



Data Evaluation Summary Report Texarkana Wood Preserving Company Site Texarkana, Bowie County, Texas

**Remedial Action Contract 2 Full Service
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Prepared for

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1. INTRODUCTION

This Data Evaluation Summary Report (DESR) presents the results of the supplemental ground water and soil sampling conducted by EA Engineering, Science, and Technology, Inc. (EA) for the Texarkana Wood Preserving Company Site (Site) located in Texarkana, Bowie County, Texas. EA prepared the DESR for the U.S. Environmental Protection Agency (EPA) Region 6 as part of Task Order No. 0014-RICO-06GZ under EPA Contract EP-W-06-004.

This DESR was completed for ground water and soil samples collected during supplemental remedial investigation/feasibility study (RI/FS) activities conducted on 5 – 9 November 2007. Data collection activities were conducted in accordance with the EPA-approved Supplemental RI/FS Work Plan (EA 2007a) and Sampling and Analysis Plan (SAP) (EA 2007b).

The purpose of this document is to summarize analytical data quality and usability in relation to the project-specific data quality objectives (DQOs). A data summary compiling, tabulating, and summarizing the data collected for the supplemental RI/FS is provided in Section 2.0. Data validation guidelines, responsibilities, and results are addressed in Section 3.0. Data quality, which includes a discussion of discrepancies and data quality issues, is presented in Section 4.0. A data evaluation is presented in Section 5.0, and a data summary is presented in Section 6.0. References are provided in Section 7.0

Supporting tables follow the text.

2. DATA SUMMARY

This section contains a summary of ground water and soil sampling data collected for the supplemental RI/FS.

2.1 GROUND WATER

To characterize and define shallow, intermediate, and deep water-bearing zone ground water impacts, 12 annual ground water samples were collected from 11 permanent and temporary ground water monitoring locations (**Table 1**). The following monitoring wells were selected for sampling because they are perimeter monitoring wells that have historically been relatively unimpacted by site contaminants:

- Permanent shallow water-bearing zone ground water monitoring locations MW-03, MW-06, MW-08, MW-28, and MW-14
- Temporary shallow water-bearing zone ground water monitoring location B-14

These sample locations were selected to determine if site-related dissolved concentrations are migrating down-gradient toward Days Creek. Shallow water-bearing zone ground water monitoring location MW-05 was located in the center of the impacted area and was used to determine the variability of the ground water plume; the ground water sample from this location will serve as the ‘worst case’ scenario for the vapor intrusion evaluation in the Human Health Risk Assessment (HHRA).

The following monitoring wells were sampled to determine if site-related dissolved concentrations are migrating into the intermediate water-bearing zone:

- Intermediate water-bearing zone ground water monitoring locations MW-17, MW-32, and MW-31
- Aquitard ground water monitoring location MW-35

Ground water samples from these locations will be used to evaluate the domestic use pathway in the HHRA.

Shallow water-bearing zone ground water samples were submitted for the following analyses: semi-volatile organic compounds (SVOCs); volatile organic compounds (VOCs); inorganics;

and dioxins/furans. Intermediate and deep water-bearing zone ground water samples were submitted for SVOC, VOC, and inorganic analyses only.

Analytes detected in ground water samples collected as part of the supplemental RI/FS activities are summarized by water-bearing zone in **Table 2**; analytical results for individual monitoring wells are presented in **Table 3**. **Table 4** presents the ground water data for detected organics in conjunction with the October 2003 ground water sampling results, when available, for comparison. Generally, ground water sample results from the November 2007 sampling event are higher than the October 2003 results.

2.2 SOIL

Soil samples were collected from Ponds 1 through 5 and from background locations to augment the nature and extent determination in the supplemental RI/FS.

2.2.1 Ponds Soil Sampling

Soil samples were collected from Ponds 1 through 5 to satisfy three DQOs: (1) to characterize the nature and extent of historic impacts to Ponds 1 through 5; (2) to determine if historic polycyclic aromatic hydrocarbon (PAH) concentrations have degraded since sample collection for the 1989 RI; and (3) to determine whether data collected in 1988 are indicative of current conditions. To answer these DQOs, 12 soil samples were collected from 0 to 0.5 feet below ground surface (bgs) in or around Ponds 1 through 5 and submitted for analysis of SVOCs (**Table 5**).

Analytes detected in the soil samples collected as part of the supplemental RI/FS activities are summarized by area in **Table 6**; analytical results for individual soil samples are provided in **Table 7**. Based on supplemental RI/FS activities, the maximum concentration of benzo(a)pyrene detected in soil was 52.9 milligrams per kilogram (mg/kg). Based on the 1988 field activities, the maximum concentration of benzo(a)pyrene in soil was 440 mg/kg. Given that there is natural variation in soil samples and that there is less than an order of magnitude difference in sample results from the pond areas, significant degradation of PAHs is not considered likely and the data collected in 1988 are considered indicative of current conditions.

2.2.2 Soil Background Sampling

Ten background soil samples were collected from the 0- to 0.5-foot bgs depth interval and submitted for analysis of SVOCs, inorganics, and dioxins/furans (**Table 5**). Analytes detected in soil samples collected as part of the supplemental RI/FS activities are summarized in **Table 6**; analytical results for individual soil samples are provided in **Table 7**.

3. DATA VALIDATION

This section describes the data validation guidelines for each type of analytical data provided by supporting laboratories. Soil and ground water samples were collected and sent to either the EPA Region 6 Laboratory (SVOCs, VOCs, and inorganics) or the EPA Contract Laboratory Program (CLP) laboratories (dioxin/furans only). In accordance with the requirements of the SAP (EA 2007b), data from the EPA CLP Laboratory and the Region 6 Laboratory were submitted to EA post-validation, and required no further validation by EA. Electronic deliverables submitted to EA by EPA CLP Laboratory and the EPA Region 6 Laboratory contained suitable data validation qualifiers and accompanying data validation summaries. Data validation qualifiers and definitions for the data qualifiers assigned by EPA CLP Laboratory and the EPA Region 6 Laboratory are presented as follows:

- U The analyte was analyzed, but was not detected above the sample quantitation limit.
- UJ The analyte was analyzed, but was not detected; the sample quantitation limit is approximate.
- J Result is estimated because of outlying quality control parameters.
- LJ The result is an estimated quantity, but the result may be biased low.
- R Result is unusable because data do not meet data quality criteria.
- B Concentration is estimated because of apparent blank contamination.
- K High bias – actual concentration may be lower than the concentration reported.

Data quality, which includes a discussion of discrepancies and data quality issues, is presented in Section 4.0. Attachment A of this DESR contains the data validation report summaries.

4. DATA QUALITY

This section describes the data quality, which includes a discussion of discrepancies and data quality issues. Soil and ground water samples were collected and sent to either the EPA Region 6 Laboratory (SVOCs, VOCs, and inorganics) or the EPA CLP Laboratory (dioxin/furans only).

4.1 EPA REGION 6 LABORATORY

Soil and ground water samples collected as part of the supplemental RI were submitted to the EPA Region 6 Laboratory for analysis of SVOCs, VOCs, and inorganics. Attachment A of this DESR contains the data validation report summaries; the full data validation reports are provided electronically on compact disc with this DESR. Significant data quality issues for the SVOC, VOC, and inorganics analyses are detailed below, as necessary.

The following analytes in shallow water-bearing zone sample MW-06 were rejected (R-flagged) because phenolic surrogates failed low or the result did not comport with the internal standard. Although the sample was re-extracted outside the holding time, the results were the same. Therefore, all acid extractable target compounds were qualified as rejected on both analyses.

Benzoic acid	2,4,5-Trichlorophenol	2,4,6-Trichlorophenol
2,4-Dichlorophenol	2,4-Dimethylphenol	2,4-Dinitrophenol
2-Chlorophenol	2-Methylphenol	2-Nitrophenol
3 &/or 4-Methylphenol	4,6-Dinitro-2-methylphenol	4-Chloro-3-methylphenol
4-Nitrophenol	Pentachlorophenol	Phenol

The only analyte of real consequence is pentachlorophenol, which is a primary contaminant of concern at the Site. However, pentachlorophenol was not historically detected at MW-06, so the impact to the nature and extent and risk assessment discussions in the supplemental RI is considered negligible.

4.2 EPA CLP LABORATORY

Soil and ground water samples collected as part of the supplemental RI were submitted to the EPA CLP Laboratory for dioxin/furans analysis. Attachment A of this DESR contains the data

validation report summaries. Significant data quality issues for the dioxin/furan analysis are detailed below.

The National Functional Guidelines (NFG) for Dioxin Data Review state that "water samples subject to compliance with the Clean Water Act (CWA) or Safe Drinking Water Act (SDWA) may require extraction within seven days from the time of collection to the day of extraction."

The SAP (EA 2007b) states that dioxin/furan analytical results will be compared to SDWA maximum contaminant levels (MCLs). However, two of the dioxin/furan water samples were not extracted within seven days. The NFG states that if holding times are exceeded, all positive results shall be flagged as estimated concentrations (J-flagged) and all non-detect sample quantitation limits shall be flagged as estimated concentrations (UJ-flagged). For the two water samples that were not extracted within seven days, no positive results or sample quantitation limits were flagged as estimated due to holding time issues, and the data validation report does not mention a holding time issue. This is because the only dioxin isotope with a SDWA MCL is 2,3,7,8 TCDD, which was not detected in any of the water samples, and the NFG recommends rather than requires that the samples be extracted within seven days. It should also be noted that the SDWA analytical method for dioxin/furans (M1613) does not require a seven-day hold time for aqueous samples. Because a seven-day holding time is not a requirement of the NFG, the impact to the data quality of the dioxin/furan ground water samples is considered negligible.

Laboratory matrix spike (MS) and matrix spike duplicate (MSD) samples, which are used to evaluate laboratory analytical precision, were not performed because chain of custody records did not designate a ground water sample for this purpose. Although a measure of laboratory precision could not be performed for this sample group, the impact to the data quality of the dioxin/furan ground water samples is considered negligible.

5. DATA EVALUATION

Analytical results were evaluated in accordance with precision, accuracy, representativeness, completeness, and comparability (PARCC) parameters to document the quality of the data and to ensure that the data are of sufficient quality to meet the project objectives. Each of the PARCC parameters is assessed below.

5.1 PRECISION

Precision is the measure of the variability associated with an entire sampling and analysis process. It is the comparison among independent measurements as the result of repeated application of the same process under similar conditions. It is determined by analyzing field duplicate pairs and MS/MSD or matrix duplicate (MD) pairs. Precision is expressed as the relative percent difference (RPD) of a pair of values (or results). Acceptance criteria for analytical methodologies are presented in the SAP (EA 2007b). During the data validation process, field duplicate and MS/MSD or MD results were evaluated for compliance with acceptance criteria for precision for each analytical methodology. RPD evaluations are documented in the data validation report summaries (Attachment A).

The SAP (EA 2007b) specifies that 10 percent (one in 10 samples) be submitted as field duplicates to the laboratory. Field duplicate pairs were collected, analyzed, and evaluated for each analysis performed on soil and ground water. The SAP (EA 2007b) criterion for field duplicate precision is 50 percent RPD.

Of the 12 ground water samples collected at the Site, two (approximately 17 percent) were designated as field duplicate samples: MW-31 and MW-05 (see **Table 1**). All ground water field duplicates were within 50 percent RPD. The highest RPD was 28 percent for pentachlorophenol in MW-05; the sample concentration was 4,490 micrograms per liter ($\mu\text{g/L}$) and the field duplicate was 3,380 $\mu\text{g/L}$.

Of the 22 soil samples collected at the Site, three (approximately 14 percent) were designated as field duplicate samples: Pond-1-W, Pond-4-W, and BKG-6 (see **Table 5**). With the exception of benzo(b)fluoranthene, fluoranthene, and pyrene results for soil sample Pond-4-W, all soil field duplicates were within 50 percent RPD. The results for sample Pond-4-W are likely due to soil heterogeneity and the uneven distribution of contaminants in the matrix.

The SAP states that the frequency criteria for MS/MSD or MD pairs are 5 percent for EPA CLP laboratories or 10 percent for the EPA Region 6 Laboratory. With the exception of dioxin/furans

in ground water (as noted in Section 4.2), MD samples were collected, analyzed, and evaluated for each analysis performed on every sample matrix.

5.2 ACCURACY

Accuracy is the degree to which a measurement agrees with its true value and is expressed as percent recovery; acceptance criteria for each analytical methodology are stated in the SAP (EA 2007b). By comparing MS/MSD or MD, laboratory control spikes (LCS), and surrogate recoveries to associated quality control (QC) limits, accuracy is assessed. Through the process of data validation, MS/MSD or MD, LCS, and surrogate recoveries were evaluated for compliance with acceptance criteria for accuracy for each applicable analytical methodology. Evaluations of percent recovery are documented in the data validation report summaries (see Attachment A).

Data were validated against CLP QC limits specified in applicable CLP protocols and the NFG. When recoveries were above or below the QC limits, a bias was assigned to the result. Recoveries above the QC limits were qualified as biased high, while recoveries below the QC limits were qualified as biased low.

5.3 REPRESENTATIVENESS

Representativeness is a qualitative parameter and is defined by the degree to which data accurately and precisely represent a characteristic of a population, parameter variations at a sampling point, or a process or environmental condition. Sample results were evaluated for representativeness by examining items related to sample collection, including chain of custody documentation, sample labeling, collection dates, and condition of the samples upon receipt at the laboratory. Laboratory procedures were also examined, including anomalies reported by the laboratory, either upon receipt of the samples at the laboratory or during analytical processes; adherence to recommended holding times of samples prior to analysis; calibration of laboratory instruments; adherence to analytical methods; and completeness of data package documentation. Additional details pertaining to the representativeness of the sample result are documented in the data validation narratives (see Attachment A).

Samples with quality control issues were documented in previous sections and will not be repeated here for brevity. Only dioxins/furans sample results for two ground water samples were qualified based on an exceedance of the recommended holding time.

Equipment rinsate and laboratory method blank results were evaluated during the data validation process to determine whether equipment decontamination procedures (equipment rinsate) or laboratory conditions (method blanks) affected sample results. No SVOCs, VOCs, inorganics, or dioxin/furans were detected above the sample quantitation limits for the rinsate blanks and field blanks. Additional details pertaining to the representativeness of the sample result are documented in the data validation narratives (see Attachment A).

5.4 COMPLETENESS

Completeness is defined as the percentage of measurements judged to be valid. The validity of sample results is determined through the data validation process. All rejected (R-flagged) sample results are considered to be incomplete. Data that are qualified as estimated (J-flagged) or estimated nondetected (UJ-flagged) are considered to be valid and usable.

The number of valid results divided by the number of possible individual analyte results, expressed as a percentage, determines the completeness of the data set. The 90 percent completeness goal stated in the SAP (EA 2007b) was met. Even with the rejected (R-flagged) data detailed in Section 4.1, which effectively removed 1 of the 12 samples from the data set for several analytes, the percent completeness goal was greater than 90 percent.

5.5 COMPARABILITY

Comparability of the data is a qualitative parameter that expresses the confidence with which one data set may be compared to another. Comparability of the data is achieved by using standard methods for sampling and analysis, reporting data in standard units, normalizing results to standard conditions, and using standardized reporting formats and data validation procedures. No method substitutions were observed that reduced the quality of the data for comparison purposes.

5.6 SENSITIVITY

Sensitivity is the measure of the signal from an instrument that represents an actual deflection or response above instrument noise. Analytical sensitivity is measured by the method detection limit or instrument detection limit and reported with the necessary dilution factors, preparation factors, and dry weight factors of an individual sample as the sample quantitation limit. As stated in the SAP (EA 2007b), the required practical quantitation limits for investigation sample analyses are equal to the contract required detection limits for analyses as provided in the EPA CLP protocols.

6. DATA SUMMARY

Although this DESR indicates some data quality issues, the only data quality issue of real consequence is the rejection (R-flagged) of the pentachlorophenol result for shallow ground water sample MW-06. Pentachlorophenol is a primary contaminant of concern at the Site; however, it was not historically detected at MW-06. Therefore, the impact to the nature and extent and risk assessment discussions in the supplemental RI is considered negligible. All other data quality issues identified in this DESR are considered negligible and do not significantly impact the quality of the data collected for the supplemental RI.

7. REFERENCES

- EA Engineering, Science, and Technology, Inc. (EA). 2007a. Supplemental RI/FS Work Plan. Texarkana Wood Preserving Company Site. Texarkana, Bowie County, Texas. May.
- EA. 2007b. Sampling and Analysis Plan. Texarkana Wood Preserving Company Site. Texarkana, Bowie County, Texas. July.

TABLES

TABLE 2
GROUND WATER SAMPLING DATA SUMMARY (DETECTED ANALYTES)

Water Bearing Zone	Analyte	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Detection Frequency	Range of Detection Limits
Aquitard	2-Methylnaphthalene	0.5	0.5	µg/L	MW-35	1 / 1	---
Aquitard	Acenaphthene	58.7	58.7	µg/L	MW-35	1 / 1	---
Aquitard	Anthracene	2.6	2.6	µg/L	MW-35	1 / 1	---
Aquitard	Benzene	9.6	9.6	µg/L	MW-35	1 / 1	---
Aquitard	Fluoranthene	1.6	1.6	µg/L	MW-35	1 / 1	---
Aquitard	Fluorene	43.3	43.3	µg/L	MW-35	1 / 1	---
Aquitard	Naphthalene	96.9	96.9	µg/L	MW-35	1 / 1	---
Aquitard	Phenanthrene	31.5	31.5	µg/L	MW-35	1 / 1	---
Aquitard	Pyrene	0.8	0.8	µg/L	MW-35	1 / 1	---
Aquitard	Aluminum	1,340	1,340	µg/L	MW-35	1 / 1	---
Aquitard	Barium	343	343	µg/L	MW-35	1 / 1	---
Aquitard	Iron	37,300	37,300	µg/L	MW-35	1 / 1	---
Aquitard	Manganese	2,930	2,930	µg/L	MW-35	1 / 1	---
Intermediate	Aluminum	269	3,980	µg/L	MW-32Shallow	3 / 4	100 - 100
Intermediate	Barium	45.5	189	µg/L	MW-17	4 / 4	---
Intermediate	Iron	829	16,800	µg/L	MW-31	4 / 4	---
Intermediate	Lead	6.4	6.4	µg/L	MW-32Shallow	1 / 4	2 - 2
Intermediate	Manganese	38.2	732	µg/L	MW-31	4 / 4	---
Intermediate	Zinc	27.9	27.9	µg/L	MW-32Shallow	1 / 4	20 - 20
Shallow	2-Methylnaphthalene	520	610	µg/L	MW-05	1 / 7	0.5 - 0.5
Shallow	Acenaphthene	35.2	351	µg/L	MW-05	2 / 7	0.5 - 0.5
Shallow	Anthracene	19.8	19.8	µg/L	MW-05	1 / 7	0.5 - 10
Shallow	Benzene	109	115	µg/L	MW-05	1 / 7	2 - 2
Shallow	Fluorene	15.4	165	µg/L	MW-05	2 / 7	0.5 - 0.5
Shallow	Fluoranthene	1.2	1.2	µg/L	B-14	1 / 7	0.5 - 10
Shallow	Naphthalene	0.6	12,400	µg/L	MW-05	4 / 7	0.5 - 0.5
Shallow	Pentachlorophenol	3,380	4,490	µg/L	MW-05	1 / 6	1 - 1
Shallow	Phenanthrene	132	152	µg/L	MW-05	1 / 7	0.5 - 0.5
Shallow	Pyrene	0.5	0.5	µg/L	B-14	1 / 7	0.5 - 10
Shallow	Aluminum	157	7,640	µg/L	MW-14	5 / 6	100 - 100
Shallow	Arsenic	18.5	19.5	µg/L	MW-05	1 / 6	6.8 - 6.8
Shallow	Barium	36	786	µg/L	MW-06	6 / 6	---
Shallow	Chromium	10.4	10.4	µg/L	MW-28	1 / 6	10 - 10
Shallow	Cobalt	48.1	48.1	µg/L	MW-06	1 / 6	20 - 20
Shallow	Iron	178	42,700	µg/L	MW-05	6 / 6	---
Shallow	Lead	2	6.3	µg/L	MW-06	4 / 6	2 - 2
Shallow	Manganese	26.7	19,900	µg/L	MW-06	6 / 6	---
Shallow	Nickel	39.1	39.1	µg/L	MW-06	1 / 6	20 - 20
Shallow	Selenium	22	22	µg/L	MW-06	1 / 6	10.4 - 10.4
Shallow	Zinc	84.4	84.4	µg/L	MW-06	1 / 6	20 - 20

Notes:

--- - Not applicable

ug/L - Micrograms per liter

TABLE 3
GROUND WATER DATA

Water Bearing Zone	Site ID	Sampling Date	2-Methylnaphthalene	Acenaphthene	Anthracene	Benzene	Fluoranthene
Aquitard	MW-35	11/6/2007	0.5	58.7	2.6	9.6	1.6
Intermediate	MW-17	11/6/2007	0.5 U	0.5 U	0.5 U	2 U	0.5 U
Intermediate	MW-31	11/6/2007	0.5 U	0.5 U	0.5 U	2 U	0.5 U
Intermediate	MW-32Deep	11/6/2007	0.5 U	0.5 U	0.5 U	2 U	0.5 U
Intermediate	MW-32Shallow	11/6/2007	0.5 U	0.5 U	0.5 U	2 U	0.5 U
Shallow	B-14	11/8/2007	0.5 U	35.2	0.5 U	2 U	1.2
Shallow	MW-03	11/7/2007	0.5 U	0.5 U	0.5 U	2 U	0.5 U
Shallow	MW-05	11/6/2007	610	351	19.8	115	10 U
Shallow	MW-06	11/7/2007	0.5 U	0.5 U	0.5 U	2 U	0.5 U
Shallow	MW-08	11/7/2007	0.5 U	0.5 U	0.5 U	2 U	0.5 U
Shallow	MW-14	11/8/2007	0.5 U	0.5 U	0.5 U	2 U	0.5 U
Shallow	MW-28	11/8/2007	0.5 U	0.5 U	0.5 U	2 U	0.5 U

Notes:

NA - Not analyzed

U - The compound was analyzed for but not detected.

R - Result is unusable because data do not meet data quality criteria

All concentrations are in µg/L (micrograms per liter).

TABLE 3
GROUND WATER DATA

Water Bearing Zone	Site ID	Sampling Date	Fluorene	Naphthalene	Pentachlorophenol	Phenanthrene	Pyrene
Aquitard	MW-35	11/6/2007	43.3	96.9	1 U	31.5	0.8
Intermediate	MW-17	11/6/2007	0.5 U	0.5 U	1 U	0.5 U	0.5 U
Intermediate	MW-31	11/6/2007	0.5 U	0.5 U	1 U	0.5 U	0.5 U
Intermediate	MW-32Deep	11/6/2007	0.5 U	0.5 U	1 U	0.5 U	0.5 U
Intermediate	MW-32Shallow	11/6/2007	0.5 U	0.5 U	1 U	0.5 U	0.5 U
Shallow	B-14	11/8/2007	15.4	3.9	1 U	0.5 U	0.5
Shallow	MW-03	11/7/2007	0.5 U	1.1	1 U	0.5 U	0.5 U
Shallow	MW-05	11/6/2007	165	12,400	4,490	152	10 U
Shallow	MW-06	11/7/2007	0.5 U	0.6	1 RU	0.5 U	0.5 U
Shallow	MW-08	11/7/2007	0.5 U	0.5 U	1 U	0.5 U	0.5 U
Shallow	MW-14	11/8/2007	0.5 U	0.5 U	1 U	0.5 U	0.5 U
Shallow	MW-28	11/8/2007	0.5 U	0.5 U	1 U	0.5 U	0.5 U

Notes:

NA - Not analyzed

U - The compound was analyzed for but not detected.

R - Result is unusable because data do not meet data quality criteria

All concentrations are in µg/L (micrograms per liter).

TABLE 3
GROUND WATER DATA

Water Bearing Zone	Site ID	Sampling Date	Aluminum	Arsenic	Barium	Chromium	Cobalt
Aquitard	MW-35	11/6/2007	1,340	6.8 U	343	10 U	20 U
Intermediate	MW-17	11/6/2007	100 U	6.8 U	189	10 U	20 U
Intermediate	MW-31	11/6/2007	1,220	6.8 U	159	10 U	20 U
Intermediate	MW-32Deep	11/6/2007	269	6.8 U	45.5	10 U	20 U
Intermediate	MW-32Shallow	11/6/2007	3,980	6.8 U	116	10 U	20 U
Shallow	B-14	11/8/2007	NA	NA	NA	NA	NA
Shallow	MW-03	11/7/2007	713	6.8 U	36	10 U	20 U
Shallow	MW-05	11/6/2007	100 U	19.5	229	10 U	20 U
Shallow	MW-06	11/7/2007	3,220	6.8 U	786	10 U	48.1
Shallow	MW-08	11/7/2007	157	6.8 U	51.6	10 U	20 U
Shallow	MW-14	11/8/2007	7,640	6.8 U	107	10 U	20 U
Shallow	MW-28	11/8/2007	5,680	6.8 U	84.1	10.4	20 U

Notes:

NA - Not analyzed

U - The compound was analyzed for but not detected.

R - Result is unusable because data do not meet data quality criteria

All concentrations are in µg/L (micrograms per liter).

TABLE 3
GROUND WATER DATA

Water Bearing Zone	Site ID	Sampling Date	Iron	Lead	Manganese	Nickel	Selenium	Zinc
Aquitard	MW-35	11/6/2007	37,300	2 U	2,930	20 U	10.4 U	20 U
Intermediate	MW-17	11/6/2007	829	2 U	74.5	20 U	10.4 U	20 U
Intermediate	MW-31	11/6/2007	16,800	2 U	732	20 U	10.4 U	20 U
Intermediate	MW-32Deep	11/6/2007	1,230	2 U	38.2	20 U	10.4 U	20 U
Intermediate	MW-32Shallow	11/6/2007	4,600	6.4	72.6	20 U	10.4 U	27.9
Shallow	B-14	11/8/2007	NA	NA	NA	NA	NA	NA
Shallow	MW-03	11/7/2007	871	2	85.2	20 U	10.4 U	20 U
Shallow	MW-05	11/6/2007	42,700	2 U	1,650	20 U	10.4 U	20 U
Shallow	MW-06	11/7/2007	8,480	6.3	19,900	39.1	22	84.4
Shallow	MW-08	11/7/2007	178	2 U	26.7	20 U	10.4 U	20 U
Shallow	MW-14	11/8/2007	6,070	4.9	274	20 U	10.4 U	20 U
Shallow	MW-28	11/8/2007	6,700	5.2	230	20 U	10.4 U	20 U

Notes:

NA - Not analyzed

U - The compound was analyzed for but not detected.

R - Result is unusable because data do not meet data quality criteria

All concentrations are in µg/L (micrograms per liter).

TABLE 4
DETECTED ORGANIC GROUND WATER DATA COMPARISON

Water Bearing Zone	Site ID	Sampling Date	2-Methylnaphthalene	Acenaphthene	Anthracene	Benzene	Fluoranthene
Aquitard	MW-35	11/6/2007	0.5 (3.7)	58.7 (30.7)	2.6 (0.5)	9.6 (NA)	1.6 (0.5 U)
Shallow	B-14	11/8/2007	0.5 U	35.2	0.5 U	2 U	1.2
Shallow	MW-03	11/7/2007	0.5 U	0.5 U	0.5 U	2 U	0.5 U
Shallow	MW-05	11/6/2007	610 (378)	351 (318)	19.8 (21.7)	115 (ND)	10 U
Shallow	MW-06	11/7/2007	0.5 U	0.5 U	0.5 U	2 U	0.5 U

Notes:

NA - Not analyzed

ND - Not detected

U - The compound was analyzed for but not detected.

R - Result is unusable because data do not meet data quality criteria

All concentrations are in µg/L (micrograms per liter).

October 2003 ground water sampling results are presented in parenthesis for detected analytes.

B-14 was not previously sampled so comparisons are not included.

TABLE 4
DETECTED ORGANIC GROUND WATER DATA COMPARISON

Water Bearing Zone	Site ID	Sampling Date	Fluorene	Naphthalene	Pentachlorophenol	Phenanthrene	Pyrene
Aquitard	MW-35	11/6/2007	43.3 (18.7)	96.9 (246)	1 U	31.5 (6.1)	0.8 (0.5 U)
Shallow	B-14	11/8/2007	15.4	3.9	1 U	0.5 U	0.5
Shallow	MW-03	11/7/2007	0.5 U	1.1 (10 U)	1 U	0.5 U	0.5 U
Shallow	MW-05	11/6/2007	165 (139)	12,400 (10,100)	4,490 (3,680)	152 (141)	10 U
Shallow	MW-06	11/7/2007	0.5 U	0.6 (10 U)	1 RU	0.5 U	0.5 U

Notes:

NA - Not analyzed

ND - Not detected

U - The compound was analyzed for but not detected.

R - Result is unusable because data do not meet data quality criteria

All concentrations are in µg/L (micrograms per liter).

October 2003 ground water sampling results are presented in parenthesis for detected analytes.

TABLE 5
SOIL SAMPLING INFORMATION

Soil Sampling ID	Sample Group	Date	Time	Semi-Volatile Organic Compound Analysis	Inorganic Analysis (Including Mercury)	Dioxin/Furan Analysis
Pond-1-E	Pond Samples	11/6/2007	1014	X		
Pond-1-W ⁽¹⁾	Pond Samples	11/6/2007	1000	X		
Pond-2-E	Pond Samples	11/6/2007	957	X		
Pond-2-W	Pond Samples	11/6/2007	948	X		
Pond-3-E	Pond Samples	11/6/2007	931	X		
Pond-3-W	Pond Samples	11/6/2007	925	X		
Pond-4-E	Pond Samples	11/6/2007	1152	X		
Pond-4-W ⁽¹⁾	Pond Samples	11/6/2007	1212	X		
Pond-5-E	Pond Samples	11/6/2007	1123	X		
Pond-5-W	Pond Samples	11/6/2007	1127	X		
SS07-1	Pond Samples	11/6/2007	1107	X		
SS07-2	Pond Samples	11/6/2007	1100	X		
BKG-1	Background Samples	11/7/2007	1215	X	X	X
BKG-2	Background Samples	11/7/2007	1020	X	X	X
BKG-3	Background Samples	11/7/2007	1215	X	X	X
BKG-4	Background Samples	11/7/2007	1534	X	X	X
BKG-5	Background Samples	11/7/2007	840	X	X	X
BKG-6 ⁽¹⁾	Background Samples	11/7/2007	1005	X	X	X
BKG-7	Background Samples	11/7/2007	1020	X	X	X
BKG-8	Background Samples	11/7/2007	1215	X	X	X
BKG-9	Background Samples	11/7/2007	1534	X	X	X
BKG-10	Background Samples	11/7/2007	1105	X	X	X

Notes:

(1) Soil samples Pond-1-W, Pond-4-W, and BKG-6 were designated as field duplicate samples.

TABLE 6
SOIL SAMPLING DATA SUMMARY (DETECTED ANALYTES)

Grouping	Analyte	Minimum Concentration (Qualifier)	Maximum Concentration (Qualifier)	Units	Location of Maximum Concentration	Detection Frequency	Range of Detection Limits
Background	1,2,3,4,6,7,8-HpCDD	0.000238	0.0793	mg/kg	BKG-1	10 / 10	---
Background	1,2,3,4,6,7,8-HpCDF	0.0000412	0.0177	mg/kg	BKG-4	10 / 10	0.0000249 - 0.0000249
Background	1,2,3,4,7,8,9-HpCDF	0.00000264	0.00115	mg/kg	BKG-4	10 / 10	0.0000249 - 0.0000249
Background	1,2,3,4,7,8-HxCDD	0.00000264	0.000511	mg/kg	BKG-4	10 / 10	0.0000249 - 0.0000626
Background	1,2,3,4,7,8-HxCDF	0.00000216	0.000687	mg/kg	BKG-4	10 / 10	0.0000249 - 0.000125
Background	1,2,3,6,7,8-HxCDD	0.0000113	0.00431	mg/kg	BKG-1	10 / 10	0.0000249 - 0.0000626
Background	1,2,3,6,7,8-HxCDF	0.00000156	0.000466	mg/kg	BKG-1	10 / 10	0.0000249 - 0.000125
Background	1,2,3,7,8,9-HxCDD	0.00000504	0.00141	mg/kg	BKG-4	10 / 10	0.0000249 - 0.0000626
Background	1,2,3,7,8,9-HxCDF	0.000000628	0.000367	mg/kg	BKG-1	10 / 10	0.0000249 - 0.000125
Background	1,2,3,7,8-PeCDD	0.000000812	0.000105	mg/kg	BKG-4	10 / 10	0.0000249 - 0.000125
Background	1,2,3,7,8-PeCDF	0.000000658	0.000141	mg/kg	BKG-1	10 / 10	0.0000249 - 0.000125
Background	2,3,4,6,7,8-HxCDF	0.00000244	0.00086	mg/kg	BKG-4	10 / 10	0.0000249 - 0.000125
Background	2,3,4,7,8-PeCDF	0.000000721	0.000147	mg/kg	BKG-1	10 / 10	0.0000249 - 0.000125
Background	2,3,7,8-TCDD	0.000000206	0.00000384	mg/kg	BKG-4	9 / 10	0.0000005 - 0.0000251
Background	2,3,7,8-TCDF	0.000000672	0.0000351	mg/kg	BKG-4	10 / 10	0.00000497 - 0.0000251
Background	Total HpCDD	0.000491	0.134	mg/kg	BKG-1	10 / 10	---
Background	Total HpCDF	0.000109	0.0608	mg/kg	BKG-4	10 / 10	0.0000249 - 0.0000249
Background	Total HxCDD	0.000092	0.0165	mg/kg	BKG-4	10 / 10	0.0000249 - 0.0000626
Background	Total HxCDF	0.0000674	0.0281	J mg/kg	BKG-4	10 / 10	0.0000249 - 0.000125
Background	Total PeCDD	0.0000119	0.000702	mg/kg	BKG-4	10 / 10	0.0000249 - 0.000125
Background	Total PeCDF	0.0000178	0.00491	J mg/kg	BKG-1	10 / 10	0.0000249 - 0.000125
Background	Total TCDD	0.00000437	0.000155	mg/kg	BKG-1	10 / 10	0.00000497 - 0.0000251
Background	Total TCDF	0.0000105	0.000813	J mg/kg	BKG-1	10 / 10	0.00000497 - 0.0000251
Background	OCDD	0.0021	0.459	J mg/kg	BKG-1	10 / 10	---
Background	OCDF	0.000115	0.0789	mg/kg	BKG-4	10 / 10	0.0000497 - 0.0000497
Background	Benzo(a)anthracene	0.833	0.833	mg/kg	BKG-10	1 / 10	0.491 - 0.588
Background	Benzo(a)pyrene	0.702	0.702	mg/kg	BKG-10	1 / 10	0.491 - 0.588

TABLE 6
SOIL SAMPLING DATA SUMMARY (DETECTED ANALYTES)

Grouping	Analyte	Minimum Concentration (Qualifier)	Maximum Concentration (Qualifier)	Units	Location of Maximum Concentration	Detection Frequency	Range of Detection Limits
Background	Benzo(b)fluoranthene	0.997	0.997	mg/kg	BKG-10	1 / 10	0.491 - 0.588
Background	Benzo(k)fluoranthene	0.907	0.907	mg/kg	BKG-10	1 / 10	0.491 - 0.588
Background	Chrysene	1.03	1.03	mg/kg	BKG-10	1 / 10	0.491 - 0.588
Background	Fluoranthene	1.6	1.6	mg/kg	BKG-10	1 / 10	0.196 - 0.235
Background	Pentachlorophenol	0.649	0.649	mg/kg	BKG-1	1 / 10	0.491 - 0.588
Background	Pyrene	1.85	1.85	mg/kg	BKG-10	1 / 10	0.196 - 0.235
Background	Aluminum	1,970	4,540	mg/kg	BKG-4	10 / 10	---
Background	Arsenic	8.3	15.2	mg/kg	BKG-9	2 / 10	6.3 - 7.1
Background	Barium	27.7	173	mg/kg	BKG-1	10 / 10	---
Background	Beryllium	0.5	0.5	mg/kg	BKG-7	1 / 10	0.5 - 0.5
Background	Cadmium	0.8	3.9	mg/kg	BKG-10	9 / 10	0.5 - 0.5
Background	Calcium	521	3,310	mg/kg	BKG-10	10 / 10	---
Background	Chromium	2.7	10	mg/kg	BKG-4	10 / 10	---
Background	Cobalt	2	5.2	mg/kg	BKG-8	9 / 10	1.8 - 1.8
Background	Copper	3.5	44.7	mg/kg	BKG-1	10 / 10	---
Background	Iron	2,530	15,200	mg/kg	BKG-10	10 / 10	---
Background	Lead	11.9	174	mg/kg	BKG-10	10 / 10	---
Background	Magnesium	134	324	mg/kg	BKG-10	10 / 10	---
Background	Manganese	105	787	mg/kg	BKG-5	10 / 10	---
Background	Mercury	0.067	0.39	mg/kg	BKG-1	10 / 10	---
Background	Nickel	2.5	4.1	mg/kg	BKG-4	8 / 10	1.8 - 2.1
Background	Potassium	153	408	mg/kg	BKG-9	10 / 10	---
Background	Vanadium	6.4	16.6	mg/kg	BKG-7	10 / 10	---
Background	Zinc	15.6	293	mg/kg	BKG-10	10 / 10	---
Ponds 1 - 3	1,1'-Biphenyl	0.766	1.01	mg/kg	Pond-1-W	1 / 6	0.518 - 0.652
Ponds 1 - 3	2-Methylnaphthalene	0.964	1.21	mg/kg	Pond-1-W	1 / 6	0.207 - 0.261
Ponds 1 - 3	Acenaphthene	22.2	23.7	mg/kg	Pond-1-W	1 / 6	0.207 - 0.261

TABLE 6
SOIL SAMPLING DATA SUMMARY (DETECTED ANALYTES)

Grouping	Analyte	Minimum Concentration (Qualifier)		Maximum Concentration (Qualifier)		Units	Location of Maximum Concentration	Detection Frequency	Range of Detection Limits
Ponds 1 - 3	Acenaphthylene	1.5		5.8		mg/kg	Pond-1-W	2 / 6	0.207 - 0.261
Ponds 1 - 3	Anthracene	4.01		11.9		mg/kg	Pond-1-W	2 / 6	0.207 - 0.261
Ponds 1 - 3	Benzo(a)anthracene	2.29		139		mg/kg	Pond-1-W	2 / 6	0.518 - 0.652
Ponds 1 - 3	Benzo(a)pyrene	6.02	J	52.9		mg/kg	Pond-1-W	2 / 6	0.518 - 0.652
Ponds 1 - 3	Benzo(b)fluoranthene	0.676		155		mg/kg	Pond-1-W	3 / 6	0.518 - 0.58
Ponds 1 - 3	Benzo(g,h,i)perylene	5.4	J	11.6		mg/kg	Pond-1-W	2 / 6	0.518 - 0.652
Ponds 1 - 3	Benzo(k)fluoranthene	21.7	J	81		mg/kg	Pond-1-W	2 / 6	0.518 - 0.652
Ponds 1 - 3	Bis(2-ethylhexyl)phthalate	0.943	J	1.36	J	mg/kg	Pond-1-W	1 / 6	0.518 - 0.652
Ponds 1 - 3	Carbazole	0.971	J	1.65	J	mg/kg	Pond-1-W	2 / 6	0.518 - 0.652
Ponds 1 - 3	Chrysene	6.49		187		mg/kg	Pond-1-W	2 / 6	0.518 - 0.652
Ponds 1 - 3	Dibenz(a,h)anthracene	1.71	J	7.29	J	mg/kg	Pond-1-W	2 / 6	0.518 - 0.652
Ponds 1 - 3	Dibenzofuran	5.13		6.6		mg/kg	Pond-1-W	1 / 6	0.518 - 0.652
Ponds 1 - 3	Fluoranthene	0.282		744		mg/kg	Pond-1-W	3 / 6	0.207 - 0.232
Ponds 1 - 3	Fluorene	10.1		10.2		mg/kg	Pond-1-W	1 / 6	0.207 - 0.261
Ponds 1 - 3	Indeno(1,2,3-cd)pyrene	6.54	J	17.7		mg/kg	Pond-1-W	2 / 6	0.518 - 0.652
Ponds 1 - 3	Naphthalene	0.274		0.322		mg/kg	Pond-1-W	1 / 6	0.0518 - 0.0652
Ponds 1 - 3	Pentachlorophenol	8.14		32.4		mg/kg	Pond-1-W	2 / 6	0.518 - 0.652
Ponds 1 - 3	Phenanthrene	0.608		34.8		mg/kg	Pond-1-W	2 / 6	0.207 - 0.261
Ponds 1 - 3	Pyrene	0.454		747		mg/kg	Pond-1-W	3 / 6	0.207 - 0.232
Ponds 4 and 5	Acenaphthylene	0.494		0.494		mg/kg	Pond-5-W	1 / 4	0.239 - 0.287
Ponds 4 and 5	Anthracene	0.351		1.05		mg/kg	Pond-5-W	3 / 4	0.287 - 0.287
Ponds 4 and 5	Benzo(a)anthracene	1.06		1.72		mg/kg	Pond-5-W	2 / 4	0.597 - 0.716
Ponds 4 and 5	Benzo(a)pyrene	1.5		1.98	J	mg/kg	Pond-5-W	2 / 4	0.597 - 0.716
Ponds 4 and 5	Benzo(b)fluoranthene	0.873		6.55	J	mg/kg	Pond-5-W	4 / 4	---
Ponds 4 and 5	Benzo(g,h,i)perylene	0.632		1.14	J	mg/kg	Pond-5-W	2 / 4	0.597 - 0.716
Ponds 4 and 5	Benzo(k)fluoranthene	1.8		4.38	J	mg/kg	Pond-5-W	2 / 4	0.597 - 0.716
Ponds 4 and 5	Chrysene	1.65		3.78		mg/kg	Pond-5-W	2 / 4	0.597 - 0.716

TABLE 6
SOIL SAMPLING DATA SUMMARY (DETECTED ANALYTES)

Grouping	Analyte	Minimum Concentration (Qualifier)	Maximum Concentration (Qualifier)	Units	Location of Maximum Concentration	Detection Frequency	Range of Detection Limits
Ponds 4 and 5	Fluoranthene	0.328	4.12	mg/kg	Pond-5-W	3 / 4	0.263 - 0.263
Ponds 4 and 5	Indeno(1,2,3-cd)pyrene	0.833	1.44	J mg/kg	Pond-5-W	2 / 4	0.597 - 0.716
Ponds 4 and 5	Naphthalene	0.131	0.131	mg/kg	Pond-5-W	1 / 4	0.0597 - 0.0716
Ponds 4 and 5	Pentachlorophenol	2.9	11.4	mg/kg	Pond-5-W	2 / 4	0.597 - 0.716
Ponds 4 and 5	Phenanthrene	0.449	0.449	mg/kg	Pond-5-W	1 / 4	0.239 - 0.287
Ponds 4 and 5	Pyrene	0.36	5.29	mg/kg	Pond-5-W	4 / 4	---

Notes:

--- - Not applicable

mg/kg - Milligrams per kilogram

J - Estimated concentration below the sample quantitation limit.

**TABLE 7
SOIL DATA**

Site ID	Sampling Depth (Feet)	Sampling Date	1,2,3,4,6,7,8-HpCDD	1,2,3,4,6,7,8-HpCDF	1,2,3,4,7,8,9-HpCDF	1,2,3,4,7,8-HxCDD	1,2,3,4,7,8-HxCDF
BKG-1	0 - 0.5	11/7/2007	0.0793	0.0155	0.00103	0.000485	0.000658
BKG-10	0 - 0.5	11/7/2007	0.000387	0.000119	0.00000578	0.00000524	0.00000435
BKG-2	0 - 0.5	11/7/2007	0.0283	0.00567	0.000391	0.000167	0.000214
BKG-3	0 - 0.5	11/7/2007	0.0294	0.00605	0.000433	0.000199	0.000249
BKG-4	0 - 0.5	11/7/2007	0.074	0.0177	0.00115	0.000511	0.000687
BKG-5	0 - 0.5	11/7/2007	0.000238	0.0000412	0.00000264	0.00000302	0.00000263
BKG-6	0 - 0.5	11/7/2007	0.0284	0.00646	0.000361	0.000193	0.000225
BKG-7	0 - 0.5	11/7/2007	0.00297	0.000459	0.0000289	0.0000249 U	0.0000249 U
BKG-8	0 - 0.5	11/7/2007	0.000294	0.000053	0.00000366	0.00000264	0.00000216 J
BKG-9	0 - 0.5	11/7/2007	0.000245	0.0000579	0.00000317	0.00000316	0.00000221 J
Pond-1-E	0 - 0.5	11/6/2007	NA	NA	NA	NA	NA
Pond-1-W	0 - 0.5	11/6/2007	NA	NA	NA	NA	NA
Pond-2-E	0 - 0.5	11/6/2007	NA	NA	NA	NA	NA
Pond-2-W	0 - 0.5	11/6/2007	NA	NA	NA	NA	NA
Pond-3-E	0 - 0.5	11/6/2007	NA	NA	NA	NA	NA
Pond-3-W	0 - 0.5	11/6/2007	NA	NA	NA	NA	NA
Pond-4-E	0 - 0.5	11/6/2007	NA	NA	NA	NA	NA
Pond-4-W	0 - 0.5	11/6/2007	NA	NA	NA	NA	NA
Pond-5-E	0 - 0.5	11/6/2007	NA	NA	NA	NA	NA
Pond-5-W	0 - 0.5	11/6/2007	NA	NA	NA	NA	NA
SS07-1	0 - 0.5	11/6/2007	NA	NA	NA	NA	NA
SS07-2	0 - 0.5	11/6/2007	NA	NA	NA	NA	NA

Notes:

All concentrations are in mg/kg (milligrams per kilogram).

J - Estimated concentration below the sample quantitation limit.

NA - Not analyzed

U - The compound was analyzed for but not detected.

**TABLE 7
SOIL DATA**

Site ID	Sampling Depth (Feet)	Sampling Date	1,2,3,6,7,8-HxCDD	1,2,3,6,7,8-HxCDF	1,2,3,7,8,9-HxCDD	1,2,3,7,8,9-HxCDF	1,2,3,7,8-PeCDD
BKG-1	0 - 0.5	11/7/2007	0.00431	0.000466	0.0012	0.000367	0.000125 U
BKG-10	0 - 0.5	11/7/2007	0.0000176	0.00000347	0.0000101	0.000000994 J	0.00000191 J
BKG-2	0 - 0.5	11/7/2007	0.00141	0.00013	0.000361	0.000121	0.0000626 U
BKG-3	0 - 0.5	11/7/2007	0.00152	0.000148	0.000466	0.000133	0.0000624 U
BKG-4	0 - 0.5	11/7/2007	0.00417	0.000454	0.00141	0.000331	0.000125 U
BKG-5	0 - 0.5	11/7/2007	0.0000131	0.00000173 J	0.00000507	0.000000969 J	0.000000812 J
BKG-6	0 - 0.5	11/7/2007	0.00147	0.000151	0.00046	0.000111	0.0000625 U
BKG-7	0 - 0.5	11/7/2007	0.000148	0.0000249 U	0.0000497	0.0000249 U	0.0000249 U
BKG-8	0 - 0.5	11/7/2007	0.0000132	0.00000156 J	0.00000504	0.000000891 J	0.00000107 J
BKG-9	0 - 0.5	11/7/2007	0.0000113	0.00000175 J	0.00000628	0.000000628 J	0.00000127 J
Pond-1-E	0 - 0.5	11/6/2007	NA	NA	NA	NA	NA
Pond-1-W	0 - 0.5	11/6/2007	NA	NA	NA	NA	NA
Pond-2-E	0 - 0.5	11/6/2007	NA	NA	NA	NA	NA
Pond-2-W	0 - 0.5	11/6/2007	NA	NA	NA	NA	NA
Pond-3-E	0 - 0.5	11/6/2007	NA	NA	NA	NA	NA
Pond-3-W	0 - 0.5	11/6/2007	NA	NA	NA	NA	NA
Pond-4-E	0 - 0.5	11/6/2007	NA	NA	NA	NA	NA
Pond-4-W	0 - 0.5	11/6/2007	NA	NA	NA	NA	NA
Pond-5-E	0 - 0.5	11/6/2007	NA	NA	NA	NA	NA
Pond-5-W	0 - 0.5	11/6/2007	NA	NA	NA	NA	NA
SS07-1	0 - 0.5	11/6/2007	NA	NA	NA	NA	NA
SS07-2	0 - 0.5	11/6/2007	NA	NA	NA	NA	NA

Notes:

All concentrations are in mg/kg (milligrams per kilogram).

J - Estimated concentration below the sample quantitation limit.

NA - Not analyzed

U - The compound was analyzed for but not detected.

**TABLE 7
SOIL DATA**

Site ID	Sampling Depth (Feet)	Sampling Date	1,2,3,7,8-PeCDF	2,3,4,6,7,8-HxCDF	2,3,4,7,8-PeCDF	2,3,7,8-TCDD	2,3,7,8-TCDF
BKG-1	0 - 0.5	11/7/2007	0.000141	0.000818	0.000147	0.000025 U	0.0000262
BKG-10	0 - 0.5	11/7/2007	0.000000975 J	0.00000518	0.00000143 J	0.000000463 J	0.00000128
BKG-2	0 - 0.5	11/7/2007	0.0000626 U	0.000268	0.0000626 U	0.0000125 U	0.0000125 U
BKG-3	0 - 0.5	11/7/2007	0.0000624 U	0.000313	0.0000624 U	0.0000125 U	0.0000126
BKG-4	0 - 0.5	11/7/2007	0.000125 U	0.00086	0.000136	0.0000251 U	0.0000351
BKG-5	0 - 0.5	11/7/2007	0.000000882 J	0.00000257	0.000000721 J	0.0000005 U	0.000000672
BKG-6	0 - 0.5	11/7/2007	0.0000625 U	0.000292	0.0000625 U	0.0000125 U	0.0000131
BKG-7	0 - 0.5	11/7/2007	0.0000249 U	0.0000278	0.0000249 U	0.00000497 U	0.00000497 U
BKG-8	0 - 0.5	11/7/2007	0.000000787 J	0.00000244 J	0.00000081 J	0.000000206 J	0.000000793
BKG-9	0 - 0.5	11/7/2007	0.000000658 J	0.00000261	0.00000082 J	0.000000316 J	0.000000875
Pond-1-E	0 - 0.5	11/6/2007	NA	NA	NA	NA	NA
Pond-1-W	0 - 0.5	11/6/2007	NA	NA	NA	NA	NA
Pond-2-E	0 - 0.5	11/6/2007	NA	NA	NA	NA	NA
Pond-2-W	0 - 0.5	11/6/2007	NA	NA	NA	NA	NA
Pond-3-E	0 - 0.5	11/6/2007	NA	NA	NA	NA	NA
Pond-3-W	0 - 0.5	11/6/2007	NA	NA	NA	NA	NA
Pond-4-E	0 - 0.5	11/6/2007	NA	NA	NA	NA	NA
Pond-4-W	0 - 0.5	11/6/2007	NA	NA	NA	NA	NA
Pond-5-E	0 - 0.5	11/6/2007	NA	NA	NA	NA	NA
Pond-5-W	0 - 0.5	11/6/2007	NA	NA	NA	NA	NA
SS07-1	0 - 0.5	11/6/2007	NA	NA	NA	NA	NA
SS07-2	0 - 0.5	11/6/2007	NA	NA	NA	NA	NA

Notes:

All concentrations are in mg/kg (milligrams per kilogram).

J - Estimated concentration below the sample quantitation limit.

NA - Not analyzed

U - The compound was analyzed for but not detected.

**TABLE 7
SOIL DATA**

Site ID	Sampling Depth (Feet)	Sampling Date	Total HpCDD	Total HpCDF	Total HxCDD	Total HxCDF	Total PeCDD
BKG-1	0 - 0.5	11/7/2007	0.134	0.0558	0.0159	0.0278 J	0.000591
BKG-10	0 - 0.5	11/7/2007	0.000805	0.00032	0.000174	0.000139	0.0000276
BKG-2	0 - 0.5	11/7/2007	0.0478	0.0202	0.00536	0.00908 J	0.000228
BKG-3	0 - 0.5	11/7/2007	0.0502	0.0215	0.0062	0.01 J	0.00029
BKG-4	0 - 0.5	11/7/2007	0.126	0.0608	0.0165	0.0281 J	0.000702
BKG-5	0 - 0.5	11/7/2007	0.000491	0.000109	0.0000958	0.0000674	0.0000119
BKG-6	0 - 0.5	11/7/2007	0.0488	0.0205	0.00592	0.00906 J	0.000238
BKG-7	0 - 0.5	11/7/2007	0.00541	0.00132	0.000687	0.0008 J	0.00004
BKG-8	0 - 0.5	11/7/2007	0.000567	0.000134	0.000092	0.0000707	0.0000122
BKG-9	0 - 0.5	11/7/2007	0.00055	0.000157	0.000111	0.0000685	0.0000178
Pond-1-E	0 - 0.5	11/6/2007	NA	NA	NA	NA	NA
Pond-1-W	0 - 0.5	11/6/2007	NA	NA	NA	NA	NA
Pond-2-E	0 - 0.5	11/6/2007	NA	NA	NA	NA	NA
Pond-2-W	0 - 0.5	11/6/2007	NA	NA	NA	NA	NA
Pond-3-E	0 - 0.5	11/6/2007	NA	NA	NA	NA	NA
Pond-3-W	0 - 0.5	11/6/2007	NA	NA	NA	NA	NA
Pond-4-E	0 - 0.5	11/6/2007	NA	NA	NA	NA	NA
Pond-4-W	0 - 0.5	11/6/2007	NA	NA	NA	NA	NA
Pond-5-E	0 - 0.5	11/6/2007	NA	NA	NA	NA	NA
Pond-5-W	0 - 0.5	11/6/2007	NA	NA	NA	NA	NA
SS07-1	0 - 0.5	11/6/2007	NA	NA	NA	NA	NA
SS07-2	0 - 0.5	11/6/2007	NA	NA	NA	NA	NA

Notes:

All concentrations are in mg/kg (milligrams per kilogram).

J - Estimated concentration below the sample quantitation limit.

NA - Not analyzed

U - The compound was analyzed for but not detected.

**TABLE 7
SOIL DATA**

Site ID	Sampling Depth (Feet)	Sampling Date	Total PeCDF	Total TCDD	Total TCDF	OCDD	OCDF
BKG-1	0 - 0.5	11/7/2007	0.00491 J	0.000155	0.000813 J	0.459 J	0.0693
BKG-10	0 - 0.5	11/7/2007	0.0000388	0.0000149	0.0000263	0.00329	0.000302
BKG-2	0 - 0.5	11/7/2007	0.00133 J	0.0000625	0.000168 J	0.194	0.0222
BKG-3	0 - 0.5	11/7/2007	0.00163 J	0.0000818	0.000268 J	0.188	0.0235
BKG-4	0 - 0.5	11/7/2007	0.00401 J	0.00014	0.00041 J	0.411	0.0789
BKG-5	0 - 0.5	11/7/2007	0.0000189	0.00000437	0.0000105	0.00313	0.000115
BKG-6	0 - 0.5	11/7/2007	0.00132 J	0.0000536	0.000172 J	0.175	0.021
BKG-7	0 - 0.5	11/7/2007	0.000176	0.0000155	0.0000554 J	0.0224	0.00135
BKG-8	0 - 0.5	11/7/2007	0.0000208	0.00000619	0.0000113	0.00291	0.000136
BKG-9	0 - 0.5	11/7/2007	0.0000178	0.0000114	0.0000169	0.0021	0.000144
Pond-1-E	0 - 0.5	11/6/2007	NA	NA	NA	NA	NA
Pond-1-W	0 - 0.5	11/6/2007	NA	NA	NA	NA	NA
Pond-2-E	0 - 0.5	11/6/2007	NA	NA	NA	NA	NA
Pond-2-W	0 - 0.5	11/6/2007	NA	NA	NA	NA	NA
Pond-3-E	0 - 0.5	11/6/2007	NA	NA	NA	NA	NA
Pond-3-W	0 - 0.5	11/6/2007	NA	NA	NA	NA	NA
Pond-4-E	0 - 0.5	11/6/2007	NA	NA	NA	NA	NA
Pond-4-W	0 - 0.5	11/6/2007	NA	NA	NA	NA	NA
Pond-5-E	0 - 0.5	11/6/2007	NA	NA	NA	NA	NA
Pond-5-W	0 - 0.5	11/6/2007	NA	NA	NA	NA	NA
SS07-1	0 - 0.5	11/6/2007	NA	NA	NA	NA	NA
SS07-2	0 - 0.5	11/6/2007	NA	NA	NA	NA	NA

Notes:

All concentrations are in mg/kg (milligrams per kilogram).

J - Estimated concentration below the sample quantitation limit.

NA - Not analyzed

U - The compound was analyzed for but not detected.

**TABLE 7
SOIL DATA**

Site ID	Sampling Depth (Feet)	Sampling Date	1,1'-Biphenyl	1,2,4-Trichlorobenzene	1,2-Dichlorobenzene	1,3-Dichlorobenzene	1,4-Dichlorobenzene
BKG-1	0 - 0.5	11/7/2007	0.56 U	0.56 U	0.56 U	0.56 U	0.56 U
BKG-10	0 - 0.5	11/7/2007	0.565 U	0.565 U	0.565 U	0.565 U	0.565 U
BKG-2	0 - 0.5	11/7/2007	0.56 U	0.56 U	0.56 U	0.56 U	0.56 U
BKG-3	0 - 0.5	11/7/2007	0.56 U	0.56 U	0.56 U	0.56 U	0.56 U
BKG-4	0 - 0.5	11/7/2007	0.588 U	0.588 U	0.588 U	0.588 U	0.588 U
BKG-5	0 - 0.5	11/7/2007	0.491 U	0.491 U	0.491 U	0.491 U	0.491 U
BKG-6	0 - 0.5	11/7/2007	0.524 U	0.524 U	0.524 U	0.524 U	0.524 U
BKG-7	0 - 0.5	11/7/2007	0.563 U	0.563 U	0.563 U	0.563 U	0.563 U
BKG-8	0 - 0.5	11/7/2007	0.534 U	0.534 U	0.534 U	0.534 U	0.534 U
BKG-9	0 - 0.5	11/7/2007	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U
Pond-1-E	0 - 0.5	11/6/2007	0.565 U	0.565 U	0.565 U	0.565 U	0.565 U
Pond-1-W	0 - 0.5	11/6/2007	1.01	0.566 U	0.566 U	0.566 U	0.566 U
Pond-2-E	0 - 0.5	11/6/2007	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U
Pond-2-W	0 - 0.5	11/6/2007	0.518 U	0.518 U	0.518 U	0.518 U	0.518 U
Pond-3-E	0 - 0.5	11/6/2007	0.536 U	0.536 U	0.536 U	0.536 U	0.536 U
Pond-3-W	0 - 0.5	11/6/2007	0.652 U	0.652 U	0.652 U	0.652 U	0.652 U
Pond-4-E	0 - 0.5	11/6/2007	0.716 U	0.716 U	0.716 U	0.716 U	0.716 U
Pond-4-W	0 - 0.5	11/6/2007	0.616 U	0.616 U	0.616 U	0.616 U	0.616 U
Pond-5-E	0 - 0.5	11/6/2007	0.656 U	0.656 U	0.656 U	0.656 U	0.656 U
Pond-5-W	0 - 0.5	11/6/2007	0.661 U	0.661 U	0.661 U	0.661 U	0.661 U
SS07-1	0 - 0.5	11/6/2007	0.68 U	0.68 U	0.68 U	0.68 U	0.68 U
SS07-2	0 - 0.5	11/6/2007	0.548 U	0.548 U	0.548 U	0.548 U	0.548 U

Notes:

All concentrations are in mg/kg (milligrams per kilogram).

J - Estimated concentration below the sample quantitation limit.

NA - Not analyzed

U - The compound was analyzed for but not detected.

**TABLE 7
SOIL DATA**

Site ID	Sampling Depth (Feet)	Sampling Date	2,4,5-Trichlorophenol	2,4,6-Trichlorophenol	2,4-Dichlorophenol	2,4-Dimethylphenol	2,4-Dinitrophenol
BKG-1	0 - 0.5	11/7/2007	0.56 U	0.56 U	0.56 U	0.56 U	2.24 U
BKG-10	0 - 0.5	11/7/2007	0.565 U	0.565 U	0.565 U	0.565 U	2.26 U
BKG-2	0 - 0.5	11/7/2007	0.56 U	0.56 U	0.56 U	0.56 U	2.24 U
BKG-3	0 - 0.5	11/7/2007	0.56 U	0.56 U	0.56 U	0.56 U	2.24 U
BKG-4	0 - 0.5	11/7/2007	0.588 U	0.588 U	0.588 U	0.588 U	2.35 U
BKG-5	0 - 0.5	11/7/2007	0.491 U	0.491 U	0.491 U	0.491 U	1.96 U
BKG-6	0 - 0.5	11/7/2007	0.524 U	0.524 U	0.524 U	0.524 U	2.1 U
BKG-7	0 - 0.5	11/7/2007	0.563 U	0.563 U	0.563 U	0.563 U	2.25 U
BKG-8	0 - 0.5	11/7/2007	0.534 U	0.534 U	0.534 U	0.534 U	2.14 U
BKG-9	0 - 0.5	11/7/2007	0.58 U	0.58 U	0.58 U	0.58 U	2.32 U
Pond-1-E	0 - 0.5	11/6/2007	0.565 U	0.565 U	0.565 U	0.565 U	2.26 U
Pond-1-W	0 - 0.5	11/6/2007	0.566 U	0.566 U	0.566 U	0.566 U	2.26 U
Pond-2-E	0 - 0.5	11/6/2007	0.58 U	0.58 U	0.58 U	0.58 U	2.32 U
Pond-2-W	0 - 0.5	11/6/2007	0.518 U	0.518 U	0.518 U	0.518 U	2.07 U
Pond-3-E	0 - 0.5	11/6/2007	0.536 U	0.536 U	0.536 U	0.536 U	2.14 U
Pond-3-W	0 - 0.5	11/6/2007	0.652 U	0.652 U	0.652 U	0.652 U	2.61 U
Pond-4-E	0 - 0.5	11/6/2007	0.716 U	0.716 U	0.716 U	0.716 U	2.87 U
Pond-4-W	0 - 0.5	11/6/2007	0.616 U	0.616 U	0.616 U	0.616 U	2.46 U
Pond-5-E	0 - 0.5	11/6/2007	0.656 U	0.656 U	0.656 U	0.656 U	2.63 U
Pond-5-W	0 - 0.5	11/6/2007	0.661 U	0.661 U	0.661 U	0.661 U	2.64 U
SS07-1	0 - 0.5	11/6/2007	0.68 U	0.68 U	0.68 U	0.68 U	2.72 U
SS07-2	0 - 0.5	11/6/2007	0.548 U	0.548 U	0.548 U	0.548 U	2.19 U

Notes:

All concentrations are in mg/kg (milligrams per kilogram).

J - Estimated concentration below the sample quantitation limit.

NA - Not analyzed

U - The compound was analyzed for but not detected.

**TABLE 7
SOIL DATA**

Site ID	Sampling Depth (Feet)	Sampling Date	2,4-Dinitrotoluene	2,6-Dinitrotoluene	2-Chloronaphthalene	2-Chlorophenol	2-Methylnaphthalene
BKG-1	0 - 0.5	11/7/2007	0.56 U	0.56 U	0.56 U	0.56 U	0.224 U
BKG-10	0 - 0.5	11/7/2007	0.565 U	0.565 U	0.565 U	0.565 U	0.226 U
BKG-2	0 - 0.5	11/7/2007	0.56 U	0.56 U	0.56 U	0.56 U	0.224 U
BKG-3	0 - 0.5	11/7/2007	0.56 U	0.56 U	0.56 U	0.56 U	0.224 U
BKG-4	0 - 0.5	11/7/2007	0.588 U	0.588 U	0.588 U	0.588 U	0.235 U
BKG-5	0 - 0.5	11/7/2007	0.491 U	0.491 U	0.491 U	0.491 U	0.196 U
BKG-6	0 - 0.5	11/7/2007	0.524 U	0.524 U	0.524 U	0.524 U	0.21 U
BKG-7	0 - 0.5	11/7/2007	0.563 U	0.563 U	0.563 U	0.563 U	0.225 U
BKG-8	0 - 0.5	11/7/2007	0.534 U	0.534 U	0.534 U	0.534 U	0.214 U
BKG-9	0 - 0.5	11/7/2007	0.58 U	0.58 U	0.58 U	0.58 U	0.232 U
Pond-1-E	0 - 0.5	11/6/2007	0.565 U	0.565 U	0.565 U	0.565 U	0.226 U
Pond-1-W	0 - 0.5	11/6/2007	0.566 U	0.566 U	0.566 U	0.566 U	1.21
Pond-2-E	0 - 0.5	11/6/2007	0.58 U	0.58 U	0.58 U	0.58 U	0.232 U
Pond-2-W	0 - 0.5	11/6/2007	0.518 U	0.518 U	0.518 U	0.518 U	0.207 U
Pond-3-E	0 - 0.5	11/6/2007	0.536 U	0.536 U	0.536 U	0.536 U	0.214 U
Pond-3-W	0 - 0.5	11/6/2007	0.652 U	0.652 U	0.652 U	0.652 U	0.261 U
Pond-4-E	0 - 0.5	11/6/2007	0.716 U	0.716 U	0.716 U	0.716 U	0.287 U
Pond-4-W	0 - 0.5	11/6/2007	0.616 U	0.616 U	0.616 U	0.616 U	0.246 U
Pond-5-E	0 - 0.5	11/6/2007	0.656 U	0.656 U	0.656 U	0.656 U	0.263 U
Pond-5-W	0 - 0.5	11/6/2007	0.661 U	0.661 U	0.661 U	0.661 U	0.264 U
SS07-1	0 - 0.5	11/6/2007	0.68 U	0.68 U	0.68 U	0.68 U	0.272 U
SS07-2	0 - 0.5	11/6/2007	0.548 U	0.548 U	0.548 U	0.548 U	0.219 U

Notes:

All concentrations are in mg/kg (milligrams per kilogram).

J - Estimated concentration below the sample quantitation limit.

NA - Not analyzed

U - The compound was analyzed for but not detected.

**TABLE 7
SOIL DATA**

Site ID	Sampling Depth (Feet)	Sampling Date	2-Methylphenol	2-Nitroaniline	2-Nitrophenol	3 &/or 4-Methylphenol	3,3'-Dichlorobenzidine
BKG-1	0 - 0.5	11/7/2007	0.56 U	0.897 U	0.56 U	0.56 U	0.56 U
BKG-10	0 - 0.5	11/7/2007	0.565 U	0.904 U	0.565 U	0.565 U	0.565 U
BKG-2	0 - 0.5	11/7/2007	0.56 U	0.896 U	0.56 U	0.56 U	0.56 U
BKG-3	0 - 0.5	11/7/2007	0.56 U	0.897 U	0.56 U	0.56 U	0.56 U
BKG-4	0 - 0.5	11/7/2007	0.588 U	0.941 U	0.588 U	0.588 U	0.588 U
BKG-5	0 - 0.5	11/7/2007	0.491 U	0.785 U	0.491 U	0.491 U	0.491 U
BKG-6	0 - 0.5	11/7/2007	0.524 U	0.838 U	0.524 U	0.524 U	0.524 U
BKG-7	0 - 0.5	11/7/2007	0.563 U	0.901 U	0.563 U	0.563 U	0.563 U
BKG-8	0 - 0.5	11/7/2007	0.534 U	0.855 U	0.534 U	0.534 U	0.534 U
BKG-9	0 - 0.5	11/7/2007	0.58 U	0.927 U	0.58 U	0.58 U	0.58 U
Pond-1-E	0 - 0.5	11/6/2007	0.565 U	0.904 U	0.565 U	0.565 U	0.565 U
Pond-1-W	0 - 0.5	11/6/2007	0.566 U	0.905 U	0.566 U	0.566 U	0.566 U
Pond-2-E	0 - 0.5	11/6/2007	0.58 U	0.929 U	0.58 U	0.58 U	0.58 U
Pond-2-W	0 - 0.5	11/6/2007	0.518 U	0.828 U	0.518 U	0.518 U	0.518 U
Pond-3-E	0 - 0.5	11/6/2007	0.536 U	0.858 U	0.536 U	0.536 U	0.536 U
Pond-3-W	0 - 0.5	11/6/2007	0.652 U	1.04 U	0.652 U	0.652 U	0.652 U
Pond-4-E	0 - 0.5	11/6/2007	0.716 U	1.15 U	0.716 U	0.716 U	0.716 U
Pond-4-W	0 - 0.5	11/6/2007	0.616 U	0.986 U	0.616 U	0.616 U	0.616 U
Pond-5-E	0 - 0.5	11/6/2007	0.656 U	1.05 U	0.656 U	0.656 U	0.656 U
Pond-5-W	0 - 0.5	11/6/2007	0.661 U	1.06 U	0.661 U	0.661 U	0.661 U
SS07-1	0 - 0.5	11/6/2007	0.68 U	1.09 U	0.68 U	0.68 U	0.68 U
SS07-2	0 - 0.5	11/6/2007	0.548 U	0.877 U	0.548 U	0.548 U	0.548 U

Notes:

All concentrations are in mg/kg (milligrams per kilogram).

J - Estimated concentration below the sample quantitation limit.

NA - Not analyzed

U - The compound was analyzed for but not detected.

**TABLE 7
SOIL DATA**

Site ID	Sampling Depth (Feet)	Sampling Date	3-Nitroaniline	4,6-Dinitro-2-methylphenol	4-Bromophenyl phenyl ether	4-Chloro-3-methylphenol	4-Chloroaniline
BKG-1	0 - 0.5	11/7/2007	0.897 U	2.24 U	0.56 U	0.56 U	0.56 U
BKG-10	0 - 0.5	11/7/2007	0.904 U	2.26 U	0.565 U	0.565 U	0.565 U
BKG-2	0 - 0.5	11/7/2007	0.896 U	2.24 U	0.56 U	0.56 U	0.56 U
BKG-3	0 - 0.5	11/7/2007	0.897 U	2.24 U	0.56 U	0.56 U	0.56 U
BKG-4	0 - 0.5	11/7/2007	0.941 U	2.35 U	0.588 U	0.588 U	0.588 U
BKG-5	0 - 0.5	11/7/2007	0.785 U	1.96 U	0.491 U	0.491 U	0.491 U
BKG-6	0 - 0.5	11/7/2007	0.838 U	2.1 U	0.524 U	0.524 U	0.524 U
BKG-7	0 - 0.5	11/7/2007	0.901 U	2.25 U	0.563 U	0.563 U	0.563 U
BKG-8	0 - 0.5	11/7/2007	0.855 U	2.14 U	0.534 U	0.534 U	0.534 U
BKG-9	0 - 0.5	11/7/2007	0.927 U	2.32 U	0.58 U	0.58 U	0.58 U
Pond-1-E	0 - 0.5	11/6/2007	0.904 U	2.26 U	0.565 U	0.565 U	0.565 U
Pond-1-W	0 - 0.5	11/6/2007	0.905 U	2.26 U	0.566 U	0.566 U	0.566 U
Pond-2-E	0 - 0.5	11/6/2007	0.929 U	2.32 U	0.58 U	0.58 U	0.58 U
Pond-2-W	0 - 0.5	11/6/2007	0.828 U	2.07 U	0.518 U	0.518 U	0.518 U
Pond-3-E	0 - 0.5	11/6/2007	0.858 U	2.14 U	0.536 U	0.536 U	0.536 U
Pond-3-W	0 - 0.5	11/6/2007	1.04 U	2.61 U	0.652 U	0.652 U	0.652 U
Pond-4-E	0 - 0.5	11/6/2007	1.15 U	2.87 U	0.716 U	0.716 U	0.716 U
Pond-4-W	0 - 0.5	11/6/2007	0.986 U	2.46 U	0.616 U	0.616 U	0.616 U
Pond-5-E	0 - 0.5	11/6/2007	1.05 U	2.63 U	0.656 U	0.656 U	0.656 U
Pond-5-W	0 - 0.5	11/6/2007	1.06 U	2.64 U	0.661 U	0.661 U	0.661 U
SS07-1	0 - 0.5	11/6/2007	1.09 U	2.72 U	0.68 U	0.68 U	0.68 U
SS07-2	0 - 0.5	11/6/2007	0.877 U	2.19 U	0.548 U	0.548 U	0.548 U

Notes:

All concentrations are in mg/kg (milligrams per kilogram).

J - Estimated concentration below the sample quantitation limit.

NA - Not analyzed

U - The compound was analyzed for but not detected.

**TABLE 7
SOIL DATA**

Site ID	Sampling Depth (Feet)	Sampling Date	4-Chlorophenyl phenyl ether	4-Nitroaniline	4-Nitrophenol	Acenaphthene	Acenaphthylene
BKG-1	0 - 0.5	11/7/2007	0.56 U	0.897 U	1.46 U	0.224 U	0.224 U
BKG-10	0 - 0.5	11/7/2007	0.565 U	0.904 U	1.47 U	0.226 U	0.226 U
BKG-2	0 - 0.5	11/7/2007	0.56 U	0.896 U	1.46 U	0.224 U	0.224 U
BKG-3	0 - 0.5	11/7/2007	0.56 U	0.897 U	1.46 U	0.224 U	0.224 U
BKG-4	0 - 0.5	11/7/2007	0.588 U	0.941 U	1.53 U	0.235 U	0.235 U
BKG-5	0 - 0.5	11/7/2007	0.491 U	0.785 U	1.28 U	0.196 U	0.196 U
BKG-6	0 - 0.5	11/7/2007	0.524 U	0.838 U	1.36 U	0.21 U	0.21 U
BKG-7	0 - 0.5	11/7/2007	0.563 U	0.901 U	1.46 U	0.225 U	0.225 U
BKG-8	0 - 0.5	11/7/2007	0.534 U	0.855 U	1.39 U	0.214 U	0.214 U
BKG-9	0 - 0.5	11/7/2007	0.58 U	0.927 U	1.51 U	0.232 U	0.232 U
Pond-1-E	0 - 0.5	11/6/2007	0.565 U	0.904 U	1.47 U	0.226 U	1.5
Pond-1-W	0 - 0.5	11/6/2007	0.566 U	0.905 U	1.47 U	23.7	5.8
Pond-2-E	0 - 0.5	11/6/2007	0.58 U	0.929 U	1.51 U	0.232 U	0.232 U
Pond-2-W	0 - 0.5	11/6/2007	0.518 U	0.828 U	1.35 U	0.207 U	0.207 U
Pond-3-E	0 - 0.5	11/6/2007	0.536 U	0.858 U	1.39 U	0.214 U	0.214 U
Pond-3-W	0 - 0.5	11/6/2007	0.652 U	1.04 U	1.7 U	0.261 U	0.261 U
Pond-4-E	0 - 0.5	11/6/2007	0.716 U	1.15 U	1.86 U	0.287 U	0.287 U
Pond-4-W	0 - 0.5	11/6/2007	0.616 U	0.986 U	1.6 U	0.246 U	0.246 U
Pond-5-E	0 - 0.5	11/6/2007	0.656 U	1.05 U	1.71 U	0.263 U	0.263 U
Pond-5-W	0 - 0.5	11/6/2007	0.661 U	1.06 U	1.72 U	0.264 U	0.494
SS07-1	0 - 0.5	11/6/2007	0.68 U	1.09 U	1.77 U	0.272 U	0.272 U
SS07-2	0 - 0.5	11/6/2007	0.548 U	0.877 U	1.43 U	0.219 U	0.219 U

Notes:

All concentrations are in mg/kg (milligrams per kilogram).

J - Estimated concentration below the sample quantitation limit.

NA - Not analyzed

U - The compound was analyzed for but not detected.

**TABLE 7
SOIL DATA**

Site ID	Sampling Depth (Feet)	Sampling Date	Acetophenone	Anthracene	Atrazine	Benzaldehyde	Benzo(a)anthracene
BKG-1	0 - 0.5	11/7/2007	0.56 U	0.224 U	0.56 U	0.56 U	0.56 U
BKG-10	0 - 0.5	11/7/2007	0.565 U	0.226 U	0.565 U	0.565 U	0.833
BKG-2	0 - 0.5	11/7/2007	0.56 U	0.224 U	0.56 U	0.56 U	0.56 U
BKG-3	0 - 0.5	11/7/2007	0.56 U	0.224 U	0.56 U	0.56 U	0.56 U
BKG-4	0 - 0.5	11/7/2007	0.588 U	0.235 U	0.588 U	0.588 U	0.588 U
BKG-5	0 - 0.5	11/7/2007	0.491 U	0.196 U	0.491 U	0.491 U	0.491 U
BKG-6	0 - 0.5	11/7/2007	0.524 U	0.21 U	0.524 U	0.524 U	0.524 U
BKG-7	0 - 0.5	11/7/2007	0.563 U	0.225 U	0.563 U	0.563 U	0.563 U
BKG-8	0 - 0.5	11/7/2007	0.534 U	0.214 U	0.534 U	0.534 U	0.534 U
BKG-9	0 - 0.5	11/7/2007	0.58 U	0.232 U	0.58 U	0.58 U	0.58 U
Pond-1-E	0 - 0.5	11/6/2007	0.565 U	4.01	0.565 U	0.565 U	2.29
Pond-1-W	0 - 0.5	11/6/2007	0.566 U	9.76	0.566 U	0.566 U	139
Pond-2-E	0 - 0.5	11/6/2007	0.58 U	0.232 U	0.58 U	0.58 U	0.58 U
Pond-2-W	0 - 0.5	11/6/2007	0.518 U	0.207 U	0.518 U	0.518 U	0.518 U
Pond-3-E	0 - 0.5	11/6/2007	0.536 U	0.214 U	0.536 U	0.536 U	0.536 U
Pond-3-W	0 - 0.5	11/6/2007	0.652 U	0.261 U	0.652 U	0.652 U	0.652 U
Pond-4-E	0 - 0.5	11/6/2007	0.716 U	0.287 U	0.716 U	0.716 U	0.716 U
Pond-4-W	0 - 0.5	11/6/2007	0.616 U	0.667	0.616 U	0.616 U	1.06
Pond-5-E	0 - 0.5	11/6/2007	0.656 U	0.351	0.656 U	0.656 U	0.656 U
Pond-5-W	0 - 0.5	11/6/2007	0.661 U	1.05	0.661 U	0.661 U	1.72
SS07-1	0 - 0.5	11/6/2007	0.68 U	0.272 U	0.68 U	0.68 U	0.68 U
SS07-2	0 - 0.5	11/6/2007	0.548 U	0.219 U	0.548 U	0.548 U	0.548 U

Notes:

All concentrations are in mg/kg (milligrams per kilogram).

J - Estimated concentration below the sample quantitation limit.

NA - Not analyzed

U - The compound was analyzed for but not detected.

**TABLE 7
SOIL DATA**

Site ID	Sampling Depth (Feet)	Sampling Date	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Benzoic acid
BKG-1	0 - 0.5	11/7/2007	0.56 U	0.56 U	0.56 U	0.56 U	1.12 U
BKG-10	0 - 0.5	11/7/2007	0.702	0.997	0.565 U	0.907	1.13 U
BKG-2	0 - 0.5	11/7/2007	0.56 U	0.56 U	0.56 U	0.56 U	1.12 U
BKG-3	0 - 0.5	11/7/2007	0.56 U	0.56 U	0.56 U	0.56 U	1.12 U
BKG-4	0 - 0.5	11/7/2007	0.588 U	0.588 U	0.588 U	0.588 U	1.18 U
BKG-5	0 - 0.5	11/7/2007	0.491 U	0.491 U	0.491 U	0.491 U	0.981 U
BKG-6	0 - 0.5	11/7/2007	0.524 U	0.524 U	0.524 U	0.524 U	1.05 U
BKG-7	0 - 0.5	11/7/2007	0.563 U	0.563 U	0.563 U	0.563 U	1.13 U
BKG-8	0 - 0.5	11/7/2007	0.534 U	0.534 U	0.534 U	0.534 U	1.07 U
BKG-9	0 - 0.5	11/7/2007	0.58 U	0.58 U	0.58 U	0.58 U	1.16 U
Pond-1-E	0 - 0.5	11/6/2007	6.02 J	27.5 J	5.4 J	21.7 J	1.13 U
Pond-1-W	0 - 0.5	11/6/2007	52.9	155	11.6	81	1.13 U
Pond-2-E	0 - 0.5	11/6/2007	0.58 U	0.58 U	0.58 U	0.58 U	1.16 U
Pond-2-W	0 - 0.5	11/6/2007	0.518 U	0.518 U	0.518 U	0.518 U	1.04 U
Pond-3-E	0 - 0.5	11/6/2007	0.536 U	0.536 U	0.536 U	0.536 U	1.07 U
Pond-3-W	0 - 0.5	11/6/2007	0.652 U	0.676	0.652 U	0.652 U	1.3 U
Pond-4-E	0 - 0.5	11/6/2007	0.716 U	0.873	0.716 U	0.716 U	1.43 U
Pond-4-W	0 - 0.5	11/6/2007	1.5	2.29	0.632	1.8	1.23 U
Pond-5-E	0 - 0.5	11/6/2007	0.656 U	0.94	0.656 U	0.656 U	1.31 U
Pond-5-W	0 - 0.5	11/6/2007	1.98 J	6.55 J	1.14 J	4.38 J	1.32 U
SS07-1	0 - 0.5	11/6/2007	0.68 U	0.68 U	0.68 U	0.68 U	1.36 U
SS07-2	0 - 0.5	11/6/2007	0.548 U	0.548 U	0.548 U	0.548 U	1.1 U

Notes:

All concentrations are in mg/kg (milligrams per kilogram).

J - Estimated concentration below the sample quantitation limit.

NA - Not analyzed

U - The compound was analyzed for but not detected.

**TABLE 7
SOIL DATA**

Site ID	Sampling Depth (Feet)	Sampling Date	Benzyl alcohol	Bis(2-chloroethoxy)methane	Bis(2-chloroethyl)ether	Bis(2-chloroisopropyl)ether	Bis(2-ethylhexyl)phthalate
BKG-1	0 - 0.5	11/7/2007	0.56 U	0.56 U	0.56 U	0.56 U	0.56 U
BKG-10	0 - 0.5	11/7/2007	0.565 U	0.565 U	0.565 U	0.565 U	0.565 U
BKG-2	0 - 0.5	11/7/2007	0.56 U	0.56 U	0.56 U	0.56 U	0.56 U
BKG-3	0 - 0.5	11/7/2007	0.56 U	0.56 U	0.56 U	0.56 U	0.56 U
BKG-4	0 - 0.5	11/7/2007	0.588 U	0.588 U	0.588 U	0.588 U	0.588 U
BKG-5	0 - 0.5	11/7/2007	0.491 U	0.491 U	0.491 U	0.491 U	0.491 U
BKG-6	0 - 0.5	11/7/2007	0.524 U	0.524 U	0.524 U	0.524 U	0.524 U
BKG-7	0 - 0.5	11/7/2007	0.563 U	0.563 U	0.563 U	0.563 U	0.563 U
BKG-8	0 - 0.5	11/7/2007	0.534 U	0.534 U	0.534 U	0.534 U	0.534 U
BKG-9	0 - 0.5	11/7/2007	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U
Pond-1-E	0 - 0.5	11/6/2007	0.565 U	0.565 U	0.565 U	0.565 U	0.565 U
Pond-1-W	0 - 0.5	11/6/2007	0.566 U	0.566 U	0.566 U	0.566 U	1.36 J
Pond-2-E	0 - 0.5	11/6/2007	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U
Pond-2-W	0 - 0.5	11/6/2007	0.518 U	0.518 U	0.518 U	0.518 U	0.518 U
Pond-3-E	0 - 0.5	11/6/2007	0.536 U	0.536 U	0.536 U	0.536 U	0.536 U
Pond-3-W	0 - 0.5	11/6/2007	0.652 U	0.652 U	0.652 U	0.652 U	0.652 U
Pond-4-E	0 - 0.5	11/6/2007	0.716 U	0.716 U	0.716 U	0.716 U	0.716 U
Pond-4-W	0 - 0.5	11/6/2007	0.616 U	0.616 U	0.616 U	0.616 U	0.616 U
Pond-5-E	0 - 0.5	11/6/2007	0.656 U	0.656 U	0.656 U	0.656 U	0.656 U
Pond-5-W	0 - 0.5	11/6/2007	0.661 U	0.661 U	0.661 U	0.661 U	0.661 U
SS07-1	0 - 0.5	11/6/2007	0.68 U	0.68 U	0.68 U	0.68 U	0.68 U
SS07-2	0 - 0.5	11/6/2007	0.548 U	0.548 U	0.548 U	0.548 U	0.548 U

Notes:

All concentrations are in mg/kg (milligrams per kilogram).

J - Estimated concentration below the sample quantitation limit.

NA - Not analyzed

U - The compound was analyzed for but not detected.

**TABLE 7
SOIL DATA**

Site ID	Sampling Depth (Feet)	Sampling Date	Butyl benzyl phthalate	Caprolactam	Carbazole	Chrysene	Dibenz(a,h)anthracene
BKG-1	0 - 0.5	11/7/2007	0.56 U	0.56 U	0.56 U	0.56 U	0.56 U
BKG-10	0 - 0.5	11/7/2007	0.565 U	0.565 U	0.565 U	1.03	0.565 U
BKG-2	0 - 0.5	11/7/2007	0.56 U	0.56 U	0.56 U	0.56 U	0.56 U
BKG-3	0 - 0.5	11/7/2007	0.56 U	0.56 U	0.56 U	0.56 U	0.56 U
BKG-4	0 - 0.5	11/7/2007	0.588 U	0.588 U	0.588 U	0.588 U	0.588 U
BKG-5	0 - 0.5	11/7/2007	0.491 U	0.491 U	0.491 U	0.491 U	0.491 U
BKG-6	0 - 0.5	11/7/2007	0.524 U	0.524 U	0.524 U	0.524 U	0.524 U
BKG-7	0 - 0.5	11/7/2007	0.563 U	0.563 U	0.563 U	0.563 U	0.563 U
BKG-8	0 - 0.5	11/7/2007	0.534 U	0.534 U	0.534 U	0.534 U	0.534 U
BKG-9	0 - 0.5	11/7/2007	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U
Pond-1-E	0 - 0.5	11/6/2007	0.565 U	0.565 U	0.971 J	6.49	1.71 J
Pond-1-W	0 - 0.5	11/6/2007	0.566 U	0.566 U	1.65 J	187	7.29 J
Pond-2-E	0 - 0.5	11/6/2007	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U
Pond-2-W	0 - 0.5	11/6/2007	0.518 U	0.518 U	0.518 U	0.518 U	0.518 U
Pond-3-E	0 - 0.5	11/6/2007	0.536 U	0.536 U	0.536 U	0.536 U	0.536 U
Pond-3-W	0 - 0.5	11/6/2007	0.652 U	0.652 U	0.652 U	0.652 U	0.652 U
Pond-4-E	0 - 0.5	11/6/2007	0.716 U	0.716 U	0.716 U	0.716 U	0.716 U
Pond-4-W	0 - 0.5	11/6/2007	0.616 U	0.616 U	0.616 U	1.65	0.616 U
Pond-5-E	0 - 0.5	11/6/2007	0.656 U	0.656 U	0.656 U	0.656 U	0.656 U
Pond-5-W	0 - 0.5	11/6/2007	0.661 U	0.661 U	0.661 U	3.78	0.661 U
SS07-1	0 - 0.5	11/6/2007	0.68 U	0.68 U	0.68 U	0.68 U	0.68 U
SS07-2	0 - 0.5	11/6/2007	0.548 U	0.548 U	0.548 U	0.548 U	0.548 U

Notes:

All concentrations are in mg/kg (milligrams per kilogram).

J - Estimated concentration below the sample quantitation limit.

NA - Not analyzed

U - The compound was analyzed for but not detected.

**TABLE 7
SOIL DATA**

Site ID	Sampling Depth (Feet)	Sampling Date	Dibenzofuran	Diethyl phthalate	Dimethyl phthalate	Di-n-butyl phthalate	Di-n-octyl phthalate
BKG-1	0 - 0.5	11/7/2007	0.56 U	0.56 U	0.56 U	0.56 U	0.56 U
BKG-10	0 - 0.5	11/7/2007	0.565 U	0.565 U	0.565 U	0.565 U	0.565 U
BKG-2	0 - 0.5	11/7/2007	0.56 U	0.56 U	0.56 U	0.56 U	0.56 U
BKG-3	0 - 0.5	11/7/2007	0.56 U	0.56 U	0.56 U	0.56 U	0.56 U
BKG-4	0 - 0.5	11/7/2007	0.588 U	0.588 U	0.588 U	0.588 U	0.588 U
BKG-5	0 - 0.5	11/7/2007	0.491 U	0.491 U	0.491 U	0.491 U	0.491 U
BKG-6	0 - 0.5	11/7/2007	0.524 U	0.524 U	0.524 U	0.524 U	0.524 U
BKG-7	0 - 0.5	11/7/2007	0.563 U	0.563 U	0.563 U	0.563 U	0.563 U
BKG-8	0 - 0.5	11/7/2007	0.534 U	0.534 U	0.534 U	0.534 U	0.534 U
BKG-9	0 - 0.5	11/7/2007	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U
Pond-1-E	0 - 0.5	11/6/2007	0.565 U	0.565 U	0.565 U	0.565 U	0.565 U
Pond-1-W	0 - 0.5	11/6/2007	6.6	0.566 U	0.566 U	0.566 U	0.566 U
Pond-2-E	0 - 0.5	11/6/2007	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U
Pond-2-W	0 - 0.5	11/6/2007	0.518 U	0.518 U	0.518 U	0.518 U	0.518 U
Pond-3-E	0 - 0.5	11/6/2007	0.536 U	0.536 U	0.536 U	0.536 U	0.536 U
Pond-3-W	0 - 0.5	11/6/2007	0.652 U	0.652 U	0.652 U	0.652 U	0.652 U
Pond-4-E	0 - 0.5	11/6/2007	0.716 U	0.716 U	0.716 U	0.716 U	0.716 U
Pond-4-W	0 - 0.5	11/6/2007	0.616 U	0.616 U	0.616 U	0.616 U	0.616 U
Pond-5-E	0 - 0.5	11/6/2007	0.656 U	0.656 U	0.656 U	0.656 U	0.656 U
Pond-5-W	0 - 0.5	11/6/2007	0.661 U	0.661 U	0.661 U	0.661 U	0.661 U
SS07-1	0 - 0.5	11/6/2007	0.68 U	0.68 U	0.68 U	0.68 U	0.68 U
SS07-2	0 - 0.5	11/6/2007	0.548 U	0.548 U	0.548 U	0.548 U	0.548 U

Notes:

All concentrations are in mg/kg (milligrams per kilogram).

J - Estimated concentration below the sample quantitation limit.

NA - Not analyzed

U - The compound was analyzed for but not detected.

**TABLE 7
SOIL DATA**

Site ID	Sampling Depth (Feet)	Sampling Date	Fluoranthene	Fluorene	Hexachlorobenzene	Hexachlorobutadiene	Hexachlorocyclopentadiene
BKG-1	0 - 0.5	11/7/2007	0.224 U	0.224 U	0.56 U	0.56 U	0.56 U
BKG-10	0 - 0.5	11/7/2007	1.6	0.226 U	0.565 U	0.565 U	0.565 U
BKG-2	0 - 0.5	11/7/2007	0.224 U	0.224 U	0.56 U	0.56 U	0.56 U
BKG-3	0 - 0.5	11/7/2007	0.224 U	0.224 U	0.56 U	0.56 U	0.56 U
BKG-4	0 - 0.5	11/7/2007	0.235 U	0.235 U	0.588 U	0.588 U	0.588 U
BKG-5	0 - 0.5	11/7/2007	0.196 U	0.196 U	0.491 U	0.491 U	0.491 U
BKG-6	0 - 0.5	11/7/2007	0.21 U	0.21 U	0.524 U	0.524 U	0.524 U
BKG-7	0 - 0.5	11/7/2007	0.225 U	0.225 U	0.563 U	0.563 U	0.563 U
BKG-8	0 - 0.5	11/7/2007	0.214 U	0.214 U	0.534 U	0.534 U	0.534 U
BKG-9	0 - 0.5	11/7/2007	0.232 U	0.232 U	0.58 U	0.58 U	0.58 U
Pond-1-E	0 - 0.5	11/6/2007	2.65	0.226 U	0.565 U	0.565 U	0.565 U
Pond-1-W	0 - 0.5	11/6/2007	744	10.2	0.566 U	0.566 U	0.566 U
Pond-2-E	0 - 0.5	11/6/2007	0.232 U	0.232 U	0.58 U	0.58 U	0.58 U
Pond-2-W	0 - 0.5	11/6/2007	0.207 U	0.207 U	0.518 U	0.518 U	0.518 U
Pond-3-E	0 - 0.5	11/6/2007	0.214 U	0.214 U	0.536 U	0.536 U	0.536 U
Pond-3-W	0 - 0.5	11/6/2007	0.282	0.261 U	0.652 U	0.652 U	0.652 U
Pond-4-E	0 - 0.5	11/6/2007	0.404	0.287 U	0.716 U	0.716 U	0.716 U
Pond-4-W	0 - 0.5	11/6/2007	0.864	0.246 U	0.616 U	0.616 U	0.616 U
Pond-5-E	0 - 0.5	11/6/2007	0.263 U	0.263 U	0.656 U	0.656 U	0.656 U
Pond-5-W	0 - 0.5	11/6/2007	4.12	0.264 U	0.661 U	0.661 U	0.661 U
SS07-1	0 - 0.5	11/6/2007	0.272 U	0.272 U	0.68 U	0.68 U	0.68 U
SS07-2	0 - 0.5	11/6/2007	0.219 U	0.219 U	0.548 U	0.548 U	0.548 U

Notes:

All concentrations are in mg/kg (milligrams per kilogram).

J - Estimated concentration below the sample quantitation limit.

NA - Not analyzed

U - The compound was analyzed for but not detected.

**TABLE 7
SOIL DATA**

Site ID	Sampling Depth (Feet)	Sampling Date	Hexachloroethane	Indeno(1,2,3-cd)pyrene	Isophorone	Naphthalene	Nitrobenzene
BKG-1	0 - 0.5	11/7/2007	0.56 U	0.56 U	0.56 U	0.056 U	0.56 U
BKG-10	0 - 0.5	11/7/2007	0.565 U	0.565 U	0.565 U	0.0565 U	0.565 U
BKG-2	0 - 0.5	11/7/2007	0.56 U	0.56 U	0.56 U	0.056 U	0.56 U
BKG-3	0 - 0.5	11/7/2007	0.56 U	0.56 U	0.56 U	0.056 U	0.56 U
BKG-4	0 - 0.5	11/7/2007	0.588 U	0.588 U	0.588 U	0.0588 U	0.588 U
BKG-5	0 - 0.5	11/7/2007	0.491 U	0.491 U	0.491 U	0.0491 U	0.491 U
BKG-6	0 - 0.5	11/7/2007	0.524 U	0.524 U	0.524 U	0.0524 U	0.524 U
BKG-7	0 - 0.5	11/7/2007	0.563 U	0.563 U	0.563 U	0.0563 U	0.563 U
BKG-8	0 - 0.5	11/7/2007	0.534 U	0.534 U	0.534 U	0.0534 U	0.534 U
BKG-9	0 - 0.5	11/7/2007	0.58 U	0.58 U	0.58 U	0.058 U	0.58 U
Pond-1-E	0 - 0.5	11/6/2007	0.565 U	6.54 J	0.565 U	0.0565 U	0.565 U
Pond-1-W	0 - 0.5	11/6/2007	0.566 U	17.7	0.566 U	0.322	0.566 U
Pond-2-E	0 - 0.5	11/6/2007	0.58 U	0.58 U	0.58 U	0.058 U	0.58 U
Pond-2-W	0 - 0.5	11/6/2007	0.518 U	0.518 U	0.518 U	0.0518 U	0.518 U
Pond-3-E	0 - 0.5	11/6/2007	0.536 U	0.536 U	0.536 U	0.0536 U	0.536 U
Pond-3-W	0 - 0.5	11/6/2007	0.652 U	0.652 U	0.652 U	0.0652 U	0.652 U
Pond-4-E	0 - 0.5	11/6/2007	0.716 U	0.716 U	0.716 U	0.0716 U	0.716 U
Pond-4-W	0 - 0.5	11/6/2007	0.616 U	0.833	0.616 U	0.0616 U	0.616 U
Pond-5-E	0 - 0.5	11/6/2007	0.656 U	0.656 U	0.656 U	0.0656 U	0.656 U
Pond-5-W	0 - 0.5	11/6/2007	0.661 U	1.44 J	0.661 U	0.131	0.661 U
SS07-1	0 - 0.5	11/6/2007	0.68 U	0.68 U	0.68 U	0.068 U	0.68 U
SS07-2	0 - 0.5	11/6/2007	0.548 U	0.548 U	0.548 U	0.0548 U	0.548 U

Notes:

All concentrations are in mg/kg (milligrams per kilogram).

J - Estimated concentration below the sample quantitation limit.

NA - Not analyzed

U - The compound was analyzed for but not detected.

**TABLE 7
SOIL DATA**

Site ID	Sampling Depth (Feet)	Sampling Date	N-Nitrosodi-n-propylamine	N-Nitrosodiphenylamine	Pentachlorophenol	Phenanthrene	Phenol
BKG-1	0 - 0.5	11/7/2007	0.56 U	0.56 U	0.649	0.224 U	0.56 U
BKG-10	0 - 0.5	11/7/2007	0.565 U	0.565 U	0.565 U	0.226 U	0.565 U
BKG-2	0 - 0.5	11/7/2007	0.56 U	0.56 U	0.56 U	0.224 U	0.56 U
BKG-3	0 - 0.5	11/7/2007	0.56 U	0.56 U	0.56 U	0.224 U	0.56 U
BKG-4	0 - 0.5	11/7/2007	0.588 U	0.588 U	0.588 U	0.235 U	0.588 U
BKG-5	0 - 0.5	11/7/2007	0.491 U	0.491 U	0.491 U	0.196 U	0.491 U
BKG-6	0 - 0.5	11/7/2007	0.524 U	0.524 U	0.524 U	0.21 U	0.524 U
BKG-7	0 - 0.5	11/7/2007	0.563 U	0.563 U	0.563 U	0.225 U	0.563 U
BKG-8	0 - 0.5	11/7/2007	0.534 U	0.534 U	0.534 U	0.214 U	0.534 U
BKG-9	0 - 0.5	11/7/2007	0.58 U	0.58 U	0.58 U	0.232 U	0.58 U
Pond-1-E	0 - 0.5	11/6/2007	0.565 U	0.565 U	8.14	0.608	0.565 U
Pond-1-W	0 - 0.5	11/6/2007	0.566 U	0.566 U	32.4	34.8	0.566 U
Pond-2-E	0 - 0.5	11/6/2007	0.58 U	0.58 U	0.58 U	0.232 U	0.58 U
Pond-2-W	0 - 0.5	11/6/2007	0.518 U	0.518 U	0.518 U	0.207 U	0.518 U
Pond-3-E	0 - 0.5	11/6/2007	0.536 U	0.536 U	0.536 U	0.214 U	0.536 U
Pond-3-W	0 - 0.5	11/6/2007	0.652 U	0.652 U	0.652 U	0.261 U	0.652 U
Pond-4-E	0 - 0.5	11/6/2007	0.716 U	0.716 U	0.716 U	0.287 U	0.716 U
Pond-4-W	0 - 0.5	11/6/2007	0.616 U	0.616 U	0.616 U	0.246 U	0.616 U
Pond-5-E	0 - 0.5	11/6/2007	0.656 U	0.656 U	2.9	0.263 U	0.656 U
Pond-5-W	0 - 0.5	11/6/2007	0.661 U	0.661 U	11.4	0.449	0.661 U
SS07-1	0 - 0.5	11/6/2007	0.68 U	0.68 U	0.68 U	0.272 U	0.68 U
SS07-2	0 - 0.5	11/6/2007	0.548 U	0.548 U	0.548 U	0.219 U	0.548 U

Notes:

All concentrations are in mg/kg (milligrams per kilogram).

J - Estimated concentration below the sample quantitation limit.

NA - Not analyzed

U - The compound was analyzed for but not detected.

**TABLE 7
SOIL DATA**

Site ID	Sampling Depth (Feet)	Sampling Date	Pyrene	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium
BKG-1	0 - 0.5	11/7/2007	0.224 U	3540	2.1 U	7.1 U	173	0.5 U	2.1	1630
BKG-10	0 - 0.5	11/7/2007	1.85	2630	2.2 U	8.3	172	0.5 U	3.9	3310
BKG-2	0 - 0.5	11/7/2007	0.224 U	3290	2 U	7 U	131	0.5 U	1.7	1040
BKG-3	0 - 0.5	11/7/2007	0.224 U	3110	1.9 U	6.7 U	131	0.5 U	2.3	2250
BKG-4	0 - 0.5	11/7/2007	0.235 U	4540	2 U	6.9 U	155	0.5 U	2	1440
BKG-5	0 - 0.5	11/7/2007	0.196 U	1970	1.8 U	6.3 U	27.7	0.5 U	0.5 U	521
BKG-6	0 - 0.5	11/7/2007	0.21 U	3640	2 U	6.8 U	95	0.5 U	1	978
BKG-7	0 - 0.5	11/7/2007	0.225 U	4490	2 U	6.8 U	109	0.5	1.3	1230
BKG-8	0 - 0.5	11/7/2007	0.214 U	2980	1.9 U	6.6 U	78	0.5 U	1.2	925
BKG-9	0 - 0.5	11/7/2007	0.232 U	2470	2.1 U	15.2	106	0.5 U	0.9	2360
Pond-1-E	0 - 0.5	11/6/2007	4.38	NA	NA	NA	NA	NA	NA	NA
Pond-1-W	0 - 0.5	11/6/2007	747	NA	NA	NA	NA	NA	NA	NA
Pond-2-E	0 - 0.5	11/6/2007	0.232 U	NA	NA	NA	NA	NA	NA	NA
Pond-2-W	0 - 0.5	11/6/2007	0.207 U	NA	NA	NA	NA	NA	NA	NA
Pond-3-E	0 - 0.5	11/6/2007	0.214 U	NA	NA	NA	NA	NA	NA	NA
Pond-3-W	0 - 0.5	11/6/2007	0.454	NA	NA	NA	NA	NA	NA	NA
Pond-4-E	0 - 0.5	11/6/2007	0.58	NA	NA	NA	NA	NA	NA	NA
Pond-4-W	0 - 0.5	11/6/2007	1.62	NA	NA	NA	NA	NA	NA	NA
Pond-5-E	0 - 0.5	11/6/2007	0.36	NA	NA	NA	NA	NA	NA	NA
Pond-5-W	0 - 0.5	11/6/2007	5.29	NA	NA	NA	NA	NA	NA	NA
SS07-1	0 - 0.5	11/6/2007	0.272 U	NA	NA	NA	NA	NA	NA	NA
SS07-2	0 - 0.5	11/6/2007	0.219 U	NA	NA	NA	NA	NA	NA	NA

Notes:

All concentrations are in mg/kg (milligrams per kilogram).

J - Estimated concentration below the sample quantitation limit.

NA - Not analyzed

U - The compound was analyzed for but not detected.

**TABLE 7
SOIL DATA**

Site ID	Sampling Depth (Feet)	Sampling Date	Chromium	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Mercury
BKG-1	0 - 0.5	11/7/2007	7.7	3.9	44.7	5780	109	260	159	0.39
BKG-10	0 - 0.5	11/7/2007	9.1	3.2	23.3	15200	174	324	387	0.113
BKG-2	0 - 0.5	11/7/2007	7	4.2	22.3	5680	75.5	215	200	0.266
BKG-3	0 - 0.5	11/7/2007	6.6	4.8	19	4990	65.3	260	261	0.203
BKG-4	0 - 0.5	11/7/2007	10	3.8	22.1	6860	96	308	179	0.304
BKG-5	0 - 0.5	11/7/2007	2.7	1.8 U	3.5	2530	11.9	134	787	0.067
BKG-6	0 - 0.5	11/7/2007	7.2	2.1	14.2	3690	56.5	256	128	0.222
BKG-7	0 - 0.5	11/7/2007	9.5	3	15.1	6370	78.2	299	317	0.272
BKG-8	0 - 0.5	11/7/2007	4.2	5.2	9.3	4440	47.4	265	244	0.102
BKG-9	0 - 0.5	11/7/2007	4.5	2.4	19.1	4530	84	277	305	0.136
Pond-1-E	0 - 0.5	11/6/2007	NA	NA	NA	NA	NA	NA	NA	NA
Pond-1-W	0 - 0.5	11/6/2007	NA	NA	NA	NA	NA	NA	NA	NA
Pond-2-E	0 - 0.5	11/6/2007	NA	NA	NA	NA	NA	NA	NA	NA
Pond-2-W	0 - 0.5	11/6/2007	NA	NA	NA	NA	NA	NA	NA	NA
Pond-3-E	0 - 0.5	11/6/2007	NA	NA	NA	NA	NA	NA	NA	NA
Pond-3-W	0 - 0.5	11/6/2007	NA	NA	NA	NA	NA	NA	NA	NA
Pond-4-E	0 - 0.5	11/6/2007	NA	NA	NA	NA	NA	NA	NA	NA
Pond-4-W	0 - 0.5	11/6/2007	NA	NA	NA	NA	NA	NA	NA	NA
Pond-5-E	0 - 0.5	11/6/2007	NA	NA	NA	NA	NA	NA	NA	NA
Pond-5-W	0 - 0.5	11/6/2007	NA	NA	NA	NA	NA	NA	NA	NA
SS07-1	0 - 0.5	11/6/2007	NA	NA	NA	NA	NA	NA	NA	NA
SS07-2	0 - 0.5	11/6/2007	NA	NA	NA	NA	NA	NA	NA	NA

Notes:

All concentrations are in mg/kg (milligrams per kilogram).

J - Estimated concentration below the sample quantitation limit.

NA - Not analyzed

U - The compound was analyzed for but not detected.

**TABLE 7
SOIL DATA**

Site ID	Sampling Depth (Feet)	Sampling Date	Nickel	Potassium	Selenium	Silver	Sodium	Thallium	Vanadium	Zinc
BKG-1	0 - 0.5	11/7/2007	3.3	257	10.4 U	1 U	52.1 U	2.1 U	13.1	207
BKG-10	0 - 0.5	11/7/2007	3.5	364	10.8 U	1.1 U	53.8 U	2.2 U	7.6	293
BKG-2	0 - 0.5	11/7/2007	2.8	213	10.2 U	1 U	50.8 U	2 U	11.6	160
BKG-3	0 - 0.5	11/7/2007	4	238	9.7 U	1 U	48.7 U	1.9 U	11.8	239
BKG-4	0 - 0.5	11/7/2007	4.1	306	10.1 U	1 U	50.3 U	2 U	16	194
BKG-5	0 - 0.5	11/7/2007	1.8 U	153	9.2 U	0.9 U	45.9 U	1.8 U	6.8	15.6
BKG-6	0 - 0.5	11/7/2007	2.9	231	9.9 U	1 U	49.5 U	2 U	11.8	90.3
BKG-7	0 - 0.5	11/7/2007	3.7	256	9.9 U	1 U	49.5 U	2 U	16.6	96.9
BKG-8	0 - 0.5	11/7/2007	3.2	210	9.7 U	1 U	48.4 U	1.9 U	8.6	59.3
BKG-9	0 - 0.5	11/7/2007	2.1 U	408	10.5 U	1 U	52.4 U	2.1 U	6.4	93
Pond-1-E	0 - 0.5	11/6/2007	NA	NA	NA	NA	NA	NA	NA	NA
Pond-1-W	0 - 0.5	11/6/2007	NA	NA	NA	NA	NA	NA	NA	NA
Pond-2-E	0 - 0.5	11/6/2007	NA	NA	NA	NA	NA	NA	NA	NA
Pond-2-W	0 - 0.5	11/6/2007	NA	NA	NA	NA	NA	NA	NA	NA
Pond-3-E	0 - 0.5	11/6/2007	NA	NA	NA	NA	NA	NA	NA	NA
Pond-3-W	0 - 0.5	11/6/2007	NA	NA	NA	NA	NA	NA	NA	NA
Pond-4-E	0 - 0.5	11/6/2007	NA	NA	NA	NA	NA	NA	NA	NA
Pond-4-W	0 - 0.5	11/6/2007	NA	NA	NA	NA	NA	NA	NA	NA
Pond-5-E	0 - 0.5	11/6/2007	NA	NA	NA	NA	NA	NA	NA	NA
Pond-5-W	0 - 0.5	11/6/2007	NA	NA	NA	NA	NA	NA	NA	NA
SS07-1	0 - 0.5	11/6/2007	NA	NA	NA	NA	NA	NA	NA	NA
SS07-2	0 - 0.5	11/6/2007	NA	NA	NA	NA	NA	NA	NA	NA

Notes:

All concentrations are in mg/kg (milligrams per kilogram).

J - Estimated concentration below the sample quantitation limit.

NA - Not analyzed

U - The compound was analyzed for but not detected.

TABLE 1
GROUND WATER SAMPLING INFORMATION

Monitoring Well ID	Type of Monitoring Well	Water Bearing Zone	Date	Time	Volatile Organic Compound Analysis	Semi-Volatile Organic Compound Analysis	Inorganic Analysis (Including Mercury)	Dioxin/Furan Analysis
MW-35 ⁽¹⁾	Permanent	Aquitard	11/6/2007	830	X	X	X	
MW-17	Permanent	Intermediate	11/6/2007	1002	X	X	X	
MW-31 ⁽²⁾	Permanent	Intermediate	11/6/2007	1125	X	X	X	
MW-32 Shallow	Permanent	Intermediate	11/6/2007	1413	X	X	X	
MW-32 Deep ⁽¹⁾	Permanent	Intermediate	11/6/2007	1259	X	X	X	
MW-05 ⁽²⁾	Permanent	Shallow	11/6/2007	1516	X	X	X	X
MW-03	Permanent	Shallow	11/7/2007	1020	X	X	X	X
MW-06	Permanent	Shallow	11/7/2007	1215	X	X	X	X
MW-08	Permanent	Shallow	11/7/2007	1534	X	X	X	X
MW-28	Permanent	Shallow	11/8/2007	840	X	X	X	X
MW-14	Permanent	Shallow	11/8/2007	1005	X	X	X	X
B-14	Temporary	Shallow	11/8/2007	1105	X	X		

Notes:

- (1) Monitoring wells MW-35 and MW-32 Deep were designated as laboratory quality assurance/ quality control samples.
- (2) Monitoring wells MW-31 and MW-05 were designated as field duplicate samples.

ATTACHMENT A

DATA VALIDATION REPORT SUMMARIES



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 6 Laboratory

Environmental Services Branch
10625 Fallstone Road, Houston, TX 77099
Phone: (281)983-2100 Fax: (281)983-2248

Final Analytical Report

Site Name -----Texarkana Wood Preserving

Sample Collection Date(s)-- 11/06/07- 11/08/07

Contact----- Charles Abshire (6SF-AP)

Report Date----- 12/18/07

Project #----- 08SF039

Work Order(s)-----0711005
0711012
0711013

Analyses included in this report:

ABN CLP Low Level
Metals ESAT Mercury 245.1
Metals ICP-MS 200.8
VOA CLP Routine List

ABN CLP Routine List
Metals ICP 200.7
Solids, Dry Weight

Report Narrative

Sample Management:

Sample 0711005-04 (MW-17) collected 11/6/07 @ 10:02 arrived at the laboratory for analysis but was not listed on the chain of custody.

Sample 0710012-02: Station location Field Blank #1 has no date or time of collection listed on the COC or the sample tags. The sample was logged in using the date of collection of all other samples that arrived with this sample. The time of collection was entered as 00:00.

Sample 0710012-04: Station location MW-05D has no date/time of collection listed on the COC. Sample logged in utilizing date & time of collection on the sample tags.

Samples 0710012-09 (MW-35) and 0710012-10 (Trip Blank #1) arrived at the laboratory for VOA analysis but were not listed on the COC.

Volatile Analysis:

One analyte failed low in BS2. This analyte was not found in the associated samples.

Report Narrative (cont'd)

Semi-volatile Analysis:

Carbazole is qualified as estimated, where reported, due to chromatography problems on the calibration.

Liquid samples -

Sample 0711013-05 had all four phenolic surrogates failing low. The sample was re-extracted outside holding time and the results were the same. Both results are reported. All acid extractable target compounds have been qualified as rejected on both analyses.

The surrogate Nitrobenzene-d5 fails high in sample 0711012-03 because the associated internal standard area is low. 2,4-Dimethylphenol is qualified as high biased because this target uses the same internal standard. All other associated targets are reported from dilutions.

Di-butylphthalate is qualified as blank related in sample 0711013-01 due to the presence of this analyte in the associated preparation blank.

4-Nitrophenol fails high in the BS for the re-extraction. This analyte is qualified as rejected.

Acenaphthene fails recovery and RPD limits in MS1/MSD1. The amount spiked was inadequate to properly calculate recoveries and RPD. No bias was placed on source results. Six other RPDs fail for this matrix spike set. None were found in the source sample above reporting limit.

Solid samples -

Four samples had internal standards outside QC limits: 0711012-12, 0711012-13, 0711012-14 and 0711012-23. The extracts were re-analyzed and results were the same. All associated targets are qualified as estimated. The affected analytes are Benzo(a)pyrene, Benzo(b)fluoranthene, Benzo(k)fluoranthene, Benzo(g,h,i)perylene, bis(2-Ethylhexyl)phthalate, Dibenz(a,h)anthracene, and Indeno(1,2,3-cd)pyrene.

Original sample analyses did not meet requested reporting limit for Naphthalene. The extracts were re-analyzed with a lower calibration curve for Naphthalene. Blanks and all samples with non-detects for Naphthalene were re-analyzed and reporting limits adjusted. Only one additional sample had a reportable hit.

Metals ICP:

Batch B7K2101:

BS1: The lab control results for sodium and potassium are below the reporting level and can not be reliably calculated. Calcium is high in this control; the results are qualified and may be biased high.

BS2/MS2/MS4: The high level of silver in this control is not expected to be recovered by this prep method.

Report Narrative (cont'd)

MS1/MS2/MS3/MS4: Calcium, iron, magnesium, potassium, and sodium concentrations exceed the spike added concentrations by a factor of four or more and can not be reliably calculated.

Batch B7L0301:

BLK1: Copper was found in the prep blank; the results are qualified and may be biased high.

MS1/MS2/MS3/MS4: Aluminum, iron, magnesium, manganese, potassium, zinc, calcium, and sodium concentrations exceed the spike added concentrations by a factor of four or more and can not be reliably calculated.

MS1: The matrix spike recoveries for copper and zinc are low; the results are qualified and may be biased low.

MS3: The matrix spike recovery for manganese is high; the result is qualified and may be biased high.

Metals ICP-MS:

Batch B7L0302:

MS1/MSD1: The matrix spike recovery is low for lead and antimony; the results are qualified and may be biased low.

SRM: Lead is low in the control sample; the results are qualified and may be biased low.

Standard procedures for quality assurance and quality control were followed in the analysis and reporting of the sample results. The results apply only to the samples tested. This final report should only be reproduced in full.

Reporting limits are adjusted for sample size and matrix interference.

Report Approvals:

Richard McMillin
Region 6 Laboratory Manager
006308

David Neleigh
Region 6 Laboratory Branch Chief



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 6 Environmental Services Branch Laboratory

10625 Fallstone Road
Houston, Texas 77099

Sample Receipt and Disposal

Site Name: Texarkana Wood Preserving

Project Number: 08SF039

Data Management Coordinator: Christy Warren

/ /

Data Management Coordinator Signature

Date

Date Transmitted: ____/____/____

Please have the U.S. EPA Project Manager/Officer call the Data Management Coordinator at 3-2137 for any comments or questions.

Please sign and date this form below and return it with any comments to:

Christy Warren
Data Management Coordinator
Region 6 Laboratory
6MD-HS

_____/____/____
Received by and Date

Comments:

The laboratory routinely disposes of samples 90 days after all analyses have been completed. If you have a need to hold these samples in custody longer than 90 days, please sign below.

Signature

Date

Please provide a reason for holding:

ENVIRONMENTAL SERVICES ASSISTANCE TEAM

ESAT Region 6
10625 Fallstone Road
Houston, TX 77099

Alion Science and Technology

MEMORANDUM

DATE: January 3, 2008
TO: Marvelyn Humphrey, ESAT PO, Region 6 EPA
FROM: Wallace Doong, Data Reviewer, ESAT
THRU: Dominic G. Jarecki, ESAT Program Manager, ESAT
SUBJECT: CLP Data Review

Contract No.:	EP-W-06-030
TO No.:	002
Task/Sub-Task:	2-11
ESAT Doc. No.:	7002-211-0113
TDF No.:	6-07-248A
ESAT File No.:	O-0216

Attached is the data review summary for Case # R608D01
SDG # D001
Site Texarkana Wood Preserving

COMMENTS:

I. LEVEL OF DATA REVIEW

Region 6 Standard Review was performed for this package.

II. CONTRACTUAL ASSESSMENT OF THE DATA PACKAGE

No CCS report is available for this data package. The hardcopy review found the data package contractually compliant.

III. TECHNICAL USABILITY ASSESSMENT OF THE DATA PACKAGE

The total number of field sample results reviewed was 200 for this data package. All results are technically acceptable.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 6
HOUSTON BRANCH
10625 FALLSTONE ROAD
HOUSTON, TEXAS 77099
ORGANIC REGIONAL DATA ASSESSMENT

CASE NO.	R608D01	SITE	Texarkana Wood Preserving
LABORATORY	FRONTIER	NO. OF SAMPLES	8
CONTRACT#	EP-08-W-000229	MATRIX	Water
SDG#	D001	REVIEWER (IF NOT ESB)	ESAT
SOW#	DLM02.0	REVIEWER'S NAME	W. Doong
SF#	302DD2C91	COMPLETION DATE	January 3, 2008

SAMPLE NO.	D001	D005			
	D002	D006			
	D003	D007			
	D004	D020			

DATA ASSESSMENT SUMMARY

PCDD/PCDF

1. HOLDING TIMES	<u>0</u>
2. GC/MS TUNE/INSTR. PERFORM.	<u>0</u>
3. CALIBRATIONS	<u>0</u>
4. BLANKS	<u>0</u>
5. LABEL COMP./CLEANUP STD. RECOVERY	<u>0</u>
6. MATRIX SPIKE/LCS	<u>0</u>
7. OTHER QC	<u>0</u>
8. COMPOUND ID/QUANTITATION	<u>0</u>
9. PERFORMANCE/COMPLETENESS	<u>0</u>
10. OVERALL ASSESSMENT	<u>0</u>

O = Data had no problems.

M = Data qualified because of major or minor problems.

Z = Data unacceptable.

NA = Not applicable.

ACTION ITEMS

AREA OF CONCERN:

NOTABLE PERFORMANCE:

**COMMENTS/CLARIFICATIONS
REGION 6 CLP QA REVIEW**

CASE R608D01 **SDG** D001 **SITE** Texarkana Wood Preserving **LAB** FRONTIER

COMMENTS: This SDG, contracted under a task order with Region 6 tracking No. R608D01, consisted of eight water samples for Dioxin/Furan analysis by SOW DLM02.0. The OTR/COC Records designated sample D020 as a rinsate. The laboratory did not perform MS/MSD analyses because the OTR/COC Records did not designate any sample for this purpose. The RSCC personnel verified that sample D005 was the field duplicate of sample D006.

Standard Review was performed for this data package as requested by the TDF. The target compound of concern is 2,3,7,8-TCDD with a user's desired detection limit of 0.00003 µg/L (30 pg/L). The user's desired detection limit was higher than the CRQL, and the laboratory demonstrated the CRQL. The samples met the user's desired detection limit requirement. The 2,3,7,8-TCDD was not detected in any sample.

Because of matrix interference, the laboratory re-extracted and reanalyzed samples D005 and D006 using half of the contract-specified volume. The laboratory demonstrated QL's that were lower than the CRQL's for all analytes through a low point initial calibration standard with a concentration lower than that specified in the SOW. The reviewer reported the actual CRQL's on the DST under the "ADJCRQL" column. Target compounds detected at concentrations above the adjusted CRQL's were OCDD, 1,2,3,4,6,7,8-HpCDD, and/or total HpCDD in samples D002, D003, D004, D005, D006, and D007.

All results are acceptable. The technical usability of the reported results is indicated by ESAT's final data qualifiers in the Data Summary Table (DST). An Evidence Audit was conducted for the Complete Sample Delivery Group File (CSF), and the audit results were reported on the Evidence Inventory Checklist.

NOTE: THE FOLLOWING REVIEW NARRATIVE ADDRESSES BOTH CONTRACTUAL ISSUES (BASED ON THE STATEMENT OF WORK) AND TECHNICAL ISSUES (BASED ON THE NATIONAL FUNCTIONAL GUIDELINES). THE ASSESSMENT MADE FOR EACH QC PARAMETER IS SOLELY BASED ON THE TECHNICAL DATA USABILITY, WHICH MAY NOT NECESSARILY BE AFFECTED BY CONTRACTUAL PROBLEMS. THE ASSESSMENTS ARE DEFINED BELOW.

Acceptable	=	No results were qualified for any problem associated with this QC parameter.
Provisional	=	Some results were qualified because of problems associated with this QC parameter.
Unusable	=	All results are unusable because of major problems associated with this QC parameter.

**ORGANIC QA REVIEW
CONTINUATION PAGE**

CASE R608D01 **SDG** D001 **SITE** Texarkana Wood Preserving **LAB** FRONTIER

1. Holding Times: Acceptable. The samples were extracted and analyzed within the contractual and technical holding time limits.

2. Tuning/Performance: Acceptable. All instrument tune and performance data met QC criteria.

3. Calibrations: Acceptable. The analytes met contractual and technical calibration criteria with some exceptions. The 13C-1,2,3,4,6,7,8-HpCDD failed RRT criteria for all calibration verifications. The reviewer verified that these problems did not affect the sample results.

4. Blanks: Acceptable. The method blanks met contractual requirements. The method blanks and rinsate sample D020 did not contain any target compound.

5. Labeled Compound/Cleanup Standard Recoveries: Acceptable. The labeled compounds and cleanup standards had acceptable recoveries in all analyses.

6. Laboratory Control Samples: Acceptable. The LCS recoveries met QC criteria.

7. Other QC:

Field Duplicates: Acceptable. Field duplicate samples had consistent results.

8. Compound Identity/Quantitation: Acceptable. Target compounds detected at concentrations above the adjusted CRQL's were OCDD, 1,2,3,4,6,7,8-HpCDD, and/or total HpCDD in samples D002, D003, D004, D005, D006, and D007. No compound identification or quantitation problem was detected.

9. Performance/Completeness: Acceptable. The data package was acceptable although it contained several reporting deficiencies. The laboratory was contacted for resolution (see Resubmission Request). The laboratory response is not expected to affect the DST.

10. Overall Assessment: All sample results were acceptable.

ORGANIC ACRONYMS

%D	Percent Difference
%RSD	Percent Relative Standard Deviation
ARO	Aroclors
BFB	4-Bromofluorobenzene
BNA	Base/Neutral and Acid
CADRE	Computer-Aided Data Review and Evaluation
CCS	Contract Compliance Screening
CCV	Continuing Calibration Verification
CF	Calibration Factor
CRQL	Contract Required Quantitation Limit
CSF	Complete SDG File
DCB	Decachlorobiphenyl
DFTPP	Decafluorotriphenylphosphine
DMC	Deuterated Monitoring Compound
DST	Data Summary Table
GC/ECD	Gas Chromatograph/Electron Capture Detector
GC/MS	Gas Chromatograph/Mass Spectrometer
GPC	Gel Permeation Chromatography
IC	Initial Calibration
INDA(B,C)	Individual Standard Mixture A(or B or C)
IS	Internal Standard
LCS	Laboratory Control Sample
LMVOA	Low/Medium Volatile Organic Analysis
MS/MSD	Matrix Spike/Matrix Spike Duplicate
NFG	National Functional Guidelines
OTR/COC	Organic Traffic Report/Chain of Custody
PAH	Polynuclear Aromatic Hydrocarbon
PE	Performance Evaluation
PEM	Performance Evaluation Mixture
PEST	Pesticides
QA	Quality Assurance
QC	Quality Control
QL	Quantitation Limit
RIC	Reconstructed Ion Chromatogram
RPD	Relative Percent Difference
RRF	Relative Response Factor
RRT	Relative Retention Time
RSCC	Regional Sample Control Center
RT	Retention Time
SDG	Sample Delivery Group
SDMC	Semivolatile Deuterated Monitoring Compound
SIM	Selected Ion Monitoring
SMO	Sample Management Office
SOW	Statement of Work
SQL	Sample Quantitation Limit
SVOA	Semivolatile Organic Analysis
TCL	Target Compound List
TCX	Tetrachloro-m-xylene
TIC	Tentatively Identified Compound
TVOA	Trace Volatile Organic Analysis
VDMC	Volatile Deuterated Monitoring Compound
VOA	Volatile Organic Analysis

HEADER DEFINITIONS FOR DIOXIN EXCEL DST

CASE: Case Number

SDG: SDG Number

EPASAMP: EPA Sample Number

LABID: Laboratory File/Sample ID

MATRIX: Sample Matrix

CASNUM: Compound CAS Number

ANALYTE: Compound Name

CONC: Compound Concentration

VALDQAL: Region 6 Organic Data Validation Qualifier (see Organic Data Qualifier Definitions on the next page)

UNITS: Concentration Units

EMPC: Estimated Maximum Possible Concentration

EDL: Estimated Detection Limit

ADJCRQL: Adjusted Contract Required Quantitation Limit Value

Disclaimer: ESAT verified the accuracy of the information reported in the Excel DST only for the following data fields: CASE, SDG, EPASAMP, MATRIX, ANALYTE, CONC, UNITS, VALDQAL, and ADJCRQL. The data qualifiers in the VALDQAL column indicate the technical usability of the reported results.

ORGANIC DATA QUALIFIER DEFINITIONS

The following definitions provide brief explanations of the ESAT-Region 6 qualifiers assigned to results in the Data Summary Table.

- U** Not detected at reported quantitation limit.
- N** Identification is tentative.
- J** Estimated value.
- L** Reported concentration is below the CRQL.
- M** Reported concentration should be used as a raised quantitation limit because of interferences and/or laboratory contamination.
- R** Unusable.
- ^** High biased. Actual concentration may be lower than the concentration reported.
- v** Low biased. Actual concentration may be higher than the concentration reported.
- F+** A false positive exists.
- F-** A false negative exists.
- UJ** Estimated quantitation limit.
- T** Identification is questionable because of absence of other commonly coexisting pesticides.
- C** Identification of pesticide or aroclor has been confirmed by Gas Chromatography/Mass Spectrometer (GC/MS).
- X** Identification of pesticide or aroclor could not be confirmed by GC/MS when attempted.
- *** Result not recommended for use because of associated QA/QC performance inferior to that from other analysis.

INORGANIC/ORGANIC COMPLETE SDG FILE (CSF) INVENTORY CHECKLIST

Case No. R608D01 SDG No. D001 SDG Nos. To Follow _____ Mod. Ref No. _____ Date Rec 12/05/07

EPA Lab ID: <u>FRONTIER</u>	ORIGINALS	YES	NO	N/A
Lab Location: <u>El Dorado, CA</u>	CUSTODY SEALS			
Region: <u>6</u> Audit No.: <u>R608D01/D001</u>	1. Present on package?	X		
Re_Submitted CSF? Yes _____ No <u>X</u>	2. Intact upon receipt?	X		
Box No(s): <u>1</u>	FORM DC-2			
COMMENTS:	3. Numbering scheme accurate?	X		
	4. Are enclosed documents listed?	X		
	5. Are listed documents enclosed?	X		
	FORM DC-1			
	6. Present?	X		
	7. Complete?		X	
	8. Accurate?	X		
	TRAFFIC REPORT /CHAIN-OF-CUSTODY RECORD(s)			
	9. Signed?	X		
	10. Dated?	X		
	AIRBILLS/AIRBILL STICKER			
	11. Present?	X		
	12. Signed?	X		
	13. Dated?	X		
	SAMPLE TAGS			
	14. Does DC-1 list tags as being included?	X		
	15. Present?	X		
	OTHER DOCUMENTS			
	16. Complete?	X		
	17. Legible?	X		
	18. Original?	X		
	18a. If "NO", does the copy indicate where original documents are located?	X		
Over for additional comments.				

Audited by: _____

Wallace Doong / ESAT Data Reviewer

Date 12/21/07

Audited by: _____

Date _____

Signature

Printed Name/Title

DC-2__

In Reference To Case No(s):
R608D01 SDG: D001 (O-0216)

**Contract Laboratory Program
REGIONAL/LABORATORY COMMUNICATION SYSTEM
Resubmission Request**

Laboratory Name:	FRONTIER
Lab Contact:	Bradley B. Silverbush
Region:	6
Regional Contact:	Mahmoud El-Feky - EPA
ESAT Reviewer:	Wallace Doong

In reference to data for the following fraction(s):

CSF Deliverables PCDD/PCDF

Summary of Questions/Issues:

A. CSF Deliverables

The SDG No. was omitted from Form DC-1 (page 439). Please resubmit the Form DC-1 with the SDG information and proper page number at this time.

B. PCDD/PCDF

1. Sample D006: The SICP for OCDF was omitted. Please submit at this time with proper pagination (page 114a).
2. Form III-HR CDD (page 169): The percent recovery was incorrectly reported for 2,3,7,8-TCDF. It should be 94.8% based on a spiked concentration of 10 pg/L. Please correct and resubmit page 169.
3. The reviewer was unable to reproduce the percent recoveries for cleanup standard 37Cl-2,3,7,8-TCDD for all analyses based on the concentrations listed in Table 7 (DLM02.0, Page 4-72). Please provide an example of calculation and a table listing all labeled compound concentrations in standards and samples.
4. The RRT was not reported for 37Cl-2,3,7,8-TCDD for all continuing calibration standards. Please calculate and report the RRT according to Table 2 (page 4-66) for the clean-up standard and resubmit Form 7DB (Form VII-HR CDD-2) for all continuing calibration standards with proper pagination (pages 271, 296, 321, and 344).

Resubmission Request

Continuation Page: 2

Laboratory/Contact: FRONTIER/Bradley B. Silverbush

In Reference to Case No. R608D01 SDG: D001

NOTE: Any laboratory resubmission should be submitted either as an addendum to the original CSF with a revised Form DC-2 or submitted as a new CSF with a new Form DC-2 except for replacement pages (DLM02.0, p. 2-14, sec. 2.6.3). Custody seals are required for all such shipments.

Please respond to the above items **within 7 days** by e-mail to El-Feky.Mahmoud@epamail.epa.gov and by regular mail to:

Mr. Mahmoud El-Feky
U.S. EPA Region 6 Laboratory
10625 Fallstone Road
Houston, TX 77099

If you have any questions, please contact Mr. El-Feky at (281) 983-2128.

Distribution: (1) Lab Copy, (2) Region Copy, and (3) ESAT Copy

ENVIRONMENTAL SERVICES ASSISTANCE TEAM

ESAT Region 6
10625 Fallstone Road
Houston, TX 77099

Alion Science and Technology

MEMORANDUM

DATE: January 3, 2008
TO: Marvelyn Humphrey, ESAT PO, Region 6 EPA
FROM: Wallace Doong, Data Reviewer, ESAT
THRU: Dominic G. Jarecki, ESAT Program Manager, ESAT
SUBJECT: CLP Data Review

Contract No.: EP-W-06-030
TO No.: 002
Task/Sub-Task: 2-11
ESAT Doc. No.: 7002-211-0115
TDF No.: 6-07-247A
ESAT File No.: O-0219

Attached is the data review summary for Case # R608D01
SDG # D008
Site Texarkana Wood Preserving

COMMENTS:

I. LEVEL OF DATA REVIEW

Region 6 Standard Review was performed for this package.

II. CONTRACTUAL ASSESSMENT OF THE DATA PACKAGE

No CCS report is available for this data package. The hardcopy review found the data package contractually compliant.

III. TECHNICAL USABILITY ASSESSMENT OF THE DATA PACKAGE

The total number of field sample results reviewed was 275 for this data package. Some results were qualified because of technical problems, and the significant problems are addressed below.

The total TCDF, total HpCDF, and/or total HxCDF results were qualified for seven samples because of ether coelution interferences.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
 REGION 6
 HOUSTON BRANCH
 10625 FALLSTONE ROAD
 HOUSTON, TEXAS 77099
 ORGANIC REGIONAL DATA ASSESSMENT

CASE NO.	R608D01	SITE	Texarkana Wood Preserving
LABORATORY	FRONTIER	NO. OF SAMPLES	11
CONTRACT#	EP-08-W-000229	MATRIX	Soil
SDG#	D008	REVIEWER (IF NOT ESB)	ESAT
SOW#	DLM02.0	REVIEWER'S NAME	W. Doong
SF#	302DD2C91	COMPLETION DATE	January 3, 2008

SAMPLE NO.	D008	D012	D016		
	D009	D013	D017		
	D010	D014	D018		
	D011	D015			

DATA ASSESSMENT SUMMARY

PCDD/PCDF

1. HOLDING TIMES	<u>O</u>
2. GC/MS TUNE/INSTR. PERFORM.	<u>O</u>
3. CALIBRATIONS	<u>M</u>
4. BLANKS	<u>O</u>
5. LABEL COMP./CLEANUP STD. RECOVERY	<u>O</u>
6. MATRIX SPIKE/LCS	<u>O</u>
7. OTHER QC	<u>O</u>
8. COMPOUND ID/QUANTITATION	<u>M</u>
9. PERFORMANCE/COMPLETENESS	<u>O</u>
10. OVERALL ASSESSMENT	<u>M</u>

O = Data had no problems.
 M = Data qualified because of major or minor problems.
 Z = Data unacceptable.
 NA = Not applicable.

ACTION ITEMS:

AREA OF CONCERN: The OCDD results exceeded the upper instrument calibration limit for six samples. The total TCDF, total HpCDF, and/or total HxCDF results were qualified for seven samples because of ether coelution interferences.

NOTABLE PERFORMANCE:

**COMMENTS/CLARIFICATIONS
REGION 6 CLP QA REVIEW**

CASE R608D01 **SDG** D008 **SITE** Texarkana Wood Preserving **LAB** FRONTIER

COMMENTS: This SDG, contracted under a task order with Region 6 tracking No. R608D01, consisted of 11 soil samples for Dioxin/Furan analysis by SOW DLM02.0. The OTR/COC Records designated samples D009 and D015 as laboratory QC samples. The RSCC personnel verified that sample D013 was the field duplicate of sample D014.

Standard Review was performed for this data package as requested by the TDF. The target compound of concern is 2,3,7,8-TCDD with a user's desired detection limit of 0.0000002 mg/Kg (0.2 ng/Kg). By lowering the concentration in the lowest point of the initial calibration standard, the laboratory achieved QL's that were lower than the CRQL's for all analytes although the demonstrated QL for 2,3,7,8-TCDD was still higher than the user's desired detection limit. The soil sample CRQL's required correction for moisture content and/or dilution. The reviewer reported the laboratory QL's corrected for moisture content and/or dilution on the DST under the "ADJCRQL" column. All samples, with the exception of sample D012, contained 2,3,7,8-TCDD at concentrations above the user desired detection limit. The laboratory reported an EDL equal to the user's desired detection limit for sample D012.

With the exception of 2,3,7,8-TCDD for sample D012, all target compounds were detected at various concentrations in all samples. Samples D008, D009, D010, D011, D013, D014, and D015 were diluted and reanalyzed because of high concentrations of HxCDD's, HpCDD's, HpCDF's, OCDD, and/or OCDF.

Some results were qualified for seven samples because of problems with calibration and compound quantitation. The technical usability of the reported results is indicated by ESAT's final data qualifiers in the Data Summary Table (DST). An Evidence Audit was conducted for the Complete Sample Delivery Group File (CSF), and the audit results were reported on the Evidence Inventory Checklist.

NOTE: THE FOLLOWING REVIEW NARRATIVE ADDRESSES BOTH CONTRACTUAL ISSUES (BASED ON THE STATEMENT OF WORK) AND TECHNICAL ISSUES (BASED ON THE NATIONAL FUNCTIONAL GUIDELINES). THE ASSESSMENT MADE FOR EACH QC PARAMETER IS SOLELY BASED ON THE TECHNICAL DATA USABILITY, WHICH MAY NOT NECESSARILY BE AFFECTED BY CONTRACTUAL PROBLEMS. THE ASSESSMENTS ARE DEFINED BELOW.

Acceptable = No results were qualified for any problem associated with this QC parameter.

Provisional = Some results were qualified because of problems associated with this QC parameter.

Unusable = All results are unusable because of major problems associated with this QC parameter.

**ORGANIC QA REVIEW
CONTINUATION PAGE**

CASE R608D01 **SDG** D008 **SITE** Texarkana Wood Preserving **LAB** FRONTIER

1. Holding Times: Acceptable. The samples were extracted and analyzed within the contractual and technical holding time limits.

2. Tuning/Performance: Acceptable. All instrument tune and performance data met QC criteria.

3. Calibrations: Provisional. The analytes met contractual and technical calibration criteria with some exceptions. The 13C-1,2,3,4,6,7,8-HpCDD failed RRT criteria for all calibration verifications. The reviewer verified that these problems did not affect the sample results.

The OCDD results exceeded the upper instrument calibration limit for samples D008, D009, D010, D011, D013, and D014 and their diluted reanalyses, and further dilution was not required by the contract. The reanalysis results were designated for use but were qualified as estimated because of questionable accuracy.

4. Blanks: Acceptable. The method blanks met contractual requirements and did not contain any target compound.

5. Labeled compound/Cleanup Standard Recoveries: Acceptable. The labeled compounds and cleanup standards had acceptable recoveries in all analyses with some exceptions. The labeled compound recoveries exceeded the QC limits for HpCDD, OCDD, and/or OCDF for samples D008, D010, and D011. The reviewer verified that these high recoveries were due to coeluting interference from the corresponding native compounds at high concentrations. Data qualification was not necessary because the diluted analysis results were recommended for use for the affected analytes.

6. Matrix Spike/Laboratory Control Samples: Acceptable. The LCS recoveries met QC criteria. Although submitted, data for the MS/MSD analyses were not evaluated because of lacking evaluation guidelines in the NFG. Besides, the reported MS/MSD results are unusable because the spiked concentrations were far lower than the native sample concentrations and some of the results were calculated based on inaccurate concentrations that exceeded the upper instrument calibration limits.

7. Other QC:

Field Duplicates: Acceptable. Field duplicate samples had consistent results.

8. Compound Identity/Quantitation: Provisional. All target compounds were detected at various concentrations in all samples, except 2,3,7,8-TCDD for sample D012. Samples D008, D009, D010, D011, D013, D014, and D015 required further dilutions (up to 50X) because of high concentrations of HxCDD's, HpCDD's, HpCDF's, OCDD,

**ORGANIC QA REVIEW
CONTINUATION PAGE**

CASE R608D01 **SDG** D008 **SITE** Texarkana Wood Preserving **LAB** FRONTIER

and/or OCDF. The contract-required second-column analysis was performed for all samples, which confirmed the 2,3,7,8-TCDF identification. Because of better isomer specificity, the second-column analysis result was reported on the DST for 2,3,7,8-TCDF for all samples.

The laboratory "X"-flagged the total TCDF, total HpCDF, and/or total HxCDF results for samples D008, D009, D010, D011, D013, D014, and D015 because of ether coelution interferences. The reviewer qualified the laboratory "X"-flagged results as estimated because of the interferences. The laboratory "Y"-flagged the total TCDF result for sample D016 because one of the non-2,3,7,8-TCDF's failed the ion ratio criteria. The reviewer, therefore, reported the concentration for the non-2,3,7,8-TCDF with outlying ion ratio as EMPC and recalculated and reported the total TCDF result on the DST for sample D016. No other compound identification or quantitation problem was detected.

9. Performance/Completeness: Acceptable. The data package was acceptable although it contained several reporting deficiencies. The laboratory was contacted for resolution (see Resubmission Request). The laboratory response is not expected to affect the DST.

10. Overall Assessment: Data are acceptable for samples D012, D016, D017, and D018. Some results were qualified for samples D008, D009, D010, D011, D013, D014, and D015 because of problems with calibration and compound quantitation.

ORGANIC ACRONYMS

%D	Percent Difference
%RSD	Percent Relative Standard Deviation
ARO	Aroclors
BFB	4-Bromofluorobenzene
BNA	Base/Neutral and Acid
CADRE	Computer-Aided Data Review and Evaluation
CCS	Contract Compliance Screening
CCV	Continuing Calibration Verification
CF	Calibration Factor
CRQL	Contract Required Quantitation Limit
CSF	Complete SDG File
DCB	Decachlorobiphenyl
DFTPP	Decafluorotriphenylphosphine
DMC	Deuterated Monitoring Compound
DST	Data Summary Table
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HEADER DEFINITIONS FOR DIOXIN EXCEL DST

CASE: Case Number

SDG: SDG Number

EPASAMP: EPA Sample Number

LABID: Laboratory File/Sample ID

MATRIX: Sample Matrix

CASNUM: Compound CAS Number

ANALYTE: Compound Name

CONC: Compound Concentration

VALDQAL: Region 6 Organic Data Validation Qualifier (see Organic Data Qualifier Definitions on the next page)

UNITS: Concentration Units

EMPC: Estimated Maximum Possible Concentration

EDL: Estimated Detection Limit

ADJCRQL: Adjusted Contract Required Quantitation Limit Value

Disclaimer: ESAT verified the accuracy of the information reported in the Excel DST only for the following data fields: CASE, SDG, EPASAMP, MATRIX, ANALYTE, CONC, UNITS, VALDQAL, and ADJCRQL. The data qualifiers in the VALDQAL column indicate the technical usability of the reported results.

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- U** Not detected at reported quantitation limit.
- N** Identification is tentative.
- J** Estimated value.
- L** Reported concentration is below the CRQL.
- M** Reported concentration should be used as a raised quantitation limit because of interferences and/or laboratory contamination.
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- X** Identification of pesticide or aroclor could not be confirmed by GC/MS when attempted.
- *** Result not recommended for use because of associated QA/QC performance inferior to that from other analysis.

INORGANIC/ORGANIC COMPLETE SDG FILE (CSF) INVENTORY CHECKLIST

Case No. R608D01 SDG No. D008 SDG Nos. To Follow _____ Mod. Ref No. _____ Date Rec 12/05/07

EPA Lab ID: <u>FRONTIER</u> Lab Location: <u>El Dorado, CA</u> Region: <u>6</u> Audit No.: <u>R608D01/D008</u> Re_Submitted CSF? Yes No <u>X</u> Box No(s): <u>1</u> COMMENTS: <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 10%;">Item</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">6</td> <td>The SDG No. was omitted. The laboratory was contacted for resubmission.</td> </tr> </tbody> </table>	Item	Description	6	The SDG No. was omitted. The laboratory was contacted for resubmission.	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 80%;">ORIGINALS</th> <th style="width: 10%;">YES</th> <th style="width: 10%;">NO</th> <th style="width: 10%;">N/A</th> </tr> </thead> <tbody> <tr> <td colspan="4">CUSTODY SEALS</td> </tr> <tr> <td>1. Present on package?</td> <td style="text-align: center;">X</td> <td></td> <td></td> </tr> <tr> <td>2. Intact upon receipt?</td> <td style="text-align: center;">X</td> <td></td> <td></td> </tr> <tr> <td colspan="4">FORM DC-2</td> </tr> <tr> <td>3. Numbering scheme accurate?</td> <td style="text-align: center;">X</td> <td></td> <td></td> </tr> <tr> <td>4. Are enclosed documents listed?</td> <td style="text-align: center;">X</td> <td></td> <td></td> </tr> <tr> <td>5. Are listed documents enclosed?</td> <td style="text-align: center;">X</td> <td></td> <td></td> </tr> <tr> <td colspan="4">FORM DC-1</td> </tr> <tr> <td>6. Present?</td> <td style="text-align: center;">X</td> <td></td> <td></td> </tr> <tr> <td>7. Complete?</td> <td></td> <td style="text-align: center;">X</td> <td></td> </tr> <tr> <td>8. Accurate?</td> <td style="text-align: center;">X</td> <td></td> <td></td> </tr> <tr> <td colspan="4">TRAFFIC REPORT /CHAIN-OF-CUSTODY RECORD(s)</td> </tr> <tr> <td>9. Signed?</td> <td style="text-align: center;">X</td> <td></td> <td></td> </tr> <tr> <td>10. Dated?</td> <td style="text-align: center;">X</td> <td></td> <td></td> </tr> <tr> <td colspan="4">AIRBILLS/AIRBILL STICKER</td> </tr> <tr> <td>11. Present?</td> <td style="text-align: center;">X</td> <td></td> <td></td> </tr> <tr> <td>12. Signed?</td> <td style="text-align: center;">X</td> <td></td> <td></td> </tr> <tr> <td>13. Dated?</td> <td style="text-align: center;">X</td> <td></td> <td></td> </tr> <tr> <td colspan="4">SAMPLE TAGS</td> </tr> <tr> <td>14. Does DC-1 list tags as being included?</td> <td style="text-align: center;">X</td> <td></td> <td></td> </tr> <tr> <td>15. Present?</td> <td style="text-align: center;">X</td> <td></td> <td></td> </tr> <tr> <td colspan="4">OTHER DOCUMENTS</td> </tr> <tr> <td>16. Complete?</td> <td style="text-align: center;">X</td> <td></td> <td></td> </tr> <tr> <td>17. Legible?</td> <td style="text-align: center;">X</td> <td></td> <td></td> </tr> <tr> <td>18. Original?</td> <td style="text-align: center;">X</td> <td></td> <td></td> </tr> <tr> <td>18a. If "NO", does the copy indicate where original documents are located?</td> <td style="text-align: center;">X</td> <td></td> <td></td> </tr> </tbody> </table>	ORIGINALS	YES	NO	N/A	CUSTODY SEALS				1. Present on package?	X			2. Intact upon receipt?	X			FORM DC-2				3. Numbering scheme accurate?	X			4. Are enclosed documents listed?	X			5. Are listed documents enclosed?	X			FORM DC-1				6. Present?	X			7. Complete?		X		8. Accurate?	X			TRAFFIC REPORT /CHAIN-OF-CUSTODY RECORD(s)				9. Signed?	X			10. Dated?	X			AIRBILLS/AIRBILL STICKER				11. Present?	X			12. Signed?	X			13. Dated?	X			SAMPLE TAGS				14. Does DC-1 list tags as being included?	X			15. Present?	X			OTHER DOCUMENTS				16. Complete?	X			17. Legible?	X			18. Original?	X			18a. If "NO", does the copy indicate where original documents are located?	X		
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18a. If "NO", does the copy indicate where original documents are located?	X																																																																																																																

Over for additional comments.

Audited by: _____
 Audited by: _____

Signature

Wallace Doong / ESAT Data Reviewer

 Printed Name/Title

Date 12/28/07
 Date _____

DC-2__

In Reference To Case No(s):
R608D01 SDG: D008 (O-0219)

**Contract Laboratory Program
REGIONAL/LABORATORY COMMUNICATION SYSTEM
Resubmission Request**

Laboratory Name: FRONTIER
Lab Contact: Bradley B. Silverbush
Region: 6
Regional Contact: Mahmoud El-Feky - EPA
ESAT Reviewer: Wallace Doong

In reference to data for the following fraction(s):

CSF Deliverables PCDD/PCDF

Summary of Questions/Issues:

A. CSF Deliverables

The SDG No. was omitted from Form DC-1 (page 855). Please resubmit the Form DC-1 with the SDG information and proper page number at this time.

B. PCDD/PCDF

1. The reviewer was unable to reproduce the percent recoveries for cleanup standard 37Cl-2,3,7,8-TCDD for all analyses based on the concentrations listed in Table 7 (DLM02.0, Page 4-72). Please provide an example of calculation and a table listing all labeled compound concentrations in standards and samples.
2. The RRT was not reported for 37Cl-2,3,7,8-TCDD for all continuing calibration standards. Please calculate and report the RRT according to Table 2 (page 4-66) for the cleanup standard and resubmit Form 7DB (Form VII-HR CDD-2) for all continuing calibration standards with proper pagination (pages 619, 644, 669, 694, 719, and 744).
3. The reviewer was unable to reproduce the diluted sample results according to the instruction in sec. 10.6.6 (DLM02.0, page 4-53) and laboratory dilution procedure (page 846). Please provide an example of calculation for the diluted sample results and a table listing all added and final labeled compound concentrations in the diluted samples.

Resubmission Request

Continuation Page: 2

Laboratory/Contact: FRONTIER/Bradley B. Silverbush

In Reference to Case No. R608D01 **SDG:** D008

4. Sample D009DL was omitted from the analytical sequence summary, Form 5DFC (Form V-HR CDD-3, page 511). Please resubmit Form 5DFC with sample D009DL and proper page number at this time.

NOTE: Any laboratory resubmission should be submitted either as an addendum to the original CSF with a revised Form DC-2 or submitted as a new CSF with a new Form DC-2 except for replacement pages (DLM02.0, p. 2-14, sec. 2.6.3). Custody seals are required for all such shipments.

Please respond to the above items **within 7 days** by e-mail to El-Feky.Mahmoud@epamail.epa.gov and by regular mail to:

Mr. Mahmoud El-Feky
U.S. EPA Region 6 Laboratory
10625 Fallstone Road
Houston, TX 77099

If you have any questions, please contact Mr. El-Feky at (281) 983-2128.

Distribution: (1) Lab Copy, (2) Region Copy, and (3) ESAT Copy