November 12, 2007

Ms. Valerie Thompson
Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup Northeast Regional Office
205B Lowell Street
Wilmington, MA 01887

Re: Site Evaluation Summary Report
Tombarello and Sons Site at 207 Marston Street, Lawrence, Massachusetts
SARSS IV Task Assignment Document Project No.
RTN 3-18126

Dear Ms. Thompson:

Shaw Environmental, Inc. (Shaw) is pleased to submit this letter report to the Massachusetts Department of Environmental Protection (MassDEP) concerning the soil sampling conducted at residential properties on Hofmann Avenue in Lawrence, Massachusetts. A discussion of sampling methods and results are summarized in this document.

Introduction and Background

Due to the past use of the Tombarello and Sons property as a scrap metal yard, abutting residential properties located on the south side of Hofmann Avenue may be impacted with polychlorinated biphenyls (PCBs) and Resource Conservation and Recovery Act (RCRA) metals. In order to evaluate the extent of impact to surficial soils, MassDEP contracted Shaw Environmental to perform soil sampling at nine residential properties on Hofmann Avenue in Lawrence, Massachusetts.

Soil Sample Collection

To evaluate the PCB and RCRA 8 metals impact to residential properties, Shaw sampled surficial soil in the backyard of nine residential properties including: 19, 21, 25, 27 & 29, 31, 33, 41, 51, and 53 Hofmann Avenue, Lawrence, Massachusetts. The surficial soil samples were collected on October 2 through October 4, 2007 by Shaw under the oversight of the MassDEP. Soil samples were collected on either a 10 by 10 foot or 20 by 20 foot grid spacing as directed by the MassDEP within the backyard of each residential

property. In addition, select soil samples were also collected next to the rear fence, which abuts or is located on the former Tombarello and Sons property.

At each soil sampling location, soil samples were collected from a depth of 0 to 6 inches below ground surface (bgs) and 6 to 12 inches bgs. At all sample locations the soil samples were collected using a stainless steel spoon. A total of 288 samples were collected including 144 samples from the shallow (0 to 6 inches bgs) interval and 144 samples from the deeper (6 – 12 inches bgs) interval. A total of 115 shallow soil samples (0 to 6 inches bgs) were submitted for PCB analysis by EPA method 8082 and RCRA 8 metal analysis by EPA method 6010B and 7471A. A total of 14 deeper (6 to 12 inches bgs) samples were submitted for laboratory analysis for PCB and/or RCRA 8 metals. Refer to Figures 1 through 5 for the approximate location of the soil samples.

During the sampling, all sampling equipment was property decontaminated between sampling locations using Shaw's standard operating procedures for drilling and sampling equipment decontamination. Soil classification of the samples were made in the field in accordance with the American Society for Testing and Materials (ASTM) Soil Classification System and Shaw's Standard Operating Procedures for soil logging. The description of each sample is included in the boring logs included in Appendix A.

1.1.1 Soil Analytical Results

A total of 117 soil samples were submitted for PCB laboratory analysis. All but four of the samples had detections above the laboratory reporting limit for PCB Aroclors. The two highest detections of total PCBs were detected from soil samples collected from 51 Hofmann Avenue. PCB in two shallow soil samples collected along the fence (SB-41 and SB 45) had PCB detections of 22 and 10 mg/kg respectively, which are significantly above the MCP Method 1 S-1/GW-2/GW-3 standard of 2 mg/kg. Five of the nine residential properties had one or more soil samples with concentrations of PCBs above the MCP Method 1 S-1/GW-2/GW-3 standard.

A total of 129 samples were submitted for RCRA 8 metals analysis. All RCRA 8 metals were detected in one or more samples. Five of the metals (arsenic, barium, cadmium, chromium, and lead) were detected in one or more samples at concentrations that exceeded the MCP Method 1 S-1/GW-2/GW-3 soil standard. Three metals (selenium, silver, and mercury) were not detected at concentrations above the applicable MCP Method 1 standard.

The detection of arsenic in soil ranged from 6.6 mg/kg (SS-100, 0 to 6 inches) to 65 mg/kg (SS-76, 6 to 12 inches) with the highest detection occurring in soil from 41 Hofmann Avenue. Four of the nine residential properties had one or more soil samples with concentrations of arsenic detected above the MCP Method 1 S-1/GW-2/GW-3 standard of 20 mg/kg.

The detection of barium in soil ranged from 32 mg/kg (SB-117, 0 to 6 inches) to 2,500 mg/kg (SB-74, 6 to 12 inches) with the highest detection occurring in soil from 41 Hofmann Avenue. Two of the nine residential properties had one or more soil samples with concentrations of barium detected above the MCP Method 1 S-1/GW-2/GW-3 standard of 1,000 mg/kg.

The detection of cadmium in soil ranged from 0.26 mg/kg (SB-97, 0 to 6 inches) to 56 mg/kg (SB-74, 6 to 12 inches) with the highest detection occurring in soil from 41 Hofmann Avenue. Five of the nine residential properties had one or more soil samples with concentrations of cadmium detected above the MCP Method 1 S-1/GW-2/GW-3 standard of 2 mg/kg.

The detection of chromium in soil ranged from 13 mg/kg (SB-79, 6 to 12 inches) to 130 mg/kg (SB-21, 6 to 12 inches) with the highest detection occurring in soil from 53 Hofmann Avenue. Seven of the nine residential properties had one or more soil samples with concentrations of chromium detected above the MCP Method 1 S-1/GW-2/GW-3 standard of 30 mg/kg.

The detection of lead in soil ranged from 31 mg/kg (SB-97, 0 to 6 inches) to 2,500 mg/kg (SB-74, 6 to 12 inches) with the highest detection occurring in soil from 41 Hofmann Avenue. Five of the nine residential properties had one or more soil samples with concentrations of lead detected above the MCP Method 1 S-1/GW-2/GW-3 standard of 300 mg/kg.

The detection of selenium in soil ranged from less than the laboratory reporting limit (numerous samples) to 1.8 mg/kg (SB-72, 0 to 6 inches) with the highest detection occurring in soil from 41 Hofmann Avenue. None of the nine residential properties had any soil samples with selenium concentrations above the MCP Method 1 S-1/GW-2/GW-3 standard of 400 mg/kg.

The detection of silver in soil ranged from less than the laboratory reporting limit (numerous samples) to 2.7 mg/kg (SB-130, 0 to 6 inches) with the highest detection occurring in soil from 19 Hofmann Avenue. None of the nine residential properties had

any soil samples with selenium concentrations above the MCP Method 1 S-1/GW-2/GW-3 standard of 100 mg/kg.

The detection of mercury in soil ranged from 0.049 mg/kg (SB-93, 0 to 6 inches) to 1.6 mg/kg (SB-83, 0 to 6 inches) with the highest detection occurring in soil from 41 Hofmann Avenue. None of the nine residential properties had any soil samples with mercury concentrations above the MCP Method 1 S-1/GW-2/GW-3 standard of 20 mg/kg.

The soil analytical results are summarized in Table 1. Refer to Appendix B for a copy of the laboratory analytical data package.

Quality Assurance and Quality Control

The analytical data from the October 2007 soil sampling were tabulated and validated by Shaw. Validation included a review of all laboratory and field quality control samples including a check of: sample log in and custody; preservation; analytical holding times; surrogate recoveries; detected results for method blank samples; calculated relative percent differences; matrix spike (MS) recoveries and calculated relative percent difference (RPD) on matrix spike duplicate (MSD); laboratory control spike (LCS) recoveries; and miscellaneous observations. In addition, detection limits were reviewed for appropriateness for this project. Based on the validation of the data, the following discrepancies were noted:

Chromium, lead and barium failed the MS/MSD recovery criteria high for the matrix spike of sample 360-12705-1. The associated LCS recovered within control limits. The detected concentrations in the batch are therefore qualified with a “J” as estimated.

Lead and barium failed the MS/MSD recovery criteria high for the matrix spike of sample 360-12735-37. The detected concentrations in the batch are therefore qualified with a “J” as estimated.

Lead and barium failed the MS/MSD recovery criteria high for the matrix spike of sample 360-12734-1. The associated LCS recovered within control limits. The detected concentrations in the batch are therefore qualified with a “J” as estimated.

Arsenic and chromium failed the MS/MSD recovery criteria high for the matrix spike of sample 360-12736-37. The associated LCS recovered within control limits. The detected concentrations in the batch are therefore qualified with a “J” as estimated.

Barium and lead exceeded the duplicate RPD limit for the duplicate sample 360-12698-9. The associated LCS, LCSD and their RPDs were all within control limits. Due to the RPD exceedance all barium and lead results in the batch have been qualified with a "J" as estimated.

Cadmium was detected in method blank (MB) 360-24046/1-A, 360-24099/1-A, 360-24091/1-A at a level that was above the method detection limit but below the reporting limit. The value for cadmium is therefore considered an estimate and all detections in the batch have been flagged with a "B" indicating MB contamination.

Chromium failed the MS/MSD recovery criteria low for the matrix spike of sample 360-12705-2 and barium failed the MS/MSD recovery criteria high. The associated LCS recovered within control limits. Since both compounds were detected in all samples in the batch, the concentrations in the batch are qualified with a "J" as estimated.

DCB decachlorobiphenyl failed the surrogate recovery criteria high for 360-12739-17. The sample was originally analyzed at a 1X dilution with passing surrogates. The 5X dilution reported here was due to high target concentration. As a result of dilution no qualification was determined to be necessary.

In accordance with MassDEP's Analytical Data Enhancement Program (Quality Assurance and Quality Control Guidelines for Sampling, Data Evaluation and Reporting Activities for the MCP) quality control samples were collected at the frequency required for presumptive certainty and all Precision, Accuracy, Representativeness, Comparability, Completeness, and Sensitivity (PARCCS) criteria were met. The analysis of Tentatively Identified Compounds (TICs) was not warranted given that these are not drinking water samples, site history is well-known, and the site is not complex. The lab used MCP methods, and the lab completed and certified the MassDEP MCP Analytical Method Report Certification Form and indicated that all analysis (except for percent solids) analysis which is not a MCP CAM method) met the requirements for presumptive certainty. Therefore, the data set meets the requirements for "presumptive approval" in accordance with the MassDEP Policy WSC-02-320 *The Compendium of Quality Assurance and Quality Control Requirements and Performance Standards for Selected Analytical Methods Used in Support of Response Actions for the Massachusetts Contingency Plan (MCP*) and may therefore be used to support associated MCP opinions.

Conclusions

Soil laboratory analytical results collected from 9 residential properties on Hoffman Avenue in October 2007 indicate the presence of PCBs and RCRA 8 metals in surficial

soil. Four of the nine properties had detections of PCBs above the MCP Method 1 soil standard. Eight of the nine properties had detections of one or more RCRA 8 metals above the MCP Method 1 soil standard. An imminent hazard evaluation was not performed by Shaw; however some of the detections of PCBs and/or RCRA 8 metals in soil are above concentrations that may exceed an imminent hazard.

Shaw appreciates the opportunity to assist the MassDEP with this work. If you have any questions or require additional assistance, please contact Jim Collins at 603-870-4508.

Sincerely,
SHAW ENVIROMENTAL, INC.

James J. Collins
Project Manager

Edward P. Van Doren, P.E., L.S.P.
SARSS Program Manager

cc: David Gallagher, MassDEP-Boston

Attachments: Table 1 – Soil Analytical Results
Figures 1 through 5
Attachment A – Soil Boring Logs
Attachment B – Laboratory Analytical Results

Table 1
Soil Analytical Results
Compared to MCP Method 1 Standards

Residential Properties on Hofmann Avenue, Lawrence, Massachusetts

CONSTITUENT	MCP Method One S1/GW2	MCP Method One S1/GW3	SB-005 SB-5 0-6 10/2/2007 0.25	SB-006 SB-6 0-6 10/2/2007 0.25	SB-007 SB-7 0-6 10/2/2007 0.25	SB-008 SB-8 0-6 10/2/2007 0.25	SB-013 SB-13 0-6 10/2/2007 0.25	SB-014 SB-14 0-6 10/2/2007 0.25	SB-015 SB-15 0-6 10/2/2007 0.25	SB-019 SB-19 0-6 10/2/2007 0.25	SB-020 SB-20 0-6 10/2/2007 0.25	SB-021 SB-21 0-6 10/2/2007 0.25
PCBs (ug/kg)												
Aroclor 1016	NA	NA	<110	<110	<110	<110	<120	<110	<110	<120	<120	<210
Aroclor 1221	NA	NA	<110	<110	<110	<110	<120	<110	<110	<120	<120	<210
Aroclor 1232	NA	NA	<110	<110	<110	<110	<120	<110	<110	<120	<120	<210
Aroclor 1242	NA	NA	<110	<110	<110	<110	<120	<110	<110	<120	<120	<210
Aroclor 1248	NA	NA	<110	<110	<110	<110	<120	<110	<110	<120	<120	<210
Aroclor 1254	NA	NA	<110	<110	<110	<110	<120	<110	<110	<120	<120	<210
Aroclor 1260	NA	NA	1300	1300	490	390	440	640	1200	580	1600	3100
Aroclor 1262	NA	NA	<110	<110	<110	<110	<120	<110	<110	<120	<120	<210
Aroclor 1268	NA	NA	<110	<110	<110	<110	<120	<110	<110	<120	<120	<210
PCB's	2000	2000	1300	1300	490	390	440	640	1200	580	1600	**{3100}**
Metals (mg/kg)												
Arsenic	20	20	7.9	7.2	8.3	7.7	8.7	8.2	7.1	11	8.2	9.4
Barium	1000	1000	43 J	42 J	49 J	40 J	47 J	51 J	76 J	46 J	58 J	**{2200}D**
Cadmium	2	2	0.93B	0.87B	0.73B	0.59B	0.70B	0.81B	1.7B	0.68B	1.2B	**{2.4}**
Chromium	30	30	16	16	15	14	16	17	19	18	19	**{130}**
Lead	300	300	89 J	77 J	74 J	54 J	69 J	76 J	120 J	70 J	120 J	**{760}**
Selenium	400	400	<0.64	0.53J	<0.61	0.40J	0.29J	0.38J	0.26J	<0.60	<0.64	0.41J
Silver	100	100	<0.64	<0.66	<0.61	<0.68	<0.64	<0.62	<0.59	<0.60	<0.64	2
Mercury	20	20	0.21	0.24	0.22	0.21	0.23	0.26	0.25	0.22	0.26	0.34

Notes:
NA = No Standard exists.
{BOLD} = Result exceeds MCP Method 1 S1/GW2 or S1/GW3 standards.
J = Estimated value.
D = Result reported is from a diluted sample.
B = Constituent detected in associatd blank.
--- = not analyzed

Table 1
Soil Analytical Results
Compared to MCP Method 1 Standards

Residential Properties on Hofmann Avenue, Lawrence, Massachusetts

CONSTITUENT	MCP Method One S1/GW2	MCP Method One S1/GW3	SB-021 SB-21 6-12 10/2/2007 0.75	SB-025 SB-25 0-6 10/2/2007 0.25	SB-026 SB-26 0-6 10/2/2007 0.25	SB-027 SB-27 0-6 10/2/2007 0.25	SB-032 SB-32 0-6 10/2/2007 0.25	SB-033 SB-33 0-6 10/2/2007 0.25	SB-034 SB-34 0-6 10/2/2007 0.25	SB-036 SB-36 0-6 10/2/2007 0.25	SB-038 SB-38 0-6 10/2/2007 0.25	SB-039 SB-39 0-6 10/2/2007 0.25	SB-040 SB-40 0-6 10/2/2007 0.25
PCBs (ug/kg)													
Aroclor 1016	NA	NA	---	<120	<130	<110	<110	<230	<120	<120	<110	<110	<110
Aroclor 1221	NA	NA	---	<120	<130	<110	<110	<230	<120	<120	<110	<110	<110
Aroclor 1232	NA	NA	---	<120	<130	<110	<110	<230	<120	<120	<110	<110	<110
Aroclor 1242	NA	NA	---	<120	<130	<110	<110	<230	<120	<120	<110	<110	<110
Aroclor 1248	NA	NA	---	<120	<130	<110	<110	<230	<120	<120	<110	<110	<110
Aroclor 1254	NA	NA	---	<120	<130	<110	<110	<230	<120	<120	<110	<110	<110
Aroclor 1260	NA	NA	---	330	430	1700	2000	3400	1200	1600	1900	1100	1600
Aroclor 1262	NA	NA	---	<120	<130	<110	<110	<230	<120	<120	<110	<110	<110
Aroclor 1268	NA	NA	---	<120	<130	<110	<110	<230	<120	<120	<110	<110	<110
PCB's	2000	2000	---	330	430	1700	2000	**{3400}**	1200	1600	1900	1100	1600
Metals (mg/kg)													
Arsenic	20	20	9.7	8	9.8	7.7	14	11	11	12	17	9.7	10
Barium	1000	1000	340 J	37 J	50 J	50 J	68 J	56 J	270 J	54 J	280 J	51 J	49 J
Cadmium	2	2	**{2.3}**	0.58	0.94	1	1.6	1.7	**{15}**	0.99	**{13}**	0.89	0.92
Chromium	30	30	**{100} J**	28 J	17 J	17 J	21 J	21 J	28 J	19 J	27 J	26 J	17 J
Lead	300	300	250	52 J	75 J	110 J	140 J	130 J	**{340} J**	110 J	290 J	91 J	92 J
Selenium	400	400	0.52J	0.32J	0.36J	<0.65	0.4J	0.41J	1.6	0.38J	1.1	<0.62	0.34J
Silver	100	100	1.3	0.14J	0.12J	<0.65	0.15J	<0.61	0.31J	<0.64	0.14J	0.11J	<0.69
Mercury	20	20	0.27	0.22	0.25	0.27	0.35	0.36	0.52	0.36	0.72	0.66	0.26

Notes:
NA = No Standard exists.
{BOLD} = Result exceeds MCP Method 1 S1/GW2 or S1/GW3 standards.
J = Estimated value.
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--- = not analyzed

Table 1
Soil Analytical Results
Compared to MCP Method 1 Standards

Residential Properties on Hofmann Avenue, Lawrence, Massachusetts

CONSTITUENT	MCP Method One S1/GW2	MCP Method One S1/GW3	SB-041 SB-41 0-6 10/2/2007 0.25	SB-041 SB-41 6-12 10/2/2007 0.75	SB-042 SB-42 0-6 10/3/2007 0.25	SB-043 SB-43 0-6 10/3/2007 0.25	SB-044 SB-44 0-6 10/3/2007 0.25	SB-045 SB-45 0-6 10/3/2007 0.25	SB-045 SB-45 6-12 10/3/2007 0.75	SB-049 SB-49 0-6 10/3/2007 0.25	SB-050 SB-50 0-6 10/3/2007 0.25	SB-054 SB-54 0-6 10/3/2007 0.25	SB-055 SB-55 0-6 10/3/2007 0.25	SB-056 SB-56 0-6 10/3/2007 0.25
PCBs (ug/kg)														
Aroclor 1016	NA	NA	<2300	<580	<120	<110	<210	<1100	<110	<120	<120	<120	<120	<110
Aroclor 1221	NA	NA	<2300	<580	<120	<110	<210	<1100	<110	<120	<120	<120	<120	<110
Aroclor 1232	NA	NA	<2300	<580	<120	<110	<210	<1100	<110	<120	<120	<120	<120	<110
Aroclor 1242	NA	NA	<2300	<580	<120	<110	<210	<1100	<110	<120	<120	<120	<120	<110
Aroclor 1248	NA	NA	<2300	<580	<120	<110	<210	<1100	<110	<120	<120	<120	<120	<110
Aroclor 1254	NA	NA	<2300	<580	<120	<110	<210	<1100	<110	<120	<120	<120	<120	<110
Aroclor 1260	NA	NA	22000	5100	960	1900	3300	10000	1600	1500	2000	1500	2000	2000
Aroclor 1262	NA	NA	<2300	<580	<120	<110	<210	<1100	<110	<120	<120	<120	<120	<110
Aroclor 1268	NA	NA	<2300	<580	<120	<110	<210	<1100	<110	<120	<120	<120	<120	<110
PCB's	2000	2000	**{22000}**	**{5100}**	960	1900	**{3300}**	**{10000}**	1600	1500	2000	1500	2000	2000
Metals (mg/kg)														
Arsenic	20	20	14	8.6	9.5	13	14	**{23}**	13	12	11	11	14	14
Barium	1000	1000	180 J	65 J	57 J	65 J	77 J	180 J	58 J	64 J	65 J	57 J	66 J	110 J
Cadmium	2	2	**{3.6}**	1.3	0.95J	1.3J	1.6	**{3.4}**	0.94	1.2J	1.5	1.1J	1.3J	1.4
Chromium	30	30	**{47} J**	18 J	23	24	26	**{42}**	18	24	24	24	23	**{32}**
Lead	300	300	300 J	76	100 J	130 J	170 J	**{370} J**	83 J	140 J	140 J	120 J	160 J	**{330} J**
Selenium	400	400	0.3J	0.44J	<3.3	<3.6	<3.2	<3.6	0.47J	<3.6	<3.2	<3.5	<3.4	<3.1
Silver	100	100	0.24J	<0.7	<3.3	<3.6	<3.2	<3.6	<0.72	<3.6	<3.2	<3.5	<3.4	<3.1
Mercury	20	20	0.71	0.31	0.22	0.31	0.33	0.61	0.22	0.26	0.32	0.24	0.33	0.39

Notes:
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Residential Properties on Hofmann Avenue, Lawrence, Massachusetts

CONSTITUENT	MCP Method One S1/GW2	MCP Method One S1/GW3	SB-057 SB-57 0-6 10/3/2007 0.25	SB-058 SB-58 0-6 10/3/2007 0.25	SB-059 SB-59 0-6 10/3/2007 0.25	SB-063 SB-63 0-6 10/3/2007 0.25	SB-063 SB-63 6-12 10/3/2007 0.75	SB-064 SB-64 0-6 10/3/2007 0.25	SB-064 SB-64 6-12 10/3/2007 0.75	SB-065 SB-65 0-6 10/3/2007 0.25	SB-065 SB-65 6-12 10/3/2007 0.75	SB-066 SB-66 0-6 10/3/2007 0.25
PCBs (ug/kg)												
Aroclor 1016	NA	NA	<110	<120	<520	<120	---	<110	---	<120	---	<120
Aroclor 1221	NA	NA	<110	<120	<520	<120	---	<110	---	<120	---	<120
Aroclor 1232	NA	NA	<110	<120	<520	<120	---	<110	---	<120	---	<120
Aroclor 1242	NA	NA	<110	<120	<520	<120	---	<110	---	<120	---	<120
Aroclor 1248	NA	NA	<110	<120	<520	<120	---	<110	---	<120	---	<120
Aroclor 1254	NA	NA	<110	<120	<520	<120	---	<110	---	<120	---	<120
Aroclor 1260	NA	NA	1200	1800	5700	870	---	830	---	1200	---	750
Aroclor 1262	NA	NA	<110	<120	<520	<120	---	<110	---	<120	---	<120
Aroclor 1268	NA	NA	<110	<120	<520	<120	---	<110	---	<120	---	<120
PCB's	2000	2000	1200	1800	**{5700}**	870	---	830	---	1200	---	750
Metals (mg/kg)												
Arsenic	20	20	14	13	15	11	9.4	11	9.6	13	11	12
Barium	1000	1000	56 J	67 J	160 J	130 J	89	150 J	120	190 J	180	130 J
Cadmium	2	2	1.1J	1.3J	**{2.9}**	1.3J	0.78	1.4	0.96	**{2.6}**	**{2.7}**	1.3J
Chromium	30	30	22	24	**{45}**	29	20	30	22	**{32}**	23	29
Lead	300	300	180 J	170 J	**{410} J**	**{370} J**	220	**{370} J**	300	**{470} J**	**{500}**	**{340} J**
Selenium	400	400	<3.4	<3.7	<3.2	<3.6	0.4J	<3.1	0.58J	<3.2	0.84	<3.7
Silver	100	100	<3.4	<3.7	<3.2	<3.6	0.11J	<3.1	0.13J	<3.2	0.32J	<3.7
Mercury	20	20	0.33	0.33	0.53	0.61	0.77	0.53	0.77	0.78	0.68	0.78

Notes:
NA = No Standard exists.
{BOLD} = Result exceeds MCP Method 1 S1/GW2 or S1/GW3 standards.
J = Estimated value.
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B = Constituent detected in associatd blank.
--- = not analyzed

Table 1
Soil Analytical Results
Compared to MCP Method 1 Standards

Residential Properties on Hofmann Avenue, Lawrence, Massachusetts

CONSTITUENT	MCP Method One S1/GW2	MCP Method One S1/GW3	SB-066 SB-66 6-12 10/3/2007 0.75	SB-067 SB-67 0-6 10/3/2007 0.25	SB-067 SB-67 6-12 10/3/2007 0.75	SB-068 SB-68 0-6 10/3/2007 0.25	SB-068 SB-68 6-12 10/3/2007 0.75	SB-069 SB-69 0-6 10/3/2007 0.25	SB-069 SB-69 6-12 10/3/2007 0.75	SB-070 SB-70 0-6 10/3/2007 0.25	SB-070 SB-70 6-12 10/3/2007 0.75	SB-071 SB-71 0-6 10/3/2007 0.25
PCBs (ug/kg)												
Aroclor 1016	NA	NA	---	<120	---	<120	---	<110	---	<100	---	<120
Aroclor 1221	NA	NA	---	<120	---	<120	---	<110	---	<100	---	<120
Aroclor 1232	NA	NA	---	<120	---	<120	---	<110	---	<100	---	<120
Aroclor 1242	NA	NA	---	<120	---	<120	---	<110	---	<100	---	<120
Aroclor 1248	NA	NA	---	<120	---	<120	---	<110	---	<100	---	<120
Aroclor 1254	NA	NA	---	<120	---	<120	---	<110	---	<100	---	<120
Aroclor 1260	NA	NA	---	790	---	840	---	1400	---	780	---	1500
Aroclor 1262	NA	NA	---	<120	---	<120	---	<110	---	<100	---	<120
Aroclor 1268	NA	NA	---	<120	---	<120	---	<110	---	<100	---	<120
PCB's	2000	2000	---	790	---	840	---	1400	---	780	---	1500
Metals (mg/kg)												
Arsenic	20	20	13	13	12	12	9.3	10	11	8	9.5	8.9
Barium	1000	1000	82	170 J	140	390 J	120	140 J	280	100 J	110	100 J
Cadmium	2	2	1.1	1.6	1.3	1.5	1.2	2B	**{4}**	0.99B	1.4	1.5B
Chromium	30	30	21	**{31}**	22	**{35}**	25	26	26	20	24	22
Lead	300	300	200	**{400} J**	**{310}**	**{410} J**	**{350}**	**{360} J**	**{550}**	**{610} J**	**{350}**	**{470} J**
Selenium	400	400	0.39J	<3.6	0.43J	<3.7	0.41J	0.57J	0.61J	0.46J	0.37J	<0.74
Silver	100	100	<0.64	<3.6	0.19J	<3.7	0.15J	0.22J	0.37J	0.11J	0.21J	0.19J
Mercury	20	20	0.59	0.84	0.83	0.67	0.74	0.87	0.56	0.61	0.72	1.3

Notes:
NA = No Standard exists.
{BOLD} = Result exceeds MCP Method 1 S1/GW2 or S1/GW3 standards.
J = Estimated value.
D = Result reported is from a diluted sample.
B = Constituent detected in associatd blank.
--- = not analyzed

Table 1
Soil Analytical Results
Compared to MCP Method 1 Standards

Residential Properties on Hofmann Avenue, Lawrence, Massachusetts

CONSTITUENT	MCP Method One S1/GW2	MCP Method One S1/GW3	SB-072 SB-72 0-6 10/3/2007 0.25	SB-073 SB-73 0-6 10/3/2007 0.25	SB-074 SB-74 0-6 10/3/2007 0.25	SB-074 SB-74 6-12 10/3/2007 0.75	SB-075 SB-75 0-6 10/3/2007 0.25	SB-076 SB-76 0-6 10/3/2007 0.25	SB-076 SB-76 6-12 10/3/2007 0.75	SB-077 SB-77 0-6 10/3/2007 0.25	SB-078 SB-78 0-6 10/3/2007 0.25	SB-079 SB-79 0-6 10/3/2007 0.25
PCBs (ug/kg)												
Aroclor 1016	NA	NA	<240	<540	<110	---	<130	<590	---	<550	<120	<130
Aroclor 1221	NA	NA	<240	<540	<110	---	<130	<590	---	<550	<120	<130
Aroclor 1232	NA	NA	<240	<540	<110	---	<130	<590	---	<550	<120	<130
Aroclor 1242	NA	NA	<240	<540	<110	---	<130	<590	---	<550	<120	<130
Aroclor 1248	NA	NA	<240	<540	<110	---	<130	<590	---	<550	<120	<130
Aroclor 1254	NA	NA	<240	<540	<110	---	<130	<590	---	<550	<120	<130
Aroclor 1260	NA	NA	3400	4400	1500	---	1200	4200	---	4600	1300	780
Aroclor 1262	NA	NA	<240	<540	<110	---	<130	<590	---	<550	<120	<130
Aroclor 1268	NA	NA	<240	<540	<110	---	<130	<590	---	<550	<120	<130
PCB's	2000	2000	**{3400}**	**{4400}**	1500	---	1200	**{4200}**	---	**{4600}**	1300	780
Metals (mg/kg)												
Arsenic	20	20	14	12	20	**{25}**	9	**{57}**	**{65}**	12	17	10
Barium	1000	1000	120 J	250 J	**{1400} J**	**{2500}D**	110 J	200 J	150	140 J	330 J	130 J
Cadmium	2	2	1.8B	**{6}B**	**{30}**	**{56}**	1.6B	**{3.4}B**	1.9	**{2.5}B**	**{6.1}B**	1.7B
Chromium	30	30	26	**{31}**	**{71}**	**{92}**	24	27	17	**{33}**	27	19
Lead	300	300	**{530} J**	**{510} J**	**{1300} J**	**{2500}**	**{510} J**	**{1000} J**	**{660}**	**{510} J**	300 J	**{1000} J**
Selenium	400	400	1.8	1.2	<3.2	<6.1	0.68J	1.1	0.81	0.68	0.84	0.48J
Silver	100	100	0.16J	0.29J	0.53J	<6.1	<0.74	0.36J	0.28J	0.26J	0.11J	0.21J
Mercury	20	20	0.63	0.71	1	1.3	0.52	0.89	0.64	0.58	0.44	0.46

Notes:
NA = No Standard exists.
{BOLD} = Result exceeds MCP Method 1 S1/GW2 or S1/GW3 standards.
J = Estimated value.
D = Result reported is from a diluted sample.
B = Constituent detected in associatd blank.
--- = not analyzed

Table 1
Soil Analytical Results
Compared to MCP Method 1 Standards

Residential Properties on Hofmann Avenue, Lawrence, Massachusetts

CONSTITUENT	MCP Method One S1/GW2	MCP Method One S1/GW3	SB-079 SB-79 6-12 10/3/2007 0.75	SB-080 SB-80 0-6 10/3/2007 0.25	SB-081 SB-81 0-6 10/3/2007 0.25	SB-082 SB-82 0-6 10/3/2007 0.25	SB-083 SB-83 0-6 10/3/2007 0.25	SB-084 SB-84 0-6 10/3/2007 0.25	SB-085 SB-85 0-6 10/3/2007 0.25	SB-086 SB-86 0-6 10/3/2007 0.25	SB-087 SB-87 0-6 10/3/2007 0.25	SB-088 SB-88 0-6 10/3/2007 0.25
PCBs (ug/kg)												
Aroclor 1016	NA	NA	---	<230	<130	<100	<120	<120	<120	<110	<110	<130
Aroclor 1221	NA	NA	---	<230	<130	<100	<120	<120	<120	<110	<110	<130
Aroclor 1232	NA	NA	---	<230	<130	<100	<120	<120	<120	<110	<110	<130
Aroclor 1242	NA	NA	---	<230	<130	<100	<120	<120	<120	<110	<110	<130
Aroclor 1248	NA	NA	---	<230	<130	<100	<120	<120	<120	<110	<110	<130
Aroclor 1254	NA	NA	---	<230	<130	<100	<120	<120	<120	<110	<110	<130
Aroclor 1260	NA	NA	---	2600	400	320	580	690	570	330	600	540
Aroclor 1262	NA	NA	---	<230	<130	<100	<120	<120	<120	<110	<110	<130
Aroclor 1268	NA	NA	---	<230	<130	<100	<120	<120	<120	<110	<110	<130
PCB's	2000	2000	---	**{2600}**	400	320	580	690	570	330	600	540
Metals (mg/kg)												
Arsenic	20	20	8.2	17	11	11 J	17 J	9 J	11 J	9.4 J	9.9 J	10 J
Barium	1000	1000	130	200	100	52	290	160	95	82	91	120
Cadmium	2	2	0.64	**{3.7}**	1.2J	0.48J	**{2.5}**	1.7	0.93J	0.82J	0.97J	1.1J
Chromium	30	30	13	28	24	20 J	27 J	20 J	24 J	23 J	27 J	28 J
Lead	300	300	**{370}**	**{560}**	**{400}**	110	220	290	230	180	260	280
Selenium	400	400	0.67J	<3.4	<3.3	<2.9	<3	<3.2	<3.7	<3.4	<3.4	<4
Silver	100	100	<0.69	<3.4	<3.3	<2.9	<3	<3.2	<3.7	<3.4	<3.4	<4
Mercury	20	20	0.29	0.52	0.46	0.16	1.6	0.33	0.3	0.19	0.25	0.75

Notes:
NA = No Standard exists.
{BOLD} = Result exceeds MCP Method 1 S1/GW2 or S1/GW3 standards.
J = Estimated value.
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--- = not analyzed

Table 1
Soil Analytical Results
Compared to MCP Method 1 Standards

Residential Properties on Hofmann Avenue, Lawrence, Massachusetts

CONSTITUENT	MCP Method One S1/GW2	MCP Method One S1/GW3	SB-089 SB-89 0-6 10/3/2007 0.25	SB-090 SB-90 0-6 10/3/2007 0.25	SB-091 SB-91 0-6 10/3/2007 0.25	SB-092 SB-92 0-6 10/3/2007 0.25	SB-093 SB-93 0-6 10/3/2007 0.25	SB-094 SB-94 0-6 10/3/2007 0.25	SB-095 SB-95 0-6 10/3/2007 0.25	SB-096 SB-96 0-6 10/3/2007 0.25	SB-097 SB-97 0-6 10/3/2007 0.25	SB-098 SB-98 0-6 10/3/2007 0.25
PCBs (ug/kg)												
Aroclor 1016	NA	NA	<110	<120	<100	<110	<110	<110	<120	<120	<100	<120
Aroclor 1221	NA	NA	<110	<120	<100	<110	<110	<110	<120	<120	<100	<120
Aroclor 1232	NA	NA	<110	<120	<100	<110	<110	<110	<120	<120	<100	<120
Aroclor 1242	NA	NA	<110	<120	<100	<110	<110	<110	<120	<120	<100	<120
Aroclor 1248	NA	NA	<110	<120	<100	<110	<110	<110	<120	<120	<100	<120
Aroclor 1254	NA	NA	<110	<120	<100	<110	<110	<110	160	<120	<100	<120
Aroclor 1260	NA	NA	63J	460	<100	1000	25J	<110	<120	770	<100	92J
Aroclor 1262	NA	NA	<110	<120	<100	<110	<110	<110	<120	<120	<100	<120
Aroclor 1268	NA	NA	<110	<120	<100	<110	<110	<110	<120	<120	<100	<120
PCB's	2000	2000	63	460	<100	1000	25	<110	160	770	<100	92
Metals (mg/kg)												
Arsenic	20	20	6.9J	11 J	7.4 J	9.5 J	7.1 J	6.9J	10 J	9.9 J	7.3 J	8.7 J
Barium	1000	1000	45	83	45	83	43	45	64	100	43	66
Cadmium	2	2	0.31J	0.85J	0.29J	0.98J	0.27J	0.28J	0.51J	1.1J	0.26J	0.72J
Chromium	30	30	**{32} J**	23 J	26 J	22 J	24 J	25 J	24 J	23 J	27 J	23 J
Lead	300	300	53	230	42	230	35	50	100	260	31	200
Selenium	400	400	<3.5	<3.3	<3.4	<3.3	<2.9	<3.5	<3.5	<3.6	<3.2	<3.4
Silver	100	100	<3.5	<3.3	<3.4	<3.3	<2.9	<3.5	<3.5	<3.6	<3.2	<3.4
Mercury	20	20	0.071J	0.41	0.056J	0.27	0.049J	0.075J	0.11	0.26	0.068J	0.17

Notes:
NA = No Standard exists.
{BOLD} = Result exceeds MCP Method 1 S1/GW2 or S1/GW3 standards.
J = Estimated value.
D = Result reported is from a diluted sample.
B = Constituent detected in associatd blank.
--- = not analyzed

Table 1
Soil Analytical Results
Compared to MCP Method 1 Standards

Residential Properties on Hofmann Avenue, Lawrence, Massachusetts

CONSTITUENT	MCP Method One S1/GW2	MCP Method One S1/GW3	SB-099 SB-99 0-6 10/3/2007 0.25	SB-100 SB-100 0-6 10/3/2007 0.25	SB-101 SB-101 0-6 10/3/2007 0.25	SB-102 SB-102 0-6 10/3/2007 0.25	SB-103 SB-103 0-6 10/3/2007 0.25	SB-104 SB-104 0-6 10/3/2007 0.25	SB-105 SB-105 0-6 10/3/2007 0.25	SB-106 SB-106 0-6 10/3/2007 0.25	SB-107 SB-107 0-6 10/3/2007 0.25	SB-108 SB-108 0-6 10/3/2007 0.25
PCBs (ug/kg)												
Aroclor 1016	NA	NA	<110	<110	<110	<120	<110	<110	<110	<110	<110	<100
Aroclor 1221	NA	NA	<110	<110	<110	<120	<110	<110	<110	<110	<110	<100
Aroclor 1232	NA	NA	<110	<110	<110	<120	<110	<110	<110	<110	<110	<100
Aroclor 1242	NA	NA	<110	<110	<110	<120	<110	<110	<110	<110	<110	<100
Aroclor 1248	NA	NA	<110	<110	<110	<120	<110	<110	<110	<110	<110	<100
Aroclor 1254	NA	NA	120	87J	190	<120	<110	<110	<110	<110	<110	<100
Aroclor 1260	NA	NA	<110	<110	<110	140	<110	570	1700	710	2000	800
Aroclor 1262	NA	NA	<110	<110	<110	<120	<110	<110	<110	<110	<110	<100
Aroclor 1268	NA	NA	<110	<110	<110	<120	<110	<110	<110	<110	<110	<100
PCB's	2000	2000	120	87	190	140	<110	570	1700	710	2000	800
Metals (mg/kg)												
Arsenic	20	20	6.9 J	6.6 J	6.8 J	9.7	6.9	7.7	15	8.6	12	9.9
Barium	1000	1000	48	53	48	67	44	53	81	66	79	60
Cadmium	2	2	0.34J	0.37JB	0.4JB	0.65JB	0.31JB	0.77JB	1.5B	0.98JB	1.4B	1JB
Chromium	30	30	26 J	20 J	25 J	30	27	26	28	24	**{31}**	26
Lead	300	300	33	68	55	120	50	100	210	170	220	180
Selenium	400	400	<3.3	<3.1	<2.8	<3.3	<3.1	<3.3	<3.2	<3.2	<3.2	<3
Silver	100	100	<3.3	<3.1	<2.8	<3.3	<3.1	<3.3	<3.2	<3.2	<3.2	<3
Mercury	20	20	0.077J	0.093	0.074J	0.18	0.077J	0.2	0.4	0.32	0.34	0.32

Notes:
NA = No Standard exists.
{BOLD} = Result exceeds MCP Method 1 S1/GW2 or S1/GW3 standards.
J = Estimated value.
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B = Constituent detected in associatd blank.
--- = not analyzed

Table 1
Soil Analytical Results
Compared to MCP Method 1 Standards

Residential Properties on Hofmann Avenue, Lawrence, Massachusetts

CONSTITUENT	MCP Method One S1/GW2	MCP Method One S1/GW3	SB-109 SB-109 0-6 10/3/2007 0.25	SB-110 SB-110 0-6 10/3/2007 0.25	SB-111 SB-111 0-6 10/3/2007 0.25	SB-112 SB-112 0-6 10/3/2007 0.25	SB-113 SB-113 0-6 10/3/2007 0.25	SB-114 SB-114 0-6 10/4/2007 0.25	SB-115 SB-115 0-6 10/4/2007 0.25	SB-116 SB-116 0-6 10/4/2007 0.25	SB-117 SB-117 0-6 10/4/2007 0.25	SB-118 SB-118 0-6 10/4/2007 0.25
PCBs (ug/kg)												
Aroclor 1016	NA	NA	<110	<110	<110	<100	<110	<120	<110	<100	<110	<110
Aroclor 1221	NA	NA	<110	<110	<110	<100	<110	<120	<110	<100	<110	<110
Aroclor 1232	NA	NA	<110	<110	<110	<100	<110	<120	<110	<100	<110	<110
Aroclor 1242	NA	NA	<110	<110	<110	<100	<110	<120	<110	<100	<110	<110
Aroclor 1248	NA	NA	3600D	1900	<110	<100	<110	<120	<110	<100	<110	<110
Aroclor 1254	NA	NA	<110	<110	<110	<100	<110	<120	<110	<100	<110	<110
Aroclor 1260	NA	NA	370	1100	190	270	1200	290	250	710	110	190
Aroclor 1262	NA	NA	<110	<110	<110	<100	<110	<120	<110	<100	<110	<110
Aroclor 1268	NA	NA	<110	<110	<110	<100	<110	<120	<110	<100	<110	<110
PCB's	2000	2000	**{4000}D**	**{3000}**	190	270	1200	290	250	710	110	190
Metals (mg/kg)												
Arsenic	20	20	9.7	11	8	7.6	9.7	12	10	20	6.7	10
Barium	1000	1000	82	81	49	43	62	64	44	79	32	43
Cadmium	2	2	0.8JB	1.7B	0.58JB	0.78JB	1.1JB	1.2JB	0.96JB	1.1JB	0.58JB	0.7JB
Chromium	30	30	24	**{31}**	24	25	26	24	28	24	19	23
Lead	300	300	170	220	73	72	170	130	71	150	35	77
Selenium	400	400	<3.3	<3	<3.1	<3.3	<3.1	<3	<3.2	<3.1	<3.1	<3.3
Silver	100	100	<3.3	<3	<3.1	<3.3	<3.1	<3	<3.2	<3.1	<3.1	<3.3
Mercury	20	20	0.18	0.4	0.1	0.15	0.54	0.22	0.21	0.4	0.079	0.16

Notes:
NA = No Standard exists.
{BOLD} = Result exceeds MCP Method 1 S1/GW2 or S1/GW3 standards.
J = Estimated value.
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B = Constituent detected in associatd blank.
--- = not analyzed

Table 1
Soil Analytical Results
Compared to MCP Method 1 Standards

Residential Properties on Hofmann Avenue, Lawrence, Massachusetts

CONSTITUENT	MCP Method One S1/GW2	MCP Method One S1/GW3	SB-119 SB-119 0-6 10/4/2007 0.25	SB-120 SB-120 0-6 10/4/2007 0.25	SB-121 SB-121 0-6 10/4/2007 0.25	SB-122 SB-122 0-6 10/4/2007 0.25	SB-123 SB-123 0-6 10/4/2007 0.25	SB-124 SB-124 0-6 10/4/2007 0.25	SB-125 SB-125 0-6 10/4/2007 0.25	SB-126 SB-126 0-6 10/4/2007 0.25	SB-127 SB-127 0-6 10/4/2007 0.25	SB-128 SB-128 0-6 10/4/2007 0.25
PCBs (ug/kg)												
Aroclor 1016	NA	NA	<110	<110	<110	<110	<110	<110	<120	<120	<130	<110
Aroclor 1221	NA	NA	<110	<110	<110	<110	<110	<110	<120	<120	<130	<110
Aroclor 1232	NA	NA	<110	<110	<110	<110	<110	<110	<120	<120	<130	<110
Aroclor 1242	NA	NA	<110	<110	<110	<110	<110	<110	<120	<120	<130	<110
Aroclor 1248	NA	NA	<110	<110	<110	<110	<110	<110	<120	<120	<130	<110
Aroclor 1254	NA	NA	<110	<110	<110	<110	<110	<110	<120	<120	<130	<110
Aroclor 1260	NA	NA	220	390	340	430	640	970	920	1500	960	710
Aroclor 1262	NA	NA	<110	<110	<110	<110	<110	<110	<120	<120	<130	<110
Aroclor 1268	NA	NA	<110	<110	<110	<110	<110	<110	<120	<120	<130	<110
PCB's	2000	2000	220	390	340	430	640	970	920	1500	960	710
Metals (mg/kg)												
Arsenic	20	20	8.5	15	15	**{21}**	17	12	12	14	13	12
Barium	1000	1000	42	45	52	42	51	56	120	240	97	100
Cadmium	2	2	0.61JB	0.65J	0.8J	0.93J	0.78J	0.72J	1.8	**{3.5}**	1.5	1.6
Chromium	30	30	20	20	29	**{34}**	24	22	30	24	27	27
Lead	300	300	83	78	81	70	110	120	**{380}**	**{600}**	160	240
Selenium	400	400	<3.1	<3.3	<3.1	<3.3	<3.2	<3.1	<3	<3.4	<3.6	<3.3
Silver	100	100	<3.1	<3.3	<3.1	<3.3	<3.2	<3.1	<3	<3.4	<3.6	<3.3
Mercury	20	20	0.23	0.25	0.14	0.22	0.27	0.22	0.38	0.43	0.46	0.43

Notes:
NA = No Standard exists.
{BOLD} = Result exceeds MCP Method 1 S1/GW2 or S1/GW3 standards.
J = Estimated value.
D = Result reported is from a diluted sample.
B = Constituent detected in associatd blank.
--- = not analyzed

Table 1
Soil Analytical Results
Compared to MCP Method 1 Standards

Residential Properties on Hofmann Avenue, Lawrence, Massachusetts

CONSTITUENT	MCP Method One S1/GW2	MCP Method One S1/GW3	SB-129 SB-129 0-6 10/4/2007 0.25	SB-130 SB-130 0-6 10/4/2007 0.25	SB-131 SB-131 0-6 10/4/2007 0.25	SB-132 SB-132 0-6 10/4/2007 0.25	SB-133 SB-133 0-6 10/4/2007 0.25	SB-134 SB-134 0-6 10/4/2007 0.25	SB-135 SB-135 0-6 10/4/2007 0.25	SB-136 SB-136 0-6 10/4/2007 0.25	SB-137 SB-137 0-6 10/4/2007 0.25	SB-138 SB-138 0-6 10/4/2007 0.25	SB-139 SB-139 0-6 10/4/2007 0.25	SB-140 SB-140 0-6 10/4/2007 0.25
PCBs (ug/kg)														
Aroclor 1016	NA	NA	<110	<120	<110	<120	<120	<120	<120	<120	<120	<120	<110	<120
Aroclor 1221	NA	NA	<110	<120	<110	<120	<120	<120	<120	<120	<120	<120	<110	<120
Aroclor 1232	NA	NA	<110	<120	<110	<120	<120	<120	<120	<120	<120	<120	<110	<120
Aroclor 1242	NA	NA	<110	<120	<110	<120	<120	<120	<120	<120	<120	<120	<110	<120
Aroclor 1248	NA	NA	<110	<120	<110	<120	<120	<120	<120	<120	<120	<120	<110	<120
Aroclor 1254	NA	NA	<110	<120	<110	<120	<120	<120	<120	<120	<120	<120	<110	<120
Aroclor 1260	NA	NA	800	490	640	1300	190	1200	1400	1300	1900	920	380	950
Aroclor 1262	NA	NA	<110	<120	<110	<120	<120	<120	<120	<120	<120	<120	<110	<120
Aroclor 1268	NA	NA	<110	<120	<110	<120	<120	<120	<120	<120	<120	<120	<110	<120
PCB's	2000	2000	800	490	640	1300	190	1200	1400	1300	1900	920	380	950
Metals (mg/kg)														
Arsenic	20	20	**{31}**	11	11	9.9	11	9.3	12	11	12	19	10	16
Barium	1000	1000	140	110	90	68	37	50	77	50	62	44	50	52
Cadmium	2	2	1.7	1.4	1.4J	1.1J	1.1J	0.85JB	1.3JB	0.95JB	1JB	0.98JB	0.96JB	0.88JB
Chromium	30	30	**{40}**	27	28	24	**{37}**	21	27	21	23	22	25	**{34}**
Lead	300	300	170	170	210	220	88	91	230	130	150	91	83	79
Selenium	400	400	<3.1	<3.4	<3.7	<3.7	<3.2	<3.6	<3.6	<3.4	<3.2	<3.1	<3.3	<3.6
Silver	100	100	<3.1	2.7J	<3.7	<3.7	<3.2	<3.6	1.8J	<3.4	<3.2	<3.1	<3.3	<3.6
Mercury	20	20	0.51	0.31	0.36	0.33	0.17	0.3	0.37	0.35	0.36	0.26	0.2	0.14

Notes:
NA = No Standard exists.
{BOLD} = Result exceeds MCP Method 1 S1/GW2 or S1/GW3 standards.
J = Estimated value.
D = Result reported is from a diluted sample.
B = Constituent detected in associatd blank.
--- = not analyzed

Table 1
Soil Analytical Results
Compared to MCP Method 1 Standards

Residential Properties on Hofmann Avenue, Lawrence, Massachusetts

CONSTITUENT	MCP Method One S1/GW2	MCP Method One S1/GW3	SB-141 SB-141 0-6 10/4/2007 0.25	SB-142 SB-142 0-6 10/4/2007 0.25	SB-143 SB-143 0-6 10/4/2007 0.25	SB-144 SB-144 0-6 10/4/2007 0.25
PCBs (ug/kg)						
Aroclor 1016	NA	NA	<120	<560	<120	<540
Aroclor 1221	NA	NA	<120	<560	<120	<540
Aroclor 1232	NA	NA	<120	<560	<120	<540
Aroclor 1242	NA	NA	<120	<560	<120	<540
Aroclor 1248	NA	NA	<120	<560	<120	<540
Aroclor 1254	NA	NA	<120	<560	<120	<540
Aroclor 1260	NA	NA	1400	3800	2400	4100
Aroclor 1262	NA	NA	<120	<560	<120	<540
Aroclor 1268	NA	NA	<120	<560	<120	<540
PCB's	2000	2000	1400	**{3800}**	**{2400}**	**{4100}**
Metals (mg/kg)						
Arsenic	20	20	12	13	9.2	11
Barium	1000	1000	50	71	75	76
Cadmium	2	2	0.98JB	1.5B	**{2.3}B**	**{2.2}B**
Chromium	30	30	25	23	27	26
Lead	300	300	100	**{320}**	180	220
Selenium	400	400	<3.3	<3.3	<3.3	<3.3
Silver	100	100	<3.3	<3.3	<3.3	<3.3
Mercury	20	20	0.24	0.9	0.44	0.43

Notes:
NA = No Standard exists.
{BOLD} = Result exceeds MCP Method 1 S1/GW2 or S1/GW3 standards.
J = Estimated value.
D = Result reported is from a diluted sample.
B = Constituent detected in associatd blank.
--- = not analyzed

N

Shaw™ Shaw Environmental, Inc.

0 100 200
SCALE IN FEET

DATE 11/8/2007
DWN EMH
APP
REV
PROJECT NO.
project

FIGURE 1
MASSACHUSETTS DEP
HOFMANN AVE
LAWRENCE, MASSACHUSETTS

HOFMANN AVE

1" 1/2" 0" 1"

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N

HOFMANN AVE

19 HOFMANN

21 HOFMANN

N/F
COSTELLO

N/F
STENNICK

SB132 SB133 SB131 SB130 SB129

SB134 SB136 SB138 SB140 SB141

SB135 SB137 SB139

SB142

SB143 SB144

LEGEND

PROPERTY LINE

FENCE

ROAD

SB98 SOIL BORING

BUILDING

Shaw™ Shaw Environmental, Inc.

0 20 40

SCALE IN FEET

DATE 11/8/2007
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PROJECT NO.
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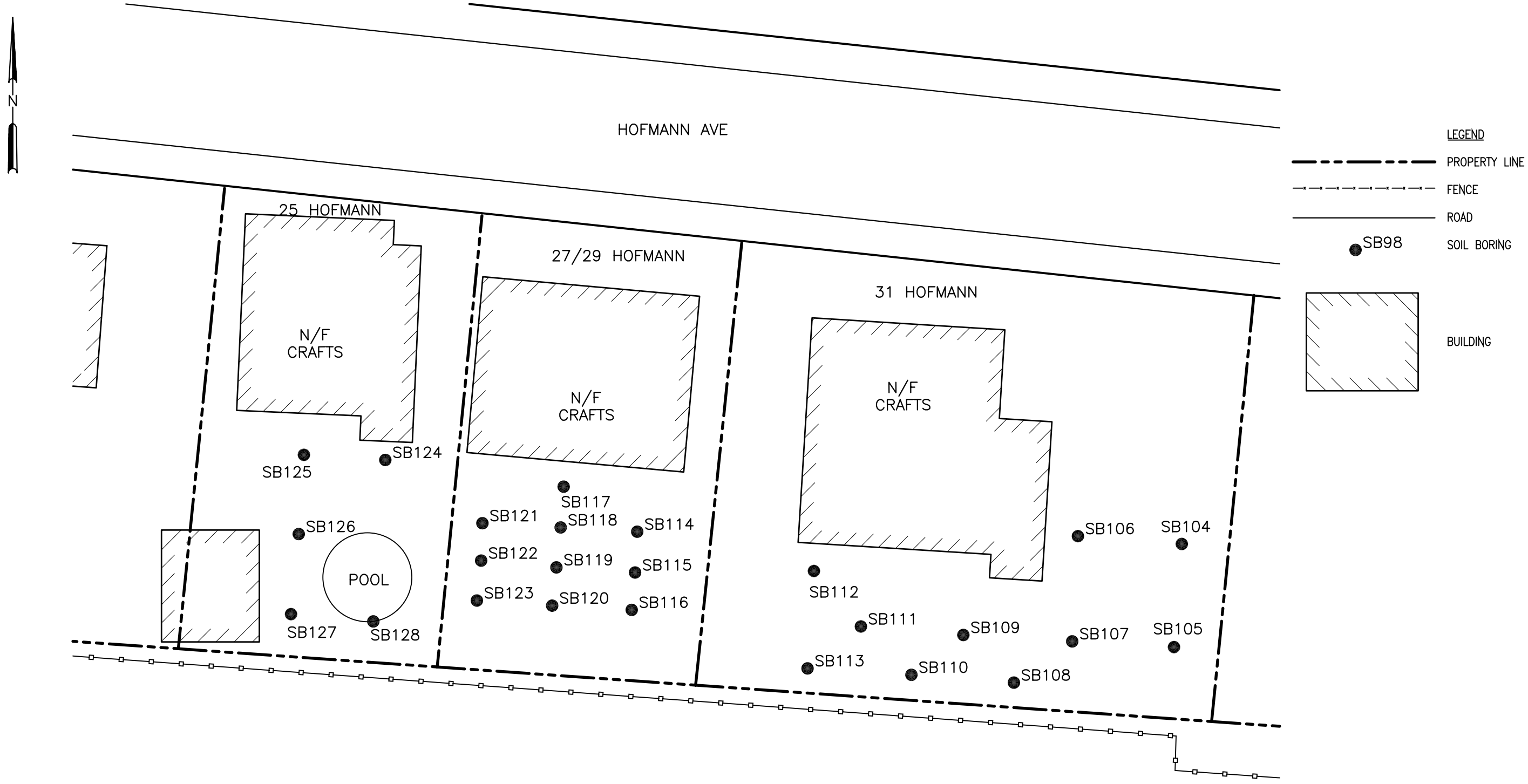
FIGURE 2
MASSACHUSETTS DEP
HOFMANN AVE
LAWRENCE, MASSACHUSETTS
19 AND 21 HOFMANN AVE

1" 1/2" 0" 1"

File: J:\dwg\sarss\Lawrence MA\smdef-01.dwg Layout: 19 & 21 Hofmann User: eric.hart Nov 08, 2007 - 6:18pm



File: J:\dwg\sarss\Lawrence MA\smdef-01.dwg Layout: 25 27 29 & 31 Hofmann User: eric.hart Nov 08, 2007 - 6:19pm

1" 1/2" 0" 1"

Shaw™ Shaw Environmental, Inc.

0 20 40

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FIGURE 3
MASSACHUSETTS DEP
HOFMANN AVE
LAWRENCE, MASSACHUSETTS
25, 27, 29 AND 31 HOFMANN AVE

N

HOFMANN AVE

33 HOFMANN

41 HOFMANN

N/F
DENARO

SHED

GARDEN

SB101 SB100 SB102 SB103 SB97 SB99 SB98 SB96 SB95 SB94 SB92 SB91 SB90 SB89 SB93 SB88 SB87 SB86 SB85 SB84 SB83 SB81 SB80 SB79 SB78 SB75 SB74 SB72 SB71 SB77 SB76 SB73 SB63 SB66 SB67 SB64 SB68 SB65 SB69 SB70 SB60 SB61 SB62

LEGEND

PROPERTY LINE

FENCE

ROAD

SB98 SOIL BORING

BUILDING

0 20 40

SCALE IN FEET

Shaw™ Shaw Environmental, Inc.

DATE 11/12/07
DWN EMH
APP
REV
PROJECT NO.
project

FIGURE 4
MASSACHUSETTS DEP
HOFMANN AVE
LAWRENCE, MASSACHUSETTS
33 AND 41 HOFMANN AVE

1" 1/2" 0" 1"

File: J:\dwg\sarss\Lawrence MA\smdef-01.dwg Layout: 33 & 41 Hofmann User: eric.hart Nov 12, 2007 - 2:03pm

N

HOFMANN AVE

51 HOFMANN

53 HOFMANN

N/F
BEALIEU

N/F
MATACHUN &
BEALIEU

POOL

SHED

SB1 SB2 SB3 SB4 SB5 SB6 SB7 SB8 SB9 SB10 SB11 SB12 SB13 SB14 SB15 SB16 SB17 SB18 SB19 SB20 SB21 SB22 SB23 SB24 SB25 SB26 SB27 SB28 SB29 SB30 SB31 SB32 SB33 SB34 SB35 SB36 SB37 SB38 SB39 SB40 SB41 SB42 SB43 SB44 SB45 SB46 SB47 SB48 SB49 SB50 SB51 SB52 SB53 SB54 SB55 SB56 SB57 SB58 SB59

LEGEND

PROPERTY LINE

FENCE

ROAD

SB98 SOIL BORING

BUILDING

Shaw™ Shaw Environmental, Inc.

0 20 40

SCALE IN FEET

DATE 11/8/2007
DWN EMH
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REV
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FIGURE 5
MASSACHUSETTS DEP
HOFMANN AVE
LAWRENCE, MASSACHUSETTS
51 AND 53 HOFMANN AVE

1" 1/2" 0" 1"

File: J:\dwg\sarss\Lawrence MA\smdef-01.dwg Layout: 51 & 53 Hofmann User: eric.hart Nov 08, 2007 - 6:20pm

ATTACHMENT A

SOIL BORING LOG

ATTACHMENT B

LABORATORY ANALYTICAL REPORTS