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US ARMY CORPS
OF ENGINEERS
New England District

Contract No. DACW33-01-D-0004

Delivery Order No. 01

December 2004

Chemistry Data Report

Task RI-12 Oxbow Area Sediment Investigation

**Centredale Manor Restoration
Project Superfund Site
North Providence, Rhode Island**



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December 30, 2004

Ms. Beverly Lawrence
U.S. Army Corps of Engineers
New England District
696 Virginia Rd.
Concord, MA 01742-2751

CONTRACT NO. DACW33-01-D-0004

DELIVERY ORDER: 1

SUBMITTAL OF DELIVERABLE – Task RI-12 Oxbow Area Sediment Investigation, Chemistry Data Report

Dear Ms. Lawrence:

Enclosed please find two double-sided copies of the final, validated chemistry data report for Delivery Order 01, *Centredale Manor Restoration Project Superfund Site*. This report includes analytical results from the chemical testing of surface sediment grab samples (0-0.5 ft) collected from the forested wetland (oxbow area) southwest of the Allendale Dam in June 2004 (Figure 1). This report includes analytical results only; an interpretation of the data will be conducted either as a supplemental remedial investigation (RI) report or with the feasibility study (FS).

Surface sediment samples were tested for dioxin/furans, polychlorinated biphenyls (PCB as Aroclor), chlorinated pesticides, metals and total organic carbon (TOC) parameters (Table 1). The following laboratories performed sample testing.

Analysis Parameters	Laboratory	Third Party Validator
Dioxin/Furans	Pace Analytical Services, Inc., Minneapolis, MN	USEPA Region 1
PCB/Pesticides	Battelle, Duxbury, MA	Environmental Standards
Metals	Battelle, Sequim, WA	
TOC	Applied Marine Sciences, Inc.	Not applicable

Laboratory data generated for this study received internal verification and validation by the Quality Assurance (QA) officers from each participating laboratory. All data, excluding TOC data, were then finalized through third party validation, which was conducted by USEPA Region 1 and Environmental Standards of Valley Forge, PA.

This data report has been reviewed and validated by the Battelle Quality Assurance Unit to verify the accuracy and completeness of the report, and by a senior scientist for technical accuracy. Hardcopies of this data report have been sent directly to the Centredale project team. All data have been loaded into the Centredale database.

METHODS

With few exceptions, chemical analysis of sediment samples was conducted according to the Final Work Plan, *Sediment Sample Collection and Analysis at the Oxbow Area, Centredale Manor Restoration Project Superfund Site* (Battelle, 2004). Exceptions included:

- **Dioxin/Furans**—Sample testing was conducted by Pace Analytical Services, Inc. A standard reference material (SRM) and matrix spike/matrix spike duplicate (MS/MSD) were not analyzed with the samples. Instead, two performance evaluation (PE) samples were analyzed.
- **PCB/Pesticides**—Sediment samples from boring locations LPX-SD-4402 and LPX-SD-4407 contained less than 30% solids. The samples were centrifuged, the overlying water decanted and the moisture content determined again. The moisture content remained above 70% for both of these samples. The freeze-dried counterparts to these samples were obtained from Battelle's metals laboratory and used for PCB/pesticide analysis. Both the wet and freeze-dried samples were extracted and analyzed for PCB/pesticides.

Analytical data compared well between the wet and freeze-dried samples from boring location LPX-SD-4407, and data from the freeze-dried sample is reported. PCB/pesticide data did not compare well, however, for the wet and dry samples from boring LPX-SD-4402. For example, the concentration of Aroclor 1254 in the freeze-dried sample is approximately 20 times higher compared to the Aroclor concentration in the wet sample. A field duplicate was also collected from this location (LPX-SD-4402, Lab ID S3224). PCB/pesticide data for the field duplicate is more comparable to data for the wet sample, than for the freeze-dried sample. This suggests that analytical data from the wet sample should be used. Even so, PCB/Pesticide data from both the wet and freeze-dried samples have been loaded into the Centredale database.

- **Metals**—Sample LPX-SD-4401-0005-01 was analyzed for target metals, although it did not require testing. A stronger digestion procedure, using nitric and hydrofluoric acids and hydrogen peroxide, was used, which may result in higher metals concentrations compared to the partial digestion procedure (e.g., nitric acid and/or nitric acid/hydrogen peroxide) used historically for Centredale samples.

Pertinent information from the project planning documents (QAPP Addendum, Battelle 2002a; Final Work Plan, Battelle, 2004) should be reviewed to facilitate the inspection of the data. The information includes the target analytes and target detection limits¹, analytical measurement performance criteria (MPC)², data qualifiers³, validator qualifiers⁴ and abbreviations and definitions⁵. Chemistry results were evaluated against the MPCs and data qualifiers were applied when the analytical MPCs were exceeded.

1 QAPP Addendum, worksheet # 9b (pages 51-52, 55-56 and 59 of 218). HCX not required.

2 QAPP Addendum, worksheets #24a (pages 123-124, 127-128 and 131 of 218) and #24b (pages 134, 136-137 and 140 of 218).

3 QAPP Addendum, worksheet # 9a (page 49 of 218)

4 Section 5 of this report

5 QAPP Addendum (pages 4 and 5)

RESULTS

This report is organized in five sections, as follows:

Section 1—Dioxin/Furan Results

Section 2—PCB/Pesticide Results

Section 3—Metals Results

Section 4—Total Organic Carbon Content Results

Section 5—Third Party Validation Reports

Each section of one through four of this document is organized as follows:

1. A QA/QC narrative, which includes a discussion of the QC results and a description of MPC exceedances and the impact, if any, the exceedances may have on the overall field sample data.
2. Summary report tables for all authentic samples presented on a dry weight concentration basis. Report tables follow electronic data deliverable (EDD) reporting format requirements.
3. Summary report tables for all QC samples presented on a concentration (blanks and laboratory duplicates), recovery (LCS, MS, MSD) and/or percent difference (SRM) basis. Report tables follow EDD reporting format requirements.

VALIDATION SUMMARY

All sample data received third party validation, except TOC data. The samples for dioxin/furan analyses were validated by USEPA Region 1 at a Tier III level using first the criteria in the Centredale Manor Tasks 19-22 QAPP (Battelle 2001) that included the QAPP Addendum (Battelle 2002a) and the QAPP Errata Sheet (Battelle 2002b), and also included the criteria in EPA Method 1613B, September 15, 1997, defaulting next to *Region I, EPA-NE Data Validation Functional Guidelines for Evaluating Environmental Analyses*, December 1996 criteria, and to EPA Region I's Environmental Services Assistance Team Dioxin Data Validation SOP ESAT-01-0007 (01/08/2003).

PCB/Pesticide and metals test results were validated by Environmental Standards of Valley Forge, PA at a Tier II level in accordance with the *Region I, EPA New England Data Validation Functional Guidelines for Evaluating Environmental Analyses* (US EPA, 12/1996), the *Centredale Manor Restoration Project Site Final Quality Assurance Project Plan (QAPP) – Addendum to Tasks 19-22 QAPP* (Battelle, 2002a), and the *Errata to Centredale Manor Tasks 19-22 Quality Assurance Project Plan – Addendum* (Battelle, 2002b).

In general, the validator fields in the final, validated EDDs (e.g., FINAL_RESULT) are only populated for study samples, not internal laboratory QC samples (e.g., blank, LCS, or duplicate). Updating the validator fields for internal laboratory QC samples is not a required element of third party validation.

Correctable deficiencies have been addressed. Specific details of the validation findings are presented in Section 5.

REFERENCES

Battelle, 2001. Tasks 19-22 Quality Assurance Project Plan for Centredale Manor Restoration Project Superfund Site Baseline Risk Assessment, Initial Project Planning and Support. Prepared under contract for U.S. Army Corps of Engineers North Atlantic Division, New England. Contract No. DACW33-96-D-0005, Delivery Order No. 59. May 23, 2001. 509 pp + apps.

Battelle, 2002a. Tasks 19-22 Quality Assurance Project Plan for Centredale Manor Restoration Project Superfund Site Baseline Risk Assessment, Initial Project Planning and Support – Addendum. Prepared under contract for U.S. Army Corps of Engineers North Atlantic Division, New England. Contract No. DACW33-01-D-0004, Delivery Order No. 01. September 27, 2002. 218 pp + apps

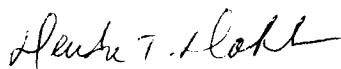
Battelle, 2002b. Errata to Tasks 19-22 Quality Assurance Project Plan for Centredale Manor Restoration Project Superfund Site Baseline Risk Assessment, Initial Project Planning and Support – Addendum. Prepared under contract for U.S. Army Corps of Engineers North Atlantic Division, New England. Contract No. DACW33-01-D-0004, Delivery Order No. 01. November 6, 2002. 6 pp.

Battelle, 2004. Final Work Plan, Sediment Sample Collection and Analysis at the Oxbow Area, Centredale Manor Restoration Project Superfund Site. Prepared under contract for U.S. Army Corps of Engineers North Atlantic Division, New England. Contract No. DACW33-01-D-0004, Delivery Order No. 01. June 17, 2004. 4 pp.

USEPA, 1996. Region I, EPA-New England Data Validation Functional Guidelines for Evaluating Environmental Analyses, U.S. EPA-New England, Region I Quality Assurance Unit Staff, Office of Environmental Measurement and Evaluation, December 1996 Revision.

Please do not hesitate to call me at (781) 952-5253 if you would like to discuss these data or if I can provide any further assistance.

Sincerely,



Deirdre Dahlen
Project Manager



Lisa Lefkovitz
Program Manager

encl.

cc: A. Krasko, USEPA (3 copies) M. Corcoran, USACE/ERDC
 A. Beliveau, USEPA L. Maccarone, RIDEM
 C. Rosiu, USEPA S. Stodola, USEPA
 C. Vu, USEPA

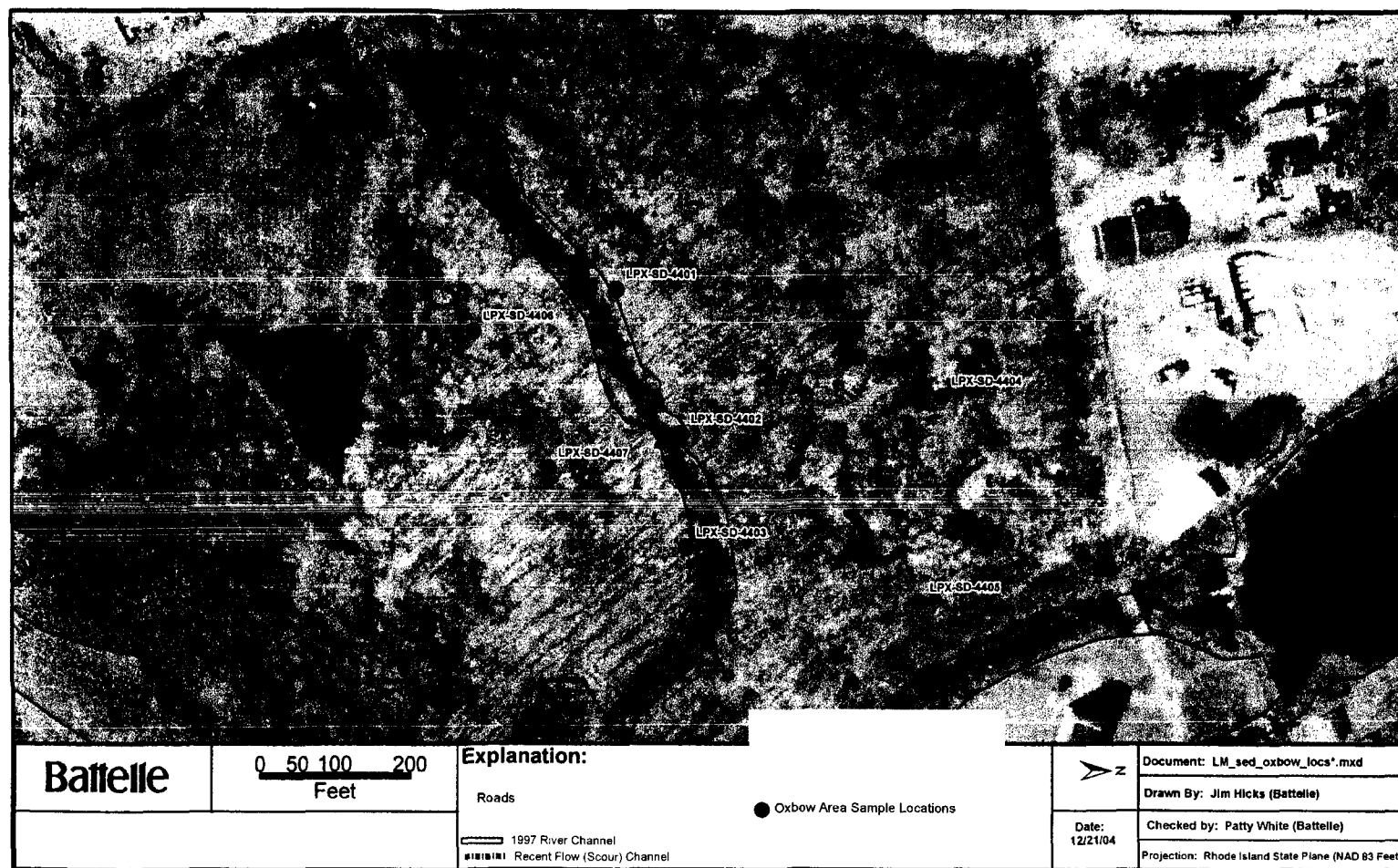


Figure 1. Oxbow Area Surface Sediment Sample Locations

(Samples from boring locations LPX-SD-4401, LPX-SD-4402 and LPX-SD-4403 do not appear to be within the channel, however, sediment samples from these locations were collected by wading into the channel as far as possible (waist deep). Sample location coordinates are accurate to 4-6m, although the presence of heavy vegetation may have impacted the accuracy of coordinate readings.)

Table 1. Surface Sediment (0-0.5 ft) Samples Collected from the Oxbow Area in June 2004.

Boring	Collection Date	Laboratory Sample ID			
		Dioxin/Furan	PCB/Pesticide	Metals	TOC
LPX-SD-4401	21-June-04	105821169	— (a)	2230*5 (b)	—
LPX-SD-4402	21-June-04	105821201	S3223-P and S3697-P (c)	2230*4	19782
LPX-SD-4403	21-June-04	105821177	—	—	—
LPX-SD-4404	21-June-04	105821151	S3220-P	2230*1	19780
LPX-SD-4405	21-June-04	105821219	—	—	—
LPX-SD-4406	21-June-04	105821185	—	—	—
LPX-SD-4407	21-June-04	105821193	S3698-P (d)	2230*3	19781
Field QC Samples					
LPX-DU-062104A (e)	21-June-04	—	—	2230*2	—
LPX-DU-062104B (f)	21-June-04	105821227	S3224-P	—	19783
PC00562	(g)	105821243	—	—	—
PC01090	(g)	105821235	—	—	—

- (a) Testing not required.
- (b) Sample not required for metals testing; however was analyzed because the field duplicate tested for metals was collected from this same boring location.
- (c) Sample contained <30% solids; the sample was extracted twice, first using the wet, low-solids content sediment material and again using freeze-dried material from the same boring location. Sample data for the wet and freeze-dried material extracts did not compare well, and data for both samples are reported.
- (d) Sample contained <30% solids; the sample was extracted twice, first using the wet, low-solids content sediment material and again using freeze-dried material from the same boring location. Sample data for the wet and freeze-dried material extracts compared well, and data for the freeze-dried sample is reported.
- (e) Field duplicate from boring location LPX-SD-4401.
- (f) Field duplicate from boring location LPX-SD-4402.
- (g) Performance evaluation (PE) samples, obtained from USEPA Region I, were analyzed for dioxin/furans. Commercially available Standard Reference Materials were analyzed for all other testing parameters.

Section 1

Dioxin/Furan Results

QA/QC Narrative
Sediment and QC Results

QA/QC Narrative

REPORT OF: CHEMICAL ANALYSES

PROJECT: PCDD/PCDF ANALYSES

DATE: August 12, 2004

ISSUED TO: USEPA Region 1
Attn: Christine Clark
11 Technology Drive
North Chelmsford, MA 01863

REPORT NO: 04-1091578

INTRODUCTION

This report presents the results from the analyses performed on ten samples submitted by a representative of USEPA Region 3. The samples were analyzed for the presence or absence of polychlorinated dibenzo-p-dioxins (PCDDs) and dibenzofurans (PCDFs) using a modified version of USEPA Method 1613B/DLM01.4.

SAMPLE IDENTIFICATION

<u>Client ID</u>	<u>Sample Type</u>	<u>Date Received</u>	<u>Pace ID</u>
D00001	Soil	07/08/04	105821151
D00002	Soil	07/08/04	105821169
D00003	Soil	07/08/04	105821177
D00004	Soil	07/08/04	105821185
D00005	Soil	07/08/04	105821193
D00006	Soil	07/08/04	105821201
D00007	Soil	07/08/04	105821219
D00008	Soil	07/08/04	105821227
D00009 PC01090	Soil	07/08/04	105821235
D00010 PC00562	Soil	07/08/04	105821243

DISCUSSION

The analyses were performed according to the procedures specified in Method 1613B and SOW DLM01.4. The cooler temperature was determined using the infrared measurement technique. The chromatographic column was a J&W DB5-MS 60 meter 0.25 mm ID 0.25 um phase thickness. Auto integration was used where accurate; manual integration was performed where auto integration was judged to be inaccurate.

It should be noted that the FedEx airbill associated with these samples was inadvertently discarded after receipt. Therefore, the airbill is not available for inclusion in this report.

REPORT OF LABORATORY ANALYSIS

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000002

REPORT OF: CHEMICAL ANALYSES

PROJECT: PCDD/PCDF ANALYSES

DATE: August 12, 2004

PAGE: 2

REPORT NO: 04-1091578

DISCUSSION (Cont.)

The native PeCDD determinations used alternate ions to those specified in the method. The method specified m/z 356 (M+2) and m/z 358 (M+4). Our analyses were performed using the molecular ion (m/z 354) and m/z 356 in order to better exclude contributions from potential interferences.

The recoveries of the isotopically-labeled PCDD/PCDF internal standards in the sample extracts ranged from 19-120%. With the exception of the cleanup standard value in sample D00007, which was artificially elevated due to interferences in the sample extract, the labeled standard recoveries obtained for this project were within the Method 1613B target ranges. Also, since the quantification of the native 2,3,7,8-substituted congeners was based on isotope dilution, the data were automatically corrected for variation in recovery and accurate values were obtained.

A laboratory method blank was prepared and analyzed with the sample batch as part of our routine quality control procedures. The results show the blank to contain trace levels of selected congeners. These were all below the calibration range of the method. The values reported for the affected congeners in the field samples were flagged "B" and may be, at least partially, attributed to the background. It should be noted that levels less than ten times the background are not generally considered to be statistically different from the background.

Laboratory spike samples were also prepared with the sample batch using clean sand that had been fortified with native standard materials. Recoveries of the native compounds in the spiked samples ranged from 85-101%, with relative percent differences of 0.0-11.5%. These results indicate high degrees of accuracy and precision for these determinations.

Sample tags were not received with the samples for this project. Also, the samples were received outside the recommended 10-day hold time. Selected concentration values reported for the samples exceeded the calibration range of the method, however, re-analyses at dilutions to bring the values into the calibration range were not performed. Sample D00001 was analyzed at a 1:10 dilution due to the presence of interfering substances which impacted the chromatography when the full-strength analysis of the extract was attempted. Confirmation analyses of the 2,3,7,8-TCDF results were performed. These confirmation analyses verified the values obtained in the initial analyses, however, confirmation data were not included in this report.

REPORT OF LABORATORY ANALYSIS

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000003

REPORT OF: CHEMICAL ANALYSES

PROJECT: PCDD/PCDF ANALYSES

DATE: August 12, 2004

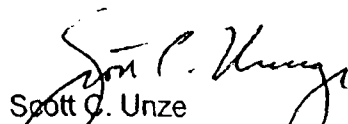
PAGE: 3

REPORT NO: 04-1091578

REMARKS

The sample extracts will be retained for a period of 30 days from the date of this report and then discarded unless other arrangements are made. The raw mass spectral data will be archived for a period of not less than one year. Questions regarding the data contained in this report may be directed to the author at the number provided below.

Pace Analytical Services, Inc.



Scott C. Unze
Project Manager, HRMS
(612) 607-6383

VERBATIM STATEMENT

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or his/her designee, as verified by the following signature.

Derrick Friedrich
Laboratory Manager
612/607-6354

REPORT OF LABORATORY ANALYSIS

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000004

Sediment and QC Results

NSAMPLE	CLASS	PARAMETER	EPASAMNO	CASNO	LAB_RESULT	QUAL	UNITS	CASE	SDG	LABORATORY	LAB_ID	REC_DATE	EXTR_DATE
DFBLK96	DIOX	2378-TCDD	DFBLK96	1746-01-6		U	PG/G_DRYWT	DF003	D00001	PACE	DFBLK96	27-Jul-04	27-Jul-04
DFBLK96	DIOX	2378-TCDF	DFBLK96	51207-31-9		U	PG/G_DRYWT	DF003	D00001	PACE	DFBLK96	27-Jul-04	27-Jul-04
DFBLK96	DIOX	12378-PeCDF	DFBLK96	57117-41-6		U	PG/G_DRYWT	DF003	D00001	PACE	DFBLK96	27-Jul-04	27-Jul-04
DFBLK96	DIOX	12378-PeCDD	DFBLK96	40321-76-4		U	PG/G_DRYWT	DF003	D00001	PACE	DFBLK96	27-Jul-04	27-Jul-04
DFBLK96	DIOX	23478-PeCDF	DFBLK96	57117-31-4		U	PG/G_DRYWT	DF003	D00001	PACE	DFBLK96	27-Jul-04	27-Jul-04
DFBLK96	DIOX	123478-HxCDF	DFBLK96	70648-26-9		U	PG/G_DRYWT	DF003	D00001	PACE	DFBLK96	27-Jul-04	27-Jul-04
DFBLK96	DIOX	123678-HxCDF	DFBLK96	57117-44-9		U	PG/G_DRYWT	DF003	D00001	PACE	DFBLK96	27-Jul-04	27-Jul-04
DFBLK96	DIOX	123478-HxCDD	DFBLK96	39227-28-6		U	PG/G_DRYWT	DF003	D00001	PACE	DFBLK96	27-Jul-04	27-Jul-04
DFBLK96	DIOX	123678-HxCDD	DFBLK96	57663-85-7		U	PG/G_DRYWT	DF003	D00001	PACE	DFBLK96	27-Jul-04	27-Jul-04
DFBLK96	DIOX	123789-HxCDD	DFBLK96	19408-74-3		U	PG/G_DRYWT	DF003	D00001	PACE	DFBLK96	27-Jul-04	27-Jul-04
DFBLK96	DIOX	234678-HxCDF	DFBLK96	60851-34-5		U	PG/G_DRYWT	DF003	D00001	PACE	DFBLK96	27-Jul-04	27-Jul-04
DFBLK96	DIOX	123789-HxCDF	DFBLK96	72918-21-9		U	PG/G_DRYWT	DF003	D00001	PACE	DFBLK96	27-Jul-04	27-Jul-04
DFBLK96	DIOX	1234678-HpCDF	DFBLK96	67562-39-4		U	PG/G_DRYWT	DF003	D00001	PACE	DFBLK96	27-Jul-04	27-Jul-04
DFBLK96	DIOX	1234678-HpCDD	DFBLK96	35822-46-9	0.4	J	PG/G_DRYWT	DF003	D00001	PACE	DFBLK96	27-Jul-04	27-Jul-04
DFBLK96	DIOX	1234789-HpCDF	DFBLK96	55673-89-7		U	PG/G_DRYWT	DF003	D00001	PACE	DFBLK96	27-Jul-04	27-Jul-04
DFBLK96	DIOX	OCDD	DFBLK96	3268-87-9	2.86	J	PG/G_DRYWT	DF003	D00001	PACE	DFBLK96	27-Jul-04	27-Jul-04
DFBLK96	DIOX	OCDF	DFBLK96	39001-02-0		U	PG/G_DRYWT	DF003	D00001	PACE	DFBLK96	27-Jul-04	27-Jul-04
DFBLK96	DIOX	13C-2378-TCDD	DFBLK96	76523-40-5	107		PCT_REC	DF003	D00001	PACE	DFBLK96	27-Jul-04	27-Jul-04
DFBLK96	DIOX	13C-12378-PeCDD	DFBLK96	109719-79-1	120		PCT_REC	DF003	D00001	PACE	DFBLK96	27-Jul-04	27-Jul-04
DFBLK96	DIOX	13C-123478-HxCDD	DFBLK96	109719-80-4	108		PCT_REC	DF003	D00001	PACE	DFBLK96	27-Jul-04	27-Jul-04
DFBLK96	DIOX	13C-123678-HxCDD	DFBLK96	109719-81-5	87		PCT_REC	DF003	D00001	PACE	DFBLK96	27-Jul-04	27-Jul-04
DFBLK96	DIOX	13C-1234678-HpCDD	DFBLK96	109719-83-7	103		PCT_REC	DF003	D00001	PACE	DFBLK96	27-Jul-04	27-Jul-04
DFBLK96	DIOX	13C-OCDD	DFBLK96	114423-97-1	80		PCT_REC	DF003	D00001	PACE	DFBLK96	27-Jul-04	27-Jul-04
DFBLK96	DIOX	13C-2378-TCDF	DFBLK96	89059-46-1	88		PCT_REC	DF003	D00001	PACE	DFBLK96	27-Jul-04	27-Jul-04
DFBLK96	DIOX	13C-12378-PeCDF	DFBLK96	109719-77-9	104		PCT_REC	DF003	D00001	PACE	DFBLK96	27-Jul-04	27-Jul-04
DFBLK96	DIOX	13C-23478-PeCDF	DFBLK96	116843-02-8	105		PCT_REC	DF003	D00001	PACE	DFBLK96	27-Jul-04	27-Jul-04
DFBLK96	DIOX	13C-123478-HxCDF	DFBLK96	114423-98-2	80		PCT_REC	DF003	D00001	PACE	DFBLK96	27-Jul-04	27-Jul-04
DFBLK96	DIOX	13C-123678-HxCDF	DFBLK96	116843-03-9	74		PCT_REC	DF003	D00001	PACE	DFBLK96	27-Jul-04	27-Jul-04
DFBLK96	DIOX	13C-123789-HxCDF	DFBLK96	116843-04-0	84		PCT_REC	DF003	D00001	PACE	DFBLK96	27-Jul-04	27-Jul-04
DFBLK96	DIOX	13C-234678-HxCDF	DFBLK96	116843-05-1	88		PCT_REC	DF003	D00001	PACE	DFBLK96	27-Jul-04	27-Jul-04
DFBLK96	DIOX	13C-1234678-HpCDF	DFBLK96	109719-84-8	97		PCT_REC	DF003	D00001	PACE	DFBLK96	27-Jul-04	27-Jul-04
DFBLK96	DIOX	13C-1234789-HpCDF	DFBLK96	109719-94-0	83		PCT_REC	DF003	D00001	PACE	DFBLK96	27-Jul-04	27-Jul-04
DFBLK96	DIOX	37Cl-2378-TCDD	DFBLK96	85508-50-5	96		PCT_REC	DF003	D00001	PACE	DFBLK96	27-Jul-04	27-Jul-04

NSAMPLE	ANAL_DATE	METHOD	MDL	IDL	CRDL_CRQL	DIL_FACTOR	PCT_MOIST	COMMENTS	DVTIER	LAB_QC_TYPE	FINAL_RESULT	FINAL_QUAL	VALID_COMMENT
DFBLK96	31-Jul-04	MOD 1613B	0.187	0.187		1	0			3 MB			
DFBLK96	31-Jul-04	MOD 1613B	0.133	0.133		1	0			3 MB			
DFBLK96	31-Jul-04	MOD 1613B	0.0935	0.0935		1	0			3 MB			
DFBLK96	31-Jul-04	MOD 1613B	0.138	0.138		1	0			3 MB			
DFBLK96	31-Jul-04	MOD 1613B	0.0753	0.0753		1	0			3 MB			
DFBLK96	31-Jul-04	MOD 1613B	0.0834	0.0834		1	0			3 MB			
DFBLK96	31-Jul-04	MOD 1613B	0.0697	0.0697		1	0			3 MB			
DFBLK96	31-Jul-04	MOD 1613B	0.11	0.11		1	0			3 MB			
DFBLK96	31-Jul-04	MOD 1613B	0.0919	0.0919		1	0			3 MB			
DFBLK96	31-Jul-04	MOD 1613B	0.0927	0.0927		1	0			3 MB			
DFBLK96	31-Jul-04	MOD 1613B	0.0636	0.0636		1	0			3 MB			
DFBLK96	31-Jul-04	MOD 1613B	0.0994	0.0994		1	0			3 MB			
DFBLK96	31-Jul-04	MOD 1613B	0.154	0.154		1	0			3 MB			
DFBLK96	31-Jul-04	MOD 1613B	0.113	0.113		1	0			3 MB			
DFBLK96	31-Jul-04	MOD 1613B	0.126	0.126		1	0			3 MB			
DFBLK96	31-Jul-04	MOD 1613B	0.247	0.247		1	0			3 MB			
DFBLK96	31-Jul-04	MOD 1613B	0.113	0.113		1	0			3 MB			
DFBLK96	31-Jul-04	MOD 1613B				1	0			3 MB			
DFBLK96	31-Jul-04	MOD 1613B				1	0			3 MB			
DFBLK96	31-Jul-04	MOD 1613B				1	0			3 MB			
DFBLK96	31-Jul-04	MOD 1613B				1	0			3 MB			
DFBLK96	31-Jul-04	MOD 1613B				1	0			3 MB			
DFBLK96	31-Jul-04	MOD 1613B				1	0			3 MB			
DFBLK96	31-Jul-04	MOD 1613B				1	0			3 MB			
DFBLK96	31-Jul-04	MOD 1613B				1	0			3 MB			
DFBLK96	31-Jul-04	MOD 1613B				1	0			3 MB			
DFBLK96	31-Jul-04	MOD 1613B				1	0			3 MB			
DFBLK96	31-Jul-04	MOD 1613B				1	0			3 MB			
DFBLK96	31-Jul-04	MOD 1613B				1	0			3 MB			
DFBLK96	31-Jul-04	MOD 1613B				1	0			3 MB			
DFBLK96	31-Jul-04	MOD 1613B				1	0			3 MB			
DFBLK96	31-Jul-04	MOD 1613B				1	0			3 MB			
DFBLK96	31-Jul-04	MOD 1613B				1	0			3 MB			
DFBLK96	31-Jul-04	MOD 1613B				1	0			3 MB			
DFBLK96	31-Jul-04	MOD 1613B				1	0			3 MB			
DFBLK96	31-Jul-04	MOD 1613B				1	0			3 MB			
DFBLK96	31-Jul-04	MOD 1613B				1	0			3 MB			

NSAMPLE	CLASS	PARAMETER	EPASAMNO	CASNO	LAB_RESULT	QUAL	UNITS	CASE	SDG	LABORATORY	LAB_ID	REC_DATE	EXTR_DATE
DFBLK96-2	DIOX	2378-TCDD	DFBLK96-2	1746-01-6	U		PG/G_DRYWT	DF003	D00001	PACE	DFBLK96-2	27-Jul-04	27-Jul-04
DFBLK96-2	DIOX	2378-TCDF	DFBLK96-2	51207-31-9	U		PG/G_DRYWT	DF003	D00001	PACE	DFBLK96-2	27-Jul-04	27-Jul-04
DFBLK96-2	DIOX	12378-PeCDF	DFBLK96-2	57117-41-6	U		PG/G_DRYWT	DF003	D00001	PACE	DFBLK96-2	27-Jul-04	27-Jul-04
DFBLK96-2	DIOX	12378-PeCDD	DFBLK96-2	40321-76-4	U		PG/G_DRYWT	DF003	D00001	PACE	DFBLK96-2	27-Jul-04	27-Jul-04
DFBLK96-2	DIOX	23478-PeCDF	DFBLK96-2	57117-31-4	U		PG/G_DRYWT	DF003	D00001	PACE	DFBLK96-2	27-Jul-04	27-Jul-04
DFBLK96-2	DIOX	123478-HxCDF	DFBLK96-2	70648-26-9	U		PG/G_DRYWT	DF003	D00001	PACE	DFBLK96-2	27-Jul-04	27-Jul-04
DFBLK96-2	DIOX	123678-HxCDF	DFBLK96-2	57117-44-9	U		PG/G_DRYWT	DF003	D00001	PACE	DFBLK96-2	27-Jul-04	27-Jul-04
DFBLK96-2	DIOX	123478-HxCDD	DFBLK96-2	39227-28-6	U		PG/G_DRYWT	DF003	D00001	PACE	DFBLK96-2	27-Jul-04	27-Jul-04
DFBLK96-2	DIOX	123678-HxCDD	DFBLK96-2	57663-85-7	U		PG/G_DRYWT	DF003	D00001	PACE	DFBLK96-2	27-Jul-04	27-Jul-04
DFBLK96-2	DIOX	123789-HxCDD	DFBLK96-2	19408-74-3	U		PG/G_DRYWT	DF003	D00001	PACE	DFBLK96-2	27-Jul-04	27-Jul-04
DFBLK96-2	DIOX	234678-HxCDF	DFBLK96-2	60851-34-5	U		PG/G_DRYWT	DF003	D00001	PACE	DFBLK96-2	27-Jul-04	27-Jul-04
DFBLK96-2	DIOX	123789-HxCDF	DFBLK96-2	72918-21-9	U		PG/G_DRYWT	DF003	D00001	PACE	DFBLK96-2	27-Jul-04	27-Jul-04
DFBLK96-2	DIOX	1234678-HpCDF	DFBLK96-2	67562-39-4	U		PG/G_DRYWT	DF003	D00001	PACE	DFBLK96-2	27-Jul-04	27-Jul-04
DFBLK96-2	DIOX	1234678-HpCDD	DFBLK96-2	35822-46-9	U		PG/G_DRYWT	DF003	D00001	PACE	DFBLK96-2	27-Jul-04	27-Jul-04
DFBLK96-2	DIOX	1234789-HpCDF	DFBLK96-2	55673-89-7	U		PG/G_DRYWT	DF003	D00001	PACE	DFBLK96-2	27-Jul-04	27-Jul-04
DFBLK96-2	DIOX	OCDD	DFBLK96-2	3268-87-9	3.3	J	PG/G_DRYWT	DF003	D00001	PACE	DFBLK96-2	27-Jul-04	27-Jul-04
DFBLK96-2	DIOX	OCDF	DFBLK96-2	39001-02-0	U		PG/G_DRYWT	DF003	D00001	PACE	DFBLK96-2	27-Jul-04	27-Jul-04
DFBLK96-2	DIOX	13C-2378-TCDD	DFBLK96-2	76523-40-5	105		PCT_REC	DF003	D00001	PACE	DFBLK96-2	27-Jul-04	27-Jul-04
DFBLK96-2	DIOX	13C-12378-PeCDD	DFBLK96-2	109719-79-1	120		PCT_REC	DF003	D00001	PACE	DFBLK96-2	27-Jul-04	27-Jul-04
DFBLK96-2	DIOX	13C-123478-HxCDD	DFBLK96-2	109719-80-4	97		PCT_REC	DF003	D00001	PACE	DFBLK96-2	27-Jul-04	27-Jul-04
DFBLK96-2	DIOX	13C-123678-HxCDD	DFBLK96-2	109719-81-5	94		PCT_REC	DF003	D00001	PACE	DFBLK96-2	27-Jul-04	27-Jul-04
DFBLK96-2	DIOX	13C-1234678-HpCDD	DFBLK96-2	109719-83-7	76		PCT_REC	DF003	D00001	PACE	DFBLK96-2	27-Jul-04	27-Jul-04
DFBLK96-2	DIOX	13C-OCDD	DFBLK96-2	114423-97-1	69		PCT_REC	DF003	D00001	PACE	DFBLK96-2	27-Jul-04	27-Jul-04
DFBLK96-2	DIOX	13C-2378-TCDF	DFBLK96-2	89059-46-1	104		PCT_REC	DF003	D00001	PACE	DFBLK96-2	27-Jul-04	27-Jul-04
DFBLK96-2	DIOX	13C-12378-PeCDF	DFBLK96-2	109719-77-9	128		PCT_REC	DF003	D00001	PACE	DFBLK96-2	27-Jul-04	27-Jul-04
DFBLK96-2	DIOX	13C-23478-PeCDF	DFBLK96-2	116843-02-8	125		PCT_REC	DF003	D00001	PACE	DFBLK96-2	27-Jul-04	27-Jul-04
DFBLK96-2	DIOX	13C-123478-HxCDF	DFBLK96-2	114423-98-2	102		PCT_REC	DF003	D00001	PACE	DFBLK96-2	27-Jul-04	27-Jul-04
DFBLK96-2	DIOX	13C-123678-HxCDF	DFBLK96-2	116843-03-9	92		PCT_REC	DF003	D00001	PACE	DFBLK96-2	27-Jul-04	27-Jul-04
DFBLK96-2	DIOX	13C-123789-HxCDF	DFBLK96-2	116843-04-0	99		PCT_REC	DF003	D00001	PACE	DFBLK96-2	27-Jul-04	27-Jul-04
DFBLK96-2	DIOX	13C-234678-HxCDF	DFBLK96-2	116843-05-1	86		PCT_REC	DF003	D00001	PACE	DFBLK96-2	27-Jul-04	27-Jul-04
DFBLK96-2	DIOX	13C-1234678-HpCDF	DFBLK96-2	109719-84-8	86		PCT_REC	DF003	D00001	PACE	DFBLK96-2	27-Jul-04	27-Jul-04
DFBLK96-2	DIOX	13C-1234789-HpCDF	DFBLK96-2	109719-94-0	71		PCT_REC	DF003	D00001	PACE	DFBLK96-2	27-Jul-04	27-Jul-04
DFBLK96-2	DIOX	37Cl-2378-TCDD	DFBLK96-2	85508-50-5	104		PCT_REC	DF003	D00001	PACE	DFBLK96-2	27-Jul-04	27-Jul-04

NSAMPLE	ANAL_DATE	METHOD	MDL	IDL	CRDL_CRQL	DIL_FACTOR	PCT_MOIST	COMMENTS	DVTIER	LAB_QC_TYPE	FINAL_RESULT	FINAL_QUAL	VALID_COMMENT
DFBLK96-2	31-Jul-04	MOD 1613B	0.118	0.118		1	0			3 MB			
DFBLK96-2	31-Jul-04	MOD 1613B	0.0842	0.0842		1	0			3 MB			
DFBLK96-2	31-Jul-04	MOD 1613B	0.0518	0.0518		1	0			3 MB			
DFBLK96-2	31-Jul-04	MOD 1613B	0.132	0.132		1	0			3 MB			
DFBLK96-2	31-Jul-04	MOD 1613B	0.0428	0.0428		1	0			3 MB			
DFBLK96-2	31-Jul-04	MOD 1613B	0.0937	0.0937		1	0			3 MB			
DFBLK96-2	31-Jul-04	MOD 1613B	0.0972	0.0972		1	0			3 MB			
DFBLK96-2	31-Jul-04	MOD 1613B	0.138	0.138		1	0			3 MB			
DFBLK96-2	31-Jul-04	MOD 1613B	0.0746	0.0746		1	0			3 MB			
DFBLK96-2	31-Jul-04	MOD 1613B	0.0856	0.0856		1	0			3 MB			
DFBLK96-2	31-Jul-04	MOD 1613B	0.0855	0.0855		1	0			3 MB			
DFBLK96-2	31-Jul-04	MOD 1613B	0.0596	0.0596		1	0			3 MB			
DFBLK96-2	31-Jul-04	MOD 1613B	0.061	0.061		1	0			3 MB			
DFBLK96-2	31-Jul-04	MOD 1613B	0.0733	0.0733		1	0			3 MB			
DFBLK96-2	31-Jul-04	MOD 1613B	0.0755	0.0755		1	0			3 MB			
DFBLK96-2	31-Jul-04	MOD 1613B	0.141	0.141		1	0			3 MB			
DFBLK96-2	31-Jul-04	MOD 1613B	0.125	0.125		1	0			3 MB			
DFBLK96-2	31-Jul-04	MOD 1613B				1	0			3 MB			
DFBLK96-2	31-Jul-04	MOD 1613B				1	0			3 MB			
DFBLK96-2	31-Jul-04	MOD 1613B				1	0			3 MB			
DFBLK96-2	31-Jul-04	MOD 1613B				1	0			3 MB			
DFBLK96-2	31-Jul-04	MOD 1613B				1	0			3 MB			
DFBLK96-2	31-Jul-04	MOD 1613B				1	0			3 MB			
DFBLK96-2	31-Jul-04	MOD 1613B				1	0			3 MB			
DFBLK96-2	31-Jul-04	MOD 1613B				1	0			3 MB			
DFBLK96-2	31-Jul-04	MOD 1613B				1	0			3 MB			
DFBLK96-2	31-Jul-04	MOD 1613B				1	0			3 MB			
DFBLK96-2	31-Jul-04	MOD 1613B				1	0			3 MB			
DFBLK96-2	31-Jul-04	MOD 1613B				1	0			3 MB			
DFBLK96-2	31-Jul-04	MOD 1613B				1	0			3 MB			
DFBLK96-2	31-Jul-04	MOD 1613B				1	0			3 MB			
DFBLK96-2	31-Jul-04	MOD 1613B				1	0			3 MB			
DFBLK96-2	31-Jul-04	MOD 1613B				1	0			3 MB			
DFBLK96-2	31-Jul-04	MOD 1613B				1	0			3 MB			
DFBLK96-2	31-Jul-04	MOD 1613B				1	0			3 MB			
DFBLK96-2	31-Jul-04	MOD 1613B				1	0			3 MB			
DFBLK96-2	31-Jul-04	MOD 1613B				1	0			3 MB			

NSAMPLE	CLASS	PARAMETER	EPASAMNO	CASNO	LAB_RESULT	QUAL	UNITS	CASE	SDG	LABORATORY	LAB_ID	REC_DATE	EXTR_DATE
DFBLK96-3	DIOX	2378-TCDD	DFBLK96-3	1746-01-6	0.0519	J	PG/G_DRYWT	DF003	D00001	PACE	DFBLK96-3	27-Jul-04	27-Jul-04
DFBLK96-3	DIOX	2378-TCDF	DFBLK96-3	51207-31-9	0.0593	J	PG/G_DRYWT	DF003	D00001	PACE	DFBLK96-3	27-Jul-04	27-Jul-04
DFBLK96-3	DIOX	12378-PeCDF	DFBLK96-3	57117-41-6		U	PG/G_DRYWT	DF003	D00001	PACE	DFBLK96-3	27-Jul-04	27-Jul-04
DFBLK96-3	DIOX	12378-PeCDD	DFBLK96-3	40321-76-4	0.0349	J	PG/G_DRYWT	DF003	D00001	PACE	DFBLK96-3	27-Jul-04	27-Jul-04
DFBLK96-3	DIOX	23478-PeCDF	DFBLK96-3	57117-31-4	0.035	J	PG/G_DRYWT	DF003	D00001	PACE	DFBLK96-3	27-Jul-04	27-Jul-04
DFBLK96-3	DIOX	123478-HxCDF	DFBLK96-3	70648-26-9	0.0267	J	PG/G_DRYWT	DF003	D00001	PACE	DFBLK96-3	27-Jul-04	27-Jul-04
DFBLK96-3	DIOX	123678-HxCDF	DFBLK96-3	57117-44-9	0.0324	J	PG/G_DRYWT	DF003	D00001	PACE	DFBLK96-3	27-Jul-04	27-Jul-04
DFBLK96-3	DIOX	123478-HxCDD	DFBLK96-3	39227-28-6		U	PG/G_DRYWT	DF003	D00001	PACE	DFBLK96-3	27-Jul-04	27-Jul-04
DFBLK96-3	DIOX	123678-HxCDD	DFBLK96-3	57663-85-7			PG/G_DRYWT	DF003	D00001	PACE	DFBLK96-3	27-Jul-04	27-Jul-04
DFBLK96-3	DIOX	123789-HxCDD	DFBLK96-3	19408-74-3			PG/G_DRYWT	DF003	D00001	PACE	DFBLK96-3	27-Jul-04	27-Jul-04
DFBLK96-3	DIOX	234678-HxCDF	DFBLK96-3	60851-34-5	0.027	J	PG/G_DRYWT	DF003	D00001	PACE	DFBLK96-3	27-Jul-04	27-Jul-04
DFBLK96-3	DIOX	123789-HxCDF	DFBLK96-3	72918-21-9	0.0224	J	PG/G_DRYWT	DF003	D00001	PACE	DFBLK96-3	27-Jul-04	27-Jul-04
DFBLK96-3	DIOX	1234678-HpCDF	DFBLK96-3	67562-39-4	0.0679	J	PG/G_DRYWT	DF003	D00001	PACE	DFBLK96-3	27-Jul-04	27-Jul-04
DFBLK96-3	DIOX	1234678-HpCDD	DFBLK96-3	35822-46-9	0.401	J	PG/G_DRYWT	DF003	D00001	PACE	DFBLK96-3	27-Jul-04	27-Jul-04
DFBLK96-3	DIOX	1234789-HpCDF	DFBLK96-3	55673-89-7		U	PG/G_DRYWT	DF003	D00001	PACE	DFBLK96-3	27-Jul-04	27-Jul-04
DFBLK96-3	DIOX	OCDD	DFBLK96-3	3268-87-9	3.08	J	PG/G_DRYWT	DF003	D00001	PACE	DFBLK96-3	27-Jul-04	27-Jul-04
DFBLK96-3	DIOX	OCDF	DFBLK96-3	39001-02-0	0.0767	J	PG/G_DRYWT	DF003	D00001	PACE	DFBLK96-3	27-Jul-04	27-Jul-04
DFBLK96-3	DIOX	13C-2378-TCDD	DFBLK96-3	76523-40-5	97		PCT_REC	DF003	D00001	PACE	DFBLK96-3	27-Jul-04	27-Jul-04
DFBLK96-3	DIOX	13C-12378-PeCDD	DFBLK96-3	109719-79-1	105		PCT_REC	DF003	D00001	PACE	DFBLK96-3	27-Jul-04	27-Jul-04
DFBLK96-3	DIOX	13C-123478-HxCDD	DFBLK96-3	109719-80-4	88		PCT_REC	DF003	D00001	PACE	DFBLK96-3	27-Jul-04	27-Jul-04
DFBLK96-3	DIOX	13C-123678-HxCDD	DFBLK96-3	109719-81-5	103		PCT_REC	DF003	D00001	PACE	DFBLK96-3	27-Jul-04	27-Jul-04
DFBLK96-3	DIOX	13C-1234678-HpCDD	DFBLK96-3	109719-83-7	89		PCT_REC	DF003	D00001	PACE	DFBLK96-3	27-Jul-04	27-Jul-04
DFBLK96-3	DIOX	13C-OCDD	DFBLK96-3	114423-97-1	99		PCT_REC	DF003	D00001	PACE	DFBLK96-3	27-Jul-04	27-Jul-04
DFBLK96-3	DIOX	13C-2378-TCDF	DFBLK96-3	89059-46-1	90		PCT_REC	DF003	D00001	PACE	DFBLK96-3	27-Jul-04	27-Jul-04
DFBLK96-3	DIOX	13C-12378-PeCDF	DFBLK96-3	109719-77-9	105		PCT_REC	DF003	D00001	PACE	DFBLK96-3	27-Jul-04	27-Jul-04
DFBLK96-3	DIOX	13C-23478-PeCDF	DFBLK96-3	116843-02-8	103		PCT_REC	DF003	D00001	PACE	DFBLK96-3	27-Jul-04	27-Jul-04
DFBLK96-3	DIOX	13C-123478-HxCDF	DFBLK96-3	114423-98-2	88		PCT_REC	DF003	D00001	PACE	DFBLK96-3	27-Jul-04	27-Jul-04
DFBLK96-3	DIOX	13C-123678-HxCDF	DFBLK96-3	116843-03-9	88		PCT_REC	DF003	D00001	PACE	DFBLK96-3	27-Jul-04	27-Jul-04
DFBLK96-3	DIOX	13C-123789-HxCDF	DFBLK96-3	116843-04-0	93		PCT_REC	DF003	D00001	PACE	DFBLK96-3	27-Jul-04	27-Jul-04
DFBLK96-3	DIOX	13C-234678-HxCDF	DFBLK96-3	116843-05-1	90		PCT_REC	DF003	D00001	PACE	DFBLK96-3	27-Jul-04	27-Jul-04
DFBLK96-3	DIOX	13C-1234678-HpCDF	DFBLK96-3	109719-84-8	103		PCT_REC	DF003	D00001	PACE	DFBLK96-3	27-Jul-04	27-Jul-04
DFBLK96-3	DIOX	13C-1234789-HpCDF	DFBLK96-3	109719-94-0	95		PCT_REC	DF003	D00001	PACE	DFBLK96-3	27-Jul-04	27-Jul-04
DFBLK96-3	DIOX	37Cl-2378-TCDD	DFBLK96-3	85508-50-5	96		PCT_REC	DF003	D00001	PACE	DFBLK96-3	27-Jul-04	27-Jul-04

NSAMPLE	CLASS	PARAMETER	EPASAMNO	CASNO	LAB_RESULT	QUAL	UNITS	CASE	SDG	LABORATORY	LAB_ID	REC_DATE	EXTR_DATE
DLCS97	DIOX	2378-TCDD	DLCS97	1746-01-6	89		PCT_REC	DF003	D00001	PACE	DLCS97	27-Jul-04	27-Jul-04
DLCS97	DIOX	2378-TCDF	DLCS97	51207-31-9	92		PCT_REC	DF003	D00001	PACE	DLCS97	27-Jul-04	27-Jul-04
DLCS97	DIOX	12378-PeCDF	DLCS97	57117-41-6	97		PCT_REC	DF003	D00001	PACE	DLCS97	27-Jul-04	27-Jul-04
DLCS97	DIOX	12378-PeCDD	DLCS97	40321-76-4	94		PCT_REC	DF003	D00001	PACE	DLCS97	27-Jul-04	27-Jul-04
DLCS97	DIOX	23478-PeCDF	DLCS97	57117-31-4	92		PCT_REC	DF003	D00001	PACE	DLCS97	27-Jul-04	27-Jul-04
DLCS97	DIOX	123478-HxCDF	DLCS97	70648-26-9	90		PCT_REC	DF003	D00001	PACE	DLCS97	27-Jul-04	27-Jul-04
DLCS97	DIOX	123678-HxCDF	DLCS97	57117-44-9	99		PCT_REC	DF003	D00001	PACE	DLCS97	27-Jul-04	27-Jul-04
DLCS97	DIOX	123478-HxCDD	DLCS97	39227-28-6	92		PCT_REC	DF003	D00001	PACE	DLCS97	27-Jul-04	27-Jul-04
DLCS97	DIOX	123678-HxCDD	DLCS97	57663-85-7	93		PCT_REC	DF003	D00001	PACE	DLCS97	27-Jul-04	27-Jul-04
DLCS97	DIOX	123789-HxCDD	DLCS97	19408-74-3	91		PCT_REC	DF003	D00001	PACE	DLCS97	27-Jul-04	27-Jul-04
DLCS97	DIOX	234678-HxCDF	DLCS97	60851-34-5	97		PCT_REC	DF003	D00001	PACE	DLCS97	27-Jul-04	27-Jul-04
DLCS97	DIOX	123789-HxCDF	DLCS97	72918-21-9	94		PCT_REC	DF003	D00001	PACE	DLCS97	27-Jul-04	27-Jul-04
DLCS97	DIOX	1234678-HpCDF	DLCS97	67562-39-4	97		PCT_REC	DF003	D00001	PACE	DLCS97	27-Jul-04	27-Jul-04
DLCS97	DIOX	1234678-HpCDD	DLCS97	35822-46-9	92		PCT_REC	DF003	D00001	PACE	DLCS97	27-Jul-04	27-Jul-04
DLCS97	DIOX	1234789-HpCDF	DLCS97	55673-89-7	93		PCT_REC	DF003	D00001	PACE	DLCS97	27-Jul-04	27-Jul-04
DLCS97	DIOX	OCDD	DLCS97	3268-87-9	96		PCT_REC	DF003	D00001	PACE	DLCS97	27-Jul-04	27-Jul-04
DLCS97	DIOX	OCDF	DLCS97	39001-02-0	85		PCT_REC	DF003	D00001	PACE	DLCS97	27-Jul-04	27-Jul-04
DLCS97	DIOX	13C-2378-TCDD	DLCS97	76523-40-5	107		PCT_REC	DF003	D00001	PACE	DLCS97	27-Jul-04	27-Jul-04
DLCS97	DIOX	13C-12378-PeCDD	DLCS97	109719-79-1	122		PCT_REC	DF003	D00001	PACE	DLCS97	27-Jul-04	27-Jul-04
DLCS97	DIOX	13C-123478-HxCDD	DLCS97	109719-80-4	120		PCT_REC	DF003	D00001	PACE	DLCS97	27-Jul-04	27-Jul-04
DLCS97	DIOX	13C-123678-HxCDD	DLCS97	109719-81-5	90		PCT_REC	DF003	D00001	PACE	DLCS97	27-Jul-04	27-Jul-04
DLCS97	DIOX	13C-1234678-HpCDD	DLCS97	109719-83-7	109		PCT_REC	DF003	D00001	PACE	DLCS97	27-Jul-04	27-Jul-04
DLCS97	DIOX	13C-OCDD	DLCS97	114423-97-1	84		PCT_REC	DF003	D00001	PACE	DLCS97	27-Jul-04	27-Jul-04
DLCS97	DIOX	13C-2378-TCDF	DLCS97	89059-46-1	85		PCT_REC	DF003	D00001	PACE	DLCS97	27-Jul-04	27-Jul-04
DLCS97	DIOX	13C-12378-PeCDF	DLCS97	109719-77-9	104		PCT_REC	DF003	D00001	PACE	DLCS97	27-Jul-04	27-Jul-04
DLCS97	DIOX	13C-23478-PeCDF	DLCS97	116843-02-8	106		PCT_REC	DF003	D00001	PACE	DLCS97	27-Jul-04	27-Jul-04
DLCS97	DIOX	13C-123478-HxCDF	DLCS97	114423-98-2	91		PCT_REC	DF003	D00001	PACE	DLCS97	27-Jul-04	27-Jul-04
DLCS97	DIOX	13C-123678-HxCDF	DLCS97	116843-03-9	76		PCT_REC	DF003	D00001	PACE	DLCS97	27-Jul-04	27-Jul-04
DLCS97	DIOX	13C-123789-HxCDF	DLCS97	116843-04-0	85		PCT_REC	DF003	D00001	PACE	DLCS97	27-Jul-04	27-Jul-04
DLCS97	DIOX	13C-234678-HxCDF	DLCS97	116843-05-1	82		PCT_REC	DF003	D00001	PACE	DLCS97	27-Jul-04	27-Jul-04
DLCS97	DIOX	13C-1234678-HpCDF	DLCS97	109719-84-8	103		PCT_REC	DF003	D00001	PACE	DLCS97	27-Jul-04	27-Jul-04
DLCS97	DIOX	13C-1234789-HpCDF	DLCS97	109719-94-0	88		PCT_REC	DF003	D00001	PACE	DLCS97	27-Jul-04	27-Jul-04
DLCS97	DIOX	37Cl-2378-TCDD	DLCS97	85508-50-5	99		PCT_REC	DF003	D00001	PACE	DLCS97	27-Jul-04	27-Jul-04

NSAMPLE	CLASS	PARAMETER	EPASAMNO	CASNO	LAB_RESULT	QUAL	UNITS	CASE	SDG	LABORATORY	LAB_ID	REC_DATE	EXTR_DATE
DLCS98	DIOX	2378-TCDD	DLCS98	1746-01-6	94		PCT_REC	DF003	D00001	PACE	DLCS98	27-Jul-04	27-Jul-04
DLCS98	DIOX	2378-TCDF	DLCS98	51207-31-9	93		PCT_REC	DF003	D00001	PACE	DLCS98	27-Jul-04	27-Jul-04
DLCS98	DIOX	12378-PeCDF	DLCS98	57117-41-6	93		PCT_REC	DF003	D00001	PACE	DLCS98	27-Jul-04	27-Jul-04
DLCS98	DIOX	12378-PeCDD	DLCS98	40321-76-4	96		PCT_REC	DF003	D00001	PACE	DLCS98	27-Jul-04	27-Jul-04
DLCS98	DIOX	23478-PeCDF	DLCS98	57117-31-4	94		PCT_REC	DF003	D00001	PACE	DLCS98	27-Jul-04	27-Jul-04
DLCS98	DIOX	123478-HxCDF	DLCS98	70648-26-9	101		PCT_REC	DF003	D00001	PACE	DLCS98	27-Jul-04	27-Jul-04
DLCS98	DIOX	123678-HxCDF	DLCS98	57117-44-9	93		PCT_REC	DF003	D00001	PACE	DLCS98	27-Jul-04	27-Jul-04
DLCS98	DIOX	123478-HxCDD	DLCS98	39227-28-6	95		PCT_REC	DF003	D00001	PACE	DLCS98	27-Jul-04	27-Jul-04
DLCS98	DIOX	123678-HxCDD	DLCS98	57663-85-7	96		PCT_REC	DF003	D00001	PACE	DLCS98	27-Jul-04	27-Jul-04
DLCS98	DIOX	123789-HxCDD	DLCS98	19408-74-3	97		PCT_REC	DF003	D00001	PACE	DLCS98	27-Jul-04	27-Jul-04
DLCS98	DIOX	234678-HxCDF	DLCS98	60851-34-5	96		PCT_REC	DF003	D00001	PACE	DLCS98	27-Jul-04	27-Jul-04
DLCS98	DIOX	123789-HxCDF	DLCS98	72918-21-9	95		PCT_REC	DF003	D00001	PACE	DLCS98	27-Jul-04	27-Jul-04
DLCS98	DIOX	1234678-HpCDF	DLCS98	67562-39-4	100		PCT_REC	DF003	D00001	PACE	DLCS98	27-Jul-04	27-Jul-04
DLCS98	DIOX	1234678-HpCDD	DLCS98	35822-46-9	96		PCT_REC	DF003	D00001	PACE	DLCS98	27-Jul-04	27-Jul-04
DLCS98	DIOX	1234789-HpCDF	DLCS98	55673-89-7	96		PCT_REC	DF003	D00001	PACE	DLCS98	27-Jul-04	27-Jul-04
DLCS98	DIOX	OCDD	DLCS98	3268-87-9	98		PCT_REC	DF003	D00001	PACE	DLCS98	27-Jul-04	27-Jul-04
DLCS98	DIOX	OCDF	DLCS98	39001-02-0	85		PCT_REC	DF003	D00001	PACE	DLCS98	27-Jul-04	27-Jul-04
DLCS98	DIOX	13C-2378-TCDD	DLCS98	76523-40-5	108		PCT_REC	DF003	D00001	PACE	DLCS98	27-Jul-04	27-Jul-04
DLCS98	DIOX	13C-12378-PeCDD	DLCS98	109719-79-1	130		PCT_REC	DF003	D00001	PACE	DLCS98	27-Jul-04	27-Jul-04
DLCS98	DIOX	13C-123478-HxCDD	DLCS98	109719-80-4	109		PCT_REC	DF003	D00001	PACE	DLCS98	27-Jul-04	27-Jul-04
DLCS98	DIOX	13C-123678-HxCDD	DLCS98	109719-81-5	96		PCT_REC	DF003	D00001	PACE	DLCS98	27-Jul-04	27-Jul-04
DLCS98	DIOX	13C-1234678-HpCDD	DLCS98	109719-83-7	113		PCT_REC	DF003	D00001	PACE	DLCS98	27-Jul-04	27-Jul-04
DLCS98	DIOX	13C-OCDD	DLCS98	114423-97-1	90		PCT_REC	DF003	D00001	PACE	DLCS98	27-Jul-04	27-Jul-04
DLCS98	DIOX	13C-2378-TCDF	DLCS98	89059-46-1	90		PCT_REC	DF003	D00001	PACE	DLCS98	27-Jul-04	27-Jul-04
DLCS98	DIOX	13C-12378-PeCDF	DLCS98	109719-77-9	115		PCT_REC	DF003	D00001	PACE	DLCS98	27-Jul-04	27-Jul-04
DLCS98	DIOX	13C-23478-PeCDF	DLCS98	116843-02-8	114		PCT_REC	DF003	D00001	PACE	DLCS98	27-Jul-04	27-Jul-04
DLCS98	DIOX	13C-123478-HxCDF	DLCS98	114423-98-2	82		PCT_REC	DF003	D00001	PACE	DLCS98	27-Jul-04	27-Jul-04
DLCS98	DIOX	13C-123678-HxCDF	DLCS98	116843-03-9	81		PCT_REC	DF003	D00001	PACE	DLCS98	27-Jul-04	27-Jul-04
DLCS98	DIOX	13C-123789-HxCDF	DLCS98	116843-04-0	89		PCT_REC	DF003	D00001	PACE	DLCS98	27-Jul-04	27-Jul-04
DLCS98	DIOX	13C-234678-HxCDF	DLCS98	116843-05-1	94		PCT_REC	DF003	D00001	PACE	DLCS98	27-Jul-04	27-Jul-04
DLCS98	DIOX	13C-1234678-HpCDF	DLCS98	109719-84-8	105		PCT_REC	DF003	D00001	PACE	DLCS98	27-Jul-04	27-Jul-04
DLCS98	DIOX	13C-1234789-HpCDF	DLCS98	109719-94-0	91		PCT_REC	DF003	D00001	PACE	DLCS98	27-Jul-04	27-Jul-04
DLCS98	DIOX	37CI-2378-TCDD	DLCS98	85508-50-5	98		PCT_REC	DF003	D00001	PACE	DLCS98	27-Jul-04	27-Jul-04

NSAMPLE	CLASS	PARAMETER	EPASAMNO	CASNO	LAB_RESULT	QUAL	UNITS	CASE	SDG	LABORATORY	LAB_ID	REC_DATE	EXTR_DATE
LPX-SD-4404-0005-01	DIOX	2378-TCDD	D00001	1746-01-6	12.2	DB	PG/G DRYWT	DF003	D00001	PACE	105821151	8-Jul-04	27-Jul-04
LPX-SD-4404-0005-01	DIOX	2378-TCDF	D00001	51207-31-9	20.5	DB	PG/G DRYWT	DF003	D00001	PACE	105821151	8-Jul-04	27-Jul-04
LPX-SD-4404-0005-01	DIOX	12378-PeCDF	D00001	57117-41-6	24.4	DJ	PG/G DRYWT	DF003	D00001	PACE	105821151	8-Jul-04	27-Jul-04
LPX-SD-4404-0005-01	DIOX	12378-PeCDD	D00001	40321-76-4	52.1	DB	PG/G DRYWT	DF003	D00001	PACE	105821151	8-Jul-04	27-Jul-04
LPX-SD-4404-0005-01	DIOX	23478-PeCDF	D00001	57117-31-4	173	DB	PG/G DRYWT	DF003	D00001	PACE	105821151	8-Jul-04	27-Jul-04
LPX-SD-4404-0005-01	DIOX	123478-HxCDF	D00001	70648-26-9	98.2	DB	PG/G DRYWT	DF003	D00001	PACE	105821151	8-Jul-04	27-Jul-04
LPX-SD-4404-0005-01	DIOX	123678-HxCDF	D00001	57117-44-9	102	DB	PG/G DRYWT	DF003	D00001	PACE	105821151	8-Jul-04	27-Jul-04
LPX-SD-4404-0005-01	DIOX	123478-HxCDD	D00001	39227-28-6	57.5	D	PG/G DRYWT	DF003	D00001	PACE	105821151	8-Jul-04	27-Jul-04
LPX-SD-4404-0005-01	DIOX	123678-HxCDD	D00001	57663-85-7	504	D	PG/G DRYWT	DF003	D00001	PACE	105821151	8-Jul-04	27-Jul-04
LPX-SD-4404-0005-01	DIOX	123789-HxCDD	D00001	19408-74-3	213	D	PG/G DRYWT	DF003	D00001	PACE	105821151	8-Jul-04	27-Jul-04
LPX-SD-4404-0005-01	DIOX	234678-HxCDF	D00001	60851-34-5	212	DB	PG/G DRYWT	DF003	D00001	PACE	105821151	8-Jul-04	27-Jul-04
LPX-SD-4404-0005-01	DIOX	123789-HxCDF	D00001	72918-21-9	62.3	DB	PG/G DRYWT	DF003	D00001	PACE	105821151	8-Jul-04	27-Jul-04
LPX-SD-4404-0005-01	DIOX	1234678-HpCDF	D00001	67562-39-4	3190	DB	PG/G DRYWT	DF003	D00001	PACE	105821151	8-Jul-04	27-Jul-04
LPX-SD-4404-0005-01	DIOX	1234678-HpCDD	D00001	35822-46-9	3440	DB	PG/G DRYWT	DF003	D00001	PACE	105821151	8-Jul-04	27-Jul-04
LPX-SD-4404-0005-01	DIOX	1234789-HpCDF	D00001	55673-89-7	93.6	D	PG/G DRYWT	DF003	D00001	PACE	105821151	8-Jul-04	27-Jul-04
LPX-SD-4404-0005-01	DIOX	OCDD	D00001	3268-87-9	4100	DB	PG/G DRYWT	DF003	D00001	PACE	105821151	8-Jul-04	27-Jul-04
LPX-SD-4404-0005-01	DIOX	OCDF	D00001	39001-02-0	1770	DB	PG/G DRYWT	DF003	D00001	PACE	105821151	8-Jul-04	27-Jul-04
LPX-SD-4404-0005-01	DIOX	13C-2378-TCDD	D00001	76523-40-5	62		PCT_REC	DF003	D00001	PACE	105821151	8-Jul-04	27-Jul-04
LPX-SD-4404-0005-01	DIOX	13C-12378-PeCDD	D00001	109719-79-1	63		PCT_REC	DF003	D00001	PACE	105821151	8-Jul-04	27-Jul-04
LPX-SD-4404-0005-01	DIOX	13C-123478-HxCDD	D00001	109719-80-4	62		PCT_REC	DF003	D00001	PACE	105821151	8-Jul-04	27-Jul-04
LPX-SD-4404-0005-01	DIOX	13C-123678-HxCDD	D00001	109719-81-5	63		PCT_REC	DF003	D00001	PACE	105821151	8-Jul-04	27-Jul-04
LPX-SD-4404-0005-01	DIOX	13C-1234678-HpCDD	D00001	109719-83-7	36		PCT_REC	DF003	D00001	PACE	105821151	8-Jul-04	27-Jul-04
LPX-SD-4404-0005-01	DIOX	13C-OCDD	D00001	114423-97-1	19		PCT_REC	DF003	D00001	PACE	105821151	8-Jul-04	27-Jul-04
LPX-SD-4404-0005-01	DIOX	13C-2378-TCDF	D00001	89059-46-1	57		PCT_REC	DF003	D00001	PACE	105821151	8-Jul-04	27-Jul-04
LPX-SD-4404-0005-01	DIOX	13C-12378-PeCDF	D00001	109719-77-9	65		PCT_REC	DF003	D00001	PACE	105821151	8-Jul-04	27-Jul-04
LPX-SD-4404-0005-01	DIOX	13C-23478-PeCDF	D00001	116843-02-8	61		PCT_REC	DF003	D00001	PACE	105821151	8-Jul-04	27-Jul-04
LPX-SD-4404-0005-01	DIOX	13C-123478-HxCDF	D00001	114423-98-2	66		PCT_REC	DF003	D00001	PACE	105821151	8-Jul-04	27-Jul-04
LPX-SD-4404-0005-01	DIOX	13C-123678-HxCDF	D00001	116843-03-9	60		PCT_REC	DF003	D00001	PACE	105821151	8-Jul-04	27-Jul-04
LPX-SD-4404-0005-01	DIOX	13C-123789-HxCDF	D00001	116843-04-0	54		PCT_REC	DF003	D00001	PACE	105821151	8-Jul-04	27-Jul-04
LPX-SD-4404-0005-01	DIOX	13C-234678-HxCDF	D00001	116843-05-1	59		PCT_REC	DF003	D00001	PACE	105821151	8-Jul-04	27-Jul-04
LPX-SD-4404-0005-01	DIOX	13C-1234678-HpCDF	D00001	109719-84-8	47		PCT_REC	DF003	D00001	PACE	105821151	8-Jul-04	27-Jul-04
LPX-SD-4404-0005-01	DIOX	13C-1234789-HpCDF	D00001	109719-94-0	33		PCT_REC	DF003	D00001	PACE	105821151	8-Jul-04	27-Jul-04
LPX-SD-4404-0005-01	DIOX	37Cl-2378-TCDD	D00001	85508-50-5	93		PCT_REC	DF003	D00001	PACE	105821151	8-Jul-04	27-Jul-04
LPX-SD-4404-0005-01	DIOX	Total TCDD	D00001		118	DB	PG/G DRYWT	DF003	D00001	PACE	105821151	8-Jul-04	27-Jul-04
LPX-SD-4404-0005-01	DIOX	Total PeCDD	D00001		547	DB	PG/G DRYWT	DF003	D00001	PACE	105821151	8-Jul-04	27-Jul-04
LPX-SD-4404-0005-01	DIOX	Total HxCDD	D00001		4930	DB	PG/G DRYWT	DF003	D00001	PACE	105821151	8-Jul-04	27-Jul-04
LPX-SD-4404-0005-01	DIOX	Total HpCDD	D00001		10700	DB	PG/G DRYWT	DF003	D00001	PACE	105821151	8-Jul-04	27-Jul-04
LPX-SD-4404-0005-01	DIOX	Total TCDF	D00001		471	DB	PG/G DRYWT	DF003	D00001	PACE	105821151	8-Jul-04	27-Jul-04
LPX-SD-4404-0005-01	DIOX	Total PeCDF	D00001		1630	DB	PG/G DRYWT	DF003	D00001	PACE	105821151	8-Jul-04	27-Jul-04
LPX-SD-4404-0005-01	DIOX	Total HxCDF	D00001		6590	DB	PG/G DRYWT	DF003	D00001	PACE	105821151	8-Jul-04	27-Jul-04
LPX-SD-4404-0005-01	DIOX	Total HpCDF	D00001		5360	DB	PG/G DRYWT	DF003	D00001	PACE	105821151	8-Jul-04	27-Jul-04

NSAMPLE	CLASS	PARAMETER	EPASAMNO	CASNO	LAB_RESULT	QUAL	UNITS	CASE	SDG	LABORATORY	LAB_ID	REC_DATE	EXTR_DATE
LPX-SD 4401-0005-01	DIOX	2378-TCDD	D00002	1746-01-6	3270	E	PG/G_DRYWT	DF003	D00001	PACE	105821169	8-Jul-04	27-Jul-04
LPX-SD 4401-0005-01	DIOX	2378-TCDF	D00002	51207-31-9	19.3		PG/G_DRYWT	DF003	D00001	PACE	105821169	8-Jul-04	27-Jul-04
LPX-SD 4401-0005-01	DIOX	12378-PeCDF	D00002	57117-41-6			PG/G_DRYWT	DF003	D00001	PACE	105821169	8-Jul-04	27-Jul-04
LPX-SD 4401-0005-01	DIOX	12378-PeCDD	D00002	40321-76-4	3.93	J	PG/G_DRYWT	DF003	D00001	PACE	105821169	8-Jul-04	27-Jul-04
LPX-SD 4401-0005-01	DIOX	23478-PeCDF	D00002	57117-31-4	11.1		PG/G_DRYWT	DF003	D00001	PACE	105821169	8-Jul-04	27-Jul-04
LPX-SD 4401-0005-01	DIOX	123478-HxCDF	D00002	70648-26-9	12.8		PG/G_DRYWT	DF003	D00001	PACE	105821169	8-Jul-04	27-Jul-04
LPX-SD 4401-0005-01	DIOX	123678-HxCDF	D00002	57117-44-9	7.63		PG/G_DRYWT	DF003	D00001	PACE	105821169	8-Jul-04	27-Jul-04
LPX-SD 4401-0005-01	DIOX	123478-HxCDD	D00002	39227-28-6			PG/G_DRYWT	DF003	D00001	PACE	105821169	8-Jul-04	27-Jul-04
LPX-SD 4401-0005-01	DIOX	123678-HxCDD	D00002	57663-85-7	7.62		PG/G_DRYWT	DF003	D00001	PACE	105821169	8-Jul-04	27-Jul-04
LPX-SD 4401-0005-01	DIOX	123789-HxCDD	D00002	19408-74-3	6.28		PG/G_DRYWT	DF003	D00001	PACE	105821169	8-Jul-04	27-Jul-04
LPX-SD 4401-0005-01	DIOX	234678-HxCDF	D00002	60851-34-5	9.7		PG/G_DRYWT	DF003	D00001	PACE	105821169	8-Jul-04	27-Jul-04
LPX-SD 4401-0005-01	DIOX	123789-HxCDF	D00002	72918-21-9	2.15	J	PG/G_DRYWT	DF003	D00001	PACE	105821169	8-Jul-04	27-Jul-04
LPX-SD 4401-0005-01	DIOX	1234678-HpCDF	D00002	67562-39-4	44.3		PG/G_DRYWT	DF003	D00001	PACE	105821169	8-Jul-04	27-Jul-04
LPX-SD 4401-0005-01	DIOX	1234678-HpCDD	D00002	35822-46-9	175		PG/G_DRYWT	DF003	D00001	PACE	105821169	8-Jul-04	27-Jul-04
LPX-SD 4401-0005-01	DIOX	1234789-HpCDF	D00002	55673-89-7	2.46	J	PG/G_DRYWT	DF003	D00001	PACE	105821169	8-Jul-04	27-Jul-04
LPX-SD 4401-0005-01	DIOX	OCDD	D00002	3268-87-9	1300	B	PG/G_DRYWT	DF003	D00001	PACE	105821169	8-Jul-04	27-Jul-04
LPX-SD 4401-0005-01	DIOX	OCDF	D00002	39001-02-0	61.5		PG/G_DRYWT	DF003	D00001	PACE	105821169	8-Jul-04	27-Jul-04
LPX-SD 4401-0005-01	DIOX	13C-2378-TCDD	D00002	76523-40-5	94		PCT_REC	DF003	D00001	PACE	105821169	8-Jul-04	27-Jul-04
LPX-SD 4401-0005-01	DIOX	13C-12378-PeCDD	D00002	109719-79-1	36		PCT_REC	DF003	D00001	PACE	105821169	8-Jul-04	27-Jul-04
LPX-SD 4401-0005-01	DIOX	13C-123478-HxCDD	D00002	109719-80-4	90		PCT_REC	DF003	D00001	PACE	105821169	8-Jul-04	27-Jul-04
LPX-SD 4401-0005-01	DIOX	13C-123678-HxCDD	D00002	109719-81-5	87		PCT_REC	DF003	D00001	PACE	105821169	8-Jul-04	27-Jul-04
LPX-SD 4401-0005-01	DIOX	13C-1234678-HpCDD	D00002	109719-83-7	57		PCT_REC	DF003	D00001	PACE	105821169	8-Jul-04	27-Jul-04
LPX-SD 4401-0005-01	DIOX	13C-OCDD	D00002	114423-97-1	41		PCT_REC	DF003	D00001	PACE	105821169	8-Jul-04	27-Jul-04
LPX-SD 4401-0005-01	DIOX	13C-2378-TCDF	D00002	89059-46-1	93		PCT_REC	DF003	D00001	PACE	105821169	8-Jul-04	27-Jul-04
LPX-SD 4401-0005-01	DIOX	13C-12378-PeCDF	D00002	109719-77-9	58		PCT_REC	DF003	D00001	PACE	105821169	8-Jul-04	27-Jul-04
LPX-SD 4401-0005-01	DIOX	13C-23478-PeCDF	D00002	116843-02-8	62		PCT_REC	DF003	D00001	PACE	105821169	8-Jul-04	27-Jul-04
LPX-SD 4401-0005-01	DIOX	13C-123478-HxCDF	D00002	114423-98-2	87		PCT_REC	DF003	D00001	PACE	105821169	8-Jul-04	27-Jul-04
LPX-SD 4401-0005-01	DIOX	13C-123678-HxCDF	D00002	116843-03-9	76		PCT_REC	DF003	D00001	PACE	105821169	8-Jul-04	27-Jul-04
LPX-SD 4401-0005-01	DIOX	13C-123789-HxCDF	D00002	116843-04-0	78		PCT_REC	DF003	D00001	PACE	105821169	8-Jul-04	27-Jul-04
LPX-SD 4401-0005-01	DIOX	13C-234678-HxCDF	D00002	116843-05-1	88		PCT_REC	DF003	D00001	PACE	105821169	8-Jul-04	27-Jul-04
LPX-SD 4401-0005-01	DIOX	13C-1234678-HpCDF	D00002	109719-84-8	64		PCT_REC	DF003	D00001	PACE	105821169	8-Jul-04	27-Jul-04
LPX-SD 4401-0005-01	DIOX	13C-1234789-HpCDF	D00002	109719-94-0	48		PCT_REC	DF003	D00001	PACE	105821169	8-Jul-04	27-Jul-04
LPX-SD 4401-0005-01	DIOX	37Cl-2378-TCDD	D00002	85508-50-5	192		PCT_REC	DF003	D00001	PACE	105821169	8-Jul-04	27-Jul-04
LPX-SD 4401-0005-01	DIOX	Total TCDD	D00002		3370		PG/G_DRYWT	DF003	D00001	PACE	105821169	8-Jul-04	27-Jul-04
LPX-SD 4401-0005-01	DIOX	Total PeCDD	D00002		124		PG/G_DRYWT	DF003	D00001	PACE	105821169	8-Jul-04	27-Jul-04
LPX-SD 4401-0005-01	DIOX	Total HxCDD	D00002		51.4	B	PG/G_DRYWT	DF003	D00001	PACE	105821169	8-Jul-04	27-Jul-04
LPX-SD 4401-0005-01	DIOX	Total HpCDD	D00002		347	B	PG/G_DRYWT	DF003	D00001	PACE	105821169	8-Jul-04	27-Jul-04
LPX-SD 4401-0005-01	DIOX	Total TCDF	D00002		264		PG/G_DRYWT	DF003	D00001	PACE	105821169	8-Jul-04	27-Jul-04
LPX-SD 4401-0005-01	DIOX	Total PeCDF	D00002		175		PG/G_DRYWT	DF003	D00001	PACE	105821169	8-Jul-04	27-Jul-04
LPX-SD 4401-0005-01	DIOX	Total HxCDF	D00002		97.9		PG/G_DRYWT	DF003	D00001	PACE	105821169	8-Jul-04	27-Jul-04
LPX-SD 4401-0005-01	DIOX	Total HpCDF	D00002		79.4		PG/G_DRYWT	DF003	D00001	PACE	105821169	8-Jul-04	27-Jul-04

NSAMPLE	CLASS	PARAMETER	EPASAMNO	CASNO	LAB_RESULT	QUAL	UNITS	CASE	SDG	LABORATORY	LAB_ID	REC_DATE	EXTR_DATE
LPX-SD-4403-0005-01	DIOX	2378-TCDD	D00003	1746-01-6	532	E	PG/G_DRYWT	DF003	D00001	PACE	105821177	8-Jul-04	27-Jul-04
LPX-SD-4403-0005-01	DIOX	2378-TCDF	D00003	51207-31-9	1.64		PG/G_DRYWT	DF003	D00001	PACE	105821177	8-Jul-04	27-Jul-04
LPX-SD-4403-0005-01	DIOX	12378-PeCDF	D00003	57117-41-6			PG/G_DRYWT	DF003	D00001	PACE	105821177	8-Jul-04	27-Jul-04
LPX-SD-4403-0005-01	DIOX	12378-PeCDD	D00003	40321-76-4	0.705	J	PG/G_DRYWT	DF003	D00001	PACE	105821177	8-Jul-04	27-Jul-04
LPX-SD-4403-0005-01	DIOX	23478-PeCDF	D00003	57117-31-4	1.94	J	PG/G_DRYWT	DF003	D00001	PACE	105821177	8-Jul-04	27-Jul-04
LPX-SD-4403-0005-01	DIOX	123478-HxCDF	D00003	70648-26-9	1.71	J	PG/G_DRYWT	DF003	D00001	PACE	105821177	8-Jul-04	27-Jul-04
LPX-SD-4403-0005-01	DIOX	123678-HxCDF	D00003	57117-44-9	1.26	J	PG/G_DRYWT	DF003	D00001	PACE	105821177	8-Jul-04	27-Jul-04
LPX-SD-4403-0005-01	DIOX	123478-HxCDD	D00003	39227-28-6			PG/G_DRYWT	DF003	D00001	PACE	105821177	8-Jul-04	27-Jul-04
LPX-SD-4403-0005-01	DIOX	123678-HxCDD	D00003	57663-85-7			PG/G_DRYWT	DF003	D00001	PACE	105821177	8-Jul-04	27-Jul-04
LPX-SD-4403-0005-01	DIOX	123789-HxCDD	D00003	19408-74-3		U	PG/G_DRYWT	DF003	D00001	PACE	105821177	8-Jul-04	27-Jul-04
LPX-SD-4403-0005-01	DIOX	234678-HxCDF	D00003	60851-34-5	1.52	J	PG/G_DRYWT	DF003	D00001	PACE	105821177	8-Jul-04	27-Jul-04
LPX-SD-4403-0005-01	DIOX	123789-HxCDF	D00003	72918-21-9		U	PG/G_DRYWT	DF003	D00001	PACE	105821177	8-Jul-04	27-Jul-04
LPX-SD-4403-0005-01	DIOX	1234678-HpCDF	D00003	67562-39-4	8.81		PG/G_DRYWT	DF003	D00001	PACE	105821177	8-Jul-04	27-Jul-04
LPX-SD-4403-0005-01	DIOX	1234678-HpCDD	D00003	35822-46-9	20.6		PG/G_DRYWT	DF003	D00001	PACE	105821177	8-Jul-04	27-Jul-04
LPX-SD-4403-0005-01	DIOX	1234789-HpCDF	D00003	55673-89-7		U	PG/G_DRYWT	DF003	D00001	PACE	105821177	8-Jul-04	27-Jul-04
LPX-SD-4403-0005-01	DIOX	OCDD	D00003	3268-87-9	142	B	PG/G_DRYWT	DF003	D00001	PACE	105821177	8-Jul-04	27-Jul-04
LPX-SD-4403-0005-01	DIOX	OCDF	D00003	39001-02-0	11		PG/G_DRYWT	DF003	D00001	PACE	105821177	8-Jul-04	27-Jul-04
LPX-SD-4403-0005-01	DIOX	13C-2378-TCDD	D00003	76523-40-5	89		PCT_REC	DF003	D00001	PACE	105821177	8-Jul-04	27-Jul-04
LPX-SD-4403-0005-01	DIOX	13C-12378-PeCDD	D00003	109719-79-1	86		PCT_REC	DF003	D00001	PACE	105821177	8-Jul-04	27-Jul-04
LPX-SD-4403-0005-01	DIOX	13C-123478-HxCDD	D00003	109719-80-4	99		PCT_REC	DF003	D00001	PACE	105821177	8-Jul-04	27-Jul-04
LPX-SD-4403-0005-01	DIOX	13C-123678-HxCDD	D00003	109719-81-5	76		PCT_REC	DF003	D00001	PACE	105821177	8-Jul-04	27-Jul-04
LPX-SD-4403-0005-01	DIOX	13C-1234678-HpCDD	D00003	109719-83-7	59		PCT_REC	DF003	D00001	PACE	105821177	8-Jul-04	27-Jul-04
LPX-SD-4403-0005-01	DIOX	13C-OCDD	D00003	114423-97-1	40		PCT_REC	DF003	D00001	PACE	105821177	8-Jul-04	27-Jul-04
LPX-SD-4403-0005-01	DIOX	13C-2378-TCDF	D00003	89059-46-1	91		PCT_REC	DF003	D00001	PACE	105821177	8-Jul-04	27-Jul-04
LPX-SD-4403-0005-01	DIOX	13C-12378-PeCDF	D00003	109719-77-9	92		PCT_REC	DF003	D00001	PACE	105821177	8-Jul-04	27-Jul-04
LPX-SD-4403-0005-01	DIOX	13C-23478-PeCDF	D00003	116843-02-8	87		PCT_REC	DF003	D00001	PACE	105821177	8-Jul-04	27-Jul-04
LPX-SD-4403-0005-01	DIOX	13C-123478-HxCDF	D00003	114423-98-2	79		PCT_REC	DF003	D00001	PACE	105821177	8-Jul-04	27-Jul-04
LPX-SD-4403-0005-01	DIOX	13C-123678-HxCDF	D00003	116843-03-9	82		PCT_REC	DF003	D00001	PACE	105821177	8-Jul-04	27-Jul-04
LPX-SD-4403-0005-01	DIOX	13C-123789-HxCDF	D00003	116843-04-0	81		PCT_REC	DF003	D00001	PACE	105821177	8-Jul-04	27-Jul-04
LPX-SD-4403-0005-01	DIOX	13C-234678-HxCDF	D00003	116843-05-1	86		PCT_REC	DF003	D00001	PACE	105821177	8-Jul-04	27-Jul-04
LPX-SD-4403-0005-01	DIOX	13C-1234678-HpCDF	D00003	109719-84-8	68		PCT_REC	DF003	D00001	PACE	105821177	8-Jul-04	27-Jul-04
LPX-SD-4403-0005-01	DIOX	13C-1234789-HpCDF	D00003	109719-94-0	49		PCT_REC	DF003	D00001	PACE	105821177	8-Jul-04	27-Jul-04
LPX-SD-4403-0005-01	DIOX	37Cl-2378-TCDD	D00003	85508-50-5	112		PCT_REC	DF003	D00001	PACE	105821177	8-Jul-04	27-Jul-04
LPX-SD-4403-0005-01	DIOX	Total TCDD	D00003		549		PG/G_DRYWT	DF003	D00001	PACE	105821177	8-Jul-04	27-Jul-04
LPX-SD-4403-0005-01	DIOX	Total PeCDD	D00003		2.92	J	PG/G_DRYWT	DF003	D00001	PACE	105821177	8-Jul-04	27-Jul-04
LPX-SD-4403-0005-01	DIOX	Total HxCDD	D00003		4.36	BJ	PG/G_DRYWT	DF003	D00001	PACE	105821177	8-Jul-04	27-Jul-04
LPX-SD-4403-0005-01	DIOX	Total HpCDD	D00003		40.3	B	PG/G_DRYWT	DF003	D00001	PACE	105821177	8-Jul-04	27-Jul-04
LPX-SD-4403-0005-01	DIOX	Total TCDF	D00003		20.9		PG/G_DRYWT	DF003	D00001	PACE	105821177	8-Jul-04	27-Jul-04
LPX-SD-4403-0005-01	DIOX	Total PeCDF	D00003		14.2		PG/G_DRYWT	DF003	D00001	PACE	105821177	8-Jul-04	27-Jul-04
LPX-SD-4403-0005-01	DIOX	Total HxCDF	D00003		15.2		PG/G_DRYWT	DF003	D00001	PACE	105821177	8-Jul-04	27-Jul-04
LPX-SD-4403-0005-01	DIOX	Total HpCDF	D00003		14.4		PG/G_DRYWT	DF003	D00001	PACE	105821177	8-Jul-04	27-Jul-04

NSAMPLE	CLASS	PARAMETER	EPASAMNO	CASNO	LAB_RESULT	QUAL	UNITS	CASE	SDG	LABORATORY	LAB_ID	REC_DATE	EXTR_DATE
LPX-SD-4406-0005-01	DIOX	2378-TCDD	D00004	1746-01-6	1830	E	PG/G DRYWT	DF003	D00001	PACE	105821185	8-Jul-04	27-Jul-04
LPX-SD-4406-0005-01	DIOX	2378-TCDF	D00004	51207-31-9	6.73		PG/G DRYWT	DF003	D00001	PACE	105821185	8-Jul-04	27-Jul-04
LPX-SD-4406-0005-01	DIOX	12378-PeCDF	D00004	57117-41-6			PG/G DRYWT	DF003	D00001	PACE	105821185	8-Jul-04	27-Jul-04
LPX-SD-4406-0005-01	DIOX	12378-PeCDD	D00004	40321-76-4	4.19	J	PG/G DRYWT	DF003	D00001	PACE	105821185	8-Jul-04	27-Jul-04
LPX-SD-4406-0005-01	DIOX	23478-PeCDF	D00004	57117-31-4	11.8		PG/G DRYWT	DF003	D00001	PACE	105821185	8-Jul-04	27-Jul-04
LPX-SD-4406-0005-01	DIOX	123478-HxCDF	D00004	70648-26-9	8.32		PG/G DRYWT	DF003	D00001	PACE	105821185	8-Jul-04	27-Jul-04
LPX-SD-4406-0005-01	DIOX	123678-HxCDF	D00004	57117-44-9			PG/G DRYWT	DF003	D00001	PACE	105821185	8-Jul-04	27-Jul-04
LPX-SD-4406-0005-01	DIOX	123478-HxCDD	D00004	39227-28-6	3.87	J	PG/G DRYWT	DF003	D00001	PACE	105821185	8-Jul-04	27-Jul-04
LPX-SD-4406-0005-01	DIOX	123678-HxCDD	D00004	57663-85-7	9.67		PG/G DRYWT	DF003	D00001	PACE	105821185	8-Jul-04	27-Jul-04
LPX-SD-4406-0005-01	DIOX	123789-HxCDD	D00004	19408-74-3	8.36		PG/G DRYWT	DF003	D00001	PACE	105821185	8-Jul-04	27-Jul-04
LPX-SD-4406-0005-01	DIOX	234678-HxCDF	D00004	60851-34-5	7.07		PG/G DRYWT	DF003	D00001	PACE	105821185	8-Jul-04	27-Jul-04
LPX-SD-4406-0005-01	DIOX	123789-HxCDF	D00004	72918-21-9			PG/G DRYWT	DF003	D00001	PACE	105821185	8-Jul-04	27-Jul-04
LPX-SD-4406-0005-01	DIOX	1234678-HpCDF	D00004	67562-39-4	72.3		PG/G DRYWT	DF003	D00001	PACE	105821185	8-Jul-04	27-Jul-04
LPX-SD-4406-0005-01	DIOX	1234678-HpCDD	D00004	35822-46-9	229		PG/G DRYWT	DF003	D00001	PACE	105821185	8-Jul-04	27-Jul-04
LPX-SD-4406-0005-01	DIOX	1234789-HpCDF	D00004	55673-89-7	4.9	J	PG/G DRYWT	DF003	D00001	PACE	105821185	8-Jul-04	27-Jul-04
LPX-SD-4406-0005-01	DIOX	OCDD	D00004	3268-87-9	1600	B	PG/G DRYWT	DF003	D00001	PACE	105821185	8-Jul-04	27-Jul-04
LPX-SD-4406-0005-01	DIOX	OCDF	D00004	39001-02-0	110		PG/G DRYWT	DF003	D00001	PACE	105821185	8-Jul-04	27-Jul-04
LPX-SD-4406-0005-01	DIOX	13C-2378-TCDD	D00004	76523-40-5	110		PCT_REC	DF003	D00001	PACE	105821185	8-Jul-04	27-Jul-04
LPX-SD-4406-0005-01	DIOX	13C-12378-PeCDD	D00004	109719-79-1	84		PCT_REC	DF003	D00001	PACE	105821185	8-Jul-04	27-Jul-04
LPX-SD-4406-0005-01	DIOX	13C-123478-HxCDD	D00004	109719-80-4	120		PCT_REC	DF003	D00001	PACE	105821185	8-Jul-04	27-Jul-04
LPX-SD-4406-0005-01	DIOX	13C-123678-HxCDD	D00004	109719-81-5	94		PCT_REC	DF003	D00001	PACE	105821185	8-Jul-04	27-Jul-04
LPX-SD-4406-0005-01	DIOX	13C-1234678-HpCDD	D00004	109719-83-7	79		PCT_REC	DF003	D00001	PACE	105821185	8-Jul-04	27-Jul-04
LPX-SD-4406-0005-01	DIOX	13C-OCDD	D00004	114423-97-1	49		PCT_REC	DF003	D00001	PACE	105821185	8-Jul-04	27-Jul-04
LPX-SD-4406-0005-01	DIOX	13C-2378-TCDF	D00004	89059-46-1	107		PCT_REC	DF003	D00001	PACE	105821185	8-Jul-04	27-Jul-04
LPX-SD-4406-0005-01	DIOX	13C-12378-PeCDF	D00004	109719-77-9	114		PCT_REC	DF003	D00001	PACE	105821185	8-Jul-04	27-Jul-04
LPX-SD-4406-0005-01	DIOX	13C-23478-PeCDF	D00004	116843-02-8	91		PCT_REC	DF003	D00001	PACE	105821185	8-Jul-04	27-Jul-04
LPX-SD-4406-0005-01	DIOX	13C-123478-HxCDF	D00004	114423-98-2	118		PCT_REC	DF003	D00001	PACE	105821185	8-Jul-04	27-Jul-04
LPX-SD-4406-0005-01	DIOX	13C-123678-HxCDF	D00004	116843-03-9	83		PCT_REC	DF003	D00001	PACE	105821185	8-Jul-04	27-Jul-04
LPX-SD-4406-0005-01	DIOX	13C-123789-HxCDF	D00004	116843-04-0	99		PCT_REC	DF003	D00001	PACE	105821185	8-Jul-04	27-Jul-04
LPX-SD-4406-0005-01	DIOX	13C-234678-HxCDF	D00004	116843-05-1	93		PCT_REC	DF003	D00001	PACE	105821185	8-Jul-04	27-Jul-04
LPX-SD-4406-0005-01	DIOX	13C-1234678-HpCDF	D00004	109719-84-8	77		PCT_REC	DF003	D00001	PACE	105821185	8-Jul-04	27-Jul-04
LPX-SD-4406-0005-01	DIOX	13C-1234789-HpCDF	D00004	109719-94-0	63		PCT_REC	DF003	D00001	PACE	105821185	8-Jul-04	27-Jul-04
LPX-SD-4406-0005-01	DIOX	37Cl-2378-TCDD	D00004	85508-50-5	170		PCT_REC	DF003	D00001	PACE	105821185	8-Jul-04	27-Jul-04
LPX-SD-4406-0005-01	DIOX	Total TCDD	D00004		1910		PG/G DRYWT	DF003	D00001	PACE	105821185	8-Jul-04	27-Jul-04
LPX-SD-4406-0005-01	DIOX	Total PeCDD	D00004		34.9		PG/G DRYWT	DF003	D00001	PACE	105821185	8-Jul-04	27-Jul-04
LPX-SD-4406-0005-01	DIOX	Total HxCDD	D00004		96.6	B	PG/G DRYWT	DF003	D00001	PACE	105821185	8-Jul-04	27-Jul-04
LPX-SD-4406-0005-01	DIOX	Total HpCDD	D00004		436	B	PG/G DRYWT	DF003	D00001	PACE	105821185	8-Jul-04	27-Jul-04
LPX-SD-4406-0005-01	DIOX	Total TCDF	D00004		124		PG/G DRYWT	DF003	D00001	PACE	105821185	8-Jul-04	27-Jul-04
LPX-SD-4406-0005-01	DIOX	Total PeCDF	D00004		123		PG/G DRYWT	DF003	D00001	PACE	105821185	8-Jul-04	27-Jul-04
LPX-SD-4406-0005-01	DIOX	Total HxCDF	D00004		131		PG/G DRYWT	DF003	D00001	PACE	105821185	8-Jul-04	27-Jul-04
LPX-SD-4406-0005-01	DIOX	Total HpCDF	D00004		153		PG/G DRYWT	DF003	D00001	PACE	105821185	8-Jul-04	27-Jul-04

NSAMPLE	CLASS	PARAMETER	EPASAMNO	CASNO	LAB_RESULT	QUAL	UNITS	CASE	SDG	LABORATORY	LAB_ID	REC_DATE	EXTR_DATE
LPX-SD-4407-0005-01	DIOX	2378-TCDD	D00005	1746-01-6	2130	E	PG/G_DRYWT	DF003	D00001	PACE	105821193	8-Jul-04	27-Jul-04
LPX-SD-4407-0005-01	DIOX	2378-TCDF	D00005	51207-31-9	23.9		PG/G_DRYWT	DF003	D00001	PACE	105821193	8-Jul-04	27-Jul-04
LPX-SD-4407-0005-01	DIOX	12378-PeCDF	D00005	57117-41-6			PG/G_DRYWT	DF003	D00001	PACE	105821193	8-Jul-04	27-Jul-04
LPX-SD-4407-0005-01	DIOX	12378-PeCDD	D00005	40321-76-4	7.74		PG/G_DRYWT	DF003	D00001	PACE	105821193	8-Jul-04	27-Jul-04
LPX-SD-4407-0005-01	DIOX	23478-PeCDF	D00005	57117-31-4	17.4		PG/G_DRYWT	DF003	D00001	PACE	105821193	8-Jul-04	27-Jul-04
LPX-SD-4407-0005-01	DIOX	123478-HxCDF	D00005	70648-26-9	19		PG/G_DRYWT	DF003	D00001	PACE	105821193	8-Jul-04	27-Jul-04
LPX-SD-4407-0005-01	DIOX	123678-HxCDF	D00005	57117-44-9	12.3		PG/G_DRYWT	DF003	D00001	PACE	105821193	8-Jul-04	27-Jul-04
LPX-SD-4407-0005-01	DIOX	123478-HxCDD	D00005	39227-28-6	6.24		PG/G_DRYWT	DF003	D00001	PACE	105821193	8-Jul-04	27-Jul-04
LPX-SD-4407-0005-01	DIOX	123678-HxCDD	D00005	57663-85-7	11.9		PG/G_DRYWT	DF003	D00001	PACE	105821193	8-Jul-04	27-Jul-04
LPX-SD-4407-0005-01	DIOX	123789-HxCDD	D00005	19408-74-3	9.09		PG/G_DRYWT	DF003	D00001	PACE	105821193	8-Jul-04	27-Jul-04
LPX-SD-4407-0005-01	DIOX	234678-HxCDF	D00005	60851-34-5	11.3		PG/G_DRYWT	DF003	D00001	PACE	105821193	8-Jul-04	27-Jul-04
LPX-SD-4407-0005-01	DIOX	123789-HxCDF	D00005	72918-21-9	3.93	J	PG/G_DRYWT	DF003	D00001	PACE	105821193	8-Jul-04	27-Jul-04
LPX-SD-4407-0005-01	DIOX	1234678-HpCDF	D00005	67562-39-4	75.2		PG/G_DRYWT	DF003	D00001	PACE	105821193	8-Jul-04	27-Jul-04
LPX-SD-4407-0005-01	DIOX	1234678-HpCDD	D00005	35822-46-9	224		PG/G_DRYWT	DF003	D00001	PACE	105821193	8-Jul-04	27-Jul-04
LPX-SD-4407-0005-01	DIOX	1234789-HpCDF	D00005	55673-89-7	5.84		PG/G_DRYWT	DF003	D00001	PACE	105821193	8-Jul-04	27-Jul-04
LPX-SD-4407-0005-01	DIOX	OCDD	D00005	3268-87-9	1480	B	PG/G_DRYWT	DF003	D00001	PACE	105821193	8-Jul-04	27-Jul-04
LPX-SD-4407-0005-01	DIOX	OCDF	D00005	39001-02-0	102		PG/G_DRYWT	DF003	D00001	PACE	105821193	8-Jul-04	27-Jul-04
LPX-SD-4407-0005-01	DIOX	13C-2378-TCDD	D00005	76523-40-5	87		PCT_REC	DF003	D00001	PACE	105821193	8-Jul-04	27-Jul-04
LPX-SD-4407-0005-01	DIOX	13C-12378-PeCDD	D00005	109719-79-1	48		PCT_REC	DF003	D00001	PACE	105821193	8-Jul-04	27-Jul-04
LPX-SD-4407-0005-01	DIOX	13C-123478-HxCDD	D00005	109719-80-4	101		PCT_REC	DF003	D00001	PACE	105821193	8-Jul-04	27-Jul-04
LPX-SD-4407-0005-01	DIOX	13C-123678-HxCDD	D00005	109719-81-5	78		PCT_REC	DF003	D00001	PACE	105821193	8-Jul-04	27-Jul-04
LPX-SD-4407-0005-01	DIOX	13C-1234678-HpCDD	D00005	109719-83-7	63		PCT_REC	DF003	D00001	PACE	105821193	8-Jul-04	27-Jul-04
LPX-SD-4407-0005-01	DIOX	13C-OCDD	D00005	114423-97-1	46		PCT_REC	DF003	D00001	PACE	105821193	8-Jul-04	27-Jul-04
LPX-SD-4407-0005-01	DIOX	13C-2378-TCDF	D00005	89059-46-1	91		PCT_REC	DF003	D00001	PACE	105821193	8-Jul-04	27-Jul-04
LPX-SD-4407-0005-01	DIOX	13C-12378-PeCDF	D00005	109719-77-9	60		PCT_REC	DF003	D00001	PACE	105821193	8-Jul-04	27-Jul-04
LPX-SD-4407-0005-01	DIOX	13C-23478-PeCDF	D00005	116843-02-8	63		PCT_REC	DF003	D00001	PACE	105821193	8-Jul-04	27-Jul-04
LPX-SD-4407-0005-01	DIOX	13C-123478-HxCDF	D00005	114423-98-2	91		PCT_REC	DF003	D00001	PACE	105821193	8-Jul-04	27-Jul-04
LPX-SD-4407-0005-01	DIOX	13C-123678-HxCDF	D00005	116843-03-9	78		PCT_REC	DF003	D00001	PACE	105821193	8-Jul-04	27-Jul-04
LPX-SD-4407-0005-01	DIOX	13C-123789-HxCDF	D00005	116843-04-0	76		PCT_REC	DF003	D00001	PACE	105821193	8-Jul-04	27-Jul-04
LPX-SD-4407-0005-01	DIOX	13C-234678-HxCDF	D00005	116843-05-1	88		PCT_REC	DF003	D00001	PACE	105821193	8-Jul-04	27-Jul-04
LPX-SD-4407-0005-01	DIOX	13C-1234678-HpCDF	D00005	109719-84-8	70		PCT_REC	DF003	D00001	PACE	105821193	8-Jul-04	27-Jul-04
LPX-SD-4407-0005-01	DIOX	13C-1234789-HpCDF	D00005	109719-94-0	50		PCT_REC	DF003	D00001	PACE	105821193	8-Jul-04	27-Jul-04
LPX-SD-4407-0005-01	DIOX	37Cl-2378-TCDD	D00005	85508-50-5	152		PCT_REC	DF003	D00001	PACE	105821193	8-Jul-04	27-Jul-04
LPX-SD-4407-0005-01	DIOX	Total TCDD	D00005		2270		PG/G_DRYWT	DF003	D00001	PACE	105821193	8-Jul-04	27-Jul-04
LPX-SD-4407-0005-01	DIOX	Total PeCDD	D00005		127		PG/G_DRYWT	DF003	D00001	PACE	105821193	8-Jul-04	27-Jul-04
LPX-SD-4407-0005-01	DIOX	Total HxCDD	D00005		137	B	PG/G_DRYWT	DF003	D00001	PACE	105821193	8-Jul-04	27-Jul-04
LPX-SD-4407-0005-01	DIOX	Total HpCDD	D00005		474	B	PG/G_DRYWT	DF003	D00001	PACE	105821193	8-Jul-04	27-Jul-04
LPX-SD-4407-0005-01	DIOX	Total TCDF	D00005		360		PG/G_DRYWT	DF003	D00001	PACE	105821193	8-Jul-04	27-Jul-04
LPX-SD-4407-0005-01	DIOX	Total PeCDF	D00005		260		PG/G_DRYWT	DF003	D00001	PACE	105821193	8-Jul-04	27-Jul-04
LPX-SD-4407-0005-01	DIOX	Total HxCDF	D00005		149		PG/G_DRYWT	DF003	D00001	PACE	105821193	8-Jul-04	27-Jul-04
LPX-SD-4407-0005-01	DIOX	Total HpCDF	D00005		138		PG/G_DRYWT	DF003	D00001	PACE	105821193	8-Jul-04	27-Jul-04

NSAMPLE	CLASS	PARAMETER	EPASAMNO	CASNO	LAB_RESULT	QUAL	UNITS	CASE	SDG	LABORATORY	LAB_ID	REC_DATE	EXTR_DATE
LPX-SD-4402-0005-01	DIOX	2378-TCDD	D00006	1746-01-6	422	E	PG/G_DRYWT	DF003	D00001	PACE	105821201	8-Jul-04	27-Jul-04
LPX-SD-4402-0005-01	DIOX	2378-TCDF	D00006	51207-31-9	3.28		PG/G_DRYWT	DF003	D00001	PACE	105821201	8-Jul-04	27-Jul-04
LPX-SD-4402-0005-01	DIOX	12378-PeCDF	D00006	57117-41-6			PG/G_DRYWT	DF003	D00001	PACE	105821201	8-Jul-04	27-Jul-04
LPX-SD-4402-0005-01	DIOX	12378-PeCDD	D00006	40321-76-4	1.5	J	PG/G_DRYWT	DF003	D00001	PACE	105821201	8-Jul-04	27-Jul-04
LPX-SD-4402-0005-01	DIOX	23478-PeCDF	D00006	57117-31-4	1.84	J	PG/G_DRYWT	DF003	D00001	PACE	105821201	8-Jul-04	27-Jul-04
LPX-SD-4402-0005-01	DIOX	123478-HxCDF	D00006	70648-26-9	2.52	J	PG/G_DRYWT	DF003	D00001	PACE	105821201	8-Jul-04	27-Jul-04
LPX-SD-4402-0005-01	DIOX	123678-HxCDF	D00006	57117-44-9	1.84	J	PG/G_DRYWT	DF003	D00001	PACE	105821201	8-Jul-04	27-Jul-04
LPX-SD-4402-0005-01	DIOX	123478-HxCDD	D00006	39227-28-6	1.29	J	PG/G_DRYWT	DF003	D00001	PACE	105821201	8-Jul-04	27-Jul-04
LPX-SD-4402-0005-01	DIOX	123678-HxCDD	D00006	57663-85-7	2.13	J	PG/G_DRYWT	DF003	D00001	PACE	105821201	8-Jul-04	27-Jul-04
LPX-SD-4402-0005-01	DIOX	123789-HxCDD	D00006	19408-74-3	1.67	J	PG/G_DRYWT	DF003	D00001	PACE	105821201	8-Jul-04	27-Jul-04
LPX-SD-4402-0005-01	DIOX	234678-HxCDF	D00006	60851-34-5	2.06	J	PG/G_DRYWT	DF003	D00001	PACE	105821201	8-Jul-04	27-Jul-04
LPX-SD-4402-0005-01	DIOX	123789-HxCDF	D00006	72918-21-9	0.881	J	PG/G_DRYWT	DF003	D00001	PACE	105821201	8-Jul-04	27-Jul-04
LPX-SD-4402-0005-01	DIOX	1234678-HpCDF	D00006	67562-39-4	14.9		PG/G_DRYWT	DF003	D00001	PACE	105821201	8-Jul-04	27-Jul-04
LPX-SD-4402-0005-01	DIOX	1234678-HpCDD	D00006	35822-46-9	37.9		PG/G_DRYWT	DF003	D00001	PACE	105821201	8-Jul-04	27-Jul-04
LPX-SD-4402-0005-01	DIOX	1234789-HpCDF	D00006	55673-89-7	1.21	J	PG/G_DRYWT	DF003	D00001	PACE	105821201	8-Jul-04	27-Jul-04
LPX-SD-4402-0005-01	DIOX	OCDD	D00006	3268-87-9	230	B	PG/G_DRYWT	DF003	D00001	PACE	105821201	8-Jul-04	27-Jul-04
LPX-SD-4402-0005-01	DIOX	OCDF	D00006	39001-02-0	29.2		PG/G_DRYWT	DF003	D00001	PACE	105821201	8-Jul-04	27-Jul-04
LPX-SD-4402-0005-01	DIOX	13C-2378-TCDD	D00006	76523-40-5	84		PCT_REC	DF003	D00001	PACE	105821201	8-Jul-04	27-Jul-04
LPX-SD-4402-0005-01	DIOX	13C-12378-PeCDD	D00006	109719-79-1	34		PCT_REC	DF003	D00001	PACE	105821201	8-Jul-04	27-Jul-04
LPX-SD-4402-0005-01	DIOX	13C-123478-HxCDD	D00006	109719-80-4	94		PCT_REC	DF003	D00001	PACE	105821201	8-Jul-04	27-Jul-04
LPX-SD-4402-0005-01	DIOX	13C-123678-HxCDD	D00006	109719-81-5	69		PCT_REC	DF003	D00001	PACE	105821201	8-Jul-04	27-Jul-04
LPX-SD-4402-0005-01	DIOX	13C-1234678-HpCDD	D00006	109719-83-7	62		PCT_REC	DF003	D00001	PACE	105821201	8-Jul-04	27-Jul-04
LPX-SD-4402-0005-01	DIOX	13C-OCDD	D00006	114423-97-1	40		PCT_REC	DF003	D00001	PACE	105821201	8-Jul-04	27-Jul-04
LPX-SD-4402-0005-01	DIOX	13C-2378-TCDF	D00006	89059-46-1	85		PCT_REC	DF003	D00001	PACE	105821201	8-Jul-04	27-Jul-04
LPX-SD-4402-0005-01	DIOX	13C-12378-PeCDF	D00006	109719-77-9	60		PCT_REC	DF003	D00001	PACE	105821201	8-Jul-04	27-Jul-04
LPX-SD-4402-0005-01	DIOX	13C-23478-PeCDF	D00006	116843-02-8	63		PCT_REC	DF003	D00001	PACE	105821201	8-Jul-04	27-Jul-04
LPX-SD-4402-0005-01	DIOX	13C-123478-HxCDF	D00006	114423-98-2	84		PCT_REC	DF003	D00001	PACE	105821201	8-Jul-04	27-Jul-04
LPX-SD-4402-0005-01	DIOX	13C-123678-HxCDF	D00006	116843-03-9	70		PCT_REC	DF003	D00001	PACE	105821201	8-Jul-04	27-Jul-04
LPX-SD-4402-0005-01	DIOX	13C-123789-HxCDF	D00006	116843-04-0	72		PCT_REC	DF003	D00001	PACE	105821201	8-Jul-04	27-Jul-04
LPX-SD-4402-0005-01	DIOX	13C-234678-HxCDF	D00006	116843-05-1	76		PCT_REC	DF003	D00001	PACE	105821201	8-Jul-04	27-Jul-04
LPX-SD-4402-0005-01	DIOX	13C-1234678-HpCDF	D00006	109719-84-8	63		PCT_REC	DF003	D00001	PACE	105821201	8-Jul-04	27-Jul-04
LPX-SD-4402-0005-01	DIOX	13C-1234789-HpCDF	D00006	109719-94-0	50		PCT_REC	DF003	D00001	PACE	105821201	8-Jul-04	27-Jul-04
LPX-SD-4402-0005-01	DIOX	37Cl-2378-TCDD	D00006	85508-50-5	98		PCT_REC	DF003	D00001	PACE	105821201	8-Jul-04	27-Jul-04
LPX-SD-4402-0005-01	DIOX	Total TCDD	D00006		435		PG/G_DRYWT	DF003	D00001	PACE	105821201	8-Jul-04	27-Jul-04
LPX-SD-4402-0005-01	DIOX	Total PeCDD	D00006		11.6		PG/G_DRYWT	DF003	D00001	PACE	105821201	8-Jul-04	27-Jul-04
LPX-SD-4402-0005-01	DIOX	Total HxCDD	D00006		22.8	B	PG/G_DRYWT	DF003	D00001	PACE	105821201	8-Jul-04	27-Jul-04
LPX-SD-4402-0005-01	DIOX	Total HpCDD	D00006		74.2	B	PG/G_DRYWT	DF003	D00001	PACE	105821201	8-Jul-04	27-Jul-04
LPX-SD-4402-0005-01	DIOX	Total TCDF	D00006		31.9		PG/G_DRYWT	DF003	D00001	PACE	105821201	8-Jul-04	27-Jul-04
LPX-SD-4402-0005-01	DIOX	Total PeCDF	D00006		34.5		PG/G_DRYWT	DF003	D00001	PACE	105821201	8-Jul-04	27-Jul-04
LPX-SD-4402-0005-01	DIOX	Total HxCDF	D00006		24		PG/G_DRYWT	DF003	D00001	PACE	105821201	8-Jul-04	27-Jul-04
LPX-SD-4402-0005-01	DIOX	Total HpCDF	D00006		30.1		PG/G_DRYWT	DF003	D00001	PACE	105821201	8-Jul-04	27-Jul-04

NSAMPLE	CLASS	PARAMETER	EPASAMNO	CASNO	LAB_RESULT	QUAL	UNITS	CASE	SDG	LABORATORY	LAB_ID	REC_DATE	EXTR_DATE
LPX-SD-4405-0005-01	DIOX	2378-TCDD	D00007	1746-01-6	4350	E	PG/G_DRYWT	DF003	D00001	PACE	105821219	8-Jul-04	27-Jul-04
LPX-SD-4405-0005-01	DIOX	2378-TCDF	D00007	51207-31-9	7.54		PG/G_DRYWT	DF003	D00001	PACE	105821219	8-Jul-04	27-Jul-04
LPX-SD-4405-0005-01	DIOX	12378-PeCDF	D00007	57117-41-6			PG/G_DRYWT	DF003	D00001	PACE	105821219	8-Jul-04	27-Jul-04
LPX-SD-4405-0005-01	DIOX	12378-PeCDD	D00007	40321-76-4	6.91		PG/G_DRYWT	DF003	D00001	PACE	105821219	8-Jul-04	27-Jul-04
LPX-SD-4405-0005-01	DIOX	23478-PeCDF	D00007	57117-31-4	6.3		PG/G_DRYWT	DF003	D00001	PACE	105821219	8-Jul-04	27-Jul-04
LPX-SD-4405-0005-01	DIOX	123478-HxCDF	D00007	70648-26-9	11.7		PG/G_DRYWT	DF003	D00001	PACE	105821219	8-Jul-04	27-Jul-04
LPX-SD-4405-0005-01	DIOX	123678-HxCDF	D00007	57117-44-9	8.55		PG/G_DRYWT	DF003	D00001	PACE	105821219	8-Jul-04	27-Jul-04
LPX-SD-4405-0005-01	DIOX	123478-HxCDD	D00007	39227-28-6	6.17		PG/G_DRYWT	DF003	D00001	PACE	105821219	8-Jul-04	27-Jul-04
LPX-SD-4405-0005-01	DIOX	123678-HxCDD	D00007	57663-85-7	12.8		PG/G_DRYWT	DF003	D00001	PACE	105821219	8-Jul-04	27-Jul-04
LPX-SD-4405-0005-01	DIOX	123789-HxCDD	D00007	19408-74-3	8.75		PG/G_DRYWT	DF003	D00001	PACE	105821219	8-Jul-04	27-Jul-04
LPX-SD-4405-0005-01	DIOX	234678-HxCDF	D00007	60851-34-5	11.8		PG/G_DRYWT	DF003	D00001	PACE	105821219	8-Jul-04	27-Jul-04
LPX-SD-4405-0005-01	DIOX	123789-HxCDF	D00007	72918-21-9	2.7	J	PG/G_DRYWT	DF003	D00001	PACE	105821219	8-Jul-04	27-Jul-04
LPX-SD-4405-0005-01	DIOX	1234678-HpCDF	D00007	67562-39-4	89.3		PG/G_DRYWT	DF003	D00001	PACE	105821219	8-Jul-04	27-Jul-04
LPX-SD-4405-0005-01	DIOX	1234678-HpCDD	D00007	35822-46-9	213		PG/G_DRYWT	DF003	D00001	PACE	105821219	8-Jul-04	27-Jul-04
LPX-SD-4405-0005-01	DIOX	1234789-HpCDF	D00007	55673-89-7	5.27		PG/G_DRYWT	DF003	D00001	PACE	105821219	8-Jul-04	27-Jul-04
LPX-SD-4405-0005-01	DIOX	OCDD	D00007	3268-87-9	1380	B	PG/G_DRYWT	DF003	D00001	PACE	105821219	8-Jul-04	27-Jul-04
LPX-SD-4405-0005-01	DIOX	OCDF	D00007	39001-02-0	114		PG/G_DRYWT	DF003	D00001	PACE	105821219	8-Jul-04	27-Jul-04
LPX-SD-4405-0005-01	DIOX	13C-2378-TCDD	D00007	76523-40-5	96		PCT_REC	DF003	D00001	PACE	105821219	8-Jul-04	27-Jul-04
LPX-SD-4405-0005-01	DIOX	13C-12378-PeCDD	D00007	109719-79-1	94		PCT_REC	DF003	D00001	PACE	105821219	8-Jul-04	27-Jul-04
LPX-SD-4405-0005-01	DIOX	13C-123478-HxCDD	D00007	109719-80-4	107		PCT_REC	DF003	D00001	PACE	105821219	8-Jul-04	27-Jul-04
LPX-SD-4405-0005-01	DIOX	13C-123678-HxCDD	D00007	109719-81-5	72		PCT_REC	DF003	D00001	PACE	105821219	8-Jul-04	27-Jul-04
LPX-SD-4405-0005-01	DIOX	13C-1234678-HpCDD	D00007	109719-83-7	73		PCT_REC	DF003	D00001	PACE	105821219	8-Jul-04	27-Jul-04
LPX-SD-4405-0005-01	DIOX	13C-OCDD	D00007	114423-97-1	56		PCT_REC	DF003	D00001	PACE	105821219	8-Jul-04	27-Jul-04
LPX-SD-4405-0005-01	DIOX	13C-2378-TCDF	D00007	89059-46-1	96		PCT_REC	DF003	D00001	PACE	105821219	8-Jul-04	27-Jul-04
LPX-SD-4405-0005-01	DIOX	13C-12378-PeCDF	D00007	109719-77-9	99		PCT_REC	DF003	D00001	PACE	105821219	8-Jul-04	27-Jul-04
LPX-SD-4405-0005-01	DIOX	13C-23478-PeCDF	D00007	116843-02-8	94		PCT_REC	DF003	D00001	PACE	105821219	8-Jul-04	27-Jul-04
LPX-SD-4405-0005-01	DIOX	13C-123478-HxCDF	D00007	114423-98-2	98		PCT_REC	DF003	D00001	PACE	105821219	8-Jul-04	27-Jul-04
LPX-SD-4405-0005-01	DIOX	13C-123678-HxCDF	D00007	116843-03-9	77		PCT_REC	DF003	D00001	PACE	105821219	8-Jul-04	27-Jul-04
LPX-SD-4405-0005-01	DIOX	13C-123789-HxCDF	D00007	116843-04-0	86		PCT_REC	DF003	D00001	PACE	105821219	8-Jul-04	27-Jul-04
LPX-SD-4405-0005-01	DIOX	13C-234678-HxCDF	D00007	116843-05-1	87		PCT_REC	DF003	D00001	PACE	105821219	8-Jul-04	27-Jul-04
LPX-SD-4405-0005-01	DIOX	13C-1234678-HpCDF	D00007	109719-84-8	77		PCT_REC	DF003	D00001	PACE	105821219	8-Jul-04	27-Jul-04
LPX-SD-4405-0005-01	DIOX	13C-1234789-HpCDF	D00007	109719-94-0	62		PCT_REC	DF003	D00001	PACE	105821219	8-Jul-04	27-Jul-04
LPX-SD-4405-0005-01	DIOX	37CI-2378-TCDD	D00007	85508-50-5	201		PCT_REC	DF003	D00001	PACE	105821219	8-Jul-04	27-Jul-04
LPX-SD-4405-0005-01	DIOX	Total TCDD	D00007		4460		PG/G_DRYWT	DF003	D00001	PACE	105821219	8-Jul-04	27-Jul-04
LPX-SD-4405-0005-01	DIOX	Total PeCDD	D00007		56.7		PG/G_DRYWT	DF003	D00001	PACE	105821219	8-Jul-04	27-Jul-04
LPX-SD-4405-0005-01	DIOX	Total HxCDD	D00007		150	B	PG/G_DRYWT	DF003	D00001	PACE	105821219	8-Jul-04	27-Jul-04
LPX-SD-4405-0005-01	DIOX	Total HpCDD	D00007		415	B	PG/G_DRYWT	DF003	D00001	PACE	105821219	8-Jul-04	27-Jul-04
LPX-SD-4405-0005-01	DIOX	Total TCDF	D00007		127		PG/G_DRYWT	DF003	D00001	PACE	105821219	8-Jul-04	27-Jul-04
LPX-SD-4405-0005-01	DIOX	Total PeCDF	D00007		227		PG/G_DRYWT	DF003	D00001	PACE	105821219	8-Jul-04	27-Jul-04
LPX-SD-4405-0005-01	DIOX	Total HxCDF	D00007		233		PG/G_DRYWT	DF003	D00001	PACE	105821219	8-Jul-04	27-Jul-04
LPX-SD-4405-0005-01	DIOX	Total HpCDF	D00007		174		PG/G_DRYWT	DF003	D00001	PACE	105821219	8-Jul-04	27-Jul-04

NSAMPLE	CLASS	PARAMETER	EPASAMNO	CASNO	LAB_RESULT	QUAL	UNITS	CASE	SDG	LABORATORY	LAB_ID	REC_DATE	EXTR_DATE
LPX-DU-062104B	DIOX	2378-TCDD	D00008	1746-01-6	806	E	PG/G_DRYWT	DF003	D00001	PACE	105821227	8-Jul-04	27-Jul-04
LPX-DU-062104B	DIOX	2378-TCDF	D00008	51207-31-9	2.86		PG/G_DRYWT	DF003	D00001	PACE	105821227	8-Jul-04	27-Jul-04
LPX-DU-062104B	DIOX	12378-PeCDF	D00008	57117-41-6			PG/G_DRYWT	DF003	D00001	PACE	105821227	8-Jul-04	27-Jul-04
LPX-DU-062104B	DIOX	12378-PeCDD	D00008	40321-76-4	1.23	J	PG/G_DRYWT	DF003	D00001	PACE	105821227	8-Jul-04	27-Jul-04
LPX-DU-062104B	DIOX	23478-PeCDF	D00008	57117-31-4			PG/G_DRYWT	DF003	D00001	PACE	105821227	8-Jul-04	27-Jul-04
LPX-DU-062104B	DIOX	123478-HxCDF	D00008	70648-26-9	2.51	J	PG/G_DRYWT	DF003	D00001	PACE	105821227	8-Jul-04	27-Jul-04
LPX-DU-062104B	DIOX	123678-HxCDF	D00008	57117-44-9	1.69	J	PG/G_DRYWT	DF003	D00001	PACE	105821227	8-Jul-04	27-Jul-04
LPX-DU-062104B	DIOX	123478-HxCDD	D00008	39227-28-6	1.28	J	PG/G_DRYWT	DF003	D00001	PACE	105821227	8-Jul-04	27-Jul-04
LPX-DU-062104B	DIOX	123678-HxCDD	D00008	57663-85-7	2.67	J	PG/G_DRYWT	DF003	D00001	PACE	105821227	8-Jul-04	27-Jul-04
LPX-DU-062104B	DIOX	123789-HxCDD	D00008	19408-74-3	2.06	J	PG/G_DRYWT	DF003	D00001	PACE	105821227	8-Jul-04	27-Jul-04
LPX-DU-062104B	DIOX	234678-HxCDF	D00008	60851-34-5	1.32	J	PG/G_DRYWT	DF003	D00001	PACE	105821227	8-Jul-04	27-Jul-04
LPX-DU-062104B	DIOX	123789-HxCDF	D00008	72918-21-9	0.852	J	PG/G_DRYWT	DF003	D00001	PACE	105821227	8-Jul-04	27-Jul-04
LPX-DU-062104B	DIOX	1234678-HpCDF	D00008	67562-39-4	13.8		PG/G_DRYWT	DF003	D00001	PACE	105821227	8-Jul-04	27-Jul-04
LPX-DU-062104B	DIOX	1234678-HpCDD	D00008	35822-46-9	44.2		PG/G_DRYWT	DF003	D00001	PACE	105821227	8-Jul-04	27-Jul-04
LPX-DU-062104B	DIOX	1234789-HpCDF	D00008	55673-89-7		U	PG/G_DRYWT	DF003	D00001	PACE	105821227	8-Jul-04	27-Jul-04
LPX-DU-062104B	DIOX	OCDD	D00008	3268-87-9	291	B	PG/G_DRYWT	DF003	D00001	PACE	105821227	8-Jul-04	27-Jul-04
LPX-DU-062104B	DIOX	OCDF	D00008	39001-02-0	19.2		PG/G_DRYWT	DF003	D00001	PACE	105821227	8-Jul-04	27-Jul-04
LPX-DU-062104B	DIOX	13C-2378-TCDD	D00008	76523-40-5	100		PCT_REC	DF003	D00001	PACE	105821227	8-Jul-04	27-Jul-04
LPX-DU-062104B	DIOX	13C-12378-PeCDD	D00008	109719-79-1	77		PCT_REC	DF003	D00001	PACE	105821227	8-Jul-04	27-Jul-04
LPX-DU-062104B	DIOX	13C-123478-HxCDD	D00008	109719-80-4	118		PCT_REC	DF003	D00001	PACE	105821227	8-Jul-04	27-Jul-04
LPX-DU-062104B	DIOX	13C-123678-HxCDD	D00008	109719-81-5	79		PCT_REC	DF003	D00001	PACE	105821227	8-Jul-04	27-Jul-04
LPX-DU-062104B	DIOX	13C-1234678-HpCDD	D00008	109719-83-7	71		PCT_REC	DF003	D00001	PACE	105821227	8-Jul-04	27-Jul-04
LPX-DU-062104B	DIOX	13C-OCDD	D00008	114423-97-1	49		PCT_REC	DF003	D00001	PACE	105821227	8-Jul-04	27-Jul-04
LPX-DU-062104B	DIOX	13C-2378-TCDF	D00008	89059-46-1	101		PCT_REC	DF003	D00001	PACE	105821227	8-Jul-04	27-Jul-04
LPX-DU-062104B	DIOX	13C-12378-PeCDF	D00008	109719-77-9	95		PCT_REC	DF003	D00001	PACE	105821227	8-Jul-04	27-Jul-04
LPX-DU-062104B	DIOX	13C-23478-PeCDF	D00008	116843-02-8	78		PCT_REC	DF003	D00001	PACE	105821227	8-Jul-04	27-Jul-04
LPX-DU-062104B	DIOX	13C-123478-HxCDF	D00008	114423-98-2	110		PCT_REC	DF003	D00001	PACE	105821227	8-Jul-04	27-Jul-04
LPX-DU-062104B	DIOX	13C-123678-HxCDF	D00008	116843-03-9	82		PCT_REC	DF003	D00001	PACE	105821227	8-Jul-04	27-Jul-04
LPX-DU-062104B	DIOX	13C-123789-HxCDF	D00008	116843-04-0	88		PCT_REC	DF003	D00001	PACE	105821227	8-Jul-04	27-Jul-04
LPX-DU-062104B	DIOX	13C-234678-HxCDF	D00008	116843-05-1	95		PCT_REC	DF003	D00001	PACE	105821227	8-Jul-04	27-Jul-04
LPX-DU-062104B	DIOX	13C-1234678-HpCDF	D00008	109719-84-8	76		PCT_REC	DF003	D00001	PACE	105821227	8-Jul-04	27-Jul-04
LPX-DU-062104B	DIOX	13C-1234789-HpCDF	D00008	109719-94-0	60		PCT_REC	DF003	D00001	PACE	105821227	8-Jul-04	27-Jul-04
LPX-DU-062104B	DIOX	37Cl-2378-TCDD	D00008	85508-50-5	125		PCT_REC	DF003	D00001	PACE	105821227	8-Jul-04	27-Jul-04
LPX-DU-062104B	DIOX	Total TCDD	D00008		833		PG/G_DRYWT	DF003	D00001	PACE	105821227	8-Jul-04	27-Jul-04
LPX-DU-062104B	DIOX	Total PeCDD	D00008		5.88		PG/G_DRYWT	DF003	D00001	PACE	105821227	8-Jul-04	27-Jul-04
LPX-DU-062104B	DIOX	Total HxCDD	D00008		26.2	B	PG/G_DRYWT	DF003	D00001	PACE	105821227	8-Jul-04	27-Jul-04
LPX-DU-062104B	DIOX	Total HpCDD	D00008		83.3	B	PG/G_DRYWT	DF003	D00001	PACE	105821227	8-Jul-04	27-Jul-04
LPX-DU-062104B	DIOX	Total TCDF	D00008		40.3		PG/G_DRYWT	DF003	D00001	PACE	105821227	8-Jul-04	27-Jul-04
LPX-DU-062104B	DIOX	Total PeCDF	D00008		34		PG/G_DRYWT	DF003	D00001	PACE	105821227	8-Jul-04	27-Jul-04
LPX-DU-062104B	DIOX	Total HxCDF	D00008		30.8		PG/G_DRYWT	DF003	D00001	PACE	105821227	8-Jul-04	27-Jul-04
LPX-DU-062104B	DIOX	Total HpCDF	D00008		27.1		PG/G_DRYWT	DF003	D00001	PACE	105821227	8-Jul-04	27-Jul-04

NSAMPLE	CLASS	PARAMETER	EPASAMNO	CASNO	LAB_RESULT	QUAL	UNITS	CASE	SDG	LABORATORY	LAB_ID	REC_DATE	EXTR_DATE
D00009	PC01090	DIOX 2378-TCDD	D00009 PC01090	1746-01-6		U	PG/G_DRYWT	DF003	D00001	PACE	105821235	8-Jul-04	27-Jul-04
D00009	PC01090	DIOX 2378-TCDF	D00009 PC01090	51207-31-9		U	PG/G_DRYWT	DF003	D00001	PACE	105821235	8-Jul-04	27-Jul-04
D00009	PC01090	DIOX 12378-PeCDF	D00009 PC01090	57117-41-6		U	PG/G_DRYWT	DF003	D00001	PACE	105821235	8-Jul-04	27-Jul-04
D00009	PC01090	DIOX 12378-PeCDD	D00009 PC01090	40321-76-4		U	PG/G_DRYWT	DF003	D00001	PACE	105821235	8-Jul-04	27-Jul-04
D00009	PC01090	DIOX 23478-PeCDF	D00009 PC01090	57117-31-4		U	PG/G_DRYWT	DF003	D00001	PACE	105821235	8-Jul-04	27-Jul-04
D00009	PC01090	DIOX 123478-HxCDF	D00009 PC01090	70648-26-9		U	PG/G_DRYWT	DF003	D00001	PACE	105821235	8-Jul-04	27-Jul-04
D00009	PC01090	DIOX 123678-HxCDF	D00009 PC01090	57117-44-9		U	PG/G_DRYWT	DF003	D00001	PACE	105821235	8-Jul-04	27-Jul-04
D00009	PC01090	DIOX 123478-HxCDD	D00009 PC01090	39227-28-6		U	PG/G_DRYWT	DF003	D00001	PACE	105821235	8-Jul-04	27-Jul-04
D00009	PC01090	DIOX 123678-HxCDD	D00009 PC01090	57663-85-7		U	PG/G_DRYWT	DF003	D00001	PACE	105821235	8-Jul-04	27-Jul-04
D00009	PC01090	DIOX 123789-HxCDD	D00009 PC01090	19408-74-3		U	PG/G_DRYWT	DF003	D00001	PACE	105821235	8-Jul-04	27-Jul-04
D00009	PC01090	DIOX 234678-HxCDF	D00009 PC01090	60851-34-5		U	PG/G_DRYWT	DF003	D00001	PACE	105821235	8-Jul-04	27-Jul-04
D00009	PC01090	DIOX 123789-HxCDF	D00009 PC01090	72918-21-9		U	PG/G_DRYWT	DF003	D00001	PACE	105821235	8-Jul-04	27-Jul-04
D00009	PC01090	DIOX 1234678-HpCDF	D00009 PC01090	67562-39-4		U	PG/G_DRYWT	DF003	D00001	PACE	105821235	8-Jul-04	27-Jul-04
D00009	PC01090	DIOX 1234678-HpCDD	D00009 PC01090	35822-46-9			PG/G_DRYWT	DF003	D00001	PACE	105821235	8-Jul-04	27-Jul-04
D00009	PC01090	DIOX 1234789-HpCDF	D00009 PC01090	55673-89-7		U	PG/G_DRYWT	DF003	D00001	PACE	105821235	8-Jul-04	27-Jul-04
D00009	PC01090	DIOX OCDD	D00009 PC01090	3268-87-9	2.37	JB	PG/G_DRYWT	DF003	D00001	PACE	105821235	8-Jul-04	27-Jul-04
D00009	PC01090	DIOX OCDF	D00009 PC01090	39001-02-0		U	PG/G_DRYWT	DF003	D00001	PACE	105821235	8-Jul-04	27-Jul-04
D00009	PC01090	DIOX 13C-2378-TCDD	D00009 PC01090	76523-40-5	101		PCT_REC	DF003	D00001	PACE	105821235	8-Jul-04	27-Jul-04
D00009	PC01090	DIOX 13C-12378-PeCDD	D00009 PC01090	109719-79-1	106		PCT_REC	DF003	D00001	PACE	105821235	8-Jul-04	27-Jul-04
D00009	PC01090	DIOX 13C-123478-HxCDD	D00009 PC01090	109719-80-4	94		PCT_REC	DF003	D00001	PACE	105821235	8-Jul-04	27-Jul-04
D00009	PC01090	DIOX 13C-123678-HxCDD	D00009 PC01090	109719-81-5	95		PCT_REC	DF003	D00001	PACE	105821235	8-Jul-04	27-Jul-04
D00009	PC01090	DIOX 13C-1234678-HpCDD	D00009 PC01090	109719-83-7	73		PCT_REC	DF003	D00001	PACE	105821235	8-Jul-04	27-Jul-04
D00009	PC01090	DIOX 13C-OCDD	D00009 PC01090	114423-97-1	58		PCT_REC	DF003	D00001	PACE	105821235	8-Jul-04	27-Jul-04
D00009	PC01090	DIOX 13C-2378-TCDF	D00009 PC01090	89059-46-1	98		PCT_REC	DF003	D00001	PACE	105821235	8-Jul-04	27-Jul-04
D00009	PC01090	DIOX 13C-12378-PeCDF	D00009 PC01090	109719-77-9	114		PCT_REC	DF003	D00001	PACE	105821235	8-Jul-04	27-Jul-04
D00009	PC01090	DIOX 13C-23478-PeCDF	D00009 PC01090	116843-02-8	108		PCT_REC	DF003	D00001	PACE	105821235	8-Jul-04	27-Jul-04
D00009	PC01090	DIOX 13C-123478-HxCDF	D00009 PC01090	114423-98-2	97		PCT_REC	DF003	D00001	PACE	105821235	8-Jul-04	27-Jul-04
D00009	PC01090	DIOX 13C-123678-HxCDF	D00009 PC01090	116843-03-9	91		PCT_REC	DF003	D00001	PACE	105821235	8-Jul-04	27-Jul-04
D00009	PC01090	DIOX 13C-123789-HxCDF	D00009 PC01090	116843-04-0	87		PCT_REC	DF003	D00001	PACE	105821235	8-Jul-04	27-Jul-04
D00009	PC01090	DIOX 13C-234678-HxCDF	D00009 PC01090	116843-05-1	87		PCT_REC	DF003	D00001	PACE	105821235	8-Jul-04	27-Jul-04
D00009	PC01090	DIOX 13C-1234678-HpCDF	D00009 PC01090	109719-84-8	80		PCT_REC	DF003	D00001	PACE	105821235	8-Jul-04	27-Jul-04
D00009	PC01090	DIOX 13C-1234789-HpCDF	D00009 PC01090	109719-94-0	62		PCT_REC	DF003	D00001	PACE	105821235	8-Jul-04	27-Jul-04
D00009	PC01090	DIOX 37Cl-2378-TCDD	D00009 PC01090	85508-50-5	101		PCT_REC	DF003	D00001	PACE	105821235	8-Jul-04	27-Jul-04
D00009	PC01090	DIOX Total TCDD	D00009 PC01090		0.719	J	PG/G_DRYWT	DF003	D00001	PACE	105821235	8-Jul-04	27-Jul-04
D00009	PC01090	DIOX Total PeCDD	D00009 PC01090			U	PG/G_DRYWT	DF003	D00001	PACE	105821235	8-Jul-04	27-Jul-04
D00009	PC01090	DIOX Total HxCDD	D00009 PC01090		0.441	JB	PG/G_DRYWT	DF003	D00001	PACE	105821235	8-Jul-04	27-Jul-04
D00009	PC01090	DIOX Total HpCDD	D00009 PC01090		0.907	JB	PG/G_DRYWT	DF003	D00001	PACE	105821235	8-Jul-04	27-Jul-04
D00009	PC01090	DIOX Total TCDF	D00009 PC01090			U	PG/G_DRYWT	DF003	D00001	PACE	105821235	8-Jul-04	27-Jul-04
D00009	PC01090	DIOX Total PeCDF	D00009 PC01090			U	PG/G_DRYWT	DF003	D00001	PACE	105821235	8-Jul-04	27-Jul-04
D00009	PC01090	DIOX Total HxCDF	D00009 PC01090			U	PG/G_DRYWT	DF003	D00001	PACE	105821235	8-Jul-04	27-Jul-04
D00009	PC01090	DIOX Total HpCDF	D00009 PC01090			U	PG/G_DRYWT	DF003	D00001	PACE	105821235	8-Jul-04	27-Jul-04

NSAMPLE	CLASS	PARAMETER	EPASAMNO	CASNO	LAB_RESULT	QUAL	UNITS	CASE	SDG	LABORATORY	LAB_ID	REC_DATE	EXTR_DATE
D00010 PC00562	DIOX	2378-TCDD	D00010 PC00562	1746-01-6	28.4		PG/G DRYWT	DF003	D00001	PACE	105821243	8-Jul-04	27-Jul-04
D00010 PC00562	DIOX	2378-TCDF	D00010 PC00562	51207-31-9	3.92		PG/G DRYWT	DF003	D00001	PACE	105821243	8-Jul-04	27-Jul-04
D00010 PC00562	DIOX	12378-PeCDF	D00010 PC00562	57117-41-6	17.9		PG/G DRYWT	DF003	D00001	PACE	105821243	8-Jul-04	27-Jul-04
D00010 PC00562	DIOX	12378-PeCDD	D00010 PC00562	40321-76-4	23.4		PG/G DRYWT	DF003	D00001	PACE	105821243	8-Jul-04	27-Jul-04
D00010 PC00562	DIOX	23478-PeCDF	D00010 PC00562	57117-31-4	0.681	J	PG/G DRYWT	DF003	D00001	PACE	105821243	8-Jul-04	27-Jul-04
D00010 PC00562	DIOX	123478-HxCDF	D00010 PC00562	70648-26-9	25.3		PG/G DRYWT	DF003	D00001	PACE	105821243	8-Jul-04	27-Jul-04
D00010 PC00562	DIOX	123678-HxCDF	D00010 PC00562	57117-44-9	3.82	J	PG/G DRYWT	DF003	D00001	PACE	105821243	8-Jul-04	27-Jul-04
D00010 PC00562	DIOX	123478-HxCDD	D00010 PC00562	39227-28-6	20.6		PG/G DRYWT	DF003	D00001	PACE	105821243	8-Jul-04	27-Jul-04
D00010 PC00562	DIOX	123678-HxCDD	D00010 PC00562	57663-85-7	5		PG/G DRYWT	DF003	D00001	PACE	105821243	8-Jul-04	27-Jul-04
D00010 PC00562	DIOX	123789-HxCDD	D00010 PC00562	19408-74-3	44.7		PG/G DRYWT	DF003	D00001	PACE	105821243	8-Jul-04	27-Jul-04
D00010 PC00562	DIOX	234678-HxCDF	D00010 PC00562	60851-34-5	20.5		PG/G DRYWT	DF003	D00001	PACE	105821243	8-Jul-04	27-Jul-04
D00010 PC00562	DIOX	123789-HxCDF	D00010 PC00562	72918-21-9	5.53		PG/G DRYWT	DF003	D00001	PACE	105821243	8-Jul-04	27-Jul-04
D00010 PC00562	DIOX	1234678-HpCDF	D00010 PC00562	67562-39-4	37.4		PG/G DRYWT	DF003	D00001	PACE	105821243	8-Jul-04	27-Jul-04
D00010 PC00562	DIOX	1234678-HpCDD	D00010 PC00562	35822-46-9	27.3		PG/G DRYWT	DF003	D00001	PACE	105821243	8-Jul-04	27-Jul-04
D00010 PC00562	DIOX	1234789-HpCDF	D00010 PC00562	55673-89-7	16.7		PG/G DRYWT	DF003	D00001	PACE	105821243	8-Jul-04	27-Jul-04
D00010 PC00562	DIOX	OCDD	D00010 PC00562	3268-87-9	210	B	PG/G DRYWT	DF003	D00001	PACE	105821243	8-Jul-04	27-Jul-04
D00010 PC00562	DIOX	OCDF	D00010 PC00562	39001-02-0	87.1		PG/G DRYWT	DF003	D00001	PACE	105821243	8-Jul-04	27-Jul-04
D00010 PC00562	DIOX	13C-2378-TCDD	D00010 PC00562	76523-40-5	80		PCT_REC	DF003	D00001	PACE	105821243	8-Jul-04	27-Jul-04
D00010 PC00562	DIOX	13C-12378-PeCDD	D00010 PC00562	109719-79-1	85		PCT_REC	DF003	D00001	PACE	105821243	8-Jul-04	27-Jul-04
D00010 PC00562	DIOX	13C-123478-HxCDD	D00010 PC00562	109719-80-4	77		PCT_REC	DF003	D00001	PACE	105821243	8-Jul-04	27-Jul-04
D00010 PC00562	DIOX	13C-123678-HxCDD	D00010 PC00562	109719-81-5	72		PCT_REC	DF003	D00001	PACE	105821243	8-Jul-04	27-Jul-04
D00010 PC00562	DIOX	13C-1234678-HpCDD	D00010 PC00562	109719-83-7	56		PCT_REC	DF003	D00001	PACE	105821243	8-Jul-04	27-Jul-04
D00010 PC00562	DIOX	13C-OCDD	D00010 PC00562	114423-97-1	44		PCT_REC	DF003	D00001	PACE	105821243	8-Jul-04	27-Jul-04
D00010 PC00562	DIOX	13C-2378-TCDF	D00010 PC00562	89059-46-1	80		PCT_REC	DF003	D00001	PACE	105821243	8-Jul-04	27-Jul-04
D00010 PC00562	DIOX	13C-12378-PeCDF	D00010 PC00562	109719-77-9	94		PCT_REC	DF003	D00001	PACE	105821243	8-Jul-04	27-Jul-04
D00010 PC00562	DIOX	13C-23478-PeCDF	D00010 PC00562	116843-02-8	88		PCT_REC	DF003	D00001	PACE	105821243	8-Jul-04	27-Jul-04
D00010 PC00562	DIOX	13C-123478-HxCDF	D00010 PC00562	114423-98-2	80		PCT_REC	DF003	D00001	PACE	105821243	8-Jul-04	27-Jul-04
D00010 PC00562	DIOX	13C-123678-HxCDF	D00010 PC00562	116843-03-9	69		PCT_REC	DF003	D00001	PACE	105821243	8-Jul-04	27-Jul-04
D00010 PC00562	DIOX	13C-123789-HxCDF	D00010 PC00562	116843-04-0	72		PCT_REC	DF003	D00001	PACE	105821243	8-Jul-04	27-Jul-04
D00010 PC00562	DIOX	13C-234678-HxCDF	D00010 PC00562	116843-05-1	68		PCT_REC	DF003	D00001	PACE	105821243	8-Jul-04	27-Jul-04
D00010 PC00562	DIOX	13C-1234678-HpCDF	D00010 PC00562	109719-84-8	62		PCT_REC	DF003	D00001	PACE	105821243	8-Jul-04	27-Jul-04
D00010 PC00562	DIOX	13C-1234789-HpCDF	D00010 PC00562	109719-94-0	48		PCT_REC	DF003	D00001	PACE	105821243	8-Jul-04	27-Jul-04
D00010 PC00562	DIOX	37Cl-2378-TCDD	D00010 PC00562	85508-50-5	99		PCT_REC	DF003	D00001	PACE	105821243	8-Jul-04	27-Jul-04
D00010 PC00562	DIOX	Total TCDD	D00010 PC00562		75		PG/G DRYWT	DF003	D00001	PACE	105821243	8-Jul-04	27-Jul-04
D00010 PC00562	DIOX	Total PeCDD	D00010 PC00562		42.7		PG/G DRYWT	DF003	D00001	PACE	105821243	8-Jul-04	27-Jul-04
D00010 PC00562	DIOX	Total HxCDD	D00010 PC00562		73	B	PG/G DRYWT	DF003	D00001	PACE	105821243	8-Jul-04	27-Jul-04
D00010 PC00562	DIOX	Total HpCDD	D00010 PC00562		97	B	PG/G DRYWT	DF003	D00001	PACE	105821243	8-Jul-04	27-Jul-04
D00010 PC00562	DIOX	Total TCDF	D00010 PC00562		111		PG/G DRYWT	DF003	D00001	PACE	105821243	8-Jul-04	27-Jul-04
D00010 PC00562	DIOX	Total PeCDF	D00010 PC00562		20.9		PG/G DRYWT	DF003	D00001	PACE	105821243	8-Jul-04	27-Jul-04
D00010 PC00562	DIOX	Total HxCDF	D00010 PC00562		60.7		PG/G DRYWT	DF003	D00001	PACE	105821243	8-Jul-04	27-Jul-04
D00010 PC00562	DIOX	Total HpCDF	D00010 PC00562		58		PG/G DRYWT	DF003	D00001	PACE	105821243	8-Jul-04	27-Jul-04

Section 2

PCB/Pesticide Results

QA/QC Narrative
Sediment and QC Results

QA/QC Narrative

PCB Aroclor/Pesticide QA/QC SUMMARY
QC Batch 04-0254

PROJECT: USACE NAE Delivery Order #01 Centredale
PARAMETER: PCB Aroclor and Chlorinated Pesticides
LABORATORY: Battelle, Duxbury, MA
MATRIX: Sediment
SAMPLE CUSTODY: Surface sediment samples were collected on June 21, 2004 at the Oxbow area, located in the northwest region of Lyman Mill Pond, Centredale. Samples were transported to Battelle Duxbury, stored refrigerated overnight, and hand-delivered to the Laboratory Sample Custodian on June 22, 2004. The samples were received in good condition, however, the temperature was not recorded upon receipt.

Freeze-dried aliquots of two study samples (borings LPX-SD-4402 and LPX-SD-4407) were received on July 8, 2004 from Battelle's metals laboratory located in Sequim, WA. Samples were received in good condition and the temperature upon receipt was 24.8 °C. Freeze-dried samples were used for PCB/Pesticide analysis because the wet sediment contained <30% solids.

QA/QC MEASUREMENT PERFORMANCE CRITERIA:

	Reference Method	Blank	Surrogate Recovery	LCS/MS Recovery	SRM % Diff.	MS/MSD Relative Precision	Achieved Detection Limits * (ng/g dry)	Project Goals ** (ng/g dry)
PCB/ PEST	L-9 Battelle SOP 5-128	<5× ssMDL ^a	40-120% Recovery	40-120% Recovery ^b	≤30% PD plus the 95% confiden ce level ^c	≤30% RPD ^b	Aroclor: 15 Pest: 0.12 to 0.24 Technical Chlordane: 15 Toxaphene: 15	Aroclor: 12.6 Pest: 0.009003 to 1260 Technical Chlordane: NA Toxaphene: NA

ssMDL = sample-specific method detection limit

^a Associated sample concentrations should be >5× blank values.

^b Analyte concentration in MS/MSD must be >5× background to be used for data quality assessment.

^c Using surrogate corrected data; certified values in SRM must be >5×ssMDL to be used for data quality assessment.

* Achieved detection limits reported here are from the associated procedural blanks prepared with the samples.

** Project detection limit goals vary by analyte – see Worksheet #9b in the project QAPP (Battelle, 2002) for detection limit goals by analyte.

METHOD: Sediment samples were prepared and analyzed for PCB Aroclor and chlorinated pesticides following methods described in Battelle (2002, 2004). Briefly,

Percent Moisture – Was determined for all samples prior to extraction. Two samples, from borings LPX-SD-4402 and LPX-SD-4407, contained <30% solids. The samples were centrifuged, the overlying water decanted and the moisture content determined again. The solids content remained below 30% for both of these samples. The freeze-dried counterparts to these samples were obtained from Battelle's metals laboratory and used for PCB/pesticide analysis. Both the wet and freeze-dried samples were extracted and analyzed for PCB/pesticides.

PCB Aroclor/Pesticide QA/QC SUMMARY
QC Batch 04-0254

METHOD
(cont):

Sample Preparation – Samples were extracted for PCB Aroclors and chlorinated pesticides following Battelle Duxbury SOP 5-192. Briefly, approximately 20 g of well-mixed, wet sediment material was weighed into an extraction vessel and spiked with the surrogate internal standard (SIS) compounds. Note that wet and freeze-dried aliquots of borings LPX-SD-4402 and LPX-SD-4407 were prepared for PCB/pesticide analysis.

Samples were extracted three times with 100 mL dichloromethane (DCM) using shaker techniques. The combined extract was dried over anhydrous sodium sulfate, reduced in volume and cleaned using alumina column, activated copper, and gel permeation chromatography High Performance Liquid Chromatography (GPC/HPLC) cleanup. The post-HPLC extract was concentrated under nitrogen to approximately 1 mL, solvent exchanged into hexane, fortified with recovery internal standard (RIS) compounds that are used for quantification, and analyzed by GC/ECD for chlorinated pesticides/PCB Aroclors.

GC/ECD Analysis – PCB Aroclors and chlorinated pesticides were analyzed by GC/ECD (Hewlett Packard 6890 Series GC) using a 60-m DB5 column and hydrogen as the carrier gas. A minimum of a six-point calibration curve was used for pesticide analysis ranging from approximately 0.001 to 0.15 mg/mL. A single point calibration at approximately 0.1 mg/mL was used for Technical Chlordane and at approximately 2 mg/mL for PCB Aroclors analysis. And a single point calibration at approximately 0.1 mg/mL was used for Toxaphene analysis.

Total Aroclor was determined as the mixture of two major Aroclor formulations. All but one of the Centredale study sediment samples contained Aroclor 1254; sample from boring LPX-SD-4404 contained Aroclor 1268.

Data Reporting – Standard laboratory measurement performance criteria (MPC) used to evaluate laboratory QC results differed slightly in some cases from the MPC listed in Battelle (2002). Wherever the MPCs differed, the laboratory MPCs used to evaluate the sample data were more rigorous.

HOLDING
TIMES:

All samples were extracted and analyzed within holding times.

<u>Batch</u>	<u>Extraction Date</u>	<u>Analysis Date</u>
04-0254	July 1 and 8, 2004 *	July 21-24, 2004

* wet sediment samples extracted on July 1, 2004 and freeze-dried sediments extracted on July 8, 2004.

DETECTION
LIMITS:

PCB Aroclor and chlorinated pesticide results are reported relative to the sample-specific method detection limits (ssMDL) and sample-specific reporting limits (ssRL) for that compound, as follows:

- Non-detects and values detected at a concentration below the ssMDL are reported as the ssMDL and U flagged.
- Compounds detected at a concentration above the ssMDL and below the ssRL are reported and J flagged.

Note that the ssMDL is the MDL for each compound determined from a seven replicate MDL study and adjusted for project specific sample sizes. The ssRL is based on the low calibration standard and adjusted for sample specific processing factors and volumes as described in the QAPP (Battelle, 2002).

PCB Aroclor/Pesticide QA/QC SUMMARY
QC Batch 04-0254

DETECTION LIMITS (cont): MDLs are not available for Technical Chlordane, PCB Aroclor and Toxaphene; these compounds were only evaluated against ssRLs.

Achieved ssMDLs met Project Action Goals (PAGs; Battelle, 2002) for all target compounds except aldrin, *alpha*-BHC, dieldrin, heptachlor epoxide, and Aroclor. Among these compounds, achieved ssMDLs were generally only slightly above the PAG (except dieldrin). As noted in Battelle (2002), the project detection limit goals are provided for perspective rather than as a requirement for the analytical methods.

BLANKS: Two laboratory procedural blanks (PB) were prepared with the samples, one with the wet sediments extracted on July 1, 2004 and a second blank with the freeze-dried sediments extracted on July 8, 2004. Blanks are analyzed to ensure that the sample extraction and analysis methods were free of contamination.

04-0254 – PCB Aroclors and chlorinated pesticides were undetected in the laboratory blanks at levels above the ssMDL.

LABORATORY CONTROL SAMPLE Two laboratory control samples (LCS) were prepared with the sediment samples. One LCS sample was fortified with PCB congeners and chlorinated pesticides. The other LCS was fortified with PCB Aroclor 1016 and 1260. The percent recoveries of PCB Aroclor and chlorinated pesticides were calculated to measure data quality in terms of accuracy.

04-0254 – The percent recoveries of all representative PCB and pesticide compounds met the MPC.

LCS recoveries ranged from:

	<u>Pesticides</u>	<u>PCB Aroclor</u>
BE580LCS-P	67 – 104%	not spiked
BE581LCS-P	not spiked	95 – 96%

MATRIX SPIKES: One matrix spike (MS)/matrix spike duplicate (MSD) sample set was prepared with the sediment samples to measure data quality in terms of accuracy and precision. The MS and MSD were fortified with chlorinated pesticides only.

04-0254 – The percent recoveries of all pesticides met the MPC.

Recoveries and RPDs ranged from:

	<u>Pesticides</u>	<u>PCB Aroclor</u>
S3220MS-P	50 – 102%	not spiked*
S3220MSD-P	55 – 105%	not spiked*
RPDs	1.5 – 20.8%	not applicable

*PCB Aroclor only spiked into the LCS, per the QAPP (Battelle, 2002)

SURROGATES: Four PCB surrogate compounds were added to each sample prior to extraction, including PCBs 14, 34, 104, and 112. Recovery data were calculated to measure data quality in terms of accuracy (extraction efficiency).

04-0254 – The percent recoveries of all PCB surrogates in all samples met the MPC.

PCB Aroclor/Pesticide QA/QC SUMMARY
QC Batch 04-0254

SRM: A standard reference material (SRM, NIST 1944) was prepared with the sediment samples. The percent difference (PD) between detected concentrations and the certified values was calculated to measure data quality in terms of accuracy. *Note* – the SRM is certified for only two of the target compounds, including 4,4'-DDT and *alpha*-Chlordane.

04-0254 – SRM PDs did not meet the MPC for both certified compounds, *alpha*-Chlordane (41% PD) and 4,4'-DDT (83%).

Corrective Action – *alpha*-Chlordane and 4,4'-DDT were over-recovered in the SRM. The certificate of analysis received with SRM 1944 indicates that the SRM is not certified as homogenous for pesticides. Further, results from the analysis of this SRM at Battelle show that 4,4'-DDT has historically been over-recovered relative to the certified value, thereby resulting in elevated PD values. The recognized SRM non-homogeneity resulting in historical over-recovery of 4,4'-DDT at Battelle, combined with the acceptable recovery of 4,4'-DDT and *alpha*-Chlordane in the associated LCS and MS/MSD samples prepared with this batch, suggest that the laboratory methods are in control. Impact on data quality as a result of the SRM exceedences should be minimal.

REFERENCES: Battelle 2002. *Centredale Manor Restoration Project Superfund Site Baseline Risk Assessment, Initial Project Planning and Support*. Tasks 19-22 QAPP Addendum and Errata Sheet prepared under contract to USACE NAE. Addendum: September 27, 2002; Errata: November 6, 2002.

Battelle 2004. *Sediment Sample Collection and Analysis at the Oxbow Area, Centredale Manor Restoration Project Superfund Site*. Final Work Plan prepared under contract to USACE NAE. June 17, 2004.

Sediment and QC Results

NSAMPLE	CLASS	PARAMETER	EPASAMNO	CASNO	LAB RESULT	QUAL	UNITS	CASE	SDG	LABORATORY	LAB ID	REC DATE	EXTR DATE	ANAL DATE	METHOD
BE619PB-P	PESTP	4,4'-DDD	BE619PB-P	72-54-8	0.24	U	NG/G DRY	04-0254	BATD	BE619PB-P	07/08/04	07/08/04	07/22/04	BAT05-128	
BE619PB-P	PESTP	4,4'-DDE	BE619PB-P	72-55-9	0.15	U	NG/G DRY	04-0254	BATD	BE619PB-P	07/08/04	07/08/04	07/22/04	BAT05-128	
BE619PB-P	PESTP	4,4'-DDT	BE619PB-P	50-29-3	0.14	U	NG/G DRY	04-0254	BATD	BE619PB-P	07/08/04	07/08/04	07/22/04	BAT05-128	
BE619PB-P	PESTP	aldrin	BE619PB-P	309-00-2	0.13	U	NG/G DRY	04-0254	BATD	BE619PB-P	07/08/04	07/08/04	07/22/04	BAT05-128	
BE619PB-P	PESTP	a-chlordane	BE619PB-P	5103-71-9	0.13	U	NG/G DRY	04-0254	BATO	BE619PB-P	07/08/04	07/08/04	07/22/04	BAT05-128	
BE619PB-P	PESTP	g-chlordane	BE619PB-P	5103-74-2	0.12	U	NG/G DRY	04-0254	BATO	BE619PB-P	07/08/04	07/08/04	07/22/04	BAT05-128	
BE619PB-P	PESTP	a-BHC	BE619PB-P	319-84-6	0.14	U	NG/G DRY	04-0254	BATO	BE619PB-P	07/08/04	07/08/04	07/22/04	BAT05-128	
BE619PB-P	PESTP	b-BHC	BE619PB-P	319-85-7	0.12	U	NG/G DRY	04-0254	BATO	BE619PB-P	07/08/04	07/08/04	07/22/04	BAT05-128	
BE619PB-P	PESTP	d-BHC	BE619PB-P	319-86-8	0.15	U	NG/G DRY	04-0254	BATO	BE619PB-P	07/08/04	07/08/04	07/22/04	BAT05-128	
BE619PB-P	PESTP	Lindane	BE619PB-P	58-89-9	0.13	U	NG/G DRY	04-0254	BATO	BE619PB-P	07/08/04	07/08/04	07/22/04	BAT05-128	
BE619PB-P	PESTP	dieldrin	BE619PB-P	60-57-1	0.15	U	NG/G DRY	04-0254	BATO	BE619PB-P	07/08/04	07/08/04	07/22/04	BAT05-128	
BE619PB-P	PESTP	endosulfan I	BE619PB-P	959-98-8	0.16	U	NG/G DRY	04-0254	BATO	BE619PB-P	07/08/04	07/08/04	07/22/04	BAT05-128	
BE619PB-P	PESTP	endosulfan II	BE619PB-P	33213-65-9	0.15	U	NG/G DRY	04-0254	BATO	BE619PB-P	07/08/04	07/08/04	07/22/04	BAT05-128	
BE619PB-P	PESTP	endosulfan sulfate	BE619PB-P	1031-07-8	0.18	U	NG/G DRY	04-0254	BATO	BE619PB-P	07/08/04	07/08/04	07/22/04	BAT05-128	
BE619PB-P	PESTP	endrin	BE619PB-P	72-20-8	0.15	U	NG/G DRY	04-0254	BATO	BE619PB-P	07/08/04	07/08/04	07/22/04	BAT05-128	
BE619PB-P	PESTP	endrin aldehyde	BE619PB-P	7421-93-4	0.2	U	NG/G DRY	04-0254	BATO	BE619PB-P	07/08/04	07/08/04	07/22/04	BAT05-128	
BE619PB-P	PESTP	endrin ketone	BE619PB-P	53494-70-5	0.15	U	NG/G DRY	04-0254	BATO	BE619PB-P	07/08/04	07/08/04	07/22/04	BAT05-128	
BE619PB-P	PESTP	heptachlor	BE619PB-P	76-44-8	0.14	U	NG/G DRY	04-0254	BATO	BE619PB-P	07/08/04	07/08/04	07/22/04	BAT05-128	
BE619PB-P	PESTP	heptachlor epoxide	BE619PB-P	1024-57-3	0.13	U	NG/G DRY	04-0254	BATO	BE619PB-P	07/08/04	07/08/04	07/22/04	BAT05-128	
BE619PB-P	PESTP	methoxychlor	BE619PB-P	72-43-5	0.21	U	NG/G DRY	04-0254	BATO	BE619PB-P	07/08/04	07/08/04	07/22/04	BAT05-128	
BE619PB-P	PESTP	Toxaphene	BE619PB-P	8001-35-2	15.36	U	NG/G DRY	04-0254	BATO	BE619PB-P	07/08/04	07/08/04	07/22/04	BAT05-128	
BE619PB-P	PESTP	Technical Chlordane	BE619PB-P	57-74-9	15.37	U	NG/G DRY	04-0254	BATO	BE619PB-P	07/08/04	07/08/04	07/22/04	BAT05-128	
BE619PB-P	PESTP	Aroclor 1016	BE619PB-P	12674-11-2	15.35	U	NG/G DRY	04-0254	BATO	BE619PB-P	07/08/04	07/08/04	07/22/04	BAT05-128	
BE619PB-P	PESTP	Aroclor 1221	BE619PB-P	11104-28-2	15.32	U	NG/G DRY	04-0254	BATO	BE619PB-P	07/08/04	07/08/04	07/22/04	BAT05-128	
BE619PB-P	PESTP	Aroclor 1232	BE619PB-P	11141-16-5	15.32	U	NG/G DRY	04-0254	BATO	BE619PB-P	07/08/04	07/08/04	07/22/04	BAT05-128	
BE619PB-P	PESTP	Aroclor 1242	BE619PB-P	53469-21-9	15.32	U	NG/G DRY	04-0254	BATO	BE619PB-P	07/08/04	07/08/04	07/22/04	BAT05-128	
BE619PB-P	PESTP	Aroclor 1248	BE619PB-P	12672-29-6	15.32	U	NG/G DRY	04-0254	BATO	BE619PB-P	07/08/04	07/08/04	07/22/04	BAT05-128	
BE619PB-P	PESTP	Aroclor 1254	BE619PB-P	11097-69-1	15.32	U	NG/G DRY	04-0254	BATO	BE619PB-P	07/08/04	07/08/04	07/22/04	BAT05-128	
BE619PB-P	PESTP	Aroclor 1260	BE619PB-P	11096-82-5	15.35	U	NG/G DRY	04-0254	BATO	BE619PB-P	07/08/04	07/08/04	07/22/04	BAT05-128	
BE619PB-P	PESTP	Aroclor 1268	BE619PB-P	11100-14-4	15.32	U	NG/G DRY	04-0254	BATO	BE619PB-P	07/08/04	07/08/04	07/22/04	BAT05-128	
BE619PB-P	PESTP	C12(14)	BE619PB-P	34883-41-5	64		PCT_REC	04-0254	BATO	BE619PB-P	07/08/04	07/08/04	07/22/04	BAT05-128	
BE619PB-P	PESTP	C13(34)	BE619PB-P	37680-68-5	65		PCT_REC	04-0254	BATO	BE619PB-P	07/08/04	07/08/04	07/22/04	BAT05-128	
BE619PB-P	PESTP	C15(104)	BE619PB-P	56558-16-8	68		PCT_REC	04-0254	BATO	BE619PB-P	07/08/04	07/08/04	07/22/04	BAT05-128	
BE619PB-P	PESTP	C15(112)	BE619PB-P	74472-36-9	79		PCT_REC	04-0254	BATD	BE619PB-P	07/08/04	07/08/04	07/22/04	BAT05-128	

NSAMPLE	MDL	IDL	CRDL	CRQL	DIL_FACTOR	PCT	MOIST	COMMENTS	DVTIER	LAB QC CODE	FINAL RESULT	FINAL QUAL	VALID COMMENT
BE619PB-P	0.24	0.15				1.7	49.2			3 PB			
BE619PB-P	0.15	0.15				1.7	49.2			3 PB			
BE619PB-P	0.14	0.15				1.7	49.2			3 PB			
BE619PB-P	0.13	0.15				1.7	49.2			3 PB			
BE619PB-P	0.13	0.15				1.7	49.2			3 PB			
BE619PB-P	0.12	0.15				1.7	49.2			3 PB			
BE619PB-P	0.14	0.15				1.7	49.2			3 PB			
BE619PB-P	0.12	0.15				1.7	49.2			3 PB			
BE619PB-P	0.15	0.15				1.7	49.2			3 PB			
BE619PB-P	0.13	0.15				1.7	49.2			3 PB			
BE619PB-P	0.15	0.15				1.7	49.2			3 PB			
BE619PB-P	0.16	0.15				1.7	49.2			3 PB			
BE619PB-P	0.15	0.15				1.7	49.2			3 PB			
BE619PB-P	0.18	0.15				1.7	49.2			3 PB			
BE619PB-P	0.15	0.15				1.7	49.2			3 PB			
BE619PB-P	0.2	0.15				1.7	49.2			3 PB			
BE619PB-P	0.15	0.15				1.7	49.2			3 PB			
BE619PB-P	0.14	0.15				1.7	49.2			3 PB			
BE619PB-P	0.13	0.15				1.7	49.2			3 PB			
BE619PB-P	0.21	0.15				1.7	49.2			3 PB			
BE619PB-P	15.36	15.36				1.7	49.2			3 PB			
BE619PB-P	15.37	15.37				1.7	49.2			3 PB			
BE619PB-P	15.35	15.35				1.7	49.2			3 PB			
BE619PB-P	15.32	15.32				1.7	49.2			3 PB			
BE619PB-P	15.32	15.32				1.7	49.2			3 PB			
BE619PB-P	15.32	15.32				1.7	49.2			3 PB			
BE619PB-P	15.32	15.32				1.7	49.2			3 PB			
BE619PB-P	15.35	15.35				1.7	49.2			3 PB			
BE619PB-P	15.32	15.32				1.7	49.2			3 PB			
BE619PB-P						1.7	49.2			3 PB			
BE619PB-P						1.7	49.2			3 PB			
BE619PB-P						1.7	49.2			3 PB			
BE619PB-P						1.7	49.2			3 PB			

NSAMPLE	CLASS	PARAMETER	EPASAMNO	CASNO	LAB RESULT	QUAL	UNITS	CASE	SDG	LABORATORY	LAB ID	REC DATE	EXTR DATE	ANAL DATE	METHOD
BE579PB-P	PESTP	4,4'-DDD	BE579PB-P	72-54-8	0.24	U	NG/G DRY	04-0254	BATD	BE579PB-P	07/01/04	07/01/04	07/21/04	BATD5-128	
BE579PB-P	PESTP	4,4'-DDE	BE579PB-P	72-55-9	0.15	U	NG/G DRY	04-0254	BATD	BE579PB-P	07/01/04	07/01/04	07/21/04	BATD5-128	
BE579PB-P	PESTP	4,4'-DDT	BE579PB-P	50-29-3	0.14	U	NG/G DRY	04-0254	BATD	BE579PB-P	07/01/04	07/01/04	07/21/04	BATD5-128	
BE579PB-P	PESTP	aldrin	BE579PB-P	309-00-2	0.13	U	NG/G DRY	04-0254	BATD	BE579PB-P	07/01/04	07/01/04	07/21/04	BATD5-128	
BE579PB-P	PESTP	a-chlordane	BE579PB-P	5103-71-9	0.13	U	NG/G DRY	04-0254	BATD	BE579PB-P	07/01/04	07/01/04	07/21/04	BATD5-128	
BE579PB-P	PESTP	g-chlordane	BE579PB-P	5103-74-2	0.12	U	NG/G DRY	04-0254	BATD	BE579PB-P	07/01/04	07/01/04	07/21/04	BATD5-128	
BE579PB-P	PESTP	a-BHC	BE579PB-P	319-84-6	0.14	U	NG/G DRY	04-0254	BATD	BE579PB-P	07/01/04	07/01/04	07/21/04	BATD5-128	
BE579PB-P	PESTP	b-BHC	BE579PB-P	319-85-7	0.12	U	NG/G DRY	04-0254	BATD	BE579PB-P	07/01/04	07/01/04	07/21/04	BATD5-128	
BE579PB-P	PESTP	d-BHC	BE579PB-P	319-86-8	0.15	U	NG/G DRY	04-0254	BATD	BE579PB-P	07/01/04	07/01/04	07/21/04	BATD5-128	
BE579PB-P	PESTP	Lindane	BE579PB-P	58-89-9	0.13	U	NG/G DRY	04-0254	BATD	BE579PB-P	07/01/04	07/01/04	07/21/04	BATD5-128	
BE579PB-P	PESTP	dieldrin	BE579PB-P	60-57-1	0.15	U	NG/G DRY	04-0254	BATD	BE579PB-P	07/01/04	07/01/04	07/21/04	BATD5-128	
BE579PB-P	PESTP	endosulfan I	BE579PB-P	959-98-8	0.16	U	NG/G DRY	04-0254	BATD	BE579PB-P	07/01/04	07/01/04	07/21/04	BATD5-128	
BE579PB-P	PESTP	endosulfan II	BE579PB-P	33213-65-9	0.15	U	NG/G DRY	04-0254	BATD	BE579PB-P	07/01/04	07/01/04	07/21/04	BATD5-128	
BE579PB-P	PESTP	endosulfan sulfate	BE579PB-P	1031-07-8	0.18	U	NG/G DRY	04-0254	BATD	BE579PB-P	07/01/04	07/01/04	07/21/04	BATD5-128	
BE579PB-P	PESTP	endrin	BE579PB-P	72-20-8	0.15	U	NG/G DRY	04-0254	BATD	BE579PB-P	07/01/04	07/01/04	07/21/04	BATD5-128	
BE579PB-P	PESTP	endrin aldehyde	BE579PB-P	7421-93-4	0.2	U	NG/G DRY	04-0254	BATD	BE579PB-P	07/01/04	07/01/04	07/21/04	BATD5-128	
BE579PB-P	PESTP	endrin ketone	BE579PB-P	53494-70-5	0.15	U	NG/G DRY	04-0254	BATD	BE579PB-P	07/01/04	07/01/04	07/21/04	BATD5-128	
BE579PB-P	PESTP	heptachlor	BE579PB-P	76-44-8	0.14	U	NG/G DRY	04-0254	BATD	BE579PB-P	07/01/04	07/01/04	07/21/04	BATD5-128	
BE579PB-P	PESTP	heptachlor epoxide	BE579PB-P	1024-57-3	0.13	U	NG/G DRY	04-0254	BATD	BE579PB-P	07/01/04	07/01/04	07/21/04	BATD5-128	
BE579PB-P	PESTP	methoxychlor	BE579PB-P	72-43-5	0.21	U	NG/G DRY	04-0254	BATD	BE579PB-P	07/01/04	07/01/04	07/21/04	BATD5-128	
BE579PB-P	PESTP	Toxaphene	BE579PB-P	8001-35-2	15.36	U	NG/G DRY	04-0254	BATD	BE579PB-P	07/01/04	07/01/04	07/21/04	BATD5-128	
BE579PB-P	PESTP	Technical Chlordane	BE579PB-P	57-74-9	15.37	U	NG/G DRY	04-0254	BATD	BE579PB-P	07/01/04	07/01/04	07/21/04	BATD5-128	
BE579PB-P	PESTP	Aroclor 1016	BE579PB-P	12674-11-2	15.35	U	NG/G DRY	04-0254	BATD	BE579PB-P	07/01/04	07/01/04	07/21/04	BATD5-128	
BE579PB-P	PESTP	Aroclor 1221	BE579PB-P	11104-28-2	15.32	U	NG/G DRY	04-0254	BATD	BE579PB-P	07/01/04	07/01/04	07/21/04	BATD5-128	
BE579PB-P	PESTP	Aroclor 1232	BE579PB-P	11141-16-5	15.32	U	NG/G DRY	04-0254	BATD	BE579PB-P	07/01/04	07/01/04	07/21/04	BATD5-128	
BE579PB-P	PESTP	Aroclor 1242	BE579PB-P	53469-21-9	15.32	U	NG/G DRY	04-0254	BATD	BE579PB-P	07/01/04	07/01/04	07/21/04	BATD5-128	
BE579PB-P	PESTP	Aroclor 1248	BE579PB-P	12672-29-6	15.32	U	NG/G DRY	04-0254	BATD	BE579PB-P	07/01/04	07/01/04	07/21/04	BATD5-128	
BE579PB-P	PESTP	Aroclor 1254	BE579PB-P	11097-69-1	15.32	U	NG/G DRY	04-0254	BATD	BE579PB-P	07/01/04	07/01/04	07/21/04	BATD5-128	
BE579PB-P	PESTP	Aroclor 1260	BE579PB-P	11096-82-5	15.35	U	NG/G DRY	04-0254	BATD	BE579PB-P	07/01/04	07/01/04	07/21/04	BATD5-128	
BE579PB-P	PESTP	Aroclor 1268	BE579PB-P	11100-14-4	15.32	U	NG/G DRY	04-0254	BATD	BE579PB-P	07/01/04	07/01/04	07/21/04	BATD5-128	
BE579PB-P	PESTP	Cl2(14)	BE579PB-P	34883-41-5	73		PCT REC	04-0254	BATD	BE579PB-P	07/01/04	07/01/04	07/21/04	BATD5-128	
BE579PB-P	PESTP	Cl3(34)	BE579PB-P	37680-68-5	74		PCT REC	04-0254	BATD	BE579PB-P	07/01/04	07/01/04	07/21/04	BATD5-128	
BE579PB-P	PESTP	Cl5(104)	BE579PB-P	56558-16-8	75		PCT REC	04-0254	BATD	BE579PB-P	07/01/04	07/01/04	07/21/04	BATD5-128	
BE579PB-P	PESTP	Cl5(112)	BE579PB-P	74472-36-9	85		PCT REC	04-0254	BATD	BE579PB-P	07/01/04	07/01/04	07/21/04	BATD5-128	

NSAMPLE	MDL	IDL	CRDL	CRQL	DIL FACTOR	PCT MOIST	COMMENTS	DVTIER	LAB QC CODE	FINAL RESULT	FINAL QUAL	VALID COMMENT
BE579PB-P	0.24	0.15			1.7	49.2			3 PB			
BE579PB-P	0.15	0.15			1.7	49.2			3 PB			
BE579PB-P	0.14	0.15			1.7	49.2			3 PB			
BE579PB-P	0.13	0.15			1.7	49.2			3 PB			
BE579PB-P	0.13	0.15			1.7	49.2			3 PB			
BE579PB-P	0.12	0.15			1.7	49.2			3 PB			
BE579PB-P	0.14	0.15			1.7	49.2			3 PB			
BE579PB-P	0.12	0.15			1.7	49.2			3 PB			
BE579PB-P	0.15	0.15			1.7	49.2			3 PB			
BE579PB-P	0.13	0.15			1.7	49.2			3 PB			
BE579PB-P	0.15	0.15			1.7	49.2			3 PB			
BE579PB-P	0.16	0.15			1.7	49.2			3 PB			
BE579PB-P	0.15	0.15			1.7	49.2			3 PB			
BE579PB-P	0.18	0.15			1.7	49.2			3 PB			
BE579PB-P	0.15	0.15			1.7	49.2			3 PB			
BE579PB-P	0.2	0.15			1.7	49.2			3 PB			
BE579PB-P	0.15	0.15			1.7	49.2			3 PB			
BE579PB-P	0.14	0.15			1.7	49.2			3 PB			
BE579PB-P	0.13	0.15			1.7	49.2			3 PB			
BE579PB-P	0.21	0.15			1.7	49.2			3 PB			
BE579PB-P	15.36	15.36			1.7	49.2			3 PB			
BE579PB-P	15.37	15.37			1.7	49.2			3 PB			
BE579PB-P	15.35	15.35			1.7	49.2			3 PB			
BE579PB-P	15.32	15.32			1.7	49.2			3 PB			
BE579PB-P	15.32	15.32			1.7	49.2			3 PB			
BE579PB-P	15.32	15.32			1.7	49.2			3 PB			
BE579PB-P	15.32	15.32			1.7	49.2			3 PB			
BE579PB-P	15.32	15.32			1.7	49.2			3 PB			
BE579PB-P	15.35	15.35			1.7	49.2			3 PB			
BE579PB-P	15.32	15.32			1.7	49.2			3 PB			
BE579PB-P					1.7	49.2			3 PB			
BE579PB-P					1.7	49.2			3 PB			
BE579PB-P					1.7	49.2			3 PB			
BE579PB-P					1.7	49.2			3 PB			
BE579PB-P					1.7	49.2			3 PB			

NSAMPLE	CLASS	PARAMETER	EPASAMNO	CASNO	LAB RESULT	QUAL	UNITS	CASE	SDG	LABORATORY	LAB ID	REC DATE	EXTR DATE	ANAL DATE	METHOD
BE580LCS-P	PESTP	4,4'-DDD	BE580LCS-P	72-54-8	89		PCT_REC	04-0254	BATD		BE580LCS-P	07/01/04	07/01/04	07/22/04	BATD5-128
BE580LCS-P	PESTP	4,4'-DDE	BE580LCS-P	72-55-9	84		PCT_REC	04-0254	BATD		BE580LCS-P	07/01/04	07/01/04	07/22/04	BATD5-128
BE580LCS-P	PESTP	4,4'-DDT	BE580LCS-P	50-29-3	93		PCT_REC	04-0254	BATD		BE580LCS-P	07/01/04	07/01/04	07/22/04	BATD5-128
BE580LCS-P	PESTP	aldrin	BE580LCS-P	309-00-2	86		PCT_REC	04-0254	BATD		BE580LCS-P	07/01/04	07/01/04	07/22/04	BATD5-128
BE580LCS-P	PESTP	a-chlordane	BE580LCS-P	5103-71-9	90		PCT_REC	04-0254	BATD		BE580LCS-P	07/01/04	07/01/04	07/22/04	BATD5-128
BE580LCS-P	PESTP	g-chlordane	BE580LCS-P	5103-74-2	75		PCT_REC	04-0254	BATD		BE580LCS-P	07/01/04	07/01/04	07/22/04	BATD5-128
BE580LCS-P	PESTP	a-BHC	BE580LCS-P	319-84-6	84		PCT_REC	04-0254	BATD		BE580LCS-P	07/01/04	07/01/04	07/22/04	BATD5-128
BE580LCS-P	PESTP	b-BHC	BE580LCS-P	319-85-7	89		PCT_REC	04-0254	BATD		BE580LCS-P	07/01/04	07/01/04	07/22/04	BATD5-128
BE580LCS-P	PESTP	d-BHC	BE580LCS-P	319-86-8	85		PCT_REC	04-0254	BATD		BE580LCS-P	07/01/04	07/01/04	07/22/04	BATD5-128
BE580LCS-P	PESTP	Lindane	BE580LCS-P	58-89-9	88		PCT_REC	04-0254	BATD		BE580LCS-P	07/01/04	07/01/04	07/22/04	BATD5-128
BE580LCS-P	PESTP	dieldrin	BE580LCS-P	60-57-1	86		PCT_REC	04-0254	BATD		BE580LCS-P	07/01/04	07/01/04	07/22/04	BATD5-128
BE580LCS-P	PESTP	endosulfan I	BE580LCS-P	959-98-8	85		PCT_REC	04-0254	BATD		BE580LCS-P	07/01/04	07/01/04	07/22/04	BATD5-128
BE580LCS-P	PESTP	endosulfan II	BE580LCS-P	33213-65-9	67		PCT_REC	04-0254	BATD		BE580LCS-P	07/01/04	07/01/04	07/22/04	BATD5-128
BE580LCS-P	PESTP	endosulfan sulfate	BE580LCS-P	1031-07-8	92		PCT_REC	04-0254	BATD		BE580LCS-P	07/01/04	07/01/04	07/22/04	BATD5-128
BE580LCS-P	PESTP	endrin	BE580LCS-P	72-20-8	104		PCT_REC	04-0254	BATD		BE580LCS-P	07/01/04	07/01/04	07/22/04	BATD5-128
BE580LCS-P	PESTP	endrin aldehyde	BE580LCS-P	7421-93-4	87		PCT_REC	04-0254	BATD		BE580LCS-P	07/01/04	07/01/04	07/22/04	BATD5-128
BE580LCS-P	PESTP	endrin ketone	BE580LCS-P	53494-70-5	87		PCT_REC	04-0254	BATD		BE580LCS-P	07/01/04	07/01/04	07/22/04	BATD5-128
BE580LCS-P	PESTP	heptachlor	BE580LCS-P	76-44-8	98		PCT_REC	04-0254	BATD		BE580LCS-P	07/01/04	07/01/04	07/22/04	BATD5-128
BE580LCS-P	PESTP	heptachlor epoxide	BE580LCS-P	1024-57-3	71		PCT_REC	04-0254	BATD		BE580LCS-P	07/01/04	07/01/04	07/22/04	BATD5-128
BE580LCS-P	PESTP	methoxychlor	BE580LCS-P	72-43-5	90		PCT_REC	04-0254	BATD		BE580LCS-P	07/01/04	07/01/04	07/22/04	BATD5-128
BE580LCS-P	PESTP	CI2(14)	BE580LCS-P	34883-41-5	75		PCT_REC	04-0254	BATD		BE580LCS-P	07/01/04	07/01/04	07/22/04	BATD5-128
BE580LCS-P	PESTP	CI3(34)	BE580LCS-P	37680-68-5	95		PCT_REC	04-0254	BATD		BE580LCS-P	07/01/04	07/01/04	07/22/04	BATD5-128
BE580LCS-P	PESTP	CI5(104)	BE580LCS-P	56558-16-8	76		PCT_REC	04-0254	BATD		BE580LCS-P	07/01/04	07/01/04	07/22/04	BATD5-128
BE580LCS-P	PESTP	CI5(112)	BE580LCS-P	74472-36-9	78		PCT_REC	04-0254	BATD		BE580LCS-P	07/01/04	07/01/04	07/22/04	BATD5-128
BE581LCS-P	PESTP	Aroclor 1016	BE581LCS-P	12674-11-2	95		PCT_REC	04-0254	BATD		BE581LCS-P	07/01/04	07/01/04	07/22/04	BATD5-128
BE581LCS-P	PESTP	Aroclor 1260	BE581LCS-P	11096-82-5	96		PCT_REC	04-0254	BATD		BE581LCS-P	07/01/04	07/01/04	07/22/04	BATD5-128
BE581LCS-P	PESTP	CI2(14)	BE581LCS-P	34883-41-5	71		PCT_REC	04-0254	BATD		BE581LCS-P	07/01/04	07/01/04	07/22/04	BATD5-128
BE581LCS-P	PESTP	CI3(34)	BE581LCS-P	37680-68-5	70		PCT_REC	04-0254	BATD		BE581LCS-P	07/01/04	07/01/04	07/22/04	BATD5-128
BE581LCS-P	PESTP	CI5(104)	BE581LCS-P	56558-16-8	73		PCT_REC	04-0254	BATD		BE581LCS-P	07/01/04	07/01/04	07/22/04	BATD5-128
BE581LCS-P	PESTP	CI5(112)	BE581LCS-P	74472-36-9	80		PCT_REC	04-0254	BATD		BE581LCS-P	07/01/04	07/01/04	07/22/04	BATD5-128
BE582SRM-P	PESTP	4,4'-DDT	BE582SRM-P	50-29-3	83.3 &		PCT_DIFF	04-0254	BATD		BE582SRM-P	07/01/04	07/01/04	07/22/04	BATD5-128
BE582SRM-P	PESTP	a-chlordane	BE582SRM-P	5103-71-9	41.4 &		PCT_DIFF	04-0254	BATD		BE582SRM-P	07/01/04	07/01/04	07/22/04	BATD5-128
BE582SRM-P	PESTP	CI2(14)	BE582SRM-P	34883-41-5	77		PCT_REC	04-0254	BATD		BE582SRM-P	07/01/04	07/01/04	07/22/04	BATD5-128
BE582SRM-P	PESTP	CI3(34)	BE582SRM-P	37680-68-5	79		PCT_REC	04-0254	BATD		BE582SRM-P	07/01/04	07/01/04	07/22/04	BATD5-128
BE582SRM-P	PESTP	CI5(104)	BE582SRM-P	56558-16-8	90		PCT_REC	04-0254	BATD		BE582SRM-P	07/01/04	07/01/04	07/22/04	BATD5-128
BE582SRM-P	PESTP	CI5(112)	BE582SRM-P	74472-36-9	74		PCT_REC	04-0254	BATD		BE582SRM-P	07/01/04	07/01/04	07/22/04	BATD5-128

[illegible]

NSAMPLE	CLASS	PARAMETER	EPASAMNO	CASNO	LAB RESULT	QUAL	UNITS	CASE	SDG	LABORATORY	LAB ID	REC DATE	EXTR DATE	ANAL DATE	METHOD
LPX-SD-4404-0005-01	PESTP	4,4'-DDD	LPX-SD-4404-0005-01	72-54-8	4.42		NG/G_DRY	04-0254	BATD	S3220-P	S3220-P	06/22/04	07/01/04	07/22/04	BATD5-128
LPX-SD-4404-0005-01	PESTP	4,4'-DDE	LPX-SD-4404-0005-01	72-55-9	6.42		NG/G_DRY	04-0254	BATD	S3220-P	S3220-P	06/22/04	07/01/04	07/22/04	BATD5-128
LPX-SD-4404-0005-01	PESTP	4,4'-DDT	LPX-SD-4404-0005-01	50-29-3	0.96		NG/G_DRY	04-0254	BATD	S3220-P	S3220-P	06/22/04	07/01/04	07/22/04	BATD5-128
LPX-SD-4404-0005-01	PESTP	aldrin	LPX-SD-4404-0005-01	309-00-2	0.14	U	NG/G_DRY	04-0254	BATD	S3220-P	S3220-P	06/22/04	07/01/04	07/22/04	BATD5-128
LPX-SD-4404-0005-01	PESTP	a-chlordane	LPX-SD-4404-0005-01	5103-71-9	1.19		NG/G_DRY	04-0254	BATD	S3220-P	S3220-P	06/22/04	07/01/04	07/22/04	BATD5-128
LPX-SD-4404-0005-01	PESTP	g-chlordane	LPX-SD-4404-0005-01	5103-74-2	2.93		NG/G_DRY	04-0254	BATD	S3220-P	S3220-P	06/22/04	07/01/04	07/22/04	BATD5-128
LPX-SD-4404-0005-01	PESTP	a-BHC	LPX-SD-4404-0005-01	319-84-6	0.15	U	NG/G_DRY	04-0254	BATD	S3220-P	S3220-P	06/22/04	07/01/04	07/22/04	BATD5-128
LPX-SD-4404-0005-01	PESTP	b-BHC	LPX-SD-4404-0005-01	319-85-7	0.14	U	NG/G_DRY	04-0254	BATD	S3220-P	S3220-P	06/22/04	07/01/04	07/22/04	BATD5-128
LPX-SD-4404-0005-01	PESTP	d-BHC	LPX-SD-4404-0005-01	319-86-8	0.17	U	NG/G_DRY	04-0254	BATD	S3220-P	S3220-P	06/22/04	07/01/04	07/22/04	BATD5-128
LPX-SD-4404-0005-01	PESTP	Lindane	LPX-SD-4404-0005-01	58-89-9	0.15	U	NG/G_DRY	04-0254	BATD	S3220-P	S3220-P	06/22/04	07/01/04	07/22/04	BATD5-128
LPX-SD-4404-0005-01	PESTP	dieldrin	LPX-SD-4404-0005-01	60-57-1	3.43		NG/G_DRY	04-0254	BATD	S3220-P	S3220-P	06/22/04	07/01/04	07/22/04	BATD5-128
LPX-SD-4404-0005-01	PESTP	endosulfan I	LPX-SD-4404-0005-01	959-98-8	0.17	U	NG/G_DRY	04-0254	BATD	S3220-P	S3220-P	06/22/04	07/01/04	07/22/04	BATD5-128
LPX-SD-4404-0005-01	PESTP	endosulfan II	LPX-SD-4404-0005-01	33213-65-9	3.37		NG/G_DRY	04-0254	BATD	S3220-P	S3220-P	06/22/04	07/01/04	07/22/04	BATD5-128
LPX-SD-4404-0005-01	PESTP	endosulfan sulfate	LPX-SD-4404-0005-01	1031-07-8	0.2	U	NG/G_DRY	04-0254	BATD	S3220-P	S3220-P	06/22/04	07/01/04	07/22/04	BATD5-128
LPX-SD-4404-0005-01	PESTP	endrin	LPX-SD-4404-0005-01	72-20-8	0.17	U	NG/G_DRY	04-0254	BATD	S3220-P	S3220-P	06/22/04	07/01/04	07/22/04	BATD5-128
LPX-SD-4404-0005-01	PESTP	endrin aldehyde	LPX-SD-4404-0005-01	7421-93-4	0.23	U	NG/G_DRY	04-0254	BATD	S3220-P	S3220-P	06/22/04	07/01/04	07/22/04	BATD5-128
LPX-SD-4404-0005-01	PESTP	endrin ketone	LPX-SD-4404-0005-01	53494-70-5	1.73		NG/G_DRY	04-0254	BATD	S3220-P	S3220-P	06/22/04	07/01/04	07/22/04	BATD5-128
LPX-SD-4404-0005-01	PESTP	heptachlor	LPX-SD-4404-0005-01	76-44-8	0.73		NG/G_DRY	04-0254	BATD	S3220-P	S3220-P	06/22/04	07/01/04	07/22/04	BATD5-128
LPX-SD-4404-0005-01	PESTP	heptachlor epoxide	LPX-SD-4404-0005-01	1024-57-3	0.18		NG/G_DRY	04-0254	BATD	S3220-P	S3220-P	06/22/04	07/01/04	07/22/04	BATD5-128
LPX-SD-4404-0005-01	PESTP	methoxychlor	LPX-SD-4404-0005-01	72-43-5	0.23	U	NG/G_DRY	04-0254	BATD	S3220-P	S3220-P	06/22/04	07/01/04	07/22/04	BATD5-128
LPX-SD-4404-0005-01	PESTP	Toxaphene	LPX-SD-4404-0005-01	8001-35-2	17	U	NG/G_DRY	04-0254	BATD	S3220-P	S3220-P	06/22/04	07/01/04	07/22/04	BATD5-128
LPX-SD-4404-0005-01	PESTP	Technical Chlordane	LPX-SD-4404-0005-01	57-74-9	30.08		NG/G_DRY	04-0254	BATD	S3220-P	S3220-P	06/22/04	07/01/04	07/22/04	BATD5-128
LPX-SD-4404-0005-01	PESTP	Aroclor 1016	LPX-SD-4404-0005-01	12674-11-2	16.99	U	NG/G_DRY	04-0254	BATD	S3220-P	S3220-P	06/22/04	07/01/04	07/22/04	BATD5-128
LPX-SD-4404-0005-01	PESTP	Aroclor 1221	LPX-SD-4404-0005-01	11104-28-2	16.96	U	NG/G_DRY	04-0254	BATD	S3220-P	S3220-P	06/22/04	07/01/04	07/22/04	BATD5-128
LPX-SD-4404-0005-01	PESTP	Aroclor 1232	LPX-SD-4404-0005-01	11141-16-5	16.96	U	NG/G_DRY	04-0254	BATD	S3220-P	S3220-P	06/22/04	07/01/04	07/22/04	BATD5-128
LPX-SD-4404-0005-01	PESTP	Aroclor 1242	LPX-SD-4404-0005-01	53469-21-9	16.96	U	NG/G_DRY	04-0254	BATD	S3220-P	S3220-P	06/22/04	07/01/04	07/22/04	BATD5-128
LPX-SD-4404-0005-01	PESTP	Aroclor 1248	LPX-SD-4404-0005-01	12672-29-6	16.96	U	NG/G_DRY	04-0254	BATD	S3220-P	S3220-P	06/22/04	07/01/04	07/22/04	BATD5-128
LPX-SD-4404-0005-01	PESTP	Aroclor 1254	LPX-SD-4404-0005-01	11097-69-1	16.96	U	NG/G_DRY	04-0254	BATD	S3220-P	S3220-P	06/22/04	07/01/04	07/22/04	BATD5-128
LPX-SD-4404-0005-01	PESTP	Aroclor 1260	LPX-SD-4404-0005-01	11096-82-5	16.99	U	NG/G_DRY	04-0254	BATD	S3220-P	S3220-P	06/22/04	07/01/04	07/22/04	BATD5-128
LPX-SD-4404-0005-01	PESTP	Aroclor 1268	LPX-SD-4404-0005-01	11100-14-4	103.11		NG/G_DRY	04-0254	BATD	S3220-P	S3220-P	06/22/04	07/01/04	07/22/04	BATD5-128
LPX-SD-4404-0005-01	PESTP	Cl2(14)	LPX-SD-4404-0005-01	34883-41-5	68		PCT_REC	04-0254	BATD	S3220-P	S3220-P	06/22/04	07/01/04	07/22/04	BATD5-128
LPX-SD-4404-0005-01	PESTP	Cl3(34)	LPX-SD-4404-0005-01	37680-68-5	61		PCT_REC	04-0254	BATD	S3220-P	S3220-P	06/22/04	07/01/04	07/22/04	BATD5-128
LPX-SD-4404-0005-01	PESTP	Cl5(104)	LPX-SD-4404-0005-01	56558-16-8	63		PCT_REC	04-0254	BATD	S3220-P	S3220-P	06/22/04	07/01/04	07/22/04	BATD5-128
LPX-SD-4404-0005-01	PESTP	Cl5(112)	LPX-SD-4404-0005-01	74472-36-9	92		PCT_REC	04-0254	BATD	S3220-P	S3220-P	06/22/04	07/01/04	07/22/04	BATD5-128

NSAMPLE	MDL	IDL	CRDL	CRQL	DIL FACTOR	PCT MOIST	COMMENTS	DVTIER	LAB QC CODE	FINAL RESULT	FINAL QUAL	VALID COMMENT
LPX-SD-4404-0005-01	0.26	0.17				1.7	62.1		3 N	4.42		
LPX-SD-4404-0005-01	0.17	0.17				1.7	62.1		3 N	6.42		
LPX-SD-4404-0005-01	0.16	0.17				1.7	62.1		3 N	0.96 J		
LPX-SD-4404-0005-01	0.14	0.17				1.7	62.1		3 N	0.14 U		
LPX-SD-4404-0005-01	0.14	0.17				1.7	62.1		3 N	1.19 J		
LPX-SD-4404-0005-01	0.13	0.17				1.7	62.1		3 N	2.93		
LPX-SD-4404-0005-01	0.15	0.17				1.7	62.1		3 N	0.15 U		
LPX-SD-4404-0005-01	0.14	0.17				1.7	62.1		3 N	0.14 U		
LPX-SD-4404-0005-01	0.17	0.17				1.7	62.1		3 N	0.17 U		
LPX-SD-4404-0005-01	0.15	0.17				1.7	62.1		3 N	0.15 U		
LPX-SD-4404-0005-01	0.17	0.17				1.7	62.1		3 N	3.43		
LPX-SD-4404-0005-01	0.17	0.17				1.7	62.1		3 N	0.17 U		
LPX-SD-4404-0005-01	0.17	0.17				1.7	62.1		3 N	3.37		
LPX-SD-4404-0005-01	0.2	0.17				1.7	62.1		3 N	0.2 U		
LPX-SD-4404-0005-01	0.17	0.17				1.7	62.1		3 N	0.17 U		
LPX-SD-4404-0005-01	0.23	0.17				1.7	62.1		3 N	0.23 U		
LPX-SD-4404-0005-01	0.17	0.17				1.7	62.1		3 N	1.73		
LPX-SD-4404-0005-01	0.16	0.17				1.7	62.1		3 N	0.73		
LPX-SD-4404-0005-01	0.14	0.17				1.7	62.1		3 N	0.18		
LPX-SD-4404-0005-01	0.23	0.17				1.7	62.1		3 N	0.23 U		
LPX-SD-4404-0005-01	17	17				1.7	62.1		3 N	17 U		
LPX-SD-4404-0005-01	17.01	17.01				1.7	62.1		3 N	30.08		
LPX-SD-4404-0005-01	16.99	16.99				1.7	62.1		3 N	16.99 U		
LPX-SD-4404-0005-01	16.96	16.96				1.7	62.1		3 N	16.96 U		
LPX-SD-4404-0005-01	16.96	16.96				1.7	62.1		3 N	16.96 U		
LPX-SD-4404-0005-01	16.96	16.96				1.7	62.1		3 N	16.96 U		
LPX-SD-4404-0005-01	16.96	16.96				1.7	62.1		3 N	16.96 U		
LPX-SD-4404-0005-01	16.96	16.96				1.7	62.1		3 N	16.96 U		
LPX-SD-4404-0005-01	16.99	16.99				1.7	62.1		3 N	16.99 U		
LPX-SD-4404-0005-01	16.96	16.96				1.7	62.1		3 N	103.11		
LPX-SD-4404-0005-01						1.7	62.1		3 N	68		
LPX-SD-4404-0005-01						1.7	62.1		3 N	61		
LPX-SD-4404-0005-01						1.7	62.1		3 N	63		
LPX-SD-4404-0005-01						1.7	62.1		3 N			

NSAMPLE	CLASS	PARAMETER	EPASAMNO	CASNO	LAB RESULT	QUAL	UNITS	CASE	SDG	LABORATORY	LAB ID	REC DATE	EXTR DATE	ANAL DATE	METHOD
S3220MS-P	PESTP	4,4'-DDD	S3220MS-P	72-54-8	701		PCT_REC	04-0254	BATD	S3220MS-P	S3220MS-P	06/22/04	07/01/04	07/23/04	BATD5-128
S3220MS-P	PESTP	4,4'-DDE	S3220MS-P	72-55-9	88		PCT_REC	04-0254	BATD	S3220MS-P	S3220MS-P	06/22/04	07/01/04	07/23/04	BATD5-128
S3220MS-P	PESTP	4,4'-DDT	S3220MS-P	50-29-3	73		PCT_REC	04-0254	BATD	S3220MS-P	S3220MS-P	06/22/04	07/01/04	07/23/04	BATD5-128
S3220MS-P	PESTP	aldrin	S3220MS-P	309-00-2	75		PCT_REC	04-0254	BATD	S3220MS-P	S3220MS-P	06/22/04	07/01/04	07/23/04	BATD5-128
S3220MS-P	PESTP	a-chlordane	S3220MS-P	5103-71-9	59		PCT_REC	04-0254	BATD	S3220MS-P	S3220MS-P	06/22/04	07/01/04	07/23/04	BATD5-128
S3220MS-P	PESTP	g-chlordane	S3220MS-P	5103-74-2	54		PCT_REC	04-0254	BATD	S3220MS-P	S3220MS-P	06/22/04	07/01/04	07/23/04	BATD5-128
S3220MS-P	PESTP	a-BHC	S3220MS-P	319-84-6	82		PCT_REC	04-0254	BATD	S3220MS-P	S3220MS-P	06/22/04	07/01/04	07/23/04	BATD5-128
S3220MS-P	PESTP	b-BHC	S3220MS-P	319-85-7	85		PCT_REC	04-0254	BATD	S3220MS-P	S3220MS-P	06/22/04	07/01/04	07/23/04	BATD5-128
S3220MS-P	PESTP	d-BHC	S3220MS-P	319-86-8	84		PCT_REC	04-0254	BATD	S3220MS-P	S3220MS-P	06/22/04	07/01/04	07/23/04	BATD5-128
S3220MS-P	PESTP	Lindane	S3220MS-P	58-89-9	96		PCT_REC	04-0254	BATD	S3220MS-P	S3220MS-P	06/22/04	07/01/04	07/23/04	BATD5-128
S3220MS-P	PESTP	dieldrin	S3220MS-P	60-57-1	97		PCT_REC	04-0254	BATD	S3220MS-P	S3220MS-P	06/22/04	07/01/04	07/23/04	BATD5-128
S3220MS-P	PESTP	endosulfan I	S3220MS-P	959-98-8	50		PCT_REC	04-0254	BATD	S3220MS-P	S3220MS-P	06/22/04	07/01/04	07/23/04	BATD5-128
S3220MS-P	PESTP	endosulfan II	S3220MS-P	33213-65-9	71		PCT_REC	04-0254	BATD	S3220MS-P	S3220MS-P	06/22/04	07/01/04	07/23/04	BATD5-128
S3220MS-P	PESTP	endosulfan sulfate	S3220MS-P	1031-07-8	88		PCT_REC	04-0254	BATD	S3220MS-P	S3220MS-P	06/22/04	07/01/04	07/23/04	BATD5-128
S3220MS-P	PESTP	endrin	S3220MS-P	72-20-8	69		PCT_REC	04-0254	BATD	S3220MS-P	S3220MS-P	06/22/04	07/01/04	07/23/04	BATD5-128
S3220MS-P	PESTP	endrin aldehyde	S3220MS-P	7421-93-4	67		PCT_REC	04-0254	BATD	S3220MS-P	S3220MS-P	06/22/04	07/01/04	07/23/04	BATD5-128
S3220MS-P	PESTP	endrin ketone	S3220MS-P	53494-70-5	61		PCT_REC	04-0254	BATD	S3220MS-P	S3220MS-P	06/22/04	07/01/04	07/23/04	BATD5-128
S3220MS-P	PESTP	heptachlor	S3220MS-P	76-44-8	102		PCT_REC	04-0254	BATD	S3220MS-P	S3220MS-P	06/22/04	07/01/04	07/23/04	BATD5-128
S3220MS-P	PESTP	heptachlor epoxide	S3220MS-P	1024-57-3	63		PCT_REC	04-0254	BATD	S3220MS-P	S3220MS-P	06/22/04	07/01/04	07/23/04	BATD5-128
S3220MS-P	PESTP	methoxychlor	S3220MS-P	72-43-5	69		PCT_REC	04-0254	BATD	S3220MS-P	S3220MS-P	06/22/04	07/01/04	07/23/04	BATD5-128
S3220MS-P	PESTP	Cl2(14)	S3220MS-P	34883-41-5	84		PCT_REC	04-0254	BATD	S3220MS-P	S3220MS-P	06/22/04	07/01/04	07/23/04	BATD5-128
S3220MS-P	PESTP	Cl3(34)	S3220MS-P	37680-68-5	86		PCT_REC	04-0254	BATD	S3220MS-P	S3220MS-P	06/22/04	07/01/04	07/23/04	BATD5-128
S3220MS-P	PESTP	Cl5(104)	S3220MS-P	56558-16-8	73		PCT_REC	04-0254	BATD	S3220MS-P	S3220MS-P	06/22/04	07/01/04	07/23/04	BATD5-128
S3220MS-P	PESTP	Cl5(112)	S3220MS-P	74472-36-9	94		PCT_REC	04-0254	BATD	S3220MS-P	S3220MS-P	06/22/04	07/01/04	07/23/04	BATD5-128
S3220MSD-P	PESTP	4,4'-DDD	S3220MSD-P	72-54-8	66		PCT_REC	04-0254	BATD	S3220MSD-P	S3220MSD-P	06/22/04	07/01/04	07/23/04	BATD5-128
S3220MSD-P	PESTP	4,4'-DDE	S3220MSD-P	72-55-9	85		PCT_REC	04-0254	BATD	S3220MSD-P	S3220MSD-P	06/22/04	07/01/04	07/23/04	BATD5-128
S3220MSD-P	PESTP	4,4'-DDT	S3220MSD-P	50-29-3	66		PCT_REC	04-0254	BATD	S3220MSD-P	S3220MSD-P	06/22/04	07/01/04	07/23/04	BATD5-128
S3220MSD-P	PESTP	aldrin	S3220MSD-P	309-00-2	79		PCT_REC	04-0254	BATD	S3220MSD-P	S3220MSD-P	06/22/04	07/01/04	07/23/04	BATD5-128
S3220MSD-P	PESTP	a-chlordane	S3220MSD-P	5103-71-9	62		PCT_REC	04-0254	BATD	S3220MSD-P	S3220MSD-P	06/22/04	07/01/04	07/23/04	BATD5-128
S3220MSD-P	PESTP	g-chlordane	S3220MSD-P	5103-74-2	59		PCT_REC	04-0254	BATD	S3220MSD-P	S3220MSD-P	06/22/04	07/01/04	07/23/04	BATD5-128
S3220MSD-P	PESTP	a-BHC	S3220MSD-P	319-84-6	88		PCT_REC	04-0254	BATD	S3220MSD-P	S3220MSD-P	06/22/04	07/01/04	07/23/04	BATD5-128
S3220MSD-P	PESTP	b-BHC	S3220MSD-P	319-85-7	92		PCT_REC	04-0254	BATD	S3220MSD-P	S3220MSD-P	06/22/04	07/01/04	07/23/04	BATD5-128
S3220MSD-P	PESTP	d-BHC	S3220MSD-P	319-86-8	89		PCT_REC	04-0254	BATD	S3220MSD-P	S3220MSD-P	06/22/04	07/01/04	07/23/04	BATD5-128
S3220MSD-P	PESTP	Lindane	S3220MSD-P	58-89-9	104		PCT_REC	04-0254	BATD	S3220MSD-P	S3220MSD-P	06/22/04	07/01/04	07/23/04	BATD5-128
S3220MSD-P	PESTP	dieldrin	S3220MSD-P	60-57-1	90		PCT_REC	04-0254	BATD	S3220MSD-P	S3220MSD-P	06/22/04	07/01/04	07/23/04	BATD5-128
S3220MSD-P	PESTP	endosulfan I	S3220MSD-P	959-98-8	55		PCT_REC	04-0254	BATD	S3220MSD-P	S3220MSD-P	06/22/04	07/01/04	07/23/04	BATD5-128
S3220MSD-P	PESTP	endosulfan II	S3220MSD-P	33213-65-9	68		PCT_REC	04-0254	BATD	S3220MSD-P	S3220MSD-P	06/22/04	07/01/04	07/23/04	BATD5-128
S3220MSD-P	PESTP	endosulfan sulfate	S3220MSD-P	1031-07-8	77		PCT_REC	04-0254	BATD	S3220MSD-P	S3220MSD-P	06/22/04	07/01/04	07/23/04	BATD5-128
S3220MSD-P	PESTP	endrin	S3220MSD-P	72-20-8	68		PCT_REC	04-0254	BATD	S3220MSD-P	S3220MSD-P	06/22/04	07/01/04	07/23/04	BATD5-128
S3220MSD-P	PESTP	endrin aldehyde	S3220MSD-P	7421-93-4	62		PCT_REC	04-0254	BATD	S3220MSD-P	S3220MSD-P	06/22/04	07/01/04	07/23/04	BATD5-128
S3220MSD-P	PESTP	endrin ketone	S3220MSD-P	53494-70-5	57		PCT_REC	04-0254	BATD	S3220MSD-P	S3220MSD-P	06/22/04	07/01/04	07/23/04	BATD5-128
S3220MSD-P	PESTP	heptachlor	S3220MSD-P	76-44-8	105		PCT_REC	04-0254	BATD	S3220MSD-P	S3220MSD-P	06/22/04	07/01/04	07/23/04	BATD5-128
S3220MSD-P	PESTP	heptachlor epoxide	S3220MSD-P	1024-57-3	66		PCT_REC	04-0254	BATD	S3220MSD-P	S3220MSD-P	06/22/04	07/01/04	07/23/04	BATD5-128
S3220MSD-P	PESTP	methoxychlor	S3220MSD-P	72-43-5	56		PCT_REC	04-0254	BATD	S3220MSD-P	S3220MSD-P	06/22/04	07/01/04	07/23/04	BATD5-128
S3220MSD-P	PESTP	Cl2(14)	S3220MSD-P	34883-41-5	90		PCT_REC	04-0254	BATD	S3220MSD-P	S3220MSD-P	06/22/04	07/01/04	07/23/04	BATD5-128
S3220MSD-P	PESTP	Cl3(34)	S3220MSD-P	37680-68-5	91		PCT_REC	04-0254	BATD	S3220MSD-P	S3220MSD-P	06/22/04	07/01/04	07/23/04	BATD5-128
S3220MSD-P	PESTP	Cl5(104)	S3220MSD-P	56558-16-8	75		PCT_REC	04-0254	BATD	S3220MSD-P	S3220MSD-P	06/22/04	07/01/04	07/23/04	BATD5-128
S3220MSD-P	PESTP	Cl5(112)	S3220MSD-P	74472-36-9	82		PCT_REC	04-0254	BATD	S3220MSD-P	S3220MSD-P	06/22/04	07/01/04	07/23/04	BATD5-128

NSAMPLE	CLASS	PARAMETER	EPASAMNO	CASNO	LAB RESULT	QUAL	UNITS	CASE	SDG	LABORATORY	LAB ID	REC DATE	EXTR DATE	ANAL DATE	METHOD
LPX-SD-4402-0005-01	PESTP	4,4'-DDD	LPX-SD-4402-0005-01	72-54-8	1.93		NG/G DRY		04-0254	BATD	S3223-P	06/22/04	07/01/04	07/23/04	BATD5-128
LPX-SD-4402-0005-01	PESTP	4,4'-DDE	LPX-SD-4402-0005-01	72-55-9	1.29		NG/G DRY		04-0254	BATD	S3223-P	06/22/04	07/01/04	07/23/04	BATD5-128
LPX-SD-4402-0005-01	PESTP	4,4'-DDT	LPX-SD-4402-0005-01	50-29-3	0.23	U	NG/G DRY		04-0254	BATD	S3223-P	06/22/04	07/01/04	07/23/04	BATD5-128
LPX-SD-4402-0005-01	PESTP	aldrin	LPX-SD-4402-0005-01	309-00-2	0.21	U	NG/G DRY		04-0254	BATD	S3223-P	06/22/04	07/01/04	07/23/04	BATD5-128
LPX-SD-4402-0005-01	PESTP	a-chlordane	LPX-SD-4402-0005-01	5103-71-9	0.21	U	NG/G DRY		04-0254	BATD	S3223-P	06/22/04	07/01/04	07/23/04	BATD5-128
LPX-SD-4402-0005-01	PESTP	g-chlordane	LPX-SD-4402-0005-01	5103-74-2	0.19	U	NG/G DRY		04-0254	BATD	S3223-P	06/22/04	07/01/04	07/23/04	BATD5-128
LPX-SD-4402-0005-01	PESTP	a-BHC	LPX-SD-4402-0005-01	319-84-6	0.22	U	NG/G DRY		04-0254	BATD	S3223-P	06/22/04	07/01/04	07/23/04	BATD5-128
LPX-SD-4402-0005-01	PESTP	b-BHC	LPX-SD-4402-0005-01	319-85-7	0.2	U	NG/G DRY		04-0254	BATD	S3223-P	06/22/04	07/01/04	07/23/04	BATD5-128
LPX-SD-4402-0005-01	PESTP	d-BHC	LPX-SD-4402-0005-01	319-86-8	0.24	U	NG/G DRY		04-0254	BATD	S3223-P	06/22/04	07/01/04	07/23/04	BATD5-128
LPX-SD-4402-0005-01	PESTP	Lindane	LPX-SD-4402-0005-01	58-89-9	0.21	U	NG/G DRY		04-0254	BATD	S3223-P	06/22/04	07/01/04	07/23/04	BATD5-128
LPX-SD-4402-0005-01	PESTP	dieldrin	LPX-SD-4402-0005-01	60-57-1	1.9		NG/G DRY		04-0254	BATD	S3223-P	06/22/04	07/01/04	07/23/04	BATD5-128
LPX-SD-4402-0005-01	PESTP	endosulfan I	LPX-SD-4402-0005-01	959-98-8	0.25	U	NG/G DRY		04-0254	BATD	S3223-P	06/22/04	07/01/04	07/23/04	BATD5-128
LPX-SD-4402-0005-01	PESTP	endosulfan II	LPX-SD-4402-0005-01	33213-65-9	1.89		NG/G DRY		04-0254	BATD	S3223-P	06/22/04	07/01/04	07/23/04	BATD5-128
LPX-SD-4402-0005-01	PESTP	endosulfan sulfate	LPX-SD-4402-0005-01	1031-07-8	0.29	U	NG/G DRY		04-0254	BATD	S3223-P	06/22/04	07/01/04	07/23/04	BATD5-128
LPX-SD-4402-0005-01	PESTP	endrin	LPX-SD-4402-0005-01	72-20-8	0.25	U	NG/G DRY		04-0254	BATD	S3223-P	06/22/04	07/01/04	07/23/04	BATD5-128
LPX-SD-4402-0005-01	PESTP	endrin aldehyde	LPX-SD-4402-0005-01	7421-93-4	0.33	U	NG/G DRY		04-0254	BATD	S3223-P	06/22/04	07/01/04	07/23/04	BATD5-128
LPX-SD-4402-0005-01	PESTP	endrin ketone	LPX-SD-4402-0005-01	53494-70-5	0.25	U	NG/G DRY		04-0254	BATD	S3223-P	06/22/04	07/01/04	07/23/04	BATD5-128
LPX-SD-4402-0005-01	PESTP	heptachlor	LPX-SD-4402-0005-01	76-44-8	0.23	U	NG/G DRY		04-0254	BATD	S3223-P	06/22/04	07/01/04	07/23/04	BATD5-128
LPX-SD-4402-0005-01	PESTP	heptachlor epoxide	LPX-SD-4402-0005-01	1024-57-3	0.21	U	NG/G DRY		04-0254	BATD	S3223-P	06/22/04	07/01/04	07/23/04	BATD5-128
LPX-SD-4402-0005-01	PESTP	methoxychlor	LPX-SD-4402-0005-01	72-43-5	0.33	U	NG/G DRY		04-0254	BATD	S3223-P	06/22/04	07/01/04	07/23/04	BATD5-128
LPX-SD-4402-0005-01	PESTP	Toxaphene	LPX-SD-4402-0005-01	8001-35-2	24.65	U	NG/G DRY		04-0254	BATD	S3223-P	06/22/04	07/01/04	07/23/04	BATD5-128
LPX-SD-4402-0005-01	PESTP	Technical Chlordane	LPX-SD-4402-0005-01	57-74-9	24.66	U	NG/G DRY		04-0254	BATD	S3223-P	06/22/04	07/01/04	07/23/04	BATD5-128
LPX-SD-4402-0005-01	PESTP	Aroclor 1016	LPX-SD-4402-0005-01	12674-11-2	24.64	U	NG/G DRY		04-0254	BATD	S3223-P	06/22/04	07/01/04	07/23/04	BATD5-128
LPX-SD-4402-0005-01	PESTP	Aroclor 1221	LPX-SD-4402-0005-01	11104-28-2	24.59	U	NG/G DRY		04-0254	BATD	S3223-P	06/22/04	07/01/04	07/23/04	BATD5-128
LPX-SD-4402-0005-01	PESTP	Aroclor 1232	LPX-SD-4402-0005-01	11141-16-5	24.59	U	NG/G DRY		04-0254	BATD	S3223-P	06/22/04	07/01/04	07/23/04	BATD5-128
LPX-SD-4402-0005-01	PESTP	Aroclor 1242	LPX-SD-4402-0005-01	53469-21-9	24.59	U	NG/G DRY		04-0254	BATD	S3223-P	06/22/04	07/01/04	07/23/04	BATD5-128
LPX-SD-4402-0005-01	PESTP	Aroclor 1248	LPX-SD-4402-0005-01	12672-29-6	24.59	U	NG/G DRY		04-0254	BATD	S3223-P	06/22/04	07/01/04	07/23/04	BATD5-128
LPX-SD-4402-0005-01	PESTP	Aroclor 1254	LPX-SD-4402-0005-01	11097-69-1	166.91		NG/G DRY		04-0254	BATD	S3223-P	06/22/04	07/01/04	07/23/04	BATD5-128
LPX-SD-4402-0005-01	PESTP	Aroclor 1260	LPX-SD-4402-0005-01	11096-82-5	24.64	U	NG/G DRY		04-0254	BATD	S3223-P	06/22/04	07/01/04	07/23/04	BATD5-128
LPX-SD-4402-0005-01	PESTP	Aroclor 1268	LPX-SD-4402-0005-01	11100-14-4	24.59	U	NG/G DRY		04-0254	BATD	S3223-P	06/22/04	07/01/04	07/23/04	BATD5-128
LPX-SD-4402-0005-01	PESTP	CI2(14)	LPX-SD-4402-0005-01	34883-41-5	104		PCT_REC		04-0254	BATD	S3223-P	06/22/04	07/01/04	07/23/04	BATD5-128
LPX-SD-4402-0005-01	PESTP	CI3(34)	LPX-SD-4402-0005-01	37680-58-5	50		PCT_REC		04-0254	BATD	S3223-P	06/22/04	07/01/04	07/23/04	BATD5-128
LPX-SD-4402-0005-01	PESTP	CI5(104)	LPX-SD-4402-0005-01	56558-16-8	57		PCT_REC		04-0254	BATD	S3223-P	06/22/04	07/01/04	07/23/04	BATD5-128
LPX-SD-4402-0005-01	PESTP	CI5(112)	LPX-SD-4402-0005-01	74472-36-9	54		PCT_REC		04-0254	BATD	S3223-P	06/22/04	07/01/04	07/23/04	BATD5-128

NSAMPLE	MDL	IDL	CRDL	CRQL	DIL FACTOR	PCT MOIST	COMMENTS	DVTIER	LAB QC CODE	FINAL RESULT	FINAL QUAL	VALID COMMENT
LPX-SD-4402-0005-01	0.38	0.25			1.7	74.5	Wet sediment used for extraction	3	N	1.93	J	
LPX-SD-4402-0005-01	0.24	0.25			1.7	74.5	Wet sediment used for extraction	3	N	1.29	J	
LPX-SD-4402-0005-01	0.23	0.25			1.7	74.5	Wet sediment used for extraction	3	N	0.23	R	
LPX-SD-4402-0005-01	0.21	0.25			1.7	74.5	Wet sediment used for extraction	3	N	0.21	R	
LPX-SD-4402-0005-01	0.21	0.25			1.7	74.5	Wet sediment used for extraction	3	N	0.21	R	
LPX-SD-4402-0005-01	0.19	0.25			1.7	74.5	Wet sediment used for extraction	3	N	0.19	R	
LPX-SD-4402-0005-01	0.22	0.25			1.7	74.5	Wet sediment used for extraction	3	N	0.22	R	
LPX-SD-4402-0005-01	0.2	0.25			1.7	74.5	Wet sediment used for extraction	3	N	0.2	R	
LPX-SD-4402-0005-01	0.24	0.25			1.7	74.5	Wet sediment used for extraction	3	N	0.24	R	
LPX-SD-4402-0005-01	0.21	0.25			1.7	74.5	Wet sediment used for extraction	3	N	0.21	R	
LPX-SD-4402-0005-01	0.24	0.25			1.7	74.5	Wet sediment used for extraction	3	N	1.9	J	
LPX-SD-4402-0005-01	0.25	0.25			1.7	74.5	Wet sediment used for extraction	3	N	0.25	R	
LPX-SD-4402-0005-01	0.24	0.25			1.7	74.5	Wet sediment used for extraction	3	N	1.89	J	
LPX-SD-4402-0005-01	0.29	0.25			1.7	74.5	Wet sediment used for extraction	3	N	0.29	R	
LPX-SD-4402-0005-01	0.25	0.25			1.7	74.5	Wet sediment used for extraction	3	N	0.25	R	
LPX-SD-4402-0005-01	0.33	0.25			1.7	74.5	Wet sediment used for extraction	3	N	0.33	R	
LPX-SD-4402-0005-01	0.25	0.25			1.7	74.5	Wet sediment used for extraction	3	N	0.25	R	
LPX-SD-4402-0005-01	0.23	0.25			1.7	74.5	Wet sediment used for extraction	3	N	0.23	R	
LPX-SD-4402-0005-01	0.21	0.25			1.7	74.5	Wet sediment used for extraction	3	N	0.21	R	
LPX-SD-4402-0005-01	0.33	0.25			1.7	74.5	Wet sediment used for extraction	3	N	0.33	R	
LPX-SD-4402-0005-01	24.65	24.65			1.7	74.5	Wet sediment used for extraction	3	N	24.65	R	
LPX-SD-4402-0005-01	24.66	24.66			1.7	74.5	Wet sediment used for extraction	3	N	24.66	R	
LPX-SD-4402-0005-01	24.64	24.64			1.7	74.5	Wet sediment used for extraction	3	N	24.64	R	
LPX-SD-4402-0005-01	24.59	24.59			1.7	74.5	Wet sediment used for extraction	3	N	24.59	R	
LPX-SD-4402-0005-01	24.59	24.59			1.7	74.5	Wet sediment used for extraction	3	N	24.59	R	
LPX-SD-4402-0005-01	24.59	24.59			1.7	74.5	Wet sediment used for extraction	3	N	24.59	R	
LPX-SD-4402-0005-01	24.59	24.59			1.7	74.5	Wet sediment used for extraction	3	N	24.59	R	
LPX-SD-4402-0005-01	24.59	24.59			1.7	74.5	Wet sediment used for extraction	3	N	166.91	J	
LPX-SD-4402-0005-01	24.64	24.64			1.7	74.5	Wet sediment used for extraction	3	N	24.64	R	
LPX-SD-4402-0005-01	24.59	24.59			1.7	74.5	Wet sediment used for extraction	3	N	24.59	R	
LPX-SD-4402-0005-01					1.7	74.5	Wet sediment used for extraction	3	N	104		
LPX-SD-4402-0005-01					1.7	74.5	Wet sediment used for extraction	3	N	50		
LPX-SD-4402-0005-01					1.7	74.5	Wet sediment used for extraction	3	N	57		
LPX-SD-4402-0005-01					1.7	74.5	Wet sediment used for extraction	3	N	54		

NSAMPLE	CLASS	PARAMETER	EPASAMNO	CASNO	LAB RESULT	QUAL	UNITS	CASE	SDG	LABORATORY	LAB ID	REC DATE	EXTR DATE	ANAL DATE	METHOD
LPX-DU-062104B	PESTP	4,4'-DDD	LPX-DU-062104B	72-54-8	2.46		NG/G_DRY	04-0254	BATD	S3224-P	06/22/04	07/01/04	07/23/04	BATD5-128	
LPX-DU-062104B	PESTP	4,4'-DDE	LPX-DU-062104B	72-55-9	2.51		NG/G_DRY	04-0254	BATD	S3224-P	06/22/04	07/01/04	07/23/04	BATD5-128	
LPX-DU-062104B	PESTP	4,4'-DDT	LPX-DU-062104B	50-29-3	0.15	U	NG/G_DRY	04-0254	BATD	S3224-P	06/22/04	07/01/04	07/23/04	BATD5-128	
LPX-DU-062104B	PESTP	aldrin	LPX-DU-062104B	309-00-2	0.14	U	NG/G_DRY	04-0254	BATD	S3224-P	06/22/04	07/01/04	07/23/04	BATD5-128	
LPX-DU-062104B	PESTP	a-chlordane	LPX-DU-062104B	5103-71-9	1.21		NG/G_DRY	04-0254	BATD	S3224-P	06/22/04	07/01/04	07/23/04	BATD5-128	
LPX-DU-062104B	PESTP	g-chlordane	LPX-DU-062104B	5103-74-2	2.1		NG/G_DRY	04-0254	BATD	S3224-P	06/22/04	07/01/04	07/23/04	BATD5-128	
LPX-DU-062104B	PESTP	a-BHC	LPX-DU-062104B	319-84-6	0.15	U	NG/G_DRY	04-0254	BATD	S3224-P	06/22/04	07/01/04	07/23/04	BATD5-128	
LPX-DU-062104B	PESTP	b-BHC	LPX-DU-062104B	319-85-7	0.13	U	NG/G_DRY	04-0254	BATD	S3224-P	06/22/04	07/01/04	07/23/04	BATD5-128	
LPX-DU-062104B	PESTP	d-BHC	LPX-DU-062104B	319-86-8	0.16	U	NG/G_DRY	04-0254	BATD	S3224-P	06/22/04	07/01/04	07/23/04	BATD5-128	
LPX-DU-062104B	PESTP	Lindane	LPX-DU-062104B	58-89-9	0.14	U	NG/G_DRY	04-0254	BATD	S3224-P	06/22/04	07/01/04	07/23/04	BATD5-128	
LPX-DU-062104B	PESTP	dieldrin	LPX-DU-062104B	60-57-1	0.16	U	NG/G_DRY	04-0254	BATD	S3224-P	06/22/04	07/01/04	07/23/04	BATD5-128	
LPX-DU-062104B	PESTP	endosulfan I	LPX-DU-062104B	959-98-8	0.17	U	NG/G_DRY	04-0254	BATD	S3224-P	06/22/04	07/01/04	07/23/04	BATD5-128	
LPX-DU-062104B	PESTP	endosulfan II	LPX-DU-062104B	33213-65-9	1.16		NG/G_DRY	04-0254	BATD	S3224-P	06/22/04	07/01/04	07/23/04	BATD5-128	
LPX-DU-062104B	PESTP	endosulfan sulfate	LPX-DU-062104B	1031-07-8	0.19	U	NG/G_DRY	04-0254	BATD	S3224-P	06/22/04	07/01/04	07/23/04	BATD5-128	
LPX-DU-062104B	PESTP	endrin	LPX-DU-062104B	72-20-8	0.16	U	NG/G_DRY	04-0254	BATD	S3224-P	06/22/04	07/01/04	07/23/04	BATD5-128	
LPX-DU-062104B	PESTP	endrin aldehyde	LPX-DU-062104B	7421-93-4	0.21	U	NG/G_DRY	04-0254	BATD	S3224-P	06/22/04	07/01/04	07/23/04	BATD5-128	
LPX-DU-062104B	PESTP	endrin ketone	LPX-DU-062104B	53494-70-5	0.16	U	NG/G_DRY	04-0254	BATD	S3224-P	06/22/04	07/01/04	07/23/04	BATD5-128	
LPX-DU-062104B	PESTP	heptachlor	LPX-DU-062104B	76-44-8	0.15	U	NG/G_DRY	04-0254	BATD	S3224-P	06/22/04	07/01/04	07/23/04	BATD5-128	
LPX-DU-062104B	PESTP	heptachlor epoxide	LPX-DU-062104B	1024-57-3	0.14	U	NG/G_DRY	04-0254	BATD	S3224-P	06/22/04	07/01/04	07/23/04	BATD5-128	
LPX-DU-062104B	PESTP	methoxychlor	LPX-DU-062104B	72-43-5	0.22	U	NG/G_DRY	04-0254	BATD	S3224-P	06/22/04	07/01/04	07/23/04	BATD5-128	
LPX-DU-062104B	PESTP	Toxaphene	LPX-DU-062104B	8001-35-2	16.2	U	NG/G_DRY	04-0254	BATD	S3224-P	06/22/04	07/01/04	07/23/04	BATD5-128	
LPX-DU-062104B	PESTP	Technical Chlordane	LPX-DU-062104B	57-74-9	16.2	U	NG/G_DRY	04-0254	BATD	S3224-P	06/22/04	07/01/04	07/23/04	BATD5-128	
LPX-DU-062104B	PESTP	Aroclor 1016	LPX-DU-062104B	12674-11-2	16.19	U	NG/G_DRY	04-0254	BATD	S3224-P	06/22/04	07/01/04	07/23/04	BATD5-128	
LPX-DU-062104B	PESTP	Aroclor 1221	LPX-DU-062104B	11104-28-2	16.15	U	NG/G_DRY	04-0254	BATD	S3224-P	06/22/04	07/01/04	07/23/04	BATD5-128	
LPX-DU-062104B	PESTP	Aroclor 1232	LPX-DU-062104B	11141-16-5	16.15	U	NG/G_DRY	04-0254	BATD	S3224-P	06/22/04	07/01/04	07/23/04	BATD5-128	
LPX-DU-062104B	PESTP	Aroclor 1242	LPX-DU-062104B	53469-21-9	16.15	U	NG/G_DRY	04-0254	BATD	S3224-P	06/22/04	07/01/04	07/23/04	BATD5-128	
LPX-DU-062104B	PESTP	Aroclor 1248	LPX-DU-062104B	12672-29-6	16.15	U	NG/G_DRY	04-0254	BATD	S3224-P	06/22/04	07/01/04	07/23/04	BATD5-128	
LPX-DU-062104B	PESTP	Aroclor 1254	LPX-DU-062104B	11097-69-1	185.42		NG/G_DRY	04-0254	BATD	S3224-P	06/22/04	07/01/04	07/23/04	BATD5-128	
LPX-DU-062104B	PESTP	Aroclor 1260	LPX-DU-062104B	11096-82-5	16.19	U	NG/G_DRY	04-0254	BATD	S3224-P	06/22/04	07/01/04	07/23/04	BATD5-128	
LPX-DU-062104B	PESTP	Aroclor 1268	LPX-DU-062104B	11100-14-4	16.15	U	NG/G_DRY	04-0254	BATD	S3224-P	06/22/04	07/01/04	07/23/04	BATD5-128	
LPX-DU-062104B	PESTP	Cl2(14)	LPX-DU-062104B	34883-41-5	84		PCT_REC	04-0254	BATD	S3224-P	06/22/04	07/01/04	07/23/04	BATD5-128	
LPX-DU-062104B	PESTP	Cl3(34)	LPX-DU-062104B	37680-68-5	46		PCT_REC	04-0254	BATD	S3224-P	06/22/04	07/01/04	07/23/04	BATD5-128	
LPX-DU-062104B	PESTP	Cl5(104)	LPX-DU-062104B	56558-16-8	49		PCT_REC	04-0254	BATD	S3224-P	06/22/04	07/01/04	07/23/04	BATD5-128	
LPX-DU-062104B	PESTP	Cl5(112)	LPX-DU-062104B	174472-36-9	55		PCT_REC	04-0254	BATD	S3224-P	06/22/04	07/01/04	07/23/04	BATD5-128	

NSAMPLE	MDL	IDL	CRDL	CRQL	DIL FACTOR	PCT MOIST	COMMENTS	DVTIER	LAB QC CODE	FINAL RESULT	FINAL QUAL	VALID COMMENT
LPX-DU-062104B	0.25	0.16			1.7	63.4		3	N	2.46		
LPX-DU-062104B	0.16	0.16			1.7	63.4		3	N	2.51	J	
LPX-DU-062104B	0.15	0.16			1.7	63.4		3	N	0.15	U	
LPX-DU-062104B	0.14	0.16			1.7	63.4		3	N	0.14	U	
LPX-DU-062104B	0.14	0.16			1.7	63.4		3	N	1.21	J	
LPX-DU-062104B	0.12	0.16			1.7	63.4		3	N	2.1	J	
LPX-DU-062104B	0.15	0.16			1.7	63.4		3	N	0.15	U	
LPX-DU-062104B	0.13	0.16			1.7	63.4		3	N	0.13	U	
LPX-DU-062104B	0.16	0.16			1.7	63.4		3	N	0.16	U	
LPX-DU-062104B	0.14	0.16			1.7	63.4		3	N	0.14	U	
LPX-DU-062104B	0.16	0.16			1.7	63.4		3	N	0.16	UJ	
LPX-DU-062104B	0.17	0.16			1.7	63.4		3	N	0.17	U	
LPX-DU-062104B	0.16	0.16			1.7	63.4		3	N	1.16		
LPX-DU-062104B	0.19	0.16			1.7	63.4		3	N	0.19	U	
LPX-DU-062104B	0.16	0.16			1.7	63.4		3	N	0.16	U	
LPX-DU-062104B	0.21	0.16			1.7	63.4		3	N	0.21	U	
LPX-DU-062104B	0.16	0.16			1.7	63.4		3	N	0.16	U	
LPX-DU-062104B	0.15	0.16			1.7	63.4		3	N	0.15	U	
LPX-DU-062104B	0.14	0.16			1.7	63.4		3	N	0.14	U	
LPX-DU-062104B	0.22	0.16			1.7	63.4		3	N	0.22	U	
LPX-DU-062104B	16.2	16.2			1.7	63.4		3	N	16.2	U	
LPX-DU-062104B	16.2	16.2			1.7	63.4		3	N	16.2	U	
LPX-DU-062104B	16.19	16.19			1.7	63.4		3	N	16.19	U	
LPX-DU-062104B	16.15	16.15			1.7	63.4		3	N	16.15	U	
LPX-DU-062104B	16.15	16.15			1.7	63.4		3	N	16.15	U	
LPX-DU-062104B	16.15	16.15			1.7	63.4		3	N	16.15	U	
LPX-DU-062104B	16.15	16.15			1.7	63.4		3	N	16.15	U	
LPX-DU-062104B	16.15	16.15			1.7	63.4		3	N	16.15	U	
LPX-DU-062104B	16.15	16.15			1.7	63.4		3	N	185.42		
LPX-DU-062104B	16.19	16.19			1.7	63.4		3	N	16.19	U	
LPX-DU-062104B	16.15	16.15			1.7	63.4		3	N	16.15	U	
LPX-DU-062104B					1.7	63.4		3	N			
LPX-DU-062104B					1.7	63.4		3	N			
LPX-DU-062104B					1.7	63.4		3	N			
LPX-DU-062104B					1.7	63.4		3	N			

NSAMPLE	CLASS	PARAMETER	EPASAMNO	CASNO	LAB RESULT	QUAL	UNITS	CASE	SDG	LABORATORY	LAB ID	REC DATE	EXTR DATE	ANAL DATE	METHOD
LPX-SD-4402-0005-01	PESTP	4,4'-DDD	LPX-SD-4402-0005-01	72-54-8	8.99		NG/G_DRY		04-0254	BATD	S3697-P	07/08/04	07/08/04	07/24/04	BATD5-128
LPX-SD-4402-0005-01	PESTP	4,4'-DDE	LPX-SD-4402-0005-01	72-55-9	5.95		NG/G_DRY		04-0254	BATD	S3697-P	07/08/04	07/08/04	07/24/04	BATD5-128
LPX-SD-4402-0005-01	PESTP	4,4'-DDT	LPX-SD-4402-0005-01	50-29-3	0.15	U	NG/G_DRY		04-0254	BATD	S3697-P	07/08/04	07/08/04	07/24/04	BATD5-128
LPX-SD-4402-0005-01	PESTP	aldrin	LPX-SD-4402-0005-01	309-00-2	1.64		NG/G_DRY		04-0254	BATD	S3697-P	07/08/04	07/08/04	07/24/04	BATD5-128
LPX-SD-4402-0005-01	PESTP	a-chlordane	LPX-SD-4402-0005-01	5103-71-9	0.14	U	NG/G_DRY		04-0254	BATD	S3697-P	07/08/04	07/08/04	07/24/04	BATD5-128
LPX-SD-4402-0005-01	PESTP	g-chlordane	LPX-SD-4402-0005-01	5103-74-2	2.08		NG/G_DRY		04-0254	BATD	S3697-P	07/08/04	07/08/04	07/24/04	BATD5-128
LPX-SD-4402-0005-01	PESTP	a-BHC	LPX-SD-4402-0005-01	319-84-6	0.15	U	NG/G_DRY		04-0254	BATD	S3697-P	07/08/04	07/08/04	07/24/04	BATD5-128
LPX-SD-4402-0005-01	PESTP	b-BHC	LPX-SD-4402-0005-01	319-85-7	0.13	U	NG/G_DRY		04-0254	BATD	S3697-P	07/08/04	07/08/04	07/24/04	BATD5-128
LPX-SD-4402-0005-01	PESTP	d-BHC	LPX-SD-4402-0005-01	319-86-8	0.16	U	NG/G_DRY		04-0254	BATD	S3697-P	07/08/04	07/08/04	07/24/04	BATD5-128
LPX-SD-4402-0005-01	PESTP	Lindane	LPX-SD-4402-0005-01	58-89-9	0.76		NG/G_DRY		04-0254	BATD	S3697-P	07/08/04	07/08/04	07/24/04	BATD5-128
LPX-SD-4402-0005-01	PESTP	dieldrin	LPX-SD-4402-0005-01	60-57-1	63.38	D	NG/G_DRY		04-0254	BATD	S3697-P	07/08/04	07/08/04	07/24/04	BATD5-128
LPX-SD-4402-0005-01	PESTP	endosulfan I	LPX-SD-4402-0005-01	959-98-8	0.17	U	NG/G_DRY		04-0254	BATD	S3697-P	07/08/04	07/08/04	07/24/04	BATD5-128
LPX-SD-4402-0005-01	PESTP	endosulfan II	LPX-SD-4402-0005-01	33213-65-9	0.16	U	NG/G_DRY		04-0254	BATD	S3697-P	07/08/04	07/08/04	07/24/04	BATD5-128
LPX-SD-4402-0005-01	PESTP	endosulfan sulfate	LPX-SD-4402-0005-01	1031-07-8	0.19	U	NG/G_DRY		04-0254	BATD	S3697-P	07/08/04	07/08/04	07/24/04	BATD5-128
LPX-SD-4402-0005-01	PESTP	endrin	LPX-SD-4402-0005-01	72-20-8	0.16	U	NG/G_DRY		04-0254	BATD	S3697-P	07/08/04	07/08/04	07/24/04	BATD5-128
LPX-SD-4402-0005-01	PESTP	endrin aldehyde	LPX-SD-4402-0005-01	7421-93-4	9.51		NG/G_DRY		04-0254	BATD	S3697-P	07/08/04	07/08/04	07/24/04	BATD5-128
LPX-SD-4402-0005-01	PESTP	endrin ketone	LPX-SD-4402-0005-01	53494-70-5	0.16	U	NG/G_DRY		04-0254	BATD	S3697-P	07/08/04	07/08/04	07/24/04	BATD5-128
LPX-SD-4402-0005-01	PESTP	heptachlor	LPX-SD-4402-0005-01	76-44-8	0.15	U	NG/G_DRY		04-0254	BATD	S3697-P	07/08/04	07/08/04	07/24/04	BATD5-128
LPX-SD-4402-0005-01	PESTP	heptachlor epoxide	LPX-SD-4402-0005-01	1024-57-3	0.14	U	NG/G_DRY		04-0254	BATD	S3697-P	07/08/04	07/08/04	07/24/04	BATD5-128
LPX-SD-4402-0005-01	PESTP	methoxychlor	LPX-SD-4402-0005-01	72-43-5	0.22	U	NG/G_DRY		04-0254	BATD	S3697-P	07/08/04	07/08/04	07/24/04	BATD5-128
LPX-SD-4402-0005-01	PESTP	Toxaphene	LPX-SD-4402-0005-01	8001-35-2	16.26	U	NG/G_DRY		04-0254	BATD	S3697-P	07/08/04	07/08/04	07/24/04	BATD5-128
LPX-SD-4402-0005-01	PESTP	Technical Chlordane	LPX-SD-4402-0005-01	57-74-9	16.26	U	NG/G_DRY		04-0254	BATD	S3697-P	07/08/04	07/08/04	07/24/04	BATD5-128
LPX-SD-4402-0005-01	PESTP	Aroclor 1016	LPX-SD-4402-0005-01	12674-11-2	16.25	U	NG/G_DRY		04-0254	BATD	S3697-P	07/08/04	07/08/04	07/24/04	BATD5-128
LPX-SD-4402-0005-01	PESTP	Aroclor 1221	LPX-SD-4402-0005-01	11104-28-2	16.22	U	NG/G_DRY		04-0254	BATD	S3697-P	07/08/04	07/08/04	07/24/04	BATD5-128
LPX-SD-4402-0005-01	PESTP	Aroclor 1232	LPX-SD-4402-0005-01	11141-16-5	16.22	U	NG/G_DRY		04-0254	BATD	S3697-P	07/08/04	07/08/04	07/24/04	BATD5-128
LPX-SD-4402-0005-01	PESTP	Aroclor 1242	LPX-SD-4402-0005-01	53469-21-9	16.22	U	NG/G_DRY		04-0254	BATD	S3697-P	07/08/04	07/08/04	07/24/04	BATD5-128
LPX-SD-4402-0005-01	PESTP	Aroclor 1248	LPX-SD-4402-0005-01	12672-29-6	16.22	U	NG/G_DRY		04-0254	BATD	S3697-P	07/08/04	07/08/04	07/24/04	BATD5-128
LPX-SD-4402-0005-01	PESTP	Aroclor 1254	LPX-SD-4402-0005-01	11097-69-1	3583.3		NG/G_DRY		04-0254	BATD	S3697-P	07/08/04	07/08/04	07/24/04	BATD5-128
LPX-SD-4402-0005-01	PESTP	Aroclor 1260	LPX-SD-4402-0005-01	11096-82-5	16.25	U	NG/G_DRY		04-0254	BATD	S3697-P	07/08/04	07/08/04	07/24/04	BATD5-128
LPX-SD-4402-0005-01	PESTP	Aroclor 1268	LPX-SD-4402-0005-01	11100-14-4	16.22	U	NG/G_DRY		04-0254	BATD	S3697-P	07/08/04	07/08/04	07/24/04	BATD5-128
LPX-SD-4402-0005-01	PFSTP	Cl2(14)	LPX-SD-4402-0005-01	34883-41-5	61		PCT_REC		04-0254	BATD	S3697-P	07/08/04	07/08/04	07/24/04	BATD5-128
LPX-SD-4402-0005-01	PESTP	Cl3(34)	LPX-SD-4402-0005-01	37680-68-5	68		PCT_REC		04-0254	BATD	S3697-P	07/08/04	07/08/04	07/24/04	BATD5-128
LPX-SD-4402-0005-01	PESTP	Cl5(104)	LPX-SD-4402-0005-01	56558-16-8	57		PCT_REC		04-0254	BATD	S3697-P	07/08/04	07/08/04	07/24/04	BATD5-128
LPX-SD-4402-0005-01	PESTP	Cl5(112)	LPX-SD-4402-0005-01	74472-36-9	97		PCT_REC		04-0254	BATD	S3697-P	07/08/04	07/08/04	07/24/04	BATD5-128

NSAMPLE	MDL	IDL	CRDL CRQL	DIL FACTOR	PCT MOIST	COMMENTS	DVTIER	LAB QC CODE	FINAL RESULT	FINAL QUAL	VALID COMMENT
LPX-SD-4402-0005-01	0.25	0.16			1.7	0.6 Freeze-dried sediment used for extraction		3 N	8.99	J	
LPX-SD-4402-0005-01	0.16	0.16			1.7	0.6 Freeze-dried sediment used for extraction		3 N	5.95	J	
LPX-SD-4402-0005-01	0.15	0.16			1.7	0.6 Freeze-dried sediment used for extraction		3 N	0.15	U	
LPX-SD-4402-0005-01	0.14	0.16			1.7	0.6 Freeze-dried sediment used for extraction		3 N	1.64	J	
LPX-SD-4402-0005-01	0.14	0.16			1.7	0.6 Freeze-dried sediment used for extraction		3 N	0.14	U	
LPX-SD-4402-0005-01	0.12	0.16			1.7	0.6 Freeze-dried sediment used for extraction		3 N	2.08	J	
LPX-SD-4402-0005-01	0.15	0.16			1.7	0.6 Freeze-dried sediment used for extraction		3 N	0.15	U	
LPX-SD-4402-0005-01	0.13	0.16			1.7	0.6 Freeze-dried sediment used for extraction		3 N	0.13	U	
LPX-SD-4402-0005-01	0.16	0.16			1.7	0.6 Freeze-dried sediment used for extraction		3 N	0.16	U	
LPX-SD-4402-0005-01	0.14	0.16			1.7	0.6 Freeze-dried sediment used for extraction		3 N	0.76	J	
LPX-SD-4402-0005-01	0.8	0.16			8.3	0.6 Freeze-dried sediment used for extraction		3 N	63.38	J	
LPX-SD-4402-0005-01	0.17	0.16			1.7	0.6 Freeze-dried sediment used for extraction		3 N	0.17	U	
LPX-SD-4402-0005-01	0.16	0.16			1.7	0.6 Freeze-dried sediment used for extraction		3 N	0.16	UJ	
LPX-SD-4402-0005-01	0.19	0.16			1.7	0.6 Freeze-dried sediment used for extraction		3 N	0.19	U	
LPX-SD-4402-0005-01	0.16	0.16			1.7	0.6 Freeze-dried sediment used for extraction		3 N	0.16	U	
LPX-SD-4402-0005-01	0.22	0.16			1.7	0.6 Freeze-dried sediment used for extraction		3 N	9.51	J	
LPX-SD-4402-0005-01	0.16	0.16			1.7	0.6 Freeze-dried sediment used for extraction		3 N	0.16	U	
LPX-SD-4402-0005-01	0.15	0.16			1.7	0.6 Freeze-dried sediment used for extraction		3 N	0.15	U	
LPX-SD-4402-0005-01	0.14	0.16			1.7	0.6 Freeze-dried sediment used for extraction		3 N	0.14	U	
LPX-SD-4402-0005-01	0.22	0.16			1.7	0.6 Freeze-dried sediment used for extraction		3 N	0.22	U	
LPX-SD-4402-0005-01	16.26	16.26			1.7	0.6 Freeze-dried sediment used for extraction		3 N	16.26	U	
LPX-SD-4402-0005-01	16.26	16.26			1.7	0.6 Freeze-dried sediment used for extraction		3 N	16.26	U	
LPX-SD-4402-0005-01	16.25	16.25			1.7	0.6 Freeze-dried sediment used for extraction		3 N	16.25	U	
LPX-SD-4402-0005-01	16.22	16.22			1.7	0.6 Freeze-dried sediment used for extraction		3 N	16.22	U	
LPX-SD-4402-0005-01	16.22	16.22			1.7	0.6 Freeze-dried sediment used for extraction		3 N	16.22	U	
LPX-SD-4402-0005-01	16.22	16.22			1.7	0.6 Freeze-dried sediment used for extraction		3 N	16.22	U	
LPX-SD-4402-0005-01	16.22	16.22			1.7	0.6 Freeze-dried sediment used for extraction		3 N	16.22	U	
LPX-SD-4402-0005-01	16.22	16.22			1.7	0.6 Freeze-dried sediment used for extraction		3 N	3583.3	J	
LPX-SD-4402-0005-01	16.25	16.25			1.7	0.6 Freeze-dried sediment used for extraction		3 N	16.25	U	
LPX-SD-4402-0005-01	16.22	16.22			1.7	0.6 Freeze-dried sediment used for extraction		3 N	16.22	U	
LPX-SD-4402-0005-01					1.7	0.6 Freeze-dried sediment used for extraction		3 N			
LPX-SD-4402-0005-01					1.7	0.6 Freeze-dried sediment used for extraction		3 N			
LPX-SD-4402-0005-01					1.7	0.6 Freeze-dried sediment used for extraction		3 N			
LPX-SD-4402-0005-01					1.7	0.6 Freeze-dried sediment used for extraction		3 N			

NSAMPLE	CLASS	PARAMETER	EPASAMNO	CASNO	LAB RESULT	QUAL	UNITS	CASE	SDG	LABORATORY	LAB ID	REC DATE	EXTR DATE	ANAL DATE	METHOD
LPX-SD-4407-0005-01	PESTP	4,4'-DDD	LPX-SD-4407-0005-01	72-54-8	26.58		NG/G_DRY		04-0254	BATD	S3698-P	07/08/04	07/08/04	07/24/04	BATD5-128
LPX-SD-4407-0005-01	PESTP	4,4'-DDE	LPX-SD-4407-0005-01	72-55-9	42.36		NG/G_DRY		04-0254	BATD	S3698-P	07/08/04	07/08/04	07/24/04	BATD5-128
LPX-SD-4407-0005-01	PESTP	4,4'-DDT	LPX-SD-4407-0005-01	50-29-3	2.76		NG/G_DRY		04-0254	BATD	S3698-P	07/08/04	07/08/04	07/24/04	BATD5-128
LPX-SD-4407-0005-01	PESTP	aldrin	LPX-SD-4407-0005-01	309-00-2	0.97		NG/G_DRY		04-0254	BATD	S3698-P	07/08/04	07/08/04	07/24/04	BATD5-128
LPX-SD-4407-0005-01	PESTP	a-chlordane	LPX-SD-4407-0005-01	5103-71-9	7.68		NG/G_DRY		04-0254	BATD	S3698-P	07/08/04	07/08/04	07/24/04	BATD5-128
LPX-SD-4407-0005-01	PESTP	g-chlordane	LPX-SD-4407-0005-01	5103-74-2	6.94		NG/G_DRY		04-0254	BATD	S3698-P	07/08/04	07/08/04	07/24/04	BATD5-128
LPX-SD-4407-0005-01	PESTP	a-BHC	LPX-SD-4407-0005-01	319-84-6	0.19	U	NG/G_DRY		04-0254	BATD	S3698-P	07/08/04	07/08/04	07/24/04	BATD5-128
LPX-SD-4407-0005-01	PESTP	b-BHC	LPX-SD-4407-0005-01	319-85-7	0.16	U	NG/G_DRY		04-0254	BATD	S3698-P	07/08/04	07/08/04	07/24/04	BATD5-128
LPX-SD-4407-0005-01	PESTP	d-BHC	LPX-SD-4407-0005-01	319-86-8	0.2	U	NG/G_DRY		04-0254	BATD	S3698-P	07/08/04	07/08/04	07/24/04	BATD5-128
LPX-SD-4407-0005-01	PESTP	Lindane	LPX-SD-4407-0005-01	58-89-9	0.18	U	NG/G_DRY		04-0254	BATD	S3698-P	07/08/04	07/08/04	07/24/04	BATD5-128
LPX-SD-4407-0005-01	PESTP	dieldrin	LPX-SD-4407-0005-01	60-57-1	2.51		NG/G_DRY		04-0254	BATD	S3698-P	07/08/04	07/08/04	07/24/04	BATD5-128
LPX-SD-4407-0005-01	PESTP	endosulfan I	LPX-SD-4407-0005-01	959-98-8	0.21	U	NG/G_DRY		04-0254	BATD	S3698-P	07/08/04	07/08/04	07/24/04	BATD5-128
LPX-SD-4407-0005-01	PESTP	endosulfan II	LPX-SD-4407-0005-01	33213-65-9	0.2	U	NG/G_DRY		04-0254	BATD	S3698-P	07/08/04	07/08/04	07/24/04	BATD5-128
LPX-SD-4407-0005-01	PESTP	endosulfan sulfate	LPX-SD-4407-0005-01	1031-07-8	0.24	U	NG/G_DRY		04-0254	BATD	S3698-P	07/08/04	07/08/04	07/24/04	BATD5-128
LPX-SD-4407-0005-01	PESTP	endrin	LPX-SD-4407-0005-01	72-20-8	0.2	U	NG/G_DRY		04-0254	BATD	S3698-P	07/08/04	07/08/04	07/24/04	BATD5-128
LPX-SD-4407-0005-01	PESTP	endrin aldehyde	LPX-SD-4407-0005-01	7421-93-4	1.9		NG/G_DRY		04-0254	BATD	S3698-P	07/08/04	07/08/04	07/24/04	BATD5-128
LPX-SD-4407-0005-01	PESTP	endrin ketone	LPX-SD-4407-0005-01	53494-70-5	0.2	U	NG/G_DRY		04-0254	BATD	S3698-P	07/08/04	07/08/04	07/24/04	BATD5-128
LPX-SD-4407-0005-01	PESTP	heptachlor	LPX-SD-4407-0005-01	76-44-8	0.19	U	NG/G_DRY		04-0254	BATD	S3698-P	07/08/04	07/08/04	07/24/04	BATD5-128
LPX-SD-4407-0005-01	PESTP	heptachlor epoxide	LPX-SD-4407-0005-01	1024-57-3	0.17	U	NG/G_DRY		04-0254	BATD	S3698-P	07/08/04	07/08/04	07/24/04	BATD5-128
LPX-SD-4407-0005-01	PESTP	methoxychlor	LPX-SD-4407-0005-01	72-43-5	0.28	U	NG/G_DRY		04-0254	BATD	S3698-P	07/08/04	07/08/04	07/24/04	BATD5-128
LPX-SD-4407-0005-01	PESTP	Toxaphene	LPX-SD-4407-0005-01	8001-35-2	20.33	U	NG/G_DRY		04-0254	BATD	S3698-P	07/08/04	07/08/04	07/24/04	BATD5-128
LPX-SD-4407-0005-01	PESTP	Technical Chlordane	LPX-SD-4407-0005-01	57-74-9	20.34	U	NG/G_DRY		04-0254	BATD	S3698-P	07/08/04	07/08/04	07/24/04	BATD5-128
LPX-SD-4407-0005-01	PESTP	Aroclor 1016	LPX-SD-4407-0005-01	12674-11-2	20.32	U	NG/G_DRY		04-0254	BATD	S3698-P	07/08/04	07/08/04	07/24/04	BATD5-128
LPX-SD-4407-0005-01	PESTP	Aroclor 1221	LPX-SD-4407-0005-01	11104-28-2	20.28	U	NG/G_DRY		04-0254	BATD	S3698-P	07/08/04	07/08/04	07/24/04	BATD5-128
LPX-SD-4407-0005-01	PESTP	Aroclor 1232	LPX-SD-4407-0005-01	11141-16-5	20.28	U	NG/G_DRY		04-0254	BATD	S3698-P	07/08/04	07/08/04	07/24/04	BATD5-128
LPX-SD-4407-0005-01	PESTP	Aroclor 1242	LPX-SD-4407-0005-01	53469-21-9	20.28	U	NG/G_DRY		04-0254	BATD	S3698-P	07/08/04	07/08/04	07/24/04	BATD5-128
LPX-SD-4407-0005-01	PESTP	Aroclor 1248	LPX-SD-4407-0005-01	12672-29-6	20.28	U	NG/G_DRY		04-0254	BATD	S3698-P	07/08/04	07/08/04	07/24/04	BATD5-128
LPX-SD-4407-0005-01	PESTP	Aroclor 1254	LPX-SD-4407-0005-01	11097-69-1	637.83		NG/G_DRY		04-0254	BATD	S3698-P	07/08/04	07/08/04	07/24/04	BATD5-128
LPX-SD-4407-0005-01	PESTP	Aroclor 1260	LPX-SD-4407-0005-01	11096-82-5	20.32	U	NG/G_DRY		04-0254	BATD	S3698-P	07/08/04	07/08/04	07/24/04	BATD5-128
LPX-SD-4407-0005-01	PESTP	Aroclor 1268	LPX-SD-4407-0005-01	11100-14-4	20.28	U	NG/G_DRY		04-0254	BATD	S3698-P	07/08/04	07/08/04	07/24/04	BATD5-128
LPX-SD-4407-0005-01	PESTP	Cl2(14)	LPX-SD-4407-0005-01	34883-41-5	69		PCT_REC		04-0254	BATD	S3698-P	07/08/04	07/08/04	07/24/04	BATD5-128
LPX-SD-4407-0005-01	PESTP	Cl3(34)	LPX-SD-4407-0005-01	37680-68-5	51		PCT_REC		04-0254	BATD	S3698-P	07/08/04	07/08/04	07/24/04	BATD5-128
LPX-SD-4407-0005-01	PESTP	Cl5(104)	LPX-SD-4407-0005-01	56558-16-8	68		PCT_REC		04-0254	BATD	S3698-P	07/08/04	07/08/04	07/24/04	BATD5-128
LPX-SD-4407-0005-01	PESTP	Cl5(112)	LPX-SD-4407-0005-01	74472-36-9	59		PCT_REC		04-0254	BATD	S3698-P	07/08/04	07/08/04	07/24/04	BATD5-128

NSAMPLE	MDL	IDL	CRDL	CRQL	DIL FACTOR	PCT. MOIST	COMMENTS	DVTIER	LAB QC CODE	FINAL RESULT	FINAL QUAL	VALID COMMENT
LPX-SD-4407-0005-01	0.31	0.2				1.7	11.6 Freeze-dried sediment used for extraction		3 N	26.58		
LPX-SD-4407-0005-01	0.2	0.2				1.7	11.6 Freeze-dried sediment used for extraction		3 N	42.36		
LPX-SD-4407-0005-01	0.19	0.2				1.7	11.6 Freeze-dried sediment used for extraction		3 N	2.76	J	
LPX-SD-4407-0005-01	0.17	0.2				1.7	11.6 Freeze-dried sediment used for extraction		3 N	0.97		
LPX-SD-4407-0005-01	0.17	0.2				1.7	11.6 Freeze-dried sediment used for extraction		3 N	7.68	J	
LPX-SD-4407-0005-01	0.15	0.2				1.7	11.6 Freeze-dried sediment used for extraction		3 N	6.94		
LPX-SD-4407-0005-01	0.19	0.2				1.7	11.6 Freeze-dried sediment used for extraction		3 N	0.19	U	
LPX-SD-4407-0005-01	0.16	0.2				1.7	11.6 Freeze-dried sediment used for extraction		3 N	0.16	U	
LPX-SD-4407-0005-01	0.2	0.2				1.7	11.6 Freeze-dried sediment used for extraction		3 N	0.2	U	
LPX-SD-4407-0005-01	0.18	0.2				1.7	11.6 Freeze-dried sediment used for extraction		3 N	0.18	U	
LPX-SD-4407-0005-01	0.2	0.2				1.7	11.6 Freeze-dried sediment used for extraction		3 N	2.51		
LPX-SD-4407-0005-01	0.21	0.2				1.7	11.6 Freeze-dried sediment used for extraction		3 N	0.21	U	
LPX-SD-4407-0005-01	0.2	0.2				1.7	11.6 Freeze-dried sediment used for extraction		3 N	0.2	U	
LPX-SD-4407-0005-01	0.24	0.2				1.7	11.6 Freeze-dried sediment used for extraction		3 N	0.24	U	
LPX-SD-4407-0005-01	0.2	0.2				1.7	11.6 Freeze-dried sediment used for extraction		3 N	0.2	U	
LPX-SD-4407-0005-01	0.27	0.2				1.7	11.6 Freeze-dried sediment used for extraction		3 N	1.9		
LPX-SD-4407-0005-01	0.2	0.2				1.7	11.6 Freeze-dried sediment used for extraction		3 N	0.2	U	
LPX-SD-4407-0005-01	0.19	0.2				1.7	11.6 Freeze-dried sediment used for extraction		3 N	0.19	U	
LPX-SD-4407-0005-01	0.17	0.2				1.7	11.6 Freeze-dried sediment used for extraction		3 N	0.17	U	
LPX-SD-4407-0005-01	0.28	0.2				1.7	11.6 Freeze-dried sediment used for extraction		3 N	0.28	U	
LPX-SD-4407-0005-01	20.33	20.33				1.7	11.6 Freeze-dried sediment used for extraction		3 N	20.33	U	
LPX-SD-4407-0005-01	20.34	20.34				1.7	11.6 Freeze-dried sediment used for extraction		3 N	20.34	U	
LPX-SD-4407-0005-01	20.32	20.32				1.7	11.6 Freeze-dried sediment used for extraction		3 N	20.32	U	
LPX-SD-4407-0005-01	20.28	20.28				1.7	11.6 Freeze-dried sediment used for extraction		3 N	20.28	U	
LPX-SD-4407-0005-01	20.28	20.28				1.7	11.6 Freeze-dried sediment used for extraction		3 N	20.28	U	
LPX-SD-4407-0005-01	20.28	20.28				1.7	11.6 Freeze-dried sediment used for extraction		3 N	20.28	U	
LPX-SD-4407-0005-01	20.28	20.28				1.7	11.6 Freeze-dried sediment used for extraction		3 N	20.28	U	
LPX-SD-4407-0005-01	20.28	20.28				1.7	11.6 Freeze-dried sediment used for extraction		3 N	637.83		
LPX-SD-4407-0005-01	20.32	20.32				1.7	11.6 Freeze-dried sediment used for extraction		3 N	20.32	U	
LPX-SD-4407-0005-01	20.28	20.28				1.7	11.6 Freeze-dried sediment used for extraction		3 N	20.28	U	
LPX-SD-4407-0005-01						1.7	11.6 Freeze-dried sediment used for extraction		3 N	69		
LPX-SD-4407-0005-01						1.7	11.6 Freeze-dried sediment used for extraction		3 N	51		
LPX-SD-4407-0005-01						1.7	11.6 Freeze-dried sediment used for extraction		3 N	68		
LPX-SD-4407-0005-01						1.7	11.6 Freeze-dried sediment used for extraction		3 N	59		

Section 3

Metals Results

QA/QC Narrative
Sediment and QC Results

QA/QC Narrative

METALS QA/QC SUMMARY

QC Batch 2230

PROJECT: USACE NAE Delivery Order #01 Centredale
PARAMETER: Metals
LABORATORY: Battelle Marine Sciences Laboratory (MSL), Sequim, WA
MATRIX: Sediment
SAMPLE CUSTODY: Surface sediment samples were collected on June 21, 2004 at the Oxbow area, located in the northwest region of Lyman Mill Pond, Centredale. Samples were transported to Battelle Duxbury, stored refrigerated overnight, and shipped via overnight carrier on June 22, 2004 to Battelle MSL for metals testing. Samples were received at MSL on June 23, 2004; samples were received in good condition.

QA/QC MEASUREMENT PERFORMANCE CRITERIA (MPC):

	Reference Method	Blank ^a	LCS Recovery	MS/MSD Recovery ^b	SRM % Diff. ^c	MS/MSD Precision ^b	Achieved QL (µg/g dry)	Project Goals (µg/g dry)
Sb	L-42	<5×MDL	70-130%	70-130%	≤25%	≤30% RPD	0.012	0.329
As	L-42	<5×MDL	70-130%	70-130%	≤25%	≤30% RPD	1.45	0.097
Ba	L-42	<5×MDL	70-130%	70-130%	NA	≤30% RPD	0.452	384
Be	L-42	<5×MDL	70-130%	70-130%	≤25%	≤30% RPD	0.124	1.65
Cd	L-42	<5×MDL	70-130%	70-130%	≤25%	≤30% RPD	0.06	0.0294
Cr	L-42	<5×MDL	70-130%	70-130%	≤25%	≤30% RPD	0.232	0.772
Co	L-42	<5×MDL	70-130%	70-130%	≤25%	≤30% RPD	0.072	7.41
Cu	L-42	<5×MDL	70-130%	70-130%	≤25%	≤30% RPD	0.928	9.56
Pb	L-42	<5×MDL	70-130%	70-130%	≤25%	≤30% RPD	0.108	0.396
Mn	L-42	<5×MDL	70-130%	70-130%	≤25%	≤30% RPD	0.144	288
Mo	L-42	<5×MDL	70-130%	70-130%	≤25%	≤30% RPD	0.088	N/A
Ni	L-42	<5×MDL	70-130%	70-130%	≤25%	≤30% RPD	0.26	3.58
Se	L-42	<5×MDL	70-130%	70-130%	≤25%	≤30% RPD	1.64	0.271
Ag	L-42	<5×MDL	70-130%	70-130%	≤25%	≤30% RPD	0.016	1.37
Tl	L-42	<5×MDL	70-130%	70-130%	≤25%	≤30% RPD	0.04	0.00165
V	L-42	<5×MDL	70-130%	70-130%	≤25%	≤30% RPD	0.072	2.22
Zn	L-42	<5×MDL	70-130%	70-130%	≤25%	≤30% RPD	2.47	6.86

^a Associated sample concentrations should be >5× blank values.

^b Metals concentration in MS/MSD must be >5× background to be used for data quality assessment

^c Certified values in SRM must be >5×MDL to be used for data quality assessment

METHOD: Seventeen (17) metals were analyzed by inductively coupled plasma mass spectrometry (ICP/MS; method L-42) following a modified version of EPA Method 200.8 (EPA 1991). To prepare sediment samples for analysis, each was frozen then freeze-dried and homogenized using a Spex mixer-mill. Approximately 0.20 gram aliquots of dried homogenous sample were digested using a modification of EPA method 200.2, where concentrated nitric and hydrofluoric acids and hydrogen peroxide were used.

The original factor used by the ICP/MS instrument were calculated incorrectly. The percent difference between the factor used to calculate the results by the instrument and those that should have been used was calculated and applied to the results. The original results were biased low. A calculation sheet was provided to the validator for validation review

METALS QA/QC SUMMARY

QC Batch 2230

**HOLDING
TIMES:**

All samples were digested and/or analyzed within the 6-month holding time.
Sample extraction/digestion and analysis dates are:

<u>Task</u>	<u>Digested</u>	<u>Analyzed</u>
ICP-MS	July 6, 2004	July 14, 2004
Re-analysis (Ni)		August 5, 2004

**DETECTION
LIMITS:**

Metals results are reported relative to the method detection limits (MDL) and quantitation limits (QL) for that compound, as follows:

- Non-detects and values detected at a concentration below the MDL are reported as the QL and U flagged.
- Compounds detected at a concentration above the MDL and below the QL are reported and J flagged.

The MDL provided in the QAPP (Battelle, 2002) was determined by multiplying the standard deviation of the results for a minimum of 7 replicate low level spikes by the Student's t value at the 99th percentile; the quantitation limit (QL) was calculated as 4 x MDL.

Achieved QLs met the Project Action Goals (PAGs) for target metals except As, Cd, Se and Tl. As noted in Battelle (2002), the project detection limit goals are provided for perspective rather than as a requirement for the analytical methods.

BLANKS:

A laboratory method blank (MB) was prepared with the study samples. Blanks are analyzed to ensure that the sample extraction and analysis methods were free of contamination.

2230 – Metals were undetected at a level above the MDL.

**LABORATORY
CONTROL
SAMPLE**

One laboratory control samples (LCS, also referred to as blank spike) was prepared with the study samples. The percent recoveries of metals were calculated to measure data quality in terms of accuracy.

2230– With the exception of Cr, the percent recovery of all metals met the MPC, and ranged from 93% to 105%. Cr was recovered at 69%.

**MATRIX
SPIKES:**

One matrix spike (MS)/matrix spike duplicate (MSD) sample set was prepared with the study samples to measure data quality in terms of accuracy and precision. The MS and MSD were fortified with representative metals to monitor data quality in terms of accuracy and precision.

2230 – The percent recovery of all metals, present at concentrations above five times background levels, met the MPC. The percent recovery of Mn, Cu, Zn, Ba and Pb did not meet the MPC – see comment section below.

Percent recoveries and relative percent difference (RPD) between the MS/MSD recoveries (for metals present at concentrations above five times background levels) ranged from:

	<u>Metals</u>
MS	80 – 104% recovery
MSD	78 – 103% recovery
RPDs	0 – 16%

METALS QA/QC SUMMARY
QC Batch 2230

MATRIX SPIKES (cont): *Comment* – The percent recovery of Mn, Cu, Zn, Ba and Pb did not meet the MPC for the MS and MSD, however, the spiking level was inappropriate to the native sample concentration. Note that the recovery of these metals was acceptable in the associated LCS sample, suggesting that the method is in control and data are useable.

SRM: One matrix-appropriate standard reference material (SRM; PACS-2 a marine sediment obtained from the National Research Council of Canada (NRCC)) was analyzed for each metal and method. The SRM is certified for all target metals except Ba. The percent difference (PD) between detected concentrations and certified values was calculated to measure data quality in terms of accuracy.

2230– With the exception of Se, PD values met the MPC for all target/certified metals, and ranged from 0-18% PD. The PD value for Se was 36%, however, the certified concentration of Se in the SRM is $<5\times$ the MDL. No corrective action was taken.

REFERENCES: Battelle 2002. *Centredale Manor Restoration Project Superfund Site Baseline Risk Assessment, Initial Project Planning and Support*. Tasks 19-22 QAPP Addendum and Errata Sheet prepared under contract to USACE NAE. Addendum: September 27, 2002; Errata: November 6, 2002.

EPA. 1991. *Methods for the Determination of Metals in Environmental Samples*. EPA-600/4-91-010. Environmental Services Division, Monitoring Management Branch

Sediment and QC Results

NSAMPLE	CLASS	PARAMETER	EPASAMNO	CASNO	LAB_RESULT	QUAL	UNITS	CASE	SDG	LABORATORY	LAB_ID	REC_DATE	EXTR_DATE
LPX-SD-4404-0005-01	M	Beryllium	LPX-SD-4404-0005-01	7440-41-7	4.54		UG/G DRYWT	2230	MSL		2230*1	23-Jun-04	6-Jul-04
LPX-SD-4404-0005-01	M	Vanadium	LPX-SD-4404-0005-01	7440-62-2	71.1		UG/G DRYWT	2230	MSL		2230*1	23-Jun-04	6-Jul-04
LPX-SD-4404-0005-01	M	Chromium	LPX-SD-4404-0005-01	7440-47-3	101		UG/G DRYWT	2230	MSL		2230*1	23-Jun-04	6-Jul-04
LPX-SD-4404-0005-01	M	Manganese	LPX-SD-4404-0005-01	7439-96-5	859		UG/G DRYWT	2230	MSL		2230*1	23-Jun-04	6-Jul-04
LPX-SD-4404-0005-01	M	Cobalt	LPX-SD-4404-0005-01	7440-48-4	22.0		UG/G DRYWT	2230	MSL		2230*1	23-Jun-04	6-Jul-04
LPX-SD-4404-0005-01	M	Nickel	LPX-SD-4404-0005-01	7440-02-0	30.9		UG/G DRYWT	2230	MSL		2230*1	23-Jun-04	6-Jul-04
LPX-SD-4404-0005-01	M	Copper	LPX-SD-4404-0005-01	7440-50-8	357		UG/G DRYWT	2230	MSL		2230*1	23-Jun-04	6-Jul-04
LPX-SD-4404-0005-01	M	Zinc	LPX-SD-4404-0005-01	7440-66-6	1867		UG/G DRYWT	2230	MSL		2230*1	23-Jun-04	6-Jul-04
LPX-SD-4404-0005-01	M	Arsenic	LPX-SD-4404-0005-01	7440-38-2	12.8		UG/G DRYWT	2230	MSL		2230*1	23-Jun-04	6-Jul-04
LPX-SD-4404-0005-01	M	Selenium	LPX-SD-4404-0005-01	7782-49-2	2.22		UG/G DRYWT	2230	MSL		2230*1	23-Jun-04	6-Jul-04
LPX-SD-4404-0005-01	M	Molybdenum	LPX-SD-4404-0005-01	13939-06-5	4.58		UG/G DRYWT	2230	MSL		2230*1	23-Jun-04	6-Jul-04
LPX-SD-4404-0005-01	M	Silver	LPX-SD-4404-0005-01	7440-22-4	11.1		UG/G DRYWT	2230	MSL		2230*1	23-Jun-04	6-Jul-04
LPX-SD-4404-0005-01	M	Cadmium	LPX-SD-4404-0005-01	7440-43-9	8.25		UG/G DRYWT	2230	MSL		2230*1	23-Jun-04	6-Jul-04
LPX-SD-4404-0005-01	M	Antimony	LPX-SD-4404-0005-01	7440-36-0	7.01		UG/G DRYWT	2230	MSL		2230*1	23-Jun-04	6-Jul-04
LPX-SD-4404-0005-01	M	Barium	LPX-SD-4404-0005-01	7440-39-3	514		UG/G DRYWT	2230	MSL		2230*1	23-Jun-04	6-Jul-04
LPX-SD-4404-0005-01	M	Thallium	LPX-SD-4404-0005-01	7440-28-0	1.04		UG/G DRYWT	2230	MSL		2230*1	23-Jun-04	6-Jul-04
LPX-SD-4404-0005-01	M	Lead	LPX-SD-4404-0005-01	7439-92-1	1835		UG/G DRYWT	2230	MSL		2230*1	23-Jun-04	6-Jul-04
LPX-DU-062104A	M	Beryllium	LPX-DU-062104A	7440-41-7	2.69		UG/G DRYWT	2230	MSL		2230*2	23-Jun-04	6-Jul-04
LPX-DU-062104A	M	Vanadium	LPX-DU-062104A	7440-62-2	31.8		UG/G DRYWT	2230	MSL		2230*2	23-Jun-04	6-Jul-04
LPX-DU-062104A	M	Chromium	LPX-DU-062104A	7440-47-3	18.1		UG/G DRYWT	2230	MSL		2230*2	23-Jun-04	6-Jul-04
LPX-DU-062104A	M	Manganese	LPX-DU-062104A	7439-96-5	834		UG/G DRYWT	2230	MSL		2230*2	23-Jun-04	6-Jul-04
LPX-DU-062104A	M	Cobalt	LPX-DU-062104A	7440-48-4	4.30		UG/G DRYWT	2230	MSL		2230*2	23-Jun-04	6-Jul-04
LPX-DU-062104A	M	Nickel	LPX-DU-062104A	7440-02-0	6.91		UG/G DRYWT	2230	MSL		2230*2	23-Jun-04	6-Jul-04
LPX-DU-062104A	M	Copper	LPX-DU-062104A	7440-50-8	23.9		UG/G DRYWT	2230	MSL		2230*2	23-Jun-04	6-Jul-04
LPX-DU-062104A	M	Zinc	LPX-DU-062104A	7440-66-6	58.3		UG/G DRYWT	2230	MSL		2230*2	23-Jun-04	6-Jul-04
LPX-DU-062104A	M	Arsenic	LPX-DU-062104A	7440-38-2	1.45 U		UG/G DRYWT	2230	MSL		2230*2	23-Jun-04	6-Jul-04
LPX-DU-062104A	M	Selenium	LPX-DU-062104A	7782-49-2	1.64 U		UG/G DRYWT	2230	MSL		2230*2	23-Jun-04	6-Jul-04
LPX-DU-062104A	M	Molybdenum	LPX-DU-062104A	13939-06-5	2.10		UG/G DRYWT	2230	MSL		2230*2	23-Jun-04	6-Jul-04
LPX-DU-062104A	M	Silver	LPX-DU-062104A	7440-22-4	0.399		UG/G DRYWT	2230	MSL		2230*2	23-Jun-04	6-Jul-04
LPX-DU-062104A	M	Cadmium	LPX-DU-062104A	7440-43-9	0.06 U		UG/G DRYWT	2230	MSL		2230*2	23-Jun-04	6-Jul-04
LPX-DU-062104A	M	Antimony	LPX-DU-062104A	7440-36-0	2.63		UG/G DRYWT	2230	MSL		2230*2	23-Jun-04	6-Jul-04
LPX-DU-062104A	M	Barium	LPX-DU-062104A	7440-39-3	163		UG/G DRYWT	2230	MSL		2230*2	23-Jun-04	6-Jul-04
LPX-DU-062104A	M	Thallium	LPX-DU-062104A	7440-28-0	0.492		UG/G DRYWT	2230	MSL		2230*2	23-Jun-04	6-Jul-04
LPX-DU-062104A	M	Lead	LPX-DU-062104A	7439-92-1	453		UG/G DRYWT	2230	MSL		2230*2	23-Jun-04	6-Jul-04
LPX-SD-4407-0005-01	M	Beryllium	LPX-SD-4407-0005-01	7440-41-7	3.46		UG/G DRYWT	2230	MSL		2230*3	23-Jun-04	6-Jul-04
LPX-SD-4407-0005-01	M	Vanadium	LPX-SD-4407-0005-01	7440-62-2	62.7		UG/G DRYWT	2230	MSL		2230*3	23-Jun-04	6-Jul-04
LPX-SD-4407-0005-01	M	Chromium	LPX-SD-4407-0005-01	7440-47-3	46.1		UG/G DRYWT	2230	MSL		2230*3	23-Jun-04	6-Jul-04
LPX-SD-4407-0005-01	M	Manganese	LPX-SD-4407-0005-01	7439-96-5	809		UG/G DRYWT	2230	MSL		2230*3	23-Jun-04	6-Jul-04
LPX-SD-4407-0005-01	M	Cobalt	LPX-SD-4407-0005-01	7440-48-4	8.79		UG/G DRYWT	2230	MSL		2230*3	23-Jun-04	6-Jul-04
LPX-SD-4407-0005-01	M	Nickel	LPX-SD-4407-0005-01	7440-02-0	30.7		UG/G DRYWT	2230	MSL		2230*3	23-Jun-04	6-Jul-04
LPX-SD-4407-0005-01	M	Copper	LPX-SD-4407-0005-01	7440-50-8	73.2		UG/G DRYWT	2230	MSL		2230*3	23-Jun-04	6-Jul-04
LPX-SD-4407-0005-01	M	Zinc	LPX-SD-4407-0005-01	7440-66-6	454		UG/G DRYWT	2230	MSL		2230*3	23-Jun-04	6-Jul-04
LPX-SD-4407-0005-01	M	Arsenic	LPX-SD-4407-0005-01	7440-38-2	2.61		UG/G DRYWT	2230	MSL		2230*3	23-Jun-04	6-Jul-04
LPX-SD-4407-0005-01	M	Selenium	LPX-SD-4407-0005-01	7782-49-2	1.78		UG/G DRYWT	2230	MSL		2230*3	23-Jun-04	6-Jul-04
LPX-SD-4407-0005-01	M	Molybdenum	LPX-SD-4407-0005-01	13939-06-5	5.83		UG/G DRYWT	2230	MSL		2230*3	23-Jun-04	6-Jul-04
LPX-SD-4407-0005-01	M	Silver	LPX-SD-4407-0005-01	7440-22-4	1.05		UG/G DRYWT	2230	MSL		2230*3	23-Jun-04	6-Jul-04
LPX-SD-4407-0005-01	M	Cadmium	LPX-SD-4407-0005-01	7440-43-9	3.77		UG/G DRYWT	2230	MSL		2230*3	23-Jun-04	6-Jul-04
LPX-SD-4407-0005-01	M	Antimony	LPX-SD-4407-0005-01	7440-36-0	2.80		UG/G DRYWT	2230	MSL		2230*3	23-Jun-04	6-Jul-04
LPX-SD-4407-0005-01	M	Barium	LPX-SD-4407-0005-01	7440-39-3	288		UG/G DRYWT	2230	MSL		2230*3	23-Jun-04	6-Jul-04
LPX-SD-4407-0005-01	M	Thallium	LPX-SD-4407-0005-01	7440-28-0	0.401		UG/G DRYWT	2230	MSL		2230*3	23-Jun-04	6-Jul-04
LPX-SD-4407-0005-01	M	Lead	LPX-SD-4407-0005-01	7439-92-1	246		UG/G DRYWT	2230	MSL		2230*3	23-Jun-04	6-Jul-04

NSAMPLE	ANAL_DATE	METHOD	MDL	IDL	CRDL	CRQL	DIL_FACTOR	PCT_MOIST	COMMENTS	DVTIER	LAB_QC_TYPE	FINAL_RESULT	FINAL_QUAL	VALID_COMMENT
LPX-SD-4404-0005-01	14-Jul-04	L-42	0.031			0.016	10	27.3		2	N	4.54		
LPX-SD-4404-0005-01	14-Jul-04	L-42	0.018			1.08	10	27.3		2	N	71.1		
LPX-SD-4404-0005-01	14-Jul-04	L-42	0.1			0.96	10	27.3		2	N	101	J	
LPX-SD-4404-0005-01	14-Jul-04	L-42	0.036			0.064	10	27.3		2	N	859		
LPX-SD-4404-0005-01	14-Jul-04	L-42	0.018			1.34	10	27.3		2	N	22.0		
LPX-SD-4404-0005-01	5-Aug-04	L-42	0.1			3.12	10	27.3		2	N	30.9		
LPX-SD-4404-0005-01	14-Jul-04	L-42	0.23			0.388	10	27.3		2	N	357		
LPX-SD-4404-0005-01	14-Jul-04	L-42	0.62			0.384	10	27.3		2	N	1867		
LPX-SD-4404-0005-01	14-Jul-04	L-42	0.36			2.00	10	27.3		2	N	12.8		
LPX-SD-4404-0005-01	14-Jul-04	L-42	0.41			1.06	10	27.3		2	N	2.22		
LPX-SD-4404-0005-01	14-Jul-04	L-42	0.0			1.6	10	27.3		2	N	4.58		
LPX-SD-4404-0005-01	14-Jul-04	L-42	0.00			0.356	10	27.3		2	N	11.1		
LPX-SD-4404-0005-01	14-Jul-04	L-42	0.015			0.710	10	27.3		2	N	8.25		
LPX-SD-4404-0005-01	14-Jul-04	L-42	0.003			0.080	10	27.3		2	N	7.01		
LPX-SD-4404-0005-01	14-Jul-04	L-42	0.113			0.040	10	27.3		2	N	514		
LPX-SD-4404-0005-01	14-Jul-04	L-42	0.010			0.080	10	27.3		2	N	1.04		
LPX-SD-4404-0005-01	14-Jul-04	L-42	0.027			0.400	10	27.3		2	N	1835		
LPX-DU-062104A	14-Jul-04	L-42	0.031			0.016	10	28.8		2	N	2.69		
LPX-DU-062104A	14-Jul-04	L-42	0.018			1.08	10	28.8		2	N	31.8	J	
LPX-DU-062104A	14-Jul-04	L-42	0.1			0.96	10	28.8		2	N	18.1	J	
LPX-DU-062104A	14-Jul-04	L-42	0.036			0.064	10	28.8		2	N	834		
LPX-DU-062104A	14-Jul-04	L-42	0.018			1.34	10	28.8		2	N	4.30	J	
LPX-DU-062104A	5-Aug-04	L-42	0.1			3.12	10	28.8		2	N	6.91	J	
LPX-DU-062104A	14-Jul-04	L-42	0.23			0.388	10	28.8		2	N	23.9		
LPX-DU-062104A	14-Jul-04	L-42	0.62			0.384	10	28.8		2	N	58.3	J	
LPX-DU-062104A	14-Jul-04	L-42	0.36			2.00	10	28.8		2	N	1.45	U	
LPX-DU-062104A	14-Jul-04	L-42	0.41			1.06	10	28.8		2	N	1.64	U	
LPX-DU-062104A	14-Jul-04	L-42	0.0			1.6	10	28.8		2	N	2.10	J	
LPX-DU-062104A	14-Jul-04	L-42	0.00			0.356	10	28.8		2	N	0.399	J	
LPX-DU-062104A	14-Jul-04	L-42	0.015			0.710	10	28.8		2	N	0.060	UJ	
LPX-DU-062104A	14-Jul-04	L-42	0.003			0.080	10	28.8		2	N	2.63	J	
LPX-DU-062104A	14-Jul-04	L-42	0.113			0.040	10	28.8		2	N	163		
LPX-DU-062104A	14-Jul-04	L-42	0.010			0.080	10	28.8		2	N	0.492		
LPX-DU-062104A	14-Jul-04	L-42	0.027			0.400	10	28.8		2	N	453	J	
LPX-SD-4407-0005-01	14-Jul-04	L-42	0.031			0.016	10	14.3		2	N	3.46		
LPX-SD-4407-0005-01	14-Jul-04	L-42	0.018			1.08	10	14.3		2	N	62.7		
LPX-SD-4407-0005-01	14-Jul-04	L-42	0.1			0.96	10	14.3		2	N	46.1	J	
LPX-SD-4407-0005-01	14-Jul-04	L-42	0.036			0.064	10	14.3		2	N	809		
LPX-SD-4407-0005-01	14-Jul-04	L-42	0.018			1.34	10	14.3		2	N	8.79		
LPX-SD-4407-0005-01	5-Aug-04	L-42	0.1			3.12	10	14.3		2	N	30.7		
LPX-SD-4407-0005-01	14-Jul-04	L-42	0.23			0.388	10	14.3		2	N	73.2		
LPX-SD-4407-0005-01	14-Jul-04	L-42	0.62			0.384	10	14.3		2	N	454		
LPX-SD-4407-0005-01	14-Jul-04	L-42	0.36			2.00	10	14.3		2	N	2.61		
LPX-SD-4407-0005-01	14-Jul-04	L-42	0.41			1.06	10	14.3		2	N	1.78		
LPX-SD-4407-0005-01	14-Jul-04	L-42	0.0			1.6	10	14.3		2	N	5.83		
LPX-SD-4407-0005-01	14-Jul-04	L-42	0.00			0.356	10	14.3		2	N	1.05		
LPX-SD-4407-0005-01	14-Jul-04	L-42	0.015			0.710	10	14.3		2	N	3.77		
LPX-SD-4407-0005-01	14-Jul-04	L-42	0.003			0.080	10	14.3		2	N	2.80		
LPX-SD-4407-0005-01	14-Jul-04	L-42	0.113			0.040	10	14.3		2	N	288		
LPX-SD-4407-0005-01	14-Jul-04	L-42	0.010			0.080	10	14.3		2	N	0.401		
LPX-SD-4407-0005-01	14-Jul-04	L-42	0.027			0.400	10	14.3		2	N	246		

NSAMPLE	CLASS	PARAMETER	EPASAMNO	CASNO	LAB_RESULT	QUAL	UNITS	CASE	SDG	LABORATORY	LAB_ID	REC_DATE	EXTR_DATE
LPX-SD-4402-0005-01	M	Beryllium	LPX-SD-4402-0005-01	7440-41-7	7.90		UG/G_DRYWT	2230	MSL		2230*4	23-Jun-04	6-Jul-04
LPX-SD-4402-0005-01	M	Vanadium	LPX-SD-4402-0005-01	7440-62-2	43.6		UG/G_DRYWT	2230	MSL		2230*4	23-Jun-04	6-Jul-04
LPX-SD-4402-0005-01	M	Chromium	LPX-SD-4402-0005-01	7440-47-3	104		UG/G_DRYWT	2230	MSL		2230*4	23-Jun-04	6-Jul-04
LPX-SD-4402-0005-01	M	Manganese	LPX-SD-4402-0005-01	7439-96-5	827		UG/G_DRYWT	2230	MSL		2230*4	23-Jun-04	6-Jul-04
LPX-SD-4402-0005-01	M	Cobalt	LPX-SD-4402-0005-01	7440-48-4	21.2		UG/G_DRYWT	2230	MSL		2230*4	23-Jun-04	6-Jul-04
LPX-SD-4402-0005-01	M	Nickel	LPX-SD-4402-0005-01	7440-02-0	32.4		UG/G_DRYWT	2230	MSL		2230*4	23-Jun-04	6-Jul-04
LPX-SD-4402-0005-01	M	Copper	LPX-SD-4402-0005-01	7440-50-8	17.2		UG/G_DRYWT	2230	MSL		2230*4	23-Jun-04	6-Jul-04
LPX-SD-4402-0005-01	M	Zinc	LPX-SD-4402-0005-01	7440-66-6	109		UG/G_DRYWT	2230	MSL		2230*4	23-Jun-04	6-Jul-04
LPX-SD-4402-0005-01	M	Arsenic	LPX-SD-4402-0005-01	7440-38-2	3.16		UG/G_DRYWT	2230	MSL		2230*4	23-Jun-04	6-Jul-04
LPX-SD-4402-0005-01	M	Selenium	LPX-SD-4402-0005-01	7782-49-2	1.64	U	UG/G_DRYWT	2230	MSL		2230*4	23-Jun-04	6-Jul-04
LPX-SD-4402-0005-01	M	Molybdenum	LPX-SD-4402-0005-01	13939-06-5	17.3		UG/G_DRYWT	2230	MSL		2230*4	23-Jun-04	6-Jul-04
LPX-SD-4402-0005-01	M	Silver	LPX-SD-4402-0005-01	7440-22-4	0.452		UG/G_DRYWT	2230	MSL		2230*4	23-Jun-04	6-Jul-04
LPX-SD-4402-0005-01	M	Cadmium	LPX-SD-4402-0005-01	7440-43-9	1.19		UG/G_DRYWT	2230	MSL		2230*4	23-Jun-04	6-Jul-04
LPX-SD-4402-0005-01	M	Antimony	LPX-SD-4402-0005-01	7440-36-0	0.922		UG/G_DRYWT	2230	MSL		2230*4	23-Jun-04	6-Jul-04
LPX-SD-4402-0005-01	M	Barium	LPX-SD-4402-0005-01	7440-39-3	174		UG/G_DRYWT	2230	MSL		2230*4	23-Jun-04	6-Jul-04
LPX-SD-4402-0005-01	M	Thallium	LPX-SD-4402-0005-01	7440-28-0	0.631		UG/G_DRYWT	2230	MSL		2230*4	23-Jun-04	6-Jul-04
LPX-SD-4402-0005-01	M	Lead	LPX-SD-4402-0005-01	7439-92-1	44.4		UG/G_DRYWT	2230	MSL		2230*4	23-Jun-04	6-Jul-04
LPX-SD-4401-0005-01	M	Beryllium	LPX-SD-4401-0005-01	7440-41-7	3.61		UG/G_DRYWT	2230	MSL		2230*5	23-Jun-04	6-Jul-04
LPX-SD-4401-0005-01	M	Vanadium	LPX-SD-4401-0005-01	7440-62-2	59.8		UG/G_DRYWT	2230	MSL		2230*5	23-Jun-04	6-Jul-04
LPX-SD-4401-0005-01	M	Chromium	LPX-SD-4401-0005-01	7440-47-3	43.1		UG/G_DRYWT	2230	MSL		2230*5	23-Jun-04	6-Jul-04
LPX-SD-4401-0005-01	M	Manganese	LPX-SD-4401-0005-01	7439-96-5	809		UG/G_DRYWT	2230	MSL		2230*5	23-Jun-04	6-Jul-04
LPX-SD-4401-0005-01	M	Cobalt	LPX-SD-4401-0005-01	7440-48-4	11.9		UG/G_DRYWT	2230	MSL		2230*5	23-Jun-04	6-Jul-04
LPX-SD-4401-0005-01	M	Nickel	LPX-SD-4401-0005-01	7440-02-0	18.4		UG/G_DRYWT	2230	MSL		2230*5	23-Jun-04	6-Jul-04
LPX-SD-4401-0005-01	M	Copper	LPX-SD-4401-0005-01	7440-50-8	36.7		UG/G_DRYWT	2230	MSL		2230*5	23-Jun-04	6-Jul-04
LPX-SD-4401-0005-01	M	Zinc	LPX-SD-4401-0005-01	7440-66-6	149		UG/G_DRYWT	2230	MSL		2230*5	23-Jun-04	6-Jul-04
LPX-SD-4401-0005-01	M	Arsenic	LPX-SD-4401-0005-01	7440-38-2	2.99		UG/G_DRYWT	2230	MSL		2230*5	23-Jun-04	6-Jul-04
LPX-SD-4401-0005-01	M	Selenium	LPX-SD-4401-0005-01	7782-49-2	1.52		UG/G_DRYWT	2230	MSL		2230*5	23-Jun-04	6-Jul-04
LPX-SD-4401-0005-01	M	Molybdenum	LPX-SD-4401-0005-01	13939-06-5	5.71		UG/G_DRYWT	2230	MSL		2230*5	23-Jun-04	6-Jul-04
LPX-SD-4401-0005-01	M	Silver	LPX-SD-4401-0005-01	7440-22-4	1.04		UG/G_DRYWT	2230	MSL		2230*5	23-Jun-04	6-Jul-04
LPX-SD-4401-0005-01	M	Cadmium	LPX-SD-4401-0005-01	7440-43-9	2.87		UG/G_DRYWT	2230	MSL		2230*5	23-Jun-04	6-Jul-04
LPX-SD-4401-0005-01	M	Antimony	LPX-SD-4401-0005-01	7440-36-0	1.37		UG/G_DRYWT	2230	MSL		2230*5	23-Jun-04	6-Jul-04
LPX-SD-4401-0005-01	M	Barium	LPX-SD-4401-0005-01	7440-39-3	224		UG/G_DRYWT	2230	MSL		2230*5	23-Jun-04	6-Jul-04
LPX-SD-4401-0005-01	M	Thallium	LPX-SD-4401-0005-01	7440-28-0	0.791		UG/G_DRYWT	2230	MSL		2230*5	23-Jun-04	6-Jul-04
LPX-SD-4401-0005-01	M	Lead	LPX-SD-4401-0005-01	7439-92-1	174		UG/G_DRYWT	2230	MSL		2230*5	23-Jun-04	6-Jul-04
Blank Soil	M	Beryllium	Blank Soil	7440-41-7	0.12	U	UG/G_DRYWT	2230	MSL		Blank Soil		6-Jul-04
Blank Soil	M	Vanadium	Blank Soil	7440-62-2	0.07	U	UG/G_DRYWT	2230	MSL		Blank Soil		6-Jul-04
Blank Soil	M	Chromium	Blank Soil	7440-47-3	0.23	U	UG/G_DRYWT	2230	MSL		Blank Soil		6-Jul-04
Blank Soil	M	Manganese	Blank Soil	7439-96-5	0.14	U	UG/G_DRYWT	2230	MSL		Blank Soil		6-Jul-04
Blank Soil	M	Cobalt	Blank Soil	7440-48-4	0.07	U	UG/G_DRYWT	2230	MSL		Blank Soil		6-Jul-04
Blank Soil	M	Nickel	Blank Soil	7440-02-0	0.26	U	UG/G_DRYWT	2230	MSL		Blank Soil		6-Jul-04
Blank Soil	M	Copper	Blank Soil	7440-50-8	0.93	U	UG/G_DRYWT	2230	MSL		Blank Soil		6-Jul-04
Blank Soil	M	Zinc	Blank Soil	7440-66-6	2.47	U	UG/G_DRYWT	2230	MSL		Blank Soil		6-Jul-04
Blank Soil	M	Arsenic	Blank Soil	7440-38-2	1.45	U	UG/G_DRYWT	2230	MSL		Blank Soil		6-Jul-04
Blank Soil	M	Selenium	Blank Soil	7782-49-2	1.64	U	UG/G_DRYWT	2230	MSL		Blank Soil		6-Jul-04
Blank Soil	M	Molybdenum	Blank Soil	13939-06-5	0.09	U	UG/G_DRYWT	2230	MSL		Blank Soil		6-Jul-04
Blank Soil	M	Silver	Blank Soil	7440-22-4	0.02	U	UG/G_DRYWT	2230	MSL		Blank Soil		6-Jul-04
Blank Soil	M	Cadmium	Blank Soil	7440-43-9	0.06	U	UG/G_DRYWT	2230	MSL		Blank Soil		6-Jul-04
Blank Soil	M	Antimony	Blank Soil	7440-36-0	0.01	U	UG/G_DRYWT	2230	MSL		Blank Soil		6-Jul-04
Blank Soil	M	Barium	Blank Soil	7440-39-3	0.45	U	UG/G_DRYWT	2230	MSL		Blank Soil		6-Jul-04
Blank Soil	M	Thallium	Blank Soil	7440-28-0	0.04	U	UG/G_DRYWT	2230	MSL		Blank Soil		6-Jul-04
Blank Soil	M	Lead	Blank Soil	7439-92-1	0.11	U	UG/G_DRYWT	2230	MSL		Blank Soil		6-Jul-04

NSAMPLE	ANAL_DATE	METHOD	MDL	IDL	CRDL	CRQL	DIL_FACTOR	PCT_MOIST	COMMENTS	DVTIER	LAB_QC_TYPE	FINAL_RESULT	FINAL_QUAL	VALID_COMMENT
LPX-SD-4402-0005-01	14-Jul-04	L-42	0.031			0.016	10	23.7		2	N	7.90		
LPX-SD-4402-0005-01	14-Jul-04	L-42	0.018			1.08	10	23.7		2	N	43.6		
LPX-SD-4402-0005-01	14-Jul-04	L-42	0.1			0.96	10	23.7		2	N	104	J	
LPX-SD-4402-0005-01	14-Jul-04	L-42	0.036			0.064	10	23.7		2	N	827		
LPX-SD-4402-0005-01	14-Jul-04	L-42	0.018			1.34	10	23.7		2	N	21.2		
LPX-SD-4402-0005-01	5-Aug-04	L-42	0.1			3.12	10	23.7		2	N	32.4		
LPX-SD-4402-0005-01	14-Jul-04	L-42	0.23			0.388	10	23.7		2	N	17.2		
LPX-SD-4402-0005-01	14-Jul-04	L-42	0.62			0.384	10	23.7		2	N	109		
LPX-SD-4402-0005-01	14-Jul-04	L-42	0.36			2.00	10	23.7		2	N	3.16		
LPX-SD-4402-0005-01	14-Jul-04	L-42	0.41			1.06	10	23.7		2	N	1.64	U	
LPX-SD-4402-0005-01	14-Jul-04	L-42	0.0			1.6	10	23.7		2	N	17.3		
LPX-SD-4402-0005-01	14-Jul-04	L-42	0.00			0.356	10	23.7		2	N	0.452		
LPX-SD-4402-0005-01	14-Jul-04	L-42	0.015			0.710	10	23.7		2	N	1.19		
LPX-SD-4402-0005-01	14-Jul-04	L-42	0.003			0.080	10	23.7		2	N	0.922		
LPX-SD-4402-0005-01	14-Jul-04	L-42	0.113			0.040	10	23.7		2	N	174		
LPX-SD-4402-0005-01	14-Jul-04	L-42	0.010			0.080	10	23.7		2	N	0.631		
LPX-SD-4402-0005-01	14-Jul-04	L-42	0.027			0.400	10	23.7		2	N	44.4		
LPX-SD-4401-0005-01	14-Jul-04	L-42	0.031			0.016	10	14.9		2	N	3.61		
LPX-SD-4401-0005-01	14-Jul-04	L-42	0.018			1.08	10	14.9		2	N	59.8	J	
LPX-SD-4401-0005-01	14-Jul-04	L-42	0.1			0.96	10	14.9		2	N	43.1	J	
LPX-SD-4401-0005-01	14-Jul-04	L-42	0.036			0.064	10	14.9		2	N	809		
LPX-SD-4401-0005-01	14-Jul-04	L-42	0.018			1.34	10	14.9		2	N	11.9	J	
LPX-SD-4401-0005-01	5-Aug-04	L-42	0.1			3.12	10	14.9		2	N	18.4	J	
LPX-SD-4401-0005-01	14-Jul-04	L-42	0.23			0.388	10	14.9		2	N	36.7		
LPX-SD-4401-0005-01	14-Jul-04	L-42	0.62			0.384	10	14.9		2	N	149	J	
LPX-SD-4401-0005-01	14-Jul-04	L-42	0.36			2.00	10	14.9		2	N	2.99		
LPX-SD-4401-0005-01	14-Jul-04	L-42	0.41			1.06	10	14.9		2	N	1.52		
LPX-SD-4401-0005-01	14-Jul-04	L-42	0.0			1.6	10	14.9		2	N	5.71	J	
LPX-SD-4401-0005-01	14-Jul-04	L-42	0.00			0.356	10	14.9		2	N	1.04	J	
LPX-SD-4401-0005-01	14-Jul-04	L-42	0.015			0.710	10	14.9		2	N	2.87	J	
LPX-SD-4401-0005-01	14-Jul-04	L-42	0.003			0.080	10	14.9		2	N	1.37	J	
LPX-SD-4401-0005-01	14-Jul-04	L-42	0.113			0.040	10	14.9		2	N	224		
LPX-SD-4401-0005-01	14-Jul-04	L-42	0.010			0.080	10	14.9		2	N	0.791		
LPX-SD-4401-0005-01	14-Jul-04	L-42	0.027			0.400	10	14.9		2	N	174	J	
Blank Soil	14-Jul-04	L-42	0.031			0.016	1	100		2	PB			
Blank Soil	14-Jul-04	L-42	0.018			1.08	1	100		2	PB			
Blank Soil	14-Jul-04	L-42	0.1			0.96	1	100		2	PB			
Blank Soil	14-Jul-04	L-42	0.036			0.064	1	100		2	PB			
Blank Soil	14-Jul-04	L-42	0.018			1.34	1	100		2	PB			
Blank Soil	5-Aug-04	L-42	0.1			3.12	1	100		2	PB			
Blank Soil	14-Jul-04	L-42	0.23			0.388	1	100		2	PB			
Blank Soil	14-Jul-04	L-42	0.62			0.384	1	100		2	PB			
Blank Soil	14-Jul-04	L-42	0.36			2.00	1	100		2	PB			
Blank Soil	14-Jul-04	L-42	0.41			1.06	1	100		2	PB			
Blank Soil	14-Jul-04	L-42	0.0			1.6	1	100		2	PB			
Blank Soil	14-Jul-04	L-42	0.00			0.356	1	100		2	PB			
Blank Soil	14-Jul-04	L-42	0.015			0.710	1	100		2	PB			
Blank Soil	14-Jul-04	L-42	0.003			0.080	1	100		2	PB			
Blank Soil	14-Jul-04	L-42	0.113			0.040	1	100		2	PB			
Blank Soil	14-Jul-04	L-42	0.010			0.080	1	100		2	PB			
Blank Soil	14-Jul-04	L-42	0.027			0.400	1	100		2	PB			

NSAMPLE	CLASS	PARAMETER	EPASAMNO	CASNO	LAB_RESULT	QUAL	UNITS	CASE	SDG	LABORATORY	LAB_ID	REC_DATE	EXTR_DATE
Blank sp Soil	M	Beryllium	Blank sp Soil	7440-41-7	95		PCT_REC		2230	MSL	Blank sp Soil		6-Jul-04
Blank sp Soil	M	Vanadium	Blank sp Soil	7440-62-2	93		PCT_REC		2230	MSL	Blank sp Soil		6-Jul-04
Blank sp Soil	M	Chromium	Blank sp Soil	7440-47-3	69 &		PCT_REC		2230	MSL	Blank sp Soil		6-Jul-04
Blank sp Soil	M	Manganese	Blank sp Soil	7439-96-5	97		PCT_REC		2230	MSL	Blank sp Soil		6-Jul-04
Blank sp Soil	M	Cobalt	Blank sp Soil	7440-48-4	98		PCT_REC		2230	MSL	Blank sp Soil		6-Jul-04
Blank sp Soil	M	Nickel	Blank sp Soil	7440-02-0	93		PCT_REC		2230	MSL	Blank sp Soil		6-Jul-04
Blank sp Soil	M	Copper	Blank sp Soil	7440-50-8	98		PCT_REC		2230	MSL	Blank sp Soil		6-Jul-04
Blank sp Soil	M	Zinc	Blank sp Soil	7440-66-6	98		PCT_REC		2230	MSL	Blank sp Soil		6-Jul-04
Blank sp Soil	M	Arsenic	Blank sp Soil	7440-38-2	96		PCT_REC		2230	MSL	Blank sp Soil		6-Jul-04
Blank sp Soil	M	Selenium	Blank sp Soil	7782-49-2	105		PCT_REC		2230	MSL	Blank sp Soil		6-Jul-04
Blank sp Soil	M	Molybdenum	Blank sp Soil	13939-06-5	101		PCT_REC		2230	MSL	Blank sp Soil		6-Jul-04
Blank sp Soil	M	Silver	Blank sp Soil	7440-22-4	99		PCT_REC		2230	MSL	Blank sp Soil		6-Jul-04
Blank sp Soil	M	Cadmium	Blank sp Soil	7440-43-9	101		PCT_REC		2230	MSL	Blank sp Soil		6-Jul-04
Blank sp Soil	M	Antimony	Blank sp Soil	7440-36-0	102		PCT_REC		2230	MSL	Blank sp Soil		6-Jul-04
Blank sp Soil	M	Barium	Blank sp Soil	7440-39-3	99		PCT_REC		2230	MSL	Blank sp Soil		6-Jul-04
Blank sp Soil	M	Thallium	Blank sp Soil	7440-28-0	98		PCT_REC		2230	MSL	Blank sp Soil		6-Jul-04
Blank sp Soil	M	Lead	Blank sp Soil	7439-92-1	97		PCT_REC		2230	MSL	Blank sp Soil		6-Jul-04
2704	M	Beryllium	2704	7440-41-7	18		PCT_DIFF		2230	MSL	PACS-2		6-Jul-04
2704	M	Vanadium	2704	7440-62-2	6		PCT_DIFF		2230	MSL	PACS-2		6-Jul-04
2704	M	Chromium	2704	7440-47-3	9		PCT_DIFF		2230	MSL	PACS-2		6-Jul-04
2704	M	Manganese	2704	7439-96-5	10		PCT_DIFF		2230	MSL	PACS-2		6-Jul-04
2704	M	Cobalt	2704	7440-48-4	2		PCT_DIFF		2230	MSL	PACS-2		6-Jul-04
2704	M	Nickel	2704	7440-02-0	15		PCT_DIFF		2230	MSL	PACS-2		6-Jul-04
2704	M	Copper	2704	7440-50-8	13		PCT_DIFF		2230	MSL	PACS-2		6-Jul-04
2704	M	Zinc	2704	7440-66-6	0		PCT_DIFF		2230	MSL	PACS-2		6-Jul-04
2704	M	Arsenic	2704	7440-38-2	9		PCT_DIFF		2230	MSL	PACS-2		6-Jul-04
2704	M	Selenium	2704	7782-49-2	36 &		PCT_DIFF		2230	MSL	PACS-2		6-Jul-04
2711	M	Molybdenum	2711	13939-06-5	4		PCT_DIFF		2230	MSL	PACS-2		6-Jul-04
2711	M	Silver	2711	7440-22-4	4		PCT_DIFF		2230	MSL	PACS-2		6-Jul-04
2711	M	Cadmium	2711	7440-43-9	1		PCT_DIFF		2230	MSL	PACS-2		6-Jul-04
2711	M	Antimony	2711	7440-36-0	2		PCT_DIFF		2230	MSL	PACS-2		6-Jul-04
2711	M	Thallium	2711	7440-28-0	12		PCT_DIFF		2230	MSL	PACS-2		6-Jul-04
2711	M	Lead	2711	7439-92-1	11		PCT_DIFF		2230	MSL	PACS-2		6-Jul-04
LPX-SD-4404-0005-01 MS	M	Beryllium	LPX-SD-4404-0005-01 MS	7440-41-7	104		PCT_REC		2230	MSL	2230*1	23-Jun-04	6-Jul-04
LPX-SD-4404-0005-01 MS	M	Vanadium	LPX-SD-4404-0005-01 MS	7440-62-2	94		PCT_REC		2230	MSL	2230*1	23-Jun-04	6-Jul-04
LPX-SD-4404-0005-01 MS	M	Chromium	LPX-SD-4404-0005-01 MS	7440-47-3	82		PCT_REC		2230	MSL	2230*1	23-Jun-04	6-Jul-04
LPX-SD-4404-0005-01 MS	M	Manganese	LPX-SD-4404-0005-01 MS	7439-96-5	0 &		PCT_REC		2230	MSL	2230*1	23-Jun-04	6-Jul-04
LPX-SD-4404-0005-01 MS	M	Cobalt	LPX-SD-4404-0005-01 MS	7440-48-4	94		PCT_REC		2230	MSL	2230*1	23-Jun-04	6-Jul-04
LPX-SD-4404-0005-01 MS	M	Nickel	LPX-SD-4404-0005-01 MS	7440-02-0	80		PCT_REC		2230	MSL	2230*1	23-Jun-04	6-Jul-04
LPX-SD-4404-0005-01 MS	M	Copper	LPX-SD-4404-0005-01 MS	7440-50-8	0 &		PCT_REC		2230	MSL	2230*1	23-Jun-04	6-Jul-04
LPX-SD-4404-0005-01 MS	M	Zinc	LPX-SD-4404-0005-01 MS	7440-66-6	0 &		PCT_REC		2230	MSL	2230*1	23-Jun-04	6-Jul-04
LPX-SD-4404-0005-01 MS	M	Arsenic	LPX-SD-4404-0005-01 MS	7440-38-2	97		PCT_REC		2230	MSL	2230*1	23-Jun-04	6-Jul-04
LPX-SD-4404-0005-01 MS	M	Selenium	LPX-SD-4404-0005-01 MS	7782-49-2	88		PCT_REC		2230	MSL	2230*1	23-Jun-04	6-Jul-04
LPX-SD-4404-0005-01 MS	M	Molybdenum	LPX-SD-4404-0005-01 MS	13939-06-5	99		PCT_REC		2230	MSL	2230*1	23-Jun-04	6-Jul-04
LPX-SD-4404-0005-01 MS	M	Silver	LPX-SD-4404-0005-01 MS	7440-22-4	88		PCT_REC		2230	MSL	2230*1	23-Jun-04	6-Jul-04
LPX-SD-4404-0005-01 MS	M	Cadmium	LPX-SD-4404-0005-01 MS	7440-43-9	91		PCT_REC		2230	MSL	2230*1	23-Jun-04	6-Jul-04
LPX-SD-4404-0005-01 MS	M	Antimony	LPX-SD-4404-0005-01 MS	7440-36-0	95		PCT_REC		2230	MSL	2230*1	23-Jun-04	6-Jul-04
LPX-SD-4404-0005-01 MS	M	Barium	LPX-SD-4404-0005-01 MS	7440-39-3	0 &		PCT_REC		2230	MSL	2230*1	23-Jun-04	6-Jul-04
LPX-SD-4404-0005-01 MS	M	Thallium	LPX-SD-4404-0005-01 MS	7440-28-0	83		PCT_REC		2230	MSL	2230*1	23-Jun-04	6-Jul-04
LPX-SD-4404-0005-01 MS	M	Lead	LPX-SD-4404-0005-01 MS	7439-92-1	0 &		PCT_REC		2230	MSL	2230*1	23-Jun-04	6-Jul-04

NSAMPLE	ANAL_DATE	METHOD	MDL	IDL	CRDL_CRQL	DIL_FACTOR	PCT_MOIST	COMMENTS	DVTIER	LAB_QC_TYPE	FINAL_RESULT	FINAL_QUAL	VALID_COMMENT
Blank sp Soil	14-Jul-04	L-42	0.031		0.016	10	100		2	LCS			
Blank sp Soil	14-Jul-04	L-42	0.018		1.08	10	100		2	LCS			
Blank sp Soil	14-Jul-04	L-42	0.1		0.96	10	100		2	LCS			
Blank sp Soil	14-Jul-04	L-42	0.036		0.064	10	100		2	LCS			
Blank sp Soil	14-Jul-04	L-42	0.018		1.34	10	100		2	LCS			
Blank sp Soil	5-Aug-04	L-42	0.1		3.12	10	100		2	LCS			
Blank sp Soil	14-Jul-04	L-42	0.23		0.388	10	100		2	LCS			
Blank sp Soil	14-Jul-04	L-42	0.62		0.384	10	100		2	LCS			
Blank sp Soil	14-Jul-04	L-42	0.36		2.00	10	100		2	LCS			
Blank sp Soil	14-Jul-04	L-42	0.41		1.06	10	100		2	LCS			
Blank sp Soil	14-Jul-04	L-42	0.0		1.6	10	100		2	LCS			
Blank sp Soil	14-Jul-04	L-42	0.00		0.356	10	100		2	LCS			
Blank sp Soil	14-Jul-04	L-42	0.015		0.710	10	100		2	LCS			
Blank sp Soil	14-Jul-04	L-42	0.003		0.080	10	100		2	LCS			
Blank sp Soil	14-Jul-04	L-42	0.113		0.040	10	100		2	LCS			
Blank sp Soil	14-Jul-04	L-42	0.010		0.080	10	100		2	LCS			
Blank sp Soil	14-Jul-04	L-42	0.027		0.400	10	100		2	LCS			
2704	14-Jul-04	L-42	0.031		0.016	10	0		2	SRM			
2704	14-Jul-04	L-42	0.018		1.08	10	0		2	SRM			
2704	14-Jul-04	L-42	0.1		0.96	10	0		2	SRM			
2704	14-Jul-04	L-42	0.036		0.064	10	0		2	SRM			
2704	14-Jul-04	L-42	0.018		1.34	10	0		2	SRM			
2704	5-Aug-04	L-42	0.1		3.12	10	0		2	SRM			
2704	14-Jul-04	L-42	0.23		0.388	10	0		2	SRM			
2704	14-Jul-04	L-42	0.62		0.384	10	0		2	SRM			
2704	14-Jul-04	L-42	0.36		2.00	10	0		2	SRM			
2704	14-Jul-04	L-42	0.41		1.06	10	0		2	SRM			
2711	14-Jul-04	L-42	0.0		1.6	10	0		2	SRM			
2711	14-Jul-04	L-42	0.00		0.356	10	0		2	SRM			
2711	14-Jul-04	L-42	0.015		0.710	10	0		2	SRM			
2711	14-Jul-04	L-42	0.003		0.080	10	0		2	SRM			
2711	14-Jul-04	L-42	0.010		0.080	10	0		2	SRM			
2711	14-Jul-04	L-42	0.027		0.400	10	0		2	SRM			
LPX-SD-4404-0005-01 MS	14-Jul-04	L-42	0.031		0.016	10	27.3		2	MS			
LPX-SD-4404-0005-01 MS	14-Jul-04	L-42	0.018		1.08	10	27.3		2	MS			
LPX-SD-4404-0005-01 MS	14-Jul-04	L-42	0.1		0.96	10	27.3		2	MS			
LPX-SD-4404-0005-01 MS	14-Jul-04	L-42	0.036		0.064	10	27.3		2	MS			
LPX-SD-4404-0005-01 MS	14-Jul-04	L-42	0.018		1.34	10	27.3		2	MS			
LPX-SD-4404-0005-01 MS	5-Aug-04	L-42	0.1		3.12	10	27.3		2	MS			
LPX-SD-4404-0005-01 MS	14-Jul-04	L-42	0.23		0.388	10	27.3		2	MS			
LPX-SD-4404-0005-01 MS	14-Jul-04	L-42	0.62		0.384	10	27.3		2	MS			
LPX-SD-4404-0005-01 MS	14-Jul-04	L-42	0.36		2.00	10	27.3		2	MS			
LPX-SD-4404-0005-01 MS	14-Jul-04	L-42	0.41		1.06	10	27.3		2	MS			
LPX-SD-4404-0005-01 MS	14-Jul-04	L-42	0.0		1.6	10	27.3		2	MS			
LPX-SD-4404-0005-01 MS	14-Jul-04	L-42	0.00		0.356	10	27.3		2	MS			
LPX-SD-4404-0005-01 MS	14-Jul-04	L-42	0.015		0.710	10	27.3		2	MS			
LPX-SD-4404-0005-01 MS	14-Jul-04	L-42	0.003		0.080	10	27.3		2	MS			
LPX-SD-4404-0005-01 MS	14-Jul-04	L-42	0.113		0.040	10	27.3		2	MS			
LPX-SD-4404-0005-01 MS	14-Jul-04	L-42	0.010		0.080	10	27.3		2	MS			
LPX-SD-4404-0005-01 MS	14-Jul-04	L-42	0.027		0.400	10	27.3		2	MS			

NSAMPLE	CLASS	PARAMETER	EPASAMNO	CASNO	LAB_RESULT	QUAL	UNITS	CASE	SDG	LABORATORY	LAB_ID	REC_DATE	EXTR_DATE
LPX-SD-4404-0005-01 MSD	M	Beryllium	LPX-SD-4404-0005-01 MSD	7440-41-7	103		PCT_REC		2230	MSL	2230*1	23-Jun-04	6-Jul-04
LPX-SD-4404-0005-01 MSD	M	Vanadium	LPX-SD-4404-0005-01 MSD	7440-62-2	96		PCT_REC		2230	MSL	2230*1	23-Jun-04	6-Jul-04
LPX-SD-4404-0005-01 MSD	M	Chromium	LPX-SD-4404-0005-01 MSD	7440-47-3	97		PCT_REC		2230	MSL	2230*1	23-Jun-04	6-Jul-04
LPX-SD-4404-0005-01 MSD	M	Manganese	LPX-SD-4404-0005-01 MSD	7439-96-5	0 &		PCT_REC		2230	MSL	2230*1	23-Jun-04	6-Jul-04
LPX-SD-4404-0005-01 MSD	M	Cobalt	LPX-SD-4404-0005-01 MSD	7440-48-4	89		PCT_REC		2230	MSL	2230*1	23-Jun-04	6-Jul-04
LPX-SD-4404-0005-01 MSD	M	Nickel	LPX-SD-4404-0005-01 MSD	7440-02-0	78		PCT_REC		2230	MSL	2230*1	23-Jun-04	6-Jul-04
LPX-SD-4404-0005-01 MSD	M	Copper	LPX-SD-4404-0005-01 MSD	7440-50-8	27 &		PCT_REC		2230	MSL	2230*1	23-Jun-04	6-Jul-04
LPX-SD-4404-0005-01 MSD	M	Zinc	LPX-SD-4404-0005-01 MSD	7440-66-6	0 &		PCT_REC		2230	MSL	2230*1	23-Jun-04	6-Jul-04
LPX-SD-4404-0005-01 MSD	M	Arsenic	LPX-SD-4404-0005-01 MSD	7440-38-2	95		PCT_REC		2230	MSL	2230*1	23-Jun-04	6-Jul-04
LPX-SD-4404-0005-01 MSD	M	Selenium	LPX-SD-4404-0005-01 MSD	7782-49-2	93		PCT_REC		2230	MSL	2230*1	23-Jun-04	6-Jul-04
LPX-SD-4404-0005-01 MSD	M	Molybdenum	LPX-SD-4404-0005-01 MSD	13939-06-5	99		PCT_REC		2230	MSL	2230*1	23-Jun-04	6-Jul-04
LPX-SD-4404-0005-01 MSD	M	Silver	LPX-SD-4404-0005-01 MSD	7440-22-4	83		PCT_REC		2230	MSL	2230*1	23-Jun-04	6-Jul-04
LPX-SD-4404-0005-01 MSD	M	Cadmium	LPX-SD-4404-0005-01 MSD	7440-43-9	88		PCT_REC		2230	MSL	2230*1	23-Jun-04	6-Jul-04
LPX-SD-4404-0005-01 MSD	M	Antimony	LPX-SD-4404-0005-01 MSD	7440-36-0	94		PCT_REC		2230	MSL	2230*1	23-Jun-04	6-Jul-04
LPX-SD-4404-0005-01 MSD	M	Barium	LPX-SD-4404-0005-01 MSD	7440-39-3	0 &		PCT_REC		2230	MSL	2230*1	23-Jun-04	6-Jul-04
LPX-SD-4404-0005-01 MSD	M	Thallium	LPX-SD-4404-0005-01 MSD	7440-28-0	85		PCT_REC		2230	MSL	2230*1	23-Jun-04	6-Jul-04
LPX-SD-4404-0005-01 MSD	M	Lead	LPX-SD-4404-0005-01 MSD	7439-92-1	0 &		PCT_REC		2230	MSL	2230*1	23-Jun-04	6-Jul-04

NSAMPLE	ANAL_DATE	METHOD	MDL	IDL	CRDL_CRQL	DIL_FACTOR	PCT_MOIST	COMMENTS	DVTIER	LAB_QC_TYPE	FINAL_RESULT	FINAL_QUAL	VALID_COMMENT
LPX-SD-4404-0005-01 MSD	14-Jul-04	L-42	0.031		0.016	10	27.3		2	MSD			
LPX-SD-4404-0005-01 MSD	14-Jul-04	L-42	0.018		1.08	10	27.3		2	MSD			
LPX-SD-4404-0005-01 MSD	14-Jul-04	L-42	0.1		0.96	10	27.3		2	MSD			
LPX-SD-4404-0005-01 MSD	14-Jul-04	L-42	0.036		0.064	10	27.3		2	MSD			
LPX-SD-4404-0005-01 MSD	14-Jul-04	L-42	0.018		1.34	10	27.3		2	MSD			
LPX-SD-4404-0005-01 MSD	5-Aug-04	L-42	0.1		3.12	10	27.3		2	MSD			
LPX-SD-4404-0005-01 MSD	14-Jul-04	L-42	0.23		0.388	10	27.3		2	MSD			
LPX-SD-4404-0005-01 MSD	14-Jul-04	L-42	0.62		0.384	10	27.3		2	MSD			
LPX-SD-4404-0005-01 MSD	14-Jul-04	L-42	0.36		2.00	10	27.3		2	MSD			
LPX-SD-4404-0005-01 MSD	14-Jul-04	L-42	0.41		1.06	10	27.3		2	MSD			
LPX-SD-4404-0005-01 MSD	14-Jul-04	L-42	0.0		1.6	10	27.3		2	MSD			
LPX-SD-4404-0005-01 MSD	14-Jul-04	L-42	0.00		0.356	10	27.3		2	MSD			
LPX-SD-4404-0005-01 MSD	14-Jul-04	L-42	0.015		0.710	10	27.3		2	MSD			
LPX-SD-4404-0005-01 MSD	14-Jul-04	L-42	0.003		0.080	10	27.3		2	MSD			
LPX-SD-4404-0005-01 MSD	14-Jul-04	L-42	0.113		0.040	10	27.3		2	MSD			
LPX-SD-4404-0005-01 MSD	14-Jul-04	L-42	0.010		0.080	10	27.3		2	MSD			
LPX-SD-4404-0005-01 MSD	14-Jul-04	L-42	0.027		0.400	10	27.3		2	MSD			

/ Section 4

Section 4

Total Organic Carbon Content Results

QA/QC Narrative
Sediment and QC Results

QA/QC Narrative

TOC SEDIMENT QA/QC Summary

PROJECT: USACE NED Delivery Order #01 Centredale
PARAMETER: Total Organic Carbon (TOC)
LABORATORY: Applied Marine Sciences, Inc., League City, Texas (AMS)
MATRIX: Sediment
SAMPLE CUSTODY: Surface sediment samples were collected on June 21, 2004 at the Oxbow area, located in the northwest region of Lyman Mill Pond, Centredale. Samples were transported to Battelle Duxbury, stored refrigerated overnight, and shipped via overnight carrier on June 22, 2004 to AMS for TOC testing. Samples were received at AMS on June 23, 2004; samples were received in good condition.

QA/QC MEASUREMENT PERFORMANCE CRITERIA:

	Reference Method	Instrument Blank	Laboratory Duplicate	SRM % Diff.	Achieved Detection Limit (% dry)
TOC	EPA Method 9060	<10× MDL ^a	≤50% RPD	≤5% PD	TOC: 0.01

^a With signal to noise >10:1

METHOD: Sediment samples were prepared and analyzed for TOC following EPA Method 9060.

HOLDING TIMES: Samples were prepared for analysis within holding time.

DETECTION LIMITS: Achieved laboratory detection limits met reporting limit requirements.

BLANKS: One instrument blank sample was analyzed with the study samples. Blanks are analyzed to ensure that the sample analysis method is free of contamination.

TOC – TOC was undetected in the instrument blank at levels above the MDL

DUPLICATE: One laboratory duplicate was prepared with the study samples. The relative percent difference (RPD) between laboratory replicate analyses for TOC was calculated to measure data quality in terms of precision.

TOC – No exceedences

Comments – RPD results were within the measurement quality objectives limits, *i.e.*, ≤50% RPD.

SRM: One standard reference material (SRM, NIST 1941a) sample was prepared with the study samples. The percent difference (PD) between detected concentrations and certified values was calculated to measure data quality in terms of accuracy.

TOC – No exceedences

Comments – TOC was recovered within the measurement quality objectives limits, *i.e.*, ≤5% PD.

Sediment and QC Results

NSAMPLE	CLASS	PARAMETER	EPASAMNO	CASNO	LAB_RESULT	QUAL	UNITS	CASE	SDG	LABORATORY	LAB_ID	REC_DATE	EXTR_DATE	ANAL_DATE
LPX-SD-4404-0005-01	TOC	Total Organic Carbon	LPX-SD-4404-0005-01		15.73		Percent			AMS	19780	23-Jun-04	23-Jun-04	12-Jul-04
LPX-SD-4407-0005-01	TOC	Total Organic Carbon	LPX-SD-4407-0005-01		36.14		Percent			AMS	19781	23-Jun-04	23-Jun-04	12-Jul-04
LPX-SD-4402-0005-01	TOC	Total Organic Carbon	LPX-SD-4402-0005-01		13.03		Percent			AMS	19782	23-Jun-04	23-Jun-04	12-Jul-04
LPX-DU-062104B	TOC	Total Organic Carbon	LPX-DU-062104B		4.73		Percent			AMS	19783	23-Jun-04	23-Jun-04	12-Jul-04
LPX-DU-062104B DUP	TOC	Total Organic Carbon	LPX-DU-062104B		5.07		Percent			AMS	19783-2	23-Jun-04	23-Jun-04	12-Jul-04
CC04	TOC	Total Organic Carbon	CC04		2.92		PCT_DIFF			AMS	CC04			12-Jul-04
CB04	TOC	Total Organic Carbon	CB04		0.01	U	Percent			AMS	CB04			12-Jul-04

NSAMPLE	METHOD	MDL	IDL	CRDL_CRQL	DIL_FACTOR	PCT_MOIST	COMMENTS	DVTIER	LAB_QC_TYPE	FINAL_RESULT	FINAL_QUAL	VALID_COMMENT
LPX-SD-4404-0005-01	EPA 9060	0.01	0.01		1				N			
LPX-SD-4407-0005-01	EPA 9060	0.01	0.01		1				N			
LPX-SD-4402-0005-01	EPA 9060	0.01	0.01		1				N			
LPX-DU-062104B	EPA 9060	0.01	0.01		1				N			
LPX-DU-062104B DUP	EPA 9060	0.01	0.01		1				DUP			
CC04	EPA 9060	0.01	0.01		1				SRM			
CB04	EPA 9060	0.01	0.01		1				MB			

Section 5

Third Party Validation Reports

Steve Stodola
US EPA Approval Signature

12/9/04
Date
October 8, 2004
Revised: December 8, 2004

Ms. Christine Clark
Regional Sample Control Custodian
Office of Environmental Measurement and Evaluation
U.S. EPA Region I
11 Technology Drive
North Chelmsford, Massachusetts 01863

Re: Task Order No. 024, Task No. 2, TDF No. 1539
Case No. DF003, SDG No. D00001
Pace Analytical Services, Inc. - Minneapolis, MN
Centredale Manor Site - North Providence, RI

Dioxin/Furan: 8/Soil/D00001, D00002, D00003, D00004, D00005, D00006, D00007,
D00008
(Field Duplicate Pair: D00006/D00008)

2/PE/D00009 (PC01090), D00010 (PC00562)

Dear Ms. Clark:

A Tier III data validation was performed on the Dioxin/Furan analytical data for eight soil samples and two soil PE samples collected by Battelle for the U.S. EPA at the Centredale Manor Site in North Providence, RI. The samples were analyzed according to DLM01.4 SOW. The samples were validated using first the criteria in the Centredale Manor Tasks 19-22 QAPP (5/23/01) which included the QAPP Addendum (dated September 27, 2002) and the QAPP Errata Sheet (dated November 6, 2002) prepared by Battelle Duxbury Operations which include the criteria in EPA Method 1613B, September 15, 1997, defaulting next to Region I, EPA-NE Data Validation Functional Guidelines for Evaluating Environmental Analyses, December 1996 criteria, and to EPA Region I's Environmental Services Assistance Team Dioxin Data Validation SOP ESAT-01-0007 (01/08/03). The data were evaluated based on the following parameters:

- Overall Evaluation of Data and Potential Usability Issues
- Data Completeness (Tier I)
- Preservation and Technical Holding Times
- * ● PE Samples/Accuracy Check
- * ● Window Defining Mix
- Initial and Continuing Calibrations
- * ● Chromatographic Resolution
- * ● Instrument Sensitivity Check

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- Blanks
- NA ● Matrix Spike/Matrix Spike Duplicate
- * ● Laboratory Control Sample/Laboratory Control Sample Duplicate
- Field Duplicates
- Internal/Surrogate/Clean-up Standards
- * ● Sample Analysis and Identification
- Sample Quantitation
- * ● Estimated Detection Limits (EDL) and Estimated Maximum Possible Concentration (EMPC)
- 2378-TCDD Toxicity Equivalents (TE) and Isomer Specificity
- * ● Required Sample Reruns and Second Column Confirmation
- * ● System Performance

* - All criteria were met for this parameter.

NA - Not Applicable

The following information was used to generate the Data Validation Memorandum attachments:

Table I: Recommendation Summary Table - summarizes validation recommendations

Table II: Overall Evaluation of Data - summarizes site objectives and potential usability issues

Data Summary Tables - summarize accepted, qualified, and rejected data

Overall Evaluation of Data and Potential Usability Issues

The following is a summary of the site investigation/assessment objectives:

- To evaluate dioxin concentrations in soil and sediments in the Oxbow Area adjacent to Lyman Mill Pond.

Two single blind Performance Evaluation (PE) samples (fortified native soil PC00562/D00010) and fortified native soil blank (PC01090/D00009) were evaluated for this SDG. All congeners were scored "Within Limits" for the fortified native soil blank (PC01090) and for the fortified native soil sample PE (PC00562).

Data validation indicated minor data quality problems which do not significantly impact most of the data. See the following discussion for details.

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Data Completeness (Tier I)

The following data or information in the data package had discrepancies and/or were missing:

1. The laboratory incorrectly calculated TEF-adjusted concentrations for 12378-PeCDD, OCDD, and OCDF for all of the samples. As a result, the total TEQ values are also incorrect. The laboratory was asked to submit corrected Form Is: CDD/CDF Toxicity Equivalence Summary for all of the samples.
2. The laboratory was asked to explain why the samples with high concentrations of TCDD were not diluted and reanalyzed.
3. The laboratory was asked to provide the tabulated confirmation results and raw data as specified in DLM01.4.

Item #1 was requested via the TOPO on September 9, 2004. Item #2 was requested by the TOPO on September 20, 2004. Item #3 was requested by the TOPO on September 23, 2004. The laboratory responded to items #1 and #3 on October 7, 2004. Both items were adequately addressed. The laboratory's rationale for item #2 was received on September 21, 2004. Subsequently, the samples were diluted and reanalyzed.

Preservation and Technical Holding Times

Originally, the laboratory reported the undiluted 2378-TCDD results with an "E" flag in seven samples to indicate that the concentrations were above the upper calibration range. The following samples were affected: D00002, D00003, D00004, D00005, D00006, D00007, and D00008. The laboratory was asked on 10/22/2004 to reanalyze the samples to bring the 2378-TCDD results within the calibration range. As a result, the laboratory reanalyzed the samples at a 1:20 dilution. The samples were extracted on July 27, 2004 and reanalyzed on November 1 and 2, 2004. Even though there was a long gap between sample extraction and analysis, the stability of the TCDD precludes the necessity of qualifying the diluted results.

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Initial and Continuing Calibrations

The following table summarizes the ending Continuing Calibration (CC) %D which did not meet the DLM01.4 %D criterion $\pm 35\%$ for native & labeled congeners, the resulting sample qualifications, and affected samples:

CC Date	Congener	%D	Action		Affected Samples
			Positive Detects	NDs	
8/01/04 (ending)	¹³ C ₁₂ -OCDD	-43	J	UJ	D00002, D00003, D00004, D00005, D00006, D00007, D00008

The data associated with the noncompliant continuing calibration are qualified due to the variability of the calibration standard. The quantitation of the associated analytes in the samples could be biased.

Blanks

All of the blanks associated with this SDG were evaluated for possible sources of contamination. The following table lists the highest concentration of contamination that was detected in the blanks. The table lists the action levels and the affected samples:

• Method Blanks

Congener	Type of Blank	Blank Concentration (ng/Kg)	Action Level (ng/Kg)	Affected Sample
Total PcCDD	Method (8/09/04)	0.425	4.25	D00003
Total HxCDD	Method (7/31/04)	0.608	6.08	D00003

Blank actions are based on Region I, EPA-NE Data Validation Functional Guidelines for Evaluating Environmental Analyses, December 1996 and EPA Region I's Environmental services Assistance Team Dioxin Data Validation SOP ESAT-01-0007 (01/08/03) criteria. Blank action levels are calculated as ten times the highest concentration determined in any blank for common contaminants (OCDD/OCDF and Total Homologues) and five times the highest concentration for all other analytes. The positive sample results that are less than the action level are reported as non-detects (U) at the reported concentration on the Data Summary Table.

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Field Duplicates

One field duplicate pair was evaluated for this SDG (D00006/D00008).

The table below summarizes the field duplicate results which did not meet the Relative Percent Difference (RPD) < 50% duplicate criterion for soil samples as specified in the Centredale Manor Tasks 19-22 QAPP (5/23/01).

Congener	D00006	D00008	RPD	Action	Affected Samples
	% Solids=23	% Solids=31		Positive Detects	
	Sample Conc. (ng/Kg)	Duplicate Conc. (ng/Kg)			
2378-TCDD	400 (1:20 dilution)	789 (1:20 dilution)	65	J	D00006, D00008
12378-PeCDF	5.64*	52.4*	161	J	D00006, D00008

* Estimated Maximum Possible Concentration (EMPC)

The positive results for 2378-TCDD and 12378-PeCDF are estimated (J) in samples D00006 and D00008 since the field duplicate precision is outside the criterion.

Internal/Surrogate/Clean-Up Standards

• Clean-Up Standards

The following table summarizes the clean-up standard recovery that did not meet the DLM01.4 acceptance criterion of 35-197%:

Clean-Up Standard	% Recovery	Action		Affected Sample
		Positive Detects	NDs	
³⁷ Cl ₄ -2378-TCDD	201	J	UJ	D00007

High recovery of the clean-up standard may indicate that the clean-up process is not effective. Sample D00007 is qualified as noted for all congeners.

Sample Quantitation

Concentrations quantitated and reported by the laboratory below the lowest calibration standard are flagged (J) on the Data Summary Table. Quantitation is not accurate when the reported results are below the lowest calibration standard.

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2378-TCDD Toxicity Equivalents (TE) and Isomer Specificity

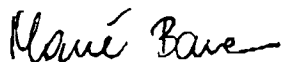
All TE values reported on the Data Summary Tables have been calculated by the ESAT data validator using the validated data discussed above in this report. The TE calculations include the reported EMPC values when present. The TEF values used in the Data Summary Table are the ones requested in Dioxin Analytical Services Client Request Form for that project, and correspond to the TEF values in "Toxic Equivalency Factors (TEFs) for PCBs, PCDDs, PCDFs for Humans and Wildlife", Environmental Health Perspectives, Volume 106 (12), December 1998, Table 1, page 778.

System Performance

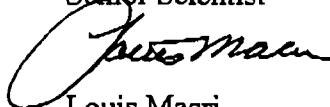
No trends noted.

Very truly yours,

LOCKHEED ENVIRONMENTAL



Maria E. Baca
Senior Scientist



Louis Macri
ESAT Program Manager

cc: Anna Krasko, EPA RPM (DV Memorandum, Data Summary Table)

Attachments: Table I: Recommendation Summary Table
Table II: Overall Evaluation of Data
Data Summary Tables
Data Validation Worksheets
Analytical Method
PE Results
Communications
Field Notes
CSF Audit
DQO Summary Form

Table I
Recommendation Summary Table for Dioxins/Furans
Centredale Manor Site
Case No. DF003, SDG No. D00001

Sample Nos.	D00001	D00002	D00003	D00004	D00005	D00006	D00007	D00008
Compound								
2378-TCDD	A	A	A	A	A	J ²	J ³	J ²
12378-PeCDD	A	A	A	A	A	A	J ³	A
123478-HxCDD	A	A	A	A	A	A	J ³	A
123678-HxCDD	A	A	A	A	A	A	J ³	A
123789-HxCDD	A	A	A	A	A	A	J ³	A
1234678-HpCDD	A	A	A	A	A	A	J ³	A
OCDD	A	J ¹	J ¹	J ¹	J ¹	J ¹	J ^{1,3}	J ¹
2378-TCDF	A	A	A	A	A	A	J ³	A
12378-PeCDF	A	A	A	A	A	J ²	J ³	J ²
23478-PeCDF	A	A	A	A	A	A	J ³	A
123478-HxCDF	A	A	A	A	A	A	J ³	A
123678-HxCDF	A	A	A	A	A	A	J ³	A
234678-HxCDF	A	A	A	A	A	A	J ³	A
123789-HxCDF	A	A	A	A	A	A	J ³	A
1234678-HpCDF	A	A	A	A	A	A	J ³	A
1234789-HpCDF	A	A	A	A	A	A	J ³	A
OCDF	A	J ¹	J ¹	J ¹	J ¹	J ¹	J ^{1,3}	J ¹

Table I
Recommendation Summary Table for Dioxins/Furans

- A - Accept results.
- J¹ - Continuing calibration %D criterion not met: J detects and UJ non-detects.
- J² - Field duplicate precision outside criterion: J detects.
- J³ - Clean-up standard % recovery outside criterion: J detects and UJ non-detects.

EPA-NE - Data Validation Worksheet
Overall Evaluation of Data - Data Validation Memorandum - Table II

DIOXIN/FURAN ANALYSIS					
DQO (list all DQOs)	Sampling and/or Analytical Method Appropriate Yes or No	Measurement Error		Sampling Variability	Potential Usability Issues
		Analytical Error	Sampling Error*		
To evaluate dioxin concentrations in soil and sediments in the Oxbow Area adjacent to Lyman Mill Pond.	Yes, Sampling Method appropriate for all samples Yes, Analytical Method appropriate for all samples.	Refer to qualification in R/S Key on Table I: J ^{1,3}	Refer to qualification in R/S Key on Table I: J ²	**	Two single blind Performance Evaluation (PE) samples (fortified native soil PC00562/D00010) and fortified native soil blank (PC01090/D00009) were evaluated for this SDG. All congeners were scored "Within Limits" for the fortified native soil blank (PC01090) and for the fortified native soil sample PE (PC00562). Data validation indicated minor data quality problems which do not significantly impact most of the data. See the discussion in the data validation memorandum details.

* The evaluation of "sampling error" cannot be completely assessed in the data validation.
 ** Sampling variability is not assessed in data validation.

Validator: Harv Bane

Date: 12/8/04

011/012

Data Summary Table
Dioxin/Furan Analysis - Soil Samples
 ng/Kg (dry weight)

SITE: Centredale Manor - North Providence, RI
 CASE NO: DF003; SDG NO: D00001
 LABORATORY: Pace Analytical Services, Inc. - Minneapolis, MN

EPA SAMPLE NUMBER	Toxicity	D00001	D00002	D00003	D00004	D00005	D00006	D00007							
STATION LOCATION	Equivalency	LPX-SD-4404-0005-01	LPX-SD-4401-0005-01	LPX-SD-4403-0005-01	LPX-SD-4408-0005-01	LPX-SD-4407-0005-01	LPX-SD-4402-0005-01	LPX-SD-4405-0005							
MATRIX:	Factor (1)	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL							
TCDD/TCDF CONC.:		ng/Kg	DL/EMPC*	ng/Kg	DL/EMPC*	ng/Kg	DL/EMPC*	ng/Kg	DL/EMPC*	ng/Kg	DL/EMPC*	ng/Kg	DL/EMPC*	ng/Kg	DL/EMPC*
2,3,7,8-TCDD	1.0000	12.2		3140 #		521 #		1800 #		2070 #		400 #		4270 #	
1,2,3,7,8-PeCDD	1.0000	52.1		3.93 J		0.705 J		4.19 J		7.74		1.50 J		6.81 J	
1,2,3,4,7,8-HxCDD	0.1000	57.5			3.93 *		0.610 *	3.87 J		6.24		1.29 J		6.17 J	
1,2,3,6,7,8-HxCDD	0.1000	504		7.62			1.28 *	9.67		11.9		2.13 J		12.8 J	
1,2,3,7,8,9-HxCDD	0.1000	213		6.23		U	0.689	8.36		9.09		1.67 J		8.75 J	
1,2,3,4,8,7,8-HpCDD	0.0100	3440		175		20.6		229		224		37.9		213 J	
OCDD	0.0001	4100		1300 J		142 J		1800 J		1480 J		230 J		1380 J	
2,3,7,8-TCDF	0.1000	20.5		19.3		1.64		6.73		23.9		3.28		7.54 J	
1,2,3,7,8-PeCDF	0.0500	24.4 J			31.8 *		3.80 *		227 *		54.0 *		5.64 *		
2,3,4,7,8-PeCDF	0.5000	173		11.1		1.94 J		11.8		17.4		1.84 J		6.30 J	
1,2,3,4,7,8-HxCDF	0.1000	98.2		12.8		1.71 J		8.32		19.0		2.52 J		11.7 J	
1,2,3,6,7,8-HxCDF	0.1000	102		7.63		1.28 J			14.3 *	12.3		1.84 J		6.55 J	
2,3,4,6,7,8-HxCDF	0.1000	212		9.70		1.52 J		7.07		11.3		2.06 J		11.8 J	
1,2,3,7,8,9-HxCDF	0.1000	62.3		2.15 J		U	0.281		4.28 *	3.93 J		0.881 J		2.70 J	
1,2,3,4,6,7,8-HpCDF	0.0100	3190		44.3		8.81		72.3		75.2		14.9		89.3 J	
1,2,3,4,7,8,9-HpCDF	0.0100	93.6		2.46 J		U	0.597	4.90 J		5.84		1.21 J		5.27 J	
OCDF	0.0001	1770		61.5 J		11.0 J		110 J		102 J		28.2 J		114 J	
Total TCDD		118 J		3370 J		549 J		1910 J		2270 J		435 J		4460 J	
Total PeCDD		547 J		124 J		UJ	2.92	34.9 J		127 J		11.6 J		56.7 J	
Total HxCDD		4930 J		51.4 J		UJ	4.38	96.6 J		137 J		22.8 J		150 J	
Total HpCDD		10700 J		347 J		40.3 J		436 J		474 J		74.2 J		415 J	
Total TCDF		471 J		264 J		20.9 J		124 J		360 J		31.9 J		127 J	
Total PeCDF		1630 J		175 J		14.2 J		123 J		260 J		34.5 J		227 J	
Total HxCDF		6580 J		97.9 J		15.2 J		131 J		149 J		24.0 J		233 J	
Total HpCDF		5360 J		79.4 J		14.4 J		153 J		138 J		30.1 J		174 J	
TOXIC EQUIVALENT(1):		350 J		3200 J		520 J		1800 J		2100 J		400 J		4300 J	
PERCENT SOLIDS:		29		14		36		12		13		23		58	
DILUTION FACTOR:		10.0		1.0		1.0		1.0		1.0		1.0		1.0	
DATE SAMPLED:		06/21/2004		06/21/2004		06/21/2004		06/21/2004		06/21/2004		06/21/2007		06/21/2004	
DATE OF RECEIPT:		07/08/2004		07/08/2004		07/08/2004		07/08/2004		07/08/2004		07/08/2004		07/08/2004	
SAMPLE EXTRACTION DATE:		07/27/2004		07/27/2004		07/27/2004		07/27/2004		07/27/2004		07/27/2004		07/27/2004	
ANALYSIS DATE:		08/08/2004		07/31/2004		07/31/2004		07/31/2004		07/31/2004		07/31/2004		07/31/2004	
LAB SAMPLE ID:		105821151		105821169		105821177		105821185		105821183		105821201		105821219	

* = The values in this column are either the Detection Limits (DL) or the Estimated Maximum Possible Concentration (EMPC). The EMPC results are marked with a "**". The DL values are unmarked. The EMPC values are not qualified with a "J", since they are already estimated.

(1) = The Toxic Equivalent concentration is calculated with the Toxicity Equivalency Factors (TEFs) found in "Toxic Equivalency Factors (TEFs) for PCBs, PCDDs, PCDFs for Humans and Wildlife". Environmental Health Perspectives, Volume 106 (12), December 1998, Table 1, page 778.

= Result reported from a 1:20 dilution.

12/09/2004 THU 15:01 FAX

Data Summary Table
Dioxin/Furan Analysis - Soil Samples
ng/Kg (dry weight)

SITE: Centredale Manor - North Providence, RI
CASE NO: DF003; SDG NO: D00001
LABORATORY: Pace Analytical Services, Inc. - Minneapolis, MN

EPA SAMPLE NUMBER	Toxicity	DO0008	
STATION LOCATION	Equivalency	LPX-DU-0821-04B	
MATRIX:	Factors (1)	SOIL	
TCDD/TCDF CONC.:		ng/Kg	DL/EMPC*
2,3,7,8-TCDD	1.0000	789 J#	
1,2,3,7,8-PeCDD	1.0000	1.23 J	
1,2,3,4,7,8-HxCDD	0.1000	1.28 J	
1,2,3,6,7,8-HxCDD	0.1000	2.67 J	
1,2,3,7,8,9-HxCDD	0.1000	2.06 J	
1,2,3,4,6,7,8-HpCDD	0.0100	44.2	
OCDD	0.0001	291 J	
2,3,7,8-TCDF	0.1000	2.86	
1,2,3,7,8-PeCDF	0.0500		52.4 *
2,3,4,7,8-PeCDF	0.5000		1.01 *
1,2,3,4,7,8-HxCDF	0.1000	2.51 J	
1,2,3,6,7,8-HxCDF	0.1000	1.69 J	
2,3,4,6,7,8-HxCDF	0.1000	1.32 J	
1,2,3,7,8,9-HxCDF	0.1000	0.852 J	
1,2,3,4,6,7,8-HpCDF	0.0100	13.8	
1,2,3,4,7,8,9-HpCDF	0.0100	U	0.875
OCDF	0.0001	19.2 J	
Total TCDD		833 J	
Total PeCDD		5.88 J	
Total HxCDD		26.2 J	
Total HpCDD		83.3 J	
Total TCDF		40.3 J	
Total PeCDF		34.0 J	
Total HxCDF		30.8 J	
Total HpCDF		27.1 J	
TOXIC EQUIVALENT(1):		800 J	
PERCENT LIPIDS:		31	
DILUTION FACTOR:		1.0	
DATE SAMPLED:		08/21/2004	
DATE OF RECEIPT:		07/08/2004	
SAMPLE EXTRACTION DATE:		07/27/2004	
ANALYSIS DATE:		07/31/2004	
LAB SAMPLE ID:		105821227	

* = The values in this column are either the Detection Limits (DL) or the Estimated Maximum Possible Concentration (EMPC). The EMPC results are marked with a "*". The DL values are unmarked. The EMPC values are not qualified with a "J", since already estimated.

(1) = The Toxic Equivalent concentration is calculated with the Toxicity Equivalency Factors (TEFs) found in "Toxic Equivalency Factors (TEFs) for PCBs, PCDDs, PCDFs for Humans and Wildlife", Environmental Health Perspectives, Volume 106 (12), December 1998, Table 1, page 778.

= Result reported from a 1:20 dilution.

Section 1 Quality Assurance Review

A. Organic Data

The organic analyses of seven sediment samples (including QC samples) were performed by Battelle Duxbury Operations of Duxbury, Massachusetts. The samples were analyzed for pesticides and PCB compounds by Battelle SOP 5-128. These analyses are specified on Table 1. The laboratory organized the samples into one sample delivery group (SDG 04-0254).

The findings in this report are based upon a rigorous review of holding times, condition of samples upon laboratory receipt, blank analysis results, laboratory control sample (LCS) recoveries, matrix spike (MS)/matrix spike duplicate (MSD) recoveries and precision, surrogate recoveries, instrument sensitivity, standard reference material (SRM) analysis, field duplicate precision, a comparison between freeze-dried aliquots and "wet" aliquots, analytical sequence, and calibrations.

Overall, the organic data quality appears to be good. The data reviewer has edited the laboratory-reported data and QC forms based on the deficiencies and comments in this QC review. Contractual and reporting requirements were met for this data set. Based upon a Tier II review of the data provided, the organic data qualifiers associated with the samples that underwent data validation are presented in the Organic Data Qualifiers section; these qualifiers should not be applied to any organic results that did not undergo data validation. Data usability issues represent an interpretation of the QC results obtained for the project samples. Quite often, data qualifications address issues relating to sample matrix problems. Similarly, the validation guidelines specify areas of the data that require qualification, yet the methods used for analysis do not require any corrective action by the laboratory. Accordingly, the data usability issues that follow should not necessarily be construed as an indication of laboratory performance.

Noncorrectable Deficiency

- The laboratory reported the sample temperature upon receipt as "Ambient" on the Sample Receipt Form. According to the Final Work Plan for Sediment Sample Collection and Analysis at the Oxbow Area Centredale Manor Restoration Project Superfund Site (6/04, Table 1), sediment samples should be preserved at $4 \pm 2^\circ\text{C}$. Furthermore, the laboratory stated that "all samples were received in good condition and within temperature specifications" in the PCB Aroclor/Pesticide QA/QC Summary. Although it was unclear what the exact temperature of the samples was upon receipt, the data reviewer assumed that the samples were properly preserved.

Comment

- Samples LPX-SD-4402-0005-01 and LPX-SD-4407-0005-01 exhibited high moisture content (> 70% moisture). The laboratory centrifuged and decanted these samples in an effort to reduce the moisture content prior to analysis; despite the laboratory efforts, the samples retained a high moisture content (>70%). Due to the high moisture content of these samples, freeze-dried aliquots were obtained from the Battelle metals analysis facility and utilized for the pesticide/PCB analyses, in addition to the "wet" (*i.e.*, non-

freeze-dried) aliquots. The results between the wet and freeze-dried aliquots of sample LPX-SD-4407-0005-01 compared favorably and only the freeze-dried aliquot results were reported by the laboratory (and evaluated as a part of this QA review). Poor precision was observed between the pesticide/PCB results for the wet and freeze-dried aliquots of sample LPX-SD-4402-0005-01; consequently, the laboratory reported both sets of results for this sample and both sets of results were independently evaluated in this QA review. The pesticide/PCB results for both aliquots of sample LPX-SD-4402-0005-01 were compared using field duplicate precision criteria as a part of this QA review (see Organic Data Qualifiers Section below). It should be noted that freeze-drying constitutes an additional cleanup process because sample water is considered a potential matrix interferent (Technical Bulletin 00-001, Woods Hole Group). The sample handling differences should be noted when assessing these sample results as well as the subsequent qualification of data that resulted from the observed imprecision.

With respect to data usability, the principal areas of concern include standard reference material analysis imprecision, field duplicate imprecision, low percent solids, and discrepancies between wet and freeze-dried aliquot results. Based on a Tier II review of the data provided, the following organic data qualifiers are offered. The following data usability issues represent an interpretation of the QC results obtained for the project samples. Quite often, data qualifications address issues relating to sample matrix problems. Similarly, the data validation guidelines routinely specify areas of the data that require qualification, yet the methods used for analysis may not require corrective action by the laboratory. Accordingly, the following data usability issues should not be construed as an indication of laboratory performance.

Organic Data Qualifiers

- The quantitation limits for pesticide/PCB compounds in the wet aliquot of sample LPX-SD-4402-0005-01 should be considered unusable, and the "not-detected" results have been flagged "R" on the data tables. In addition, any reported positive results for pesticide/PCB compounds in this sample analysis should be considered estimated and have been flagged "J" on the data tables. A very low percent solids result (<30%) was obtained for this sediment sample.
- The reported positive results for 4,4'-DDT in samples LPX-SD-4404-0005-01 and LPX-SD-4407-0005-01 and for *a*-chlordane in samples LPX-SD-4404-0005-01, LPX-DU-062104B, and LPX-SD-4407-0005-01 should be considered estimated and have been flagged "J" on the data tables. High percent differences (%D>30%), indicating a high bias for these compounds, was observed in the associated SRM analysis.
- One field duplicate pair (sample LPX-SD-4402-0005-01 and its field duplicate, sample LPX-DU-062104B) was submitted to the laboratory with this data set. Acceptable precision and sample representativeness were demonstrated by the correlation between the reported results in the field duplicate pair with the following exceptions. The reported positive results for 4,4'-DDE in samples LPX-SD-4402-0005-01 and LPX-DU-062104B should be considered estimated and have been flagged "J" on the data tables. In addition,

the quantitation limits for *a*-chlordane and *g*-chlordane in sample LPX-SD-4402-0005-01 and the quantitation limit for dieldrin in sample LPX-DU-062104B may be higher than reported, and the "not-detected" results have been flagged "UJ" (unless previously flagged "R") on the data tables. Furthermore, the reported positive results for *a*-chlordane and *g*-chlordane in sample LPX-DU-062104B and for dieldrin in sample LPX-SD-4402-0005-01 should be considered estimated and have been flagged "J" on the data tables. Large discrepancies (*i.e.*, relative percent difference [RPD] > 50%) were observed between the results for these analytes in the field duplicate pair. A complete comparison of the field duplicate results has been included in Section 3.

- A comparison between the wet and freeze-dried aliquot results for sample LPX-SD-4402-0005-01 (see Comment) did not yield acceptable precision and sample representativeness; consequently, the quantitation limits for aldrin, *g*-chlordane, lindane, and endrin aldehyde in the wet aliquot and for endosulfan II in the freeze-dried aliquot may be higher than reported, and the "not-detected" results have been flagged "UJ" (unless previously flagged "R") on the data tables. In addition, the reported positive results for 4,4'-DDD; 4,4'-DDE; dieldrin; and Aroclor-1254 in both the wet and freeze-dried aliquots; for endosulfan II in the wet aliquot; and for aldrin, *g*-chlordane, lindane, and endrin aldehyde in the freeze-dried aliquot should be considered estimated and have been flagged "J" on the data tables. Large discrepancies (*i.e.*, RPD > 50%) were observed between the results for these analytes in the two aliquots of sample LPX-SD-4402-0005-01. A complete comparison of the reported results has been included in Section 3.

Complete support documentation for this organic QA review is presented in Section 3 of this report. The cover sheet for this section is a checklist of all QA procedures required by the methods and examined in this data review.

B. Inorganic Data

The inorganic analyses of seven sediment samples (including QC samples) were performed by Battelle Marine Sciences Laboratory of Sequim, Washington. The samples were analyzed for total metals (specifically, beryllium, vanadium, chromium, manganese, cobalt, nickel, copper, zinc, arsenic, selenium, molybdenum, silver, cadmium, antimony, barium, thallium, and lead) by US EPA Method 200.8 Modified. These analyses are specified on Table 1. The laboratory organized the samples into one SDG (SDG 2230).

The findings in this report are based upon a rigorous review of sample holding times, condition of samples upon laboratory receipt, blank analysis results, calibration data, MS/MSD recoveries and precision, LCS recoveries, SRM analysis, and field duplicate precision.

Overall, the inorganic data quality appears to be good. The data reviewer has edited the laboratory-reported data and QC forms based on the deficiencies and comment in this QC review. Contractual and reporting requirements other than those listed below were met for this

data set. Based upon a Tier II review of the data provided, the inorganic data qualifiers associated with the samples that underwent data validation are presented in the Inorganic Data Qualifiers section; these qualifiers should not be applied to any inorganic results that did not undergo data validation. Data usability issues represent an interpretation of the QC results obtained for the project samples. Quite often, data qualifications address issues relating to sample matrix problems. Similarly, the validation guidelines specify areas of the data that require qualification, yet the methods used for analysis do not require any corrective action by the laboratory. Accordingly, the data usability issues that follow should not necessarily be construed as an indication of laboratory performance.

Noncorrectable Deficiencies

1. The laboratory recorded a cooler temperature of "1.2°C" on the Log-in Checklist. According to the Final Work Plan for Sediment Sample Collection and Analysis at the Oxbow Area Centredale Manor Restoration Project Superfund Site (6/04, Table 1), sediment samples should be preserved at $4\pm 2^{\circ}\text{C}$. The laboratory did not indicate that any samples were frozen or that any sample containers were damaged; therefore, qualification of data was not warranted due to this issue.
2. The laboratory method detection limits (MDLs) for beryllium, zinc, and barium were higher than the respective quantitation limits (QLs) as defined in the QAPP (Worksheet #9b). The reported results for beryllium, zinc, and barium in all samples were significantly greater than the QLs and MDLs; therefore, qualification of data was not warranted due to this issue.

Comment

- The laboratory freeze-dried the sample aliquots prior to determinative preparation and analysis. The freeze-drying was performed in order to reduce the moisture content of the samples.

With respect to data usability, the principal areas of concern are a low LCS recovery and field duplicate imprecision. Based on a Tier II review of the data provided, the following inorganic data qualifiers are offered. The following data usability issues represent an interpretation of the QC results obtained for the project samples. Quite often, data qualifications address issues relating to sample matrix problems. Similarly, the data validation guidelines routinely specify areas of the data that require qualification, yet the methods used for analysis may not require corrective action by the laboratory. Accordingly, the following data usability issues should not be construed as an indication of laboratory performance.

Inorganic Data Qualifiers

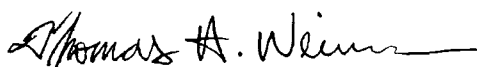
- The reported positive results for chromium in all samples should be considered estimated and have been flagged "J" on the data tables. A low recovery (<70%) was observed for chromium in the associated LCS analysis.
- One field duplicate pair (sample LPX-SD-4401-0005-01 and its field duplicate, sample LPX-DU-062104A) was submitted to the laboratory with this data set. Acceptable precision and sample representativeness were demonstrated by the correlation between the reported results in the field duplicate pair with the following exceptions. The reported positive results for vanadium, chromium, cobalt, nickel, zinc, molybdenum, silver, antimony, and lead in samples LPX-SD-4401-0005-01 and LPX-DU-062104A should be considered estimated and have been flagged "J" on the data tables. In addition, the reported positive result for cadmium in sample LPX-SD-4401-0005-01 and the detection limit for cadmium in sample LPX-DU-062104A should be considered estimated and have been flagged "J" and "UJ" on the data tables, respectively. Large discrepancies (*i.e.*, RPD > 50% when at least one result was >10× the MDL) were observed between the results for these analytes in the field duplicate pair. A complete comparison of the field duplicate results has been included in Section 4.

Complete support documentation for this inorganic QA review is presented in Section 4 of this report. The cover sheet for this section is a checklist of all QA procedures required by the methods and examined in this data review.

C. Conclusions

Overall, the data quality is good. Based on this QA review, several organic results were qualified due to standard reference material analysis imprecision, field duplicate imprecision, low percent solids, and discrepancies between wet and freeze-dried aliquot results. In addition, several inorganic results were qualified due to a low LCS recovery and field duplicate imprecision. Overall, the data are acceptable for use, provided the data user understands the limitations and qualifications stated in this QA review. The Laboratory Case Narratives and Chain-of-Custody Records are presented in Sections 5 and 6, respectively.

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