

Appendix C
Chemistry Laboratory Reports and
Chain-of-Custody Forms

(provided electronically on CD)

Appendix C-1
Chemistry Laboratory Reports

Table of Contents: ARI Job RA17, RA18, RA23, RA31

Client: Science Applications, Intl.

Project: Fidalgo Bay/ Custom Plywood Dioxin

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BC
Signature

June-28-2010
Date



Analytical Resources, Incorporated
Analytical Chemists and Consultants

June 28, 2010

Tim Hammermeister
SAIC
18912 North Creek Parkway, Suite 101
Bothell, WA 98011

RE: Project: Fidalgo Bay / Custom Plywood Dioxin Study
ARI Job No: RA17, RA18, RA23, & RA31

Dear Tim:

Please find enclosed the Chain-of-Custody (COC) records, sample receipt documentation, and the final data package for samples from the project referenced above.

Sample receipt and details of the analyses are discussed in the Case Narrative.

An electronic copy of this data and associated raw data will be kept on file with ARI. Should you have any questions or problems, please feel free to contact me at any time.

Sincerely,

ANALYTICAL RESOURCES, INC.



Cheronne Oreiro
Project Manager
(206) 695-6214
cheronneo@arilabs.com

Enclosures

cc: eFile RA17/RA18/RA23/RA31

Chain of Custody Documentation

ARI Job ID: RA17, RA18, RA23, RA31

RA17



18912 North Creek Parkway, Suite 101
Bothell, Washington 98011
TEL: 425.485.5800 • FAX: 425.485.5566

Analyses / Tests

Shipping Information

CHAIN OF CUSTODY RECORD

Project No.: _____ Project Mgr: Tim Hammermeister
 Project Name: Fidalgo Bay / Custom Plywood Dioxin study
 Project Location: Fidalgo Bay
 Sample Collectors: Will Hefner Tim Hammermeister Chris Hunt
 Client Name: ECOlogy

Number of Shipping Containers:

Date Shipped:

Carrier:

Waybill No.:

Comments

Sample ID	Depth	Matrix	Date	Time	# of Containers	Grain Size	TOC	Total Solids	Total Sol/Fides	Archive								
SDS-PB-01	0-10cm	Sed	6/7/10	1307	4	X	X	X	X	X								
SDS-PB-02	0-10cm	Sed	6/7/10	1345	4	X	X	X	X	X								
SDS-PB-03	0-10cm	Sed	6/7/10	1407	4	X	X	X	X	X								
SDS-PB-04	0-10cm	Sed	6/7/10	1434	4	X	X	X	X	X								
SDS-PB-05	0-10cm	Sed	6/7/10	1450	4	X	X	X	X	X								
SDS-PB-05-D	0-10cm	Sed	6/7/10	1450	3	X	X	X	X									
SDS-PB-05-T	0-10cm	Sed	6/7/10	1450	3	X	X	X	X									
SDS-PB-06	0-10cm	Sed	6/7/10	1524	4	X	X	X	X	X								
SDS-PB-07	0-10cm	Sed	6/7/10	1550	4	X	X	X	X	X								

RELINQUISHED BY:
 Signature: [Signature]
 Date/Time: 6/11/10 10:10
 Affiliation: SAIC

RECEIVED BY:
 Signature: [Signature]
 Date/Time: 6/11/10 1010
 Affiliation: ARI

RELINQUISHED BY:
 Signature: _____
 Date/Time: _____
 Affiliation: _____

RECEIVED BY:
 Signature: _____
 Date/Time: _____
 Affiliation: _____

RA17:00003

• White: Lab Returns to Originator Upon Receipt of Samples • Canary: Lab Retains • Pink: Lab Returns to Project Manager with Final Report • Goldenrod: Retained by Sampler



Cooler Receipt Form

ARI Client: SAIC

Project Name: Fidalgo Bay/Custom plywood

COC No(s): _____ (NA)

Delivered by: Fed-Ex UPS Courier Hand Delivered Other: _____

Assigned ARI Job No: RA17

Tracking No: _____ (NA)

Preliminary Examination Phase:

Were intact, properly signed and dated custody seals attached to the outside of to cooler? YES (NO)
 Were custody papers included with the cooler? YES NO
 Were custody papers properly filled out (ink, signed, etc.) YES NO
 Temperature of Cooler(s) (°C) (recommended 2.0-6.0 °C for chemistry)..... 4.4 3.6 5.1 5.2 1.9 1.9
 If cooler temperature is out of compliance fill out form 00070F Temp Gun ID#: 90877952

Cooler Accepted by: AV Date: 6/11/10 Time: 1010

Complete custody forms and attach all shipping documents

Log-In Phase:

Was a temperature blank included in the cooler? YES (NO)
 What kind of packing material was used? ... Bubble Wrap Wet Ice Gel Packs Baggies Foam Block Paper Other: _____
 Was sufficient ice used (if appropriate)? NA YES NO
 Were all bottles sealed in individual plastic bags? YES (NO)
 Did all bottles arrive in good condition (unbroken)? YES NO
 Were all bottle labels complete and legible? YES NO
 Did the number of containers listed on COC match with the number of containers received? YES (NO)
 Did all bottle labels and tags agree with custody papers? YES NO
 Were all bottles used correct for the requested analyses? YES NO
 Do any of the analyses (bottles) require preservation? (attach preservation sheet, excluding VOCs)... (NA) YES NO
 Were all VOC vials free of air bubbles? (NA) YES NO
 Was sufficient amount of sample sent in each bottle? YES NO
 Date VOC Trip Blank was made at ARI..... (NA)
 Was Sample Split by ARI : (NA) YES Date/Time: _____ Equipment: _____ Split by: _____

Samples Logged by: AV Date: 6/11/10 Time: 1111

**** Notify Project Manager of discrepancies or concerns ****

Sample ID on Bottle	Sample ID on COC	Sample ID on Bottle	Sample ID on COC

Additional Notes, Discrepancies, & Resolutions:
 X Extra Jar (Dioxins) on SDS-PB-04 & SDS-PB-05-D
 X on SDS-PB-04 time on bottles is 1429 except sulfides jar time is correct at 1434.

By: AV Date: 6/11/10

			Small → "sm"
			Peabubbles → "pb"
			Large → "lg"
			Headspace → "hs"



Cooler Receipt Form

ARI Client: SAIC

Project Name: Fidalgo Bay/Custom plywood

COC No(s): _____ (NA)

Delivered by: Fed-Ex UPS Courier Hand Delivered Other: _____

Assigned ARI Job No: RA18

Tracking No: _____ (NA)

Preliminary Examination Phase:

Were intact, properly signed and dated custody seals attached to the outside of to cooler? YES (NO)

Were custody papers included with the cooler? YES (YES) NO

Were custody papers properly filled out (ink, signed, etc.) YES (YES) NO

Temperature of Cooler(s) (°C) (recommended 2.0-6.0 °C for chemistry)..... 4.4 3.6 5.1 5.2 1.9 1.9

If cooler temperature is out of compliance fill out form 00070F Temp Gun ID#: 90877952

Cooler Accepted by: AV Date: 6/11/10 Time: 1010

Complete custody forms and attach all shipping documents

Log-In Phase:

Was a temperature blank included in the cooler? YES (NO)

What kind of packing material was used? ... Bubble Wrap Wet Ice Gel Packs Baggies Foam Block Paper Other: _____

Was sufficient ice used (if appropriate)? NA (YES) NO

Were all bottles sealed in individual plastic bags? YES (NO)

Did all bottles arrive in good condition (unbroken)? YES (YES) NO

Were all bottle labels complete and legible? YES (YES) NO

Did the number of containers listed on COC match with the number of containers received? YES (YES) NO

Did all bottle labels and tags agree with custody papers? YES (NO)

Were all bottles used correct for the requested analyses? YES (YES) NO

Do any of the analyses (bottles) require preservation? (attach preservation sheet, excluding VOCs)... (NA) YES NO

Were all VOC vials free of air bubbles? (NA) YES NO

Was sufficient amount of sample sent in each bottle? YES (YES) NO

Date VOC Trip Blank was made at ARI..... (NA)

Was Sample Split by ARI : (NA) YES Date/Time: _____ Equipment: _____ Split by: _____

Samples Logged by: JW Date: 6/11/10 Time: 1120

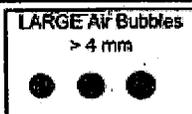
**** Notify Project Manager of discrepancies or concerns ****

Sample ID on Bottle	Sample ID on COC	Sample ID on Bottle	Sample ID on COC

Additional Notes, Discrepancies, & Resolutions:

Samples SDS-FB-07, SDS-FB-07-D, & SDS-FB-07-T COC says sampled @ 1045, all bottles say 1405.

By: JW Date: 6/11/10



Small → "sm"

Peabubbles → "pb"

Large → "lg"

Headspace → "hs"

RA23



18912 North Creek Parkway, Suite 101
Bothell, Washington 98011
TEL: 425.485.5800 • FAX: 425.485.5566

Analyses / Tests

Shipping Information

CHAIN OF CUSTODY RECORD

Project No.: _____ Project Mgr: Tim Hammermeister
 Project Name: Fidalgo Bay / Custom Plywood Dixon Study
 Project Location: Fidalgo Bay
 Sample Collectors: Tim Hammermeister Will Heber Julie Wages
 Client Name: Ecology

Number of Shipping Containers:

Date Shipped:

Carrier:

Waybill No.:

Sample ID	Depth	Matrix	Date	Time	# of Containers	Grain size	TOC	Total Solids	Total Solids	Av. Mo											Comments	
SOS-CPD-05	0-10cm	Sed	6/10/10	1057	4	X	X	X	X	X												
SOS-CPD-06	0-10cm	Sed	6/10/10	1116	4	X	X	X	X	X												
SOS-CPD-09	0-10cm	Sed	6/10/10	1130	4	X	X	X	X	X												
SOS-CPD-11	0-10cm	Sed	6/10/10	1144	4	X	X	X	X	X												
SOS-CPD-12	0-10cm	Sed	6/10/10	1200	4	X	X	X	X	X												
SOS-CPD-14	0-10cm	Sed	6/10/10	1212	4	X	X	X	X	X												
SOS-CPD-15	0-10cm	Sed	6/10/10	1223	4	X	X	X	X	X												

RELINQUISHED BY: [Signature]
 Signature: _____
 Date/Time: 6/11/10 10:10
 Date/Time: _____
 Affiliation: SAIC
 Affiliation: _____

RECEIVED BY: [Signature]
 Signature: _____
 Date/Time: 6/11/10 10:10
 Date/Time: _____
 Affiliation: ART
 Affiliation: _____

RELINQUISHED BY: _____
 Signature: _____
 Date/Time: _____
 Date/Time: _____
 Affiliation: _____
 Affiliation: _____

RECEIVED BY: _____
 Signature: _____
 Date/Time: _____
 Date/Time: _____
 Affiliation: _____
 Affiliation: _____

RA17:00008

• White: Lab Returns to Originator Upon Receipt of Samples • Canary: Lab Retains • Pink: Lab Returns to Project Manager with Final Report • Goldenrod: Retained by Sampler



Cooler Receipt Form

ARI Client: SAIC

Project Name: Fidalgo Bay/Custom plywood

COC No(s): _____ (NA)

Delivered by: Fed-Ex UPS Courier Hand Delivered Other: _____

Assigned ARI Job No: RA23

Tracking No: _____ (NA)

Preliminary Examination Phase:

Were intact, properly signed and dated custody seals attached to the outside of to cooler? YES (NO)

Were custody papers included with the cooler? (YES) NO

Were custody papers properly filled out (ink, signed, etc.) (YES) NO

Temperature of Cooler(s) (°C) (recommended 2.0-6.0 °C for chemistry)..... 4.4 3.6 5.1 5.2 1.9 1.9

If cooler temperature is out of compliance fill out form 00070F Temp Gun ID#: 90877952

Cooler Accepted by: AV Date: 6/11/10 Time: 1010

Complete custody forms and attach all shipping documents

Log-In Phase:

Was a temperature blank included in the cooler? YES (NO)

What kind of packing material was used? ... Bubble Wrap Wet Ice Gel Packs Baggies Foam Block Paper Other: _____

Was sufficient ice used (if appropriate)? NA (YES) NO

Were all bottles sealed in individual plastic bags? YES (NO)

Did all bottles arrive in good condition (unbroken)? (YES) NO

Were all bottle labels complete and legible? (YES) NO

Did the number of containers listed on COC match with the number of containers received? (YES) NO

Did all bottle labels and tags agree with custody papers? (YES) NO

Were all bottles used correct for the requested analyses? (YES) NO

Do any of the analyses (bottles) require preservation? (attach preservation sheet, excluding VOCs)... (NA) YES NO

Were all VOC vials free of air bubbles? (NA) YES NO

Was sufficient amount of sample sent in each bottle? (YES) NO

Date VOC Trip Blank was made at ARI..... (NA)

Was Sample Split by ARI : (NA) YES Date/Time: _____ Equipment: _____ Split by: _____

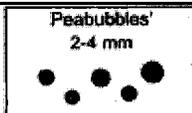
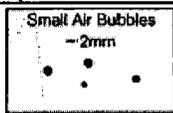
Samples Logged by: AV Date: 6/11/10 Time: 1230

**** Notify Project Manager of discrepancies or concerns ****

Sample ID on Bottle	Sample ID on COC	Sample ID on Bottle	Sample ID on COC

Additional Notes, Discrepancies, & Resolutions:

By: _____ Date: _____



Small → "sm"
Peabubbles → "pb"
Large → "lg"
Headspace → "hs"

RA31



18912 North Creek Parkway, Suite 101
Bothell, Washington 98011
TEL: 425.485.5800 • FAX: 425.485.5566

CHAIN OF CUSTODY RECORD

Project No.: _____ Project Mgr: Jim Hammermeister
 Project Name: Fidalgo Bay / Cushman Plymouth Diatom Study
 Project Location: Fidalgo Bay
 Sample Collectors: Will Hehrer Jim Hammermeister Chris Hunt
 Client Name: Ecology

Analyses / Tests									
Groh Set	TOC	Total Solids	Total Sulfides	Archie					

Shipping Information	
Number of Shipping Containers:	
Date Shipped:	
Carrier:	
Waybill No.:	
Comments	

Sample ID	Depth	Matrix	Date	Time	# of Containers	Groh Set	TOC	Total Solids	Total Sulfides	Archie								
SDS-CPD-01	0-10cm	sed	6/9/10	940	4	X	X	X	X	X								
SDS-CPD-02	0-10cm	sed	6/9/10	1001	4	X	X	X	X	X								
SDS-CPD-03	0-10cm	sed	6/9/10	1046	4	X	X	X	X	X								
SDS-CPD-04	0-10cm	sed	6/9/10	1107	4	X	X	X	X	X								
SDS-CPD-07	0-10cm	sed	6/9/10	1135	4	X	X	X	X	X								
SDS-CPD-08	0-10cm	sed	6/9/10	1146	4	X	X	X	X	X								
SDS-CPD-08-D	0-10cm	sed	6/9/10	1146	3	X	X	X	X									
SDS-CPD-08-T	0-10cm	sed	6/9/10	1146	3	X	X	X	X									
SDS-CPD-10	0-10cm	sed	6/9/10	1312	4	X	X	X	X	X								
SDS-CPD-13	0-10cm	sed	6/9/10	1320	4	X	X	X	X	X								
SDS-CPD-16	0-10cm	sed	6/9/10	1331	4	X	X	X	X	X								
SDS-CPD-17	0-10cm	sed	6/9/10	1343	4	X	X	X	X	X								

RELINQUISHED BY:	RECEIVED BY:	RELINQUISHED BY:	RECEIVED BY:
Signature: <u>[Signature]</u>	Signature: <u>[Signature]</u>	Signature: _____	Signature: _____
Date/Time: <u>6/11/10 10:10</u>	Date/Time: <u>6/11/10 10:10</u>	Date/Time: _____	Date/Time: _____
Affiliation: <u>SAIC</u>	Affiliation: <u>SAIC</u>	Affiliation: _____	Affiliation: _____

RA17:00010

• White: Lab Returns to Originator Upon Receipt of Samples • Canary: Lab Retains • Pink: Lab Returns to Project Manager with Final Report • Goldenrod: Retained by Sampler



Cooler Receipt Form

ARI Client: SAIC

Project Name: Fidalgo Bay/Custom plywood

COC No(s): _____ (NA)

Delivered by: Fed-Ex UPS Courier Hand Delivered Other: _____

Assigned ARI Job No: RA31

Tracking No: _____ (NA)

Preliminary Examination Phase:

Were intact, properly signed and dated custody seals attached to the outside of to cooler? YES (NO)

Were custody papers included with the cooler? YES (YES) NO

Were custody papers properly filled out (ink, signed, etc.) YES (YES) NO

Temperature of Cooler(s) (°C) (recommended 2.0-6.0 °C for chemistry)..... 4.4 3.6 5.1 5.2 1.9 1.9

If cooler temperature is out of compliance fill out form 00070F Temp Gun ID#: 90877952

Cooler Accepted by: AV Date: 6/11/10 Time: 1010

Complete custody forms and attach all shipping documents

Log-In Phase:

Was a temperature blank included in the cooler? YES (NO)

What kind of packing material was used? ... (Bubble Wrap) (Wet Ice) Gel Packs Baggies Foam Block Paper Other: _____

Was sufficient ice used (if appropriate)? NA (YES) NO

Were all bottles sealed in individual plastic bags? YES (NO)

Did all bottles arrive in good condition (unbroken)? YES (YES) NO

Were all bottle labels complete and legible? YES (YES) NO

Did the number of containers listed on COC match with the number of containers received? YES (YES) NO

Did all bottle labels and tags agree with custody papers? YES (YES) NO

Were all bottles used correct for the requested analyses? YES (YES) NO

Do any of the analyses (bottles) require preservation? (attach preservation sheet, excluding VOCs)... (NA) YES NO

Were all VOC vials free of air bubbles? (NA) YES NO

Was sufficient amount of sample sent in each bottle? YES (YES) NO

Date VOC Trip Blank was made at ARI..... (NA)

Was Sample Split by ARI : (NA) YES Date/Time: _____ Equipment: _____ Split by: _____

Samples Logged by: AV Date: 6/11/10 Time: 1547

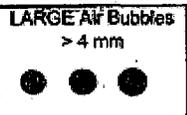
**** Notify Project Manager of discrepancies or concerns ****

Sample ID on Bottle	Sample ID on COC	Sample ID on Bottle	Sample ID on COC

Additional Notes, Discrepancies, & Resolutions:

By: _____

Date: _____



- Small → "sm"
- Peabubbles → "pb"
- Large → "lg"
- Headspace → "hs"

Case Narrative, Data Qualifiers, Control Limits

ARI Job ID: RA17, RA18, RA23, RA31



Case Narrative

Client: SAIC

Project: Fidalgo Bay / Custom Plywood Dioxin Study

ARI Job No.: RA17, RA18, RA23, & RA31

Sample Receipt

Forty-seven sediment samples were received June 11, 2010 under ARI jobs RA17, RA18, RA23, and RA31. The cooler temperatures measured by IR thermometer following ARI SOP were 1.9, 1.9, 3.6, 4.4, 5.1, and 5.2°C. Select sample containers were archived frozen upon receipt. For further details regarding sample receipt, please refer to the Cooler Receipt Forms.

General Chemistry Parameters (TOC/TS)

The samples were prepared and analyzed within method recommended holding times.

The method blanks were clean at the reporting limits. The LCS percent recoveries were within control limits.

The SRM percent recoveries were within limits.

The matrix spike percent recoveries of sulfide were outside the control limits for samples **SDS-CPD-05** and **SDS-CDP-01**. All other QC parameters were within control limits. No corrective action was taken.

The replicate RPD/RSDs were within control limits.

Geotechnical Parameters

Laboratory-specific case narratives follow.



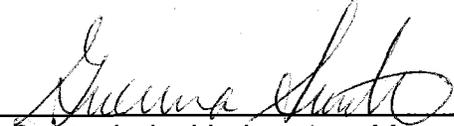
Client: Science Applications International Corp.

ARI Job No.: RA17

Client Project: Fidalgo Bay/ Custom Plywood Dioxin

Case Narrative

1. Nine samples were submitted for grain size analysis according to Puget Sound Estuary Protocol (PSEP) methodology on June 11, 2010.
2. The samples were run in a single batch and one sample from another job, SDS-CPD-14, was chosen for triplicate analysis. The triplicate data is reported on the QA summary.
3. Three samples, SDS-PB-02, SDS-PB-04 and SDS-PB-06, did not contain the required 5 grams of fines for the pipette portion of the analysis. The analytical balance has a capacity of about 200 grams (by 0.0001 grams) and a sample that would yield 5 grams of fines could not be split and stay within the capacity of the balance.
4. Samples SDS-PB-01, SDS-PB-05, SDS-PB-05-D, SDS-PB-05-T and SDS-PB-07 contained woody or other organic matter, which may have broken down during the sieving process affecting grain size analysis.
5. Samples SDS-PB-02, SDS-PB-06, and SDS-PB-07 contained shell fragments.
6. The data is provided in summary tables and plots.
7. There were no other noted anomalies in this project.

Approved by: 
Geotechnical Laboratory Manager

Date: 6/24/10



Client: Science Applications International Corp.

ARI Job No.: RA18

Client Project: Fidalgo/Padilla Bay

Case Narrative

1. Fifteen samples were submitted for grain size analysis according to Puget Sound Estuary Protocol (PSEP) methodology on June 11, 2010.
2. The samples were run in a single batch and one sample from this job, SDS-PB-10, was chosen for triplicate analysis. The triplicate data is reported on the QA summary.
3. One sample, SDS-PB-09, did not contain the required 5 grams of fines for the pipette portion of the analysis. The analytical balance has a capacity of about 200 grams (by 0.0001 grams) and a sample that would yield 5 grams of fines could not be split and stay within the capacity of the balance.
4. Samples SDS-PB-10, SDS-PB-08, and SDS-FB-06 contained woody or other organic matter, which may have broken down during the sieving process affecting grain size analysis.
5. Samples SDS-PB-09, SDS-FB-01, SDS-FB-03, SDS-FB-06, SDS-FB-07, and SDS-FB-07 contained shell fragments.
6. The data is provided in summary tables and plots.
7. There were no other noted anomalies in this project.

Approved by: _____

Guillermo Suro
Geotechnical Laboratory Manager

Date: _____

6/21/10



Client: Science Applications International Corp.

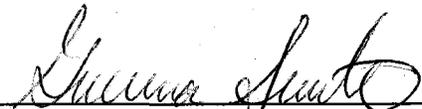
ARI Job No.: RA23

Client Project: Fidalgo Bay/ Custom Plywood Dioxin

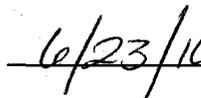
Case Narrative

1. Seven samples were submitted for grain size analysis according to Puget Sound Estuary Protocol (PSEP) methodology on June 11, 2010.
2. The samples were run in a single batch and one sample from this job, SDS-CPD-14, was chosen for triplicate analysis. The triplicate data is reported on the QA summary.
3. Samples SDS-CPD-14, SDS-CPD-05, SDS-CPD-09, SDS-CPD-15 and SDS-CPD-06 contained woody or other organic matter, which may have broken down during the sieving process affecting grain size analysis.
4. All of the samples contained shell fragments.
5. The data is provided in summary tables and plots.
6. There were no other noted anomalies in this project.

Approved by:


Geotechnical Laboratory Manager

Date:





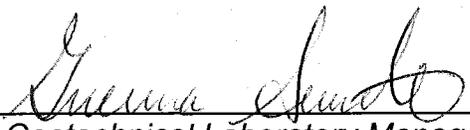
Client: Science Applications International Corp.

ARI Job No.: RA31

Client Project: Fidalgo Bay/ Custom Plywood Dioxin

Case Narrative

1. Sixteen samples were submitted for grain size analysis according to Puget Sound Estuary Protocol (PSEP) methodology on June 11, 2010.
2. The samples were run in a single batch and one sample from this job, SDS-CPD-01, was chosen for triplicate analysis. The triplicate data is reported on the QA summary.
3. Samples SDS-CPD-07, SDS-CPD-10, SDS-CPD-13, and SDS-CPD-21 contained woody or other organic matter, which may have broken down during the sieving process affecting grain size analysis.
4. Samples SDS-CPD-01, SDS-CPD-02, SDS-CPD-03, SDS-CPD-04, SDS-CPD-08, SDS-CPD-08-D, SDS-CPD-08-T, SDS-CPD-16, SDS-CPD-18, and SDS-CPD-20 contained shell fragments.
5. The data is provided in summary tables and plots.
6. There were no other noted anomalies in this project.

Approved by: 
Geotechnical Laboratory Manager

Date: 6/25/10



Data Reporting Qualifiers

Effective 7/10/2009

Inorganic Data

- U Indicates that the target analyte was not detected at the reported concentration
- * Duplicate RPD is not within established control limits
- B Reported value is less than the CRDL but \geq the Reporting Limit
- N Matrix Spike recovery not within established control limits
- NA Not Applicable, analyte not spiked
- H The natural concentration of the spiked element is so much greater than the concentration spiked that an accurate determination of spike recovery is not possible
- L Analyte concentration is ≤ 5 times the Reporting Limit and the replicate control limit defaults to ± 1 RL instead of the normal 20% RPD

Organic Data

- U Indicates that the target analyte was not detected at the reported concentration
- * Flagged value is not within established control limits
- B Analyte detected in an associated Method Blank at a concentration greater than one-half of ARI's Reporting Limit or 5% of the regulatory limit or 5% of the analyte concentration in the sample.
- J Estimated concentration when the value is less than ARI's established reporting limits
- D The spiked compound was not detected due to sample extract dilution
- E Estimated concentration calculated for an analyte response above the valid instrument calibration range. A dilution is required to obtain an accurate quantification of the analyte.
- Q Indicates a detected analyte with an initial or continuing calibration that does not meet established acceptance criteria ($< 20\%$ RSD, $< 20\%$ Drift or minimum RRF).
- S Indicates an analyte response that has saturated the detector. The calculated concentration is not valid; a dilution is required to obtain valid quantification of the analyte



- NA The flagged analyte was not analyzed for
- NR Spiked compound recovery is not reported due to chromatographic interference
- NS The flagged analyte was not spiked into the sample
- M Estimated value for an analyte detected and confirmed by an analyst but with low spectral match parameters. This flag is used only for GC-MS analyses
- M2 The sample contains PCB congeners that do not match any standard Aroclor pattern. The PCBs are identified and quantified as the Aroclor whose pattern most closely matches that of the sample. The reported value is an estimate.
- N The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification"
- Y The analyte is not detected at or above the reported concentration. The reporting limit is raised due to chromatographic interference. The Y flag is equivalent to the U flag with a raised reporting limit.
- C The analyte was positively identified on only one of two chromatographic columns. Chromatographic interference prevented a positive identification on the second column
- P The analyte was detected on both chromatographic columns but the quantified values differ by $\geq 40\%$ RPD with no obvious chromatographic interference

Geotechnical Data

- A The total of all fines fractions. This flag is used to report total fines when only sieve analysis is requested and balances total grain size with sample weight.
- F Samples were frozen prior to particle size determination
- SM Sample matrix was not appropriate for the requested analysis. This normally refers to samples contaminated with an organic product that interferes with the sieving process and/or moisture content, porosity and saturation calculations
- SS Sample did not contain the proportion of "fines" required to perform the pipette portion of the grain size analysis
- W Weight of sample in some pipette aliquots was below the level required for accurate weighting



Spike Recovery Control Limits for Conventional Wet Chemistry		
Effective 5/1/09		
Control limits are updated periodically. Assure that you have ARI's current control limits by downloading the files at the time of use. http://www.arilabs.com/portal/downloads/ARI-CLs.zip		
Sample Matrix:	ARI's Control Limits	
	Water	Soil / Sediment
Matrix Spike Recoveries	% Recovery	% Recovery
Ammonia	75 - 125	75 - 125
Bromide	75 - 125	75 - 125
Chloride	75 - 125	75 - 125
Cyanide	75 - 125	75 - 125
Ferrous Iron	75 - 125	75 - 125
Fluoride	75 - 125	75 - 125
Formaldehyde	75 - 125	75 - 125
Hexane Extractable Material	-- - --	78 - 114
Hexavalent Chromium	75 - 125	75 - 125
Nitrate/Nitrite	75 - 125	75 - 125
Oil and Grease	75 - 125	75 - 125
Phenol	75 - 125	75 - 125
Phosphorous	75 - 125	75 - 125
Sulfate	75 - 125	75 - 125
Sulfide	75 - 125	75 - 125
Total Kjeldahl Nitrogen	75 - 125	75 - 125
Total Organic Carbon	75 - 125	75 - 125
Duplicate RPDs		
Acidity	±20%	±20%
Alkalinity	±20%	±20%
BOD	±20%	±20%
Cation Exchange	±20%	±20%
COD	±20%	±20%
Conductivity	±20%	±20%
Salinity	±20%	±20%
Solids	±20%	±20%
Turbidity	±20%	±20%

General Chemistry Analysis

ARI Job ID: RA17, RA18, RA23, RA31

**General Chemistry Analysis
Report and Summary QC Forms**

ARI Job ID: RA17, RA18, RA23, RA31

SAMPLE RESULTS-CONVENTIONALS
RA17-Science Applications, Intl.



Matrix: Sediment
Data Release Authorized:
Reported: 06/24/10

A handwritten signature in black ink, appearing to be 'JL' or similar, written over the 'Data Release Authorized' text.

Project: Fidalgo Bay/ Custom Plywood
Event: NA
Date Sampled: 06/07/10
Date Received: 06/11/10

Client ID: SDS-PB-01
ARI ID: 10-14040 RA17A

Analyte	Date	Method	Units	RL	Sample
Total Solids	06/14/10 061410#1	EPA 160.3	Percent	0.01	64.40
Preserved Total Solids	06/11/10 061110#1	EPA 160.3	Percent	0.01	61.20
Sulfide	06/11/10 061110#1	EPA 376.2	mg/kg	3.09	39.2
Total Organic Carbon	06/22/10 062210#1	Plumb,1981	Percent	0.020	0.679

RL Analytical reporting limit
U Undetected at reported detection limit

SAMPLE RESULTS-CONVENTIONALS
RA17-Science Applications, Intl.



Matrix: Sediment
Data Release Authorized:
Reported: 06/24/10

A handwritten signature in black ink, appearing to be 'JR' or similar, written over the 'Data Release Authorized' line.

Project: Fidalgo Bay/ Custom Plywood
Event: NA
Date Sampled: 06/07/10
Date Received: 06/11/10

Client ID: SDS-PB-02
ARI ID: 10-14041 RA17B

Analyte	Date	Method	Units	RL	Sample
Total Solids	06/14/10 061410#1	EPA 160.3	Percent	0.01	76.40
Preserved Total Solids	06/11/10 061110#1	EPA 160.3	Percent	0.01	73.20
Sulfide	06/11/10 061110#1	EPA 376.2	mg/kg	2.47	27.6
Total Organic Carbon	06/22/10 062210#1	Plumb,1981	Percent	0.020	0.171

RL Analytical reporting limit
U Undetected at reported detection limit

SAMPLE RESULTS-CONVENTIONALS
RA17-Science Applications, Intl.



Matrix: Sediment
Data Release Authorized:
Reported: 06/24/10

A handwritten signature in black ink, appearing to be a stylized name or initials.

Project: Fidalgo Bay/ Custom Plywood
Event: NA
Date Sampled: 06/07/10
Date Received: 06/11/10

Client ID: SDS-PB-03
ARI ID: 10-14042 RA17C

Analyte	Date	Method	Units	RL	Sample
Total Solids	06/14/10 061410#1	EPA 160.3	Percent	0.01	46.90
Preserved Total Solids	06/11/10 061110#1	EPA 160.3	Percent	0.01	53.70
Sulfide	06/11/10 061110#1	EPA 376.2	mg/kg	35.5	324
Total Organic Carbon	06/22/10 062210#1	Plumb,1981	Percent	0.020	1.20

RL Analytical reporting limit
U Undetected at reported detection limit

SAMPLE RESULTS-CONVENTIONALS
RA17-Science Applications, Intl.



Matrix: Sediment
Data Release Authorized: 
Reported: 06/24/10

Project: Fidalgo Bay/ Custom Plywood
Event: NA
Date Sampled: 06/07/10
Date Received: 06/11/10

Client ID: SDS-PB-04
ARI ID: 10-14043 RA17D

Analyte	Date	Method	Units	RL	Sample
Total Solids	06/14/10 061410#1	EPA 160.3	Percent	0.01	74.50
Preserved Total Solids	06/11/10 061110#1	EPA 160.3	Percent	0.01	72.90
Sulfide	06/11/10 061110#1	EPA 376.2	mg/kg	1.34	< 1.34 U
Total Organic Carbon	06/22/10 062210#1	Plumb,1981	Percent	0.020	0.984

RL Analytical reporting limit
U Undetected at reported detection limit

SAMPLE RESULTS-CONVENTIONALS
RA17-Science Applications, Intl.



Matrix: Sediment
Data Release Authorized:
Reported: 06/24/10

A handwritten signature in black ink, appearing to be a stylized name, located to the right of the matrix and reporting information.

Project: Fidalgo Bay/ Custom Plywood
Event: NA
Date Sampled: 06/07/10
Date Received: 06/11/10

Client ID: SDS-PB-05
ARI ID: 10-14044 RA17E

Analyte	Date	Method	Units	RL	Sample
Total Solids	06/14/10 061410#1	EPA 160.3	Percent	0.01	63.40
Preserved Total Solids	06/11/10 061110#1	EPA 160.3	Percent	0.01	64.90
Sulfide	06/11/10 061110#1	EPA 376.2	mg/kg	2.86	48.6
Total Organic Carbon	06/22/10 062210#1	Plumb,1981	Percent	0.020	0.190

RL Analytical reporting limit
U Undetected at reported detection limit

SAMPLE RESULTS-CONVENTIONALS
RA17-Science Applications, Intl.



Matrix: Sediment
Data Release Authorized:
Reported: 06/24/10

A handwritten signature in black ink, appearing to be a stylized 'G' or similar character.

Project: Fidalgo Bay/ Custom Plywood
Event: NA
Date Sampled: 06/07/10
Date Received: 06/11/10

Client ID: SDS-PB-05-D
ARI ID: 10-14045 RA17F

Analyte	Date	Method	Units	RL	Sample
Total Solids	06/14/10 061410#1	EPA 160.3	Percent	0.01	62.25
Preserved Total Solids	06/11/10 061110#1	EPA 160.3	Percent	0.01	62.70
Sulfide	06/11/10 061110#1	EPA 376.2	mg/kg	2.94	48.1
Total Organic Carbon	06/22/10 062210#1	Plumb,1981	Percent	0.020	0.426

RL Analytical reporting limit
U Undetected at reported detection limit

SAMPLE RESULTS-CONVENTIONALS
RA17-Science Applications, Intl.



Matrix: Sediment
Data Release Authorized:
Reported: 06/24/10

A handwritten signature in black ink, appearing to be a stylized 'M' or similar character.

Project: Fidalgo Bay/ Custom Plywood
Event: NA
Date Sampled: 06/07/10
Date Received: 06/11/10

Client ID: SDS-PB-05-T
ARI ID: 10-14046 RA17G

Analyte	Date	Method	Units	RL	Sample
Total Solids	06/14/10 061410#1	EPA 160.3	Percent	0.01	62.50
Preserved Total Solids	06/11/10 061110#1	EPA 160.3	Percent	0.01	64.00
Sulfide	06/11/10 061110#1	EPA 376.2	mg/kg	2.82	32.2
Total Organic Carbon	06/22/10 062210#1	Plumb, 1981	Percent	0.020	0.377

RL Analytical reporting limit
U Undetected at reported detection limit

SAMPLE RESULTS-CONVENTIONALS
RA17-Science Applications, Intl.



Matrix: Sediment
Data Release Authorized: 
Reported: 06/24/10

Project: Fidalgo Bay/ Custom Plywood
Event: NA
Date Sampled: 06/07/10
Date Received: 06/11/10

Client ID: SDS-PB-06
ARI ID: 10-14047 RA17H

Analyte	Date	Method	Units	RL	Sample
Total Solids	06/14/10 061410#1	EPA 160.3	Percent	0.01	78.90
Preserved Total Solids	06/11/10 061110#1	EPA 160.3	Percent	0.01	73.40
Sulfide	06/11/10 061110#1	EPA 376.2	mg/kg	1.34	< 1.34 U
Total Organic Carbon	06/22/10 062210#1	Plumb,1981	Percent	0.020	0.215

RL Analytical reporting limit
U Undetected at reported detection limit

SAMPLE RESULTS-CONVENTIONALS
RA17-Science Applications, Intl.



Matrix: Sediment
Data Release Authorized
Reported: 06/24/10

A handwritten signature in black ink, appearing to be a stylized name, located to the right of the matrix information.

Project: Fidalgo Bay/ Custom Plywood
Event: NA
Date Sampled: 06/07/10
Date Received: 06/11/10

Client ID: SDS-PB-07
ARI ID: 10-14048 RA17I

Analyte	Date	Method	Units	RL	Sample
Total Solids	06/14/10 061410#1	EPA 160.3	Percent	0.01	73.10
Preserved Total Solids	06/11/10 061110#1	EPA 160.3	Percent	0.01	71.90
Sulfide	06/11/10 061110#1	EPA 376.2	mg/kg	1.23	13.0
Total Organic Carbon	06/22/10 062210#1	Plumb, 1981	Percent	0.020	0.422

RL Analytical reporting limit
U Undetected at reported detection limit

MS/MSD RESULTS-CONVENTIONALS
RA17-Science Applications, Intl.



Matrix: Sediment
Data Release Authorized:
Reported: 06/24/10

A handwritten signature in black ink, appearing to be 'S. J. ...', written over the 'Data Release Authorized' text.

Project: Fidalgo Bay/ Custom Plywood
Event: NA
Date Sampled: 06/07/10
Date Received: 06/11/10

Analyte	Date	Units	Sample	Spike	Spike Added	Recovery
ARI ID: RA17A Client ID: SDS-PB-01						
Sulfide	06/11/10	mg/kg	39.2	290	245	102.4%
Total Organic Carbon	06/22/10	Percent	0.679	1.67	0.822	120.6%

REPLICATE RESULTS-CONVENTIONALS
RA17-Science Applications, Intl.



Matrix: Sediment
Data Release Authorized.
Reported: 06/24/10

A handwritten signature in black ink, appearing to be 'A. J. ...', written over the 'Data Release Authorized' text.

Project: Fidalgo Bay/ Custom Plywood
Event: NA
Date Sampled: 06/07/10
Date Received: 06/11/10

Analyte	Date	Units	Sample	Replicate (s)	RPD/RSD
ARI ID: RA17A Client ID: SDS-PB-01					
Total Solids	06/14/10	Percent	64.40	64.60 63.80	0.6%
Preserved Total Solids	06/11/10	Percent	61.20	60.80	0.7%
Sulfide	06/11/10	mg/kg	39.2	41.6	5.9%
Total Organic Carbon	06/22/10	Percent	0.679	0.784 0.623	11.8%

LAB CONTROL RESULTS-CONVENTIONALS
RA17-Science Applications, Intl.



Matrix: Sediment
Data Release Authorized: 
Reported: 06/24/10

Project: Fidalgo Bay/ Custom Plywood
Event: NA
Date Sampled: NA
Date Received: NA

Analyte/Method	QC ID	Date	Units	LCS	Spike Added	Recovery
Sulfide EPA 376.2	PREP	06/11/10	mg/kg	6.95	8.13	85.5%
Total Organic Carbon Plumb, 1981	ICVL	06/22/10	Percent	0.090	0.100	90.0%

METHOD BLANK RESULTS-CONVENTIONALS
RA17-Science Applications, Intl.



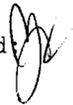
Matrix: Sediment
Data Release Authorized: 
Reported: 06/24/10

Project: Fidalgo Bay/ Custom Plywood
Event: NA
Date Sampled: NA
Date Received: NA

Analyte	Date	Units	Blank
Total Solids	06/14/10	Percent	< 0.01 U
Preserved Total Solids	06/11/10	Percent	< 0.01 U
Sulfide	06/11/10	mg/kg	< 1.00 U
Total Organic Carbon	06/22/10	Percent	< 0.020 U

STANDARD REFERENCE RESULTS-CONVENTIONALS
RA17-Science Applications, Intl.



Matrix: Sediment
Data Release Authorized: 
Reported: 06/24/10

Project: Fidalgo Bay/ Custom Plywood
Event: NA
Date Sampled: NA
Date Received: NA

Analyte/SRM ID	Date	Units	SRM	True Value	Recovery
Total Organic Carbon NIST #8704	06/22/10	Percent	3.09	3.35	92.2%

SAMPLE RESULTS-CONVENTIONALS
RA18-Science Applications, Intl.



Matrix: Sediment
Data Release Authorized
Reported: 06/24/10

A handwritten signature in black ink, appearing to be 'JP' or similar initials, written over the 'Data Release Authorized' text.

Project: Fidalgo/Padilla Bay
Event: NA
Date Sampled: 06/08/10
Date Received: 06/11/10

Client ID: SDS-PB-08
ARI ID: 10-14049 RA18A

Analyte	Date	Method	Units	RL	Sample
Total Solids	06/15/10 061510#1	EPA 160.3	Percent	0.01	55.70
Preserved Total Solids	06/16/10 061610#1	EPA 160.3	Percent	0.01	62.00
Sulfide	06/12/10 061210#1	EPA 376.2	mg/kg	15.1	231
Total Organic Carbon	06/22/10 062210#1	Plumb,1981	Percent	0.020	0.467

RL Analytical reporting limit
U Undetected at reported detection limit

SAMPLE RESULTS-CONVENTIONALS
RA18-Science Applications, Intl.



Matrix: Sediment
Data Release Authorized: 
Reported: 06/24/10

Project: Fidalgo/Padilla Bay
Event: NA
Date Sampled: 06/08/10
Date Received: 06/11/10

Client ID: SDS-PB-09
ARI ID: 10-14050 RA18B

Analyte	Date	Method	Units	RL	Sample
Total Solids	06/15/10 061510#1	EPA 160.3	Percent	0.01	78.10
Preserved Total Solids	06/16/10 061610#1	EPA 160.3	Percent	0.01	76.50
Sulfide	06/12/10 061210#1	EPA 376.2	mg/kg	1.16	1.60
Total Organic Carbon	06/22/10 062210#1	Plumb,1981	Percent	0.020	0.253

RL Analytical reporting limit
U Undetected at reported detection limit

SAMPLE RESULTS-CONVENTIONALS
RA18-Science Applications, Intl.



Matrix: Sediment
Data Release Authorized: 
Reported: 06/24/10

Project: Fidalgo/Padilla Bay
Event: NA
Date Sampled: 06/08/10
Date Received: 06/11/10

Client ID: SDS-PB-10
ARI ID: 10-14051 RA18C

Analyte	Date	Method	Units	RL	Sample
Total Solids	06/15/10 061510#1	EPA 160.3	Percent	0.01	52.00
Preserved Total Solids	06/16/10 061610#1	EPA 160.3	Percent	0.01	60.20
Sulfide	06/12/10 061210#1	EPA 376.2	mg/kg	82.7	1,150
Total Organic Carbon	06/22/10 062210#1	Plumb,1981	Percent	0.020	0.941

RL Analytical reporting limit
U Undetected at reported detection limit

SAMPLE RESULTS-CONVENTIONALS
RA18-Science Applications, Intl.



Matrix: Sediment
Data Release Authorized
Reported: 06/24/10

A handwritten signature in black ink, appearing to be 'J. K.', written over the 'Data Release Authorized' text.

Project: Fidalgo/Padilla Bay
Event: NA
Date Sampled: 06/08/10
Date Received: 06/11/10

Client ID: SDS-FB-01
ARI ID: 10-14052 RA18D

Analyte	Date	Method	Units	RL	Sample
Total Solids	06/15/10 061510#1	EPA 160.3	Percent	0.01	69.90
Preserved Total Solids	06/16/10 061610#1	EPA 160.3	Percent	0.01	68.80
Sulfide	06/12/10 061210#1	EPA 376.2	mg/kg	1.41	6.79
Total Organic Carbon	06/22/10 062210#1	Plumb,1981	Percent	0.020	0.349

RL Analytical reporting limit
U Undetected at reported detection limit

SAMPLE RESULTS-CONVENTIONALS
RA18-Science Applications, Intl.



Matrix: Sediment
Data Release Authorized: 
Reported: 06/24/10

Project: Fidalgo/Padilla Bay
Event: NA
Date Sampled: 06/08/10
Date Received: 06/11/10

Client ID: SDS-FB-02
ARI ID: 10-14053 RA18E

Analyte	Date	Method	Units	RL	Sample
Total Solids	06/15/10 061510#1	EPA 160.3	Percent	0.01	72.00
Preserved Total Solids	06/16/10 061610#1	EPA 160.3	Percent	0.01	71.50
Sulfide	06/12/10 061210#1	EPA 376.2	mg/kg	1.29	5.61
Total Organic Carbon	06/22/10 062210#1	Plumb,1981	Percent	0.020	0.305

RL Analytical reporting limit
U Undetected at reported detection limit

SAMPLE RESULTS-CONVENTIONALS
RA18-Science Applications, Intl.



Matrix: Sediment
Data Release Authorized: 
Reported: 06/24/10

Project: Fidalgo/Padilla Bay
Event: NA
Date Sampled: 06/08/10
Date Received: 06/11/10

Client ID: SDS-FB-03
ARI ID: 10-14054 RA18F

Analyte	Date	Method	Units	RL	Sample
Total Solids	06/15/10 061510#1	EPA 160.3	Percent	0.01	70.50
Preserved Total Solids	06/16/10 061610#1	EPA 160.3	Percent	0.01	69.10
Sulfide	06/12/10 061210#1	EPA 376.2	mg/kg	1.39	7.40
Total Organic Carbon	06/22/10 062210#1	Plumb,1981	Percent	0.020	0.477

RL Analytical reporting limit
U Undetected at reported detection limit

SAMPLE RESULTS-CONVENTIONALS
RA18-Science Applications, Intl.



Matrix: Sediment
Data Release Authorized: 
Reported: 06/24/10

Project: Fidalgo/Padilla Bay
Event: NA
Date Sampled: 06/08/10
Date Received: 06/11/10

Client ID: SDS-FB-04
ARI ID: 10-14055 RA18G

Analyte	Date	Method	Units	RL	Sample
Total Solids	06/15/10 061510#1	EPA 160.3	Percent	0.01	60.70
Preserved Total Solids	06/16/10 061610#1	EPA 160.3	Percent	0.01	65.30
Sulfide	06/12/10 061210#1	EPA 376.2	mg/kg	28.8	380
Total Organic Carbon	06/22/10 062210#1	Plumb,1981	Percent	0.020	0.654

RL Analytical reporting limit
U Undetected at reported detection limit

SAMPLE RESULTS-CONVENTIONAL
RA18-Science Applications, Intl.



Matrix: Sediment
Data Release Authorized:
Reported: 06/24/10

A handwritten signature in black ink, appearing to be 'M. J.', written over the 'Data Release Authorized:' line.

Project: Fidalgo/Padilla Bay
Event: NA
Date Sampled: 06/08/10
Date Received: 06/11/10

Client ID: SDS-FB-05
ARI ID: 10-14056 RA18H

Analyte	Date	Method	Units	RL	Sample
Total Solids	06/15/10 061510#1	EPA 160.3	Percent	0.01	63.90
Preserved Total Solids	06/16/10 061610#1	EPA 160.3	Percent	0.01	64.30
Sulfide	06/12/10 061210#1	EPA 376.2	mg/kg	1.49	15.1
Total Organic Carbon	06/22/10 062210#1	Plumb,1981	Percent	0.020	0.842

RL Analytical reporting limit
U Undetected at reported detection limit

SAMPLE RESULTS-CONVENTIONALS
RA18-Science Applications, Intl.



Matrix: Sediment
Data Release Authorized: 
Reported: 06/24/10

Project: Fidalgo/Padilla Bay
Event: NA
Date Sampled: 06/08/10
Date Received: 06/11/10

Client ID: SDS-FB-06
ARI ID: 10-14057 RA18I

Analyte	Date	Method	Units	RL	Sample
Total Solids	06/15/10 061510#1	EPA 160.3	Percent	0.01	69.30
Preserved Total Solids	06/16/10 061610#1	EPA 160.3	Percent	0.01	71.10
Sulfide	06/12/10 061210#1	EPA 376.2	mg/kg	1.27	1.61
Total Organic Carbon	06/22/10 062210#1	Plumb,1981	Percent	0.020	0.525

RL Analytical reporting limit
U Undetected at reported detection limit

SAMPLE RESULTS-CONVENTIONALS
RA18-Science Applications, Intl.



Matrix: Sediment
Data Release Authorized:
Reported: 06/24/10

A handwritten signature in black ink, appearing to be 'M. J.', written over the 'Data Release Authorized' line.

Project: Fidalgo/Padilla Bay
Event: NA
Date Sampled: 06/08/10
Date Received: 06/11/10

Client ID: SDS-FB-07
ARI ID: 10-14058 RA18J

Analyte	Date	Method	Units	RL	Sample
Total Solids	06/15/10 061510#1	EPA 160.3	Percent	0.01	53.20
Preserved Total Solids	06/16/10 061610#1	EPA 160.3	Percent	0.01	60.90
Sulfide	06/12/10 061210#1	EPA 376.2	mg/kg	29.1	477
Total Organic Carbon	06/22/10 062210#1	Plumb,1981	Percent	0.020	0.912

RL Analytical reporting limit
U Undetected at reported detection limit

SAMPLE RESULTS-CONVENTIONALS
RA18-Science Applications, Intl.



Matrix: Sediment
Data Release Authorized:
Reported: 06/24/10

A handwritten signature in black ink, appearing to be 'A. J. ...', written over the 'Data Release Authorized' text.

Project: Fidalgo/Padilla Bay
Event: NA
Date Sampled: 06/08/10
Date Received: 06/11/10

Client ID: SDS-FB-07-D
ARI ID: 10-14059 RA18K

Analyte	Date	Method	Units	RL	Sample
Total Solids	06/15/10 061510#1	EPA 160.3	Percent	0.01	53.50
Preserved Total Solids	06/16/10 061610#1	EPA 160.3	Percent	0.01	60.50
Sulfide	06/12/10 061210#1	EPA 376.2	mg/kg	31.8	516
Total Organic Carbon	06/22/10 062210#1	Plumb,1981	Percent	0.020	0.807

RL Analytical reporting limit
U Undetected at reported detection limit

SAMPLE RESULTS-CONVENTIONALS
RA18-Science Applications, Intl.



Matrix: Sediment
Data Release Authorized:
Reported: 06/24/10

A handwritten signature in black ink, appearing to be a stylized name, located to the right of the matrix and reporting information.

Project: Fidalgo/Padilla Bay
Event: NA
Date Sampled: 06/08/10
Date Received: 06/11/10

Client ID: SDS-FB-07-T
ARI ID: 10-14060 RA18L

Analyte	Date	Method	Units	RL	Sample
Total Solids	06/15/10 061510#1	EPA 160.3	Percent	0.01	53.40
Preserved Total Solids	06/16/10 061610#1	EPA 160.3	Percent	0.01	59.80
Sulfide	06/12/10 061210#1	EPA 376.2	mg/kg	16.0	276
Total Organic Carbon	06/22/10 062210#1	Plumb,1981	Percent	0.020	1.22

RL Analytical reporting limit
U Undetected at reported detection limit

SAMPLE RESULTS-CONVENTIONALS
RA18-Science Applications, Intl.



Matrix: Sediment
Data Release Authorized: 
Reported: 06/24/10

Project: Fidalgo/Padilla Bay
Event: NA
Date Sampled: 06/08/10
Date Received: 06/11/10

Client ID: SDS-FB-08
ARI ID: 10-14061 RA18M

Analyte	Date	Method	Units	RL	Sample
Total Solids	06/15/10 061510#1	EPA 160.3	Percent	0.01	58.10
Preserved Total Solids	06/16/10 061610#1	EPA 160.3	Percent	0.01	64.50
Sulfide	06/12/10 061210#1	EPA 376.2	mg/kg	28.9	272
Total Organic Carbon	06/22/10 062210#1	Plumb,1981	Percent	0.020	0.741

RL Analytical reporting limit
U Undetected at reported detection limit

SAMPLE RESULTS-CONVENTIONALS
RA18-Science Applications, Intl.



Matrix: Sediment
Data Release Authorized: 
Reported: 06/24/10

Project: Fidalgo/Padilla Bay
Event: NA
Date Sampled: 06/08/10
Date Received: 06/11/10

Client ID: SDS-FB-09
ARI ID: 10-14062 RA18N

Analyte	Date	Method	Units	RL	Sample
Total Solids	06/15/10 061510#1	EPA 160.3	Percent	0.01	54.60
Preserved Total Solids	06/16/10 061610#1	EPA 160.3	Percent	0.01	61.10
Sulfide	06/12/10 061210#1	EPA 376.2	mg/kg	15.8	192
Total Organic Carbon	06/22/10 062210#1	Plumb, 1981	Percent	0.020	0.819

RL Analytical reporting limit
U Undetected at reported detection limit

SAMPLE RESULTS-CONVENTIONALS
RA18-Science Applications, Intl.



Matrix: Sediment
Data Release Authorized: 
Reported: 06/24/10

Project: Fidalgo/Padilla Bay
Event: NA
Date Sampled: 06/08/10
Date Received: 06/11/10

Client ID: SDS-FB-10
ARI ID: 10-14063 RA180

Analyte	Date	Method	Units	RL	Sample
Total Solids	06/15/10 061510#1	EPA 160.3	Percent	0.01	50.30
Preserved Total Solids	06/16/10 061610#1	EPA 160.3	Percent	0.01	54.40
Sulfide	06/12/10 061210#1	EPA 376.2	mg/kg	88.2	713
Total Organic Carbon	06/22/10 062210#1	Plumb,1981	Percent	0.020	1.35

RL Analytical reporting limit
U Undetected at reported detection limit

MS/MSD RESULTS-CONVENTIONALS
RA18-Science Applications, Intl.



Matrix: Sediment
Data Release Authorized
Reported: 06/24/10

A handwritten signature in black ink, appearing to be 'M. J.', written over the 'Data Release Authorized' text.

Project: Fidalgo/Padilla Bay
Event: NA
Date Sampled: 06/08/10
Date Received: 06/11/10

Analyte	Date	Units	Sample	Spike	Spike Added	Recovery
ARI ID: RA18A Client ID: SDS-PB-08						
Sulfide	06/12/10	mg/kg	231	512	255	110.2%
Total Organic Carbon	06/22/10	Percent	0.467	1.43	0.786	122.5%

REPLICATE RESULTS-CONVENTIONALS
RA18-Science Applications, Intl.



Matrix: Sediment
Data Release Authorized:
Reported: 06/24/10

A handwritten signature in black ink, appearing to be 'B. J.' or similar, written over the 'Data Release Authorized' text.

Project: Fidalgo/Padilla Bay
Event: NA
Date Sampled: 06/08/10
Date Received: 06/11/10

Analyte	Date	Units	Sample	Replicate (s)	RPD/RSD
ARI ID: RA18A Client ID: SDS-PB-08					
Total Solids	06/15/10	Percent	55.70	55.30 55.70	0.4%
Preserved Total Solids	06/16/10	Percent	62.00	62.70	1.1%
Sulfide	06/12/10	mg/kg	231	269 258	7.7%
Total Organic Carbon	06/22/10	Percent	0.467	0.475 0.447	3.1%

LAB CONTROL RESULTS-CONVENTIONALS
RA18-Science Applications, Intl.



Matrix: Sediment
Data Release Authorized
Reported: 06/24/10

A handwritten signature in black ink, appearing to be a stylized name or initials.

Project: Fidalgo/Padilla Bay
Event: NA
Date Sampled: NA
Date Received: NA

Analyte/Method	QC ID	Date	Units	LCS	Spike Added	Recovery
Sulfide EPA 376.2	PREP	06/12/10	mg/kg	8.13	8.13	100.0%
Total Organic Carbon Plumb, 1981	ICVL	06/22/10	Percent	0.090	0.100	90.0%

METHOD BLANK RESULTS-CONVENTIONALS
RA18-Science Applications, Intl.



Matrix: Sediment
Data Release Authorized: 
Reported: 06/24/10

Project: Fidalgo/Padilla Bay
Event: NA
Date Sampled: NA
Date Received: NA

Analyte	Date	Units	Blank
Total Solids	06/15/10	Percent	< 0.01 U
Preserved Total Solids	06/16/10	Percent	< 0.01 U
Sulfide	06/12/10	mg/kg	< 1.00 U
Total Organic Carbon	06/22/10	Percent	< 0.020 U

STANDARD REFERENCE RESULTS-CONVENTIONALS
RA18-Science Applications, Intl.



Matrix: Sediment
Data Release Authorized:
Reported: 06/24/10

A handwritten signature in black ink, appearing to be a stylized 'M' or similar character.

Project: Fidalgo/Padilla Bay
Event: NA
Date Sampled: NA
Date Received: NA

Analyte/SRM ID	Date	Units	SRM	True Value	Recovery
Total Organic Carbon NIST #8704	06/22/10	Percent	3.09	3.35	92.2%

SAMPLE RESULTS-CONVENTIONALS
RA23-Science Applications, Intl.



Matrix: Sediment
Data Release Authorized: 
Reported: 06/23/10

Project: Fidalgo Bay/ Custom Plywood
Event: NA
Date Sampled: 06/10/10
Date Received: 06/11/10

Client ID: SDS-CPD-05
ARI ID: 10-14079 RA23A

Analyte	Date	Method	Units	RL	Sample
Total Solids	06/14/10 061410#1	EPA 160.3	Percent	0.01	56.40
Preserved Total Solids	06/16/10 061610#1	EPA 160.3	Percent	0.01	59.50
Sulfide	06/15/10 061510#1	EPA 376.2	mg/kg	32.8	461
Total Organic Carbon	06/17/10 061710#1	Plumb,1981	Percent	0.020	0.554

RL Analytical reporting limit
U Undetected at reported detection limit

SAMPLE RESULTS-CONVENTIONALS
RA23-Science Applications, Intl.



Matrix: Sediment
Data Release Authorized: 
Reported: 06/23/10

Project: Fidalgo Bay/ Custom Plywood
Event: NA
Date Sampled: 06/10/10
Date Received: 06/11/10

Client ID: SDS-CPD-06
ARI ID: 10-14080 RA23B

Analyte	Date	Method	Units	RL	Sample
Total Solids	06/14/10 061410#1	EPA 160.3	Percent	0.01	50.80
Preserved Total Solids	06/16/10 061610#1	EPA 160.3	Percent	0.01	59.60
Sulfide	06/15/10 061510#1	EPA 376.2	mg/kg	1.59	27.4
Total Organic Carbon	06/17/10 061710#1	Plumb,1981	Percent	0.020	0.573

RL Analytical reporting limit
U Undetected at reported detection limit

SAMPLE RESULTS-CONVENTIONALS
RA23-Science Applications, Intl.



Matrix: Sediment
Data Release Authorized: 
Reported: 06/23/10

Project: Fidalgo Bay/ Custom Plywood
Event: NA
Date Sampled: 06/10/10
Date Received: 06/11/10

Client ID: SDS-CPD-09
ARI ID: 10-14081 RA23C

Analyte	Date	Method	Units	RL	Sample
Total Solids	06/14/10 061410#1	EPA 160.3	Percent	0.01	47.80
Preserved Total Solids	06/16/10 061610#1	EPA 160.3	Percent	0.01	57.80
Sulfide	06/15/10 061510#1	EPA 376.2	mg/kg	1.67	24.6
Total Organic Carbon	06/17/10 061710#1	Plumb,1981	Percent	0.020	0.988

RL Analytical reporting limit
U Undetected at reported detection limit

SAMPLE RESULTS-CONVENTIONALS
RA23-Science Applications, Intl.



Matrix: Sediment
Data Release Authorized: 
Reported: 06/23/10

Project: Fidalgo Bay/ Custom Plywood
Event: NA
Date Sampled: 06/10/10
Date Received: 06/11/10

Client ID: SDS-CPD-11
ARI ID: 10-14082 RA23D

Analyte	Date	Method	Units	RL	Sample
Total Solids	06/14/10 061410#1	EPA 160.3	Percent	0.01	53.80
Preserved Total Solids	06/16/10 061610#1	EPA 160.3	Percent	0.01	57.40
Sulfide	06/15/10 061510#1	EPA 376.2	mg/kg	1.66	28.1
Total Organic Carbon	06/17/10 061710#1	Plumb,1981	Percent	0.020	0.485

RL Analytical reporting limit
U Undetected at reported detection limit

SAMPLE RESULTS-CONVENTIONALS
RA23-Science Applications, Intl.



Matrix: Sediment
Data Release Authorized:
Reported: 06/23/10

A handwritten signature in black ink, appearing to be 'B. J.', written over the 'Data Release Authorized' text.

Project: Fidalgo Bay/ Custom Plywood
Event: NA
Date Sampled: 06/10/10
Date Received: 06/11/10

Client ID: SDS-CPD-12
ARI ID: 10-14083 RA23E

Analyte	Date	Method	Units	RL	Sample
Total Solids	06/14/10 061410#1	EPA 160.3	Percent	0.01	55.60
Preserved Total Solids	06/16/10 061610#1	EPA 160.3	Percent	0.01	63.00
Sulfide	06/15/10 061510#1	EPA 376.2	mg/kg	1.56	27.5
Total Organic Carbon	06/17/10 061710#1	Plumb,1981	Percent	0.020	0.863

RL Analytical reporting limit
U Undetected at reported detection limit

SAMPLE RESULTS-CONVENTIONALS
RA23-Science Applications, Intl.



Matrix: Sediment
Data Release Authorized
Reported: 06/23/10

A handwritten signature in black ink, appearing to be 'M. J.', written over the 'Data Release Authorized' text.

Project: Fidalgo Bay/ Custom Plywood
Event: NA
Date Sampled: 06/10/10
Date Received: 06/11/10

Client ID: SDS-CPD-14
ARI ID: 10-14084 RA23F

Analyte	Date	Method	Units	RL	Sample
Total Solids	06/14/10 061410#1	EPA 160.3	Percent	0.01	52.30
Preserved Total Solids	06/16/10 061610#1	EPA 160.3	Percent	0.01	59.70
Sulfide	06/15/10 061510#1	EPA 376.2	mg/kg	1.60	30.7
Total Organic Carbon	06/17/10 061710#1	Plumb, 1981	Percent	0.020	1.15

RL Analytical reporting limit
U Undetected at reported detection limit

SAMPLE RESULTS-CONVENTIONALS
RA23-Science Applications, Intl.



Matrix: Sediment
Data Release Authorized: 
Reported: 06/23/10

Project: Fidalgo Bay/ Custom Plywood
Event: NA
Date Sampled: 06/10/10
Date Received: 06/11/10

Client ID: SDS-CPD-15
ARI ID: 10-14085 RA23G

Analyte	Date	Method	Units	RL	Sample
Total Solids	06/14/10 061410#1	EPA 160.3	Percent	0.01	53.20
Preserved Total Solids	06/16/10 061610#1	EPA 160.3	Percent	0.01	59.20
Sulfide	06/15/10 061510#1	EPA 376.2	mg/kg	33.1	506
Total Organic Carbon	06/17/10 061710#1	Plumb,1981	Percent	0.020	1.10

RL Analytical reporting limit
U Undetected at reported detection limit

MS/MSD RESULTS-CONVENTIONALS
RA23-Science Applications, Intl.



Matrix: Sediment
Data Release Authorized: 
Reported: 06/23/10

Project: Fidalgo Bay/ Custom Plywood
Event: NA
Date Sampled: 06/10/10
Date Received: 06/11/10

Analyte	Date	Units	Sample	Spike	Spike Added	Recovery
ARI ID: RA23A Client ID: SDS-CPD-05						
Sulfide	06/15/10	mg/kg	461	807	254	136.2%

REPLICATE RESULTS-CONVENTIONALS
RA23-Science Applications, Intl.



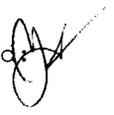
Matrix: Sediment
Data Release Authorized: 
Reported: 06/23/10

Project: Fidalgo Bay/ Custom Plywood
Event: NA
Date Sampled: 06/10/10
Date Received: 06/11/10

Analyte	Date	Units	Sample	Replicate(s)	RPD/RSD
<hr/>					
ARI ID: RA23A	Client ID: SDS-CPD-05				
Sulfide	06/15/10	mg/kg	461	478	3.6%

LAB CONTROL RESULTS-CONVENTIONALS
RA23-Science Applications, Intl.



Matrix: Sediment
Data Release Authorized: 
Reported: 06/23/10

Project: Fidalgo Bay/ Custom Plywood
Event: NA
Date Sampled: NA
Date Received: NA

Analyte/Method	QC ID	Date	Units	LCS	Spike Added	Recovery
Sulfide EPA 376.2	PREP	06/15/10	mg/kg	7.82	7.59	103.0%
Total Organic Carbon Plumb, 1981	ICVL	06/17/10	Percent	0.094	0.100	94.0%

METHOD BLANK RESULTS-CONVENTIONALS
RA23-Science Applications, Intl.



Matrix: Sediment
Data Release Authorized: 
Reported: 06/23/10

Project: Fidalgo Bay/ Custom Plywood
Event: NA
Date Sampled: NA
Date Received: NA

Analyte	Date	Units	Blank
Total Solids	06/14/10	Percent	< 0.01 U
Preserved Total Solids	06/16/10 06/16/10	Percent	< 0.01 U < 0.01 U
Sulfide	06/15/10	mg/kg	< 1.00 U
Total Organic Carbon	06/17/10	Percent	< 0.020 U

STANDARD REFERENCE RESULTS-CONVENTIONALS
RA23-Science Applications, Intl.



Matrix: Sediment
Data Release Authorized: 
Reported: 06/23/10

Project: Fidalgo Bay/ Custom Plywood
Event: NA
Date Sampled: NA
Date Received: NA

Analyte/SRM ID	Date	Units	SRM	True Value	Recovery
Total Organic Carbon NIST #8704	06/17/10	Percent	3.10	3.35	92.5%

SAMPLE RESULTS-CONVENTIONALS
RA31-Science Applications, Intl.



Matrix: Sediment
Data Release Authorized:
Reported: 06/23/10

A handwritten signature in black ink, appearing to be 'M' or similar, written over the 'Data Release Authorized' line.

Project: Fidalgo Bay/ Custom Plywood
Event: NA
Date Sampled: 06/09/10
Date Received: 06/11/10

Client ID: SDS-CPD-01
ARI ID: 10-14127 RA31A

Analyte	Date	Method	Units	RL	Sample
Total Solids	06/15/10 061510#1	EPA 160.3	Percent	0.01	55.50
Preserved Total Solids	06/16/10 061610#1	EPA 160.3	Percent	0.01	61.60
Sulfide	06/14/10 061410#1	EPA 376.2	mg/kg	33.0	508
Total Organic Carbon	06/17/10 061710#1	Plumb,1981	Percent	0.020	0.937

RL Analytical reporting limit
U Undetected at reported detection limit

SAMPLE RESULTS-CONVENTIONALS
RA31-Science Applications, Intl.



Matrix: Sediment
Data Release Authorized: *[Signature]*
Reported: 06/23/10

Project: Fidalgo Bay/ Custom Plywood
Event: NA
Date Sampled: 06/09/10
Date Received: 06/11/10

Client ID: SDS-CPD-02
ARI ID: 10-14128 RA31B

Analyte	Date	Method	Units	RL	Sample
Total Solids	06/15/10 061510#1	EPA 160.3	Percent	0.01	57.50
Preserved Total Solids	06/16/10 061610#1	EPA 160.3	Percent	0.01	60.60
Sulfide	06/14/10 061410#1	EPA 376.2	mg/kg	31.3	318
Total Organic Carbon	06/16/10 061610#1	Plumb,1981	Percent	0.020	0.752

RL Analytical reporting limit
U Undetected at reported detection limit

SAMPLE RESULTS-CONVENTIONALS
RA31-Science Applications, Intl.



Matrix: Sediment
Data Release Authorized
Reported: 06/23/10

A handwritten signature in black ink, appearing to be 'M. J.', is written over the 'Data Release Authorized' text.

Project: Fidalgo Bay/ Custom Plywood
Event: NA
Date Sampled: 06/09/10
Date Received: 06/11/10

Client ID: SDS-CPD-03
ARI ID: 10-14129 RA31C

Analyte	Date	Method	Units	RL	Sample
Total Solids	06/15/10 061510#1	EPA 160.3	Percent	0.01	52.00
Preserved Total Solids	06/16/10 061610#1	EPA 160.3	Percent	0.01	54.10
Sulfide	06/14/10 061410#1	EPA 376.2	mg/kg	35.0	562
Total Organic Carbon	06/16/10 061610#1	Plumb, 1981	Percent	0.020	1.38

RL Analytical reporting limit
U Undetected at reported detection limit

SAMPLE RESULTS-CONVENTIONALS
RA31-Science Applications, Intl.



Matrix: Sediment
Data Release Authorized: 
Reported: 06/23/10

Project: Fidalgo Bay/ Custom Plywood
Event: NA
Date Sampled: 06/09/10
Date Received: 06/11/10

Client ID: SDS-CPD-04
ARI ID: 10-14130 RA31D

Analyte	Date	Method	Units	RL	Sample
Total Solids	06/15/10 061510#1	EPA 160.3	Percent	0.01	52.00
Preserved Total Solids	06/16/10 061610#1	EPA 160.3	Percent	0.01	60.50
Sulfide	06/14/10 061410#1	EPA 376.2	mg/kg	34.2	326
Total Organic Carbon	06/16/10 061610#1	Plumb,1981	Percent	0.020	0.848

RL Analytical reporting limit
U Undetected at reported detection limit

SAMPLE RESULTS-CONVENTIONALS
RA31-Science Applications, Intl.



Matrix: Sediment
Data Release Authorized: 
Reported: 06/23/10

Project: Fidalgo Bay/ Custom Plywood
Event: NA
Date Sampled: 06/09/10
Date Received: 06/11/10

Client ID: SDS-CPD-07
ARI ID: 10-14131 RA31E

Analyte	Date	Method	Units	RL	Sample
Total Solids	06/15/10 061510#1	EPA 160.3	Percent	0.01	48.20
Preserved Total Solids	06/16/10 061610#1	EPA 160.3	Percent	0.01	53.10
Sulfide	06/14/10 061410#1	EPA 376.2	mg/kg	37.7	606
Total Organic Carbon	06/16/10 061610#1	Plumb,1981	Percent	0.020	1.24

RL Analytical reporting limit
U Undetected at reported detection limit

SAMPLE RESULTS-CONVENTIONALS
RA31-Science Applications, Intl.



Matrix: Sediment
Data Release Authorized:
Reported: 06/23/10

A handwritten signature in black ink, appearing to be 'M. J.' or similar, written over the 'Data Release Authorized:' text.

Project: Fidalgo Bay/ Custom Plywood
Event: NA
Date Sampled: 06/09/10
Date Received: 06/11/10

Client ID: SDS-CPD-08
ARI ID: 10-14132 RA31F

Analyte	Date	Method	Units	RL	Sample
Total Solids	06/15/10 061510#1	EPA 160.3	Percent	0.01	53.60
Preserved Total Solids	06/16/10 061610#1	EPA 160.3	Percent	0.01	60.00
Sulfide	06/14/10 061410#1	EPA 376.2	mg/kg	33.7	382
Total Organic Carbon	06/16/10 061610#1	Plumb,1981	Percent	0.020	1.12

RL Analytical reporting limit
U Undetected at reported detection limit

SAMPLE RESULTS-CONVENTIONALS
RA31-Science Applications, Intl.



Matrix: Sediment
Data Release Authorized: 
Reported: 06/23/10

Project: Fidalgo Bay/ Custom Plywood
Event: NA
Date Sampled: 06/09/10
Date Received: 06/11/10

Client ID: SDS-CPD-08-D
ARI ID: 10-14133 RA31G

Analyte	Date	Method	Units	RL	Sample
Total Solids	06/15/10 061510#1	EPA 160.3	Percent	0.01	54.70
Preserved Total Solids	06/16/10 061610#1	EPA 160.3	Percent	0.01	59.70
Sulfide	06/14/10 061410#1	EPA 376.2	mg/kg	32.1	317
Total Organic Carbon	06/16/10 061610#1	Plumb,1981	Percent	0.020	1.27

RL Analytical reporting limit
U Undetected at reported detection limit

SAMPLE RESULTS-CONVENTIONALS
RA31-Science Applications, Intl.



Matrix: Sediment
Data Release Authorized:
Reported: 06/23/10

A handwritten signature in black ink, appearing to be 'M. J.', written over the 'Data Release Authorized' text.

Project: Fidalgo Bay/ Custom Plywood
Event: NA
Date Sampled: 06/09/10
Date Received: 06/11/10

Client ID: SDS-CPD-08-T
ARI ID: 10-14134 RA31H

Analyte	Date	Method	Units	RL	Sample
Total Solids	06/15/10 061510#1	EPA 160.3	Percent	0.01	55.40
Preserved Total Solids	06/16/10 061610#1	EPA 160.3	Percent	0.01	61.10
Sulfide	06/14/10 061410#1	EPA 376.2	mg/kg	36.9	335
Total Organic Carbon	06/16/10 061610#1	Plumb,1981	Percent	0.020	0.447

RL Analytical reporting limit
U Undetected at reported detection limit

SAMPLE RESULTS-CONVENTIONALS
RA31-Science Applications, Intl.



Matrix: Sediment
Data Release Authorized
Reported: 06/23/10

A handwritten signature in black ink, appearing to be a stylized name, located to the right of the matrix information.

Project: Fidalgo Bay/ Custom Plywood
Event: NA
Date Sampled: 06/09/10
Date Received: 06/11/10

Client ID: SDS-CPD-10
ARI ID: 10-14135 RA31I

Analyte	Date	Method	Units	RL	Sample
Total Solids	06/15/10 061510#1	EPA 160.3	Percent	0.01	45.80
Preserved Total Solids	06/16/10 061610#1	EPA 160.3	Percent	0.01	49.90
Sulfide	06/14/10 061410#1	EPA 376.2	mg/kg	40.2	407
Total Organic Carbon	06/16/10 061610#1	Plumb,1981	Percent	0.020	1.91

RL Analytical reporting limit
U Undetected at reported detection limit

SAMPLE RESULTS-CONVENTIONALS
RA31-Science Applications, Intl.



Matrix: Sediment
Data Release Authorized
Reported: 06/23/10

A handwritten signature in black ink, appearing to be 'JL' or similar, written over the 'Data Release Authorized' text.

Project: Fidalgo Bay/ Custom Plywood
Event: NA
Date Sampled: 06/09/10
Date Received: 06/11/10

Client ID: SDS-CPD-13
ARI ID: 10-14136 RA31J

Analyte	Date	Method	Units	RL	Sample
Total Solids	06/15/10 061510#1	EPA 160.3	Percent	0.01	49.20
Preserved Total Solids	06/16/10 061610#1	EPA 160.3	Percent	0.01	55.50
Sulfide	06/14/10 061410#1	EPA 376.2	mg/kg	34.8	391
Total Organic Carbon	06/16/10 061610#1	Plumb,1981	Percent	0.020	1.60

RL Analytical reporting limit
U Undetected at reported detection limit

SAMPLE RESULTS-CONVENTIONALS
RA31-Science Applications, Intl.



Matrix: Sediment
Data Release Authorized: *[Signature]*
Reported: 06/23/10

Project: Fidalgo Bay/ Custom Plywood
Event: NA
Date Sampled: 06/09/10
Date Received: 06/11/10

Client ID: SDS-CPD-16
ARI ID: 10-14137 RA31K

Analyte	Date	Method	Units	RL	Sample
Total Solids	06/15/10 061510#1	EPA 160.3	Percent	0.01	41.20
Preserved Total Solids	06/16/10 061610#1	EPA 160.3	Percent	0.01	48.00
Sulfide	06/14/10 061410#1	EPA 376.2	mg/kg	108	845
Total Organic Carbon	06/16/10 061610#1	Plumb,1981	Percent	0.020	1.66

RL Analytical reporting limit
U Undetected at reported detection limit

SAMPLE RESULTS-CONVENTIONALS
RA31-Science Applications, Intl.



Matrix: Sediment
Data Release Authorized
Reported: 06/23/10

A handwritten signature in black ink, appearing to be 'M' or 'J', written over the 'Data Release Authorized' text.

Project: Fidalgo Bay/ Custom Plywood
Event: NA
Date Sampled: 06/09/10
Date Received: 06/11/10

Client ID: SDS-CPD-17
ARI ID: 10-14138 RA31L

Analyte	Date	Method	Units	RL	Sample
Total Solids	06/15/10 061510#1	EPA 160.3	Percent	0.01	47.20
Preserved Total Solids	06/16/10 061610#1	EPA 160.3	Percent	0.01	52.20
Sulfide	06/14/10 061410#1	EPA 376.2	mg/kg	36.9	515
Total Organic Carbon	06/17/10 061710#1	Plumb,1981	Percent	0.020	0.893

RL Analytical reporting limit
U Undetected at reported detection limit

SAMPLE RESULTS-CONVENTIONALS
RA31-Science Applications, Intl.



Matrix: Sediment
Data Release Authorized:
Reported: 06/23/10

A handwritten signature in black ink, appearing to be 'WJ' or similar, written over the 'Data Release Authorized' line.

Project: Fidalgo Bay/ Custom Plywood
Event: NA
Date Sampled: 06/09/10
Date Received: 06/11/10

Client ID: SDS-CPD-18
ARI ID: 10-14139 RA31M

Analyte	Date	Method	Units	RL	Sample
Total Solids	06/15/10 061510#1	EPA 160.3	Percent	0.01	47.80
Preserved Total Solids	06/16/10 061610#1	EPA 160.3	Percent	0.01	54.80
Sulfide	06/14/10 061410#1	EPA 376.2	mg/kg	38.7	475
Total Organic Carbon	06/17/10 061710#1	Plumb,1981	Percent	0.020	1.36

RL Analytical reporting limit
U Undetected at reported detection limit

SAMPLE RESULTS-CONVENTIONALS
RA31-Science Applications, Intl.



Matrix: Sediment
Data Release Authorized:
Reported: 06/23/10

A handwritten signature in black ink, appearing to be 'M. J.', written over the 'Data Release Authorized' text.

Project: Fidalgo Bay/ Custom Plywood
Event: NA
Date Sampled: 06/09/10
Date Received: 06/11/10

Client ID: SDS-CPD-19
ARI ID: 10-14140 RA31N

Analyte	Date	Method	Units	RL	Sample
Total Solids	06/15/10 061510#1	EPA 160.3	Percent	0.01	45.60
Preserved Total Solids	06/16/10 061610#1	EPA 160.3	Percent	0.01	52.40
Sulfide	06/14/10 061410#1	EPA 376.2	mg/kg	93.2	861
Total Organic Carbon	06/17/10 061710#1	Plumb,1981	Percent	0.020	1.29

RL Analytical reporting limit
U Undetected at reported detection limit

SAMPLE RESULTS-CONVENTIONALS
RA31-Science Applications, Intl.



Matrix: Sediment
Data Release Authorized: 
Reported: 06/23/10

Project: Fidalgo Bay/ Custom Plywood
Event: NA
Date Sampled: 06/09/10
Date Received: 06/11/10

Client ID: SDS-CPD-20
ARI ID: 10-14141 RA310

Analyte	Date	Method	Units	RL	Sample
Total Solids	06/15/10 061510#1	EPA 160.3	Percent	0.01	51.30
Preserved Total Solids	06/16/10 061610#1	EPA 160.3	Percent	0.01	59.80
Sulfide	06/14/10 061410#1	EPA 376.2	mg/kg	32.4	529
Total Organic Carbon	06/17/10 061710#1	Plumb,1981	Percent	0.020	0.391

RL Analytical reporting limit
U Undetected at reported detection limit

SAMPLE RESULTS-CONVENTIONALS
RA31-Science Applications, Intl.



Matrix: Sediment
Data Release Authorized:
Reported: 06/23/10

A handwritten signature in black ink, appearing to be 'M. K.', written over the 'Data Release Authorized' text.

Project: Fidalgo Bay/ Custom Plywood
Event: NA
Date Sampled: 06/09/10
Date Received: 06/11/10

Client ID: SDS-CPD-21
ARI ID: 10-14142 RA31P

Analyte	Date	Method	Units	RL	Sample
Total Solids	06/15/10 061510#1	EPA 160.3	Percent	0.01	45.50
Preserved Total Solids	06/16/10 061610#1	EPA 160.3	Percent	0.01	51.10
Sulfide	06/14/10 061410#1	EPA 376.2	mg/kg	38.4	721
Total Organic Carbon	06/17/10 061710#1	Plumb, 1981	Percent	0.020	1.24

RL Analytical reporting limit
U Undetected at reported detection limit

MS/MSD RESULTS-CONVENTIONALS
RA31-Science Applications, Intl.



Matrix: Sediment
Data Release Authorized:
Reported: 06/23/10

A handwritten signature in black ink, appearing to be 'JL' or similar, written over the 'Data Release Authorized' text.

Project: Fidalgo Bay/ Custom Plywood
Event: NA
Date Sampled: 06/09/10
Date Received: 06/11/10

Analyte	Date	Units	Sample	Spike	Spike Added	Recovery
ARI ID: RA31A Client ID: SDS-CPD-01						
Sulfide	06/14/10	mg/kg	508	606	246	39.8%
Total Organic Carbon	06/17/10	Percent	0.937	2.27	1.15	115.6%

REPLICATE RESULTS-CONVENTIONALS
RA31-Science Applications, Intl.



Matrix: Sediment
Data Release Authorized: 
Reported: 06/23/10

Project: Fidalgo Bay/ Custom Plywood
Event: NA
Date Sampled: 06/09/10
Date Received: 06/11/10

Analyte	Date	Units	Sample	Replicate(s)	RPD/RSD
ARI ID: RA31A Client ID: SDS-CPD-01					
Total Solids	06/15/10	Percent	55.50	55.60 55.70	0.2%
Preserved Total Solids	06/16/10	Percent	61.60	61.60	0.0%
Sulfide	06/14/10	mg/kg	508	430	16.6%
Total Organic Carbon	06/17/10	Percent	0.937	0.924 0.847	5.4%

LAB CONTROL RESULTS-CONVENTIONALS
RA31-Science Applications, Intl.



Matrix: Sediment
Data Release Authorized: *[Signature]*
Reported: 06/23/10

Project: Fidalgo Bay/ Custom Plywood
Event: NA
Date Sampled: NA
Date Received: NA

Analyte/Method	QC ID	Date	Units	LCS	Spike Added	Recovery
Sulfide EPA 376.2	PREP	06/14/10	mg/kg	6.55	7.96	82.3%
Total Organic Carbon	ICVL	06/16/10	Percent	0.091	0.100	91.0%
Plumb, 1981	ICVL	06/17/10		0.094	0.100	94.0%

METHOD BLANK RESULTS-CONVENTIONALS
RA31-Science Applications, Intl.



Matrix: Sediment
Data Release Authorized:
Reported: 06/23/10

A handwritten signature in black ink, appearing to be 'WJ' or similar, written over the 'Data Release Authorized:' line.

Project: Fidalgo Bay/ Custom Plywood
Event: NA
Date Sampled: NA
Date Received: NA

Analyte	Date	Units	Blank
Total Solids	06/15/10	Percent	< 0.01 U
Preserved Total Solids	06/16/10	Percent	< 0.01 U
Sulfide	06/14/10	mg/kg	< 1.00 U
Total Organic Carbon	06/16/10 06/17/10	Percent	< 0.020 U < 0.020 U

STANDARD REFERENCE RESULTS-CONVENTIONALS
RA31-Science Applications, Intl.



Matrix: Sediment
Data Release Authorized:
Reported: 06/23/10

A handwritten signature in black ink, appearing to be 'W. J. ...', written over the 'Data Release Authorized' text.

Project: Fidalgo Bay/ Custom Plywood
Event: NA
Date Sampled: NA
Date Received: NA

Analyte/SRM ID	Date	Units	SRM	True Value	Recovery
Total Organic Carbon	06/16/10	Percent	3.04	3.35	90.7%
NIST #8704	06/17/10		3.10	3.35	92.5%

Geotechnical Analysis

ARI Job ID: RA17, RA18, RA23, RA31

**Geotechnical Analysis
Report and Summary QC Forms**

ARI Job ID: RA17, RA18, RA23, RA31

Science Applications, Intl.

Fidalgo Bay/Custom Plywood Dioxin

Apparent Grain Size Distribution Summary
Percent Finer Than Indicated Size

Sample No.	Gravel			Very Coarse Sand	Coarse Sand	Medium Sand	Fine Sand	Very Fine Sand	Silt				Clay		
	Phi Size	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10
Sieve Size (microns)	3/8"	#4 (4750)	#10 (2000)	#18 (1000)	#35 (500)	#60 (250)	#120 (125)	#230 (63)		31.00	15.60	7.80	3.90	2.00	1.00
SDS-CPD-14	100.0	100.0	99.5	99.3	99.0	98.4	97.3	91.7	62.7	37.8	24.9	18.8	14.8	10.5	
	100.0	100.0	99.9	99.8	99.4	98.8	97.8	92.7	59.6	36.0	24.4	18.3	14.6	10.2	
	100.0	100.0	99.5	99.3	99.0	98.4	97.3	92.2	57.1	34.2	22.9	17.1	13.4	9.5	
SDS-PB-01	100.0	99.9	99.8	99.3	96.4	77.1	31.1	14.3	8.6	6.4	5.2	4.3	3.6	2.8	
SDS-PB-02	100.0	100.0	99.7	95.5	63.4	10.9	1.9	1.8	NA	NA	NA	NA	NA	NA	
SDS-PB-03	100.0	100.0	99.9	99.1	97.9	94.8	84.7	68.0	49.0	33.9	25.6	20.0	15.5	11.1	
SDS-PB-04	100.0	99.7	98.1	91.9	63.8	7.8	2.1	2.0	NA	NA	NA	NA	NA	NA	
SDS-PB-05	100.0	100.0	100.0	99.8	99.3	97.3	74.3	25.7	16.7	12.4	9.9	8.0	6.4	4.3	
SDS-PB-05-D	100.0	100.0	100.0	99.8	99.2	97.0	73.9	25.8	16.6	12.6	10.0	8.2	6.4	4.6	
SDS-PB-05-T	100.0	100.0	100.0	99.8	99.2	97.0	74.9	26.5	17.3	12.9	10.5	8.4	6.8	4.8	
SDS-PB-06	100.0	99.5	98.4	92.8	63.1	6.8	1.5	1.4	NA	NA	NA	NA	NA	NA	
SDS-PB-07	100.0	99.9	99.8	95.2	80.9	52.9	14.7	7.5	5.8	4.5	3.7	3.0	2.4	1.7	

Notes to the Testing:

- Organic matter was not removed prior to testing, thus the reported values are the "apparent" grain size distribution. See narrative for discussion of the testing.

Science Applications, Intl.

Fidalgo Bay/Custom Plywood Dioxin

Apparent Grain Size Distribution Summary
Percent Retained in Each Size Fraction

Sample No.	Gravel	Very Coarse Sand	Coarse Sand	Medium Sand	Fine Sand	Very Fine Sand	Coarse Silt	Medium Silt	Fine Silt	Very Fine Silt	Clay			Total Fines
Phi Size	> -1	-1 to 0	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	< 10	<4
Sieve Size (microns)	> #10 (2000)	10 to 18 (2000-1000)	18-35 (1000-500)	35-60 (500-250)	60-120 (250-125)	120-230 (125-62)	62.5-31.0	31.0-15.6	15.6-7.8	7.8-3.9	3.9-2.0	2.0-1.0	<1.0	<230 (<62)
SDS-CPD-14	0.5	0.2	0.3	0.6	1.1	5.7	29.0	24.9	12.9	6.1	4.1	4.3	10.5	91.7
	0.1	0.1	0.3	0.6	1.0	5.1	33.1	23.6	11.6	6.1	3.7	4.5	10.2	92.7
	0.5	0.2	0.3	0.6	1.1	5.1	35.1	22.8	11.3	5.8	3.8	3.8	9.5	92.2
SDS-PB-01	0.2	0.4	2.9	19.2	46.0	16.8	5.7	2.2	1.3	0.8	0.7	0.8	2.8	14.3
SDS-PB-02	0.3	4.2	32.1	52.5	9.0	0.2	NA	NA	NA	NA	NA	NA	NA	1.8
SDS-PB-03	0.1	0.9	1.1	3.1	10.1	16.8	18.9	15.1	8.3	5.6	4.5	4.5	11.1	68.0
SDS-PB-04	1.9	6.1	28.1	56.0	5.7	0.1	NA	NA	NA	NA	NA	NA	NA	2.0
SDS-PB-05	0.0	0.2	0.5	1.9	23.1	48.6	9.0	4.3	2.6	1.9	1.6	2.1	4.3	25.7
SDS-PB-05-D	0.0	0.2	0.6	2.2	23.0	48.2	9.2	4.0	2.6	1.8	1.7	1.9	4.6	25.8
SDS-PB-05-T	0.0	0.2	0.6	2.2	22.0	48.4	9.2	4.4	2.5	2.0	1.6	2.0	4.8	26.5
SDS-PB-06	1.6	5.6	29.7	56.3	5.3	0.1	NA	NA	NA	NA	NA	NA	NA	1.4
SDS-PB-07	0.2	4.7	14.3	28.0	38.3	7.2	1.7	1.2	0.9	0.7	0.6	0.7	1.7	7.5

Notes to the Testing:

1. Organic matter was not removed prior to testing, thus the reported values are the "apparent" grain size distribution. See narrative for discussion of the testing.

QA SUMMARY

Client:	Science Applications, Intl.	Client Project:	Fidalgo Bay/Custom Plywood Dioxin
ARI Trip. Sample ID:	RA23F	Batch No.:	RA17-1
Client Trip. Sample ID:	SDS-CPD-14	Page:	1 of 1

Relative Standard Deviation, By Phi Size

Sample ID	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10
SDS-CPD-14	100.0	100.0	99.5	99.3	99.0	98.4	97.3	91.7	62.7	37.8	24.9	18.8	14.8	10.5
	100.0	100.0	99.9	99.8	99.4	98.8	97.8	92.7	59.6	36.0	24.4	18.3	14.6	10.2
	100.0	100.0	99.5	99.3	99.0	98.4	97.3	92.2	57.1	34.2	22.9	17.1	13.4	9.5
AVE	NA	100.00	99.62	99.44	99.12	98.54	97.49	92.19	59.78	35.99	24.07	18.09	14.25	10.08
STDEV	NA	0.00	0.22	0.28	0.27	0.26	0.29	0.53	2.80	1.77	1.05	0.88	0.78	0.48
%RSD	NA	0.00	0.22	0.28	0.27	0.26	0.30	0.58	4.68	4.91	4.37	4.86	5.46	4.78

The Triplicate Applies To The Following Samples

Client ID	Date Sampled	Date Extracted	Date Complete	QA Ratio (95-105)	Data Qualifiers	Pipette Portion (5.0-25.0g)
SDS-CPD-14	6/10/2010	6/21/2010	6/22/2010	103.9		13.1
	6/10/2010	6/21/2010	6/22/2010	101.0		11.8
	6/10/2010	6/21/2010	6/22/2010	95.3		12.9
SDS-PB-01	6/7/2010	6/21/2010	6/22/2010	100.7		10.5
SDS-PB-02	6/7/2010	6/21/2010	6/22/2010	100.8	SS	2.1
SDS-PB-03	6/7/2010	6/21/2010	6/22/2010	100.6		13.5
SDS-PB-04	6/7/2010	6/21/2010	6/22/2010	101.0	SS	2.2
SDS-PB-05	6/7/2010	6/21/2010	6/22/2010	100.4		15.8
SDS-PB-05-D	6/7/2010	6/21/2010	6/22/2010	99.3		6.6
SDS-PB-05-T	6/7/2010	6/21/2010	6/22/2010	100.3		7.1
SDS-PB-06	6/7/2010	6/21/2010	6/22/2010	100.2	SS	1.2
SDS-PB-07	6/7/2010	6/21/2010	6/22/2010	100.1		8.2

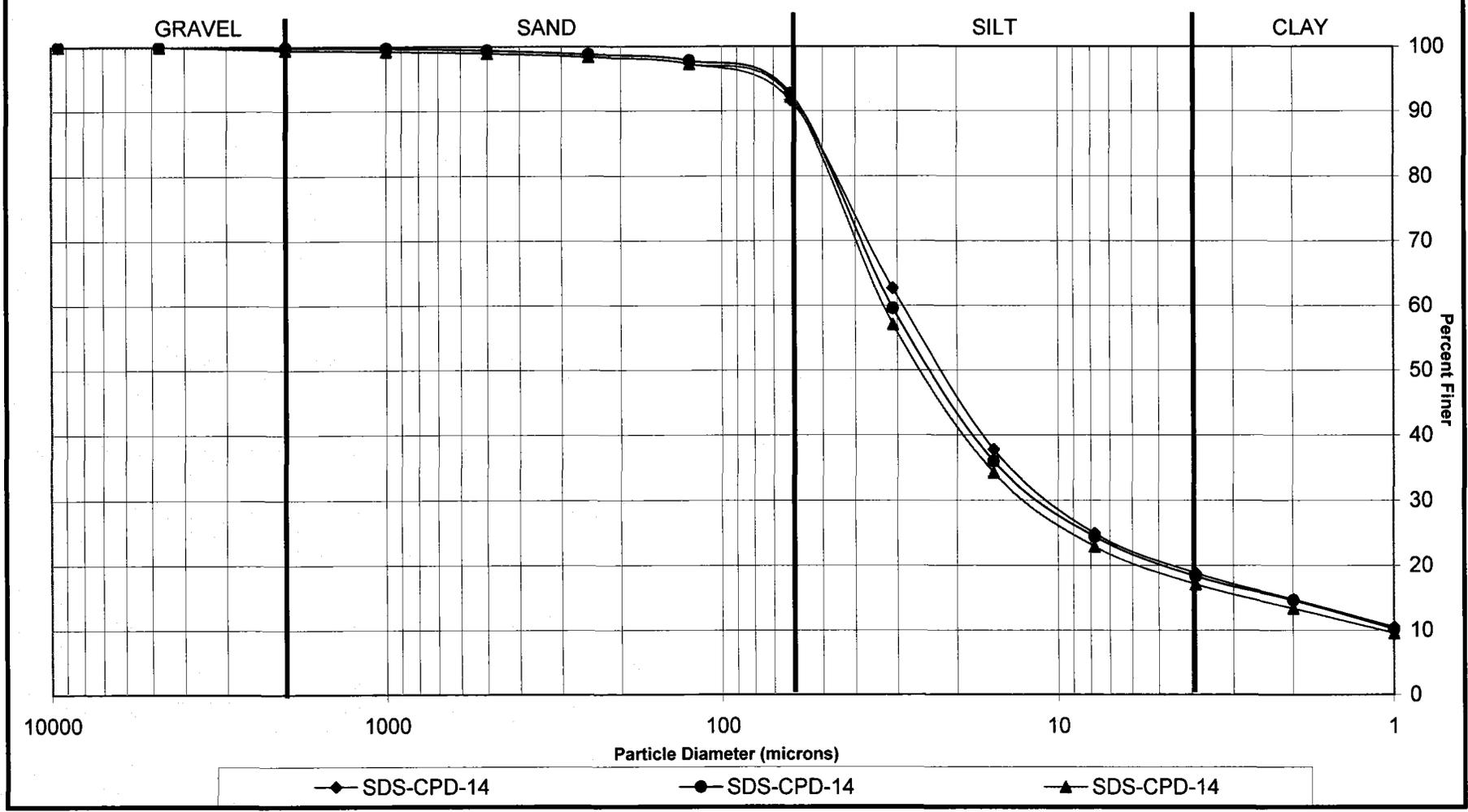
* ARI Internal QA limits = 95-105%

Notes to the Testing:

- Organic matter was not removed prior to testing, thus the reported values are the "apparent" grain size distribution. See narrative for discussion of the testing.

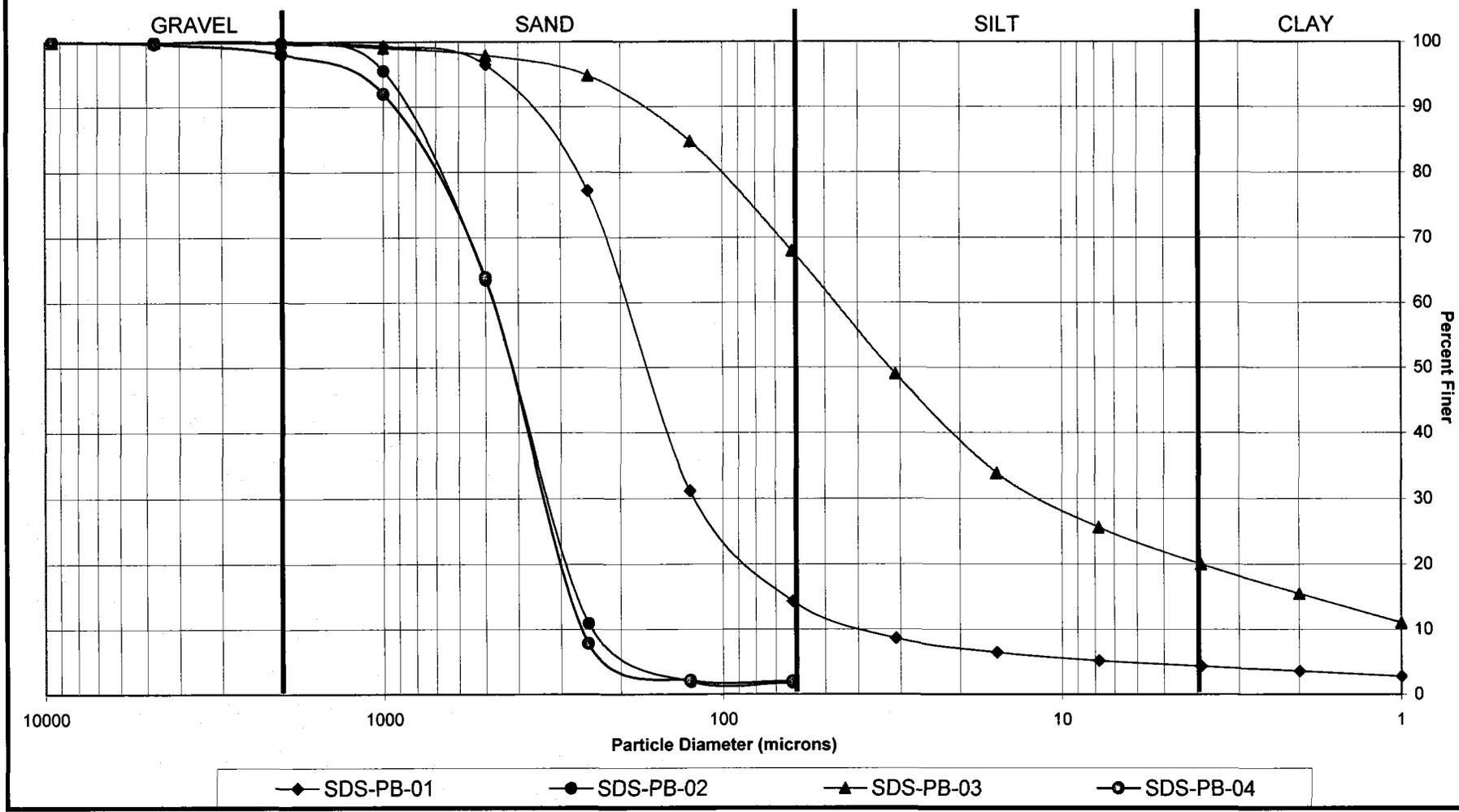
PSEP Grain Size Distribution

Triplicate Sample Plot

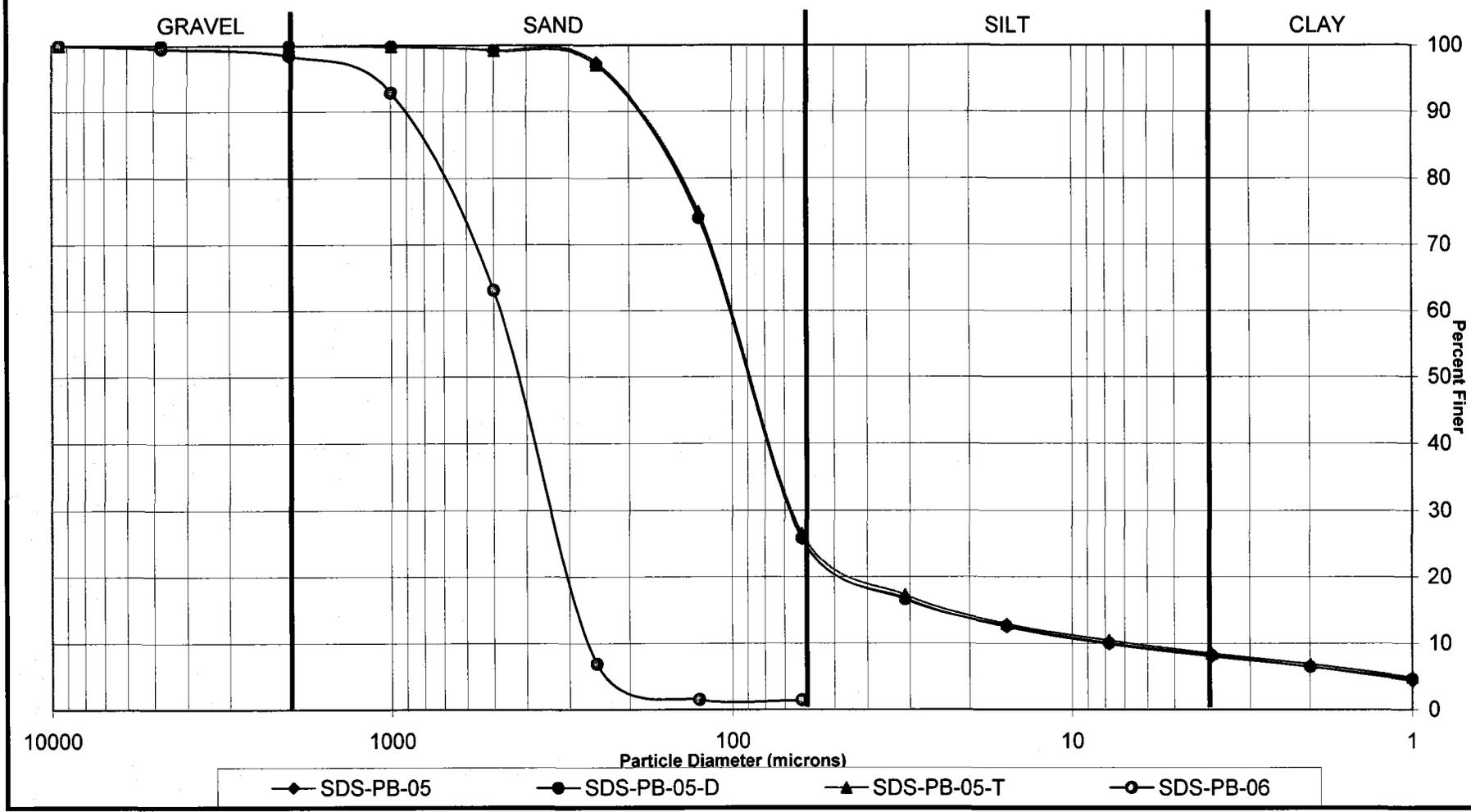


RA17:00096

PSEP Grain Size Distribution

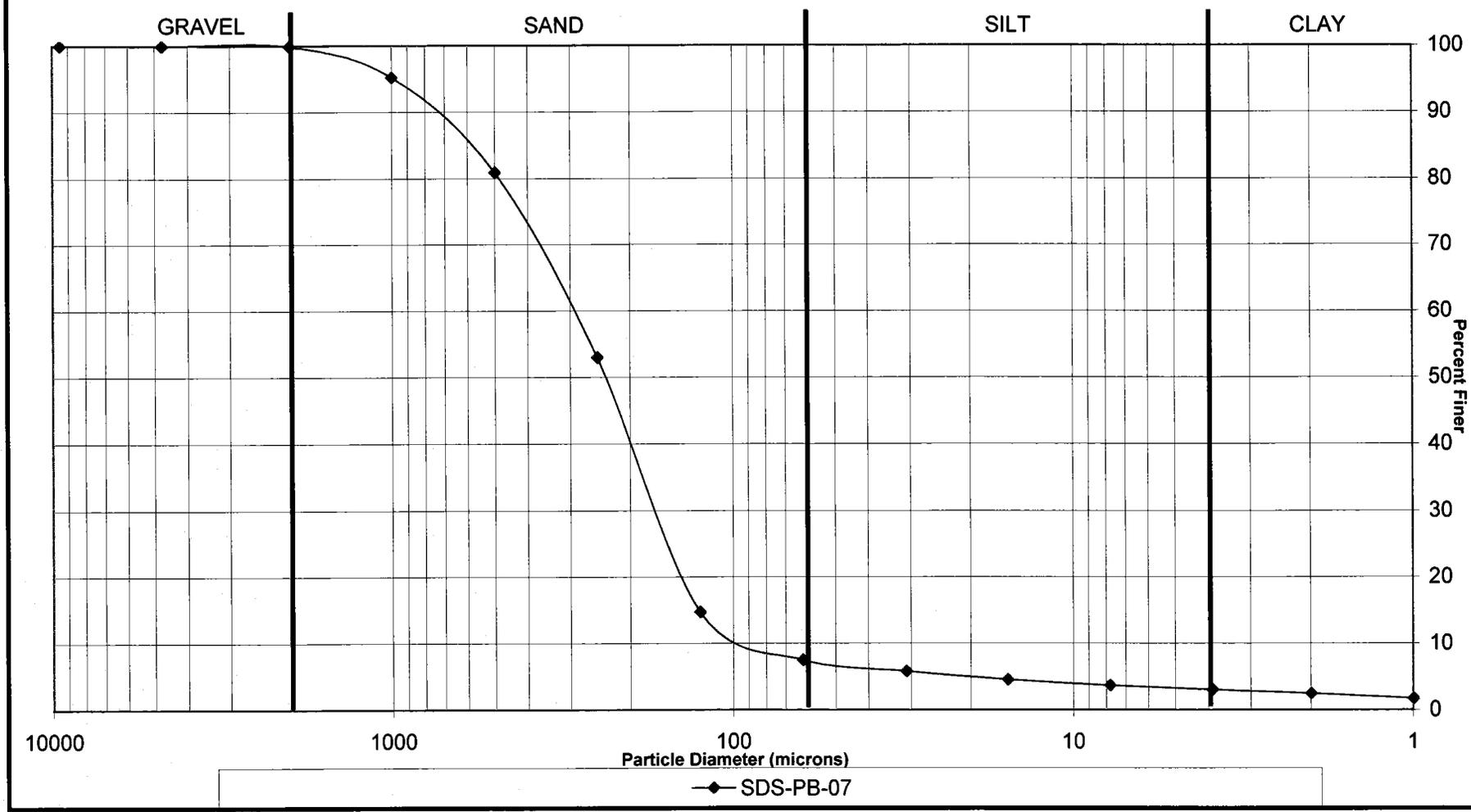


PSEP Grain Size Distribution



RA17:00098

PSEP Grain Size Distribution



RA17:00099

Science Applications, Intl.

Fidalgo/Padilla Bay

Apparent Grain Size Distribution Summary
Percent Finer Than Indicated Size

Sample No.	Gravel			Very Coarse Sand	Coarse Sand	Medium Sand	Fine Sand	Very Fine Sand	Silt				Clay	
	-3	-2	-1						0	1	2	3	4	5
Phi Size	3/8"	#4 (4750)	#10 (2000)	#18 (1000)	#35 (500)	#60 (250)	#120 (125)	#230 (63)	31.00	15.60	7.80	3.90	2.00	1.00
SDS-PB-10	100.0	100.0	100.0	99.3	98.0	96.2	86.8	57.1	36.8	25.0	18.3	13.9	10.5	7.1
	100.0	100.0	100.0	99.3	98.2	96.6	86.4	56.7	37.3	25.1	18.5	13.8	10.6	7.2
	100.0	100.0	100.0	99.4	98.3	96.6	85.7	55.3	36.7	24.5	18.2	13.8	10.4	7.1
SDS-PB-08	100.0	100.0	99.9	99.2	98.1	96.1	64.9	26.8	15.2	10.7	8.3	6.6	5.3	3.8
SDS-PB-09	100.0	99.5	92.3	74.6	42.2	9.8	4.9	3.9	NA	NA	NA	NA	NA	NA
SDS-FB-01	100.0	100.0	99.8	98.8	96.9	89.3	19.4	7.2	5.7	4.8	4.0	3.4	2.9	2.2
SDS-FB-02	100.0	100.0	100.0	99.8	99.0	86.9	18.8	6.0	4.9	4.1	3.5	2.9	2.4	1.7
SDS-FB-03	100.0	99.2	97.9	95.8	92.3	73.0	18.6	9.8	8.5	6.8	5.6	4.5	3.5	2.3
SDS-FB-04	100.0	100.0	99.9	99.6	98.9	97.6	83.1	42.9	27.7	19.5	14.3	11.4	9.0	6.4
SDS-FB-05	100.0	100.0	100.0	99.8	99.3	93.0	31.2	17.2	13.3	10.4	8.3	6.7	5.3	3.5
SDS-FB-06	100.0	98.9	96.3	94.6	92.6	74.9	19.5	10.8	8.4	6.7	5.5	4.5	3.6	2.4
SDS-FB-07	100.0	99.4	99.3	98.9	98.3	97.3	89.3	53.2	34.2	22.9	16.2	12.4	9.7	6.8
SDS-FB-07-D	100.0	100.0	100.0	99.6	98.9	97.8	88.9	52.0	34.9	22.8	16.4	12.4	9.5	6.7
SDS-FB-07-T	100.0	99.6	99.6	99.2	98.6	97.8	90.3	53.8	35.3	23.1	16.5	12.5	9.6	6.7
SDS-FB-08	100.0	100.0	99.8	99.4	98.6	97.1	74.9	40.9	27.3	20.1	15.6	12.1	9.5	6.5
SDS-FB-09	100.0	100.0	99.9	99.6	98.8	97.7	93.4	62.6	36.3	21.8	15.4	11.6	9.3	6.5
SDS-FB-10	100.0	98.5	98.5	98.2	97.8	96.9	94.6	85.5	61.9	39.7	27.0	20.4	15.7	11.1

Notes to the Testing:

- Organic matter was not removed prior to testing, thus the reported values are the "apparent" grain size distribution. See narrative for discussion of the testing.

RA18

RA17:00100

Science Applications, Intl.

Fidalgo/Padilla Bay

Apparent Grain Size Distribution Summary
Percent Retained in Each Size Fraction

Sample No.	Gravel	Very Coarse Sand	Coarse Sand	Medium Sand	Fine Sand	Very Fine Sand	Coarse Silt	Medium Silt	Fine Silt	Very Fine Silt	Clay			Total Fines
Phi Size	> -1	-1 to 0	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	< 10	<4
Sieve Size (microns)	> #10 (2000)	10 to 18 (2000-1000)	18-35 (1000-500)	35-60 (500-250)	60-120 (250-125)	120-230 (125-62)	62.5-31.0	31.0-15.6	15.6-7.8	7.8-3.9	3.9-2.0	2.0-1.0	<1.0	<230 (<62)
SDS-PB-10	0.0	0.7	1.3	1.8	9.5	29.6	20.3	11.8	6.7	4.5	3.4	3.3	7.1	57.1
	0.0	0.7	1.1	1.6	10.2	29.8	19.4	12.2	6.6	4.6	3.3	3.3	7.2	56.7
	0.0	0.6	1.1	1.6	10.9	30.4	18.6	12.2	6.3	4.4	3.4	3.3	7.1	55.3
SDS-PB-08	0.1	0.7	1.0	2.0	31.2	38.1	11.6	4.5	2.4	1.7	1.4	1.5	3.8	26.8
SDS-PB-09	7.7	17.8	32.3	32.5	4.9	1.0	NA	NA	NA	NA	NA	NA	NA	3.9
SDS-FB-01	0.2	0.9	1.9	7.6	69.9	12.2	1.5	0.9	0.7	0.6	0.5	0.7	2.2	7.2
SDS-FB-02	0.0	0.1	0.8	12.1	68.1	12.8	1.2	0.7	0.7	0.6	0.5	0.6	1.7	6.0
SDS-FB-03	2.1	2.0	3.5	19.3	54.4	8.8	1.3	1.8	1.2	1.1	1.0	1.1	2.3	9.8
SDS-FB-04	0.1	0.4	0.7	1.2	14.5	40.2	15.3	8.2	5.1	2.9	2.4	2.7	6.4	42.9
SDS-FB-05	0.0	0.2	0.5	6.3	61.7	14.0	3.9	3.0	2.1	1.5	1.4	1.8	3.5	17.2
SDS-FB-06	3.7	1.7	2.0	17.7	55.4	8.7	2.4	1.6	1.2	1.0	0.9	1.2	2.4	10.8
SDS-FB-07	0.7	0.5	0.6	1.0	8.0	36.1	19.0	11.3	6.7	3.7	2.7	2.9	6.8	53.2
SDS-FB-07-D	0.0	0.4	0.6	1.1	9.0	36.9	17.1	12.1	6.4	4.0	2.9	2.8	6.7	52.0
SDS-FB-07-T	0.4	0.4	0.6	0.8	7.5	36.5	18.5	12.2	6.6	4.0	3.0	2.9	6.7	53.8
SDS-FB-08	0.2	0.4	0.8	1.5	22.2	34.0	13.7	7.2	4.6	3.5	2.6	3.0	6.5	40.9
SDS-FB-09	0.1	0.3	0.8	1.1	4.3	30.8	26.3	14.5	6.3	3.8	2.3	2.8	6.5	62.6
SDS-FB-10	1.5	0.3	0.4	0.9	2.2	9.1	23.6	22.2	12.7	6.6	4.6	4.6	11.1	85.5

Notes to the Testing:

1. Organic matter was not removed prior to testing, thus the reported values are the "apparent" grain size distribution. See narrative for discussion of the testing.

QA SUMMARY

Client:	Science Applications, Intl.	Client Project:	Fidalgo/Padilla Bay
ARI Trip. Sample ID:	RA18C	Batch No.:	RA18-1
Client Trip. Sample ID:	SDS-PB-10	Page:	1 of 1

Relative Standard Deviation, By Phi Size

Sample ID	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10
SDS-PB-10	100.0	100.0	100.0	99.3	98.0	96.2	86.8	57.1	36.8	25.0	18.3	13.9	10.5	7.1
	100.0	100.0	100.0	99.3	98.2	96.6	86.4	56.7	37.3	25.1	18.5	13.8	10.6	7.2
	100.0	100.0	100.0	99.4	98.3	96.6	85.7	55.3	36.7	24.5	18.2	13.8	10.4	7.1
AVE	NA	100.00	99.98	99.32	98.15	96.50	86.30	56.37	36.92	24.87	18.34	13.83	10.48	7.17
STDEV	NA	0.00	0.03	0.04	0.15	0.24	0.53	0.95	0.33	0.30	0.12	0.04	0.07	0.05
%RSD	NA	0.00	0.03	0.04	0.15	0.25	0.62	1.68	0.89	1.22	0.66	0.26	0.63	0.68

The Triplicate Applies To The Following Samples

Client ID	Date Sampled	Date Extracted	Date Complete	QA Ratio (95-105)	Data Qualifiers	Pipette Portion (5.0-25.0g)
SDS-PB-10	6/8/2010	6/17/2010	6/18/2010	98.7		14.9
	6/8/2010	6/17/2010	6/18/2010	101.6		14.4
	6/8/2010	6/17/2010	6/18/2010	99.9		13.9
SDS-PB-08	6/8/2010	6/17/2010	6/18/2010	98.4		8.1
SDS-PB-09	6/8/2010	6/17/2010	6/18/2010	101.8	SS	3.8
SDS-FB-01	6/8/2010	6/17/2010	6/18/2010	99.6		5.2
SDS-FB-02	6/8/2010	6/17/2010	6/18/2010	100.0		6.7
SDS-FB-03	6/8/2010	6/17/2010	6/18/2010	99.1		7.1
SDS-FB-04	6/8/2010	6/17/2010	6/18/2010	100.1		14.7
SDS-FB-05	6/8/2010	6/17/2010	6/18/2010	99.4		8.6
SDS-FB-06	6/8/2010	6/17/2010	6/18/2010	99.6		7.5
SDS-FB-07	6/8/2010	6/17/2010	6/18/2010	99.5		16.0
SDS-FB-07-D	6/8/2010	6/17/2010	6/18/2010	99.5		17.4
SDS-FB-07-T	6/8/2010	6/17/2010	6/18/2010	98.3		17.0
SDS-FB-08	6/8/2010	6/17/2010	6/18/2010	100.3		13.2
SDS-FB-09	6/8/2010	6/17/2010	6/18/2010	99.7		20.5
SDS-FB-10	6/8/2010	6/17/2010	6/18/2010	99.9		23.3

* ARI Internal QA limits = 95-105%

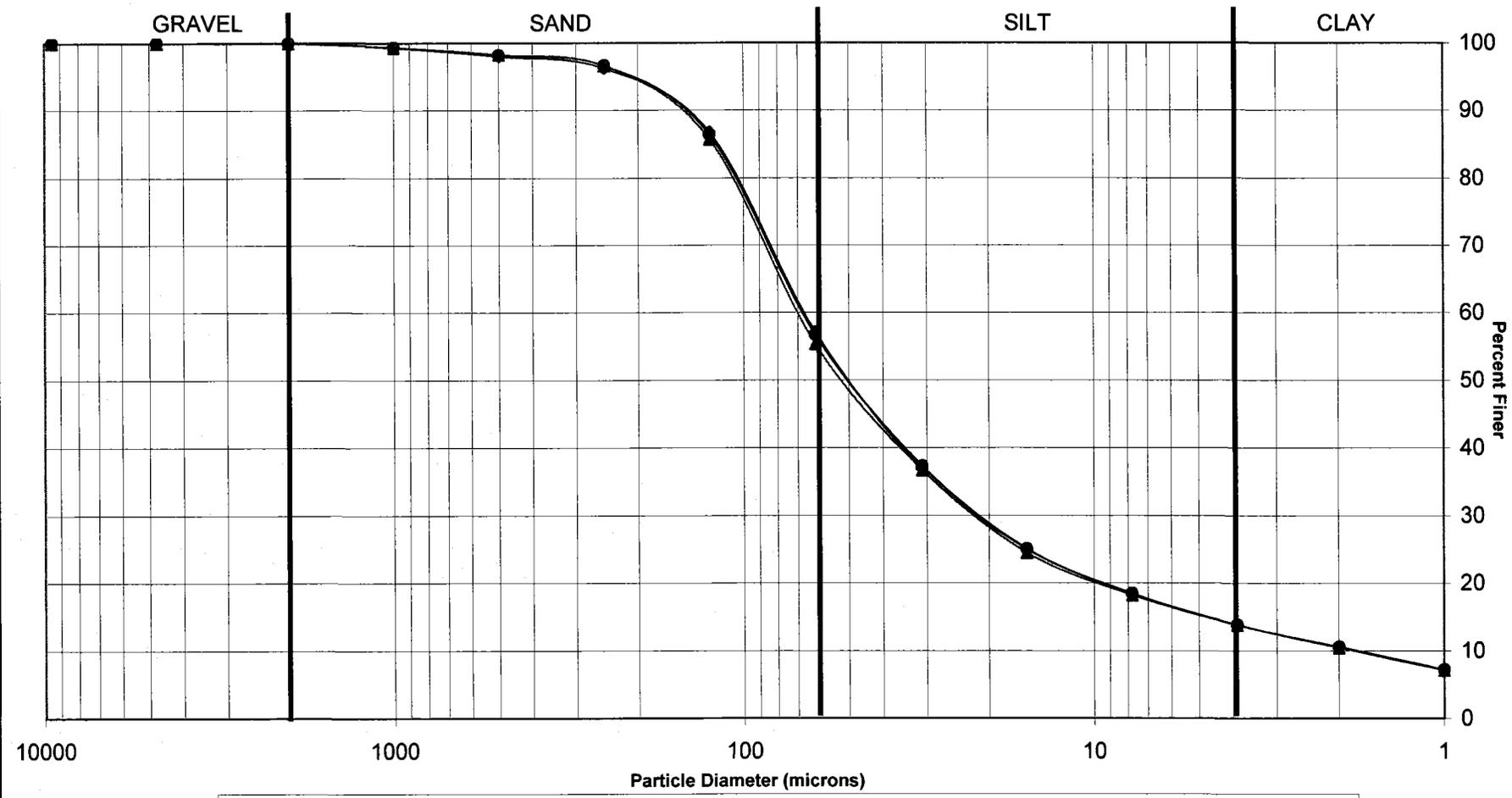
Notes to the Testing:

1. Organic matter was not removed prior to testing, thus the reported values are the "apparent" grain size distribution. See narrative for discussion of the testing.

RA17:00102

PSEP Grain Size Distribution

Triplicate Sample Plot



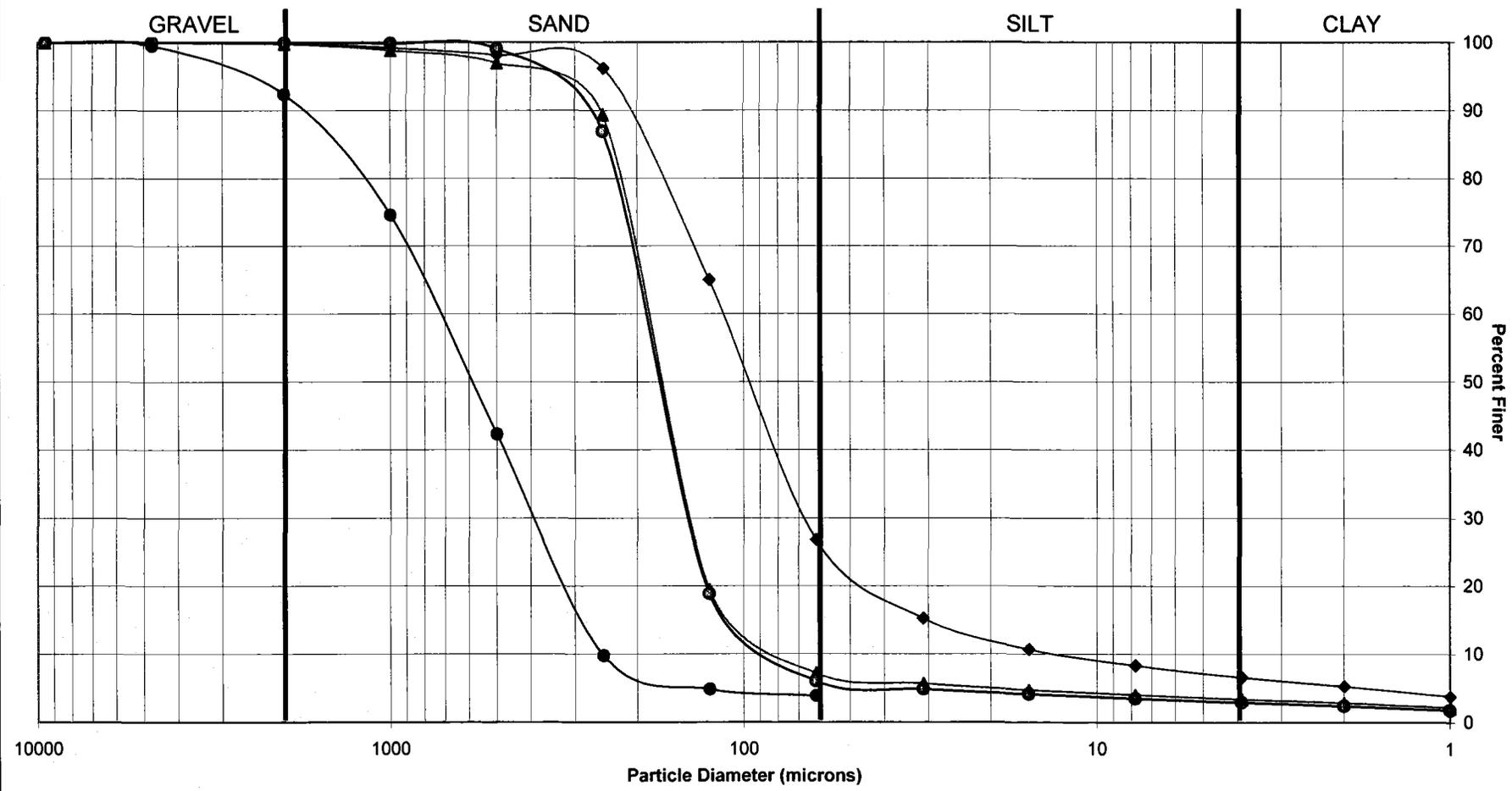
RA17:00103

—●— SDS-PB-10

—●— SDS-PB-10

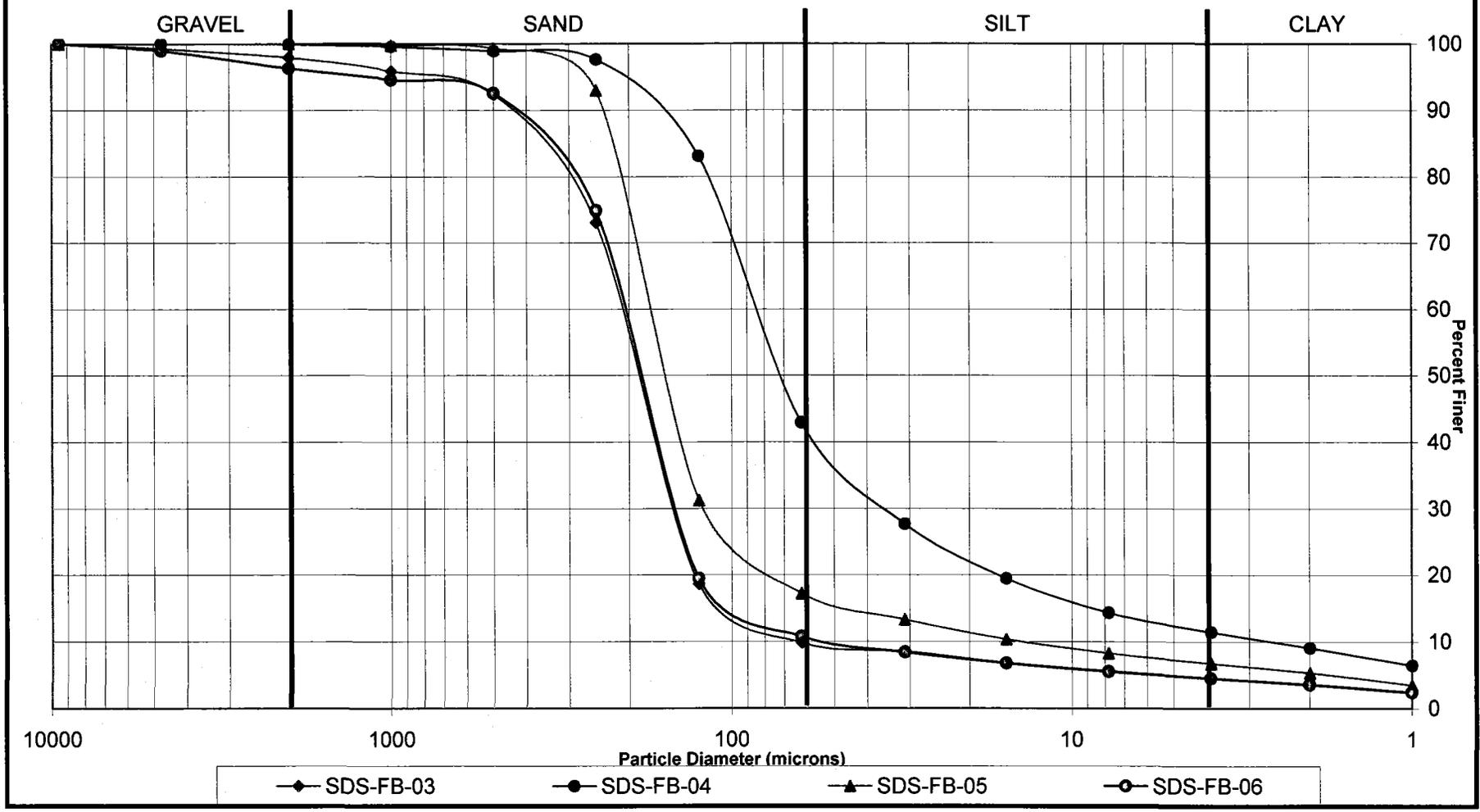
—▲— SDS-PB-10

PSEP Grain Size Distribution



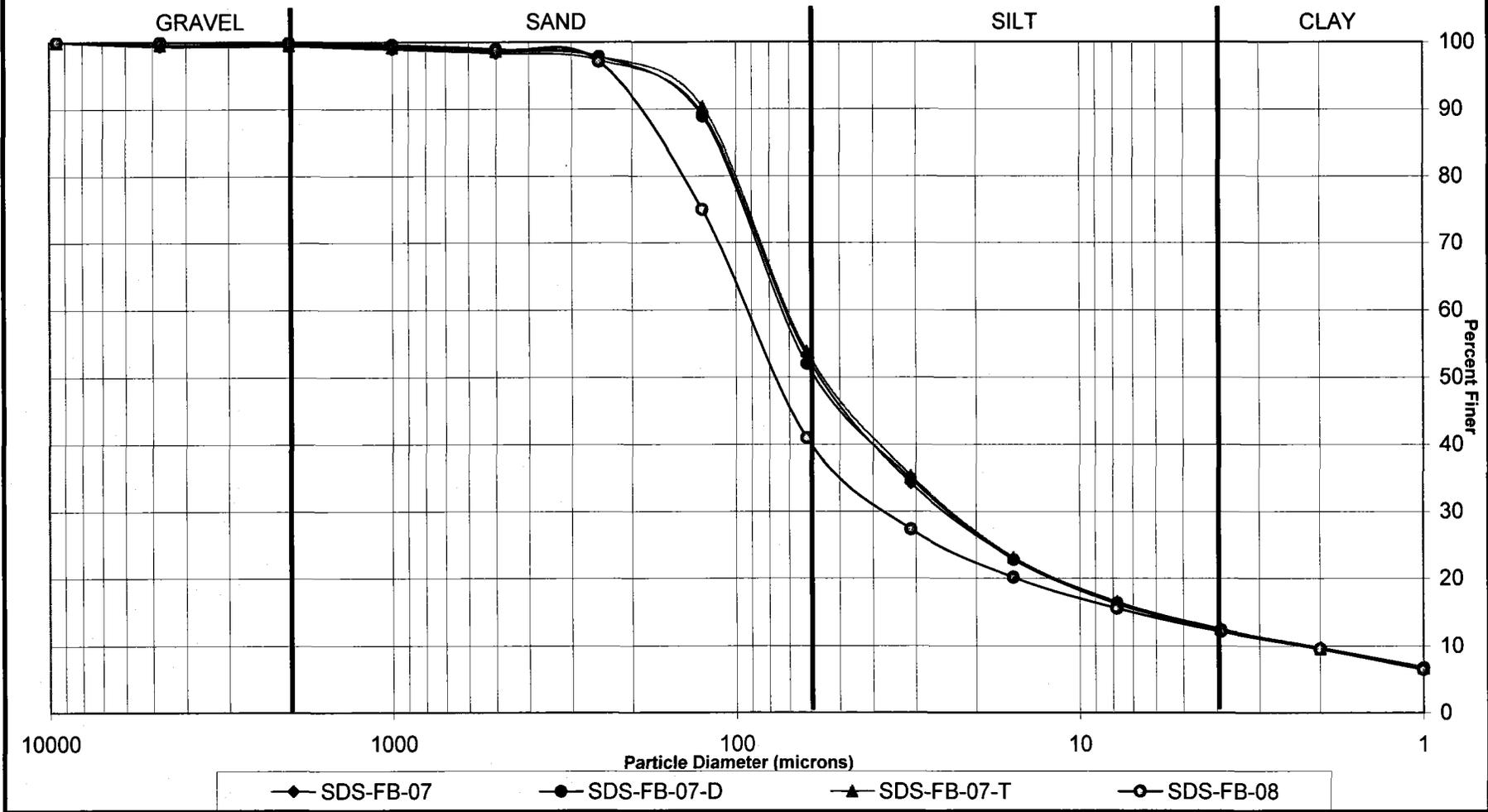
RA17:00104

PSEP Grain Size Distribution



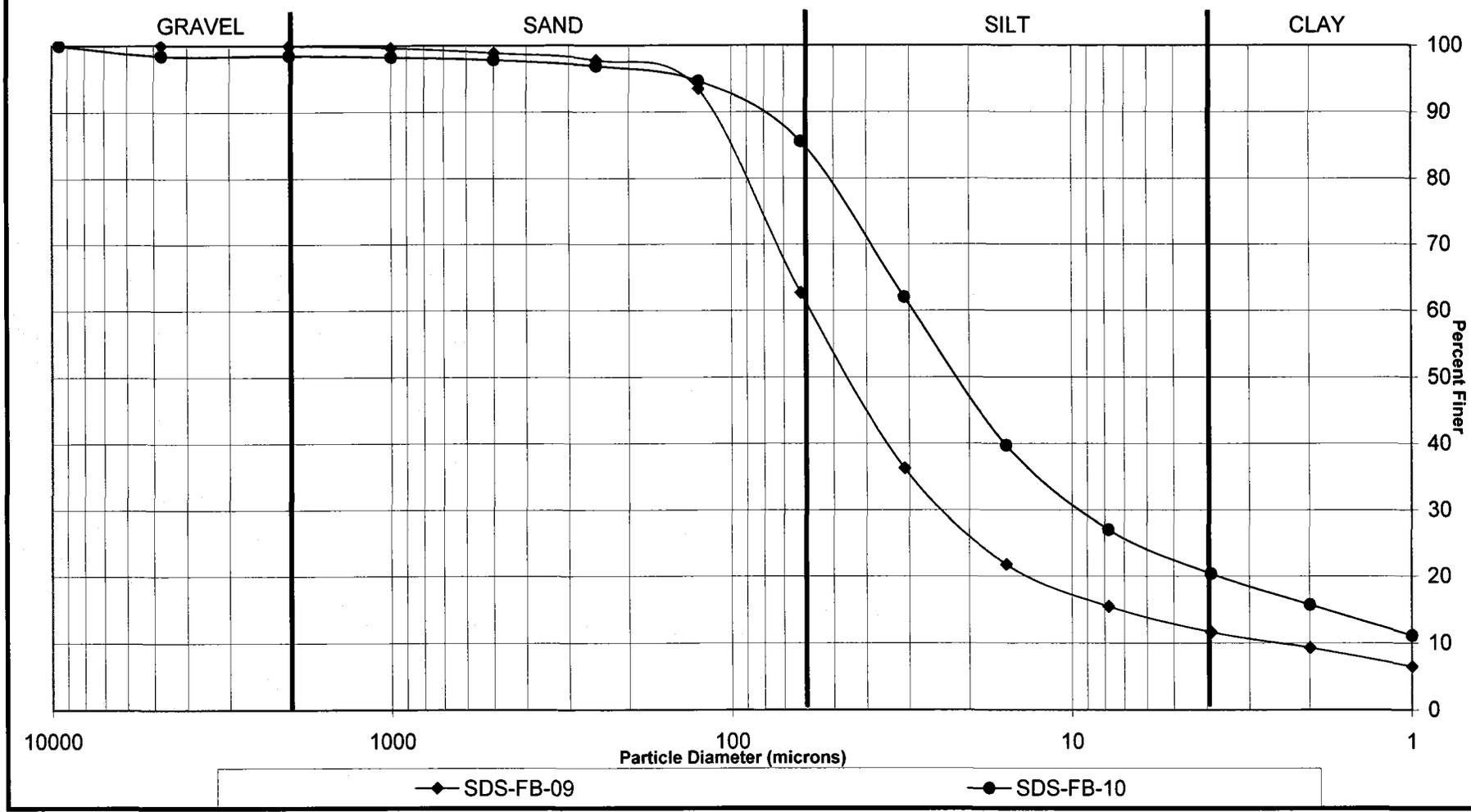
RA17:00105

PSEP Grain Size Distribution



RA17:00106

PSEP Grain Size Distribution



RA17:00107

Science Applications, Intl.

Fidalgo Bay/Custom Plywood Dioxin

Apparent Grain Size Distribution Summary
Percent Finer Than Indicated Size

Sample No.	Gravel			Very Coarse Sand	Coarse Sand	Medium Sand	Fine Sand	Very Fine Sand	Silt				Clay	
	Phi Size	Phi Size	Phi Size						Phi Size					
	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10
Sieve Size (microns)	3/8"	#4 (4750)	#10 (2000)	#18 (1000)	#35 (500)	#60 (250)	#120 (125)	#230 (63)	31.00	15.60	7.80	3.90	2.00	1.00
SDS-CPD-14	100.0	100.0	99.5	99.3	99.0	98.4	97.3	91.7	62.7	37.8	24.9	18.8	14.8	10.5
	100.0	100.0	99.9	99.8	99.4	98.8	97.8	92.7	59.6	36.0	24.4	18.3	14.6	10.2
	100.0	100.0	99.5	99.3	99.0	98.4	97.3	92.2	57.1	34.2	22.9	17.1	13.4	9.5
SDS-CPD-05	100.0	98.9	98.8	98.7	98.4	97.9	96.4	81.3	46.1	28.2	19.2	14.8	11.7	8.4
SDS-CPD-06	100.0	100.0	99.9	99.7	99.1	98.5	96.5	78.8	47.4	29.6	19.9	15.3	12.1	8.6
SDS-CPD-09	100.0	100.0	99.6	99.2	97.2	96.2	94.5	78.9	46.7	29.5	19.8	15.6	12.2	8.6
SDS-CPD-11	100.0	98.7	98.3	98.0	97.4	96.7	95.3	81.5	52.0	31.8	21.1	16.2	12.6	8.9
SDS-CPD-12	100.0	97.0	96.6	96.3	95.4	94.4	92.0	73.9	42.8	26.0	17.1	13.4	10.8	7.8
SDS-CPD-15	100.0	100.0	99.7	99.1	98.2	97.1	95.0	81.3	48.7	29.7	19.6	15.1	12.1	8.8

Notes to the Testing:

1. Organic matter was not removed prior to testing, thus the reported values are the "apparent" grain size distribution. See narrative for discussion of the testing.

RA23

RA17:00108

Science Applications, Intl.

Fidalgo Bay/Custom Plywood Dioxin

Apparent Grain Size Distribution Summary
Percent Retained in Each Size Fraction

Sample No.	Gravel	Very Coarse Sand	Coarse Sand	Medium Sand	Fine Sand	Very Fine Sand	Coarse Silt	Medium Silt	Fine Silt	Very Fine Silt	Clay			Total Fines
Phi Size	> -1	-1 to 0	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	< 10	<4
Sieve Size (microns)	> #10 (2000)	10 to 18 (2000-1000)	18-35 (1000-500)	35-60 (500-250)	60-120 (250-125)	120-230 (125-62)	62.5-31.0	31.0-15.6	15.6-7.8	7.8-3.9	3.9-2.0	2.0-1.0	<1.0	<230 (<62)
SDS-CPD-14	0.5	0.2	0.3	0.6	1.1	5.7	29.0	24.9	12.9	6.1	4.1	4.3	10.5	91.7
	0.1	0.1	0.3	0.6	1.0	5.1	33.1	23.6	11.6	6.1	3.7	4.5	10.2	92.7
	0.5	0.2	0.3	0.6	1.1	5.1	35.1	22.8	11.3	5.8	3.8	3.8	9.5	92.2
SDS-CPD-05	1.2	0.1	0.2	0.6	1.5	15.1	35.2	17.9	9.0	4.4	3.1	3.3	8.4	81.3
SDS-CPD-06	0.1	0.3	0.6	0.6	2.0	17.7	31.4	17.8	9.7	4.6	3.2	3.5	8.6	78.8
SDS-CPD-09	0.4	0.3	2.1	1.0	1.7	15.6	32.2	17.2	9.7	4.3	3.4	3.6	8.6	78.9
SDS-CPD-11	1.7	0.2	0.6	0.7	1.4	13.8	29.5	20.2	10.7	4.9	3.6	3.7	8.9	81.5
SDS-CPD-12	3.4	0.3	0.9	0.9	2.4	18.1	31.1	16.9	8.8	3.8	2.6	3.1	7.8	73.9
SDS-CPD-15	0.3	0.5	0.9	1.1	2.0	13.8	32.6	19.0	10.1	4.5	3.0	3.3	8.8	81.3

Notes to the Testing:

1. Organic matter was not removed prior to testing, thus the reported values are the "apparent" grain size distribution. See narrative for discussion of the testing.

QA SUMMARY

Client:	Science Applications, Intl.	Client Project:	Fidalgo Bay/Custom Plywood Dioxin
ARI Trip. Sample ID:	RA23F	Batch No.:	RA23-1
Client Trip. Sample ID:	SDS-CPD-14	Page:	1 of 1

Relative Standard Deviation, By Phi Size

Sample ID	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10
SDS-CPD-14	100.0	100.0	99.5	99.3	99.0	98.4	97.3	91.7	62.7	37.8	24.9	18.8	14.8	10.5
	100.0	100.0	99.9	99.8	99.4	98.8	97.8	92.7	59.6	36.0	24.4	18.3	14.6	10.2
	100.0	100.0	99.5	99.3	99.0	98.4	97.3	92.2	57.1	34.2	22.9	17.1	13.4	9.5
AVE	NA	100.00	99.62	99.44	99.12	98.54	97.49	92.19	59.78	35.99	24.07	18.09	14.25	10.08
STDEV	NA	0.00	0.22	0.28	0.27	0.26	0.29	0.53	2.80	1.77	1.05	0.88	0.78	0.48
%RSD	NA	0.00	0.22	0.28	0.27	0.26	0.30	0.58	4.68	4.91	4.37	4.86	5.46	4.78

The Triplicate Applies To The Following Samples

Client ID	Date Sampled	Date Extracted	Date Complete	QA Ratio (95-105)	Data Qualifiers	Pipette Portion (5.0-25.0g)
SDS-CPD-14	6/10/2010	6/21/2010	6/22/2010	103.9		13.1
	6/10/2010	6/21/2010	6/22/2010	101.0		11.8
	6/10/2010	6/21/2010	6/22/2010	95.3		12.9
SDS-CPD-05	6/10/2010	6/21/2010	6/22/2010	103.6		19.5
SDS-CPD-06	6/10/2010	6/21/2010	6/22/2010	104.0		17.5
SDS-CPD-09	6/10/2010	6/21/2010	6/22/2010	99.1		14.7
SDS-CPD-11	6/10/2010	6/21/2010	6/22/2010	104.9		19.3
SDS-CPD-12	6/10/2010	6/21/2010	6/22/2010	98.7		15.4
SDS-CPD-15	6/10/2010	6/21/2010	6/22/2010	100.9		18.6

* ARI Internal QA limits = 95-105%

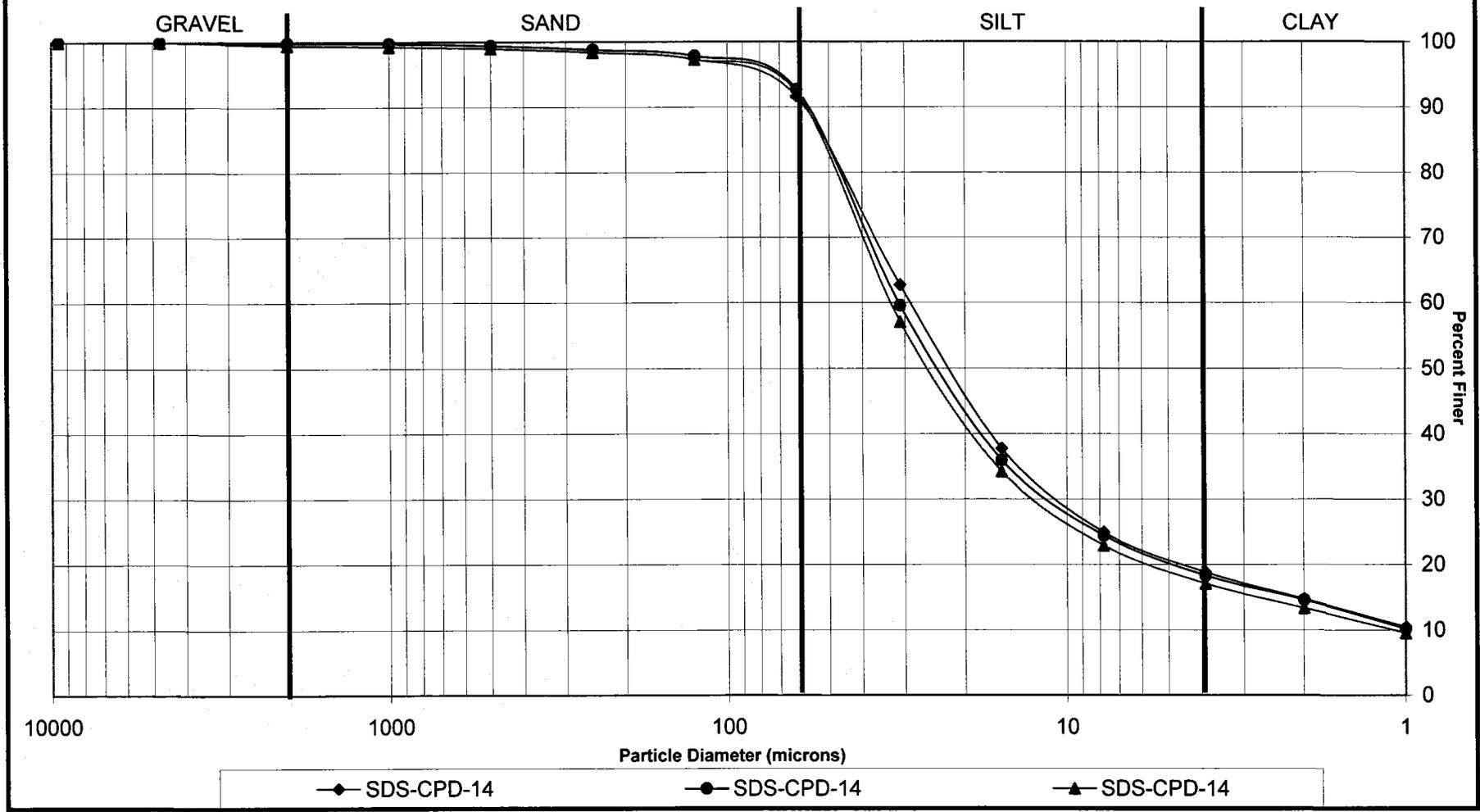
Notes to the Testing:

1. Organic matter was not removed prior to testing, thus the reported values are the "apparent" grain size distribution. See narrative for discussion of the testing.

RA17:00110

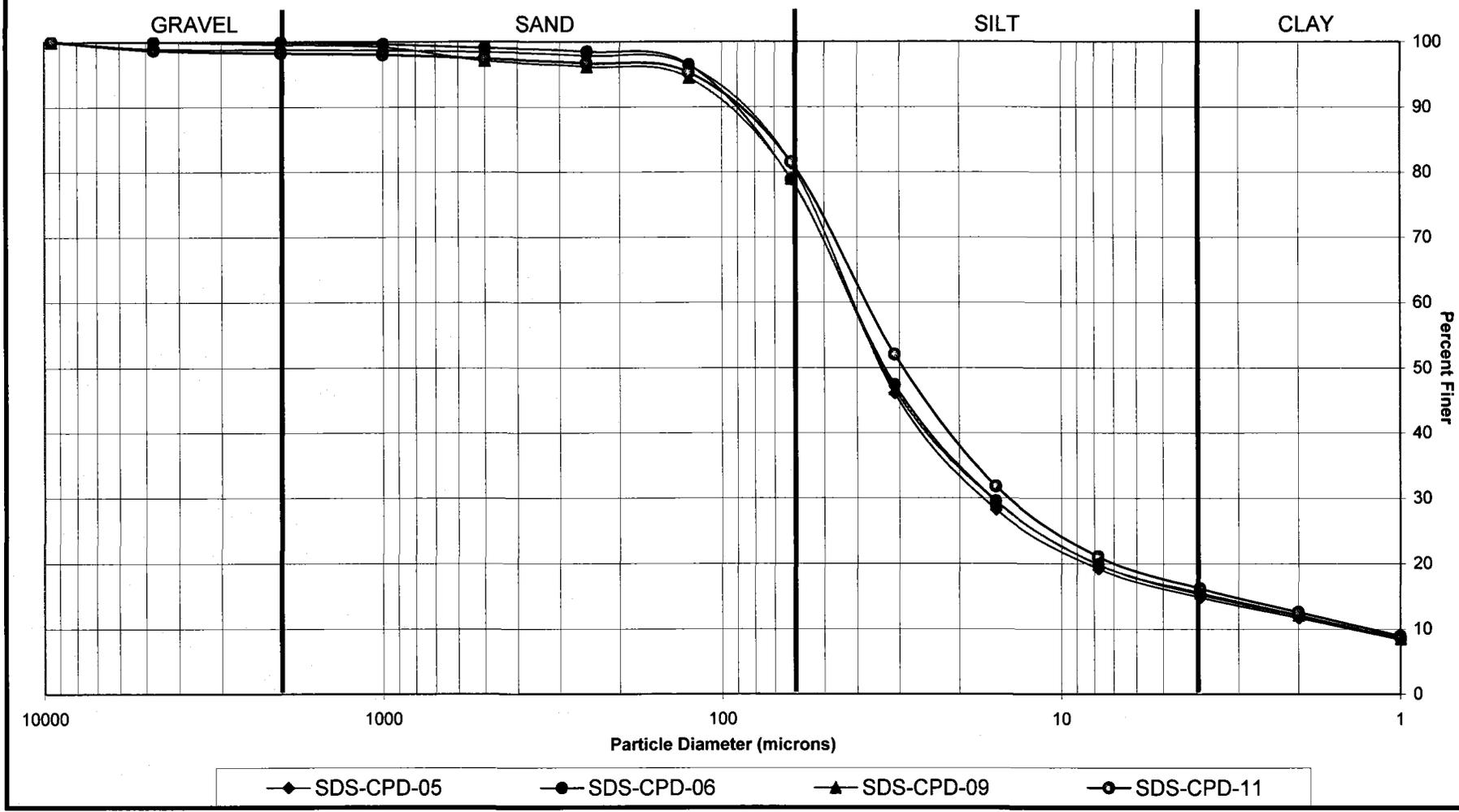
PSEP Grain Size Distribution

Triplicate Sample Plot



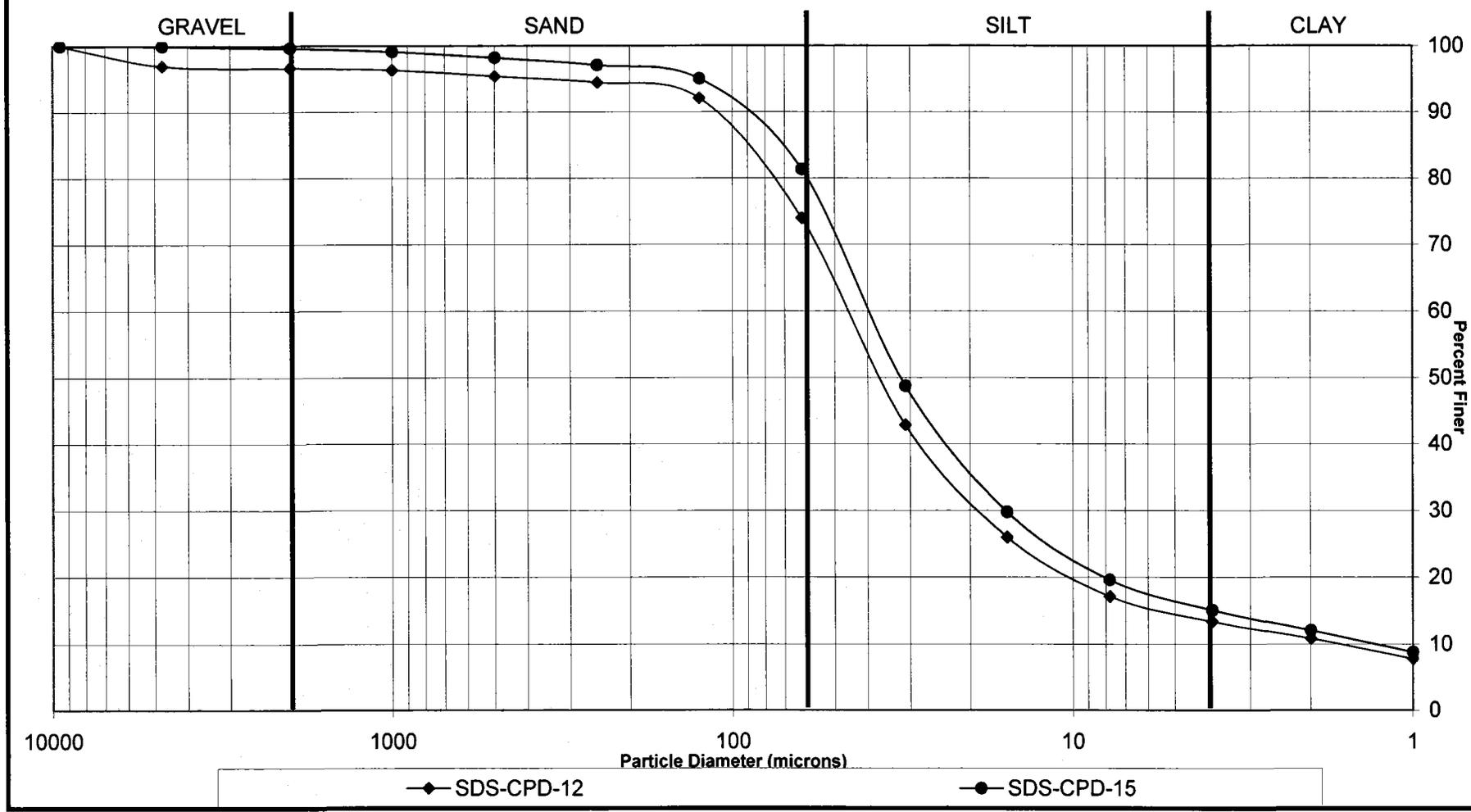
RA17:00111

PSEP Grain Size Distribution



RA17:00112

PSEP Grain Size Distribution



RA17:00113

Science Applications, Intl.

Fidalgo Bay/Custom Plywood Dioxin

Apparent Grain Size Distribution Summary
Percent Finer Than Indicated Size

Sample No.	Gravel			Very Coarse Sand	Coarse Sand	Medium Sand	Fine Sand	Very Fine Sand	Silt				Clay	
	Phi Size	-3	-2	-1	0	1	2	3	4	5	6	7	8	9
Sieve Size (microns)	3/8"	#4 (4750)	#10 (2000)	#18 (1000)	#35 (500)	#60 (250)	#120 (125)	#230 (63)	31.00	15.60	7.80	3.90	2.00	1.00
SDS-CPD-01	100.0	100.0	99.2	99.0	98.7	98.2	97.6	87.3	43.9	25.6	16.9	13.1	10.1	7.1
	100.0	100.0	99.9	99.8	99.6	99.2	98.7	89.7	44.7	27.0	17.8	13.3	10.2	7.0
	100.0	100.0	100.0	99.8	99.6	99.2	98.6	88.6	44.6	26.2	17.6	13.3	10.4	7.2
SDS-CPD-02	100.0	100.0	99.9	99.7	99.4	98.9	98.2	85.3	44.8	26.3	17.7	13.6	10.6	7.5
SDS-CPD-03	100.0	100.0	99.8	99.0	98.0	96.7	94.5	84.0	50.6	31.4	21.0	15.5	11.6	7.7
SDS-CPD-04	100.0	98.9	97.8	97.3	96.3	95.2	93.7	75.0	37.6	21.5	14.0	10.5	7.9	5.6
SDS-CPD-07	100.0	100.0	98.9	97.8	96.3	94.1	91.6	81.7	47.8	30.8	20.7	15.4	11.6	7.9
SDS-CPD-08	100.0	100.0	99.8	99.3	98.4	97.3	95.7	81.0	46.5	28.0	18.9	14.2	11.0	7.8
SDS-CPD-08-D	100.0	100.0	99.7	99.3	98.3	96.9	94.8	79.3	44.1	26.5	17.9	13.6	10.6	7.6
SDS-CPD-08-T	100.0	99.7	99.4	98.9	98.1	97.0	95.5	81.1	44.2	27.8	18.4	14.2	10.8	7.7
SDS-CPD-10	100.0	98.9	97.7	96.3	94.1	91.3	88.6	81.2	54.7	34.3	22.1	16.1	11.8	8.2
SDS-CPD-13	100.0	99.8	98.3	97.4	95.9	93.9	92.0	84.9	49.0	33.1	21.2	14.9	10.8	7.2
SDS-CPD-16	100.0	100.0	99.5	98.7	98.0	97.1	95.4	89.6	58.7	36.3	22.8	15.9	11.6	7.8
SDS-CPD-17	100.0	99.6	99.3	98.0	96.6	92.9	86.2	80.5	52.9	33.2	21.6	15.5	11.5	8.0
SDS-CPD-18	100.0	99.6	99.2	98.5	97.5	95.8	93.0	84.3	51.9	33.7	22.3	16.3	12.0	8.3
SDS-CPD-19	100.0	99.2	99.2	98.6	97.9	97.1	95.5	84.5	57.8	39.4	26.2	18.9	13.8	9.6
SDS-CPD-20	100.0	100.0	100.0	99.6	99.1	98.6	97.0	78.8	54.0	33.4	23.5	17.3	13.3	9.4
SDS-CPD-21	100.0	100.0	99.4	98.3	97.3	96.0	94.1	87.7	55.8	38.9	25.0	17.6	12.9	9.1

Notes to the Testing:

1. Organic matter was not removed prior to testing, thus the reported values are the "apparent" grain size distribution. See narrative for discussion of the testing.

RA31

RA17:00114

Science Applications, Intl.

Fidalgo Bay/Custom Plywood Dioxin

Apparent Grain Size Distribution Summary
Percent Retained in Each Size Fraction

Sample No.	Gravel	Very Coarse Sand	Coarse Sand	Medium Sand	Fine Sand	Very Fine Sand	Coarse Silt	Medium Silt	Fine Silt	Very Fine Silt	Clay			Total Fines
Phi Size	> -1	-1 to 0	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	< 10	<4
Sieve Size (microns)	> #10 (2000)	10 to 18 (2000-1000)	18-35 (1000-500)	35-60 (500-250)	60-120 (250-125)	120-230 (125-62)	62.5-31.0	31.0-15.6	15.6-7.8	7.8-3.9	3.9-2.0	2.0-1.0	<1.0	<230 (<62)
SDS-CPD-01	0.8	0.2	0.3	0.5	0.6	10.3	43.5	18.2	8.7	3.8	3.0	3.1	7.1	87.3
	0.1	0.1	0.2	0.4	0.5	8.9	45.0	17.8	9.2	4.5	3.1	3.2	7.0	89.7
	0.0	0.1	0.3	0.4	0.6	10.0	44.0	18.5	8.5	4.3	3.0	3.2	7.2	88.6
SDS-CPD-02	0.1	0.1	0.4	0.5	0.6	13.0	40.5	18.5	8.5	4.2	3.0	3.1	7.5	85.3
SDS-CPD-03	0.2	0.8	1.0	1.3	2.1	10.5	33.4	19.2	10.4	5.5	4.0	3.9	7.7	84.0
SDS-CPD-04	2.2	0.5	1.0	1.1	1.6	18.7	37.4	16.1	7.5	3.5	2.6	2.3	5.6	75.0
SDS-CPD-07	1.1	1.1	1.6	2.2	2.5	9.9	33.9	17.0	10.2	5.3	3.8	3.7	7.9	81.7
SDS-CPD-08	0.2	0.5	0.9	1.1	1.6	14.6	34.6	18.5	9.2	4.7	3.2	3.2	7.8	81.0
SDS-CPD-08-D	0.3	0.5	1.0	1.4	2.1	15.5	35.1	17.7	8.5	4.3	3.0	3.0	7.6	79.3
SDS-CPD-08-T	0.6	0.4	0.9	1.1	1.5	14.4	36.9	16.4	9.4	4.1	3.4	3.1	7.7	81.1
SDS-CPD-10	2.3	1.5	2.2	2.8	2.7	7.5	26.5	20.4	12.2	6.1	4.3	3.5	8.2	81.2
SDS-CPD-13	1.7	0.9	1.5	2.0	1.9	7.1	35.9	15.9	11.9	6.3	4.1	3.6	7.2	84.9
SDS-CPD-16	0.5	0.8	0.6	1.0	1.7	5.8	30.8	22.4	13.5	6.9	4.3	3.8	7.8	89.6
SDS-CPD-17	0.7	1.2	1.5	3.7	6.7	5.7	27.6	19.6	11.7	6.1	4.0	3.5	8.0	80.5
SDS-CPD-18	0.8	0.7	1.1	1.6	2.9	8.7	32.4	18.1	11.4	6.1	4.3	3.8	8.3	84.3
SDS-CPD-19	0.8	0.6	0.7	0.8	1.6	11.0	26.8	18.3	13.3	7.3	5.1	4.2	9.6	84.5
SDS-CPD-20	0.0	0.4	0.5	0.5	1.6	18.2	24.8	20.6	9.9	6.1	4.0	4.0	9.4	78.8
SDS-CPD-21	0.6	1.1	1.0	1.4	1.8	6.4	32.0	16.9	13.9	7.4	4.7	3.8	9.1	87.7

Notes to the Testing:

1. Organic matter was not removed prior to testing, thus the reported values are the "apparent" grain size distribution. See narrative for discussion of the testing.

QA SUMMARY

Client:	Science Applications, Intl.	Client Project:	Fidalgo Bay/Custom Plywood Dioxin
ARI Trip. Sample ID:	RA31A	Batch No.:	RA31-1
Client Trip. Sample ID:	SDS-CPD-01	Page:	1 of 1

Relative Standard Deviation, By Phi Size

Sample ID	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10
SDS-CPD-01	100.0	100.0	99.2	99.0	98.7	98.2	97.6	87.3	43.9	25.6	16.9	13.1	10.1	7.1
	100.0	100.0	99.9	99.8	99.6	99.2	98.7	89.7	44.7	27.0	17.8	13.3	10.2	7.0
	100.0	100.0	100.0	99.8	99.6	99.2	98.6	88.6	44.6	26.2	17.6	13.3	10.4	7.2
AVE	NA	100.00	99.69	99.56	99.30	98.86	98.28	88.55	44.41	26.25	17.42	13.24	10.22	7.09
STDEV	NA	0.00	0.44	0.47	0.52	0.55	0.58	1.22	0.48	0.66	0.45	0.12	0.13	0.10
%RSD	NA	0.00	0.44	0.47	0.52	0.56	0.59	1.37	1.08	2.52	2.60	0.91	1.24	1.45

The Triplicate Applies To The Following Samples

Client ID	Date Sampled	Date Extracted	Date Complete	QA Ratio (95-105)	Data Qualifiers	Pipette Portion (5.0-25.0g)
SDS-CPD-01	6/9/2010	6/15/2010	6/23/2010	101.0		16.1
	6/9/2010	6/15/2010	6/23/2010	103.7		16.8
	6/9/2010	6/15/2010	6/23/2010	102.0		17.0
SDS-CPD-02	6/9/2010	6/15/2010	6/23/2010	102.8		17.4
SDS-CPD-03	6/9/2010	6/15/2010	6/23/2010	101.5		16.0
SDS-CPD-04	6/9/2010	6/16/2010	6/23/2010	101.2		17.8
SDS-CPD-07	6/9/2010	6/16/2010	6/23/2010	102.0		14.3
SDS-CPD-08	6/9/2010	6/16/2010	6/23/2010	104.6		19.1
SDS-CPD-08-D	6/9/2010	6/16/2010	6/23/2010	99.6		18.7
SDS-CPD-08-T	6/9/2010	6/16/2010	6/23/2010	102.2		20.0
SDS-CPD-10	6/9/2010	6/16/2010	6/23/2010	104.4		17.7
SDS-CPD-13	6/9/2010	6/16/2010	6/23/2010	99.8		17.9
SDS-CPD-16	6/9/2010	6/16/2010	6/23/2010	101.4		17.6
SDS-CPD-17	6/9/2010	6/16/2010	6/23/2010	105.0		17.7
SDS-CPD-18	6/9/2010	6/16/2010	6/23/2010	101.8		17.9
SDS-CPD-19	6/9/2010	6/16/2010	6/23/2010	100.6		17.0
SDS-CPD-20	6/9/2010	6/16/2010	6/24/2010	101.3		17.5
SDS-CPD-21	6/9/2010	6/16/2010	6/23/2010	99.0		16.6

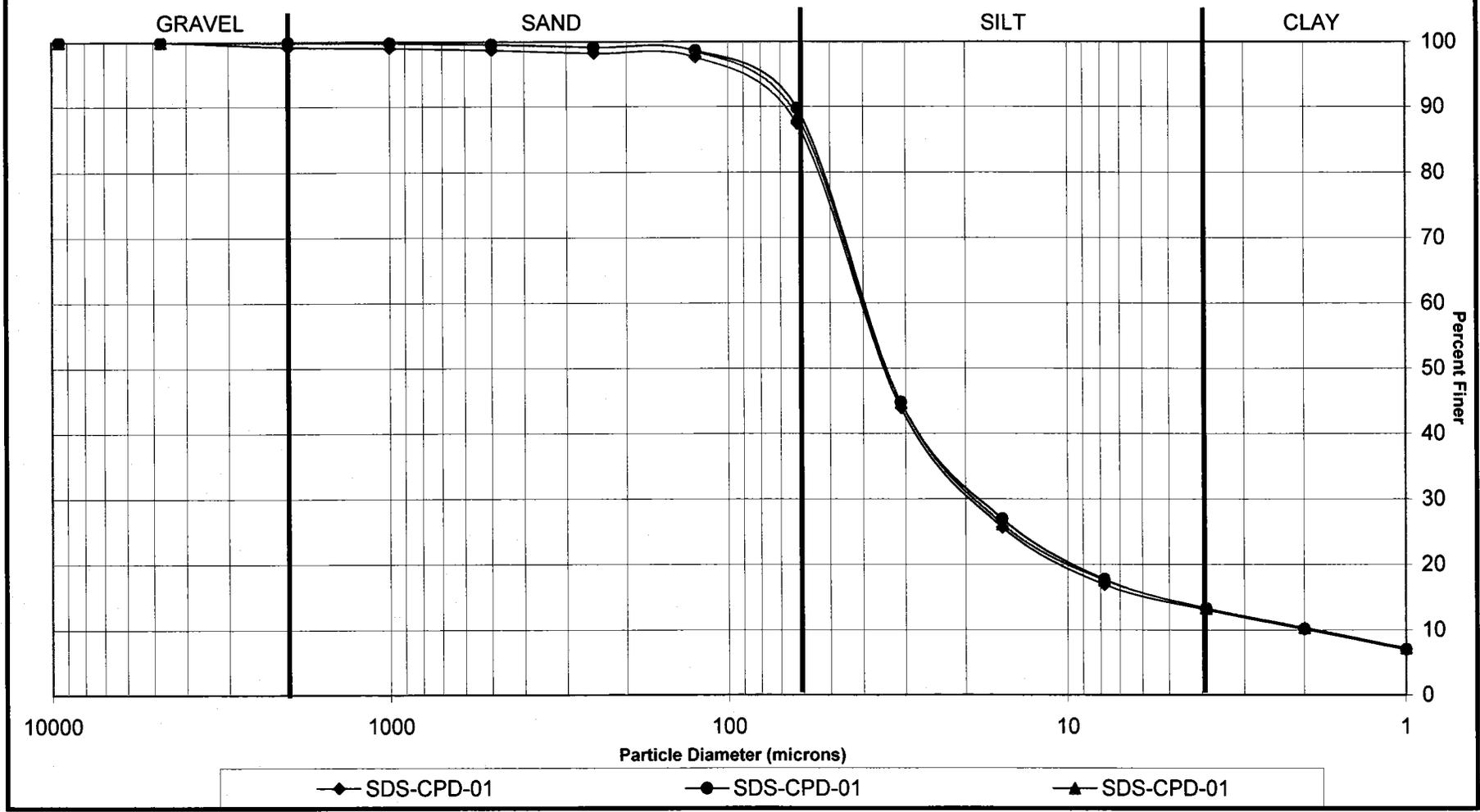
* ARI Internal QA limits = 95-105%

Notes to the Testing:

1. Organic matter was not removed prior to testing, thus the reported values are the "apparent" grain size distribution. See narrative for discussion of the testing.

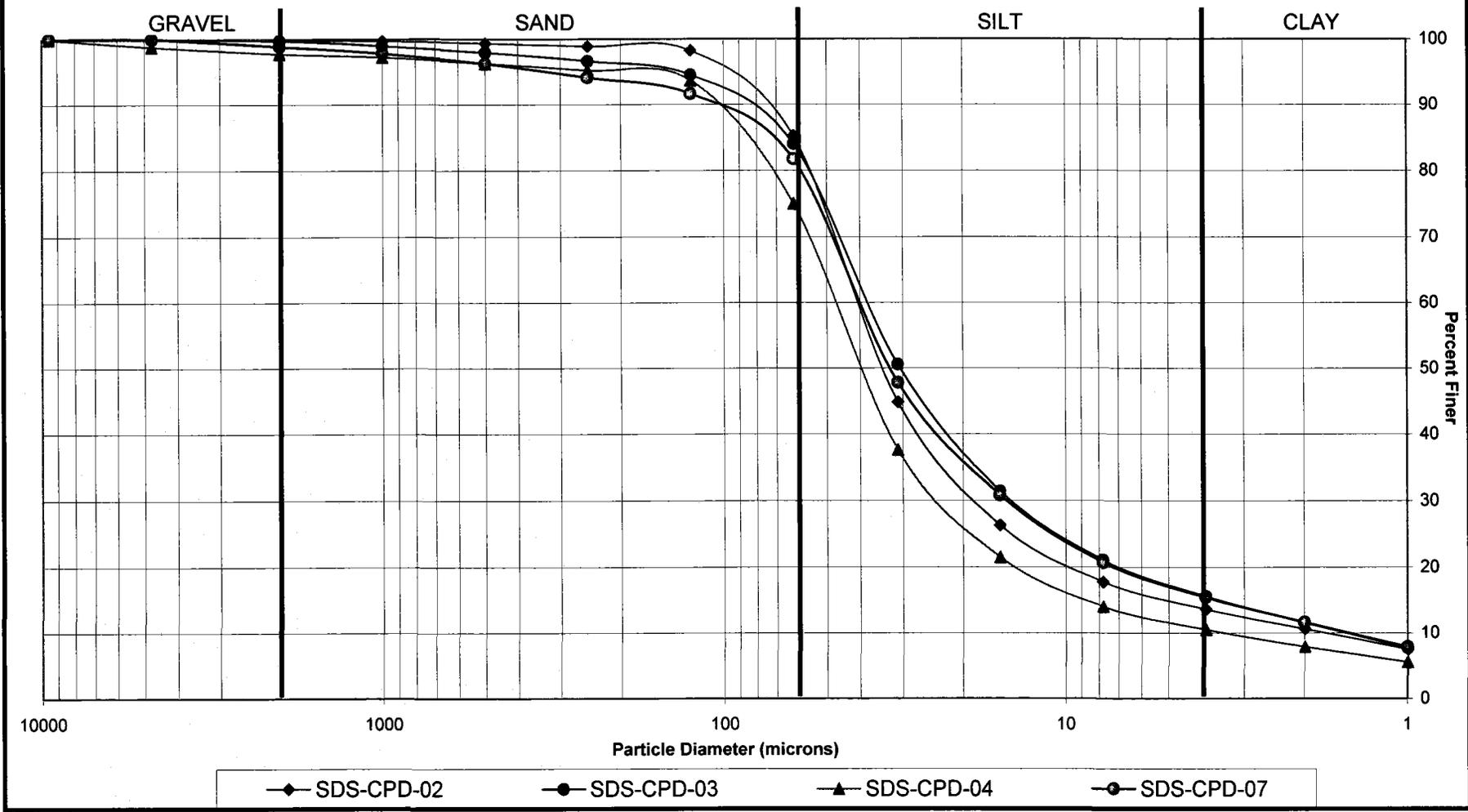
PSEP Grain Size Distribution

Triplicate Sample Plot

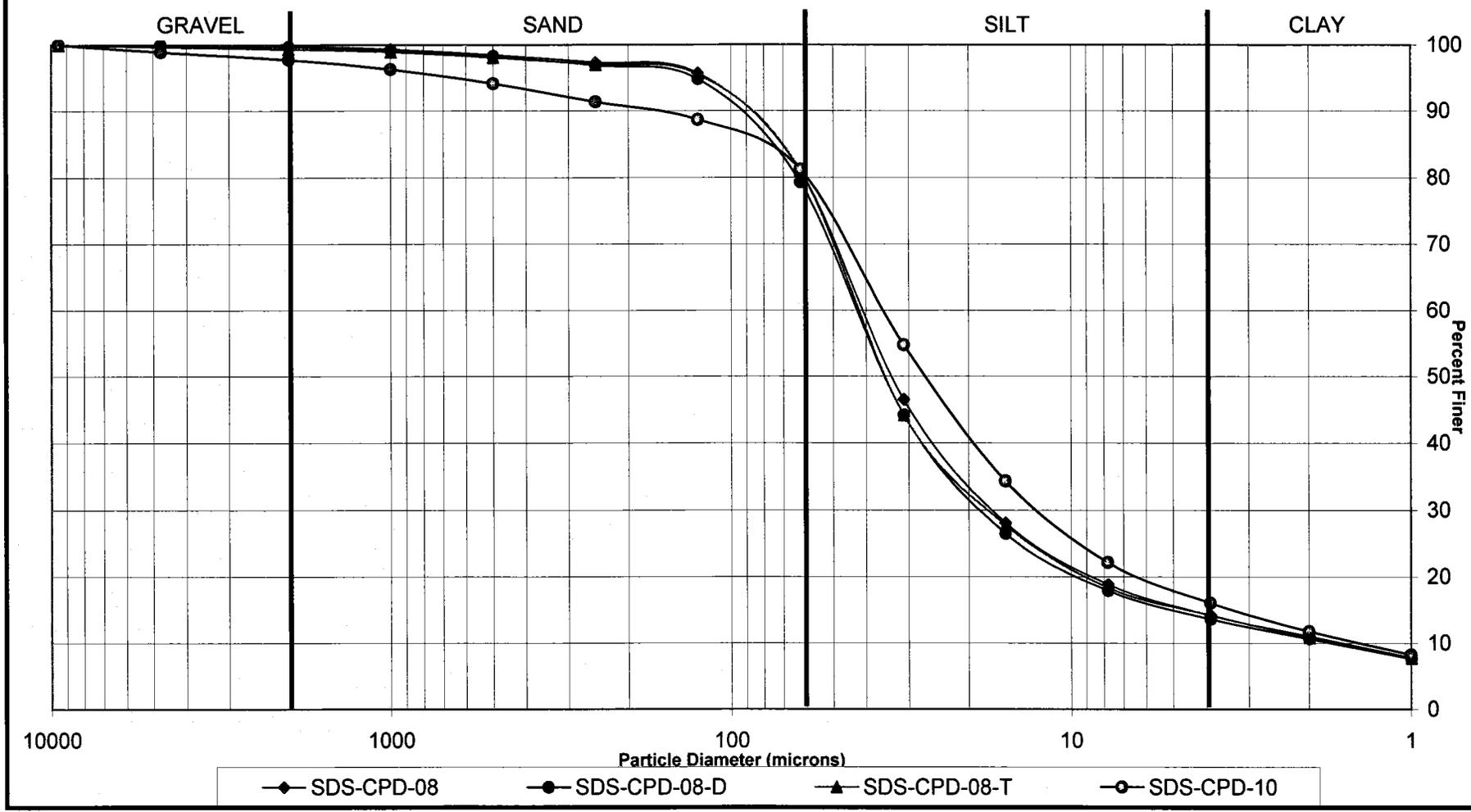


RA17:00117

PSEP Grain Size Distribution

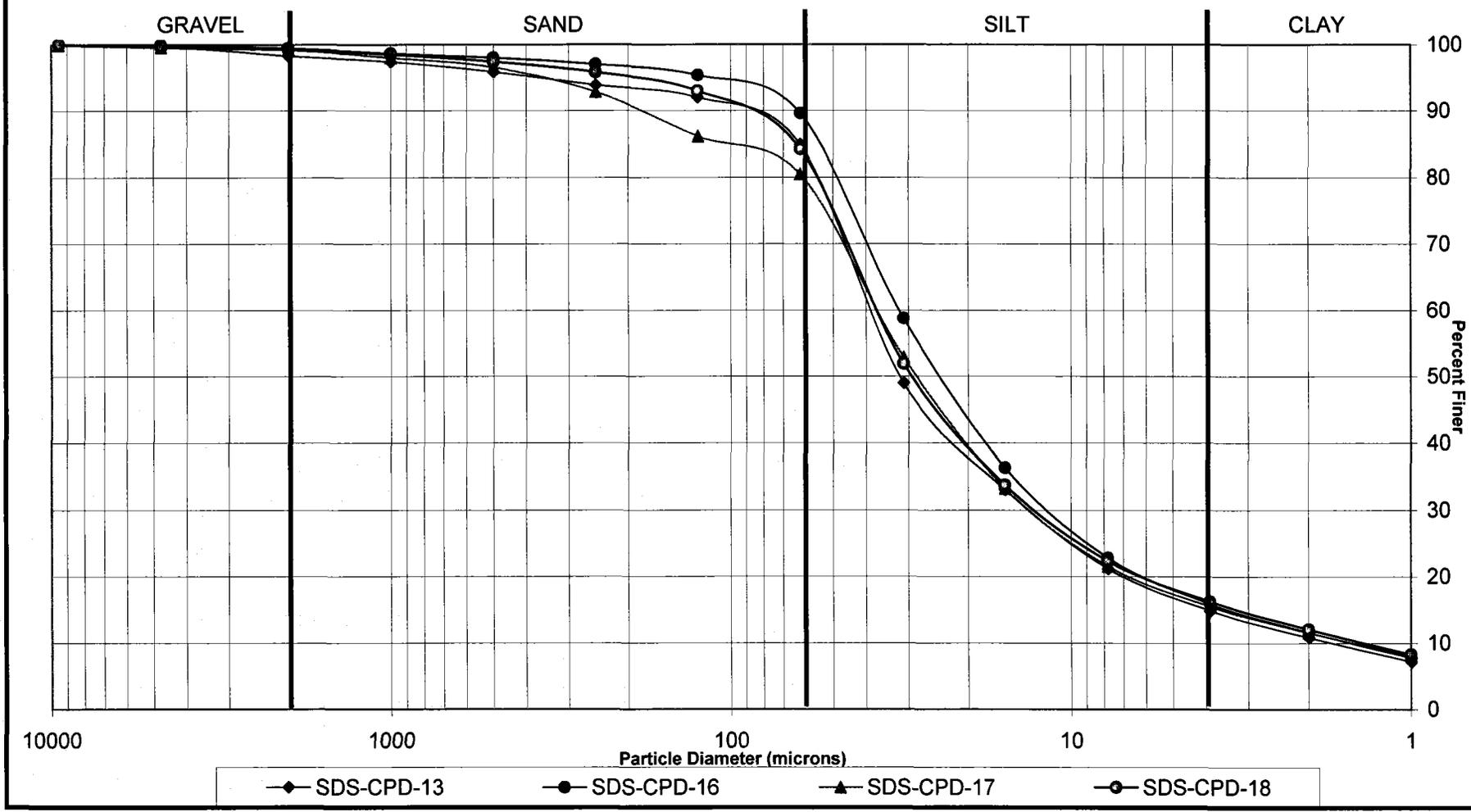


PSEP Grain Size Distribution



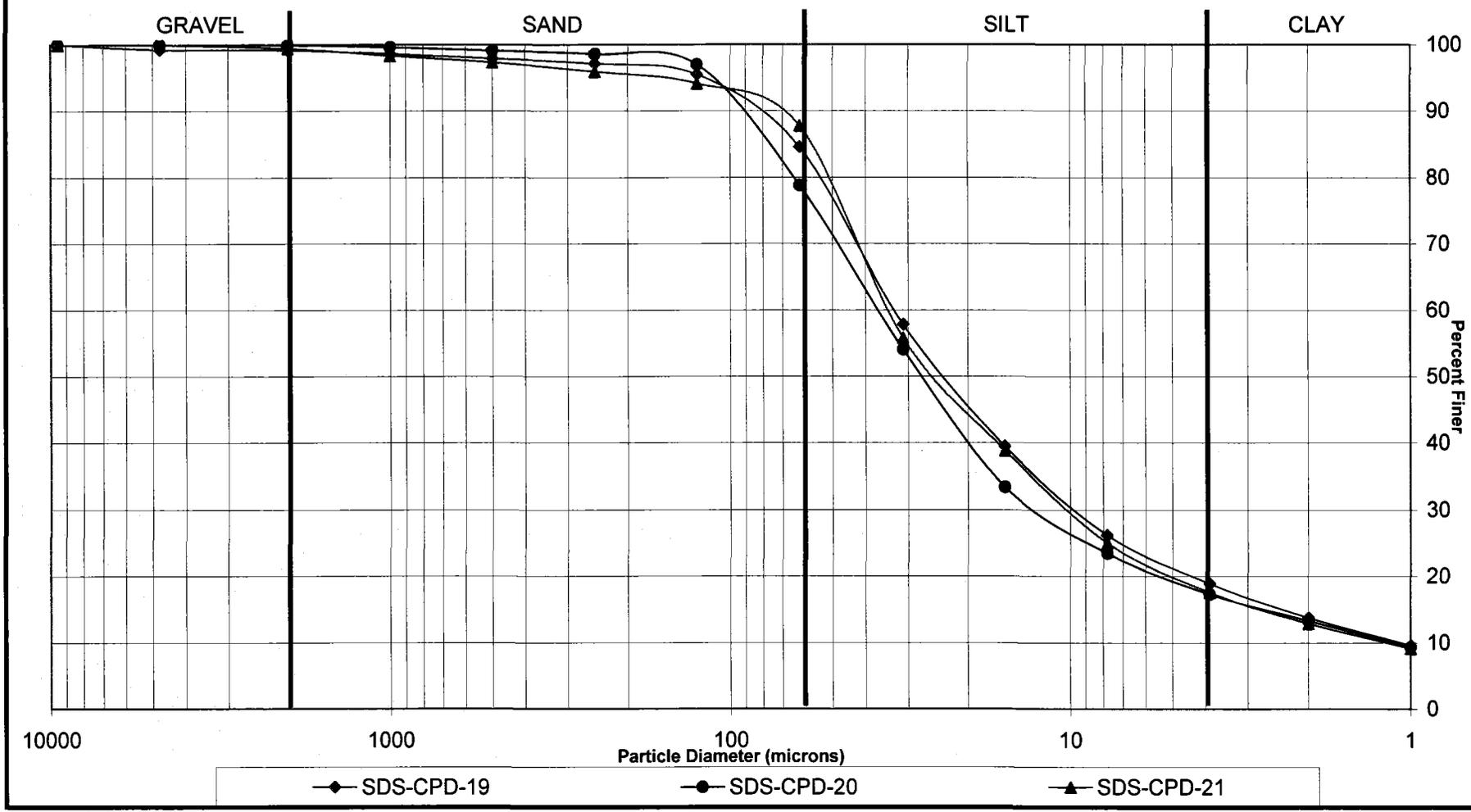
RA17:00119

PSEP Grain Size Distribution



RA17:00120

PSEP Grain Size Distribution



RA17:00121

Table of Contents: ARI Job RA55

Client: Science Applications, Intl.

Project: Fidalgo Bay/Custom Plywood Dioxin S

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Signature

July-02-2010
Date



Analytical Resources, Incorporated
Analytical Chemists and Consultants

July 2, 2010

Tim Hammermeister
SAIC
18912 North Creek Parkway, Suite 101
Bothell, WA 98011

RE: Project: Fidalgo Bay / Custom Plywood Dioxin Study
ARI Job No: RA55

Dear Tim:

Please find enclosed the Chain-of-Custody (COC) record, sample receipt documentation, and the final data package for samples from the project referenced above.

Sample receipt and details of the analyses are discussed in the Case Narrative.

An electronic copy of this data and associated raw data will be kept on file with ARI. Should you have any questions or problems, please feel free to contact me at any time.

Sincerely,

ANALYTICAL RESOURCES, INC.

Cheronne Oreiro
Project Manager
(206) 695-6214
cheronneo@arilabs.com

Enclosures

cc: eFile RA55

Chain of Custody Documentation

ARI Job ID: RA55



18912 North Creek Parkway, Suite 101
Bothell, Washington 98011
TEL: 425.485.5800 • FAX: 425.485.5566

Analyses / Tests

Shipping Information

CHAIN OF CUSTODY RECORD

Project No.: _____ Project Mgr: Tim Hammermeister
 Project Name: Fidalgo Bay / Custom Plywood Dixon Study
 Project Location: Fidalgo Bay
 Sample Collectors: WH CH AW JW DK
 Client Name: Ecology

Number of Shipping Containers: 1

Date Shipped: 6/15/10

Carrier: SAIC

Waybill No.: _____

Sample ID	Depth	Matrix	Date	Time	# of Containers	Grain Size	Total Enfrids	TOC	Total Solids	ArchNo										Comments	
SDS-CT-01A	0-10cm	sed	6/14/10	1047	4	X	X	X	X	X											
SDS-CT-01B	0-10cm	sed	6/14/10	1115	4	X	X	X	X	X											
SDS-CT-02	0-10cm	sed	6/14/10	1147	4	X	X	X	X	X											
SDS-CT-03	0-10cm	sed	6/14/10	1230	4	X	X	X	X	X											
SDS-CT-04	0-10cm	sed	6/14/10	1331	4	X	X	X	X	X											
SDS-CT-05	0-10cm	sed	6/14/10	1306	4	X	X	X	X	X											

RELINQUISHED BY: _____
 Signature: [Signature]
 Date/Time: 6/15/2010 1405
 Affiliation: SAIC

RECEIVED BY: _____
 Signature: [Signature]
 Date/Time: 6/15/10 1405
 Affiliation: ARI

RELINQUISHED BY: _____
 Signature: _____
 Date/Time: _____
 Affiliation: _____

RECEIVED BY: _____
 Signature: _____
 Date/Time: _____
 Affiliation: _____

PASS: 00003

• White: Lab Returns to Originator Upon Receipt of Samples • Canary: Lab Retains • Pink: Lab Returns to Project Manager with Final Report • Goldenrod: Retained by Sampler



Cooler Receipt Form

ARI Client: SAIC

Project Name: Fidalgoo Brij/Custom Plywood Dro. 54

COC No(s): _____ NA

Delivered by: Fed-Ex UPS Courier Hand Delivered Other: _____

Assigned ARI Job No: RA55

Tracking No: _____ NA

Preliminary Examination Phase:

Were intact, properly signed and dated custody seals attached to the outside of to cooler? YES NO

Were custody papers included with the cooler? YES NO

Were custody papers properly filled out (ink, signed, etc.) YES NO

Temperature of Cooler(s) (°C) (recommended 2.0-6.0 °C for chemistry)..... 2.2

If cooler temperature is out of compliance fill out form 00070F Temp Gun ID#: 90941619

Cooler Accepted by: JW Date: 6/15/10 Time: 1405

Complete custody forms and attach all shipping documents

Log-In Phase:

Was a temperature blank included in the cooler? YES NO

What kind of packing material was used? ... Bubble Wrap Wet Ice Gel Packs Baggies Foam Block Paper Other: _____

Was sufficient ice used (if appropriate)? NA YES NO

Were all bottles sealed in individual plastic bags? YES NO

Did all bottles arrive in good condition (unbroken)? YES NO

Were all bottle labels complete and legible? YES NO

Did the number of containers listed on COC match with the number of containers received? YES NO

Did all bottle labels and tags agree with custody papers? YES NO

Were all bottles used correct for the requested analyses? YES NO

Do any of the analyses (bottles) require preservation? (attach preservation sheet, excluding VOCs)... NA YES NO

Were all VOC vials free of air bubbles? NA YES NO

Was sufficient amount of sample sent in each bottle? YES NO

Date VOC Trip Blank was made at ARI..... NA

Was Sample Split by ARI : NA YES Date/Time: _____ Equipment: _____ Split by: _____

Samples Logged by: JW Date: 6/15/10 Time: 1516

**** Notify Project Manager of discrepancies or concerns ****

Sample ID on Bottle	Sample ID on COC	Sample ID on Bottle	Sample ID on COC

Additional Notes, Discrepancies, & Resolutions:

By: _____ Date: _____

			Small → "sm"
			Peabubbles → "pb"
			Large → "lg"
			Headspace → "hs"

Case Narrative, Data Qualifiers, Control Limits

ARI Job ID: RA55



Case Narrative

Client: SAIC

Project: Fidalgo Bay / Custom Plywood Dioxin Study

ARI Job No.: RA55

Sample Receipt

Six sediment samples were received June 15, 2010 under ARI job RA55. The cooler temperature measured by IR thermometer following ARI SOP was 2.2°C. Select sample containers were archived frozen upon receipt. For further details regarding sample receipt, please refer to the Cooler Receipt Forms.

General Chemistry Parameters (TOC/TS)

The samples were prepared and analyzed within method recommended holding times.

The method blanks were clean at the reporting limits. The LCS percent recoveries were within control limits.

The SRM percent recovery was within limits.

The matrix spike percent recovery and replicate RPD/RSDs were within control limits.

Geotechnical Parameters

A laboratory-specific case narrative follows.



Client: Science Applications International Corp.

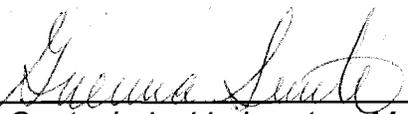
ARI Job No.: RA55

Client Project: Fidalgo Bay/ Custom Plywood Dioxin S

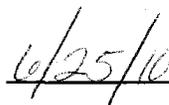
Case Narrative

1. Six samples were submitted for grain size analysis according to Puget Sound Estuary Protocol (PSEP) methodology on June 15, 2010.
2. The samples were run in a single batch and one sample from this job, SDS-CT-03, was chosen for triplicate analysis. The triplicate data is reported on the QA summary.
3. Samples SDS-CT-01A and SDS-CT-02 contained woody or other organic matter, which may have broken down during the sieving process affecting grain size analysis.
4. Samples SDS-CT-01B, SDS-CT-02, SDS-CT-04, and SDS-CT-05 contained shell fragments.
5. Samples SDS-CT-01A, SDS-CT-02, and SDS-CT-04 displayed an oily sheen and a fuel-like odor. Organic contaminants may skew the grain size data.
6. The data is provided in summary tables and plots.
7. There were no other noted anomalies in this project.

Approved by:


Geotechnical Laboratory Manager

Date:


6/25/10



Spike Recovery Control Limits for Conventional Wet Chemistry		
Effective 5/1/09		
Control limits are updated periodically. Assure that you have ARI's current control limits by downloading the files at the time of use. http://www.arilabs.com/portal/downloads/ARI-CLs.zip		
	ARI's Control Limits	
Sample Matrix:	Water	Soil / Sediment
Matrix Spike Recoveries	% Recovery	% Recovery
Ammonia	75 - 125	75 - 125
Bromide	75 - 125	75 - 125
Chloride	75 - 125	75 - 125
Cyanide	75 - 125	75 - 125
Ferrous Iron	75 - 125	75 - 125
Fluoride	75 - 125	75 - 125
Formaldehyde	75 - 125	75 - 125
Hexane Extractable Material	-- --	78 - 114
Hexavalent Chromium	75 - 125	75 - 125
Nitrate/Nitrite	75 - 125	75 - 125
Oil and Grease	75 - 125	75 - 125
Phenol	75 - 125	75 - 125
Phosphorous	75 - 125	75 - 125
Sulfate	75 - 125	75 - 125
Sulfide	75 - 125	75 - 125
Total Kjeldahl Nitrogen	75 - 125	75 - 125
Total Organic Carbon	75 - 125	75 - 125
Duplicate RPDs		
Acidity	±20%	±20%
Alkalinity	±20%	±20%
BOD	±20%	±20%
Cation Exchange	±20%	±20%
COD	±20%	±20%
Conductivity	±20%	±20%
Salinity	±20%	±20%
Solids	±20%	±20%
Turbidity	±20%	±20%

General Chemistry Analysis

ARI Job ID: RA55

**General Chemistry Analysis
Report and Summary QC Forms**

ARI Job ID: RA55

SAMPLE RESULTS-CONVENTIONALS
RA55-Science Applications, Intl.



Matrix: Sediment
Data Release Authorized: 
Reported: 07/02/10

Project: Fidalgo Bay/Custom Plywood D
Event: NA
Date Sampled: 06/14/10
Date Received: 06/15/10

Client ID: SDS-CT-01A
ARI ID: 10-14254 RA55A

Analyte	Date	Method	Units	RL	Sample
Total Solids	06/17/10 061710#1	EPA 160.3	Percent	0.01	41.30
Preserved Total Solids	06/17/10 061710#1	EPA 160.3	Percent	0.01	35.10
Sulfide	06/15/10 061510#1	EPA 376.2	mg/kg	278	2,480
Total Organic Carbon	07/01/10 070110#1	Plumb,1981	Percent	0.020	5.56

RL Analytical reporting limit
U Undetected at reported detection limit

SAMPLE RESULTS-CONVENTIONALS
RA55-Science Applications, Intl.



Matrix: Sediment
Data Release Authorized
Reported: 07/02/10

A handwritten signature in black ink, appearing to be 'M' or 'M.', written over the 'Data Release Authorized' text.

Project: Fidalgo Bay/Custom Plywood D
Event: NA
Date Sampled: 06/14/10
Date Received: 06/15/10

Client ID: SDS-CT-01B
ARI ID: 10-14255 RA55B

Analyte	Date	Method	Units	RL	Sample
Total Solids	06/17/10 061710#1	EPA 160.3	Percent	0.01	75.00
Preserved Total Solids	06/17/10 061710#1	EPA 160.3	Percent	0.01	79.60
Sulfide	06/15/10 061510#1	EPA 376.2	mg/kg	24.8	484
Total Organic Carbon	07/01/10 070110#1	Plumb,1981	Percent	0.020	1.89

RL Analytical reporting limit
U Undetected at reported detection limit

SAMPLE RESULTS-CONVENTIONALS
RA55-Science Applications, Intl.



Matrix: Sediment
Data Release Authorized:
Reported: 07/02/10

A handwritten signature in black ink, appearing to be 'MPL' or similar, written over the 'Data Release Authorized' text.

Project: Fidalgo Bay/Custom Plywood D
Event: NA
Date Sampled: 06/14/10
Date Received: 06/15/10

Client ID: SDS-CT-02
ARI ID: 10-14256 RA55C

Analyte	Date	Method	Units	RL	Sample
Total Solids	06/17/10 061710#1	EPA 160.3	Percent	0.01	60.10
Preserved Total Solids	06/17/10 061710#1	EPA 160.3	Percent	0.01	45.90
Sulfide	06/15/10 061510#1	EPA 376.2	mg/kg	43.5	534
Total Organic Carbon	07/01/10 070110#1	Plumb, 1981	Percent	0.020	1.30

RL Analytical reporting limit
U Undetected at reported detection limit

SAMPLE RESULTS-CONVENTIONALS
RA55-Science Applications, Intl.



Matrix: Sediment
Data Release Authorized:
Reported: 07/02/10

A handwritten signature in black ink, appearing to be a stylized name, located to the right of the matrix information.

Project: Fidalgo Bay/Custom Plywood D
Event: NA
Date Sampled: 06/14/10
Date Received: 06/15/10

Client ID: SDS-CT-03
ARI ID: 10-14257 RA55D

Analyte	Date	Method	Units	RL	Sample
Total Solids	06/17/10 061710#1	EPA 160.3	Percent	0.01	72.70
Preserved Total Solids	06/17/10 061710#1	EPA 160.3	Percent	0.01	75.60
Sulfide	06/15/10 061510#1	EPA 376.2	mg/kg	25.5	271
Total Organic Carbon	07/01/10 070110#1	Plumb,1981	Percent	0.020	0.823

RL Analytical reporting limit
U Undetected at reported detection limit

SAMPLE RESULTS-CONVENTIONAL
RA55-Science Applications, Intl.



Matrix: Sediment
Data Release Authorized: *[Signature]*
Reported: 07/02/10

Project: Fidalgo Bay/Custom Plywood D
Event: NA
Date Sampled: 06/14/10
Date Received: 06/15/10

Client ID: SDS-CT-04
ARI ID: 10-14258 RA55E

Analyte	Date	Method	Units	RL	Sample
Total Solids	06/17/10 061710#1	EPA 160.3	Percent	0.01	72.70
Preserved Total Solids	06/17/10 061710#1	EPA 160.3	Percent	0.01	71.60
Sulfide	06/15/10 061510#1	EPA 376.2	mg/kg	12.8	235
Total Organic Carbon	07/01/10 070110#1	Plumb,1981	Percent	0.020	1.05

RL Analytical reporting limit
U Undetected at reported detection limit

SAMPLE RESULTS-CONVENTIONALS
RA55-Science Applications, Intl.



Matrix: Sediment
Data Release Authorized:
Reported: 07/02/10

A handwritten signature in black ink, appearing to be 'JH' or similar, written over the 'Data Release Authorized' text.

Project: Fidalgo Bay/Custom Plywood D
Event: NA
Date Sampled: 06/14/10
Date Received: 06/15/10

Client ID: SDS-CT-05
ARI ID: 10-14259 RA55F

Analyte	Date	Method	Units	RL	Sample
Total Solids	06/17/10 061710#1	EPA 160.3	Percent	0.01	67.90
Preserved Total Solids	06/17/10 061710#1	EPA 160.3	Percent	0.01	68.70
Sulfide	06/15/10 061510#1	EPA 376.2	mg/kg	27.9	329
Total Organic Carbon	07/01/10 070110#1	Plumb,1981	Percent	0.020	1.44

RL Analytical reporting limit
U Undetected at reported detection limit

MS/MSD RESULTS-CONVENTIONALS
RA55-Science Applications, Intl.



Matrix: Sediment
Data Release Authorized: 
Reported: 07/02/10

Project: Fidalgo Bay/Custom Plywood D
Event: NA
Date Sampled: 06/14/10
Date Received: 06/15/10

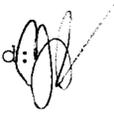
Analyte	Date	Units	Sample	Spike	Spike Added	Recovery
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ARI ID: RA55A Client ID: SDS-CT-01A

Total Organic Carbon	07/01/10	Percent	5.56	13.5	8.84	89.8%
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REPLICATE RESULTS-CONVENTIONALS
RA55-Science Applications, Intl.



Matrix: Sediment
Data Release Authorized: 
Reported: 07/02/10

Project: Fidalgo Bay/Custom Plywood D
Event: NA
Date Sampled: 06/14/10
Date Received: 06/15/10

Analyte	Date	Units	Sample	Replicate (s)	RPD/RSD
ARI ID: RA55A Client ID: SDS-CT-01A					
Total Solids	06/17/10	Percent	41.30	41.50 41.00	0.6%
Preserved Total Solids	06/17/10	Percent	35.10	35.90	2.3%
Total Organic Carbon	07/01/10	Percent	5.56	5.72 4.34	14.5%

LAB CONTROL RESULTS-CONVENTIONALS
RA55-Science Applications, Intl.



Matrix: Sediment
Data Release Authorized: 
Reported: 07/02/10

Project: Fidalgo Bay/Custom Plywood D
Event: NA
Date Sampled: NA
Date Received: NA

Analyte/Method	QC ID	Date	Units	LCS	Spike Added	Recovery
Sulfide EPA 376.2	PREP	06/15/10	mg/kg	7.82	7.59	103.0%
Total Organic Carbon Plumb, 1981	ICVL	07/01/10	Percent	0.093	0.100	93.0%

METHOD BLANK RESULTS-CONVENTIONALS
RA55-Science Applications, Intl.



Matrix: Sediment
Data Release Authorized: 
Reported: 07/02/10

Project: Fidalgo Bay/Custom Plywood D
Event: NA
Date Sampled: NA
Date Received: NA

Analyte	Date	Units	Blank
Total Solids	06/17/10	Percent	< 0.01 U
Preserved Total Solids	06/17/10	Percent	< 0.01 U
Sulfide	06/15/10	mg/kg	< 1.00 U
Total Organic Carbon	07/01/10	Percent	< 0.020 U

STANDARD REFERENCE RESULTS-CONVENTIONALS
RA55-Science Applications, Intl.



Matrix: Sediment
Data Release Authorized
Reported: 07/02/10

A handwritten signature in black ink, appearing to be 'ML' or similar initials, written over the 'Data Release Authorized' text.

Project: Fidalgo Bay/Custom Plywood D
Event: NA
Date Sampled: NA
Date Received: NA

Analyte/SRM ID	Date	Units	SRM	True Value	Recovery
Total Organic Carbon NIST #8704	07/01/10	Percent	3.21	3.35	95.8%

Geotechnical Analysis

ARI Job ID: RA55

**Geotechnical Analysis
Report and Summary QC Forms**

ARI Job ID: RA55

Science Applications International, Corp.

Fidalgo Bay/Custom Plywood Dioxin S

Apparent Grain Size Distribution Summary
Percent Finer Than Indicated Size

Sample No.	Gravel			Very Coarse Sand	Coarse Sand	Medium Sand	Fine Sand	Very Fine Sand	Silt				Clay	
	Phi Size	Phi Size	Phi Size						Phi Size					
Sieve Size (microns)	3/8"	#4 (4750)	#10 (2000)	#18 (1000)	#35 (500)	#60 (250)	#120 (125)	#230 (63)	31.00	15.60	7.80	3.90	2.00	1.00
SDS-CT-03	100.0	97.9	96.8	96.1	94.6	82.2	23.8	11.3	8.3	6.2	5.0	4.0	2.7	1.8
	100.0	98.8	97.8	96.8	95.3	82.5	23.2	11.0	8.2	6.2	5.0	3.7	2.6	1.9
	100.0	93.9	92.5	91.8	90.3	78.5	21.9	9.4	8.0	6.2	4.9	3.8	2.6	1.9
SDS-CT-01A	100.0	97.3	92.4	89.5	84.0	60.7	38.5	24.4	14.1	8.7	6.8	5.8	5.2	4.4
SDS-CT-01B	100.0	65.2	45.2	31.0	18.6	9.7	6.8	6.0	4.3	3.4	2.6	1.9	1.4	0.9
SDS-CT-02	100.0	95.2	91.8	88.7	85.2	77.8	52.9	19.2	14.9	11.3	8.7	6.9	5.4	3.7
SDS-CT-04	100.0	97.8	95.3	94.1	92.1	79.5	23.9	8.8	6.7	5.4	4.3	3.3	2.4	1.8
SDS-CT-05	100.0	98.6	97.1	95.6	92.5	71.2	31.7	19.4	13.1	9.8	7.7	6.1	4.7	3.1

Notes to the Testing:

1. Organic matter was not removed prior to testing, thus the reported values are the "apparent" grain size distribution. See narrative for discussion of the testing.

RA55

RA55:00024

Science Applications International, Corp.

Fidalgo Bay/Custom Plywood Dioxin S

Apparent Grain Size Distribution Summary
Percent Retained in Each Size Fraction

Sample No.	Gravel	Very Coarse Sand	Coarse Sand	Medium Sand	Fine Sand	Very Fine Sand	Coarse Silt	Medium Silt	Fine Silt	Very Fine Silt	Clay			Total Fines
Phi Size	> -1	-1 to 0	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	< 10	<4
Sieve Size (microns)	> #10 (2000)	10 to 18 (2000-1000)	18-35 (1000-500)	35-60 (500-250)	60-120 (250-125)	120-230 (125-62)	62.5-31.0	31.0-15.6	15.6-7.8	7.8-3.9	3.9-2.0	2.0-1.0	<1.0	<230 (<62)
SDS-CT-03	3.2	0.8	1.5	12.4	58.4	12.5	3.0	2.1	1.2	1.0	1.3	0.9	1.8	11.3
	2.2	1.0	1.6	12.8	59.3	12.2	2.8	2.0	1.2	1.3	1.2	0.7	1.9	11.0
	7.5	0.7	1.4	11.9	56.6	12.5	1.3	1.9	1.2	1.1	1.3	0.7	1.9	9.4
SDS-CT-01A	7.6	2.9	5.6	23.3	22.2	14.1	10.3	5.3	2.0	0.9	0.6	0.8	4.4	24.4
SDS-CT-01B	54.8	14.2	12.4	8.9	3.0	0.8	1.7	0.8	0.8	0.7	0.5	0.5	0.9	6.0
SDS-CT-02	8.2	3.1	3.5	7.4	25.0	33.7	4.3	3.6	2.6	1.8	1.5	1.7	3.7	19.2
SDS-CT-04	4.7	1.1	2.0	12.6	55.6	15.1	2.1	1.4	1.0	1.0	0.9	0.7	1.8	8.8
SDS-CT-05	2.9	1.4	3.1	21.3	39.5	12.3	6.3	3.4	2.1	1.6	1.4	1.5	3.1	19.4

Notes to the Testing:

1. Organic matter was not removed prior to testing, thus the reported values are the "apparent" grain size distribution. See narrative for discussion of the testing.

RA55

RA55 : 00025

QA SUMMARY

Client:	Science Applications International, Corp.	Client Project:	Fidalgo Bay/Custom Plywood Dioxin S
ARI Trip. Sample ID:	RA55D	Batch No.:	RA55-1
Client Trip. Sample ID:	SDS-CT-03	Page:	1 of 1

Relative Standard Deviation, By Phi Size

Sample ID	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10
SDS-CT-03	100.0	97.9	96.8	96.1	94.6	82.2	23.8	11.3	8.3	6.2	5.0	4.0	2.7	1.8
	100.0	98.8	97.8	96.8	95.3	82.5	23.2	11.0	8.2	6.2	5.0	3.7	2.6	1.9
	100.0	93.9	92.5	91.8	90.3	78.5	21.9	9.4	8.0	6.2	4.9	3.8	2.6	1.9
AVE	NA	96.83	95.71	94.89	93.40	81.05	22.95	10.56	8.19	6.20	4.98	3.85	2.60	1.88
STDEV	NA	2.59	2.82	2.72	2.67	2.23	0.95	1.05	0.16	0.03	0.04	0.15	0.07	0.04
%RSD	NA	2.68	2.94	2.87	2.86	2.76	4.12	9.91	1.95	0.53	0.87	3.94	2.83	1.99

The Triplicate Applies To The Following Samples

Client ID	Date Sampled	Date Extracted	Date Complete	QA Ratio (95-105)	Data Qualifiers	Pipette Portion (5.0-25.0g)
SDS-CT-03	6/14/2010	6/24/2010	6/25/2010	100.9		8.1
	6/14/2010	6/24/2010	6/25/2010	100.4		7.8
	6/14/2010	6/24/2010	6/25/2010	99.1		6.7
SDS-CT-01A	6/14/2010	6/24/2010	6/25/2010	97.9		8.1
SDS-CT-01B	6/14/2010	6/24/2010	6/25/2010	101.3		7.6
SDS-CT-02	6/14/2010	6/24/2010	6/25/2010	99.1		5.5
SDS-CT-04	6/14/2010	6/24/2010	6/25/2010	99.7		8.4
SDS-CT-05	6/14/2010	6/24/2010	6/25/2010	102.1		7.7

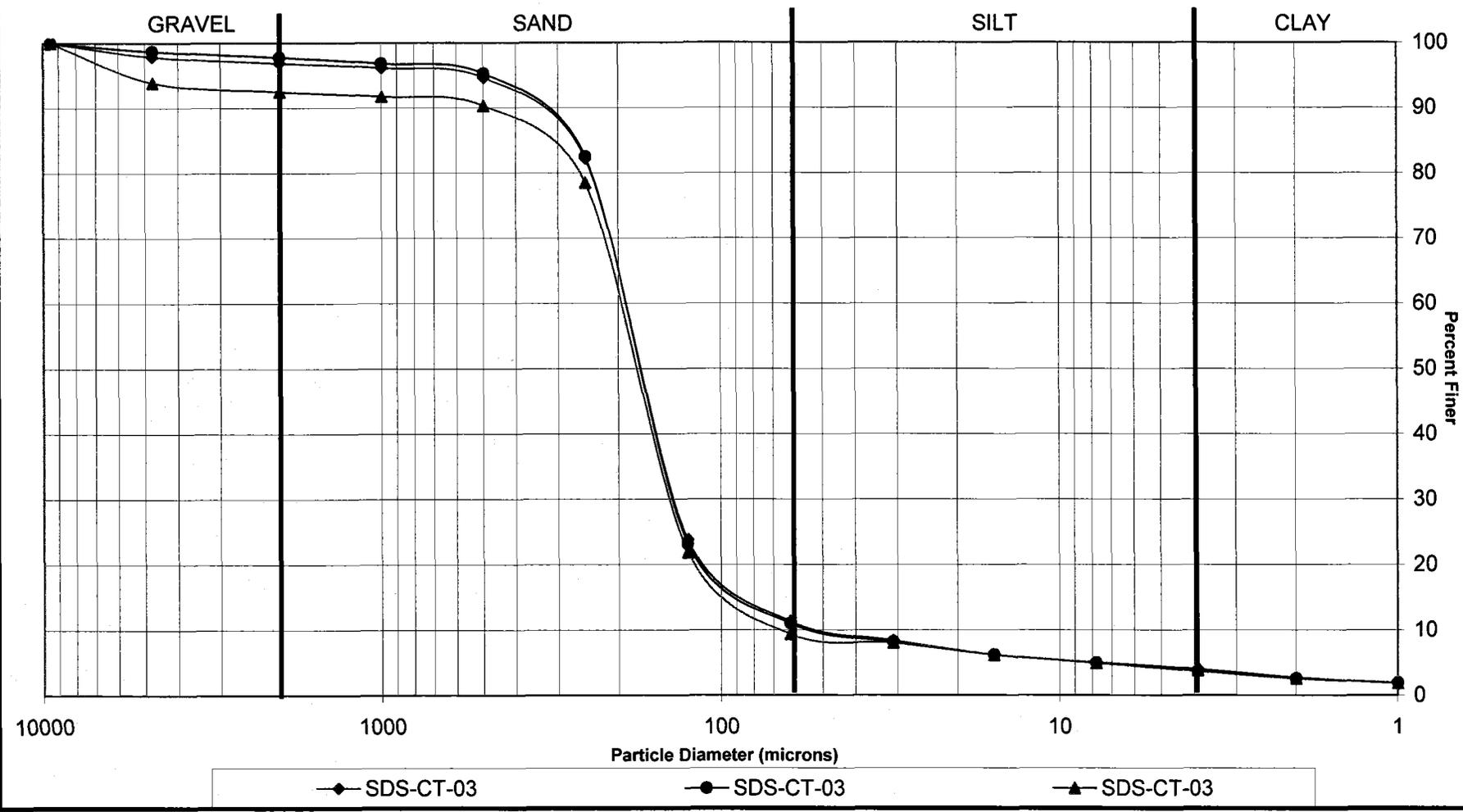
* ARI Internal QA limits = 95-105%

Notes to the Testing:

1. Organic matter was not removed prior to testing, thus the reported values are the "apparent" grain size distribution. See narrative for discussion of the testing.

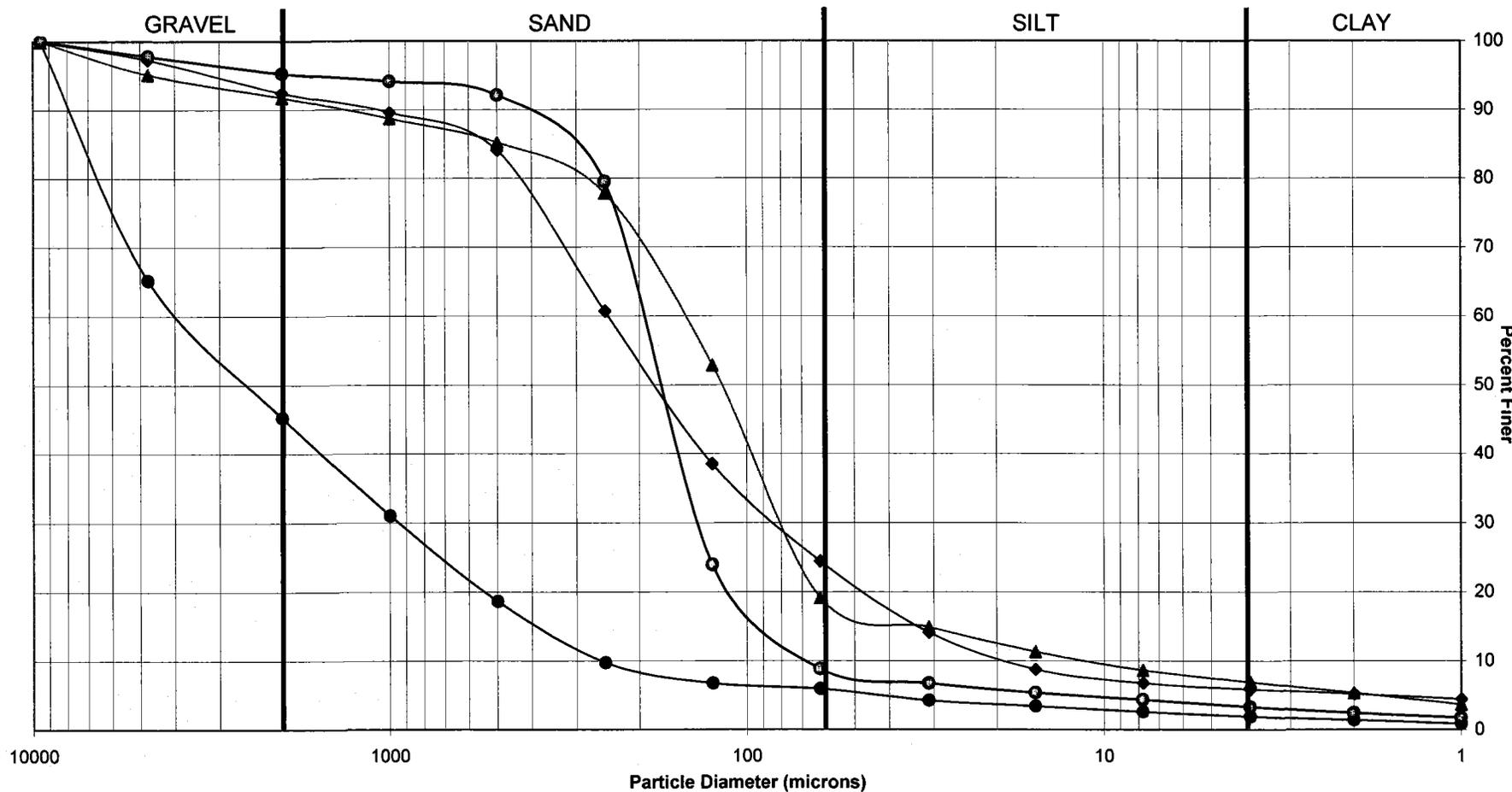
PSEP Grain Size Distribution

Triplicate Sample Plot



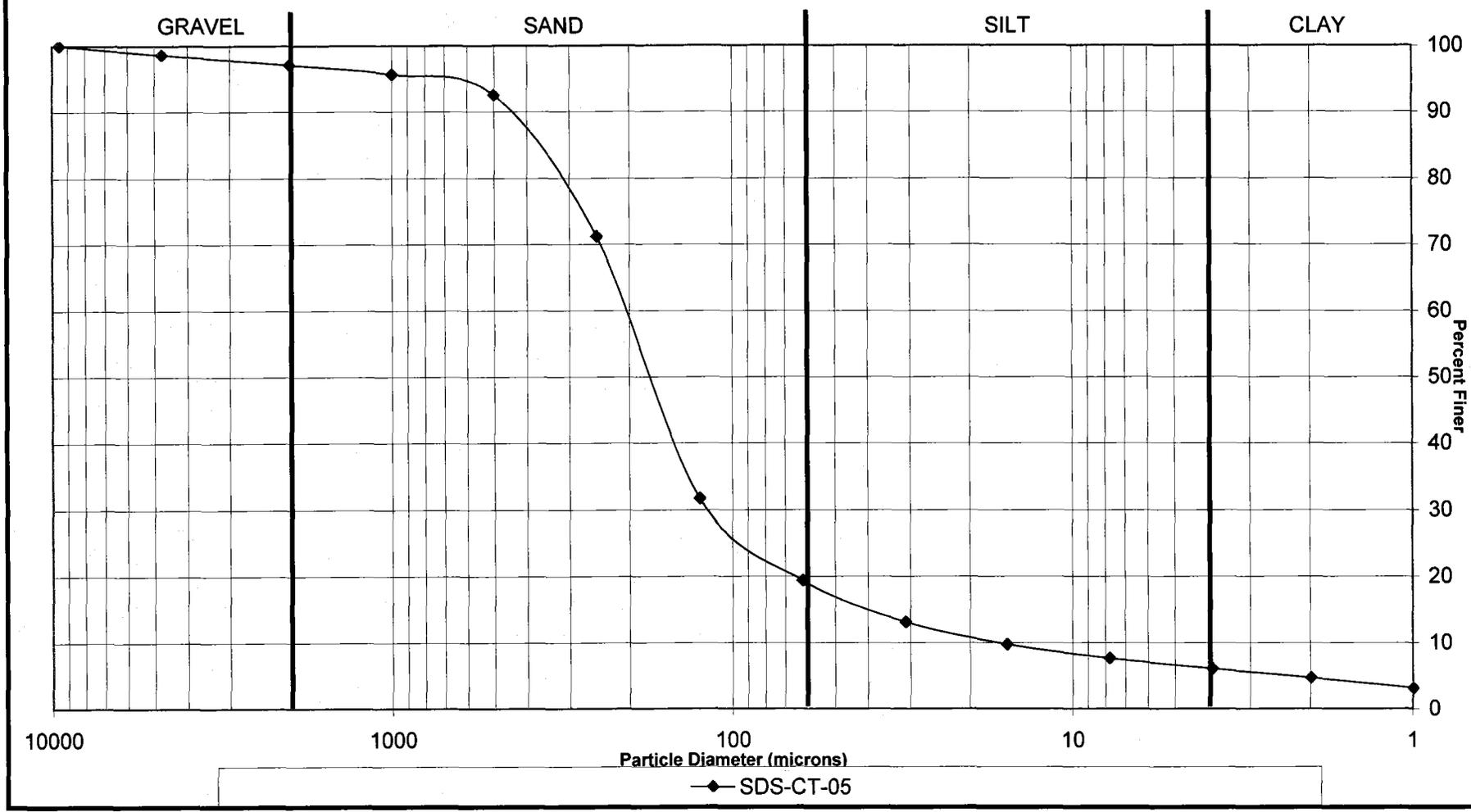
RA55:00027

PSEP Grain Size Distribution



RASS: 00028

PSEP Grain Size Distribution



RASS: 00029

BATCH SUMMARY

Batch ID: WG33444	Date: 24-Aug-2010
Analysis Type: Dioxin/Furan	Matrix Type: Aqueous
BATCH MAKEUP	
Contract: 4406 Samples: L14873-1 SDS-FB-RB L14873-2 SDS-FB-ER L14873-3 SDS-PB-ER L14873-4 SDS-CPD-ER	Blank: WG33444-101 Reference or Spike: WG33444-102
<p>Comments: RESUBMISSION 08-SEP-10: Disregard all previous submissions. All data remain unchanged except for the following:</p> <ol style="list-style-type: none"> 1- The samples SDS-FB-RB, SDS-FB-ER, and SDS-CPD-ER (AXYS ID: L14873-1, -2, and -4, respectively) are reported for all compounds except for TCDD data. The TCDD data did not meet method specifications and are reported in WG33704. 2- The percent recovery of surrogate ¹³C-2,3,7,8-TCDF in the sample SDS-FB-RB (AXYS ID: L14873-1) was observed to be below the method lower limit and is flagged with a 'V' on the report form. As the isotope dilution method of quantification produces data that are recovery corrected, the slight variances from the method acceptance criteria are deemed not to affect the quantification of these analytes. Percent surrogate recoveries are used as general method performance indicator only. 3- All client sample extract volumes have been revised to 10 uL on the report forms. <p>There are no data available for samples SDS-FB-RB, SDS-FB-ER and SDS-CPD-ER (Axys IDs: L14873-1,-2,-4). These samples were set for a repeat analysis in another batch. Data will be available in another database.</p> <ol style="list-style-type: none"> 1- Data are not blank corrected 2- The percent recovery value of native 1,2,3,7,8,9 HxCDD in the OPR (AXYS ID: WG33444-102) was slightly above the method control limit and has been flagged with an 'N'. This compound was not detected in any samples and data are considered not significantly affected by this variance. 3- The recoveries of several ¹³C-labeled-surrogates in the Spiked Matrix sample (AXYS ID WG33444-102) were slightly outside the method acceptance criteria; these compounds have been flagged with a 'V'. As the isotope dilution method of quantification produces data that are recovery corrected, the slight variances from the method acceptance criteria are deemed not to affect the quantification of these analytes. Percent surrogate recoveries are used as general method performance indicator only. 	



Form 1A
PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
SDS-FB-RB
Sample Collection:
08-Jun-2010 11:55

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.

FIDALGO BAY, CUSTOM
PLYWOOD DX STUDY
L14873-1

Contract No.: 4406

Lab Sample I.D.:

Matrix: AQUEOUS

Sample Size: 0.516 L

Sample Receipt Date: 17-Jun-2010

Initial Calibration Date: 30-Jul-2010

Extraction Date: 23-Jul-2010

Instrument ID: HR GC/MS

Analysis Date: 12-Aug-2010 Time: 19:48:29

GC Column ID: DB5

Extract Volume (uL): 10

Sample Data Filename: DX0M_106E S: 34

Injection Volume (uL): 1.0

Blank Data Filename: DX0M_106E S: 24

Dilution Factor: N/A

Cal. Ver. Data Filename: DX0M_106E S: 31

Concentration Units: pg/L

COMPOUND	LAB FLAG ¹	CONCENTRATION FOUND	DETECTION LIMIT	ION ABUND. RATIO ²	RRT ²
2,3,7,8-TCDD	X				
1,2,3,7,8-PECDD ³	U		0.969		
1,2,3,4,7,8-HXCDD	U		0.969		
1,2,3,6,7,8-HXCDD	U		0.969		
1,2,3,7,8,9-HXCDD	U		0.969		
1,2,3,4,6,7,8-HPCDD	U		0.969		
OCDD	K B J	1.80	0.969	1.35	1.000
2,3,7,8-TCDF	U		2.40		
1,2,3,7,8-PECDF	U		0.969		
2,3,4,7,8-PECDF	U		0.969		
1,2,3,4,7,8-HXCDF	U		0.969		
1,2,3,6,7,8-HXCDF	U		0.969		
1,2,3,7,8,9-HXCDF	U		0.969		
2,3,4,6,7,8-HXCDF	U		0.969		
1,2,3,4,6,7,8-HPCDF	U		0.969		
1,2,3,4,7,8,9-HPCDF	U		0.969		
OCDF	K B J	1.08	0.969	2.00	1.002
TOTAL TETRA-DIOXINS	X				
TOTAL PENTA-DIOXINS	U		0.969		
TOTAL HEXA-DIOXINS	U		0.969		
TOTAL HEPTA-DIOXINS	U		0.969		
TOTAL TETRA-FURANS	J	4.04	2.40		
TOTAL PENTA-FURANS	U		0.969		
TOTAL HEXA-FURANS	U		0.969		
TOTAL HEPTA-FURANS	U		0.969		

(1) Where applicable, custom lab flags have been used on this report; U = not detected; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; B = analyte found in sample and the associated blank; J = concentration less than LMCL; X = result reported separately.
 (2) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.
 (3) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.

Signed: _____ Bryan Alonzo _____



AXYS METHOD MLA-017 Rev 19

Form 1A
PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
SDS-FB-RB
Sample Collection:
08-Jun-2010 11:55

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.: 4406

Project No.

FIDALGO BAY, CUSTOM
PLYWOOD DX STUDY

Lab Sample I.D.:

L14873-1 Ri

Matrix: AQUEOUS

Sample Size: 0.428 L

Sample Receipt Date: 17-Jun-2010

Initial Calibration Date: 30-Jul-2010

Extraction Date: 20-Aug-2010

Instrument ID: HR GC/MS

Analysis Date: 01-Sep-2010 Time: 21:03:52

GC Column ID: DB5

Extract Volume (uL): 10

Sample Data Filename: DX0M_116 S: 6

Injection Volume (uL): 1.0

Blank Data Filename: DX0M_114 S: 29

Dilution Factor: N/A

Cal. Ver. Data Filename: DX0M_116 S: 2

Concentration Units: pg/L

COMPOUND	LAB FLAG ¹	CONCENTRATION FOUND	DETECTION LIMIT	ION ABUND. RATIO ²	RRT ²
2,3,7,8-TCDD	U		1.17		
1,2,3,7,8-PECDD ³	X				
1,2,3,4,7,8-HXCDD	X				
1,2,3,6,7,8-HXCDD	X				
1,2,3,7,8,9-HXCDD	X				
1,2,3,4,6,7,8-HPCDD	X				
OCDD	X				
2,3,7,8-TCDF	X				
1,2,3,7,8-PECDF	X				
2,3,4,7,8-PECDF	X				
1,2,3,4,7,8-HXCDF	X				
1,2,3,6,7,8-HXCDF	X				
1,2,3,7,8,9-HXCDF	X				
2,3,4,6,7,8-HXCDF	X				
1,2,3,4,6,7,8-HPCDF	X				
1,2,3,4,7,8,9-HPCDF	X				
OCDF	X				
TOTAL TETRA-DIOXINS	U		1.17		
TOTAL PENTA-DIOXINS	X				
TOTAL HEXA-DIOXINS	X				
TOTAL HEPTA-DIOXINS	X				
TOTAL TETRA-FURANS	X				
TOTAL PENTA-FURANS	X				
TOTAL HEXA-FURANS	X				
TOTAL HEPTA-FURANS	X				

- (1) Where applicable, custom lab flags have been used on this report; U = not detected; X = result reported separately.
- (2) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.
- (3) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.

Signed: _____ Bryan Alonzo _____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 08-Sep-2010 14:02:43; Application: XMLTransformer-1.10.25;
Report Filename: 1613_DIOXINS_1613DB5_L14873-1_Form1A_DX0M_116S6_SJ1187555.html; Workgroup: WG33704; Design ID: 1402]

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested. Results are compliant with NELAP where specific accreditation is held.



Form 1A
PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
SDS-FB-ER
Sample Collection:
08-Jun-2010 12:00

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.: 4406

Project No.

FIDALGO BAY, CUSTOM
PLYWOOD DX STUDY
L14873-2

Matrix: AQUEOUS

Lab Sample I.D.: L14873-2

Sample Size: 0.525 L

Sample Receipt Date: 17-Jun-2010

Initial Calibration Date: 30-Jul-2010

Extraction Date: 23-Jul-2010

Instrument ID: HR GC/MS

Analysis Date: 12-Aug-2010 Time: 20:43:31

GC Column ID: DB5

Extract Volume (uL): 10

Sample Data Filename: DX0M_106E S: 35

Injection Volume (uL): 1.0

Blank Data Filename: DX0M_106E S: 24

Dilution Factor: N/A

Cal. Ver. Data Filename: DX0M_106E S: 31

Concentration Units: pg/L

COMPOUND	LAB FLAG ¹	CONCENTRATION FOUND	DETECTION LIMIT	ION ABUND. RATIO ²	RRT ²
2,3,7,8-TCDD	X				
1,2,3,7,8-PECDD ³	U		0.952		
1,2,3,4,7,8-HXCDD	U		0.952		
1,2,3,6,7,8-HXCDD	U		0.952		
1,2,3,7,8,9-HXCDD	U		0.952		
1,2,3,4,6,7,8-HPCDD	U		0.952		
OCDD	B J	1.19	0.952	0.80	1.000
2,3,7,8-TCDF	U		0.952		
1,2,3,7,8-PECDF	U		0.952		
2,3,4,7,8-PECDF	U		0.952		
1,2,3,4,7,8-HXCDF	U		0.952		
1,2,3,6,7,8-HXCDF	U		0.952		
1,2,3,7,8,9-HXCDF	U		0.952		
2,3,4,6,7,8-HXCDF	U		0.952		
1,2,3,4,6,7,8-HPCDF	U		0.952		
1,2,3,4,7,8,9-HPCDF	U		0.952		
OCDF	U		0.952		
TOTAL TETRA-DIOXINS	X				
TOTAL PENTA-DIOXINS	U		0.952		
TOTAL HEXA-DIOXINS	U		0.952		
TOTAL HEPTA-DIOXINS	U		0.952		
TOTAL TETRA-FURANS	U		0.952		
TOTAL PENTA-FURANS	U		0.952		
TOTAL HEXA-FURANS	U		0.952		
TOTAL HEPTA-FURANS	U		0.952		

- (1) Where applicable, custom lab flags have been used on this report; U = not detected; B = analyte found in sample and the associated blank; J = concentration less than LMCL; X = result reported separately.
- (2) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.
- (3) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.

Signed: _____ Bryan Alonzo _____

For Axy Internal Use Only [XSL Template: Form1A.xsl; Created: 08-Sep-2010 12:54:43; Application: XMLTransformer-1.10.25; Report Filename: 1613_DIOXINS_1613DB5_L14873-2_Form1A_DX0M_106ES35_SJ1180389.html; Workgroup: WG33444; Design ID: 1402]

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested. Results are compliant with NELAP where specific accreditation is held.



AXYS METHOD MLA-017 Rev 19

Form 1A
PCDD/PCDF ANALYSIS REPORTCLIENT SAMPLE NO.
SDS-FB-ER
Sample Collection:
08-Jun-2010 12:00

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.: 4406

Project No.

FIDALGO BAY, CUSTOM
PLYWOOD DX STUDY
L14873-2 R

Matrix: AQUEOUS

Lab Sample I.D.: L14873-2 R

Sample Receipt Date: 17-Jun-2010

Sample Size: 0.431 L

Extraction Date: 20-Aug-2010

Initial Calibration Date: 30-Jul-2010

Analysis Date: 28-Aug-2010 Time: 09:46:12

Instrument ID: HR GC/MS

Extract Volume (uL): 10

GC Column ID: DB5

Injection Volume (uL): 1.0

Sample Data Filename: DX0M_114 S: 42

Dilution Factor: N/A

Blank Data Filename: DX0M_114 S: 29

Concentration Units: pg/L

Cal. Ver. Data Filename: DX0M_114 S: 34

COMPOUND	LAB FLAG ¹	CONCENTRATION FOUND	DETECTION LIMIT	ION ABUND. RATIO ²	RRT ²
2,3,7,8-TCDD	U		1.16		
1,2,3,7,8-PECDD ³	X				
1,2,3,4,7,8-HXCDD	X				
1,2,3,6,7,8-HXCDD	X				
1,2,3,7,8,9-HXCDD	X				
1,2,3,4,6,7,8-HPCDD	X				
OCDD	X				
2,3,7,8-TCDF	X				
1,2,3,7,8-PECDF	X				
2,3,4,7,8-PECDF	X				
1,2,3,4,7,8-HXCDF	X				
1,2,3,6,7,8-HXCDF	X				
1,2,3,7,8,9-HXCDF	X				
2,3,4,6,7,8-HXCDF	X				
1,2,3,4,6,7,8-HPCDF	X				
1,2,3,4,7,8,9-HPCDF	X				
OCDF	X				
TOTAL TETRA-DIOXINS	U		1.16		
TOTAL PENTA-DIOXINS	X				
TOTAL HEXA-DIOXINS	X				
TOTAL HEPTA-DIOXINS	X				
TOTAL TETRA-FURANS	X				
TOTAL PENTA-FURANS	X				
TOTAL HEXA-FURANS	X				
TOTAL HEPTA-FURANS	X				

(1) Where applicable, custom lab flags have been used on this report; U = not detected; X = result reported separately.

(2) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

(3) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.

Signed: _____ Bryan Alonzo _____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 08-Sep-2010 14:02:43; Application: XMLTransformer-1.10.25;
Report Filename: 1613_DIOXINS_1613DB5_L14873-2_Form1A_DX0M_114S42_SJ1186853.html; Workgroup: WG33704; Design ID: 1402]

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested. Results are compliant with NELAP where specific accreditation is held.



Form 1A
PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
SDS-PB-ER
Sample Collection:
08-Jun-2010 16:20

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.: 4406

Project No.

FIDALGO BAY, CUSTOM
PLYWOOD DX STUDY
L14873-3

Lab Sample I.D.:

Matrix: AQUEOUS

Sample Size: 0.503 L

Sample Receipt Date: 17-Jun-2010

Initial Calibration Date: 30-Jul-2010

Extraction Date: 23-Jul-2010

Instrument ID: HR GC/MS

Analysis Date: 12-Aug-2010 Time: 21:38:34

GC Column ID: DB5

Extract Volume (uL): 10

Sample Data Filename: DX0M_106E S: 36

Injection Volume (uL): 1.0

Blank Data Filename: DX0M_106E S: 24

Dilution Factor: N/A

Cal. Ver. Data Filename: DX0M_106E S: 31

Concentration Units: pg/L

COMPOUND	LAB FLAG ¹	CONCENTRATION FOUND	DETECTION LIMIT	ION ABUND. RATIO ²	RRT ²
2,3,7,8-TCDD	U		0.994		
1,2,3,7,8-PECDD ³	U		0.994		
1,2,3,4,7,8-HXCDD	U		0.994		
1,2,3,6,7,8-HXCDD	U		0.994		
1,2,3,7,8,9-HXCDD	U		0.994		
1,2,3,4,6,7,8-HPCDD	U		0.994		
OCDD	K B J	1.03	0.994	0.72	1.000
2,3,7,8-TCDF	U		0.994		
1,2,3,7,8-PECDF	U		0.994		
2,3,4,7,8-PECDF	U		0.994		
1,2,3,4,7,8-HXCDF	U		0.994		
1,2,3,6,7,8-HXCDF	U		0.994		
1,2,3,7,8,9-HXCDF	U		0.994		
2,3,4,6,7,8-HXCDF	U		0.994		
1,2,3,4,6,7,8-HPCDF	U		0.994		
1,2,3,4,7,8,9-HPCDF	U		0.994		
OCDF	U		0.994		
TOTAL TETRA-DIOXINS	U		0.994		
TOTAL PENTA-DIOXINS	U		0.994		
TOTAL HEXA-DIOXINS	U		0.994		
TOTAL HEPTA-DIOXINS	U		0.994		
TOTAL TETRA-FURANS	U		0.994		
TOTAL PENTA-FURANS	U		0.994		
TOTAL HEXA-FURANS	U		0.994		
TOTAL HEPTA-FURANS	U		0.994		

(1) Where applicable, custom lab flags have been used on this report; U = not detected; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; B = analyte found in sample and the associated blank; J = concentration less than LMCL.

(2) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

(3) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.

Signed: _____ Bryan Alonzo _____



Form 1A
PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
SDS-CPD-ER
Sample Collection:
09-Jun-2010 12:08

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.: 4406

Project No.

FIDALGO BAY, CUSTOM
PLYWOOD DX STUDY

Lab Sample I.D.:

L14873-4 i

Matrix: AQUEOUS

Sample Size: 0.498 L

Sample Receipt Date: 17-Jun-2010

Initial Calibration Date: 30-Jul-2010

Extraction Date: 23-Jul-2010

Instrument ID: HR GC/MS

Analysis Date: 01-Sep-2010 Time: 20:11:39

GC Column ID: DB5

Extract Volume (uL): 10

Sample Data Filename: DX0M_116 S: 5

Injection Volume (uL): 1.0

Blank Data Filename: DX0M_106E S: 24

Dilution Factor: N/A

Cal. Ver. Data Filename: DX0M_116 S: 2

Concentration Units: pg/L

COMPOUND	LAB FLAG ¹	CONCENTRATION FOUND	DETECTION LIMIT	ION ABUND. RATIO ²	RRT ²
2,3,7,8-TCDD	X				
1,2,3,7,8-PECDD ³	U		1.01		
1,2,3,4,7,8-HXCDD	U		1.01		
1,2,3,6,7,8-HXCDD	U		1.01		
1,2,3,7,8,9-HXCDD	U		1.01		
1,2,3,4,6,7,8-HPCDD	U		1.01		
OCDD	K B J	3.47	1.01	1.04	1.000
2,3,7,8-TCDF	U		1.01		
1,2,3,7,8-PECDF	U		1.01		
2,3,4,7,8-PECDF	U		1.01		
1,2,3,4,7,8-HXCDF	U		1.01		
1,2,3,6,7,8-HXCDF	U		1.01		
1,2,3,7,8,9-HXCDF	U		1.01		
2,3,4,6,7,8-HXCDF	U		1.01		
1,2,3,4,6,7,8-HPCDF	U		1.01		
1,2,3,4,7,8,9-HPCDF	U		1.01		
OCDF	U		1.01		
TOTAL TETRA-DIOXINS	X				
TOTAL PENTA-DIOXINS	U		1.01		
TOTAL HEXA-DIOXINS	U		1.01		
TOTAL HEPTA-DIOXINS	U		1.01		
TOTAL TETRA-FURANS	U		1.01		
TOTAL PENTA-FURANS	U		1.01		
TOTAL HEXA-FURANS	U		1.01		
TOTAL HEPTA-FURANS	U		1.01		

(1) Where applicable, custom lab flags have been used on this report; U = not detected; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; B = analyte found in sample and the associated blank; J = concentration less than LMCL; X = result reported separately.

(2) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

(3) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.

Signed: _____ Bryan Alonzo _____



AXYS METHOD MLA-017 Rev 19

Form 1A
PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
SDS-CPD-ER
Sample Collection:
09-Jun-2010 12:08

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.: 4406

Project No.

FIDALGO BAY, CUSTOM
PLYWOOD DX STUDY

Lab Sample I.D.:

L14873-4 R

Matrix: AQUEOUS

Sample Size: 0.447 L

Sample Receipt Date: 17-Jun-2010

Initial Calibration Date: 30-Jul-2010

Extraction Date: 20-Aug-2010

Instrument ID: HR GC/MS

Analysis Date: 28-Aug-2010 Time: 10:41:14

GC Column ID: DB5

Extract Volume (uL): 10

Sample Data Filename: DX0M_114 S: 43

Injection Volume (uL): 1.0

Blank Data Filename: DX0M_114 S: 29

Dilution Factor: N/A

Cal. Ver. Data Filename: DX0M_114 S: 34

Concentration Units: pg/L

COMPOUND	LAB FLAG ¹	CONCENTRATION FOUND	DETECTION LIMIT	ION ABUND. RATIO ²	RRT ²
2,3,7,8-TCDD	U		1.12		
1,2,3,7,8-PECDD ³	X				
1,2,3,4,7,8-HXCDD	X				
1,2,3,6,7,8-HXCDD	X				
1,2,3,7,8,9-HXCDD	X				
1,2,3,4,6,7,8-HPCDD	X				
OCDD	X				
2,3,7,8-TCDF	X				
1,2,3,7,8-PECDF	X				
2,3,4,7,8-PECDF	X				
1,2,3,4,7,8-HXCDF	X				
1,2,3,6,7,8-HXCDF	X				
1,2,3,7,8,9-HXCDF	X				
2,3,4,6,7,8-HXCDF	X				
1,2,3,4,6,7,8-HPCDF	X				
1,2,3,4,7,8,9-HPCDF	X				
OCDF	X				
TOTAL TETRA-DIOXINS	U		1.12		
TOTAL PENTA-DIOXINS	X				
TOTAL HEXA-DIOXINS	X				
TOTAL HEPTA-DIOXINS	X				
TOTAL TETRA-FURANS	X				
TOTAL PENTA-FURANS	X				
TOTAL HEXA-FURANS	X				
TOTAL HEPTA-FURANS	X				

(1) Where applicable, custom lab flags have been used on this report; U = not detected; X = result reported separately.

(2) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

(3) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.

Signed: _____ Bryan Alonzo _____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 08-Sep-2010 14:02:43; Application: XMLTransformer-1.10.25;
Report Filename: 1613_DIOXINS_1613DB5_L14873-4_Form1A_DX0M_114S43_SJ1186854.html; Workgroup: WG33704; Design ID: 1402]

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested. Results are compliant with NELAP where specific accreditation is held.



Form 1A
PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
Lab Blank
Sample Collection:
N/A

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.: 4406

Project No. N/A

Lab Sample I.D.: WG33444-101 :5PT

Matrix: AQUEOUS

Sample Size: 0.500 L

Sample Receipt Date: N/A

Initial Calibration Date: 30-Jul-2010

Extraction Date: 23-Jul-2010

Instrument ID: HR GC/MS

Analysis Date: 12-Aug-2010 Time: 10:21:28

GC Column ID: DB5

Extract Volume (uL): 20

Sample Data Filename: DX0M_106E S: 24

Injection Volume (uL): 1.0

Blank Data Filename: DX0M_106E S: 24

Dilution Factor: N/A

Cal. Ver. Data Filename: DX0M_106E S: 20

Concentration Units: pg/L

COMPOUND	LAB FLAG ¹	CONCENTRATION FOUND	DETECTION LIMIT	ION ABUND. RATIO ²	RRT ²
2,3,7,8-TCDD	U		1.00		
1,2,3,7,8-PECDD ³	U		1.00		
1,2,3,4,7,8-HXCDD	U		1.20		
1,2,3,6,7,8-HXCDD	U		1.20		
1,2,3,7,8,9-HXCDD	U		1.20		
1,2,3,4,6,7,8-HPCDD	K J	1.04	1.01	0.83	1.000
OCDD	K J	2.42	1.00	1.22	1.000
2,3,7,8-TCDF	U		1.00		
1,2,3,7,8-PECDF	U		1.00		
2,3,4,7,8-PECDF	U		1.00		
1,2,3,4,7,8-HXCDF	U		1.00		
1,2,3,6,7,8-HXCDF	U		1.00		
1,2,3,7,8,9-HXCDF	U		1.00		
2,3,4,6,7,8-HXCDF	U		1.00		
1,2,3,4,6,7,8-HPCDF	U		1.00		
1,2,3,4,7,8,9-HPCDF	U		1.00		
OCDF	J	1.57	1.00	0.97	1.002
TOTAL TETRA-DIOXINS	U		1.00		
TOTAL PENTA-DIOXINS	U		1.00		
TOTAL HEXA-DIOXINS	U		1.20		
TOTAL HEPTA-DIOXINS	U		1.01		
TOTAL TETRA-FURANS	U		1.00		
TOTAL PENTA-FURANS	U		1.00		
TOTAL HEXA-FURANS	U		1.00		
TOTAL HEPTA-FURANS	U		1.00		

(1) Where applicable, custom lab flags have been used on this report; U = not detected; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; J = concentration less than LMCL.

(2) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

(3) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.

Signed: _____Celine Vaillant_____

For Axy Internal Use Only [XSL Template: Form1A.xsl; Created: 24-Aug-2010 13:33:21; Application: XMLTransformer-1.10.25; Report Filename: 1613_DIOXINS_1613DB5_WG33444-101_Form1A_DX0M_106ES24_SJ1180324.html; Workgroup: WG33444; Design ID: 1402]

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested. Results are compliant with NELAP where specific accreditation is held.



Form 8A
PCDD/PCDF ONGOING PRECISION AND RECOVERY (OPR)

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
 V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.: 4406 **OPR Data Filename:** DX0M_106E S: 21

Matrix: AQUEOUS **Lab Sample I.D.:** WG33444-102 :5PT

Extraction Date: 23-Jul-2010 **Analysis Date:** 12-Aug-2010 **Time:** 07:39:03

ALL CONCENTRATIONS REPORTED ON THIS FORM ARE CONCENTRATIONS IN EXTRACT, BASED ON A 20 uL EXTRACT VOLUME.

COMPOUND	LAB FLAG ¹	ION ABUND. RATIO ²	SPIKE CONC. (ng/mL)	CONC. FOUND (ng/mL)	OPR CONC. LIMITS ³ (ng/mL)	% RECOVERY
2,3,7,8-TCDD		0.71	10.0	9.84	6.70 - 15.8	98.4
1,2,3,7,8-PECDD ⁴		0.57	52.0	52.3	36.4 - 73.8	101
1,2,3,4,7,8-HXCDD		1.26	56.5	51.0	39.6 - 92.7	90.2
1,2,3,6,7,8-HXCDD		1.21	55.5	56.5	42.2 - 74.4	102
1,2,3,7,8,9-HXCDD	N	1.26	54.0	119	34.6 - 87.5	220
1,2,3,4,6,7,8-HPCDD		0.97	47.5	48.5	33.3 - 66.5	102
OCDD		0.82	100	96.2	78.0 - 144	96.2
2,3,7,8-TCDF		0.76	10.7	11.3	8.03 - 16.9	105
1,2,3,7,8-PECDF		1.56	46.0	50.9	36.8 - 61.6	111
2,3,4,7,8-PECDF		1.51	47.0	53.0	32.0 - 75.2	113
1,2,3,4,7,8-HXCDF		1.23	50.0	57.0	36.0 - 67.0	114
1,2,3,6,7,8-HXCDF		1.17	47.5	50.1	39.9 - 61.8	105
1,2,3,7,8,9-HXCDF		1.20	52.5	56.1	41.0 - 68.3	107
2,3,4,6,7,8-HXCDF		1.12	53.0	57.2	37.1 - 82.7	108
1,2,3,4,6,7,8-HPCDF		1.00	50.0	54.3	41.0 - 61.0	109
1,2,3,4,7,8,9-HPCDF		1.00	50.0	52.3	39.0 - 69.0	105
OCDF		0.79	104	71.4	65.5 - 177	68.6

- (1) Where applicable, custom lab flags have been used on this report; N = authentic recovery is not within method/contract control limits.
- (2) Contract-required Ion Abundance Ratios are specified in Table 9, Method 1613.
- (3) Contract-required concentration range as determined from the percent of the test concentration in Table 6, Method 1613, under OPR.
- (4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.

Signed: _____Celine Vaillant_____

For Axys Internal Use Only [XSL Template: Form8A.xsl; Created: 24-Aug-2010 13:33:21; Application: XMLTransformer-1.10.25; Report Filename: 1613_DIOXINS_1613DB5_WG33444-102_Form8A_SJ1180319.html; Workgroup: WG33444; Design ID: 1402]

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested. Results are compliant with NELAP where specific accreditation is held.



BATCH SUMMARY

Batch ID: WG33418	Date: 20-Aug-2010
Analysis Type: Dioxin/Furan	Matrix Type: Solid
BATCH MAKEUP	
Contract: 4406 Samples: L14884-4 SDS-CPD-04 L14884-11 SDS-PB-01 L14884-14 SDS-PB-04 L14884-15 SDS-PB-05 L14884-16 SDS-PB-05-D L14884-17 SDS-PB-06 L14884-18 SDS-PB-07 L14884-19 SDS-CPD-05 L14884-23 SDS-CPD-12 L14884-25 SDS-CPD-15	Blank: WG33418-101 Reference or Spike: WG33418-102 WG33418-104 Duplicate: WG33418-103
Comments: <ol style="list-style-type: none"> Data are not blank corrected. The CRM (AXYS ID WG33418-104) recovered well, however for some compounds the recovery fell outside the certified range. The lock mass signal in the vicinity of native and labeled 1,2,3,7,8-PeCDD was observed in the Lab Blank, OPR, sample duplicate, and CRM (AXYS ID: WG33418-101, -102, -103, -104, respectively). The compound 1,2,3,7,8-PECDD and its surrogate are flagged with a 'G' on the report form. The data are not considered significantly affected by these fluctuations. The surrogate recoveries in the duplicate sample SDS-PB-01 (Duplicate) (AXYS ID: WG33418-103) fell below the lower method control limit, and are flagged with a 'V' on the report form. The duplication analysis demonstrates that the low recoveries have a negligible impact on the data. The replicates agree well for congeners quantified against exact labeled analogs, and for congeners quantified against surrogates whose recoveries are within the control limits. Percent recovery of clean up standard 37CL-2,3,7,8-TCDD in the several samples and several surrogate recoveries in the Lab Blank, sample SDS-PB-06, and SDS-CPD-15 (AXYS ID: WG33418-101, L14884-17, and -25, respectively) were observed to be slightly outside the method limits and have been flagged with a 'V' on the report form. As the isotope dilution method of quantification produces data that are recovery corrected, the slight variances from the method acceptance criteria are deemed not to affect the quantification of these analytes. Percent surrogate recoveries are used as general method performance indicator only. The analysis of samples SDS-CPD-01, SDS-CPD-03, SDS-CPD-16, SDS-PB-02, SDS-PB-03 and SDS-CPD-09 (AXYS ID: L14884-1, -3, -10, -12, -13, -21) was not successful and data is not available in this batch summary 	



Form 1A
PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
SDS-CPD-04
Sample Collection:
09-Jun-2010 11:07

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.: 4406

Project No.

FIDALGO BAY, CUSTOM
PLYWOOD DX STUDY
L14884-4

Matrix: SOLID

Lab Sample I.D.: L14884-4

Sample Size: 9.63 g (dry)

Sample Receipt Date: 17-Jun-2010

Initial Calibration Date: 05-Aug-2010

Extraction Date: 22-Jul-2010

Instrument ID: HR GC/MS

Analysis Date: 06-Aug-2010 Time: 15:03:04

GC Column ID: DB5

Extract Volume (uL): 20

Sample Data Filename: DX0B_170 S: 9

Injection Volume (uL): 1.0

Blank Data Filename: DX0B_170 S: 5

Dilution Factor: N/A

Cal. Ver. Data Filename: DX0B_170 S: 1

Concentration Units: pg/g (dry weight basis)

% Moisture: 40.4

COMPOUND	LAB FLAG ¹	CONCENTRATION FOUND	DETECTION LIMIT	ION ABUND. RATIO ²	RRT ²
2,3,7,8-TCDD	K B J	0.220	0.0519	0.59	1.001
1,2,3,7,8-PECDD ³	K J	0.714	0.0519	0.47	1.001
1,2,3,4,7,8-HXCDD	J	0.936	0.108	1.08	1.000
1,2,3,6,7,8-HXCDD	J	3.44	0.108	1.19	1.000
1,2,3,7,8,9-HXCDD	J	2.52	0.108	1.38	1.010
1,2,3,4,6,7,8-HPCDD	B	41.4	0.110	1.06	1.000
OCDD	B	274	0.0606	0.89	1.000
2,3,7,8-TCDF		1.80	0.0519	0.80	1.002
1,2,3,7,8-PECDF	J	0.328	0.0519	1.70	1.000
2,3,4,7,8-PECDF	B J	0.515	0.0519	1.73	1.000
1,2,3,4,7,8-HXCDF	J	0.678	0.0942	1.24	1.000
1,2,3,6,7,8-HXCDF	K J	0.471	0.0942	1.50	1.000
1,2,3,7,8,9-HXCDF	U		0.0942		
2,3,4,6,7,8-HXCDF	J	0.572	0.0942	1.16	1.000
1,2,3,4,6,7,8-HPCDF		11.3	0.0747	1.06	1.000
1,2,3,4,7,8,9-HPCDF	J	0.757	0.0747	1.12	1.000
OCDF		39.6	0.0519	0.88	1.002
TOTAL TETRA-DIOXINS	B	21.1	0.0519		
TOTAL PENTA-DIOXINS		17.1	0.0519		
TOTAL HEXA-DIOXINS		55.0	0.108		
TOTAL HEPTA-DIOXINS	B	100	0.110		
TOTAL TETRA-FURANS		11.4	0.0519		
TOTAL PENTA-FURANS		7.49	0.0519		
TOTAL HEXA-FURANS		13.4	0.0942		
TOTAL HEPTA-FURANS		34.3	0.0747		

(1) Where applicable, custom lab flags have been used on this report; U = not detected; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; B = analyte found in sample and the associated blank; J = concentration less than LMCL.

(2) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

(3) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.

Signed: _____ Bryan Alonzo _____



Form 1A
PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
SDS-CPD-04
Sample Collection:
09-Jun-2010 11:07

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.: 4406

Matrix: SOLID

Sample Receipt Date: 17-Jun-2010

Extraction Date: 22-Jul-2010

Analysis Date: 04-Aug-2010 Time: 21:20:54

Extract Volume (uL): 20

Injection Volume (uL): 2.0

Dilution Factor: N/A

Concentration Units: pg/g (dry weight basis)

Project No.

Lab Sample I.D.:

Sample Size:

Initial Calibration Date:

Instrument ID:

GC Column ID:

Sample Data Filename:

Blank Data Filename:

Cal. Ver. Data Filename:

% Moisture:

FIDALGO BAY, CUSTOM
PLYWOOD DX STUDY
L14884-4

9.63 g (dry)

13-Jul-2010

HR GC/MS

DB225

DB03_102 S: 4

DX0B_170 S: 5

DB03_102 S: 2

40.4

COMPOUND	LAB FLAG ¹	CONCENTRATION FOUND	DETECTION LIMIT	ION ABUND. RATIO ²	RRT ²
2,3,7,8-TCDF	J	0.791	0.239	0.70	1.001

(1) Where applicable, custom lab flags have been used on this report; J = concentration less than LMCL.

(2) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.

Signed: _____ Bryan Alonzo _____

For AxyS Internal Use Only [XSL Template: Form1A.xsl; Created: 20-Aug-2010 11:42:50; Application: XMLTransformer-1.10.25;
Report Filename: 1613_DIOXINS_1613DB225_L14884-4_Form1A_DB03_102S4_SJ1178901.html; Workgroup: WG33418; Design ID: 699]

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested. Results are compliant with NELAP where specific accreditation is held.



Form 1A
PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
SDS-PB-01
Sample Collection:
07-Jun-2010 13:07

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4406	Project No.	FIDALGO BAY, CUSTOM PLYWOOD DX STUDY
Matrix:	SOLID	Lab Sample I.D.:	L14884-11 (A)
Sample Receipt Date:	17-Jun-2010	Sample Size:	10.8 g (dry)
Extraction Date:	22-Jul-2010	Initial Calibration Date:	05-Aug-2010
Analysis Date:	06-Aug-2010 Time: 16:52:40	Instrument ID:	HR GC/MS
Extract Volume (uL):	20	GC Column ID:	DB5
Injection Volume (uL):	1.0	Sample Data Filename:	DX0B_170 S: 11
Dilution Factor:	N/A	Blank Data Filename:	DX0B_170 S: 5
Concentration Units:	pg/g (dry weight basis)	Cal. Ver. Data Filename:	DX0B_170 S: 1
		% Moisture:	28.0

COMPOUND	LAB FLAG ¹	CONCENTRATION FOUND	DETECTION LIMIT	ION ABUND. RATIO ²	RRT ²
2,3,7,8-TCDD	K B J	0.074	0.0463	0.33	1.001
1,2,3,7,8-PECDD ³	K J	0.089	0.0463	0.74	1.001
1,2,3,4,7,8-HXCDD	K J	0.096	0.0774	0.92	1.000
1,2,3,6,7,8-HXCDD	J	0.576	0.0774	1.16	1.000
1,2,3,7,8,9-HXCDD	K J	0.423	0.0774	1.97	1.010
1,2,3,4,6,7,8-HPCDD	B J	3.55	0.0463	1.03	1.000
OCDD	B	20.4	0.0560	0.89	1.000
2,3,7,8-TCDF	J	0.351	0.0463	0.75	1.001
1,2,3,7,8-PECDF	U		0.0563		
2,3,4,7,8-PECDF	B J	0.082	0.0563	1.52	1.000
1,2,3,4,7,8-HXCDF	J	0.091	0.0504	1.12	1.001
1,2,3,6,7,8-HXCDF	K J	0.084	0.0504	0.97	1.000
1,2,3,7,8,9-HXCDF	U		0.0504		
2,3,4,6,7,8-HXCDF	J	0.083	0.0504	1.31	1.000
1,2,3,4,6,7,8-HPCDF	K J	0.821	0.0506	0.82	1.000
1,2,3,4,7,8,9-HPCDF	U		0.0506		
OCDF	J	1.70	0.0463	0.83	1.002
TOTAL TETRA-DIOXINS	B	0.261	0.0463		
TOTAL PENTA-DIOXINS		0.731	0.0463		
TOTAL HEXA-DIOXINS		4.18	0.0774		
TOTAL HEPTA-DIOXINS	B	8.45	0.0463		
TOTAL TETRA-FURANS		1.47	0.0463		
TOTAL PENTA-FURANS		0.384	0.0563		
TOTAL HEXA-FURANS		1.09	0.0504		
TOTAL HEPTA-FURANS		1.20	0.0506		

(1) Where applicable, custom lab flags have been used on this report; U = not detected; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; B = analyte found in sample and the associated blank; J = concentration less than LMCL.
 (2) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.
 (3) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.
 Signed: _____ Bryan Alonzo _____



Form 1A
PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
SDS-PB-01
Sample Collection:
07-Jun-2010 13:07

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.: 4406
Matrix: SOLID
Sample Receipt Date: 17-Jun-2010
Extraction Date: 22-Jul-2010
Analysis Date: 04-Aug-2010 Time: 22:34:03
Extract Volume (uL): 20
Injection Volume (uL): 2.0
Dilution Factor: N/A
Concentration Units: pg/g (dry weight basis)

Project No. FIDALGO BAY, CUSTOM
PLYWOOD DX STUDY
Lab Sample I.D.: L14884-11 (A)
Sample Size: 10.8 g (dry)
Initial Calibration Date: 13-Jul-2010
Instrument ID: HR GC/MS
GC Column ID: DB225
Sample Data Filename: DB03_102 S: 6
Blank Data Filename: DX0B_170 S: 5
Cal. Ver. Data Filename: DB03_102 S: 2
% Moisture: 28.0

COMPOUND	LAB FLAG ¹	CONCENTRATION FOUND	DETECTION LIMIT	ION ABUND. RATIO ²	RRT ²
2,3,7,8-TCDF	U		0.201		

(1) Where applicable, custom lab flags have been used on this report; U = not detected.
(2) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.
Signed: _____ Bryan Alonzo _____

For AxyS Internal Use Only [XSL Template: Form1A.xsl; Created: 20-Aug-2010 11:42:50; Application: XMLTransformer-1.10.25; Report Filename: 1613_DIOXINS_1613DB225_L14884-11_Form1A_DB03_102S6_SJ1178902.html; Workgroup: WG33418; Design ID: 699]

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested. Results are compliant with NELAP where specific accreditation is held.



Form 1A
PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
SDS-PB-04
Sample Collection:
07-Jun-2010 14:39

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.: 4406
Matrix: SOLID
Sample Receipt Date: 17-Jun-2010
Extraction Date: 22-Jul-2010
Analysis Date: 10-Aug-2010 Time: 12:18:42
Extract Volume (uL): 20
Injection Volume (uL): 1.0
Dilution Factor: N/A
Concentration Units: pg/g (dry weight basis)

Project No. FIDALGO BAY, CUSTOM
PLYWOOD DX STUDY
Lab Sample I.D.: L14884-14 i
Sample Size: 10.3 g (dry)
Initial Calibration Date: 05-Aug-2010
Instrument ID: HR GC/MS
GC Column ID: DB5
Sample Data Filename: DX0B_177 S: 6
Blank Data Filename: DX0B_170 S: 5
Cal. Ver. Data Filename: DX0B_177 S: 1
% Moisture: 17.6

COMPOUND	LAB FLAG ¹	CONCENTRATION FOUND	DETECTION LIMIT	ION ABUND. RATIO ²	RRT ²
2,3,7,8-TCDD	K B J	0.069	0.0504	0.50	1.001
1,2,3,7,8-PECDD ³	U		0.0486		
1,2,3,4,7,8-HXCDD	U		0.0607		
1,2,3,6,7,8-HXCDD	K J	0.117	0.0607	0.99	1.000
1,2,3,7,8,9-HXCDD	U		0.0607		
1,2,3,4,6,7,8-HPCDD	K B J	0.428	0.0486	0.85	1.000
OCDD	K B J	2.07	0.0593	1.08	1.000
2,3,7,8-TCDF	K J	0.134	0.0486	0.47	1.001
1,2,3,7,8-PECDF	K J	0.053	0.0486	2.23	1.001
2,3,4,7,8-PECDF	K B J	0.080	0.0486	1.80	1.001
1,2,3,4,7,8-HXCDF	U		0.0486		
1,2,3,6,7,8-HXCDF	K J	0.049	0.0486	0.85	1.001
1,2,3,7,8,9-HXCDF	U		0.0486		
2,3,4,6,7,8-HXCDF	K J	0.050	0.0486	1.92	1.000
1,2,3,4,6,7,8-HPCDF	J	0.153	0.0689	0.90	1.000
1,2,3,4,7,8,9-HPCDF	U		0.0689		
OCDF	K J	0.150	0.0486	0.56	1.001
TOTAL TETRA-DIOXINS	U		0.0504		
TOTAL PENTA-DIOXINS	U		0.0486		
TOTAL HEXA-DIOXINS		0.533	0.0607		
TOTAL HEPTA-DIOXINS	U		0.0486		
TOTAL TETRA-FURANS	U		0.0486		
TOTAL PENTA-FURANS	U		0.0486		
TOTAL HEXA-FURANS		0.157	0.0486		
TOTAL HEPTA-FURANS		0.332	0.0689		

(1) Where applicable, custom lab flags have been used on this report; U = not detected; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; B = analyte found in sample and the associated blank; J = concentration less than LMCL.
(2) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.
(3) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.
Signed: _____ Bryan Alonzo _____



Form 1A
PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
SDS-PB-04
Sample Collection:
07-Jun-2010 14:39

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.: 4406
Matrix: SOLID
Sample Receipt Date: 17-Jun-2010
Extraction Date: 22-Jul-2010
Analysis Date: 05-Aug-2010 Time: 01:00:24
Extract Volume (uL): 20
Injection Volume (uL): 2.0
Dilution Factor: N/A
Concentration Units: pg/g (dry weight basis)

Project No. FIDALGO BAY, CUSTOM
Lab Sample I.D.: PLYWOOD DX STUDY
L14884-14
Sample Size: 10.3 g (dry)
Initial Calibration Date: 13-Jul-2010
Instrument ID: HR GC/MS
GC Column ID: DB225
Sample Data Filename: DB03_102 S: 10
Blank Data Filename: DX0B_170 S: 5
Cal. Ver. Data Filename: DB03_102 S: 2
% Moisture: 17.6

COMPOUND	LAB FLAG ¹	CONCENTRATION FOUND	DETECTION LIMIT	ION ABUND. RATIO ²	RRT ²
2,3,7,8-TCDF	U		0.247		

(1) Where applicable, custom lab flags have been used on this report; U = not detected.
(2) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.
Signed: _____ Bryan Alonzo _____

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Form 1A
PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
SDS-PB-05
Sample Collection:
07-Jun-2010 14:50

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.: 4406

Project No.

FIDALGO BAY, CUSTOM
PLYWOOD DX STUDY

Lab Sample I.D.:

L14884-15 i

Matrix: SOLID

Sample Size: 10.9 g (dry)

Sample Receipt Date: 17-Jun-2010

Initial Calibration Date: 05-Aug-2010

Extraction Date: 22-Jul-2010

Instrument ID: HR GC/MS

Analysis Date: 10-Aug-2010 Time: 13:13:31

GC Column ID: DB5

Extract Volume (uL): 20

Sample Data Filename: DX0B_177 S: 7

Injection Volume (uL): 1.0

Blank Data Filename: DX0B_170 S: 5

Dilution Factor: N/A

Cal. Ver. Data Filename: DX0B_177 S: 1

Concentration Units: pg/g (dry weight basis)

% Moisture: 29.9

COMPOUND	LAB FLAG ¹	CONCENTRATION FOUND	DETECTION LIMIT	ION ABUND. RATIO ²	RRT ²
2,3,7,8-TCDD	K B J	0.157	0.0652	0.97	1.002
1,2,3,7,8-PECDD ³	J	0.214	0.0462	0.59	1.000
1,2,3,4,7,8-HXCDD	J	0.164	0.0605	1.38	1.000
1,2,3,6,7,8-HXCDD	K J	0.853	0.0605	1.78	1.000
1,2,3,7,8,9-HXCDD	J	0.582	0.0605	1.07	1.010
1,2,3,4,6,7,8-HPCDD	B	6.03	0.0480	1.10	1.000
OCDD	B	38.7	0.0711	0.89	1.000
2,3,7,8-TCDF	J	0.547	0.0668	0.73	1.001
1,2,3,7,8-PECDF	K J	0.078	0.0461	2.47	1.001
2,3,4,7,8-PECDF	K B J	0.181	0.0461	1.90	1.001
1,2,3,4,7,8-HXCDF	K J	0.152	0.0605	1.02	1.000
1,2,3,6,7,8-HXCDF	J	0.080	0.0605	1.25	1.000
1,2,3,7,8,9-HXCDF	U		0.0605		
2,3,4,6,7,8-HXCDF	K J	0.134	0.0605	0.62	1.000
1,2,3,4,6,7,8-HPCDF	J	2.07	0.0493	0.95	1.000
1,2,3,4,7,8,9-HPCDF	K J	0.074	0.0493	0.53	1.000
OCDF	J	3.65	0.0553	0.89	1.002
TOTAL TETRA-DIOXINS	B	0.297	0.0652		
TOTAL PENTA-DIOXINS		0.907	0.0462		
TOTAL HEXA-DIOXINS		6.39	0.0605		
TOTAL HEPTA-DIOXINS	B	16.1	0.0480		
TOTAL TETRA-FURANS		1.68	0.0668		
TOTAL PENTA-FURANS		1.35	0.0461		
TOTAL HEXA-FURANS		0.967	0.0605		
TOTAL HEPTA-FURANS		4.81	0.0493		

(1) Where applicable, custom lab flags have been used on this report; U = not detected; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; B = analyte found in sample and the associated blank; J = concentration less than LMCL.

(2) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

(3) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.

Signed: _____ Bryan Alonzo _____



Form 1A
PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
SDS-PB-05
Sample Collection:
07-Jun-2010 14:50

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.: 4406
Matrix: SOLID
Sample Receipt Date: 17-Jun-2010
Extraction Date: 22-Jul-2010
Analysis Date: 05-Aug-2010 **Time:** 01:36:58
Extract Volume (uL): 20
Injection Volume (uL): 2.0
Dilution Factor: N/A
Concentration Units: pg/g (dry weight basis)

Project No. FIDALGO BAY, CUSTOM
Lab Sample I.D.: PLYWOOD DX STUDY
L14884-15
Sample Size: 10.9 g (dry)
Initial Calibration Date: 13-Jul-2010
Instrument ID: HR GC/MS
GC Column ID: DB225
Sample Data Filename: DB03_102 S: 11
Blank Data Filename: DX0B_170 S: 5
Cal. Ver. Data Filename: DB03_102 S: 2
% Moisture: 29.9

COMPOUND	LAB FLAG ¹	CONCENTRATION FOUND	DETECTION LIMIT	ION ABUND. RATIO ²	RRT ²
2,3,7,8-TCDF	J	0.450	0.238	0.71	1.001

(1) Where applicable, custom lab flags have been used on this report; J = concentration less than LMCL.
(2) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.
Signed: _____ Bryan Alonzo _____

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Report Filename: 1613_DIOXINS_1613DB225_L14884-15_Form1A_DB03_102S11_SJ1178905.html; Workgroup: WG33418; Design ID: 699]

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Form 1A
PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
SDS-PB-06
Sample Collection:
07-Jun-2010 15:24

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.: 4406
Matrix: SOLID
Sample Receipt Date: 17-Jun-2010
Extraction Date: 22-Jul-2010
Analysis Date: 09-Aug-2010 Time: 15:04:20
Extract Volume (uL): 20
Injection Volume (uL): 1.0
Dilution Factor: N/A
Concentration Units: pg/g (dry weight basis)

Project No. FIDALGO BAY, CUSTOM
PLYWOOD DX STUDY
Lab Sample I.D.: L14884-17
Sample Size: 10.2 g (dry)
Initial Calibration Date: 05-Aug-2010
Instrument ID: HR GC/MS
GC Column ID: DB5
Sample Data Filename: DX0B_175A S: 7
Blank Data Filename: DX0B_170 S: 5
Cal. Ver. Data Filename: DX0B_175A S: 1
% Moisture: 20.2

COMPOUND	LAB FLAG ¹	CONCENTRATION FOUND	DETECTION LIMIT	ION ABUND. RATIO ²	RRT ²
2,3,7,8-TCDD	K B J	0.076	0.0591	0.35	1.001
1,2,3,7,8-PECDD ³	K J	0.073	0.0493	0.09	1.001
1,2,3,4,7,8-HXCDD	U		0.0753		
1,2,3,6,7,8-HXCDD	U		0.0753		
1,2,3,7,8,9-HXCDD	U		0.0753		
1,2,3,4,6,7,8-HPCDD	K B J	0.463	0.0493	0.77	1.000
OCDD	B J	2.44	0.0493	0.98	1.000
2,3,7,8-TCDF	K J	0.101	0.0493	1.10	1.001
1,2,3,7,8-PECDF	U		0.0493		
2,3,4,7,8-PECDF	B J	0.057	0.0493	1.74	1.001
1,2,3,4,7,8-HXCDF	U		0.0493		
1,2,3,6,7,8-HXCDF	U		0.0493		
1,2,3,7,8,9-HXCDF	U		0.0493		
2,3,4,6,7,8-HXCDF	U		0.0493		
1,2,3,4,6,7,8-HPCDF	K J	0.105	0.0507	0.87	1.000
1,2,3,4,7,8,9-HPCDF	U		0.0507		
OCDF	J	0.256	0.0493	0.99	1.002
TOTAL TETRA-DIOXINS	U		0.0591		
TOTAL PENTA-DIOXINS	U		0.0493		
TOTAL HEXA-DIOXINS		0.584	0.0753		
TOTAL HEPTA-DIOXINS	B	0.694	0.0493		
TOTAL TETRA-FURANS	U		0.0493		
TOTAL PENTA-FURANS		0.057	0.0493		
TOTAL HEXA-FURANS		0.088	0.0493		
TOTAL HEPTA-FURANS		0.163	0.0507		

(1) Where applicable, custom lab flags have been used on this report; U = not detected; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; B = analyte found in sample and the associated blank; J = concentration less than LMCL.
(2) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.
(3) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.
Signed: _____ Bryan Alonzo _____



Form 1A
PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
SDS-PB-06
Sample Collection:
07-Jun-2010 15:24

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.: 4406
Matrix: SOLID
Sample Receipt Date: 17-Jun-2010
Extraction Date: 22-Jul-2010
Analysis Date: 05-Aug-2010 Time: 02:50:10
Extract Volume (uL): 20
Injection Volume (uL): 2.0
Dilution Factor: N/A
Concentration Units: pg/g (dry weight basis)

Project No. FIDALGO BAY, CUSTOM
Lab Sample I.D.: PLYWOOD DX STUDY
L14884-17
Sample Size: 10.2 g (dry)
Initial Calibration Date: 13-Jul-2010
Instrument ID: HR GC/MS
GC Column ID: DB225
Sample Data Filename: DB03_102 S: 13
Blank Data Filename: DX0B_170 S: 5
Cal. Ver. Data Filename: DB03_102 S: 2
% Moisture: 20.2

COMPOUND	LAB FLAG ¹	CONCENTRATION FOUND	DETECTION LIMIT	ION ABUND. RATIO ²	RRT ²
2,3,7,8-TCDF	U		0.239		

(1) Where applicable, custom lab flags have been used on this report; U = not detected.
(2) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.
Signed: _____ Bryan Alonzo _____

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Report Filename: 1613_DIOXINS_1613DB225_L14884-17_Form1A_DB03_102S13_SJ1178906.html; Workgroup: WG33418; Design ID: 699]

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested. Results are compliant with NELAP where specific accreditation is held.



Form 1A
PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
SDS-PB-07
Sample Collection:
07-Jun-2010 15:47

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.: 4406
Matrix: SOLID
Sample Receipt Date: 17-Jun-2010
Extraction Date: 22-Jul-2010
Analysis Date: 09-Aug-2010 Time: 15:59:08
Extract Volume (uL): 20
Injection Volume (uL): 1.0
Dilution Factor: N/A
Concentration Units: pg/g (dry weight basis)

Project No. FIDALGO BAY, CUSTOM
PLYWOOD DX STUDY
Lab Sample I.D.: L14884-18
Sample Size: 10.2 g (dry)
Initial Calibration Date: 05-Aug-2010
Instrument ID: HR GC/MS
GC Column ID: DB5
Sample Data Filename: DX0B_175A S: 8
Blank Data Filename: DX0B_170 S: 5
Cal. Ver. Data Filename: DX0B_175A S: 1
% Moisture: 24.2

COMPOUND	LAB FLAG ¹	CONCENTRATION FOUND	DETECTION LIMIT	ION ABUND. RATIO ²	RRT ²
2,3,7,8-TCDD	K B J	0.092	0.0655	0.32	1.001
1,2,3,7,8-PECDD ³	K J	0.114	0.0489	0.34	1.001
1,2,3,4,7,8-HXCDD	K J	0.061	0.0491	1.86	1.000
1,2,3,6,7,8-HXCDD	J	0.280	0.0491	1.22	1.001
1,2,3,7,8,9-HXCDD	J	0.217	0.0491	1.21	1.010
1,2,3,4,6,7,8-HPCDD	K B J	1.80	0.0489	0.86	1.000
OCDD	B	9.92	0.0489	0.87	1.000
2,3,7,8-TCDF	K J	0.192	0.0489	0.90	1.001
1,2,3,7,8-PECDF	K J	0.061	0.0489	2.09	1.001
2,3,4,7,8-PECDF	B J	0.093	0.0489	1.62	1.000
1,2,3,4,7,8-HXCDF	K J	0.056	0.0489	1.66	1.000
1,2,3,6,7,8-HXCDF	U		0.0489		
1,2,3,7,8,9-HXCDF	U		0.0489		
2,3,4,6,7,8-HXCDF	K J	0.055	0.0489	0.48	1.000
1,2,3,4,6,7,8-HPCDF	J	0.387	0.0601	1.12	1.000
1,2,3,4,7,8,9-HPCDF	U		0.0601		
OCDF	J	0.722	0.0489	0.91	1.002
TOTAL TETRA-DIOXINS	U		0.0655		
TOTAL PENTA-DIOXINS		0.104	0.0489		
TOTAL HEXA-DIOXINS		2.14	0.0491		
TOTAL HEPTA-DIOXINS	B	2.27	0.0489		
TOTAL TETRA-FURANS		0.169	0.0489		
TOTAL PENTA-FURANS		0.211	0.0489		
TOTAL HEXA-FURANS		0.468	0.0489		
TOTAL HEPTA-FURANS		0.866	0.0601		

(1) Where applicable, custom lab flags have been used on this report; U = not detected; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; B = analyte found in sample and the associated blank; J = concentration less than LMCL.
 (2) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.
 (3) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.
 Signed: _____ Bryan Alonzo _____



Form 1A
PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
SDS-PB-07
Sample Collection:
07-Jun-2010 15:47

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.: 4406
Matrix: SOLID
Sample Receipt Date: 17-Jun-2010
Extraction Date: 22-Jul-2010
Analysis Date: 05-Aug-2010 Time: 03:26:44
Extract Volume (uL): 20
Injection Volume (uL): 2.0
Dilution Factor: N/A
Concentration Units: pg/g (dry weight basis)

Project No. FIDALGO BAY, CUSTOM
Lab Sample I.D.: PLYWOOD DX STUDY
L14884-18
Sample Size: 10.2 g (dry)
Initial Calibration Date: 13-Jul-2010
Instrument ID: HR GC/MS
GC Column ID: DB225
Sample Data Filename: DB03_102 S: 14
Blank Data Filename: DX0B_170 S: 5
Cal. Ver. Data Filename: DB03_102 S: 2
% Moisture: 24.2

COMPOUND	LAB FLAG ¹	CONCENTRATION FOUND	DETECTION LIMIT	ION ABUND. RATIO ²	RRT ²
2,3,7,8-TCDF	U		0.149		

(1) Where applicable, custom lab flags have been used on this report; U = not detected.
(2) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.
Signed: _____ Bryan Alonzo _____

For AxyS Internal Use Only [XSL Template: Form1A.xsl; Created: 20-Aug-2010 11:42:50; Application: XMLTransformer-1.10.25; Report Filename: 1613_DIOXINS_1613DB225_L14884-18_Form1A_DB03_102S14_SJ1178907.html; Workgroup: WG33418; Design ID: 699]

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested. Results are compliant with NELAP where specific accreditation is held.



Form 1A
PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
SDS-CPD-05
Sample Collection:
10-Jun-2010 10:57

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.: 4406

Project No.

FIDALGO BAY, CUSTOM
PLYWOOD DX STUDY
L14884-19

Matrix: SOLID

Lab Sample I.D.: L14884-19

Sample Size: 9.59 g (dry)

Sample Receipt Date: 17-Jun-2010

Initial Calibration Date: 05-Aug-2010

Extraction Date: 22-Jul-2010

Instrument ID: HR GC/MS

Analysis Date: 09-Aug-2010 Time: 16:53:56

GC Column ID: DB5

Extract Volume (uL): 20

Sample Data Filename: DX0B_175A S: 9

Injection Volume (uL): 1.0

Blank Data Filename: DX0B_170 S: 5

Dilution Factor: N/A

Cal. Ver. Data Filename: DX0B_175A S: 1

Concentration Units: pg/g (dry weight basis)

% Moisture: 42.4

COMPOUND	LAB FLAG ¹	CONCENTRATION FOUND	DETECTION LIMIT	ION ABUND. RATIO ²	RRT ²
2,3,7,8-TCDD	K B J	0.253	0.157	0.43	1.001
1,2,3,7,8-PECDD ³	K J	0.761	0.0712	0.48	1.001
1,2,3,4,7,8-HXCDD	K J	0.731	0.0902	1.54	1.000
1,2,3,6,7,8-HXCDD	J	2.30	0.0902	1.15	1.000
1,2,3,7,8,9-HXCDD	J	1.90	0.0902	1.09	1.010
1,2,3,4,6,7,8-HPCDD	B	19.7	0.0926	1.06	1.000
OCDD	B	126	0.0521	0.89	1.000
2,3,7,8-TCDF		2.98	0.0872	0.77	1.001
1,2,3,7,8-PECDF	J	0.511	0.0521	1.50	1.000
2,3,4,7,8-PECDF	B J	0.633	0.0521	1.66	1.000
1,2,3,4,7,8-HXCDF	J	0.612	0.0893	1.22	1.000
1,2,3,6,7,8-HXCDF	J	0.399	0.0893	1.06	1.000
1,2,3,7,8,9-HXCDF	U		0.0893		
2,3,4,6,7,8-HXCDF	J	0.318	0.0893	1.27	1.000
1,2,3,4,6,7,8-HPCDF	J	5.19	0.117	1.01	1.000
1,2,3,4,7,8,9-HPCDF	K J	0.418	0.117	1.27	1.000
OCDF		13.3	0.0671	0.88	1.002
TOTAL TETRA-DIOXINS	B	21.6	0.157		
TOTAL PENTA-DIOXINS		15.4	0.0712		
TOTAL HEXA-DIOXINS		21.0	0.0902		
TOTAL HEPTA-DIOXINS	B	54.9	0.0926		
TOTAL TETRA-FURANS		15.0	0.0872		
TOTAL PENTA-FURANS		5.76	0.0521		
TOTAL HEXA-FURANS		7.21	0.0893		
TOTAL HEPTA-FURANS		13.9	0.117		

(1) Where applicable, custom lab flags have been used on this report; U = not detected; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; B = analyte found in sample and the associated blank; J = concentration less than LMCL.

(2) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

(3) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.

Signed: _____ Bryan Alonzo _____



Form 1A
PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
SDS-CPD-05
Sample Collection:
10-Jun-2010 10:57

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.: 4406
Matrix: SOLID
Sample Receipt Date: 17-Jun-2010
Extraction Date: 22-Jul-2010
Analysis Date: 05-Aug-2010 **Time:** 04:03:19
Extract Volume (uL): 20
Injection Volume (uL): 2.0
Dilution Factor: N/A
Concentration Units: pg/g (dry weight basis)

Project No. FIDALGO BAY, CUSTOM
Lab Sample I.D.: PLYWOOD DX STUDY
L14884-19
Sample Size: 9.59 g (dry)
Initial Calibration Date: 13-Jul-2010
Instrument ID: HR GC/MS
GC Column ID: DB225
Sample Data Filename: DB03_102 S: 15
Blank Data Filename: DX0B_170 S: 5
Cal. Ver. Data Filename: DB03_102 S: 2
% Moisture: 42.4

COMPOUND	LAB FLAG ¹	CONCENTRATION FOUND	DETECTION LIMIT	ION ABUND. RATIO ²	RRT ²
2,3,7,8-TCDF	K J	0.980	0.408	0.53	1.002

(1) Where applicable, custom lab flags have been used on this report; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; J = concentration less than LMCL.
(2) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.

Signed: _____ Bryan Alonzo _____

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These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested. Results are compliant with NELAP where specific accreditation is held.



Form 1A
PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
SDS-CPD-15
Sample Collection:
10-Jun-2010 12:23

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.: 4406
Matrix: SOLID
Sample Receipt Date: 17-Jun-2010
Extraction Date: 22-Jul-2010
Analysis Date: 09-Aug-2010 Time: 19:38:20
Extract Volume (uL): 20
Injection Volume (uL): 1.0
Dilution Factor: N/A
Concentration Units: pg/g (dry weight basis)

Project No. FIDALGO BAY, CUSTOM
PLYWOOD DX STUDY
Lab Sample I.D.: L14884-25
Sample Size: 10.0 g (dry)
Initial Calibration Date: 05-Aug-2010
Instrument ID: HR GC/MS
GC Column ID: DB5
Sample Data Filename: DX0B_175A S: 12
Blank Data Filename: DX0B_170 S: 5
Cal. Ver. Data Filename: DX0B_175A S: 1
% Moisture: 42.9

COMPOUND	LAB FLAG ¹	CONCENTRATION FOUND	DETECTION LIMIT	ION ABUND. RATIO ²	RRT ²
2,3,7,8-TCDD	K B J	0.194	0.0544	0.32	1.001
1,2,3,7,8-PECDD ³	J	0.599	0.0573	0.55	1.000
1,2,3,4,7,8-HXCDD	J	0.688	0.0770	1.09	1.000
1,2,3,6,7,8-HXCDD	J	2.71	0.0770	1.22	1.000
1,2,3,7,8,9-HXCDD	J	2.20	0.0770	1.18	1.010
1,2,3,4,6,7,8-HPCDD	B	27.1	0.0703	1.06	1.000
OCDD	B	171	0.0499	0.88	1.001
2,3,7,8-TCDF		1.73	0.0752	0.84	1.002
1,2,3,7,8-PECDF	K J	0.336	0.0683	2.19	1.000
2,3,4,7,8-PECDF	B J	0.243	0.0683	1.30	1.010
1,2,3,4,7,8-HXCDF	K J	0.607	0.0722	1.60	1.000
1,2,3,6,7,8-HXCDF	K J	0.320	0.0722	1.02	1.000
1,2,3,7,8,9-HXCDF	U		0.0722		
2,3,4,6,7,8-HXCDF	J	0.457	0.0722	1.11	1.000
1,2,3,4,6,7,8-HPCDF		7.62	0.0894	1.09	1.000
1,2,3,4,7,8,9-HPCDF	K J	0.454	0.0894	0.83	1.000
OCDF		19.9	0.0793	0.87	1.002
TOTAL TETRA-DIOXINS	B	7.85	0.0544		
TOTAL PENTA-DIOXINS		7.70	0.0573		
TOTAL HEXA-DIOXINS		28.1	0.0770		
TOTAL HEPTA-DIOXINS	B	70.7	0.0703		
TOTAL TETRA-FURANS		8.10	0.0752		
TOTAL PENTA-FURANS		4.04	0.0683		
TOTAL HEXA-FURANS		8.08	0.0722		
TOTAL HEPTA-FURANS		19.3	0.0894		

(1) Where applicable, custom lab flags have been used on this report; U = not detected; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; B = analyte found in sample and the associated blank; J = concentration less than LMCL.
(2) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.
(3) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.
Signed: _____ Bryan Alonzo _____



Form 1A
PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
SDS-CPD-15
Sample Collection:
10-Jun-2010 12:23

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.: 4406
Matrix: SOLID
Sample Receipt Date: 17-Jun-2010
Extraction Date: 22-Jul-2010
Analysis Date: 05-Aug-2010 **Time:** 05:53:05
Extract Volume (uL): 20
Injection Volume (uL): 2.0
Dilution Factor: N/A
Concentration Units: pg/g (dry weight basis)

Project No. FIDALGO BAY, CUSTOM
Lab Sample I.D.: PLYWOOD DX STUDY
L14884-25
Sample Size: 10.0 g (dry)
Initial Calibration Date: 13-Jul-2010
Instrument ID: HR GC/MS
GC Column ID: DB225
Sample Data Filename: DB03_102 S: 18
Blank Data Filename: DX0B_170 S: 5
Cal. Ver. Data Filename: DB03_102 S: 2
% Moisture: 42.9

COMPOUND	LAB FLAG ¹	CONCENTRATION FOUND	DETECTION LIMIT	ION ABUND. RATIO ²	RRT ²
2,3,7,8-TCDF	K J	0.908	0.357	0.91	1.002

(1) Where applicable, custom lab flags have been used on this report; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; J = concentration less than LMCL.

(2) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.

Signed: _____ Bryan Alonzo _____

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These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested. Results are compliant with NELAP where specific accreditation is held.



Form 1A
PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
SDS-PB-01 (Duplicate)
Sample Collection:
07-Jun-2010 13:07

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.: 4406

Project No.

FIDALGO BAY, CUSTOM
PLYWOOD DX STUDY

Lab Sample I.D.:

WG33418-103 (DUP L14884-11)

Matrix: SOLID

Sample Size: 10.6 g (dry)

Sample Receipt Date: 17-Jun-2010

Initial Calibration Date: 05-Aug-2010

Extraction Date: 22-Jul-2010

Instrument ID: HR GC/MS

Analysis Date: 06-Aug-2010 Time: 17:47:29

GC Column ID: DB5

Extract Volume (uL): 20

Sample Data Filename: DX0B_170 S: 12

Injection Volume (uL): 1.0

Blank Data Filename: DX0B_170 S: 5

Dilution Factor: N/A

Cal. Ver. Data Filename: DX0B_170 S: 1

Concentration Units: pg/g (dry weight basis)

% Moisture: 27.3

COMPOUND	LAB FLAG ¹	CONCENTRATION FOUND	DETECTION LIMIT	ION ABUND. RATIO ²	RRT ²
2,3,7,8-TCDD	K B J	0.075	0.0711	0.46	1.000
1,2,3,7,8-PECDD ³	U G		0.117		
1,2,3,4,7,8-HXCDD	J	0.190	0.0698	1.17	1.000
1,2,3,6,7,8-HXCDD	K J	0.578	0.0698	1.60	1.000
1,2,3,7,8,9-HXCDD	J	0.533	0.0698	1.35	1.010
1,2,3,4,6,7,8-HPCDD	B J	3.45	0.0488	1.13	1.000
OCDD	B	20.4	0.0952	0.91	1.000
2,3,7,8-TCDF	J	0.343	0.0571	0.85	1.001
1,2,3,7,8-PECDF	U		0.158		
2,3,4,7,8-PECDF	U		0.158		
1,2,3,4,7,8-HXCDF	K J	0.105	0.0816	3.22	1.000
1,2,3,6,7,8-HXCDF	J	0.107	0.0816	1.34	1.000
1,2,3,7,8,9-HXCDF	U		0.0816		
2,3,4,6,7,8-HXCDF	K J	0.118	0.0816	0.57	1.000
1,2,3,4,6,7,8-HPCDF	J	0.911	0.131	1.16	1.000
1,2,3,4,7,8,9-HPCDF	U		0.131		
OCDF	J	1.61	0.0520	0.93	1.002
TOTAL TETRA-DIOXINS	U		0.0711		
TOTAL PENTA-DIOXINS		0.561	0.117		
TOTAL HEXA-DIOXINS		4.29	0.0698		
TOTAL HEPTA-DIOXINS	B	8.45	0.0488		
TOTAL TETRA-FURANS		0.954	0.0571		
TOTAL PENTA-FURANS	U		0.158		
TOTAL HEXA-FURANS		0.993	0.0816		
TOTAL HEPTA-FURANS		1.86	0.131		

(1) Where applicable, custom lab flags have been used on this report; U = not detected; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; B = analyte found in sample and the associated blank; J = concentration less than LMCL; G = lock mass interference present.
 (2) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.
 (3) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.

Signed: _____ Bryan Alonzo _____



Form 1A
PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
SDS-PB-01 (Duplicate)
Sample Collection:
07-Jun-2010 13:07

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.: 4406
Matrix: SOLID
Sample Receipt Date: 17-Jun-2010
Extraction Date: 22-Jul-2010
Analysis Date: 04-Aug-2010 **Time:** 23:10:40
Extract Volume (uL): 20
Injection Volume (uL): 2.0
Dilution Factor: N/A
Concentration Units: pg/g (dry weight basis)

Project No. FIDALGO BAY, CUSTOM
Lab Sample I.D.: PLYWOOD DX STUDY
WG33418-103 (DUP L14884-11)
Sample Size: 10.6 g (dry)
Initial Calibration Date: 13-Jul-2010
Instrument ID: HR GC/MS
GC Column ID: DB225
Sample Data Filename: DB03_102 S: 7
Blank Data Filename: DX0B_170 S: 5
Cal. Ver. Data Filename: DB03_102 S: 2
% Moisture: 27.3

COMPOUND	LAB FLAG ¹	CONCENTRATION FOUND	DETECTION LIMIT	ION ABUND. RATIO ²	RRT ²
2,3,7,8-TCDF	U		0.284		

(1) Where applicable, custom lab flags have been used on this report; U = not detected.
(2) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.
Signed: _____ Bryan Alonzo _____

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These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested. Results are compliant with NELAP where specific accreditation is held.



PCDD/PCDF ANALYSIS REPORT
RELATIVE PERCENT DIFFERENCE

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.

FIDALGO BAY, CUSTOM
PLYWOOD DX STUDY

Contract No.: 4406

Client ID: SDS-PB-01

Concentration Units: pg/g (dry weight basis)

COMPOUND	L14884-11 (A)		WG33418-103		MEAN	RELATIVE PERCENT DIFFERENCE
	LAB FLAG ¹	CONC. FOUND	LAB FLAG ¹	CONC. FOUND		
2,3,7,8-TCDD	K J	0.074	K J	0.075		
1,2,3,7,8-PECDD	K J	0.089	U G			
1,2,3,4,7,8-HXCDD	K J	0.096	J	0.190		
1,2,3,6,7,8-HXCDD	J	0.576	K J	0.578		
1,2,3,7,8,9-HXCDD	K J	0.423	J	0.533		
1,2,3,4,6,7,8-HPCDD	J	3.55	J	3.45	3.50	2.94
OCDD		20.4		20.4	20.4	0.108
2,3,7,8-TCDF	U		U			
1,2,3,7,8-PECDF	U		U			
2,3,4,7,8-PECDF	J	0.082	U			
1,2,3,4,7,8-HXCDF	J	0.091	K J	0.105		
1,2,3,6,7,8-HXCDF	K J	0.084	J	0.107		
1,2,3,7,8,9-HXCDF	U		U			
2,3,4,6,7,8-HXCDF	J	0.083	K J	0.118		
1,2,3,4,6,7,8-HPCDF	K J	0.821	J	0.911		
1,2,3,4,7,8,9-HPCDF	U		U			
OCDF	J	1.70	J	1.61	1.65	5.75

(1) Where applicable, custom lab flags have been used on this report; U = not detected; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; J = concentration less than LMCL; G = lock mass interference present.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.

Signed: _____ Bryan Alonzo _____

For Axys Internal Use Only [XSL Template: RPD.xml; Created: 20-Aug-2010 11:44:27; Application: XMLTransformer-1.10.25; Report Filename: RPD_DIOXINS_1613-RPD_WG33418-103_L14884-11_.html; Workgroup: WG33418; Design ID: 699]

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested. Results are compliant with NELAP where specific accreditation is held.



Form 1A
PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
Lab Blank
Sample Collection:
N/A

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.: 4406

Project No. N/A

Lab Sample I.D.: WG33418-101

Matrix: SOLID

Sample Size: 10.0 g

Sample Receipt Date: N/A

Initial Calibration Date: 05-Aug-2010

Extraction Date: 22-Jul-2010

Instrument ID: HR GC/MS

Analysis Date: 06-Aug-2010 Time: 11:23:42

GC Column ID: DB5

Extract Volume (uL): 20

Sample Data Filename: DX0B_170 S: 5

Injection Volume (uL): 1.0

Blank Data Filename: DX0B_170 S: 5

Dilution Factor: N/A

Cal. Ver. Data Filename: DX0B_170 S: 1

Concentration Units: pg/g

COMPOUND	LAB FLAG ¹	CONCENTRATION FOUND	DETECTION LIMIT	ION ABUND. RATIO ²	RRT ²
2,3,7,8-TCDD	J	0.114	0.0500	0.73	1.001
1,2,3,7,8-PECDD ³	U G		0.0500		
1,2,3,4,7,8-HXCDD	U		0.0500		
1,2,3,6,7,8-HXCDD	U		0.0500		
1,2,3,7,8,9-HXCDD	U		0.0500		
1,2,3,4,6,7,8-HPCDD	J	0.052	0.0500	1.13	1.000
OCDD	K J	0.088	0.0500	0.42	1.000
2,3,7,8-TCDF	U		0.0500		
1,2,3,7,8-PECDF	U		0.0500		
2,3,4,7,8-PECDF	K J	0.062	0.0500	1.02	1.001
1,2,3,4,7,8-HXCDF	U		0.0500		
1,2,3,6,7,8-HXCDF	U		0.0500		
1,2,3,7,8,9-HXCDF	U		0.0500		
2,3,4,6,7,8-HXCDF	U		0.0500		
1,2,3,4,6,7,8-HPCDF	U		0.0500		
1,2,3,4,7,8,9-HPCDF	U		0.0500		
OCDF	U		0.0500		
TOTAL TETRA-DIOXINS		0.114	0.0500		
TOTAL PENTA-DIOXINS	U		0.0500		
TOTAL HEXA-DIOXINS	U		0.0500		
TOTAL HEPTA-DIOXINS		0.052	0.0500		
TOTAL TETRA-FURANS	U		0.0500		
TOTAL PENTA-FURANS	U		0.0500		
TOTAL HEXA-FURANS	U		0.0500		
TOTAL HEPTA-FURANS	U		0.0500		

(1) Where applicable, custom lab flags have been used on this report; U = not detected; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; J = concentration less than LMCL; G = lock mass interference present.

(2) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

(3) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.

Signed: _____ Bryan Alonzo _____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 20-Aug-2010 11:43:30; Application: XMLTransformer-1.10.25; Report Filename: 1613_DIOXINS_1613DB5_WG33418-101_Form1A_DX0B_170S5_SJ1178292.html; Workgroup: WG33418; Design ID: 699]

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested. Results are compliant with NELAP where specific accreditation is held.



Form 8A
PCDD/PCDF ONGOING PRECISION AND RECOVERY (OPR)

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
 V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.: 4406

OPR Data Filename: DX0B_170 S: 2

Matrix: SOLID

Lab Sample I.D.: WG33418-102

Extraction Date: 22-Jul-2010

Analysis Date: 06-Aug-2010 **Time:** 08:39:11

ALL CONCENTRATIONS REPORTED ON THIS FORM ARE CONCENTRATIONS IN EXTRACT, BASED ON A 20 µL EXTRACT VOLUME.

COMPOUND	LAB FLAG ¹	ION ABUND. RATIO ²	SPIKE CONC. (ng/mL)	CONC. FOUND (ng/mL)	OPR CONC. LIMITS ³ (ng/mL)	% RECOVERY
2,3,7,8-TCDD		0.80	10.0	10.5	6.70 - 15.8	105
1,2,3,7,8-PECDD ⁴	G	0.62	52.0	52.4	36.4 - 73.8	101
1,2,3,4,7,8-HXCDD		1.26	56.5	57.4	39.6 - 92.7	102
1,2,3,6,7,8-HXCDD		1.24	55.5	57.6	42.2 - 74.4	104
1,2,3,7,8,9-HXCDD		1.26	54.0	53.4	34.6 - 87.5	98.8
1,2,3,4,6,7,8-HPCDD		1.06	47.5	46.4	33.3 - 66.5	97.8
OCDD		0.89	100	99.8	78.0 - 144	99.8
2,3,7,8-TCDF		0.80	10.7	11.1	8.03 - 16.9	104
1,2,3,7,8-PECDF		1.57	46.0	46.6	36.8 - 61.6	101
2,3,4,7,8-PECDF		1.55	47.0	49.2	32.0 - 75.2	105
1,2,3,4,7,8-HXCDF		1.25	50.0	49.2	36.0 - 67.0	98.5
1,2,3,6,7,8-HXCDF		1.25	47.5	46.7	39.9 - 61.8	98.4
1,2,3,7,8,9-HXCDF		1.26	52.5	51.7	41.0 - 68.3	98.4
2,3,4,6,7,8-HXCDF		1.27	53.0	51.3	37.1 - 82.7	96.8
1,2,3,4,6,7,8-HPCDF		1.06	50.0	51.5	41.0 - 61.0	103
1,2,3,4,7,8,9-HPCDF		1.05	50.0	49.7	39.0 - 69.0	99.4
OCDF		0.91	104	109	65.5 - 177	104

- (1) Where applicable, custom lab flags have been used on this report; G = lock mass interference present.
- (2) Contract-required Ion Abundance Ratios are specified in Table 9, Method 1613.
- (3) Contract-required concentration range as determined from the percent of the test concentration in Table 6, Method 1613, under OPR.
- (4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.

Signed: _____ Bryan Alonzo _____

For Axys Internal Use Only [XSL Template: Form8A.xsl; Created: 20-Aug-2010 11:43:30; Application: XMLTransformer-1.10.25; Report Filename: 1613_DIOXINS_1613DB5_WG33418-102_Form8A_SJ1178288.html; Workgroup: WG33418; Design ID: 699]

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested. Results are compliant with NELAP where specific accreditation is held.



PCDD/PCDF CERTIFIED REFERENCE MATERIAL (CRM) REPORT FOR NIST SRM 1944

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
 V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4406	Lab Sample I.D.:	WG33418-104
Matrix:	SOLID	Sample Size:	1.00 g (dry)
Extraction Date:	22-Jul-2010	Initial Calibration Date:	05-Aug-2010
Analysis Date:	06-Aug-2010 Time: 12:18:29	Instrument ID:	HR GC/MS
Extract Volume (uL):	20	GC Column ID:	DB5
Injection Volume (uL):	1.0	CRM Data Filename:	DX0B_170 S: 6
Dilution Factor:	N/A	Blank Data Filename:	DX0B_170 S: 5
Concentration Units:	pg/g (dry weight basis)	Cal. Ver. Data Filename:	DX0B_170 S: 1

COMPOUND	LAB FLAG ¹	DETERMINED	CERTIFIED / REFERENCE
2,3,7,8-TCDD		132	133 +/- 9
1,2,3,7,8-PECDD ²	G	18.6	19 +/- 2
1,2,3,4,7,8-HXCDD		28.8	26 +/- 3
1,2,3,6,7,8-HXCDD		67.7	56 +/- 6
1,2,3,7,8,9-HXCDD		75.8	53 +/- 7
1,2,3,4,6,7,8-HPCDD		794	800 +/- 70
OCDD		5820	5800 +/- 700
2,3,7,8-TCDF		175	39 +/- 15
1,2,3,7,8-PECDF		44.8	45 +/- 7
2,3,4,7,8-PECDF		43.3	45 +/- 4
1,2,3,4,7,8-HXCDF		200	220 +/- 30
1,2,3,6,7,8-HXCDF		86.3	90 +/- 10
1,2,3,7,8,9-HXCDF		2.83	19 +/- 18
2,3,4,6,7,8-HXCDF		49.0	54 +/- 6
1,2,3,4,6,7,8-HPCDF		965	1000 +/- 100
1,2,3,4,7,8,9-HPCDF		43.4	40 +/- 6
OCDF		1080	1000 +/- 100

(1) Where applicable, custom lab flags have been used on this report; G = lock mass interference present.

(2) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.

Signed: _____ Bryan Alonzo _____

For Axys Internal Use Only [XSL Template: Form8G.xsl; Created: 20-Aug-2010 11:43:30; Application: XMLTransformer-1.10.25; Report Filename: 1613_DIOXINS_1613DB5_WG33418-104_Form8G_SJ1178294.html; Workgroup: WG33418; Design ID: 699]

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested. Results are compliant with NELAP where specific accreditation is held.



PCDD/PCDF CERTIFIED REFERENCE MATERIAL (CRM) REPORT FOR NIST SRM 1944

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
 V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4406	Lab Sample I.D.:	WG33418-104
Matrix:	SOLID	Sample Size:	1.00 g (dry)
Extraction Date:	22-Jul-2010	Initial Calibration Date:	13-Jul-2010
Analysis Date:	04-Aug-2010 Time: 11:23:22	Instrument ID:	HR GC/MS
Extract Volume (uL):	20	GC Column ID:	DB225
Injection Volume (uL):	2.0	CRM Data Filename:	DB03_101 S: 7
Dilution Factor:	N/A	Blank Data Filename:	DX0B_170 S: 5
Concentration Units:	pg/g (dry weight basis)	Cal. Ver. Data Filename:	DB03_101 S: 2

COMPOUND	LAB FLAG ¹	DETERMINED	CERTIFIED / REFERENCE
2,3,7,8-TCDF	K	29.2	39 +/- 15

(1) Where applicable, custom lab flags have been used on this report; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.

Signed: _____ Bryan Alonzo _____

For Axys Internal Use Only [XSL Template: Form8G.xsl; Created: 20-Aug-2010 11:42:50; Application: XMLTransformer-1.10.25; Report Filename: 1613_DIOXINS_1613DB225_WG33418-104_Form8G_SJ1178844.html; Workgroup: WG33418; Design ID: 699]

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested. Results are compliant with NELAP where specific accreditation is held.



BATCH SUMMARY

Batch ID: WG33419	Date: 27-Aug-2010
Analysis Type: Dioxin/Furan	Matrix Type: Solid
BATCH MAKEUP	
<p>Contract: 4406 Samples:</p> <p>L14884-27 SDS-CT-01B L14884-29 SDS-CT-03 L14884-30 SDS-CT-04 L14884-32 SDS-CPD-17 L14884-37 SDS-PB-08 L14884-38 SDS-PB-09 L14884-40 SDS-FB-01 L14884-41 SDS-FB-02 L14884-45 SDS-FB-06</p>	<p>Blank: WG33419-101</p> <hr/> <p>Reference or Spike: WG33419-102 WG33419-104</p> <hr/> <p>Duplicate: WG33419-103</p>
<p>Comments:</p> <ol style="list-style-type: none"> 1. Data are not blank corrected. 2. Percent surrogate recovery of 13C-2,3,7,8-TCDD in the Lab Blank (AXYS ID: WG33419-101) was below the range required for accurate quantification. As a result the surrogate and its associated analytes have been flagged 'NQ' on the report form. 3. The lock mass signal in the vicinity of native and labeled 1,2,3,7,8 -PeCDD was observed in the sample SDS-FB-02 (AXYS ID: L14884-41). The compound 1,2,3,7,8-PECDD and its surrogate are flagged with a 'G' on the report form. The data are not considered significantly affected by these fluctuations. 4. The surrogate recoveries in the duplicate sample SDS -PB-09 (Duplicate) (AXYS ID: WG33419-103) fell below the lower method control limit, and are flagged with a 'V' on the report form. The duplication analysis demonstrates that the low recoveries have a negligible impact on the data. For target analytes whose concentrations are lower than ten times that of the corresponding detection limit, greater percent differences were observed but overall, there was good agreement in target analyte concentrations between the duplicate samples. The replicates agree well for congeners quantified against exact labeled analogs, and for congeners quantified against surrogates whose recoveries are within the control limits. 5. The analysis of samples SDS-CT-01A, SDS-CT-02, SDS-CT-05, SDS-PB-10, SDS-FB-03, SDS-FB-04 and SDS-FB-05 (AXYS ID: L14884-26, -28, -31, -39, -42, -43, and -44, respectively) was not successful and data is not available in this batch summary. 	



Form 1A
PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
SDS-CT-01B
Sample Collection:
14-Jun-2010 11:15

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.: 4406
Matrix: SOLID
Sample Receipt Date: 17-Jun-2010
Extraction Date: 22-Jul-2010
Analysis Date: 06-Aug-2010 Time: 01:36:03
Extract Volume (uL): 20
Injection Volume (uL): 1.0
Dilution Factor: N/A
Concentration Units: pg/g (dry weight basis)

Project No. FIDALGO BAY, CUSTOM
PLYWOOD DX STUDY
Lab Sample I.D.: L14884-27
Sample Size: 9.91 g (dry)
Initial Calibration Date: 05-Aug-2010
Instrument ID: HR GC/MS
GC Column ID: DB5
Sample Data Filename: DX0B_169B S: 5
Blank Data Filename: DX0B_169B S: 4
Cal. Ver. Data Filename: DX0B_169 S: 1
% Moisture: 23.7

COMPOUND	LAB FLAG ¹	CONCENTRATION FOUND	DETECTION LIMIT	ION ABUND. RATIO ²	RRT ²
2,3,7,8-TCDD	K J	0.390	0.0505	0.61	1.001
1,2,3,7,8-PECDD ³	J	3.50	0.0505	0.59	1.000
1,2,3,4,7,8-HXCDD	J	5.66	0.0705	1.28	1.000
1,2,3,6,7,8-HXCDD		23.9	0.0705	1.26	1.000
1,2,3,7,8,9-HXCDD		13.0	0.0705	1.26	1.010
1,2,3,4,6,7,8-HPCDD	B	287	0.230	1.05	1.000
OCDD	B	1950	0.0505	0.88	1.000
2,3,7,8-TCDF	J	1.06	0.0505	0.78	1.002
1,2,3,7,8-PECDF	J	0.684	0.0505	1.75	1.001
2,3,4,7,8-PECDF	B J	0.922	0.0505	1.71	1.000
1,2,3,4,7,8-HXCDF	J	2.58	0.0694	1.27	1.000
1,2,3,6,7,8-HXCDF	J	1.90	0.0694	1.24	1.000
1,2,3,7,8,9-HXCDF	K J	0.169	0.0694	0.94	1.000
2,3,4,6,7,8-HXCDF	J	2.10	0.0694	1.23	1.000
1,2,3,4,6,7,8-HPCDF		44.9	0.0695	1.02	1.001
1,2,3,4,7,8,9-HPCDF	J	2.08	0.0695	0.99	1.000
OCDF	B	128	0.0505	0.89	1.002
TOTAL TETRA-DIOXINS		6.09	0.0505		
TOTAL PENTA-DIOXINS		16.1	0.0505		
TOTAL HEXA-DIOXINS		109	0.0705		
TOTAL HEPTA-DIOXINS		553	0.230		
TOTAL TETRA-FURANS		6.69	0.0505		
TOTAL PENTA-FURANS	B	21.0	0.0505		
TOTAL HEXA-FURANS		82.0	0.0694		
TOTAL HEPTA-FURANS		151	0.0695		

(1) Where applicable, custom lab flags have been used on this report; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; B = analyte found in sample and the associated blank; J = concentration less than LMCL.
(2) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.
(3) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.

Signed: _____ Bryan Alonzo _____



Form 1A
PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
SDS-CT-01B
Sample Collection:
14-Jun-2010 11:15

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.: 4406
Matrix: SOLID
Sample Receipt Date: 17-Jun-2010
Extraction Date: 22-Jul-2010
Analysis Date: 11-Aug-2010 **Time:** 00:42:30
Extract Volume (uL): 20
Injection Volume (uL): 2.0
Dilution Factor: N/A
Concentration Units: pg/g (dry weight basis)

Project No. FIDALGO BAY, CUSTOM
Lab Sample I.D.: PLYWOOD DX STUDY
L14884-27 i
Sample Size: 9.91 g (dry)
Initial Calibration Date: 13-Jul-2010
Instrument ID: HR GC/MS
GC Column ID: DB225
Sample Data Filename: DB03_110 S: 8
Blank Data Filename: DB03_110 S: 5
Cal. Ver. Data Filename: DB03_110 S: 2
% Moisture: 23.7

COMPOUND	LAB FLAG ¹	CONCENTRATION FOUND	DETECTION LIMIT	ION ABUND. RATIO ²	RRT ²
2,3,7,8-TCDF	J	0.449	0.292	0.84	1.001

(1) Where applicable, custom lab flags have been used on this report; J = concentration less than LMCL.
(2) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.
Signed: _____ Bryan Alonzo _____

For AxyS Internal Use Only [XSL Template: Form1A.xsl; Created: 27-Aug-2010 11:49:42; Application: XMLTransformer-1.10.25;
Report Filename: 1613_DIOXINS_1613DB225_L14884-27_Form1A_DB03_110S8_SJ1179598.html; Workgroup: WG33419; Design ID: 699]

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested. Results are compliant with NELAP where specific accreditation is held.



Form 1A
PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
SDS-CT-03
Sample Collection:
14-Jun-2010 12:30

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.: 4406
Matrix: SOLID
Sample Receipt Date: 17-Jun-2010
Extraction Date: 22-Jul-2010
Analysis Date: 06-Aug-2010 Time: 02:30:56
Extract Volume (uL): 20
Injection Volume (uL): 1.0
Dilution Factor: N/A
Concentration Units: pg/g (dry weight basis)

Project No. FIDALGO BAY, CUSTOM PLYWOOD DX STUDY
Lab Sample I.D.: L14884-29
Sample Size: 10.8 g (dry)
Initial Calibration Date: 05-Aug-2010
Instrument ID: HR GC/MS
GC Column ID: DB5
Sample Data Filename: DX0B_169B S: 6
Blank Data Filename: DX0B_169B S: 4
Cal. Ver. Data Filename: DX0B_169 S: 1
% Moisture: 24.9

COMPOUND	LAB FLAG ¹	CONCENTRATION FOUND	DETECTION LIMIT	ION ABUND. RATIO ²	RRT ²
2,3,7,8-TCDD	K J	0.139	0.0465	0.49	1.001
1,2,3,7,8-PECDD ³	K J	0.562	0.0465	0.71	1.000
1,2,3,4,7,8-HXCDD	J	0.807	0.0465	1.38	1.000
1,2,3,6,7,8-HXCDD	J	3.37	0.0465	1.20	1.000
1,2,3,7,8,9-HXCDD	J	2.08	0.0465	1.31	1.010
1,2,3,4,6,7,8-HPCDD	B	52.5	0.0818	1.05	1.000
OCDD	B	394	0.0465	0.89	1.000
2,3,7,8-TCDF	J	0.547	0.0465	0.77	1.001
1,2,3,7,8-PECDF	J	0.211	0.0465	1.37	1.000
2,3,4,7,8-PECDF	B J	0.344	0.0465	1.36	1.000
1,2,3,4,7,8-HXCDF	J	0.771	0.0465	1.27	1.000
1,2,3,6,7,8-HXCDF	J	0.472	0.0465	1.23	1.000
1,2,3,7,8,9-HXCDF	K J	0.111	0.0465	0.94	1.000
2,3,4,6,7,8-HXCDF	J	0.555	0.0465	1.42	1.000
1,2,3,4,6,7,8-HPCDF		17.8	0.0589	1.04	1.000
1,2,3,4,7,8,9-HPCDF	J	1.20	0.0589	0.99	1.000
OCDF	B	71.6	0.0465	0.90	1.002
TOTAL TETRA-DIOXINS		2.42	0.0465		
TOTAL PENTA-DIOXINS		5.23	0.0465		
TOTAL HEXA-DIOXINS		29.6	0.0465		
TOTAL HEPTA-DIOXINS		112	0.0818		
TOTAL TETRA-FURANS		3.58	0.0465		
TOTAL PENTA-FURANS	B	5.55	0.0465		
TOTAL HEXA-FURANS		18.7	0.0465		
TOTAL HEPTA-FURANS		57.9	0.0589		

(1) Where applicable, custom lab flags have been used on this report; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; B = analyte found in sample and the associated blank; J = concentration less than LMCL.
(2) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.
(3) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.

Signed: _____ Bryan Alonzo _____



Form 1A
PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
SDS-CT-03
Sample Collection:
14-Jun-2010 12:30

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.: 4406
Matrix: SOLID
Sample Receipt Date: 17-Jun-2010
Extraction Date: 22-Jul-2010
Analysis Date: 11-Aug-2010 Time: 01:55:42
Extract Volume (uL): 20
Injection Volume (uL): 2.0
Dilution Factor: N/A
Concentration Units: pg/g (dry weight basis)

Project No. FIDALGO BAY, CUSTOM
Lab Sample I.D.: PLYWOOD DX STUDY
L14884-29 i
Sample Size: 10.8 g (dry)
Initial Calibration Date: 13-Jul-2010
Instrument ID: HR GC/MS
GC Column ID: DB225
Sample Data Filename: DB03_110 S: 10
Blank Data Filename: DB03_110 S: 5
Cal. Ver. Data Filename: DB03_110 S: 2
% Moisture: 24.9

COMPOUND	LAB FLAG ¹	CONCENTRATION FOUND	DETECTION LIMIT	ION ABUND. RATIO ²	RRT ²
2,3,7,8-TCDF	K J	0.317	0.180	0.95	1.001

(1) Where applicable, custom lab flags have been used on this report; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; J = concentration less than LMCL.
(2) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.

Signed: _____ Bryan Alonzo _____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 27-Aug-2010 11:49:42; Application: XMLTransformer-1.10.25; Report Filename: 1613_DIOXINS_1613DB225_L14884-29_Form1A_DB03_110S10_SJ1179600.html; Workgroup: WG33419; Design ID: 699]

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested. Results are compliant with NELAP where specific accreditation is held.



Form 1A
PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
SDS-CT-04
Sample Collection:
14-Jun-2010 13:31

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.: 4406
Matrix: SOLID
Sample Receipt Date: 17-Jun-2010
Extraction Date: 22-Jul-2010
Analysis Date: 06-Aug-2010 Time: 03:25:50
Extract Volume (uL): 20
Injection Volume (uL): 1.0
Dilution Factor: N/A
Concentration Units: pg/g (dry weight basis)

Project No. FIDALGO BAY, CUSTOM
PLYWOOD DX STUDY
Lab Sample I.D.: L14884-30
Sample Size: 10.3 g (dry)
Initial Calibration Date: 05-Aug-2010
Instrument ID: HR GC/MS
GC Column ID: DB5
Sample Data Filename: DX0B_169B S: 7
Blank Data Filename: DX0B_169B S: 4
Cal. Ver. Data Filename: DX0B_169 S: 1
% Moisture: 24.1

COMPOUND	LAB FLAG ¹	CONCENTRATION FOUND	DETECTION LIMIT	ION ABUND. RATIO ²	RRT ²
2,3,7,8-TCDD	K J	0.100	0.0484	0.58	1.001
1,2,3,7,8-PECDD ³	J	0.328	0.0484	0.69	1.000
1,2,3,4,7,8-HXCDD	J	0.464	0.0601	1.09	1.000
1,2,3,6,7,8-HXCDD	J	1.57	0.0601	1.20	1.000
1,2,3,7,8,9-HXCDD	J	1.06	0.0601	1.40	1.010
1,2,3,4,6,7,8-HPCDD	B	22.4	0.0714	1.08	1.000
OCDD	B	146	0.0484	0.90	1.000
2,3,7,8-TCDF	J	0.431	0.0484	0.75	1.002
1,2,3,7,8-PECDF	J	0.127	0.0484	1.73	1.000
2,3,4,7,8-PECDF	K B J	0.199	0.0484	1.19	1.000
1,2,3,4,7,8-HXCDF	J	0.349	0.0484	1.37	1.000
1,2,3,6,7,8-HXCDF	J	0.225	0.0484	1.08	1.000
1,2,3,7,8,9-HXCDF	J	0.051	0.0484	1.23	1.000
2,3,4,6,7,8-HXCDF	J	0.320	0.0484	1.28	1.000
1,2,3,4,6,7,8-HPCDF		8.82	0.0637	1.06	1.000
1,2,3,4,7,8,9-HPCDF	J	0.488	0.0637	1.09	1.000
OCDF	B	28.7	0.0484	0.86	1.002
TOTAL TETRA-DIOXINS		1.90	0.0484		
TOTAL PENTA-DIOXINS		3.69	0.0484		
TOTAL HEXA-DIOXINS		15.1	0.0601		
TOTAL HEPTA-DIOXINS		48.8	0.0714		
TOTAL TETRA-FURANS		2.43	0.0484		
TOTAL PENTA-FURANS	B	3.29	0.0484		
TOTAL HEXA-FURANS		9.43	0.0484		
TOTAL HEPTA-FURANS		24.8	0.0637		

(1) Where applicable, custom lab flags have been used on this report; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; B = analyte found in sample and the associated blank; J = concentration less than LMCL.
(2) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.
(3) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.

Signed: _____ Bryan Alonzo _____



Form 1A
PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
SDS-CT-04
Sample Collection:
14-Jun-2010 13:31

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.: 4406

Matrix: SOLID

Sample Receipt Date: 17-Jun-2010

Extraction Date: 22-Jul-2010

Analysis Date: 11-Aug-2010 Time: 02:32:21

Extract Volume (uL): 20

Injection Volume (uL): 2.0

Dilution Factor: N/A

Concentration Units: pg/g (dry weight basis)

Project No. FIDALGO BAY, CUSTOM
PLYWOOD DX STUDY
Lab Sample I.D.: L14884-30 i

Sample Size: 10.3 g (dry)

Initial Calibration Date: 13-Jul-2010

Instrument ID: HR GC/MS

GC Column ID: DB225

Sample Data Filename: DB03_110 S: 11

Blank Data Filename: DB03_110 S: 5

Cal. Ver. Data Filename: DB03_110 S: 2

% Moisture: 24.1

COMPOUND	LAB FLAG ¹	CONCENTRATION FOUND	DETECTION LIMIT	ION ABUND. RATIO ²	RRT ²
2,3,7,8-TCDF	K J	0.237	0.215	1.04	1.001

(1) Where applicable, custom lab flags have been used on this report; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; J = concentration less than LMCL.
(2) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.

Signed: _____ Bryan Alonzo _____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 27-Aug-2010 11:49:42; Application: XMLTransformer-1.10.25; Report Filename: 1613_DIOXINS_1613DB225_L14884-30_Form1A_DB03_110S11_SJ1179601.html; Workgroup: WG33419; Design ID: 699]

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested. Results are compliant with NELAP where specific accreditation is held.



Form 1A
PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
SDS-CPD-17
Sample Collection:
09-Jun-2010 13:43

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.: 4406
Matrix: SOLID
Sample Receipt Date: 17-Jun-2010
Extraction Date: 22-Jul-2010
Analysis Date: 11-Aug-2010 Time: 13:09:43
Extract Volume (uL): 20
Injection Volume (uL): 1.0
Dilution Factor: N/A
Concentration Units: pg/g (dry weight basis)

Project No. FIDALGO BAY, CUSTOM
PLYWOOD DX STUDY
Lab Sample I.D.: L14884-32
Sample Size: 9.78 g (dry)
Initial Calibration Date: 05-Aug-2010
Instrument ID: HR GC/MS
GC Column ID: DB5
Sample Data Filename: DX0B_179 S: 7
Blank Data Filename: DX0B_169B S: 4
Cal. Ver. Data Filename: DX0B_179 S: 1
% Moisture: 48.7

COMPOUND	LAB FLAG ¹	CONCENTRATION FOUND	DETECTION LIMIT	ION ABUND. RATIO ²	RRT ²
2,3,7,8-TCDD	K J	0.281	0.0511	0.60	1.001
1,2,3,7,8-PECDD ³	J	1.09	0.0511	0.68	1.000
1,2,3,4,7,8-HXCDD	J	1.48	0.0948	1.33	1.000
1,2,3,6,7,8-HXCDD		5.73	0.0948	1.29	1.000
1,2,3,7,8,9-HXCDD	J	3.80	0.0948	1.21	1.010
1,2,3,4,6,7,8-HPCDD	B	74.7	0.152	1.04	1.000
OCDD	B	504	0.0511	0.89	1.000
2,3,7,8-TCDF		2.37	0.0902	0.79	1.001
1,2,3,7,8-PECDF	J	0.442	0.0511	1.41	1.001
2,3,4,7,8-PECDF	B J	0.694	0.0511	1.67	1.000
1,2,3,4,7,8-HXCDF	J	1.23	0.103	1.16	1.000
1,2,3,6,7,8-HXCDF	J	0.732	0.103	1.22	1.000
1,2,3,7,8,9-HXCDF	U		0.103		
2,3,4,6,7,8-HXCDF	J	1.03	0.103	1.28	1.000
1,2,3,4,6,7,8-HPCDF		24.0	0.0977	1.05	1.000
1,2,3,4,7,8,9-HPCDF	J	1.38	0.0977	1.06	1.000
OCDF	B	76.1	0.0511	0.88	1.002
TOTAL TETRA-DIOXINS		15.2	0.0511		
TOTAL PENTA-DIOXINS		16.7	0.0511		
TOTAL HEXA-DIOXINS		51.5	0.0948		
TOTAL HEPTA-DIOXINS		174	0.152		
TOTAL TETRA-FURANS		15.1	0.0902		
TOTAL PENTA-FURANS	B	13.1	0.0511		
TOTAL HEXA-FURANS		29.1	0.103		
TOTAL HEPTA-FURANS		70.5	0.0977		

(1) Where applicable, custom lab flags have been used on this report; U = not detected; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; B = analyte found in sample and the associated blank; J = concentration less than LMCL.
 (2) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.
 (3) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.
 Signed: _____ Bryan Alonzo _____



Form 1A
PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
SDS-CPD-17
Sample Collection:
09-Jun-2010 13:43

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.: 4406
Matrix: SOLID
Sample Receipt Date: 17-Jun-2010
Extraction Date: 22-Jul-2010
Analysis Date: 11-Aug-2010 Time: 03:45:33
Extract Volume (uL): 20
Injection Volume (uL): 2.0
Dilution Factor: N/A
Concentration Units: pg/g (dry weight basis)

Project No. FIDALGO BAY, CUSTOM
Lab Sample I.D.: PLYWOOD DX STUDY
L14884-32 i
Sample Size: 9.78 g (dry)
Initial Calibration Date: 13-Jul-2010
Instrument ID: HR GC/MS
GC Column ID: DB225
Sample Data Filename: DB03_110 S: 13
Blank Data Filename: DB03_110 S: 5
Cal. Ver. Data Filename: DB03_110 S: 2
% Moisture: 48.7

COMPOUND	LAB FLAG ¹	CONCENTRATION FOUND	DETECTION LIMIT	ION ABUND. RATIO ²	RRT ²
2,3,7,8-TCDF		1.18	0.176	0.86	1.001

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.
Signed: _____ Bryan Alonzo _____

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These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested. Results are compliant with NELAP where specific accreditation is held.



Form 1A
PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
SDS-PB-08
Sample Collection:
08-Jun-2010 15:21

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.: 4406

Project No.

FIDALGO BAY, CUSTOM
PLYWOOD DX STUDY
L14884-37

Matrix: SOLID

Lab Sample I.D.: 11.1 g (dry)

Sample Receipt Date: 17-Jun-2010

Initial Calibration Date: 05-Aug-2010

Extraction Date: 22-Jul-2010

Instrument ID: HR GC/MS

Analysis Date: 10-Aug-2010 Time: 15:03:07

GC Column ID: DB5

Extract Volume (uL): 20

Sample Data Filename: DX0B_177 S: 9

Injection Volume (uL): 1.0

Blank Data Filename: DX0B_169B S: 4

Dilution Factor: N/A

Cal. Ver. Data Filename: DX0B_177 S: 1

Concentration Units: pg/g (dry weight basis)

% Moisture: 30.3

COMPOUND	LAB FLAG ¹	CONCENTRATION FOUND	DETECTION LIMIT	ION ABUND. RATIO ²	RRT ²
2,3,7,8-TCDD	K J	0.083	0.0449	0.27	1.001
1,2,3,7,8-PECDD ³	K J	0.118	0.0449	0.39	1.001
1,2,3,4,7,8-HXCDD	K J	0.143	0.0568	1.57	1.000
1,2,3,6,7,8-HXCDD	K J	0.427	0.0568	1.66	1.000
1,2,3,7,8,9-HXCDD	K J	0.378	0.0568	0.99	1.010
1,2,3,4,6,7,8-HPCDD	B J	3.52	0.0449	1.02	1.000
OCDD	B	22.7	0.0886	0.92	1.000
2,3,7,8-TCDF	J	0.306	0.0449	0.86	1.001
1,2,3,7,8-PECDF	K J	0.077	0.0449	2.11	1.000
2,3,4,7,8-PECDF	K B J	0.126	0.0449	1.31	1.000
1,2,3,4,7,8-HXCDF	K J	0.112	0.0478	1.59	1.000
1,2,3,6,7,8-HXCDF	K J	0.068	0.0478	1.61	1.000
1,2,3,7,8,9-HXCDF	U		0.0478		
2,3,4,6,7,8-HXCDF	K J	0.087	0.0478	2.03	1.000
1,2,3,4,6,7,8-HPCDF	J	0.855	0.0738	1.12	1.000
1,2,3,4,7,8,9-HPCDF	K J	0.090	0.0738	0.83	1.000
OCDF	B J	1.79	0.0631	0.99	1.002
TOTAL TETRA-DIOXINS		0.799	0.0449		
TOTAL PENTA-DIOXINS		0.654	0.0449		
TOTAL HEXA-DIOXINS		3.43	0.0568		
TOTAL HEPTA-DIOXINS		9.95	0.0449		
TOTAL TETRA-FURANS		0.995	0.0449		
TOTAL PENTA-FURANS	B	0.768	0.0449		
TOTAL HEXA-FURANS		0.805	0.0478		
TOTAL HEPTA-FURANS		2.10	0.0738		

(1) Where applicable, custom lab flags have been used on this report; U = not detected; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; B = analyte found in sample and the associated blank; J = concentration less than LMCL.

(2) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

(3) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.

Signed: _____ Bryan Alonzo _____



Form 1A
PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
SDS-PB-08
Sample Collection:
08-Jun-2010 15:21

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.: 4406

Matrix: SOLID

Sample Receipt Date: 17-Jun-2010

Extraction Date: 22-Jul-2010

Analysis Date: 11-Aug-2010 Time: 10:43:20

Extract Volume (uL): 20

Injection Volume (uL): 2.0

Dilution Factor: N/A

Concentration Units: pg/g (dry weight basis)

Project No.

Lab Sample I.D.:

Sample Size:

Initial Calibration Date:

Instrument ID:

GC Column ID:

Sample Data Filename:

Blank Data Filename:

Cal. Ver. Data Filename:

% Moisture:

FIDALGO BAY, CUSTOM
PLYWOOD DX STUDY
L14884-37 i

11.1 g (dry)

13-Jul-2010

HR GC/MS

DB225

DB03_111 S: 5

DB03_110 S: 5

DB03_111 S: 2

30.3

COMPOUND	LAB FLAG ¹	CONCENTRATION FOUND	DETECTION LIMIT	ION ABUND. RATIO ²	RRT ²
2,3,7,8-TCDF	K J	0.198	0.169	0.30	1.000

(1) Where applicable, custom lab flags have been used on this report; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; J = concentration less than LMCL.

(2) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.

Signed: _____ Bryan Alonzo _____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 27-Aug-2010 11:49:42; Application: XMLTransformer-1.10.25; Report Filename: 1613_DIOXINS_1613DB225_L14884-37_Form1A_DB03_111S5_SJ1179614.html; Workgroup: WG33419; Design ID: 699]

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested. Results are compliant with NELAP where specific accreditation is held.



Form 1A
PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
SDS-PB-09
Sample Collection:
08-Jun-2010 15:58

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.: 4406

Project No.

FIDALGO BAY, CUSTOM
PLYWOOD DX STUDY
L14884-38 (A)

Lab Sample I.D.:

Matrix: SOLID

Sample Size: 10.7 g (dry)

Sample Receipt Date: 17-Jun-2010

Initial Calibration Date: 05-Aug-2010

Extraction Date: 22-Jul-2010

Instrument ID: HR GC/MS

Analysis Date: 06-Aug-2010 Time: 04:20:44

GC Column ID: DB5

Extract Volume (uL): 20

Sample Data Filename: DX0B_169B S: 8

Injection Volume (uL): 1.0

Blank Data Filename: DX0B_169B S: 4

Dilution Factor: N/A

Cal. Ver. Data Filename: DX0B_169 S: 1

Concentration Units: pg/g (dry weight basis)

% Moisture: 16.4

COMPOUND	LAB FLAG ¹	CONCENTRATION FOUND	DETECTION LIMIT	ION ABUND. RATIO ²	RRT ²
2,3,7,8-TCDD	U		0.0466		
1,2,3,7,8-PECDD ³	J	0.054	0.0466	0.60	1.000
1,2,3,4,7,8-HXCDD	U		0.0466		
1,2,3,6,7,8-HXCDD	K J	0.103	0.0466	0.98	1.000
1,2,3,7,8,9-HXCDD	K J	0.102	0.0466	0.76	1.009
1,2,3,4,6,7,8-HPCDD	B J	0.636	0.0466	1.00	1.000
OCDD	B J	3.51	0.0466	0.88	1.000
2,3,7,8-TCDF	K J	0.078	0.0466	0.61	1.001
1,2,3,7,8-PECDF	U		0.0466		
2,3,4,7,8-PECDF	B J	0.056	0.0466	1.60	1.001
1,2,3,4,7,8-HXCDF	U		0.0466		
1,2,3,6,7,8-HXCDF	U		0.0466		
1,2,3,7,8,9-HXCDF	U		0.0466		
2,3,4,6,7,8-HXCDF	K J	0.057	0.0466	1.86	1.000
1,2,3,4,6,7,8-HPCDF	J	0.225	0.0466	0.93	1.000
1,2,3,4,7,8,9-HPCDF	U		0.0466		
OCDF	B J	0.378	0.0466	0.88	1.002
TOTAL TETRA-DIOXINS	U		0.0466		
TOTAL PENTA-DIOXINS		0.054	0.0466		
TOTAL HEXA-DIOXINS		0.553	0.0466		
TOTAL HEPTA-DIOXINS		1.49	0.0466		
TOTAL TETRA-FURANS	U		0.0466		
TOTAL PENTA-FURANS	B	0.132	0.0466		
TOTAL HEXA-FURANS		0.185	0.0466		
TOTAL HEPTA-FURANS		0.429	0.0466		

(1) Where applicable, custom lab flags have been used on this report; U = not detected; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; B = analyte found in sample and the associated blank; J = concentration less than LMCL.

(2) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

(3) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.

Signed: _____ Bryan Alonzo _____



Form 1A
PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
SDS-PB-09
Sample Collection:
08-Jun-2010 15:58

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.: 4406
Matrix: SOLID
Sample Receipt Date: 17-Jun-2010
Extraction Date: 22-Jul-2010
Analysis Date: 11-Aug-2010 **Time:** 04:22:11
Extract Volume (uL): 20
Injection Volume (uL): 2.0
Dilution Factor: N/A
Concentration Units: pg/g (dry weight basis)

Project No. FIDALGO BAY, CUSTOM
Lab Sample I.D.: PLYWOOD DX STUDY
L14884-38 i (A)
Sample Size: 10.7 g (dry)
Initial Calibration Date: 13-Jul-2010
Instrument ID: HR GC/MS
GC Column ID: DB225
Sample Data Filename: DB03_110 S: 14
Blank Data Filename: DB03_110 S: 5
Cal. Ver. Data Filename: DB03_110 S: 2
% Moisture: 16.4

COMPOUND	LAB FLAG ¹	CONCENTRATION FOUND	DETECTION LIMIT	ION ABUND. RATIO ²	RRT ²
2,3,7,8-TCDF	U		0.134		

(1) Where applicable, custom lab flags have been used on this report; U = not detected.
(2) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.
Signed: _____ Bryan Alonzo _____

For AxyS Internal Use Only [XSL Template: Form1A.xsl; Created: 27-Aug-2010 11:49:42; Application: XMLTransformer-1.10.25;
Report Filename: 1613_DIOXINS_1613DB225_L14884-38_Form1A_DB03_110S14_SJ1179604.html; Workgroup: WG33419; Design ID: 699]

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested. Results are compliant with NELAP where specific accreditation is held.



Form 1A
PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
SDS-FB-01
Sample Collection:
08-Jun-2010 10:03

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.: 4406
Matrix: SOLID
Sample Receipt Date: 17-Jun-2010
Extraction Date: 22-Jul-2010
Analysis Date: 10-Aug-2010 Time: 16:52:44
Extract Volume (uL): 20
Injection Volume (uL): 1.0
Dilution Factor: N/A
Concentration Units: pg/g (dry weight basis)

Project No. FIDALGO BAY, CUSTOM
PLYWOOD DX STUDY
Lab Sample I.D.: L14884-40
Sample Size: 10.8 g (dry)
Initial Calibration Date: 05-Aug-2010
Instrument ID: HR GC/MS
GC Column ID: DB5
Sample Data Filename: DX0B_177 S: 11
Blank Data Filename: DX0B_169B S: 4
Cal. Ver. Data Filename: DX0B_177 S: 1
% Moisture: 25.3

COMPOUND	LAB FLAG ¹	CONCENTRATION FOUND	DETECTION LIMIT	ION ABUND. RATIO ²	RRT ²
2,3,7,8-TCDD	K J	0.081	0.0464	0.56	1.001
1,2,3,7,8-PECDD ³	K J	0.144	0.0464	0.47	1.000
1,2,3,4,7,8-HXCDD	K J	0.129	0.0464	1.70	1.000
1,2,3,6,7,8-HXCDD	K J	0.691	0.0464	1.03	1.000
1,2,3,7,8,9-HXCDD	J	0.477	0.0464	1.18	1.010
1,2,3,4,6,7,8-HPCDD	B J	4.23	0.0464	1.13	1.000
OCDD	B	23.5	0.0464	0.91	1.000
2,3,7,8-TCDF	J	0.414	0.0464	0.70	1.002
1,2,3,7,8-PECDF	K J	0.063	0.0464	1.22	1.001
2,3,4,7,8-PECDF	B J	0.120	0.0464	1.40	1.000
1,2,3,4,7,8-HXCDF	J	0.103	0.0464	1.09	1.000
1,2,3,6,7,8-HXCDF	K J	0.071	0.0464	1.04	1.000
1,2,3,7,8,9-HXCDF	U		0.0464		
2,3,4,6,7,8-HXCDF	K J	0.081	0.0464	1.72	1.000
1,2,3,4,6,7,8-HPCDF	J	1.02	0.0464	0.95	1.000
1,2,3,4,7,8,9-HPCDF	K J	0.089	0.0464	1.53	1.000
OCDF	B J	1.58	0.0464	0.91	1.002
TOTAL TETRA-DIOXINS		0.362	0.0464		
TOTAL PENTA-DIOXINS		0.670	0.0464		
TOTAL HEXA-DIOXINS		4.63	0.0464		
TOTAL HEPTA-DIOXINS		9.95	0.0464		
TOTAL TETRA-FURANS		1.57	0.0464		
TOTAL PENTA-FURANS	B	1.09	0.0464		
TOTAL HEXA-FURANS		1.12	0.0464		
TOTAL HEPTA-FURANS		2.39	0.0464		

(1) Where applicable, custom lab flags have been used on this report; U = not detected; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; B = analyte found in sample and the associated blank; J = concentration less than LMCL.
 (2) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.
 (3) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.
 Signed: _____ Bryan Alonzo _____



Form 1A
PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
SDS-FB-01
Sample Collection:
08-Jun-2010 10:03

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.: 4406

Matrix: SOLID

Sample Receipt Date: 17-Jun-2010

Extraction Date: 22-Jul-2010

Analysis Date: 11-Aug-2010 Time: 11:56:32

Extract Volume (uL): 20

Injection Volume (uL): 2.0

Dilution Factor: N/A

Concentration Units: pg/g (dry weight basis)

Project No. FIDALGO BAY, CUSTOM
PLYWOOD DX STUDY
Lab Sample I.D.: L14884-40 i

Sample Size: 10.8 g (dry)

Initial Calibration Date: 13-Jul-2010

Instrument ID: HR GC/MS

GC Column ID: DB225

Sample Data Filename: DB03_111 S: 7

Blank Data Filename: DB03_110 S: 5

Cal. Ver. Data Filename: DB03_111 S: 2

% Moisture: 25.3

COMPOUND	LAB FLAG ¹	CONCENTRATION FOUND	DETECTION LIMIT	ION ABUND. RATIO ²	RRT ²
2,3,7,8-TCDF	K J	0.201	0.138	1.02	1.001

(1) Where applicable, custom lab flags have been used on this report; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; J = concentration less than LMCL.
(2) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.

Signed: _____ Bryan Alonzo _____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 27-Aug-2010 11:49:42; Application: XMLTransformer-1.10.25; Report Filename: 1613_DIOXINS_1613DB225_L14884-40_Form1A_DB03_111S7_SJ1179616.html; Workgroup: WG33419; Design ID: 699]

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested. Results are compliant with NELAP where specific accreditation is held.



Form 1A
PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
SDS-FB-02
Sample Collection:
08-Jun-2010 10:21

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.: 4406

Project No.

FIDALGO BAY, CUSTOM
PLYWOOD DX STUDY

Lab Sample I.D.:

L14884-41 L

Matrix: SOLID

Sample Size: 9.96 g (dry)

Sample Receipt Date: 17-Jun-2010

Initial Calibration Date: 30-Jul-2010

Extraction Date: 22-Jul-2010

Instrument ID: HR GC/MS

Analysis Date: 20-Aug-2010 Time: 11:49:21

GC Column ID: DB5

Extract Volume (uL): 20

Sample Data Filename: DX0M_110 S: 18

Injection Volume (uL): 1.0

Blank Data Filename: DX0B_169B S: 4

Dilution Factor: N/A

Cal. Ver. Data Filename: DX0M_110 S: 13

Concentration Units: pg/g (dry weight basis)

% Moisture: 27.0

COMPOUND	LAB FLAG ¹	CONCENTRATION FOUND	DETECTION LIMIT	ION ABUND. RATIO ²	RRT ²
2,3,7,8-TCDD	K J	0.087	0.0502	0.23	1.003
1,2,3,7,8-PECDD ³	K J G	0.107	0.0502	0.39	1.000
1,2,3,4,7,8-HXCDD	K J	0.129	0.0857	2.05	1.001
1,2,3,6,7,8-HXCDD	J	0.488	0.0857	1.18	1.001
1,2,3,7,8,9-HXCDD	J	0.273	0.0857	1.15	1.000
1,2,3,4,6,7,8-HPCDD	B J	4.49	0.0680	1.12	1.000
OCDD	B	33.7	0.170	0.94	1.000
2,3,7,8-TCDF	K	1.48	0.0502	0.60	1.001
1,2,3,7,8-PECDF	K J	0.221	0.0858	1.06	1.002
2,3,4,7,8-PECDF	B J	0.518	0.0858	1.46	1.000
1,2,3,4,7,8-HXCDF	K J	0.174	0.171	2.57	1.000
1,2,3,6,7,8-HXCDF	U		0.171		
1,2,3,7,8,9-HXCDF	U		0.171		
2,3,4,6,7,8-HXCDF	U		0.171		
1,2,3,4,6,7,8-HPCDF	K J	1.05	0.0502	1.37	1.000
1,2,3,4,7,8,9-HPCDF	K J	0.208	0.0502	0.43	1.001
OCDF	K B J	3.89	0.0502	0.74	1.002
TOTAL TETRA-DIOXINS	J	0.143	0.0502		
TOTAL PENTA-DIOXINS	J	0.102	0.0502		
TOTAL HEXA-DIOXINS	J	2.25	0.0857		
TOTAL HEPTA-DIOXINS		10.4	0.0680		
TOTAL TETRA-FURANS		3.64	0.0502		
TOTAL PENTA-FURANS	B J	2.24	0.0858		
TOTAL HEXA-FURANS	J	0.646	0.171		
TOTAL HEPTA-FURANS	J	2.09	0.0502		

(1) Where applicable, custom lab flags have been used on this report; U = not detected; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; B = analyte found in sample and the associated blank; J = concentration less than LMCL; G = lock mass interference present.

(2) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

(3) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.

Signed: _____ Bryan Alonzo _____



Form 1A
PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
SDS-FB-02
Sample Collection:
08-Jun-2010 10:21

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.: 4406
Matrix: SOLID
Sample Receipt Date: 17-Jun-2010
Extraction Date: 22-Jul-2010
Analysis Date: 20-Aug-2010 Time: 05:10:43
Extract Volume (uL): 20
Injection Volume (uL): 2.0
Dilution Factor: N/A
Concentration Units: pg/g (dry weight basis)

Project No. FIDALGO BAY, CUSTOM
PLYWOOD DX STUDY
Lab Sample I.D.: L14884-41 L
Sample Size: 9.96 g (dry)
Initial Calibration Date: 13-Jul-2010
Instrument ID: HR GC/MS
GC Column ID: DB225
Sample Data Filename: DB03_114A S: 16
Blank Data Filename: DB03_110 S: 5
Cal. Ver. Data Filename: DB03_114A S: 2
% Moisture: 27.0

COMPOUND	LAB FLAG ¹	CONCENTRATION FOUND	DETECTION LIMIT	ION ABUND. RATIO ²	RRT ²
2,3,7,8-TCDF	J	0.835	0.282	0.88	1.000

(1) Where applicable, custom lab flags have been used on this report; J = concentration less than LMCL.
(2) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.
Signed: _____ Bryan Alonzo _____

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Report Filename: 1613_DIOXINS_1613DB225_L14884-41_Form1A_DB03_114AS16_SJ1184599.html; Workgroup: WG33419; Design ID: 699]

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested. Results are compliant with NELAP where specific accreditation is held.



Form 1A
PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
SDS-FB-06
Sample Collection:
08-Jun-2010 11:14

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.: 4406

Project No.

FIDALGO BAY, CUSTOM
PLYWOOD DX STUDY
L14884-45

Matrix: SOLID

Lab Sample I.D.:
Sample Size: 9.87 g (dry)

Sample Receipt Date: 17-Jun-2010

Initial Calibration Date: 05-Aug-2010

Extraction Date: 22-Jul-2010

Instrument ID: HR GC/MS

Analysis Date: 11-Aug-2010 Time: 11:20:07

GC Column ID: DB5

Extract Volume (uL): 20

Sample Data Filename: DX0B_179 S: 5

Injection Volume (uL): 1.0

Blank Data Filename: DX0B_169B S: 4

Dilution Factor: N/A

Cal. Ver. Data Filename: DX0B_179 S: 1

Concentration Units: pg/g (dry weight basis)

% Moisture: 24.2

COMPOUND	LAB FLAG ¹	CONCENTRATION FOUND	DETECTION LIMIT	ION ABUND. RATIO ²	RRT ²
2,3,7,8-TCDD	K J	0.120	0.0507	0.60	1.001
1,2,3,7,8-PECDD ³	K J	0.157	0.0507	0.79	1.000
1,2,3,4,7,8-HXCDD	J	0.144	0.0520	1.17	1.000
1,2,3,6,7,8-HXCDD	J	0.594	0.0520	1.15	1.000
1,2,3,7,8,9-HXCDD	K J	0.365	0.0520	1.49	1.010
1,2,3,4,6,7,8-HPCDD	B J	3.68	0.0610	1.01	1.000
OCDD	B	22.9	0.0507	0.92	1.000
2,3,7,8-TCDF	J	0.340	0.0507	0.81	1.001
1,2,3,7,8-PECDF	J	0.057	0.0507	1.64	1.001
2,3,4,7,8-PECDF	K B J	0.127	0.0507	1.04	1.000
1,2,3,4,7,8-HXCDF	K J	0.093	0.0507	1.52	1.000
1,2,3,6,7,8-HXCDF	J	0.094	0.0507	1.20	1.000
1,2,3,7,8,9-HXCDF	U		0.0507		
2,3,4,6,7,8-HXCDF	K J	0.051	0.0507	1.82	1.000
1,2,3,4,6,7,8-HPCDF	J	0.863	0.0583	1.07	1.000
1,2,3,4,7,8,9-HPCDF	K J	0.096	0.0583	1.48	1.000
OCDF	B J	1.71	0.0507	0.81	1.002
TOTAL TETRA-DIOXINS		0.646	0.0507		
TOTAL PENTA-DIOXINS		0.614	0.0507		
TOTAL HEXA-DIOXINS		4.39	0.0520		
TOTAL HEPTA-DIOXINS		8.62	0.0610		
TOTAL TETRA-FURANS		1.22	0.0507		
TOTAL PENTA-FURANS	B	0.426	0.0507		
TOTAL HEXA-FURANS		0.936	0.0507		
TOTAL HEPTA-FURANS		1.91	0.0583		

(1) Where applicable, custom lab flags have been used on this report; U = not detected; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; B = analyte found in sample and the associated blank; J = concentration less than LMCL.

(2) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

(3) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.

Signed: _____ Bryan Alonzo _____



Form 1A
PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
SDS-FB-06
Sample Collection:
08-Jun-2010 11:14

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.: 4406
Matrix: SOLID
Sample Receipt Date: 17-Jun-2010
Extraction Date: 22-Jul-2010
Analysis Date: 03-Aug-2010 **Time:** 16:13:06
Extract Volume (uL): 20
Injection Volume (uL): 2.0
Dilution Factor: N/A
Concentration Units: pg/g (dry weight basis)

Project No. FIDALGO BAY, CUSTOM
Lab Sample I.D.: PLYWOOD DX STUDY
L14884-45
Sample Size: 9.87 g (dry)
Initial Calibration Date: 13-Jul-2010
Instrument ID: HR GC/MS
GC Column ID: DB225
Sample Data Filename: DB03_099 S: 13
Blank Data Filename: DB03_110 S: 5
Cal. Ver. Data Filename: DB03_099 S: 3
% Moisture: 24.2

COMPOUND	LAB FLAG ¹	CONCENTRATION FOUND	DETECTION LIMIT	ION ABUND. RATIO ²	RRT ²
2,3,7,8-TCDF	U		0.244		

(1) Where applicable, custom lab flags have been used on this report; U = not detected.
(2) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.
Signed: _____ Bryan Alonzo _____

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Report Filename: 1613_DIOXINS_1613DB225_L14884-45_Form1A_DB03_099S13_SJ1179588.html; Workgroup: WG33419; Design ID: 699]

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested. Results are compliant with NELAP where specific accreditation is held.



Form 1A
PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
SDS-PB-09 (Duplicate)
Sample Collection:
08-Jun-2010 15:58

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4406	Project No.	FIDALGO BAY, CUSTOM PLYWOOD DX STUDY
Matrix:	SOLID	Lab Sample I.D.:	WG33419-103 (DUP L14884-38)
Sample Receipt Date:	17-Jun-2010	Sample Size:	10.9 g (dry)
Extraction Date:	22-Jul-2010	Initial Calibration Date:	05-Aug-2010
Analysis Date:	06-Aug-2010 Time: 05:15:34	Instrument ID:	HR GC/MS
Extract Volume (uL):	20	GC Column ID:	DB5
Injection Volume (uL):	1.0	Sample Data Filename:	DX0B_169B S: 9
Dilution Factor:	N/A	Blank Data Filename:	DX0B_169B S: 4
Concentration Units:	pg/g (dry weight basis)	Cal. Ver. Data Filename:	DX0B_169 S: 1
		% Moisture:	14.5

COMPOUND	LAB FLAG ¹	CONCENTRATION FOUND	DETECTION LIMIT	ION ABUND. RATIO ²	RRT ²
2,3,7,8-TCDD	K J	0.060	0.0523	0.53	1.001
1,2,3,7,8-PECDD ³	J	0.118	0.0458	0.53	1.000
1,2,3,4,7,8-HXCDD	J	0.110	0.0851	1.38	1.000
1,2,3,6,7,8-HXCDD	K J	0.120	0.0851	0.83	1.000
1,2,3,7,8,9-HXCDD	J	0.140	0.0851	1.26	1.010
1,2,3,4,6,7,8-HPCDD	B J	0.571	0.0458	0.98	1.000
OCDD	B J	3.37	0.0702	0.79	1.000
2,3,7,8-TCDF	J	0.084	0.0458	0.83	1.001
1,2,3,7,8-PECDF	K J	0.116	0.0458	0.90	1.001
2,3,4,7,8-PECDF	K B J	0.123	0.0458	1.12	1.000
1,2,3,4,7,8-HXCDF	K J	0.103	0.0529	1.56	1.000
1,2,3,6,7,8-HXCDF	J	0.067	0.0529	1.38	1.000
1,2,3,7,8,9-HXCDF	K J	0.083	0.0529	2.36	1.000
2,3,4,6,7,8-HXCDF	J	0.105	0.0529	1.10	1.001
1,2,3,4,6,7,8-HPCDF	K J	0.192	0.0657	1.21	1.000
1,2,3,4,7,8,9-HPCDF	K J	0.094	0.0657	0.69	1.000
OCDF	B J	0.396	0.0539	0.96	1.002
TOTAL TETRA-DIOXINS	U		0.0523		
TOTAL PENTA-DIOXINS		0.118	0.0458		
TOTAL HEXA-DIOXINS		0.250	0.0851		
TOTAL HEPTA-DIOXINS		1.22	0.0458		
TOTAL TETRA-FURANS		0.084	0.0458		
TOTAL PENTA-FURANS	U		0.0458		
TOTAL HEXA-FURANS		0.248	0.0529		
TOTAL HEPTA-FURANS	U		0.0657		

(1) Where applicable, custom lab flags have been used on this report; U = not detected; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; B = analyte found in sample and the associated blank; J = concentration less than LMCL.
 (2) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.
 (3) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.
 Signed: _____ Bryan Alonzo _____



Form 1A
PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
SDS-PB-09 (Duplicate)
Sample Collection:
08-Jun-2010 15:58

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.: 4406
Matrix: SOLID
Sample Receipt Date: 17-Jun-2010
Extraction Date: 22-Jul-2010
Analysis Date: 11-Aug-2010 Time: 04:58:45
Extract Volume (uL): 20
Injection Volume (uL): 2.0
Dilution Factor: N/A
Concentration Units: pg/g (dry weight basis)

Project No. FIDALGO BAY, CUSTOM
PLYWOOD DX STUDY
Lab Sample I.D.: WG33419-103 i (DUP L14884-38)
Sample Size: 10.9 g (dry)
Initial Calibration Date: 13-Jul-2010
Instrument ID: HR GC/MS
GC Column ID: DB225
Sample Data Filename: DB03_110 S: 15
Blank Data Filename: DB03_110 S: 5
Cal. Ver. Data Filename: DB03_110 S: 2
% Moisture: 14.5

COMPOUND	LAB FLAG ¹	CONCENTRATION FOUND	DETECTION LIMIT	ION ABUND. RATIO ²	RRT ²
2,3,7,8-TCDF	U		0.390		

(1) Where applicable, custom lab flags have been used on this report; U = not detected.
(2) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.
Signed: _____ Bryan Alonzo _____

For AxyS Internal Use Only [XSL Template: Form1A.xsl; Created: 27-Aug-2010 11:49:42; Application: XMLTransformer-1.10.25; Report Filename: 1613_DIOXINS_1613DB225_WG33419-103_Form1A_DB03_110S15_SJ1179605.html; Workgroup: WG33419; Design ID: 699]

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested. Results are compliant with NELAP where specific accreditation is held.



PCDD/PCDF ANALYSIS REPORT
RELATIVE PERCENT DIFFERENCE

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.

FIDALGO BAY, CUSTOM
PLYWOOD DX STUDY

Contract No.: 4406

Client ID: SDS-PB-09

Concentration Units: pg/g (dry weight basis)

COMPOUND	L14884-38 (A)		WG33419-103		MEAN	RELATIVE PERCENT DIFFERENCE
	LAB FLAG ¹	CONC. FOUND	LAB FLAG ¹	CONC. FOUND		
2,3,7,8-TCDD	U		K J	0.060		
1,2,3,7,8-PECDD	J	0.054	J	0.118	0.086	74.4
1,2,3,4,7,8-HXCDD	U		J	0.110		
1,2,3,6,7,8-HXCDD	K J	0.103	K J	0.120		
1,2,3,7,8,9-HXCDD	K J	0.102	J	0.140		
1,2,3,4,6,7,8-HPCDD	J	0.636	J	0.571	0.604	10.8
OCDD	J	3.51	J	3.37	3.44	4.16
2,3,7,8-TCDF	U		U			
1,2,3,7,8-PECDF	U		K J	0.116		
2,3,4,7,8-PECDF	J	0.056	K J	0.123		
1,2,3,4,7,8-HXCDF	U		K J	0.103		
1,2,3,6,7,8-HXCDF	U		J	0.067		
1,2,3,7,8,9-HXCDF	U		K J	0.083		
2,3,4,6,7,8-HXCDF	K J	0.057	J	0.105		
1,2,3,4,6,7,8-HPCDF	J	0.225	K J	0.192		
1,2,3,4,7,8,9-HPCDF	U		K J	0.094		
OCDF	J	0.378	J	0.396	0.387	4.65

(1) Where applicable, custom lab flags have been used on this report; U = not detected; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; J = concentration less than LMCL.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.

Signed: _____ Bryan Alonzo _____

For Axys Internal Use Only [XSL Template: RPD.xml; Created: 27-Aug-2010 11:59:08; Application: XMLTransformer-1.10.25; Report Filename: RPD_DIOXINS_1613-RPD_WG33419-103_L14884-38_.html; Workgroup: WG33419; Design ID: 699]

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested. Results are compliant with NELAP where specific accreditation is held.



Form 1A
PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
Lab Blank
Sample Collection:
N/A

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.: 4406

Project No.

N/A

Lab Sample I.D.:

WG33419-101

Matrix: SOLID

Sample Size:

10.0 g

Sample Receipt Date: N/A

Initial Calibration Date:

05-Aug-2010

Extraction Date: 22-Jul-2010

Instrument ID:

HR GC/MS

Analysis Date: 06-Aug-2010 Time: 00:41:14

GC Column ID:

DB5

Extract Volume (uL): 20

Sample Data Filename:

DX0B_169B S: 4

Injection Volume (uL): 1.0

Blank Data Filename:

DX0B_169B S: 4

Dilution Factor: N/A

Cal. Ver. Data Filename:

DX0B_169 S: 1

Concentration Units: pg/g

COMPOUND	LAB FLAG ¹	CONCENTRATION FOUND	DETECTION LIMIT	ION ABUND. RATIO ²	RRT ²
2,3,7,8-TCDD	NQ				
1,2,3,7,8-PECDD ³	U		0.0500		
1,2,3,4,7,8-HXCDD	U		0.0500		
1,2,3,6,7,8-HXCDD	U		0.0500		
1,2,3,7,8,9-HXCDD	U		0.0500		
1,2,3,4,6,7,8-HPCDD	K J	0.078	0.0500	0.71	1.000
OCDD	J	0.332	0.0500	0.90	1.000
2,3,7,8-TCDF	U		0.0500		
1,2,3,7,8-PECDF	U		0.0500		
2,3,4,7,8-PECDF	J	0.061	0.0500	1.75	1.000
1,2,3,4,7,8-HXCDF	U		0.0500		
1,2,3,6,7,8-HXCDF	U		0.0500		
1,2,3,7,8,9-HXCDF	U		0.0500		
2,3,4,6,7,8-HXCDF	U		0.0500		
1,2,3,4,6,7,8-HPCDF	U		0.0500		
1,2,3,4,7,8,9-HPCDF	U		0.0500		
OCDF	J	0.069	0.0500	0.82	1.002
TOTAL TETRA-DIOXINS	NQ				
TOTAL PENTA-DIOXINS	U		0.0500		
TOTAL HEXA-DIOXINS	U		0.0500		
TOTAL HEPTA-DIOXINS	U		0.0500		
TOTAL TETRA-FURANS	U		0.0500		
TOTAL PENTA-FURANS		0.061	0.0500		
TOTAL HEXA-FURANS	U		0.0500		
TOTAL HEPTA-FURANS	U		0.0500		

(1) Where applicable, custom lab flags have been used on this report; U = not detected; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; J = concentration less than LMCL; NQ = data not quantifiable.
 (2) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.
 (3) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.

Signed: _____ Bryan Alonzo _____



Form 8A
PCDD/PCDF ONGOING PRECISION AND RECOVERY (OPR)

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
 V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.: 4406 **OPR Data Filename:** DX0B_169B S: 1

Matrix: SOLID **Lab Sample I.D.:** WG33419-102 i

Extraction Date: 22-Jul-2010 **Analysis Date:** 05-Aug-2010 **Time:** 21:56:51

ALL CONCENTRATIONS REPORTED ON THIS FORM ARE CONCENTRATIONS IN EXTRACT, BASED ON A 20 uL EXTRACT VOLUME.

COMPOUND	LAB FLAG ¹	ION ABUND. RATIO ²	SPIKE CONC. (ng/mL)	CONC. FOUND (ng/mL)	OPR CONC. LIMITS ³ (ng/mL)	% RECOVERY
2,3,7,8-TCDD		0.83	10.0	9.08	6.70 - 15.8	90.8
1,2,3,7,8-PECDD ⁴		0.62	52.0	50.3	36.4 - 73.8	96.7
1,2,3,4,7,8-HXCDD		1.28	56.5	56.4	39.6 - 92.7	99.7
1,2,3,6,7,8-HXCDD		1.27	55.5	56.2	42.2 - 74.4	101
1,2,3,7,8,9-HXCDD		1.27	54.0	54.2	34.6 - 87.5	100
1,2,3,4,6,7,8-HPCDD		1.06	47.5	45.9	33.3 - 66.5	96.6
OCDD		0.90	100	99.2	78.0 - 144	99.2
2,3,7,8-TCDF		0.78	10.7	11.0	8.03 - 16.9	103
1,2,3,7,8-PECDF		1.57	46.0	47.0	36.8 - 61.6	102
2,3,4,7,8-PECDF		1.57	47.0	48.9	32.0 - 75.2	104
1,2,3,4,7,8-HXCDF		1.24	50.0	48.3	36.0 - 67.0	96.6
1,2,3,6,7,8-HXCDF		1.25	47.5	46.4	39.9 - 61.8	97.6
1,2,3,7,8,9-HXCDF		1.26	52.5	50.7	41.0 - 68.3	96.6
2,3,4,6,7,8-HXCDF		1.26	53.0	51.6	37.1 - 82.7	97.3
1,2,3,4,6,7,8-HPCDF		1.04	50.0	54.4	41.0 - 61.0	109
1,2,3,4,7,8,9-HPCDF		1.02	50.0	49.7	39.0 - 69.0	99.4
OCDF		0.91	104	96.4	65.5 - 177	92.7

- (1) Where applicable, custom lab flags have been used on this report.
- (2) Contract-required Ion Abundance Ratios are specified in Table 9, Method 1613.
- (3) Contract-required concentration range as determined from the percent of the test concentration in Table 6, Method 1613, under OPR.
- (4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.

Signed: _____ Bryan Alonzo _____

For Axys Internal Use Only [XSL Template: Form8A.xsl; Created: 27-Aug-2010 11:52:06; Application: XMLTransformer-1.10.25; Report Filename: 1613_DIOXINS_1613DB5_WG33419-102_Form8A_SJ1177649.html; Workgroup: WG33419; Design ID: 699]

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested. Results are compliant with NELAP where specific accreditation is held.



PCDD/PCDF CERTIFIED REFERENCE MATERIAL (CRM) REPORT FOR NIST SRM 1944

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
 V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4406	Lab Sample I.D.:	WG33419-104
Matrix:	SOLID	Sample Size:	1.01 g (dry)
Extraction Date:	22-Jul-2010	Initial Calibration Date:	05-Aug-2010
Analysis Date:	11-Aug-2010 Time: 10:25:19	Instrument ID:	HR GC/MS
Extract Volume (uL):	20	GC Column ID:	DB5
Injection Volume (uL):	1.0	CRM Data Filename:	DX0B_179 S: 4
Dilution Factor:	N/A	Blank Data Filename:	DX0B_169B S: 4
Concentration Units:	pg/g (dry weight basis)	Cal. Ver. Data Filename:	DX0B_179 S: 1

COMPOUND	LAB FLAG ¹	DETERMINED	CERTIFIED / REFERENCE
2,3,7,8-TCDD		133	133 +/- 9
1,2,3,7,8-PECDD ²		20.5	19 +/- 2
1,2,3,4,7,8-HXCDD		27.0	26 +/- 3
1,2,3,6,7,8-HXCDD		63.4	56 +/- 6
1,2,3,7,8,9-HXCDD		61.6	53 +/- 7
1,2,3,4,6,7,8-HPCDD		765	800 +/- 70
OCDD		5800	5800 +/- 700
2,3,7,8-TCDF		182	39 +/- 15
1,2,3,7,8-PECDF		51.3	45 +/- 7
2,3,4,7,8-PECDF		48.3	45 +/- 4
1,2,3,4,7,8-HXCDF		206	220 +/- 30
1,2,3,6,7,8-HXCDF		89.7	90 +/- 10
1,2,3,7,8,9-HXCDF		3.24	19 +/- 18
2,3,4,6,7,8-HXCDF		48.9	54 +/- 6
1,2,3,4,6,7,8-HPCDF		931	1000 +/- 100
1,2,3,4,7,8,9-HPCDF		36.1	40 +/- 6
OCDF		1150	1000 +/- 100

(1) Where applicable, custom lab flags have been used on this report.
 (2) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.

Signed: _____ Bryan Alonzo _____

For Axys Internal Use Only [XSL Template: Form8G.xsl; Created: 27-Aug-2010 11:52:06; Application: XMLTransformer-1.10.25; Report Filename: 1613_DIOXINS_1613DB5_WG33419-104_Form8G_SJ1179442.html; Workgroup: WG33419; Design ID: 699]

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested. Results are compliant with NELAP where specific accreditation is held.



PCDD/PCDF CERTIFIED REFERENCE MATERIAL (CRM) REPORT FOR NIST SRM 1944

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
 V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4406	Lab Sample I.D.:	WG33419-104 i
Matrix:	SOLID	Sample Size:	1.01 g (dry)
Extraction Date:	22-Jul-2010	Initial Calibration Date:	13-Jul-2010
Analysis Date:	10-Aug-2010 Time: 23:29:13	Instrument ID:	HR GC/MS
Extract Volume (uL):	20	GC Column ID:	DB225
Injection Volume (uL):	2.0	CRM Data Filename:	DB03_110 S: 6
Dilution Factor:	N/A	Blank Data Filename:	DB03_110 S: 5
Concentration Units:	pg/g (dry weight basis)	Cal. Ver. Data Filename:	DB03_110 S: 2

COMPOUND	LAB FLAG ¹	DETERMINED	CERTIFIED / REFERENCE
2,3,7,8-TCDF		32.5	39 +/- 15

(1) Where applicable, custom lab flags have been used on this report.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.

Signed: _____ Bryan Alonzo _____

For Axys Internal Use Only [XSL Template: Form8G.xsl; Created: 27-Aug-2010 11:49:42; Application: XMLTransformer-1.10.25; Report Filename: 1613_DIOXINS_1613DB225_WG33419-104_Form8G_SJ1179596.html; Workgroup: WG33419; Design ID: 699]

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested. Results are compliant with NELAP where specific accreditation is held.



BATCH SUMMARY

Batch ID: WG33420	Date: 09-Sep-2010
Analysis Type: Dioxin/Furan	Matrix Type: Solid
BATCH MAKEUP	
Contract: 4406 Samples: L14884-50 SDS-FB-10 L15027-7 10654011 L15027-9 10654015 L15027-10 10654021 L15027-11 10654022	Blank: WG33420-101 Reference or Spike: WG33420-102
Comments: <div style="border: 1px solid black; padding: 10px;"><ol style="list-style-type: none">1. The results are not blank-corrected.2. The recoveries of the cleanup standard 37Cl-2,3,7,8-TCDD in the method blank and in samples 10654011, 10654021, 10654015 fell below the lower method control limit, and are flagged "V" accordingly. The cleanup standard is used to monitor the performance of the extract cleanup, and no analytes are quantified against it.3. The recoveries of 13C-labeled TCDF, 1,2,3,4,7,8-HxCDD, and 1,2,3,7,8,9-HxCDF in sample 10654015 fell below the lower method control limits, and are flagged "V" accordingly. The results are recovery-corrected, the labeled compound recoveries, although below the lower method control limit, are sufficient for accurate quantification.</div>	



Form 1A
PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
SDS-FB-10
Sample Collection:
08-Jun-2010 14:53

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.: 4406

Project No.

FIDALGO BAY, CUSTOM
PLYWOOD DX STUDY

Lab Sample I.D.:

L14884-50 i2

Matrix: SOLID

Sample Size: 10.2 g (dry)

Sample Receipt Date: 17-Jun-2010

Initial Calibration Date: 30-Jul-2010

Extraction Date: 23-Jul-2010

Instrument ID: HR GC/MS

Analysis Date: 26-Aug-2010 Time: 01:06:43

GC Column ID: DB5

Extract Volume (uL): 20

Sample Data Filename: DX0M_112 S: 19

Injection Volume (uL): 1.0

Blank Data Filename: DX01_175A S: 5

Dilution Factor: N/A

Cal. Ver. Data Filename: DX0M_112 S: 13

Concentration Units: pg/g (dry weight basis)

% Moisture: 44.4

COMPOUND	LAB FLAG ¹	CONCENTRATION FOUND	DETECTION LIMIT	ION ABUND. RATIO ²	RRT ²
2,3,7,8-TCDD	J	0.269	0.0543	0.68	1.002
1,2,3,7,8-PECDD ³	B J	0.720	0.0617	0.65	1.001
1,2,3,4,7,8-HXCDD	K J	0.649	0.0907	1.85	1.000
1,2,3,6,7,8-HXCDD	J	2.83	0.0907	1.15	1.001
1,2,3,7,8,9-HXCDD	J	2.18	0.0907	1.19	1.000
1,2,3,4,6,7,8-HPCDD	B	29.8	0.209	1.02	1.000
OCDD	B	205	0.282	0.88	1.000
2,3,7,8-TCDF		1.85	0.0587	0.73	1.001
1,2,3,7,8-PECDF	K J	0.205	0.103	0.84	1.002
2,3,4,7,8-PECDF	J	0.470	0.103	1.39	1.001
1,2,3,4,7,8-HXCDF	J	0.243	0.115	1.13	1.001
1,2,3,6,7,8-HXCDF	K J	0.344	0.115	0.46	1.001
1,2,3,7,8,9-HXCDF	U		0.115		
2,3,4,6,7,8-HXCDF	B J	0.371	0.115	1.41	1.000
1,2,3,4,6,7,8-HPCDF	B	6.33	0.134	0.90	1.000
1,2,3,4,7,8,9-HPCDF	K B J	0.475	0.134	0.80	1.001
OCDF	B	16.5	0.150	0.82	1.002
TOTAL TETRA-DIOXINS		8.39	0.0543		
TOTAL PENTA-DIOXINS		7.76	0.0617		
TOTAL HEXA-DIOXINS		33.8	0.0907		
TOTAL HEPTA-DIOXINS		116	0.209		
TOTAL TETRA-FURANS		7.50	0.0587		
TOTAL PENTA-FURANS		3.83	0.103		
TOTAL HEXA-FURANS		4.56	0.115		
TOTAL HEPTA-FURANS	B	16.8	0.134		

(1) Where applicable, custom lab flags have been used on this report; U = not detected; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; B = analyte found in sample and the associated blank; J = concentration less than LMCL.

(2) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

(3) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.

Signed: _____ Brian Watson _____



Form 1A
PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
SDS-FB-10
Sample Collection:
08-Jun-2010 14:53

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.: 4406

Matrix: SOLID

Sample Receipt Date: 17-Jun-2010

Extraction Date: 23-Jul-2010

Analysis Date: 06-Aug-2010 Time: 14:13:55

Extract Volume (uL): 20

Injection Volume (uL): 2.0

Dilution Factor: N/A

Concentration Units: pg/g (dry weight basis)

Project No. FIDALGO BAY, CUSTOM
PLYWOOD DX STUDY
Lab Sample I.D.: L14884-50

Sample Size: 10.2 g (dry)

Initial Calibration Date: 13-Jul-2010

Instrument ID: HR GC/MS

GC Column ID: DB225

Sample Data Filename: DB03_105 S: 12

Blank Data Filename: DB03_105 S: 5

Cal. Ver. Data Filename: DB03_105 S: 2

% Moisture: 44.4

COMPOUND	LAB FLAG ¹	CONCENTRATION FOUND	DETECTION LIMIT	ION ABUND. RATIO ²	RRT ²
2,3,7,8-TCDF	K J	0.840	0.594	0.54	1.001

(1) Where applicable, custom lab flags have been used on this report; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; J = concentration less than LMCL.
(2) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.

Signed: _____ Brian Watson _____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 09-Sep-2010 14:50:36; Application: XMLTransformer-1.10.25; Report Filename: 1613_DIOXINS_1613DB225_L14884-50_Form1A_DB03_105S12_SJ1179464.html; Workgroup: WG33420; Design ID: 699]

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested. Results are compliant with NELAP where specific accreditation is held.



Form 1A
PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
10654011
Sample Collection:
04-Sep-2008 10:59

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.: 4406

Project No.

FIDALGO BAY, CUSTOM
PLYWOOD DX STUDY
L15027-7

Lab Sample I.D.:

Matrix: SOLID

Sample Size: 10.1 g (dry)

Sample Receipt Date: 16-Jul-2010

Initial Calibration Date: 06-Aug-2010

Extraction Date: 23-Jul-2010

Instrument ID: HR GC/MS

Analysis Date: 07-Aug-2010 Time: 17:10:44

GC Column ID: DB5

Extract Volume (uL): 20

Sample Data Filename: DX01_176D S: 5

Injection Volume (uL): 1.0

Blank Data Filename: DX01_175A S: 5

Dilution Factor: N/A

Cal. Ver. Data Filename: DX01_176D S: 1

Concentration Units: pg/g (dry weight basis)

% Moisture: 39.2

COMPOUND	LAB FLAG ¹	CONCENTRATION FOUND	DETECTION LIMIT	ION ABUND. RATIO ²	RRT ²
2,3,7,8-TCDD	K J	0.392	0.0495	0.47	1.000
1,2,3,7,8-PECDD ³	B J	1.69	0.0495	0.61	1.000
1,2,3,4,7,8-HXCDD	J	2.65	0.467	1.17	1.000
1,2,3,6,7,8-HXCDD		13.5	0.467	1.38	1.000
1,2,3,7,8,9-HXCDD		6.60	0.467	1.30	1.010
1,2,3,4,6,7,8-HPCDD	B	262	0.565	1.08	1.000
OCDD	B	1950	0.111	0.91	1.000
2,3,7,8-TCDF		2.35	0.115	0.88	1.002
1,2,3,7,8-PECDF	K J	0.777	0.0495	1.20	1.001
2,3,4,7,8-PECDF	J	1.13	0.0495	1.50	1.000
1,2,3,4,7,8-HXCDF	J	3.11	0.132	1.40	1.000
1,2,3,6,7,8-HXCDF	K J	1.75	0.132	1.01	1.001
1,2,3,7,8,9-HXCDF	U		0.132		
2,3,4,6,7,8-HXCDF	B J	2.13	0.132	1.23	1.000
1,2,3,4,6,7,8-HPCDF	B	75.0	0.167	1.05	1.001
1,2,3,4,7,8,9-HPCDF	K B J	4.36	0.167	0.88	1.001
OCDF	B	344	0.0495	0.90	1.002
TOTAL TETRA-DIOXINS		23.3	0.0495		
TOTAL PENTA-DIOXINS		20.0	0.0495		
TOTAL HEXA-DIOXINS		119	0.467		
TOTAL HEPTA-DIOXINS		562	0.565		
TOTAL TETRA-FURANS		14.5	0.115		
TOTAL PENTA-FURANS		21.0	0.0495		
TOTAL HEXA-FURANS		82.8	0.132		
TOTAL HEPTA-FURANS	B	269	0.167		

(1) Where applicable, custom lab flags have been used on this report; U = not detected; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; B = analyte found in sample and the associated blank; J = concentration less than LMCL.

(2) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

(3) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.

Signed: _____ Brian Watson _____



Form 1A
PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
10654011
Sample Collection:
04-Sep-2008 10:59

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.: 4406

Matrix: SOLID

Sample Receipt Date: 16-Jul-2010

Extraction Date: 23-Jul-2010

Analysis Date: 06-Aug-2010 Time: 22:45:38

Extract Volume (uL): 20

Injection Volume (uL): 2.0

Dilution Factor: N/A

Concentration Units: pg/g (dry weight basis)

Project No.

Lab Sample I.D.:

Sample Size:

Initial Calibration Date:

Instrument ID:

GC Column ID:

Sample Data Filename:

Blank Data Filename:

Cal. Ver. Data Filename:

% Moisture:

FIDALGO BAY, CUSTOM
PLYWOOD DX STUDY
L15027-7

10.1 g (dry)

13-Jul-2010

HR GC/MS

DB225

DB03_106 S: 6

DB03_105 S: 5

DB03_106 S: 2

39.2

COMPOUND	LAB FLAG ¹	CONCENTRATION FOUND	DETECTION LIMIT	ION ABUND. RATIO ²	RRT ²
2,3,7,8-TCDF		1.28	0.218	0.86	1.002

(1) Where applicable, custom lab flags have been used on this report.

(2) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.

Signed: _____ Brian Watson _____

For AxyS Internal Use Only [XSL Template: Form1A.xsl; Created: 09-Sep-2010 14:50:36; Application: XMLTransformer-1.10.25;
Report Filename: 1613_DIOXINS_1613DB225_L15027-7_Form1A_DB03_106S6_SJ1179477.html; Workgroup: WG33420; Design ID: 699]

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested. Results are compliant with NELAP where specific accreditation is held.



Form 1A
PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
10654015
Sample Collection:
04-Sep-2008 14:19

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.: 4406

Project No.

FIDALGO BAY, CUSTOM
PLYWOOD DX STUDY
L15027-9 L

Lab Sample I.D.:

Matrix: SOLID

Sample Size: 10.0 g (dry)

Sample Receipt Date: 16-Jul-2010

Initial Calibration Date: 30-Jul-2010

Extraction Date: 23-Jul-2010

Instrument ID: HR GC/MS

Analysis Date: 01-Sep-2010 Time: 13:25:48

GC Column ID: DB5

Extract Volume (uL): 20

Sample Data Filename: DX0M_115 S: 54

Injection Volume (uL): 1.0

Blank Data Filename: DX01_175A S: 5

Dilution Factor: N/A

Cal. Ver. Data Filename: DX0M_115 S: 44

Concentration Units: pg/g (dry weight basis)

% Moisture: 43.1

COMPOUND	LAB FLAG ¹	CONCENTRATION FOUND	DETECTION LIMIT	ION ABUND. RATIO ²	RRT ²
2,3,7,8-TCDD	J	0.500	0.184	0.74	1.000
1,2,3,7,8-PECDD ³	B J	1.21	0.275	0.70	1.001
1,2,3,4,7,8-HXCDD	J	1.73	0.434	1.12	1.000
1,2,3,6,7,8-HXCDD		5.91	0.434	1.26	1.000
1,2,3,7,8,9-HXCDD	J	4.83	0.434	1.36	1.000
1,2,3,4,6,7,8-HPCDD	B	95.9	0.668	0.98	1.000
OCDD	B	651	0.569	0.88	1.000
2,3,7,8-TCDF		5.96	0.281	0.76	1.001
1,2,3,7,8-PECDF	J	0.925	0.599	1.57	1.002
2,3,4,7,8-PECDF	J	1.67	0.599	1.50	1.001
1,2,3,4,7,8-HXCDF	J	1.92	0.830	1.23	1.001
1,2,3,6,7,8-HXCDF	K J	0.836	0.830	0.68	1.001
1,2,3,7,8,9-HXCDF	U		0.830		
2,3,4,6,7,8-HXCDF	K B J	1.32	0.830	0.79	1.001
1,2,3,4,6,7,8-HPCDF	B	25.7	0.571	0.90	1.000
1,2,3,4,7,8,9-HPCDF	B J	1.48	0.571	0.92	1.001
OCDF	B	81.7	0.548	0.82	1.002
TOTAL TETRA-DIOXINS		11.6	0.184		
TOTAL PENTA-DIOXINS		13.1	0.275		
TOTAL HEXA-DIOXINS		61.3	0.434		
TOTAL HEPTA-DIOXINS		234	0.668		
TOTAL TETRA-FURANS		29.4	0.281		
TOTAL PENTA-FURANS		15.7	0.599		
TOTAL HEXA-FURANS		29.3	0.830		
TOTAL HEPTA-FURANS	B	82.8	0.571		

(1) Where applicable, custom lab flags have been used on this report; U = not detected; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; B = analyte found in sample and the associated blank; J = concentration less than LMCL.

(2) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

(3) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.

Signed: _____ Brian Watson _____



Form 1A
PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
10654015
Sample Collection:
04-Sep-2008 14:19

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.: 4406
Matrix: SOLID
Sample Receipt Date: 16-Jul-2010
Extraction Date: 23-Jul-2010
Analysis Date: 06-Aug-2010 Time: 23:58:51
Extract Volume (uL): 20
Injection Volume (uL): 2.0
Dilution Factor: N/A
Concentration Units: pg/g (dry weight basis)

Project No. FIDALGO BAY, CUSTOM
PLYWOOD DX STUDY
Lab Sample I.D.: L15027-9
Sample Size: 10.0 g (dry)
Initial Calibration Date: 13-Jul-2010
Instrument ID: HR GC/MS
GC Column ID: DB225
Sample Data Filename: DB03_106 S: 8
Blank Data Filename: DB03_105 S: 5
Cal. Ver. Data Filename: DB03_106 S: 2
% Moisture: 43.1

COMPOUND	LAB FLAG ¹	CONCENTRATION FOUND	DETECTION LIMIT	ION ABUND. RATIO ²	RRT ²
2,3,7,8-TCDF		1.09	0.654	0.80	1.001

(1) Where applicable, custom lab flags have been used on this report.

(2) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.

Signed: _____ Brian Watson _____

For AxyS Internal Use Only [XSL Template: Form1A.xsl; Created: 09-Sep-2010 14:50:36; Application: XMLTransformer-1.10.25; Report Filename: 1613_DIOXINS_1613DB225_L15027-9_Form1A_DB03_106S8_SJ1179479.html; Workgroup: WG33420; Design ID: 699]

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested. Results are compliant with NELAP where specific accreditation is held.



Form 1A
PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
10654021
Sample Collection:
05-Sep-2008 09:23

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.: 4406

Project No.

FIDALGO BAY, CUSTOM
PLYWOOD DX STUDY
L15027-10 W

Lab Sample I.D.:

Matrix: SOLID

Sample Size: 10.1 g (dry)

Sample Receipt Date: 16-Jul-2010

Initial Calibration Date: 30-Jul-2010

Extraction Date: 23-Jul-2010

Instrument ID: HR GC/MS

Analysis Date: 01-Sep-2010 Time: 11:35:48

GC Column ID: DB5

Extract Volume (uL): 50

Sample Data Filename: DX0M_115 S: 52

Injection Volume (uL): 1.0

Blank Data Filename: DX01_175A S: 5

Dilution Factor: 2.5

Cal. Ver. Data Filename: DX0M_115 S: 44

Concentration Units: pg/g (dry weight basis)

% Moisture: 48.7

COMPOUND	LAB FLAG ¹	CONCENTRATION FOUND	DETECTION LIMIT	ION ABUND. RATIO ²	RRT ²
2,3,7,8-TCDD	D J	1.60	1.34	0.67	0.999
1,2,3,7,8-PECDD ³	B D J	3.47	1.48	0.66	1.000
1,2,3,4,7,8-HXCDD	D J	3.69	1.45	1.40	1.000
1,2,3,6,7,8-HXCDD	D	14.0	1.45	1.31	1.000
1,2,3,7,8,9-HXCDD	D J	6.19	1.45	1.36	1.000
1,2,3,4,6,7,8-HPCDD	B D	238	1.46	0.99	1.000
OCDD	B D	1590	1.89	0.85	1.000
2,3,7,8-TCDF	D	3.14	0.958	0.79	1.003
1,2,3,7,8-PECDF	U D		1.54		
2,3,4,7,8-PECDF	U D		1.54		
1,2,3,4,7,8-HXCDF	K D J	4.25	2.03	0.99	1.000
1,2,3,6,7,8-HXCDF	U D		2.03		
1,2,3,7,8,9-HXCDF	U D		2.03		
2,3,4,6,7,8-HXCDF	K B D J	2.90	2.03	0.80	1.000
1,2,3,4,6,7,8-HPCDF	B D	78.1	1.53	0.93	1.000
1,2,3,4,7,8,9-HPCDF	B D J	4.66	1.53	1.00	1.000
OCDF	B D	278	2.97	0.83	1.002
TOTAL TETRA-DIOXINS	D	33.4	1.34		
TOTAL PENTA-DIOXINS	D	31.7	1.48		
TOTAL HEXA-DIOXINS	D	127	1.45		
TOTAL HEPTA-DIOXINS	D	517	1.46		
TOTAL TETRA-FURANS	D	20.3	0.958		
TOTAL PENTA-FURANS	D	23.4	1.54		
TOTAL HEXA-FURANS	D	60.3	2.03		
TOTAL HEPTA-FURANS	B D	226	1.53		

(1) Where applicable, custom lab flags have been used on this report; U = not detected; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; B = analyte found in sample and the associated blank; D = dilution data; J = concentration less than LMCL.

(2) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

(3) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.

Signed: _____ Brian Watson _____



Form 1A
PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
10654021
Sample Collection:
05-Sep-2008 09:23

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.: 4406
Matrix: SOLID
Sample Receipt Date: 16-Jul-2010
Extraction Date: 23-Jul-2010
Analysis Date: 07-Aug-2010 Time: 00:35:29
Extract Volume (uL): 20
Injection Volume (uL): 2.0
Dilution Factor: N/A
Concentration Units: pg/g (dry weight basis)

Project No. FIDALGO BAY, CUSTOM
Lab Sample I.D.: PLYWOOD DX STUDY
L15027-10
Sample Size: 10.1 g (dry)
Initial Calibration Date: 13-Jul-2010
Instrument ID: HR GC/MS
GC Column ID: DB225
Sample Data Filename: DB03_106 S: 9
Blank Data Filename: DB03_105 S: 5
Cal. Ver. Data Filename: DB03_106 S: 2
% Moisture: 48.7

COMPOUND	LAB FLAG ¹	CONCENTRATION FOUND	DETECTION LIMIT	ION ABUND. RATIO ²	RRT ²
2,3,7,8-TCDF		1.62	0.412	0.84	1.001

(1) Where applicable, custom lab flags have been used on this report.
(2) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.
Signed: _____ Brian Watson _____

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These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested. Results are compliant with NELAP where specific accreditation is held.



Form 1A
PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
10654022
Sample Collection:
05-Sep-2008 10:15

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.: 4406

Project No.

FIDALGO BAY, CUSTOM
PLYWOOD DX STUDY
L15027-11 W

Lab Sample I.D.:

Matrix: SOLID

Sample Size: 10.2 g (dry)

Sample Receipt Date: 16-Jul-2010

Initial Calibration Date: 30-Jul-2010

Extraction Date: 23-Jul-2010

Instrument ID: HR GC/MS

Analysis Date: 01-Sep-2010 Time: 12:30:51

GC Column ID: DB5

Extract Volume (uL): 50

Sample Data Filename: DX0M_115 S: 53

Injection Volume (uL): 1.0

Blank Data Filename: DX01_175A S: 5

Dilution Factor: 2.5

Cal. Ver. Data Filename: DX0M_115 S: 44

Concentration Units: pg/g (dry weight basis)

% Moisture: 39.9

COMPOUND	LAB FLAG ¹	CONCENTRATION FOUND	DETECTION LIMIT	ION ABUND. RATIO ²	RRT ²
2,3,7,8-TCDD	U D		0.301		
1,2,3,7,8-PECDD ³	B D J	0.913	0.359	0.67	1.001
1,2,3,4,7,8-HXCDD	D J	1.80	0.320	1.25	1.000
1,2,3,6,7,8-HXCDD	K D J	4.68	0.320	0.94	1.000
1,2,3,7,8,9-HXCDD	D J	3.83	0.320	1.31	1.000
1,2,3,4,6,7,8-HPCDD	B D	73.3	0.525	1.03	1.000
OCDD	B D	482	0.789	0.85	1.000
2,3,7,8-TCDF	D J	1.89	0.332	0.75	1.001
1,2,3,7,8-PECDF	U D		0.347		
2,3,4,7,8-PECDF	D J	0.847	0.347	1.42	1.001
1,2,3,4,7,8-HXCDF	D J	1.12	0.216	1.13	1.002
1,2,3,6,7,8-HXCDF	D J	0.929	0.216	1.10	1.001
1,2,3,7,8,9-HXCDF	U D		0.216		
2,3,4,6,7,8-HXCDF	B D J	0.684	0.216	1.24	1.001
1,2,3,4,6,7,8-HPCDF	B D	21.5	0.523	1.03	1.000
1,2,3,4,7,8,9-HPCDF	K B D J	2.18	0.523	0.81	1.000
OCDF	B D	69.3	0.693	0.81	1.002
TOTAL TETRA-DIOXINS	D	15.8	0.301		
TOTAL PENTA-DIOXINS	D	16.1	0.359		
TOTAL HEXA-DIOXINS	D	52.8	0.320		
TOTAL HEPTA-DIOXINS	D	176	0.525		
TOTAL TETRA-FURANS	D	11.6	0.332		
TOTAL PENTA-FURANS	D	8.14	0.347		
TOTAL HEXA-FURANS	D	16.4	0.216		
TOTAL HEPTA-FURANS	B D	63.1	0.523		

(1) Where applicable, custom lab flags have been used on this report; U = not detected; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; B = analyte found in sample and the associated blank; D = dilution data; J = concentration less than LMCL.

(2) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

(3) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.

Signed: _____ Brian Watson _____



Form 1A
PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
10654022
Sample Collection:
05-Sep-2008 10:15

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.: 4406

Matrix: SOLID

Sample Receipt Date: 16-Jul-2010

Extraction Date: 23-Jul-2010

Analysis Date: 07-Aug-2010 Time: 01:12:07

Extract Volume (uL): 20

Injection Volume (uL): 2.0

Dilution Factor: N/A

Concentration Units: pg/g (dry weight basis)

Project No. FIDALGO BAY, CUSTOM
PLYWOOD DX STUDY
Lab Sample I.D.: L15027-11

Sample Size: 10.2 g (dry)

Initial Calibration Date: 13-Jul-2010

Instrument ID: HR GC/MS

GC Column ID: DB225

Sample Data Filename: DB03_106 S: 10

Blank Data Filename: DB03_105 S: 5

Cal. Ver. Data Filename: DB03_106 S: 2

% Moisture: 39.9

COMPOUND	LAB FLAG ¹	CONCENTRATION FOUND	DETECTION LIMIT	ION ABUND. RATIO ²	RRT ²
2,3,7,8-TCDF	K	1.16	0.206	1.03	1.002

(1) Where applicable, custom lab flags have been used on this report; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration.

(2) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.

Signed: _____ Brian Watson _____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 09-Sep-2010 14:50:36; Application: XMLTransformer-1.10.25; Report Filename: 1613_DIOXINS_1613DB225_L15027-11_Form1A_DB03_106S10_SJ1179481.html; Workgroup: WG33420; Design ID: 699]

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested. Results are compliant with NELAP where specific accreditation is held.



Form 1A
PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
Lab Blank
Sample Collection:
N/A

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.: 4406

Project No. N/A

Lab Sample I.D.: WG33420-101

Matrix: SOLID

Sample Size: 10.0 g

Sample Receipt Date: N/A

Initial Calibration Date: 06-Aug-2010

Extraction Date: 23-Jul-2010

Instrument ID: HR GC/MS

Analysis Date: 06-Aug-2010 Time: 23:13:55

GC Column ID: DB5

Extract Volume (uL): 20

Sample Data Filename: DX01_175A S: 5

Injection Volume (uL): 1.0

Blank Data Filename: DX01_175A S: 5

Dilution Factor: N/A

Cal. Ver. Data Filename: DX01_175A S: 1

Concentration Units: pg/g

COMPOUND	LAB FLAG ¹	CONCENTRATION FOUND	DETECTION LIMIT	ION ABUND. RATIO ²	RRT ²
2,3,7,8-TCDD	U		0.0500		
1,2,3,7,8-PECDD ³	K J	0.077	0.0500	2.91	1.000
1,2,3,4,7,8-HXCDD	U		0.0800		
1,2,3,6,7,8-HXCDD	U		0.0800		
1,2,3,7,8,9-HXCDD	U		0.0800		
1,2,3,4,6,7,8-HPCDD	K J	0.141	0.0500	0.73	1.000
OCDD	K J	0.302	0.0500	1.28	1.000
2,3,7,8-TCDF	U		0.0500		
1,2,3,7,8-PECDF	U		0.0800		
2,3,4,7,8-PECDF	U		0.0800		
1,2,3,4,7,8-HXCDF	U		0.0500		
1,2,3,6,7,8-HXCDF	U		0.0500		
1,2,3,7,8,9-HXCDF	U		0.0500		
2,3,4,6,7,8-HXCDF	K J	0.106	0.0500	1.85	1.000
1,2,3,4,6,7,8-HPCDF	K J	0.126	0.0500	1.67	1.000
1,2,3,4,7,8,9-HPCDF	J	0.117	0.0500	1.09	1.000
OCDF	J	0.242	0.0500	1.01	1.002
TOTAL TETRA-DIOXINS	U		0.0500		
TOTAL PENTA-DIOXINS	U		0.0500		
TOTAL HEXA-DIOXINS	U		0.0500		
TOTAL HEPTA-DIOXINS	U		0.0500		
TOTAL TETRA-FURANS	U		0.0500		
TOTAL PENTA-FURANS	U		0.0500		
TOTAL HEXA-FURANS	U		0.0500		
TOTAL HEPTA-FURANS		0.117	0.0500		

(1) Where applicable, custom lab flags have been used on this report; U = not detected; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; J = concentration less than LMCL.

(2) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

(3) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.

Signed: _____ Brian Watson _____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 09-Sep-2010 14:48:07; Application: XMLTransformer-1.10.25; Report Filename: 1613_DIOXINS_1613DB5_WG33420-101_Form1A_DX01_175AS5_SJ1179202.html; Workgroup: WG33420; Design ID: 699]

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested. Results are compliant with NELAP where specific accreditation is held.



Form 8A
PCDD/PCDF ONGOING PRECISION AND RECOVERY (OPR)

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
 V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.: 4406 **OPR Data Filename:** DX01_175A S: 2

Matrix: SOLID **Lab Sample I.D.:** WG33420-102

Extraction Date: 23-Jul-2010 **Analysis Date:** 06-Aug-2010 **Time:** 20:29:51

ALL CONCENTRATIONS REPORTED ON THIS FORM ARE CONCENTRATIONS IN EXTRACT, BASED ON A 20 µL EXTRACT VOLUME.

COMPOUND	LAB FLAG ¹	ION ABUND. RATIO ²	SPIKE CONC. (ng/mL)	CONC. FOUND (ng/mL)	OPR CONC. LIMITS ³ (ng/mL)	% RECOVERY
2,3,7,8-TCDD		0.79	10.6	9.60	7.10 - 16.7	90.6
1,2,3,7,8-PECDD ⁴		0.66	56.6	48.3	39.6 - 80.4	85.4
1,2,3,4,7,8-HXCDD		1.24	59.2	53.6	41.4 - 97.1	90.5
1,2,3,6,7,8-HXCDD		1.25	51.8	54.0	39.4 - 69.4	104
1,2,3,7,8,9-HXCDD		1.24	56.7	50.4	36.3 - 91.9	88.8
1,2,3,4,6,7,8-HPCDD		1.08	50.0	45.0	35.0 - 70.0	90.0
OCDD		0.93	108	88.6	84.2 - 155	82.1
2,3,7,8-TCDF		0.81	10.9	10.3	8.18 - 17.2	94.2
1,2,3,7,8-PECDF		1.57	50.0	44.4	40.0 - 67.0	88.8
2,3,4,7,8-PECDF		1.58	50.0	46.0	34.0 - 80.0	92.0
1,2,3,4,7,8-HXCDF		1.28	54.4	48.7	39.2 - 72.9	89.5
1,2,3,6,7,8-HXCDF		1.25	50.0	45.9	42.0 - 65.0	91.8
1,2,3,7,8,9-HXCDF		1.22	50.0	54.9	39.0 - 65.0	110
2,3,4,6,7,8-HXCDF		1.23	53.1	51.6	37.2 - 82.8	97.2
1,2,3,4,6,7,8-HPCDF		1.03	50.0	49.9	41.0 - 61.0	99.8
1,2,3,4,7,8,9-HPCDF		1.02	50.0	50.1	39.0 - 69.0	100
OCDF		0.93	109	89.5	68.4 - 185	82.4

- (1) Where applicable, custom lab flags have been used on this report.
- (2) Contract-required Ion Abundance Ratios are specified in Table 9, Method 1613.
- (3) Contract-required concentration range as determined from the percent of the test concentration in Table 6, Method 1613, under OPR.
- (4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.

Signed: _____ Brian Watson _____

For Axys Internal Use Only [XSL Template: Form8A.xsl; Created: 09-Sep-2010 14:48:07; Application: XMLTransformer-1.10.25; Report Filename: 1613_DIOXINS_1613DB5_WG33420-102_Form8A_SJ1179198.html; Workgroup: WG33420; Design ID: 699]

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested. Results are compliant with NELAP where specific accreditation is held.



BATCH SUMMARY

Batch ID: WG33623	Date: 10-Sep-2010
Analysis Type: Dioxin/Furan	Matrix Type: Solid
BATCH MAKEUP	
Contract: 4406 Samples: L14884-1 SDS-CPD-01 L14884-3 SDS-CPD-03 L14884-10 SDS-CPD-16 L14884-12 SDS-PB-02 L14884-16 SDS-PB-05-D L14884-21 SDS-CPD-09 L14884-23 SDS-CPD-12	Blank: WG33623-101 Reference or Spike: WG33623-102 WG33623-104 Duplicate:
Comments: <ol style="list-style-type: none"> 1. Data are not blank corrected. 2. Elevated levels of 2,3,7,8-TCDF, 1,2,3,7,8-PeCDF and 2,3,4,7,8-PeCDF were observed in the Lab Blank (AXYS ID WG33622-101). Cautions should be taken in evaluation of sample data for these congeners which concentrations were not significantly greater than those of the Lab Blank. However, TEQ values for all client samples except for sample SDS-PB-02 (AXYS ID L14884-12) were significantly greater than that of the Lab Blank, indicating TEQ values were not impacted by the variances for these samples. 3. A disturbance of the mass ions used to monitor instrument performance (lock-mass) was observed at the retention time corresponding to 1,2,3,6,7-PeCDD (a non-2,3,7,8-PeCDD) in samples SDS-CPD-01, SDS-CPD-03, SDS-CPD-16, SDS-PB-05-D and the Lab Blank (AXYS ID L14881-1, -3, -10, -16 and WG33623-101, respectively). This congener is flagged with a 'G' on the quantification summary accompanying the chromatograms when it is detected. As the interference only affected congener that was non-2,3,7,8-PeCDD and a small contributor to the overall total Penta-Dioxins, data are not considered affected by the variance. 	



Form 1A
PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
SDS-CPD-01
Sample Collection:
09-Jun-2010 09:40

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.: 4406
Matrix: SOLID
Sample Receipt Date: 17-Jun-2010
Extraction Date: 13-Aug-2010
Analysis Date: 27-Aug-2010 Time: 13:52:07
Extract Volume (uL): 20
Injection Volume (uL): 1.0
Dilution Factor: N/A
Concentration Units: pg/g (dry weight basis)

Project No. FIDALGO BAY, CUSTOM
PLYWOOD DX STUDY
Lab Sample I.D.: L14884-1 R
Sample Size: 10.7 g (dry)
Initial Calibration Date: 26-Aug-2010
Instrument ID: HR GC/MS
GC Column ID: DB5
Sample Data Filename: DX0B_199A S: 6
Blank Data Filename: DX0B_199A S: 5
Cal. Ver. Data Filename: DX0B_199A S: 1
% Moisture: 39.4

COMPOUND	LAB FLAG ¹	CONCENTRATION FOUND	DETECTION LIMIT	ION ABUND. RATIO ²	RRT ²
2,3,7,8-TCDD	K B J	0.238	0.0468	0.52	1.001
1,2,3,7,8-PECDD ³	B J	1.12	0.0468	0.57	1.001
1,2,3,4,7,8-HXCDD	J	1.46	0.0983	1.34	1.000
1,2,3,6,7,8-HXCDD	B	5.27	0.0983	1.24	1.000
1,2,3,7,8,9-HXCDD	B J	3.82	0.0983	1.34	1.010
1,2,3,4,6,7,8-HPCDD	B	70.8	0.144	1.06	1.000
OCDD	B	452	0.0468	0.89	1.000
2,3,7,8-TCDF	B	2.42	0.0468	0.78	1.001
1,2,3,7,8-PECDF	B J	0.382	0.0468	1.45	1.000
2,3,4,7,8-PECDF	B J	0.660	0.0468	1.59	1.000
1,2,3,4,7,8-HXCDF	B J	1.02	0.0509	1.17	1.000
1,2,3,6,7,8-HXCDF	J	0.594	0.0509	1.28	1.000
1,2,3,7,8,9-HXCDF	J	0.086	0.0509	1.17	1.000
2,3,4,6,7,8-HXCDF	B J	0.641	0.0509	1.32	1.000
1,2,3,4,6,7,8-HPCDF		16.8	0.0810	1.05	1.000
1,2,3,4,7,8,9-HPCDF	J	1.10	0.0810	1.11	1.000
OCDF	B	59.7	0.0468	0.86	1.002
TOTAL TETRA-DIOXINS		57.7	0.0468		
TOTAL PENTA-DIOXINS	B	63.5	0.0468		
TOTAL HEXA-DIOXINS		94.6	0.0983		
TOTAL HEPTA-DIOXINS	B	166	0.144		
TOTAL TETRA-FURANS	B	14.7	0.0468		
TOTAL PENTA-FURANS	B	10.2	0.0468		
TOTAL HEXA-FURANS	B	20.8	0.0509		
TOTAL HEPTA-FURANS		58.5	0.0810		

(1) Where applicable, custom lab flags have been used on this report; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; B = analyte found in sample and the associated blank; J = concentration less than LMCL.
(2) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.
(3) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.

Signed: _____Matthew Ou_____



Form 1A
PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
SDS-CPD-01
Sample Collection:
09-Jun-2010 09:40

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.: 4406
Matrix: SOLID
Sample Receipt Date: 17-Jun-2010
Extraction Date: 13-Aug-2010
Analysis Date: 28-Aug-2010 Time: 04:52:03
Extract Volume (uL): 20
Injection Volume (uL): 2.0
Dilution Factor: N/A
Concentration Units: pg/g (dry weight basis)

Project No. FIDALGO BAY, CUSTOM
PLYWOOD DX STUDY
Lab Sample I.D.: L14884-1 R
Sample Size: 10.7 g (dry)
Initial Calibration Date: 24-Aug-2010
Instrument ID: HR GC/MS
GC Column ID: DB225
Sample Data Filename: DB03_123A S: 13
Blank Data Filename: DB03_132 S: 5
Cal. Ver. Data Filename: DB03_123A S: 2
% Moisture: 39.4

COMPOUND	LAB FLAG ¹	CONCENTRATION FOUND	DETECTION LIMIT	ION ABUND. RATIO ²	RRT ²
2,3,7,8-TCDF	B	1.19	0.0542	0.84	1.002

(1) Where applicable, custom lab flags have been used on this report; B = analyte found in sample and the associated blank.
(2) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.
Signed: _____Matthew Ou_____

For AxyS Internal Use Only [XSL Template: Form1A.xsl; Created: 11-Sep-2010 15:47:12; Application: XMLTransformer-1.10.25;
Report Filename: 1613_DIOXINS_1613DB225_L14884-1_Form1A_DB03_123AS13_SJ1188788.html; Workgroup: WG33623; Design ID: 699]

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested. Results are compliant with NELAP where specific accreditation is held.



Form 1A
PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
SDS-CPD-03
Sample Collection:
09-Jun-2010 10:46

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.: 4406

Project No.

FIDALGO BAY, CUSTOM
PLYWOOD DX STUDY

Lab Sample I.D.:

L14884-3 R

Matrix: SOLID

Sample Size: 10.9 g (dry)

Sample Receipt Date: 17-Jun-2010

Initial Calibration Date: 26-Aug-2010

Extraction Date: 13-Aug-2010

Instrument ID: HR GC/MS

Analysis Date: 27-Aug-2010 Time: 14:47:02

GC Column ID: DB5

Extract Volume (uL): 20

Sample Data Filename: DX0B_199A S: 7

Injection Volume (uL): 1.0

Blank Data Filename: DX0B_199A S: 5

Dilution Factor: N/A

Cal. Ver. Data Filename: DX0B_199A S: 1

Concentration Units: pg/g (dry weight basis)

% Moisture: 42.6

COMPOUND	LAB FLAG ¹	CONCENTRATION FOUND	DETECTION LIMIT	ION ABUND. RATIO ²	RRT ²
2,3,7,8-TCDD	K B J	0.306	0.0460	0.55	1.001
1,2,3,7,8-PECDD ³	B J	1.20	0.0460	0.53	1.001
1,2,3,4,7,8-HXCDD	J	1.72	0.0587	1.25	1.000
1,2,3,6,7,8-HXCDD	B	7.77	0.0587	1.29	1.000
1,2,3,7,8,9-HXCDD	B J	4.48	0.0587	1.24	1.010
1,2,3,4,6,7,8-HPCDD	B	139	0.341	1.05	1.000
OCDD	B	1000	0.0460	0.89	1.000
2,3,7,8-TCDF	B	2.38	0.0460	0.76	1.001
1,2,3,7,8-PECDF	B J	0.539	0.0460	1.48	1.000
2,3,4,7,8-PECDF	B J	0.991	0.0460	1.67	1.000
1,2,3,4,7,8-HXCDF	B J	1.83	0.0670	1.25	1.000
1,2,3,6,7,8-HXCDF	J	1.10	0.0670	1.32	1.000
1,2,3,7,8,9-HXCDF	J	0.139	0.0670	1.11	1.000
2,3,4,6,7,8-HXCDF	B J	1.27	0.0670	1.35	1.000
1,2,3,4,6,7,8-HPCDF		41.0	0.105	1.03	1.000
1,2,3,4,7,8,9-HPCDF	J	2.23	0.105	0.93	1.000
OCDF	B	154	0.0460	0.89	1.002
TOTAL TETRA-DIOXINS		15.2	0.0460		
TOTAL PENTA-DIOXINS	B	16.3	0.0460		
TOTAL HEXA-DIOXINS		74.1	0.0587		
TOTAL HEPTA-DIOXINS	B	327	0.341		
TOTAL TETRA-FURANS	B	15.4	0.0460		
TOTAL PENTA-FURANS	B	16.4	0.0460		
TOTAL HEXA-FURANS	B	45.5	0.0670		
TOTAL HEPTA-FURANS		154	0.105		

(1) Where applicable, custom lab flags have been used on this report; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; B = analyte found in sample and the associated blank; J = concentration less than LMCL.
 (2) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.
 (3) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.

Signed: _____Matthew Ou_____



Form 1A
PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
SDS-CPD-03
Sample Collection:
09-Jun-2010 10:46

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.: 4406
Matrix: SOLID
Sample Receipt Date: 17-Jun-2010
Extraction Date: 13-Aug-2010
Analysis Date: 28-Aug-2010 Time: 05:28:40
Extract Volume (uL): 20
Injection Volume (uL): 2.0
Dilution Factor: N/A
Concentration Units: pg/g (dry weight basis)

Project No. FIDALGO BAY, CUSTOM
PLYWOOD DX STUDY
Lab Sample I.D.: L14884-3 R
Sample Size: 10.9 g (dry)
Initial Calibration Date: 24-Aug-2010
Instrument ID: HR GC/MS
GC Column ID: DB225
Sample Data Filename: DB03_123A S: 14
Blank Data Filename: DB03_132 S: 5
Cal. Ver. Data Filename: DB03_123A S: 2
% Moisture: 42.6

COMPOUND	LAB FLAG ¹	CONCENTRATION FOUND	DETECTION LIMIT	ION ABUND. RATIO ²	RRT ²
2,3,7,8-TCDF	B	1.04	0.149	0.87	1.002

(1) Where applicable, custom lab flags have been used on this report; B = analyte found in sample and the associated blank.
(2) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.
Signed: _____Matthew Ou_____

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Report Filename: 1613_DIOXINS_1613DB225_L14884-3_Form1A_DB03_123AS14_SJ1188789.html; Workgroup: WG33623; Design ID: 699]

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested. Results are compliant with NELAP where specific accreditation is held.



Form 1A
PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
SDS-CPD-16
Sample Collection:
09-Jun-2010 13:31

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.: 4406

Project No.

FIDALGO BAY, CUSTOM
PLYWOOD DX STUDY
L14884-10 R

Matrix: SOLID

Lab Sample I.D.: L14884-10 R

Sample Size: 10.7 g (dry)

Sample Receipt Date: 17-Jun-2010

Initial Calibration Date: 26-Aug-2010

Extraction Date: 13-Aug-2010

Instrument ID: HR GC/MS

Analysis Date: 27-Aug-2010 Time: 15:42:03

GC Column ID: DB5

Extract Volume (uL): 20

Sample Data Filename: DX0B_199A S: 8

Injection Volume (uL): 1.0

Blank Data Filename: DX0B_199A S: 5

Dilution Factor: N/A

Cal. Ver. Data Filename: DX0B_199A S: 1

Concentration Units: pg/g (dry weight basis)

% Moisture: 47.8

COMPOUND	LAB FLAG ¹	CONCENTRATION FOUND	DETECTION LIMIT	ION ABUND. RATIO ²	RRT ²
2,3,7,8-TCDD	K B J	0.282	0.0468	0.52	1.001
1,2,3,7,8-PECDD ³	B J	1.02	0.0468	0.59	1.001
1,2,3,4,7,8-HXCDD	J	1.10	0.0723	1.22	1.000
1,2,3,6,7,8-HXCDD	B J	4.64	0.0723	1.31	1.000
1,2,3,7,8,9-HXCDD	B J	3.35	0.0723	1.16	1.010
1,2,3,4,6,7,8-HPCDD	B	64.8	0.189	1.04	1.000
OCDD	B	421	0.0468	0.89	1.000
2,3,7,8-TCDF	B	2.54	0.0468	0.81	1.001
1,2,3,7,8-PECDF	B J	0.460	0.0468	1.64	1.000
2,3,4,7,8-PECDF	B J	0.703	0.0468	1.61	1.001
1,2,3,4,7,8-HXCDF	B J	1.05	0.0468	1.18	1.000
1,2,3,6,7,8-HXCDF	J	0.676	0.0468	1.41	1.000
1,2,3,7,8,9-HXCDF	J	0.081	0.0468	1.27	1.000
2,3,4,6,7,8-HXCDF	B J	0.773	0.0468	1.28	1.000
1,2,3,4,6,7,8-HPCDF		18.2	0.0881	1.05	1.000
1,2,3,4,7,8,9-HPCDF	K J	1.15	0.0881	0.80	1.000
OCDF	B	71.8	0.0468	0.87	1.002
TOTAL TETRA-DIOXINS		18.1	0.0468		
TOTAL PENTA-DIOXINS	B	17.8	0.0468		
TOTAL HEXA-DIOXINS		56.1	0.0723		
TOTAL HEPTA-DIOXINS	B	155	0.189		
TOTAL TETRA-FURANS	B	13.9	0.0468		
TOTAL PENTA-FURANS	B	10.3	0.0468		
TOTAL HEXA-FURANS	B	21.2	0.0468		
TOTAL HEPTA-FURANS		59.0	0.0881		

(1) Where applicable, custom lab flags have been used on this report; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; B = analyte found in sample and the associated blank; J = concentration less than LMCL.
 (2) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.
 (3) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.

Signed: _____Matthew Ou_____



Form 1A
PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
SDS-CPD-16
Sample Collection:
09-Jun-2010 13:31

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.: 4406
Matrix: SOLID
Sample Receipt Date: 17-Jun-2010
Extraction Date: 13-Aug-2010
Analysis Date: 28-Aug-2010 Time: 06:05:19
Extract Volume (uL): 20
Injection Volume (uL): 2.0
Dilution Factor: N/A
Concentration Units: pg/g (dry weight basis)

Project No. FIDALGO BAY, CUSTOM
PLYWOOD DX STUDY
Lab Sample I.D.: L14884-10 R
Sample Size: 10.7 g (dry)
Initial Calibration Date: 24-Aug-2010
Instrument ID: HR GC/MS
GC Column ID: DB225
Sample Data Filename: DB03_123A S: 15
Blank Data Filename: DB03_132 S: 5
Cal. Ver. Data Filename: DB03_123A S: 2
% Moisture: 47.8

COMPOUND	LAB FLAG ¹	CONCENTRATION FOUND	DETECTION LIMIT	ION ABUND. RATIO ²	RRT ²
2,3,7,8-TCDF	B	1.34	0.172	0.76	1.001

(1) Where applicable, custom lab flags have been used on this report; B = analyte found in sample and the associated blank.
(2) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.
Signed: _____Matthew Ou_____

For AxyS Internal Use Only [XSL Template: Form1A.xsl; Created: 11-Sep-2010 15:47:12; Application: XMLTransformer-1.10.25;
Report Filename: 1613_DIOXINS_1613DB225_L14884-10_Form1A_DB03_123AS15_SJ1188790.html; Workgroup: WG33623; Design ID: 699]

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested. Results are compliant with NELAP where specific accreditation is held.



Form 1A
PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
SDS-PB-02
Sample Collection:
07-Jun-2010 13:45

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.: 4406

Project No.

FIDALGO BAY, CUSTOM
PLYWOOD DX STUDY
L14884-12 Ri

Lab Sample I.D.:

Matrix: SOLID

Sample Size: 10.2 g (dry)

Sample Receipt Date: 17-Jun-2010

Initial Calibration Date: 26-Aug-2010

Extraction Date: 13-Aug-2010

Instrument ID: HR GC/MS

Analysis Date: 08-Sep-2010 Time: 00:18:53

GC Column ID: DB5

Extract Volume (uL): 20

Sample Data Filename: DX0B_205E S: 6

Injection Volume (uL): 1.0

Blank Data Filename: DX0B_199A S: 5

Dilution Factor: N/A

Cal. Ver. Data Filename: DX0B_205E S: 1

Concentration Units: pg/g (dry weight basis)

% Moisture: 21.2

COMPOUND	LAB FLAG ¹	CONCENTRATION FOUND	DETECTION LIMIT	ION ABUND. RATIO ²	RRT ²
2,3,7,8-TCDD	K B J	0.054	0.0489	0.24	1.001
1,2,3,7,8-PECDD ³	U		0.0489		
1,2,3,4,7,8-HXCDD	K J	0.049	0.0489	0.80	1.000
1,2,3,6,7,8-HXCDD	K B J	0.088	0.0489	1.90	1.000
1,2,3,7,8,9-HXCDD	K B J	0.081	0.0489	0.93	1.010
1,2,3,4,6,7,8-HPCDD	B J	0.369	0.0489	1.16	1.000
OCDD	B J	1.49	0.0489	0.87	1.000
2,3,7,8-TCDF	B J	0.943	0.0489	0.77	1.001
1,2,3,7,8-PECDF	B J	0.135	0.0489	1.58	1.001
2,3,4,7,8-PECDF	B J	0.298	0.0489	1.57	1.001
1,2,3,4,7,8-HXCDF	B J	0.052	0.0489	1.06	1.001
1,2,3,6,7,8-HXCDF	J	0.049	0.0489	1.19	1.001
1,2,3,7,8,9-HXCDF	U		0.0489		
2,3,4,6,7,8-HXCDF	B J	0.055	0.0489	1.37	1.000
1,2,3,4,6,7,8-HPCDF	J	0.097	0.0489	1.16	1.000
1,2,3,4,7,8,9-HPCDF	U		0.0489		
OCDF	K B J	0.150	0.0489	1.15	1.002
TOTAL TETRA-DIOXINS		0.058	0.0489		
TOTAL PENTA-DIOXINS	B	0.074	0.0489		
TOTAL HEXA-DIOXINS		0.141	0.0489		
TOTAL HEPTA-DIOXINS	B	0.840	0.0489		
TOTAL TETRA-FURANS	B	2.86	0.0489		
TOTAL PENTA-FURANS	B	1.26	0.0489		
TOTAL HEXA-FURANS	B	0.155	0.0489		
TOTAL HEPTA-FURANS		0.097	0.0489		

(1) Where applicable, custom lab flags have been used on this report; U = not detected; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; B = analyte found in sample and the associated blank; J = concentration less than LMCL.

(2) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

(3) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.

Signed: _____ Matthew Ou _____



Form 1A
PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
SDS-PB-02
Sample Collection:
07-Jun-2010 13:45

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.: 4406
Matrix: SOLID
Sample Receipt Date: 17-Jun-2010
Extraction Date: 13-Aug-2010
Analysis Date: 28-Aug-2010 Time: 06:41:56
Extract Volume (uL): 20
Injection Volume (uL): 2.0
Dilution Factor: N/A
Concentration Units: pg/g (dry weight basis)

Project No. FIDALGO BAY, CUSTOM
PLYWOOD DX STUDY
Lab Sample I.D.: L14884-12 R
Sample Size: 10.2 g (dry)
Initial Calibration Date: 24-Aug-2010
Instrument ID: HR GC/MS
GC Column ID: DB225
Sample Data Filename: DB03_123A S: 16
Blank Data Filename: DB03_132 S: 5
Cal. Ver. Data Filename: DB03_123A S: 2
% Moisture: 21.2

COMPOUND	LAB FLAG ¹	CONCENTRATION FOUND	DETECTION LIMIT	ION ABUND. RATIO ²	RRT ²
2,3,7,8-TCDF	K B J	0.615	0.0660	0.91	1.001

(1) Where applicable, custom lab flags have been used on this report; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; B = analyte found in sample and the associated blank; J = concentration less than LMCL.
(2) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 11-Sep-2010 15:47:12; Application: XMLTransformer-1.10.25; Report Filename: 1613_DIOXINS_1613DB225_L14884-12_Form1A_DB03_123AS16_SJ1188791.html; Workgroup: WG33623; Design ID: 699]

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested. Results are compliant with NELAP where specific accreditation is held.



Form 1A
PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
SDS-PB-05-D
Sample Collection:
07-Jun-2010 14:50

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.: 4406

Project No.

FIDALGO BAY, CUSTOM
PLYWOOD DX STUDY

Lab Sample I.D.:

L14884-16 R

Matrix: SOLID

Sample Size: 10.4 g (dry)

Sample Receipt Date: 17-Jun-2010

Initial Calibration Date: 26-Aug-2010

Extraction Date: 13-Aug-2010

Instrument ID: HR GC/MS

Analysis Date: 27-Aug-2010 Time: 17:31:53

GC Column ID: DB5

Extract Volume (uL): 20

Sample Data Filename: DX0B_199A S: 10

Injection Volume (uL): 1.0

Blank Data Filename: DX0B_199A S: 5

Dilution Factor: N/A

Cal. Ver. Data Filename: DX0B_199A S: 1

Concentration Units: pg/g (dry weight basis)

% Moisture: 28.2

COMPOUND	LAB FLAG ¹	CONCENTRATION FOUND	DETECTION LIMIT	ION ABUND. RATIO ²	RRT ²
2,3,7,8-TCDD	K B J	0.089	0.0479	0.55	1.001
1,2,3,7,8-PECDD ³	K B J	0.162	0.0479	0.80	1.000
1,2,3,4,7,8-HXCDD	J	0.197	0.0479	1.25	1.000
1,2,3,6,7,8-HXCDD	B J	0.940	0.0479	1.30	1.000
1,2,3,7,8,9-HXCDD	B J	0.677	0.0479	1.13	1.010
1,2,3,4,6,7,8-HPCDD	B	7.04	0.0514	1.05	1.000
OCDD	B	41.2	0.0479	0.89	1.000
2,3,7,8-TCDF	B	1.14	0.0479	0.77	1.002
1,2,3,7,8-PECDF	K B J	0.168	0.0479	1.30	1.000
2,3,4,7,8-PECDF	B J	0.331	0.0479	1.42	1.000
1,2,3,4,7,8-HXCDF	B J	0.194	0.0479	1.16	1.000
1,2,3,6,7,8-HXCDF	K J	0.117	0.0479	1.65	1.000
1,2,3,7,8,9-HXCDF	U		0.0479		
2,3,4,6,7,8-HXCDF	B J	0.151	0.0479	1.16	1.000
1,2,3,4,6,7,8-HPCDF	J	1.46	0.0479	1.10	1.000
1,2,3,4,7,8,9-HPCDF	J	0.119	0.0479	0.96	1.000
OCDF	B J	2.81	0.0479	0.86	1.002
TOTAL TETRA-DIOXINS		1.99	0.0479		
TOTAL PENTA-DIOXINS	B	1.85	0.0479		
TOTAL HEXA-DIOXINS		7.86	0.0479		
TOTAL HEPTA-DIOXINS	B	18.6	0.0514		
TOTAL TETRA-FURANS	B	4.65	0.0479		
TOTAL PENTA-FURANS	B	2.29	0.0479		
TOTAL HEXA-FURANS	B	2.22	0.0479		
TOTAL HEPTA-FURANS		4.00	0.0479		

(1) Where applicable, custom lab flags have been used on this report; U = not detected; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; B = analyte found in sample and the associated blank; J = concentration less than LMCL.

(2) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

(3) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.

Signed: _____ Matthew Ou _____



Form 1A
PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
SDS-PB-05-D
Sample Collection:
07-Jun-2010 14:50

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.: 4406
Matrix: SOLID
Sample Receipt Date: 17-Jun-2010
Extraction Date: 13-Aug-2010
Analysis Date: 28-Aug-2010 **Time:** 07:18:43
Extract Volume (uL): 20
Injection Volume (uL): 2.0
Dilution Factor: N/A
Concentration Units: pg/g (dry weight basis)

Project No. FIDALGO BAY, CUSTOM
Lab Sample I.D.: PLYWOOD DX STUDY
L14884-16 R
Sample Size: 10.4 g (dry)
Initial Calibration Date: 24-Aug-2010
Instrument ID: HR GC/MS
GC Column ID: DB225
Sample Data Filename: DB03_123A S: 17
Blank Data Filename: DB03_132 S: 5
Cal. Ver. Data Filename: DB03_123A S: 2
% Moisture: 28.2

COMPOUND	LAB FLAG ¹	CONCENTRATION FOUND	DETECTION LIMIT	ION ABUND. RATIO ²	RRT ²
2,3,7,8-TCDF	B J	0.647	0.0683	0.81	1.001

(1) Where applicable, custom lab flags have been used on this report; B = analyte found in sample and the associated blank; J = concentration less than LMCL.

(2) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.

Signed: _____Matthew Ou_____

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These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested. Results are compliant with NELAP where specific accreditation is held.



Form 1A
PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
SDS-CPD-09
Sample Collection:
10-Jun-2010 11:30

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4406	Project No.	FIDALGO BAY, CUSTOM PLYWOOD DX STUDY
Matrix:	SOLID	Lab Sample I.D.:	L14884-21 R
Sample Receipt Date:	17-Jun-2010	Sample Size:	10.7 g (dry)
Extraction Date:	13-Aug-2010	Initial Calibration Date:	26-Aug-2010
Analysis Date:	27-Aug-2010 Time: 22:33:13	Instrument ID:	HR GC/MS
Extract Volume (uL):	20	GC Column ID:	DB5
Injection Volume (uL):	1.0	Sample Data Filename:	DX0B_200 S: 4
Dilution Factor:	N/A	Blank Data Filename:	DX0B_199A S: 5
Concentration Units:	pg/g (dry weight basis)	Cal. Ver. Data Filename:	DX0B_200 S: 1
		% Moisture:	41.5

COMPOUND	LAB FLAG ¹	CONCENTRATION FOUND	DETECTION LIMIT	ION ABUND. RATIO ²	RRT ²
2,3,7,8-TCDD	K B J	0.225	0.0466	0.61	1.001
1,2,3,7,8-PECDD ³	B J	0.814	0.0466	0.67	1.001
1,2,3,4,7,8-HXCDD	J	1.11	0.0532	1.12	1.000
1,2,3,6,7,8-HXCDD	B J	3.22	0.0532	1.33	1.000
1,2,3,7,8,9-HXCDD	B J	2.45	0.0532	1.21	1.010
1,2,3,4,6,7,8-HPCDD	B	32.8	0.114	1.05	1.000
OCDD	B	186	0.0466	0.90	1.000
2,3,7,8-TCDF	B	2.84	0.0466	0.76	1.001
1,2,3,7,8-PECDF	B J	0.380	0.0466	1.42	1.001
2,3,4,7,8-PECDF	K B J	0.692	0.0466	1.88	1.000
1,2,3,4,7,8-HXCDF	B J	0.681	0.0466	1.41	1.000
1,2,3,6,7,8-HXCDF	J	0.488	0.0466	1.17	1.000
1,2,3,7,8,9-HXCDF	K J	0.053	0.0466	1.03	1.000
2,3,4,6,7,8-HXCDF	B J	0.507	0.0466	1.24	1.000
1,2,3,4,6,7,8-HPCDF		7.93	0.0673	1.05	1.000
1,2,3,4,7,8,9-HPCDF	J	0.645	0.0673	1.06	1.000
OCDF	B	21.4	0.0466	0.88	1.002
TOTAL TETRA-DIOXINS		113	0.0466		
TOTAL PENTA-DIOXINS	B	71.2	0.0466		
TOTAL HEXA-DIOXINS		65.6	0.0532		
TOTAL HEPTA-DIOXINS	B	87.5	0.114		
TOTAL TETRA-FURANS	B	14.6	0.0466		
TOTAL PENTA-FURANS	B	7.08	0.0466		
TOTAL HEXA-FURANS	B	11.5	0.0466		
TOTAL HEPTA-FURANS		24.5	0.0673		

(1) Where applicable, custom lab flags have been used on this report; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; B = analyte found in sample and the associated blank; J = concentration less than LMCL.
 (2) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.
 (3) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.

Signed: _____Matthew Ou_____



Form 1A
PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
SDS-CPD-09
Sample Collection:
10-Jun-2010 11:30

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.: 4406

Matrix: SOLID

Sample Receipt Date: 17-Jun-2010

Extraction Date: 13-Aug-2010

Analysis Date: 10-Sep-2010 Time: 12:02:26

Extract Volume (uL): 20

Injection Volume (uL): 2.0

Dilution Factor: N/A

Concentration Units: pg/g (dry weight basis)

Project No.

Lab Sample I.D.:

Sample Size:

Initial Calibration Date:

Instrument ID:

GC Column ID:

Sample Data Filename:

Blank Data Filename:

Cal. Ver. Data Filename:

% Moisture:

FIDALGO BAY, CUSTOM
PLYWOOD DX STUDY
L14884-21 Ri

10.7 g (dry)

24-Aug-2010

HR GC/MS

DB225

DB03_132 S: 6

DB03_132 S: 5

DB03_132 S: 2

41.5

COMPOUND	LAB FLAG ¹	CONCENTRATION FOUND	DETECTION LIMIT	ION ABUND. RATIO ²	RRT ²
2,3,7,8-TCDF	B	1.13	0.0623	0.81	1.002

(1) Where applicable, custom lab flags have been used on this report; B = analyte found in sample and the associated blank.
(2) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.
Signed: _____Matthew Ou_____

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Report Filename: 1613_DIOXINS_1613DB225_L14884-21_Form1A_DB03_132S6_SJ1189683.html; Workgroup: WG33623; Design ID: 699]

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested. Results are compliant with NELAP where specific accreditation is held.



Form 1A
PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
SDS-CPD-12
Sample Collection:
10-Jun-2010 12:00

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.: 4406

Project No.

FIDALGO BAY, CUSTOM
PLYWOOD DX STUDY
L14884-23 R

Lab Sample I.D.:

Matrix: SOLID

Sample Size: 9.97 g (dry)

Sample Receipt Date: 17-Jun-2010

Initial Calibration Date: 26-Aug-2010

Extraction Date: 13-Aug-2010

Instrument ID: HR GC/MS

Analysis Date: 27-Aug-2010 Time: 23:28:05

GC Column ID: DB5

Extract Volume (uL): 20

Sample Data Filename: DX0B_200 S: 5

Injection Volume (uL): 1.0

Blank Data Filename: DX0B_199A S: 5

Dilution Factor: N/A

Cal. Ver. Data Filename: DX0B_200 S: 1

Concentration Units: pg/g (dry weight basis)

% Moisture: 39.8

COMPOUND	LAB FLAG ¹	CONCENTRATION FOUND	DETECTION LIMIT	ION ABUND. RATIO ²	RRT ²
2,3,7,8-TCDD	K B J	0.169	0.0502	0.60	1.002
1,2,3,7,8-PECDD ³	B J	0.623	0.0502	0.62	1.001
1,2,3,4,7,8-HXCDD	J	0.667	0.0628	1.14	1.000
1,2,3,6,7,8-HXCDD	B J	2.48	0.0628	1.19	1.000
1,2,3,7,8,9-HXCDD	B J	1.96	0.0628	1.17	1.010
1,2,3,4,6,7,8-HPCDD	B	24.2	0.0856	1.05	1.000
OCDD	B	143	0.0502	0.90	1.000
2,3,7,8-TCDF	B	2.49	0.0502	0.78	1.001
1,2,3,7,8-PECDF	B J	0.369	0.0502	1.41	1.000
2,3,4,7,8-PECDF	B J	0.563	0.0502	1.53	1.000
1,2,3,4,7,8-HXCDF	B J	0.603	0.0502	1.19	1.000
1,2,3,6,7,8-HXCDF	J	0.403	0.0502	1.25	1.000
1,2,3,7,8,9-HXCDF	U		0.0502		
2,3,4,6,7,8-HXCDF	B J	0.435	0.0502	1.35	1.000
1,2,3,4,6,7,8-HPCDF		6.04	0.0502	1.04	1.000
1,2,3,4,7,8,9-HPCDF	J	0.421	0.0502	1.03	1.000
OCDF	B	14.5	0.0502	0.87	1.002
TOTAL TETRA-DIOXINS		10.4	0.0502		
TOTAL PENTA-DIOXINS	B	12.1	0.0502		
TOTAL HEXA-DIOXINS		33.8	0.0628		
TOTAL HEPTA-DIOXINS	B	74.2	0.0856		
TOTAL TETRA-FURANS	B	13.0	0.0502		
TOTAL PENTA-FURANS	B	5.94	0.0502		
TOTAL HEXA-FURANS	B	8.65	0.0502		
TOTAL HEPTA-FURANS		18.3	0.0502		

(1) Where applicable, custom lab flags have been used on this report; U = not detected; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; B = analyte found in sample and the associated blank; J = concentration less than LMCL.

(2) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

(3) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.

Signed: _____ Matthew Ou _____



Form 1A
PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
SDS-CPD-12
Sample Collection:
10-Jun-2010 12:00

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.: 4406

Matrix: SOLID

Sample Receipt Date: 17-Jun-2010

Extraction Date: 13-Aug-2010

Analysis Date: 10-Sep-2010 Time: 12:39:12

Extract Volume (uL): 20

Injection Volume (uL): 2.0

Dilution Factor: N/A

Concentration Units: pg/g (dry weight basis)

Project No.

Lab Sample I.D.:

Sample Size:

Initial Calibration Date:

Instrument ID:

GC Column ID:

Sample Data Filename:

Blank Data Filename:

Cal. Ver. Data Filename:

% Moisture:

FIDALGO BAY, CUSTOM
PLYWOOD DX STUDY
L14884-23 Ri

9.97 g (dry)

24-Aug-2010

HR GC/MS

DB225

DB03_132 S: 7

DB03_132 S: 5

DB03_132 S: 2

39.8

COMPOUND	LAB FLAG ¹	CONCENTRATION FOUND	DETECTION LIMIT	ION ABUND. RATIO ²	RRT ²
2,3,7,8-TCDF	B J	0.957	0.0587	0.71	1.001

(1) Where applicable, custom lab flags have been used on this report; B = analyte found in sample and the associated blank; J = concentration less than LMCL.

(2) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.

Signed: _____Matthew Ou_____

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These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested. Results are compliant with NELAP where specific accreditation is held.



Form 1A
PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
Lab Blank
Sample Collection:
N/A

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.: 4406

Project No. N/A

Lab Sample I.D.: WG33623-101

Matrix: SOLID

Sample Size: 10.0 g

Sample Receipt Date: N/A

Initial Calibration Date: 26-Aug-2010

Extraction Date: 13-Aug-2010

Instrument ID: HR GC/MS

Analysis Date: 27-Aug-2010 Time: 12:57:12

GC Column ID: DB5

Extract Volume (uL): 20

Sample Data Filename: DX0B_199A S: 5

Injection Volume (uL): 1.0

Blank Data Filename: DX0B_199A S: 5

Dilution Factor: N/A

Cal. Ver. Data Filename: DX0B_199A S: 1

Concentration Units: pg/g

COMPOUND	LAB FLAG ¹	CONCENTRATION FOUND	DETECTION LIMIT	ION ABUND. RATIO ²	RRT ²
2,3,7,8-TCDD	K J	0.066	0.0500	0.32	1.001
1,2,3,7,8-PECDD ³	J	0.064	0.0500	0.64	1.000
1,2,3,4,7,8-HXCDD	U		0.0500		
1,2,3,6,7,8-HXCDD	K J	0.092	0.0500	0.85	1.000
1,2,3,7,8,9-HXCDD	K J	0.072	0.0500	1.79	1.009
1,2,3,4,6,7,8-HPCDD	J	0.075	0.0500	0.91	1.000
OCDD	J	0.088	0.0500	0.97	1.000
2,3,7,8-TCDF	J	0.536	0.0500	0.75	1.001
1,2,3,7,8-PECDF	K J	0.121	0.0500	2.18	1.000
2,3,4,7,8-PECDF	J	0.257	0.0500	1.43	1.001
1,2,3,4,7,8-HXCDF	J	0.073	0.0500	1.19	1.000
1,2,3,6,7,8-HXCDF	U		0.0500		
1,2,3,7,8,9-HXCDF	U		0.0500		
2,3,4,6,7,8-HXCDF	J	0.069	0.0500	1.09	1.000
1,2,3,4,6,7,8-HPCDF	U		0.0500		
1,2,3,4,7,8,9-HPCDF	U		0.0500		
OCDF	K J	0.065	0.0500	1.25	1.001
TOTAL TETRA-DIOXINS	U		0.0500		
TOTAL PENTA-DIOXINS		0.064	0.0500		
TOTAL HEXA-DIOXINS	U		0.0500		
TOTAL HEPTA-DIOXINS		0.075	0.0500		
TOTAL TETRA-FURANS		1.20	0.0500		
TOTAL PENTA-FURANS		0.396	0.0500		
TOTAL HEXA-FURANS		0.143	0.0500		
TOTAL HEPTA-FURANS	U		0.0500		

(1) Where applicable, custom lab flags have been used on this report; U = not detected; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; J = concentration less than LMCL.

(2) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

(3) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.

Signed: _____ Matthew Ou _____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 11-Sep-2010 15:46:20; Application: XMLTransformer-1.10.25; Report Filename: 1613_DIOXINS_1613DB5_WG33623-101_Form1A_DX0B_199AS5_SJ1187166.html; Workgroup: WG33623; Design ID: 699]

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested. Results are compliant with NELAP where specific accreditation is held.



Form 1A
PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
Lab Blank
Sample Collection:
N/A

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.: 4406

Project No.

N/A

Lab Sample I.D.:

WG33623-101 i

Matrix: SOLID

Sample Size: 10.0 g

Sample Receipt Date: N/A

Initial Calibration Date: 24-Aug-2010

Extraction Date: 13-Aug-2010

Instrument ID: HR GC/MS

Analysis Date: 10-Sep-2010 Time: 11:25:39

GC Column ID: DB225

Extract Volume (uL): 20

Sample Data Filename: DB03_132 S: 5

Injection Volume (uL): 2.0

Blank Data Filename: DB03_132 S: 5

Dilution Factor: N/A

Cal. Ver. Data Filename: DB03_132 S: 2

Concentration Units: pg/g

COMPOUND	LAB FLAG ¹	CONCENTRATION FOUND	DETECTION LIMIT	ION ABUND. RATIO ²	RRT ²
2,3,7,8-TCDF	J	0.249	0.0500	0.80	1.001

(1) Where applicable, custom lab flags have been used on this report; J = concentration less than LMCL.

(2) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 11-Sep-2010 15:47:12; Application: XMLTransformer-1.10.25; Report Filename: 1613_DIOXINS_1613DB225_WG33623-101_Form1A_DB03_132S5_SJ1189681.html; Workgroup: WG33623; Design ID: 699]

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested. Results are compliant with NELAP where specific accreditation is held.



Form 8A
PCDD/PCDF ONGOING PRECISION AND RECOVERY (OPR)

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.: 4406 **OPR Data Filename:** DX0B_199A S: 2

Matrix: SOLID **Lab Sample I.D.:** WG33623-102

Extraction Date: 13-Aug-2010 **Analysis Date:** 27-Aug-2010 **Time:** 10:12:19

ALL CONCENTRATIONS REPORTED ON THIS FORM ARE CONCENTRATIONS IN EXTRACT, BASED ON A 20 uL EXTRACT VOLUME.

COMPOUND	LAB FLAG ¹	ION ABUND. RATIO ²	SPIKE CONC. (ng/mL)	CONC. FOUND (ng/mL)	OPR CONC. LIMITS ³ (ng/mL)	% RECOVERY
2,3,7,8-TCDD		0.79	10.0	10.4	6.70 - 15.8	104
1,2,3,7,8-PECDD ⁴		0.61	52.0	52.1	36.4 - 73.8	100
1,2,3,4,7,8-HXCDD		1.26	56.5	54.7	39.6 - 92.7	96.8
1,2,3,6,7,8-HXCDD		1.24	55.5	55.4	42.2 - 74.4	99.7
1,2,3,7,8,9-HXCDD		1.24	54.0	53.5	34.6 - 87.5	99.0
1,2,3,4,6,7,8-HPCDD		1.07	47.5	47.9	33.3 - 66.5	101
OCDD		0.89	100	94.6	78.0 - 144	94.6
2,3,7,8-TCDF		0.81	10.7	11.0	8.03 - 16.9	103
1,2,3,7,8-PECDF		1.55	46.0	46.1	36.8 - 61.6	100
2,3,4,7,8-PECDF		1.56	47.0	47.8	32.0 - 75.2	102
1,2,3,4,7,8-HXCDF		1.26	50.0	47.9	36.0 - 67.0	95.8
1,2,3,6,7,8-HXCDF		1.25	47.5	45.2	39.9 - 61.8	95.1
1,2,3,7,8,9-HXCDF		1.26	52.5	51.1	41.0 - 68.3	97.3
2,3,4,6,7,8-HXCDF		1.25	53.0	50.2	37.1 - 82.7	94.7
1,2,3,4,6,7,8-HPCDF		1.05	50.0	50.3	41.0 - 61.0	101
1,2,3,4,7,8,9-HPCDF		1.02	50.0	47.3	39.0 - 69.0	94.6
OCDF		0.89	104	88.9	65.5 - 177	85.5

- (1) Where applicable, custom lab flags have been used on this report.
- (2) Contract-required Ion Abundance Ratios are specified in Table 9, Method 1613.
- (3) Contract-required concentration range as determined from the percent of the test concentration in Table 6, Method 1613, under OPR.
- (4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Form8A.xsl; Created: 11-Sep-2010 15:46:20; Application: XMLTransformer-1.10.25; Report Filename: 1613_DIOXINS_1613DB5_WG33623-102_Form8A_SJ1187162.html; Workgroup: WG33623; Design ID: 699]

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested. Results are compliant with NELAP where specific accreditation is held.



PCDD/PCDF CERTIFIED REFERENCE MATERIAL (CRM) REPORT FOR NIST SRM 1944

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
 V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4406	Lab Sample I.D.:	WG33623-104
Matrix:	SOLID	Sample Size:	1.03 g (received)
Extraction Date:	13-Aug-2010	Initial Calibration Date:	26-Aug-2010
Analysis Date:	30-Aug-2010 Time: 17:19:13	Instrument ID:	HR GC/MS
Extract Volume (uL):	20	GC Column ID:	DB5
Injection Volume (uL):	1.0	CRM Data Filename:	DX0B_201 S: 11
Dilution Factor:	N/A	Blank Data Filename:	DX0B_199A S: 5
Concentration Units:	pg/g (received weight basis)	Cal. Ver. Data Filename:	DX0B_201 S: 1

COMPOUND	LAB FLAG ¹	DETERMINED	CERTIFIED / REFERENCE
2,3,7,8-TCDD		136	133 +/- 9
1,2,3,7,8-PECDD ²	J	17.7	19 +/- 2
1,2,3,4,7,8-HXCDD	J	26.2	26 +/- 3
1,2,3,6,7,8-HXCDD		59.9	56 +/- 6
1,2,3,7,8,9-HXCDD		63.8	53 +/- 7
1,2,3,4,6,7,8-HPCDD		802	800 +/- 70
OCDD		5750	5800 +/- 700
2,3,7,8-TCDF	X		
1,2,3,7,8-PECDF		45.5	45 +/- 7
2,3,4,7,8-PECDF		47.5	45 +/- 4
1,2,3,4,7,8-HXCDF		199	220 +/- 30
1,2,3,6,7,8-HXCDF		87.6	90 +/- 10
1,2,3,7,8,9-HXCDF	J	2.62	19 +/- 18
2,3,4,6,7,8-HXCDF	J	46.9	54 +/- 6
1,2,3,4,6,7,8-HPCDF		949	1000 +/- 100
1,2,3,4,7,8,9-HPCDF	J	40.5	40 +/- 6
OCDF		1030	1000 +/- 100

(1) Where applicable, custom lab flags have been used on this report; J = concentration less than LMCL; X = result reported separately.
 (2) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Form8G.xsl; Created: 11-Sep-2010 15:46:20; Application: XMLTransformer-1.10.25;
 Report Filename: 1613_DIOXINS_1613DB5_WG33623-104_Form8G_SJ1187195.html; Workgroup: WG33623; Design ID: 699]

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested. Results are compliant with NELAP where specific accreditation is held.



PCDD/PCDF CERTIFIED REFERENCE MATERIAL (CRM) REPORT FOR NIST SRM 1944

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
 V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4406	Lab Sample I.D.:	WG33623-104
Matrix:	SOLID	Sample Size:	1.03 g (received)
Extraction Date:	13-Aug-2010	Initial Calibration Date:	24-Aug-2010
Analysis Date:	28-Aug-2010 Time: 07:55:28	Instrument ID:	HR GC/MS
Extract Volume (uL):	20	GC Column ID:	DB225
Injection Volume (uL):	2.0	CRM Data Filename:	DB03_123A S: 18
Dilution Factor:	N/A	Blank Data Filename:	DB03_132 S: 5
Concentration Units:	pg/g (received weight basis)	Cal. Ver. Data Filename:	DB03_123A S: 2

COMPOUND	LAB FLAG ¹	DETERMINED	CERTIFIED / REFERENCE
2,3,7,8-TCDF		32.7	39 +/- 15

(1) Where applicable, custom lab flags have been used on this report.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.

Signed: _____Matthew Ou_____

For Axys Internal Use Only [XSL Template: Form8G.xsl; Created: 11-Sep-2010 15:47:12; Application: XMLTransformer-1.10.25; Report Filename: 1613_DIOXINS_1613DB225_WG33623-104_Form8G_SJ1188793.html; Workgroup: WG33623; Design ID: 699]

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested. Results are compliant with NELAP where specific accreditation is held.



BATCH SUMMARY

Batch ID: WG33742	Date: 13-Sep-2010																																												
Analysis Type: Dioxin/Furan	Matrix Type: Solid																																												
BATCH MAKEUP																																													
Contract: 4406 Samples: <table style="width: 100%; border: none;"> <tr> <td style="width: 25%;">L14884-26</td> <td style="width: 25%;">SDS-CT-01A</td> <td style="width: 25%;">L15027-1</td> <td style="width: 25%;">10654001</td> </tr> <tr> <td>L14884-28</td> <td>SDS-CT-02</td> <td>L15027-2</td> <td>10654002</td> </tr> <tr> <td>L14884-31</td> <td>SDS-CT-05</td> <td>L15027-3</td> <td>10654003</td> </tr> <tr> <td>L14884-39</td> <td>SDS-PB-10</td> <td>L15027-5</td> <td>10654008</td> </tr> <tr> <td>L14884-42</td> <td>SDS-FB-03</td> <td>L15027-6</td> <td>10654009</td> </tr> <tr> <td>L14884-43</td> <td>SDS-FB-04</td> <td>L15027-8</td> <td>10654013</td> </tr> <tr> <td>L14884-44</td> <td>SDS-FB-05</td> <td>L15027-12</td> <td>10654026</td> </tr> <tr> <td>L14884-46</td> <td>SDS-FB-07</td> <td></td> <td></td> </tr> <tr> <td>L14884-47</td> <td>SDS-FB-07-D</td> <td></td> <td></td> </tr> <tr> <td>L14884-48</td> <td>SDS-FB-08</td> <td></td> <td></td> </tr> <tr> <td>L14884-49</td> <td>SDS-FB-09</td> <td></td> <td></td> </tr> </table>	L14884-26	SDS-CT-01A	L15027-1	10654001	L14884-28	SDS-CT-02	L15027-2	10654002	L14884-31	SDS-CT-05	L15027-3	10654003	L14884-39	SDS-PB-10	L15027-5	10654008	L14884-42	SDS-FB-03	L15027-6	10654009	L14884-43	SDS-FB-04	L15027-8	10654013	L14884-44	SDS-FB-05	L15027-12	10654026	L14884-46	SDS-FB-07			L14884-47	SDS-FB-07-D			L14884-48	SDS-FB-08			L14884-49	SDS-FB-09			Blank: WG33742-101 Reference or Spike: WG33742-102 WG33742-104 Duplicate: WG33742-103
L14884-26	SDS-CT-01A	L15027-1	10654001																																										
L14884-28	SDS-CT-02	L15027-2	10654002																																										
L14884-31	SDS-CT-05	L15027-3	10654003																																										
L14884-39	SDS-PB-10	L15027-5	10654008																																										
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L14884-46	SDS-FB-07																																												
L14884-47	SDS-FB-07-D																																												
L14884-48	SDS-FB-08																																												
L14884-49	SDS-FB-09																																												
Comments: <div style="border: 1px solid black; padding: 10px; min-height: 150px;"> <ol style="list-style-type: none"> 1. The results are not blank-corrected. The level of 2,3,7,8-TCDF is slightly high in the procedural blank. 2. The value of 2,3,7,8-TCDD determined for the reference material NIST exceeds the reference value, although the recovery of TCDD in the OPR is within control limits. </div>																																													



Form 1A
PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
SDS-CT-01A
Sample Collection:
14-Jun-2010 10:47

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.: 4406
Matrix: SOLID
Sample Receipt Date: 17-Jun-2010
Extraction Date: 25-Aug-2010
Analysis Date: 04-Sep-2010 Time: 16:41:42
Extract Volume (uL): 20
Injection Volume (uL): 1.0
Dilution Factor: N/A
Concentration Units: pg/g (dry weight basis)

Project No. FIDALGO BAY, CUSTOM
PLYWOOD DX STUDY
Lab Sample I.D.: L14884-26 Ri
Sample Size: 9.72 g (dry)
Initial Calibration Date: 30-Jul-2010
Instrument ID: HR GC/MS
GC Column ID: DB5
Sample Data Filename: DX0M_119 S: 9
Blank Data Filename: DX0M_123 S: 4
Cal. Ver. Data Filename: DX0M_119 S: 1
% Moisture: 54.9

COMPOUND	LAB FLAG ¹	CONCENTRATION FOUND	DETECTION LIMIT	ION ABUND. RATIO ²	RRT ²
2,3,7,8-TCDD		3.01	0.0756	0.65	1.001
1,2,3,7,8-PECDD ³		11.8	0.174	0.56	1.001
1,2,3,4,7,8-HXCDD		16.8	0.263	1.18	1.000
1,2,3,6,7,8-HXCDD		95.7	0.263	1.20	1.000
1,2,3,7,8,9-HXCDD	B	50.8	0.263	1.22	1.000
1,2,3,4,6,7,8-HPCDD	B	2500	0.600	0.98	1.000
OCDD	E				
2,3,7,8-TCDF	B	41.9	0.130	0.74	1.002
1,2,3,7,8-PECDF		9.80	0.159	1.43	1.000
2,3,4,7,8-PECDF	B	15.9	0.159	1.41	1.000
1,2,3,4,7,8-HXCDF	B	29.7	0.299	1.18	1.000
1,2,3,6,7,8-HXCDF		13.9	0.299	1.14	1.000
1,2,3,7,8,9-HXCDF	K B J	1.05	0.299	1.04	1.000
2,3,4,6,7,8-HXCDF	B	14.3	0.299	1.12	1.001
1,2,3,4,6,7,8-HPCDF	B	497	0.494	0.96	1.000
1,2,3,4,7,8,9-HPCDF		30.2	0.494	0.91	1.000
OCDF	B	1870	0.0907	0.85	1.001
TOTAL TETRA-DIOXINS		112	0.0756		
TOTAL PENTA-DIOXINS		174	0.174		
TOTAL HEXA-DIOXINS		1010	0.263		
TOTAL HEPTA-DIOXINS		6800	0.600		
TOTAL TETRA-FURANS	B	262	0.130		
TOTAL PENTA-FURANS	B	215	0.159		
TOTAL HEXA-FURANS	B	704	0.299		
TOTAL HEPTA-FURANS	B	2190	0.494		

(1) Where applicable, custom lab flags have been used on this report; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; B = analyte found in sample and the associated blank; J = concentration less than LMCL; E = exceeds calibrated linear range, see dilution data.
 (2) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.
 (3) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.
 Signed: _____ Brian Watson _____



Form 1A
PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
SDS-CT-01A
Sample Collection:
14-Jun-2010 10:47

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.: 4406

Matrix: SOLID

Sample Receipt Date: 17-Jun-2010

Extraction Date: 25-Aug-2010

Analysis Date: 10-Sep-2010 Time: 17:02:29

Extract Volume (uL): 200

Injection Volume (uL): 1.0

Dilution Factor: 10

Concentration Units: pg/g (dry weight basis)

Project No. FIDALGO BAY, CUSTOM
PLYWOOD DX STUDY
Lab Sample I.D.: L14884-26 RW

Sample Size: 9.72 g (dry)

Initial Calibration Date: 30-Jul-2010

Instrument ID: HR GC/MS

GC Column ID: DB5

Sample Data Filename: DX0M_123 S: 11

Blank Data Filename: DX0M_123 S: 4

Cal. Ver. Data Filename: DX0M_123 S: 1

% Moisture: 54.9

COMPOUND	LAB FLAG ¹	CONCENTRATION FOUND	DETECTION LIMIT	ION ABUND. RATIO ²	RRT ²
2,3,7,8-TCDD	X				
1,2,3,7,8-PECDD ³	X				
1,2,3,4,7,8-HXCDD	X				
1,2,3,6,7,8-HXCDD	X				
1,2,3,7,8,9-HXCDD	X				
1,2,3,4,6,7,8-HPCDD	X				
OCDD	B D	22200	5.97	0.85	1.000
2,3,7,8-TCDF	X				
1,2,3,7,8-PECDF	X				
2,3,4,7,8-PECDF	X				
1,2,3,4,7,8-HXCDF	X				
1,2,3,6,7,8-HXCDF	X				
1,2,3,7,8,9-HXCDF	X				
2,3,4,6,7,8-HXCDF	X				
1,2,3,4,6,7,8-HPCDF	X				
1,2,3,4,7,8,9-HPCDF	X				
OCDF	X				
TOTAL TETRA-DIOXINS	X				
TOTAL PENTA-DIOXINS	X				
TOTAL HEXA-DIOXINS	X				
TOTAL HEPTA-DIOXINS	X				
TOTAL TETRA-FURANS	X				
TOTAL PENTA-FURANS	X				
TOTAL HEXA-FURANS	X				
TOTAL HEPTA-FURANS	X				

(1) Where applicable, custom lab flags have been used on this report; B = analyte found in sample and the associated blank; D = dilution data; X = result reported separately.
 (2) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.
 (3) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.

Signed: _____ Brian Watson _____



Form 1A
PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
SDS-CT-01A
Sample Collection:
14-Jun-2010 10:47

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.: 4406
Matrix: SOLID
Sample Receipt Date: 17-Jun-2010
Extraction Date: 25-Aug-2010
Analysis Date: 07-Sep-2010 **Time:** 23:45:56
Extract Volume (uL): 20
Injection Volume (uL): 2.0
Dilution Factor: N/A
Concentration Units: pg/g (dry weight basis)

Project No. FIDALGO BAY, CUSTOM
Lab Sample I.D.: PLYWOOD DX STUDY
L14884-26 R
Sample Size: 9.72 g (dry)
Initial Calibration Date: 24-Aug-2010
Instrument ID: HR GC/MS
GC Column ID: DB225
Sample Data Filename: DB03_128 S: 7
Blank Data Filename: DB03_128 S: 5
Cal. Ver. Data Filename: DB03_128 S: 2
% Moisture: 54.9

COMPOUND	LAB FLAG ¹	CONCENTRATION FOUND	DETECTION LIMIT	ION ABUND. RATIO ²	RRT ²
2,3,7,8-TCDF	B	16.9	0.161	0.77	1.002

(1) Where applicable, custom lab flags have been used on this report; B = analyte found in sample and the associated blank.
(2) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.

Signed: _____ Brian Watson _____

For AxyS Internal Use Only [XSL Template: Form1A.xsl; Created: 13-Sep-2010 12:08:35; Application: XMLTransformer-1.10.26;
Report Filename: 1613_DIOXINS_1613DB225_L14884-26_Form1A_DB03_128S7_SJ1190205.html; Workgroup: WG33742; Design ID: 699]

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested. Results are compliant with NELAP where specific accreditation is held.



Form 1A
PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
SDS-CT-02
Sample Collection:
14-Jun-2010 11:47

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.: 4406

Project No.

FIDALGO BAY, CUSTOM
PLYWOOD DX STUDY
L14884-28 Ri

Matrix: SOLID

Lab Sample I.D.: 10.6 g (dry)

Sample Receipt Date: 17-Jun-2010

Initial Calibration Date: 30-Jul-2010

Extraction Date: 25-Aug-2010

Instrument ID: HR GC/MS

Analysis Date: 04-Sep-2010 Time: 17:36:44

GC Column ID: DB5

Extract Volume (uL): 20

Sample Data Filename: DX0M_119 S: 10

Injection Volume (uL): 1.0

Blank Data Filename: DX0M_123 S: 4

Dilution Factor: N/A

Cal. Ver. Data Filename: DX0M_119 S: 1

Concentration Units: pg/g (dry weight basis)

% Moisture: 34.2

COMPOUND	LAB FLAG ¹	CONCENTRATION FOUND	DETECTION LIMIT	ION ABUND. RATIO ²	RRT ²
2,3,7,8-TCDD	K J	0.453	0.0527	0.59	1.001
1,2,3,7,8-PECDD ³	J	2.07	0.0558	0.58	1.001
1,2,3,4,7,8-HXCDD	J	2.71	0.147	1.24	1.000
1,2,3,6,7,8-HXCDD		18.1	0.147	1.18	1.000
1,2,3,7,8,9-HXCDD	B	7.64	0.147	1.26	1.000
1,2,3,4,6,7,8-HPCDD	B	325	0.261	0.96	1.000
OCDD	B	2340	0.0555	0.87	1.000
2,3,7,8-TCDF	K B	1.82	0.0473	0.65	1.001
1,2,3,7,8-PECDF	J	0.593	0.0893	1.60	1.001
2,3,4,7,8-PECDF	B J	1.65	0.0893	1.58	1.000
1,2,3,4,7,8-HXCDF	B J	4.01	0.101	1.13	1.000
1,2,3,6,7,8-HXCDF	J	1.84	0.101	1.37	1.000
1,2,3,7,8,9-HXCDF	B J	0.143	0.101	1.23	1.000
2,3,4,6,7,8-HXCDF	B J	2.54	0.101	1.36	1.000
1,2,3,4,6,7,8-HPCDF	B	104	0.201	0.99	1.000
1,2,3,4,7,8,9-HPCDF		6.28	0.201	0.96	1.000
OCDF	B	319	0.0473	0.84	1.002
TOTAL TETRA-DIOXINS		29.7	0.0527		
TOTAL PENTA-DIOXINS		29.7	0.0558		
TOTAL HEXA-DIOXINS		150	0.147		
TOTAL HEPTA-DIOXINS		809	0.261		
TOTAL TETRA-FURANS	B	11.3	0.0473		
TOTAL PENTA-FURANS	B	25.8	0.0893		
TOTAL HEXA-FURANS	B	106	0.101		
TOTAL HEPTA-FURANS	B	376	0.201		

(1) Where applicable, custom lab flags have been used on this report; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; B = analyte found in sample and the associated blank; J = concentration less than LMCL.
(2) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.
(3) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.

Signed: _____ Brian Watson _____



Form 1A
PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
SDS-CT-02
Sample Collection:
14-Jun-2010 11:47

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.: 4406
Matrix: SOLID
Sample Receipt Date: 17-Jun-2010
Extraction Date: 25-Aug-2010
Analysis Date: 08-Sep-2010 **Time:** 00:59:29
Extract Volume (uL): 20
Injection Volume (uL): 2.0
Dilution Factor: N/A
Concentration Units: pg/g (dry weight basis)

Project No. FIDALGO BAY, CUSTOM
Lab Sample I.D.: PLYWOOD DX STUDY
L14884-28 R
Sample Size: 10.6 g (dry)
Initial Calibration Date: 24-Aug-2010
Instrument ID: HR GC/MS
GC Column ID: DB225
Sample Data Filename: DB03_128 S: 9
Blank Data Filename: DB03_128 S: 5
Cal. Ver. Data Filename: DB03_128 S: 2
% Moisture: 34.2

COMPOUND	LAB FLAG ¹	CONCENTRATION FOUND	DETECTION LIMIT	ION ABUND. RATIO ²	RRT ²
2,3,7,8-TCDF	B J	0.874	0.0477	0.86	1.001

(1) Where applicable, custom lab flags have been used on this report; B = analyte found in sample and the associated blank; J = concentration less than LMCL.

(2) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.

Signed: _____ Brian Watson _____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 13-Sep-2010 12:08:35; Application: XMLTransformer-1.10.26; Report Filename: 1613_DIOXINS_1613DB225_L14884-28_Form1A_DB03_128S9_SJ1190207.html; Workgroup: WG33742; Design ID: 699]

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested. Results are compliant with NELAP where specific accreditation is held.



Form 1A
PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
SDS-CT-05
Sample Collection:
14-Jun-2010 13:06

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.: 4406

Project No.

FIDALGO BAY, CUSTOM
PLYWOOD DX STUDY
L14884-31 Ri

Matrix: SOLID

Lab Sample I.D.: 10.6 g (dry)

Sample Receipt Date: 17-Jun-2010

Initial Calibration Date: 30-Jul-2010

Extraction Date: 25-Aug-2010

Instrument ID: HR GC/MS

Analysis Date: 04-Sep-2010 Time: 18:31:47

GC Column ID: DB5

Extract Volume (uL): 20

Sample Data Filename: DX0M_119 S: 11

Injection Volume (uL): 1.0

Blank Data Filename: DX0M_123 S: 4

Dilution Factor: N/A

Cal. Ver. Data Filename: DX0M_119 S: 1

Concentration Units: pg/g (dry weight basis)

% Moisture: 27.1

COMPOUND	LAB FLAG ¹	CONCENTRATION FOUND	DETECTION LIMIT	ION ABUND. RATIO ²	RRT ²
2,3,7,8-TCDD	K J	0.083	0.0470	0.36	1.001
1,2,3,7,8-PECDD ³	J	0.421	0.0679	0.55	1.001
1,2,3,4,7,8-HXCDD	J	0.442	0.0845	1.15	1.001
1,2,3,6,7,8-HXCDD	J	2.03	0.0845	1.26	1.000
1,2,3,7,8,9-HXCDD	B J	1.45	0.0845	1.20	1.000
1,2,3,4,6,7,8-HPCDD	B	31.6	0.132	0.91	1.000
OCDD	B	199	0.193	0.85	1.000
2,3,7,8-TCDF	K B	1.01	0.0489	0.63	1.001
1,2,3,7,8-PECDF	K J	0.136	0.123	1.11	1.000
2,3,4,7,8-PECDF	K B J	0.427	0.123	1.20	1.001
1,2,3,4,7,8-HXCDF	B J	0.549	0.155	1.29	1.000
1,2,3,6,7,8-HXCDF	K J	0.315	0.155	0.89	1.000
1,2,3,7,8,9-HXCDF	U		0.155		
2,3,4,6,7,8-HXCDF	B J	0.467	0.155	1.38	1.000
1,2,3,4,6,7,8-HPCDF	B	9.47	0.123	1.04	1.000
1,2,3,4,7,8,9-HPCDF	K J	0.556	0.123	1.24	1.000
OCDF	B	27.2	0.0762	0.88	1.002
TOTAL TETRA-DIOXINS		0.527	0.0470		
TOTAL PENTA-DIOXINS		2.04	0.0679		
TOTAL HEXA-DIOXINS		19.3	0.0845		
TOTAL HEPTA-DIOXINS		148	0.132		
TOTAL TETRA-FURANS	B	3.61	0.0489		
TOTAL PENTA-FURANS	B	3.17	0.123		
TOTAL HEXA-FURANS	B	5.08	0.155		
TOTAL HEPTA-FURANS	B	26.5	0.123		

(1) Where applicable, custom lab flags have been used on this report; U = not detected; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; B = analyte found in sample and the associated blank; J = concentration less than LMCL.

(2) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

(3) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.

Signed: _____ Brian Watson _____



Form 1A
PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
SDS-CT-05
Sample Collection:
14-Jun-2010 13:06

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.: 4406

Matrix: SOLID

Sample Receipt Date: 17-Jun-2010

Extraction Date: 25-Aug-2010

Analysis Date: 08-Sep-2010 Time: 01:36:07

Extract Volume (uL): 20

Injection Volume (uL): 2.0

Dilution Factor: N/A

Concentration Units: pg/g (dry weight basis)

Project No. FIDALGO BAY, CUSTOM
PLYWOOD DX STUDY
Lab Sample I.D.: L14884-31 R

Sample Size: 10.6 g (dry)

Initial Calibration Date: 24-Aug-2010

Instrument ID: HR GC/MS

GC Column ID: DB225

Sample Data Filename: DB03_128 S: 10

Blank Data Filename: DB03_128 S: 5

Cal. Ver. Data Filename: DB03_128 S: 2

% Moisture: 27.1

COMPOUND	LAB FLAG ¹	CONCENTRATION FOUND	DETECTION LIMIT	ION ABUND. RATIO ²	RRT ²
2,3,7,8-TCDF	B J	0.520	0.0656	0.74	1.001

(1) Where applicable, custom lab flags have been used on this report; B = analyte found in sample and the associated blank; J = concentration less than LMCL.

(2) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.

Signed: _____ Brian Watson _____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 13-Sep-2010 12:08:35; Application: XMLTransformer-1.10.26; Report Filename: 1613_DIOXINS_1613DB225_L14884-31_Form1A_DB03_128S10_SJ1190208.html; Workgroup: WG33742; Design ID: 699]

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested. Results are compliant with NELAP where specific accreditation is held.



Form 1A
PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
SDS-PB-10
Sample Collection:
08-Jun-2010 16:20

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.: 4406

Project No.

FIDALGO BAY, CUSTOM
PLYWOOD DX STUDY
L14884-39 Ri

Matrix: SOLID

Lab Sample I.D.: 11.1 g (dry)

Sample Receipt Date: 17-Jun-2010

Initial Calibration Date: 30-Jul-2010

Extraction Date: 25-Aug-2010

Instrument ID: HR GC/MS

Analysis Date: 09-Sep-2010 Time: 08:12:20

GC Column ID: DB5

Extract Volume (uL): 20

Sample Data Filename: DX0M_122 S: 23

Injection Volume (uL): 1.0

Blank Data Filename: DX0M_123 S: 4

Dilution Factor: N/A

Cal. Ver. Data Filename: DX0M_122 S: 13

Concentration Units: pg/g (dry weight basis)

% Moisture: 38.8

COMPOUND	LAB FLAG ¹	CONCENTRATION FOUND	DETECTION LIMIT	ION ABUND. RATIO ²	RRT ²
2,3,7,8-TCDD	K J	0.052	0.0451	0.12	1.000
1,2,3,7,8-PECDD ³	K J	0.152	0.0451	0.83	1.000
1,2,3,4,7,8-HXCDD	J	0.267	0.0451	1.10	1.001
1,2,3,6,7,8-HXCDD	J	1.08	0.0451	1.12	1.000
1,2,3,7,8,9-HXCDD	K B J	0.859	0.0451	0.89	1.000
1,2,3,4,6,7,8-HPCDD	B	17.4	0.0842	0.98	1.000
OCDD	B	196	0.133	0.87	1.000
2,3,7,8-TCDF	B	1.30	0.0451	0.74	1.001
1,2,3,7,8-PECDF	K J	0.063	0.0616	2.13	1.000
2,3,4,7,8-PECDF	B J	0.315	0.0616	1.46	1.001
1,2,3,4,7,8-HXCDF	B J	0.208	0.0534	1.26	1.000
1,2,3,6,7,8-HXCDF	K J	0.133	0.0534	0.82	1.001
1,2,3,7,8,9-HXCDF	U		0.0534		
2,3,4,6,7,8-HXCDF	K B J	0.189	0.0534	0.99	1.001
1,2,3,4,6,7,8-HPCDF	K B J	1.92	0.0451	0.84	1.000
1,2,3,4,7,8,9-HPCDF	K J	0.201	0.0451	1.44	1.000
OCDF	B J	4.71	0.0472	0.79	1.002
TOTAL TETRA-DIOXINS		1.26	0.0451		
TOTAL PENTA-DIOXINS		0.613	0.0451		
TOTAL HEXA-DIOXINS		11.3	0.0451		
TOTAL HEPTA-DIOXINS		201	0.0842		
TOTAL TETRA-FURANS	B	4.61	0.0451		
TOTAL PENTA-FURANS	B	1.41	0.0616		
TOTAL HEXA-FURANS	B	1.42	0.0534		
TOTAL HEPTA-FURANS	B	3.30	0.0451		

(1) Where applicable, custom lab flags have been used on this report; U = not detected; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; B = analyte found in sample and the associated blank; J = concentration less than LMCL.

(2) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

(3) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.

Signed: _____ Brian Watson _____



Form 1A
PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
SDS-PB-10
Sample Collection:
08-Jun-2010 16:20

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.: 4406
Matrix: SOLID
Sample Receipt Date: 17-Jun-2010
Extraction Date: 25-Aug-2010
Analysis Date: 08-Sep-2010 **Time:** 02:12:46
Extract Volume (uL): 20
Injection Volume (uL): 2.0
Dilution Factor: N/A
Concentration Units: pg/g (dry weight basis)

Project No. FIDALGO BAY, CUSTOM
Lab Sample I.D.: PLYWOOD DX STUDY
L14884-39 R
Sample Size: 11.1 g (dry)
Initial Calibration Date: 24-Aug-2010
Instrument ID: HR GC/MS
GC Column ID: DB225
Sample Data Filename: DB03_128 S: 11
Blank Data Filename: DB03_128 S: 5
Cal. Ver. Data Filename: DB03_128 S: 2
% Moisture: 38.8

COMPOUND	LAB FLAG ¹	CONCENTRATION FOUND	DETECTION LIMIT	ION ABUND. RATIO ²	RRT ²
2,3,7,8-TCDF	B J	0.626	0.0451	0.83	1.001

(1) Where applicable, custom lab flags have been used on this report; B = analyte found in sample and the associated blank; J = concentration less than LMCL.

(2) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.

Signed: _____ Brian Watson _____

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These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested. Results are compliant with NELAP where specific accreditation is held.



Form 1A
PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
SDS-FB-03
Sample Collection:
08-Jun-2010 10:52

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.: 4406

Project No.

FIDALGO BAY, CUSTOM
PLYWOOD DX STUDY
L14884-42 Ri

Matrix: SOLID

Lab Sample I.D.: 11.3 g (dry)

Sample Receipt Date: 17-Jun-2010

Initial Calibration Date: 30-Jul-2010

Extraction Date: 25-Aug-2010

Instrument ID: HR GC/MS

Analysis Date: 09-Sep-2010 Time: 01:46:56

GC Column ID: DB5

Extract Volume (uL): 20

Sample Data Filename: DX0M_122 S: 16

Injection Volume (uL): 1.0

Blank Data Filename: DX0M_123 S: 4

Dilution Factor: N/A

Cal. Ver. Data Filename: DX0M_122 S: 13

Concentration Units: pg/g (dry weight basis)

% Moisture: 22.1

COMPOUND	LAB FLAG ¹	CONCENTRATION FOUND	DETECTION LIMIT	ION ABUND. RATIO ²	RRT ²
2,3,7,8-TCDD	K J	0.066	0.0443	0.08	1.000
1,2,3,7,8-PECDD ³	J	0.127	0.0443	0.63	1.001
1,2,3,4,7,8-HXCDD	K J	0.196	0.0449	1.00	1.000
1,2,3,6,7,8-HXCDD	J	0.747	0.0449	1.33	1.000
1,2,3,7,8,9-HXCDD	B J	0.469	0.0449	1.18	1.000
1,2,3,4,6,7,8-HPCDD	B	4.41	0.0443	0.96	1.000
OCDD	B	26.3	0.0994	0.88	1.000
2,3,7,8-TCDF	B	1.13	0.0801	0.76	1.001
1,2,3,7,8-PECDF	K J	0.102	0.0516	2.72	1.001
2,3,4,7,8-PECDF	B J	0.282	0.0516	1.75	1.001
1,2,3,4,7,8-HXCDF	B J	0.186	0.0443	1.20	1.000
1,2,3,6,7,8-HXCDF	K J	0.111	0.0443	1.66	1.001
1,2,3,7,8,9-HXCDF	U		0.0443		
2,3,4,6,7,8-HXCDF	K B J	0.134	0.0443	0.96	1.001
1,2,3,4,6,7,8-HPCDF	B J	0.869	0.0481	1.01	1.000
1,2,3,4,7,8,9-HPCDF	K J	0.056	0.0481	1.25	1.000
OCDF	B J	1.59	0.0443	0.77	1.002
TOTAL TETRA-DIOXINS		0.579	0.0443		
TOTAL PENTA-DIOXINS		0.481	0.0443		
TOTAL HEXA-DIOXINS		6.02	0.0449		
TOTAL HEPTA-DIOXINS		96.8	0.0443		
TOTAL TETRA-FURANS	B	3.54	0.0801		
TOTAL PENTA-FURANS	B	0.802	0.0516		
TOTAL HEXA-FURANS	B	0.750	0.0443		
TOTAL HEPTA-FURANS	B	2.10	0.0481		

(1) Where applicable, custom lab flags have been used on this report; U = not detected; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; B = analyte found in sample and the associated blank; J = concentration less than LMCL.

(2) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

(3) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.

Signed: _____ Brian Watson _____



Form 1A
PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
SDS-FB-03
Sample Collection:
08-Jun-2010 10:52

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.: 4406
Matrix: SOLID
Sample Receipt Date: 17-Jun-2010
Extraction Date: 25-Aug-2010
Analysis Date: 08-Sep-2010 Time: 02:49:23
Extract Volume (uL): 20
Injection Volume (uL): 2.0
Dilution Factor: N/A
Concentration Units: pg/g (dry weight basis)

Project No. FIDALGO BAY, CUSTOM
PLYWOOD DX STUDY
Lab Sample I.D.: L14884-42 R
Sample Size: 11.3 g (dry)
Initial Calibration Date: 24-Aug-2010
Instrument ID: HR GC/MS
GC Column ID: DB225
Sample Data Filename: DB03_128 S: 12
Blank Data Filename: DB03_128 S: 5
Cal. Ver. Data Filename: DB03_128 S: 2
% Moisture: 22.1

COMPOUND	LAB FLAG ¹	CONCENTRATION FOUND	DETECTION LIMIT	ION ABUND. RATIO ²	RRT ²
2,3,7,8-TCDF	B J	0.547	0.0443	0.87	1.001

(1) Where applicable, custom lab flags have been used on this report; B = analyte found in sample and the associated blank; J = concentration less than LMCL.

(2) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.

Signed: _____ Brian Watson _____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 13-Sep-2010 12:08:35; Application: XMLTransformer-1.10.26; Report Filename: 1613_DIOXINS_1613DB225_L14884-42_Form1A_DB03_128S12_SJ1190210.html; Workgroup: WG33742; Design ID: 699]

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested. Results are compliant with NELAP where specific accreditation is held.



Form 1A
PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
SDS-FB-04
Sample Collection:
08-Jun-2010 11:52

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.: 4406
Matrix: SOLID
Sample Receipt Date: 17-Jun-2010
Extraction Date: 25-Aug-2010
Analysis Date: 09-Sep-2010 Time: 02:41:59
Extract Volume (uL): 20
Injection Volume (uL): 1.0
Dilution Factor: N/A
Concentration Units: pg/g (dry weight basis)

Project No. FIDALGO BAY, CUSTOM
PLYWOOD DX STUDY
Lab Sample I.D.: L14884-43 Ri
Sample Size: 10.7 g (dry)
Initial Calibration Date: 30-Jul-2010
Instrument ID: HR GC/MS
GC Column ID: DB5
Sample Data Filename: DX0M_122 S: 17
Blank Data Filename: DX0M_123 S: 4
Cal. Ver. Data Filename: DX0M_122 S: 13
% Moisture: 34.3

COMPOUND	LAB FLAG ¹	CONCENTRATION FOUND	DETECTION LIMIT	ION ABUND. RATIO ²	RRT ²
2,3,7,8-TCDD	K J	0.190	0.0466	0.45	1.001
1,2,3,7,8-PECDD ³	J	0.344	0.0654	0.55	1.001
1,2,3,4,7,8-HXCDD	J	0.278	0.128	1.36	1.001
1,2,3,6,7,8-HXCDD	J	1.69	0.128	1.29	1.001
1,2,3,7,8,9-HXCDD	B J	1.27	0.128	1.07	1.000
1,2,3,4,6,7,8-HPCDD	B	13.3	0.0931	1.08	1.000
OCDD	B	88.3	0.0507	0.86	1.000
2,3,7,8-TCDF	B	1.99	0.0466	0.77	1.001
1,2,3,7,8-PECDF	J	0.199	0.0863	1.38	1.001
2,3,4,7,8-PECDF	K B J	0.381	0.0863	0.91	1.001
1,2,3,4,7,8-HXCDF	B J	0.364	0.0842	1.14	1.001
1,2,3,6,7,8-HXCDF	K J	0.265	0.0842	0.84	1.000
1,2,3,7,8,9-HXCDF	U		0.0842		
2,3,4,6,7,8-HXCDF	B J	0.253	0.0842	1.11	1.000
1,2,3,4,6,7,8-HPCDF	B J	2.93	0.0847	0.90	1.000
1,2,3,4,7,8,9-HPCDF	K J	0.234	0.0847	1.49	1.000
OCDF	B J	5.69	0.0884	0.86	1.002
TOTAL TETRA-DIOXINS		7.08	0.0466		
TOTAL PENTA-DIOXINS		4.24	0.0654		
TOTAL HEXA-DIOXINS		20.9	0.128		
TOTAL HEPTA-DIOXINS		157	0.0931		
TOTAL TETRA-FURANS	B	7.85	0.0466		
TOTAL PENTA-FURANS	B	2.66	0.0863		
TOTAL HEXA-FURANS	B	3.50	0.0842		
TOTAL HEPTA-FURANS	B	2.93	0.0847		

(1) Where applicable, custom lab flags have been used on this report; U = not detected; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; B = analyte found in sample and the associated blank; J = concentration less than LMCL.
 (2) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.
 (3) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.
 Signed: _____ Brian Watson _____



Form 1A
PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
SDS-FB-04
Sample Collection:
08-Jun-2010 11:52

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.: 4406
Matrix: SOLID
Sample Receipt Date: 17-Jun-2010
Extraction Date: 25-Aug-2010
Analysis Date: 08-Sep-2010 Time: 03:26:10
Extract Volume (uL): 20
Injection Volume (uL): 2.0
Dilution Factor: N/A
Concentration Units: pg/g (dry weight basis)

Project No. FIDALGO BAY, CUSTOM
PLYWOOD DX STUDY
Lab Sample I.D.: L14884-43 R
Sample Size: 10.7 g (dry)
Initial Calibration Date: 24-Aug-2010
Instrument ID: HR GC/MS
GC Column ID: DB225
Sample Data Filename: DB03_128 S: 13
Blank Data Filename: DB03_128 S: 5
Cal. Ver. Data Filename: DB03_128 S: 2
% Moisture: 34.3

COMPOUND	LAB FLAG ¹	CONCENTRATION FOUND	DETECTION LIMIT	ION ABUND. RATIO ²	RRT ²
2,3,7,8-TCDF	B J	0.923	0.0484	0.70	1.001

(1) Where applicable, custom lab flags have been used on this report; B = analyte found in sample and the associated blank; J = concentration less than LMCL.
(2) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.

Signed: _____ Brian Watson _____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 13-Sep-2010 12:08:35; Application: XMLTransformer-1.10.26; Report Filename: 1613_DIOXINS_1613DB225_L14884-43_Form1A_DB03_128S13_SJ1190211.html; Workgroup: WG33742; Design ID: 699]

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested. Results are compliant with NELAP where specific accreditation is held.



Form 1A
PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
SDS-FB-05
Sample Collection:
08-Jun-2010 13:48

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.: 4406

Project No.

FIDALGO BAY, CUSTOM
PLYWOOD DX STUDY
L14884-44 Ri2 (A)

Lab Sample I.D.:

Matrix: SOLID

Sample Size: 11.1 g (dry)

Sample Receipt Date: 17-Jun-2010

Initial Calibration Date: 30-Jul-2010

Extraction Date: 25-Aug-2010

Instrument ID: HR GC/MS

Analysis Date: 10-Sep-2010 Time: 16:07:28

GC Column ID: DB5

Extract Volume (uL): 20

Sample Data Filename: DX0M_123 S: 10

Injection Volume (uL): 1.0

Blank Data Filename: DX0M_123 S: 4

Dilution Factor: N/A

Cal. Ver. Data Filename: DX0M_123 S: 1

Concentration Units: pg/g (dry weight basis)

% Moisture: 23.2

COMPOUND	LAB FLAG ¹	CONCENTRATION FOUND	DETECTION LIMIT	ION ABUND. RATIO ²	RRT ²
2,3,7,8-TCDD	K J	0.086	0.0452	0.35	1.001
1,2,3,7,8-PECDD ³	K J	0.135	0.0452	0.80	1.001
1,2,3,4,7,8-HXCDD	K J	0.156	0.0452	1.79	1.000
1,2,3,6,7,8-HXCDD	J	0.811	0.0452	1.32	1.001
1,2,3,7,8,9-HXCDD	B J	0.710	0.0452	1.34	1.000
1,2,3,4,6,7,8-HPCDD	B	6.99	0.0573	0.98	1.000
OCDD	B	44.8	0.0672	0.86	1.000
2,3,7,8-TCDF	B J	0.947	0.0452	0.67	1.001
1,2,3,7,8-PECDF	K J	0.107	0.0452	1.12	1.002
2,3,4,7,8-PECDF	K B J	0.201	0.0452	0.95	1.001
1,2,3,4,7,8-HXCDF	K B J	0.102	0.0649	1.55	1.000
1,2,3,6,7,8-HXCDF	J	0.085	0.0649	1.06	1.000
1,2,3,7,8,9-HXCDF	U		0.0649		
2,3,4,6,7,8-HXCDF	B J	0.126	0.0649	1.10	1.001
1,2,3,4,6,7,8-HPCDF	B J	1.53	0.0452	0.97	1.000
1,2,3,4,7,8,9-HPCDF	K J	0.105	0.0452	0.79	1.001
OCDF	B J	2.33	0.0452	0.94	1.002
TOTAL TETRA-DIOXINS		0.795	0.0452		
TOTAL PENTA-DIOXINS		0.906	0.0452		
TOTAL HEXA-DIOXINS		7.90	0.0452		
TOTAL HEPTA-DIOXINS		22.6	0.0573		
TOTAL TETRA-FURANS	B	3.18	0.0452		
TOTAL PENTA-FURANS	B	1.31	0.0452		
TOTAL HEXA-FURANS	B	1.80	0.0649		
TOTAL HEPTA-FURANS	B	3.60	0.0452		

(1) Where applicable, custom lab flags have been used on this report; U = not detected; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; B = analyte found in sample and the associated blank; J = concentration less than LMCL.

(2) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

(3) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.

Signed: _____ Brian Watson _____



Form 1A
PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
SDS-FB-05
Sample Collection:
08-Jun-2010 13:48

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.: 4406

Matrix: SOLID

Sample Receipt Date: 17-Jun-2010

Extraction Date: 25-Aug-2010

Analysis Date: 08-Sep-2010 Time: 04:02:48

Extract Volume (uL): 20

Injection Volume (uL): 2.0

Dilution Factor: N/A

Concentration Units: pg/g (dry weight basis)

Project No. FIDALGO BAY, CUSTOM
PLYWOOD DX STUDY
Lab Sample I.D.: L14884-44 R (A)

Sample Size: 11.1 g (dry)

Initial Calibration Date: 24-Aug-2010

Instrument ID: HR GC/MS

GC Column ID: DB225

Sample Data Filename: DB03_128 S: 14

Blank Data Filename: DB03_128 S: 5

Cal. Ver. Data Filename: DB03_128 S: 2

% Moisture: 23.2

COMPOUND	LAB FLAG ¹	CONCENTRATION FOUND	DETECTION LIMIT	ION ABUND. RATIO ²	RRT ²
2,3,7,8-TCDF	B J	0.493	0.0452	0.84	1.001

(1) Where applicable, custom lab flags have been used on this report; B = analyte found in sample and the associated blank; J = concentration less than LMCL.

(2) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.

Signed: _____ Brian Watson _____

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These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested. Results are compliant with NELAP where specific accreditation is held.



Form 1A
PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
SDS-FB-07
Sample Collection:
08-Jun-2010 14:05

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.: 4406

Project No.

FIDALGO BAY, CUSTOM
PLYWOOD DX STUDY
L14884-46 Ri

Lab Sample I.D.:

Matrix: SOLID

Sample Size: 11.1 g (dry)

Sample Receipt Date: 17-Jun-2010

Initial Calibration Date: 30-Jul-2010

Extraction Date: 25-Aug-2010

Instrument ID: HR GC/MS

Analysis Date: 09-Sep-2010 Time: 06:22:14

GC Column ID: DB5

Extract Volume (uL): 20

Sample Data Filename: DX0M_122 S: 21

Injection Volume (uL): 1.0

Blank Data Filename: DX0M_123 S: 4

Dilution Factor: N/A

Cal. Ver. Data Filename: DX0M_122 S: 13

Concentration Units: pg/g (dry weight basis)

% Moisture: 39.2

COMPOUND	LAB FLAG ¹	CONCENTRATION FOUND	DETECTION LIMIT	ION ABUND. RATIO ²	RRT ²
2,3,7,8-TCDD	K J	0.113	0.0451	0.34	1.001
1,2,3,7,8-PECDD ³	K J	0.337	0.0530	0.48	1.001
1,2,3,4,7,8-HXCDD	J	0.355	0.0518	1.29	1.000
1,2,3,6,7,8-HXCDD	K J	1.51	0.0518	1.46	1.000
1,2,3,7,8,9-HXCDD	B J	1.33	0.0518	1.14	1.000
1,2,3,4,6,7,8-HPCDD	B	13.4	0.0600	0.96	1.000
OCDD	B	99.5	0.102	0.87	1.000
2,3,7,8-TCDF	B	1.54	0.0672	0.77	1.001
1,2,3,7,8-PECDF	K J	0.093	0.0839	0.71	1.001
2,3,4,7,8-PECDF	B J	0.421	0.0839	1.43	1.001
1,2,3,4,7,8-HXCDF	K B J	0.368	0.0451	1.65	1.000
1,2,3,6,7,8-HXCDF	K J	0.222	0.0451	2.09	1.000
1,2,3,7,8,9-HXCDF	U		0.0451		
2,3,4,6,7,8-HXCDF	K B J	0.207	0.0451	0.89	1.000
1,2,3,4,6,7,8-HPCDF	B J	3.01	0.0451	0.93	1.000
1,2,3,4,7,8,9-HPCDF	J	0.185	0.0451	0.90	1.000
OCDF	B J	6.67	0.0451	0.87	1.002
TOTAL TETRA-DIOXINS		4.21	0.0451		
TOTAL PENTA-DIOXINS		2.93	0.0530		
TOTAL HEXA-DIOXINS		9.03	0.0518		
TOTAL HEPTA-DIOXINS		148	0.0600		
TOTAL TETRA-FURANS	B	6.50	0.0672		
TOTAL PENTA-FURANS	B	2.00	0.0839		
TOTAL HEXA-FURANS	B	3.11	0.0451		
TOTAL HEPTA-FURANS	B	7.56	0.0451		

(1) Where applicable, custom lab flags have been used on this report; U = not detected; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; B = analyte found in sample and the associated blank; J = concentration less than LMCL.

(2) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

(3) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.

Signed: _____ Brian Watson _____



Form 1A
PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
SDS-FB-07
Sample Collection:
08-Jun-2010 14:05

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.: 4406

Matrix: SOLID

Sample Receipt Date: 17-Jun-2010

Extraction Date: 25-Aug-2010

Analysis Date: 08-Sep-2010 Time: 04:39:27

Extract Volume (uL): 20

Injection Volume (uL): 2.0

Dilution Factor: N/A

Concentration Units: pg/g (dry weight basis)

Project No. FIDALGO BAY, CUSTOM
PLYWOOD DX STUDY
Lab Sample I.D.: L14884-46 R

Sample Size: 11.1 g (dry)

Initial Calibration Date: 24-Aug-2010

Instrument ID: HR GC/MS

GC Column ID: DB225

Sample Data Filename: DB03_128 S: 15

Blank Data Filename: DB03_128 S: 5

Cal. Ver. Data Filename: DB03_128 S: 2

% Moisture: 39.2

COMPOUND	LAB FLAG ¹	CONCENTRATION FOUND	DETECTION LIMIT	ION ABUND. RATIO ²	RRT ²
2,3,7,8-TCDF	B J	0.785	0.0524	0.78	1.001

(1) Where applicable, custom lab flags have been used on this report; B = analyte found in sample and the associated blank; J = concentration less than LMCL.

(2) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.

Signed: _____ Brian Watson _____

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These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested. Results are compliant with NELAP where specific accreditation is held.



Form 1A
PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
SDS-FB-07-D
Sample Collection:
08-Jun-2010 14:05

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.: 4406

Project No.

FIDALGO BAY, CUSTOM
PLYWOOD DX STUDY
L14884-47 Ri

Lab Sample I.D.:

Matrix: SOLID

Sample Size: 11.2 g (dry)

Sample Receipt Date: 17-Jun-2010

Initial Calibration Date: 30-Jul-2010

Extraction Date: 25-Aug-2010

Instrument ID: HR GC/MS

Analysis Date: 09-Sep-2010 Time: 04:32:10

GC Column ID: DB5

Extract Volume (uL): 20

Sample Data Filename: DX0M_122 S: 19

Injection Volume (uL): 1.0

Blank Data Filename: DX0M_123 S: 4

Dilution Factor: N/A

Cal. Ver. Data Filename: DX0M_122 S: 13

Concentration Units: pg/g (dry weight basis)

% Moisture: 38.0

COMPOUND	LAB FLAG ¹	CONCENTRATION FOUND	DETECTION LIMIT	ION ABUND. RATIO ²	RRT ²
2,3,7,8-TCDD	J	0.130	0.0446	0.81	1.002
1,2,3,7,8-PECDD ³	J	0.303	0.0446	0.59	1.001
1,2,3,4,7,8-HXCDD	K J	0.269	0.0446	0.84	1.000
1,2,3,6,7,8-HXCDD	K J	1.36	0.0446	1.00	1.000
1,2,3,7,8,9-HXCDD	B J	0.998	0.0446	1.30	1.000
1,2,3,4,6,7,8-HPCDD	B	11.0	0.0794	1.05	1.000
OCDD	B	75.6	0.0632	0.88	1.000
2,3,7,8-TCDF	B	1.89	0.0446	0.69	1.001
1,2,3,7,8-PECDF	K J	0.175	0.0669	1.19	1.001
2,3,4,7,8-PECDF	K B J	0.413	0.0669	1.00	1.000
1,2,3,4,7,8-HXCDF	K B J	0.291	0.0544	0.85	1.001
1,2,3,6,7,8-HXCDF	K J	0.121	0.0544	2.19	1.001
1,2,3,7,8,9-HXCDF	U		0.0544		
2,3,4,6,7,8-HXCDF	K B J	0.246	0.0544	1.67	1.000
1,2,3,4,6,7,8-HPCDF	B J	2.50	0.0447	1.02	1.000
1,2,3,4,7,8,9-HPCDF	K J	0.188	0.0447	0.81	1.000
OCDF	B J	5.26	0.0446	0.87	1.002
TOTAL TETRA-DIOXINS		2.67	0.0446		
TOTAL PENTA-DIOXINS		1.34	0.0446		
TOTAL HEXA-DIOXINS		14.8	0.0446		
TOTAL HEPTA-DIOXINS		144	0.0794		
TOTAL TETRA-FURANS	B	7.08	0.0446		
TOTAL PENTA-FURANS	B	0.510	0.0669		
TOTAL HEXA-FURANS	B	2.85	0.0544		
TOTAL HEPTA-FURANS	B	6.48	0.0447		

(1) Where applicable, custom lab flags have been used on this report; U = not detected; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; B = analyte found in sample and the associated blank; J = concentration less than LMCL.

(2) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

(3) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.

Signed: _____ Brian Watson _____



Form 1A
PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
SDS-FB-07-D
Sample Collection:
08-Jun-2010 14:05

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.: 4406
Matrix: SOLID
Sample Receipt Date: 17-Jun-2010
Extraction Date: 25-Aug-2010
Analysis Date: 08-Sep-2010 Time: 05:16:12
Extract Volume (uL): 20
Injection Volume (uL): 2.0
Dilution Factor: N/A
Concentration Units: pg/g (dry weight basis)

Project No. FIDALGO BAY, CUSTOM
Lab Sample I.D.: PLYWOOD DX STUDY
L14884-47 R
Sample Size: 11.2 g (dry)
Initial Calibration Date: 24-Aug-2010
Instrument ID: HR GC/MS
GC Column ID: DB225
Sample Data Filename: DB03_128 S: 16
Blank Data Filename: DB03_128 S: 5
Cal. Ver. Data Filename: DB03_128 S: 2
% Moisture: 38.0

COMPOUND	LAB FLAG ¹	CONCENTRATION FOUND	DETECTION LIMIT	ION ABUND. RATIO ²	RRT ²
2,3,7,8-TCDF	B	0.969	0.0446	0.70	1.001

(1) Where applicable, custom lab flags have been used on this report; B = analyte found in sample and the associated blank.
(2) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.
Signed: _____ Brian Watson _____

For AxyS Internal Use Only [XSL Template: Form1A.xsl; Created: 13-Sep-2010 12:08:35; Application: XMLTransformer-1.10.26;
Report Filename: 1613_DIOXINS_1613DB225_L14884-47_Form1A_DB03_128S16_SJ1190214.html; Workgroup: WG33742; Design ID: 699]

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested. Results are compliant with NELAP where specific accreditation is held.



Form 1A
PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
SDS-FB-08
Sample Collection:
08-Jun-2010 11:33

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4406	Project No.	FIDALGO BAY, CUSTOM PLYWOOD DX STUDY
Matrix:	SOLID	Lab Sample I.D.:	L14884-48 Ri
Sample Receipt Date:	17-Jun-2010	Sample Size:	10.9 g (dry)
Extraction Date:	25-Aug-2010	Initial Calibration Date:	30-Jul-2010
Analysis Date:	09-Sep-2010 Time: 05:27:12	Instrument ID:	HR GC/MS
Extract Volume (uL):	20	GC Column ID:	DB5
Injection Volume (uL):	1.0	Sample Data Filename:	DX0M_122 S: 20
Dilution Factor:	N/A	Blank Data Filename:	DX0M_123 S: 4
Concentration Units:	pg/g (dry weight basis)	Cal. Ver. Data Filename:	DX0M_122 S: 13
		% Moisture:	34.7

COMPOUND	LAB FLAG ¹	CONCENTRATION FOUND	DETECTION LIMIT	ION ABUND. RATIO ²	RRT ²
2,3,7,8-TCDD	K J	0.132	0.0459	0.44	1.001
1,2,3,7,8-PECDD ³	J	0.248	0.0459	0.52	1.000
1,2,3,4,7,8-HXCDD	K J	0.284	0.0459	1.55	1.000
1,2,3,6,7,8-HXCDD	K J	1.27	0.0459	1.43	1.000
1,2,3,7,8,9-HXCDD	K B J	0.879	0.0459	1.63	1.000
1,2,3,4,6,7,8-HPCDD	B	10.6	0.0817	1.02	1.000
OCDD	B	82.5	0.0595	0.85	1.000
2,3,7,8-TCDF	B	1.29	0.0459	0.67	1.001
1,2,3,7,8-PECDF	K J	0.110	0.0711	5.55	1.000
2,3,4,7,8-PECDF	K B J	0.316	0.0711	1.14	1.000
1,2,3,4,7,8-HXCDF	K B J	0.254	0.0652	0.92	1.001
1,2,3,6,7,8-HXCDF	J	0.169	0.0652	1.34	1.001
1,2,3,7,8,9-HXCDF	U		0.0652		
2,3,4,6,7,8-HXCDF	B J	0.219	0.0652	1.06	1.000
1,2,3,4,6,7,8-HPCDF	B J	2.24	0.0939	1.02	1.000
1,2,3,4,7,8,9-HPCDF	J	0.200	0.0939	0.92	1.000
OCDF	B J	4.22	0.0459	0.88	1.002
TOTAL TETRA-DIOXINS		2.07	0.0459		
TOTAL PENTA-DIOXINS		2.09	0.0459		
TOTAL HEXA-DIOXINS		10.7	0.0459		
TOTAL HEPTA-DIOXINS		141	0.0817		
TOTAL TETRA-FURANS	B	4.66	0.0459		
TOTAL PENTA-FURANS	B	1.13	0.0711		
TOTAL HEXA-FURANS	B	1.69	0.0652		
TOTAL HEPTA-FURANS	B	2.57	0.0939		

(1) Where applicable, custom lab flags have been used on this report; U = not detected; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; B = analyte found in sample and the associated blank; J = concentration less than LMCL.
 (2) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.
 (3) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.
 Signed: _____ Brian Watson _____



Form 1A
PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
SDS-FB-08
Sample Collection:
08-Jun-2010 11:33

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.: 4406
Matrix: SOLID
Sample Receipt Date: 17-Jun-2010
Extraction Date: 25-Aug-2010
Analysis Date: 08-Sep-2010 Time: 05:52:59
Extract Volume (uL): 20
Injection Volume (uL): 2.0
Dilution Factor: N/A
Concentration Units: pg/g (dry weight basis)

Project No. FIDALGO BAY, CUSTOM
PLYWOOD DX STUDY
Lab Sample I.D.: L14884-48 R
Sample Size: 10.9 g (dry)
Initial Calibration Date: 24-Aug-2010
Instrument ID: HR GC/MS
GC Column ID: DB225
Sample Data Filename: DB03_128 S: 17
Blank Data Filename: DB03_128 S: 5
Cal. Ver. Data Filename: DB03_128 S: 2
% Moisture: 34.7

COMPOUND	LAB FLAG ¹	CONCENTRATION FOUND	DETECTION LIMIT	ION ABUND. RATIO ²	RRT ²
2,3,7,8-TCDF	B J	0.706	0.0459	0.78	1.001

(1) Where applicable, custom lab flags have been used on this report; B = analyte found in sample and the associated blank; J = concentration less than LMCL.
(2) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.

Signed: _____ Brian Watson _____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 13-Sep-2010 12:08:35; Application: XMLTransformer-1.10.26; Report Filename: 1613_DIOXINS_1613DB225_L14884-48_Form1A_DB03_128S17_SJ1190215.html; Workgroup: WG33742; Design ID: 699]

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested. Results are compliant with NELAP where specific accreditation is held.



Form 1A
PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
SDS-FB-09
Sample Collection:
08-Jun-2010 14:35

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.: 4406
Matrix: SOLID
Sample Receipt Date: 17-Jun-2010
Extraction Date: 25-Aug-2010
Analysis Date: 09-Sep-2010 Time: 07:17:17
Extract Volume (uL): 20
Injection Volume (uL): 1.0
Dilution Factor: N/A
Concentration Units: pg/g (dry weight basis)

Project No. FIDALGO BAY, CUSTOM
PLYWOOD DX STUDY
Lab Sample I.D.: L14884-49 Ri
Sample Size: 11.7 g (dry)
Initial Calibration Date: 30-Jul-2010
Instrument ID: HR GC/MS
GC Column ID: DB5
Sample Data Filename: DX0M_122 S: 22
Blank Data Filename: DX0M_123 S: 4
Cal. Ver. Data Filename: DX0M_122 S: 13
% Moisture: 34.6

COMPOUND	LAB FLAG ¹	CONCENTRATION FOUND	DETECTION LIMIT	ION ABUND. RATIO ²	RRT ²
2,3,7,8-TCDD	K J	0.155	0.0428	0.47	1.001
1,2,3,7,8-PECDD ³	J	0.440	0.0428	0.63	1.000
1,2,3,4,7,8-HXCDD	J	0.417	0.0428	1.10	1.000
1,2,3,6,7,8-HXCDD	J	1.68	0.0428	1.25	1.001
1,2,3,7,8,9-HXCDD	B J	1.34	0.0428	1.25	1.000
1,2,3,4,6,7,8-HPCDD	B	14.6	0.0948	1.00	1.000
OCDD	B	101	0.0468	0.88	1.000
2,3,7,8-TCDF	B	1.88	0.0428	0.73	1.001
1,2,3,7,8-PECDF	J	0.231	0.0495	1.67	1.001
2,3,4,7,8-PECDF	B J	0.501	0.0495	1.44	1.000
1,2,3,4,7,8-HXCDF	B J	0.406	0.0741	1.20	1.000
1,2,3,6,7,8-HXCDF	J	0.231	0.0741	1.15	1.001
1,2,3,7,8,9-HXCDF	U		0.0741		
2,3,4,6,7,8-HXCDF	B J	0.258	0.0741	1.32	1.000
1,2,3,4,6,7,8-HPCDF	B J	3.04	0.0428	0.92	1.000
1,2,3,4,7,8,9-HPCDF	K J	0.259	0.0428	0.84	1.000
OCDF	B J	7.07	0.0947	0.81	1.002
TOTAL TETRA-DIOXINS		7.64	0.0428		
TOTAL PENTA-DIOXINS		4.96	0.0428		
TOTAL HEXA-DIOXINS		21.1	0.0428		
TOTAL HEPTA-DIOXINS		160	0.0948		
TOTAL TETRA-FURANS	B	7.36	0.0428		
TOTAL PENTA-FURANS	B	2.29	0.0495		
TOTAL HEXA-FURANS	B	4.57	0.0741		
TOTAL HEPTA-FURANS	B	7.75	0.0428		

(1) Where applicable, custom lab flags have been used on this report; U = not detected; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; B = analyte found in sample and the associated blank; J = concentration less than LMCL.
 (2) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.
 (3) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.
 Signed: _____ Brian Watson _____



Form 1A
PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
SDS-FB-09
Sample Collection:
08-Jun-2010 14:35

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.: 4406
Matrix: SOLID
Sample Receipt Date: 17-Jun-2010
Extraction Date: 25-Aug-2010
Analysis Date: 08-Sep-2010 Time: 06:29:45
Extract Volume (uL): 20
Injection Volume (uL): 2.0
Dilution Factor: N/A
Concentration Units: pg/g (dry weight basis)

Project No. FIDALGO BAY, CUSTOM
PLYWOOD DX STUDY
Lab Sample I.D.: L14884-49 R
Sample Size: 11.7 g (dry)
Initial Calibration Date: 24-Aug-2010
Instrument ID: HR GC/MS
GC Column ID: DB225
Sample Data Filename: DB03_128 S: 18
Blank Data Filename: DB03_128 S: 5
Cal. Ver. Data Filename: DB03_128 S: 2
% Moisture: 34.6

COMPOUND	LAB FLAG ¹	CONCENTRATION FOUND	DETECTION LIMIT	ION ABUND. RATIO ²	RRT ²
2,3,7,8-TCDF	B	0.973	0.0428	0.81	1.001

(1) Where applicable, custom lab flags have been used on this report; B = analyte found in sample and the associated blank.
(2) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.
Signed: _____ Brian Watson _____

For AxyS Internal Use Only [XSL Template: Form1A.xsl; Created: 13-Sep-2010 12:08:35; Application: XMLTransformer-1.10.26;
Report Filename: 1613_DIOXINS_1613DB225_L14884-49_Form1A_DB03_128S18_SJ1190216.html; Workgroup: WG33742; Design ID: 699]

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested. Results are compliant with NELAP where specific accreditation is held.



Form 1A
PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
10654001
Sample Collection:
03-Sep-2008 11:28

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.: 4406

Project No.

FIDALGO BAY, CUSTOM
PLYWOOD DX STUDY
L15027-1 Ri2

Matrix: SOLID

Lab Sample I.D.: 10.5 g (dry)

Sample Receipt Date: 16-Jul-2010

Initial Calibration Date: 30-Jul-2010

Extraction Date: 25-Aug-2010

Instrument ID: HR GC/MS

Analysis Date: 07-Sep-2010 Time: 21:01:25

GC Column ID: DB5

Extract Volume (uL): 20

Sample Data Filename: DX0M_121F S: 4

Injection Volume (uL): 1.0

Blank Data Filename: DX0M_123 S: 4

Dilution Factor: N/A

Cal. Ver. Data Filename: DX0M_121F S: 1

Concentration Units: pg/g (dry weight basis)

% Moisture: 55.2

COMPOUND	LAB FLAG ¹	CONCENTRATION FOUND	DETECTION LIMIT	ION ABUND. RATIO ²	RRT ²
2,3,7,8-TCDD	J	0.608	0.135	0.69	1.001
1,2,3,7,8-PECDD ³	J	2.74	0.0474	0.55	1.001
1,2,3,4,7,8-HXCDD	J	3.66	0.242	1.11	1.000
1,2,3,6,7,8-HXCDD		19.4	0.242	1.19	1.000
1,2,3,7,8,9-HXCDD	B	10.8	0.242	1.24	1.000
1,2,3,4,6,7,8-HPCDD	B	376	0.432	0.99	1.000
OCDD	B	2710	0.0489	0.87	1.000
2,3,7,8-TCDF	B	5.22	0.0699	0.71	1.001
1,2,3,7,8-PECDF	K J	0.953	0.175	1.22	1.000
2,3,4,7,8-PECDF	B J	1.97	0.175	1.36	1.001
1,2,3,4,7,8-HXCDF	B J	4.64	0.205	1.06	1.001
1,2,3,6,7,8-HXCDF	J	2.55	0.205	1.36	1.000
1,2,3,7,8,9-HXCDF	B J	0.260	0.205	1.26	1.000
2,3,4,6,7,8-HXCDF	B J	2.64	0.205	1.10	1.001
1,2,3,4,6,7,8-HPCDF	B	104	0.373	0.97	1.000
1,2,3,4,7,8,9-HPCDF		5.70	0.373	1.01	1.000
OCDF	B	411	0.0474	0.85	1.002
TOTAL TETRA-DIOXINS		62.6	0.135		
TOTAL PENTA-DIOXINS		38.9	0.0474		
TOTAL HEXA-DIOXINS		200	0.242		
TOTAL HEPTA-DIOXINS		1010	0.432		
TOTAL TETRA-FURANS	B	33.4	0.0699		
TOTAL PENTA-FURANS	B	32.9	0.175		
TOTAL HEXA-FURANS	B	110	0.205		
TOTAL HEPTA-FURANS	B	368	0.373		

(1) Where applicable, custom lab flags have been used on this report; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; B = analyte found in sample and the associated blank; J = concentration less than LMCL.
 (2) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.
 (3) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.

Signed: _____ Brian Watson _____



Form 1A
PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
10654001
Sample Collection:
03-Sep-2008 11:28

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.: 4406

Matrix: SOLID

Sample Receipt Date: 16-Jul-2010

Extraction Date: 25-Aug-2010

Analysis Date: 09-Sep-2010 Time: 22:53:08

Extract Volume (uL): 20

Injection Volume (uL): 2.0

Dilution Factor: N/A

Concentration Units: pg/g (dry weight basis)

Project No.

Lab Sample I.D.:

Sample Size:

Initial Calibration Date:

Instrument ID:

GC Column ID:

Sample Data Filename:

Blank Data Filename:

Cal. Ver. Data Filename:

% Moisture:

FIDALGO BAY, CUSTOM
PLYWOOD DX STUDY
L15027-1 Ri

10.5 g (dry)

24-Aug-2010

HR GC/MS

DB225

DB03_131 S: 6

DB03_128 S: 5

DB03_131 S: 2

55.2

COMPOUND	LAB FLAG ¹	CONCENTRATION FOUND	DETECTION LIMIT	ION ABUND. RATIO ²	RRT ²
2,3,7,8-TCDF	B	2.39	0.118	0.83	1.000

(1) Where applicable, custom lab flags have been used on this report; B = analyte found in sample and the associated blank.
(2) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.

Signed: _____ Brian Watson _____

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Report Filename: 1613_DIOXINS_1613DB225_L15027-1_Form1A_DB03_131S6_SJ1190320.html; Workgroup: WG33742; Design ID: 699]

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested. Results are compliant with NELAP where specific accreditation is held.



Form 1A
PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
10654002
Sample Collection:
03-Sep-2008 12:39

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.: 4406

Project No.

FIDALGO BAY, CUSTOM
PLYWOOD DX STUDY
L15027-2 Ri2

Matrix: SOLID

Lab Sample I.D.: 10.6 g (dry)

Sample Receipt Date: 16-Jul-2010

Initial Calibration Date: 30-Jul-2010

Extraction Date: 25-Aug-2010

Instrument ID: HR GC/MS

Analysis Date: 07-Sep-2010 Time: 21:56:28

GC Column ID: DB5

Extract Volume (uL): 20

Sample Data Filename: DX0M_121F S: 5

Injection Volume (uL): 1.0

Blank Data Filename: DX0M_123 S: 4

Dilution Factor: N/A

Cal. Ver. Data Filename: DX0M_121F S: 1

Concentration Units: pg/g (dry weight basis)

% Moisture: 44.7

COMPOUND	LAB FLAG ¹	CONCENTRATION FOUND	DETECTION LIMIT	ION ABUND. RATIO ²	RRT ²
2,3,7,8-TCDD	K J	0.276	0.0471	0.58	1.001
1,2,3,7,8-PECDD ³	J	1.06	0.0496	0.58	1.001
1,2,3,4,7,8-HXCDD	J	1.49	0.0951	1.26	1.000
1,2,3,6,7,8-HXCDD		6.69	0.0951	1.13	1.000
1,2,3,7,8,9-HXCDD	B J	4.24	0.0951	1.25	1.000
1,2,3,4,6,7,8-HPCDD	B	118	0.268	0.99	1.000
OCDD	B	859	0.196	0.86	1.000
2,3,7,8-TCDF	B	2.78	0.0471	0.74	1.001
1,2,3,7,8-PECDF	K J	0.434	0.108	1.92	1.000
2,3,4,7,8-PECDF	B J	0.745	0.108	1.40	1.000
1,2,3,4,7,8-HXCDF	K B J	1.64	0.105	1.02	1.000
1,2,3,6,7,8-HXCDF	J	0.875	0.105	1.25	1.001
1,2,3,7,8,9-HXCDF	K B J	0.112	0.105	0.50	1.001
2,3,4,6,7,8-HXCDF	B J	1.11	0.105	1.06	1.000
1,2,3,4,6,7,8-HPCDF	B	31.5	0.146	0.95	1.000
1,2,3,4,7,8,9-HPCDF	K J	1.78	0.146	0.73	1.000
OCDF	B	112	0.134	0.85	1.002
TOTAL TETRA-DIOXINS		19.5	0.0471		
TOTAL PENTA-DIOXINS		19.5	0.0496		
TOTAL HEXA-DIOXINS		72.7	0.0951		
TOTAL HEPTA-DIOXINS		392	0.268		
TOTAL TETRA-FURANS	B	16.1	0.0471		
TOTAL PENTA-FURANS	B	11.5	0.108		
TOTAL HEXA-FURANS	B	28.5	0.105		
TOTAL HEPTA-FURANS	B	95.6	0.146		

(1) Where applicable, custom lab flags have been used on this report; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; B = analyte found in sample and the associated blank; J = concentration less than LMCL.
 (2) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.
 (3) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.

Signed: _____ Brian Watson _____



Form 1A
PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
10654002
Sample Collection:
03-Sep-2008 12:39

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.: 4406

Matrix: SOLID

Sample Receipt Date: 16-Jul-2010

Extraction Date: 25-Aug-2010

Analysis Date: 09-Sep-2010 Time: 23:29:45

Extract Volume (uL): 20

Injection Volume (uL): 2.0

Dilution Factor: N/A

Concentration Units: pg/g (dry weight basis)

Project No.

Lab Sample I.D.:

Sample Size:

Initial Calibration Date:

Instrument ID:

GC Column ID:

Sample Data Filename:

Blank Data Filename:

Cal. Ver. Data Filename:

% Moisture:

FIDALGO BAY, CUSTOM
PLYWOOD DX STUDY
L15027-2 Ri

10.6 g (dry)

24-Aug-2010

HR GC/MS

DB225

DB03_131 S: 7

DB03_128 S: 5

DB03_131 S: 2

44.7

COMPOUND	LAB FLAG ¹	CONCENTRATION FOUND	DETECTION LIMIT	ION ABUND. RATIO ²	RRT ²
2,3,7,8-TCDF	B	1.41	0.150	0.83	1.000

(1) Where applicable, custom lab flags have been used on this report; B = analyte found in sample and the associated blank.
(2) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.

Signed: _____ Brian Watson _____

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Report Filename: 1613_DIOXINS_1613DB225_L15027-2_Form1A_DB03_131S7_SJ1190321.html; Workgroup: WG33742; Design ID: 699]

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested. Results are compliant with NELAP where specific accreditation is held.



Form 1A
PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
10654003
Sample Collection:
03-Sep-2008 13:21

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.: 4406

Project No.

FIDALGO BAY, CUSTOM
PLYWOOD DX STUDY
L15027-3 Ri2

Lab Sample I.D.:

Matrix: SOLID

Sample Size: 10.7 g (dry)

Sample Receipt Date: 16-Jul-2010

Initial Calibration Date: 30-Jul-2010

Extraction Date: 25-Aug-2010

Instrument ID: HR GC/MS

Analysis Date: 07-Sep-2010 Time: 22:51:30

GC Column ID: DB5

Extract Volume (uL): 20

Sample Data Filename: DX0M_121F S: 6

Injection Volume (uL): 1.0

Blank Data Filename: DX0M_123 S: 4

Dilution Factor: N/A

Cal. Ver. Data Filename: DX0M_121F S: 1

Concentration Units: pg/g (dry weight basis)

% Moisture: 34.2

COMPOUND	LAB FLAG ¹	CONCENTRATION FOUND	DETECTION LIMIT	ION ABUND. RATIO ²	RRT ²
2,3,7,8-TCDD	K J	0.197	0.0656	1.01	1.001
1,2,3,7,8-PECDD ³	K J	0.890	0.103	0.75	1.001
1,2,3,4,7,8-HXCDD	K J	0.837	0.112	1.00	1.000
1,2,3,6,7,8-HXCDD	J	3.42	0.112	1.14	1.000
1,2,3,7,8,9-HXCDD	B J	2.15	0.112	1.08	1.000
1,2,3,4,6,7,8-HPCDD	B	57.1	0.167	0.94	1.000
OCDD	B	440	0.0468	0.85	1.000
2,3,7,8-TCDF	B	2.78	0.0884	0.69	1.002
1,2,3,7,8-PECDF	J	0.337	0.0851	1.41	1.000
2,3,4,7,8-PECDF	K B J	0.525	0.0851	2.00	1.000
1,2,3,4,7,8-HXCDF	B J	0.970	0.109	1.21	1.000
1,2,3,6,7,8-HXCDF	J	0.527	0.109	1.25	1.000
1,2,3,7,8,9-HXCDF	U		0.109		
2,3,4,6,7,8-HXCDF	K B J	0.567	0.109	0.86	1.000
1,2,3,4,6,7,8-HPCDF	B	17.6	0.146	1.02	1.000
1,2,3,4,7,8,9-HPCDF	K J	1.18	0.146	1.45	1.001
OCDF	B	93.4	0.0561	0.81	1.002
TOTAL TETRA-DIOXINS		15.9	0.0656		
TOTAL PENTA-DIOXINS		7.83	0.103		
TOTAL HEXA-DIOXINS		38.3	0.112		
TOTAL HEPTA-DIOXINS		251	0.167		
TOTAL TETRA-FURANS	B	15.2	0.0884		
TOTAL PENTA-FURANS	B	7.20	0.0851		
TOTAL HEXA-FURANS	B	15.5	0.109		
TOTAL HEPTA-FURANS	B	58.2	0.146		

(1) Where applicable, custom lab flags have been used on this report; U = not detected; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; B = analyte found in sample and the associated blank; J = concentration less than LMCL.

(2) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

(3) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.

Signed: _____ Brian Watson _____



Form 1A
PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
10654003
Sample Collection:
03-Sep-2008 13:21

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.: 4406

Matrix: SOLID

Sample Receipt Date: 16-Jul-2010

Extraction Date: 25-Aug-2010

Analysis Date: 10-Sep-2010 Time: 00:06:24

Extract Volume (uL): 20

Injection Volume (uL): 2.0

Dilution Factor: N/A

Concentration Units: pg/g (dry weight basis)

Project No.

Lab Sample I.D.:

Sample Size:

Initial Calibration Date:

Instrument ID:

GC Column ID:

Sample Data Filename:

Blank Data Filename:

Cal. Ver. Data Filename:

% Moisture:

FIDALGO BAY, CUSTOM
PLYWOOD DX STUDY
L15027-3 Ri

10.7 g (dry)

24-Aug-2010

HR GC/MS

DB225

DB03_131 S: 8

DB03_128 S: 5

DB03_131 S: 2

34.2

COMPOUND	LAB FLAG ¹	CONCENTRATION FOUND	DETECTION LIMIT	ION ABUND. RATIO ²	RRT ²
2,3,7,8-TCDF	B	1.26	0.0754	0.82	1.001

(1) Where applicable, custom lab flags have been used on this report; B = analyte found in sample and the associated blank.
(2) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.

Signed: _____ Brian Watson _____

For AxyS Internal Use Only [XSL Template: Form1A.xsl; Created: 13-Sep-2010 12:08:35; Application: XMLTransformer-1.10.26; Report Filename: 1613_DIOXINS_1613DB225_L15027-3_Form1A_DB03_131S8_SJ1190322.html; Workgroup: WG33742; Design ID: 699]

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested. Results are compliant with NELAP where specific accreditation is held.



Form 1A
PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
10654008
Sample Collection:
04-Sep-2008 08:23

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.: 4406

Project No.

FIDALGO BAY, CUSTOM
PLYWOOD DX STUDY
L15027-5 Ri

Matrix: SOLID

Lab Sample I.D.:
Sample Size: 10.7 g (dry)

Sample Receipt Date: 16-Jul-2010

Initial Calibration Date: 30-Jul-2010

Extraction Date: 25-Aug-2010

Instrument ID: HR GC/MS

Analysis Date: 07-Sep-2010 Time: 23:46:32

GC Column ID: DB5

Extract Volume (uL): 20

Sample Data Filename: DX0M_121F S: 7

Injection Volume (uL): 1.0

Blank Data Filename: DX0M_123 S: 4

Dilution Factor: N/A

Cal. Ver. Data Filename: DX0M_121F S: 1

Concentration Units: pg/g (dry weight basis)

% Moisture: 49.7

COMPOUND	LAB FLAG ¹	CONCENTRATION FOUND	DETECTION LIMIT	ION ABUND. RATIO ²	RRT ²
2,3,7,8-TCDD	J	0.626	0.0468	0.77	1.001
1,2,3,7,8-PECDD ³	J	2.60	0.0515	0.62	1.001
1,2,3,4,7,8-HXCDD	J	3.47	0.112	1.09	1.000
1,2,3,6,7,8-HXCDD		18.8	0.112	1.20	1.001
1,2,3,7,8,9-HXCDD	B	9.90	0.112	1.24	1.000
1,2,3,4,6,7,8-HPCDD	B	384	0.305	0.99	1.000
OCDD	B	2930	0.0792	0.87	1.000
2,3,7,8-TCDF	B	4.51	0.0617	0.71	1.001
1,2,3,7,8-PECDF	J	0.939	0.101	1.50	1.002
2,3,4,7,8-PECDF	B J	1.86	0.101	1.53	1.000
1,2,3,4,7,8-HXCDF	B	4.70	0.129	1.15	1.001
1,2,3,6,7,8-HXCDF	J	2.42	0.129	1.07	1.000
1,2,3,7,8,9-HXCDF	K B J	0.218	0.129	1.73	1.000
2,3,4,6,7,8-HXCDF	B J	2.45	0.129	1.12	1.001
1,2,3,4,6,7,8-HPCDF	B	117	0.137	0.99	1.000
1,2,3,4,7,8,9-HPCDF		7.15	0.137	0.93	1.000
OCDF	B	481	0.0468	0.84	1.002
TOTAL TETRA-DIOXINS		29.1	0.0468		
TOTAL PENTA-DIOXINS		29.1	0.0515		
TOTAL HEXA-DIOXINS		175	0.112		
TOTAL HEPTA-DIOXINS		1020	0.305		
TOTAL TETRA-FURANS	B	28.1	0.0617		
TOTAL PENTA-FURANS	B	31.8	0.101		
TOTAL HEXA-FURANS	B	119	0.129		
TOTAL HEPTA-FURANS	B	449	0.137		

(1) Where applicable, custom lab flags have been used on this report; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; B = analyte found in sample and the associated blank; J = concentration less than LMCL.
 (2) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.
 (3) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.

Signed: _____ Brian Watson _____



Form 1A
PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
10654008
Sample Collection:
04-Sep-2008 08:23

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.: 4406
Matrix: SOLID
Sample Receipt Date: 16-Jul-2010
Extraction Date: 25-Aug-2010
Analysis Date: 10-Sep-2010 Time: 00:43:01
Extract Volume (uL): 20
Injection Volume (uL): 2.0
Dilution Factor: N/A
Concentration Units: pg/g (dry weight basis)

Project No. FIDALGO BAY, CUSTOM
Lab Sample I.D.: PLYWOOD DX STUDY
L15027-5 R
Sample Size: 10.7 g (dry)
Initial Calibration Date: 24-Aug-2010
Instrument ID: HR GC/MS
GC Column ID: DB225
Sample Data Filename: DB03_131 S: 9
Blank Data Filename: DB03_128 S: 5
Cal. Ver. Data Filename: DB03_131 S: 2
% Moisture: 49.7

COMPOUND	LAB FLAG ¹	CONCENTRATION FOUND	DETECTION LIMIT	ION ABUND. RATIO ²	RRT ²
2,3,7,8-TCDF	B	1.64	0.0831	0.77	1.001

(1) Where applicable, custom lab flags have been used on this report; B = analyte found in sample and the associated blank.
(2) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.
Signed: _____ Brian Watson _____

For AxyS Internal Use Only [XSL Template: Form1A.xsl; Created: 13-Sep-2010 12:08:35; Application: XMLTransformer-1.10.26;
Report Filename: 1613_DIOXINS_1613DB225_L15027-5_Form1A_DB03_131S9_SJ1190323.html; Workgroup: WG33742; Design ID: 699]

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested. Results are compliant with NELAP where specific accreditation is held.



Form 1A
PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
10654009
Sample Collection:
04-Sep-2008 09:37

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.: 4406

Project No.

FIDALGO BAY, CUSTOM
PLYWOOD DX STUDY
L15027-6 Ri

Lab Sample I.D.:

Matrix: SOLID

Sample Size: 5.81 g (dry)

Sample Receipt Date: 16-Jul-2010

Initial Calibration Date: 30-Jul-2010

Extraction Date: 25-Aug-2010

Instrument ID: HR GC/MS

Analysis Date: 08-Sep-2010 Time: 00:41:35

GC Column ID: DB5

Extract Volume (uL): 20

Sample Data Filename: DX0M_121F S: 8

Injection Volume (uL): 1.0

Blank Data Filename: DX0M_123 S: 4

Dilution Factor: N/A

Cal. Ver. Data Filename: DX0M_121F S: 1

Concentration Units: pg/g (dry weight basis)

% Moisture: 42.8

COMPOUND	LAB FLAG ¹	CONCENTRATION FOUND	DETECTION LIMIT	ION ABUND. RATIO ²	RRT ²
2,3,7,8-TCDD	J	0.529	0.0861	0.66	1.001
1,2,3,7,8-PECDD ³	J	2.51	0.0861	0.53	1.000
1,2,3,4,7,8-HXCDD	J	3.08	0.110	1.18	1.000
1,2,3,6,7,8-HXCDD		16.2	0.110	1.17	1.000
1,2,3,7,8,9-HXCDD	B J	8.89	0.110	1.15	1.000
1,2,3,4,6,7,8-HPCDD	B	458	0.326	1.00	1.000
OCDD	B	3510	0.149	0.87	1.000
2,3,7,8-TCDF	B	5.13	0.0861	0.70	1.001
1,2,3,7,8-PECDF	K J	0.520	0.0977	4.28	1.000
2,3,4,7,8-PECDF	B J	1.70	0.0977	1.59	1.001
1,2,3,4,7,8-HXCDF	B J	3.45	0.147	1.23	1.001
1,2,3,6,7,8-HXCDF	J	1.69	0.147	1.22	1.001
1,2,3,7,8,9-HXCDF	K B J	0.190	0.147	0.99	1.000
2,3,4,6,7,8-HXCDF	B J	2.17	0.147	1.07	1.000
1,2,3,4,6,7,8-HPCDF	B	81.3	0.298	1.00	1.001
1,2,3,4,7,8,9-HPCDF	K J	4.58	0.298	0.88	1.000
OCDF	B	305	0.0861	0.83	1.002
TOTAL TETRA-DIOXINS		21.0	0.0861		
TOTAL PENTA-DIOXINS		26.4	0.0861		
TOTAL HEXA-DIOXINS		159	0.110		
TOTAL HEPTA-DIOXINS		1300	0.326		
TOTAL TETRA-FURANS	B	31.8	0.0861		
TOTAL PENTA-FURANS	B	25.5	0.0977		
TOTAL HEXA-FURANS	B	79.0	0.147		
TOTAL HEPTA-FURANS	B	276	0.298		

(1) Where applicable, custom lab flags have been used on this report; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; B = analyte found in sample and the associated blank; J = concentration less than LMCL.
 (2) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.
 (3) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.

Signed: _____ Brian Watson _____



Form 1A
PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
10654009
Sample Collection:
04-Sep-2008 09:37

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.: 4406

Matrix: SOLID

Sample Receipt Date: 16-Jul-2010

Extraction Date: 25-Aug-2010

Analysis Date: 10-Sep-2010 Time: 01:19:39

Extract Volume (uL): 20

Injection Volume (uL): 2.0

Dilution Factor: N/A

Concentration Units: pg/g (dry weight basis)

Project No.

Lab Sample I.D.:

Sample Size:

Initial Calibration Date:

Instrument ID:

GC Column ID:

Sample Data Filename:

Blank Data Filename:

Cal. Ver. Data Filename:

% Moisture:

FIDALGO BAY, CUSTOM
PLYWOOD DX STUDY
L15027-6 R

5.81 g (dry)

24-Aug-2010

HR GC/MS

DB225

DB03_131 S: 10

DB03_128 S: 5

DB03_131 S: 2

42.8

COMPOUND	LAB FLAG ¹	CONCENTRATION FOUND	DETECTION LIMIT	ION ABUND. RATIO ²	RRT ²
2,3,7,8-TCDF	B	2.00	0.195	0.81	1.001

(1) Where applicable, custom lab flags have been used on this report; B = analyte found in sample and the associated blank.
(2) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.

Signed: _____ Brian Watson _____

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Report Filename: 1613_DIOXINS_1613DB225_L15027-6_Form1A_DB03_131S10_SJ1190324.html; Workgroup: WG33742; Design ID: 699]

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested. Results are compliant with NELAP where specific accreditation is held.



Form 1A
PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
10654013
Sample Collection:
04-Sep-2008 13:04

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.: 4406

Project No.

FIDALGO BAY, CUSTOM
PLYWOOD DX STUDY
L15027-8 Ri

Matrix: SOLID

Lab Sample I.D.: L15027-8 Ri

Sample Receipt Date: 16-Jul-2010

Sample Size: 10.9 g (dry)

Extraction Date: 25-Aug-2010

Initial Calibration Date: 30-Jul-2010

Analysis Date: 08-Sep-2010 Time: 01:36:37

Instrument ID: HR GC/MS

Extract Volume (uL): 20

GC Column ID: DB5

Injection Volume (uL): 1.0

Sample Data Filename: DX0M_121F S: 9

Dilution Factor: N/A

Blank Data Filename: DX0M_123 S: 4

Concentration Units: pg/g (dry weight basis)

Cal. Ver. Data Filename: DX0M_121F S: 1

COMPOUND	LAB FLAG ¹	CONCENTRATION FOUND	DETECTION LIMIT	ION ABUND. RATIO ²	RRT ²
2,3,7,8-TCDD	K J	0.237	0.0460	0.52	1.000
1,2,3,7,8-PECDD ³	J	0.616	0.0460	0.63	1.001
1,2,3,4,7,8-HXCDD	J	0.686	0.0479	1.20	1.001
1,2,3,6,7,8-HXCDD	J	2.87	0.0479	1.23	1.000
1,2,3,7,8,9-HXCDD	B J	2.25	0.0479	1.21	1.000
1,2,3,4,6,7,8-HPCDD	B	39.2	0.108	0.99	1.000
OCDD	B	271	0.0460	0.86	1.000
2,3,7,8-TCDF	B	2.33	0.0460	0.71	1.001
1,2,3,7,8-PECDF	J	0.378	0.0534	1.69	1.002
2,3,4,7,8-PECDF	K B J	0.704	0.0534	1.83	1.001
1,2,3,4,7,8-HXCDF	K B J	0.852	0.0616	0.98	1.000
1,2,3,6,7,8-HXCDF	K J	0.477	0.0616	0.94	1.001
1,2,3,7,8,9-HXCDF	K B J	0.062	0.0616	1.47	1.000
2,3,4,6,7,8-HXCDF	B J	0.551	0.0616	1.16	1.000
1,2,3,4,6,7,8-HPCDF	B	9.84	0.0734	1.00	1.000
1,2,3,4,7,8,9-HPCDF	J	0.586	0.0734	0.97	1.000
OCDF	B	29.4	0.0607	0.84	1.002
TOTAL TETRA-DIOXINS		8.39	0.0460		
TOTAL PENTA-DIOXINS		8.39	0.0460		
TOTAL HEXA-DIOXINS		37.5	0.0479		
TOTAL HEPTA-DIOXINS		224	0.108		
TOTAL TETRA-FURANS	B	11.4	0.0460		
TOTAL PENTA-FURANS	B	5.52	0.0534		
TOTAL HEXA-FURANS	B	10.1	0.0616		
TOTAL HEPTA-FURANS	B	27.8	0.0734		

(1) Where applicable, custom lab flags have been used on this report; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; B = analyte found in sample and the associated blank; J = concentration less than LMCL.
(2) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.
(3) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.

Signed: _____ Brian Watson _____



Form 1A
PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
10654013
Sample Collection:
04-Sep-2008 13:04

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.: 4406

Project No.

FIDALGO BAY, CUSTOM
PLYWOOD DX STUDY
L15027-8 R

Lab Sample I.D.:

Matrix: SOLID

Sample Size: 10.9 g (dry)

Sample Receipt Date: 16-Jul-2010

Initial Calibration Date: 24-Aug-2010

Extraction Date: 25-Aug-2010

Instrument ID: HR GC/MS

Analysis Date: 10-Sep-2010 Time: 01:56:18

GC Column ID: DB225

Extract Volume (uL): 20

Sample Data Filename: DB03_131 S: 11

Injection Volume (uL): 2.0

Blank Data Filename: DB03_128 S: 5

Dilution Factor: N/A

Cal. Ver. Data Filename: DB03_131 S: 2

Concentration Units: pg/g (dry weight basis)

% Moisture: 37.0

COMPOUND	LAB FLAG ¹	CONCENTRATION FOUND	DETECTION LIMIT	ION ABUND. RATIO ²	RRT ²
2,3,7,8-TCDF	B J	0.946	0.0478	0.80	1.001

(1) Where applicable, custom lab flags have been used on this report; B = analyte found in sample and the associated blank; J = concentration less than LMCL.

(2) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.

Signed: _____ Brian Watson _____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 13-Sep-2010 12:08:35; Application: XMLTransformer-1.10.26; Report Filename: 1613_DIOXINS_1613DB225_L15027-8_Form1A_DB03_131S11_SJ1190325.html; Workgroup: WG33742; Design ID: 699]

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested. Results are compliant with NELAP where specific accreditation is held.



Form 1A
PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
10654026
Sample Collection:
05-Sep-2008 13:42

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.: 4406

Project No.

FIDALGO BAY, CUSTOM
PLYWOOD DX STUDY
L15027-12 Ri

Lab Sample I.D.:

Matrix: SOLID

Sample Size: 10.8 g (dry)

Sample Receipt Date: 16-Jul-2010

Initial Calibration Date: 30-Jul-2010

Extraction Date: 25-Aug-2010

Instrument ID: HR GC/MS

Analysis Date: 08-Sep-2010 Time: 02:31:40

GC Column ID: DB5

Extract Volume (uL): 20

Sample Data Filename: DX0M_121F S: 10

Injection Volume (uL): 1.0

Blank Data Filename: DX0M_123 S: 4

Dilution Factor: N/A

Cal. Ver. Data Filename: DX0M_121F S: 1

Concentration Units: pg/g (dry weight basis)

% Moisture: 41.9

COMPOUND	LAB FLAG ¹	CONCENTRATION FOUND	DETECTION LIMIT	ION ABUND. RATIO ²	RRT ²
2,3,7,8-TCDD	K J	0.194	0.0465	0.62	1.001
1,2,3,7,8-PECDD ³	J	0.706	0.0465	0.56	1.001
1,2,3,4,7,8-HXCDD	J	0.720	0.0645	1.13	1.000
1,2,3,6,7,8-HXCDD	J	2.96	0.0645	1.15	1.000
1,2,3,7,8,9-HXCDD	B J	2.34	0.0645	1.23	1.000
1,2,3,4,6,7,8-HPCDD	B	33.7	0.0996	0.98	1.000
OCDD	B	230	0.0698	0.86	1.000
2,3,7,8-TCDF	B	2.55	0.0465	0.75	1.001
1,2,3,7,8-PECDF	K J	0.267	0.0699	0.96	1.000
2,3,4,7,8-PECDF	B J	0.591	0.0699	1.62	1.001
1,2,3,4,7,8-HXCDF	K B J	0.815	0.106	1.52	1.001
1,2,3,6,7,8-HXCDF	K J	0.552	0.106	0.99	1.000
1,2,3,7,8,9-HXCDF	U		0.106		
2,3,4,6,7,8-HXCDF	B J	0.761	0.106	1.09	1.001
1,2,3,4,6,7,8-HPCDF	B	9.44	0.0926	0.92	1.000
1,2,3,4,7,8,9-HPCDF	J	0.672	0.0926	1.17	1.001
OCDF	B	26.3	0.0465	0.84	1.002
TOTAL TETRA-DIOXINS		7.84	0.0465		
TOTAL PENTA-DIOXINS		9.10	0.0465		
TOTAL HEXA-DIOXINS		35.1	0.0645		
TOTAL HEPTA-DIOXINS		192	0.0996		
TOTAL TETRA-FURANS	B	11.4	0.0465		
TOTAL PENTA-FURANS	B	6.14	0.0699		
TOTAL HEXA-FURANS	B	9.36	0.106		
TOTAL HEPTA-FURANS	B	25.0	0.0926		

(1) Where applicable, custom lab flags have been used on this report; U = not detected; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; B = analyte found in sample and the associated blank; J = concentration less than LMCL.

(2) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

(3) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.

Signed: _____ Brian Watson _____



Form 1A
PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
10654026
Sample Collection:
05-Sep-2008 13:42

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.: 4406
Matrix: SOLID
Sample Receipt Date: 16-Jul-2010
Extraction Date: 25-Aug-2010
Analysis Date: 10-Sep-2010 Time: 02:32:56
Extract Volume (uL): 20
Injection Volume (uL): 2.0
Dilution Factor: N/A
Concentration Units: pg/g (dry weight basis)

Project No. FIDALGO BAY, CUSTOM
PLYWOOD DX STUDY
Lab Sample I.D.: L15027-12 R
Sample Size: 10.8 g (dry)
Initial Calibration Date: 24-Aug-2010
Instrument ID: HR GC/MS
GC Column ID: DB225
Sample Data Filename: DB03_131 S: 12
Blank Data Filename: DB03_128 S: 5
Cal. Ver. Data Filename: DB03_131 S: 2
% Moisture: 41.9

COMPOUND	LAB FLAG ¹	CONCENTRATION FOUND	DETECTION LIMIT	ION ABUND. RATIO ²	RRT ²
2,3,7,8-TCDF	B	1.19	0.0560	0.74	1.001

(1) Where applicable, custom lab flags have been used on this report; B = analyte found in sample and the associated blank.
(2) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.
Signed: _____ Brian Watson _____

For Axy Internal Use Only [XSL Template: Form1A.xsl; Created: 13-Sep-2010 12:08:35; Application: XMLTransformer-1.10.26;
Report Filename: 1613_DIOXINS_1613DB225_L15027-12_Form1A_DB03_131S12_SJ1190326.html; Workgroup: WG33742; Design ID: 699]

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested. Results are compliant with NELAP where specific accreditation is held.



Form 1A
PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
SDS-FB-05 (Duplicate)
Sample Collection:
08-Jun-2010 13:48

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4406	Project No.	FIDALGO BAY, CUSTOM PLYWOOD DX STUDY
Matrix:	SOLID	Lab Sample I.D.:	WG33742-103 i (DUP L14884-44)
Sample Receipt Date:	17-Jun-2010	Sample Size:	10.1 g (dry)
Extraction Date:	25-Aug-2010	Initial Calibration Date:	30-Jul-2010
Analysis Date:	04-Sep-2010 Time: 15:46:39	Instrument ID:	HR GC/MS
Extract Volume (uL):	20	GC Column ID:	DB5
Injection Volume (uL):	1.0	Sample Data Filename:	DX0M_119 S: 8
Dilution Factor:	N/A	Blank Data Filename:	DX0M_123 S: 4
Concentration Units:	pg/g (dry weight basis)	Cal. Ver. Data Filename:	DX0M_119 S: 1
		% Moisture:	28.3

COMPOUND	LAB FLAG ¹	CONCENTRATION FOUND	DETECTION LIMIT	ION ABUND. RATIO ²	RRT ²
2,3,7,8-TCDD	U		0.0495		
1,2,3,7,8-PECDD ³	K J	0.190	0.0495	0.36	1.002
1,2,3,4,7,8-HXCDD	K J	0.228	0.0495	0.96	1.000
1,2,3,6,7,8-HXCDD	J	0.877	0.0495	1.19	1.000
1,2,3,7,8,9-HXCDD	B J	0.699	0.0495	1.35	1.000
1,2,3,4,6,7,8-HPCDD	B	6.67	0.0583	1.12	1.000
OCDD	B	40.4	0.0495	0.85	1.000
2,3,7,8-TCDF	B	1.24	0.0722	0.72	1.001
1,2,3,7,8-PECDF	U		0.109		
2,3,4,7,8-PECDF	K B J	0.357	0.109	1.28	1.000
1,2,3,4,7,8-HXCDF	K B J	0.168	0.0495	1.52	1.001
1,2,3,6,7,8-HXCDF	K J	0.105	0.0495	1.66	1.000
1,2,3,7,8,9-HXCDF	U		0.0495		
2,3,4,6,7,8-HXCDF	K B J	0.156	0.0495	0.92	1.000
1,2,3,4,6,7,8-HPCDF	B J	1.68	0.0501	1.07	1.001
1,2,3,4,7,8,9-HPCDF	U		0.0501		
OCDF	B J	2.34	0.0495	0.95	1.002
TOTAL TETRA-DIOXINS		0.807	0.0495		
TOTAL PENTA-DIOXINS		0.741	0.0495		
TOTAL HEXA-DIOXINS		7.91	0.0495		
TOTAL HEPTA-DIOXINS		95.7	0.0583		
TOTAL TETRA-FURANS	B	2.63	0.0722		
TOTAL PENTA-FURANS	B	0.601	0.109		
TOTAL HEXA-FURANS	B	0.906	0.0495		
TOTAL HEPTA-FURANS	B	3.68	0.0501		

(1) Where applicable, custom lab flags have been used on this report; U = not detected; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; B = analyte found in sample and the associated blank; J = concentration less than LMCL.
 (2) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.
 (3) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.
 Signed: _____ Brian Watson _____



Form 1A
PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
SDS-FB-05 (Duplicate)
Sample Collection:
08-Jun-2010 13:48

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.: 4406

Matrix: SOLID

Sample Receipt Date: 17-Jun-2010

Extraction Date: 25-Aug-2010

Analysis Date: 08-Sep-2010 Time: 00:22:43

Extract Volume (uL): 20

Injection Volume (uL): 2.0

Dilution Factor: N/A

Concentration Units: pg/g (dry weight basis)

Project No.

Lab Sample I.D.:

Sample Size:

Initial Calibration Date:

Instrument ID:

GC Column ID:

Sample Data Filename:

Blank Data Filename:

Cal. Ver. Data Filename:

% Moisture:

FIDALGO BAY, CUSTOM
PLYWOOD DX STUDY
WG33742-103 (DUP L14884-44)

10.1 g (dry)

24-Aug-2010

HR GC/MS

DB225

DB03_128 S: 8

DB03_128 S: 5

DB03_128 S: 2

28.3

COMPOUND	LAB FLAG ¹	CONCENTRATION FOUND	DETECTION LIMIT	ION ABUND. RATIO ²	RRT ²
2,3,7,8-TCDF	B J	0.765	0.147	0.79	1.001

(1) Where applicable, custom lab flags have been used on this report; B = analyte found in sample and the associated blank; J = concentration less than LMCL.

(2) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.

Signed: _____ Brian Watson _____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 13-Sep-2010 12:08:35; Application: XMLTransformer-1.10.26; Report Filename: 1613_DIOXINS_1613DB225_WG33742-103_Form1A_DB03_128S8_SJ1190206.html; Workgroup: WG33742; Design ID: 699]

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested. Results are compliant with NELAP where specific accreditation is held.



PCDD/PCDF ANALYSIS REPORT
RELATIVE PERCENT DIFFERENCE

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.

FIDALGO BAY, CUSTOM
PLYWOOD DX STUDY

Contract No.: 4406

Client ID: SDS-FB-05

Concentration Units: pg/g (dry weight basis)

COMPOUND	L14884-44 (A)		WG33742-103		MEAN	RELATIVE PERCENT DIFFERENCE
	LAB FLAG ¹	CONC. FOUND	LAB FLAG ¹	CONC. FOUND		
2,3,7,8-TCDD	K J	0.086	U			
1,2,3,7,8-PECDD	K J	0.135	K J	0.190		
1,2,3,4,7,8-HXCDD	K J	0.156	K J	0.228		
1,2,3,6,7,8-HXCDD	J	0.811	J	0.877	0.844	7.76
1,2,3,7,8,9-HXCDD	J	0.710	J	0.699	0.704	1.54
1,2,3,4,6,7,8-HPCDD		6.99		6.67	6.83	4.67
OCDD		44.8		40.4	42.6	10.5
2,3,7,8-TCDF	J	0.493	J	0.765	0.629	43.2
1,2,3,7,8-PECDF	K J	0.107	U			
2,3,4,7,8-PECDF	K J	0.201	K J	0.357		
1,2,3,4,7,8-HXCDF	K J	0.102	K J	0.168		
1,2,3,6,7,8-HXCDF	J	0.085	K J	0.105		
1,2,3,7,8,9-HXCDF	U		U			
2,3,4,6,7,8-HXCDF	J	0.126	K J	0.156		
1,2,3,4,6,7,8-HPCDF	J	1.53	J	1.68	1.60	9.34
1,2,3,4,7,8,9-HPCDF	K J	0.105	U			
OCDF	J	2.33	J	2.34	2.33	0.454

(1) Where applicable, custom lab flags have been used on this report; U = not detected; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; J = concentration less than LMCL.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.

Signed: _____ Brian Watson _____

For Axys Internal Use Only [XSL Template: RPD.xml; Created: 13-Sep-2010 12:10:30; Application: XMLTransformer-1.10.26; Report Filename: RPD_DIOXINS_1613-RPD_WG33742-103_L14884-44_.html; Workgroup: WG33742; Design ID: 699]

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested. Results are compliant with NELAP where specific accreditation is held.



Form 1A
PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
Lab Blank
Sample Collection:
N/A

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.: 4406

Project No. N/A

Lab Sample I.D.: WG33742-101 Ri2

Matrix: SOLID

Sample Size: 10.0 g

Sample Receipt Date: N/A

Initial Calibration Date: 30-Jul-2010

Extraction Date: 25-Aug-2010

Instrument ID: HR GC/MS

Analysis Date: 10-Sep-2010 Time: 10:37:17

GC Column ID: DB5

Extract Volume (uL): 20

Sample Data Filename: DX0M_123 S: 4

Injection Volume (uL): 1.0

Blank Data Filename: DX0M_123 S: 4

Dilution Factor: N/A

Cal. Ver. Data Filename: DX0M_123 S: 1

Concentration Units: pg/g

COMPOUND	LAB FLAG ¹	CONCENTRATION FOUND	DETECTION LIMIT	ION ABUND. RATIO ²	RRT ²
2,3,7,8-TCDD	U		0.0500		
1,2,3,7,8-PECDD ³	U		0.0500		
1,2,3,4,7,8-HXCDD	U		0.0500		
1,2,3,6,7,8-HXCDD	U		0.0500		
1,2,3,7,8,9-HXCDD	K J	0.054	0.0500	0.55	1.000
1,2,3,4,6,7,8-HPCDD	K J	0.068	0.0500	1.53	1.000
OCDD	K J	0.227	0.0500	1.15	1.000
2,3,7,8-TCDF	J	0.448	0.0500	0.88	1.003
1,2,3,7,8-PECDF	U		0.0706		
2,3,4,7,8-PECDF	K J	0.099	0.0706	1.21	1.002
1,2,3,4,7,8-HXCDF	J	0.051	0.0500	1.06	1.000
1,2,3,6,7,8-HXCDF	U		0.0500		
1,2,3,7,8,9-HXCDF	K J	0.068	0.0500	0.32	0.999
2,3,4,6,7,8-HXCDF	K J	0.071	0.0500	3.23	1.000
1,2,3,4,6,7,8-HPCDF	J	0.085	0.0500	1.17	1.001
1,2,3,4,7,8,9-HPCDF	U		0.0500		
OCDF	K J	0.059	0.0500	1.39	1.002
TOTAL TETRA-DIOXINS	U		0.0500		
TOTAL PENTA-DIOXINS	U		0.0500		
TOTAL HEXA-DIOXINS	U		0.0500		
TOTAL HEPTA-DIOXINS	U		0.0500		
TOTAL TETRA-FURANS		0.620	0.0500		
TOTAL PENTA-FURANS		0.078	0.0706		
TOTAL HEXA-FURANS		0.051	0.0500		
TOTAL HEPTA-FURANS		0.085	0.0500		

(1) Where applicable, custom lab flags have been used on this report; U = not detected; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; J = concentration less than LMCL.

(2) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

(3) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.

Signed: _____ Brian Watson _____

For Axy Internal Use Only [XSL Template: Form1A.xsl; Created: 13-Sep-2010 12:06:30; Application: XMLTransformer-1.10.26; Report Filename: 1613_DIOXINS_1613DB5_WG33742-101_Form1A_DX0M_123S4_SJ1190067.html; Workgroup: WG33742; Design ID: 699]

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested. Results are compliant with NELAP where specific accreditation is held.



Form 1A
PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
Lab Blank
Sample Collection:
N/A

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.: 4406

Project No.

N/A

Lab Sample I.D.:

WG33742-101

Matrix: SOLID

Sample Size:

10.0 g

Sample Receipt Date: N/A

Initial Calibration Date:

24-Aug-2010

Extraction Date: 25-Aug-2010

Instrument ID:

HR GC/MS

Analysis Date: 07-Sep-2010 Time: 22:32:20

GC Column ID:

DB225

Extract Volume (uL): 20

Sample Data Filename:

DB03_128 S: 5

Injection Volume (uL): 2.0

Blank Data Filename:

DB03_128 S: 5

Dilution Factor: N/A

Cal. Ver. Data Filename:

DB03_128 S: 2

Concentration Units: pg/g

COMPOUND	LAB FLAG ¹	CONCENTRATION FOUND	DETECTION LIMIT	ION ABUND. RATIO ²	RRT ²
2,3,7,8-TCDF	J	0.214	0.0500	0.77	1.001

(1) Where applicable, custom lab flags have been used on this report; J = concentration less than LMCL.

(2) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.

Signed: _____ Brian Watson _____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 13-Sep-2010 12:08:35; Application: XMLTransformer-1.10.26; Report Filename: 1613_DIOXINS_1613DB225_WG33742-101_Form1A_DB03_128S5_SJ1190201.html; Workgroup: WG33742; Design ID: 699]

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested. Results are compliant with NELAP where specific accreditation is held.



Form 8A
PCDD/PCDF ONGOING PRECISION AND RECOVERY (OPR)

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
 V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.: 4406

OPR Data Filename: DX0M_119 S: 3

Matrix: SOLID

Lab Sample I.D.: WG33742-102 i

Extraction Date: 25-Aug-2010

Analysis Date: 04-Sep-2010 **Time:** 11:11:28

ALL CONCENTRATIONS REPORTED ON THIS FORM ARE CONCENTRATIONS IN EXTRACT, BASED ON A 20 uL EXTRACT VOLUME.

COMPOUND	LAB FLAG ¹	ION ABUND. RATIO ²	SPIKE CONC. (ng/mL)	CONC. FOUND (ng/mL)	OPR CONC. LIMITS ³ (ng/mL)	% RECOVERY
2,3,7,8-TCDD		0.75	10.0	8.78	6.70 - 15.8	87.8
1,2,3,7,8-PECDD ⁴		0.61	52.0	46.7	36.4 - 73.8	89.8
1,2,3,4,7,8-HXCDD		1.23	56.5	51.0	39.6 - 92.7	90.3
1,2,3,6,7,8-HXCDD		1.13	55.5	51.1	42.2 - 74.4	92.1
1,2,3,7,8,9-HXCDD		1.24	54.0	51.7	34.6 - 87.5	95.7
1,2,3,4,6,7,8-HPCDD		1.01	47.5	44.9	33.3 - 66.5	94.6
OCDD		0.87	100	93.7	78.0 - 144	93.7
2,3,7,8-TCDF		0.73	10.7	10.0	8.03 - 16.9	93.5
1,2,3,7,8-PECDF		1.48	46.0	42.8	36.8 - 61.6	93.0
2,3,4,7,8-PECDF		1.43	47.0	42.2	32.0 - 75.2	89.8
1,2,3,4,7,8-HXCDF		1.16	50.0	48.1	36.0 - 67.0	96.2
1,2,3,6,7,8-HXCDF		1.12	47.5	45.9	39.9 - 61.8	96.7
1,2,3,7,8,9-HXCDF		1.14	52.5	50.6	41.0 - 68.3	96.5
2,3,4,6,7,8-HXCDF		1.17	53.0	52.2	37.1 - 82.7	98.5
1,2,3,4,6,7,8-HPCDF		0.92	50.0	52.7	41.0 - 61.0	105
1,2,3,4,7,8,9-HPCDF		0.98	50.0	50.0	39.0 - 69.0	100
OCDF		0.87	104	89.6	65.5 - 177	86.2

- (1) Where applicable, custom lab flags have been used on this report.
- (2) Contract-required Ion Abundance Ratios are specified in Table 9, Method 1613.
- (3) Contract-required concentration range as determined from the percent of the test concentration in Table 6, Method 1613, under OPR.
- (4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.

Signed: _____ Brian Watson _____

For Axys Internal Use Only [XSL Template: Form8A.xsl; Created: 13-Sep-2010 12:06:30; Application: XMLTransformer-1.10.26; Report Filename: 1613_DIOXINS_1613DB5_WG33742-102_Form8A_SJ1188491.html; Workgroup: WG33742; Design ID: 699]

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested. Results are compliant with NELAP where specific accreditation is held.



PCDD/PCDF CERTIFIED REFERENCE MATERIAL (CRM) REPORT FOR NIST SRM 1944

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
 V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4406	Lab Sample I.D.:	WG33742-104 i
Matrix:	SOLID	Sample Size:	1.22 g (dry)
Extraction Date:	25-Aug-2010	Initial Calibration Date:	30-Jul-2010
Analysis Date:	08-Sep-2010 Time: 03:26:42	Instrument ID:	HR GC/MS
Extract Volume (uL):	20	GC Column ID:	DB5
Injection Volume (uL):	1.0	CRM Data Filename:	DX0M_121F S: 11
Dilution Factor:	N/A	Blank Data Filename:	DX0M_123 S: 4
Concentration Units:	pg/g (dry weight basis)	Cal. Ver. Data Filename:	DX0M_121F S: 1

COMPOUND	LAB FLAG ¹	DETERMINED	CERTIFIED / REFERENCE
2,3,7,8-TCDD		201	133 +/- 9
1,2,3,7,8-PECDD ²	K J	18.4	19 +/- 2
1,2,3,4,7,8-HXCDD	J	29.1	26 +/- 3
1,2,3,6,7,8-HXCDD		61.6	56 +/- 6
1,2,3,7,8,9-HXCDD		74.6	53 +/- 7
1,2,3,4,6,7,8-HPCDD		824	800 +/- 70
OCDD		6150	5800 +/- 700
2,3,7,8-TCDF	X		
1,2,3,7,8-PECDF		48.1	45 +/- 7
2,3,4,7,8-PECDF		46.3	45 +/- 4
1,2,3,4,7,8-HXCDF		233	220 +/- 30
1,2,3,6,7,8-HXCDF		93.6	90 +/- 10
1,2,3,7,8,9-HXCDF	J	3.45	19 +/- 18
2,3,4,6,7,8-HXCDF		52.5	54 +/- 6
1,2,3,4,6,7,8-HPCDF		1050	1000 +/- 100
1,2,3,4,7,8,9-HPCDF	J	40.8	40 +/- 6
OCDF		1090	1000 +/- 100

(1) Where applicable, custom lab flags have been used on this report; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; J = concentration less than LMCL; X = result reported separately.
 (2) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.

Signed: _____ Brian Watson _____

For Axys Internal Use Only [XSL Template: Form8G.xsl; Created: 13-Sep-2010 12:06:30; Application: XMLTransformer-1.10.26; Report Filename: 1613_DIOXINS_1613DB5_WG33742-104_Form8G_SJ1188689.html; Workgroup: WG33742; Design ID: 699]

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested. Results are compliant with NELAP where specific accreditation is held.



PCDD/PCDF CERTIFIED REFERENCE MATERIAL (CRM) REPORT FOR NIST SRM 1944

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
 V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4406	Lab Sample I.D.:	WG33742-104
Matrix:	SOLID	Sample Size:	1.22 g (dry)
Extraction Date:	25-Aug-2010	Initial Calibration Date:	24-Aug-2010
Analysis Date:	10-Sep-2010 Time: 03:09:34	Instrument ID:	HR GC/MS
Extract Volume (uL):	20	GC Column ID:	DB225
Injection Volume (uL):	2.0	CRM Data Filename:	DB03_131 S: 13
Dilution Factor:	N/A	Blank Data Filename:	DB03_128 S: 5
Concentration Units:	pg/g (dry weight basis)	Cal. Ver. Data Filename:	DB03_131 S: 2

COMPOUND	LAB FLAG ¹	DETERMINED	CERTIFIED / REFERENCE
2,3,7,8-TCDF		29.7	39 +/- 15

(1) Where applicable, custom lab flags have been used on this report.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.

Signed: _____ Brian Watson _____

For Axys Internal Use Only [XSL Template: Form8G.xsl; Created: 13-Sep-2010 12:08:35; Application: XMLTransformer-1.10.26; Report Filename: 1613_DIOXINS_1613DB225_WG33742-104_Form8G_SJ1190327.html; Workgroup: WG33742; Design ID: 699]

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested. Results are compliant with NELAP where specific accreditation is held.



BATCH SUMMARY

Batch ID: WG33891	Date: 15-Sep-2010
Analysis Type: Dioxin/Furan	Matrix Type: Solid
BATCH MAKEUP	
Contract: 4406 Samples: L14884-13 SDS-PB-03 L15027-4 10654004	Blank: WG33891-101 Reference or Spike: WG33891-102 WG33891-104 Duplicate: WG33891-103
Comments: <div style="border: 1px solid black; padding: 5px;"><ol style="list-style-type: none">1- Data are not blank corrected2- Concentrations of tetrafurans and pentafurans in the procedural blank are above the method control limits. The sample analyte concentrations are not blank corrected; the results should be interpreted with consideration of the blank.3- The duplication between 10654004 and its duplicate (Axys IDs: L15027-4 and WG33891-103) was outside method specifications for 1,2,3,7,8,9 HXCDF. All calculations and chromatography were reviewed for possible error and the concentrations in each sample were confirmed. The variability may be due to the matrix, which is solid (marine sediment).</div>	

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February 1993

FQA-006 Rev. 2. 18-Jul-1994



Form 1A
PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
SDS-PB-03
Sample Collection:
07-Jun-2010 14:07

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.: 4406

Project No.

FIDALGO BAY, CUSTOM
PLYWOOD DX STUDY
L14884-13 R

Matrix: SOLID

Lab Sample I.D.: L14884-13 R

Sample Size: 9.80 g (dry)

Sample Receipt Date: 17-Jun-2010

Initial Calibration Date: 26-Aug-2010

Extraction Date: 11-Sep-2010

Instrument ID: HR GC/MS

Analysis Date: 14-Sep-2010 Time: 01:50:25

GC Column ID: DB5

Extract Volume (uL): 20

Sample Data Filename: DX0B_214A S: 7

Injection Volume (uL): 1.0

Blank Data Filename: DX0B_214A S: 5

Dilution Factor: N/A

Cal. Ver. Data Filename: DX0B_214A S: 1

Concentration Units: pg/g (dry weight basis)

% Moisture: 49.0

COMPOUND	LAB FLAG ¹	CONCENTRATION FOUND	DETECTION LIMIT	ION ABUND. RATIO ²	RRT ²
2,3,7,8-TCDD	B J	0.257	0.0510	0.66	1.001
1,2,3,7,8-PECDD ³	J	0.570	0.0510	0.57	1.001
1,2,3,4,7,8-HXCDD	J	0.465	0.0510	1.19	1.000
1,2,3,6,7,8-HXCDD	J	2.71	0.0510	1.28	1.000
1,2,3,7,8,9-HXCDD	J	2.07	0.0510	1.16	1.010
1,2,3,4,6,7,8-HPCDD		17.8	0.0995	1.05	1.000
OCDD	B	97.4	0.0510	0.90	1.000
2,3,7,8-TCDF	B	2.63	0.0510	0.79	1.001
1,2,3,7,8-PECDF	K B J	0.315	0.0510	2.05	1.000
2,3,4,7,8-PECDF	B J	0.611	0.0510	1.51	1.000
1,2,3,4,7,8-HXCDF	B J	0.464	0.0565	1.29	1.000
1,2,3,6,7,8-HXCDF	B J	0.289	0.0565	1.14	1.000
1,2,3,7,8,9-HXCDF	U		0.0565		
2,3,4,6,7,8-HXCDF	K B J	0.324	0.0565	0.88	1.000
1,2,3,4,6,7,8-HPCDF	J	4.04	0.0510	0.98	1.000
1,2,3,4,7,8,9-HPCDF	J	0.235	0.0510	0.90	1.000
OCDF	J	7.16	0.0510	0.88	1.002
TOTAL TETRA-DIOXINS		6.96	0.0510		
TOTAL PENTA-DIOXINS		8.89	0.0510		
TOTAL HEXA-DIOXINS		25.2	0.0510		
TOTAL HEPTA-DIOXINS		45.5	0.0995		
TOTAL TETRA-FURANS	B	11.4	0.0510		
TOTAL PENTA-FURANS	B	5.20	0.0510		
TOTAL HEXA-FURANS	B	6.58	0.0565		
TOTAL HEPTA-FURANS		10.6	0.0510		

(1) Where applicable, custom lab flags have been used on this report; U = not detected; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; B = analyte found in sample and the associated blank; J = concentration less than LMCL.

(2) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

(3) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.

Signed: _____Celine Vaillant_____



Form 1A
PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
SDS-PB-03
Sample Collection:
07-Jun-2010 14:07

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.: 4406
Matrix: SOLID
Sample Receipt Date: 17-Jun-2010
Extraction Date: 11-Sep-2010
Analysis Date: 13-Sep-2010 Time: 21:11:39
Extract Volume (uL): 20
Injection Volume (uL): 2.0
Dilution Factor: N/A
Concentration Units: pg/g (dry weight basis)

Project No. FIDALGO BAY, CUSTOM
PLYWOOD DX STUDY
Lab Sample I.D.: L14884-13 R
Sample Size: 9.80 g (dry)
Initial Calibration Date: 24-Aug-2010
Instrument ID: HR GC/MS
GC Column ID: DB225
Sample Data Filename: DB03_134C S: 5
Blank Data Filename: DB03_134C S: 4
Cal. Ver. Data Filename: DB03_134C S: 2
% Moisture: 49.0

COMPOUND	LAB FLAG ¹	CONCENTRATION FOUND	DETECTION LIMIT	ION ABUND. RATIO ²	RRT ²
2,3,7,8-TCDF	B	1.25	0.0510	0.71	1.001

(1) Where applicable, custom lab flags have been used on this report; B = analyte found in sample and the associated blank.
(2) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.
Signed: _____ Celine Vaillant _____

For AxyS Internal Use Only [XSL Template: Form1A.xsl; Created: 16-Sep-2010 08:22:47; Application: XMLTransformer-1.10.26;
Report Filename: 1613_DIOXINS_1613DB225_L14884-13_Form1A_DB03_134CS5_SJ1190864.html; Workgroup: WG33891; Design ID: 699]

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested. Results are compliant with NELAP where specific accreditation is held.



Form 1A
PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
10654004
Sample Collection:
03-Sep-2008 14:14

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.: 4406

Project No.

FIDALGO BAY, CUSTOM
PLYWOOD DX STUDY
L15027-4 R (A)

Lab Sample I.D.:

Matrix: SOLID

Sample Size: 10.4 g (dry)

Sample Receipt Date: 16-Jul-2010

Initial Calibration Date: 26-Aug-2010

Extraction Date: 11-Sep-2010

Instrument ID: HR GC/MS

Analysis Date: 14-Sep-2010 Time: 02:45:13

GC Column ID: DB5

Extract Volume (uL): 20

Sample Data Filename: DX0B_214A S: 8

Injection Volume (uL): 1.0

Blank Data Filename: DX0B_214A S: 5

Dilution Factor: N/A

Cal. Ver. Data Filename: DX0B_214A S: 1

Concentration Units: pg/g (dry weight basis)

% Moisture: 56.2

COMPOUND	LAB FLAG ¹	CONCENTRATION FOUND	DETECTION LIMIT	ION ABUND. RATIO ²	RRT ²
2,3,7,8-TCDD	B J	0.662	0.0481	0.80	1.001
1,2,3,7,8-PECDD ³	J	2.92	0.0481	0.64	1.001
1,2,3,4,7,8-HXCDD	J	3.90	0.321	1.22	1.000
1,2,3,6,7,8-HXCDD		22.7	0.321	1.24	1.000
1,2,3,7,8,9-HXCDD		11.9	0.321	1.16	1.010
1,2,3,4,6,7,8-HPCDD		524	0.673	1.06	1.000
OCDD	B	3960	0.0481	0.89	1.000
2,3,7,8-TCDF	B	4.55	0.133	0.83	1.002
1,2,3,7,8-PECDF	B J	1.25	0.0481	1.70	1.000
2,3,4,7,8-PECDF	B J	2.24	0.0481	1.52	1.000
1,2,3,4,7,8-HXCDF	B	5.80	0.0613	1.29	1.001
1,2,3,6,7,8-HXCDF	B J	2.74	0.0613	1.35	1.000
1,2,3,7,8,9-HXCDF	J	0.247	0.0613	1.15	1.000
2,3,4,6,7,8-HXCDF	B J	3.14	0.0613	1.22	1.001
1,2,3,4,6,7,8-HPCDF		142	0.199	1.06	1.000
1,2,3,4,7,8,9-HPCDF		7.14	0.199	1.07	1.000
OCDF		675	0.0481	0.88	1.002
TOTAL TETRA-DIOXINS		30.0	0.0481		
TOTAL PENTA-DIOXINS		43.2	0.0481		
TOTAL HEXA-DIOXINS		206	0.321		
TOTAL HEPTA-DIOXINS		1190	0.673		
TOTAL TETRA-FURANS	B	30.1	0.133		
TOTAL PENTA-FURANS	B	40.8	0.0481		
TOTAL HEXA-FURANS	B	153	0.0613		
TOTAL HEPTA-FURANS		583	0.199		

(1) Where applicable, custom lab flags have been used on this report; B = analyte found in sample and the associated blank; J = concentration less than LMCL.

(2) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

(3) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.

Signed: _____ Celine Vaillant _____

For Axy Internal Use Only [XSL Template: Form1A.xsl; Created: 16-Sep-2010 08:23:03; Application: XMLTransformer-1.10.26; Report Filename: 1613_DIOXINS_1613DB5_L15027-4_Form1A_DX0B_214AS8_SJ1190751.html; Workgroup: WG33891; Design ID: 699]

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested. Results are compliant with NELAP where specific accreditation is held.



Form 1A
PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
10654004
Sample Collection:
03-Sep-2008 14:14

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.: 4406
Matrix: SOLID
Sample Receipt Date: 16-Jul-2010
Extraction Date: 11-Sep-2010
Analysis Date: 13-Sep-2010 Time: 21:48:17
Extract Volume (uL): 20
Injection Volume (uL): 2.0
Dilution Factor: N/A
Concentration Units: pg/g (dry weight basis)

Project No. FIDALGO BAY, CUSTOM
PLYWOOD DX STUDY
Lab Sample I.D.: L15027-4 R (A)
Sample Size: 10.4 g (dry)
Initial Calibration Date: 24-Aug-2010
Instrument ID: HR GC/MS
GC Column ID: DB225
Sample Data Filename: DB03_134C S: 6
Blank Data Filename: DB03_134C S: 4
Cal. Ver. Data Filename: DB03_134C S: 2
% Moisture: 56.2

COMPOUND	LAB FLAG ¹	CONCENTRATION FOUND	DETECTION LIMIT	ION ABUND. RATIO ²	RRT ²
2,3,7,8-TCDF	B	1.86	0.0573	0.88	1.002

(1) Where applicable, custom lab flags have been used on this report; B = analyte found in sample and the associated blank.
(2) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.
Signed: _____ Celine Vaillant _____

For AxyS Internal Use Only [XSL Template: Form1A.xsl; Created: 16-Sep-2010 08:22:47; Application: XMLTransformer-1.10.26;
Report Filename: 1613_DIOXINS_1613DB225_L15027-4_Form1A_DB03_134CS6_SJ1190865.html; Workgroup: WG33891; Design ID: 699]

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Form 1A
PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
10654004 (Duplicate)
Sample Collection:
03-Sep-2008 14:14

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.: 4406

Project No.

FIDALGO BAY, CUSTOM
PLYWOOD DX STUDY

Lab Sample I.D.:

WG33891-103 (DUP L15027-4)

Matrix: SOLID

Sample Size: 10.4 g (dry)

Sample Receipt Date: 16-Jul-2010

Initial Calibration Date: 26-Aug-2010

Extraction Date: 11-Sep-2010

Instrument ID: HR GC/MS

Analysis Date: 14-Sep-2010 Time: 03:40:05

GC Column ID: DB5

Extract Volume (uL): 20

Sample Data Filename: DX0B_214A S: 9

Injection Volume (uL): 1.0

Blank Data Filename: DX0B_214A S: 5

Dilution Factor: N/A

Cal. Ver. Data Filename: DX0B_214A S: 1

Concentration Units: pg/g (dry weight basis)

COMPOUND	LAB FLAG ¹	CONCENTRATION FOUND	DETECTION LIMIT	ION ABUND. RATIO ²	RRT ²
2,3,7,8-TCDD	B J	0.514	0.0480	0.75	1.001
1,2,3,7,8-PECDD ³	J	2.25	0.0480	0.64	1.001
1,2,3,4,7,8-HXCDD	J	3.21	0.528	1.20	1.000
1,2,3,6,7,8-HXCDD		16.5	0.528	1.39	1.000
1,2,3,7,8,9-HXCDD		8.74	0.528	1.27	1.010
1,2,3,4,6,7,8-HPCDD		370	0.498	1.06	1.000
OCDD	B	2860	0.0812	0.89	1.000
2,3,7,8-TCDF	B	3.81	0.0630	0.75	1.002
1,2,3,7,8-PECDF	B J	1.05	0.0566	1.37	1.000
2,3,4,7,8-PECDF	B J	2.03	0.0566	1.56	1.000
1,2,3,4,7,8-HXCDF	B J	4.44	0.0722	1.26	1.000
1,2,3,6,7,8-HXCDF	B J	2.09	0.0722	1.10	1.000
1,2,3,7,8,9-HXCDF	J	0.158	0.0722	1.21	1.000
2,3,4,6,7,8-HXCDF	B J	2.42	0.0722	1.22	1.000
1,2,3,4,6,7,8-HPCDF		103	0.245	1.05	1.000
1,2,3,4,7,8,9-HPCDF		4.91	0.245	1.11	1.000
OCDF		452	0.0480	0.88	1.002
TOTAL TETRA-DIOXINS		31.5	0.0480		
TOTAL PENTA-DIOXINS		41.9	0.0480		
TOTAL HEXA-DIOXINS		166	0.528		
TOTAL HEPTA-DIOXINS		893	0.498		
TOTAL TETRA-FURANS	B	24.4	0.0630		
TOTAL PENTA-FURANS	B	34.3	0.0566		
TOTAL HEXA-FURANS	B	116	0.0722		
TOTAL HEPTA-FURANS		399	0.245		

(1) Where applicable, custom lab flags have been used on this report; B = analyte found in sample and the associated blank; J = concentration less than LMCL.

(2) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

(3) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.

Signed: _____ Celine Vaillant _____



Form 1A
PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
10654004 (Duplicate)
Sample Collection:
03-Sep-2008 14:14

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.: 4406
Matrix: SOLID
Sample Receipt Date: 16-Jul-2010
Extraction Date: 11-Sep-2010
Analysis Date: 13-Sep-2010 Time: 22:24:51
Extract Volume (uL): 20
Injection Volume (uL): 2.0
Dilution Factor: N/A
Concentration Units: pg/g (dry weight basis)

Project No. FIDALGO BAY, CUSTOM
PLYWOOD DX STUDY
Lab Sample I.D.: WG33891-103 (DUP L15027-4)
Sample Size: 10.4 g (dry)
Initial Calibration Date: 24-Aug-2010
Instrument ID: HR GC/MS
GC Column ID: DB225
Sample Data Filename: DB03_134C S: 7
Blank Data Filename: DB03_134C S: 4
Cal. Ver. Data Filename: DB03_134C S: 2

COMPOUND	LAB FLAG ¹	CONCENTRATION FOUND	DETECTION LIMIT	ION ABUND. RATIO ²	RRT ²
2,3,7,8-TCDF	B	1.46	0.0898	0.71	1.001

(1) Where applicable, custom lab flags have been used on this report; B = analyte found in sample and the associated blank.
(2) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.
Signed: _____ Celine Vaillant _____

For AxyS Internal Use Only [XSL Template: Form1A.xsl; Created: 16-Sep-2010 08:22:47; Application: XMLTransformer-1.10.26;
Report Filename: 1613_DIOXINS_1613DB225_WG33891-103_Form1A_DB03_134CS7_SJ1190866.html; Workgroup: WG33891; Design ID: 699]

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested. Results are compliant with NELAP where specific accreditation is held.



PCDD/PCDF ANALYSIS REPORT
RELATIVE PERCENT DIFFERENCE

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.

FIDALGO BAY, CUSTOM
PLYWOOD DX STUDY

Contract No.: 4406

Client ID: 10654004

Concentration Units: pg/g (dry weight basis)

COMPOUND	L15027-4 (A)		WG33891-103		MEAN	RELATIVE PERCENT DIFFERENCE
	LAB FLAG ¹	CONC. FOUND	LAB FLAG ¹	CONC. FOUND		
2,3,7,8-TCDD	J	0.662	J	0.514	0.588	25.2
1,2,3,7,8-PECDD	J	2.92	J	2.25	2.59	26.0
1,2,3,4,7,8-HXCDD	J	3.90	J	3.21	3.55	19.5
1,2,3,6,7,8-HXCDD		22.7		16.5	19.6	31.3
1,2,3,7,8,9-HXCDD		11.9		8.74	10.3	30.5
1,2,3,4,6,7,8-HPCDD		524		370	447	34.6
OCDD		3960		2860	3410	32.4
2,3,7,8-TCDF		1.86		1.46	1.66	23.8
1,2,3,7,8-PECDF	J	1.25	J	1.05	1.15	17.1
2,3,4,7,8-PECDF	J	2.24	J	2.03	2.14	9.68
1,2,3,4,7,8-HXCDF		5.80	J	4.44	5.12	26.5
1,2,3,6,7,8-HXCDF	J	2.74	J	2.09	2.41	26.9
1,2,3,7,8,9-HXCDF	J	0.247	J	0.158	0.203	44.0
2,3,4,6,7,8-HXCDF	J	3.14	J	2.42	2.78	26.0
1,2,3,4,6,7,8-HPCDF		142		103	122	32.2
1,2,3,4,7,8,9-HPCDF		7.14		4.91	6.03	37.0
OCDF		675		452	563	39.6

(1) Where applicable, custom lab flags have been used on this report; J = concentration less than LMCL.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.

Signed: _____ Celine Vaillant _____

For Axys Internal Use Only [XSL Template: RPD.xsl; Created: 16-Sep-2010 08:23:39; Application: XMLTransformer-1.10.26; Report Filename: RPD_DIOXINS_1613-RPD_WG33891-103_L15027-4_.html; Workgroup: WG33891; Design ID: 699]

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested. Results are compliant with NELAP where specific accreditation is held.



Form 1A
PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
Lab Blank
Sample Collection:
N/A

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.: 4406

Project No.

N/A

Lab Sample I.D.:

WG33891-101

Matrix: SOLID

Sample Size: 10.0 g

Sample Receipt Date: N/A

Initial Calibration Date: 26-Aug-2010

Extraction Date: 11-Sep-2010

Instrument ID: HR GC/MS

Analysis Date: 14-Sep-2010 Time: 00:00:37

GC Column ID: DB5

Extract Volume (uL): 20

Sample Data Filename: DX0B_214A S: 5

Injection Volume (uL): 1.0

Blank Data Filename: DX0B_214A S: 5

Dilution Factor: N/A

Cal. Ver. Data Filename: DX0B_214A S: 1

Concentration Units: pg/g

COMPOUND	LAB FLAG ¹	CONCENTRATION FOUND	DETECTION LIMIT	ION ABUND. RATIO ²	RRT ²
2,3,7,8-TCDD	K J	0.056	0.0500	0.33	1.002
1,2,3,7,8-PECDD ³	U		0.0500		
1,2,3,4,7,8-HXCDD	U		0.0500		
1,2,3,6,7,8-HXCDD	U		0.0500		
1,2,3,7,8,9-HXCDD	U		0.0500		
1,2,3,4,6,7,8-HPCDD	U		0.0500		
OCDD	J	0.185	0.0500	0.98	1.000
2,3,7,8-TCDF	J	0.533	0.0500	0.82	1.002
1,2,3,7,8-PECDF	J	0.138	0.0500	1.75	1.000
2,3,4,7,8-PECDF	J	0.306	0.0500	1.55	1.000
1,2,3,4,7,8-HXCDF	K J	0.088	0.0500	1.38	1.000
1,2,3,6,7,8-HXCDF	J	0.063	0.0500	1.08	1.000
1,2,3,7,8,9-HXCDF	U		0.0500		
2,3,4,6,7,8-HXCDF	J	0.059	0.0500	1.13	1.000
1,2,3,4,6,7,8-HPCDF	U		0.0500		
1,2,3,4,7,8,9-HPCDF	U		0.0500		
OCDF	U		0.0696		
TOTAL TETRA-DIOXINS	U		0.0500		
TOTAL PENTA-DIOXINS	U		0.0500		
TOTAL HEXA-DIOXINS	U		0.0500		
TOTAL HEPTA-DIOXINS	U		0.0500		
TOTAL TETRA-FURANS		1.61	0.0500		
TOTAL PENTA-FURANS		0.759	0.0500		
TOTAL HEXA-FURANS		0.210	0.0500		
TOTAL HEPTA-FURANS	U		0.0500		

(1) Where applicable, custom lab flags have been used on this report; U = not detected; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; J = concentration less than LMCL.

(2) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

(3) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.

Signed: _____Celine Vaillant_____

For Axy Internal Use Only [XSL Template: Form1A.xsl; Created: 16-Sep-2010 08:23:03; Application: XMLTransformer-1.10.26; Report Filename: 1613_DIOXINS_1613DB5_WG33891-101_Form1A_DX0B_214AS5_SJ1190747.html; Workgroup: WG33891; Design ID: 699]

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested. Results are compliant with NELAP where specific accreditation is held.



Form 1A
PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
Lab Blank
Sample Collection:
N/A

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.: 4406

Project No.

N/A

Lab Sample I.D.:

WG33891-101

Matrix: SOLID

Sample Size:

10.0 g

Sample Receipt Date: N/A

Initial Calibration Date:

24-Aug-2010

Extraction Date: 11-Sep-2010

Instrument ID:

HR GC/MS

Analysis Date: 13-Sep-2010 Time: 20:24:25

GC Column ID:

DB225

Extract Volume (uL): 20

Sample Data Filename:

DB03_134C S: 4

Injection Volume (uL): 2.0

Blank Data Filename:

DB03_134C S: 4

Dilution Factor: N/A

Cal. Ver. Data Filename:

DB03_134C S: 2

Concentration Units: pg/g

COMPOUND	LAB FLAG ¹	CONCENTRATION FOUND	DETECTION LIMIT	ION ABUND. RATIO ²	RRT ²
2,3,7,8-TCDF	J	0.307	0.0500	0.68	1.000

(1) Where applicable, custom lab flags have been used on this report; J = concentration less than LMCL.

(2) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.

Signed: _____Celine Vaillant_____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 16-Sep-2010 08:22:47; Application: XMLTransformer-1.10.26;
Report Filename: 1613_DIOXINS_1613DB225_WG33891-101_Form1A_DB03_134CS4_SJ1190862.html; Workgroup: WG33891; Design ID: 699]

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested. Results are compliant with NELAP where specific accreditation is held.



Form 8A
PCDD/PCDF ONGOING PRECISION AND RECOVERY (OPR)

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
 V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.: 4406 **OPR Data Filename:** DX0B_214A S: 2

Matrix: SOLID **Lab Sample I.D.:** WG33891-102

Extraction Date: 11-Sep-2010 **Analysis Date:** 13-Sep-2010 **Time:** 21:15:59

ALL CONCENTRATIONS REPORTED ON THIS FORM ARE CONCENTRATIONS IN EXTRACT, BASED ON A 20 µL EXTRACT VOLUME.

COMPOUND	LAB FLAG ¹	ION ABUND. RATIO ²	SPIKE CONC. (ng/mL)	CONC. FOUND (ng/mL)	OPR CONC. LIMITS ³ (ng/mL)	% RECOVERY
2,3,7,8-TCDD		0.80	10.0	10.1	6.70 - 15.8	101
1,2,3,7,8-PECDD ⁴		0.61	52.0	51.1	36.4 - 73.8	98.2
1,2,3,4,7,8-HXCDD		1.24	56.5	54.8	39.6 - 92.7	97.0
1,2,3,6,7,8-HXCDD		1.25	55.5	56.1	42.2 - 74.4	101
1,2,3,7,8,9-HXCDD		1.26	54.0	55.4	34.6 - 87.5	103
1,2,3,4,6,7,8-HPCDD		1.07	47.5	48.7	33.3 - 66.5	102
OCDD		0.89	100	95.1	78.0 - 144	95.1
2,3,7,8-TCDF		0.80	10.7	11.1	8.03 - 16.9	104
1,2,3,7,8-PECDF		1.55	46.0	47.1	36.8 - 61.6	102
2,3,4,7,8-PECDF		1.56	47.0	49.2	32.0 - 75.2	105
1,2,3,4,7,8-HXCDF		1.26	50.0	49.8	36.0 - 67.0	99.5
1,2,3,6,7,8-HXCDF		1.27	47.5	44.8	39.9 - 61.8	94.4
1,2,3,7,8,9-HXCDF		1.24	52.5	51.9	41.0 - 68.3	98.9
2,3,4,6,7,8-HXCDF		1.27	53.0	52.0	37.1 - 82.7	98.1
1,2,3,4,6,7,8-HPCDF		1.05	50.0	51.0	41.0 - 61.0	102
1,2,3,4,7,8,9-HPCDF		1.06	50.0	48.7	39.0 - 69.0	97.5
OCDF		0.89	104	102	65.5 - 177	98.5

- (1) Where applicable, custom lab flags have been used on this report.
- (2) Contract-required Ion Abundance Ratios are specified in Table 9, Method 1613.
- (3) Contract-required concentration range as determined from the percent of the test concentration in Table 6, Method 1613, under OPR.
- (4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.

Signed: _____Celine Vaillant_____

For Axys Internal Use Only [XSL Template: Form8A.xsl; Created: 16-Sep-2010 08:23:03; Application: XMLTransformer-1.10.26; Report Filename: 1613_DIOXINS_1613DB5_WG33891-102_Form8A_SJ1190743.html; Workgroup: WG33891; Design ID: 699]

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested. Results are compliant with NELAP where specific accreditation is held.



PCDD/PCDF CERTIFIED REFERENCE MATERIAL (CRM) REPORT FOR NIST SRM 1944

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
 V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4406	Lab Sample I.D.:	WG33891-104
Matrix:	SOLID	Sample Size:	1.24 g (dry)
Extraction Date:	11-Sep-2010	Initial Calibration Date:	26-Aug-2010
Analysis Date:	14-Sep-2010 Time: 04:34:58	Instrument ID:	HR GC/MS
Extract Volume (uL):	20	GC Column ID:	DB5
Injection Volume (uL):	1.0	CRM Data Filename:	DX0B_214A S: 10
Dilution Factor:	N/A	Blank Data Filename:	DX0B_214A S: 5
Concentration Units:	pg/g (dry weight basis)	Cal. Ver. Data Filename:	DX0B_214A S: 1

COMPOUND	LAB FLAG ¹	DETERMINED	CERTIFIED / REFERENCE
2,3,7,8-TCDD		190	133 +/- 9
1,2,3,7,8-PECDD ²	J	23.5	19 +/- 2
1,2,3,4,7,8-HXCDD	J	35.1	26 +/- 3
1,2,3,6,7,8-HXCDD		80.7	56 +/- 6
1,2,3,7,8,9-HXCDD		87.5	53 +/- 7
1,2,3,4,6,7,8-HPCDD		900	800 +/- 70
OCDD		5460	5800 +/- 700
2,3,7,8-TCDF	X		
1,2,3,7,8-PECDF		47.0	45 +/- 7
2,3,4,7,8-PECDF		52.8	45 +/- 4
1,2,3,4,7,8-HXCDF		212	220 +/- 30
1,2,3,6,7,8-HXCDF		96.7	90 +/- 10
1,2,3,7,8,9-HXCDF	J	3.43	19 +/- 18
2,3,4,6,7,8-HXCDF		57.8	54 +/- 6
1,2,3,4,6,7,8-HPCDF		964	1000 +/- 100
1,2,3,4,7,8,9-HPCDF		43.2	40 +/- 6
OCDF		1020	1000 +/- 100

(1) Where applicable, custom lab flags have been used on this report; J = concentration less than LMCL; X = result reported separately.
 (2) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.

Signed: _____ Celine Vaillant _____

For Axys Internal Use Only [XSL Template: Form8G.xsl; Created: 16-Sep-2010 08:23:03; Application: XMLTransformer-1.10.26;
 Report Filename: 1613_DIOXINS_1613DB5_WG33891-104_Form8G_SJ1190753.html; Workgroup: WG33891; Design ID: 699]

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested. Results are compliant with NELAP where specific accreditation is held.



PCDD/PCDF CERTIFIED REFERENCE MATERIAL (CRM) REPORT FOR NIST SRM 1944

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
 V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4406	Lab Sample I.D.:	WG33891-104
Matrix:	SOLID	Sample Size:	1.24 g (dry)
Extraction Date:	11-Sep-2010	Initial Calibration Date:	24-Aug-2010
Analysis Date:	14-Sep-2010 Time: 10:49:56	Instrument ID:	HR GC/MS
Extract Volume (uL):	20	GC Column ID:	DB225
Injection Volume (uL):	2.0	CRM Data Filename:	DB03_135 S: 5
Dilution Factor:	N/A	Blank Data Filename:	DB03_134C S: 4
Concentration Units:	pg/g (dry weight basis)	Cal. Ver. Data Filename:	DB03_135 S: 2

COMPOUND	LAB FLAG ¹	DETERMINED	CERTIFIED / REFERENCE
2,3,7,8-TCDF		29.7	39 +/- 15

(1) Where applicable, custom lab flags have been used on this report.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.

Signed: _____ Celine Vaillant _____

For Axys Internal Use Only [XSL Template: Form8G.xsl; Created: 16-Sep-2010 08:22:47; Application: XMLTransformer-1.10.26; Report Filename: 1613_DIOXINS_1613DB225_WG33891-104_Form8G_SJ1190889.html; Workgroup: WG33891; Design ID: 699]

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested. Results are compliant with NELAP where specific accreditation is held.



BATCH SUMMARY

Batch ID: WG33443	Date: 03-Sep-2010
Analysis Type: Dioxin/Furan	Matrix Type: Tissue
BATCH MAKEUP	
Contract: 4406 Samples: L14872-1 SDS-CT-01A L14872-2 SDS-CT-01B L14872-3 SDS-CT-02 L14872-4 SDS-CT-03 L14872-5 SDS-CT-04 L14872-6 SDS-CT-05	Blank: WG33443-101 Reference or Spike: WG33443-102 Duplicate: WG33443-103
Comments: 1. Data are not blank corrected.	

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February 1993

FQA-006 Rev. 2. 18-Jul-1994



Form 1A
PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
SDS-CT-01A
Sample Collection:
14-Jun-2010 10:47

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.: 4406

Project No.

FIDALGO BAY, CUSTOM
PLYWOOD DX STUDY

Lab Sample I.D.:

L14872-1 L

Matrix: TISSUE

Sample Size: 10.3 g (wet)

Sample Receipt Date: 17-Jun-2010

Initial Calibration Date: 30-Jul-2010

Extraction Date: 23-Jul-2010

Instrument ID: HR GC/MS

Analysis Date: 27-Aug-2010 Time: 04:44:08

GC Column ID: DB5

Extract Volume (uL): 20

Sample Data Filename: DX0M_114 S: 11

Injection Volume (uL): 1.0

Blank Data Filename: DX0M_114 S: 6

Dilution Factor: N/A

Cal. Ver. Data Filename: DX0M_114 S: 1

Concentration Units: pg/g (wet weight basis)

% Moisture: 84.3
% Lipid: 1.00

COMPOUND	LAB FLAG ¹	CONCENTRATION FOUND	DETECTION LIMIT	ION ABUND. RATIO ²	RRT ²
2,3,7,8-TCDD	K J	0.109	0.0582	0.51	1.001
1,2,3,7,8-PECDD ³	K J	0.212	0.0572	0.42	1.002
1,2,3,4,7,8-HXCDD	J	0.246	0.0486	1.25	1.001
1,2,3,6,7,8-HXCDD	J	1.23	0.0486	1.34	1.000
1,2,3,7,8,9-HXCDD	J	0.695	0.0486	1.17	1.000
1,2,3,4,6,7,8-HPCDD	B	26.8	0.138	0.98	1.000
OCDD	B	221	0.116	0.86	1.000
2,3,7,8-TCDF	B J	0.593	0.0486	0.81	1.002
1,2,3,7,8-PECDF	K B J	0.088	0.0683	1.23	1.001
2,3,4,7,8-PECDF	K B J	0.213	0.0683	1.93	1.001
1,2,3,4,7,8-HXCDF	J	0.312	0.0755	1.15	1.001
1,2,3,6,7,8-HXCDF	K J	0.168	0.0755	1.03	1.001
1,2,3,7,8,9-HXCDF	J	0.105	0.0755	1.15	1.004
2,3,4,6,7,8-HXCDF	J	0.223	0.0755	1.28	1.001
1,2,3,4,6,7,8-HPCDF		5.75	0.0736	0.90	1.000
1,2,3,4,7,8,9-HPCDF	B J	0.305	0.0736	1.17	1.001
OCDF		17.9	0.0486	0.89	1.002
TOTAL TETRA-DIOXINS		1.16	0.0582		
TOTAL PENTA-DIOXINS	J	1.40	0.0572		
TOTAL HEXA-DIOXINS		12.1	0.0486		
TOTAL HEPTA-DIOXINS		72.5	0.138		
TOTAL TETRA-FURANS	B	1.98	0.0486		
TOTAL PENTA-FURANS		8.84	0.0683		
TOTAL HEXA-FURANS		7.24	0.0755		
TOTAL HEPTA-FURANS		20.9	0.0736		

(1) Where applicable, custom lab flags have been used on this report; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; B = analyte found in sample and the associated blank; J = concentration less than LMCL.
 (2) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.
 (3) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.

Signed: _____ Bryan Alonzo _____



Form 1A
PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
SDS-CT-01A
Sample Collection:
14-Jun-2010 10:47

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.: 4406

Matrix: TISSUE

Sample Receipt Date: 17-Jun-2010

Extraction Date: 23-Jul-2010

Analysis Date: 04-Aug-2010 Time: 11:59:57

Extract Volume (uL): 20

Injection Volume (uL): 2.0

Dilution Factor: N/A

Concentration Units: pg/g (wet weight basis)

Project No. FIDALGO BAY, CUSTOM
PLYWOOD DX STUDY
Lab Sample I.D.: L14872-1

Sample Size: 10.3 g (wet)

Initial Calibration Date: 13-Jul-2010

Instrument ID: HR GC/MS

GC Column ID: DB225

Sample Data Filename: DB03_101 S: 8

Blank Data Filename: DX0M_114 S: 6

Cal. Ver. Data Filename: DB03_101 S: 2

% Moisture: 84.3
% Lipid: 1.00

COMPOUND	LAB FLAG ¹	CONCENTRATION FOUND	DETECTION LIMIT	ION ABUND. RATIO ²	RRT ²
2,3,7,8-TCDF	K J	0.202	0.103	0.39	1.002

(1) Where applicable, custom lab flags have been used on this report; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; J = concentration less than LMCL.
(2) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.

Signed: _____ Bryan Alonzo _____

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Report Filename: 1613_DIOXINS_1613DB225_L14872-1_Form1A_DB03_101S8_SJ1186100.html; Workgroup: WG33443; Design ID: 883]

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested. Results are compliant with NELAP where specific accreditation is held.



Form 1A
PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
SDS-CT-01B
Sample Collection:
14-Jun-2010 11:15

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.: 4406
Matrix: TISSUE
Sample Receipt Date: 17-Jun-2010
Extraction Date: 23-Jul-2010
Analysis Date: 27-Aug-2010 Time: 08:33:25
Extract Volume (uL): 100
Injection Volume (uL): 1.0
Dilution Factor: 5
Concentration Units: pg/g (wet weight basis)

Project No. FIDALGO BAY, CUSTOM
Lab Sample I.D.: PLYWOOD DX STUDY
L14872-2 LW
Sample Size: 10.2 g (wet)
Initial Calibration Date: 30-Jul-2010
Instrument ID: HR GC/MS
GC Column ID: DB5
Sample Data Filename: DX0M_114 S: 15
Blank Data Filename: DX0M_114 S: 6
Cal. Ver. Data Filename: DX0M_114 S: 12
% Moisture: 83.8
% Lipid: 1.30

COMPOUND	LAB FLAG ¹	CONCENTRATION FOUND	DETECTION LIMIT	ION ABUND. RATIO ²	RRT ²
2,3,7,8-TCDD	U D		0.0925		
1,2,3,7,8-PECDD ³	K D J	0.150	0.107	0.84	1.001
1,2,3,4,7,8-HXCDD	K D J	0.898	0.217	0.61	1.004
1,2,3,6,7,8-HXCDD	U D		0.217		
1,2,3,7,8,9-HXCDD	U D		0.217		
1,2,3,4,6,7,8-HPCDD	K B D J	5.00	0.150	0.79	1.001
OCDD	B D J	27.4	0.354	0.99	1.000
2,3,7,8-TCDF	B D J	0.320	0.146	0.82	1.001
1,2,3,7,8-PECDF	U D		0.0968		
2,3,4,7,8-PECDF	K B D J	0.131	0.0968	0.96	1.002
1,2,3,4,7,8-HXCDF	K D J	0.155	0.138	2.22	1.000
1,2,3,6,7,8-HXCDF	U D		0.138		
1,2,3,7,8,9-HXCDF	U D		0.138		
2,3,4,6,7,8-HXCDF	U D		0.138		
1,2,3,4,6,7,8-HPCDF	K D J	0.632	0.173	2.36	1.000
1,2,3,4,7,8,9-HPCDF	U D		0.173		
OCDF	K D J	2.11	0.133	1.30	1.002
TOTAL TETRA-DIOXINS	U D		0.0925		
TOTAL PENTA-DIOXINS	U D		0.107		
TOTAL HEXA-DIOXINS	D	1.67	0.217		
TOTAL HEPTA-DIOXINS	D	7.96	0.150		
TOTAL TETRA-FURANS	B D	0.320	0.146		
TOTAL PENTA-FURANS	U D		0.0968		
TOTAL HEXA-FURANS	U D		0.138		
TOTAL HEPTA-FURANS	U D		0.173		

(1) Where applicable, custom lab flags have been used on this report; U = not detected; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; B = analyte found in sample and the associated blank; D = dilution data; J = concentration less than LMCL.
 (2) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.
 (3) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.

Signed: _____ Bryan Alonzo _____



Form 1A
PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
SDS-CT-01B
Sample Collection:
14-Jun-2010 11:15

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.: 4406
Matrix: TISSUE
Sample Receipt Date: 17-Jun-2010
Extraction Date: 23-Jul-2010
Analysis Date: 04-Aug-2010 **Time:** 12:36:30
Extract Volume (uL): 20
Injection Volume (uL): 2.0
Dilution Factor: N/A
Concentration Units: pg/g (wet weight basis)

Project No. FIDALGO BAY, CUSTOM
Lab Sample I.D.: PLYWOOD DX STUDY
L14872-2
Sample Size: 10.2 g (wet)
Initial Calibration Date: 13-Jul-2010
Instrument ID: HR GC/MS
GC Column ID: DB225
Sample Data Filename: DB03_101 S: 9
Blank Data Filename: DX0M_114 S: 6
Cal. Ver. Data Filename: DB03_101 S: 2
% Moisture: 83.8
% Lipid: 1.30

COMPOUND	LAB FLAG ¹	CONCENTRATION FOUND	DETECTION LIMIT	ION ABUND. RATIO ²	RRT ²
2,3,7,8-TCDF	U		0.536		

(1) Where applicable, custom lab flags have been used on this report; U = not detected.
(2) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.

Signed: _____ Bryan Alonzo _____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 03-Sep-2010 14:17:30; Application: XMLTransformer-1.10.25;
Report Filename: 1613_DIOXINS_1613DB225_L14872-2_Form1A_DB03_101S9_SJ1186101.html; Workgroup: WG33443; Design ID: 883]

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested. Results are compliant with NELAP where specific accreditation is held.



Form 1A
PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
SDS-CT-02
Sample Collection:
14-Jun-2010 11:47

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.

FIDALGO BAY, CUSTOM
PLYWOOD DX STUDY

Contract No.: 4406

Lab Sample I.D.:

L14872-3 L

Matrix: TISSUE

Sample Size: 10.3 g (wet)

Sample Receipt Date: 17-Jun-2010

Initial Calibration Date: 30-Jul-2010

Extraction Date: 23-Jul-2010

Instrument ID: HR GC/MS

Analysis Date: 27-Aug-2010 Time: 11:18:26

GC Column ID: DB5

Extract Volume (uL): 20

Sample Data Filename: DX0M_114 S: 18

Injection Volume (uL): 1.0

Blank Data Filename: DX0M_114 S: 6

Dilution Factor: N/A

Cal. Ver. Data Filename: DX0M_114 S: 12

Concentration Units: pg/g (wet weight basis)

% Moisture: 84.3
% Lipid: 1.05

COMPOUND	LAB FLAG ¹	CONCENTRATION FOUND	DETECTION LIMIT	ION ABUND. RATIO ²	RRT ²
2,3,7,8-TCDD	K J	0.054	0.0488	0.22	1.000
1,2,3,7,8-PECDD ³	U		0.0488		
1,2,3,4,7,8-HXCDD	U		0.0488		
1,2,3,6,7,8-HXCDD	J	0.155	0.0488	1.12	1.000
1,2,3,7,8,9-HXCDD	K J	0.095	0.0488	0.59	1.000
1,2,3,4,6,7,8-HPCDD	B J	1.69	0.0726	1.01	1.000
OCDD	B J	9.84	0.0652	0.89	1.000
2,3,7,8-TCDF	B J	0.255	0.0488	0.82	1.002
1,2,3,7,8-PECDF	U		0.0488		
2,3,4,7,8-PECDF	K B J	0.079	0.0488	2.27	1.000
1,2,3,4,7,8-HXCDF	K J	0.058	0.0488	1.71	1.001
1,2,3,6,7,8-HXCDF	U		0.0488		
1,2,3,7,8,9-HXCDF	U		0.0488		
2,3,4,6,7,8-HXCDF	K J	0.056	0.0488	2.04	1.001
1,2,3,4,6,7,8-HPCDF	K J	0.639	0.0488	0.79	1.000
1,2,3,4,7,8,9-HPCDF	U		0.0488		
OCDF	J	1.56	0.0488	0.91	1.002
TOTAL TETRA-DIOXINS		0.075	0.0488		
TOTAL PENTA-DIOXINS	U		0.0488		
TOTAL HEXA-DIOXINS		1.06	0.0488		
TOTAL HEPTA-DIOXINS		4.09	0.0726		
TOTAL TETRA-FURANS	B	0.457	0.0488		
TOTAL PENTA-FURANS	U		0.0488		
TOTAL HEXA-FURANS		0.304	0.0488		
TOTAL HEPTA-FURANS		1.34	0.0488		

(1) Where applicable, custom lab flags have been used on this report; U = not detected; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; B = analyte found in sample and the associated blank; J = concentration less than LMCL.

(2) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

(3) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.

Signed: _____ Bryan Alonzo _____



Form 1A
PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
SDS-CT-02
Sample Collection:
14-Jun-2010 11:47

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.: 4406

Matrix: TISSUE

Sample Receipt Date: 17-Jun-2010

Extraction Date: 23-Jul-2010

Analysis Date: 04-Aug-2010 Time: 13:13:05

Extract Volume (uL): 20

Injection Volume (uL): 2.0

Dilution Factor: N/A

Concentration Units: pg/g (wet weight basis)

Project No. FIDALGO BAY, CUSTOM
PLYWOOD DX STUDY
Lab Sample I.D.: L14872-3

Sample Size: 10.3 g (wet)

Initial Calibration Date: 13-Jul-2010

Instrument ID: HR GC/MS

GC Column ID: DB225

Sample Data Filename: DB03_101 S: 10

Blank Data Filename: DX0M_114 S: 6

Cal. Ver. Data Filename: DB03_101 S: 2

% Moisture: 84.3
% Lipid: 1.05

COMPOUND	LAB FLAG ¹	CONCENTRATION FOUND	DETECTION LIMIT	ION ABUND. RATIO ²	RRT ²
2,3,7,8-TCDF	U		0.101		

(1) Where applicable, custom lab flags have been used on this report; U = not detected.
(2) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.

Signed: _____ Bryan Alonzo _____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 03-Sep-2010 14:17:30; Application: XMLTransformer-1.10.25; Report Filename: 1613_DIOXINS_1613DB225_L14872-3_Form1A_DB03_101S10_SJ1186102.html; Workgroup: WG33443; Design ID: 883]

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested. Results are compliant with NELAP where specific accreditation is held.



Form 1A
PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
SDS-CT-03
Sample Collection:
14-Jun-2010 12:30

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.: 4406

Project No.

FIDALGO BAY, CUSTOM
PLYWOOD DX STUDY
L14872-4 L (A)

Matrix: TISSUE

Lab Sample I.D.: L14872-4 L (A)

Sample Size: 10.3 g (wet)

Sample Receipt Date: 17-Jun-2010

Initial Calibration Date: 30-Jul-2010

Extraction Date: 23-Jul-2010

Instrument ID: HR GC/MS

Analysis Date: 27-Aug-2010 Time: 09:28:22

GC Column ID: DB5

Extract Volume (uL): 20

Sample Data Filename: DX0M_114 S: 16

Injection Volume (uL): 1.0

Blank Data Filename: DX0M_114 S: 6

Dilution Factor: N/A

Cal. Ver. Data Filename: DX0M_114 S: 12

Concentration Units: pg/g (wet weight basis)

% Moisture: 84.3
% Lipid: 1.11

COMPOUND	LAB FLAG ¹	CONCENTRATION FOUND	DETECTION LIMIT	ION ABUND. RATIO ²	RRT ²
2,3,7,8-TCDD	U		0.0486		
1,2,3,7,8-PECDD ³	K J	0.066	0.0486	0.38	1.001
1,2,3,4,7,8-HXCDD	J	0.064	0.0588	1.35	1.000
1,2,3,6,7,8-HXCDD	J	0.196	0.0588	1.11	1.000
1,2,3,7,8,9-HXCDD	K J	0.153	0.0588	1.55	1.001
1,2,3,4,6,7,8-HPCDD	B J	1.83	0.0486	0.94	1.000
OCDD	B J	8.90	0.115	0.87	1.000
2,3,7,8-TCDF	B J	0.299	0.0486	0.71	1.001
1,2,3,7,8-PECDF	U		0.0486		
2,3,4,7,8-PECDF	B J	0.092	0.0486	1.57	1.001
1,2,3,4,7,8-HXCDF	U		0.0533		
1,2,3,6,7,8-HXCDF	U		0.0533		
1,2,3,7,8,9-HXCDF	U		0.0533		
2,3,4,6,7,8-HXCDF	U		0.0533		
1,2,3,4,6,7,8-HPCDF	K J	0.343	0.0486	0.68	1.000
1,2,3,4,7,8,9-HPCDF	K B J	0.051	0.0486	0.40	1.000
OCDF	J	1.31	0.0486	0.90	1.002
TOTAL TETRA-DIOXINS		0.152	0.0486		
TOTAL PENTA-DIOXINS		0.130	0.0486		
TOTAL HEXA-DIOXINS		0.841	0.0588		
TOTAL HEPTA-DIOXINS		4.67	0.0486		
TOTAL TETRA-FURANS	B	0.474	0.0486		
TOTAL PENTA-FURANS		0.092	0.0486		
TOTAL HEXA-FURANS		0.391	0.0533		
TOTAL HEPTA-FURANS	U		0.0486		

(1) Where applicable, custom lab flags have been used on this report; U = not detected; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; B = analyte found in sample and the associated blank; J = concentration less than LMCL.

(2) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

(3) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.

Signed: _____ Bryan Alonzo _____



Form 1A
PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
SDS-CT-03
Sample Collection:
14-Jun-2010 12:30

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.: 4406

Matrix: TISSUE

Sample Receipt Date: 17-Jun-2010

Extraction Date: 23-Jul-2010

Analysis Date: 04-Aug-2010 Time: 13:49:39

Extract Volume (uL): 20

Injection Volume (uL): 2.0

Dilution Factor: N/A

Concentration Units: pg/g (wet weight basis)

Project No. FIDALGO BAY, CUSTOM
PLYWOOD DX STUDY
Lab Sample I.D.: L14872-4 (A)

Sample Size: 10.3 g (wet)

Initial Calibration Date: 13-Jul-2010

Instrument ID: HR GC/MS

GC Column ID: DB225

Sample Data Filename: DB03_101 S: 11

Blank Data Filename: DX0M_114 S: 6

Cal. Ver. Data Filename: DB03_101 S: 2

% Moisture: 84.3
% Lipid: 1.11

COMPOUND	LAB FLAG ¹	CONCENTRATION FOUND	DETECTION LIMIT	ION ABUND. RATIO ²	RRT ²
2,3,7,8-TCDF	U		0.0951		

(1) Where applicable, custom lab flags have been used on this report; U = not detected.
(2) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.

Signed: _____ Bryan Alonzo _____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 03-Sep-2010 14:17:30; Application: XMLTransformer-1.10.25; Report Filename: 1613_DIOXINS_1613DB225_L14872-4_Form1A_DB03_101S11_SJ1186103.html; Workgroup: WG33443; Design ID: 883]

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Form 1A
PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
SDS-CT-04
Sample Collection:
14-Jun-2010 13:31

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.: 4406

Project No.

FIDALGO BAY, CUSTOM
PLYWOOD DX STUDY
L14872-5 L

Matrix: TISSUE

Lab Sample I.D.: L14872-5 L

Sample Size: 9.86 g (wet)

Sample Receipt Date: 17-Jun-2010

Initial Calibration Date: 30-Jul-2010

Extraction Date: 23-Jul-2010

Instrument ID: HR GC/MS

Analysis Date: 27-Aug-2010 Time: 12:13:28

GC Column ID: DB5

Extract Volume (uL): 20

Sample Data Filename: DX0M_114 S: 19

Injection Volume (uL): 1.0

Blank Data Filename: DX0M_114 S: 6

Dilution Factor: N/A

Cal. Ver. Data Filename: DX0M_114 S: 12

Concentration Units: pg/g (wet weight basis)

% Moisture: 83.9
% Lipid: 1.03

COMPOUND	LAB FLAG ¹	CONCENTRATION FOUND	DETECTION LIMIT	ION ABUND. RATIO ²	RRT ²
2,3,7,8-TCDD	J	0.053	0.0507	0.67	1.000
1,2,3,7,8-PECDD ³	U		0.0507		
1,2,3,4,7,8-HXCDD	U		0.0507		
1,2,3,6,7,8-HXCDD	J	0.113	0.0507	1.09	1.001
1,2,3,7,8,9-HXCDD	U		0.0507		
1,2,3,4,6,7,8-HPCDD	B J	1.00	0.0507	1.11	1.000
OCDD	B J	4.93	0.0507	0.90	1.000
2,3,7,8-TCDF	K B J	0.233	0.0507	0.65	1.001
1,2,3,7,8-PECDF	U		0.0507		
2,3,4,7,8-PECDF	K B J	0.057	0.0507	2.16	1.001
1,2,3,4,7,8-HXCDF	U		0.0507		
1,2,3,6,7,8-HXCDF	U		0.0507		
1,2,3,7,8,9-HXCDF	U		0.0507		
2,3,4,6,7,8-HXCDF	U		0.0507		
1,2,3,4,6,7,8-HPCDF	K J	0.398	0.0582	0.70	1.000
1,2,3,4,7,8,9-HPCDF	U		0.0582		
OCDF	J	0.537	0.0507	0.80	1.002
TOTAL TETRA-DIOXINS		0.053	0.0507		
TOTAL PENTA-DIOXINS		0.069	0.0507		
TOTAL HEXA-DIOXINS		1.15	0.0507		
TOTAL HEPTA-DIOXINS		2.73	0.0507		
TOTAL TETRA-FURANS	B	0.322	0.0507		
TOTAL PENTA-FURANS		0.148	0.0507		
TOTAL HEXA-FURANS		0.131	0.0507		
TOTAL HEPTA-FURANS	U		0.0582		

(1) Where applicable, custom lab flags have been used on this report; U = not detected; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; B = analyte found in sample and the associated blank; J = concentration less than LMCL.

(2) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

(3) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.

Signed: _____ Bryan Alonzo _____



Form 1A
PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
SDS-CT-04
Sample Collection:
14-Jun-2010 13:31

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.: 4406

Matrix: TISSUE

Sample Receipt Date: 17-Jun-2010

Extraction Date: 23-Jul-2010

Analysis Date: 04-Aug-2010 Time: 15:02:48

Extract Volume (uL): 20

Injection Volume (uL): 2.0

Dilution Factor: N/A

Concentration Units: pg/g (wet weight basis)

Project No. FIDALGO BAY, CUSTOM
PLYWOOD DX STUDY
Lab Sample I.D.: L14872-5

Sample Size: 9.86 g (wet)

Initial Calibration Date: 13-Jul-2010

Instrument ID: HR GC/MS

GC Column ID: DB225

Sample Data Filename: DB03_101 S: 13

Blank Data Filename: DX0M_114 S: 6

Cal. Ver. Data Filename: DB03_101 S: 2

% Moisture: 83.9
% Lipid: 1.03

COMPOUND	LAB FLAG ¹	CONCENTRATION FOUND	DETECTION LIMIT	ION ABUND. RATIO ²	RRT ²
2,3,7,8-TCDF	U		0.0610		

(1) Where applicable, custom lab flags have been used on this report; U = not detected.
(2) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.

Signed: _____ Bryan Alonzo _____

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Form 1A
PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
SDS-CT-05
Sample Collection:
14-Jun-2010 13:06

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.: 4406
Matrix: TISSUE
Sample Receipt Date: 17-Jun-2010
Extraction Date: 23-Jul-2010
Analysis Date: 27-Aug-2010 Time: 13:18:37
Extract Volume (uL): 20
Injection Volume (uL): 1.0
Dilution Factor: N/A
Concentration Units: pg/g (wet weight basis)

Project No. FIDALGO BAY, CUSTOM
PLYWOOD DX STUDY
Lab Sample I.D.: L14872-6 L
Sample Size: 9.99 g (wet)
Initial Calibration Date: 30-Jul-2010
Instrument ID: HR GC/MS
GC Column ID: DB5
Sample Data Filename: DX0M_114 S: 20
Blank Data Filename: DX0M_114 S: 6
Cal. Ver. Data Filename: DX0M_114 S: 12
% Moisture: 82.2
% Lipid: 3.17

COMPOUND	LAB FLAG ¹	CONCENTRATION FOUND	DETECTION LIMIT	ION ABUND. RATIO ²	RRT ²
2,3,7,8-TCDD	U		0.0501		
1,2,3,7,8-PECDD ³	U		0.0501		
1,2,3,4,7,8-HXCDD	U		0.0501		
1,2,3,6,7,8-HXCDD	K J	0.060	0.0501	0.94	1.000
1,2,3,7,8,9-HXCDD	U		0.0501		
1,2,3,4,6,7,8-HPCDD	B J	0.772	0.0501	1.13	1.000
OCDD	B J	5.15	0.0503	0.86	1.000
2,3,7,8-TCDF	K B J	0.215	0.0501	1.01	1.002
1,2,3,7,8-PECDF	U		0.0501		
2,3,4,7,8-PECDF	B J	0.106	0.0501	1.41	1.002
1,2,3,4,7,8-HXCDF	U		0.0501		
1,2,3,6,7,8-HXCDF	U		0.0501		
1,2,3,7,8,9-HXCDF	U		0.0501		
2,3,4,6,7,8-HXCDF	U		0.0501		
1,2,3,4,6,7,8-HPCDF	K J	0.210	0.0501	0.26	1.000
1,2,3,4,7,8,9-HPCDF	U		0.0501		
OCDF	J	0.599	0.0501	0.86	1.002
TOTAL TETRA-DIOXINS	U		0.0501		
TOTAL PENTA-DIOXINS	U		0.0501		
TOTAL HEXA-DIOXINS	U		0.0501		
TOTAL HEPTA-DIOXINS		2.25	0.0501		
TOTAL TETRA-FURANS	B	0.172	0.0501		
TOTAL PENTA-FURANS		0.194	0.0501		
TOTAL HEXA-FURANS	U		0.0501		
TOTAL HEPTA-FURANS		0.354	0.0501		

(1) Where applicable, custom lab flags have been used on this report; U = not detected; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; B = analyte found in sample and the associated blank; J = concentration less than LMCL.
 (2) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.
 (3) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.
 Signed: _____ Bryan Alonzo _____



Form 1A
PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
SDS-CT-05
Sample Collection:
14-Jun-2010 13:06

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.: 4406

Matrix: TISSUE

Sample Receipt Date: 17-Jun-2010

Extraction Date: 23-Jul-2010

Analysis Date: 04-Aug-2010 Time: 15:39:21

Extract Volume (uL): 20

Injection Volume (uL): 2.0

Dilution Factor: N/A

Concentration Units: pg/g (wet weight basis)

Project No. FIDALGO BAY, CUSTOM
PLYWOOD DX STUDY
Lab Sample I.D.: L14872-6

Sample Size: 9.99 g (wet)

Initial Calibration Date: 13-Jul-2010

Instrument ID: HR GC/MS

GC Column ID: DB225

Sample Data Filename: DB03_101 S: 14

Blank Data Filename: DX0M_114 S: 6

Cal. Ver. Data Filename: DB03_101 S: 2

% Moisture: 82.2
% Lipid: 3.17

COMPOUND	LAB FLAG ¹	CONCENTRATION FOUND	DETECTION LIMIT	ION ABUND. RATIO ²	RRT ²
2,3,7,8-TCDF	U		0.102		

(1) Where applicable, custom lab flags have been used on this report; U = not detected.
(2) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.

Signed: _____ Bryan Alonzo _____

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These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested. Results are compliant with NELAP where specific accreditation is held.



Form 1A
PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
SDS-CT-03 (Duplicate)
Sample Collection:
14-Jun-2010 12:30

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	4406	Project No.	FIDALGO BAY, CUSTOM PLYWOOD DX STUDY
Matrix:	TISSUE	Lab Sample I.D.:	WG33443-103 L (DUP L14872-4)
Sample Receipt Date:	17-Jun-2010	Sample Size:	10.2 g (wet)
Extraction Date:	23-Jul-2010	Initial Calibration Date:	30-Jul-2010
Analysis Date:	27-Aug-2010 Time: 10:23:24	Instrument ID:	HR GC/MS
Extract Volume (uL):	20	GC Column ID:	DB5
Injection Volume (uL):	1.0	Sample Data Filename:	DX0M_114 S: 17
Dilution Factor:	N/A	Blank Data Filename:	DX0M_114 S: 6
Concentration Units:	pg/g (wet weight basis)	Cal. Ver. Data Filename:	DX0M_114 S: 12
		% Moisture:	84.3
		% Lipid:	1.18

COMPOUND	LAB FLAG ¹	CONCENTRATION FOUND	DETECTION LIMIT	ION ABUND. RATIO ²	RRT ²
2,3,7,8-TCDD	U		0.0490		
1,2,3,7,8-PECDD ³	U		0.0490		
1,2,3,4,7,8-HXCDD	U		0.0597		
1,2,3,6,7,8-HXCDD	K	0.173	0.0597	1.05	1.001
1,2,3,7,8,9-HXCDD	K	0.070	0.0597	2.53	1.001
1,2,3,4,6,7,8-HPCDD	K B	1.72	0.0727	0.64	1.000
OCDD	B	9.22	0.0749	0.94	1.000
2,3,7,8-TCDF	B	0.351	0.0490	0.75	1.001
1,2,3,7,8-PECDF	U		0.0523		
2,3,4,7,8-PECDF	K B	0.088	0.0523	0.58	1.001
1,2,3,4,7,8-HXCDF	K	0.094	0.0490	1.99	1.001
1,2,3,6,7,8-HXCDF	U		0.0490		
1,2,3,7,8,9-HXCDF	U		0.0490		
2,3,4,6,7,8-HXCDF	K	0.064	0.0490	0.32	1.001
1,2,3,4,6,7,8-HPCDF		0.645	0.0490	1.14	1.000
1,2,3,4,7,8,9-HPCDF	U		0.0490		
OCDF	K	0.939	0.195	1.25	1.002
TOTAL TETRA-DIOXINS		0.100	0.0490		
TOTAL PENTA-DIOXINS	U		0.0490		
TOTAL HEXA-DIOXINS		0.126	0.0597		
TOTAL HEPTA-DIOXINS	U		0.0727		
TOTAL TETRA-FURANS	B	0.475	0.0490		
TOTAL PENTA-FURANS	U		0.0523		
TOTAL HEXA-FURANS		0.319	0.0490		
TOTAL HEPTA-FURANS		1.68	0.0490		

(1) Where applicable, custom lab flags have been used on this report; U = not detected; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; B = analyte found in sample and the associated blank.
 (2) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.
 (3) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.
 Signed: _____ Bryan Alonzo _____



Form 1A
PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
SDS-CT-03 (Duplicate)
Sample Collection:
14-Jun-2010 12:30

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.: 4406
Matrix: TISSUE
Sample Receipt Date: 17-Jun-2010
Extraction Date: 23-Jul-2010
Analysis Date: 04-Aug-2010 **Time:** 14:26:13
Extract Volume (uL): 20
Injection Volume (uL): 2.0
Dilution Factor: N/A
Concentration Units: pg/g (wet weight basis)

Project No. FIDALGO BAY, CUSTOM
Lab Sample I.D.: PLYWOOD DX STUDY
WG33443-103 (DUP L14872-4)
Sample Size: 10.2 g (wet)
Initial Calibration Date: 13-Jul-2010
Instrument ID: HR GC/MS
GC Column ID: DB225
Sample Data Filename: DB03_101 S: 12
Blank Data Filename: DX0M_114 S: 6
Cal. Ver. Data Filename: DB03_101 S: 2
% Moisture: 84.3
% Lipid: 1.18

COMPOUND	LAB FLAG ¹	CONCENTRATION FOUND	DETECTION LIMIT	ION ABUND. RATIO ²	RRT ²
2,3,7,8-TCDF	U		0.128		

(1) Where applicable, custom lab flags have been used on this report; U = not detected.
(2) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.

Signed: _____ Bryan Alonzo _____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 03-Sep-2010 14:17:30; Application: XMLTransformer-1.10.25; Report Filename: 1613_DIOXINS_1613DB225_WG33443-103_Form1A_DB03_101S12_SJ1186104.html; Workgroup: WG33443; Design ID: 883]

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested. Results are compliant with NELAP where specific accreditation is held.



PCDD/PCDF ANALYSIS REPORT
RELATIVE PERCENT DIFFERENCE

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.

FIDALGO BAY, CUSTOM
PLYWOOD DX STUDY

Contract No.: 4406

Client ID: SDS-CT-03

Concentration Units:

pg/g (wet weight basis)

COMPOUND	L14872-4 (A)		WG33443-103		MEAN	RELATIVE PERCENT DIFFERENCE
	LAB FLAG ¹	CONC. FOUND	LAB FLAG ¹	CONC. FOUND		
2,3,7,8-TCDD	U		U			
1,2,3,7,8-PECDD	K J	0.066	U			
1,2,3,4,7,8-HXCDD	J	0.064	U			
1,2,3,6,7,8-HXCDD	J	0.196	K	0.173		
1,2,3,7,8,9-HXCDD	K J	0.153	K	0.070		
1,2,3,4,6,7,8-HPCDD	J	1.83	K	1.72		
OCDD	J	8.90		9.22	9.06	3.53
2,3,7,8-TCDF	U		U			
1,2,3,7,8-PECDF	U		U			
2,3,4,7,8-PECDF	J	0.092	K	0.088		
1,2,3,4,7,8-HXCDF	U		K	0.094		
1,2,3,6,7,8-HXCDF	U		U			
1,2,3,7,8,9-HXCDF	U		U			
2,3,4,6,7,8-HXCDF	U		K	0.064		
1,2,3,4,6,7,8-HPCDF	K J	0.343		0.645		
1,2,3,4,7,8,9-HPCDF	K J	0.051	U			
OCDF	J	1.31	K	0.939		

(1) Where applicable, custom lab flags have been used on this report; U = not detected; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; J = concentration less than LMCL.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.

Signed: _____ Bryan Alonzo _____

For Axys Internal Use Only [XSL Template: RPD.xml; Created: 03-Sep-2010 14:34:56; Application: XMLTransformer-1.10.25; Report Filename: RPD_DIOXINS_1613-RPD_WG33443-103_L14872-4_.html; Workgroup: WG33443; Design ID: 883]

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested. Results are compliant with NELAP where specific accreditation is held.



Form 1A
PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
Lab Blank
Sample Collection:
N/A

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.: 4406

Project No. N/A

Lab Sample I.D.: WG33443-101 L:5PT

Matrix: CANOLA OIL

Sample Size: 10.0 g

Sample Receipt Date: N/A

Initial Calibration Date: 30-Jul-2010

Extraction Date: 23-Jul-2010

Instrument ID: HR GC/MS

Analysis Date: 27-Aug-2010 Time: 00:08:57

GC Column ID: DB5

Extract Volume (uL): 20

Sample Data Filename: DX0M_114 S: 6

Injection Volume (uL): 1.0

Blank Data Filename: DX0M_114 S: 6

Dilution Factor: N/A

Cal. Ver. Data Filename: DX0M_114 S: 1

Concentration Units: pg/g

COMPOUND	LAB FLAG ¹	CONCENTRATION FOUND	DETECTION LIMIT	ION ABUND. RATIO ²	RRT ²
2,3,7,8-TCDD	U		0.0500		
1,2,3,7,8-PECDD ³	U		0.0500		
1,2,3,4,7,8-HXCDD	U		0.0711		
1,2,3,6,7,8-HXCDD	U		0.0711		
1,2,3,7,8,9-HXCDD	U		0.0711		
1,2,3,4,6,7,8-HPCDD	K J	0.060	0.0500	1.59	1.000
OCDD	K J	0.224	0.0500	2.09	1.000
2,3,7,8-TCDF	K J	0.191	0.0500	0.41	1.001
1,2,3,7,8-PECDF	K J	0.050	0.0500	0.24	1.001
2,3,4,7,8-PECDF	K J	0.057	0.0500	0.98	1.002
1,2,3,4,7,8-HXCDF	U		0.0516		
1,2,3,6,7,8-HXCDF	U		0.0516		
1,2,3,7,8,9-HXCDF	U		0.0516		
2,3,4,6,7,8-HXCDF	U		0.0516		
1,2,3,4,6,7,8-HPCDF	U		0.0500		
1,2,3,4,7,8,9-HPCDF	K J	0.060	0.0500	0.37	1.001
OCDF	U		0.140		
TOTAL TETRA-DIOXINS	U		0.0500		
TOTAL PENTA-DIOXINS	U		0.0500		
TOTAL HEXA-DIOXINS	U		0.0711		
TOTAL HEPTA-DIOXINS	U		0.0500		
TOTAL TETRA-FURANS	J	0.085	0.0500		
TOTAL PENTA-FURANS	U		0.0500		
TOTAL HEXA-FURANS	U		0.0516		
TOTAL HEPTA-FURANS	U		0.0500		

(1) Where applicable, custom lab flags have been used on this report; U = not detected; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; J = concentration less than LMCL.

(2) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

(3) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.

Signed: _____ Bryan Alonzo _____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 03-Sep-2010 14:33:39; Application: XMLTransformer-1.10.25; Report Filename: 1613_DIOXINS_1613DB5_WG33443-101_Form1A_DX0M_114S6_SJ1185863.html; Workgroup: WG33443; Design ID: 883]

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested. Results are compliant with NELAP where specific accreditation is held.



Form 1A
PCDD/PCDF ANALYSIS REPORT

CLIENT SAMPLE NO.
Lab Blank
Sample Collection:
N/A

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.: 4406

Project No.

N/A

Lab Sample I.D.:

WG33443-101

Matrix: CANOLA OIL

Sample Size:

10.0 g

Sample Receipt Date: N/A

Initial Calibration Date:

13-Jul-2010

Extraction Date: 23-Jul-2010

Instrument ID:

HR GC/MS

Analysis Date: 04-Aug-2010 Time: 10:10:14

GC Column ID:

DB225

Extract Volume (uL): 20

Sample Data Filename:

DB03_101 S: 5

Injection Volume (uL): 2.0

Blank Data Filename:

DX0M_114 S: 6

Dilution Factor: N/A

Cal. Ver. Data Filename:

DB03_101 S: 2

Concentration Units: pg/g

COMPOUND	LAB FLAG ¹	CONCENTRATION FOUND	DETECTION LIMIT	ION ABUND. RATIO ²	RRT ²
2,3,7,8-TCDF	U		0.103		

(1) Where applicable, custom lab flags have been used on this report; U = not detected.

(2) Contract-required limits for RRTs and ion abundance ratios are specified in Tables 2 and 9, respectively, Method 1613.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.

Signed: _____ Bryan Alonzo _____

For Axys Internal Use Only [XSL Template: Form1A.xsl; Created: 03-Sep-2010 14:17:30; Application: XMLTransformer-1.10.25; Report Filename: 1613_DIOXINS_1613DB225_WG33443-101_Form1A_DB03_101S5_SJ1180936.html; Workgroup: WG33443; Design ID: 883]

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested. Results are compliant with NELAP where specific accreditation is held.



Form 8A
PCDD/PCDF ONGOING PRECISION AND RECOVERY (OPR)

AXYS ANALYTICAL SERVICES

2045 MILLS RD., SIDNEY, B.C., CANADA
 V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.: 4406

OPR Data Filename: DX0M_114 S: 3

Matrix: TISSUE

Lab Sample I.D.: WG33443-102 L:5PT

Extraction Date: 23-Jul-2010

Analysis Date: 26-Aug-2010 **Time:** 21:23:46

ALL CONCENTRATIONS REPORTED ON THIS FORM ARE CONCENTRATIONS IN EXTRACT, BASED ON A 20 µL EXTRACT VOLUME.

COMPOUND	LAB FLAG ¹	ION ABUND. RATIO ²	SPIKE CONC. (ng/mL)	CONC. FOUND (ng/mL)	OPR CONC. LIMITS ³ (ng/mL)	% RECOVERY
2,3,7,8-TCDD		0.75	10.6	9.99	7.10 - 16.7	94.2
1,2,3,7,8-PECDD ⁴		0.61	56.6	48.9	39.6 - 80.4	86.4
1,2,3,4,7,8-HXCDD		1.19	59.2	57.6	41.4 - 97.1	97.3
1,2,3,6,7,8-HXCDD		1.24	51.8	56.4	39.4 - 69.4	109
1,2,3,7,8,9-HXCDD		1.19	56.7	48.9	36.3 - 91.9	86.2
1,2,3,4,6,7,8-HPCDD		1.04	50.0	45.8	35.0 - 70.0	91.5
OCDD		0.84	108	95.5	84.2 - 155	88.5
2,3,7,8-TCDF		0.72	10.9	10.9	8.18 - 17.2	100
1,2,3,7,8-PECDF		1.49	50.0	46.2	40.0 - 67.0	92.4
2,3,4,7,8-PECDF		1.43	50.0	47.4	34.0 - 80.0	94.7
1,2,3,4,7,8-HXCDF		1.20	54.4	49.8	39.2 - 72.9	91.6
1,2,3,6,7,8-HXCDF		1.19	50.0	49.3	42.0 - 65.0	98.7
1,2,3,7,8,9-HXCDF		1.15	50.0	53.4	39.0 - 65.0	107
2,3,4,6,7,8-HXCDF		1.20	53.1	53.5	37.2 - 82.8	101
1,2,3,4,6,7,8-HPCDF		0.99	50.0	53.8	41.0 - 61.0	108
1,2,3,4,7,8,9-HPCDF		0.98	50.0	49.6	39.0 - 69.0	99.1
OCDF		0.86	109	99.8	68.4 - 185	91.9

- (1) Where applicable, custom lab flags have been used on this report.
- (2) Contract-required Ion Abundance Ratios are specified in Table 9, Method 1613.
- (3) Contract-required concentration range as determined from the percent of the test concentration in Table 6, Method 1613, under OPR.
- (4) Alternate confirmation and quantitation ions used for native and labeled PECDD.

These data are validated and reported as accurate, true and compliant with AXYS Analytical Services Ltd. quality assurance processes.

Signed: _____ Bryan Alonzo _____

For Axys Internal Use Only [XSL Template: Form8A.xsl; Created: 03-Sep-2010 14:33:39; Application: XMLTransformer-1.10.25; Report Filename: 1613_DIOXINS_1613DB5_WG33443-102_Form8A_SJ1185859.html; Workgroup: WG33443; Design ID: 883]

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested. Results are compliant with NELAP where specific accreditation is held.



