HERST & ASSOCIATES, INC.®

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0714
Site: West Lake Landfill
ID # MBD029900932
Break: 10.0
Other:
3-9-04

40241282
SUPERFUND RECORDS

Mr. Dan Wall
U. S. Environmental Protection Agency
Region VII
901 N 5th St
Kansas City, Kansas 66115

March 9, 2004

Dear Mr. Wall:

Monthly Progress Report – February 2004,
West Lake (Bridgeton) Landfill, Operable Unit 2 RI/FS

On behalf of Laidlaw Waste Systems, Inc. (Laidlaw), Herst & Associates, Inc. has prepared the following progress report in accordance with Section XIII, Paragraph 39 of the Administrative Order on Consent (Consent Order), EPA Docket No. VII-94-F-0025. The progress report describes activities conducted in February 2004.

I. ACTIONS TAKEN TO COMPLY WITH THE CONSENT ORDER

A monthly progress report was submitted to EPA.

During an October 7, 2003 meeting, US EPA and the Missouri Department of Natural Resources (MDNR) requested groundwater sampling to provide updated data supplemental to the remedial investigation sampling previously conducted in 1997. In response to the request, a November 12, 2003 letter proposal was submitted, which described the wells to be sampled and the analyses to be performed. The November 12, 2003 letter indicated that the supplemental sampling would include landfill detection monitoring wells that are sampled on a semi-annual basis as part of the landfill's environmental compliance, plus selected additional alluvial wells near the boundary of Operable Unit 2. As described in the November 12 letter, two rounds of supplemental sampling were proposed. The first sampling event was proposed for November/December 2003, and the second sampling event was proposed for May/June 2004. The primary goals of the sampling events are to provide current groundwater quality data and to determine if current groundwater quality is similar to the results previously obtained during 1997 as part of the OU-2 remedial investigation.

The supplemental sampling was verbally approved by EPA on November 13. Based on a December 18, 2003 electronic mail message from you to Herst & Associates, Inc, the MDNR approved the supplemental sampling on or about December 18.

Detection monitoring wells were sampled on November 20 and 21, 2003, consistent with the landfill's environmental compliance schedule that specifies semi-annual sampling in November of each year. Monitoring well designations include, from shallow to deep, "-AS" (alluvial), "-SS" (St. Louis Formation), and "-SD" (Salem Formation). For wells not part of landfill detection monitoring, four of

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five supplemental alluvial groundwater samples were collected over the period December 11 through December 15, 2003 to meet the proposed November/December sampling period and in anticipation of MDNR approval. The fifth supplemental groundwater sampling point (PZ-302-AS) was dry during December, but had sufficient water in early January to allow sample collection on January 11 and 12, 2004. Figure 1 illustrates the locations of the wells included in the November/December 2003 sampling event.

Detection Monitoring Wells

Table 1 includes a comparison of November 2003 detection monitoring well results to data collected during the remedial investigation. Note that the analytical reporting limits for the remedial investigation in 1997 were in many cases significantly lowered compared to typical reporting limits, to provide data specific to risk assessment purposes. As described in the November 12, 2003 letter, standard laboratory detection limits were requested for the November/December 2003 sampling event. Given the goals of the supplemental sampling, which include ascertaining if the current groundwater quality is generally similar to the 1997 groundwater quality, changes in detection limits in 2003 compared to 1997 do not affect the ability to draw meaningful conclusions.

The analytical laboratory data package for the November 2003 detection monitoring event has previously been forwarded to the MDNR – Solid Waste Division, and is therefore not reproduced as part of this submittal. As described above, remedial investigation data from February and May 1997, where available, are used as a basis for comparison. Selected detection monitoring wells were not sampled during February and May 1997 as part of the remedial investigation; for these wells, August and November 1997 data are used as a basis for comparison. Table 1 includes only those parameters that had a detectable concentration in at least one of the samples collected during the November 2003 event or the 1997 comparison events.

Only one well, PZ-114-AS, yielded detectable concentrations of volatile organic compounds in November 2003. PZ-114-AS has apparently been impacted by an off-site source. PM Resources, Inc. is located across St. Charles Rock Road to the north of Bridgeton Landfill and upgradient of PZ-114-AS. According to the document titled "RCRA Operation & Maintenance Groundwater Monitoring Field Audit Report (Report)" compiled by PM Resources, Inc. and submitted on March 12, 2003 to the MDNR-Air and Land Protection Division-Hazardous Waste Program, the site is currently conducting a Groundwater Compliance Monitoring Program as part of MDNR's agreement with the US EPA. According to the Report mentioned above, PM Resources is a facility that produces a wide variety of animal health care products including pharmaceuticals, medical feeds, rodenticides, sanitizers, cleaners, and pesticide products. The facility has been producing these types of products since 1970. In September 1994 the owner reportedly removed the catchment system. Upon removal of the system, it was revealed that a release of hazardous chemicals had occurred. The chemicals released from the catchment system included petroleum products such as benzene, toluene, ethylbenzene, and xylenes (BTEX) along with some of their volatile breakdown components. Contaminants of concern at the PM Resources, Inc. site are BTEX and volatile by-products involved with the removal of the catchment system and pesticides and herbicides that may have been released during the facility's production history. Chlorobenzene has been detected at elevated concentrations in groundwater beneath the PM Resources, Inc. property. The three VOCs detected in groundwater at PZ-114-AS (benzene, chlorobenzene, and 1,4-dichlorobenzene) appear related to the PM Resources, Inc. impacts.

Based on the lack of VOCs in other detection monitoring wells, the groundwater quality is generally the same or slightly improved compared to 1997 data that indicated sporadic, low-level VOC detections in selected wells.

For metals, Table 1 includes data for arsenic, iron, and manganese, which were identified as compounds of potential concern based on remedial investigation sampling. All arsenic results for the detection wells from November 2003 are significantly below the federal drinking water Maximum Concentration Limit (MCL) of 0.05 mg/l. The 1997 arsenic results ranged from less than detection to 0.096 mg/l, excluding a probable outlier in PZ-109-SS. The November 2003 arsenic results range from less than detection to 0.023 mg/l. Only one well yielded a detectable arsenic concentration that was higher in November 2003 than in either of the two 1997 comparison sampling events, although the typical detection monitoring reporting limit of 0.005 mg/l utilized in November 2003 is slightly higher than the 1997 reporting limit (0.002 mg/l). For iron, approximately 50% of the November 2003 results are slightly lower than at least one of the 1997 sample results and approximately 50% are slightly higher. The 1997 iron concentrations in the detection wells range from 0.087 mg/l to 40 mg/l, and the November 2003 concentrations range from 0.02 mg/l to 66 mg/l. For manganese, the November 2003 concentrations are lower than the 1997 results in 11 of 14 samples (approximately 80%). The 1997 manganese concentrations range from less than detection (<0.01 mg/l) to 87.6 mg/l. The November 2003 manganese concentrations range from 0.008 mg/l to 6.5 mg/l. Based on the metals results, the current groundwater quality is similar to the 1997 groundwater quality.

TDS results from November 2003 were lower than at least one of the 1997 results in 11 of 14 wells (approximately 80%). The TDS values in 1997 ranged from 340 mg/l to 1,510 mg/l. The November 2003 TDS values range from 330 mg/l to 1,400 mg/l. For chloride, approximately 50% of the November 2003 results are slightly lower than at least one of the 1997 results, and approximately 50% are slightly higher. The 1997 chloride results range from less than detection (<3 mg/l) to 296 mg/l, and the November 2003 results range from less than detection (<3 mg/l) to 430 mg/l. Both the 1997 and November 2003 results indicate that one well, PZ-114-AS, exceeds the secondary MCL for chloride of 250 mg/l. For fluoride, approximately 50% of the November 2003 results are slightly lower than at least one of the 1997 results, and approximately 50% are slightly higher. The 1997 fluoride results range from 0.32 mg/l to 2.3 mg/l, and the November 2003 results range from 0.26 mg/l to 2.2 mg/l.

Based on the above comparisons, the groundwater quality monitored by the landfill's detection wells is similar to the 1997 groundwater quality.

Supplemental Alluvial Wells

Attachment 1 provides the laboratory analytical data sheets and field sampling forms for the supplemental alluvial wells. Table 2 includes a comparison of December 2003 results for the supplemental alluvial wells to data collected during the remedial investigation, where available. It should be noted that MW-F2 was identified as a candidate for supplemental groundwater sampling in the November 12, 2003 proposal. However, MW-F2 could not be located during the sampling event. The above-ground portion of MW-F2 formerly consisted of a 2-inch diameter PVC approximately 10 inches in length, with no protective casing. MW-F2 was not installed as part of the remedial investigation, and its construction quality was unknown. As described in the June 2000 *Remedial Investigation Report* for Operable Unit 2, MW-303-AS was installed adjacent to the MW-F2 location as part of the remedial investigation, to provide a groundwater sampling point with known, reliable construction quality. MW-303-AS was included in the December 2003 supplemental sampling event; therefore, reliable groundwater quality is available for this area.

Of the five supplemental alluvial wells that could be sampled, two (PZ-303-AI and PZ-303-AS) were not included in 1997 sampling. The remaining three alluvial wells do have 1997 data that can be used for comparison purposes. For VOCs with detectable concentrations, the December 2003 results were lower than at least one of the 1997 results in 10 out of 13 instances (approximately 75%). It should be noted that the December 2003 reporting limit was slightly higher than the 1997 reporting limit.

Four of the five supplemental alluvial wells exhibited non-detectable semi-volatile organic compounds (SVOC) in both December 2003 and 1997. Well PZ-303-AS exhibited low-level SVOCs in December 2003, and exhibited the same five SVOCs that had been detected in at least one of the two 1997 sampling events. No SVOCs were detected in December 2003 that had not been detected in 1997.

For the three metals (arsenic, iron, and manganese), December 2003 arsenic concentrations are slightly higher in two of the three wells that also have 1997 data (the third well has a December 2003 detection limit higher than the 1997 results); December 2003 iron concentrations are slightly higher in two of the three wells than in 1997; and, December 2003 manganese concentrations are slightly lower in all three wells than in 1997. For the three inorganics (TDS, chloride, and fluoride), December 2003 TDS values are lower in all three wells than in 1997; December 2003 chloride concentrations are lower in all three wells than in 1997; and, December 2003 fluoride concentrations are lower in all three wells than in 1997. Overall, the metal and inorganic results indicate that December 2003 groundwater quality is comparable to 1997 groundwater quality.

Summary

Based on the detailed descriptions provided above, the current groundwater quality is similar to the groundwater quality data collected in 1997. Accordingly, the evaluation of remedial alternatives can confidently move forward using the available data. The May/June 2004 sampling results will be used to further verify the applicability of the groundwater quality data for purposes of remedial alternative evaluation.

II. VALIDATED RESULTS RECEIVED

No validated data were received in February. See Section I above for discussion of laboratory data.

III. WORK PLANNED DURING MARCH AND APRIL 2004.

Preparation of the FS Report will continue in March.

IV. MATERIAL PROBLEMS ENCOUNTERED OR ANTICIPATED MATERIAL DELAYS

No material problems or delays were encountered in February and none are anticipated for March or April.

If you have any questions or comments, please contact Mr. Doug Borro, the Respondent's designated Project Coordinator, or the undersigned.

Sincerely,

HERST & ASSOCIATES, INC.

Ward E. Herst, CPHG, CEM
Managing Director

cc: Michael Hockley, Esq. - Spencer Fane Britt & Browne
Tony Walker - Allied Waste Industries, Inc.
Rod Bloese – Allied Waste Industries, Inc
Jill Bruss - Missouri Department of Natural Resources
Jacinta Douma – Bridgeton Landfill, LLC.
Paul Rosasco - Engineering Management Support, Inc.

TABLES

Table 1
Detection Monitoring Network
Groundwater Data Comparison, 1997 to 2003

	Compound	PZ-100-SD February 1997	PZ-100-SD May 1997	PZ-100-SD November 2003	PZ-100-SS February 1997	PZ-100-SS May 1997	PZ-100-SS November 2003	PZ-104-SD February 1997	PZ-104-SD May 1997	PZ-104-SD November 2003	PZ-104-SS February 1997	PZ-104-SS May 1997	PZ-104-SS November 2003
Volatiles	1,2-cis-Dichloroethylene	<0.002	<0.002	<0.005	<0.002	<0.002	<0.005	<0.002	<0.002	<0.005	<0.002	<0.002	<0.005
	1,4-Dichlorobenzene	<0.002	<0.002	<0.005	<0.002	<0.002	<0.005	<0.002	<0.002	<0.005	<0.002	<0.002	<0.005
	Benzene	<0.002	<0.002	<0.005	<0.002	<0.002	<0.005	<0.002	<0.002	<0.005	<0.002	<0.002	<0.005
	Chlorobenzene	<0.002	<0.002	<0.005	<0.002	<0.002	<0.005	<0.002	<0.002	<0.005	<0.002	<0.002	<0.005
	Xylenes (Total)	<0.002	<0.002	<0.005	<0.002	<0.002	<0.005	<0.002	<0.002	<0.005	<0.002	<0.002	<0.005
Metals	Arsenic, Total	0.003	0.002	<0.005	<0.002	<0.002	<0.005	<0.002	<0.002	<0.005	0.004	<0.002	<0.005
	Iron, Total	1.71	2.09	1.9	1.39	0.554	0.62	0.318	0.327	1.1	3.06	0.833	3.2
	Manganese, Total	0.277	0.332	0.1	0.75	0.045	0.0894	0.14	0.194	0.074	0.057	0.064	0.033
Inorganics	Chloride	3	<3	<3	6	4	7	64	52	54	4	3	3.1
	Fluoride	2.02	2.2	2.1	0.3	0.87	0.76	0.77	0.68	1.1	0.73	0.51	0.85
	Total Dissolved Solids (TDS)	412	372	330	328	332	300	630	638	540	507	499	410

	Compound	PZ-105-SS August 1997	PZ-105-SS November 1997	PZ-105-SS November 2003	PZ-106-SD February 1997	PZ-106-SD May 1997	PZ-106-SD November 2003	PZ-106-SS February 1997	PZ-106-SS May 1997	PZ-106-SS November 2003
Volatiles	1,2-cis-Dichloroethylene	<0.005	<0.005	<0.005	<0.002	<0.002	<0.005	<0.002	<0.002	<0.005
	1,4-Dichlorobenzene	<0.005	<0.005	<0.005	<0.002	<0.002	<0.005	<0.002	<0.002	<0.005
	Benzene	<0.005	<0.005	<0.005	<0.002	<0.002	<0.005	<0.002	3.1	<0.005
	Chlorobenzene	<0.005	<0.005	<0.005	<0.002	<0.002	<0.005	<0.002	<0.002	<0.005
	Xylenes (Total)	<0.005	<0.005	<0.005	<0.002	<0.002	<0.005	<0.002	<0.002	<0.005
Metals	Arsenic, Total	0.003	<0.005	<0.005	<0.002	0.002	<0.005	0.005	0.004	<0.005
	Iron, Total	0.867	0.133	0.14	0.188	0.279	1	6.47	4.85	0.1
	Manganese, Total	0.203	0.297	0.028	0.025	0.017	0.37	0.24	0.0412	0.051
Inorganics	Chloride	24	22	19	10	14	7.7	12	12.5	77
	Fluoride	0.9	1	1.2	1.85	3	2.1	0.87	0.68	0.78
	Total Dissolved Solids (TDS)	563	616	548	474	531	440	436	442	540

Detection Monitoring Network (continued)
Groundwater Data Comparison, 1997 to 2003

	Compound	PZ-109-SS August 1997	PZ-109-SS November 1997	PZ-109-SS November 2003	PZ-110-SS February 1997	PZ-110-SS May 1997	PZ-110-SS November 2003	PZ-111-SD February 1997	PZ-111-SD May 1997	PZ-111-SD November 2003
Volatiles	1,2-cis-Dichloroethylene	<0.005	<0.005	<0.005	<0.002	0.0024	<0.005	<0.002	<0.002	<0.005
	1,4-Dichlorobenzene	<0.005	<0.005	<0.005	<0.002	<0.002	<0.005	<0.002	<0.002	<0.005
	Benzene	<0.005	<0.005	<0.005	<0.002	<0.002	<0.005	<0.002	0.013	<0.005
	Chlorobenzene	<0.005	<0.005	<0.005	<0.002	<0.002	<0.005	<0.002	<0.002	<0.005
	Xylenes (Total)	<0.005	<0.005	<0.005	<0.002	<0.002	<0.005	<0.002	<0.002	<0.005
Metals	Arsenic, Total	0.008	0.003	<0.005	0.003	0.003	<0.005	<0.002	<0.002	<0.005
	Iron, Total	4.77	1.24	0.17	4.88	5.87	0	0.119	0.293	1.9
	Manganese, Total	0.12	0.0658	0.015	0.156	0.156	0.22	0.011	0.019	0.066
Inorganics	Chloride	10	8.3	4	215	156	230	10	10	14
	Fluoride	1.61	1.8	2.2	0.43	0.50	0.4	1.2	2.3	2.1
	Total Dissolved Solids (TDS)	529	482	420	1,410	1,150	1,300	340	362	470

	Compound	PZ-114-AS August 1997	PZ-114-AS November 1997	PZ-114-AS November 2003	PZ-115-SS August 1997	PZ-115-SS November 1997	PZ-115-SS November 2003	PZ-201A-SS February 1997	PZ-201A-SS May 1997	PZ-201A-SS November 2003	PZ-205-SS August 1997	PZ-205-SS November 1997	PZ-205-SS November 2003
Volatiles	1,2-cis-Dichloroethylene	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.002	<0.002	<0.005	<0.005	<0.005	<0.005
	1,4-Dichlorobenzene	<0.005	<0.005	0.014	<0.005	<0.005	<0.005	<0.002	<0.002	<0.005	<0.005	<0.005	<0.005
	Benzene	<0.005	<0.005	0.0061	<0.005	<0.005	<0.005	<0.002	<0.002	<0.005	<0.005	<0.005	<0.005
	Chlorobenzene	0.007	0.0081	0.12	<0.005	<0.005	<0.005	<0.002	<0.002	<0.005	<0.005	<0.005	<0.005
	Xylenes (Total)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.002	0.002	<0.005	<0.005	<0.005	<0.005
Metals	Arsenic, Total	0.004	0.008	0.023	<0.007	<0.00455	<0.005	0.003	0.004	0.0065	<0.002	0.00525	<0.005
	Iron, Total	40	32.8	66	0.84	0.88	0.58	2.79	3.97	1.7	1.88	6.24	1.1
	Manganese, Total	77	67.6	8.5	<0.01	0.0087	0.067	0.305	0.528	0.16	0.32	0.181	0.0059
Inorganics	Chloride	290	275	450	91	67.5	360	4	<3	3.1	14	17.4	30
	Fluoride	0.32	0.337	0.26	1.0	1.52	0.67	0.32	0.58	0.36	0.44	0.413	0.47
	Total Dissolved Solids (TDS)	3,450	3,510	1,400	893	588	1,000	540	525	460	481	489	610

All results presented in mg/L

* Probable outlier not representative of arsenic in this well. Subsequent sampling results consistently yield arsenic concentrations of 0.005 mg/l or less

Notes:

1) Wells PZ-105-SS, PZ-109-SS, PZ-114-AS, PZ-115-SS and PZ-205-SS were not part of the sampling events conducted in February and May 1997. August and November 1997 data are presented

2) Analytes shown include only those parameters detected in at least one sample.

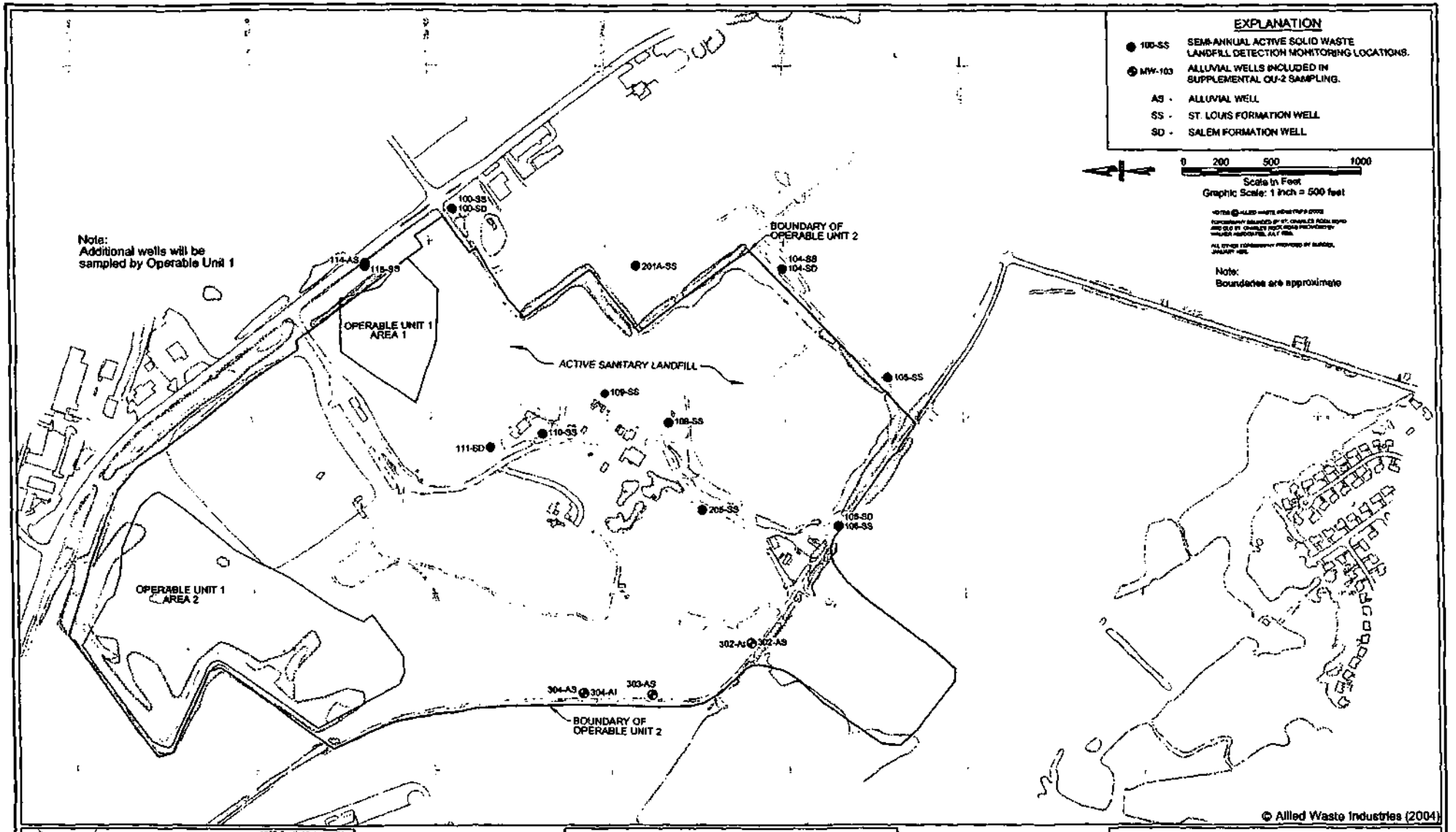
Table 2
Wells PZ-302-AS, PZ-302-AI, PZ-303-AS, PZ-304-AS, PZ-304-AI
Groundwater Data Comparison, 1997 to 2003

	Compound	PZ-302-AI December 2003	PZ-302-AS December 2003	PZ-303-AS February 1997	PZ-303-AS May 1997	PZ-303-AS December 2003	PZ-304-AI February 1997	PZ-304-AI May 1997	PZ-304-AI December 2003	PZ-304-AS February 1997	PZ-304-AS May 1997	PZ-304-AS December 2003
Volatiles	1,1-Dichloroethane	<0.005	<0.005	<0.002	0.033	<0.02	<0.002	<0.002	<0.005	0.002	<0.002	<0.005
	1,1-Dichloroethylene	<0.005	<0.005	<0.002	<0.002	<0.02	<0.002	<0.002	<0.005	<0.002	0.003	<0.005
	1,2-cis-Dichloroethylene	<0.005	<0.005	0.008	0.0081	<0.02	0.011	0.013	0.014	0.006	0.0067	<0.005
	1,2-Dichlorobenzene	<0.005	<0.005	<0.002	0.0038	<0.02	<0.002	<0.002	<0.005	<0.002	<0.002	<0.005
	1,2-Dichloroethane	<0.005	<0.005	0.002	<0.002	<0.02	<0.002	<0.002	<0.005	<0.002	<0.002	<0.005
	1,2-trans-Dichloroethylene	<0.005	<0.005	0.002	0.0025	<0.02	<0.002	<0.002	<0.005	<0.002	<0.002	<0.005
	1,4-Dichlorobenzene	<0.005	<0.005	<0.002	0.0034	<0.02	0.003	0.0033	<0.005	0.012	0.012	0.0058
	Acetone	<0.005	<0.005	0.009	<0.005	<0.1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
	Benzene	<0.005	0.0051	0.078	0.078	0.054	0.01	0.011	<0.005	0.005	0.0062	0.0053
	Chlorobenzene	<0.005	0.054	<0.002	<0.002	<0.02	<0.002	<0.002	<0.005	0.008	0.0087	<0.005
	Chloroethane	<0.005	<0.005	0.013	0.011	<0.02	<0.002	<0.002	<0.005	<0.002	<0.002	<0.005
	Ethylbenzene	<0.005	<0.005	0.120	0.113	0.056	<0.002	<0.002	<0.005	<0.002	<0.002	<0.005
	Methyl Ethyl Ketone	<0.005	<0.005	0.007	<0.005	<0.1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
	Gasoline Range Organics	<0.05	0.13	1.3	1.3	3.7	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
	Petroleum Hydrocarbons (Diesel)	<0.48	<0.5	19	10	14	0.69	0.4	0.52	0.99	0.6	0.85
	Styrene	<0.005	<0.005	0.006	<0.002	<0.02	<0.002	<0.002	<0.005	<0.002	<0.002	<0.005
	Toluene	<0.005	<0.005	0.4	0.260	0.7	<0.002	<0.002	<0.005	<0.002	<0.002	<0.005
	trans-1,3-Dichloropropylene	<0.005	<0.005	0.008	<0.002	<0.02	<0.002	<0.002	<0.005	<0.002	<0.002	<0.005
	Vinyl chloride	<0.001	<0.001	0.012	0.026	<0.02	0.01	0.0062	0.0053	0.012	0.0076	0.0014
	Xylenes (Total)	<0.005	<0.005	0.67	0.53	0.39	<0.002	<0.002	<0.005	<0.002	<0.002	<0.005
Semivolatiles	2,4-Dimethylphenol	<0.01	<0.01	0.086	0.078	0.062	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
	2-Methylnaphthalene	<0.01	<0.01	<0.01	0.015	0.045	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
	4-Methylphenol (p-Cresol)	<0.01	<0.01	<0.01	0.016	0.015	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
	Naphthalene	<0.01	<0.01	0.032	0.032	0.035	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
	o-Cresol	<0.01	<0.01	0.022	<0.01	0.031	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Metals	Arsenic, Total	<0.01	0.25	0.087	0.057	0.12	0.003	0.002	<0.01	0.086	0.078	0.18
	Iron, Total	1.7	103.0	90.1	83.4	104.0	10.3	10.4	16.2	28.8	29.8	24.1
	Manganese, Total	0.19	3.7	2.34	1.82	2.2	1.8	1.82	1.6	0.434	0.438	0.12
Inorganics	Chloride	86.2	54.0	191	170	106	209	239	206	273	299	283
	Fluoride	0.27	0.40	0.33	0.37	0.18	0.45	0.54	0.28	0.73	0.66	0.52
	Total Dissolved Solids (TDS)	768	927	1,396	1,344	1,210	1,070	1,220	1,070	1,220	1,056	960

All results presented in mg/L

Notes:
1) The December 2003 data indicate detections of Cyclohexane at 0.02 mg/L and Methylcyclohexane at 0.03 mg/L in PZ-303-AS.
These compounds were not analyzed in the February and May 1997 sampling events.
2) Wells PZ-302-AI and PZ-302-AS were not part of the sampling event conducted in February and May 1997.
3) p-Cresol reported as m+p-Cresol in prior sampling events
4) Analytes shown include only those parameters detected in at least one sample.

FIGURES



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Fax (636) 939-9767
HERST & ASSOCIATES, INC.

Westlake Landfill
Bridgeton, Missouri

Figure 1
Wells Included in Supplemental OU-2 Sampling

ATTACHMENT I

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SEVERN TRENT STL

STL Buffalo
10 Hazelwood Drive, Suite 106
Amherst, NY 14228

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ANALYTICAL REPORT

Job#: A03-C204,A03-C243

STL Project#: NY0A862901
SDG#: C204
Site Name: ALLIED WASTE - WESTLAKE LANDFILL (MO)
Task: Westlake Landfill

Mr. Ward Herst
Herst & Associates
4630 S. Hwy 94, N. Outer Rd.
St. Charles, MO 63304

STL Buffalo

Brian J. Fischer
Project Manager

01/05/2004

STL Buffalo
Current Certifications

STATE	Program	Cert # / Lab ID
A2LA (ISO 17025)	SDWA, CWA, RCRA	0732-01
Arkansas	SDWA, CWA, RCRA, SOIL	03-054-D/88-0686
California	NELAP CWA, RCRA	01169CA
Canada	GENERAL	SCC 1007-15/10B
Connecticut	SDWA, CWA, RCRA, SOIL	PH-0568
Florida	NELAP CWA, RCRA	E87672
Georgia	SDWA	956
Illinois	NELAP SDWA, CWA, RCRA	200003
Kansas	NELAP SDWA, CWA, RCRA	E-10187
Kentucky	SDWA	90029
Kentucky UST	UST	30
Louisiana	NELAP CWA, RCRA	2031
Maine	SDWA, CWA	NY044
Maryland	SDWA	294
Massachusetts	SDWA, CWA	M-NY044
Michigan	SDWA	9937
Minnesota	SDWA, CWA, RCRA	036-999-337
New Hampshire	NELAP SDWA, CWA	233701
New Jersey	SDWA, CWA, RCRA, CLP	NY455
New York	NELAP, AIR, SDWA, CWA, RCRA	10026
North Carolina	CWA	411
North Dakota	SDWA, CWA, RCRA	R-176
Oklahoma	CWA, RCRA	9421
Oregon	NELAP,SDWA, CWA, RCRA	NY200001
Pennsylvania	NELAP, Env. Lab Reg.	68-281
South Carolina	RCRA	91013
Tennessee	SDWA	2970
USDA	FOREIGN SOIL PERMIT	S-4650
Virginia	SDWA	278
Washington	CWA, RCRA	C254
West Virginia	CWA	252
Wisconsin	CWA	998310390
Wyoming UST	UST	NA

SAMPLE SUMMARY

LAB SAMPLE ID	CLIENT SAMPLE ID	SAMPLED DATE	SAMPLED TIME	RECEIVED DATE	RECEIVED TIME
A3C20401	DUPLICATE	12/11/2003	12:05	12/15/2003	10:00
A3C20406	FIELD BLANK	12/11/2003	15:20	12/15/2003	10:00
A3C20402	PZ-302-AI	12/11/2003	15:25	12/15/2003	10:00
A3C24301	PZ-302-AS	12/15/2003	11:00	12/16/2003	10:15
A3C20403	PZ-303-AS	12/11/2003	12:35	12/15/2003	10:00
A3C20404	PZ-304-AI	12/11/2003	12:00	12/15/2003	10:00
A3C20405	PZ-304-AS	12/11/2003	13:10	12/15/2003	10:00
A3C20407	TRIP BLANK	12/11/2003		12/15/2003	10:00

METHODS SUMMARY

Job#: A03-C204,A03-C243

STL Project#: NY0A862901
SDG#: C204
Site Name: ALLIED WASTE - WESTLAKE LANDFILL (MO)

PARAMETER	ANALYTICAL METHOD
WESTLAKE - 8260 25ML- TCL VOLATILES - W(UNPRES)	SW8463 8260
ALLIED - GASOLINE RANGE ORGANICS-8015B-W (UNPRES)	SW8463 8015 B
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS	SW8463 8270
ALLIED - DIESEL RANGE ORGANICS - METHOD 8015B - W	SW8463 8015B
Arsenic - Total	SW8463 6010
Iron - Total	SW8463 6010
Manganese - Total	SW8463 6010
Chloride	SW8463 9056
Fluoride	SW8463 9056
Total Dissolved Solids	CFR136 160.1

References:

CFR136 Guidelines Establishing Test Procedures for the Analysis of Pollutants Under the Clean Water Act, and Appendix A-C; 40 CFR Part 136, USEPA Office of Water.

SW8463 "Test Methods for Evaluating Solid Waste Physical/Chemical Methods (SW846), Third Edition, 9/86; Update I, 7/92; Update IIA, 8/93; Update II, 9/94; Update IIB, 1/95; Update III, 12/96.

NON-CONFORMANCE SUMMARY

Job#: A03-C204,A03-C243

STL Project#: NY0A862901
SDG#: C204
Site Name: ALLIED WASTE - WESTLAKE LANDFILL (MO)

General Comments

The enclosed data have been reported utilizing data qualifiers (Q) as defined on the Data Comment Page.

Soil, sediment and sludge sample results are reported on "dry weight" basis unless otherwise noted in this data package.

According to 40CFR Part 136.3, pH, Chlorine Residual and Dissolved Oxygen analyses are to be performed immediately after aqueous sample collection. When these parameters are not indicated as field (e.g. pH-Field), they were not analyzed immediately, but as soon as possible after laboratory receipt.

Sample dilutions were performed as indicated on the attached Dilution Log. The rationale for dilution is specified by the 3-digit code and definition.

Sample Receipt Comments

A03-C204
Sample Cooler(s) were received at the following temperature(s); 2@2.0 °C
All samples were received in good condition.
A03-C243
Sample Cooler(s) were received at the following temperature(s); 2.0 °C
All samples were received in good condition.

GC/MS Volatile Data

No deviations from protocol were encountered during the analytical procedures.

GC Volatile Data

For method 8015B, sample PZ-303-AS exhibited a pH >2 at the time of analysis. The analysis was performed within 7 days of sampling, therefore there is no impact on data usability.

For Method 8015B, the recovery of surrogate a,a,a-Trifluorotoluene is slightly above control limits for the initial calibration verification, and compliant in all subsequent calibration verifications. All sample recoveries are within control limits, no action required.

GC/MS Semivolatile Data

No deviations from protocol were encountered during the analytical procedures.

GC Extractable Data

No deviations from protocol were encountered during the analytical procedures.

Metals Data

No deviations from protocol were encountered during the analytical procedures.

Wet Chemistry Data

No deviations from protocol were encountered during the analytical procedures.

****

The results presented in this report relate only to the analytical testing and condition of the sample at receipt. This report pertains to only those samples actually tested. All pages of this report are integral parts of the analytical data. Therefore, this report should be reproduced only in its entirety.

Client Sample ID	Lab Sample ID	Parameter (Inorganic)/Method (Organic)	Dilution	Code
DUPLICATE	A3C20401	Chloride	5.00	008
DUPLICATE	A3C20401	Fluoride	2.00	002
PZ-303-AS	A3C20403	8015 B	10.00	008
PZ-303-AS	A3C20403	8015B	2.00	008
PZ-303-AS	A3C20403	8260	20.00	008
PZ-303-AS	A3C20403	Chloride	2.00	008
PZ-303-AS	A3C20403	Fluoride	2.00	002
PZ-304-AI	A3C20404	Chloride	10.00	008
PZ-304-AI	A3C20404	Fluoride	2.00	002
PZ-304-AS	A3C20405	Chloride	10.00	002
PZ-304-AS	A3C20405	Fluoride	2.00	002
PZ-302-ASDL	A3C24301DL	8260	2.00	008

Dilution Code Definition:

002 - sample matrix effects
003 - excessive foaming
004 - high levels of non-target compounds
005 - sample matrix resulted in method non-compliance for an Internal Standard
006 - sample matrix resulted in method non-compliance for Surrogate
007 - nature of the TCLP matrix
008 - high concentration of target analyte(s)
009 - sample turbidity
010 - sample color
011 - insufficient volume for lower dilution
012 - sample viscosity
013 - other

DATA COMMENT PAGE

ORGANIC DATA QUALIFIERS

ND or U Indicates compound was analyzed for, but not detected at or above the reporting limit

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

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

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

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

D This flag identifies all compounds identified in an analysis at the secondary dilution factor.

N Indicates presumptive evidence of a compound. This flag is used only for tentatively identified compounds, where the identification is based on the Mass Spectral library search. It is applied to all TIC results.

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

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

' Indicates coelution.

* Indicates analysis is not within the quality control limits.

INORGANIC DATA QUALIFIERS

ND or U Indicates element was analyzed for, but not detected at or above the reporting limit

J or B Indicates a value greater than or equal to the instrument detection limit, but less than the quantitation limit

N Indicates spike sample recovery is not within the quality control limits.

K Indicates the post digestion spike recovery is not within the quality control limits.

S Indicates value determined by the Method of Standard Addition.

M Indicates duplicate injection results exceeded quality control limits.

W Post digestion spike for Furnace AA analysis is out of quality control limits (85-115%) while sample absorbance is less than 50% of spike absorbance.

E Indicates a value estimated or not reported due to the presence of interferences.

H Indicates analytical holding time exceedance. The value obtained should be considered an estimate.

* Indicates analysis is not within the quality control limits.

+ Indicates the correlation coefficient for the Method of Standard Addition is less than 0.995.

Sample Data Package

ALLIED WASTE - WESTLAKE LANDFILL (MO)
Westlake Landfill
WESTLAKE - 8260 25ML- TCL VOLATILES - W(UNPRES)

Client ID Job No Sample Date	Lab ID	DUPLICATE A03-C204 12/11/2003	A3C20401	FIELD BLANK A03-C204 12/11/2003	A3C20406	PZ-302-A1 A03-C204 12/11/2003	A3C20402	PZ-302-A5 A03-C243 12/15/2003	A3C24301
Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
Acetone	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	5.0
Benzene	UG/L	ND	5.0	ND	5.0	ND	5.0	5.1	5.0
Bromodichloromethane	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	5.0
Bromoform	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	5.0
Bromomethane	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	5.0
2-Butanone	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	5.0
Carbon Disulfide	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	5.0
Carbon Tetrachloride	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	5.0
Chlorobenzene	UG/L	ND	5.0	ND	5.0	ND	5.0	55 E	5.0
Chloroethane	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	5.0
Chloroform	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	5.0
Chloromethane	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	5.0
Cyclohexane	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	5.0
1,2-Dibromoethane	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	5.0
Dibromochloromethane	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	5.0
1,2-Dibromo-3-chloropropane	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	5.0
1,2-Dichlorobenzene	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	5.0
1,3-Dichlorobenzene	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	5.0
1,4-Dichlorobenzene	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	5.0
Dichlorodifluoromethane	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	5.0
1,1-Dichloroethane	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	5.0
1,2-Dichloroethane	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	5.0
1,1-Dichloroethene	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	5.0
cis-1,2-Dichloroethene	UG/L	14	5.0	ND	5.0	ND	5.0	ND	5.0
trans-1,2-Dichloroethene	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	5.0
1,2-Dichloropropane	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	5.0
cis-1,3-Dichloropropene	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	5.0
trans-1,3-Dichloropropene	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	5.0
Ethylbenzene	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	5.0
2-Hexanone	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	5.0
Isopropylbenzene	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	5.0
Methyl acetate	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	5.0
Methylcyclohexane	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	5.0
Methylene chloride	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	5.0
4-Methyl-2-pentanone	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	5.0
Methyl tert butyl ether	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	5.0
Styrene	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	5.0
1,1,2,2-Tetrachloroethane	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	5.0
Tetrachloroethene	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	5.0
Toluene	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	5.0
1,2,4-Trichlorobenzene	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	5.0
1,1,1-Trichloroethane	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	5.0
1,1,2-Trichloroethane	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	5.0

NA = Not Applicable ND = Not Detected

STL Buffalo

Client ID Job No Sample Date	Lab ID	DUPLICATE A03-C204 12/11/2003	A3C20401	FIELD BLANK A03-C204 12/11/2003	A3C20406	PZ-302-A1 A03-C204 12/11/2003	A3C20402	PZ-302-A5 A03-C243 12/15/2003	A3C24301
Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
1,1,2-Trichloro-1,2,2-trifluor	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	5.0
Trichlorofluoromethane	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	5.0
Trichloroethene	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	5.0
Vinyl acetate	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	5.0
Vinyl chloride	UG/L	5.4	1.0	ND	1.0	ND	1.0	ND	1.0
Total Xylenes	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	5.0
IS/SURROGATE(S)									
Chlorobenzene-D5	%	97	50-200	102	50-200	98	50-200	91	50-200
1,4-Difluorobenzene	%	95	50-200	102	50-200	97	50-200	96	50-200
1,4-Dichlorobenzene-D4	%	100	50-200	102	50-200	96	50-200	88	50-200
Toluene-D8	%	91	76-116	90	76-116	92	76-116	94	76-116
p-Bromofluorobenzene	%	101	73-117	101	73-117	100	73-117	86	73-117
1,2-Dichloroethane-D4	%	83	72-143	85	72-143	81	72-143	88	72-143

NA = Not Applicable ND = Not Detected

STL Buffalo

ALLIED WASTE - WESTLAKE LANDFILL (MO)
Westlake Landfill
WESTLAKE - 8260 25ML- TCL VOLATILES - W(UNPRES)

Client ID Job No Sample Date	Lab ID	PZ-302-ASDL A03-C243 12/15/2003	A3C24301DL	PZ-303-AS A03-C204 12/11/2003	A3C20403	PZ-304-AI A03-C204 12/11/2003	A3C20404	PZ-304-AS A03-C204 12/11/2003	A3C20405
Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
Acetone	UG/L	ND	10	ND	100	ND	5.0	ND	5.0
Benzene	UG/L	ND	10	54	20	ND	5.0	5.3	5.0
Bromodichloromethane	UG/L	ND	10	ND	20	ND	5.0	ND	5.0
Bromoform	UG/L	ND	10	ND	20	ND	5.0	ND	5.0
Bromomethane	UG/L	ND	10	ND	20	ND	5.0	ND	5.0
2-Butanone	UG/L	ND	10	ND	100	ND	5.0	ND	5.0
Carbon Disulfide	UG/L	ND	10	ND	20	ND	5.0	ND	5.0
Carbon Tetrachloride	UG/L	ND	10	ND	20	ND	5.0	ND	5.0
Chlorobenzene	UG/L	54 D	10	ND	20	ND	5.0	ND	5.0
Chloroethane	UG/L	ND	10	ND	20	ND	5.0	ND	5.0
Chloroform	UG/L	ND	10	ND	20	ND	5.0	ND	5.0
Chloromethane	UG/L	ND	10	ND	20	ND	5.0	ND	5.0
Cyclohexane	UG/L	ND	10	20	20	ND	5.0	ND	5.0
1,2-Dibromoethane	UG/L	ND	10	ND	20	ND	5.0	ND	5.0
Dibromochloromethane	UG/L	ND	10	ND	20	ND	5.0	ND	5.0
1,2-Dibromo-3-chloropropane	UG/L	ND	10	ND	20	ND	5.0	ND	5.0
1,2-Dichlorobenzene	UG/L	ND	10	ND	20	ND	5.0	ND	5.0
1,3-Dichlorobenzene	UG/L	ND	10	ND	20	ND	5.0	ND	5.0
1,4-Dichlorobenzene	UG/L	ND	10	ND	20	ND	5.0	5.8	5.0
Dichlorodifluoromethane	UG/L	ND	10	ND	20	ND	5.0	ND	5.0
1,1-Dichloroethane	UG/L	ND	10	ND	20	ND	5.0	ND	5.0
1,2-Dichloroethane	UG/L	ND	10	ND	20	ND	5.0	ND	5.0
1,1-Dichloroethene	UG/L	ND	10	ND	20	ND	5.0	ND	5.0
cis-1,2-Dichloroethene	UG/L	ND	10	ND	20	14	5.0	ND	5.0
trans-1,2-Dichloroethene	UG/L	ND	10	ND	20	ND	5.0	ND	5.0
1,2-Dichloropropane	UG/L	ND	10	ND	20	ND	5.0	ND	5.0
cis-1,3-Dichloropropene	UG/L	ND	10	ND	20	ND	5.0	ND	5.0
trans-1,3-Dichloropropene	UG/L	ND	10	ND	20	ND	5.0	ND	5.0
Ethylbenzene	UG/L	ND	10	56	20	ND	5.0	ND	5.0
2-Hexanone	UG/L	ND	10	ND	100	ND	5.0	ND	5.0
Isopropylbenzene	UG/L	ND	10	ND	20	ND	5.0	ND	5.0
Methyl acetate	UG/L	ND	10	ND	20	ND	5.0	ND	5.0
Methylcyclohexane	UG/L	ND	10	30	20	ND	5.0	ND	5.0
Methylene chloride	UG/L	ND	10	ND	20	ND	5.0	ND	5.0
4-Methyl-2-pentanone	UG/L	ND	10	ND	100	ND	5.0	ND	5.0
Methyl tert butyl ether	UG/L	ND	10	ND	20	ND	5.0	ND	5.0
Styrene	UG/L	ND	10	ND	20	ND	5.0	ND	5.0
1,1,2,2-Tetrachloroethane	UG/L	ND	10	ND	20	ND	5.0	ND	5.0
Tetrachloroethene	UG/L	ND	10	ND	20	ND	5.0	ND	5.0
Toluene	UG/L	ND	10	700	20	ND	5.0	ND	5.0
1,2,4-Trichlorobenzene	UG/L	ND	10	ND	20	ND	5.0	ND	5.0
1,1,1-Trichloroethane	UG/L	ND	10	ND	20	ND	5.0	ND	5.0
1,1,2-Trichloroethane	UG/L	ND	10	ND	20	ND	5.0	ND	5.0

NA = Not Applicable ND = Not Detected

STL Buffalo

Client ID Job No Sample Date	Lab ID	PZ-302-ASDL A03-C243 12/15/2003	A3C243010L	PZ-303-AS A03-C204 12/11/2003	A3C20403	PZ-304-AI A03-C204 12/11/2003	A3C20404	PZ-304-AS A03-C204 12/11/2003	A3C20405
Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
1,1,2-Trichloro-1,2,2-trifluor	UG/L	ND	10	ND	20	ND	5.0	ND	5.0
Trichlorofluoromethane	UG/L	ND	10	ND	20	ND	5.0	ND	5.0
Trichloroethene	UG/L	ND	10	ND	20	ND	5.0	ND	5.0
Vinyl acetate	UG/L	ND	10	ND	100	ND	5.0	ND	5.0
Vinyl chloride	UG/L	ND	2.0	ND	20	5.3	1.0	1.4	1.0
Total Xylenes	UG/L	ND	10	390	60	ND	5.0	ND	5.0
IS/SURROGATE(S)									
Chlorobenzene-D5	%	89	50-200	95	50-200	95	50-200	98	50-200
1,4-Difluorobenzene	%	93	50-200	96	50-200	92	50-200	94	50-200
1,4-Dichlorobenzene-D4	%	84	50-200	94	50-200	99	50-200	104	50-200
Toluene-D8	%	99	76-116	97	76-116	95	76-116	91	76-116
p-Bromofluorobenzene	%	84	73-117	102	73-117	104	73-117	99	73-117
1,2-Dichloroethane-D4	%	87	72-143	81	72-143	86	72-143	84	72-143

NA = Not Applicable ND = Not Detected

ALLIED WASTE - WESTLAKE LANDFILL (MO)
Westlake Landfill
ALLIED - GASOLINE RANGE ORGANICS-8015B-W (UNPRES)

Client ID Job No Sample Date	Lab ID	DUPLICATE A03-C204 12/11/2003	A3C20401	PZ-302-AI A03-C204 12/11/2003	A3C20402	PZ-302-AS A03-C243 12/15/2003	A3C24301	PZ-303-AS A03-C204 12/11/2003	A3C20403
Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
Gasoline Range Organics	MG/L	ND	0.050	ND	0.050	0.13	0.050	3.7	0.50
SURROGATE(S)									
a,a,a-Trifluorotoluene	%	131	71-138	128	71-138	133	71-138	129	71-138

Client ID Job No Sample Date	Lab ID	PZ-304-AI A03-C204 12/11/2003	A3C20404	PZ-304-AS A03-C204 12/11/2003	A3C20405				
Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
Gasoline Range Organics	MG/L	ND	0.050	ND	0.050	NA		NA	
SURROGATE(S)									
a,a,a-Trifluorotoluene	%	130	71-138	131	71-138	NA		NA	

NA = Not Applicable ND = Not Detected

Date: 01/27/2004
Time: 08:51:18

ALLIED WASTE - WESTLAKE LANDFILL (ND)
Westlake Landfill
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS

Rept: AN0326

Client ID / Job No / Sample Date / Lab ID		DUPLICATE / A03-C204 / 12/11/2003 / A3C20401		PZ-302-AI / A03-C204 / 12/11/2003 / A3C20402		PZ-303-AS / A03-C204 / 12/11/2003 / A3C20403		PZ-304-AI / A03-C204 / 12/11/2003 / A3C20404	
Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
Phenol	UG/L	ND	10	ND	10	ND	10	ND	10
Bis(2-chloroethyl) ether	UG/L	ND	10	ND	10	ND	10	ND	10
2-Chlorophenol	UG/L	ND	10	ND	10	ND	10	ND	10
2-Methylphenol	UG/L	ND	10	ND	10	31	10	ND	10
2,2'-Oxybis(1-Chloropropane)	UG/L	ND	10	ND	10	ND	10	ND	10
4-Methylphenol	UG/L	ND	10	ND	10	15	10	ND	10
N-Nitroso-Di-n-propylamine	UG/L	ND	10	ND	10	ND	10	ND	10
Hexachloroethane	UG/L	ND	10	ND	10	ND	10	ND	10
Nitrobenzene	UG/L	ND	10	ND	10	ND	10	ND	10
Isophorone	UG/L	ND	10	ND	10	ND	10	ND	10
2-Nitrophenol	UG/L	ND	10	ND	10	ND	10	ND	10
2,4-Dimethylphenol	UG/L	ND	10	ND	10	62	10	ND	10
Bis(2-chloroethoxy) methane	UG/L	ND	10	ND	10	ND	10	ND	10
2,4-Dichlorophenol	UG/L	ND	10	ND	10	ND	10	ND	10
Naphthalene	UG/L	ND	10	ND	10	35	10	ND	10
4-Chloroaniline	UG/L	ND	10	ND	10	ND	10	ND	10
Hexachlorobutadiene	UG/L	ND	10	ND	10	ND	10	ND	10
4-Chloro-3-methylphenol	UG/L	ND	10	ND	10	ND	10	ND	10
2-Methylnaphthalene	UG/L	ND	10	ND	10	46	10	ND	10
Hexachlorocyclopentadiene	UG/L	ND	23	ND	23	ND	23	ND	23
2,4,6-Trichlorophenol	UG/L	ND	10	ND	10	ND	10	ND	10
2,4,5-Trichlorophenol	UG/L	ND	10	ND	10	ND	10	ND	10
2-Chloronaphthalene	UG/L	ND	10	ND	10	ND	10	ND	10
2-Nitroaniline	UG/L	ND	48	ND	48	ND	48	ND	48
Dimethyl phthalate	UG/L	ND	10	ND	10	ND	10	ND	10
Acenaphthylene	UG/L	ND	10	ND	10	ND	10	ND	10
3-Nitroaniline	UG/L	ND	48	ND	48	ND	48	ND	48
Acenaphthene	UG/L	ND	10	ND	10	ND	10	ND	10
2,4-Dinitrophenol	UG/L	ND	48	ND	48	ND	48	ND	48
4-Nitrophenol	UG/L	ND	48	ND	48	ND	48	ND	48
Dibenzofuran	UG/L	ND	10	ND	10	ND	10	ND	10
2,4-Dinitrotoluene	UG/L	ND	10	ND	10	ND	10	ND	10
Diethyl phthalate	UG/L	ND	10	ND	10	ND	10	ND	10
4-Chlorophenyl phenyl ether	UG/L	ND	10	ND	10	ND	10	ND	10
Fluorene	UG/L	ND	10	ND	10	ND	10	ND	10
4-Nitroaniline	UG/L	ND	48	ND	48	ND	48	ND	48
4,6-Dinitro-2-methylphenol	UG/L	ND	48	ND	48	ND	48	ND	48
N-nitrosodiphenylamine	UG/L	ND	10	ND	10	ND	10	ND	10
4-Bromophenyl phenyl ether	UG/L	ND	10	ND	10	ND	10	ND	10
Hexachlorobenzene	UG/L	ND	10	ND	10	ND	10	ND	10
Pentachlorophenol	UG/L	ND	48	ND	48	ND	48	ND	48
Phenanthrene	UG/L	ND	10	ND	10	ND	10	ND	10
Anthracene	UG/L	ND	10	ND	10	ND	10	ND	10

NA = Not Applicable ND = Not Detected

STL Buffalo

Client ID Job No Sample Date	Lab ID	DUPLICATE A03-C204 12/11/2003	A3C20401	PZ-302-AI A03-C204 12/11/2003	A3C20402	PZ-303-AS A03-C204 12/11/2003	A3C20403	PZ-304-AI A03-C204 12/11/2003	A3C20404
Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
Di-n-butyl phthalate	UG/L	ND	10	ND	10	ND	10	ND	10
Fluoranthene	UG/L	ND	10	ND	10	ND	10	ND	10
Pyrene	UG/L	ND	10	ND	10	ND	10	ND	10
Butyl benzyl phthalate	UG/L	ND	10	ND	10	ND	10	ND	10
3,3'-Dichlorobenzidine	UG/L	ND	19	ND	19	ND	19	ND	19
Benzo(a)anthracene	UG/L	ND	10	ND	10	ND	10	ND	10
Chrysene	UG/L	ND	10	ND	10	ND	10	ND	10
Bis(2-ethylhexyl) phthalate	UG/L	ND	10	ND	10	ND	10	ND	10
Di-n-octyl phthalate	UG/L	ND	10	ND	10	ND	10	ND	10
Benzo(b)fluoranthene	UG/L	ND	10	ND	10	ND	10	ND	10
Benzo(k)fluoranthene	UG/L	ND	10	ND	10	ND	10	ND	10
Benzo(a)pyrene	UG/L	ND	10	ND	10	ND	10	ND	10
Indeno(1,2,3-cd)pyrene	UG/L	ND	10	ND	10	ND	10	ND	10
Dibenzo(a,h)anthracene	UG/L	ND	10	ND	10	ND	10	ND	10
Benzo(ghi)perylene	UG/L	ND	10	ND	10	ND	10	ND	10
2,6-Dinitrotoluene	UG/L	ND	10	ND	10	ND	10	ND	10
IS/SURROGATE(S)									
1,4-Dichlorobenzene-D4	%	130	50-200	98	50-200	97	50-200	95	50-200
Naphthalene-D8	%	135	50-200	103	50-200	91	50-200	95	50-200
Acenaphthene-D10	%	129	50-200	100	50-200	94	50-200	95	50-200
Phenanthrene-D10	%	120	50-200	100	50-200	87	50-200	92	50-200
Chrysene-D12	%	110	50-200	91	50-200	92	50-200	87	50-200
Perylene-D12	%	127	50-200	104	50-200	104	50-200	98	50-200
Nitrobenzene-D5	%	69	37-120	72	37-120	85	37-120	78	37-120
2-Fluorobiphenyl	%	82	47-120	88	47-120	93	47-120	90	47-120
p-Terphenyl-d14	%	90	31-154	107	31-154	94	31-154	94	31-154
Phenol-D5	%	28	10-110	31	10-110	34	10-110	34	10-110
2-Fluorophenol	%	42	18-120	47	18-120	53	18-120	49	18-120
2,4,6-Tribromophenol	%	95	41-149	100	41-149	103	41-149	100	41-149

16/82

NA = Not Applicable ND = Not Detected

Date: 01/27/2004
Time: 08:51:18

ALLIED WASTE - WESTLAKE LANDFILL (MO)
Westlake Landfill
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS

Rept: AN0326

Client ID		PZ-304-AS							
Job No / Lab ID		A03-C204	A3C20405						
Sample Date		12/11/2003							
Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
Phenol	UG/L	ND	10	NA		NA		NA	
Bis(2-chloroethyl) ether	UG/L	ND	10	NA		NA		NA	
2-Chlorophenol	UG/L	ND	10	NA		NA		NA	
2-Methylphenol	UG/L	ND	10	NA		NA		NA	
2,2'-Oxybis(1-Chloropropane)	UG/L	ND	10	NA		NA		NA	
4-Methylphenol	UG/L	ND	10	NA		NA		NA	
N-Nitroso-Di-n-propylamine	UG/L	ND	10	NA		NA		NA	
Hexachloroethane	UG/L	ND	10	NA		NA		NA	
Nitrobenzene	UG/L	ND	10	NA		NA		NA	
Isophorone	UG/L	ND	10	NA		NA		NA	
2-Nitrophenol	UG/L	ND	10	NA		NA		NA	
2,4-Dimethylphenol	UG/L	ND	10	NA		NA		NA	
Bis(2-chloroethoxy) methane	UG/L	ND	10	NA		NA		NA	
2,4-Dichlorophenol	UG/L	ND	10	NA		NA		NA	
Naphthalene	UG/L	ND	10	NA		NA		NA	
4-Chloroaniline	UG/L	ND	10	NA		NA		NA	
Hexachlorobutadiene	UG/L	ND	10	NA		NA		NA	
4-Chloro-3-methylphenol	UG/L	ND	10	NA		NA		NA	
2-Methylnaphthalene	UG/L	ND	10	NA		NA		NA	
Hexachlorocyclopentadiene	UG/L	ND	23	NA		NA		NA	
2,4,6-Trichlorophenol	UG/L	ND	10	NA		NA		NA	
2,4,5-Trichlorophenol	UG/L	ND	10	NA		NA		NA	
2-Chloronaphthalene	UG/L	ND	10	NA		NA		NA	
2-Nitroaniline	UG/L	ND	48	NA		NA		NA	
Dimethyl phthalate	UG/L	ND	10	NA		NA		NA	
Acenaphthylene	UG/L	ND	10	NA		NA		NA	
3-Nitroaniline	UG/L	ND	48	NA		NA		NA	
Acenaphthene	UG/L	ND	10	NA		NA		NA	
2,4-Dinitrophenol	UG/L	ND	48	NA		NA		NA	
4-Nitrophenol	UG/L	ND	48	NA		NA		NA	
Dibenzofuran	UG/L	ND	10	NA		NA		NA	
2,4-Dinitrotoluene	UG/L	ND	10	NA		NA		NA	
Diethyl phthalate	UG/L	ND	10	NA		NA		NA	
4-Chlorophenyl phenyl ether	UG/L	ND	10	NA		NA		NA	
Fluorene	UG/L	ND	10	NA		NA		NA	
4-Nitroaniline	UG/L	ND	48	NA		NA		NA	
4,6-Dinitro-2-methylphenol	UG/L	ND	48	NA		NA		NA	
N-nitrosodiphenylamine	UG/L	ND	10	NA		NA		NA	
4-Bromophenyl phenyl ether	UG/L	ND	10	NA		NA		NA	
Hexachlorobenzene	UG/L	ND	10	NA		NA		NA	
Pentachlorophenol	UG/L	ND	48	NA		NA		NA	
Phenanthrene	UG/L	ND	10	NA		NA		NA	
Anthracene	UG/L	ND	10	NA		NA		NA	

17/82

NA = Not Applicable ND = Not Detected

STL Buffalo

Client ID Job No Lab ID Sample Date		PZ-304-AS A03-C204 A3C20405 12/11/2003							
Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
Di-n-butyl phthalate	UG/L	ND	10	NA		NA		NA	
Fluoranthene	UG/L	ND	10	NA		NA		NA	
Pyrene	UG/L	ND	10	NA		NA		NA	
Butyl benzyl phthalate	UG/L	ND	10	NA		NA		NA	
3,3'-Dichlorobenzidine	UG/L	ND	19	NA		NA		NA	
Benzo(a)anthracene	UG/L	ND	10	NA		NA		NA	
Chrysene	UG/L	ND	10	NA		NA		NA	
Bis(2-ethylhexyl) phthalate	UG/L	ND	10	NA		NA		NA	
Di-n-octyl phthalate	UG/L	ND	10	NA		NA		NA	
Benzo(b)fluoranthene	UG/L	ND	10	NA		NA		NA	
Benzo(k)fluoranthene	UG/L	ND	10	NA		NA		NA	
Benzo(a)pyrene	UG/L	ND	10	NA		NA		NA	
Indeno(1,2,3-cd)pyrene	UG/L	ND	10	NA		NA		NA	
Dibenzo(a,h)anthracene	UG/L	ND	10	NA		NA		NA	
Benzo(ghi)perylene	UG/L	ND	10	NA		NA		NA	
2,6-Dinitrotoluene	UG/L	ND	10	NA		NA		NA	
IS/SURROGATE(S)									
1,4-Dichlorobenzene-D4	%	109	50-200	NA		NA		NA	
Naphthalene-D8	%	113	50-200	NA		NA		NA	
Acenaphthene-D10	%	113	50-200	NA		NA		NA	
Phenanthrene-D10	%	103	50-200	NA		NA		NA	
Chrysene-D12	%	100	50-200	NA		NA		NA	
Perylene-D12	%	114	50-200	NA		NA		NA	
Nitrobenzene-D5	%	55	37-120	NA		NA		NA	
2-Fluorobiphenyl	%	64	47-120	NA		NA		NA	
p-Terphenyl-d14	%	67	31-154	NA		NA		NA	
Phenol-D5	%	26	10-110	NA		NA		NA	
2-Fluorophenol	%	38	18-120	NA		NA		NA	
2,4,6-Tribromophenol	%	75	41-149	NA		NA		NA	

NA = Not Applicable ND = Not Detected

ALLIED WASTE - WESTLAKE LANDFILL (MD)
Westlake Landfill
ALLIED - DIESEL RANGE ORGANICS - METHOD 8015B - W

Client ID Job No Sample Date	Lab ID	DUPLICATE A03-C204 12/11/2003	A3C20401	PZ-302-AI A03-C204 12/11/2003	A3C20402	PZ-303-AS A03-C204 12/11/2003	A3C20403	PZ-304-AI A03-C204 12/11/2003	A3C20404
Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
Diesel Range Organics	MG/L	ND	0.48	ND	0.48	14	0.97	0.52	0.48
SURROGATE(S)									
o-Terphenyl	%	73	27-153	75	27-153	84	27-153	76	27-153

Client ID Job No Sample Date	Lab ID	PZ-304-AS A03-C204 12/11/2003	A3C20405						
Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
Diesel Range Organics	MG/L	0.85	0.50	NA		NA		NA	
SURROGATE(S)									
o-Terphenyl	%	90	27-153	NA		NA		NA	

19/82

NA = Not Applicable ND = Not Detected

Date: 01/05/2004
Time: 14:27:20

ALLIED WASTE - WESTLAKE LANDFILL (MO)
Westlake Landfill
WEST LAKE - TOTAL METALS (3) - W

Rept: AN0326

Client ID		DUPLICATE		PZ-302-A1		PZ-302-A5		PZ-303-A5	
Job No	Lab ID	A03-C204	A3C20401	A03-C204	A3C20402	A03-C243	A3C24301	A03-C204	A3C20403
Sample Date		12/11/2003		12/11/2003		12/15/2003		12/11/2003	
Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
Arsenic - Total	MG/L	0.045	0.010	ND	0.010	0.25	0.010	0.12	0.010
Iron - Total	MG/L	36.0	0.050	1.7	0.050	103	0.050	104	0.050
Manganese - Total	MG/L	0.25	0.0030	0.19	0.0030	3.7	0.0030	2.2	0.0030

Client ID		PZ-304-A1		PZ-304-A5					
Job No	Lab ID	A03-C204	A3C20404	A03-C204	A3C20405				
Sample Date		12/11/2003		12/11/2003					
Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
Arsenic - Total	MG/L	ND	0.010	0.18	0.010	NA		NA	
Iron - Total	MG/L	16.2	0.050	24.1	0.050	NA		NA	
Manganese - Total	MG/L	1.6	0.0030	0.12	0.0030	NA		NA	

20182

NA - Not Applicable ND - Not Detected

STL Buffalo

Date: 01/05/2004
Time: 14:27:23

ALLIED WASTE - WESTLAKE LANDFILL (MO)
Westlake Landfill
WET CHEMISTRY ANALYSIS

Rept: AN0326

Client ID Job No Sample Date	Lab ID	DUPLICATE A03-C204 12/11/2003	A3C20401	PZ-302-AI A03-C204 12/11/2003	A3C20402	PZ-303-AS A03-C204 12/11/2003	A3C20403	PZ-304-AI A03-C204 12/11/2003	A3C20404
Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
Chloride	MG/L	247	2.5	86.2	0.50	106	1.0	206	5.0
Fluoride	MG/L	0.30	0.10	0.27	0.050	0.18	0.10	0.28	0.10
Total Dissolved Solids	MG/L	1050	10	768	10	1210	10	1070	10

Client ID Job No Sample Date	Lab ID	PZ-304-AS A03-C204 12/11/2003	A3C20405						
Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
Chloride	MG/L	283	5.0	NA		NA		NA	
Fluoride	MG/L	0.52	0.10	NA		NA		NA	
Total Dissolved Solids	MG/L	960	10	NA		NA		NA	

21\82

NA = Not Applicable ND = Not Detected

STL Buffalo

Chronology and QC Summary Package

Client ID / Job No / Sample Date / Lab ID		VBLK19 A03-C204	A3C20411	VBLK20 A03-C204	A3C20413	VBLK21 A03-C204	A3C20415	VBLK39 A03-C243	A3C24305
Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
Acetone	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	5.0
Benzene	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	5.0
Bromodichloromethane	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	5.0
Bromoform	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	5.0
Bromomethane	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	5.0
2-Butanone	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	5.0
Carbon Disulfide	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	5.0
Carbon Tetrachloride	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	5.0
Chlorobenzene	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	5.0
Chloroethane	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	5.0
Chloroform	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	5.0
Chloromethane	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	5.0
Cyclohexane	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	5.0
1,2-Dibromoethane	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	5.0
Dibromochloromethane	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	5.0
1,2-Dibromo-3-chloropropane	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	5.0
1,2-Dichlorobenzene	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	5.0
1,3-Dichlorobenzene	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	5.0
1,4-Dichlorobenzene	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	5.0
Dichlorodifluoromethane	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	5.0
1,1-Dichloroethane	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	5.0
1,2-Dichloroethane	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	5.0
1,1-Dichloroethene	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	5.0
cis-1,2-Dichloroethene	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	5.0
trans-1,2-Dichloroethene	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	5.0
1,2-Dichloropropane	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	5.0
cis-1,3-Dichloropropene	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	5.0
trans-1,3-Dichloropropene	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	5.0
Ethylbenzene	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	5.0
2-Hexanone	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	5.0
Isopropylbenzene	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	5.0
Methyl acetate	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	5.0
Methylcyclohexane	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	5.0
Methylene chloride	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	5.0
4-Methyl-2-pentanone	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	5.0
Methyl tert butyl ether	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	5.0
Styrene	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	5.0
1,1,2,2-Tetrachloroethane	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	5.0
Tetrachloroethene	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	5.0
Toluene	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	5.0
1,2,4-Trichlorobenzene	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	5.0
1,1,1-Trichloroethane	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	5.0
1,1,2-Trichloroethane	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	5.0

NA = Not Applicable ND = Not Detected

Client ID Job No Sample Date	Lab ID	VBLK19 A03-C204	A3C20411	VBLK20 A03-C204	A3C20413	VBLK21 A03-C204	A3C20415	VBLK39 A03-C243	A3C24305
Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
1,1,2-Trichloro-1,2,2-trifluor	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	5.0
Trichlorofluoromethane	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	5.0
Trichloroethene	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	5.0
Vinyl acetate	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	5.0
Vinyl chloride	UG/L	ND	1.0	ND	1.0	ND	1.0	ND	1.0
Total Xylenes	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	5.0
IS/SURROGATE(S)									
Chlorobenzene-D5	%	102	50-200	98	50-200	97	50-200	91	50-200
1,4-Difluorobenzene	%	102	50-200	96	50-200	97	50-200	97	50-200
1,4-Dichlorobenzene-D4	%	99	50-200	104	50-200	100	50-200	96	50-200
Toluene-D8	%	91	76-116	93	76-116	91	76-116	96	76-116
p-Bromofluorobenzene	%	97	73-117	105	73-117	104	73-117	93	73-117
1,2-Dichloroethane-D4	%	84	72-143	83	72-143	86	72-143	96	72-143

NA = Not Applicable ND = Not Detected

Date: 01/27/2004
Time: 08:50:26

ALLIED WASTE - WESTLAKE LANDFILL (MO)
Westlake Landfill
WESTLAKE - 8260 25ML- TCL VOLATILES - W(UNPRES)

Rept: AN0326

Client ID Job No Sample Date	Lab ID	VBLK40 A03-C243	A3C24307						
Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
Acetone	UG/L	ND	5.0	NA		NA		NA	
Benzene	UG/L	ND	5.0	NA		NA		NA	
Bromodichloromethane	UG/L	ND	5.0	NA		NA		NA	
Bromoform	UG/L	ND	5.0	NA		NA		NA	
Bromomethane	UG/L	ND	5.0	NA		NA		NA	
2-Butanone	UG/L	ND	5.0	NA		NA		NA	
Carbon Disulfide	UG/L	ND	5.0	NA		NA		NA	
Carbon Tetrachloride	UG/L	ND	5.0	NA		NA		NA	
Chlorobenzene	UG/L	ND	5.0	NA		NA		NA	
Chloroethane	UG/L	ND	5.0	NA		NA		NA	
Chloroform	UG/L	ND	5.0	NA		NA		NA	
Chloromethane	UG/L	ND	5.0	NA		NA		NA	
Cyclohexane	UG/L	ND	5.0	NA		NA		NA	
1,2-Dibromoethane	UG/L	ND	5.0	NA		NA		NA	
Dibromochloromethane	UG/L	ND	5.0	NA		NA		NA	
1,2-Dibromo-3-chloropropane	UG/L	ND	5.0	NA		NA		NA	
1,2-Dichlorobenzene	UG/L	ND	5.0	NA		NA		NA	
1,3-Dichlorobenzene	UG/L	ND	5.0	NA		NA		NA	
1,4-Dichlorobenzene	UG/L	ND	5.0	NA		NA		NA	
Dichlorodifluoromethane	UG/L	ND	5.0	NA		NA		NA	
1,1-Dichloroethane	UG/L	ND	5.0	NA		NA		NA	
1,2-Dichloroethane	UG/L	ND	5.0	NA		NA		NA	
1,1-Dichloroethene	UG/L	ND	5.0	NA		NA		NA	
cis-1,2-Dichloroethene	UG/L	ND	5.0	NA		NA		NA	
trans-1,2-Dichloroethene	UG/L	ND	5.0	NA		NA		NA	
1,2-Dichloropropane	UG/L	ND	5.0	NA		NA		NA	
cis-1,3-Dichloropropene	UG/L	ND	5.0	NA		NA		NA	
trans-1,3-Dichloropropene	UG/L	ND	5.0	NA		NA		NA	
Ethylbenzene	UG/L	ND	5.0	NA		NA		NA	
2-Hexanone	UG/L	ND	5.0	NA		NA		NA	
Isopropylbenzene	UG/L	ND	5.0	NA		NA		NA	
Methyl acetate	UG/L	ND	5.0	NA		NA		NA	
Methylcyclohexane	UG/L	ND	5.0	NA		NA		NA	
Methylene chloride	UG/L	ND	5.0	NA		NA		NA	
4-Methyl-2-pentanone	UG/L	ND	5.0	NA		NA		NA	
Methyl tert butyl ether	UG/L	ND	5.0	NA		NA		NA	
Styrene	UG/L	ND	5.0	NA		NA		NA	
1,1,2,2-Tetrachloroethane	UG/L	ND	5.0	NA		NA		NA	
Tetrachloroethene	UG/L	ND	5.0	NA		NA		NA	
Toluene	UG/L	ND	5.0	NA		NA		NA	
1,2,4-Trichlorobenzene	UG/L	ND	5.0	NA		NA		NA	
1,1,1-Trichloroethane	UG/L	ND	5.0	NA		NA		NA	
1,1,2-Trichloroethane	UG/L	ND	5.0	NA		NA		NA	

NA = Not Applicable ND = Not Detected

STL Buffalo

Client ID Job No Sample Date	Lab ID	VBLK40 A03-C243	A3C24307						
Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
1,1,2-Trichloro-1,2,2-trifluor	UG/L	ND	5.0	NA		NA		NA	
Trichlorofluoromethane	UG/L	ND	5.0	NA		NA		NA	
Trichloroethene	UG/L	ND	5.0	NA		NA		NA	
Vinyl acetate	UG/L	ND	5.0	NA		NA		NA	
Vinyl chloride	UG/L	ND	1.0	NA		NA		NA	
Total Xylenes	UG/L	ND	5.0	NA		NA		NA	
IS/SURROGATE(S)									
Chlorobenzene-D5	%	94	50-200	NA		NA		NA	
1,4-Difluorobenzene	%	94	50-200	NA		NA		NA	
1,4-Dichlorobenzene-D4	%	89	50-200	NA		NA		NA	
Toluene-D8	%	97	76-116	NA		NA		NA	
p-Bromofluorobenzene	%	85	73-117	NA		NA		NA	
1,2-Dichloroethane-D4	%	91	72-143	NA		NA		NA	

26/82

NA = Not Applicable ND = Not Detected

Date: 01/27/2004
Time: 08:50:26

ALLIED WASTE - WESTLAKE LANDFILL (MO)
Westlake Landfill
WESTLAKE - 8260 25ML- TCL VOLATILES - W(UNPRES)

Rept: AN0326

Client ID / Job No / Sample Date	Lab ID	MSB19 A03-C204	A3C20412	MSB20 A03-C204	A3C20414	MSB21 A03-C204	A3C20416	MSB39 A03-C243	A3C24306
Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
Acetone	UG/L	40	5.0	ND	5.0	ND	5.0	45	5.0
Benzene	UG/L	9.5	5.0	9.8	5.0	9.4	5.0	9.4	5.0
Bromodichloromethane	UG/L	9.2	5.0	ND	5.0	ND	5.0	9.5	5.0
Bromoform	UG/L	10	5.0	ND	5.0	ND	5.0	9.2	5.0
Bromomethane	UG/L	7.2	5.0	ND	5.0	ND	5.0	8.8	5.0
2-Butanone	UG/L	39	5.0	ND	5.0	ND	5.0	43	5.0
Carbon Disulfide	UG/L	7.9	5.0	ND	5.0	ND	5.0	9.4	5.0
Carbon Tetrachloride	UG/L	8.8	5.0	ND	5.0	ND	5.0	9.3	5.0
Chlorobenzene	UG/L	9.7	5.0	10	5.0	9.6	5.0	8.9	5.0
Chloroethane	UG/L	7.4	5.0	ND	5.0	ND	5.0	9.3	5.0
Chloroform	UG/L	8.8	5.0	ND	5.0	ND	5.0	9.3	5.0
Chloromethane	UG/L	8.1	5.0	ND	5.0	ND	5.0	8.6	5.0
Cyclohexane	UG/L	8.0	5.0	ND	5.0	ND	5.0	9.0	5.0
1,2-Dibromoethane	UG/L	10	5.0	ND	5.0	ND	5.0	9.1	5.0
Dibromochloromethane	UG/L	10	5.0	ND	5.0	ND	5.0	9.2	5.0
1,2-Dibromo-3-chloropropane	UG/L	9.5	5.0	ND	5.0	ND	5.0	8.7	5.0
1,2-Dichlorobenzene	UG/L	9.9	5.0	ND	5.0	ND	5.0	9.4	5.0
1,3-Dichlorobenzene	UG/L	9.1	5.0	ND	5.0	ND	5.0	9.3	5.0
1,4-Dichlorobenzene	UG/L	9.4	5.0	ND	5.0	ND	5.0	9.4	5.0
Dichlorodifluoromethane	UG/L	6.4	5.0	ND	5.0	ND	5.0	8.6	5.0
1,1-Dichloroethane	UG/L	9.1	5.0	ND	5.0	ND	5.0	9.5	5.0
1,2-Dichloroethane	UG/L	8.3	5.0	ND	5.0	ND	5.0	9.2	5.0
1,1-Dichloroethene	UG/L	9.9	5.0	11	5.0	9.8	5.0	9.8	5.0
cis-1,2-Dichloroethene	UG/L	9.7	5.0	ND	5.0	ND	5.0	9.6	5.0
trans-1,2-Dichloroethene	UG/L	9.9	5.0	ND	5.0	ND	5.0	9.8	5.0
1,2-Dichloropropane	UG/L	9.4	5.0	ND	5.0	ND	5.0	9.4	5.0
cis-1,3-Dichloropropene	UG/L	9.1	5.0	ND	5.0	ND	5.0	9.5	5.0
trans-1,3-Dichloropropene	UG/L	9.3	5.0	ND	5.0	ND	5.0	9.3	5.0
Ethylbenzene	UG/L	9.3	5.0	ND	5.0	ND	5.0	9.2	5.0
2-Hexanone	UG/L	39	5.0	ND	5.0	ND	5.0	42	5.0
Isopropylbenzene	UG/L	9.5	5.0	ND	5.0	ND	5.0	9.6	5.0
Methyl acetate	UG/L	8.2	5.0	ND	5.0	ND	5.0	8.9	5.0
Methylcyclohexane	UG/L	8.8	5.0	ND	5.0	ND	5.0	9.0	5.0
Methylene chloride	UG/L	8.4	5.0	ND	5.0	ND	5.0	9.3	5.0
4-Methyl-2-pentanone	UG/L	38	5.0	ND	5.0	ND	5.0	42	5.0
Methyl tert butyl ether	UG/L	8.2	5.0	ND	5.0	ND	5.0	8.8	5.0
Styrene	UG/L	10	5.0	ND	5.0	ND	5.0	9.1	5.0
1,1,2,2-Tetrachloroethane	UG/L	10	5.0	ND	5.0	ND	5.0	9.4	5.0
Tetrachloroethene	UG/L	10	5.0	ND	5.0	ND	5.0	9.3	5.0
Toluene	UG/L	9.6	5.0	10	5.0	9.5	5.0	8.9	5.0
1,2,4-Trichlorobenzene	UG/L	12	5.0	ND	5.0	ND	5.0	8.9	5.0
1,1,1-Trichloroethane	UG/L	8.7	5.0	ND	5.0	ND	5.0	9.3	5.0
1,1,2-Trichloroethane	UG/L	9.8	5.0	ND	5.0	ND	5.0	9.3	5.0

NA = Not Applicable ND = Not Detected

STL Buffalo

Client ID Job No Sample Date	Lab ID	MSB19 A03-C204	A3C20412	MSB20 A03-C204	A3C20414	MSB21 A03-C204	A3C20416	MSB39 A03-C243	A3C24306
Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
1,1,2-Trichloro-1,2,2-trifluor	UG/L	9.2	5.0	ND	5.0	ND	5.0	9.6	5.0
Trichlorofluoromethane	UG/L	7.7	5.0	ND	5.0	ND	5.0	8.9	5.0
Trichloroethene	UG/L	9.4	5.0	9.8	5.0	9.2	5.0	9.3	5.0
Vinyl acetate	UG/L	38	5.0	ND	5.0	ND	5.0	45	5.0
Vinyl chloride	UG/L	7.6	1.0	ND	1.0	ND	1.0	9.1	1.0
Total Xylenes	UG/L	29	5.0	ND	5.0	ND	5.0	28	5.0
IS/SURROGATE(S)									
Chlorobenzene-D5	%	103	50-200	93	50-200	97	50-200	100	50-200
1,4-Difluorobenzene	%	104	50-200	91	50-200	100	50-200	99	50-200
1,4-Dichlorobenzene-D4	%	103	50-200	93	50-200	99	50-200	100	50-200
Toluene-D8	%	93	76-116	91	76-116	92	76-116	94	76-116
p-Bromofluorobenzene	%	97	73-117	100	73-117	102	73-117	93	73-117
1,2-Dichloroethane-D4	%	83	72-143	83	72-143	81	72-143	93	72-143

NA = Not Applicable ND = Not Detected

Date: 01/2//2004
Time: 08:50:26

ALLIED WASTE - WESTLAKE LANDFILL (MO)
Westlake Landfill
WESTLAKE - 8260 25ML- TCL VOLATILES - W(UNPRES)

Rept: AN0326

Client ID Job No Sample Date	Lab ID	MSB40 A03-C243	A3C24308						
Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
Acetone	UG/L	ND	5.0	NA		NA		NA	
Benzene	UG/L	9.6	5.0	NA		NA		NA	
Bromodichloromethane	UG/L	ND	5.0	NA		NA		NA	
Bromoform	UG/L	ND	5.0	NA		NA		NA	
Bromomethane	UG/L	ND	5.0	NA		NA		NA	
2-Butanone	UG/L	ND	5.0	NA		NA		NA	
Carbon Disulfide	UG/L	ND	5.0	NA		NA		NA	
Carbon Tetrachloride	UG/L	ND	5.0	NA		NA		NA	
Chlorobenzene	UG/L	8.8	5.0	NA		NA		NA	
Chloroethane	UG/L	ND	5.0	NA		NA		NA	
Chloroform	UG/L	ND	5.0	NA		NA		NA	
Chloromethane	UG/L	ND	5.0	NA		NA		NA	
Cyclohexane	UG/L	ND	5.0	NA		NA		NA	
1,2-Dibromoethane	UG/L	ND	5.0	NA		NA		NA	
Dibromochloromethane	UG/L	ND	5.0	NA		NA		NA	
1,2-Dibromo-3-chloropropane	UG/L	ND	5.0	NA		NA		NA	
1,2-Dichlorobenzene	UG/L	ND	5.0	NA		NA		NA	
1,3-Dichlorobenzene	UG/L	ND	5.0	NA		NA		NA	
1,4-Dichlorobenzene	UG/L	ND	5.0	NA		NA		NA	
Dichlorodifluoromethane	UG/L	ND	5.0	NA		NA		NA	
1,1-Dichloroethane	UG/L	ND	5.0	NA		NA		NA	
1,2-Dichloroethane	UG/L	ND	5.0	NA		NA		NA	
1,1-Dichloroethene	UG/L	10	5.0	NA		NA		NA	
cis-1,2-Dichloroethene	UG/L	ND	5.0	NA		NA		NA	
trans-1,2-Dichloroethene	UG/L	ND	5.0	NA		NA		NA	
1,2-Dichloropropane	UG/L	ND	5.0	NA		NA		NA	
cis-1,3-Dichloropropene	UG/L	ND	5.0	NA		NA		NA	
trans-1,3-Dichloropropene	UG/L	ND	5.0	NA		NA		NA	
Ethylbenzene	UG/L	ND	5.0	NA		NA		NA	
2-Hexanone	UG/L	ND	5.0	NA		NA		NA	
Isopropylbenzene	UG/L	ND	5.0	NA		NA		NA	
Methyl acetate	UG/L	ND	5.0	NA		NA		NA	
Methylcyclohexane	UG/L	ND	5.0	NA		NA		NA	
Methylene chloride	UG/L	ND	5.0	NA		NA		NA	
4-Methyl-2-pentanone	UG/L	ND	5.0	NA		NA		NA	
Methyl tert butyl ether	UG/L	ND	5.0	NA		NA		NA	
Styrene	UG/L	ND	5.0	NA		NA		NA	
1,1,2,2-Tetrachloroethane	UG/L	ND	5.0	NA		NA		NA	
Tetrachloroethene	UG/L	ND	5.0	NA		NA		NA	
Toluene	UG/L	9.7	5.0	NA		NA		NA	
1,2,4-Trichlorobenzene	UG/L	ND	5.0	NA		NA		NA	
1,1,1-Trichloroethane	UG/L	ND	5.0	NA		NA		NA	
1,1,2-Trichloroethane	UG/L	ND	5.0	NA		NA		NA	

NA = Not Applicable ND = Not Detected

STL Buffalo

Client ID Job No Sample Date	Lab ID	MSB40 A03-C243	A3C24308						
Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
1,1,2-Trichloro-1,2,2-trifluor	UG/L	ND	5.0	NA		NA		NA	
Trichlorofluoromethane	UG/L	ND	5.0	NA		NA		NA	
Trichloroethene	UG/L	9.3	5.0	NA		NA		NA	
Vinyl acetate	UG/L	ND	5.0	NA		NA		NA	
Vinyl chloride	UG/L	ND	1.0	NA		NA		NA	
Total Xylenes	UG/L	ND	5.0	NA		NA		NA	
IS/SURROGATE(S)									
Chlorobenzene-D5	%	97	50-200	NA		NA		NA	
1,4-Difluorobenzene	%	98	50-200	NA		NA		NA	
1,4-Dichlorobenzene-D4	%	90	50-200	NA		NA		NA	
Toluene-D8	%	96	76-116	NA		NA		NA	
p-Bromofluorobenzene	%	81	73-117	NA		NA		NA	
1,2-Dichloroethane-D4	%	86	72-143	NA		NA		NA	

NA = Not Applicable ND = Not Detected

Client ID Job No Sample Date	Lab ID	TRIP BLANK A03-C204 12/11/2003	A3C20407						
Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
Acetone	UG/L	ND	5.0	NA		NA		NA	
Benzene	UG/L	ND	5.0	NA		NA		NA	
Bromodichloromethane	UG/L	ND	5.0	NA		NA		NA	
Bromoform	UG/L	ND	5.0	NA		NA		NA	
Bromomethane	UG/L	ND	5.0	NA		NA		NA	
2-Butanone	UG/L	ND	5.0	NA		NA		NA	
Carbon Disulfide	UG/L	ND	5.0	NA		NA		NA	
Carbon Tetrachloride	UG/L	ND	5.0	NA		NA		NA	
Chlorobenzene	UG/L	ND	5.0	NA		NA		NA	
Chloroethane	UG/L	ND	5.0	NA		NA		NA	
Chloroform	UG/L	ND	5.0	NA		NA		NA	
Chloromethane	UG/L	ND	5.0	NA		NA		NA	
Cyclohexane	UG/L	ND	5.0	NA		NA		NA	
1,2-Dibromoethane	UG/L	ND	5.0	NA		NA		NA	
Dibromochloromethane	UG/L	ND	5.0	NA		NA		NA	
1,2-Dibromo-3-chloropropane	UG/L	ND	5.0	NA		NA		NA	
1,2-Dichlorobenzene	UG/L	ND	5.0	NA		NA		NA	
1,3-Dichlorobenzene	UG/L	ND	5.0	NA		NA		NA	
1,4-Dichlorobenzene	UG/L	ND	5.0	NA		NA		NA	
Dichlorodifluoromethane	UG/L	ND	5.0	NA		NA		NA	
1,1-Dichloroethane	UG/L	ND	5.0	NA		NA		NA	
1,2-Dichloroethane	UG/L	ND	5.0	NA		NA		NA	
1,1-Dichloroethene	UG/L	ND	5.0	NA		NA		NA	
cis-1,2-Dichloroethene	UG/L	ND	5.0	NA		NA		NA	
trans-1,2-Dichloroethene	UG/L	ND	5.0	NA		NA		NA	
1,2-Dichloropropane	UG/L	ND	5.0	NA		NA		NA	
cis-1,3-Dichloropropene	UG/L	ND	5.0	NA		NA		NA	
trans-1,3-Dichloropropene	UG/L	ND	5.0	NA		NA		NA	
Ethylbenzene	UG/L	ND	5.0	NA		NA		NA	
2-Hexanone	UG/L	ND	5.0	NA		NA		NA	
Isopropylbenzene	UG/L	ND	5.0	NA		NA		NA	
Methyl acetate	UG/L	ND	5.0	NA		NA		NA	
Methylcyclohexane	UG/L	ND	5.0	NA		NA		NA	
Methylene chloride	UG/L	ND	5.0	NA		NA		NA	
4-Methyl-2-pentanone	UG/L	ND	5.0	NA		NA		NA	
Methyl tert butyl ether	UG/L	ND	5.0	NA		NA		NA	
Styrene	UG/L	ND	5.0	NA		NA		NA	
1,1,2,2-Tetrachloroethane	UG/L	ND	5.0	NA		NA		NA	
Tetrachloroethene	UG/L	ND	5.0	NA		NA		NA	
Toluene	UG/L	ND	5.0	NA		NA		NA	
1,2,4-Trichlorobenzene	UG/L	ND	5.0	NA		NA		NA	
1,1,1-Trichloroethane	UG/L	ND	5.0	NA		NA		NA	
1,1,2-Trichloroethane	UG/L	ND	5.0	NA		NA		NA	

NA = Not Applicable ND = Not Detected

STL Buffalo

Client ID Job No Sample Date	Lab ID	TRIP BLANK A03-C204 12/11/2003	A3C20407						
Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
1,1,2-Trichloro-1,2,2-trifluor	UG/L	ND	5.0	NA		NA		NA	
Trichlorofluoromethane	UG/L	ND	5.0	NA		NA		NA	
Trichloroethene	UG/L	ND	5.0	NA		NA		NA	
Vinyl acetate	UG/L	ND	5.0	NA		NA		NA	
Vinyl chloride	UG/L	ND	1.0	NA		NA		NA	
Total Xylenes	UG/L	ND	5.0	NA		NA		NA	
IS/SURROGATE(S)									
Chlorobenzene-D5	%	104	50-200	NA		NA		NA	
1,4-Difluorobenzene	%	104	50-200	NA		NA		NA	
1,4-Dichlorobenzene-D4	%	103	50-200	NA		NA		NA	
Toluene-D8	%	88	76-116	NA		NA		NA	
p-Bromofluorobenzene	%	97	73-117	NA		NA		NA	
1,2-Dichloroethane-D4	%	86	72-143	NA		NA		NA	

NA = Not Applicable ND = Not Detected

ALLIED WASTE - WESTLAKE LANDFILL (MO)
Westlake Landfill
ALLIED - GASOLINE RANGE ORGANICS-8015B-W (UMPRES)

Client ID Job No Sample Date	Lab ID	VBLK091 A03-C204	A3C20408	VBLK149 A03-C243	A3C24302				
Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
Gasoline Range Organics	MG/L	ND	0.050	ND	0.050	NA		NA	
SURROGATE(S)									
a,a,a-Trifluorotoluene	%	131	71-138	130	71-138	NA		NA	

NA = Not Applicable ND = Not Detected

Client ID Job No Sample Date	Lab ID	LCS A03-C243	A3C24303	LCSD A03-C243	A3C24304	MSB A03-C204	A3C20409	MSBD A03-C204	A3C20410
Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
Gasoline Range Organics	MG/L	0.20	0.050	0.20	0.050	0.20	0.050	0.20	0.050
SURROGATE(S)									
a,a,a-Trifluorotoluene	%	134	71-138	133	71-138	134	71-138	134	71-138

NA = Not Applicable ND = Not Detected

ALLIED WASTE - WESTLAKE LANDFILL (MO)
Westlake Landfill
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS

Client ID Job No Sample Date	Lab ID	Method Blank AD3-C204	A381437902						
Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
Phenol	UG/L	ND	10	NA		NA		NA	
Bis(2-chloroethyl) ether	UG/L	ND	10	NA		NA		NA	
2-Chlorophenol	UG/L	ND	10	NA		NA		NA	
2-Methylphenol	UG/L	ND	10	NA		NA		NA	
2,2'-Oxybis(1-Chloropropane)	UG/L	ND	10	NA		NA		NA	
4-Methylphenol	UG/L	ND	10	NA		NA		NA	
N-Nitroso-Di-n-propylamine	UG/L	ND	10	NA		NA		NA	
Hexachloroethane	UG/L	ND	10	NA		NA		NA	
Nitrobenzene	UG/L	ND	10	NA		NA		NA	
Isophorone	UG/L	ND	10	NA		NA		NA	
2-Nitrophenol	UG/L	ND	10	NA		NA		NA	
2,4-Dimethylphenol	UG/L	ND	10	NA		NA		NA	
Bis(2-chloroethoxy) methane	UG/L	ND	10	NA		NA		NA	
2,4-Dichlorophenol	UG/L	ND	10	NA		NA		NA	
Naphthalene	UG/L	ND	10	NA		NA		NA	
4-Chloroaniline	UG/L	ND	10	NA		NA		NA	
Hexachlorobutadiene	UG/L	ND	10	NA		NA		NA	
4-Chloro-3-methylphenol	UG/L	ND	10	NA		NA		NA	
2-Methylnaphthalene	UG/L	ND	10	NA		NA		NA	
Hexachlorocyclopentadiene	UG/L	ND	24	NA		NA		NA	
2,4,6-Trichlorophenol	UG/L	ND	10	NA		NA		NA	
2,4,5-Trichlorophenol	UG/L	ND	10	NA		NA		NA	
2-Chloronaphthalene	UG/L	ND	10	NA		NA		NA	
2-Nitroaniline	UG/L	ND	50	NA		NA		NA	
Dimethyl phthalate	UG/L	ND	10	NA		NA		NA	
Acenaphthylene	UG/L	ND	10	NA		NA		NA	
3-Nitroaniline	UG/L	ND	50	NA		NA		NA	
Acenaphthene	UG/L	ND	10	NA		NA		NA	
2,4-Dinitrophenol	UG/L	ND	50	NA		NA		NA	
4-Nitrophenol	UG/L	ND	50	NA		NA		NA	
Dibenzofuran	UG/L	ND	10	NA		NA		NA	
2,4-Dinitrotoluene	UG/L	ND	10	NA		NA		NA	
Diethyl phthalate	UG/L	ND	10	NA		NA		NA	
4-Chlorophenyl phenyl ether	UG/L	ND	10	NA		NA		NA	
Fluorene	UG/L	ND	10	NA		NA		NA	
4-Nitroaniline	UG/L	ND	50	NA		NA		NA	
4,6-Dinitro-2-methylphenol	UG/L	ND	50	NA		NA		NA	
N-nitrosodiphenylamine	UG/L	ND	10	NA		NA		NA	
4-Bromophenyl phenyl ether	UG/L	ND	10	NA		NA		NA	
Hexachlorobenzene	UG/L	ND	10	NA		NA		NA	
Pentachlorophenol	UG/L	ND	50	NA		NA		NA	
Phenanthrene	UG/L	ND	10	NA		NA		NA	
Anthracene	UG/L	ND	10	NA		NA		NA	

NA = Not Applicable ND = Not Detected

STL Buffalo

Client ID Job No Sample Date	Lab ID	Method Blank A03-C204	A381437902						
Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
Di-n-butyl phthalate	UG/L	ND	10	NA		NA		NA	
Fluoranthene	UG/L	ND	10	NA		NA		NA	
Pyrene	UG/L	ND	10	NA		NA		NA	
Butyl benzyl phthalate	UG/L	ND	10	NA		NA		NA	
3,3'-Dichlorobenzidine	UG/L	ND	20	NA		NA		NA	
Benzo(a)anthracene	UG/L	ND	10	NA		NA		NA	
Chrysene	UG/L	ND	10	NA		NA		NA	
Bis(2-ethylhexyl) phthalate	UG/L	ND	10	NA		NA		NA	
Di-n-octyl phthalate	UG/L	ND	10	NA		NA		NA	
Benzo(b)fluoranthene	UG/L	ND	10	NA		NA		NA	
Benzo(k)fluoranthene	UG/L	ND	10	NA		NA		NA	
Benzo(a)pyrene	UG/L	ND	10	NA		NA		NA	
Indeno(1,2,3-cd)pyrene	UG/L	ND	10	NA		NA		NA	
Dibenzo(a,h)anthracene	UG/L	ND	10	NA		NA		NA	
Benzo(ghi)perylene	UG/L	ND	10	NA		NA		NA	
2,6-Dinitrotoluene	UG/L	ND	10	NA		NA		NA	
——IS/SURROGATE(S)——									
1,4-Dichlorobenzene-D4	%	100	50-200	NA		NA		NA	
Naphthalene-D8	%	101	50-200	NA		NA		NA	
Acenaphthene-D10	%	96	50-200	NA		NA		NA	
Phenanthrene-D10	%	104	50-200	NA		NA		NA	
Chrysene-D12	%	107	50-200	NA		NA		NA	
Perylene-D12	%	129	50-200	NA		NA		NA	
Nitrobenzene-D5	%	66	37-120	NA		NA		NA	
2-Fluorobiphenyl	%	75	47-120	NA		NA		NA	
p-Terphenyl-d14	%	94	31-154	NA		NA		NA	
Phenol-D5	%	32	10-110	NA		NA		NA	
2-Fluorophenol	%	47	18-120	NA		NA		NA	
2,4,6-Tribromophenol	%	91	41-149	NA		NA		NA	

NA = Not Applicable ND = Not Detected

ALLIED WASTE - WESTLAKE LANDFILL (MO)
Westlake Landfill
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS

Client ID Job No Sample Date	Lab ID	Matrix Spike Blank A03-C204	A381437901						
Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
Phenol	UG/L	44	10	NA		NA		NA	
Bis(2-chloroethyl) ether	UG/L	82	10	NA		NA		NA	
2-Chlorophenol	UG/L	83	10	NA		NA		NA	
2-Methylphenol	UG/L	81	10	NA		NA		NA	
2,2'-Oxybis(1-Chloropropane)	UG/L	81	10	NA		NA		NA	
4-Methylphenol	UG/L	78	10	NA		NA		NA	
N-Nitroso-Di-n-propylamine	UG/L	87	10	NA		NA		NA	
Hexachloroethane	UG/L	56	10	NA		NA		NA	
Nitrobenzene	UG/L	76	10	NA		NA		NA	
Isophorone	UG/L	83	10	NA		NA		NA	
2-Nitrophenol	UG/L	91	10	NA		NA		NA	
2,4-Dimethylphenol	UG/L	89	10	NA		NA		NA	
Bis(2-chloroethoxy) methane	UG/L	85	10	NA		NA		NA	
2,4-Dichlorophenol	UG/L	98	10	NA		NA		NA	
Naphthalene	UG/L	84	10	NA		NA		NA	
4-Chloroaniline	UG/L	93	10	NA		NA		NA	
Hexachlorobutadiene	UG/L	63	10	NA		NA		NA	
4-Chloro-3-methylphenol	UG/L	99	10	NA		NA		NA	
2-Methylnaphthalene	UG/L	89	10	NA		NA		NA	
Hexachlorocyclopentadiene	UG/L	42	24	NA		NA		NA	
2,4,6-Trichlorophenol	UG/L	100	10	NA		NA		NA	
2,4,5-Trichlorophenol	UG/L	100	10	NA		NA		NA	
2-Chloronaphthalene	UG/L	89	10	NA		NA		NA	
2-Nitroaniline	UG/L	100	50	NA		NA		NA	
Dimethyl phthalate	UG/L	110	10	NA		NA		NA	
Acenaphthylene	UG/L	97	10	NA		NA		NA	
3-Nitroaniline	UG/L	110	50	NA		NA		NA	
Acenaphthene	UG/L	96	10	NA		NA		NA	
2,4-Dinitrophenol	UG/L	76	50	NA		NA		NA	
4-Nitrophenol	UG/L	ND	50	NA		NA		NA	
Dibenzofuran	UG/L	100	10	NA		NA		NA	
2,4-Dinitrotoluene	UG/L	110	10	NA		NA		NA	
Diethyl phthalate	UG/L	100	10	NA		NA		NA	
4-Chlorophenyl phenyl ether	UG/L	110	10	NA		NA		NA	
Fluorene	UG/L	110	10	NA		NA		NA	
4-Nitroaniline	UG/L	120	50	NA		NA		NA	
4,6-Dinitro-2-methylphenol	UG/L	99	50	NA		NA		NA	
N-nitrosodiphenylamine	UG/L	100	10	NA		NA		NA	
4-Bromophenyl phenyl ether	UG/L	110	10	NA		NA		NA	
Hexachlorobenzene	UG/L	100	10	NA		NA		NA	
Pentachlorophenol	UG/L	110	50	NA		NA		NA	
Phenanthrene	UG/L	110	10	NA		NA		NA	
Anthracene	UG/L	100	10	NA		NA		NA	

NA = Not Applicable ND = Not Detected

STL Buffalo

Client ID Job No Lab ID Sample Date		Matrix Spike Blank A03-C204 A3B1437901							
Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
Di-n-butyl phthalate	UG/L	100	10	NA		NA		NA	
Fluoranthene	UG/L	110	10	NA		NA		NA	
Pyrene	UG/L	110	10	NA		NA		NA	
Butyl benzyl phthalate	UG/L	100	10	NA		NA		NA	
3,3'-Dichlorobenzidine	UG/L	130	20	NA		NA		NA	
Benzo(a)anthracene	UG/L	110	10	NA		NA		NA	
Chrysene	UG/L	94	10	NA		NA		NA	
Bis(2-ethylhexyl) phthalate	UG/L	96	10	NA		NA		NA	
Di-n-octyl phthalate	UG/L	100	10	NA		NA		NA	
Benzo(b)fluoranthene	UG/L	100	10	NA		NA		NA	
Benzo(k)fluoranthene	UG/L	100	10	NA		NA		NA	
Benzo(a)pyrene	UG/L	100	10	NA		NA		NA	
Indeno(1,2,3-cd)pyrene	UG/L	100	10	NA		NA		NA	
Dibenzo(a,h)anthracene	UG/L	93	10	NA		NA		NA	
Benzo(ghi)perylene	UG/L	97	10	NA		NA		NA	
2,6-Dinitrotoluene	UG/L	110	10	NA		NA		NA	
IS/SURROGATE(S)									
1,4-Dichlorobenzene-D4	%	94	50-200	NA		NA		NA	
Naphthalene-D8	%	94	50-200	NA		NA		NA	
Acenaphthene-D10	%	91	50-200	NA		NA		NA	
Phenanthrene-D10	%	91	50-200	NA		NA		NA	
Chrysene-D12	%	99	50-200	NA		NA		NA	
Perylene-D12	%	121	50-200	NA		NA		NA	
Nitrobenzene-D5	%	79	37-120	NA		NA		NA	
2-Fluorobiphenyl	%	92	47-120	NA		NA		NA	
p-Terphenyl-d14	%	102	31-154	NA		NA		NA	
Phenol-D5	%	35	10-110	NA		NA		NA	
2-Fluorophenol	%	50	18-120	NA		NA		NA	
2,4,6-Tribromophenol	%	105	41-149	NA		NA		NA	

NA = Not Applicable ND = Not Detected

ALLIED WASTE - WESTLAKE LANDFILL (NO)
Westlake Landfill
ALLIED - DIESEL RANGE ORGANICS - METHOD 8015B - W

Client ID Job No Sample Date	Lab ID	Method Blank A03-C204	A381437803						
Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
Diesel Range Organics	MG/L	ND	0.50	NA		NA		NA	
SURROGATE(S)									
o-Terphenyl	%	96	27-153	NA		NA		NA	

NA = Not Applicable ND = Not Detected

ALLIED WASTE - WESTLAKE LANDFILL (MO)
Westlake Landfill
ALLIED - DIESEL RANGE ORGANICS - METHOD 8015B - W

Client ID Job No Sample Date	Lab ID	Matrix Spike Blank A03-C204	A381437801	Matrix Spike Blk Dup A03-C204	A381437802				
Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
Diesel Range Organics	MG/L	1.2	0.50	1.3	0.50	NA		NA	
SURROGATE(S)									
o-Terphenyl	%	70	27-153	80	27-153	NA		NA	

NA = Not Applicable ND = Not Detected

Date: 01/05/2004
Time: 14:28:01

ALLIED WASTE - WESTLAKE LANDFILL (MO)
Westlake Landfill
WEST LAKE - TOTAL METALS (3) - W

Rept: AN0326

Client ID Job No Sample Date	Lab ID	Method Blank A03-C204	A3B1441502	Method Blank A03-C243	A3B1447502				
Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
Iron - Total	MG/L	ND	0.050	ND	0.050	NA		NA	
Arsenic - Total	MG/L	ND	0.010	ND	0.010	NA		NA	
Manganese - Total	MG/L	ND	0.0030	ND	0.0030	NA		NA	

NA = Not Applicable ND = Not Detected

STL Buffalo

Date: 01/05/2004
Time: 14:28:01

ALLIED WASTE - WESTLAKE LANDFILL (MO)
Westlake Landfill
WEST LAKE - TOTAL METALS (3) - W

Rept: AN0326

Client ID Job No Sample Date	Lab ID	LFB A03-C204	A381441301	LFB A03-C243	A381447501				
Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
Manganese - Total	MG/L	0.21	0.0030	0.19	0.0030	NA		NA	
Arsenic - Total	MG/L	0.21	0.010	0.19	0.010	NA		NA	
Iron - Total	MG/L	0.44	0.050	0.40	0.050	NA		NA	

42\82

NA = Not Applicable ND = Not Detected

SIL Buffalo

Date: 01/05/2004
Time: 14:28:03

ALLIED WASTE - WESTLAKE LANDFILL (MO)
Westlake Landfill
WET CHEMISTRY ANALYSIS

Rept: AN0326

Client ID Job No Sample Date	Lab ID	Method Blank A03-C204	A3B1447102	Method Blank A03-C204	A3B1486602	Method Blank A03-C204	A3B1494002	Method Blank A03-C204	A3B1497102
Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
Total Dissolved Solids	MG/L	ND	10	NA		NA		NA	
Chloride	MG/L	NA		ND	0.50	ND	0.50	ND	0.50
Fluoride	MG/L	NA		ND	0.050	NA		NA	

43\82

NA = Not Applicable ND = Not Detected

STL Buffalo

Date: 01/05/2004
Time: 14:28:03

ALLIED WASTE - WESTLAKE LANDFILL (MO)
Westlake Landfill
WET CHEMISTRY ANALYSIS

Rept: AN0326

Client ID Job No Sample Date	Lab ID		LCS A03-C204	A381447101	LCS A03-C204	A381486601	LCS A03-C204	A381494001	LCS A03-C204	A381497101
Analyte		Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
Total Dissolved Solids		MG/L	496	10	NA		NA		NA	
Chloride		MG/L	NA		9.7	0.50	9.9	0.50	10.1	0.50
Fluoride		MG/L	NA		0.91	0.050	NA		NA	

NA = Not Applicable ND = Not Detected

STL Buffalo

SDG: C204
Client Sample ID: VBLK19 MSB19
Lab Sample ID: A3C20411 A3C20412

Analyte	Units of Measure	Concentration Blank Spike	Spike Amount	% Recovery Blank Spike	QC LIMITS
WESTLAKE - 8260 25ML- TCL VOLATILES - W(					
1,1-Dichloroethene	UG/L	9.93	10.0	99	65-138
Trichloroethene	UG/L	9.36	10.0	94	71-123
Benzene	UG/L	9.50	10.0	95	71-124
Toluene	UG/L	9.60	10.0	96	70-122
Chlorobenzene	UG/L	9.72	10.0	97	72-120

45\82

* Indicates Result is outside QC Limits
NC = Not Calculated ND = Not Detected

SDG: C204
Client Sample ID: VBLK20 MSB20
Lab Sample ID: A3C20413 A3C20414

Analyte	Units of Measure	Concentration Blank Spike	Spike Amount	% Recovery Blank Spike	QC LIMITS
WESTLAKE - 8260 25ML- TCL VOLATILES - WC					
1,1-Dichloroethene	UG/L	10.7	10.0	107	65-138
Trichloroethene	UG/L	9.83	10.0	98	71-123
Benzene	UG/L	9.83	10.0	98	71-124
Toluene	UG/L	10.3	10.0	103	70-122
Chlorobenzene	UG/L	10.1	10.0	101	72-120

46\82

* Indicates Result is outside QC Limits
NC = Not Calculated ND = Not Detected

SDG: C204
Client Sample ID: VBLKZ1 MSD21
Lab Sample ID: A3C20415 A3C20416

Analyte	Units of Measure	Concentration Blank Spike	Spike Amount	% Recovery Blank Spike	QC LIMITS
WESTLAKE - 8260 25ML- TCL VOLATILES - W(					
1,1-Dichloroethene	UG/L	9.75	10.0	98	65-138
Trichloroethene	UG/L	9.16	10.0	92	71-123
Benzene	UG/L	9.41	10.0	94	71-124
Toluene	UG/L	9.52	10.0	95	70-122
Chlorobenzene	UG/L	9.65	10.0	96	72-120

47\82

* Indicates Result is outside QC Limits
NC = Not Calculated ND = Not Detected

SDG: C204
Client Sample ID: VBLX39 MSB39
Lab Sample ID: A3C24305 A3C24306

Analyte	Units of Measure	Concentration Blank Spike	Spike Amount	% Recovery Blank Spike	QC LIMITS
WESTLAKE - 8260 25ML- TCL VOLATILES - W(					
1,1-Dichloroethene	UG/L	9.78	10.0	98	65-138
Trichloroethene	UG/L	9.30	10.0	93	71-123
Benzene	UG/L	9.39	10.0	94	71-124
Toluene	UG/L	8.94	10.0	89	70-122
Chlorobenzene	UG/L	8.88	10.0	89	72-120

48182

* Indicates Result is outside QC Limits
NC = Not Calculated ND = Not Detected

SDG: C204
Client Sample ID: VBLK40 MSB40
Lab Sample ID: A3C24307 A3C24308

Analyte	Units of Measure	Concentration Blank Spike	Spike Amount	% Recovery Blank Spike	QC LIMITS
WESTLAKE - 8260 25ML- TCL VOLATILES - W(					
1,1-Dichloroethene	UG/L	10.3	10.0	104	65-138
Trichloroethene	UG/L	9.31	10.0	93	71-123
Benzene	UG/L	9.63	10.0	96	71-124
Toluene	UG/L	9.70	10.0	97	70-122
Chlorobenzene	UG/L	8.75	10.0	88	72-120

49\82

* Indicates Result is outside QC Limits
NC = Not Calculated ND = Not Detected

Date : 01/05/2004 14:28:09
Job No: A03-C204

ALLIED WASTE INDUSTRIES
WESTLAKE LANDFILL

Rept: AN0364

SDG: C204
Client Sample ID: VBLK091 MSB MSBD
Lab Sample ID: A3C20408 A3C20409 A3C20410

Analyte	Units of Measure	Concentration Spike Blank	Concentration Spike Blank Dup	Spike Amount SB	Spike Amount SBD	% Recovery SB	% Recovery SBD	% Recovery Avg	% RPD	QC LIMITS RPD	QC LIMITS REC.
ALLIED - GASOLINE RANGE ORGANICS-8015B-W											
Gasoline Range Organics	MG/L	0.204	0.201	0.200	0.200	102	100	101	2	30.0	62-126

50182

* Indicates Result is outside QC Limits
NC = Not Calculated ND = Not Detected

STL Buffalo

SDG: C204
Client Sample ID: VBLK149 LCS LCSD
Lab Sample ID: A3C24302 A3C24303 A3C24304

Analyte	Units of Measure	Concentration Spike Blank	Concentration Spike Blank Dup	Spike Amount SB	Spike Amount SBD	% Recovery SB	% Recovery SBD	% Recovery Avg	% RPD	QC LIMITS RPD	QC LIMITS REC.
ALLIED - GASOLINE RANGE ORGANICS-8015B-W Gasoline Range Organics	MG/L	0.199	0.200	0.200	0.200	100	100	100	0	30.0	62-126

51\82

* Indicates Result is outside QC Limits
NC = Not Calculated ND = Not Detected

Date : 01/05/2004 14:28:12
Job No: A03-C204

ALLIED WASTE INDUSTRIES
WESTLAKE LANDFILL

Rept: AN0364

SDG: C204
Client Sample ID: Method Blank — Matrix Spike Blank
Lab Sample ID: A3B1437902 — A3B1437901

Analyte	Units of Measure	Concentration Blank Spike	Spike Amount	% Recovery Blank Spike	QC LIMITS
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS					
Acenaphthene	UG/L	95.6	100	96	52-120
Acenaphthylene	UG/L	97.1	100	97	57-120
Anthracene	UG/L	105	100	106	71-126
Benzo(a)anthracene	UG/L	111	100	112	74-133
Benzo(b)fluoranthene	UG/L	99.5	100	100	62-138
Benzo(k)fluoranthene	UG/L	105	100	105	63-136
Benzo(ghi)perylene	UG/L	96.8	100	97	42-160
Benzo(a)pyrene	UG/L	105	100	106	72-126
Bis(2-chloroethoxy) methane	UG/L	85.0	100	85	57-120
Bis(2-chloroethyl) ether	UG/L	82.5	100	82	47-120
2,2'-Oxybis(1-Chloropropane)	UG/L	80.7	100	81	39-120
Bis(2-ethylhexyl) phthalate	UG/L	95.6	100	95	64-185
4-Bromophenyl phenyl ether	UG/L	106	100	107	66-130
Butyl benzyl phthalate	UG/L	100	100	101	64-144
4-Chloroaniline	UG/L	93.4	100	93	57-125
4-Chloro-3-methylphenol	UG/L	98.6	100	99	53-123
2-Chloronaphthalene	UG/L	89.3	100	89	49-112
2-Chlorophenol	UG/L	82.7	100	83	40-120
4-Chlorophenyl phenyl ether	UG/L	109	100	110	59-125
Chrysene	UG/L	94.0	100	94	76-133
Dibenzo(a,h)anthracene	UG/L	92.9	100	93	50-148
Dibenzofuran	UG/L	99.9	100	100	59-120
Di-n-butyl phthalate	UG/L	100	100	100	68-136
3,3'-Dichlorobenzidine	UG/L	126	100	126	63-160
2,4-Dichlorophenol	UG/L	97.9	100	98	57-120
Diethyl phthalate	UG/L	104	100	104	68-160
2,4-Dimethylphenol	UG/L	89.0	100	89	53-124
Dimethyl phthalate	UG/L	107	100	107	70-132
4,6-Dinitro-2-methylphenol	UG/L	98.6	100	99	56-144
2,4-Dinitrophenol	UG/L	76.3	100	76	32-147
2,4-Dinitrotoluene	UG/L	108	100	109	52-130
2,6-Dinitrotoluene	UG/L	110	100	110	74-135
Di-n-octyl phthalate	UG/L	104	100	104	68-153
Fluoranthene	UG/L	106	100	107	67-134
Fluorene	UG/L	112	100	113	61-123
Hexachlorobenzene	UG/L	101	100	102	39-132
Hexachlorobutadiene	UG/L	63.0	100	63	10-120
Hexachlorocyclopentadiene	UG/L	42.0	100	42	4-120
Hexachloroethane	UG/L	55.7	100	56	10-120
Indeno(1,2,3-cd)pyrene	UG/L	99.6	100	100	52-148
Isophorone	UG/L	82.7	100	83	44-120
2-Methylnaphthalene	UG/L	89.2	100	89	41-120
2-Methylphenol	UG/L	81.3	100	81	28-125

* Indicates Result is outside QC Limits
NC - Not Calculated ND - Not Detected

STL Buffalo

52182

SDG: C204
Client Sample ID: Method Blank — Matrix Spike Blank
Lab Sample ID: A3B1437902 — A3B1437901

Analyte	Units of Measure	Concentration Blank Spike	Spike Amount	% Recovery Blank Spike	QC LIMITS
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS					
4-Methylphenol	UG/L	78.5	100	78	23-120
Naphthalene	UG/L	83.6	100	84	38-120
2-Nitroaniline	UG/L	101	100	101	59-153
3-Nitroaniline	UG/L	112	100	112	70-143
4-Nitroaniline	UG/L	118	100	118	71-142
Nitrobenzene	UG/L	76.4	100	76	38-120
2-Nitrophenol	UG/L	91.0	100	91	54-120
4-Nitrophenol	UG/L	38.9	100	39	7-120
N-nitrosodiphenylamine	UG/L	105	100	105	60-120
N-Nitroso-di-n-propylamine	UG/L	87.4	100	87	37-120
Pentachlorophenol	UG/L	109	100	109	22-131
Phenanthrene	UG/L	108	100	108	72-128
Phenol	UG/L	44.4	100	44	12-149
Pyrene	UG/L	113	100	114	60-140
2,4,5-Trichlorophenol	UG/L	104	100	105	57-130
2,4,6-Trichlorophenol	UG/L	102	100	103	56-125

53182

* Indicates Result is outside QC Limits
NC = Not Calculated ND = Not Detected

Date : 01/05/2004 14:28:16
Job No: A03-CZ04

ALLIED WASTE INDUSTRIES
WESTLAKE LANDFILL

Rept: AM0364

SDG: CZ04
Client Sample ID: Method Blank — Matrix Spike Blank — Matrix Spike Blk Dup
Lab Sample ID: A381437803 — A381437801 — A381437802

Analyte	Units of Measure	Concentration Spike Blank	Concentration Spike Blank Dup	Spike Amount SB	Spike Amount SBD	% Recovery SB	% Recovery SBD	% Recovery Avg	% RPD	QC LIMITS RPD	QC LIMITS REC.
ALLIED - DIESEL RANGE ORGANICS - METHOD											
Diesel Range Organics	MG/L	1.17	1.26	1.50	1.50	78	84	81	7	30.0	53-162

54\82

* Indicates Result is outside QC Limits
NC = Not Calculated ND = Not Detected

SIL Buffalo

SDG: C204
Client Sample ID: Method Blank LFB
Lab Sample ID: A3B1441302 A3B1441301

Analyte	Units of Measure	Concentration Blank Spike	Spike Amount	% Recovery Blank Spike	QC LIMITS
WEST LAKE - TOTAL METALS (3) - W					
ALLIED - TOTAL ARSENIC - W	MG/L	0.208	0.200	104	80-120
ALLIED - TOTAL IRON - W	MG/L	0.435	0.400	107	80-120
ALLIED - TOTAL MANGANESE - W	MG/L	0.208	0.200	104	80-120

5582

* Indicates Result is outside QC Limits
NC = Not Calculated ND = Not Detected

SDG: C204
Client Sample ID: Method Blank LFB
Lab Sample ID: A3B1447502 A3B1447501

Analyte	Units of Measure	Concentration Blank Spike	Spike Amount	% Recovery Blank Spike	QC LIMITS
WEST LAKE - TOTAL METALS (3) - W					
ALLIED - TOTAL ARSENIC - W	MG/L	0.194	0.200	97	80-120
ALLIED - TOTAL IRON - W	MG/L	0.401	0.400	100	80-120
ALLIED - TOTAL MANGANESE - W	MG/L	0.193	0.200	96	80-120

5682

* Indicates Result is outside QC Limits
NC = Not Calculated ND = Not Detected

SDG: C204
Client Sample ID: Method Blank LCS
Lab Sample ID: A3B1447102 A3B1447101

Analyte	Units of Measure	Concentration Blank Spike	Spike Amount	% Recovery Blank Spike	QC LIMITS
WET CHEMISTRY ANALYSIS					
ALLIED - METHOD 160.1 - TOTAL DISSOLVE	MG/L	496.0	500.0	99	85-115

57482

* Indicates Result is outside QC Limits
NC = Not Calculated ND = Not Detected

SDG: C204
Client Sample ID: Method Blank LCS
Lab Sample ID: A3B1486602 A3B1486601

Analyte	Units of Measure	Concentration Blank Spike	Spike Amount	% Recovery Blank Spike	QC LIMITS
WET CHEMISTRY ANALYSIS					
ALLIED - 9056 CHLORIDE BY IC	MG/L	9.66	10.0	97	90-110
ALLIED - 9056 METHOD 9056 - FLUORIDE	MG/L	0.910	1.00	91	90-110

58182

* Indicates Result is outside QC Limits
NC = Not Calculated ND = Not Detected

SDG: C204
Client Sample ID: Method Blank LCS
Lab Sample ID: A3B1494002 A3B1494001

Analyte	Units of Measure	Concentration Blank Spike	Spike Amount	% Recovery Blank Spike	QC LIMITS
WET CHEMISTRY ANALYSIS					
ALLIED - 9056 CHLORIDE BY IC	MG/L	9.87	10.0	99	90-110

59\82

* Indicates Result is outside QC Limits
NC = Not Calculated ND = Not Detected

SDG: C204
Client Sample ID: Method Blank LCS
Lab Sample ID: A381497102 A381497101

Analyte	Units of Measure	Concentration Blank Spike	Spike Amount	% Recovery Blank Spike	QC LIMITS
WET CHEMISTRY ANALYSIS					
ALLIED - 9056 CHLORIDE BY IC	MG/L	10.11	10.0	100	90-110

60\82

* Indicates Result is outside QC Limits
NC = Not Calculated ND = Not Detected

WESTLAKE - 8260 25ML- TCL VOLATILES - W(UNPRES)

Client Sample ID Job No & Lab Sample ID	DUPLICATE A03-C204 A3C20401	FIELD BLANK A03-C204 A3C20406	PZ-302-A1 A03-C204 A3C20402	PZ-302-A5 A03-C243 A3C24301	PZ-302-A5DL A03-C243 A3C24301DL
Sample Date	12/11/2003 12:05	12/11/2003 15:20	12/11/2003 15:25	12/15/2003 11:00	12/15/2003 11:00
Received Date	12/15/2003 10:00	12/15/2003 10:00	12/15/2003 10:00	12/16/2003 10:15	12/16/2003 10:15
Extraction Date					
Analysis Date	12/17/2003 17:20	12/17/2003 03:06	12/17/2003 17:55	12/19/2003 15:37	12/20/2003 01:04
Extraction HT Met?	-	-	-	-	-
Analytical HT Met?	YES	YES	YES	YES	YES
Sample Matrix	WATER	WATER	WATER	WATER	WATER
Dilution Factor	1.0	1.0	1.0	1.0	2.0
Sample wt/vol	0.025 LITERS	0.025 LITERS	0.025 LITERS	0.025 LITERS	0.025 LITERS
% Dry					

61\82

WESTLAKE - 8260 25ML- TCL VOLATILES - W(UNPRES)

Client Sample ID Job No & Lab Sample ID	PZ-303-AS A03-C204 A3C20403	PZ-304-A1 A03-C204 A3C20404	PZ-304-AS A03-C204 A3C20405		
Sample Date	12/11/2003 12:35	12/11/2003 12:00	12/11/2003 13:10		
Received Date	12/15/2003 10:00	12/15/2003 10:00	12/15/2003 10:00		
Extraction Date					
Analysis Date	12/18/2003 06:40	12/17/2003 18:30	12/17/2003 19:05		
Extraction HT Met?	-	-	-		
Analytical HT Met?	YES	YES	YES		
Sample Matrix	WATER	WATER	WATER		
Dilution Factor	20.0	1.0	1.0		
Sample wt/vol	0.025 LITERS	0.025 LITERS	0.025 LITERS		
% Dry					

62\82

WESTLAKE - 8260 25ML- TCL VOLATILES - W(UNPRES)

Client Sample ID Job No & Lab Sample ID	TRLP BLANK A03-C204 A3C20407				
Sample Date	12/11/2003				
Received Date	12/15/2003 10:00				
Extraction Date					
Analysis Date	12/17/2003 02:31				
Extraction HT Met?	-				
Analytical HT Met?	YES				
Sample Matrix	WATER				
Dilution Factor	1.0				
Sample wt/vol	0.025 LITERS				
% Dry					

63182

WESTLAKE - 8260 25ML- TCL VOLATILES - W(UNPRES)

Client Sample ID Job No & Lab Sample ID	MSB19 A03-C204 A3C20412	MSB20 A03-C204 A3C20414	MSB21 A03-C204 A3C20416	MSB39 A03-C243 A3C24306	MSB40 A03-C243 A3C24308
Sample Date					
Received Date					
Extraction Date					
Analysis Date	12/17/2003 00:47	12/17/2003 13:16	12/18/2003 00:21	12/19/2003 11:16	12/19/2003 22:11
Extraction HT Met?	-	-	-	-	-
Analytical HT Met?	-	-	-	-	-
Sample Matrix	WATER	WATER	WATER	WATER	WATER
Dilution Factor	1.0	1.0	1.0	1.0	1.0
Sample wt/vol	0.025 LITERS	0.025 LITERS	0.025 LITERS	0.025 LITERS	0.025 LITERS
% Dry					

64\82

WESTLAKE - 8260 25ML- TCL VOLATILES - W(UNPRES)

Client Sample ID Job No & Lab Sample ID	VBLK19 A03-C204 A3C20411	VBLK20 A03-C204 A3C20413	VBLK21 A03-C204 A3C20415	VBLK39 A03-C243 A3C24305	VBLK40 A03-C243 A3C24307
Sample Date					
Received Date					
Extraction Date					
Analysis Date	12/17/2003 01:57	12/17/2003 13:50	12/18/2003 00:56	12/19/2003 12:14	12/19/2003 22:39
Extraction HT Met?	-	-	-	-	-
Analytical HT Met?	-	-	-	-	-
Sample Matrix	WATER	WATER	WATER	WATER	WATER
Dilution Factor	1.0	1.0	1.0	1.0	1.0
Sample wt/vol	0.025 LITERS	0.025 LITERS	0.025 LITERS	0.025 LITERS	0.025 LITERS
% Dry					

65082

ALLIED - GASOLINE RANGE ORGANICS-8015B-W (UNPRES)

Client Sample ID Job No & Lab Sample ID	DUPLICATE A03-C204 A3C20401	PZ-302-AI A03-C204 A3C20402	PZ-302-AS A03-C243 A3C24301	PZ-303-AS A03-C204 A3C20403	PZ-304-AI A03-C204 A3C20404
Sample Date	12/11/2003 12:05	12/11/2003 15:25	12/15/2003 11:00	12/11/2003 12:35	12/11/2003 12:00
Received Date	12/15/2003 10:00	12/15/2003 10:00	12/16/2003 10:15	12/15/2003 10:00	12/15/2003 10:00
Extraction Date					
Analysis Date	12/15/2003 16:33	12/15/2003 17:05	12/18/2003 14:04	12/15/2003 19:15	12/15/2003 17:38
Extraction HT Met?	-	-	-	-	-
Analytical HT Met?	YES	YES	YES	YES	YES
Sample Matrix	WATER	WATER	WATER	WATER	WATER
Dilution Factor	1.0	1.0	1.0	10.0	1.0
Sample wt/vol	0.005 LITERS	0.005 LITERS	0.005 LITERS	0.005 LITERS	0.005 LITERS
% Dry					

ALLIED - GASOLINE RANGE ORGANICS-8015B-W (UNPRES)

Client Sample ID Job No & Lab Sample ID	PZ-304-AS A03-C204 A3C20405				
Sample Date	12/11/2003 13:10				
Received Date	12/15/2003 10:00				
Extraction Date					
Analysis Date	12/15/2003 18:10				
Extraction HT Met?	-				
Analytical HT Met?	YES				
Sample Matrix	WATER				
Dilution Factor	1.0				
Sample wt/vol	0.005 LITERS				
% Dry					

67782

ALLIED - GASOLINE RANGE ORGANICS-8015B-W (UNPRES)

Client Sample ID Job No & Lab Sample ID	LCS A03-C243 A3C24303	LCSD A03-C243 A3C24304	MSB A03-C204 A3C20409	MSBD A03-C204 A3C20410	
Sample Date					
Received Date					
Extraction Date					
Analysis Date	12/18/2003 12:46	12/18/2003 13:20	12/15/2003 12:37	12/15/2003 13:09	
Extraction HT Met?	-	-	-	-	
Analytical HT Met?	-	-	-	-	
Sample Matrix	WATER	WATER	WATER	WATER	
Dilution Factor	1.0	1.0	1.0	1.0	
Sample wt/vol	0.005 LITERS	0.005 LITERS	0.005 LITERS	0.005 LITERS	
% Dry					

68\82

ALLIED - GASOLINE RANGE ORGANICS-8015B-W (UNPRES)

Client Sample ID Job No & Lab Sample ID	VBLK091 A03-C204 A3C20408	VBLK149 A03-C243 A3C24302			
Sample Date					
Received Date					
Extraction Date					
Analysis Date	12/15/2003 11:53	12/18/2003 11:27			
Extraction HT Met?	-	-			
Analytical HT Met?	-	-			
Sample Matrix	WATER	WATER			
Dilution Factor	1.0	1.0			
Sample Wt/vol	0.005 LITERS	0.005 LITERS			
% Dry					

69\82

METHOD 8270 - TCL SEMI-VOLATILE ORGANICS

Client Sample ID Job No & Lab Sample ID	DUPLICATE A03-C204 A3C20401	PZ-302-AI A03-C204 A3C20402	PZ-303-AS A03-C204 A3C20403	PZ-304-AI A03-C204 A3C20404	PZ-304-AS A03-C204 A3C20405
Sample Date	12/11/2003 12:05	12/11/2003 15:25	12/11/2003 12:35	12/11/2003 12:00	12/11/2003 13:10
Received Date	12/15/2003 10:00	12/15/2003 10:00	12/15/2003 10:00	12/15/2003 10:00	12/15/2003 10:00
Extraction Date	12/16/2003 07:00	12/16/2003 07:00	12/16/2003 07:00	12/16/2003 07:00	12/16/2003 07:00
Analysis Date	12/18/2003 17:45	12/18/2003 18:12	12/18/2003 18:39	12/18/2003 19:06	12/18/2003 19:33
Extraction HT Met?	YES	YES	YES	YES	YES
Analytical HT Met?	YES	YES	YES	YES	YES
Sample Matrix	WATER	WATER	WATER	WATER	WATER
Dilution Factor	1.0	1.0	1.0	1.0	1.0
Sample wt/vol	1.045 LITERS	1.04 LITERS	1.045 LITERS	1.045 LITERS	1.045 LITERS
% Dry					

70\82

METHOD 8270 - TCL SEMI-VOLATILE ORGANICS

Client Sample ID Job No & Lab Sample ID	Matrix Spike Blank A03-C204 A381437901				
Sample Date					
Received Date					
Extraction Date	12/16/2003 07:00				
Analysis Date	12/17/2003 18:21				
Extraction HT Met?	-				
Analytical HT Met?	-				
Sample Matrix	WATER				
Dilution Factor	1.0				
Sample wt/vol	1.0 LITERS				
% Dry					

71\82

METHOD 8270 - TCL SEMI-VOLATILE ORGANICS

Client Sample ID Job No & Lab Sample ID	Method Blank A03-C204 A3B1437902				
Sample Date					
Received Date					
Extraction Date	12/16/2003 07:00				
Analysis Date	12/17/2003 16:48				
Extraction HT Met?	-				
Analytical HT Met?	-				
Sample Matrix	WATER				
Dilution Factor	1.0				
Sample wt/vol	1.0 LITERS				
% Dry					

72\82

ALLIED WASTE INDUSTRIES
SAMPLE CHRONOLOGY

ALLIED - DIESEL RANGE ORGANICS - METHOD 8015B - W

Client Sample ID Job No & Lab Sample ID	DUPLICATE A03-C204 A3C20401	PZ-302-A1 A03-C204 A3C20402	PZ-303-A5 A03-C204 A3C20403	PZ-304-A1 A03-C204 A3C20404	PZ-304-A5 A03-C204 A3C20405
Sample Date	12/11/2003 12:05	12/11/2003 15:25	12/11/2003 12:35	12/11/2003 12:00	12/11/2003 13:10
Received Date	12/15/2003 10:00	12/15/2003 10:00	12/15/2003 10:00	12/15/2003 10:00	12/15/2003 10:00
Extraction Date	12/16/2003 07:00	12/16/2003 07:00	12/16/2003 07:00	12/16/2003 07:00	12/16/2003 07:00
Analysis Date	12/22/2003 15:58	12/22/2003 16:30	12/22/2003 17:01	12/22/2003 17:33	12/22/2003 18:04
Extraction HT Met?	YES	YES	YES	YES	YES
Analytical HT Met?	YES	YES	YES	YES	YES
Sample Matrix	WATER	WATER	WATER	WATER	WATER
Dilution Factor	1.0	1.0	2.0	1.0	1.0
Sample wt/vol	1.045 LITERS	1.03 LITERS	1.035 LITERS	1.04 LITERS	1.01 LITERS
% Dry					

73\82

NA = Not Applicable

ALLIED - DIESEL RANGE ORGANICS - METHOD 8015B - W

Client Sample ID Job No & Lab Sample ID	Matrix Spike Blank A03-C204 A3B1437801	Matrix Spike Blk Dup A03-C204 A3B1437802			
Sample Date					
Received Date					
Extraction Date	12/16/2003 07:00	12/16/2003 07:00			
Analysis Date	12/22/2003 13:21	12/22/2003 13:52			
Extraction HT Met?	-	-			
Analytical HT Met?	-	-			
Sample Matrix	WATER	WATER			
Dilution Factor	1.0	1.0			
Sample wt/vol	1.0 LITERS	1.0 LITERS			
% Dry					

74\82

ALLIED - DIESEL RANGE ORGANICS - METHOD 8015B - W

Client Sample ID Job No & Lab Sample ID	Method Blank A03-C204 A3B1437803				
Sample Date					
Received Date					
Extraction Date	12/16/2003 07:00				
Analysis Date	12/22/2003 14:24				
Extraction HT Met?	-				
Analytical HT Met?	-				
Sample Matrix	WATER				
Dilution Factor	1.0				
Sample wt/vol	1.0 LITERS				
% Dry					

75\82

Date: 01/05/2004 14:28:35
Jobno: A03-C204

ALLIED WASTE INDUSTRIES
SAMPLE CHRONOLOGY

Rept: AN0369

Lab ID	Sample ID	Units	Analyte	Method	Dilution Factor	Sample Date	Receive Date	TCLP Date	THT	Analysis Date	AHT	Matrix
A3C20401	DUPLICATE	MG/L	Arsenic - Total	6010	1.00	12/11/2003 12:05	12/15 10:00	NA	NA	12/22 22:33	Yes	WATER
		MG/L	Iron - Total	6010	1.00	12/11/2003 12:05	12/15 10:00	NA	NA	12/22 22:33	Yes	WATER
		MG/L	Manganese - Total	6010	1.00	12/11/2003 12:05	12/15 10:00	NA	NA	12/22 22:33	Yes	WATER
A3C20402	PZ-302-A1	MG/L	Arsenic - Total	6010	1.00	12/11/2003 15:25	12/15 10:00	NA	NA	12/22 20:45	Yes	WATER
		MG/L	Iron - Total	6010	1.00	12/11/2003 15:25	12/15 10:00	NA	NA	12/22 20:45	Yes	WATER
		MG/L	Manganese - Total	6010	1.00	12/11/2003 15:25	12/15 10:00	NA	NA	12/22 20:45	Yes	WATER
A3C24301	PZ-302-AS	MG/L	Arsenic - Total	6010	1.00	12/15/2003 11:00	12/16 10:15	NA	NA	12/20 20:47	Yes	WATER
		MG/L	Iron - Total	6010	1.00	12/15/2003 11:00	12/16 10:15	NA	NA	12/20 20:47	Yes	WATER
		MG/L	Manganese - Total	6010	1.00	12/15/2003 11:00	12/16 10:15	NA	NA	12/20 20:47	Yes	WATER
A3C20403	PZ-303-AS	MG/L	Arsenic - Total	6010	1.00	12/11/2003 12:35	12/15 10:00	NA	NA	12/22 21:01	Yes	WATER
		MG/L	Iron - Total	6010	1.00	12/11/2003 12:35	12/15 10:00	NA	NA	12/22 21:01	Yes	WATER
		MG/L	Manganese - Total	6010	1.00	12/11/2003 12:35	12/15 10:00	NA	NA	12/22 21:01	Yes	WATER
A3C20404	PZ-304-A1	MG/L	Arsenic - Total	6010	1.00	12/11/2003 12:00	12/15 10:00	NA	NA	12/22 21:06	Yes	WATER
		MG/L	Iron - Total	6010	1.00	12/11/2003 12:00	12/15 10:00	NA	NA	12/22 21:06	Yes	WATER
		MG/L	Manganese - Total	6010	1.00	12/11/2003 12:00	12/15 10:00	NA	NA	12/22 21:06	Yes	WATER
A3C20405	PZ-304-AS	MG/L	Arsenic - Total	6010	1.00	12/11/2003 13:10	12/15 10:00	NA	NA	12/22 21:11	Yes	WATER
		MG/L	Iron - Total	6010	1.00	12/11/2003 13:10	12/15 10:00	NA	NA	12/22 21:11	Yes	WATER
		MG/L	Manganese - Total	6010	1.00	12/11/2003 13:10	12/15 10:00	NA	NA	12/22 21:11	Yes	WATER

7682

AHT = Analysis Holding Time Met
THT = TCLP Holding Time Met
NA = Not Applicable

STL Buffalo

Date: 01/05/2004 14:28:35
Jobno: A03-C204

ALLIED WASTE INDUSTRIES
QC CHRONOLOGY

Rept: AN0369

Lab ID	Sample ID	Units	Analyte	Method	Dilution Factor	Sample Date	Receive Date	TCLP Date	THT	Analysis Date	AHT	Matrix
A3B1441302	Method Blank	MG/L	Arsenic - Total	6010	1.00	-	- 10:00	NA	NA	12/22 19:42	Yes	WATER
		MG/L	Iron - Total	6010	1.00	-	- 10:00	NA	NA	12/22 19:42	Yes	WATER
		MG/L	Manganese - Total	6010	1.00	-	- 10:00	NA	NA	12/22 19:42	Yes	WATER
A3B1447502	Method Blank	MG/L	Arsenic - Total	6010	1.00	-	- 10:15	NA	NA	12/20 19:10	Yes	WATER
		MG/L	Iron - Total	6010	1.00	-	- 10:15	NA	NA	12/20 19:10	Yes	WATER
		MG/L	Manganese - Total	6010	1.00	-	- 10:15	NA	NA	12/20 19:10	Yes	WATER
A3B1441301	LFB	MG/L	Arsenic - Total	6010	1.00	-	- 10:00	NA	NA	12/22 19:47	Yes	WATER
		MG/L	Iron - Total	6010	1.00	-	- 10:00	NA	NA	12/22 19:47	Yes	WATER
		MG/L	Manganese - Total	6010	1.00	-	- 10:00	NA	NA	12/22 19:47	Yes	WATER
A3B1447501	LFB	MG/L	Arsenic - Total	6010	1.00	-	- 10:15	NA	NA	12/20 19:15	Yes	WATER
		MG/L	Iron - Total	6010	1.00	-	- 10:15	NA	NA	12/20 19:15	Yes	WATER
		MG/L	Manganese - Total	6010	1.00	-	- 10:15	NA	NA	12/20 19:15	Yes	WATER

77A82

AHT = Analysis Holding Time Met
THT = TCLP Holding Time Met
NA = Not Applicable

STL Buffalo

Date: 01/05/2004 14:28:38
Jobno: A03-C204

ALLIED WASTE INDUSTRIES
SAMPLE CHRONOLOGY

Rept: ANO369

Lab ID	Sample ID	Units	Analyte	Method	Dilution Factor	Sample Date	Receive Date	TCLP Date	THT	Analysis Date	AHT	Matrix
A3C20401	DUPLICATE	MG/L	Total Dissolved Solids	160.1	1.00	12/11/2003 12:05	12/15 10:00	NA	NA	12/17 12:00	Yes	WATER
		MG/L	Chloride	9056	5.00	12/11/2003 12:05	12/15 10:00	NA	NA	12/30	Yes	WATER
		MG/L	Fluoride	9056	2.00	12/11/2003 12:05	12/15 10:00	NA	NA	12/29 13:40	Yes	WATER
A3C20402	PZ-302-AI	MG/L	Total Dissolved Solids	160.1	1.00	12/11/2003 15:25	12/15 10:00	NA	NA	12/17 12:00	Yes	WATER
		MG/L	Chloride	9056	1.00	12/11/2003 15:25	12/15 10:00	NA	NA	12/29 13:40	Yes	WATER
		MG/L	Fluoride	9056	1.00	12/11/2003 15:25	12/15 10:00	NA	NA	12/29 13:40	Yes	WATER
A3C20403	PZ-303-AS	MG/L	Total Dissolved Solids	160.1	1.00	12/11/2003 12:35	12/15 10:00	NA	NA	12/17 12:00	Yes	WATER
		MG/L	Chloride	9056	2.00	12/11/2003 12:35	12/15 10:00	NA	NA	12/29 13:40	Yes	WATER
		MG/L	Fluoride	9056	2.00	12/11/2003 12:35	12/15 10:00	NA	NA	12/29 13:40	Yes	WATER
A3C20404	PZ-304-AI	MG/L	Total Dissolved Solids	160.1	1.00	12/11/2003 12:00	12/15 10:00	NA	NA	12/17 12:00	Yes	WATER
		MG/L	Chloride	9056	10.00	12/11/2003 12:00	12/15 10:00	NA	NA	12/31 10:21	Yes	WATER
		MG/L	Fluoride	9056	2.00	12/11/2003 12:00	12/15 10:00	NA	NA	12/29 13:40	Yes	WATER
A3C20405	PZ-304-AS	MG/L	Total Dissolved Solids	160.1	1.00	12/11/2003 13:10	12/15 10:00	NA	NA	12/17 12:00	Yes	WATER
		MG/L	Chloride	9056	10.00	12/11/2003 13:10	12/15 10:00	NA	NA	12/31 10:21	Yes	WATER
		MG/L	Fluoride	9056	2.00	12/11/2003 13:10	12/15 10:00	NA	NA	12/29 13:40	Yes	WATER

78\82

AHT = Analysis Holding Time Met
THT = TCLP Holding Time Met
NA = Not Applicable

STL Buffalo

Date: 01/05/2004 14:28:38
Jobno: A03-C204

ALLIED WASTE INDUSTRIES
QC CHRONOLOGY

Rept: AN0369

Lab ID	Sample ID	Units	Analyte	Method	Dilution Factor	Sample Date	Receive Date	TCLP Date	THI	Analysis Date	AHT	Matrix
A3B1447102	Method Blank	MG/L	Total Dissolved Solids	160.1	1.00	-	- 10:00	NA	NA	12/17 12:00	Yes	WATER
A3B1447101	LCS	MG/L	Total Dissolved Solids	160.1	1.00	-	- 10:00	NA	NA	12/17 12:00	Yes	WATER
A3B1486601	LCS	MG/L	Chloride	9056	1.00	-	- 10:00	NA	NA	12/29 13:40	Yes	WATER
		MG/L	Fluoride	9056	1.00	-	- 10:00	NA	NA	12/29 13:40	Yes	WATER
A3B1494001	LCS	MG/L	Chloride	9056	1.00	-	- 10:00	NA	NA	12/30	Yes	WATER
A3B1497101	LCS	MG/L	Chloride	9056	1.00	-	- 10:00	NA	NA	12/31 10:21	Yes	WATER
A3B1486602	Method Blank	MG/L	Chloride	9056	1.00	-	- 10:00	NA	NA	12/29 13:40	Yes	WATER
		MG/L	Fluoride	9056	1.00	-	- 10:00	NA	NA	12/29 13:40	Yes	WATER
A3B1494002	Method Blank	MG/L	Chloride	9056	1.00	-	- 10:00	NA	NA	12/30	Yes	WATER
A3B1497102	Method Blank	MG/L	Chloride	9056	1.00	-	- 10:00	NA	NA	12/31 10:21	Yes	WATER

79\82

AHT = Analysis Holding Time Met
THI = TCLP Holding Time Met
NA = Not Applicable

STL Buffalo

Chain of Custody

Chain of
Custody Record

TRENT SERVICES **Severn Trent Laboratories, Inc.**

STL-4124 (1200)

Client: Herst & Associates	Project Manager: Ward Herst	Date: 12-12-03	Chain of Custody Number: 096660
Address: 4630 S. Hwy 94. N. Outer Rd	Telephone Number (Area Code)/Fax Number: (636) 939-4111 / (636) 939-9757	Lab Number:	Page 1 of 1
City: St. Charles; State: MO; Zip Code: 63304	Site Contact:	Lab Contact: BJF	
Project Name and Location (State): Westlake OU2 Bridgeton, MO	Carrier/Waybill Number:		
Contract/Purchase Order/Quote No.: Westlake OU 2			

Analysis (Attach list if more space is needed)

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	HNO3	VOC	SV	TDS	ICP Metals	Gasoline Range Organics	Diesel Range Organics	Special Instructions/ Conditions of Receipt
P2-304-A1	12-11-03	1200		X			3	2		6			1	X	X	X	X	X	X	
Duplicate	↓	1205		X			3	2		6			1	X	X	X	X	X	X	
P2-304-A5	↓	1310		X			3	2		6			1	X	X	X	X	X	X	
Field Blank	↓	1520		X						4				X						
P2-302-A1	↓	1525		X			3	2		6			1	X	X	X	X	X	X	
P2-303-A5	12-12-03	1235		X			3	2		6			1	X	X	X	X	X	X	VOAs effervesced
TRIP BLANK				X						4				X						sent unpreserved
																				Petroleum odor + sheen

Possible Hazard Identification: ☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal: ☐ Return To Client ☒ Disposal By Lab ☐ Archive For ____ Months (A fee may be assessed if samples are retained longer than 3 months)

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☐ Other ____

QC Requirements (Specify):

	Date	Time		Date	Time
1. Relinquished By: [signature]	12-12-03	1730	1. Received By: Fed EX 8447 7318 5567 / 8447 7318 5579	12-12-03	1730
2. Relinquished By:			2. Received By: [signature] SR	12/13/03	1000
3. Relinquished By:			3. Received By:		

Comments: 2e 2.0 L

DISTRIBUTION: WHITE - Stays with the Sample. CANARY - Returned to Client with Report; PINK - Field Copy

81182

Chain of
Custody Record

TRENT SERVICES **Severn Trent Laboratories, Inc.**

STL-4124 (1200)

Client: Herst & Associates	Project Manager: Ward Herst	Date: 12-15-03	Chain of Custody Number: 096661
Address: 4630 S. Hwy 94 N Outer Rd	Telephone Number (Area Code)/Fax Number: (636) 939-9111 / (636) 939-9757		Lab Number:
City: St. Charles; State: MO; Zip Code: 63304	Site Contact:	Lab Contact:	Page 1 of 1
Project Name and Location (State): Westlake OU2 Bridgeton, MO	Carrier/Waybill Number:		
Contract/Purchase Order/Quote No.: Westlake OU2			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Air	Aqueous	Sed	Soil	Unpres	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	HNO3	VOC	Gasoline Range Organics	ICP Metals	Special Instructions/ Conditions of Receipt
PZ-302-AS	12-15-03	1100		X						6			1	X	X	X	insufficient volume to collect remainder of bottle set.

Matrix — Containers & Preservatives — Analysis (Attach list if more space is needed)

Possible Hazard Identification: ☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal: ☐ Return To Client ☒ Disposal By Lab ☐ Archive For ____ Months (A fee may be assessed if samples are retained longer than 3 months)

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☐ Other ____

QC Requirements (Specify):

	Date	Time		Date	Time
1. Relinquished By: Timothy J Ewing	12-15-03	1730	1. Received By: Fed Ex 8431 7590 1967	12-15-03	1730
2. Relinquished By:			2. Received By: [signature] STL Burlington	12/16/03	1015
3. Relinquished By:			3. Received By:		

Comments: 2.0°C

DISTRIBUTION: WHITE - Stays with the Sample; CANARY - Returned to Client with Report; PINK - Field Copy

82182

SEVERN TRENT STL

STL Buffalo
10 Hazelwood Drive, Suite 106
Amherst, NY 14228

Tel: 716 691 2600 Fax: 716 691 7991
www.stl-inc.com

ANALYTICAL REPORT

Job#: A04-0408

STL Project#: NY0A862901
Site Name: ALLIED WASTE - WESTLAKE LANDFILL (MO)
Task: Westlake Landfill

*Mr. Ward Herst
Herst & Associates
4630 S. Hwy 94, N. Outer Rd.
St. Charles, MO 63304

STL Buffalo

Brian J. Fischer
Project Manager

01/29/2004

STL Buffalo
Current Certifications

STATE	Program	Cert # / Lab ID
A2LA (ISO 17025)	SDWA, CWA, RCRA	0732-01
Arkansas	SDWA, CWA, RCRA, SOIL	03-054-D/88-0686
California	NELAP CWA, RCRA	01169CA
Canada	GENERAL	SCC 1007-15/108
Connecticut	SDWA, CWA, RCRA, SOIL	PH-0568
Florida	NELAP CWA, RCRA	E87672
Georgia	SDWA	956
Illinois	NELAP SDWA, CWA, RCRA	200003
Kansas	NELAP SDWA, CWA, RCRA	E-10187
Kentucky	SDWA	90029
Kentucky UST	UST	30
Louisiana	NELAP CWA, RCRA	2031
Maine	SDWA, CWA	NY044
Maryland	SDWA	294
Massachusetts	SDWA, CWA	M-NY044
Michigan	SDWA	9937
Minnesota	SDWA, CWA, RCRA	036-999-337
New Hampshire	NELAP SDWA, CWA	233701
New Jersey	SDWA, CWA, RCRA, CLP	NY455
New York	NELAP, AIR, SDWA, CWA, RCRA	10026
North Carolina	CWA	411
North Dakota	SDWA, CWA, RCRA	R-176
Oklahoma	CWA, RCRA	9421
Pennsylvania	Env. Lab Reg.	68-281
South Carolina	RCRA	91013
Tennessee	SDWA	2970
USDA	FOREIGN SOIL PERMIT	S-4650
Virginia	SDWA	278
Washington	CWA, RCRA	C254
West Virginia	CWA	252
Wisconsin	CWA, RCRA	998310390
Wyoming UST	UST	NA

SAMPLE SUMMARY

LAB SAMPLE ID	CLIENT SAMPLE ID	SAMPLED DATE	SAMPLED TIME	RECEIVED DATE	RECEIVED TIME
A4040801	PZ-302-AS	01/12/2004	13:00	01/15/2004	10:30
A4040802	PZ-302-AS	01/12/2004	16:10	01/15/2004	10:30
A4040804	PZ-302-AS	01/13/2004	10:40	01/15/2004	10:30

METHODS SUMMARY

Job#: A04-0408

STL Project#: NY0A862901
Site Name: ALLIED WASTE - WESTLAKE LANDFILL (MO)

PARAMETER	ANALYTICAL METHOD
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS	SW8463 8270
ALLIED - DIESEL RANGE ORGANICS - METHOD 8015B - W	SW8463 8015B
Chloride	SW8463 9056
Fluoride	SW8463 9056
Total Dissolved Solids	CFR136 160.1

References:

CFR136 Guidelines Establishing Test Procedures for the Analysis of Pollutants Under the Clean Water Act, and Appendix A-C; 40 CFR Part 136, USEPA Office of Water.

SW8463 "Test Methods for Evaluating Solid Waste Physical/Chemical Methods (SW846), Third Edition, 9/86; Update I, 7/92; Update IIA, 8/93; Update II, 9/94; Update IIB, 1/95; Update III, 12/96.

NON-CONFORMANCE SUMMARY

Job#: A04-0408

STL Project#: NY0A862901
Site Name: ALLIED WASTE - WESTLAKE LANDFILL (MO)

General Comments

The enclosed data have been reported utilizing data qualifiers (Q) as defined on the Data Comment Page.

Soil, sediment and sludge sample results are reported on "dry weight" basis unless otherwise noted in this data package.

According to 40CFR Part 136.3, pH, Chlorine Residual and Dissolved Oxygen analyses are to be performed immediately after aqueous sample collection. When these parameters are not indicated as field (e.g. pH-Field), they were not analyzed immediately, but as soon as possible after laboratory receipt.

Sample dilutions were performed as indicated on the attached Dilution Log. The rationale for dilution is specified by the 3-digit code and definition.

Sample Receipt Comments

A04-0408
Sample Cooler(s) were received at the following temperature(s); 2.0 °C
All samples were received in good condition.

GC/MS Semivolatile Data

No deviations from protocol were encountered during the analytical procedures.

GC Extractable Data

No deviations from protocol were encountered during the analytical procedures.

Wet Chemistry Data

No deviations from protocol were encountered during the analytical procedures.

****

The results presented in this report relate only to the analytical testing and condition of the sample at receipt. This report pertains to only those samples actually tested. All pages of this report are integral parts of the analytical data. Therefore, this report should be reproduced only in its entirety.

DATA COMMENT PAGE

ORGANIC DATA QUALIFIERS

ND or U Indicates compound was analyzed for, but not detected at or above the reporting limit.

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

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

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

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

D This flag identifies all compounds identified in an analysis at the secondary dilution factor.

N Indicates presumptive evidence of a compound. This flag is used only for tentatively identified compounds, where the identification is based on the Mass Spectral library search. It is applied to all TIC results.

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

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

1 Indicates coelution.

* Indicates analysis is not within the quality control limits.

INORGANIC DATA QUALIFIERS

ND or U Indicates element was analyzed for, but not detected at or above the reporting limit.

J or B Indicates a value greater than or equal to the instrument detection limit, but less than the quantitation limit.

N Indicates spike sample recovery is not within the quality control limits.

K Indicates the post digestion spike recovery is not within the quality control limits.

S Indicates value determined by the Method of Standard Addition.

M Indicates duplicate injection results exceeded quality control limits.

W Post digestion spike for Furnace AA analysis is out of quality control limits (85-115%) while sample absorbance is less than 50% of spike absorbance.

E Indicates a value estimated or not reported due to the presence of interferences.

H Indicates analytical holding time exceedance. The value obtained should be considered an estimate.

* Indicates analysis is not within the quality control limits.

+ Indicates the correlation coefficient for the Method of Standard Addition is less than 0.995.

Sample Data Package

Date: 01/29/2004
Time: 11:58:20

ALLIED WASTE - WESTLAKE LANDFILL (MO)
Westlake Landfill
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS

Rept: AN0326

Client ID		PZ-302-AS							
Job No	Lab ID	A04-0408	A4040801						
Sample Date		01/12/2004							
Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
Phenol	UG/L	ND	10	NA		NA		NA	
Bis(2-chloroethyl) ether	UG/L	ND	10	NA		NA		NA	
2-Chlorophenol	UG/L	ND	10	NA		NA		NA	
2-Methylphenol	UG/L	ND	10	NA		NA		NA	
2,2'-Oxybis(1-chloropropane)	UG/L	ND	10	NA		NA		NA	
4-Methylphenol	UG/L	ND	10	NA		NA		NA	
N-Nitroso-Di-n-propylamine	UG/L	ND	10	NA		NA		NA	
Hexachloroethane	UG/L	ND	10	NA		NA		NA	
Nitrobenzene	UG/L	ND	10	NA		NA		NA	
Isophorone	UG/L	ND	10	NA		NA		NA	
2-Nitrophenol	UG/L	ND	10	NA		NA		NA	
2,4-Dimethylphenol	UG/L	ND	10	NA		NA		NA	
Bis(2-chloroethoxy) methane	UG/L	ND	10	NA		NA		NA	
2,4-Dichlorophenol	UG/L	ND	10	NA		NA		NA	
Naphthalene	UG/L	ND	10	NA		NA		NA	
4-Chloroaniline	UG/L	ND	10	NA		NA		NA	
Hexachlorobutadiene	UG/L	ND	10	NA		NA		NA	
4-Chloro-3-methylphenol	UG/L	ND	10	NA		NA		NA	
2-Methylnaphthalene	UG/L	ND	10	NA		NA		NA	
Hexachlorocyclopentadiene	UG/L	ND	23	NA		NA		NA	
2,4,6-Trichlorophenol	UG/L	ND	10	NA		NA		NA	
2,4,5-Trichlorophenol	UG/L	ND	10	NA		NA		NA	
2-Chloronaphthalene	UG/L	ND	10	NA		NA		NA	
2-Nitroaniline	UG/L	ND	48	NA		NA		NA	
Dimethyl phthalate	UG/L	ND	10	NA		NA		NA	
Acenaphthylene	UG/L	ND	10	NA		NA		NA	
3-Nitroaniline	UG/L	ND	48	NA		NA		NA	
Acenaphthene	UG/L	ND	10	NA		NA		NA	
2,4-Dinitrophenol	UG/L	ND	48	NA		NA		NA	
4-Nitrophenol	UG/L	ND	48	NA		NA		NA	
Dibenzofuran	UG/L	ND	10	NA		NA		NA	
2,4-Dinitrotoluene	UG/L	ND	10	NA		NA		NA	
Diethyl phthalate	UG/L	ND	10	NA		NA		NA	
4-Chlorophenyl phenyl ether	UG/L	ND	10	NA		NA		NA	
Fluorene	UG/L	ND	10	NA		NA		NA	
4-Nitroaniline	UG/L	ND	48	NA		NA		NA	
4,6-Dinitro-2-methylphenol	UG/L	ND	48	NA		NA		NA	
N-nitrosodiphenylamine	UG/L	ND	10	NA		NA		NA	
4-Bromophenyl phenyl ether	UG/L	ND	10	NA		NA		NA	
Hexachlorobenzene	UG/L	ND	10	NA		NA		NA	
Pentachlorophenol	UG/L	ND	48	NA		NA		NA	
Phenanthrene	UG/L	ND	10	NA		NA		NA	
Anthracene	UG/L	ND	10	NA		NA		NA	

8/35

NA = Not Applicable ND = Not Detected

SEL Buffalo

Date: 01/29/2004
Time: 11:58:20

ALLIED WASTE - WESTLAKE LANDFILL (MO)
Westlake Landfill
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS

Rept: AM0326

Client ID		PZ-302-AS							
Job No / Lab ID		A04-0408	A4040801						
Sample Date		01/12/2004							
Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
Di-n-butyl phthalate	UG/L	ND	10	NA		NA		NA	
Fluoranthene	UG/L	ND	10	NA		NA		NA	
Pyrene	UG/L	ND	10	NA		NA		NA	
Butyl benzyl phthalate	UG/L	ND	10	NA		NA		NA	
3,3'-Dichlorobenzidine	UG/L	ND	19	NA		NA		NA	
Benzo(a)anthracene	UG/L	ND	10	NA		NA		NA	
Chrysene	UG/L	ND	10	NA		NA		NA	
Bis(2-ethylhexyl) phthalate	UG/L	ND	10	NA		NA		NA	
Di-n-octyl phthalate	UG/L	ND	10	NA		NA		NA	
Benzo(b)fluoranthene	UG/L	ND	10	NA		NA		NA	
Benzo(k)fluoranthene	UG/L	ND	10	NA		NA		NA	
Benzo(a)pyrene	UG/L	ND	10	NA		NA		NA	
Indeno(1,2,3-cd)pyrene	UG/L	ND	10	NA		NA		NA	
Dibenzo(a,h)anthracene	UG/L	ND	10	NA		NA		NA	
Benzo(ghi)perylene	UG/L	ND	10	NA		NA		NA	
2,6-Dinitrotoluene	UG/L	ND	10	NA		NA		NA	
IS/SURROGATE(S)									
1,4-Dichlorobenzene-D4	%	86	50-200	NA		NA		NA	
Naphthalene-D8	%	91	50-200	NA		NA		NA	
Acenaphthene-D10	%	91	50-200	NA		NA		NA	
Phenanthrene-D10	%	88	50-200	NA		NA		NA	
Chrysene-D12	%	89	50-200	NA		NA		NA	
Perylene-D12	%	93	50-200	NA		NA		NA	
Nitrobenzene-D5	%	88	37-120	NA		NA		NA	
2-Fluorobiphenyl	%	100	47-120	NA		NA		NA	
p-Terphenyl-d14	%	97	31-154	NA		NA		NA	
Phenol-D5	%	31	10-110	NA		NA		NA	
2-Fluorophenol	%	48	18-120	NA		NA		NA	
2,4,6-Tribromophenol	%	110	41-149	NA		NA		NA	

9/35

NA = Not Applicable ND = Not Detected

STL Buffalo

Date: 01/29/2004
Time: 11:58:23

ALLIED WASTE - WESTLAKE LANDFILL (MO)
Westlake Landfill
ALLIED - DIESEL RANGE ORGANICS - METHOD 8015B - W

Rept: AN0326

Client ID		PZ-302-AS							
Job No / Lab ID		A04-0408	A4040802						
Sample Date		01/12/2004							
Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
Diesel Range Organics	MG/L	ND	0.50	NA		NA		NA	
SURROGATE(S)									
o-Terphenyl	%	101	27-153	NA		NA		NA	

NA = Not Applicable ND = Not Detected

SIL Buffalo

Date: 01/29/2004
Time: 11:58:27

ALLIED WASTE - WESTLAKE LANDFILL (MO)
Westlake Landfill
WET CHEMISTRY ANALYSIS

Rept: AN0326

Client ID		PZ-302-AS							
Job No	Lab ID	A04-0408	A4040804						
Sample Date		01/13/2004							
Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
Chloride	MG/L	54.0	0.50	NA		NA		NA	
Fluoride	MG/L	0.40	0.050	NA		NA		NA	
Total Dissolved Solids	MG/L	927	10	NA		NA		NA	

NA = Not Applicable ND = Not Detected

STL Buffalo

Chronology and QC Summary Package

Date: 01/29/2004
Time: 11:58:39

ALLIED WASTE - WESTLAKE LANDFILL (MO)
Westlake Landfill
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS

Rept: AN0326

Client ID		3 Blank							
Job No	Lab ID	A04-0408	A4B0482602						
Sample Date									
Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
Phenol	UG/L	ND	10	NA		NA		NA	
Bis(2-chloroethyl) ether	UG/L	ND	10	NA		NA		NA	
2-Chlorophenol	UG/L	ND	10	NA		NA		NA	
2-Methylphenol	UG/L	ND	10	NA		NA		NA	
2,2'-Oxybis(1-Chloropropane)	UG/L	ND	10	NA		NA		NA	
4-Methylphenol	UG/L	ND	10	NA		NA		NA	
N-Nitroso-Di-n-propylamine	UG/L	ND	10	NA		NA		NA	
Hexachloroethane	UG/L	ND	10	NA		NA		NA	
Nitrobenzene	UG/L	ND	10	NA		NA		NA	
Isophorone	UG/L	ND	10	NA		NA		NA	
2-Nitrophenol	UG/L	ND	10	NA		NA		NA	
2,4-Dimethylphenol	UG/L	ND	10	NA		NA		NA	
Bis(2-chloroethoxy) methane	UG/L	ND	10	NA		NA		NA	
2,4-Dichlorophenol	UG/L	ND	10	NA		NA		NA	
Naphthalene	UG/L	ND	10	NA		NA		NA	
4-Chloroaniline	UG/L	ND	10	NA		NA		NA	
Hexachlorobutadiene	UG/L	ND	10	NA		NA		NA	
4-Chloro-3-methylphenol	UG/L	ND	10	NA		NA		NA	
2-Methylnaphthalene	UG/L	ND	10	NA		NA		NA	
Hexachlorocyclopentadiene	UG/L	ND	24	NA		NA		NA	
2,4,6-Trichlorophenol	UG/L	ND	10	NA		NA		NA	
2,4,5-Trichlorophenol	UG/L	ND	10	NA		NA		NA	
2-Chloronaphthalene	UG/L	ND	10	NA		NA		NA	
2-Nitroaniline	UG/L	ND	50	NA		NA		NA	
Dimethyl phthalate	UG/L	ND	10	NA		NA		NA	
Acenaphthylene	UG/L	ND	10	NA		NA		NA	
3-Nitroaniline	UG/L	ND	50	NA		NA		NA	
Acenaphthene	UG/L	ND	10	NA		NA		NA	
2,4-Dinitrophenol	UG/L	ND	50	NA		NA		NA	
4-Nitrophenol	UG/L	ND	50	NA		NA		NA	
Dibenzofuran	UG/L	ND	10	NA		NA		NA	
2,4-Dinitrotoluene	UG/L	ND	10	NA		NA		NA	
Diethyl phthalate	UG/L	ND	10	NA		NA		NA	
4-Chlorophenyl phenyl ether	UG/L	ND	10	NA		NA		NA	
Fluorene	UG/L	ND	10	NA		NA		NA	
4-Nitroaniline	UG/L	ND	50	NA		NA		NA	
4,6-Dinitro-2-methylphenol	UG/L	ND	50	NA		NA		NA	
N-nitrosodiphenylamine	UG/L	ND	10	NA		NA		NA	
4-Bromophenyl phenyl ether	UG/L	ND	10	NA		NA		NA	
Hexachlorobenzene	UG/L	ND	10	NA		NA		NA	
Pentachlorophenol	UG/L	ND	50	NA		NA		NA	
Phenanthrene	UG/L	ND	10	NA		NA		NA	
Anthracene	UG/L	ND	10	NA		NA		NA	

NA = Not Applicable ND = Not Detected

STL Buffalo

Date: 01/29/2004
Time: 11:58:39

ALLIED WASTE - WESTLAKE LANDFILL (MO)
Westlake Landfill
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS

Rept: AN0326

Client ID		S Blank							
Job No / Lab ID		A04-0408	A4B0682602						
Sample Date									
Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
Di-n-butyl phthalate	UG/L	ND	10	NA		NA		NA	
Fluoranthene	UG/L	ND	10	NA		NA		NA	
Pyrene	UG/L	ND	10	NA		NA		NA	
Butyl benzyl phthalate	UG/L	ND	10	NA		NA		NA	
3,3'-Dichlorobenzidine	UG/L	ND	20	NA		NA		NA	
Benzo(a)anthracene	UG/L	ND	10	NA		NA		NA	
Chrysene	UG/L	ND	10	NA		NA		NA	
Bis(2-ethylhexyl) phthalate	UG/L	ND	10	NA		NA		NA	
Di-n-octyl phthalate	UG/L	ND	10	NA		NA		NA	
Benzo(b)fluoranthene	UG/L	ND	10	NA		NA		NA	
Benzo(k)fluoranthene	UG/L	ND	10	NA		NA		NA	
Benzo(a)pyrene	UG/L	ND	10	NA		NA		NA	
Indeno(1,2,3-cd)pyrene	UG/L	ND	10	NA		NA		NA	
Dibenzo(a,h)anthracene	UG/L	ND	10	NA		NA		NA	
Benzo(ghi)perylene	UG/L	ND	10	NA		NA		NA	
2,6-Dinitrotoluene	UG/L	ND	10	NA		NA		NA	
==IS/SURROGATE(S)==									
1,4-Dichlorobenzene-D4	%	92	50-200	NA		NA		NA	
Naphthalene-D8	%	93	50-200	NA		NA		NA	
Acenaphthene-D10	%	91	50-200	NA		NA		NA	
Phenanthrene-D10	%	94	50-200	NA		NA		NA	
Chrysene-D12	%	87	50-200	NA		NA		NA	
Perylene-D12	%	102	50-200	NA		NA		NA	
Nitrobenzene-D5	%	88	37-120	NA		NA		NA	
2-Fluorobiphenyl	%	97	47-120	NA		NA		NA	
p-Terphenyl-d14	%	120	31-154	NA		NA		NA	
Phenol-D5	%	36	10-110	NA		NA		NA	
2-Fluorophenol	%	53	10-120	NA		NA		NA	
2,4,6-Tribromophenol	%	108	41-149	NA		NA		NA	

14/35

NA = Not Applicable ND = Not Detected

STL Buffalo

Date: 01/29/2004
Time: 11:58:39

ALLIED WASTE - WESTLAKE LANDFILL (MO)
Westlake Landfill
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS

Rept: AN0326

Client ID		Matrix Spike Blank							
Job No / Lab ID		A04-0408	A480482601						
Sample Date									
Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
Phenol	UG/L	34	10	NA		NA		NA	
Bis(2-chloroethyl) ether	UG/L	85	10	NA		NA		NA	
2-Chlorophenol	UG/L	81	10	NA		NA		NA	
2-Methylphenol	UG/L	81	10	NA		NA		NA	
2,2'-Oxybis(1-Chloropropane)	UG/L	86	10	NA		NA		NA	
4-Methylphenol	UG/L	77	10	NA		NA		NA	
N-Nitroso-Di-n-propylamine	UG/L	93	10	NA		NA		NA	
Hexachloroethane	UG/L	65	10	NA		NA		NA	
Nitrobenzene	UG/L	89	10	NA		NA		NA	
Isophorone	UG/L	92	10	NA		NA		NA	
2-Nitrophenol	UG/L	95	10	NA		NA		NA	
2,4-Dimethylphenol	UG/L	96	10	NA		NA		NA	
Bis(2-chloroethoxy) methane	UG/L	92	10	NA		NA		NA	
2,4-Dichlorophenol	UG/L	99	10	NA		NA		NA	
Naphthalene	UG/L	86	10	NA		NA		NA	
4-Chloroaniline	UG/L	97	10	NA		NA		NA	
Hexachlorobutadiene	UG/L	76	10	NA		NA		NA	
4-Chloro-3-methylphenol	UG/L	100	10	NA		NA		NA	
2-Methylnaphthalene	UG/L	92	10	NA		NA		NA	
Hexachlorocyclopentadiene	UG/L	45	24	NA		NA		NA	
2,4,6-Trichlorophenol	UG/L	100	10	NA		NA		NA	
2,4,5-Trichlorophenol	UG/L	100	10	NA		NA		NA	
2-Chloronaphthalene	UG/L	94	10	NA		NA		NA	
2-Nitroaniline	UG/L	100	50	NA		NA		NA	
Dimethyl phthalate	UG/L	100	10	NA		NA		NA	
Acenaphthylene	UG/L	98	10	NA		NA		NA	
3-Nitroaniline	UG/L	110	50	NA		NA		NA	
Acenaphthene	UG/L	97	10	NA		NA		NA	
2,4-Dinitrophenol	UG/L	100	50	NA		NA		NA	
4-Nitrophenol	UG/L	ND	50	NA		NA		NA	
Dibenzofuran	UG/L	97	10	NA		NA		NA	
2,4-Dinitrotoluene	UG/L	100	10	NA		NA		NA	
Diethyl phthalate	UG/L	100	10	NA		NA		NA	
4-Chlorophenyl phenyl ether	UG/L	97	10	NA		NA		NA	
Fluorene	UG/L	100	10	NA		NA		NA	
4-Nitroaniline	UG/L	110	50	NA		NA		NA	
4,6-Dinitro-2-methylphenol	UG/L	110	50	NA		NA		NA	
N-nitrosodiphenylamine	UG/L	97	10	NA		NA		NA	
4-Bromophenyl phenyl ether	UG/L	100	10	NA		NA		NA	
Hexachlorobenzene	UG/L	100	10	NA		NA		NA	
Pentachlorophenol	UG/L	120	50	NA		NA		NA	
Phenanthrene	UG/L	100	10	NA		NA		NA	
Anthracene	UG/L	100	10	NA		NA		NA	

NA = Not Applicable ND = Not Detected

STL Buffalo

Date: 01/29/2004
Time: 11:58:39

ALLIED WASTE - WESTLAKE LANDFILL (MO)
Westlake Landfill
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS

Rept: AN0526

Client ID		Matrix Spike Blank							
Job No / Lab ID		A04-0408	A4B0482601						
Sample Date									
Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
Di-n-butyl phthalate	UG/L	100	10	NA		NA		NA	
Fluoranthene	UG/L	100	10	NA		NA		NA	
Pyrene	UG/L	110	10	NA		NA		NA	
Butyl benzyl phthalate	UG/L	110	10	NA		NA		NA	
3,3'-Dichlorobenzidine	UG/L	110	20	NA		NA		NA	
Benzo(a)anthracene	UG/L	100	10	NA		NA		NA	
Chrysene	UG/L	95	10	NA		NA		NA	
Bis(2-ethylhexyl) phthalate	UG/L	100	10	NA		NA		NA	
Di-n-octyl phthalate	UG/L	110	10	NA		NA		NA	
Benzo(b)fluoranthene	UG/L	100	10	NA		NA		NA	
Benzo(k)fluoranthene	UG/L	100	10	NA		NA		NA	
Benzo(a)pyrene	UG/L	100	10	NA		NA		NA	
Indeno(1,2,3-cd)pyrene	UG/L	110	10	NA		NA		NA	
Dibenzo(a,h)anthracene	UG/L	100	10	NA		NA		NA	
Benzo(ghi)perylene	UG/L	120	10	NA		NA		NA	
2,6-Dinitrotoluene	UG/L	100	10	NA		NA		NA	
IS/SURROGATE(S)									
1,4-Dichlorobenzene-D4	%	94	50-200	NA		NA		NA	
Naphthalene-D8	%	95	50-200	NA		NA		NA	
Acenaphthene-D10	%	94	50-200	NA		NA		NA	
Phenanthrene-D10	%	92	50-200	NA		NA		NA	
Chrysene-D12	%	92	50-200	NA		NA		NA	
Perylene-D12	%	97	50-200	NA		NA		NA	
Nitrobenzene-D5	%	89	37-120	NA		NA		NA	
2-Fluorobiphenyl	%	98	47-120	NA		NA		NA	
p-Terphenyl-d14	%	109	31-154	NA		NA		NA	
Phenol-D5	%	36	10-110	NA		NA		NA	
2-Fluorophenol	%	52	18-120	NA		NA		NA	
2,4,6-Tribromophenol	%	109	41-149	NA		NA		NA	

NA = Not Applicable ND = Not Detected

STL Buffalo

Date: 01/29/2004
Time: 11:58:43

ALLIED WASTE - WESTLAKE LANDFILL (MO)
Westlake Landfill
ALLIED - DIESEL RANGE ORGANICS - METHOD 8015B - W

Rept: AN0326

Client ID Job No Sample Date	Lab ID	Method Blank A04-0408	A480482903						
Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
Diesel Range Organics	MG/L	ND	0.50	NA		NA		NA	
SURROGATE(S)									
o-Terphenyl	%	70	27-153	NA		NA		NA	

NA = Not Applicable ND = Not Detected

STL Buffalo

Date: 01/29/2004
Time: 11:58:43

ALLIED WASTE - WESTLAKE LANDFILL (MO)
Westlake Landfill
ALLIED - DIESEL RANGE ORGANICS - METHOD 8015B - W

Rept: AN0326

Client ID Job No Sample Date	Lab ID	Matrix Spike Blank A04-0408	A480482901	Matrix Spike Blk Dup A04-0408	A480482902				
Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
Diesel Range Organics	MG/L	1.1	0.50	1.5	0.50	NA		NA	
SURROGATE(S)									
o-terphenyl	%	61	27-153	80	27-153	NA		NA	

18/35

NA - Not Applicable ND - Not Detected

STL Buffalo

Date: 01/29/2004
Time: 11:58:47

ALLIED WASTE - WESTLAKE LANDFILL (MO)
Westlake Landfill
WET CHEMISTRY ANALYSIS

Rept: AN0326

Client ID / Job No / Sample Date / Lab ID		Method Blank A04-0408 A480481902		Method Blank A04-0408 A480494802					
Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
Total Dissolved Solids	MG/L	ND	10	NA		NA		NA	
Chloride	MG/L	NA		ND	0.50	NA		NA	
Fluoride	MG/L	NA		ND	0.050	NA		NA	

NA = Not Applicable ND = Not Detected

STL Buffalo

Date: 01/29/2004
Time: 11:58:47

ALLIED WASTE - WESTLAKE LANDFILL (MO)
Westlake Landfill
WET CHEMISTRY ANALYSIS

Rept: AN0326

Client ID Job No Sample Date	Lab ID	LCS A04-0408	A480481901	LCS A04-0408	A480494801				
Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
Total Dissolved Solids	MG/L	509	10	NA		NA		NA	
Chloride	MG/L	NA		9.6	0.50	NA		NA	
Fluoride	MG/L	NA		0.96	0.050	NA		NA	

20/35

NA = Not Applicable ND = Not Detected

STL Buffalo

Date : 01/29/2004 11:58:55
Job No: R04-0408

ALLIED WASTE INDUSTRIES
WESTLAKE LANDFILL

Rept: AN0364

Client Sample ID: S Blank
Lab Sample ID: A4B0482602

Matrix Spike Blank
A4B0482601

Analyte	Units of Measure	Concentration Blank Spike	Spike Amount	% Recovery Blank Spike	QC LIMITS
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS					
Acenaphthene	UG/L	96.6	100	97	52-120
Acenaphthylene	UG/L	98.4	100	98	57-120
Anthracene	UG/L	101	100	102	71-126
Benzo(a)anthracene	UG/L	104	100	104	74-133
Benzo(b)fluoranthene	UG/L	100	100	101	62-138
Benzo(k)fluoranthene	UG/L	104	100	104	63-136
Benzo(ghi)perylene	UG/L	117	100	117	42-160
Benzo(a)pyrene	UG/L	102	100	103	72-126
Bis(2-chloroethoxy) methane	UG/L	92.0	100	92	57-120
Bis(2-chloroethyl) ether	UG/L	85.4	100	85	47-120
2,2'-Oxybis(1-chloropropane)	UG/L	86.4	100	86	39-120
Bis(2-ethylhexyl) phthalate	UG/L	104	100	104	64-185
4-Bromophenyl phenyl ether	UG/L	104	100	104	66-130
Butyl benzyl phthalate	UG/L	107	100	108	64-144
4-Chloroaniline	UG/L	97.3	100	97	57-125
4-Chloro-3-methylphenol	UG/L	104	100	104	53-123
2-Chloronaphthalene	UG/L	93.7	100	94	49-112
2-Chlorophenol	UG/L	81.2	100	81	40-120
4-Chlorophenyl phenyl ether	UG/L	97.2	100	97	59-125
Chrysene	UG/L	95.1	100	95	76-133
Dibenzo(a,h)anthracene	UG/L	101	100	102	50-148
Dibenzofuran	UG/L	96.9	100	97	59-120
Di-n-butyl phthalate	UG/L	105	100	104	68-136
3,3'-Dichlorobenzidine	UG/L	112	100	112	63-160
2,4-Dichlorophenol	UG/L	99.2	100	99	57-120
Diethyl phthalate	UG/L	102	100	102	68-160
2,4-Dimethylphenol	UG/L	96.4	100	96	53-124
Dimethyl phthalate	UG/L	102	100	102	70-132
4,6-Dinitro-2-methylphenol	UG/L	111	100	112	56-144
2,4-Dinitrophenol	UG/L	102	100	103	32-147
2,4-Dinitrotoluene	UG/L	100	100	100	52-130
2,6-Dinitrotoluene	UG/L	102	100	102	74-135
Di-n-octyl phthalate	UG/L	112	100	112	68-153
Fluoranthene	UG/L	105	100	106	67-134
Fluorene	UG/L	100	100	101	61-123
Hexachlorobenzene	UG/L	101	100	101	39-132
Hexachlorobutadiene	UG/L	76.0	100	76	10-120
Hexachlorocyclopentadiene	UG/L	44.6	100	45	4-120
Hexachloroethane	UG/L	65.4	100	65	10-120
Indeno(1,2,3-cd)pyrene	UG/L	112	100	112	52-148
Isophorone	UG/L	91.6	100	92	44-120
2-Methylnaphthalene	UG/L	92.1	100	92	41-120
2-Methylphenol	UG/L	81.3	100	81	28-125

21/35

* Indicates Result is outside QC Limits
NC = Not Calculated ND = Not Detected

STL Buffalo

Client Sample ID: S Blank — Matrix Spike Blank
Lab Sample ID: A4B0482602 — A4B0482601

Analyte	Units of Measure	Concentration Blank Spike	Concentration Spike Amount	% Recovery Blank Spike	QC LIMITS
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS					
4-Methylphenol	UG/L	77.1	100	77	23-120
Naphthalene	UG/L	86.0	100	86	38-120
2-Nitroaniline	UG/L	105	100	105	59-153
3-Nitroaniline	UG/L	108	100	109	70-143
4-Nitroaniline	UG/L	111	100	111	71-142
Nitrobenzene	UG/L	89.1	100	89	38-120
2-Nitrophenol	UG/L	92.8	100	93	54-120
4-Nitrophenol	UG/L	47.0	100	47	7-120
N-nitrosodiphenylamine	UG/L	96.9	100	97	60-120
N-Nitroso-Di-n-propylamine	UG/L	92.8	100	93	37-120
Pentachlorophenol	UG/L	116	100	117	22-131
Phenanthrene	UG/L	105	100	106	72-128
Phenol	UG/L	34.3	100	34	12-149
Pyrene	UG/L	112	100	112	60-140
2,4,5-Trichlorophenol	UG/L	103	100	104	57-130
2,4,6-Trichlorophenol	UG/L	103	100	103	56-125

* Indicates Result is outside QC Limits
NC = Not Calculated ND = Not Detected

Date : 01/29/2004 11:58:58
Job No: A04-0408

ALLIED WASTE INDUSTRIES
WESTLAKE LANDFILL

Rept: AN0364

Client Sample ID: Method Blank
Lab Sample ID: A480482903

Matrix Spike Blank
A480482901

Matrix Spike Blk Dup
A480482902

Analyte	Units of Measure	Concentration		Spike Amount		% Recovery			% RPD	QC LIMITS	
		Spike Blank	Spike Blank Dup	SB	SBD	SB	SBD	Avg		RPD	REC.
ALLIED - DIESEL RANGE ORGANICS - METHOD											
Diesel Range Organics	MG/L	1.08	1.47	1.50	1.50	72	98	85	30	30.0	53-162

23/35

* Indicates Result is outside QC Limits
NC = Not Calculated ND = Not Detected

STL Buffalo

Client Sample ID: Method Blank LCS
Lab Sample ID: A480481902 A480481901

Analyte	Units of Measure	Concentration Blank Spike	Spike Amount	% Recovery Blank Spike	QC LIMITS
WET CHEMISTRY ANALYSIS					
ALLIED - METHOD 160.1 - TOTAL DISSOLVE	MG/L	509.0	500.0	102	85-115

* Indicates Result is outside QC Limits
NC = Not Calculated ND = Not Detected

Client Sample ID: Method Blank LCS
Lab Sample ID: A480494802 A480494801

Analyte	Units of Measure	Concentration Blank Spike	Spike Amount	% Recovery Blank spike	QC LIMITS
WET CHEMISTRY ANALYSIS					
ALLIED - 9056 CHLORIDE BY IC	MG/L	9.61	10.0	96	90-110
ALLIED - 9056 METHOD 9056 - FLUORIDE	MG/L	0.960	1.00	96	90-110

* Indicates Result is outside QC Limits
NC = Not Calculated ND = Not Detected

ALLIED WASTE INDUSTRIES
SAMPLE CHRONOLOGY

METHOD 8270 - TCL SEMI-VOLATILE ORGANICS

Client Sample ID Job No & Lab Sample ID	PZ-302-AS A04-0408 A4040801				
Sample Date	01/12/2004 13:00				
Received Date	01/15/2004 10:30				
Extraction Date	01/19/2004 07:00				
Analysis Date	01/26/2004 11:07				
Extraction HT Met?	YES				
Analytical HT Met?	YES				
Sample Matrix	WATER				
Dilution Factor	1.0				
Sample wt/vol	1.035 LITERS				
% Dry					

26/35

NA = Not Applicable

METHOD 8270 - TCL SEMI-VOLATILE ORGANICS

Client Sample ID Job No & Lab Sample ID	Matrix Spike Blank A04-0408 A480482601				
Sample Date					
Received Date					
Extraction Date	01/19/2004 07:00				
Analysis Date	01/23/2004 13:50				
Extraction HT Met?	-				
Analytical HT Met?	-				
Sample Matrix	WATER				
Dilution Factor	1.0				
Sample wt/vol	1.0 LITERS				
% Dry					

27/35

NA = Not Applicable

METHOD 8270 - TCL SEMI-VOLATILE ORGANICS

Client Sample ID Job No & Lab Sample ID	S Blank A04-0608 A4B0482602				
Sample Date					
Received Date					
Extraction Date	01/19/2004 07:00				
Analysis Date	01/23/2004 14:17				
Extraction HI Met?	-				
Analytical HI Met?	-				
Sample Matrix	WATER				
Dilution Factor	1.0				
Sample wt/vol	1.0 LITERS				
% Dry					

28/35

ALLIED - DIESEL RANGE ORGANICS - METHOD 8015B - W

Client Sample ID Job No & Lab Sample ID	PI-302-AS A04-0408 A4040802				
Sample Date	01/12/2004 16:10				
Received Date	01/15/2004 10:30				
Extraction Date	01/19/2004 07:00				
Analysis Date	01/20/2004 16:24				
Extraction HI Met?	YES				
Analytical HI Met?	YES				
Sample Matrix	WATER				
Dilution Factor	1.0				
Sample Wt/vol	1.01 LITERS				
% Dry					

29/35

NA = Not Applicable

ALLIED - DIESEL RANGE ORGANICS - METHOD 8015B - W

Client Sample ID Job No & Lab Sample ID	Matrix Spike Blank A04-0408 A4B0482901	Matrix Spike Blk Dup A04-0408 A4B0482902			
Sample Date					
Received Date					
Extraction Date	01/19/2004 07:00	01/19/2004 07:00			
Analysis Date	01/20/2004 14:19	01/20/2004 14:50			
Extraction HT Met?	-	-			
Analytical HT Met?	-	-			
Sample Matrix	WATER	WATER			
Dilution Factor	1.0	1.0			
Sample wt/vol	1.0 LITERS	1.0 LITERS			
% Dry					

NA = Not Applicable

ALLIED - DIESEL RANGE ORGANICS - METHOD 8015B - W

Client Sample ID Job No & Lab Sample ID	Method Blank A04-0408 A4B0482903				
Sample Date					
Received Date					
Extraction Date	01/19/2004 07:00				
Analysis Date	01/20/2004 15:22				
Extraction HT Met?	-				
Analytical HT Met?	-				
Sample Matrix	WATER				
Dilution Factor	1.0				
Sample wt/vol	1.0 LITERS				
% Dry					

31/35

Date: 01/29/2004 11:59:16
Jobno: A04-0408

ALLIED WASTE INDUSTRIES
SAMPLE CHRONOLOGY

Rept: AN0369

Lab ID	Sample ID	Units	Analyte	Method	Dilution Factor	Sample Date	Receive Date	TCLP Date	THT	Analysis Date	AHT	Matrix
A4040804	PZ-30Z-AS	MG/L	Total Dissolved Solids	160.1	1.00	01/13/2004 10:40	01/15 10:30	NA	NA	01/16 13:00	Yes	WATER
		MG/L	Chloride	9056	1.00	01/13/2004 10:40	01/15 10:30	NA	NA	01/20 11:17	Yes	WATER
		MG/L	Fluoride	9056	1.00	01/13/2004 10:40	01/15 10:30	NA	NA	01/20 11:17	Yes	WATER

32/35

AHT = Analysis Holding Time Met
THT = TCLP Holding Time Met
NA = Not Applicable

STL Buffalo

Date: 01/29/2004 11:59:16
Jobno: A04-0408

ALLIED WASTE INDUSTRIES
QC CHRONOLOGY

Rept: AN0369

Lab ID	Sample ID	Units	Analyte	Method	Dilution Factor	Sample Date	Receive Date	ICLP Date	THI	Analysis Date	AHI	Matrix
A480481902	Method Blank	MG/L	Total Dissolved Solids	160.1	1.00	-	- 10:30	NA	NA	01/16 13:00	Yes	WATER
A480481901	LCS	MG/L	Total Dissolved Solids	160.1	1.00	-	- 10:30	NA	NA	01/16 13:00	Yes	WATER
A480494801	LCS	MG/L	Chloride	9056	1.00	-	- 10:30	NA	NA	01/20 11:17	Yes	WATER
		MG/L	Fluoride	9056	1.00	-	- 10:30	NA	NA	01/20 11:17	Yes	WATER
A480494802	Method Blank	MG/L	Chloride	9056	1.00	-	- 10:30	NA	NA	01/20 11:17	Yes	WATER
		MG/L	Fluoride	9056	1.00	-	- 10:30	NA	NA	01/20 11:17	Yes	WATER

AHI = Analysis Holding Time Met
THI = ICLP Holding Time Met
NA = Not Applicable

STL Buffalo

Chain of Custody

Chain of Custody Record

SEVERN TRENT SERVICES **Severn Trent Laboratories, Inc.**

STL-4124 (1200)

Client: Herst & Associates	Project Manager: Ward Herst	Date: 1-13-04	Chain of Custody Number: 096663
Address: 4630 S. Hwy 94 N. Outer Rd	Telephone Number (Area Code)/Fax Number: (636) 939-9111 / (636) 939-9757	Lab Number	Page 1 of 1
City: St. Charles; State: MO; Zip Code: 63304	Site Contact	Lab Contact	
Project Name and Location (State)	Carrier/Waybill Number		
Contract/Purchase Order/Quote No			

Analysis (Attach list if more space is needed): TDS; Diesel Range Organics; Semi-volatile Organics

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sludge	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	TDS	Diesel Range Organics	Semi-volatile Organics	Special Instructions/ Conditions of Receipt
PZ-302-AS	1-12-04	1300		X			1								X	well was slow to recharge; could not collect one bottle at a time that's why there are 4 different times.
		1610		X				1						X		
	1-13-04	0950		X				1						X		
		1040		X			1						X			

Possible Hazard Identification: ☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal: ☐ Return To Client ☒ Disposal By Lab ☐ Archive For ____ Months (A fee may be assessed if samples are retained longer than 3 months)

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☐ Other ____

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By: [signature]	1-13-04	1830	1. Received By: FedEx 8431 7590 1463	1-13-04	1830
2. Relinquished By			2. Received By: [signature] STL Buffalo	01/16/04	1018a
3. Relinquished By			3. Received By		

Comments: 2.0°C

DISTRIBUTION: WHITE - Stays with the Sample, CANARY - Returned to Client with Report; PINK - Field Copy

35/35

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Global Presence
Personal Attention

FIELD INFORMATION LOG Part 1

Facility: West Lake OU2

Location: Bridgeton, MO.

Sample Matrix: Groundwater

Sample Point ID: P2 302 AI

Sampler(s): Shane Tamborski
Tim Ewing

Top of Casing (ft. msl) 451.15

PURGE INFORMATION:

Method of Well Purge: Disposable Bailer

Date/Time Initiated: 12/11/03 1450

Initial Water Level (feet): 23.06

Initial Water Level Previous Event (feet): N/A

Ground Water Elevation (ft. msl): 428.09

Ground Water Elevation Previous Event (ft. msl): N/A

Well Total Depth (feet): 44.16

Well Total Depth Previous Event (feet): N/A

Dedicated Equipment: Yes ____ No X

Casing Diameter (inches): 2"

One Casing Volume (gal): 1vol = 3.44 5vol = 17.2

One Casing Volume Previous Event (gal): ____

Total Volume Purged (gal): s.t. ~~18~~ 19

Purged Dry?: Yes ____ No X

Water Level after Purge (feet): 23.08

Date/Time Completed: 12-11-03 1518

PURGE DATA:

Time	Purge Rate (gpm / Hz)	Cumulative Volume (gal)	Temp (°C)	pH (std units)	Conductivity (uS = umhos/cm)	Turbidity (NTU)	Other	Notes
1502		5	13.6	6.9	1352	20		
1507		10	12.8	6.9	1235	11		
1513		15	13.0	6.8	1227	13		
1518		s.t. ~~18~~ 19	12.9	6.9	1203	6.2		

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FIELD INFORMATION LOG Part 2

SAMPLING INFORMATION:

Sample Point ID: PZ 302 AI

Sampling Method: Disposable Bailer

Dedicated: Yes ____ No X

Water Level @ Sampling (ft): 23.08

Well Collection Sequence #: 3 of 5

Parameters: Annual: ___ Semi-Annual: X Quarterly: ___ Monthly: ___ Other: ___

SAMPLE DATA:

Time & Date	Sample Rate	Temp (°C)	pH (std units)	Conductivity (uS = umhos/cm)	Turbidity (NTU)	Other	Notes
13 1525 12-11-03	VOC: Other:	12.9	6.9	1203	6.2		

INSTRUMENT CALIBRATION DATA: pH Battery changed & recalibrated

Beginning of day: (time) 0850 & 1139

End of day: (time) 1730

Turbidity Serial #: LaMotte 2020

pH Serial #: pH Testr 2 Waterproof

Conductivity Serial #: TDS Testr 20

Purging Event Beginning of day	Purging Event End of day		Sampling Event Beginning of day	Sampling Event End of day	
		NTU std= 1, 10		0996/11	NTU std= 1, 10
1428		uS std= 1413		1401	uS std= 1413
4.0		pH std = 4.0		4.1	pH std = 4.0
7.0		pH std = 7.0		7.0	pH std = 7.0
10.0		pH std = 10.0		10.0	pH std = 10.0

Other Calibration: ____

GENERAL INFORMATION:

Weather Conditions @ Sampling: Sunny 25°F

Sample Characteristics: clear

COMMENTS AND OBSERVATIONS:

Field Blk @ 1520 VOC-VOA only - 4 bottles

Date: 12-11-03 By: Diane Tanbach

Company: Herst & Associates, Inc.

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Global Presence
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FIELD INFORMATION LOG Part 1

Facility: West Lake OU2

Location: Bridgeton, MO.

Sample Matrix: Groundwater

Sample Point ID: PZ 302 A5

Sampler(s): Shane Tamborski
Tim Ewing

Top of Casing (ft, msl) 451.42

PURGE INFORMATION:

Method of Well Purge: Disposable Bailer

Date/Time Initiated: 12-12-03 1125

Initial Water Level (feet): 23.29

Initial Water Level Previous Event (feet): N/A

Ground Water Elevation (ft, msl): 428.13

Ground Water Elevation Previous Event (ft, msl): N/A

Well Total Depth (feet): 24.44

Well Total Depth Previous Event (feet): N/A.

Dedicated Equipment: Yes ____ No X

Casing Diameter (inches): 2"

One Casing Volume (gal): 1vol = .2 5vol = 1gal

One Casing Volume Previous Event (gal): ____

Total Volume Purged (gal): .2

Purged Dry?: Yes X No ____

Water Level after Purge (feet): Dry

Date/Time Completed: 12-12-03 1136

PURGE DATA:

Time	Purge Rate (gpm / Hz)	Cumulative Volume (gal)	Temp (°C)	pH (std units)	Conductivity (uS = umhos/cm)	Turbidity (NTU)	Other	Notes
1136		.2	Well went dry after 1/2 bailer total					
			will check to see if it recharges.					
1324		.4	13.7	6.4	1054	314		w.l. 23.40
		Will try to collect VOA's on Monday						

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FIELD INFORMATION LOG Part 2

SAMPLING INFORMATION: Sample Point ID: PZ 302 AS

Sampling Method: Disposable Bailer Dedicated: Yes ____ No X

Water Level @ Sampling (ft): 23.19 Well Collection Sequence #: 5 of 5

Parameters: Annual: ____ Semi-Annual: X Quarterly: ____ Monthly: ____ Other: ____

SAMPLE DATA:

Time & Date	Sample Rate	Temp (°C)	pH (std units)	Conductivity (uS = umhos/cm)	Turbidity (NTU)	Other	Notes
1100 12-15-03	VOC: Other:	No	readings	collected	@	sampling	

INSTRUMENT CALIBRATION DATA:

Beginning of day: (time) 0810

End of day: (time) 1705

Turbidity Serial # LaMotte 2020

pH Serial #: pH Testr 2 waterproof

Conductivity Serial #: TDS Testr 20

Purging Event Beginning of day	Purging Event End of day		Sampling Event Beginning of day	Sampling Event End of day	
1.2/10	10.63	NTU std= 1, 10			NTU std=
1432	1188 @13.6°C	uS std= 1413			uS std=
4.0	4.3	pH std = 4.0			pH std = 4.0
7.0	6.7	pH std = 7.0			pH std = 7.0
10.0	9.7	pH std = 10.0			pH std = 10.0

Other Calibration: No calibration #'s for 12/15/03 since no readings were collected.

GENERAL INFORMATION:

Weather Conditions @ Sampling: Overcast 1 1/2 inches of snow on ground 35°F

Sample Characteristics: Clear

COMMENTS AND OBSERVATIONS:

No parameters were taken at sampling due to the extremely low volumes.
4- VOC VOA's - HCL
2- Gasoline Range organics - VOA's - HCL
1- 8oz Plastic ICP Metals HNO3 ~~preserv~~ preserved

Date: 12-15-03 By: Shane Tambardi

Company: Herst & Associates, Inc.

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FIELD INFORMATION LOG Part 1

Facility: West Lake OU 2

Location: Bridgeton, MO.

Sample Matrix: Groundwater

Sample Point ID: P2 303 AS

Sampler(s): Shane Tamborski
Tim Ewing

Top of Casing (ft, msl) 453.18

PURGE INFORMATION:

Method of Well Purge: Disposable Bailer

Date/Time Initiated: 12-12-03 1208

Initial Water Level (feet): 25.19

Initial Water Level Previous Event (feet): N/A

Ground Water Elevation (ft, msl): 427.99

Ground Water Elevation Previous Event (ft, msl): N/A

Well Total Depth (feet): 28.02

Well Total Depth Previous Event (feet): N/A

Dedicated Equipment: Yes ____ No X

Casing Diameter (inches): 2"

One Casing Volume (gal): 1vol = .46 5vol = 2.3

One Casing Volume Previous Event (gal): ____

Total Volume Purged (gal): 6

Purged Dry?: Yes ____ No X

Water Level after Purge (feet): 25.13

Date/Time Completed: 12-12-03 1232

PURGE DATA:

Time	Purge Rate (gpm / Hz)	Cumulative Volume (gal)	Temp (°C)	pH (std units)	Conductivity (µS = umhos/cm)	Turbidity (NTU)	Other	Notes Petroleum odor
1216		0	14.8	6.4	1569	11.7		oily sheen on water
								second bailer was
								Blk water
1221		3	15.1	6.4	1309	82.3		water is clearing
1227		4	15.1	6.3	1324	200		some bailers are blk.
1230		5	14.9	6.3	1336	48		
1232		6	14.8	6.3	1357	86		

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FIELD INFORMATION LOG Part 2

SAMPLING INFORMATION:

Sample Point ID: PZ 303 AS

Sampling Method: Disposable Bailer

Dedicated: Yes ____ No X

Water Level @ Sampling (ft): 25.13

Well Collection Sequence #: 4 of 5

Parameters: Annual: ___ Semi-Annual: X Quarterly: ___ Monthly: ___ Other: ___

SAMPLE DATA:

Time & Date	Sample Rate	Temp (°C)	pH (std units)	Conductivity (uS = umhos/cm)	Turbidity (NTU)	Other	Notes
1235 12-12-03	VOC: Other:	14.8	6.3	1357	86		

INSTRUMENT CALIBRATION DATA:

Beginning of day: (time) 0810

End of day: (time) 1705

Turbidity Serial #: La Motte 2020

pH Serial #: pH Testr 2 Waterproof

Conductivity Serial #: TDS Testr 20

Purging Event: Beginning of day	Purging Event: End of day		Sampling Event: Beginning of day	Sampling Event: End of day	
1.2/10	~~1.2~~ 1.10 S.T.	NTU std= ~~1413~~ 1,10 S.T.		10.63	NTU std= 1, 10
1432		uS std= ~~1,10~~ 1413 S.T.		1158 @13.6°C	uS std= 1413
4.0		pH std = 4.0		4.3	pH std = 4.0
7.0		pH std = 7.0		6.7	pH std = 7.0
10.0		pH std = 10.0		9.7	pH std = 10.0

Other Calibration: ____

GENERAL INFORMATION:

Weather Conditions @ Sampling: Sunny 30°F

Sample Characteristics: clear - ~~black~~ w/ a few small floaters

COMMENTS AND OBSERVATIONS:

Petroleum odor and sheen on water
VOA's effervesced - sent unpreserved.

Date: 12-12-03 By: Shane Tamborski

Company: Herst & Associates, Inc.

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FIELD INFORMATION LOG Part 1

Facility: West Lake OU2

Location: Bridgeton, MO.

Sample Matrix: Groundwater

Sample Point ID: P2 304 AI

Sampler(s): Shane Tamborski
Tim Ewing

Top of Casing (ft, msl) 454.02

PURGE INFORMATION:

Method of Well Purge: Bailer Disposable

Date/Time Initiated: 12-11-03 1110

Initial Water Level (feet): 26.09

Initial Water Level Previous Event (feet): N/A

Ground Water Elevation (ft, msl): 427.93

Ground Water Elevation Previous Event (ft, msl): N/A

Well Total Depth (feet): 52.08

Well Total Depth Previous Event (feet): N/A

Dedicated Equipment: Yes ____ No X

Casing Diameter (inches): 2"

One Casing Volume (gal): 1vol = 4.2 5vol = 21

One Casing Volume Previous Event (gal): ____

Total Volume Purged (gal): 21

Purged Dry?: Yes ____ No X

Water Level after Purge (feet): 26.01

Date/Time Completed: 12-11-03 1155

PURGE DATA:

Time	Purge Rate (gpm / Hz)	Cumulative Volume (gal)	Temp (°C)	pH (std units)	Conductivity (uS = umhos/cm)	Turbidity (NTU)	Other	Notes
1128		4	13.9	6.0	1853	45		couple floaters
1133		8	13.8	6.4	1901	40		
1139		12	16.3	5.9	1838	15		pH meter battery changed 4.0, 7.0, 10.0 called.
1148		16	16.5	6.0	1805	17		
1155		21	16.3	6.0	1838	10		

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FIELD INFORMATION LOG Part 2

SAMPLING INFORMATION:

Sample Point ID: PZ 304 A I

Sampling Method: Disposable Bailer

Dedicated: Yes ____ No X

Water Level @ Sampling (ft): 26.01

Well Collection Sequence #: 1 of 5

Parameters: Annual: ___ Semi-Annual: X Quarterly: ___ Monthly: ___ Other: ___

SAMPLE DATA:

Time & Date	Sample Rate	Temp (°C)	pH (std units)	Conductivity (uS = umhos/cm)	Turbidity (NTU)	Other	Notes
1200 12-11-03	VOC: Other:	16.3	6.0	1838	10		

INSTRUMENT CALIBRATION DATA: pH battery changed @ recalibrated

Beginning of day: (time) 0850 113 1139

End of day: (time) 1730

Turbidity Serial #: LaMotte 2020

pH Serial #: pH Testr 2 waterproof

Conductivity Serial #: TDS Testr 20

Purging Event Beginning of day	Purging Event End of day		Sampling Event Beginning of day	Sampling Event End of day	
		NTU std= 1, 10		0.96/11	NTU std= 1, 10
1428		uS std= 1413		1401	uS std= 1413
4.0		pH std = 4.0		4.1	pH std = 4.0
7.0		pH std = 7.0		7.0	pH std = 7.0
10.0		pH std = 10.0		10.0	pH std = 10.0

Other Calibration: ___

GENERAL INFORMATION:

Weather Conditions @ Sampling: Sunny light breeze 30°F

Sample Characteristics: clear

COMMENTS AND OBSERVATIONS:

Duplicate @ 1205 - one VOA had a bubble

Date: 12-11-03 By: Shane Fantanski

Company: Herst & Associates, Inc.

HERST & ASSOCIATES, INC. ®

Global Presence
Personal Attention

FIELD INFORMATION LOG Part 1

Facility: west Lake OU2

Location: Bridgeton, MO.

Sample Matrix: Groundwater

Sample Point ID: PZ 304 AS

Sampler(s): Shane Tamborski
Tim Ewing

Top of Casing (ft, msl) 453.71

PURGE INFORMATION:

Method of Well Purge: Disposable Bailer

Date/Time Initiated: 12-11-03 1248

Initial Water Level (feet): 25.79

Initial Water Level Previous Event (feet): N/A

Ground Water Elevation (ft, msl): 427.92

Ground Water Elevation Previous Event (ft, msl): N/A

Well Total Depth (feet): 29.16

Well Total Depth Previous Event (feet): N/A

Dedicated Equipment: Yes ____ No X

Casing Diameter (inches): 2"

One Casing Volume (gal): 1vol = .55 5vol = 2.75

One Casing Volume Previous Event (gal): ____

Total Volume Purged (gal): 3

Purged Dry?: Yes ____ No X

Water Level after Purge (feet): 25.79

Date/Time Completed: 12-11-03 1305

PURGE DATA:

Time	Purge Rate (gpm / Hz)	Cumulative Volume (gal)	Temp (°C)	pH (std units)	Conductivity (uS = umhos/cm)	Turbidity (NTU)	Other	Notes
1253		.5	15.8	6.6	2.52 mS 2526 uS	20		Some small BIK. floaters
1255		1	15.6	6.7	2.51 mS 2510 uS	21		clearing some
1300		2	15.9	6.7	2.48 mS 2480 uS	22		↓ floaters
1305		3	15.8	6.6	2.45 mS 2450 uS	22		clear

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Global Presence
Personal Attention

FIELD INFORMATION LOG Part 2

SAMPLING INFORMATION:

Sample Point ID: PZ 304 AS

Sampling Method: Disposable Bailer

Dedicated: Yes ____ No X

Water Level @ Sampling (ft): 25.79

Well Collection Sequence #: 2 of 5

Parameters: Annual: ___ Semi-Annual: X Quarterly: ___ Monthly: ___ Other: ___

SAMPLE DATA:

Time & Date	Sample Rate	Temp (°C)	pH (std units)	Conductivity (uS = umhos/cm)	Turbidity (NTU)	Other	Notes
1310 12-11-03	VOC: / Other:	15.8	6.6	2450 us	22		

INSTRUMENT CALIBRATION DATA: pH Battery changed & re calibrated

Beginning of day: (time) 0850 & 1139

End of day: (time) 1730

Turbidity Serial #: La Motte 2020

pH Serial #: pH Testr 2 waterproof

Conductivity Serial #: TDS Testr 20

Purging Event				Sampling Event			
Beginning of day	End of day			Beginning of day	End of day		
			NTU std= 1, 10		0.96/11		NTU std= 1, 10
1428			uS std= 1413		1401		uS std= 1413
4.0			pH std = 4.0		4.1		pH std = 4.0
7.0			pH std = 7.0		7.0		pH std = 7.0
10.0			pH std = 10.0		10.0		pH std = 10.0

Other Calibration: ____

GENERAL INFORMATION:

Weather Conditions @ Sampling: Sunny light Breeze 30°F

Sample Characteristics: Clear

COMMENTS AND OBSERVATIONS:

Date: 12-11-03 By: [signature]

Company: Herst & Associates, Inc.