7	2-Chloronaphthalene	100 U
88-74-4	2-Nitroaniline	500 U
131-11-3	Dimethylphthalate	100 U
208-96-8	**Acenaphthylene**	**270**
99-09-2	3-Nitroaniline	600 U
83-32-9	Acenaphthene	100 U
51-28-5	2,4-Dinitrophenol	1,000 U
100-02-7	4-Nitrophenol	500 U
132-64-9	Dibenzofuran	100 U
606-20-2	2,6-Dinitrotoluene	500 U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by GC/MS

Lab Sample ID: Q838E-DL
LIMS ID: 96-19778
Matrix: Water
Data Release Authorized:
Reported: 11/21/96

Sample No: MW-205-11/19/96 DILUTION
QC Report No: Q838-Landau Associates, Inc.
Project: Union Station 273008.29
Date Sampled: 11/19/96
Date Received: 11/19/96

Date extracted: 11/20/96
Date analyzed: 11/21/96
Instrument: NT1

Sample Amount: 500 mL
Final Extract Volume: 0.5 mL
Dilution Factor: 1:100

CAS Number	Analyte	ug/L
121-14-2	2,4-Dinitrotoluene	500 U
84-66-2	Diethylphthalate	100 U
7005-72-3	4-Chlorophenyl-phenylether	100 U
86-73-7	Fluorene	100 U
100-01-6	4-Nitroaniline	500 U
534-52-1	4,6-Dinitro-2-Methylphenol	1,000 U
86-30-6	N-Nitrosodiphenylamine	100 U
101-55-3	4-Bromophenyl-phenylether	100 U
118-74-1	Hexachlorobenzene	100 U
87-86-5	Pentachlorophenol	500 U
85-01-8	Phenanthrene	120
86-74-8	Carbazole	210
120-12-7	Anthracene	100 U
84-74-2	Di-n-Butylphthalate	100 U
206-44-0	Fluoranthene	100 U
129-00-0	Pyrene	100 U
85-68-7	Butylbenzylphthalate	100 U
91-94-1	3,3'-Dichlorobenzidine	500 U
56-55-3	Benzo(a)anthracene	100 U
117-81-7	bis(2-Ethylhexyl)phthalate	100 U
218-01-9	Chrysene	100 U
117-84-0	Di-n-Octyl phthalate	100 U
205-99-2	Benzo(b)fluoranthene	100 U
207-08-9	Benzo(k)fluoranthene	100 U
50-32-8	Benzo(a)pyrene	100 U
193-39-5	Indeno(1,2,3-cd)pyrene	100 U
53-70-3	Dibenz(a,h)anthracene	100 U
191-24-2	Benzo(g,h,i)perylene	100 U

Semivolatiles Surrogate Recovery

d5-Nitrobenzene	D	d5-Phenol	D
2-Fluorobiphenyl	D	2-Fluorophenol	D
d14-p-Terphenyl	D	2,4,6-Tribromophenol	D
d4-1,2-Dichlorobenzene	D	d4-2-Chlorophenol	D

ANALYTICAL
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ORGANICS ANALYSIS DATA SHEET
Semivolatiles by GC/MS

Sample No: MW-107-11/19/96

Lab Sample ID: Q838F
LIMS ID: 96-19779
Matrix: Water
Data Release Authorized: AH
Reported: 11/21/96

QC Report No: Q838-Landau Associates, Inc.
Project: Union Station
273008.29
Date Sampled: 11/19/96
Date Received: 11/19/96

Date extracted: 11/20/96
Date analyzed: 11/20/96
Instrument: NT1

Sample Amount: 500 mL
Final Extract Volume: 0.5 mL
Dilution Factor: 1:1

CAS Number	Analyte	ug/L
108-95-2	Phenol	2.0 U
111-44-4	Bis-(2-Chloroethyl) Ether	2.0 U
95-57-8	2-Chlorophenol	1.0 U
541-73-1	1,3-Dichlorobenzene	1.0 U
106-46-7	1,4-Dichlorobenzene	1.0 U
100-51-6	Benzyl Alcohol	5.0 U
95-50-1	1,2-Dichlorobenzene	1.0 U
95-48-7	2-Methylphenol	2.0 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	1.0 U
106-44-5	4-Methylphenol	1.0 U
621-64-7	N-Nitroso-Di-N-Propylamine	2.0 U
67-72-1	Hexachloroethane	2.0 U
98-95-3	Nitrobenzene	1.0 U
78-59-1	Isophorone	1.0 U
88-75-5	2-Nitrophenol	5.0 U
105-67-9	2,4-Dimethylphenol	3.0 U
65-85-0	Benzoic Acid	10 U
111-91-1	bis(2-Chloroethoxy) Methane	1.0 U
120-83-2	2,4-Dichlorophenol	3.0 U
120-82-1	1,2,4-Trichlorobenzene	1.0 U
91-20-3	**Naphthalene**	**660 E**
106-47-8	4-Chloroaniline	3.0 U
87-68-3	Hexachlorobutadiene	2.0 U
59-50-7	4-Chloro-3-methylphenol	2.0 U
91-57-6	**2-Methylnaphthalene**	**80**
77-47-4	Hexachlorocyclopentadiene	5.0 U
88-06-2	2,4,6-Trichlorophenol	5.0 U
95-95-4	2,4,5-Trichlorophenol	5.0 U
91-58-7	2-Chloronaphthalene	1.0 U
88-74-4	2-Nitroaniline	5.0 U
131-11-3	Dimethylphthalate	1.0 U
208-96-8	Acenaphthylene	1.0 U
99-09-2	3-Nitroaniline	6.0 U
83-32-9	**Acenaphthene**	**45**
51-28-5	2,4-Dinitrophenol	10 U
100-02-7	4-Nitrophenol	5.0 U
132-64-9	**Dibenzofuran**	**1.7**
606-20-2	2,6-Dinitrotoluene	5.0 U

ANALYTICAL
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ORGANICS ANALYSIS DATA SHEET
Semivolatiles by GC/MS

Sample No: MW-107-11/19/96

Lab Sample ID: Q838F
LIMS ID: 96-19779
Matrix: Water
Data Release Authorized: MP
Reported: 11/21/96

QC Report No: Q838-Landau Associates, Inc.
Project: Union Station
273008.29
Date Sampled: 11/19/96
Date Received: 11/19/96

Date extracted: 11/20/96
Date analyzed: 11/20/96
Instrument: NT1

Sample Amount: 500 mL
Final Extract Volume: 0.5 mL
Dilution Factor: 1:1

CAS Number	Analyte	ug/L
121-14-2	2,4-Dinitrotoluene	5.0 U
84-66-2	Diethylphthalate	1.0 U
7005-72-3	4-Chlorophenyl-phenylether	1.0 U
86-73-7	**Fluorene**	10
100-01-6	4-Nitroaniline	5.0 U
534-52-1	4,6-Dinitro-2-Methylphenol	10 U
86-30-6	N-Nitrosodiphenylamine	1.0 U
101-55-3	4-Bromophenyl-phenylether	1.0 U
118-74-1	Hexachlorobenzene	1.0 U
87-86-5	Pentachlorophenol	5.0 U
85-01-8	**Phenanthrene**	8.9
86-74-8	**Carbazole**	4.2
120-12-7	Anthracene	1.0 U
84-74-2	Di-n-Butylphthalate	1.0 U
206-44-0	Fluoranthene	1.0 U
129-00-0	Pyrene	1.0 U
85-68-7	Butylbenzylphthalate	1.0 U
91-94-1	3,3'-Dichlorobenzidine	5.0 U
56-55-3	Benzo(a)anthracene	1.0 U
117-81-7	bis(2-Ethylhexyl)phthalate	1.0 U
218-01-9	Chrysene	1.0 U
117-84-0	Di-n-Octyl phthalate	1.0 U
205-99-2	Benzo(b)fluoranthene	1.0 U
207-08-9	Benzo(k)fluoranthene	1.0 U
50-32-8	Benzo(a)pyrene	1.0 U
193-39-5	Indeno(1,2,3-cd)pyrene	1.0 U
53-70-3	Dibenz(a,h)anthracene	1.0 U
191-24-2	Benzo(g,h,i)perylene	1.0 U

Semivolatiles Surrogate Recovery

d5-Nitrobenzene	75.3%	d5-Phenol	43.6%
2-Fluorobiphenyl	71.0%	2-Fluorophenol	64.6%
d14-p-Terphenyl	93.0%	2,4,6-Tribromophenol	95.3%
d4-1,2-Dichlorobenzene	66.4%	d4-2-Chlorophenol	71.5%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by GC/MS

Lab Sample ID: Q838F-DL
LIMS ID: 96-19779
Matrix: Water
Data Release Authorized:
Reported: 11/21/96

Sample No: MW-107-11/19/96 DILUTION
QC Report No: Q838-Landau Associates, Inc.
Project: Union Station 273008.29
Date Sampled: 11/19/96
Date Received: 11/19/96

Date extracted: 11/20/96
Date analyzed: 11/21/96
Instrument: NT1

Sample Amount: 500 mL
Final Extract Volume: 0.5 mL
Dilution Factor: 1:20

CAS Number	Analyte	ug/L
108-95-2	Phenol	40 U
111-44-4	Bis-(2-Chloroethyl) Ether	40 U
95-57-8	2-Chlorophenol	20 U
541-73-1	1,3-Dichlorobenzene	20 U
106-46-7	1,4-Dichlorobenzene	20 U
100-51-6	Benzyl Alcohol	100 U
95-50-1	1,2-Dichlorobenzene	20 U
95-48-7	2-Methylphenol	40 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	20 U
106-44-5	4-Methylphenol	20 U
621-64-7	N-Nitroso-Di-N-Propylamine	40 U
67-72-1	Hexachloroethane	40 U
98-95-3	Nitrobenzene	20 U
78-59-1	Isophorone	20 U
88-75-5	2-Nitrophenol	100 U
105-67-9	2,4-Dimethylphenol	60 U
65-85-0	Benzoic Acid	200 U
111-91-1	bis(2-Chloroethoxy) Methane	20 U
120-83-2	2,4-Dichlorophenol	60 U
120-82-1	1,2,4-Trichlorobenzene	20 U
91-20-3	**Naphthalene**	830
106-47-8	4-Chloroaniline	60 U
87-68-3	Hexachlorobutadiene	40 U
59-50-7	4-Chloro-3-methylphenol	40 U
91-57-6	**2-Methylnaphthalene**	76
77-47-4	Hexachlorocyclopentadiene	100 U
88-06-2	2,4,6-Trichlorophenol	100 U
95-95-4	2,4,5-Trichlorophenol	100 U
91-58-7	2-Chloronaphthalene	20 U
88-74-4	2-Nitroaniline	100 U
131-11-3	Dimethylphthalate	20 U
208-96-8	Acenaphthylene	20 U
99-09-2	3-Nitroaniline	120 U
83-32-9	**Acenaphthene**	46
51-28-5	2,4-Dinitrophenol	200 U
100-02-7	4-Nitrophenol	100 U
132-64-9	Dibenzofuran	20 U
606-20-2	2,6-Dinitrotoluene	100 U

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by GC/MS

ANALYTICAL RESOURCES INCORPORATED

Lab Sample ID: Q838F-DL
LIMS ID: 96-19779
Matrix: Water
Data Release Authorized: MP
Reported: 11/21/96

Sample No: MW-107-11/19/96 DILUTION
QC Report No: Q838-Landau Associates, Inc.
Project: Union Station 273008.29
Date Sampled: 11/19/96
Date Received: 11/19/96

Date extracted: 11/20/96
Date analyzed: 11/21/96
Instrument: NT1

Sample Amount: 500 mL
Final Extract Volume: 0.5 mL
Dilution Factor: 1:20

CAS Number	Analyte	ug/L
121-14-2	2,4-Dinitrotoluene	100 U
84-66-2	Diethylphthalate	20 U
7005-72-3	4-Chlorophenyl-phenylether	20 U
86-73-7	Fluorene	20 U
100-01-6	4-Nitroaniline	100 U
534-52-1	4,6-Dinitro-2-Methylphenol	200 U
86-30-6	N-Nitrosodiphenylamine	20 U
101-55-3	4-Bromophenyl-phenylether	20 U
118-74-1	Hexachlorobenzene	20 U
87-86-5	Pentachlorophenol	100 U
85-01-8	Phenanthrene	20 U
86-74-8	Carbazole	20 U
120-12-7	Anthracene	20 U
84-74-2	Di-n-Butylphthalate	20 U
206-44-0	Fluoranthene	20 U
129-00-0	Pyrene	20 U
85-68-7	Butylbenzylphthalate	20 U
91-94-1	3,3'-Dichlorobenzidine	100 U
56-55-3	Benzo(a)anthracene	20 U
117-81-7	bis(2-Ethylhexyl)phthalate	20 U
218-01-9	Chrysene	20 U
117-84-0	Di-n-Octyl phthalate	20 U
205-99-2	Benzo(b)fluoranthene	20 U
207-08-9	Benzo(k)fluoranthene	20 U
50-32-8	Benzo(a)pyrene	20 U
193-39-5	Indeno(1,2,3-cd)pyrene	20 U
53-70-3	Dibenz(a,h)anthracene	20 U
191-24-2	Benzo(g,h,i)perylene	20 U

Semivolatiles Surrogate Recovery

d5-Nitrobenzene	68.8%	d5-Phenol	40.5%
2-Fluorobiphenyl	72.0%	2-Fluorophenol	66.1%
d14-p-Terphenyl	83.2%	2,4,6-Tribromophenol	44.3%
d4-1,2-Dichlorobenzene	74.4%	d4-2-Chlorophenol	70.9%

ANALYTICAL
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ORGANICS ANALYSIS DATA SHEET
Semivolatiles by GC/MS

Sample No: Method Blank

Lab Sample ID: Q838MB
LIMS ID: 96-19774
Matrix: Water
Data Release Authorized: DAF
Reported: 11/21/96

QC Report No: Q838-Landau Associates, Inc.
Project: Union Station
273008.29
Date Sampled: NA
Date Received: NA

Date extracted: 11/20/96
Date analyzed: 11/20/96
Instrument: NT1

Sample Amount: 500 mL
Final Extract Volume: 0.5 mL
Dilution Factor: 1:1

CAS Number	Analyte	ug/L
108-95-2	Phenol	2.0 U
111-44-4	Bis-(2-Chloroethyl) Ether	2.0 U
95-57-8	2-Chlorophenol	1.0 U
541-73-1	1,3-Dichlorobenzene	1.0 U
106-46-7	1,4-Dichlorobenzene	1.0 U
100-51-6	Benzyl Alcohol	5.0 U
95-50-1	1,2-Dichlorobenzene	1.0 U
95-48-7	2-Methylphenol	2.0 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	1.0 U
106-44-5	4-Methylphenol	1.0 U
621-64-7	N-Nitroso-Di-N-Propylamine	2.0 U
67-72-1	Hexachloroethane	2.0 U
98-95-3	Nitrobenzene	1.0 U
78-59-1	Isophorone	1.0 U
88-75-5	2-Nitrophenol	5.0 U
105-67-9	2,4-Dimethylphenol	3.0 U
65-85-0	Benzoic Acid	10 U
111-91-1	bis(2-Chloroethoxy) Methane	1.0 U
120-83-2	2,4-Dichlorophenol	3.0 U
120-82-1	1,2,4-Trichlorobenzene	1.0 U
91-20-3	Naphthalene	1.0 U
106-47-8	4-Chloroaniline	3.0 U
87-68-3	Hexachlorobutadiene	2.0 U
59-50-7	4-Chloro-3-methylphenol	2.0 U
91-57-6	2-Methylnaphthalene	1.0 U
77-47-4	Hexachlorocyclopentadiene	5.0 U
88-06-2	2,4,6-Trichlorophenol	5.0 U
95-95-4	2,4,5-Trichlorophenol	5.0 U
91-58-7	2-Chloronaphthalene	1.0 U
88-74-4	2-Nitroaniline	5.0 U
131-11-3	Dimethylphthalate	1.0 U
208-96-8	Acenaphthylene	1.0 U
99-09-2	3-Nitroaniline	6.0 U
83-32-9	Acenaphthene	1.0 U
51-28-5	2,4-Dinitrophenol	10 U
100-02-7	4-Nitrophenol	5.0 U
132-64-9	Dibenzofuran	1.0 U
606-20-2	2,6-Dinitrotoluene	5.0 U

ANALYTICAL
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ORGANICS ANALYSIS DATA SHEET
Semivolatiles by GC/MS
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Sample No: Method Blank

Lab Sample ID: Q838MB
LIMS ID: 96-19774
Matrix: Water
Data Release Authorized: MP
Reported: 11/21/96

QC Report No: Q838-Landau Associates, Inc.
Project: Union Station
273008.29
Date Sampled: NA
Date Received: NA

Date extracted: 11/20/96
Date analyzed: 11/20/96
Instrument: NT1

Sample Amount: 500 mL
Final Extract Volume: 0.5 mL
Dilution Factor: 1:1

CAS Number	Analyte	ug/L
121-14-2	2,4-Dinitrotoluene	5.0 U
84-66-2	Diethylphthalate	1.0 U
7005-72-3	4-Chlorophenyl-phenylether	1.0 U
86-73-7	Fluorene	1.0 U
100-01-6	4-Nitroaniline	5.0 U
534-52-1	4,6-Dinitro-2-Methylphenol	10 U
86-30-6	N-Nitrosodiphenylamine	1.0 U
101-55-3	4-Bromophenyl-phenylether	1.0 U
118-74-1	Hexachlorobenzene	1.0 U
87-86-5	Pentachlorophenol	5.0 U
85-01-8	Phenanthrene	1.0 U
86-74-8	Carbazole	1.0 U
120-12-7	Anthracene	1.0 U
84-74-2	Di-n-Butylphthalate	1.0 U
206-44-0	Fluoranthene	1.0 U
129-00-0	Pyrene	1.0 U
85-68-7	Butylbenzylphthalate	1.0 U
91-94-1	3,3'-Dichlorobenzidine	5.0 U
56-55-3	Benzo(a)anthracene	1.0 U
117-81-7	bis(2-Ethylhexyl)phthalate	1.0 U
218-01-9	Chrysene	1.0 U
117-84-0	Di-n-Octyl phthalate	1.0 U
205-99-2	Benzo(b)fluoranthene	1.0 U
207-08-9	Benzo(k)fluoranthene	1.0 U
50-32-8	Benzo(a)pyrene	1.0 U
193-39-5	Indeno(1,2,3-cd)pyrene	1.0 U
53-70-3	Dibenz(a,h)anthracene	1.0 U
191-24-2	Benzo(g,h,i)perylene	1.0 U

Semivolatiles Surrogate Recovery

d5-Nitrobenzene	85.8%	d5-Phenol	45.4%
2-Fluorobiphenyl	83.4%	2-Fluorophenol	69.8%
d14-p-Terphenyl	103%	2,4,6-Tribromophenol	80.2%
d4-1,2-Dichlorobenzene	83.7%	d4-2-Chlorophenol	77.0%

ANALYTICAL
RESOURCES
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ORGANICS ANALYSIS DATA SHEET
Semivolatiles by GC/MS

Lab Sample ID: Q838F
LIMS ID: 96-19779
Matrix: Water

Sample No: MW-107-11/19/96
QC Report No: Q838-Landau Associates, Inc.
Project: Union Station
273008.29
Date Received: 11/19/96

Data Release Authorized: MP
Reported: 11/21/96

MATRIX SPIKE/SPIKE DUPLICATE RECOVERY
Date extracted: 11/20/96
Date analyzed: 11/20/96

CONSTITUENT	SAMPLE VALUE	SPIKE VALUE	SPIKE ADDED	% RECOVERY	RPD
Phenol	< 2.0	19.4	37.5	51.7%	
2-Chlorophenol	< 1.0	29.3	37.5	78.1%	
1,4-Dichlorobenzene	< 1.0	19.4	25.0	77.6%	
N-Nitroso-Di-N-Propylamine	< 2.0	19.4	25.0	77.6%	
1,2,4-Trichlorobenzene	< 1.0	18.1	25.0	72.4%	
4-Chloro-3-methylphenol	< 2.0	33.1	37.5	88.3%	
Acenaphthene	45.4	68.9	25.0	94.0%	
4-Nitrophenol	< 5.0	23.0	37.5	61.3%	
2,4-Dinitrotoluene	< 5.0	27.7	25.0	111%	
Pentachlorophenol	< 5.0	51.4	37.5	137%	
Pyrene	< 1.0	23.4	25.0	93.6%	
MATRIX SPIKE DUPLICATE					
Phenol	< 2.0	18.8	37.5	50.1%	3.2%
2-Chlorophenol	< 1.0	29.0	37.5	77.3%	1.1%
1,4-Dichlorobenzene	< 1.0	18.1	25.0	72.4%	6.9%
N-Nitroso-Di-N-Propylamine	< 2.0	19.8	25.0	79.2%	2.0%
1,2,4-Trichlorobenzene	< 1.0	16.9	25.0	67.6%	6.9%
4-Chloro-3-methylphenol	< 2.0	34.3	37.5	91.5%	3.6%
Acenaphthene	45.4	66.5	25.0	84.4%	11%
4-Nitrophenol	< 5.0	21.9	37.5	58.4%	4.9%
2,4-Dinitrotoluene	< 5.0	27.2	25.0	109%	1.6%
Pentachlorophenol	< 5.0	48.7	37.5	130%	5.3%
Pyrene	< 1.0	22.6	25.0	90.4%	3.5%

Reported in Total ug/L

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by GC/MS

Lab Sample ID: Q838F-MS
LIMS ID: 96-19779
Matrix: Water
Data Release Authorized: MF
Reported: 11/21/96

Sample No: MW-107-11/19/96 MATRIX SPIKE
QC Report No: Q838-Landau Associates, Inc.
Project: Union Station 273008.29
Date Sampled: 11/19/96
Date Received: 11/19/96

Date extracted: 11/20/96
Date analyzed: 11/20/96
Instrument: NT1

Sample Amount: 500 mL
Final Extract Volume: 0.5 mL
Dilution Factor: 1:1

CAS Number	Analyte	ug/L
108-95-2	Phenol	---
111-44-4	Bis-(2-Chloroethyl) Ether	2.0 U
95-57-8	2-Chlorophenol	---
541-73-1	1,3-Dichlorobenzene	1.0 U
106-46-7	1,4-Dichlorobenzene	---
100-51-6	Benzyl Alcohol	5.0 U
95-50-1	1,2-Dichlorobenzene	1.0 U
95-48-7	2-Methylphenol	2.0 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	1.0 U
106-44-5	**4-Methylphenol**	1.2
621-64-7	N-Nitroso-Di-N-Propylamine	---
67-72-1	Hexachloroethane	2.0 U
98-95-3	Nitrobenzene	1.0 U
78-59-1	Isophorone	1.0 U
88-75-5	2-Nitrophenol	5.0 U
105-67-9	2,4-Dimethylphenol	3.0 U
65-85-0	Benzoic Acid	10 U
111-91-1	bis(2-Chloroethoxy) Methane	1.0 U
120-83-2	2,4-Dichlorophenol	3.0 U
120-82-1	1,2,4-Trichlorobenzene	---
91-20-3	**Naphthalene**	700 E
106-47-8	4-Chloroaniline	3.0 U
87-68-3	Hexachlorobutadiene	2.0 U
59-50-7	4-Chloro-3-methylphenol	---
91-57-6	**2-Methylnaphthalene**	87 E
77-47-4	Hexachlorocyclopentadiene	5.0 U
88-06-2	2,4,6-Trichlorophenol	5.0 U
95-95-4	2,4,5-Trichlorophenol	5.0 U
91-58-7	2-Chloronaphthalene	1.0 U
88-74-4	2-Nitroaniline	5.0 U
131-11-3	Dimethylphthalate	1.0 U
208-96-8	Acenaphthylene	1.0 U
99-09-2	3-Nitroaniline	6.0 U
83-32-9	Acenaphthene	---
51-28-5	2,4-Dinitrophenol	10 U
100-02-7	4-Nitrophenol	---
132-64-9	**Dibenzofuran**	1.8
606-20-2	2,6-Dinitrotoluene	5.0 U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by GC/MS

Sample No: MW-107-11/19/96
MATRIX SPIKE

Lab Sample ID: Q838F-MS
LIMS ID: 96-19779
Matrix: Water
Data Release Authorized: MAP
Reported: 11/21/96

QC Report No: Q838-Landau Associates, Inc.
Project: Union Station
273008.29
Date Sampled: 11/19/96
Date Received: 11/19/96

Date extracted: 11/20/96
Date analyzed: 11/20/96
Instrument: NT1

Sample Amount: 500 mL
Final Extract Volume: 0.5 mL
Dilution Factor: 1:1

CAS Number	Analyte	ug/L
121-14-2	2,4-Dinitrotoluene	---
84-66-2	Diethylphthalate	1.0 U
7005-72-3	4-Chlorophenyl-phenylether	1.0 U
86-73-7	**Fluorene**	**11**
100-01-6	4-Nitroaniline	5.0 U
534-52-1	4,6-Dinitro-2-Methylphenol	10 U
86-30-6	N-Nitrosodiphenylamine	1.0 U
101-55-3	4-Bromophenyl-phenylether	1.0 U
118-74-1	Hexachlorobenzene	1.0 U
87-86-5	Pentachlorophenol	---
85-01-8	**Phenanthrene**	**9.6**
86-74-8	**Carbazole**	**4.4**
120-12-7	**Anthracene**	**1.0**
84-74-2	Di-n-Butylphthalate	1.0 U
206-44-0	Fluoranthene	1.0 U
129-00-0	Pyrene	---
85-68-7	Butylbenzylphthalate	1.0 U
91-94-1	3,3'-Dichlorobenzidine	5.0 U
56-55-3	Benzo(a)anthracene	1.0 U
117-81-7	bis(2-Ethylhexyl)phthalate	1.0 U
218-01-9	Chrysene	1.0 U
117-84-0	Di-n-Octyl phthalate	1.0 U
205-99-2	Benzo(b)fluoranthene	1.0 U
207-08-9	Benzo(k)fluoranthene	1.0 U
50-32-8	Benzo(a)pyrene	1.0 U
193-39-5	Indeno(1,2,3-cd)pyrene	1.0 U
53-70-3	Dibenz(a,h)anthracene	1.0 U
191-24-2	Benzo(g,h,i)perylene	1.0 U

Semivolatiles Surrogate Recovery

d5-Nitrobenzene	82.4%	d5-Phenol	49.4%
2-Fluorobiphenyl	77.3%	2-Fluorophenol	68.9%
d14-p-Terphenyl	96.5%	2,4,6-Tribromophenol	105%
d4-1,2-Dichlorobenzene	70.8%	d4-2-Chlorophenol	78.5%

ANALYTICAL
RESOURCES
INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by GC/MS

Lab Sample ID: Q838F-MSD
LIMS ID: 96-19779
Matrix: Water
Data Release Authorized: MM
Reported: 11/21/96

Sample No: MW-107-11/19/96
MS DUPLICATE
QC Report No: Q838-Landau Associates, Inc.
Project: Union Station
273008.29
Date Sampled: 11/19/96
Date Received: 11/19/96

Date extracted: 11/20/96
Date analyzed: 11/20/96
Instrument: NT1

Sample Amount: 500 mL
Final Extract Volume: 0.5 mL
Dilution Factor: 1:1

CAS Number	Analyte	ug/L
108-95-2	Phenol	---
111-44-4	Bis-(2-Chloroethyl) Ether	2.0 U
95-57-8	2-Chlorophenol	---
541-73-1	1,3-Dichlorobenzene	1.0 U
106-46-7	1,4-Dichlorobenzene	---
100-51-6	Benzyl Alcohol	5.0 U
95-50-1	1,2-Dichlorobenzene	1.0 U
95-48-7	2-Methylphenol	2.0 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	1.0 U
106-44-5	**4-Methylphenol**	**1.2**
621-64-7	N-Nitroso-Di-N-Propylamine	---
67-72-1	Hexachloroethane	2.0 U
98-95-3	Nitrobenzene	1.0 U
78-59-1	Isophorone	1.0 U
88-75-5	2-Nitrophenol	5.0 U
105-67-9	2,4-Dimethylphenol	3.0 U
65-85-0	Benzoic Acid	10 U
111-91-1	bis(2-Chloroethoxy) Methane	1.0 U
120-83-2	2,4-Dichlorophenol	3.0 U
120-82-1	1,2,4-Trichlorobenzene	---
91-20-3	**Naphthalene**	**680 E**
106-47-8	4-Chloroaniline	3.0 U
87-68-3	Hexachlorobutadiene	2.0 U
59-50-7	4-Chloro-3-methylphenol	---
91-57-6	**2-Methylnaphthalene**	**85 E**
77-47-4	Hexachlorocyclopentadiene	5.0 U
88-06-2	2,4,6-Trichlorophenol	5.0 U
95-95-4	2,4,5-Trichlorophenol	5.0 U
91-58-7	2-Chloronaphthalene	1.0 U
88-74-4	2-Nitroaniline	5.0 U
131-11-3	Dimethylphthalate	1.0 U
208-96-8	Acenaphthylene	1.0 U
99-09-2	3-Nitroaniline	6.0 U
83-32-9	Acenaphthene	---
51-28-5	2,4-Dinitrophenol	10 U
100-02-7	4-Nitrophenol	---
132-64-9	**Dibenzofuran**	**1.9**
606-20-2	2,6-Dinitrotoluene	5.0 U

ANALYTICAL
RESOURCES
INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by GC/MS

Sample No: MW-107-11/19/96
MS DUPLICATE

Lab Sample ID: Q838F-MSD
LIMS ID: 96-19779
Matrix: Water
Data Release Authorized: MK
Reported: 11/21/96

QC Report No: Q838-Landau Associates, Inc.
Project: Union Station
273008.29
Date Sampled: 11/19/96
Date Received: 11/19/96

Date extracted: 11/20/96
Date analyzed: 11/20/96
Instrument: NT1

Sample Amount: 500 mL
Final Extract Volume: 0.5 mL
Dilution Factor: 1:1

CAS Number	Analyte	ug/L
121-14-2	2,4-Dinitrotoluene	---
84-66-2	Diethylphthalate	1.0 U
7005-72-3	4-Chlorophenyl-phenylether	1.0 U
86-73-7	**Fluorene**	**11**
100-01-6	4-Nitroaniline	5.0 U
534-52-1	4,6-Dinitro-2-Methylphenol	10 U
86-30-6	N-Nitrosodiphenylamine	1.0 U
101-55-3	4-Bromophenyl-phenylether	1.0 U
118-74-1	Hexachlorobenzene	1.0 U
87-86-5	Pentachlorophenol	---
85-01-8	**Phenanthrene**	**9.6**
86-74-8	**Carbazole**	**4.3**
120-12-7	Anthracene	1.0 U
84-74-2	Di-n-Butylphthalate	1.0 U
206-44-0	Fluoranthene	1.0 U
129-00-0	Pyrene	---
85-68-7	Butylbenzylphthalate	1.0 U
91-94-1	3,3'-Dichlorobenzidine	5.0 U
56-55-3	Benzo(a)anthracene	1.0 U
117-81-7	bis(2-Ethylhexyl)phthalate	1.0 U
218-01-9	Chrysene	1.0 U
117-84-0	Di-n-Octyl phthalate	1.0 U
205-99-2	Benzo(b)fluoranthene	1.0 U
207-08-9	Benzo(k)fluoranthene	1.0 U
50-32-8	Benzo(a)pyrene	1.0 U
193-39-5	Indeno(1,2,3-cd)pyrene	1.0 U
53-70-3	Dibenz(a,h)anthracene	1.0 U
191-24-2	Benzo(g,h,i)perylene	1.0 U

Semivolatiles Surrogate Recovery

d5-Nitrobenzene	82.5%	d5-Phenol	49.0%
2-Fluorobiphenyl	71.8%	2-Fluorophenol	68.6%
d14-p-Terphenyl	87.2%	2,4,6-Tribromophenol	93.8%
d4-1,2-Dichlorobenzene	65.4%	d4-2-Chlorophenol	76.2%

ANALYTICAL
RESOURCES
INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by GC/MS
Page 1 of 1

Lab Sample ID: Q838SB
LIMS ID: 96-19774
Matrix: Water

QC Report No: Q838-Landau Associates, Inc.
Project: Union Station
273008.29

Data Release Authorized: NP
Reported: 11/21/96

LABORATORY CONTROL SAMPLE
Date extracted: 11/20/96
Date analyzed: 11/20/96

CONSTITUENT	SPIKE VALUE	SPIKE ADDED	% RECOVERY
Phenol	19.8	37.5	52.8%
2-Chlorophenol	28.7	37.5	76.5%
1,4-Dichlorobenzene	20.2	25.0	80.8%
N-Nitroso-Di-N-Propylamine	20.4	25.0	81.6%
1,2,4-Trichlorobenzene	18.4	25.0	73.6%
4-Chloro-3-methylphenol	32.9	37.5	87.7%
Acenaphthene	21.7	25.0	86.8%
4-Nitrophenol	8.0	37.5	21.3%
2,4-Dinitrotoluene	28.0	25.0	112%
Pentachlorophenol	12.4	37.5	33.1%
Pyrene	25.6	25.0	102%

Lab Control Surrogate Recovery

d5-Nitrobenzene	88.0%	d5-Phenol	50.5%
2-Fluorobiphenyl	88.1%	2-Fluorophenol	61.0%
d14-p-Terphenyl	119%	2,4,6-Tribromophenol	67.8%
d4-1,2-Dichlorobenzene	78.4%	d4-2-Chlorophenol	78.2%

Reported in Total ug/L

ANALYTICAL
RESOURCES
INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Pesticides/PCB by GC/ECD Method 8081

Sample No: B-6 11/18/96

Lab Sample ID: Q829A
LIMS ID: 96-19678
Matrix: Water

QC Report No: Q829-Landau Associates, Inc.
Project: Union Station
273008.29
Date Sampled: 11/18/96
Date Received: 11/18/96

Data Release Authorized:
Reported: 11/20/96

Date extracted: 11/19/96
Date analyzed: 11/19/96 ECD3
GPC Cleanup: NO
Florisil: YES
Sulfur Cleanup: NO

Sample Amount: 500 mL
Final Extract Volume: 5.0 mL
Dilution Factor: 1:1

CAS Number	Analyte	ug/L
319-84-6	alpha-BHC	0.050 U
319-85-7	beta-BHC	0.050 U
319-86-8	delta-BHC	0.050 U
58-89-9	gamma-BHC (Lindane)	0.050 U
76-44-8	Heptachlor	0.050 U
309-00-2	Aldrin	0.050 U
1024-57-3	Heptachlor Epoxide	0.050 U
959-98-8	Endosulfan I	0.050 U
60-57-1	Dieldrin	0.10 U
72-55-9	4,4'-DDE	0.10 U
72-20-8	Endrin	0.10 U
33213-65-9	Endosulfan II	0.10 U
72-54-8	4,4'-DDD	0.10 U
1031-07-8	Endosulfan Sulfate	0.10 U
50-29-3	4,4'-DDT	0.10 U
72-43-5	Methoxychlor	0.50 U
53494-70-5	Endrin Ketone	0.10 U
7421-93-4	Endrin Aldehyde	0.10 U
57-74-9	gamma Chlordane	0.050 U
5103-71-9	alpha Chlordane	0.050 U
8001-35-2	Toxaphene	5.0 U
12674-11-2	Aroclor 1016	1.0 U
53469-21-9	Aroclor 1242	1.0 U
12672-29-6	Aroclor 1248	1.0 U
11097-69-1	Aroclor 1254	1.0 U
11096-82-5	Aroclor 1260	1.0 U
11104-28-2	Aroclor 1221	2.0 U
11141-16-5	Aroclor 1232	1.0 U

Pesticide Surrogate Recovery

Decachlorobiphenyl	77.5%
Tetrachlorometaxylene	64.5%

ANALYTICAL
RESOURCES
INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Pesticides/PCB by GC/ECD Method 8081

Sample No: HC-102 11/18/96

Lab Sample ID: Q829B
LIMS ID: 96-19679
Matrix: Water

QC Report No: Q829-Landau Associates, Inc.
Project: Union Station
273008.29
Date Sampled: 11/18/96
Date Received: 11/18/96

Data Release Authorized:
Reported: 11/20/96

Date extracted: 11/19/96
Date analyzed: 11/19/96 ECD3
GPC Cleanup: NO
Florisil: YES
Sulfur Cleanup: NO

Sample Amount: 500 mL
Final Extract Volume: 5.0 mL
Dilution Factor: 1:1

CAS Number	Analyte	ug/L
319-84-6	alpha-BHC	0.050 U
319-85-7	beta-BHC	0.050 U
319-86-8	delta-BHC	0.050 U
58-89-9	gamma-BHC (Lindane)	0.050 U
76-44-8	Heptachlor	0.050 U
309-00-2	Aldrin	0.050 U
1024-57-3	Heptachlor Epoxide	0.050 U
959-98-8	Endosulfan I	0.050 U
60-57-1	Dieldrin	0.10 U
72-55-9	4,4'-DDE	0.10 U
72-20-8	Endrin	0.10 U
33213-65-9	Endosulfan II	0.10 U
72-54-8	4,4'-DDD	0.10 U
1031-07-8	Endosulfan Sulfate	0.10 U
50-29-3	4,4'-DDT	0.10 U
72-43-5	Methoxychlor	0.50 U
53494-70-5	Endrin Ketone	0.10 U
7421-93-4	Endrin Aldehyde	0.10 U
57-74-9	gamma Chlordane	0.050 U
5103-71-9	alpha Chlordane	0.050 U
8001-35-2	Toxaphene	5.0 U
12674-11-2	Aroclor 1016	1.0 U
53469-21-9	Aroclor 1242	1.0 U
12672-29-6	Aroclor 1248	1.0 U
11097-69-1	Aroclor 1254	1.0 U
11096-82-5	Aroclor 1260	1.0 U
11104-28-2	Aroclor 1221	2.0 U
11141-16-5	Aroclor 1232	1.0 U

Pesticide Surrogate Recovery

Decachlorobiphenyl	75.8%
Tetrachlorometaxylene	70.8%

ANALYTICAL
RESOURCES
INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Pesticides/PCB by GC/ECD Method 8081

Sample No: HC-101 11/18/96

Lab Sample ID: Q829C
LIMS ID: 96-19680
Matrix: Water

QC Report No: Q829-Landau Associates, Inc.
Project: Union Station
273008.29
Date Sampled: 11/18/96
Date Received: 11/18/96

Data Release Authorized:
Reported: 11/20/96

Date extracted: 11/19/96
Date analyzed: 11/19/96 ECD3
GPC Cleanup: NO
Florisil: YES
Sulfur Cleanup: NO

Sample Amount: 500 mL
Final Extract Volume: 5.0 mL
Dilution Factor: 1:1

CAS Number	Analyte	ug/L
319-84-6	alpha-BHC	0.050 U
319-85-7	beta-BHC	0.050 U
319-86-8	delta-BHC	0.050 U
58-89-9	gamma-BHC (Lindane)	0.050 U
76-44-8	Heptachlor	0.050 U
309-00-2	Aldrin	0.050 U
1024-57-3	Heptachlor Epoxide	0.050 U
959-98-8	Endosulfan I	0.050 U
60-57-1	Dieldrin	0.10 U
72-55-9	4,4'-DDE	0.10 U
72-20-8	Endrin	0.10 U
33213-65-9	Endosulfan II	0.10 U
72-54-8	4,4'-DDD	0.10 U
1031-07-8	Endosulfan Sulfate	0.10 U
50-29-3	4,4'-DDT	0.10 U
72-43-5	Methoxychlor	0.50 U
53494-70-5	Endrin Ketone	0.10 U
7421-93-4	Endrin Aldehyde	0.10 U
57-74-9	gamma Chlordane	0.050 U
5103-71-9	alpha Chlordane	0.050 U
8001-35-2	Toxaphene	5.0 U
12674-11-2	Aroclor 1016	1.0 U
53469-21-9	Aroclor 1242	1.0 U
12672-29-6	Aroclor 1248	1.0 U
11097-69-1	Aroclor 1254	1.0 U
11096-82-5	Aroclor 1260	1.0 U
11104-28-2	Aroclor 1221	2.0 U
11141-16-5	Aroclor 1232	1.0 U

Pesticide Surrogate Recovery

Decachlorobiphenyl	67.5%
Tetrachlorometaxylene	62.0%

ANALYTICAL
RESOURCES
INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Pesticides/PCB by GC/ECD Method 8081

Sample No: Method Blank

Lab Sample ID: Q829MB
LIMS ID: 96-19678
Matrix: Water

QC Report No: Q829-Landau Associates, Inc.
Project: Union Station
273008.29
Date Sampled: NA
Date Received: NA

Data Release Authorized:
Reported: 11/20/96

Date extracted: 11/19/96
Date analyzed: 11/19/96 ECD3
GPC Cleanup: NO
Florisil: YES
Sulfur Cleanup: NO

Sample Amount: 500 mL
Final Extract Volume: 5.0 mL
Dilution Factor: 1:1

CAS Number	Analyte	ug/L
319-84-6	alpha-BHC	0.050 U
319-85-7	beta-BHC	0.050 U
319-86-8	delta-BHC	0.050 U
58-89-9	gamma-BHC (Lindane)	0.050 U
76-44-8	Heptachlor	0.050 U
309-00-2	Aldrin	0.050 U
1024-57-3	Heptachlor Epoxide	0.050 U
959-98-8	Endosulfan I	0.050 U
60-57-1	Dieldrin	0.10 U
72-55-9	4,4'-DDE	0.10 U
72-20-8	Endrin	0.10 U
33213-65-9	Endosulfan II	0.10 U
72-54-8	4,4'-DDD	0.10 U
1031-07-8	Endosulfan Sulfate	0.10 U
50-29-3	4,4'-DDT	0.10 U
72-43-5	Methoxychlor	0.50 U
53494-70-5	Endrin Ketone	0.10 U
7421-93-4	Endrin Aldehyde	0.10 U
57-74-9	gamma Chlordane	0.050 U
5103-71-9	alpha Chlordane	0.050 U
8001-35-2	Toxaphene	5.0 U
12674-11-2	Aroclor 1016	1.0 U
53469-21-9	Aroclor 1242	1.0 U
12672-29-6	Aroclor 1248	1.0 U
11097-69-1	Aroclor 1254	1.0 U
11096-82-5	Aroclor 1260	1.0 U
11104-28-2	Aroclor 1221	2.0 U
11141-16-5	Aroclor 1232	1.0 U

Pesticide Surrogate Recovery

Decachlorobiphenyl	71.2%
Tetrachlorometaxylene	71.5%

ANALYTICAL
RESOURCES
INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Pesticide/PCB by GC/ECD

Lab Sample ID: Q829SB
LIMS ID: 96-19678
Matrix: Water

QC Report No: Q829-Landau Associates, Inc.
Project: Union Station
273008.29

Data Release Authorized:
Reported: 11/20/96

LABORATORY CONTROL SAMPLE
Date extracted: 11/19/96
Date analyzed: 11/19/96

CONSTITUENT	SPIKE FOUND	SPIKE ADDED	% RECOVERY
gamma-BHC (Lindane)	0.938	1.00	93.8%
Heptachlor	0.796	1.00	79.6%
Aldrin	0.853	1.00	85.3%
Dieldrin	1.76	2.00	88.0%
Endrin	1.80	2.00	90.0%
4,4'-DDT	1.71	2.00	85.5%

Spike Blank Surrogate Recovery

Decachlorobiphenyl	77.5%
Tetrachlorometaxylene	86.5%

Values reported in ug/L

ANALYTICAL
RESOURCES
INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Pesticides/PCB by GC/ECD Method 8081

Sample No: MW-106-11/19/96

Lab Sample ID: Q838A
LIMS ID: 96-19774
Matrix: Water

QC Report No: Q838-Landau Associates, Inc.
Project: Union Station
273008.29
Date Sampled: 11/19/96
Date Received: 11/19/96

Data Release Authorized:
Reported: 11/21/96

Date extracted: 11/20/96
Date analyzed: 11/20/96 ECD3
GPC Cleanup: NO
Florisil: YES
Sulfur Cleanup: NO

Sample Amount: 500 mL
Final Extract Volume: 5.0 mL
Dilution Factor: 1:1

CAS Number	Analyte	ug/L
319-84-6	alpha-BHC	0.050 U
319-85-7	beta-BHC	0.050 U
319-86-8	delta-BHC	0.050 U
58-89-9	gamma-BHC (Lindane)	0.050 U
76-44-8	Heptachlor	0.050 U
309-00-2	Aldrin	0.050 U
1024-57-3	Heptachlor Epoxide	0.050 U
959-98-8	Endosulfan I	0.050 U
60-57-1	Dieldrin	0.10 U
72-55-9	4,4'-DDE	0.10 U
72-20-8	Endrin	0.10 U
33213-65-9	Endosulfan II	0.10 U
72-54-8	4,4'-DDD	0.10 U
1031-07-8	Endosulfan Sulfate	0.10 U
50-29-3	4,4'-DDT	0.10 U
72-43-5	Methoxychlor	0.50 U
53494-70-5	Endrin Ketone	0.10 U
7421-93-4	Endrin Aldehyde	0.10 U
57-74-9	gamma Chlordane	0.050 U
5103-71-9	alpha Chlordane	0.050 U
8001-35-2	Toxaphene	5.0 U
12674-11-2	Aroclor 1016	1.0 U
53469-21-9	Aroclor 1242	1.0 U
12672-29-6	Aroclor 1248	1.0 U
11097-69-1	Aroclor 1254	1.0 U
11096-82-5	Aroclor 1260	1.0 U
11104-28-2	Aroclor 1221	2.0 U
11141-16-5	Aroclor 1232	1.0 U

Pesticide Surrogate Recovery

Decachlorobiphenyl	57.5%
Tetrachlorometaxylene	52.5%

ANALYTICAL
RESOURCES
INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Pesticides/PCB by GC/ECD Method 8081

Sample No: MW-105-11/19/96

Lab Sample ID: Q838B
LIMS ID: 96-19775
Matrix: Water

QC Report No: Q838-Landau Associates, Inc.
Project: Union Station
273008.29
Date Sampled: 11/19/96
Date Received: 11/19/96

Data Release Authorized:
Reported: 11/21/96

Date extracted: 11/20/96
Date analyzed: 11/20/96 ECD3
GPC Cleanup: NO
Florisil: YES
Sulfur Cleanup: NO

Sample Amount: 500 mL
Final Extract Volume: 5.0 mL
Dilution Factor: 1:1

CAS Number	Analyte	ug/L
319-84-6	alpha-BHC	0.050 U
319-85-7	beta-BHC	0.050 U
319-86-8	delta-BHC	0.050 U
58-89-9	gamma-BHC (Lindane)	0.050 U
76-44-8	Heptachlor	0.050 U
309-00-2	Aldrin	0.050 U
1024-57-3	Heptachlor Epoxide	0.050 U
959-98-8	Endosulfan I	0.050 U
60-57-1	Dieldrin	0.10 U
72-55-9	4,4'-DDE	0.10 U
72-20-8	Endrin	0.10 U
33213-65-9	Endosulfan II	0.10 U
72-54-8	4,4'-DDD	0.10 U
1031-07-8	Endosulfan Sulfate	0.10 U
50-29-3	4,4'-DDT	0.10 U
72-43-5	Methoxychlor	0.50 U
53494-70-5	Endrin Ketone	0.10 U
7421-93-4	Endrin Aldehyde	0.10 U
57-74-9	gamma Chlordane	0.050 U
5103-71-9	alpha Chlordane	0.050 U
8001-35-2	Toxaphene	5.0 U
12674-11-2	Aroclor 1016	1.0 U
53469-21-9	Aroclor 1242	1.0 U
12672-29-6	Aroclor 1248	1.0 U
11097-69-1	Aroclor 1254	1.0 U
11096-82-5	Aroclor 1260	1.0 U
11104-28-2	Aroclor 1221	2.0 U
11141-16-5	Aroclor 1232	1.0 U

Pesticide Surrogate Recovery

Decachlorobiphenyl	68.0%
Tetrachlorometaxylene	49.0%

ANALYTICAL
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ORGANICS ANALYSIS DATA SHEET
Pesticides/PCB by GC/ECD Method 8081

Sample No: MW-104-11/19/96

Lab Sample ID: Q838C
LIMS ID: 96-19776
Matrix: Water

QC Report No: Q838-Landau Associates, Inc.
Project: Union Station
273008.29
Date Sampled: 11/19/96
Date Received: 11/19/96

Data Release Authorized:
Reported: 11/21/96

Date extracted: 11/20/96
Date analyzed: 11/20/96 ECD3
GPC Cleanup: NO
Florisil: YES
Sulfur Cleanup: NO

Sample Amount: 500 mL
Final Extract Volume: 5.0 mL
Dilution Factor: 1:1

CAS Number	Analyte	ug/L
319-84-6	alpha-BHC	0.050 U
319-85-7	beta-BHC	0.050 U
319-86-8	delta-BHC	0.050 U
58-89-9	gamma-BHC (Lindane)	0.050 U
76-44-8	Heptachlor	0.050 U
309-00-2	Aldrin	0.050 U
1024-57-3	Heptachlor Epoxide	0.050 U
959-98-8	Endosulfan I	0.050 U
60-57-1	Dieldrin	0.10 U
72-55-9	4,4'-DDE	0.10 U
72-20-8	Endrin	0.10 U
33213-65-9	Endosulfan II	0.10 U
72-54-8	4,4'-DDD	0.10 U
1031-07-8	Endosulfan Sulfate	0.10 U
50-29-3	4,4'-DDT	0.10 U
72-43-5	Methoxychlor	0.50 U
53494-70-5	Endrin Ketone	0.10 U
7421-93-4	Endrin Aldehyde	0.10 U
57-74-9	gamma Chlordane	0.050 U
5103-71-9	alpha Chlordane	0.050 U
8001-35-2	Toxaphene	5.0 U
12674-11-2	Aroclor 1016	1.0 U
53469-21-9	Aroclor 1242	1.0 U
12672-29-6	Aroclor 1248	1.0 U
11097-69-1	Aroclor 1254	1.0 U
11096-82-5	Aroclor 1260	1.0 U
11104-28-2	Aroclor 1221	2.0 U
11141-16-5	Aroclor 1232	1.0 U

Pesticide Surrogate Recovery

Decachlorobiphenyl	72.0%
Tetrachlorometaxylene	48.5%

ANALYTICAL
RESOURCES
INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Pesticides/PCB by GC/ECD Method 8081

Sample No: HC-103-11/19/96

Lab Sample ID: Q838D
LIMS ID: 96-19777
Matrix: Water

QC Report No: Q838-Landau Associates, Inc.
Project: Union Station
273008.29
Date Sampled: 11/19/96
Date Received: 11/19/96

Data Release Authorized:
Reported: 11/21/96

Date extracted: 11/20/96
Date analyzed: 11/20/96 ECD3
GPC Cleanup: NO
Florisil: YES
Sulfur Cleanup: NO

Sample Amount: 500 mL
Final Extract Volume: 5.0 mL
Dilution Factor: 1:1

CAS Number	Analyte	ug/L
319-84-6	alpha-BHC	0.050 U
319-85-7	beta-BHC	0.050 U
319-86-8	delta-BHC	0.050 U
58-89-9	gamma-BHC (Lindane)	0.050 U
76-44-8	Heptachlor	0.050 U
309-00-2	Aldrin	0.050 U
1024-57-3	Heptachlor Epoxide	0.050 U
959-98-8	Endosulfan I	0.050 U
60-57-1	Dieldrin	0.10 U
72-55-9	4,4'-DDE	0.10 U
72-20-8	Endrin	0.10 U
33213-65-9	Endosulfan II	0.10 U
72-54-8	4,4'-DDD	0.10 U
1031-07-8	Endosulfan Sulfate	0.10 U
50-29-3	4,4'-DDT	0.10 U
72-43-5	Methoxychlor	0.50 U
53494-70-5	Endrin Ketone	0.10 U
7421-93-4	Endrin Aldehyde	0.10 U
57-74-9	gamma Chlordane	0.050 U
5103-71-9	alpha Chlordane	0.050 U
8001-35-2	Toxaphene	5.0 U
12674-11-2	Aroclor 1016	1.0 U
53469-21-9	Aroclor 1242	1.0 U
12672-29-6	Aroclor 1248	1.0 U
11097-69-1	Aroclor 1254	1.0 U
11096-82-5	Aroclor 1260	1.0 U
11104-28-2	Aroclor 1221	2.0 U
11141-16-5	Aroclor 1232	1.0 U

Pesticide Surrogate Recovery

Decachlorobiphenyl	73.5%
Tetrachlorometaxylene	56.5%

ANALYTICAL
RESOURCES
INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Pesticides/PCB by GC/ECD Method 8081

Sample No: MW-205-11/19/96

Lab Sample ID: Q838E
LIMS ID: 96-19778
Matrix: Water

QC Report No: Q838-Landau Associates, Inc.
Project: Union Station
273008.29
Date Sampled: 11/19/96
Date Received: 11/19/96

Data Release Authorized:
Reported: 11/21/96

Date extracted: 11/20/96
Date analyzed: 11/21/96 ECD3
GPC Cleanup: NO
Florisil: YES
Sulfur Cleanup: NO

Sample Amount: 500 mL
Final Extract Volume: 5.0 mL
Dilution Factor: 1:1

CAS Number	Analyte	ug/L
319-84-6	alpha-BHC	0.050 U
319-85-7	beta-BHC	0.050 U
319-86-8	delta-BHC	0.050 U
58-89-9	gamma-BHC (Lindane)	0.050 U
76-44-8	Heptachlor	0.050 U
309-00-2	Aldrin	0.050 U
1024-57-3	Heptachlor Epoxide	0.050 U
959-98-8	Endosulfan I	0.050 U
60-57-1	Dieldrin	0.10 U
72-55-9	4,4'-DDE	0.10 U
72-20-8	Endrin	0.10 U
33213-65-9	Endosulfan II	0.10 U
72-54-8	4,4'-DDD	0.10 U
1031-07-8	Endosulfan Sulfate	0.10 U
50-29-3	4,4'-DDT	0.10 U
72-43-5	Methoxychlor	0.50 U
53494-70-5	Endrin Ketone	0.10 U
7421-93-4	Endrin Aldehyde	0.10 U
57-74-9	gamma Chlordane	0.050 U
5103-71-9	alpha Chlordane	0.050 U
8001-35-2	Toxaphene	5.0 U
12674-11-2	Aroclor 1016	1.0 U
53469-21-9	Aroclor 1242	1.0 U
12672-29-6	Aroclor 1248	1.0 U
11097-69-1	Aroclor 1254	1.0 U
11096-82-5	Aroclor 1260	1.0 U
11104-28-2	Aroclor 1221	2.0 U
11141-16-5	Aroclor 1232	1.0 U

Pesticide Surrogate Recovery

Decachlorobiphenyl	70.5%
Tetrachlorometaxylene	50.0%

ANALYTICAL
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ORGANICS ANALYSIS DATA SHEET
Pesticides/PCB by GC/ECD Method 8081

Sample No: MW-107-11/19/96

Lab Sample ID: Q838F
LIMS ID: 96-19779
Matrix: Water

QC Report No: Q838-Landau Associates, Inc.
Project: Union Station
273008.29
Date Sampled: 11/19/96
Date Received: 11/19/96

Data Release Authorized:
Reported: 11/21/96

Date extracted: 11/20/96
Date analyzed: 11/21/96 ECD3
GPC Cleanup: NO
Florisil: YES
Sulfur Cleanup: NO

Sample Amount: 500 mL
Final Extract Volume: 5.0 mL
Dilution Factor: 1:1

CAS Number	Analyte	ug/L
319-84-6	alpha-BHC	0.050 U
319-85-7	beta-BHC	0.050 U
319-86-8	delta-BHC	0.050 U
58-89-9	gamma-BHC (Lindane)	0.050 U
76-44-8	Heptachlor	0.050 U
309-00-2	Aldrin	0.050 U
1024-57-3	Heptachlor Epoxide	0.050 U
959-98-8	Endosulfan I	0.050 U
60-57-1	Dieldrin	0.10 U
72-55-9	4,4'-DDE	0.10 U
72-20-8	Endrin	0.10 U
33213-65-9	Endosulfan II	0.10 U
72-54-8	4,4'-DDD	0.10 U
1031-07-8	Endosulfan Sulfate	0.10 U
50-29-3	4,4'-DDT	0.10 U
72-43-5	Methoxychlor	0.50 U
53494-70-5	Endrin Ketone	0.10 U
7421-93-4	Endrin Aldehyde	0.10 U
57-74-9	gamma Chlordane	0.050 U
5103-71-9	alpha Chlordane	0.050 U
8001-35-2	Toxaphene	5.0 U
12674-11-2	Aroclor 1016	1.0 U
53469-21-9	Aroclor 1242	1.0 U
12672-29-6	Aroclor 1248	1.0 U
11097-69-1	Aroclor 1254	1.0 U
11096-82-5	Aroclor 1260	1.0 U
11104-28-2	Aroclor 1221	2.0 U
11141-16-5	Aroclor 1232	1.0 U

Pesticide Surrogate Recovery

Decachlorobiphenyl	70.0%
Tetrachlorometaxylene	63.0%

ANALYTICAL
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ORGANICS ANALYSIS DATA SHEET
Pesticides/PCB by GC/ECD Method 8081

Sample No: Method Blank

Lab Sample ID: Q838MB
LIMS ID: 96-19774
Matrix: Water

QC Report No: Q838-Landau Associates, Inc.
Project: Union Station
273008.29
Date Sampled: NA
Date Received: NA

Data Release Authorized:
Reported: 11/21/96

Date extracted: 11/20/96
Date analyzed: 11/20/96 ECD3
GPC Cleanup: NO
Florisil: YES
Sulfur Cleanup: NO

Sample Amount: 500 mL
Final Extract Volume: 5.0 mL
Dilution Factor: 1:1

CAS Number	Analyte	ug/L
319-84-6	alpha-BHC	0.050 U
319-85-7	beta-BHC	0.050 U
319-86-8	delta-BHC	0.050 U
58-89-9	gamma-BHC (Lindane)	0.050 U
76-44-8	Heptachlor	0.050 U
309-00-2	Aldrin	0.050 U
1024-57-3	Heptachlor Epoxide	0.050 U
959-98-8	Endosulfan I	0.050 U
60-57-1	Dieldrin	0.10 U
72-55-9	4,4'-DDE	0.10 U
72-20-8	Endrin	0.10 U
33213-65-9	Endosulfan II	0.10 U
72-54-8	4,4'-DDD	0.10 U
1031-07-8	Endosulfan Sulfate	0.10 U
50-29-3	4,4'-DDT	0.10 U
72-43-5	Methoxychlor	0.50 U
53494-70-5	Endrin Ketone	0.10 U
7421-93-4	Endrin Aldehyde	0.10 U
57-74-9	gamma Chlordane	0.050 U
5103-71-9	alpha Chlordane	0.050 U
8001-35-2	Toxaphene	5.0 U
12674-11-2	Aroclor 1016	1.0 U
53469-21-9	Aroclor 1242	1.0 U
12672-29-6	Aroclor 1248	1.0 U
11097-69-1	Aroclor 1254	1.0 U
11096-82-5	Aroclor 1260	1.0 U
11104-28-2	Aroclor 1221	2.0 U
11141-16-5	Aroclor 1232	1.0 U

Pesticide Surrogate Recovery

Decachlorobiphenyl	72.0%
Tetrachlorometaxylene	65.0%

ANALYTICAL
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INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Pesticide/PCB by GC/ECD

Sample No: MW-107-11/19/96
Lab Sample ID: Q838F
QC Report No: Q838-Landau Associates, Inc.
LIMS ID: 96-19779
Project: Union Station
Matrix: Water
273008.29
Date Received: 11/19/96

Data Release Authorized:
Reported: 11/21/96

MATRIX SPIKE/SPIKE DUPLICATE RECOVERY
Date extracted: 11/20/96
Date analyzed: 11/21/96

CONSTITUENT	SAMPLE VALUE	SPIKE FOUND	SPIKE ADDED	% RECOVERY	RPD
MATRIX SPIKE					
gamma-BHC (Lindane)	< 0.050	0.407	0.500	81.4%	
Heptachlor	< 0.050	0.358	0.500	71.6%	
Aldrin	< 0.050	0.362	0.500	72.4%	
Dieldrin	< 0.100	0.804	1.00	80.4%	
Endrin	< 0.100	0.912	1.00	91.2%	
4,4'-DDT	< 0.100	0.770	1.00	77.0%	

ANALYTICAL
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ORGANICS ANALYSIS DATA SHEET
Pesticide/PCB by GC/ECD

Lab Sample ID: Q838F
LIMS ID: 96-19779
Matrix: Water

Sample No: MW-107-11/19/96
QC Report No: Q838-Landau Associates, Inc.
Project: Union Station
273008.29
Date Received: 11/19/96

Data Release Authorized:
Reported: 11/21/96

MATRIX SPIKE/SPIKE DUPLICATE RECOVERY
Date extracted: 11/20/96
Date analyzed: 11/21/96

CONSTITUENT	SAMPLE VALUE	SPIKE FOUND	SPIKE ADDED	% RECOVERY	RPD
MATRIX SPIKE DUPLICATE					
gamma-BHC (Lindane)	< 0.050	0.412	0.500	82.4%	1.2%
Heptachlor	< 0.050	0.321	0.500	64.2%	11.0%
Aldrin	< 0.050	0.325	0.500	65.0%	11.0%
Dieldrin	< 0.100	0.797	1.00	79.7%	0.9%
Endrin	< 0.100	0.902	1.00	90.2%	1.1%
4,4'-DDT	< 0.100	0.760	1.00	76.0%	1.3%

Values reported in ug/L

ANALYTICAL
RESOURCES
INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Pesticides/PCB by GC/ECD Method 8081

Sample No: MW-107-11/19/96
MATRIX SPIKE

Lab Sample ID: Q838F-MS
LIMS ID: 96-19779
Matrix: Water

QC Report No: Q838-Landau Associates, Inc.
Project: Union Station
273008.29
Date Sampled: 11/19/96
Date Received: 11/19/96

Data Release Authorized:
Reported: 11/21/96

Date extracted: 11/20/96
Date analyzed: 11/21/96 ECD3
GPC Cleanup: NO
Florisil: YES
Sulfur Cleanup: NO

Sample Amount: 500 mL
Final Extract Volume: 5.0 mL
Dilution Factor: 1:1

CAS Number	Analyte	ug/L
319-84-6	alpha-BHC	0.050 U
319-85-7	beta-BHC	0.050 U
319-86-8	delta-BHC	0.050 U
58-89-9	gamma-BHC (Lindane)	---
76-44-8	Heptachlor	---
309-00-2	Aldrin	---
1024-57-3	Heptachlor Epoxide	0.050 U
959-98-8	Endosulfan I	0.050 U
60-57-1	Dieldrin	---
72-55-9	4,4'-DDE	0.10 U
72-20-8	Endrin	---
33213-65-9	Endosulfan II	0.10 U
72-54-8	4,4'-DDD	0.10 U
1031-07-8	Endosulfan Sulfate	0.10 U
50-29-3	4,4'-DDT	---
72-43-5	Methoxychlor	0.50 U
53494-70-5	Endrin Ketone	0.10 U
7421-93-4	Endrin Aldehyde	0.10 U
57-74-9	gamma Chlordane	0.050 U
5103-71-9	alpha Chlordane	0.050 U
8001-35-2	Toxaphene	5.0 U
12674-11-2	Aroclor 1016	1.0 U
53469-21-9	Aroclor 1242	1.0 U
12672-29-6	Aroclor 1248	1.0 U
11097-69-1	Aroclor 1254	1.0 U
11096-82-5	Aroclor 1260	1.0 U
11104-28-2	Aroclor 1221	2.0 U
11141-16-5	Aroclor 1232	1.0 U

Pesticide Surrogate Recovery

Decachlorobiphenyl	75.0%
Tetrachlorometaxylene	68.5%

ANALYTICAL
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ORGANICS ANALYSIS DATA SHEET
Pesticides/PCB by GC/ECD Method 8081

Sample No: MW-107-11/19/96
SPIKE DUPLICATE

Lab Sample ID: Q838F-MSD
LIMS ID: 96-19779
Matrix: Water

QC Report No: Q838-Landau Associates, Inc.
Project: Union Station
273008.29
Date Sampled: 11/19/96
Date Received: 11/19/96

Data Release Authorized:
Reported: 11/21/96

Date extracted: 11/20/96
Date analyzed: 11/21/96 ECD3
GPC Cleanup: NO
Florisil: YES
Sulfur Cleanup: NO

Sample Amount: 500 mL
Final Extract Volume: 5.0 mL
Dilution Factor: 1:1

CAS Number	Analyte	ug/L
319-84-6	alpha-BHC	0.050 U
319-85-7	beta-BHC	0.050 U
319-86-8	delta-BHC	0.050 U
58-89-9	gamma-BHC (Lindane)	---
76-44-8	Heptachlor	---
309-00-2	Aldrin	---
1024-57-3	Heptachlor Epoxide	0.050 U
959-98-8	Endosulfan I	0.050 U
60-57-1	Dieldrin	---
72-55-9	4,4'-DDE	0.10 U
72-20-8	Endrin	---
33213-65-9	Endosulfan II	0.10 U
72-54-8	4,4'-DDD	0.10 U
1031-07-8	Endosulfan Sulfate	0.10 U
50-29-3	4,4'-DDT	---
72-43-5	Methoxychlor	0.50 U
53494-70-5	Endrin Ketone	0.10 U
7421-93-4	Endrin Aldehyde	0.10 U
57-74-9	gamma Chlordane	0.050 U
5103-71-9	alpha Chlordane	0.050 U
8001-35-2	Toxaphene	5.0 U
12674-11-2	Aroclor 1016	1.0 U
53469-21-9	Aroclor 1242	1.0 U
12672-29-6	Aroclor 1248	1.0 U
11097-69-1	Aroclor 1254	1.0 U
11096-82-5	Aroclor 1260	1.0 U
11104-28-2	Aroclor 1221	2.0 U
11141-16-5	Aroclor 1232	1.0 U

Pesticide Surrogate Recovery

Decachlorobiphenyl	75.0%
Tetrachlorometaxylene	57.5%

ANALYTICAL
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ORGANICS ANALYSIS DATA SHEET
Pesticide/PCB by GC/ECD

Lab Sample ID: Q838SB
LIMS ID: 96-19774
Matrix: Water

QC Report No: Q838-Landau Associates, Inc.
Project: Union Station
273008.29

Data Release Authorized:
Reported: 11/21/96

LABORATORY CONTROL SAMPLE
Date extracted: 11/20/96
Date analyzed: 11/20/96

CONSTITUENT	SPIKE FOUND	SPIKE ADDED	% RECOVERY
gamma-BHC (Lindane)	0.428	0.500	85.6%
Heptachlor	0.319	0.500	63.8%
Aldrin	0.301	0.500	60.2%
Dieldrin	0.811	1.00	81.1%
Endrin	0.905	1.00	90.5%
4,4'-DDT	0.769	1.00	76.9%

Spike Blank Surrogate Recovery

Decachlorobiphenyl	78.5%
Tetrachlorometaxylene	58.0%

Values reported in ug/L

ANALYTICAL
RESOURCES
INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Herbicides by GC/ECD

Sample No: B-6 11/18/96

Lab Sample ID: Q829A
LIMS ID: 96-19678
Matrix: Water

QC Report No: Q829-Landau Associates, Inc.
Project: Union Station
273008.29
Date Sampled: 11/18/96
Date Received: 11/18/96

Data Release Authorized:
Reported: 11/20/96

Date extracted: 11/18/96
Date analyzed: 11/20/96

Sample Amount: 500 mL
Final Extract Volume: 50 mL
Dilution Factor: 1:1

CAS Number	Analyte	ug/L
93-72-1	2,4,5-TP (Silvex)	0.25 U
93-76-5	2,4,5-T	0.50 U
88-85-7	Dinoseb	0.50 U
1918-00-9	Dicamba	0.50 U
94-75-7	2,4-D	1.0 U
94-82-6	2,4-DB	5.0 U
75-99-0	Dalapon	0.60 U
94-74-6	MCPA	1,200 U
120-36-5	Dichloroprop	1.0 U

Herbicide Surrogate Recovery

Dichlorophenylacetic Acid 84.0%

Data Qualifiers

J Indicates an estimated value when that result is less than the calculated detection limit.
E Indicates a value above the linear range of the detector. Dilution Required
S Indicates no value reported due to saturation of the detector.
D Indicates the surrogate was diluted out.
U Indicates compound was analyzed for, but not detected at the given detection limit.
B Found in associated method blank
NA Indicates compound was not analyzed.
NR Indicates no recovery due to interferences.
Y Indicates a raised reporting limit due to matrix interferences. The analyte may be present at or below the listed concentration, but in the opinion of the analyst, confirmation was inadequate.

ANALYTICAL
RESOURCES
INCORPORATED

ORGANICS ANALYSIS DATA SHEET **Sample No: HC-102 11/18/96**
Herbicides by GC/ECD

Lab Sample ID: Q829B
LIMS ID: 96-19679
Matrix: Water

QC Report No: Q829-Landau Associates, Inc.
Project: Union Station
273008.29
Date Sampled: 11/18/96
Date Received: 11/18/96

Data Release Authorized:
Reported: 11/20/96

Date extracted: 11/18/96
Date analyzed: 11/20/96

Sample Amount: 500 mL
Final Extract Volume: 50 mL
Dilution Factor: 1:1

CAS Number	Analyte	ug/L
93-72-1	2,4,5-TP (Silvex)	0.25 U
93-76-5	2,4,5-T	0.50 U
88-85-7	Dinoseb	0.50 U
1918-00-9	Dicamba	0.50 U
94-75-7	2,4-D	1.0 U
94-82-6	2,4-DB	5.0 U
75-99-0	Dalapon	0.60 U
94-74-6	MCPA	1,200 U
120-36-5	Dichloroprop	1.0 U

Herbicide Surrogate Recovery

Dichlorophenylacetic Acid 76.2%

Data Qualifiers

J Indicates an estimated value when that result is less than the calculated detection limit.
E Indicates a value above the linear range of the detector. Dilution Required
S Indicates no value reported due to saturation of the detector.
D Indicates the surrogate was diluted out.
U Indicates compound was analyzed for, but not detected at the given detection limit.
B Found in associated method blank
NA Indicates compound was not analyzed.
NR Indicates no recovery due to interferences.
Y Indicates a raised reporting limit due to matrix interferences. The analyte may be present at or below the listed concentration, but in the opinion of the analyst, confirmation was inadequate.

ANALYTICAL
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ORGANICS ANALYSIS DATA SHEET
Herbicides by GC/ECD

Sample No: HC-101 11/18/96

Lab Sample ID: Q829C
LIMS ID: 96-19680
Matrix: Water

QC Report No: Q829-Landau Associates, Inc.
Project: Union Station
273008.29
Date Sampled: 11/18/96
Date Received: 11/18/96

Data Release Authorized:
Reported: 11/20/96

Date extracted: 11/18/96
Date analyzed: 11/20/96

Sample Amount: 500 mL
Final Extract Volume: 50 mL
Dilution Factor: 1:1

CAS Number	Analyte	ug/L
93-72-1	2,4,5-TP (Silvex)	0.25 U
93-76-5	2,4,5-T	0.50 U
88-85-7	Dinoseb	0.50 U
1918-00-9	Dicamba	0.50 U
94-75-7	2,4-D	1.0 U
94-82-6	2,4-DB	5.0 U
75-99-0	Dalapon	3.1 Y
94-74-6	MCPA	1,200 U
120-36-5	Dichloroprop	1.0 U

Herbicide Surrogate Recovery

Dichlorophenylacetic Acid 88.2%

Data Qualifiers

J Indicates an estimated value when that result is less than the calculated detection limit.
E Indicates a value above the linear range of the detector. Dilution Required
S Indicates no value reported due to saturation of the detector.
D Indicates the surrogate was diluted out.
U Indicates compound was analyzed for, but not detected at the given detection limit.
B Found in associated method blank
NA Indicates compound was not analyzed.
NR Indicates no recovery due to interferences.
Y Indicates a raised reporting limit due to matrix interferences. The analyte may be present at or below the listed concentration, but in the opinion of the analyst, confirmation was inadequate.

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ORGANICS ANALYSIS DATA SHEET **Sample No: Method Blank**
Herbicides by GC/ECD

Lab Sample ID: Q829MB
LIMS ID: 96-19678
Matrix: Water

QC Report No: Q829-Landau Associates, Inc.
Project: Union Station
273008.29
Date Sampled: NA
Date Received: NA

Data Release Authorized:
Reported: 11/20/96

Date extracted: 11/18/96
Date analyzed: 11/20/96

Sample Amount: 500 mL
Final Extract Volume: 50 mL
Dilution Factor: 1:1

CAS Number	Analyte	ug/L
93-72-1	2,4,5-TP (Silvex)	0.25 U
93-76-5	2,4,5-T	0.50 U
88-85-7	Dinoseb	0.50 U
1918-00-9	Dicamba	0.50 U
94-75-7	2,4-D	1.0 U
94-82-6	2,4-DB	5.0 U
75-99-0	Dalapon	0.60 U
94-74-6	MCPA	1,200 U
120-36-5	Dichloroprop	1.0 U

Herbicide Surrogate Recovery

Dichlorophenylacetic Acid 80.9%

Data Qualifiers

J Indicates an estimated value when that result is less than the calculated detection limit.
E Indicates a value above the linear range of the detector. Dilution Required
S Indicates no value reported due to saturation of the detector.
D Indicates the surrogate was diluted out.
U Indicates compound was analyzed for, but not detected at the given detection limit.
B Found in associated method blank
NA Indicates compound was not analyzed.
NR Indicates no recovery due to interferences.
Y Indicates a raised reporting limit due to matrix interferences. The analyte may be present at or below the listed concentration, but in the opinion of the analyst, confirmation was inadequate.

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ORGANICS ANALYSIS DATA SHEET
Herbicide by GC/ECD

Lab Sample ID: Q829SB
LIMS ID: 96-19678
Matrix: Water

QC Report No: Q829-Landau Associates, Inc.
Project: Union Station
273008.29

Data Release Authorized:
Reported: 11/20/96

Date Extracted: 11/18/96
Date Analyzed: 11/20/96

LABORATORY CONTROL SAMPLE CONSTITUENT	SPIKE VALUE	SPIKE ADDED	% RECOVERY
2,4,5-TP (Silvex)	2.30	2.50	92.0%
Dicamba	3.60	5.00	72.0%
2,4-D	6.70	10.0	67.0%

Spike Blank Surrogate Recovery

Dichlorophenylacetic Acid 81.4%

Values reported in ug/L

ANALYTICAL
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ORGANICS ANALYSIS DATA SHEET **Sample No: MW-106-11/19/96**
Herbicides by GC/ECD

Lab Sample ID: Q838A
LIMS ID: 96-19774
Matrix: Water

QC Report No: Q838-Landau Associates, Inc.
Project: Union Station
273008.29
Date Sampled: 11/19/96
Date Received: 11/19/96

Data Release Authorized:
Reported: 11/22/96

Date extracted: 11/20/96
Date analyzed: 11/21/96

Sample Amount: 500 mL
Final Extract Volume: 50 mL
Dilution Factor: 1:1

CAS Number	Analyte	ug/L
93-72-1	2,4,5-TP (Silvex)	0.25 U
93-76-5	2,4,5-T	0.50 U
88-85-7	Dinoseb	0.50 U
1918-00-9	Dicamba	0.50 U
94-75-7	2,4-D	1.0 U
94-82-6	2,4-DB	5.0 U
75-99-0	Dalapon	5.3 Y
94-74-6	MCPA	6,500 Y
120-36-5	Dichloroprop	1.5 Y

Herbicide Surrogate Recovery

Dichlorophenylacetic Acid 99.5%

Data Qualifiers

J Indicates an estimated value when that result is less than the calculated detection limit.
E Indicates a value above the linear range of the detector. Dilution Required
S Indicates no value reported due to saturation of the detector.
D Indicates the surrogate was diluted out.
U Indicates compound was analyzed for, but not detected at the given detection limit.
B Found in associated method blank
NA Indicates compound was not analyzed.
NR Indicates no recovery due to interferences.
Y Indicates a raised reporting limit due to matrix interferences. The analyte may be present at or below the listed concentration, but in the opinion of the analyst, confirmation was inadequate.

ANALYTICAL
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ORGANICS ANALYSIS DATA SHEET
Herbicides by GC/ECD

Sample No: MW-105-11/19/96

Lab Sample ID: Q838B
LIMS ID: 96-19775
Matrix: Water

QC Report No: Q838-Landau Associates, Inc.
Project: Union Station
273008.29
Date Sampled: 11/19/96
Date Received: 11/19/96

Data Release Authorized:
Reported: 11/22/96

Date extracted: 11/20/96
Date analyzed: 11/21/96

Sample Amount: 500 mL
Final Extract Volume: 50 mL
Dilution Factor: 1:1

CAS Number	Analyte	ug/L
93-72-1	2,4,5-TP (Silvex)	0.25 U
93-76-5	2,4,5-T	0.50 U
88-85-7	Dinoseb	0.50 U
1918-00-9	Dicamba	0.50 U
94-75-7	2,4-D	1.0 U
94-82-6	2,4-DB	5.0 U
75-99-0	Dalapon	8.6 Y
94-74-6	MCPA	1,300 Y
120-36-5	Dichloroprop	1.0 U

Herbicide Surrogate Recovery

Dichlorophenylacetic Acid 82.1%

Data Qualifiers

J Indicates an estimated value when that result is less than the calculated detection limit.
E Indicates a value above the linear range of the detector. Dilution Required
S Indicates no value reported due to saturation of the detector.
D Indicates the surrogate was diluted out.
U Indicates compound was analyzed for, but not detected at the given detection limit.
B Found in associated method blank
NA Indicates compound was not analyzed.
NR Indicates no recovery due to interferences.
Y Indicates a raised reporting limit due to matrix interferences. The analyte may be present at or below the listed concentration, but in the opinion of the analyst, confirmation was inadequate.

ANALYTICAL
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ORGANICS ANALYSIS DATA SHEET **Sample No: MW-104-11/19/96**
Herbicides by GC/ECD

Lab Sample ID: Q838C
LIMS ID: 96-19776
Matrix: Water

QC Report No: Q838-Landau Associates, Inc.
Project: Union Station
273008.29
Date Sampled: 11/19/96
Date Received: 11/19/96

Data Release Authorized: Cathy W. Hamm
Reported: 11/22/96

Date extracted: 11/20/96
Date analyzed: 11/21/96

Sample Amount: 500 mL
Final Extract Volume: 50 mL
Dilution Factor: 1:1

CAS Number	Analyte	ug/L
93-72-1	2,4,5-TP (Silvex)	0.25 U
93-76-5	2,4,5-T	0.50 U
88-85-7	Dinoseb	0.50 U
1918-00-9	Dicamba	0.50 U
94-75-7	2,4-D	1.0 U
94-82-6	2,4-DB	5.0 U
75-99-0	Dalapon	0.60 U
94-74-6	MCPA	1,200 U
120-36-5	Dichloroprop	1.0 U

Herbicide Surrogate Recovery

Dichlorophenylacetic Acid 80.9%

Data Qualifiers

J Indicates an estimated value when that result is less than the calculated detection limit.
E Indicates a value above the linear range of the detector. Dilution Required
S Indicates no value reported due to saturation of the detector.
D Indicates the surrogate was diluted out.
U Indicates compound was analyzed for, but not detected at the given detection limit.
B Found in associated method blank
NA Indicates compound was not analyzed.
NR Indicates no recovery due to interferences.
Y Indicates a raised reporting limit due to matrix interferences. The analyte may be present at or below the listed concentration, but in the opinion of the analyst, confirmation was inadequate.

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ORGANICS ANALYSIS DATA SHEET
Herbicides by GC/ECD

Sample No: HC-103-11/19/96

Lab Sample ID: Q838D
LIMS ID: 96-19777
Matrix: Water

QC Report No: Q838-Landau Associates, Inc.
Project: Union Station
273008.29
Date Sampled: 11/19/96
Date Received: 11/19/96

Data Release Authorized:
Reported: 11/22/96

Date extracted: 11/20/96
Date analyzed: 11/21/96

Sample Amount: 500 mL
Final Extract Volume: 50 mL
Dilution Factor: 1:1

CAS Number	Analyte	ug/L
93-72-1	2,4,5-TP (Silvex)	0.25 U
93-76-5	2,4,5-T	0.50 U
88-85-7	Dinoseb	0.50 U
1918-00-9	Dicamba	0.50 U
94-75-7	2,4-D	1.0 U
94-82-6	2,4-DB	5.0 U
75-99-0	Dalapon	0.60 U
94-74-6	MCPA	1,200 U
120-36-5	Dichloroprop	1.0 U

Herbicide Surrogate Recovery

Dichlorophenylacetic Acid 80.2%

Data Qualifiers

J Indicates an estimated value when that result is less than the calculated detection limit.
E Indicates a value above the linear range of the detector. Dilution Required
S Indicates no value reported due to saturation of the detector.
D Indicates the surrogate was diluted out.
U Indicates compound was analyzed for, but not detected at the given detection limit.
B Found in associated method blank
NA Indicates compound was not analyzed.
NR Indicates no recovery due to interferences.
Y Indicates a raised reporting limit due to matrix interferences. The analyte may be present at or below the listed concentration, but in the opinion of the analyst, confirmation was inadequate.

ANALYTICAL
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ORGANICS ANALYSIS DATA SHEET
Herbicides by GC/ECD

Sample No: MW-205-11/19/96

Lab Sample ID: Q838E
LIMS ID: 96-19778
Matrix: Water

QC Report No: Q838-Landau Associates, Inc.
Project: Union Station
273008.29
Date Sampled: 11/19/96
Date Received: 11/19/96

Data Release Authorized:
Reported: 11/22/96

Date extracted: 11/20/96
Date analyzed: 11/21/96

Sample Amount: 500 mL
Final Extract Volume: 50 mL
Dilution Factor: 1:1

CAS Number	Analyte	ug/L
93-72-1	2,4,5-TP (Silvex)	0.25 U
93-76-5	2,4,5-T	0.50 U
88-85-7	Dinoseb	0.50 U
1918-00-9	Dicamba	0.50 U
94-75-7	2,4-D	1.0 U
94-82-6	2,4-DB	6.7 Y
75-99-0	Dalapon	6.8 Y
94-74-6	MCPA	1,200 U
120-36-5	Dichloroprop	1.0 U

Herbicide Surrogate Recovery

Dichlorophenylacetic Acid 90.5%

Data Qualifiers

J Indicates an estimated value when that result is less than the calculated detection limit.
E Indicates a value above the linear range of the detector. Dilution Required
S Indicates no value reported due to saturation of the detector.
D Indicates the surrogate was diluted out.
U Indicates compound was analyzed for, but not detected at the given detection limit.
B Found in associated method blank
NA Indicates compound was not analyzed.
NR Indicates no recovery due to interferences.
Y Indicates a raised reporting limit due to matrix interferences. The analyte may be present at or below the listed concentration, but in the opinion of the analyst, confirmation was inadequate.

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ORGANICS ANALYSIS DATA SHEET
Herbicides by GC/ECD

Sample No: MW-107-11/19/96

Lab Sample ID: Q838F
LIMS ID: 96-19779
Matrix: Water

QC Report No: Q838-Landau Associates, Inc.
Project: Union Station
273008.29
Date Sampled: 11/19/96
Date Received: 11/19/96

Data Release Authorized:
Reported: 11/22/96

Date extracted: 11/20/96
Date analyzed: 11/21/96

Sample Amount: 500 mL
Final Extract Volume: 50 mL
Dilution Factor: 1:1

CAS Number	Analyte	ug/L
93-72-1	2,4,5-TP (Silvex)	0.25 U
93-76-5	2,4,5-T	0.50 U
88-85-7	Dinoseb	0.50 U
1918-00-9	Dicamba	0.50 U
94-75-7	2,4-D	1.0 U
94-82-6	2,4-DB	5.0 U
75-99-0	Dalapon	0.60 U
94-74-6	MCPA	1,200 U
120-36-5	Dichloroprop	1.0 U

Herbicide Surrogate Recovery

Dichlorophenylacetic Acid 85.9%

Data Qualifiers

J Indicates an estimated value when that result is less than the calculated detection limit.
E Indicates a value above the linear range of the detector. Dilution Required
S Indicates no value reported due to saturation of the detector.
D Indicates the surrogate was diluted out.
U Indicates compound was analyzed for, but not detected at the given detection limit.
B Found in associated method blank
NA Indicates compound was not analyzed.
NR Indicates no recovery due to interferences.
Y Indicates a raised reporting limit due to matrix interferences. The analyte may be present at or below the listed concentration, but in the opinion of the analyst, confirmation was inadequate.

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ORGANICS ANALYSIS DATA SHEET **Sample No: Method Blank**
Herbicides by GC/ECD

Lab Sample ID: Q838MB
LIMS ID: 96-19774
Matrix: Water

QC Report No: Q838-Landau Associates, Inc.
Project: Union Station
273008.29
Date Sampled: NA
Date Received: NA

Data Release Authorized: Cathie M. Hansen
Reported: 11/22/96

Date extracted: 11/20/96
Date analyzed: 11/21/96

Sample Amount: 500 mL
Final Extract Volume: 50 mL
Dilution Factor: 1:1

CAS Number	Analyte	ug/L
93-72-1	2,4,5-TP (Silvex)	0.25 U
93-76-5	2,4,5-T	0.50 U
88-85-7	Dinoseb	0.50 U
1918-00-9	Dicamba	0.50 U
94-75-7	2,4-D	1.0 U
94-82-6	2,4-DB	5.0 U
75-99-0	Dalapon	6.3 Y
94-74-6	MCPA	1,200 U
120-36-5	Dichloroprop	1.0 U

Herbicide Surrogate Recovery

Dichlorophenylacetic Acid 80.3%

Data Qualifiers

J Indicates an estimated value when that result is less than the calculated detection limit.
E Indicates a value above the linear range of the detector. Dilution Required
S Indicates no value reported due to saturation of the detector.
D Indicates the surrogate was diluted out.
U Indicates compound was analyzed for, but not detected at the given detection limit.
B Found in associated method blank
NA Indicates compound was not analyzed.
NR Indicates no recovery due to interferences.
Y Indicates a raised reporting limit due to matrix interferences. The analyte may be present at or below the listed concentration, but in the opinion of the analyst, confirmation was inadequate.

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ORGANICS ANALYSIS DATA SHEET
Herbicide by GC/ECD

Sample No: MW-107-11/19/96
Lab Sample ID: Q838F — QC Report No: Q838-Landau Associates, Inc.
LIMS ID: 96-19779 — Project: Union Station
Matrix: Water — 273008.29
Date Received: 11/19/96
Data Release Authorized:
Reported: 11/22/96

MATRIX SPIKE/SPIKE DUPLICATE RECOVERY
Date Extracted: 11/20/96
Date Analyzed: 11/21/96

CONSTITUENT	SAMPLE VALUE	SPIKE VALUE	SPIKE ADDED	% RECOVERY	RPD
MATRIX SPIKE					
2,4,5-TP (Silvex)	< 0.2	2.40	2.50	96.0%	
Dicamba	< 0.5	4.10	5.00	82.0%	
2,4-D	< 1.0	8.00	10.0	80.0%	
MATRIX SPIKE DUPLICATE					
2,4,5-TP (Silvex)	< 0.2	2.40	2.50	96.0%	0.0%
Dicamba	< 0.5	4.10	5.00	82.0%	0.0%
2,4-D	< 1.0	7.60	10.0	76.0%	5.1%

Values reported in ug/L

ANALYTICAL
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ORGANICS ANALYSIS DATA SHEET
Herbicides by GC/ECD

Sample No: MW-107-11/19/96
MATRIX SPIKE

Lab Sample ID: Q838F-MS
LIMS ID: 96-19779
Matrix: Water

QC Report No: Q838-Landau Associates, Inc.
Project: Union Station
273008.29
Date Sampled: 11/19/96
Date Received: 11/19/96

Data Release Authorized:
Reported: 11/22/96

Date extracted: 11/20/96
Date analyzed: 11/21/96

Sample Amount: 500 mL
Final Extract Volume: 50 mL
Dilution Factor: 1:1

CAS Number	Analyte	ug/L
93-72-1	2,4,5-TP (Silvex)	---
93-76-5	2,4,5-T	0.50 U
88-85-7	Dinoseb	0.50 U
1918-00-9	Dicamba	---
94-75-7	2,4-D	---
94-82-6	2,4-DB	5.0 U
75-99-0	Dalapon	2.3 Y
94-74-6	MCPA	1,200 U
120-36-5	Dichloroprop	1.0 U

Herbicide Surrogate Recovery

Dichlorophenylacetic Acid 90.7%

Data Qualifiers

J Indicates an estimated value when that result is less than the calculated detection limit.
E Indicates a value above the linear range of the detector. Dilution Required
S Indicates no value reported due to saturation of the detector.
D Indicates the surrogate was diluted out.
U Indicates compound was analyzed for, but not detected at the given detection limit.
B Found in associated method blank
NA Indicates compound was not analyzed.
NR Indicates no recovery due to interferences.
Y Indicates a raised reporting limit due to matrix interferences. The analyte may be present at or below the listed concentration, but in the opinion of the analyst, confirmation was inadequate.

ANALYTICAL
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ORGANICS ANALYSIS DATA SHEET
Herbicides by GC/ECD

Sample No: MW-107-11/19/96
MS DUPLICATE

Lab Sample ID: Q838F-MSD
LIMS ID: 96-19779
Matrix: Water

QC Report No: Q838-Landau Associates, Inc.
Project: Union Station
273008.29
Date Sampled: 11/19/96
Date Received: 11/19/96

Data Release Authorized:
Reported: 11/22/96

Date extracted: 11/20/96
Date analyzed: 11/21/96

Sample Amount: 500 mL
Final Extract Volume: 50 mL
Dilution Factor: 1:1

CAS Number	Analyte	ug/L
93-72-1	2,4,5-TP (Silvex)	---
93-76-5	2,4,5-T	0.50 U
88-85-7	Dinoseb	0.50 U
1918-00-9	Dicamba	---
94-75-7	2,4-D	---
94-82-6	2,4-DB	5.0 U
75-99-0	Dalapon	8.0 Y
94-74-6	MCPA	1,200 U
120-36-5	Dichloroprop	1.0 U

Herbicide Surrogate Recovery

Dichlorophenylacetic Acid 87.3%

Data Qualifiers

J Indicates an estimated value when that result is less than the calculated detection limit.
E Indicates a value above the linear range of the detector. Dilution Required
S Indicates no value reported due to saturation of the detector.
D Indicates the surrogate was diluted out.
U Indicates compound was analyzed for, but not detected at the given detection limit.
B Found in associated method blank
NA Indicates compound was not analyzed.
NR Indicates no recovery due to interferences.
Y Indicates a raised reporting limit due to matrix interferences. The analyte may be present at or below the listed concentration, but in the opinion of the analyst, confirmation was inadequate.

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ORGANICS ANALYSIS DATA SHEET
Herbicide by GC/ECD

Lab Sample ID: Q838SB
LIMS ID: 96-19774
Matrix: Water

QC Report No: Q838-Landau Associates, Inc.
Project: Union Station
273008.29

Data Release Authorized:
Reported: 11/22/96

Date Extracted: 11/20/96
Date Analyzed: 11/21/96

LABORATORY CONTROL SAMPLE CONSTITUENT	SPIKE VALUE	SPIKE ADDED	% RECOVERY
2,4,5-TP (Silvex)	2.40	2.50	96.0%
Dicamba	4.10	5.00	82.0%
2,4-D	7.40	10.0	74.0%

Spike Blank Surrogate Recovery

Dichlorophenylacetic Acid 84.5%

Values reported in ug/L

ANALYTICAL
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INCORPORATED

TOTAL DIESEL RANGE HYDROCARBONS
WA TPHd Range C12 to C24 by GC/FID
and Motor Oil

Lab ID: 96-19678
Matrix: Water

QC Report No: Q829-Landau Associates, Inc.
Project: Union Station
273008.29
Date Received: 11/18/96

Data Release Authorized:
Reported: 11/20/96

Lab ID	Sample ID	Date Extracted	Date Analyzed	Dilution Factor	Diesel Range	*HC ID	Motor Oil Range	Surr Rec
Q829MB	Method Blank	11/19/96	11/19/96	1:1	0.25 U	---	0.50 U	95.5%
Q829A	B-6 11/18/96	11/19/96	11/19/96	1:1	0.25 U	---	0.50 U	105%
Q829B	HC-102 11/18/96	11/19/96	11/19/96	1:1	0.25 U	---	0.50 U	99.9%
Q829C	HC-101 11/18/96	11/19/96	11/19/96	1:1	3.4	NO	0.50 U	108%
Q829D	B-4 11/18/96	11/19/96	11/19/96	1:10	13	NO	5.0 U	91.0%

Surrogate is Methyl-Arachidate.

* ID indicates, in the opinion of the analyst, the petroleum product with the best pattern match. 'NO' indicates that there was not a good match for any of the requested products.
Values reported in ppm (mg/L)
Diesel quantitation on total peaks in the range from C12 to C24.
Motor Oil quantitation on total peaks in the range from C24 to C38.

Data Qualifiers

U	Compound not detected at the given detection limit.
X	Value detected above linear range of instrument. Dilution required.
J	Indicates an estimated value below the calculated detection limit.
S	No value reported due to saturation of the detector. Dilution required.
D	Indicates the surrogate was not detected because of dilution of the extract.
E	Indicates a value above the linear range of the detector. Dilution required.
NR	Indicates no recovery due to matrix interference.

ANALYTICAL
RESOURCES
INCORPORATED

TOTAL DIESEL RANGE HYDROCARBONS
WA TPHd Range C12 to C24 by GC/FID

Lab Sample ID: Q829SB
LIMS ID: 96-19678
Matrix: Water

Data Release Authorized:
Reported: 11/20/96

QC Report No: Q829-Landau Associates, Inc.
Project: Union Station
273008.29

LABORATORY CONTROL SAMPLE RECOVERY REPORT
Analyzed 11/19/96

CONSTITUENT	SPIKE FOUND	SPIKE ADDED	% RECOVERY
Diesel Range Hydrocarbons	2.68	2.50	107%

TPHd Surrogate Recovery

Methylarachidate	105%

Values reported in parts per million (mg/L)

ANALYTICAL
RESOURCES
INCORPORATED

TOTAL DIESEL RANGE HYDROCARBONS
WA TPHd Range C12 to C24 by GC/FID
and Motor Oil

Lab ID: 96-19774
Matrix: Water

QC Report No: Q838-Landau Associates, Inc.
Project: Union Station
273008.29
Date Received: 11/19/96

Data Release Authorized:
Reported: 11/22/96

Lab ID	Sample ID	Date Extracted	Date Analyzed	Dilution Factor	Diesel Range	*HC ID	Motor Oil Range	Surr Rec
Q838MB	Method Blank	11/20/96	11/20/96	1:1	0.25 U	---	0.50 U	101%
Q838A	MW-106-11/19/96	11/20/96	11/20/96	1:1	0.78	NO	0.50 U	102%
Q838B	MW-105-11/19/96	11/20/96	11/20/96	1:1	18 E	NO	0.50 U	101%
Q838B	MW-105-11/19/96	11/20/96	11/21/96	1:10	16	NO	5.0 U	125%
Q838C	MW-104-11/19/96	11/20/96	11/20/96	1:1	5.1	NO	0.50 U	98.7%
Q838D	HC-103-11/19/96	11/20/96	11/20/96	1:1	0.25 U	---	0.50 U	96.4%
Q838E	MW-205-11/19/96	11/20/96	11/20/96	1:1	20 E	NO	0.50 U	101%
Q838E	MW-205-11/19/96	11/20/96	11/21/96	1:10	17	NO	5.0 U	132%
Q838F	MW-107-11/19/96	11/20/96	11/20/96	1:1	1.7	NO	0.50 U	96.0%

Surrogate is Methyl-Arachidate.

* ID indicates, in the opinion of the analyst, the petroleum product with the best pattern match. 'NO' indicates that there was not a good match for any of the requested products.
Values reported in ppm (mg/L)
Diesel quantitation on total peaks in the range from C12 to C24.
Motor Oil quantitation on total peaks in the range from C12 to C32.

Data Qualifiers

U	Compound not detected at the given detection limit.
X	Value detected above linear range of instrument. Dilution required.
J	Indicates an estimated value below the calculated detection limit.
S	No value reported due to saturation of the detector. Dilution required.
D	Indicates the surrogate was not detected because of dilution of the extract.
E	Indicates a value above the linear range of the detector. Dilution required.
NR	Indicates no recovery due to matrix interference.

ANALYTICAL
RESOURCES
INCORPORATED

TOTAL DIESEL RANGE HYDROCARBONS
WA TPHd Range C12 to C24 by GC/FID

Lab Sample ID: Q838F
LIMS ID: 96-19779
Matrix: Water

Data Release Authorized:
Reported: 11/21/96

Sample No: MW-107-11/19/96
QC Report No: Q838-Landau Associates, Inc.
Project: Union Station
273008.29
Date Received: 11/19/96

MATRIX SPIKE/SPIKE DUPLICATE RECOVERY

Analyzed: 11/20/96

CONSTITUENT	SAMPLE VALUE	SPIKE VALUE	SPIKE AMT	% RECOVERY	RPD
MATRIX SPIKE					
Diesel Range Hydrocarbons	1.68	4.58	2.50	116%	
MATRIX SPIKE DUPLICATE					
Diesel Range Hydrocarbons	1.68	4.88	2.50	128%	9.8%

TPHd Surrogate Recovery

Matrix Spike	Methylarachidate	99.9%
MS Duplicate	Methylarachidate	101%

Values reported in parts per million (mg/L)

ANALYTICAL
RESOURCES
INCORPORATED

TOTAL DIESEL RANGE HYDROCARBONS
WA TPHd Range C12 to C24 by GC/FID

Lab Sample ID: Q838SB
LIMS ID: 96-19774
Matrix: Water

QC Report No: Q838-Landau Associates, Inc.
Project: Union Station
273008.29

Data Release Authorized:
Reported: 11/21/96

LABORATORY CONTROL SAMPLE RECOVERY REPORT
Analyzed 11/20/96

CONSTITUENT	SPIKE FOUND	SPIKE ADDED	% RECOVERY
Diesel Range Hydrocarbons	2.76	2.50	110%

TPHd Surrogate Recovery

Methylarachidate	104%

Values reported in parts per million (mg/L)

ANALYTICAL
RESOURCES
INCORPORATED

TOTAL GASOLINE RANGE HYDROCARBONS
WTPHg Range Toluene to C12 by GC/FID

Matrix: Water

QC Report No: Q829-Landau Associates, Inc.
Project: Union Station
273008.29

Data Release Authorized:
Reported: 11/20/96

Date Received: 11/18/96

Lab ID	Client Sample ID	Date Analyzed	Dilution Factor	Gas Range	Gas ID	Surr A Rec	Surr B Rec
Q829-1120MB	Method Blank	11/20/96	1:1	0.25 U	NO	105%	73.1%
96-19678-Q829A	B-6 11/18/96	11/20/96	1:1	0.25 U	NO	104%	72.2%
96-19679-Q829B	HC-102 11/18/96	11/20/96	1:1	0.25 U	NO	103%	81.2%
96-19680-Q829C	HC-101 11/18/96	11/20/96	1:1	5.8	NO	118%	128%
96-19681-Q829D	B-4 11/18/96	11/20/96	1:1	3.6	NO	101%	109%

Surrogate A is Trifluorotoluene.
Surrogate B is Bromobenzene.
Values reported in ppm (mg/L).
Quantitation on total peaks in the gasoline range from Toluene to C12.

Data Qualifiers

U	Compound not detected at the given detection limit.
X	Value detected above linear range of instrument. Dilution required.
J	Indicates an estimated value below the calculated detection limit.
S	No value reported due to saturation of the detector. Dilution required.
D	Indicates the surrogate was not detected because of dilution of the extract.
NR	Indicates no recovery due to matrix interference.

ANALYTICAL
RESOURCES
INCORPORATED

TOTAL GASOLINE RANGE HYDROCARBONS
WTPHg Range Toluene to C12 by GC/FID

Lab Sample ID: Q829SB
LIMS ID: 96-19678
Matrix: Water

QC Report No: Q829-Landau Associates, Inc.
Project: Union Station
273008.29

Data Release Authorized:
Reported: 11/20/96

LABORATORY CONTROL SAMPLE RECOVERY REPORT
Analyzed 11/20/96

CONSTITUENT	SPIKE FOUND	SPIKE ADDED	% RECOVERY
LABORATORY CONTROL SAMPLE			
Gasoline Range Hydrocarbons	2.76	2.5	110%

TPHg Surrogate Recovery

Trifluorotoluene	143%
Bromobenzene	115%

Values reported in parts per million (mg/L)

TPHg SPIKE CONTROL LIMITS

Percent Recovery	50-150%
Duplicate RPD	<50%

Advisory QA Limits

ANALYTICAL
RESOURCES
INCORPORATED

TOTAL GASOLINE RANGE HYDROCARBONS
WTPHg Range Toluene to C12 by GC/FID

Matrix: Water

QC Report No: Q838-Landau Associates, Inc.
Project: Union Station
273008.29
Date Received: 11/19/96

Data Release Authorized:
Reported: 11/21/96

Lab ID	Client Sample ID	Date Analyzed	Dilution Factor	Gas Range	Gas ID	Surr A Rec	Surr B Rec
Q838-1120MB	Method Blank	11/20/96	1:1	0.25 U	NO	105%	73.1%
96-19774-Q838A	MW-106-11/19/96	11/20/96	1:1	0.25 U	NO	102%	87.3%
96-19775-Q838B	MW-105-11/19/96	11/20/96	1:1	11	NO	115%	122%
96-19776-Q838C	MW-104-11/19/96	11/20/96	1:1	1.8	NO	112%	114%
96-19777-Q838D	HC-103-11/19/96	11/20/96	1:1	0.25 U	NO	99.1%	75.4%
96-19778-Q838E	MW-205-11/19/96	11/20/96	1:1	10	NO	114%	120%
96-19779-Q838F	MW-107-11/19/96	11/20/96	1:1	0.86	NO	112%	110%

Surrogate A is Trifluorotoluene.
Surrogate B is Bromobenzene.
Values reported in ppm (mg/L).
Quantitation on total peaks in the gasoline range from Toluene to C12.

Data Qualifiers

U	Compound not detected at the given detection limit.
X	Value detected above linear range of instrument. Dilution required.
J	Indicates an estimated value below the calculated detection limit.
S	No value reported due to saturation of the detector. Dilution required.
D	Indicates the surrogate was not detected because of dilution of the extract.
NR	Indicates no recovery due to matrix interference.

ANALYTICAL
RESOURCES
INCORPORATED

TOTAL GASOLINE RANGE HYDROCARBONS
WTPHg Range Toluene to C12 by GC/FID

Lab Sample ID: Q838F
LIMS ID: 96-19779
Matrix: Water

Data Release Authorized:
Reported: 11/21/96

Sample No: MW-107-11/19/96
QC Report No: Q838-Landau Associates, Inc.
Project: Union Station
273008.29
Date Received: 11/19/96

MATRIX SPIKE/SPIKE DUPLICATE RECOVERY

Analyzed 11/20/96

CONSTITUENT	SAMPLE VALUE	SPIKE FOUND	SPIKE ADDED	% RECOVERY	RPD
MATRIX SPIKE					
Gasoline Range Hydrocarbons	0.9	3.93	2.5	120%	
MATRIX SPIKE DUPLICATE					
Gasoline Range Hydrocarbons	0.9	4.08	2.5	129%	7.2%

TPHg Surrogate Recovery

Matrix Spike	Trifluorotoluene	145%
Matrix Spike	Bromobenzene	110%
MS Duplicate	Trifluorotoluene	143%
MS Duplicate	Bromobenzene	111%

Values reported in parts per million (mg/L)

TPHg SPIKE CONTROL LIMITS

Percent Recovery 50-150%
Duplicate RPD <50%

*Advisory QA Limits

ANALYTICAL
RESOURCES
INCORPORATED

TOTAL GASOLINE RANGE HYDROCARBONS
WTPHg Range Toluene to C12 by GC/FID

Lab Sample ID: Q838SB
LIMS ID: 96-19774
Matrix: Water

QC Report No: Q838-Landau Associates, Inc.
Project: Union Station
273008.29

Data Release Authorized:
Reported: 11/21/96

LABORATORY CONTROL SAMPLE RECOVERY REPORT
Analyzed 11/20/96

CONSTITUENT	SPIKE FOUND	SPIKE ADDED	% RECOVERY
LABORATORY CONTROL SAMPLE			
Gasoline Range Hydrocarbons	2.76	2.5	110%

TPHg Surrogate Recovery

Trifluorotoluene	143%
Bromobenzene	115%

Values reported in parts per million (mg/L)

TPHg SPIKE CONTROL LIMITS

Percent Recovery	50-150%
Duplicate RPD	<50%

Advisory QA Limits

ANALYTICAL
RESOURCES
INCORPORATED

Final Report
Laboratory Analysis of Conventional Parameters

Sample No: B-6 11/18/96

Lab Sample ID: Q829A
LIMS ID: 96-19678
Matrix: Water

QC Report No: Q829-Landau Associates, Inc.
Project: Union Station
273008.29
Date Sampled: 11/18/96
Date Received: 11/18/96

Data Release Authorized: MAP
Reported: 11/20/96 Dr. M.A. Perkins

Analyte	Analysis Date & Batch	Method	RL	Units	Result
Total Dissolved Solids	11/18/96 111896#1	EPA 160.1	12	mg/L	860
Total Suspended Solids	11/18/96 111896#1	EPA 160.2	4.0	mg/L	72
Turbidity	11/18/96 111896#1	EPA 180.1	0.05	NTU	34
Total Cyanide	11/19/96 111996#1	EPA 335.2	0.004	mg/L	< 0.004 U

RL Analytical reporting limit
U Undetected at reported detection limit

Report for Q829 received 11/18/96

ANALYTICAL
RESOURCES
INCORPORATED

Final Report
Laboratory Analysis of Conventional Parameters

Sample No: HC-102 11/18/96

Lab Sample ID: Q829B
LIMS ID: 96-19679
Matrix: Water

QC Report No: Q829-Landau Associates, Inc.
Project: Union Station
273008.29
Date Sampled: 11/18/96
Date Received: 11/18/96

Data Release Authorized: MAP
Reported: 11/20/96 Dr. M.A. Perkins

Analyte	Analysis Date & Batch	Method	RL	Units	Result
Total Dissolved Solids	11/18/96 111896#1	EPA 160.1	10	mg/L	570
Total Suspended Solids	11/18/96 111896#1	EPA 160.2	1.0	mg/L	3.7
Turbidity	11/18/96 111896#1	EPA 180.1	0.05	NTU	10
Total Cyanide	11/19/96 111996#1	EPA 335.2	0.004	mg/L	0.012

RL Analytical reporting limit
U Undetected at reported detection limit

Report for Q829 received 11/18/96

ANALYTICAL
RESOURCES
INCORPORATED

Final Report
Laboratory Analysis of Conventional Parameters

Sample No: HC-101 11/18/96

Lab Sample ID: Q829C
LIMS ID: 96-19680
Matrix: Water

QC Report No: Q829-Landau Associates, Inc.
Project: Union Station
273008.29
Date Sampled: 11/18/96
Date Received: 11/18/96

Data Release Authorized: MAP
Reported: 11/20/96 Dr. M.A. Perkins

Analyte	Analysis Date & Batch	Method	RL	Units	Result
Total Dissolved Solids	11/18/96 111896#1	EPA 160.1	17	mg/L	1,100
Total Suspended Solids	11/18/96 111896#1	EPA 160.2	2.5	mg/L	46
Turbidity	11/18/96 111896#1	EPA 180.1	0.20	NTU	110
Total Cyanide	11/19/96 111996#1	EPA 335.2	0.004	mg/L	0.009

RL Analytical reporting limit
U Undetected at reported detection limit

Report for Q829 received 11/18/96

ANALYTICAL
RESOURCES
INCORPORATED

Final Report
Laboratory Analysis of Conventional Parameters

Sample No: B-4 11/18/96

Lab Sample ID: Q829D
LIMS ID: 96-19681
Matrix: Water

QC Report No: Q829-Landau Associates, Inc.
Project: Union Station
273008.29
Date Sampled: 11/18/96
Date Received: 11/18/96

Data Release Authorized: MMP
Reported: 11/20/96 Dr. M.A. Perkins

Analyte	Analysis Date & Batch	Method	RL	Units	Result
Total Cyanide	11/19/96 111996#1	EPA 335.2	0.004	mg/L	0.018

RL Analytical reporting limit
U Undetected at reported detection limit

Report for Q829 received 11/18/96

ANALYTICAL
RESOURCES
INCORPORATED

QA Report - Method Blank Analysis

Matrix: Water

QC Report No: Q829-Landau Associates, Inc.
Project: Union Station
273008.29
Date Received: NA

Data Release Authorized: MAS
Reported: 11/20/96 Dr. M.A. Perkins

METHOD BLANK RESULTS
CONVENTIONALS

Analysis Date & Batch	Constituent	Units	Result	
11/18/96 111896#1	Total Dissolved Solids	mg/L	< 10	U
11/18/96 111896#1	Total Suspended Solids	mg/L	< 1.0	U
11/18/96 111896#1	Turbidity	NTU	< 0.05	U
11/19/96 111996#1	Total Cyanide	mg/L	< 0.004	U

ANALYTICAL
RESOURCES
INCORPORATED

QA Report - Replicate Analysis

QC Report No: Q829-Landau Associates, Inc.
Matrix: Water Project: Union Station
273008.29
Date Received: 11/18/96

Data Release Authorized: MMC
Reported: 11/20/96 Dr. M.A. Perkins

DUPLICATE ANALYSIS RESULTS
CONVENTIONALS

Constituent	Units	Sample Value	Duplicate Value	RPD
ARI ID: 96-19678, Q829 A	**Client Sample ID: B-6 11/18/96**			
Total Dissolved Solids	mg/L	860	870	RPD: 1.2%
Total Suspended Solids	mg/L	72	71	RPD: 1.4%
Turbidity	NTU	34	35	RPD: 2.9%
ARI ID: 96-19679, Q829 B	**Client Sample ID: HC-102 11/18/96**			
Total Cyanide	mg/L	0.012	0.012	RPD: 0.0%

ANALYTICAL
RESOURCES
INCORPORATED

QA Report - Matrix Spike/Matrix Spike Duplicate Analysis

Matrix: Water

QC Report No: Q829-Landau Associates, Inc.
Project: Union Station
273008.29
Date Received: 11/18/96

Data Release Authorized: MAP
Reported: 11/20/96 Dr. M.A. Perkins

MATRIX SPIKE QA/QC REPORT
CONVENTIONALS

Constituent	Units	Sample Value	Spike Value	Spike Added	Recovery
ARI ID: 96-19679, Q829 B Client Sample ID: HC-102 11/18/96					
Total Cyanide	mg/L	0.0120	0.156	0.145	99.3%

MS/MSD Recovery Limits: 75 - 125 %

ANALYTICAL
RESOURCES
INCORPORATED

QA Report - Laboratory Control Samples

QC Report No: Q829-Landau Associates, Inc.
Project: Union Station
273008.29
Date Received: NA

Data Release Authorized:
Reported: 11/20/96 Dr. M.A. Perkins

LABORATORY CONTROL SAMPLES
CONVENTIONALS

Constituent	Units	Measured Value	True Value	Recovery
Laboratory Control Sample				
Turbidity	NTU	16.6	16.6	100%
Date analyzed: 11/18/96	Batch ID: 111896#1			

ANALYTICAL
RESOURCES
INCORPORATED

QA Report - Standard Reference Material Analysis

QC Report No: Q829-Landau Associates, Inc.
Project: Union Station
273008.29
Date Received: NA

Data Release Authorized: MP
Reported: 11/20/96 Dr. M.A. Perkins

STANDARD REFERENCE MATERIAL ANALYSIS
CONVENTIONALS

Constituent	Units	Value	True Value	Recovery
SPEX QC Lot#10-91AS				
Total Cyanide	mg/L	0.141	0.150	94.0%

Date analyzed: 11/19/96 Batch ID: 111996#1

ANALYTICAL
RESOURCES
INCORPORATED

Final Report
Laboratory Analysis of Conventional Parameters

Sample No: MW-106-11/19/96

Lab Sample ID: Q838A
LIMS ID: 96-19774
Matrix: Water

QC Report No: Q838-Landau Associates, Inc.
Project: Union Station
273008.29
Date Sampled: 11/19/96
Date Received: 11/19/96

Data Release Authorized: MAP
Reported: 11/25/96 Dr. M.A. Perkins

Analyte	Analysis Date & Batch	Method	RL	Units	Result
Total Dissolved Solids	11/20/96 112096#1	EPA 160.1	20	mg/L	14,000
Total Suspended Solids	11/20/96 112096#1	EPA 160.2	10	mg/L	200
Turbidity	11/20/96 112096#1	EPA 180.1	0.50	NTU	220
Total Cyanide	11/20/96 112096#1	EPA 335.2	0.004	mg/L	< 0.004 U

RL Analytical reporting limit
U Undetected at reported detection limit

Report for Q838 received 11/19/96

ANALYTICAL
RESOURCES
INCORPORATED

Final Report
Laboratory Analysis of Conventional Parameters

Sample No: MW-105-11/19/96

Lab Sample ID: Q838B
LIMS ID: 96-19775
Matrix: Water

QC Report No: Q838-Landau Associates, Inc.
Project: Union Station
273008.29
Date Sampled: 11/19/96
Date Received: 11/19/96

Data Release Authorized: MP
Reported: 11/25/96 Dr. M.A. Perkins

Analyte	Analysis Date & Batch	Method	RL	Units	Result
Total Dissolved Solids	11/20/96 112096#1	EPA 160.1	20	mg/L	4,200
Total Suspended Solids	11/20/96 112096#1	EPA 160.2	10	mg/L	140
Turbidity	11/20/96 112096#1	EPA 180.1	0.50	NTU	210
Total Cyanide	11/20/96 112096#1	EPA 335.2	0.004	mg/L	0.005

RL Analytical reporting limit
U Undetected at reported detection limit

Report for Q838 received 11/19/96

ANALYTICAL
RESOURCES
INCORPORATED

Final Report
Laboratory Analysis of Conventional Parameters

Sample No: MW-104-11/19/96

Lab Sample ID: Q838C
LIMS ID: 96-19776
Matrix: Water

QC Report No: Q838-Landau Associates, Inc.
Project: Union Station
273008.29
Date Sampled: 11/19/96
Date Received: 11/19/96

Data Release Authorized: MAP
Reported: 11/25/96 Dr. M.A. Perkins

Analyte	Analysis Date & Batch	Method	RL	Units	Result
Total Dissolved Solids	11/20/96 112096#1	EPA 160.1	10	mg/L	1,000
Total Suspended Solids	11/20/96 112096#1	EPA 160.2	5.0	mg/L	90
Turbidity	11/20/96 112096#1	EPA 180.1	0.10	NTU	58
Total Cyanide	11/20/96 112096#1	EPA 335.2	0.004	mg/L	0.045

RL Analytical reporting limit
U Undetected at reported detection limit

Report for Q838 received 11/19/96

ANALYTICAL
RESOURCES
INCORPORATED

Final Report
Laboratory Analysis of Conventional Parameters

Sample No: HC-103-11/19/96

Lab Sample ID: Q838D
LIMS ID: 96-19777
Matrix: Water

QC Report No: Q838-Landau Associates, Inc.
Project: Union Station
273008.29
Date Sampled: 11/19/96
Date Received: 11/19/96

Data Release Authorized: MAP
Reported: 11/25/96 Dr. M.A. Perkins

Analyte	Analysis Date & Batch	Method	RL	Units	Result
Total Dissolved Solids	11/20/96 112096#1	EPA 160.1	10	mg/L	320
Total Suspended Solids	11/20/96 112096#1	EPA 160.2	1.8	mg/L	32
Turbidity	11/20/96 112096#1	EPA 180.1	0.05	NTU	6.9
Total Cyanide	11/20/96 112096#1	EPA 335.2	0.004	mg/L	0.005

RL Analytical reporting limit
U Undetected at reported detection limit

Report for Q838 received 11/19/96

ANALYTICAL
RESOURCES
INCORPORATED

Final Report
Laboratory Analysis of Conventional Parameters

Sample No: MW-205-11/19/96

Lab Sample ID: Q838E
LIMS ID: 96-19778
Matrix: Water

QC Report No: Q838-Landau Associates, Inc.
Project: Union Station
273008.29
Date Sampled: 11/19/96
Date Received: 11/19/96

Data Release Authorized: MR
Reported: 11/25/96 Dr. M.A. Perkins

Analyte	Analysis Date & Batch	Method	RL	Units	Result
Total Dissolved Solids	11/20/96 112096#1	EPA 160.1	20	mg/L	4,300
Total Suspended Solids	11/20/96 112096#1	EPA 160.2	10	mg/L	130
Turbidity	11/20/96 112096#1	EPA 180.1	0.25	NTU	190
Total Cyanide	11/20/96 112096#1	EPA 335.2	0.004	mg/L	0.005

RL Analytical reporting limit
U Undetected at reported detection limit

Report for Q838 received 11/19/96

ANALYTICAL
RESOURCES
INCORPORATED

Final Report
Laboratory Analysis of Conventional Parameters

Sample No: MW-107-11/19/96

Lab Sample ID: Q838F
LIMS ID: 96-19779
Matrix: Water

QC Report No: Q838-Landau Associates, Inc.
Project: Union Station
273008.29
Date Sampled: 11/19/96
Date Received: 11/19/96

Data Release Authorized: MAP
Reported: 11/25/96 Dr. M.A. Perkins

Analyte	Analysis Date & Batch	Method	RL	Units	Result
Total Dissolved Solids	11/20/96 112096#1	EPA 160.1	12	mg/L	5,300
Total Suspended Solids	11/20/96 112096#1	EPA 160.2	5.0	mg/L	200
Turbidity	11/20/96 112096#1	EPA 180.1	0.20	NTU	110
Total Cyanide	11/20/96 112096#1	EPA 335.2	0.004	mg/L	< 0.004 U

RL Analytical reporting limit
U Undetected at reported detection limit

Report for Q838 received 11/19/96

ANALYTICAL
RESOURCES
INCORPORATED

QA Report - Method Blank Analysis

Matrix: Water

QC Report No: Q838-Landau Associates, Inc.
Project: Union Station
273008.29
Date Received: NA

Data Release Authorized: MP
Reported: 11/25/96 Dr. M.A. Perkins

METHOD BLANK RESULTS
CONVENTIONALS

Analysis Date & Batch	Constituent	Units	Result	
11/20/96 112096#1	Total Dissolved Solids	mg/L	< 10	U
11/20/96 112096#1	Total Suspended Solids	mg/L	< 1.0	U
11/20/96 112096#1	Turbidity	NTU	< 0.05	U
11/20/96 112096#1	Total Cyanide	mg/L	< 0.004	U

ANALYTICAL
RESOURCES
INCORPORATED

QA Report - Replicate Analysis

Matrix: Water

QC Report No: Q838-Landau Associates, Inc.
Project: Union Station
273008.29
Date Received: 11/19/96

Data Release Authorized: MP
Reported: 11/25/96 Dr. M.A. Perkins

DUPLICATE ANALYSIS RESULTS
CONVENTIONALS

Constituent	Units	Sample Value	Duplicate Value	RPD
ARI ID: 96-19779, Q838 F	**Client Sample ID: MW-107-11/19/96**			
Total Dissolved Solids	mg/L	5,300	5,300	RPD: 0.0%
Total Suspended Solids	mg/L	200	160	RPD: 22.2%
Turbidity	NTU	110	110	RPD: 0.0%
Total Cyanide	mg/L	< 0.004 U	< 0.004 U	NA

ANALYTICAL
RESOURCES
INCORPORATED

QA Report - Matrix Spike/Matrix Spike Duplicate Analysis

Matrix: Water

QC Report No: Q838-Landau Associates, Inc.
Project: Union Station
273008.29
Date Received: 11/19/96

Data Release Authorized:
Reported: 11/25/96 Dr. M.A. Perkins

MATRIX SPIKE QA/QC REPORT
CONVENTIONALS

Constituent	Units	Sample Value	Spike Value	Spike Added	Recovery
ARI ID: 96-19779, Q838 F	Client Sample ID: MW-107-11/19/96				
Total Cyanide	mg/L	< 0.004	0.152	0.145	105%

MS/MSD Recovery Limits: 75 - 125 %

ANALYTICAL
RESOURCES
INCORPORATED

QA Report - Laboratory Control Samples

QC Report No: Q838-Landau Associates, Inc.
Project: Union Station
273008.29
Date Received: NA

Data Release Authorized: MP
Reported: 11/25/96 Dr. M.A. Perkins

LABORATORY CONTROL SAMPLES
CONVENTIONALS

Constituent	Units	Measured Value	True Value	Recovery
Laboratory Control Sample				
Turbidity	NTU	16.7	16.6	101%

Date analyzed: 11/20/96 Batch ID: 112096#1

ANALYTICAL
RESOURCES
INCORPORATED

QA Report - Standard Reference Material Analysis

QC Report No: Q838-Landau Associates, Inc.
Project: Union Station
273008.29
Date Received: NA

Data Release Authorized: MP
Reported: 11/25/96 Dr. M.A. Perkins

STANDARD REFERENCE MATERIAL ANALYSIS
CONVENTIONALS

Constituent	Units	Value	True Value	Recovery
SPEX QC Lot#10-99AS				
Total Cyanide	mg/L	0.139	0.150	92.7%
Date analyzed: 11/20/96	Batch ID: 112096#1			