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

Site: West Lake Landfill
ID: MBD079900932
Break: 10.0
Other: OU2
8-9-04

August 9, 2004

Dear Mr. Wall:

Monthly Progress Report – July 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 July 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.

The first sampling round was completed on November 20 and 21, 2003 and the results summarized in the February 2004 Monthly Progress Report to the EPA. The second round of sampling occurred on May 10 through 12, 2004. Detection monitoring wells were sampled on May 11 and 12, 2004, consistent with the landfill's environmental compliance schedule that specifies semi-annual sampling in

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November and May 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, five supplemental alluvial groundwater samples were collected over the period May 10 and 11, 2004. Figure 1 illustrates the locations of the wells included in the May/June 2004 sampling event.

Detection Monitoring Wells

Table 1 includes a comparison of May 2004 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 and May/June 2004 sampling events. 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 and 2004 compared to 1997 do not affect the ability to draw meaningful conclusions.

The analytical laboratory data package for the May 2004 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 and May 2004 events or the 1997 comparison events.

How about some Hydro

Only one well, PZ-114-AS, yielded detectable concentrations of volatile organic compounds in May 2004. 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 similar 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 May 2004 are 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 May 2004 arsenic results range from less than detection to 0.047 mg/l. No wells yielded a detectable arsenic concentration that was higher in May 2004 than in either of the two 1997 comparison sampling events, although the typical detection monitoring reporting limit of 0.005 mg/l utilized in May 2004 is slightly higher than the 1997 reporting limit (0.002 mg/l). For iron, approximately 50% of the May 2004 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 May 2004 concentrations range from 0.058 mg/l to 76 mg/l. For manganese, the May 2004 concentrations are lower than the 1997 results in 10 of 14 samples (approximately 70%). The 1997 manganese concentrations range from less than detection (<0.01 mg/l) to 87.6 mg/l. The May 2004 manganese concentrations range from less than detection (<0.005 mg/l) to 4.5 mg/l. Based on the metals results, the current groundwater quality is similar to the 1997 groundwater quality.

TDS results from May 2004 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 May 2004 TDS values range from 340 mg/l to 1,400 mg/l. For chloride, the May 2004 results in 10 of the 14 wells (approximately 70%) are slightly lower than at least one of the 1997 results. 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 400 mg/l. Both the 1997 and May 2004 results indicate that one well, PZ-114-AS, exceeds the secondary MCL for chloride of 250 mg/l. Fluoride results from May 2004 were lower than at least one of the 1997 results in 11 of 14 wells (approximately 80%). The 1997 fluoride results range from 0.32 mg/l to 2.3 mg/l, and the May 2004 results range from 0.37 mg/l to 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 May 2004 results for the supplemental alluvial wells to data collected during the remedial investigation, where available.

Of the five supplemental alluvial wells that were 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 May 2004 results were lower than or equal to at least one of the 1997 results in 7 out of 13 instances (approximately 50%). It should be noted that the May 2004 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 May 2004 and 1997. Well PZ-303-AS exhibited low-level SVOCs in May 2004, and exhibited only two of the five SVOCs that had been detected in at least one of the two 1997 sampling events. No SVOCs were detected in May 2004 that had not been detected in 1997.

For the three metals (arsenic, iron, and manganese), May 2004 arsenic concentrations are slightly higher in one of the three wells that also have 1997 data; May 2004 iron concentrations are slightly higher in one of the three wells than in 1997; and, May 2004 manganese concentrations are slightly lower or equal to one of the 1997 results in all three wells. For the three inorganics (TDS, chloride, and fluoride), May 2004 TDS values are lower in one of three wells than in 1997; May 2004 chloride concentrations are lower in one of three wells than in 1997; and, May 2004 fluoride concentrations are lower in all three wells than in 1997. Overall, the metal and inorganic results indicate that May 2004 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.

II. VALIDATED RESULTS RECEIVED

No validated data were received in July.

III. WORK PLANNED DURING AUGUST AND SEPTEMBER 2004.

Preparation of the FS Report will continue in August.

IV. MATERIAL PROBLEMS ENCOUNTERED OR ANTICIPATED MATERIAL DELAYS

No material problems or delays were encountered in July and none are anticipated for August or September.

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
Rod Bloese – Allied
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 May 2004

	Compound	PZ-100-SD February 1997	PZ-100-SD May 1997	PZ-100-SD November 2003	PZ-100-SD May 2004	PZ-100-SS February 1997	PZ-100-SS May 1997	PZ-100-SS November 2003	PZ-100-SS May 2004	PZ-104-SD February 1997	PZ-104-SD May 1997	PZ-104-SD November 2003	PZ-104-SD May 2004
Volatiles	1,2-cis-Dichloroethylene	<0.002	<0.002	<0.005	<0.005	<0.002	<0.002	<0.005	<0.005	<0.002	<0.002	<0.005	<0.005
	1,4-Dichlorobenzene	<0.002	<0.002	<0.005	<0.005	<0.002	<0.002	<0.005	<0.005	<0.002	<0.002	<0.005	<0.005
	Benzene	<0.002	<0.002	<0.005	<0.005	<0.002	<0.002	<0.005	<0.005	<0.002	<0.002	<0.005	<0.005
	Chlorobenzene	<0.002	<0.002	<0.005	<0.005	<0.002	<0.002	<0.005	<0.005	<0.002	<0.002	<0.005	<0.005
	Xylenes (Total)	<0.002	<0.002	<0.005	<0.005	<0.002	<0.002	<0.005	<0.005	<0.002	<0.002	<0.005	<0.005
Metals	Arsenic, Total	0.002	0.002	<0.005	<0.005	<0.002	<0.002	<0.005	<0.005	<0.002	<0.002	<0.005	<0.005
	Iron, Total	1.71	2.09	1.9	2.2	1.95	0.554	0.02	0.058	0.378	0.327	1.1	1.6
	Manganese, Total	0.277	0.332	0.1	0.12	0.75	0.045	0.0084	0.0097	0.14	0.104	0.074	0.074
Inorganics	Chloride	3	<3	<3	<3	6	4	7	6.8	56	52	54	49
	Fluoride	2.02	2.2	2.1	1.9	0.9	0.87	0.76	0.66	0.77	0.88	1.1	0.89
	Total Dissolved Solids (TDS)	412	372	330	340	528	532	500	500	630	638	540	560

	Compound	PZ-104-SS February 1997	PZ-104-SS May 1997	PZ-104-SS November 2003	PZ-104-SS May 2004	PZ-105-SS August 1997	PZ-105-SS November 1997	PZ-105-SS November 2003	PZ-105-SS May 2004	PZ-106-SD February 1997	PZ-106-SD May 1997	PZ-106-SD November 2003	PZ-106-SD May 2004	PZ-106-SS February 1997	PZ-106-SS May 1997	PZ-106-SS November 2003	PZ-106-SS May 2004
Volatiles	1,2-cis-Dichloroethylene	<0.002	<0.002	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.002	<0.002	<0.005	<0.005	<0.002	<0.002	<0.005	<0.005
	1,4-Dichlorobenzene	<0.002	<0.002	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.002	<0.002	<0.005	<0.005	<0.002	<0.002	<0.005	<0.005
	Benzene	<0.002	<0.002	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.002	<0.002	<0.005	<0.005	<0.002	3.1	<0.005	<0.005
	Chlorobenzene	<0.002	<0.002	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.002	<0.002	<0.005	<0.005	<0.002	<0.002	<0.005	<0.005
	Xylenes (Total)	<0.002	0.002	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.002	<0.002	<0.005	<0.005	<0.002	<0.002	<0.005	<0.005
Metals	Arsenic, Total	0.004	<0.002	<0.005	<0.005	0.003	<0.005	<0.005	<0.005	<0.002	0.002	<0.005	<0.005	0.005	0.004	<0.005	<0.005
	Iron, Total	3.05	0.823	3.2	2.6	6.47	4.85	8.1	1.2	0.087	0.133	0.14	2.1	0.188	0.279	1	0.22
	Manganese, Total	0.057	0.064	0.033	0.038	0.24	0.0412	0.051	0.016	0.283	0.257	0.026	0.44	0.025	0.017	0.27	0.013
Inorganics	Chloride	4	5	3.1	3	12	12.5	77	40	24	22	19	18	10	14	7.7	8.1
	Fluoride	0.71	0.81	0.85	0.75	0.87	0.868	0.78	0.74	0.9	1	1.2	0.97	1.86	2	2.1	1.9
	Total Dissolved Solids (TDS)	509	495	410	430	438	442	540	470	665	618	540	560	474	531	440	440

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-109-SS May 2004	PZ-110-SS February 1997	PZ-110-SS May 1997	PZ-110-SS November 2003	PZ-110-SS May 2004	PZ-111-SD February 1997	PZ-111-SD May 1997	PZ-111-SD November 2003	PZ-111-SD May 2004
Volatiles	1,2-cis-Dichloroethylene	<0.005	<0.005	<0.005	<0.005	<0.002	0.0024	<0.005	<0.005	<0.002	<0.002	<0.005	<0.005
	1,4-Dichlorobenzene	<0.005	<0.005	<0.005	<0.005	<0.002	<0.002	<0.005	<0.005	<0.002	<0.002	<0.005	<0.005
	Benzene	<0.005	<0.005	<0.005	<0.005	<0.002	<0.002	<0.005	<0.005	<0.002	0.013	<0.005	<0.005
	Chlorobenzene	<0.005	<0.005	<0.005	<0.005	<0.002	<0.002	<0.005	<0.005	<0.002	<0.002	<0.005	<0.005
	Xylenes (Total)	<0.005	<0.005	<0.005	<0.005	<0.002	<0.002	<0.005	<0.005	<0.002	<0.002	<0.005	<0.005
Metals	Arsenic, Total	0.008	5.83	<0.005	<0.005	0.003	0.003	<0.005	<0.005	<0.002	<0.002	<0.005	<0.005
	Iron, Total	4.77	1.24	0.17	0.29	4.08	5.87	9	7	0.119	0.203	1.9	1.9
	Manganese, Total	0.12	0.0658	0.015	0.012	0.156	0.156	0.22	0.18	0.017	0.019	0.008	0.0092
Inorganics	Chloride	10	8.3	4	4.3	215	156	230	150	18	18	14	13
	Fluoride	1.81	1.8	2.2	2	0.43	0.58	0.4	0.4	1.2	2.3	2.1	1.9
	Total Dissolved Solids (TDS)	525	482	420	460	1,418	1,158	1,300	1,100	340	562	470	480

	Compound	PZ-114-AS August 1997	PZ-114-AS November 1997	PZ-114-AS November 2003	PZ-114-AS May 2004	PZ-115-SS August 1997	PZ-115-SS November 1997	PZ-115-SS November 2003	PZ-115-SS May 2004	PZ-201A-SS February 1997	PZ-201A-SS May 1997	PZ-201A-SS November 2003	PZ-201A-SS May 2004	PZ-205-SS August 1997	PZ-205-SS November 1997	PZ-205-SS November 2003	PZ-205-SS May 2004
Volatiles	1,2-cis-Dichloroethylene	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.002	<0.002	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
	1,4-Dichlorobenzene	<0.005	<0.005	0.014	0.018	<0.005	<0.005	<0.005	<0.005	<0.002	<0.002	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
	Benzene	<0.005	<0.005	0.0061	0.0054	<0.005	<0.005	<0.005	<0.005	<0.002	<0.002	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
	Chlorobenzene	0.007	0.0051	0.12	0.13	<0.005	<0.005	<0.005	<0.005	<0.002	<0.002	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
	Xylenes (Total)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.002	0.002	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Metals	Arsenic, Total	0.094	0.096	0.023	0.047	<0.002	<0.00455	<0.005	<0.005	0.003	0.004	0.0065	<0.005	<0.002	0.00525	<0.005	<0.005
	Iron, Total	40	32.8	66	76	0.84	1.08	0.98	1.1	2.75	3.97	1.7	0.29	1.06	6.26	1.1	0.43
	Manganese, Total	77	87.6	6.5	4.5	<0.01	0.0087	0.067	0.061	0.305	0.528	0.15	0.12	0.02	0.101	0.0059	<0.005
Inorganics	Chloride	296	275	430	270	71	67.8	340	400	4	<3	3.1	3.1	14	17.4	30	28
	Fluoride	0.32	0.337	0.26	0.4	1.6	1.52	0.57	0.61	0.52	0.58	0.55	0.47	0.44	0.413	0.47	0.37
	Total Dissolved Solids (TDS)	1,450	1,510	1,400	1,200	693	588	1,000	1,400	548	525	460	480	481	459	510	510

All results presented in mg/L

*: Probable outlier not respresentative of arsenic in this well. Subsequent sampling results consistently yield arsenic concentrations of 0.008 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.

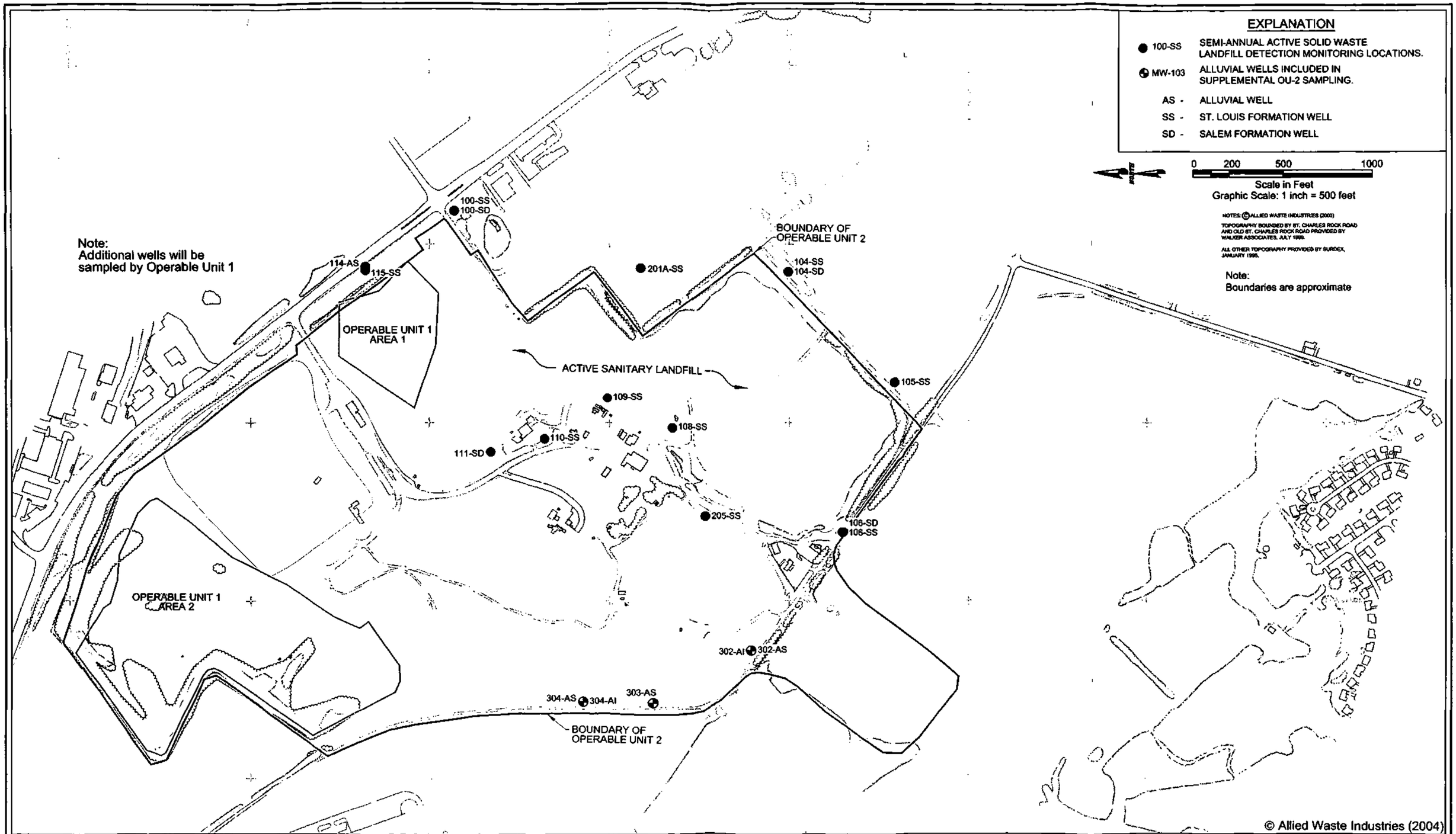
Table 2
Wells PZ-302-AS, PZ-302-AI, PZ-303-AS, PZ-304-AS, PZ-304-AI
Groundwater Data Comparison

	Compound	PZ-302-AI December 2003	PZ-302-AI May 2004	PZ-302-AS December 2003	PZ-302-AS May 2004	PZ-303-AS February 1997	PZ-303-AS May 1997	PZ-303-AS December 2003	PZ-303-AS May 2004	PZ-304-AI February 1997	PZ-304-AI May 1997	PZ-304-AI December 2003	PZ-304-AI May 2004	PZ-304-AS February 1997	PZ-304-AS May 1997	PZ-304-AS December 2003	PZ-304-AS May 2004
Volatiles	1,1-Dichloroethane	<0.005	<0.005	<0.005	<0.005	<0.002	0.033	<0.02	<0 02	<0.002	<0.002	<0 005	<0.005	0.002	<0.002	<0.005	<0 005
	1,1-Dichloroethylene	<0.005	<0.005	<0 005	<0.005	<0.002	<0.002	<0.02	<0 02	<0.002	<0.002	<0.005	<0.005	<0.002	0.003	<0.005	<0.005
	1,2-cis-Dichloroethylene	<0 005	<0.005	<0.005	<0.005	0.008	0.0081	<0.02	<0.02	0.011	0.013	0.014	0.010	0.006	0.0067	<0 005	<0.005
	1,2-Dichlorobenzene	<0 005	<0.005	<0.005	<0.005	<0 002	0.0038	<0.02	<0.02	<0.002	<0.002	<0 005	<0.005	<0.002	<0.002	<0.005	<0 005
	1,2-Dichloroethane	<0.005	<0.005	<0 005	<0.005	0.002	<0 002	<0 02	<0.02	<0.002	<0.002	<0 005	<0.005	<0.002	<0.002	<0.005	<0.005
	1,2-trans-Dichloroethylene	<0.005	<0.005	<0.005	<0.005	0.002	0.0025	<0.02	<0.02	<0.002	<0.002	<0 005	<0 005	<0.002	<0.002	<0.005	<0.005
	1,4-Dichlorobenzene	<0.005	<0.005	<0 005	<0.005	<0.002	0.0034	<0.02	<0.02	0.003	0.0033	<0 005	<0.005	0.012	0.012	0.0058	0.0057
	Acetone	<0 005	<0.005	<0.005	<0.005	0.009	<0.005	<0 1	<0.1	<0.005	<0.005	<0.005	<0.005	<0.005	<0 005	<0 005	<0.005
	Benzene	<0 005	<0.005	0.0051	<0.005	0.078	0.078	0.054	0.051	0.01	0.011	<0.005	<0.005	0.005	0.0062	0.0053	0.0062
	Chlorobenzene	<0.005	<0.005	0.054	0.087	<0 002	<0.002	<0.02	<0.02	<0.002	<0 002	<0.005	<0.005	0.008	0.0087	<0.005	<0.005
	Chloroethane	<0.005	<0.005	<0 005	<0.005	0.013	0.011	<0.02	<0.02	<0.002	<0 002	<0.005	<0.005	<0.002	<0 002	<0.005	<0 005
	Ethylbenzene	<0.005	<0 005	<0.005	<0 005	0.120	0.113	0.056	0.071	<0.002	<0 002	<0.005	<0.005	<0.002	<0 002	<0.005	<0 005
	Methyl Ethyl Ketone	<0.005	<0.005	<0 005	<0.005	0.007	<0.005	<0.1	<0 2	<0.005	<0.005	<0.005	<0.005	<0 005	<0.005	<0 005	<0.005
	Gasoline Range Organics	<0.05	<0 05	0.13	0.14	1.3	1.3	3.7	3.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0 05	<0.05
	Petroleum Hydrocarbons (Diesel)	<0.48	<0.5	<0.5	<0.49	19	10	14	20	0.69	0.4	0.52	0.89	0.99	0.6	0.85	1.2
	Styrene	<0.005	<0.005	<0.005	<0 005	0.006	<0.002	<0.02	<0.02	<0 002	<0 002	<0 005	<0.005	<0.002	<0.002	<0.005	<0.005
	Toluene	<0 005	<0 005	<0.005	<0 005	0.4	0.280	0.7	1.5	<0 002	<0 002	<0 005	<0.005	<0.002	<0.002	<0.005	<0.005
	trans-1,3-Dichloropropylene	<0 005	<0.005	<0.005	<0.005	0.008	<0.002	<0.02	<0.02	<0 002	<0.002	<0.005	<0 005	<0.002	<0.002	<0.005	<0.005
	Vinyl chloride	<0.001	<0.001	<0 001	<0.001	0.012	0.026	<0.02	<0.02	0.01	0.0062	0.0053	0.0067	0.012	0.0076	0.0014	0.0014
	Xylenes (Total)	<0.005	<0 005	<0.005	<0.005	0.67	0.53	0.39	0.39	<0.002	<0 002	<0.005	<0.005	<0.002	<0.002	<0 005	<0.005
Semivolatiles	2,4-Dimethylphenol	<0.01	<0 01	<0.01	<0 01	0.086	0.078	0.062	<0.009	<0.01	<0 01	<0.01	<0.01	<0 01	<0 01	<0.01	<0.01
	2-Methylnaphthalene	<0.01	<0.01	<0.01	<0.01	<0.01	0.015	0.046	0.055	<0.01	<0.01	<0 01	<0.01	<0.01	<0.01	<0 01	<0.01
	4-Methylphenol (p-Cresol)	<0 01	<0 01	<0 01	<0.01	<0 01	0.016	0.015	<0 009	<0 01	<0 01	<0 01	<0 01	<0.01	<0.01	<0.01	<0.01
	Naphthalene	<0.01	<0 01	<0.01	<0.01	0.032	0.032	0.035	0.033	<0.01	<0 01	<0.01	<0.01	<0 01	<0.01	<0.01	<0 01
	o-Cresol	<0.01	<0.01	<0.01	<0 01	0.022	<0.01	0.031	<0.009	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Metals	Arsenic, Total	<0.01	<0.02	0.25	0.14	0.087	0.057	0.12	0.084	0.003	0.002	<0 01	<0 01	0.086	0.078	0.18	0.13
	Iron, Total	1.7	1.4	103	104	90.1	83.4	104	88.8	10.3	10.4	16.2	19.3	28.8	29.8	24.1	28.5
	Manganese, Total	0.19	0.19	3.7	10.1	2.34	1.82	2.2	1.8	1.8	1.82	1.6	1.8	0.434	0.438	0.12	0.14
Inorganics	Chloride	86.2	77.1	54.0	50.9	191	170	106	94.4	209	239	206	337	273	299	283	602
	Fluoride	0.27	0.35	0.40	0.60	0.33	0.37	0.18	0.18	0.45	0.54	0.28	0.40	0.73	0.66	0.52	0.65
	Total Dissolved Solids (TDS)	768	769	927	1,060	1,396	1,344	1,210	1,120	1,070	1,220	1,070	1,460	1,220	1,056	960	1,420

All results presented in mg/L

Notes:
1) The May 2004 data indicate detections of Cyclohexane at 0.022 mg/L, Methylcyclohexane at 0.05 mg/L, and bis (2-ethylhexyl) phthalate at 0 012 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) Analytes shown include only those parameters detected in at least one sample.

FIGURES



4630 South Highway 94
North Outer Road
St. Charles, Missouri 63304
Phone (636) 939-9111
Fax (636) 939-9757
HERST & ASSOCIATES, INC.

Westlake Landfill
Bridgeton, Missouri

Figure 1
Wells Included in Supplemental OU-2 Sampling

ATTACHMENT I

1\90

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#: A04-4441

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

05/27/2004

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 SDWA, CWA, RCRA	01169CA
Canada	GENERAL	SCC 1007-15/10B
Connecticut	SDWA, CWA, RCRA, SOIL	PH-0568
Florida	NELAP RCRA	E87672
Georgia	SDWA	956
Illinois	NELAP SDWA, CWA, RCRA	200003
Iowa	SW/CS	374
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	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
USDA	FOREIGN SOIL PERMIT	S-4650
Virginia	SDWA	278
Washington	CWA	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
A4444101	DUPLICATE @ PZ-303AS	05/10/2004	17:00	05/12/2004	09:45
A4444102	EQUIP BLANK	05/10/2004	19:15	05/12/2004	09:45
A4444103	FIELD BLANK@PZ-303AS	05/10/2004	16:25	05/12/2004	09:45
A4444104	PZ-302-AI	05/11/2004	15:30	05/12/2004	09:45
A4444105	PZ-302-AS	05/10/2004	08:30	05/12/2004	09:45
A4444106	PZ-303-AS	05/10/2004	16:55	05/12/2004	09:45
A4444107	PZ-304-AI	05/10/2004	18:45	05/12/2004	09:45
A4444108	PZ-304-AS	05/10/2004	18:00	05/12/2004	09:45
A4444109	TRIP BLANK	05/10/2004		05/12/2004	09:45

METHODS SUMMARY

Job#: A04-4441

STL Project#: NY0A862901
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	MCAWW 160.1

References:

MCAWW "Methods for Chemical Analysis of Water and Wastes",EPA/600/4-79-020 (Mar 1983) with updates and supplements EPA/600/4-91-010 (Jun 1991), EPA/600/R-92-129 (Aug 1992) and EPA/600/R-93-100 (Aug 1993)

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#: A04-4441

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

A04-4441
Sample Cooler(s) were received at the following temperature(s); 3 @ 2.0 °C
Samples 01,04 and 06 contain unpreserved VOA volumes - 7 day hold time.

GC/MS Volatile Data

Volatile samples DUPLICATE @ PZ-303AS,PZ-302-AI, PZ-304-AS, and PZ-304-AI exhibited a pH of 7 at the time of analysis. The analysis was performed within 7 days of sampling, therefore there is no impact on data useability.

GC Volatile Data

For method 8015B, samples DUPLICATE @ PZ-303AS, PZ-302-AI, PZ-303-AS and PZ-304-AI 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.

GC/MS Semivolatile Data

No deviations from protocol were encountered during the analytical procedures.

GC Extractable Data

The recovery of surrogate o-Terphenyl for samples DUPLICATE @ PZ-303AS and PZ-303-AS for Diesel Range Organics analysis is biased high and is outside of quality control limits due to matrix interference and dilution of the extract. All other surrogate recoveries for this batch are compliant with quality control limits; no corrective action is indicated.

Metals Data

No deviations from protocol were encountered during the analytical procedures.

Wet Chemistry Data

The field parameter measurements were supplied by a non-Nelac agent of the client.

****

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 @ PZ-303AS	A4444101	8015 B	20.00	008
DUPLICATE @ PZ-303AS	A4444101	8015B	5.00	008
DUPLICATE @ PZ-303AS	A4444101	8260	20.00	008
DUPLICATE @ PZ-303AS	A4444101DL	8260	40.00	008
DUPLICATE @ PZ-303AS	A4444101MS	8015 B	20.00	008
DUPLICATE @ PZ-303AS	A4444101SD	8015 B	20.00	008
PZ-302-AS	A4444105	8260	2.00	008
PZ-302-ASDL	A4444105DL	8260	4.00	008
PZ-303-AS	A4444106	8015 B	20.00	008
PZ-303-AS	A4444106	8015B	5.00	008
PZ-303-AS	A4444106	8260	20.00	008
PZ-303-ASDL	A4444106DL	8260	50.00	008
PZ-304-AI	A4444107	Chloride	5.00	008
PZ-304-AS	A4444108	Chloride	10.00	008
PZ-304-AS	A4444108	Fluoride	5.00	002

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.

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: 05/27/2004
Time: 15:36:06

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

Rept: AN0326

Client ID		DUPLICATE @ PZ-303AS		DUPLICATE @ PZ-303AS		EQUIP BLANK		FIELD BLANK@PZ-303AS	
Job No / Lab ID		A04-4441	A4444101	A04-4441	A4444101DL	A04-4441	A4444102	A04-4441	A4444103
Sample Date		05/10/2004		05/10/2004		05/10/2004		05/10/2004	
Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
Acetone	UG/L	ND	100	ND	200	26	5.0	ND	5.0
Benzene	UG/L	53	20	46 D	40	ND	5.0	ND	5.0
Bromodichloromethane	UG/L	ND	20	ND	40	ND	5.0	ND	5.0
Bromoform	UG/L	ND	20	ND	40	ND	5.0	ND	5.0
Bromomethane	UG/L	ND	20	ND	40	ND	5.0	ND	5.0
2-Butanone	UG/L	ND	100	ND	200	ND	5.0	ND	5.0
Carbon Disulfide	UG/L	ND	20	ND	40	ND	5.0	ND	5.0
Carbon Tetrachloride	UG/L	ND	20	ND	40	ND	5.0	ND	5.0
Chlorobenzene	UG/L	ND	20	ND	40	ND	5.0	ND	5.0
Chloroethane	UG/L	ND	20	ND	40	ND	5.0	ND	5.0
Chloroform	UG/L	ND	20	ND	40	ND	5.0	ND	5.0
Chloromethane	UG/L	ND	20	ND	40	ND	5.0	ND	5.0
Cyclohexane	UG/L	20	20	ND	40	ND	5.0	ND	5.0
1,2-Dibromoethane	UG/L	ND	20	ND	40	ND	5.0	ND	5.0
Dibromochloromethane	UG/L	ND	20	ND	40	ND	5.0	ND	5.0
1,2-Dibromo-3-chloropropane	UG/L	ND	20	ND	40	ND	5.0	ND	5.0
1,2-Dichlorobenzene	UG/L	ND	20	ND	40	ND	5.0	ND	5.0
1,3-Dichlorobenzene	UG/L	ND	20	ND	40	ND	5.0	ND	5.0
1,4-Dichlorobenzene	UG/L	ND	20	ND	40	ND	5.0	ND	5.0
Dichlorodifluoromethane	UG/L	ND	20	ND	40	ND	5.0	ND	5.0
1,1-Dichloroethane	UG/L	ND	20	ND	40	ND	5.0	ND	5.0
1,2-Dichloroethane	UG/L	ND	20	ND	40	ND	5.0	ND	5.0
1,1-Dichloroethene	UG/L	ND	20	ND	40	ND	5.0	ND	5.0
cis-1,2-Dichloroethene	UG/L	ND	20	ND	40	ND	5.0	ND	5.0
trans-1,2-Dichloroethene	UG/L	ND	20	ND	40	ND	5.0	ND	5.0
1,2-Dichloropropane	UG/L	ND	20	ND	40	ND	5.0	ND	5.0
cis-1,3-Dichloropropene	UG/L	ND	20	ND	40	ND	5.0	ND	5.0
trans-1,3-Dichloropropene	UG/L	ND	20	ND	40	ND	5.0	ND	5.0
Ethylbenzene	UG/L	49	20	54 D	40	ND	5.0	ND	5.0
2-Hexanone	UG/L	ND	100	ND	200	ND	5.0	ND	5.0
Isopropylbenzene	UG/L	ND	20	ND	40	ND	5.0	ND	5.0
Methyl acetate	UG/L	ND	20	ND	40	ND	5.0	ND	5.0
Methylcyclohexane	UG/L	34	20	ND	40	ND	5.0	ND	5.0
Methylene chloride	UG/L	ND	20	ND	40	ND	5.0	ND	5.0
4-Methyl-2-pentanone	UG/L	ND	100	ND	200	ND	5.0	ND	5.0
Methyl tert butyl ether	UG/L	ND	20	ND	40	ND	5.0	ND	5.0
Styrene	UG/L	ND	20	ND	40	ND	5.0	ND	5.0
1,1,2,2-Tetrachloroethane	UG/L	ND	20	ND	40	ND	5.0	ND	5.0
Tetrachloroethene	UG/L	ND	20	ND	40	ND	5.0	ND	5.0
Toluene	UG/L	940 E	20	1100 D	40	8.5	5.0	ND	5.0
1,2,4-Trichlorobenzene	UG/L	ND	20	ND	40	ND	5.0	ND	5.0
1,1,1-Trichloroethane	UG/L	ND	20	ND	40	ND	5.0	ND	5.0
1,1,2-Trichloroethane	UG/L	ND	20	ND	40	ND	5.0	ND	5.0

NA = Not Applicable ND = Not Detected

STL Buffalo

Date: 05/27/2004
Time: 15:36:06

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

Rept: AN0326

Client ID		DUPLICATE @ PZ-303AS		DUPLICATE @ PZ-303AS		EQUIP BLANK		FIELD BLANK@PZ-303AS	
Job No / Lab ID		A04-4441	A4444101	A04-4441	A4444101DL	A04-4441	A4444102	A04-4441	A4444103
Sample Date		05/10/2004		05/10/2004		05/10/2004		05/10/2004	
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	20	ND	40	ND	5.0	ND	5.0
Trichlorofluoromethane	UG/L	ND	20	ND	40	ND	5.0	ND	5.0
Trichloroethene	UG/L	ND	20	ND	40	ND	5.0	ND	5.0
Vinyl acetate	UG/L	ND	100	ND	200	ND	5.0	ND	5.0
Vinyl chloride	UG/L	ND	20	ND	40	ND	1.0	ND	1.0
Total Xylenes	UG/L	280	60	310 D	120	ND	5.0	ND	5.0
IS/SURROGATE(S)									
Chlorobenzene-D5	%	87	50-200	87	50-200	96	50-200	95	50-200
1,4-Difluorobenzene	%	87	50-200	87	50-200	98	50-200	100	50-200
1,4-Dichlorobenzene-D4	%	95	50-200	94	50-200	96	50-200	96	50-200
Toluene-D8	%	98	76-116	96	76-116	99	76-116	100	76-116
p-Bromofluorobenzene	%	110	73-117	104	73-117	105	73-117	105	73-117
1,2-Dichloroethane-D4	%	112	72-143	105	72-143	106	72-143	105	72-143

11\90

NA = Not Applicable ND = Not Detected

STL Buffalo

Date: 05/27/2004
Time: 15:36:06

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

Rept: AN0326

Client ID		PZ-302-AI		PZ-302-AS		PZ-302-ASDL		PZ-303-AS	
Job No	Lab ID	A04-4441	A4444104	A04-4441	A4444105	A04-4441	A4444105DL	A04-4441	A4444106
Sample Date		05/11/2004		05/10/2004		05/10/2004		05/10/2004	
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	10	ND	20	ND	100
Benzene	UG/L	ND	5.0	ND	10	ND	20	51	20
Bromodichloromethane	UG/L	ND	5.0	ND	10	ND	20	ND	20
Bromoform	UG/L	ND	5.0	ND	10	ND	20	ND	20
Bromomethane	UG/L	ND	5.0	ND	10	ND	20	ND	20
2-Butanone	UG/L	ND	5.0	ND	10	ND	20	ND	100
Carbon Disulfide	UG/L	ND	5.0	ND	10	ND	20	ND	20
Carbon Tetrachloride	UG/L	ND	5.0	ND	10	ND	20	ND	20
Chlorobenzene	UG/L	ND	5.0	82 E	10	87 D	20	ND	20
Chloroethane	UG/L	ND	5.0	ND	10	ND	20	ND	20
Chloroform	UG/L	ND	5.0	ND	10	ND	20	ND	20
Chloromethane	UG/L	ND	5.0	ND	10	ND	20	ND	20
Cyclohexane	UG/L	ND	5.0	ND	10	ND	20	22	20
1,2-Dibromoethane	UG/L	ND	5.0	ND	10	ND	20	ND	20
Dibromochloromethane	UG/L	ND	5.0	ND	10	ND	20	ND	20
1,2-Dibromo-3-chloropropane	UG/L	ND	5.0	ND	10	ND	20	ND	20
1,2-Dichlorobenzene	UG/L	ND	5.0	ND	10	ND	20	ND	20
1,3-Dichlorobenzene	UG/L	ND	5.0	ND	10	ND	20	ND	20
1,4-Dichlorobenzene	UG/L	ND	5.0	ND	10	ND	20	ND	20
Dichlorodifluoromethane	UG/L	ND	5.0	ND	10	ND	20	ND	20
1,1-Dichloroethane	UG/L	ND	5.0	ND	10	ND	20	ND	20
1,2-Dichloroethane	UG/L	ND	5.0	ND	10	ND	20	ND	20
1,1-Dichloroethene	UG/L	ND	5.0	ND	10	ND	20	ND	20
cis-1,2-Dichloroethene	UG/L	ND	5.0	ND	10	ND	20	ND	20
trans-1,2-Dichloroethene	UG/L	ND	5.0	ND	10	ND	20	ND	20
1,2-Dichloropropane	UG/L	ND	5.0	ND	10	ND	20	ND	20
cis-1,3-Dichloropropene	UG/L	ND	5.0	ND	10	ND	20	ND	20
trans-1,3-Dichloropropene	UG/L	ND	5.0	ND	10	ND	20	ND	20
Ethylbenzene	UG/L	ND	5.0	ND	10	ND	20	71	20
2-Hexanone	UG/L	ND	5.0	ND	10	ND	20	ND	100
Isopropylbenzene	UG/L	ND	5.0	ND	10	ND	20	ND	20
Methyl acetate	UG/L	ND	5.0	ND	10	ND	20	ND	20
Methylcyclohexane	UG/L	ND	5.0	ND	10	ND	20	50	20
Methylene chloride	UG/L	ND	5.0	ND	10	ND	20	ND	20
4-Methyl-2-pentanone	UG/L	ND	5.0	ND	10	ND	20	ND	100
Methyl tert butyl ether	UG/L	ND	5.0	ND	10	ND	20	ND	20
Styrene	UG/L	ND	5.0	ND	10	ND	20	ND	20
1,1,2,2-Tetrachloroethane	UG/L	ND	5.0	ND	10	ND	20	ND	20
Tetrachloroethene	UG/L	ND	5.0	ND	10	ND	20	ND	20
Toluene	UG/L	ND	5.0	ND	10	ND	20	1600 E	20
1,2,4-Trichlorobenzene	UG/L	ND	5.0	ND	10	ND	20	ND	20
1,1,1-Trichloroethane	UG/L	ND	5.0	ND	10	ND	20	ND	20
1,1,2-Trichloroethane	UG/L	ND	5.0	ND	10	ND	20	ND	20

NA = Not Applicable ND = Not Detected

STL Buffalo

Date: 05/27/2004
Time: 15:36:06

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

Rept: AN0326

Client ID		PZ-302-AI		PZ-302-AS		PZ-302-ASDL		PZ-303-AS	
Job No	Lab ID	A04-4441	A4444104	A04-4441	A4444105	A04-4441	A4444105DL	A04-4441	A4444106
Sample Date		05/11/2004		05/10/2004		05/10/2004		05/10/2004	
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	10	ND	20	ND	20
Trichlorofluoromethane	UG/L	ND	5.0	ND	10	ND	20	ND	20
Trichloroethene	UG/L	ND	5.0	ND	10	ND	20	ND	20
Vinyl acetate	UG/L	ND	5.0	ND	10	ND	20	ND	100
Vinyl chloride	UG/L	ND	1.0	ND	2.0	ND	4.0	ND	20
Total Xylenes	UG/L	ND	5.0	ND	10	ND	20	390	60
IS/SURROGATE(S)									
Chlorobenzene-D5	%	90	50-200	86	50-200	85	50-200	94	50-200
1,4-Difluorobenzene	%	94	50-200	92	50-200	87	50-200	94	50-200
1,4-Dichlorobenzene-D4	%	91	50-200	92	50-200	91	50-200	99	50-200
Toluene-D8	%	100	76-116	104	76-116	104	76-116	96	76-116
p-Bromofluorobenzene	%	106	73-117	112	73-117	110	73-117	109	73-117
1,2-Dichloroethane-D4	%	108	72-143	112	72-143	110	72-143	109	72-143

13\90

NA = Not Applicable ND = Not Detected

STL Buffalo

Date: 05/27/2004
Time: 15:36:06

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

Rept: AN0326

Client ID Job No Sample Date	Lab ID	PZ-303-ASDL A04-4441 05/10/2004	A4444106DL	PZ-304-AI A04-4441 05/10/2004	A4444107	PZ-304-AS A04-4441 05/10/2004	A4444108		
Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
Acetone	UG/L	ND	250	ND	5.0	ND	5.0	NA	
Benzene	UG/L	ND	50	ND	5.0	6.2	5.0	NA	
Bromodichloromethane	UG/L	ND	50	ND	5.0	ND	5.0	NA	
Bromoform	UG/L	ND	50	ND	5.0	ND	5.0	NA	
Bromomethane	UG/L	ND	50	ND	5.0	ND	5.0	NA	
2-Butanone	UG/L	ND	250	ND	5.0	ND	5.0	NA	
Carbon Disulfide	UG/L	ND	50	ND	5.0	ND	5.0	NA	
Carbon Tetrachloride	UG/L	ND	50	ND	5.0	ND	5.0	NA	
Chlorobenzene	UG/L	ND	50	ND	5.0	ND	5.0	NA	
Chloroethane	UG/L	ND	50	ND	5.0	ND	5.0	NA	
Chloroform	UG/L	ND	50	ND	5.0	ND	5.0	NA	
Chloromethane	UG/L	ND	50	ND	5.0	ND	5.0	NA	
Cyclohexane	UG/L	ND	50	ND	5.0	ND	5.0	NA	
1,2-Dibromoethane	UG/L	ND	50	ND	5.0	ND	5.0	NA	
Dibromochloromethane	UG/L	ND	50	ND	5.0	ND	5.0	NA	
1,2-Dibromo-3-chloropropane	UG/L	ND	50	ND	5.0	ND	5.0	NA	
1,2-Dichlorobenzene	UG/L	ND	50	ND	5.0	ND	5.0	NA	
1,3-Dichlorobenzene	UG/L	ND	50	ND	5.0	ND	5.0	NA	
1,4-Dichlorobenzene	UG/L	ND	50	ND	5.0	5.7	5.0	NA	
Dichlorodifluoromethane	UG/L	ND	50	ND	5.0	ND	5.0	NA	
1,1-Dichloroethane	UG/L	ND	50	ND	5.0	ND	5.0	NA	
1,2-Dichloroethane	UG/L	ND	50	ND	5.0	ND	5.0	NA	
1,1-Dichloroethene	UG/L	ND	50	ND	5.0	ND	5.0	NA	
cis-1,2-Dichloroethene	UG/L	ND	50	10	5.0	ND	5.0	NA	
trans-1,2-Dichloroethene	UG/L	ND	50	ND	5.0	ND	5.0	NA	
1,2-Dichloropropane	UG/L	ND	50	ND	5.0	ND	5.0	NA	
cis-1,3-Dichloropropene	UG/L	ND	50	ND	5.0	ND	5.0	NA	
trans-1,3-Dichloropropene	UG/L	ND	50	ND	5.0	ND	5.0	NA	
Ethylbenzene	UG/L	64 D	50	ND	5.0	ND	5.0	NA	
2-Hexanone	UG/L	ND	250	ND	5.0	ND	5.0	NA	
Isopropylbenzene	UG/L	ND	50	ND	5.0	ND	5.0	NA	
Methyl acetate	UG/L	ND	50	ND	5.0	ND	5.0	NA	
Methylcyclohexane	UG/L	ND	50	ND	5.0	ND	5.0	NA	
Methylene chloride	UG/L	ND	50	ND	5.0	ND	5.0	NA	
4-Methyl-2-pentanone	UG/L	ND	250	ND	5.0	ND	5.0	NA	
Methyl tert butyl ether	UG/L	ND	50	ND	5.0	ND	5.0	NA	
Styrene	UG/L	ND	50	ND	5.0	ND	5.0	NA	
1,1,2,2-Tetrachloroethane	UG/L	ND	50	ND	5.0	ND	5.0	NA	
Tetrachloroethene	UG/L	ND	50	ND	5.0	ND	5.0	NA	
Toluene	UG/L	1500 D	50	ND	5.0	ND	5.0	NA	
1,2,4-Trichlorobenzene	UG/L	ND	50	ND	5.0	ND	5.0	NA	
1,1,1-Trichloroethane	UG/L	ND	50	ND	5.0	ND	5.0	NA	
1,1,2-Trichloroethane	UG/L	ND	50	ND	5.0	ND	5.0	NA	

NA = Not Applicable ND = Not Detected

STL Buffalo

Date: 05/27/2004
Time: 15:36:06

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

Rept: AN0326

Client ID		PZ-303-ASDL		PZ-304-AI		PZ-304-AS			
Job No	Lab ID	A04-4441	A4444106DL	A04-4441	A4444107	A04-4441	A4444108		
Sample Date		05/10/2004		05/10/2004		05/10/2004			
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	50	ND	5.0	ND	5.0	NA	
Trichlorofluoromethane	UG/L	ND	50	ND	5.0	ND	5.0	NA	
Trichloroethene	UG/L	ND	50	ND	5.0	ND	5.0	NA	
Vinyl acetate	UG/L	ND	250	ND	5.0	ND	5.0	NA	
Vinyl chloride	UG/L	ND	50	6.7	1.0	1.4	1.0	NA	
Total Xylenes	UG/L	360 D	150	ND	5.0	ND	5.0	NA	
==IS/SURROGATE(S)==									
Chlorobenzene-D5	%	89	50-200	89	50-200	89	50-200	NA	
1,4-Difluorobenzene	%	88	50-200	90	50-200	90	50-200	NA	
1,4-Dichlorobenzene-D4	%	95	50-200	92	50-200	93	50-200	NA	
Toluene-D8	%	98	76-116	101	76-116	102	76-116	NA	
p-Bromofluorobenzene	%	104	73-117	105	73-117	108	73-117	NA	
1,2-Dichloroethane-D4	%	107	72-143	104	72-143	105	72-143	NA	

1590

NA = Not Applicable ND = Not Detected

STL Buffalo

Date: 05/27/2004
Time: 15:36:10

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

Rept: AN0326

Client ID Job No Sample Date	Lab ID	DUPLICATE @ PZ-303AS A04-4441 05/10/2004	A4444101	EQUIP BLANK A04-4441 05/10/2004	A4444102	PZ-302-AI A04-4441 05/11/2004	A4444104	PZ-302-AS A04-4441 05/10/2004	A4444105
Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
Gasoline Range Organics	MG/L	2.4	1.0	ND	0.050	ND	0.050	0.14	0.050
SURROGATE(S)									
a,a,a-Trifluorotoluene	%	112	71-138	111	71-138	111	71-138	111	71-138

Client ID Job No Sample Date	Lab ID	PZ-303-AS A04-4441 05/10/2004	A4444106	PZ-304-AI A04-4441 05/10/2004	A4444107	PZ-304-AS A04-4441 05/10/2004	A4444108		
Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
Gasoline Range Organics	MG/L	3.2	1.0	ND	0.050	ND	0.050	NA	
SURROGATE(S)									
a,a,a-Trifluorotoluene	%	111	71-138	108	71-138	109	71-138	NA	

16\90

NA = Not Applicable ND = Not Detected

STL Buffalo

Date: 05/27/2004
Time: 15:36:21

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

Rept: AN0326

Client ID Job No Sample Date	Lab ID	DUPLICATE @ PZ-303AS A04-4441 05/10/2004	A4444101	EQUIP BLANK A04-4441 05/10/2004	A4444102	PZ-302-A1 A04-4441 05/11/2004	A4444104	PZ-302-AS A04-4441 05/10/2004	A4444105
Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
Phenol	UG/L	ND	9	ND	10	ND	10	ND	10
Bis(2-chloroethyl) ether	UG/L	ND	9	ND	10	ND	10	ND	10
2-Chlorophenol	UG/L	ND	9	ND	10	ND	10	ND	10
2-Methylphenol	UG/L	ND	9	ND	10	ND	10	ND	10
2,2'-Oxybis(1-Chloropropane)	UG/L	ND	9	ND	10	ND	10	ND	10
4-Methylphenol	UG/L	ND	9	ND	10	ND	10	ND	10
N-Nitroso-Di-n-propylamine	UG/L	ND	9	ND	10	ND	10	ND	10
Hexachloroethane	UG/L	ND	9	ND	10	ND	10	ND	10
Nitrobenzene	UG/L	ND	9	ND	10	ND	10	ND	10
Isophorone	UG/L	ND	9	ND	10	ND	10	ND	10
2-Nitrophenol	UG/L	ND	9	ND	10	ND	10	ND	10
2,4-Dimethylphenol	UG/L	ND	9	ND	10	ND	10	ND	10
Bis(2-chloroethoxy) methane	UG/L	ND	9	ND	10	ND	10	ND	10
2,4-Dichlorophenol	UG/L	ND	9	ND	10	ND	10	ND	10
Naphthalene	UG/L	22	9	ND	10	ND	10	ND	10
4-Chloroaniline	UG/L	ND	9	ND	10	ND	10	ND	10
Hexachlorobutadiene	UG/L	ND	9	ND	10	ND	10	ND	10
4-Chloro-3-methylphenol	UG/L	ND	9	ND	10	ND	10	ND	10
2-Methylnaphthalene	UG/L	41	9	ND	10	ND	10	ND	10
Hexachlorocyclopentadiene	UG/L	ND	22	ND	23	ND	23	ND	23
2,4,6-Trichlorophenol	UG/L	ND	9	ND	10	ND	10	ND	10
2,4,5-Trichlorophenol	UG/L	ND	9	ND	10	ND	10	ND	10
2-Chloronaphthalene	UG/L	ND	9	ND	10	ND	10	ND	10
2-Nitroaniline	UG/L	ND	47	ND	48	ND	48	ND	50
Dimethyl phthalate	UG/L	ND	9	ND	10	ND	10	ND	10
Acenaphthylene	UG/L	ND	9	ND	10	ND	10	ND	10
3-Nitroaniline	UG/L	ND	47	ND	48	ND	48	ND	50
Acenaphthene	UG/L	ND	9	ND	10	ND	10	ND	10
2,4-Dinitrophenol	UG/L	ND	47	ND	48	ND	48	ND	50
4-Nitrophenol	UG/L	ND	47	ND	48	ND	48	ND	50
Dibenzofuran	UG/L	ND	9	ND	10	ND	10	ND	10
2,4-Dinitrotoluene	UG/L	ND	9	ND	10	ND	10	ND	10
Diethyl phthalate	UG/L	ND	9	ND	10	ND	10	ND	10
4-Chlorophenyl phenyl ether	UG/L	ND	9	ND	10	ND	10	ND	10
Fluorene	UG/L	ND	9	ND	10	ND	10	ND	10
4-Nitroaniline	UG/L	ND	47	ND	48	ND	48	ND	50
4,6-Dinitro-2-methylphenol	UG/L	ND	47	ND	48	ND	48	ND	50
N-nitrosodiphenylamine	UG/L	ND	9	ND	10	ND	10	ND	10
4-Bromophenyl phenyl ether	UG/L	ND	9	ND	10	ND	10	ND	10
Hexachlorobenzene	UG/L	ND	9	ND	10	ND	10	ND	10
Pentachlorophenol	UG/L	ND	47	ND	48	ND	48	ND	50
Phenanthrene	UG/L	ND	9	ND	10	ND	10	ND	10
Anthracene	UG/L	ND	9	ND	10	ND	10	ND	10

17\90

NA = Not Applicable ND = Not Detected

STL Buffalo

Date: 05/27/2004
Time: 15:36:21

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

Rept: AN0326

Client ID		DUPLICATE @ PZ-303AS		EQUIP BLANK		PZ-302-AI		PZ-302-AS	
Job No / Lab ID		A04-4441	A4444101	A04-4441	A4444102	A04-4441	A4444104	A04-4441	A4444105
Sample Date		05/10/2004		05/10/2004		05/11/2004		05/10/2004	
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	9	ND	10	ND	10	ND	10
Fluoranthene	UG/L	ND	9	ND	10	ND	10	ND	10
Pyrene	UG/L	ND	9	ND	10	ND	10	ND	10
Butyl benzyl phthalate	UG/L	ND	9	ND	10	ND	10	ND	10
3,3'-Dichlorobenzidine	UG/L	ND	19	ND	19	ND	19	ND	20
Benzo(a)anthracene	UG/L	ND	9	ND	10	ND	10	ND	10
Chrysene	UG/L	ND	9	ND	10	ND	10	ND	10
Bis(2-ethylhexyl) phthalate	UG/L	ND	9	ND	10	ND	10	ND	10
Di-n-octyl phthalate	UG/L	ND	9	ND	10	ND	10	ND	10
Benzo(b)fluoranthene	UG/L	ND	9	ND	10	ND	10	ND	10
Benzo(k)fluoranthene	UG/L	ND	9	ND	10	ND	10	ND	10
Benzo(a)pyrene	UG/L	ND	9	ND	10	ND	10	ND	10
Indeno(1,2,3-cd)pyrene	UG/L	ND	9	ND	10	ND	10	ND	10
Dibenzo(a,h)anthracene	UG/L	ND	9	ND	10	ND	10	ND	10
Benzo(ghi)perylene	UG/L	ND	9	ND	10	ND	10	ND	10
2,6-Dinitrotoluene	UG/L	ND	9	ND	10	ND	10	ND	10
IS/SURROGATE(S)									
1,4-Dichlorobenzene-D4	%	96	50-200	109	50-200	107	50-200	105	50-200
Naphthalene-D8	%	93	50-200	111	50-200	107	50-200	104	50-200
Acenaphthene-D10	%	93	50-200	112	50-200	110	50-200	106	50-200
Phenanthrene-D10	%	87	50-200	111	50-200	104	50-200	99	50-200
Chrysene-D12	%	94	50-200	97	50-200	101	50-200	110	50-200
Perylene-D12	%	109	50-200	105	50-200	113	50-200	134	50-200
Nitrobenzene-D5	%	88	34-121	80	34-121	86	34-121	84	34-121
2-Fluorobiphenyl	%	87	42-126	84	42-126	86	42-126	86	42-126
p-Terphenyl-d14	%	82	36-145	113	36-145	85	36-145	82	36-145
Phenol-D5	%	31	10-110	30	10-110	32	10-110	33	10-110
2-Fluorophenol	%	45	14-120	41	14-120	44	14-120	45	14-120
2,4,6-Tribromophenol	%	103	42-158	96	42-158	101	42-158	101	42-158

18\90

NA = Not Applicable ND = Not Detected

STL Buffalo

Date: 05/27/2004
Time: 15:36:21

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

Rept: AN0326

Client ID Job No Sample Date	Lab ID	PZ-303-AS A04-4441 05/10/2004	A4444106	PZ-304-AI A04-4441 05/10/2004	A4444107	PZ-304-AS A04-4441 05/10/2004	A4444108		
Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
Phenol	UG/L	ND	9	ND	10	ND	10	NA	
Bis(2-chloroethyl) ether	UG/L	ND	9	ND	10	ND	10	NA	
2-Chlorophenol	UG/L	ND	9	ND	10	ND	10	NA	
2-Methylphenol	UG/L	ND	9	ND	10	ND	10	NA	
2,2'-Oxybis(1-chloropropane)	UG/L	ND	9	ND	10	ND	10	NA	
4-Methylphenol	UG/L	ND	9	ND	10	ND	10	NA	
N-Nitroso-Di-n-propylamine	UG/L	ND	9	ND	10	ND	10	NA	
Hexachloroethane	UG/L	ND	9	ND	10	ND	10	NA	
Nitrobenzene	UG/L	ND	9	ND	10	ND	10	NA	
Isophorone	UG/L	ND	9	ND	10	ND	10	NA	
2-Nitrophenol	UG/L	ND	9	ND	10	ND	10	NA	
2,4-Dimethylphenol	UG/L	ND	9	ND	10	ND	10	NA	
Bis(2-chloroethoxy) methane	UG/L	ND	9	ND	10	ND	10	NA	
2,4-Dichlorophenol	UG/L	ND	9	ND	10	ND	10	NA	
Naphthalene	UG/L	33	9	ND	10	ND	10	NA	
4-Chloroaniline	UG/L	ND	9	ND	10	ND	10	NA	
Hexachlorobutadiene	UG/L	ND	9	ND	10	ND	10	NA	
4-Chloro-3-methylphenol	UG/L	ND	9	ND	10	ND	10	NA	
2-Methylnaphthalene	UG/L	55	9	ND	10	ND	10	NA	
Hexachlorocyclopentadiene	UG/L	ND	22	ND	23	ND	23	NA	
2,4,6-Trichlorophenol	UG/L	ND	9	ND	10	ND	10	NA	
2,4,5-Trichlorophenol	UG/L	ND	9	ND	10	ND	10	NA	
2-Chloronaphthalene	UG/L	ND	9	ND	10	ND	10	NA	
2-Nitroaniline	UG/L	ND	47	ND	48	ND	48	NA	
Dimethyl phthalate	UG/L	ND	9	ND	10	ND	10	NA	
Acenaphthylene	UG/L	ND	9	ND	10	ND	10	NA	
3-Nitroaniline	UG/L	ND	47	ND	48	ND	48	NA	
Acenaphthene	UG/L	ND	9	ND	10	ND	10	NA	
2,4-Dinitrophenol	UG/L	ND	47	ND	48	ND	48	NA	
4-Nitrophenol	UG/L	ND	47	ND	48	ND	48	NA	
Dibenzofuran	UG/L	ND	9	ND	10	ND	10	NA	
2,4-Dinitrotoluene	UG/L	ND	9	ND	10	ND	10	NA	
Diethyl phthalate	UG/L	ND	9	ND	10	ND	10	NA	
4-Chlorophenyl phenyl ether	UG/L	ND	9	ND	10	ND	10	NA	
Fluorene	UG/L	ND	9	ND	10	ND	10	NA	
4-Nitroaniline	UG/L	ND	47	ND	48	ND	48	NA	
4,6-Dinitro-2-methylphenol	UG/L	ND	47	ND	48	ND	48	NA	
N-nitrosodiphenylamine	UG/L	ND	9	ND	10	ND	10	NA	
4-Bromophenyl phenyl ether	UG/L	ND	9	ND	10	ND	10	NA	
Hexachlorobenzene	UG/L	ND	9	ND	10	ND	10	NA	
Pentachlorophenol	UG/L	ND	47	ND	48	ND	48	NA	
Phenanthrene	UG/L	ND	9	ND	10	ND	10	NA	
Anthracene	UG/L	ND	9	ND	10	ND	10	NA	

NA = Not Applicable ND = Not Detected

STL Buffalo

Date: 05/27/2004
Time: 15:36:21

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

Rept: AN0326

Client ID		PZ-303-AS		PZ-304-AI		PZ-304-AS			
Job No	Lab ID	A04-4441	A4444106	A04-4441	A4444107	A04-4441	A4444108		
Sample Date		05/10/2004		05/10/2004		05/10/2004			
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	9	ND	10	ND	10	NA	
Fluoranthene	UG/L	ND	9	ND	10	ND	10	NA	
Pyrene	UG/L	ND	9	ND	10	ND	10	NA	
Butyl benzyl phthalate	UG/L	ND	9	ND	10	ND	10	NA	
3,3'-Dichlorobenzidine	UG/L	ND	19	ND	19	ND	19	NA	
Benzo(a)anthracene	UG/L	ND	9	ND	10	ND	10	NA	
Chrysene	UG/L	ND	9	ND	10	ND	10	NA	
Bis(2-ethylhexyl) phthalate	UG/L	12	9	ND	10	ND	10	NA	
Di-n-octyl phthalate	UG/L	ND	9	ND	10	ND	10	NA	
Benzo(b)fluoranthene	UG/L	ND	9	ND	10	ND	10	NA	
Benzo(k)fluoranthene	UG/L	ND	9	ND	10	ND	10	NA	
Benzo(a)pyrene	UG/L	ND	9	ND	10	ND	10	NA	
Indeno(1,2,3-cd)pyrene	UG/L	ND	9	ND	10	ND	10	NA	
Dibenzo(a,h)anthracene	UG/L	ND	9	ND	10	ND	10	NA	
Benzo(ghi)perylene	UG/L	ND	9	ND	10	ND	10	NA	
2,6-Dinitrotoluene	UG/L	ND	9	ND	10	ND	10	NA	
=IS/SURROGATE(S)=									
1,4-Dichlorobenzene-D4	%	97	50-200	107	50-200	117	50-200	NA	
Naphthalene-D8	%	93	50-200	102	50-200	116	50-200	NA	
Acenaphthene-D10	%	89	50-200	104	50-200	119	50-200	NA	
Phenanthrene-D10	%	91	50-200	96	50-200	105	50-200	NA	
Chrysene-D12	%	101	50-200	97	50-200	105	50-200	NA	
Perylene-D12	%	119	50-200	117	50-200	126	50-200	NA	
Nitrobenzene-D5	%	94	34-121	85	34-121	86	34-121	NA	
2-Fluorobiphenyl	%	97	42-126	87	42-126	85	42-126	NA	
p-Terphenyl-d14	%	78	36-145	74	36-145	80	36-145	NA	
Phenol-D5	%	37	10-110	32	10-110	31	10-110	NA	
2-Fluorophenol	%	45	14-120	43	14-120	46	14-120	NA	
2,4,6-Tribromophenol	%	100	42-158	108	42-158	105	42-158	NA	

20\90

NA = Not Applicable ND = Not Detected

STL Buffalo

Date: 05/27/2004
Time: 15:36:25

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

Rept: AN0326

Client ID Job No Sample Date	Lab ID	DUPLICATE @ PZ-303AS A04-4441 05/10/2004	A4444101	EQUIP BLANK A04-4441 05/10/2004	A4444102	PZ-302-AI A04-4441 05/11/2004	A4444104	PZ-302-AS A04-4441 05/10/2004	A4444105
Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
Diesel Range Organics	MG/L	11	2.4	ND	0.48	ND	0.50	ND	0.49
SURROGATE(S)									
o-Terphenyl	%	205 *	27-153	69	27-153	105	27-153	95	27-153

Client ID Job No Sample Date	Lab ID	PZ-303-AS A04-4441 05/10/2004	A4444106	PZ-304-AI A04-4441 05/10/2004	A4444107	PZ-304-AS A04-4441 05/10/2004	A4444108		
Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
Diesel Range Organics	MG/L	20	2.4	0.89	0.48	1.2	0.48	NA	
SURROGATE(S)									
o-Terphenyl	%	218 *	27-153	128	27-153	133	27-153	NA	

21\90

NA = Not Applicable ND = Not Detected

STL Buffalo

Date: 05/27/2004
Time: 15:36:27

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

Rept: AN0326

Client ID Job No Sample Date	Lab ID	DUPLICATE @ PZ-303AS A04-4441 05/10/2004	A4444101	EQUIP BLANK A04-4441 05/10/2004	A4444102	PZ-302-AI A04-4441 05/11/2004	A4444104	PZ-302-AS A04-4441 05/10/2004	A4444105
Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
Arsenic - Total	MG/L	0.085	0.010	ND	0.010	ND	0.010	0.14	0.010
Iron - Total	MG/L	90.3	0.050	ND	0.050	1.4	0.050	104	0.050
Manganese - Total	MG/L	1.8	0.0030	ND	0.0030	0.19	0.0030	10.1	0.0030

Client ID Job No Sample Date	Lab ID	PZ-303-AS A04-4441 05/10/2004	A4444106	PZ-304-AI A04-4441 05/10/2004	A4444107	PZ-304-AS A04-4441 05/10/2004	A4444108		
Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
Arsenic - Total	MG/L	0.084	0.010	ND	0.010	0.13	0.010	NA	
Iron - Total	MG/L	88.8	0.050	19.3	0.050	28.5	0.050	NA	
Manganese - Total	MG/L	1.8	0.0030	1.8	0.0030	0.14	0.0030	NA	

22190

NA = Not Applicable ND = Not Detected

STL Buffalo

Date: 05/27/2004
Time: 15:36:30

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

Rept: AN0326

Client ID	DUPLICATE @ PZ-303AS		EQUIP BLANK		PZ-302-AI		PZ-302-AS	
Job No / Lab ID	A04-4441	A4444101	A04-4441	A4444102	A04-4441	A4444104	A04-4441	A4444105
Sample Date	05/10/2004		05/10/2004		05/11/2004		05/10/2004	

Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
Chloride	MG/L	99.1	0.50	ND	0.50	77.1	0.50	50.9	0.50
Fluoride	MG/L	0.19	0.050	ND	0.050	0.35	0.050	0.60	0.050
Total Dissolved Solids	MG/L	1160	10	ND	10	769	10	1060	10
Specific Conductance (25 C) (F	UMHOS/CM	NA		NA		1253	0	1856	0
Temperature, Field (°C)	°C	NA		NA		15.4	0	15.8	0
pH (Field)	S.U.	NA		NA		6.70	0	7.60	0

Client ID	PZ-303-AS		PZ-304-AI		PZ-304-AS			
Job No / Lab ID	A04-4441	A4444106	A04-4441	A4444107	A04-4441	A4444108		
Sample Date	05/10/2004		05/10/2004		05/10/2004			

Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
Chloride	MG/L	94.4	0.50	337	2.5	602	5.0	NA	
Fluoride	MG/L	0.18	0.050	0.40	0.050	0.65	0.25	NA	
Specific Conductance (25 C) (F	UMHOS/CM	1905	0	1507	0	2070	0	NA	
Temperature, Field (°C)	°C	15.7	0	17.1	0	17.3	0	NA	
Total Dissolved Solids	MG/L	1120	10	1460	10	1420	10	NA	
pH (Field)	S.U.	7.20	0	7.90	0	7.40	0	NA	

23\90

NA = Not Applicable ND = Not Detected

STL Buffalo

Chronology and QC Summary Package

Date: 05/27/2004
Time: 15:36:43

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

Rept: AN0326

Client ID		VBLK57		VBLK58					
Job No / Lab ID		A04-4441	A4444115	A04-4441	A4444117				
Sample Date									
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	NA		NA	
Benzene	UG/L	ND	5.0	ND	5.0	NA		NA	
Bromodichloromethane	UG/L	ND	5.0	ND	5.0	NA		NA	
Bromoform	UG/L	ND	5.0	ND	5.0	NA		NA	
Bromomethane	UG/L	ND	5.0	ND	5.0	NA		NA	
2-Butanone	UG/L	ND	5.0	ND	5.0	NA		NA	
Carbon Disulfide	UG/L	ND	5.0	ND	5.0	NA		NA	
Carbon Tetrachloride	UG/L	ND	5.0	ND	5.0	NA		NA	
Chlorobenzene	UG/L	ND	5.0	ND	5.0	NA		NA	
Chloroethane	UG/L	ND	5.0	ND	5.0	NA		NA	
Chloroform	UG/L	ND	5.0	ND	5.0	NA		NA	
Chloromethane	UG/L	ND	5.0	ND	5.0	NA		NA	
Cyclohexane	UG/L	ND	5.0	ND	5.0	NA		NA	
1,2-Dibromoethane	UG/L	ND	5.0	ND	5.0	NA		NA	
Dibromochloromethane	UG/L	ND	5.0	ND	5.0	NA		NA	
1,2-Dibromo-3-chloropropane	UG/L	ND	5.0	ND	5.0	NA		NA	
1,2-Dichlorobenzene	UG/L	ND	5.0	ND	5.0	NA		NA	
1,3-Dichlorobenzene	UG/L	ND	5.0	ND	5.0	NA		NA	
1,4-Dichlorobenzene	UG/L	ND	5.0	ND	5.0	NA		NA	
Dichlorodifluoromethane	UG/L	ND	5.0	ND	5.0	NA		NA	
1,1-Dichloroethane	UG/L	ND	5.0	ND	5.0	NA		NA	
1,2-Dichloroethane	UG/L	ND	5.0	ND	5.0	NA		NA	
1,1-Dichloroethene	UG/L	ND	5.0	ND	5.0	NA		NA	
cis-1,2-Dichloroethene	UG/L	ND	5.0	ND	5.0	NA		NA	
trans-1,2-Dichloroethene	UG/L	ND	5.0	ND	5.0	NA		NA	
1,2-Dichloropropane	UG/L	ND	5.0	ND	5.0	NA		NA	
cis-1,3-Dichloropropene	UG/L	ND	5.0	ND	5.0	NA		NA	
trans-1,3-Dichloropropene	UG/L	ND	5.0	ND	5.0	NA		NA	
Ethylbenzene	UG/L	ND	5.0	ND	5.0	NA		NA	
2-Hexanone	UG/L	ND	5.0	ND	5.0	NA		NA	
Isopropylbenzene	UG/L	ND	5.0	ND	5.0	NA		NA	
Methyl acetate	UG/L	ND	5.0	ND	5.0	NA		NA	
Methylcyclohexane	UG/L	ND	5.0	ND	5.0	NA		NA	
Methylene chloride	UG/L	ND	5.0	ND	5.0	NA		NA	
4-Methyl-2-pentanone	UG/L	ND	5.0	ND	5.0	NA		NA	
Methyl tert butyl ether	UG/L	ND	5.0	ND	5.0	NA		NA	
Styrene	UG/L	ND	5.0	ND	5.0	NA		NA	
1,1,2,2-Tetrachloroethane	UG/L	ND	5.0	ND	5.0	NA		NA	
Tetrachloroethene	UG/L	ND	5.0	ND	5.0	NA		NA	
Toluene	UG/L	ND	5.0	ND	5.0	NA		NA	
1,2,4-Trichlorobenzene	UG/L	ND	5.0	ND	5.0	NA		NA	
1,1,1-Trichloroethane	UG/L	ND	5.0	ND	5.0	NA		NA	
1,1,2-Trichloroethane	UG/L	ND	5.0	ND	5.0	NA		NA	

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	VBLK57 A04-4441	A4444115	VBLK58 A04-4441	A4444117				
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	NA		NA	
Trichlorofluoromethane	UG/L	ND	5.0	ND	5.0	NA		NA	
Trichloroethene	UG/L	ND	5.0	ND	5.0	NA		NA	
Vinyl acetate	UG/L	ND	5.0	ND	5.0	NA		NA	
Vinyl chloride	UG/L	ND	1.0	ND	1.0	NA		NA	
Total Xylenes	UG/L	ND	5.0	ND	5.0	NA		NA	
IS/SURROGATE(S)									
Chlorobenzene-D5	%	102	50-200	94	50-200	NA		NA	
1,4-Difluorobenzene	%	104	50-200	96	50-200	NA		NA	
1,4-Dichlorobenzene-D4	%	99	50-200	93	50-200	NA		NA	
Toluene-D8	%	98	76-116	99	76-116	NA		NA	
p-Bromofluorobenzene	%	105	73-117	105	73-117	NA		NA	
1,2-Dichloroethane-D4	%	100	72-143	98	72-143	NA		NA	

NA = Not Applicable ND = Not Detected

Date: 05/27/2004
Time: 15:36:43

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

Rept: AN0326

Client ID		MSB57		MSB58					
Job No / Lab ID		A04-4441	A4444116	A04-4441	A4444118				
Sample Date									
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	NA		NA	
Benzene	UG/L	8.9	5.0	8.6	5.0	NA		NA	
Bromodichloromethane	UG/L	ND	5.0	ND	5.0	NA		NA	
Bromoform	UG/L	ND	5.0	ND	5.0	NA		NA	
Bromomethane	UG/L	ND	5.0	ND	5.0	NA		NA	
2-Butanone	UG/L	ND	5.0	ND	5.0	NA		NA	
Carbon Disulfide	UG/L	ND	5.0	ND	5.0	NA		NA	
Carbon Tetrachloride	UG/L	ND	5.0	ND	5.0	NA		NA	
Chlorobenzene	UG/L	8.9	5.0	8.6	5.0	NA		NA	
Chloroethane	UG/L	ND	5.0	ND	5.0	NA		NA	
Chloroform	UG/L	ND	5.0	ND	5.0	NA		NA	
Chloromethane	UG/L	ND	5.0	ND	5.0	NA		NA	
Cyclohexane	UG/L	ND	5.0	ND	5.0	NA		NA	
1,2-Dibromoethane	UG/L	ND	5.0	ND	5.0	NA		NA	
Dibromochloromethane	UG/L	ND	5.0	ND	5.0	NA		NA	
1,2-Dibromo-3-chloropropane	UG/L	ND	5.0	ND	5.0	NA		NA	
1,2-Dichlorobenzene	UG/L	ND	5.0	ND	5.0	NA		NA	
1,3-Dichlorobenzene	UG/L	ND	5.0	ND	5.0	NA		NA	
1,4-Dichlorobenzene	UG/L	ND	5.0	ND	5.0	NA		NA	
Dichlorodifluoromethane	UG/L	ND	5.0	ND	5.0	NA		NA	
1,1-Dichloroethane	UG/L	ND	5.0	ND	5.0	NA		NA	
1,2-Dichloroethane	UG/L	ND	5.0	ND	5.0	NA		NA	
1,1-Dichloroethene	UG/L	9.5	5.0	9.9	5.0	NA		NA	
cis-1,2-Dichloroethene	UG/L	ND	5.0	ND	5.0	NA		NA	
trans-1,2-Dichloroethene	UG/L	ND	5.0	ND	5.0	NA		NA	
1,2-Dichloropropane	UG/L	ND	5.0	ND	5.0	NA		NA	
cis-1,3-Dichloropropene	UG/L	ND	5.0	ND	5.0	NA		NA	
trans-1,3-Dichloropropene	UG/L	ND	5.0	ND	5.0	NA		NA	
Ethylbenzene	UG/L	ND	5.0	ND	5.0	NA		NA	
2-Hexanone	UG/L	ND	5.0	ND	5.0	NA		NA	
Isopropylbenzene	UG/L	ND	5.0	ND	5.0	NA		NA	
Methyl acetate	UG/L	ND	5.0	ND	5.0	NA		NA	
Methylcyclohexane	UG/L	ND	5.0	ND	5.0	NA		NA	
Methylene chloride	UG/L	ND	5.0	ND	5.0	NA		NA	
4-Methyl-2-pentanone	UG/L	ND	5.0	ND	5.0	NA		NA	
Methyl tert butyl ether	UG/L	ND	5.0	ND	5.0	NA		NA	
Styrene	UG/L	ND	5.0	ND	5.0	NA		NA	
1,1,2,2-Tetrachloroethane	UG/L	ND	5.0	ND	5.0	NA		NA	
Tetrachloroethene	UG/L	ND	5.0	ND	5.0	NA		NA	
Toluene	UG/L	9.3	5.0	9.1	5.0	NA		NA	
1,2,4-Trichlorobenzene	UG/L	ND	5.0	ND	5.0	NA		NA	
1,1,1-Trichloroethane	UG/L	ND	5.0	ND	5.0	NA		NA	
1,1,2-Trichloroethane	UG/L	ND	5.0	ND	5.0	NA		NA	

NA = Not Applicable ND = Not Detected

STL Buffalo

27190

Date: 05/27/2004
Time: 15:36:43

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

Rept: AN0326

Client ID Job No Sample Date	Lab ID	MSB57 A04-4441	A4444116	MSB58 A04-4441	A4444118				
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	NA		NA	
Trichlorofluoromethane	UG/L	ND	5.0	ND	5.0	NA		NA	
Trichloroethene	UG/L	8.9	5.0	8.7	5.0	NA		NA	
Vinyl acetate	UG/L	ND	5.0	ND	5.0	NA		NA	
Vinyl chloride	UG/L	ND	1.0	ND	1.0	NA		NA	
Total Xylenes	UG/L	ND	5.0	ND	5.0	NA		NA	
IS/SURROGATE(S)									
Chlorobenzene-D5	%	102	50-200	101	50-200	NA		NA	
1,4-Difluorobenzene	%	107	50-200	106	50-200	NA		NA	
1,4-Dichlorobenzene-D4	%	100	50-200	95	50-200	NA		NA	
Toluene-D8	%	98	76-116	100	76-116	NA		NA	
p-Bromofluorobenzene	%	109	73-117	104	73-117	NA		NA	
1,2-Dichloroethane-D4	%	100	72-143	92	72-143	NA		NA	

NA = Not Applicable ND = Not Detected

STL Buffalo

28\90

Date: 05/27/2004
Time: 15:36:43

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

Rept: AN0326

Client ID		TRIP BLANK							
Job No	Lab ID	A04-4441	A4444109						
Sample Date		05/10/2004							
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

Date: 05/27/2004
Time: 15:36:43

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

Rept: AN0326

Client ID		TRIP BLANK							
Job No / Lab ID		A04-4441	A4444109						
Sample Date		05/10/2004							
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	%	98	50-200	NA		NA		NA	
1,4-Difluorobenzene	%	101	50-200	NA		NA		NA	
1,4-Dichlorobenzene-D4	%	96	50-200	NA		NA		NA	
Toluene-D8	%	99	76-116	NA		NA		NA	
p-Bromofluorobenzene	%	106	73-117	NA		NA		NA	
1,2-Dichloroethane-D4	%	103	72-143	NA		NA		NA	

30\90

NA = Not Applicable ND = Not Detected

STL Buffalo

Date: 05/27/2004
Time: 15:36:47

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

Rept: AN0326

Client ID Job No Sample Date	Lab ID	VBLK119 A04-4441	A4444110	VBLK133 A04-4441	A4444112				
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	%	112	71-138	108	71-138	NA		NA	

31\90

NA = Not Applicable ND = Not Detected

STL Buffalo

Date: 05/27/2004
Time: 15:36:47

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

Rept: AN0326

Client ID Job No Sample Date	Lab ID	DUPLICATE @ PZ-303AS A04-4441 05/10/2004	A4444101MS	DUPLICATE @ PZ-303AS A04-4441 05/10/2004	A4444101SD	LCS A04-4441	A4444111	LCS A04-4441	A4444113
Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
Gasoline Range Organics	MG/L	6.5	1.0	6.5	1.0	0.19	0.050	0.20	0.050
SURROGATE(S)									
a,a,a-Trifluorotoluene	%	114	71-138	113	71-138	114	71-138	110	71-138

Client ID Job No Sample Date	Lab ID	LCSD A04-4441	A4444114						
Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
Gasoline Range Organics	MG/L	0.19	0.050	NA		NA		NA	
SURROGATE(S)									
a,a,a-Trifluorotoluene	%	110	71-138	NA		NA		NA	

32190

NA = Not Applicable ND = Not Detected

STL Buffalo

Date: 05/27/2004
Time: 15:36:57

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

Rept: AN0326

Client ID		S Blank							
Job No	Lab ID	A04-4441	A480975402						
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: 05/27/2004
Time: 15:36:57

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

Rept: AN0326

Client ID		S Blank							
Job No	Lab ID	A04-4441	A4B0975402						
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	%	114	50-200	NA		NA		NA	
Naphthalene-D8	%	114	50-200	NA		NA		NA	
Acenaphthene-D10	%	112	50-200	NA		NA		NA	
Phenanthrene-D10	%	117	50-200	NA		NA		NA	
Chrysene-D12	%	113	50-200	NA		NA		NA	
Perylene-D12	%	132	50-200	NA		NA		NA	
Nitrobenzene-D5	%	80	34-121	NA		NA		NA	
2-Fluorobiphenyl	%	83	42-126	NA		NA		NA	
p-Terphenyl-d14	%	102	36-145	NA		NA		NA	
Phenol-D5	%	33	10-110	NA		NA		NA	
2-Fluorophenol	%	46	14-120	NA		NA		NA	
2,4,6-Tribromophenol	%	100	42-158	NA		NA		NA	

34190

NA = Not Applicable ND = Not Detected

STL Buffalo

Date: 05/27/2004
Time: 15:36:57

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

Rept: AN0326

Client ID Job No Sample Date	Lab ID	Matrix Spike Blank A04-4441	A4B0975401						
Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
Phenol	UG/L	33	10	NA		NA		NA	
Bis(2-chloroethyl) ether	UG/L	68	10	NA		NA		NA	
2-Chlorophenol	UG/L	65	10	NA		NA		NA	
2-Methylphenol	UG/L	69	10	NA		NA		NA	
2,2'-Oxybis(1-Chloropropane)	UG/L	68	10	NA		NA		NA	
4-Methylphenol	UG/L	62	10	NA		NA		NA	
N-Nitroso-Di-n-propylamine	UG/L	75	10	NA		NA		NA	
Hexachloroethane	UG/L	46	10	NA		NA		NA	
Nitrobenzene	UG/L	72	10	NA		NA		NA	
Isophorone	UG/L	81	10	NA		NA		NA	
2-Nitrophenol	UG/L	73	10	NA		NA		NA	
2,4-Dimethylphenol	UG/L	79	10	NA		NA		NA	
Bis(2-chloroethoxy) methane	UG/L	72	10	NA		NA		NA	
2,4-Dichlorophenol	UG/L	78	10	NA		NA		NA	
Naphthalene	UG/L	68	10	NA		NA		NA	
4-Chloroaniline	UG/L	85	10	NA		NA		NA	
Hexachlorobutadiene	UG/L	56	10	NA		NA		NA	
4-Chloro-3-methylphenol	UG/L	90	10	NA		NA		NA	
2-Methylnaphthalene	UG/L	74	10	NA		NA		NA	
Hexachlorocyclopentadiene	UG/L	39	24	NA		NA		NA	
2,4,6-Trichlorophenol	UG/L	84	10	NA		NA		NA	
2,4,5-Trichlorophenol	UG/L	86	10	NA		NA		NA	
2-Chloronaphthalene	UG/L	73	10	NA		NA		NA	
2-Nitroaniline	UG/L	89	50	NA		NA		NA	
Dimethyl phthalate	UG/L	86	10	NA		NA		NA	
Acenaphthylene	UG/L	81	10	NA		NA		NA	
3-Nitroaniline	UG/L	92	50	NA		NA		NA	
Acenaphthene	UG/L	79	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	82	10	NA		NA		NA	
2,4-Dinitrotoluene	UG/L	85	10	NA		NA		NA	
Diethyl phthalate	UG/L	88	10	NA		NA		NA	
4-Chlorophenyl phenyl ether	UG/L	87	10	NA		NA		NA	
Fluorene	UG/L	87	10	NA		NA		NA	
4-Nitroaniline	UG/L	92	50	NA		NA		NA	
4,6-Dinitro-2-methylphenol	UG/L	ND	50	NA		NA		NA	
N-nitrosodiphenylamine	UG/L	80	10	NA		NA		NA	
4-Bromophenyl phenyl ether	UG/L	85	10	NA		NA		NA	
Hexachlorobenzene	UG/L	84	10	NA		NA		NA	
Pentachlorophenol	UG/L	100	50	NA		NA		NA	
Phenanthrene	UG/L	88	10	NA		NA		NA	
Anthracene	UG/L	85	10	NA		NA		NA	

35190

NA = Not Applicable ND = Not Detected

STL Buffalo

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

Client ID Job No Lab ID Sample Date		Matrix Spike Blank A04-4441 A4B0975401							
Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
Di-n-butyl phthalate	UG/L	83	10	NA		NA		NA	
Fluoranthene	UG/L	88	10	NA		NA		NA	
Pyrene	UG/L	94	10	NA		NA		NA	
Butyl benzyl phthalate	UG/L	88	10	NA		NA		NA	
3,3'-Dichlorobenzidine	UG/L	70	20	NA		NA		NA	
Benzo(a)anthracene	UG/L	90	10	NA		NA		NA	
Chrysene	UG/L	82	10	NA		NA		NA	
Bis(2-ethylhexyl) phthalate	UG/L	86	10	NA		NA		NA	
Di-n-octyl phthalate	UG/L	88	10	NA		NA		NA	
Benzo(b)fluoranthene	UG/L	82	10	NA		NA		NA	
Benzo(k)fluoranthene	UG/L	84	10	NA		NA		NA	
Benzo(a)pyrene	UG/L	84	10	NA		NA		NA	
Indeno(1,2,3-cd)pyrene	UG/L	90	10	NA		NA		NA	
Dibenzo(a,h)anthracene	UG/L	86	10	NA		NA		NA	
Benzo(ghi)perylene	UG/L	89	10	NA		NA		NA	
2,6-Dinitrotoluene	UG/L	84	10	NA		NA		NA	
==========IS/SURROGATE(S)==========									
1,4-Dichlorobenzene-D4	%	123	50-200	NA		NA		NA	
Naphthalene-D8	%	124	50-200	NA		NA		NA	
Acenaphthene-D10	%	122	50-200	NA		NA		NA	
Phenanthrene-D10	%	124	50-200	NA		NA		NA	
Chrysene-D12	%	124	50-200	NA		NA		NA	
Perylene-D12	%	139	50-200	NA		NA		NA	
Nitrobenzene-D5	%	72	34-121	NA		NA		NA	
2-Fluorobiphenyl	%	69	42-126	NA		NA		NA	
p-Terphenyl-d14	%	92	36-145	NA		NA		NA	
Phenol-D5	%	30	10-110	NA		NA		NA	
2-Fluorophenol	%	40	14-120	NA		NA		NA	
2,4,6-Tribromophenol	%	86	42-158	NA		NA		NA	

3690

NA = Not Applicable ND = Not Detected

Date: 05/27/2004
Time: 15:37:01

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 A04-4441	A480974402						
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	%	80	27-153	NA		NA		NA	

3790

NA = Not Applicable ND = Not Detected

STL Buffalo

Date: 05/27/2004
Time: 15:37:01

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 A04-4441	A4B0974401	PZ-302-AI A04-4441 05/11/2004	A4444104MS	PZ-302-AI A04-4441 05/11/2004	A4444104SD		
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	2.6	0.98	2.6	0.98	NA	
SURROGATE(S)									
o-Terphenyl	%	114	27-153	118	27-153	116	27-153	NA	

38190

NA = Not Applicable ND = Not Detected

STL Buffalo

Date: 05/27/2004
Time: 15:37:04

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 A04-4441	A480971902						
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	NA		NA		NA	
Manganese - Total	MG/L	ND	0.0030	NA		NA		NA	
Iron - Total	MG/L	ND	0.050	NA		NA		NA	

39\90

NA = Not Applicable ND = Not Detected

SIL Buffalo

Date: 05/27/2004
Time: 15:37:04

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

Rept: AN0326

Client ID		LFB							
Job No	Lab ID	A04-4441	A4B0971901						
Sample Date									
Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
Iron - Total	MG/L	0.36	0.050	NA		NA		NA	
Arsenic - Total	MG/L	0.20	0.010	NA		NA		NA	
Manganese - Total	MG/L	0.21	0.0030	NA		NA		NA	

NA = Not Applicable ND = Not Detected

STL Buffalo

Date: 05/27/2004
Time: 15:37:07

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

Rept: AN0326

Client ID Job No Sample Date	Lab ID	Method Blank A04-4441	A4B0973202	Method Blank A04-4441	A4B0976302	Method Blank A04-4441	A4B0990502		
Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
Chloride	MG/L	ND	0.50	NA		ND	0.50	NA	
Total Dissolved Solids	MG/L	NA		ND	10	NA		NA	
Fluoride	MG/L	ND	0.050	NA		NA		NA	

NA = Not Applicable ND = Not Detected

STL Buffalo

41\90

Date: 05/27/2004
Time: 15:37:07

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

Rept: AW0326

Client ID Job No Sample Date	Lab ID	LCS A04-4441	A4B0973201	LCS A04-4441	A4B0976301	LCS A04-4441	A4B0990501		
Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
Chloride	MG/L	9.7	0.50	NA		9.4	0.50	NA	
Total Dissolved Solids	MG/L	NA		525	10	NA		NA	
Fluoride	MG/L	1.0	0.050	NA		NA		NA	

42\90

IA = Not Applicable ND = Not Detected

STL Buffalo

Client Sample ID: VBLK57 MSB57
Lab Sample ID: A4444115 A4444116

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	9.52	10.0	95	65-138
Trichloroethene	UG/L	8.88	10.0	89	71-120
Benzene	UG/L	8.90	10.0	89	67-126
Toluene	UG/L	9.26	10.0	93	71-120
Chlorobenzene	UG/L	8.91	10.0	89	74-120

43\90

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

Client Sample ID: VBLK58 MSB58
Lab Sample ID: A4444117 A4444118

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	9.88	10.0	99	65-138
Trichloroethene	UG/L	8.67	10.0	87	71-120
Benzene	UG/L	8.58	10.0	86	67-126
Toluene	UG/L	9.14	10.0	91	71-120
Chlorobenzene	UG/L	8.64	10.0	86	74-120

4490

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

Date : 05/27/2004 15:37:12
Job No: A04-4441

ALLIED WASTE INDUSTRIES
WESTLAKE LANDFILL
SAMPLE DATE 05/10/2004

Rept: AN0364

Client Sample ID: DUPLICATE @ PZ-303AS DUPLICATE @ PZ-303AS DUPLICATE @ PZ-303AS
Lab Sample ID: A4444101 A4444101MS A4444101SD

Analyte	Units of Measure	Concentration			Spike Amount		% Recovery			%	QC LIMITS	
		Sample	Matrix Spike	Spike Duplicate	MS	MSD	MS	MSD	Avg	RPD	RPD	REC.
ALLIED - GASOLINE RANGE ORGANICS-8015B-W												
Gasoline Range Organics	MG/L	2.39	6.47	6.49	4.00	4.00	102	102	102	0	30.0	62-126

45190

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

STL Buffalo

Client Sample ID: VBLK119 LCS
Lab Sample ID: A4444110 A4444111

Analyte	Units of Measure	Concentration Blank Spike	Spike Amount	% Recovery Blank Spike	QC LIMITS
ALLIED - GASOLINE RANGE ORGANICS-8015B-W					
Gasoline Range Organics	MG/L	0.190	0.200	95	62-126

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

Client Sample ID: VBLK133 LCS LCSD
Lab Sample ID: A4444112 A4444113 A4444114

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	0.196	0.193	0.200	0.200	98	97	98	1	30.0	62-126

47\90

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

Client Sample ID: S Blank — Matrix Spike Blank
Lab Sample ID: A4B0975402 — A4B0975401

Analyte	Units of Measure	Concentration Blank Spike	Spike Amount	% Recovery Blank Spike	QC LIMITS
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS					
Acenaphthene	UG/L	78.7	100	79	46-121
Acenaphthylene	UG/L	80.8	100	81	57-120
Anthracene	UG/L	84.8	100	85	50-126
Benzo(a)anthracene	UG/L	89.9	100	90	50-144
Benzo(b)fluoranthene	UG/L	82.2	100	82	40-158
Benzo(k)fluoranthene	UG/L	83.8	100	84	42-140
Benzo(ghi)perylene	UG/L	88.9	100	89	33-139
Benzo(a)pyrene	UG/L	84.1	100	84	50-140
Bis(2-chloroethoxy) methane	UG/L	72.4	100	72	35-120
Bis(2-chloroethyl) ether	UG/L	67.7	100	68	24-120
2,2'-Oxybis(1-Chloropropane)	UG/L	68.1	100	68	24-120
Bis(2-ethylhexyl) phthalate	UG/L	86.3	100	85	29-171
4-Bromophenyl phenyl ether	UG/L	84.7	100	85	46-134
Butyl benzyl phthalate	UG/L	87.7	100	88	46-147
4-Chloroaniline	UG/L	84.6	100	85	38-120
4-Chloro-3-methylphenol	UG/L	90.5	100	90	48-135
2-Chloronaphthalene	UG/L	73.1	100	73	39-120
2-Chlorophenol	UG/L	65.3	100	65	33-120
4-Chlorophenyl phenyl ether	UG/L	86.8	100	87	47-128
Chrysene	UG/L	82.0	100	82	56-128
Dibenzo(a,h)anthracene	UG/L	85.8	100	86	45-125
Dibenzofuran	UG/L	81.9	100	82	46-120
Di-n-butyl phthalate	UG/L	83.4	100	83	68-136
3,3'-Dichlorobenzidine	UG/L	69.5	100	70	37-154
2,4-Dichlorophenol	UG/L	78.2	100	78	36-126
Diethyl phthalate	UG/L	88.2	100	88	48-143
2,4-Dimethylphenol	UG/L	79.3	100	79	35-125
Dimethyl phthalate	UG/L	86.2	100	86	50-135
4,6-Dinitro-2-methylphenol	UG/L	47.6	100	48	39-164
2,4-Dinitrophenol	UG/L	32.5	100	32	15-155
2,4-Dinitrotoluene	UG/L	84.9	100	85	49-135
2,6-Dinitrotoluene	UG/L	83.7	100	84	53-142
Di-n-octyl phthalate	UG/L	87.6	100	88	49-156
Fluoranthene	UG/L	87.5	100	88	51-139
Fluorene	UG/L	87.3	100	87	49-130
Hexachlorobenzene	UG/L	83.9	100	84	44-139
Hexachlorobutadiene	UG/L	56.2	100	56	10-120
Hexachlorocyclopentadiene	UG/L	38.6	100	39	12-120
Hexachloroethane	UG/L	46.2	100	46	10-120
Indeno(1,2,3-cd)pyrene	UG/L	89.8	100	90	49-135
Isophorone	UG/L	80.6	100	81	24-121
2-Methylnaphthalene	UG/L	73.7	100	74	44-120
2-Methylphenol	UG/L	68.7	100	69	26-134

48190

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

Client Sample ID: S Blank — Matrix Spike Blank
Lab Sample ID: A4B0975402 — A4B0975401

Analyte	Units of Measure	Concentration Blank Spike	Spike Amount	% Recovery Blank Spike	QC LIMITS
METHOD 8270 - TCL SEMI-VOLATILE ORGANICS					
4-Methylphenol	UG/L	61.9	100	62	35-125
Naphthalene	UG/L	68.5	100	68	38-120
2-Nitroaniline	UG/L	89.4	100	89	52-139
3-Nitroaniline	UG/L	92.2	100	92	65-140
4-Nitroaniline	UG/L	92.0	100	92	59-147
Nitrobenzene	UG/L	71.8	100	72	34-128
2-Nitrophenol	UG/L	73.2	100	73	41-120
4-Nitrophenol	UG/L	41.8	100	42	7-120
N-nitrosodiphenylamine	UG/L	79.7	100	80	43-120
N-Nitroso-Di-n-propylamine	UG/L	75.2	100	75	36-124
Pentachlorophenol	UG/L	102	100	103	21-137
Phenanthrene	UG/L	87.5	100	88	54-136
Phenol	UG/L	33.4	100	33	13-149
Pyrene	UG/L	93.8	100	94	53-142
2,4,5-Trichlorophenol	UG/L	86.3	100	86	52-139
2,4,6-Trichlorophenol	UG/L	84.3	100	84	48-139

49\90

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

Date : 05/27/2004 15:37:18
Job No: A04-4441

ALLIED WASTE INDUSTRIES
WESTLAKE LANDFILL
SAMPLE DATE 05/11/2004

Rept: ANO364

Client Sample ID: PZ-302-AI PZ-302-AI PZ-302-AI
Lab Sample ID: A4444104 A4444104MS A4444104SD

Analyte	Units of Measure	Concentration Sample	Matrix Spike	Spike Duplicate	Spike Amount MS	MSD	% Recovery MS	MSD	Avg	% RPD	QC LIMITS RPD	REC.
ALLIED - DIESEL RANGE ORGANICS - METHOD Diesel Range Organics	MG/L	0	2.56	2.62	2.94	2.94	87	89	88	2	30.0	53-162

50\90

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

STL Buffalo

Client Sample ID: Method Blank
Lab Sample ID: A4B0974402

Matrix Spike Blank
A4B0974401

Analyte	Units of Measure	Concentration Blank Spike	Spike Amount	% Recovery Blank Spike	QC LIMITS
ALLIED - DIESEL RANGE ORGANICS - METHOD					
Diesel Range Organics	MG/L	1.23	1.50	82	53-162

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

Client Sample ID: Method Blank LFB
Lab Sample ID: A4B0971902 A4B0971901

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	0.195	0.200	98	80-120
ALLIED - TOTAL IRON - W	MG/L	0.363	0.400	91	80-120
ALLIED - TOTAL MANGANESE - W	MG/L	0.209	0.200	104	80-120

52\90

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

Client Sample ID: Method Blank LCS
Lab Sample ID: A4B0973202 A4B0973201

Analyte	Units of Measure	Concentration Blank Spike	Spike Amount	% Recovery Blank Spike	QC LIMITS
WET CHEMISTRY ANALYSIS					
ALLIED - 9056 CHLORIDE BY IC	MG/L	9.73	10.0	95	90-110
ALLIED - 9056 METHOD 9056 - FLUORIDE	MG/L	1.05	1.00	105	90-110

53\90

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

Client Sample ID: Method Blank LCS
Lab Sample ID: A4B0976302 A4B0976301

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	525.0	500.0	105	85-115

5490

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

Client Sample ID: Method Blank LCS
Lab Sample ID: A4B0990502 A4B0990501

Analyte	Units of Measure	Concentration Blank Spike	Spike Amount	% Recovery Blank Spike	QC LIMITS
WET CHEMISTRY ANALYSIS					
ALLIED - 9056 CHLORIDE BY IC	MG/L	9.36	10.0	92	90-110

* 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 @ PZ-303AS A04-4441 A4444101	DUPLICATE @ PZ-303AS A04-4441 A44441010L	EQUIP BLANK A04-4441 A4444102	FIELD BLANK@PZ-303AS A04-4441 A4444103	PZ-302-A1 A04-4441 A4444104
Sample Date	05/10/2004 17:00	05/10/2004 17:00	05/10/2004 19:15	05/10/2004 16:25	05/11/2004 15:30
Received Date	05/12/2004 09:45	05/12/2004 09:45	05/12/2004 09:45	05/12/2004 09:45	05/12/2004 09:45
Extraction Date					
Analysis Date	05/13/2004 20:40	05/14/2004 13:11	05/13/2004 21:14	05/13/2004 21:48	05/13/2004 22:22
Extraction HT Met?	-	-	-	-	-
Analytical HT Met?	YES	YES	YES	YES	YES
Sample Matrix	WATER	WATER	WATER	WATER	WATER
Dilution Factor	20.0	40.0	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					

5690

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

Client Sample ID Job No & Lab Sample ID	PZ-302-AS A04-4441 A4444105	PZ-302-ASDL A04-4441 A4444105DL	PZ-303-AS A04-4441 A4444106	PZ-303-ASDL A04-4441 A4444106DL	PZ-304-AI A04-4441 A4444107
Sample Date	05/10/2004 08:30	05/10/2004 08:30	05/10/2004 16:55	05/10/2004 16:55	05/10/2004 18:45
Received Date	05/12/2004 09:45	05/12/2004 09:45	05/12/2004 09:45	05/12/2004 09:45	05/12/2004 09:45
Extraction Date					
Analysis Date	05/13/2004 22:56	05/14/2004 13:45	05/13/2004 23:29	05/14/2004 14:19	05/14/2004 14:53
Extraction HT Met?	-	-	-	-	-
Analytical HT Met?	YES	YES	YES	YES	YES
Sample Matrix	WATER	WATER	WATER	WATER	WATER
Dilution Factor	2.0	4.0	20.0	50.0	1.0
Sample wt/vol	0.025 LITERS	0.025 LITERS	0.025 LITERS	0.025 LITERS	0.025 LITERS
% Dry					

5790

NA = Not Applicable

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

Client Sample ID Job No & Lab Sample ID	PZ-304-AS A04-4441 A4444108				
Sample Date	05/10/2004 18:00				
Received Date	05/12/2004 09:45				
Extraction Date					
Analysis Date	05/14/2004 15:27				
Extraction HT Met?	-				
Analytical HT Met?	YES				
Sample Matrix	WATER				
Dilution Factor	1.0				
Sample wt/vol	0.025 LITERS				
% Dry					

58190

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

Client Sample ID Job No & Lab Sample ID	TRIP BLANK A04-4441 A4444109				
Sample Date	05/10/2004				
Received Date	05/12/2004 09:45				
Extraction Date					
Analysis Date	05/13/2004 15:00				
Extraction HT Met?	-				
Analytical HT Met?	YES				
Sample Matrix	WATER				
Dilution Factor	1.0				
Sample wt/vol	0.025 LITERS				
% Dry					

59\90

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

Client Sample ID Job No & Lab Sample ID	MSB57 A04-4441 A4444116	MSB58 A04-4441 A4444118			
Sample Date					
Received Date					
Extraction Date					
Analysis Date	05/13/2004 13:51	05/14/2004 09:45			
Extraction HT Met?	-	-			
Analytical HT Met?	-	-			
Sample Matrix	WATER	WATER			
Dilution Factor	1.0	1.0			
Sample wt/vol	0.025 LITERS	0.025 LITERS			
% Dry					

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

Client Sample ID Job No & Lab Sample ID	VBLK57 A04-4441 A4444115	VBLK58 A04-4441 A4444117			
Sample Date					
Received Date					
Extraction Date					
Analysis Date	05/13/2004 14:26	05/14/2004 10:20			
Extraction HT Met?	-	-			
Analytical HT Met?	-	-			
Sample Matrix	WATER	WATER			
Dilution Factor	1.0	1.0			
Sample wt/vol	0.025 LITERS	0.025 LITERS			
% Dry					

61\90

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

Client Sample ID Job No & Lab Sample ID	DUPLICATE @ PZ-303AS A04-4441 A4444101	EQUIP BLANK A04-4441 A4444102	PZ-302-AI A04-4441 A4444104	PZ-302-AS A04-4441 A4444105	PZ-303-AS A04-4441 A4444106
Sample Date	05/10/2004 17:00	05/10/2004 19:15	05/11/2004 15:30	05/10/2004 08:30	05/10/2004 16:55
Received Date	05/12/2004 09:45	05/12/2004 09:45	05/12/2004 09:45	05/12/2004 09:45	05/12/2004 09:45
Extraction Date					
Analysis Date	05/13/2004 16:38	05/13/2004 18:08	05/13/2004 18:38	05/13/2004 19:07	05/13/2004 19:37
Extraction HT Met?	-	-	-	-	-
Analytical HT Met?	YES	YES	YES	YES	YES
Sample Matrix	WATER	WATER	WATER	WATER	WATER
Dilution Factor	20.0	1.0	1.0	1.0	20.0
Sample wt/vol	0.005 LITERS	0.005 LITERS	0.005 LITERS	0.005 LITERS	0.005 LITERS
% Dry					

62\90

NA = Not Applicable

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

Client Sample ID Job No & Lab Sample ID	PZ-304-AI A04-4441 A4444107	PZ-304-AS A04-4441 A4444108			
Sample Date	05/10/2004 18:45	05/10/2004 18:00			
Received Date	05/12/2004 09:45	05/12/2004 09:45			
Extraction Date					
Analysis Date	05/14/2004 12:08	05/14/2004 12:39			
Extraction HT Met?	-	-			
Analytical HT Met?	YES	YES			
Sample Matrix	WATER	WATER			
Dilution Factor	1.0	1.0			
Sample wt/vol	0.005 LITERS	0.005 LITERS			
% Dry					

63190

NA = Not Applicable

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

Client Sample ID Job No & Lab Sample ID	DUPLICATE @ PZ-303AS A04-4441 A4444101MS	DUPLICATE @ PZ-303AS A04-4441 A4444101SD	LCS A04-4441 A4444111	LCS A04-4441 A4444113	LCSD A04-4441 A4444114
Sample Date	05/10/2004 17:00	05/10/2004 17:00			
Received Date	05/12/2004 09:45	05/12/2004 09:45			
Extraction Date					
Analysis Date	05/13/2004 17:08	05/13/2004 17:38	05/13/2004 14:55	05/14/2004 11:06	05/14/2004 11:37
Extraction HT Met?	-	-	-	-	-
Analytical HT Met?	YES	YES	-	-	-
Sample Matrix	WATER	WATER	WATER	WATER	WATER
Dilution Factor	20.0	20.0	1.0	1.0	1.0
Sample wt/vol	0.005 LITERS	0.005 LITERS	0.005 LITERS	0.005 LITERS	0.005 LITERS
% Dry					

64\90

NA = Not Applicable

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

Client Sample ID Job No & Lab Sample ID	VBLK119 A04-4441 A4444110	VBLK133 A04-4441 A4444112			
Sample Date					
Received Date					
Extraction Date					
Analysis Date	05/13/2004 14:24	05/14/2004 10:35			
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					

METHOD 8270 - TCL SEMI-VOLATILE ORGANICS

Client Sample ID Job No & Lab Sample ID	DUPLICATE @ PZ-303AS A04-4441 A4444101	EQUIP BLANK A04-4441 A4444102	PZ-302-AI A04-4441 A4444104	PZ-302-AS A04-4441 A4444105	PZ-303-AS A04-4441 A4444106
Sample Date	05/10/2004 17:00	05/10/2004 19:15	05/11/2004 15:30	05/10/2004 08:30	05/10/2004 16:55
Received Date	05/12/2004 09:45	05/12/2004 09:45	05/12/2004 09:45	05/12/2004 09:45	05/12/2004 09:45
Extraction Date	05/14/2004 07:00	05/14/2004 07:00	05/14/2004 07:00	05/14/2004 07:00	05/14/2004 07:00
Analysis Date	05/17/2004 17:16	05/17/2004 17:43	05/17/2004 18:10	05/18/2004 09:14	05/18/2004 09:41
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	1.055 LITERS	1.045 LITERS	1.045 LITERS	1.01 LITERS	1.055 LITERS
% Dry					

NA = Not Applicable

METHOD 8270 - TCL SEMI-VOLATILE ORGANICS

Client Sample ID Job No & Lab Sample ID	PZ-304-AI A04-4441 A4444107	PZ-304-AS A04-4441 A4444108			
Sample Date	05/10/2004 18:45	05/10/2004 18:00			
Received Date	05/12/2004 09:45	05/12/2004 09:45			
Extraction Date	05/14/2004 07:00	05/14/2004 07:00			
Analysis Date	05/18/2004 10:08	05/18/2004 10:35			
Extraction HT Met?	YES	YES			
Analytical HT Met?	YES	YES			
Sample Matrix	WATER	WATER			
Dilution Factor	1.0	1.0			
Sample wt/vol	1.035 LITERS	1.045 LITERS			
% Dry					

6790

NA = Not Applicable

METHOD 8270 - TCL SEMI-VOLATILE ORGANICS

Client Sample ID Job No & Lab Sample ID	Matrix Spike Blank A04-4441 A4B0975401				
Sample Date					
Received Date					
Extraction Date	05/14/2004 07:00				
Analysis Date	05/15/2004 22:33				
Extraction HT Met?	-				
Analytical HT Met?	-				
Sample Matrix	WATER				
Dilution Factor	1.0				
Sample wt/vol	1.0 LITERS				
% Dry					

06189

METHOD 8270 - TCL SEMI-VOLATILE ORGANICS

Client Sample ID Job No & Lab Sample ID	S Blank A04-4441 A4B0975402				
Sample Date					
Received Date					
Extraction Date	05/14/2004 07:00				
Analysis Date	05/15/2004 23:00				
Extraction HT Met?	-				
Analytical HT Met?	-				
Sample Matrix	WATER				
Dilution Factor	1.0				
Sample wt/vol	1.0 LITERS				
% Dry					

0069

ALLIED - DIESEL RANGE ORGANICS - METHOD 8015B - W

Client Sample ID Job No & Lab Sample ID	DUPLICATE @ PZ-303AS A04-4441 A4444101	EQUIP BLANK A04-4441 A4444102	PZ-302-A1 A04-4441 A4444104	PZ-302-AS A04-4441 A4444105	PZ-303-AS A04-4441 A4444106
Sample Date	05/10/2004 17:00	05/10/2004 19:15	05/11/2004 15:30	05/10/2004 08:30	05/10/2004 16:55
Received Date	05/12/2004 09:45	05/12/2004 09:45	05/12/2004 09:45	05/12/2004 09:45	05/12/2004 09:45
Extraction Date	05/14/2004 07:00	05/14/2004 07:00	05/14/2004 07:00	05/14/2004 07:00	05/14/2004 07:00
Analysis Date	05/18/2004 15:07	05/18/2004 10:03	05/18/2004 10:57	05/18/2004 12:21	05/18/2004 15:35
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	5.0	1.0	1.0	1.0	5.0
Sample wt/vol	1.03 LITERS	1.045 LITERS	1.0 LITERS	1.025 LITERS	1.055 LITERS
% Dry					

70\90

ALLIED - DIESEL RANGE ORGANICS - METHOD 8015B - W

Client Sample ID Job No & Lab Sample ID	PZ-304-AI A04-4441 A4444107	PZ-304-AS A04-4441 A4444108			
Sample Date	05/10/2004 18:45	05/10/2004 18:00			
Received Date	05/12/2004 09:45	05/12/2004 09:45			
Extraction Date	05/14/2004 07:00	05/14/2004 07:00			
Analysis Date	05/18/2004 13:16	05/18/2004 14:39			
Extraction HT Met?	YES	YES			
Analytical HT Met?	YES	YES			
Sample Matrix	WATER	WATER			
Dilution Factor	1.0	1.0			
Sample wt/vol	1.045 LITERS	1.04 LITERS			
% Dry					

71\90

NA = Not Applicable

ALLIED - DIESEL RANGE ORGANICS - METHOD 8015B - W

Client Sample ID Job No & Lab Sample ID	Matrix Spike Blank A04-4441 A4B0974401	PZ-302-AI A04-4441 A4444104MS	PZ-302-AI A04-4441 A4444104SD		
Sample Date		05/11/2004 15:30	05/11/2004 15:30		
Received Date		05/12/2004 09:45	05/12/2004 09:45		
Extraction Date	05/14/2004 07:00	05/14/2004 07:00	05/14/2004 07:00		
Analysis Date	05/18/2004 08:39	05/18/2004 11:25	05/18/2004 11:53		
Extraction HT Met?	-	YES	YES		
Analytical HT Met?	-	YES	YES		
Sample Matrix	WATER	WATER	WATER		
Dilution Factor	1.0	1.0	1.0		
Sample wt/vol	1.0 LITERS	0.51 LITERS	0.51 LITERS		
% Dry					

72\90

ALLIED - DIESEL RANGE ORGANICS - METHOD 8015B - W

Client Sample ID Job No & Lab Sample ID	Method Blank A04-4441 A4B0974402				
Sample Date					
Received Date					
Extraction Date	05/14/2004 07:00				
Analysis Date	05/18/2004 09:07				
Extraction HT Met?	-				
Analytical HT Met?	-				
Sample Matrix	WATER				
Dilution Factor	1.0				
Sample wt/vol	1.0 LITERS				
% Dry					

73\90

Date: 05/27/2004 15:37:38
Jobno: A04-4441

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
A4444101	DUPLICATE @ PZ-303AS	MG/L	Arsenic - Total	6010	1.00	05/10/2004 17:00	05/12 09:45	NA	NA	05/15 00:43	Yes	WATER
		MG/L	Iron - Total	6010	1.00	05/10/2004 17:00	05/12 09:45	NA	NA	05/15 00:43	Yes	WATER
		MG/L	Manganese - Total	6010	1.00	05/10/2004 17:00	05/12 09:45	NA	NA	05/15 00:43	Yes	WATER
A4444102	EQUIP BLANK	MG/L	Arsenic - Total	6010	1.00	05/10/2004 19:15	05/12 09:45	NA	NA	05/15 00:48	Yes	WATER
		MG/L	Iron - Total	6010	1.00	05/10/2004 19:15	05/12 09:45	NA	NA	05/15 00:48	Yes	WATER
		MG/L	Manganese - Total	6010	1.00	05/10/2004 19:15	05/12 09:45	NA	NA	05/15 00:48	Yes	WATER
A4444104	PZ-302-AI	MG/L	Arsenic - Total	6010	1.00	05/11/2004 15:30	05/12 09:45	NA	NA	05/15 00:53	Yes	WATER
		MG/L	Iron - Total	6010	1.00	05/11/2004 15:30	05/12 09:45	NA	NA	05/15 00:53	Yes	WATER
		MG/L	Manganese - Total	6010	1.00	05/11/2004 15:30	05/12 09:45	NA	NA	05/15 00:53	Yes	WATER
A4444105	PZ-302-AS	MG/L	Arsenic - Total	6010	1.00	05/10/2004 08:30	05/12 09:45	NA	NA	05/15 00:58	Yes	WATER
		MG/L	Iron - Total	6010	1.00	05/10/2004 08:30	05/12 09:45	NA	NA	05/15 00:58	Yes	WATER
		MG/L	Manganese - Total	6010	1.00	05/10/2004 08:30	05/12 09:45	NA	NA	05/15 00:58	Yes	WATER
A4444106	PZ-303-AS	MG/L	Arsenic - Total	6010	1.00	05/10/2004 16:55	05/12 09:45	NA	NA	05/15 01:02	Yes	WATER
		MG/L	Iron - Total	6010	1.00	05/10/2004 16:55	05/12 09:45	NA	NA	05/15 01:02	Yes	WATER
		MG/L	Manganese - Total	6010	1.00	05/10/2004 16:55	05/12 09:45	NA	NA	05/15 01:02	Yes	WATER
A4444107	PZ-304-AI	MG/L	Arsenic - Total	6010	1.00	05/10/2004 18:45	05/12 09:45	NA	NA	05/15 01:07	Yes	WATER
		MG/L	Iron - Total	6010	1.00	05/10/2004 18:45	05/12 09:45	NA	NA	05/15 01:07	Yes	WATER
		MG/L	Manganese - Total	6010	1.00	05/10/2004 18:45	05/12 09:45	NA	NA	05/15 01:07	Yes	WATER
A4444108	PZ-304-AS	MG/L	Arsenic - Total	6010	1.00	05/10/2004 18:00	05/12 09:45	NA	NA	05/15 01:12	Yes	WATER
		MG/L	Iron - Total	6010	1.00	05/10/2004 18:00	05/12 09:45	NA	NA	05/15 01:12	Yes	WATER
		MG/L	Manganese - Total	6010	1.00	05/10/2004 18:00	05/12 09:45	NA	NA	05/15 01:12	Yes	WATER

7490

HT = Analysis Holding Time Met
HT = TCLP Holding Time Met
A = Not Applicable

STL Buffalo

Date: 05/27/2004 15:37:38
Jobno: A04-4441

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
A4B0971902	Method Blank	MG/L	Arsenic - Total	6010	1.00	-	- 09:45	NA	NA	05/14 23:14	Yes	WATER
		MG/L	Iron - Total	6010	1.00	-	- 09:45	NA	NA	05/14 23:14	Yes	WATER
		MG/L	Manganese - Total	6010	1.00	-	- 09:45	NA	NA	05/18 15:19	Yes	WATER
A4B0971901	LFB	MG/L	Arsenic - Total	6010	1.00	-	- 09:45	NA	NA	05/14 23:19	Yes	WATER
		MG/L	Iron - Total	6010	1.00	-	- 09:45	NA	NA	05/14 23:19	Yes	WATER
		MG/L	Manganese - Total	6010	1.00	-	- 09:45	NA	NA	05/17 13:42	Yes	WATER

7590

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

STL Buffalo

Date: 05/27/2004 15:37:41
Jobno: A04-4441

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
A4444101	DUPLICATE @ PZ-303AS	MG/L	Total Dissolved Solids	160.1	1.00	05/10/2004 17:00	05/12 09:45	NA	NA	05/13 20:00	Yes	WATER
		MG/L	Chloride	9056	1.00	05/10/2004 17:00	05/12 09:45	NA	NA	05/13 10:35	Yes	WATER
		MG/L	Fluoride	9056	1.00	05/10/2004 17:00	05/12 09:45	NA	NA	05/13 10:35	Yes	WATER
A4444102	EQUIP BLANK	MG/L	Total Dissolved Solids	160.1	1.00	05/10/2004 19:15	05/12 09:45	NA	NA	05/13 20:00	Yes	WATER
		MG/L	Chloride	9056	1.00	05/10/2004 19:15	05/12 09:45	NA	NA	05/13 10:35	Yes	WATER
		MG/L	Fluoride	9056	1.00	05/10/2004 19:15	05/12 09:45	NA	NA	05/13 10:35	Yes	WATER
A4444104	PZ-302-AI	MG/L	Total Dissolved Solids	160.1	1.00	05/11/2004 15:30	05/12 09:45	NA	NA	05/13 20:00	Yes	WATER
		MG/L	Chloride	9056	1.00	05/11/2004 15:30	05/12 09:45	NA	NA	05/13 10:35	Yes	WATER
		MG/L	Fluoride	9056	1.00	05/11/2004 15:30	05/12 09:45	NA	NA	05/13 10:35	Yes	WATER
		UMHOS/CM	Specific Conductance (25 C) (Field)	120.1	1.00	05/11/2004 15:30	05/12 09:45	NA	NA	05/11	Yes	WATER
		S.U.	pH (Field)	150.1	1.00	05/11/2004 15:30	05/12 09:45	NA	NA	05/11	Yes	WATER
		°C	Temperature, Field (°C)	TEMP	1.00	05/11/2004 15:30	05/12 09:45	NA	NA	05/11	Yes	WATER
A4444105	PZ-302-AS	MG/L	Total Dissolved Solids	160.1	1.00	05/10/2004 08:30	05/12 09:45	NA	NA	05/13 20:00	Yes	WATER
		MG/L	Chloride	9056	1.00	05/10/2004 08:30	05/12 09:45	NA	NA	05/13 10:35	Yes	WATER
		MG/L	Fluoride	9056	1.00	05/10/2004 08:30	05/12 09:45	NA	NA	05/13 10:35	Yes	WATER
		UMHOS/CM	Specific Conductance (25 C) (Field)	120.1	1.00	05/10/2004 08:30	05/12 09:45	NA	NA	05/10	Yes	WATER
		S.U.	pH (Field)	150.1	1.00	05/10/2004 08:30	05/12 09:45	NA	NA	05/10	Yes	WATER
		°C	Temperature, Field (°C)	TEMP	1.00	05/10/2004 08:30	05/12 09:45	NA	NA	05/10	Yes	WATER
A4444106	PZ-303-AS	MG/L	Total Dissolved Solids	160.1	1.00	05/10/2004 16:55	05/12 09:45	NA	NA	05/13 20:00	Yes	WATER
		MG/L	Chloride	9056	1.00	05/10/2004 16:55	05/12 09:45	NA	NA	05/13 10:35	Yes	WATER
		MG/L	Fluoride	9056	1.00	05/10/2004 16:55	05/12 09:45	NA	NA	05/13 10:35	Yes	WATER
		UMHOS/CM	Specific Conductance (25 C) (Field)	120.1	1.00	05/10/2004 16:55	05/12 09:45	NA	NA	05/10	Yes	WATER
		S.U.	pH (Field)	150.1	1.00	05/10/2004 16:55	05/12 09:45	NA	NA	05/10	Yes	WATER
		°C	Temperature, Field (°C)	TEMP	1.00	05/10/2004 16:55	05/12 09:45	NA	NA	05/10	Yes	WATER
A4444107	PZ-304-AI	MG/L	Total Dissolved Solids	160.1	1.00	05/10/2004 18:45	05/12 09:45	NA	NA	05/13 20:00	Yes	WATER
		MG/L	Chloride	9056	5.00	05/10/2004 18:45	05/12 09:45	NA	NA	05/13 10:35	Yes	WATER
		MG/L	Fluoride	9056	1.00	05/10/2004 18:45	05/12 09:45	NA	NA	05/13 10:35	Yes	WATER
		UMHOS/CM	Specific Conductance (25 C) (Field)	120.1	1.00	05/10/2004 18:45	05/12 09:45	NA	NA	05/10	Yes	WATER
		S.U.	pH (Field)	150.1	1.00	05/10/2004 18:45	05/12 09:45	NA	NA	05/10	Yes	WATER
		°C	Temperature, Field (°C)	TEMP	1.00	05/10/2004 18:45	05/12 09:45	NA	NA	05/10	Yes	WATER
A4444108	PZ-304-AS	MG/L	Total Dissolved Solids	160.1	1.00	05/10/2004 18:00	05/12 09:45	NA	NA	05/13 20:00	Yes	WATER
		MG/L	Chloride	9056	10.00	05/10/2004 18:00	05/12 09:45	NA	NA	05/17 14:22	Yes	WATER
		MG/L	Fluoride	9056	5.00	05/10/2004 18:00	05/12 09:45	NA	NA	05/13 10:35	Yes	WATER
		UMHOS/CM	Specific Conductance (25 C) (Field)	120.1	1.00	05/10/2004 18:00	05/12 09:45	NA	NA	05/10	Yes	WATER
		S.U.	pH (Field)	150.1	1.00	05/10/2004 18:00	05/12 09:45	NA	NA	05/10	Yes	WATER
		°C	Temperature, Field (°C)	TEMP	1.00	05/10/2004 18:00	05/12 09:45	NA	NA	05/10	Yes	WATER

7690

HT = Analysis Holding Time Met
HT = TCLP Holding Time Met
A = Not Applicable

STL Buffalo

Chain of Custody Record

SEVERN TRENT **STL**

Severn Trent Laboratories, Inc.

STL-4124 (0901)

Client: West Lake OV-2 c/o Herst & Associates	Project Manager: Ward E. Herst	Date: 5-11-2004	Chain of Custody Number: 137239
Address: 4630 S. Hwy 94 - N. Outer Road	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: Brian J. Fischer	
Project Name and Location (State): West Lake OV-2 Bridgeton, Missouri	Carrier/Waybill Number: Federal Express (See below)		
Contract/Purchase Order/Quote No.: West Lake OV-2			

Analysis (Attach list if more space is needed): 8260 VOC; 8270 SVOC; 8015 Gasoline Range Organics; 8015B Diesel Range Organics; 6010 TCP Metals; TDS

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	DW	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	8260 VOC	8270 SVOC	8015 Gasoline Range Organics	8015B Diesel Range Organics	6010 TCP Metals	TDS	Special Instructions/ Conditions of Receipt
PZ-302AI	5-10-04	1530		X				3	2	1	6*			X	X	X	X	X	X	VOA's effervesced - sent unpres. *7 day hold
Field Blank @ PZ-303AS	5-10-04	1625					X				4			X						
PZ-303AS	5-10-04	1655		X				3	2	1	6*			X	X	X	X	X	X	VOA's effervesced - sent unpres. *7 day hold
Duplicate @ PZ-303AS	5-10-04	1700		X				3	2	1	6*			X	X	X	X	X	X	VOA's effervesced - sent unpres. *7 day hold
PZ-304AS	5-10-04	1800		X				3	2	1	6			X	X	X	X	X	X	
PZ-304AI	5-10-04	1845		X				3	2	1	6			X	X	X	X	X	X	
Equipment Blank	5-10-04	1915					X	3	2	1	6			X	X	X	X	X	X	Taken on water level probe
PZ-302AS	5-11-04	0830		X				3	2	1	6			X	X	X	X	X	X	
Trip Blank							X				2			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 1 month)

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

QC Requirements (Specify):

	Date	Time
1. Relinquished By: [signature]	5-11-04	2000
2. Relinquished By:		
3. Relinquished By:		

	Date	Time
1. Received By: 8452-2460-1756 FedEx 8467-7066-2243		
2. Received By: 8452-2460-1220 [signature] STL [signature]	05/12/04	09:45
3. Received By:		

Comments: 3@ 2.0°C

7990

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

Field Data

HERST & ASSOCIATES, INC. ®

Global Presence
Personal Attention

FIELD INFORMATION LOG Part 1

Facility: Westlake Landfill (OU-2)

Location: Bridgeton, Missouri

Sample Matrix: Groundwater

Sample Point ID: PZ-302-AI

Sampler(s): Jonathan Wilkinson
Brett Dougherty Shank

Top of Casing (ft, msl) 451.15

PURGE INFORMATION:

Method of Well Purge: Disposible Polyethylene Bailer

Dedicated Equipment: Yes ____ No X

Date/Time Initiated: 5-10-2004 1504

Casing Diameter (Inches): 2"

Initial Water Level (feet): 21.39

One Casing Volume (gal): 3.7 gal 3 vol = 11.3 gal

Initial Water Level Previous Event (feet): 23.06

One Casing Volume Previous Event (gal): 3.44

Ground Water Elevation (ft, msl): 429.76

Total Volume Purged (gal): 12 gallons

Ground Water Elevation Previous Event (ft, msl): 428.09

Purged Dry?: Yes ____ No ✓

Well Total Depth (feet): 44.16

Water Level after Purge (feet): 21.35

Well Total Depth Previous Event (feet): 44.16

Date/Time Completed: 5/10/2004 1523

PURGE DATA:

Time	Purge Rate (gpm / Hz)	Cumulative Volume (gal)	Temp (°C)	pH (std units)	Conductivity (uS = umhos/cm)	Turbidity (NTU)	Other	Notes
1508	–	2.0	15.7	6.9	1209	29.3	–	Clear w/black flakes
1512	–	4.0	16.7	6.8	1249	10.12	–	" " " "
1516	–	6.0	16.1	6.8	1235	7.46	–	" " " "
1518	–	8.0	15.8	6.8	1234	7.63	–	Clear
1520	–	10.0	15.7	6.8	1215	4.36	–	"
1523	–	12.0	15.4	6.7	1253	4.52	–	"

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Personal Attention

FIELD INFORMATION LOG Part 2

SAMPLING INFORMATION:

Sample Point ID: PZ-302-AI

Sampling Method: Disposible Polyethylene Bailer

Dedicated: Yes ____ No X

Water Level @ Sampling (ft): 21.35

Well Collection Sequence #: 1 of 5

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

SAMPLE DATA:

Time & Date	Sample Rate	Temp (°C)	pH (std units)	Conductivity (uS = umhos/cm)	Turbidity (NTU)	Other	Notes
5/10/2004 1530	VOC: – Other: –	15.4	6.7	1253	4.52	–	Clear

INSTRUMENT CALIBRATION DATA:

Beginning of day: (time) 1420

End of day: (time) 1900

Turbidity Serial #: Lamotte 2020 #00053

pH Serial #: pH Testr 2 Waterproof #00452

Conductivity Serial #: TDS Testr 20 #03395

Purging Event Beginning of day	Purging Event End of day		Sampling Event Beginning of day	Sampling Event End of day	
9.99		NTU std= 10.0		9.88	NTU std= 10.0
1422		uS std= 1413		1298	uS std= 1413
4.0		pH std = 4.0		4.2	pH std = 4.0
7.0		pH std = 7.0		6.9	pH std = 7.0
10.0		pH std = 10.0		9.7	pH std = 10.0

Other Calibration: ____

GENERAL INFORMATION:

Weather Conditions @ Sampling: P. Cloudy, Lt. Breeze, 85°F

Sample Characteristics: Clear

COMMENTS AND OBSERVATIONS:

Collect 6x40 mL Neat glass; 2x1L Neat glass; 2x1L H_2SO_4 glass; 1x8 oz HNO_3 plastic; 1x16 oz Neat plastic; lock up well

* VOAs effervesced, sent unpreserved *

Date: 5-10-2004 By: [signature] Staff Hydrologist
Brett D. Shank

Company: Herst & Associates, Inc.

HERST & ASSOCIATES, INC. ®

Global Presence
Personal Attention

FIELD INFORMATION LOG Part 1

Facility: Westlake Landfill (OU-2)

Location: Bridgeton, Missouri

Sample Matrix: Groundwater

Sample Point ID: PZ-302-AS

Sampler(s): Jonathan Wilkinson
Brett Dougherty Shank

Top of Casing (ft, msl) 451.42

PURGE INFORMATION:

Method of Well Purge: Disposible Polyethylene Bailer

Dedicated Equipment: Yes ____ No X

Date/Time Initiated: 5-10-04 1447

Casing Diameter (inches): 2"

Initial Water Level (feet): 21.56

One Casing Volume (gal): 0.47 gal × 3 = 1.41 gal

Initial Water Level Previous Event (feet): 23.29

One Casing Volume Previous Event (gal): 0.19

Ground Water Elevation (ft, msl): 429.86

Total Volume Purged (gal): ~0.75 gallons

Ground Water Elevation Previous Event (ft, msl): 428.13

Purged Dry?: Yes ✓ No ____

Well Total Depth (feet): 24.46

Water Level after Purge (feet): Dry @ bottom of well

Well Total Depth Previous Event (feet): 24.44

Date/Time Completed: 5-10-04 1454

PURGE DATA:

Time	Purge Rate (gpm / Hz)	Cumulative Volume (gal)	Temp (°C)	pH (std units)	Conductivity (uS = umhos/cm)	Turbidity (NTU)	Other	Notes
1449	–	~0.25	15.6	6.4	1725	6.56	–	clear
1451	–	~0.50	15.4	6.3	1882	30.8	–	clear
1453	–	~0.75	16.3	6.2	1844	114	–	clear
		Purged dry @ ~0.75 gallons - Allow to recharge						

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FIELD INFORMATION LOG Part 2

SAMPLING INFORMATION: Sample Point ID: PZ-302-AS

Sampling Method: Disposible Polyethylene Bailer Dedicated: Yes ____ No X

Water Level @ Sampling (ft): 21.59 Well Collection Sequence #: 5 of 5

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

SAMPLE DATA:

Time & Date	Sample Rate	Temp (°C)	pH (std units)	Conductivity (uS = umhos/cm)	Turbidity (NTU)	Other	Notes
5-11-04 ~~10-5-04~~ 0830	VOC: – Other: –	15.8	7.6	1856	180	–	cloudy

INSTRUMENT CALIBRATION DATA:

Beginning of day: (time) 5-10-04 1420 5-11-04 0800

End of day: (time) 1900

Turbidity Serial #: Lamotte 2020 #00053 #00452

pH Serial #: pH Testr 2 Waterproof

Conductivity Serial #: TDS Testr 20 #03395

Purging Event Beginning of day	Purging Event End of day		Sampling Event Beginning of day	Sampling Event End of day	
9.99	9.88	NTU std= 10.0	10.01		NTU std= 10.0
1422	1298	uS std= 1413	1417		uS std= 1413
4.0	4.2	pH std = 4.0	4.0		pH std = 4.0
7.0	6.9	pH std = 7.0	7.0		pH std = 7.0
10.0	9.7	pH std = 10.0	9.8		pH std = 10.0

Other Calibration:

GENERAL INFORMATION:

Weather Conditions @ Sampling: Sunny, 75°F

Sample Characteristics: cloudy

COMMENTS AND OBSERVATIONS:

Collect 6x40ml HCl VOA, 2x1l gl H_2SO_4, 1x 8oz HNO_3, 1x 16oz Nat @ 0830
Well went dry @ sampling - will return to get 2x1L gl Nat
well exhibits 'slower' recovery than other alluvial wells

Date: 5-11-2004 By: Brett D. Shank Staff Hydrologist

Company: Herst & Associates, Inc.

HERST & ASSOCIATES, INC. ®

Global Presence
Personal Attention

FIELD INFORMATION LOG Part 1

Facility: Westlake Landfill (OU-2)

Location: Bridgeton, Missouri

Sample Matrix: Groundwater

Sample Point ID: PZ-303-AS

Sampler(s): Jonathan Wilkinson
Brett Dougherty Shank

Top of Casing (ft, msl) 453.18

PURGE INFORMATION:

Method of Well Purge: Disposible Polyethylene Bailer

Dedicated Equipment: Yes ____ No X

Date/Time Initiated: 5-10-04 1628

Casing Diameter (inches): 2"

Initial Water Level (feet): 23.42

One Casing Volume (gal): 0.78 gal x 4 vol = 3.1 gallons

Initial Water Level Previous Event (feet): 25.19

One Casing Volume Previous Event (gal): 0.46

Ground Water Elevation (ft, msl): 429.76

Total Volume Purged (gal): 3.5 gallons

Ground Water Elevation Previous Event (ft, msl): 427.99

Purged Dry?: Yes ____ No ✓

Well Total Depth (feet): 28.20

Water Level after Purge (feet): 23.43

Well Total Depth Previous Event (feet): 28.02

Date/Time Completed: 5-10-04 1650

PURGE DATA:

Time	Purge Rate (gpm / Hz)	Cumulative Volume (gal)	Temp (°C)	pH (std units)	Conductivity (uS = umhos/cm)	Turbidity (NTU)	Other	Notes
1631	—	~0.5	15.8	7.4	1773	21.8	- clear	oily sheen, chemical odor
1634	—	~1.0	16.1	7.4	1902	26.7	- dark gray	oily sheen, chem. odor
1637	—	~1.5	16.1	7.3	1911	38.5	- "	" "
1640	—	~2.0	15.6	7.3	1921	34.2	- gray	oily sheen, chem. odor
1643	—	~2.5	15.7	7.2	1926	43.2	- "	" "
1646	—	~3.0	15.8	7.2	1907	43.7	- "	" "
1650		~3.5	15.7	7.2	1905	40.6	- "	" "

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FIELD INFORMATION LOG Part 2

SAMPLING INFORMATION:

Sample Point ID: PZ-303-AS

Sampling Method: Disposible Polyethylene Bailer

Dedicated: Yes ____ No X

Water Level @ Sampling (ft): 23.43

Well Collection Sequence #: 2 of 5

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

SAMPLE DATA:

Time & Date	Sample Rate	Temp (°C)	pH (std units)	Conductivity (uS = umhos/cm)	Turbidity (NTU)	Other	Notes
5-10-04 1655	VOC: – Other: –	15.7	7.2	1905	40.6	gray, oily sheen, chemical odor	

INSTRUMENT CALIBRATION DATA:

Beginning of day: (time) 1420

End of day: (time) 1900

Turbidity Serial #: Lamotte 2020 #00053

pH Serial #: pH Testr 2 Waterproof #00452

Conductivity Serial #: TDS Testr 20 #03395

Purging Event			Sampling Event		
Beginning of day	End of day		Beginning of day	End of day	
9.99		NTU std= 10.0		9.88	NTU std= 10.0
1422		uS std= 1413		1298	uS std= 1413
4.0		pH std = 4.0		4.2	pH std = 4.0
7.0		pH std = 7.0		6.9	pH std = 7.0
10.0		pH std = 10.0		9.7	pH std = 10.0

Other Calibration:

GENERAL INFORMATION:

Weather Conditions @ Sampling: Overcast, Slight wind, 85°F

Sample Characteristics: gray, oily sheen, chemical odor

COMMENTS AND OBSERVATIONS:

Collect field Blank (@ PZ303AS) 1625 4x40ml HCl VOA's only
Collect 4x40ml VOA, 2x1Lgl Neat, 2x1Lgl H_2SO_4, 1x160z gl Neat, 1x8oz HNO_3, VOA's effervesced - sent unpreserved
Collect Duplicate @ PZ303AS (12 Bottles - Same bottles as sample) 1700
Lock up well

Date: 5-10-04 By: Brett D. Stenk Staff Hydrologist

Company: Herst & Associates, Inc.

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Global Presence
Personal Attention

FIELD INFORMATION LOG Part 1

Facility: Westlake Landfill (OU-2)

Location: Bridgeton, Missouri

Sample Matrix: Groundwater

Sample Point ID: PZ-304-AI

Sampler(s): Jonathan Wilkinson
Brett Dougherty Shank

Top of Casing (ft, msl) 454.02

PURGE INFORMATION:

Method of Well Purge: Disposible Polyethylene Bailer

Dedicated Equipment: Yes ____ No X

Date/Time Initiated: 5-10-04 1820

Casing Diameter (inches): 2"

Initial Water Level (feet): 24.33

One Casing Volume (gal): 4.53gal x 3vol = 13.6 gallons

Initial Water Level Previous Event (feet): 26.09

One Casing Volume Previous Event (gal): 4.24

Ground Water Elevation (ft, msl): 429.69

Total Volume Purged (gal): 14.0 gallons

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

Purged Dry?: Yes ____ No ✓

Well Total Depth (feet): 52.11

Water Level after Purge (feet): 24.34

Well Total Depth Previous Event (feet): 52.08

Date/Time Completed: 5-10-04 1842

PURGE DATA:

Time	Purge Rate (gpm / Hz)	Cumulative Volume (gal)	Temp (°C)	pH (std units)	Conductivity (uS = umhos/cm)	Turbidity (NTU)	Other	Notes
1825	–	~2.25	17.6	7.9	1067	33.6	–	Brown tint
1827	–	~4.5	16.9	7.9	1447	40.4	–	Brown tint
1831	–	~7.0	17.2	7.9	1512	16.3	–	gray, oily sheen
1832	–	~8.5	17.6	7.9	1508	8.66	–	" "
1835	–	10.0	17.4	7.9	1526	6.98	–	clear
1838	–	12.0	17.1	7.9	1498	6.71	–	clear
1842	–	14.0	17.1	7.9	1507	5.84	–	clear

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FIELD INFORMATION LOG Part 2

SAMPLING INFORMATION: Sample Point ID: PZ-304-AI

Sampling Method: Disposible Polyethylene Bailer Dedicated: Yes ____ No X

Water Level @ Sampling (ft): 24.34 Well Collection Sequence #: 4 of 5

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

SAMPLE DATA:

Time & Date	Sample Rate	Temp (°C)	pH (std units)	Conductivity (uS = umhos/cm)	Turbidity (NTU)	Other	Notes
5-10-04 1845	VOC: – Other: –	17.1	7.9	1507	5.84	–	clear

INSTRUMENT CALIBRATION DATA:

Beginning of day: (time) 1420

End of day: (time) 1900

Turbidity Serial #: Lamotte 2020 #00053 #00452

pH Serial #: pH Testr 2 Waterproof

Conductivity Serial #: TDS Testr 20 #03395

Purging Event			Sampling Event		
Beginning of day	End of day		Beginning of day	End of day	
9.99		NTU std= 10.0		9.88	NTU std= 10.0
1422		uS std= 1413		1298	uS std= 1413
4.0		pH std = 4.0		4.2	pH std = 4.0
7.0		pH std = 7.0		6.9	pH std = 7.0
10.0		pH std = 10.0		9.7	pH std = 10.0

Other Calibration:

GENERAL INFORMATION:

Weather Conditions @ Sampling: Sunny, 75°F

Sample Characteristics: clear

COMMENTS AND OBSERVATIONS:

Collect 6x40ml HCl VOA, 2x1Lgl Neat, 2x1L gl H_2SO_4, 1x16oz Neat, 1x8oz HNO_3
Lock up well
Equipment Blank taken W.L. probe 1915 (Full suite)

Date: 5-10-04 By: Brett D. Shank Staff Hydrologist

Company: Herst & Associates, Inc.

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FIELD INFORMATION LOG Part 1

Facility: Westlake Landfill (OU-2)

Location: Bridgeton, Missouri

Sample Matrix: Groundwater

Sample Point ID: PZ-304-AS

Sampler(s): Jonathan Wilkinson
Brett Dougherty Shank

Top of Casing (ft, msl) 453.71

PURGE INFORMATION:

Method of Well Purge: Disposible Polyethylene Bailer

Dedicated Equipment: Yes ____ No X

Date/Time Initiated: 5-10-04 1744

Casing Diameter (inches): 2"

Initial Water Level (feet): 24.06

One Casing Volume (gal): 0.84 gal x 3 vol = 2.5 gallons

Initial Water Level Previous Event (feet): 25.79

One Casing Volume Previous Event (gal): 0.55

Ground Water Elevation (ft, msl): 429.65

Total Volume Purged (gal): 3 gallons

Ground Water Elevation Previous Event (ft, msl): 427.92

Purged Dry?: Yes ____ No ✓

Well Total Depth (feet): 29.22

Water Level after Purge (feet): 24.03

Well Total Depth Previous Event (feet): 29.16

Date/Time Completed: 5/10/2004 1758

PURGE DATA:

Time	Purge Rate (gpm / Hz)	Cumulative Volume (gal)	Temp (°C)	pH (std units)	Conductivity (uS = umhos/cm)	Turbidity (NTU)	Other	Notes
1740	-	0.5	18.2	7.6	2300	18.3	-	Clear
1749	-	1.0	17.7	7.4	1793	13.6	-	"
1757	-	1.5	17.4	7.3	1767	8.85	-	"
1752	-	2.0	18.1	7.4	1756	14.2	-	"
1754	-	2.5	18.2	7.4	1708	8.88	-	"
1757	-	3.0	17.3	7.4	2070	11.9	-	"

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FIELD INFORMATION LOG Part 2

SAMPLING INFORMATION: Sample Point ID: PZ-304-AS

Sampling Method: Disposible Polyethylene Bailer Dedicated: Yes ____ No X

Water Level @ Sampling (ft): 24.03 Well Collection Sequence #: 3 of 5

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

SAMPLE DATA:

Time & Date	Sample Rate	Temp (°C)	pH (std units)	Conductivity (uS = umhos/cm)	Turbidity (NTU)	Other	Notes
Stabilized 1800	VOC: – Other: –	17.3	7.4	2070	17.9	—	clear

INSTRUMENT CALIBRATION DATA:

Beginning of day: (time) 1420

End of day: (time) 1900

Turbidity Serial #: Lamotte 2020 #00053

pH Serial #: pH Testr 2 Waterproof #00452

Conductivity Serial #: TDS Testr 20 #03395

Purging Event			Sampling Event		
Beginning of day	End of day		Beginning of day	End of day	
9.99		NTU std= 10.0		9.88	NTU std= 10.0
1422		uS std= 1413		1298	uS std= 1413
4.0		pH std = 4.0		4.2	pH std = 4.0
7.0		pH std = 7.0		6.9	pH std = 7.0
10.0		pH std = 10.0		9.7	pH std = 10.0

Other Calibration:

GENERAL INFORMATION:

Weather Conditions @ Sampling: Sunny, 85°F

Sample Characteristics: clear

COMMENTS AND OBSERVATIONS:

Collect 6x40ml HCl VOA, 2x1Lg1 Neat, 2x1Lg1 H_2SO_4, 1x16oz pl Neat, 1x8oz HNO_3 Lockwell

Date: 5-10-2004 By: Brett D. Stenk Staff Hydrologist

Company: Herst & Associates, Inc.