

April 13, 2010

Vista Project I.D.: 32530

Ms. Yvette Lowney
Exponent
4141 Arapahoe Avenue
Suite 101
Boulder, CO 80301

Dear Ms. Lowney,

Enclosed are the results for the 12 aqueous samples and 1 matched spike sample prepared at Vista Analytical Laboratory on March 31, 2010 under your Project Name "2027.001". These samples were prepared using the "Protocol for Determining the Bioaccessibility of Organic Chemicals in Soil" and then extracted and analyzed using EPA Method 1613 for tetra-through-octa chlorinated dioxins and furans. In addition, the filtered solids of three samples were extracted and analyzed using EPA Method 1613 for tetra-through-octa chlorinated dioxins and furans. A standard turnaround time was provided for this work.

The internal standard recoveries for sample "Blank 2" were low due to emulsions formed during the extraction process. The "Matched Spike" sample consisted of extraction fluid spiked with native dioxin and furan compounds.

The following report consists of a Sample Inventory (Section I), Analytical Results (Section II) and the Appendix, which contains the chain-of-custody, a list of data qualifiers and abbreviations, Vista's current certifications, and copies of the raw data (if requested).

Vista Analytical Laboratory is committed to serving you effectively. If you require additional information, please contact me at 916-673-1520 or by email at billux@vista-analytical.com. Thank you for choosing Vista as part of your analytical support team.

Sincerely,

William J. Luksemburg
President



Vista Analytical Laboratory certifies that the report herein meets all the requirements set forth by NELAC for those applicable test methods. Results relate only to the samples as received by the laboratory. This report should not be reproduced except in full without the written approval of Vista Analytical Laboratory.



Section I: Sample Inventory Report

Date Received: 3/10/2010

<u>Vista Lab. ID</u>	<u>Client Sample ID</u>
32530-001	BLANK 1
32530-002	SA75-0.0B-BIO-A
32530-003	RSAH3-0.0B-BIO-A
32530-004	RSAL3-0.0B-BIO-A
32530-005	RSAK4-0.0B-BIO-A
32530-006	RSAK4009-0.0B-BIO-A
32530-007	SA114-0.0B-BIO-A
32530-008	BLANK 2
32530-009	SA150-0.0B-BIO-A
32530-010	SA167-0.0B-BIO-A
32530-011	SA167-0.0B-BIO-A DUP
32530-012	SA167-0.0B-BIO-A TRIP
32530-013	SA84-0.0B-BIO-A
32530-014	SA169-0.0B-BIO-A

Section I: Sample Inventory Report

Date Received: 3/10/2010

<u>Vista Lab. ID</u>	<u>Client Sample ID</u>
32530-015	MATCHED SPIKE
32530-016	SA167-0.0B-BIO-A
32530-017	SA167-0.0B-BIO-A DUP
32530-018	SA167-0.0B-BIO-A TRIP

SECTION II

Method Blank					EPA Method 1613				
Matrix:	Aqueous	QC Batch No.:	2909	Lab Sample:	0-MB001	Date Analyzed DB-5:	6-Apr-10	Date Analyzed DB-225:	NA
Sample Size:	1.00 L	Date Extracted:	31-Mar-10						
Analyte	Conc. (pg/L)	DL ^a	EMPC ^b	Qualifiers	Labeled Standard	%R	LCL-UCL ^d	Qualifiers	
2,3,7,8-TCDD	ND	1.96			IS 13C-2,3,7,8-TCDD	80.2	25 - 164		
1,2,3,7,8-PeCDD	ND	2.36			13C-1,2,3,7,8-PeCDD	68.1	25 - 181		
1,2,3,4,7,8-HxCDD	ND	3.38			13C-1,2,3,4,7,8-HxCDD	70.4	32 - 141		
1,2,3,6,7,8-HxCDD	ND	3.68			13C-1,2,3,6,7,8-HxCDD	77.0	28 - 130		
1,2,3,7,8,9-HxCDD	ND	3.67			13C-1,2,3,7,8,9-HxCDD	70.9	32 - 141		
1,2,3,4,6,7,8-HpCDD	ND	4.16			13C-1,2,3,4,6,7,8-HpCDD	37.4	23 - 140		
OCDD	ND	10.1			13C-OCDD	25.0	17 - 157		
2,3,7,8-TCDF	ND	1.25			13C-2,3,7,8-TCDF	76.9	24 - 169		
1,2,3,7,8-PeCDF	ND	2.00			13C-1,2,3,7,8-PeCDF	65.9	24 - 185		
2,3,4,7,8-PeCDF	ND	2.27			13C-2,3,4,7,8-PeCDF	64.2	21 - 178		
1,2,3,4,7,8-HxCDF	ND	1.66			13C-1,2,3,4,7,8-HxCDF	77.5	26 - 152		
1,2,3,6,7,8-HxCDF	ND	1.53			13C-1,2,3,6,7,8-HxCDF	85.9	26 - 123		
2,3,4,6,7,8-HxCDF	ND	2.09			13C-2,3,4,6,7,8-HxCDF	75.1	28 - 136		
1,2,3,7,8,9-HxCDF	ND	2.64			13C-1,2,3,7,8,9-HxCDF	69.1	29 - 147		
1,2,3,4,6,7,8-HpCDF	ND	2.71			13C-1,2,3,4,6,7,8-HpCDF	50.5	28 - 143		
1,2,3,4,7,8,9-HpCDF	ND	3.93			13C-1,2,3,4,7,8,9-HpCDF	40.4	26 - 138		
OCDF	ND	11.5			13C-OCDF	30.4	17 - 157		
					CRS 37Cl-2,3,7,8-TCDD	82.2	35 - 197		
Totals					Toxic Equivalent Quotient (TEQ) Data ^e				
Total TCDD	ND	1.96			TEQ (Min):	0			
Total PeCDD	ND	2.36							
Total HxCDD	ND	3.58							
Total HpCDD	ND	4.16							
Total TCDF	ND	1.25							
Total PeCDF	ND	2.13							
Total HxCDF	ND	1.92							
Total HpCDF	ND	3.20							

Analyst: MAS

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OPR Results				EPA Method 1613			
Matrix:	Aqueous	QC Batch No.:	2909	Lab Sample:	0-OPR001		
Sample Size:	1.00 L	Date Extracted:	31-Mar-10	Date Analyzed DB-5:	6-Apr-10	Date Analyzed DB-225:	NA
Analyte	Spike Conc.	Conc. (ng/mL)	OPR Limits	Labeled Standard	%R	LCL-UCL	Qualifier
2,3,7,8-TCDD	10.0	9.67	6.7 - 15.8	IS 13C-2,3,7,8-TCDD	80.2	25 - 164	
1,2,3,7,8-PeCDD	50.0	49.2	35 - 71	13C-1,2,3,7,8-PeCDD	74.0	25 - 181	
1,2,3,4,7,8-HxCDD	50.0	50.1	35 - 82	13C-1,2,3,4,7,8-HxCDD	73.7	32 - 141	
1,2,3,6,7,8-HxCDD	50.0	49.8	38 - 67	13C-1,2,3,6,7,8-HxCDD	78.0	28 - 130	
1,2,3,7,8,9-HxCDD	50.0	50.0	32 - 81	13C-1,2,3,7,8,9-HxCDD	75.3	32 - 141	
1,2,3,4,6,7,8-HpCDD	50.0	47.6	35 - 70	13C-1,2,3,4,6,7,8-HpCDD	63.3	23 - 140	
OCDD	100	98.2	78 - 144	13C-OCDD	50.5	17 - 157	
2,3,7,8-TCDF	10.0	9.29	7.5 - 15.8	13C-2,3,7,8-TCDF	78.3	24 - 169	
1,2,3,7,8-PeCDF	50.0	49.3	40 - 67	13C-1,2,3,7,8-PeCDF	71.2	24 - 185	
2,3,4,7,8-PeCDF	50.0	48.1	34 - 80	13C-2,3,4,7,8-PeCDF	70.6	21 - 178	
1,2,3,4,7,8-HxCDF	50.0	51.1	36 - 67	13C-1,2,3,4,7,8-HxCDF	73.3	26 - 152	
1,2,3,6,7,8-HxCDF	50.0	51.2	42 - 65	13C-1,2,3,6,7,8-HxCDF	84.4	26 - 123	
2,3,4,6,7,8-HxCDF	50.0	50.8	35 - 78	13C-2,3,4,6,7,8-HxCDF	76.8	28 - 136	
1,2,3,7,8,9-HxCDF	50.0	49.3	39 - 65	13C-1,2,3,7,8,9-HxCDF	77.4	29 - 147	
1,2,3,4,6,7,8-HpCDF	50.0	50.7	41 - 61	13C-1,2,3,4,6,7,8-HpCDF	69.3	28 - 143	
1,2,3,4,7,8,9-HpCDF	50.0	49.5	39 - 69	13C-1,2,3,4,7,8,9-HpCDF	66.4	26 - 138	
OCDF	100	98.6	63 - 170	13C-OCDF	55.5	17 - 157	
				CRS 37Cl-2,3,7,8-TCDD	90.1	35 - 197	

Analyst: MAS

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Sample ID: BLANK 1					EPA Method 1613			
Client Data			Sample Data		Laboratory Data			
Name:	Exponent		Matrix:	Aqueous	Lab Sample:	32530-001	Date Received:	10-Mar-10
Project:	2027.001		Sample Size:	0.990 L	QC Batch No.:	2909	Date Extracted:	31-Mar-10
Date Collected:	25-Mar-10				Date Analyzed DB-5:	8-Apr-10	Date Analyzed DB-225:	NA
Time Collected:	NA							
Analyte	Conc. (pg/L)	DL ^a	EMPC ^b	Qualifiers	Labeled Standard	%R	LCL-UCL ^d	Qualifiers
2,3,7,8-TCDD	ND	1.73			IS 13C-2,3,7,8-TCDD	71.7	25 - 164	
1,2,3,7,8-PeCDD	ND	1.95			13C-1,2,3,7,8-PeCDD	63.1	25 - 181	
1,2,3,4,7,8-HxCDD	ND	4.21			13C-1,2,3,4,7,8-HxCDD	56.0	32 - 141	
1,2,3,6,7,8-HxCDD	ND	4.33			13C-1,2,3,6,7,8-HxCDD	55.7	28 - 130	
1,2,3,7,8,9-HxCDD	ND	4.71			13C-1,2,3,7,8,9-HxCDD	53.7	32 - 141	
1,2,3,4,6,7,8-HpCDD	40.4				13C-1,2,3,4,6,7,8-HpCDD	49.6	23 - 140	
OCDD	300				13C-OCDD	37.2	17 - 157	
2,3,7,8-TCDF	ND	1.86			13C-2,3,7,8-TCDF	70.4	24 - 169	
1,2,3,7,8-PeCDF	ND	2.31			13C-1,2,3,7,8-PeCDF	70.6	24 - 185	
2,3,4,7,8-PeCDF	ND	2.13			13C-2,3,4,7,8-PeCDF	71.4	21 - 178	
1,2,3,4,7,8-HxCDF	ND	2.67			13C-1,2,3,4,7,8-HxCDF	57.3	26 - 152	
1,2,3,6,7,8-HxCDF	ND	2.69			13C-1,2,3,6,7,8-HxCDF	56.7	26 - 123	
2,3,4,6,7,8-HxCDF	ND	1.33			13C-2,3,4,6,7,8-HxCDF	59.3	28 - 136	
1,2,3,7,8,9-HxCDF	ND	1.76			13C-1,2,3,7,8,9-HxCDF	59.0	29 - 147	
1,2,3,4,6,7,8-HpCDF	6.27			J	13C-1,2,3,4,6,7,8-HpCDF	49.8	28 - 143	
1,2,3,4,7,8,9-HpCDF	ND	2.25			13C-1,2,3,4,7,8,9-HpCDF	54.7	26 - 138	
OCDF	ND	11.7			13C-OCDF	41.5	17 - 157	
					CRS 37Cl-2,3,7,8-TCDD	78.6	35 - 197	
Totals					Toxic Equivalent Quotient (TEQ) Data ^e			
Total TCDD	6.02				TEQ (Min):	0.557		
Total PeCDD	ND	4.72						
Total HxCDD	ND	7.32						a. Sample specific estimated detection limit.
Total HpCDD	73.5							b. Estimated maximum possible concentration.
Total TCDF	ND	1.86						c. Method detection limit.
Total PeCDF	ND	2.22						d. Lower control limit - upper control limit.
Total HxCDF	ND	3.00						e. TEQ based on (2005) World Health Organization Toxic Equivalent Factors.(WHO)
Total HpCDF	6.27							

Analyst: MAS

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Sample ID: SA75-0.0B-BIO-A					EPA Method 1613			
Client Data		Sample Data		Laboratory Data				
Name:	Exponent	Matrix:	Aqueous	Lab Sample:	32530-002	Date Received:	10-Mar-10	
Project:	2027.001	Sample Size:	0.911 L	QC Batch No.:	2909	Date Extracted:	31-Mar-10	
Date Collected:	8-Mar-10			Date Analyzed DB-5:	6-Apr-10	Dates Analyzed DB-225:	7-Apr-10	
Time Collected:	1435							
Analyte	Conc. (pg/L)	DL ^a	EMPC ^b	Qualifiers	Labeled Standard	%R	LCL-UCL ^d	Qualifiers
2,3,7,8-TCDD	140				IS 13C-2,3,7,8-TCDD	48.7	25 - 164	
1,2,3,7,8-PeCDD	405				13C-1,2,3,7,8-PeCDD	40.0	25 - 181	
1,2,3,4,7,8-HxCDD	243				13C-1,2,3,4,7,8-HxCDD	33.5	32 - 141	
1,2,3,6,7,8-HxCDD	449				13C-1,2,3,6,7,8-HxCDD	35.0	28 - 130	
1,2,3,7,8,9-HxCDD	402				13C-1,2,3,7,8,9-HxCDD	31.2	32 - 141	H
1,2,3,4,6,7,8-HpCDD	1410				13C-1,2,3,4,6,7,8-HpCDD	25.5	23 - 140	
OCDD	1570				13C-OCDD	23.8	17 - 157	
2,3,7,8-TCDF	2830				13C-2,3,7,8-TCDF	52.5	24 - 169	
1,2,3,7,8-PeCDF	5030				13C-1,2,3,7,8-PeCDF	41.6	24 - 185	
2,3,4,7,8-PeCDF	3360				13C-2,3,4,7,8-PeCDF	39.9	21 - 178	
1,2,3,4,7,8-HxCDF	7220				13C-1,2,3,4,7,8-HxCDF	40.1	26 - 152	
1,2,3,6,7,8-HxCDF	5340				13C-1,2,3,6,7,8-HxCDF	39.5	26 - 123	
2,3,4,6,7,8-HxCDF	3510				13C-2,3,4,6,7,8-HxCDF	37.0	28 - 136	
1,2,3,7,8,9-HxCDF	2570				13C-1,2,3,7,8,9-HxCDF	33.9	29 - 147	
1,2,3,4,6,7,8-HpCDF	16900				13C-1,2,3,4,6,7,8-HpCDF	26.4	28 - 143	H
1,2,3,4,7,8,9-HpCDF	7100				13C-1,2,3,4,7,8,9-HpCDF	33.2	26 - 138	
OCDF	35600				13C-OCDF	29.3	17 - 157	
					CRS 37Cl-2,3,7,8-TCDD	90.7	35 - 197	
Totals					Toxic Equivalent Quotient (TEQ) Data ^e			
Total TCDD	4080		4110		TEQ (Min):	4230		
Total PeCDD	4510				a. Sample specific estimated detection limit.			
Total HxCDD	3500				b. Estimated maximum possible concentration.			
Total HpCDD	2120				c. Method detection limit.			
Total TCDF	38200				d. Lower control limit - upper control limit.			
Total PeCDF	44700				e. TEQ based on (2005) World Health Organization Toxic Equivalent Factors.(WHO)			
Total HxCDF	44600							
Total HpCDF	34300							

Analyst: MAS

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Sample ID: RSAH3-0.0B-BIO-A					EPA Method 1613			
Client Data		Sample Data		Laboratory Data				
Name:	Exponent	Matrix:	Aqueous	Lab Sample:	32530-003	Date Received:	10-Mar-10	
Project:	2027.001	Sample Size:	0.959 L	QC Batch No.:	2909	Date Extracted:	31-Mar-10	
Date Collected:	8-Mar-10			Date Analyzed DB-5:	6-Apr-10	Dates Analyzed DB-225:	7-Apr-10	
Time Collected:	1630							
Analyte	Conc. (pg/L)	DL ^a	EMPC ^b	Qualifiers	Labeled Standard	%R	LCL-UCL ^d	Qualifiers
2,3,7,8-TCDD	60.9				IS 13C-2,3,7,8-TCDD	67.8	25 - 164	
1,2,3,7,8-PeCDD	239				13C-1,2,3,7,8-PeCDD	59.4	25 - 181	
1,2,3,4,7,8-HxCDD	172				13C-1,2,3,4,7,8-HxCDD	49.6	32 - 141	
1,2,3,6,7,8-HxCDD	340				13C-1,2,3,6,7,8-HxCDD	50.0	28 - 130	
1,2,3,7,8,9-HxCDD	265				13C-1,2,3,7,8,9-HxCDD	47.8	32 - 141	
1,2,3,4,6,7,8-HpCDD	1050				13C-1,2,3,4,6,7,8-HpCDD	40.8	23 - 140	
OCDD	1190				13C-OCDD	40.0	17 - 157	
2,3,7,8-TCDF	2000				13C-2,3,7,8-TCDF	64.8	24 - 169	
1,2,3,7,8-PeCDF	3600				13C-1,2,3,7,8-PeCDF	60.3	24 - 185	
2,3,4,7,8-PeCDF	2330				13C-2,3,4,7,8-PeCDF	57.5	21 - 178	
1,2,3,4,7,8-HxCDF	5170				13C-1,2,3,4,7,8-HxCDF	60.2	26 - 152	
1,2,3,6,7,8-HxCDF	4180				13C-1,2,3,6,7,8-HxCDF	59.1	26 - 123	
2,3,4,6,7,8-HxCDF	2590				13C-2,3,4,6,7,8-HxCDF	53.5	28 - 136	
1,2,3,7,8,9-HxCDF	1540				13C-1,2,3,7,8,9-HxCDF	51.5	29 - 147	
1,2,3,4,6,7,8-HpCDF	13000				13C-1,2,3,4,6,7,8-HpCDF	42.5	28 - 143	
1,2,3,4,7,8,9-HpCDF	4750				13C-1,2,3,4,7,8,9-HpCDF	48.1	26 - 138	
OCDF	24600				13C-OCDF	47.2	17 - 157	
					CRS 37Cl-2,3,7,8-TCDD	93.8	35 - 197	
Totals					Toxic Equivalent Quotient (TEQ) Data ^e			
Total TCDD	2680		2700		TEQ (Min):	2930		
Total PeCDD	3060				a. Sample specific estimated detection limit.			
Total HxCDD	2600				b. Estimated maximum possible concentration.			
Total HpCDD	1620				c. Method detection limit.			
Total TCDF	33400				d. Lower control limit - upper control limit.			
Total PeCDF	34700				e. TEQ based on (2005) World Health Organization Toxic Equivalent Factors.(WHO)			
Total HxCDF	34400							
Total HpCDF	25600							

Analyst: MAS

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Sample ID: RSAL3-0.0B-BIO-A					EPA Method 1613			
Client Data			Sample Data		Laboratory Data			
Name:	Exponent		Matrix:	Aqueous	Lab Sample:	32530-004	Date Received:	10-Mar-10
Project:	2027.001		Sample Size:	0.923 L	QC Batch No.:	2909	Date Extracted:	31-Mar-10
Date Collected:	8-Mar-10				Date Analyzed DB-5:	6-Apr-10	Dates Analyzed DB-225:	7-Apr-10
Time Collected:	1555							
Analyte	Conc. (pg/L)	DL ^a	EMPC ^b	Qualifiers	Labeled Standard	%R	LCL-UCL ^d	Qualifiers
2,3,7,8-TCDD	26.1				IS 13C-2,3,7,8-TCDD	69.0	25 - 164	
1,2,3,7,8-PeCDD	147				13C-1,2,3,7,8-PeCDD	62.0	25 - 181	
1,2,3,4,7,8-HxCDD	195				13C-1,2,3,4,7,8-HxCDD	52.6	32 - 141	
1,2,3,6,7,8-HxCDD	360				13C-1,2,3,6,7,8-HxCDD	54.9	28 - 130	
1,2,3,7,8,9-HxCDD	210				13C-1,2,3,7,8,9-HxCDD	49.8	32 - 141	
1,2,3,4,6,7,8-HpCDD	1280				13C-1,2,3,4,6,7,8-HpCDD	34.8	23 - 140	
OCDD	1480				13C-OCDD	37.2	17 - 157	
2,3,7,8-TCDF	654				13C-2,3,7,8-TCDF	68.1	24 - 169	
1,2,3,7,8-PeCDF	1770				13C-1,2,3,7,8-PeCDF	61.7	24 - 185	
2,3,4,7,8-PeCDF	1240				13C-2,3,4,7,8-PeCDF	64.4	21 - 178	
1,2,3,4,7,8-HxCDF	3580				13C-1,2,3,4,7,8-HxCDF	59.9	26 - 152	
1,2,3,6,7,8-HxCDF	2220				13C-1,2,3,6,7,8-HxCDF	62.1	26 - 123	
2,3,4,6,7,8-HxCDF	1230				13C-2,3,4,6,7,8-HxCDF	55.9	28 - 136	
1,2,3,7,8,9-HxCDF	1240				13C-1,2,3,7,8,9-HxCDF	56.4	29 - 147	
1,2,3,4,6,7,8-HpCDF	7210				13C-1,2,3,4,6,7,8-HpCDF	37.8	28 - 143	
1,2,3,4,7,8,9-HpCDF	2530				13C-1,2,3,4,7,8,9-HpCDF	41.0	26 - 138	
OCDF	14600				13C-OCDF	43.0	17 - 157	
					CRS 37Cl-2,3,7,8-TCDD	83.6	35 - 197	
Totals					Toxic Equivalent Quotient (TEQ) Data ^e			
Total TCDD	1400		1500		TEQ (Min):	1680		
Total PeCDD	2360		2380					
Total HxCDD	3020				a. Sample specific estimated detection limit.			
Total HpCDD	2080				b. Estimated maximum possible concentration.			
Total TCDF	12800				c. Method detection limit.			
Total PeCDF	17500			P	d. Lower control limit - upper control limit.			
Total HxCDF	19100				e. TEQ based on (2005) World Health Organization Toxic Equivalent Factors.(WHO)			
Total HpCDF	13900							

Analyst: MAS

Approved By: William J. Luksemburg 12-Apr-2010 17:17

Sample ID: RSAK4-0.0B-BIO-A					EPA Method 1613			
Client Data		Sample Data		Laboratory Data				
Name:	Exponent	Matrix:	Aqueous	Lab Sample:	32530-005	Date Received:	10-Mar-10	
Project:	2027.001	Sample Size:	0.944 L	QC Batch No.:	2909	Date Extracted:	31-Mar-10	
Date Collected:	8-Mar-10			Date Analyzed DB-5:	9-Apr-10	Dates Analyzed DB-225:	7-Apr-10	
Time Collected:	1515							
Analyte	Conc. (pg/L)	DL ^a	EMPC ^b	Qualifiers	Labeled Standard	%R	LCL-UCL ^d	Qualifiers
2,3,7,8-TCDD	261				IS 13C-2,3,7,8-TCDD	47.2	25 - 164	
1,2,3,7,8-PeCDD	754				13C-1,2,3,7,8-PeCDD	40.8	25 - 181	
1,2,3,4,7,8-HxCDD	484				13C-1,2,3,4,7,8-HxCDD	29.1	32 - 141	H
1,2,3,6,7,8-HxCDD	962				13C-1,2,3,6,7,8-HxCDD	29.3	28 - 130	
1,2,3,7,8,9-HxCDD	776				13C-1,2,3,7,8,9-HxCDD	27.6	32 - 141	H
1,2,3,4,6,7,8-HpCDD	2800				13C-1,2,3,4,6,7,8-HpCDD	26.6	23 - 140	
OCDD	2620				13C-OCDD	21.4	17 - 157	
2,3,7,8-TCDF	5820			E	13C-2,3,7,8-TCDF	51.3	24 - 169	
1,2,3,7,8-PeCDF	10500				13C-1,2,3,7,8-PeCDF	42.3	24 - 185	
2,3,4,7,8-PeCDF	7310				13C-2,3,4,7,8-PeCDF	43.0	21 - 178	
1,2,3,4,7,8-HxCDF	15900				13C-1,2,3,4,7,8-HxCDF	31.0	26 - 152	
1,2,3,6,7,8-HxCDF	12200				13C-1,2,3,6,7,8-HxCDF	29.9	26 - 123	
2,3,4,6,7,8-HxCDF	7200				13C-2,3,4,6,7,8-HxCDF	32.2	28 - 136	
1,2,3,7,8,9-HxCDF	5720				13C-1,2,3,7,8,9-HxCDF	32.8	29 - 147	
1,2,3,4,6,7,8-HpCDF	37400			E	13C-1,2,3,4,6,7,8-HpCDF	25.9	28 - 143	H
1,2,3,4,7,8,9-HpCDF	15800				13C-1,2,3,4,7,8,9-HpCDF	34.9	26 - 138	
OCDF	82000			E	13C-OCDF	25.8	17 - 157	
					CRS 37Cl-2,3,7,8-TCDD	93.2	35 - 197	
Totals					Toxic Equivalent Quotient (TEQ) Data ^e			
Total TCDD	9890				TEQ (Min):	9010		
Total PeCDD	9430							
Total HxCDD	7130							
Total HpCDD	4230							
Total TCDF	98000							
Total PeCDF	92400							
Total HxCDF	97200							
Total HpCDF	75400							

Analyst: MAS

Approved By: William J. Luksemburg 12-Apr-2010 17:17

Sample ID: RSAK4009-0.0B-BIO-A					EPA Method 1613			
Client Data			Sample Data		Laboratory Data			
Name:	Exponent		Matrix:	Aqueous	Lab Sample:	32530-006	Date Received:	10-Mar-10
Project:	2027.001		Sample Size:	0.906 L	QC Batch No.:	2909	Date Extracted:	31-Mar-10
Date Collected:	8-Mar-10				Date Analyzed DB-5:	6-Apr-10	Dates Analyzed DB-225:	7-Apr-10
Time Collected:	1515							
Analyte	Conc. (pg/L)	DL ^a	EMPC ^b	Qualifiers	Labeled Standard	%R	LCL-UCL ^d	Qualifiers
2,3,7,8-TCDD	34.4				IS 13C-2,3,7,8-TCDD	77.6	25 - 164	
1,2,3,7,8-PeCDD	115				13C-1,2,3,7,8-PeCDD	72.6	25 - 181	
1,2,3,4,7,8-HxCDD	82.7				13C-1,2,3,4,7,8-HxCDD	70.1	32 - 141	
1,2,3,6,7,8-HxCDD	193				13C-1,2,3,6,7,8-HxCDD	69.0	28 - 130	
1,2,3,7,8,9-HxCDD	154				13C-1,2,3,7,8,9-HxCDD	65.9	32 - 141	
1,2,3,4,6,7,8-HpCDD	703				13C-1,2,3,4,6,7,8-HpCDD	52.0	23 - 140	
OCDD	1090				13C-OCDD	55.4	17 - 157	
2,3,7,8-TCDF	874				13C-2,3,7,8-TCDF	77.6	24 - 169	
1,2,3,7,8-PeCDF	1910				13C-1,2,3,7,8-PeCDF	71.5	24 - 185	
2,3,4,7,8-PeCDF	1260				13C-2,3,4,7,8-PeCDF	71.5	21 - 178	
1,2,3,4,7,8-HxCDF	3350				13C-1,2,3,4,7,8-HxCDF	81.4	26 - 152	
1,2,3,6,7,8-HxCDF	2590				13C-1,2,3,6,7,8-HxCDF	80.1	26 - 123	
2,3,4,6,7,8-HxCDF	1550				13C-2,3,4,6,7,8-HxCDF	73.2	28 - 136	
1,2,3,7,8,9-HxCDF	1080				13C-1,2,3,7,8,9-HxCDF	67.8	29 - 147	
1,2,3,4,6,7,8-HpCDF	10200				13C-1,2,3,4,6,7,8-HpCDF	55.7	28 - 143	
1,2,3,4,7,8,9-HpCDF	3800				13C-1,2,3,4,7,8,9-HpCDF	64.4	26 - 138	
OCDF	23300				13C-OCDF	64.6	17 - 157	
					CRS 37Cl-2,3,7,8-TCDD	89.8	35 - 197	
Totals					Toxic Equivalent Quotient (TEQ) Data ^e			
Total TCDD	1650				TEQ (Min):	1730		
Total PeCDD	1700							
Total HxCDD	1550				a. Sample specific estimated detection limit.			
Total HpCDD	1100				b. Estimated maximum possible concentration.			
Total TCDF	15100				c. Method detection limit.			
Total PeCDF	18600				d. Lower control limit - upper control limit.			
Total HxCDF	21500				e. TEQ based on (2005) World Health Organization Toxic Equivalent Factors.(WHO)			
Total HpCDF	19500							

Analyst: MAS

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Sample ID: SA114-0.0B-BIO-A					EPA Method 1613			
Client Data			Sample Data		Laboratory Data			
Name:	Exponent		Matrix:	Aqueous	Lab Sample:	32530-007	Date Received:	10-Mar-10
Project:	2027.001		Sample Size:	0.910 L	QC Batch No.:	2909	Date Extracted:	31-Mar-10
Date Collected:	8-Mar-10				Date Analyzed DB-5:	6-Apr-10	Dates Analyzed DB-225:	7-Apr-10
Time Collected:	1305							
Analyte	Conc. (pg/L)	DL ^a	EMPC ^b	Qualifiers	Labeled Standard	%R	LCL-UCL ^d	Qualifiers
2,3,7,8-TCDD	100				IS 13C-2,3,7,8-TCDD	73.9	25 - 164	
1,2,3,7,8-PeCDD	356				13C-1,2,3,7,8-PeCDD	66.9	25 - 181	
1,2,3,4,7,8-HxCDD	260				13C-1,2,3,4,7,8-HxCDD	62.9	32 - 141	
1,2,3,6,7,8-HxCDD	530				13C-1,2,3,6,7,8-HxCDD	63.2	28 - 130	
1,2,3,7,8,9-HxCDD	396				13C-1,2,3,7,8,9-HxCDD	59.2	32 - 141	
1,2,3,4,6,7,8-HpCDD	1680				13C-1,2,3,4,6,7,8-HpCDD	45.5	23 - 140	
OCDD	1850				13C-OCDD	48.3	17 - 157	
2,3,7,8-TCDF	1980				13C-2,3,7,8-TCDF	69.0	24 - 169	
1,2,3,7,8-PeCDF	4040				13C-1,2,3,7,8-PeCDF	65.1	24 - 185	
2,3,4,7,8-PeCDF	2870				13C-2,3,4,7,8-PeCDF	61.8	21 - 178	
1,2,3,4,7,8-HxCDF	7270				13C-1,2,3,4,7,8-HxCDF	70.8	26 - 152	
1,2,3,6,7,8-HxCDF	5090				13C-1,2,3,6,7,8-HxCDF	72.6	26 - 123	
2,3,4,6,7,8-HxCDF	3150				13C-2,3,4,6,7,8-HxCDF	65.4	28 - 136	
1,2,3,7,8,9-HxCDF	2340				13C-1,2,3,7,8,9-HxCDF	61.5	29 - 147	
1,2,3,4,6,7,8-HpCDF	18000				13C-1,2,3,4,6,7,8-HpCDF	49.4	28 - 143	
1,2,3,4,7,8,9-HpCDF	7510				13C-1,2,3,4,7,8,9-HpCDF	51.7	26 - 138	
OCDF	40300				13C-OCDF	60.1	17 - 157	
					CRS 37Cl-2,3,7,8-TCDD	84.5	35 - 197	
Totals					Toxic Equivalent Quotient (TEQ) Data ^e			
Total TCDD	5010		5030		TEQ (Min):	3820		
Total PeCDD	4970							
Total HxCDD	4240				a. Sample specific estimated detection limit.			
Total HpCDD	2590				b. Estimated maximum possible concentration.			
Total TCDF	43200				c. Method detection limit.			
Total PeCDF	40900				d. Lower control limit - upper control limit.			
Total HxCDF	43400				e. TEQ based on (2005) World Health Organization Toxic Equivalent Factors.(WHO)			
Total HpCDF	37200							

Analyst: MAS

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Sample ID: BLANK 2					EPA Method 1613				
Client Data			Sample Data		Laboratory Data				
Name:	Exponent		Matrix:	Aqueous	Lab Sample:	32530-008	Date Received:	10-Mar-10	
Project:	2027.001		Sample Size:	0.949 L	QC Batch No.:	2909	Date Extracted:	31-Mar-10	
Date Collected:	25-Mar-10				Date Analyzed DB-5:	6-Apr-10	Date Analyzed DB-225:	NA	
Time Collected:	NA								
Analyte	Conc. (pg/L)	DL ^a	EMPC ^b	Qualifiers	Labeled Standard	%R	LCL-UCL ^d	Qualifiers	
2,3,7,8-TCDD	ND	6.67			IS 13C-2,3,7,8-TCDD	14.7	25 - 164	H	
1,2,3,7,8-PeCDD	ND	9.51			13C-1,2,3,7,8-PeCDD	12.8	25 - 181	H	
1,2,3,4,7,8-HxCDD	ND	18.5			13C-1,2,3,4,7,8-HxCDD	16.2	32 - 141	H	
1,2,3,6,7,8-HxCDD	ND	21.5			13C-1,2,3,6,7,8-HxCDD	15.0	28 - 130	H	
1,2,3,7,8,9-HxCDD	ND	29.1			13C-1,2,3,7,8,9-HxCDD	9.96	32 - 141	H	
1,2,3,4,6,7,8-HpCDD	ND	92.1			13C-1,2,3,4,6,7,8-HpCDD	11.4	23 - 140	H	
OCDD	300				13C-OCDD	13.0	17 - 157	H	
2,3,7,8-TCDF	ND	16.6			13C-2,3,7,8-TCDF	6.61	24 - 169	H	
1,2,3,7,8-PeCDF	ND	7.93			13C-1,2,3,7,8-PeCDF	20.0	24 - 185	H	
2,3,4,7,8-PeCDF	ND	29.2			13C-2,3,4,7,8-PeCDF	5.76	21 - 178	H	
1,2,3,4,7,8-HxCDF	ND	3.25			13C-1,2,3,4,7,8-HxCDF	25.9	26 - 152	H	
1,2,3,6,7,8-HxCDF	ND	3.47			13C-1,2,3,6,7,8-HxCDF	27.2	26 - 123	H	
2,3,4,6,7,8-HxCDF	ND	16.4			13C-2,3,4,6,7,8-HxCDF	6.30	28 - 136	H	
1,2,3,7,8,9-HxCDF	ND	10.5			13C-1,2,3,7,8,9-HxCDF	12.1	29 - 147	H	
1,2,3,4,6,7,8-HpCDF	ND	7.84			13C-1,2,3,4,6,7,8-HpCDF	16.7	28 - 143	H	
1,2,3,4,7,8,9-HpCDF	ND	9.58			13C-1,2,3,4,7,8,9-HpCDF	14.7	26 - 138	H	
OCDF	ND	19.9			13C-OCDF	16.2	17 - 157	H	
					CRS 37Cl-2,3,7,8-TCDD	34.4	35 - 197	H	
Totals					Toxic Equivalent Quotient (TEQ) Data ^e				
Total TCDD	ND	13.6			TEQ (Min):	0.0900			
Total PeCDD	ND	9.51				a. Sample specific estimated detection limit.			
Total HxCDD	ND	22.4				b. Estimated maximum possible concentration.			
Total HpCDD	ND	92.1				c. Method detection limit.			
Total TCDF	ND	16.6				d. Lower control limit - upper control limit.			
Total PeCDF	ND	12.7				e. TEQ based on (2005) World Health Organization Toxic Equivalent Factors.(WHO)			
Total HxCDF	ND	5.62							
Total HpCDF	ND	8.60							

Analyst: MAS

Approved By: William J. Luksemburg 12-Apr-2010 17:17

Sample ID: SA150-0.0B-BIO-A					EPA Method 1613			
Client Data			Sample Data		Laboratory Data			
Name:	Exponent		Matrix:	Aqueous	Lab Sample:	32530-009	Date Received:	10-Mar-10
Project:	2027.001		Sample Size:	0.937 L	QC Batch No.:	2909	Date Extracted:	31-Mar-10
Date Collected:	8-Mar-10				Date Analyzed DB-5:	9-Apr-10	Dates Analyzed DB-225:	7-Apr-10
Time Collected:	1333							
Analyte	Conc. (pg/L)	DL ^a	EMPC ^b	Qualifiers	Labeled Standard	%R	LCL-UCL ^d	Qualifiers
2,3,7,8-TCDD	158				IS 13C-2,3,7,8-TCDD	64.3	25 - 164	
1,2,3,7,8-PeCDD	503				13C-1,2,3,7,8-PeCDD	60.3	25 - 181	
1,2,3,4,7,8-HxCDD	318				13C-1,2,3,4,7,8-HxCDD	47.1	32 - 141	
1,2,3,6,7,8-HxCDD	704				13C-1,2,3,6,7,8-HxCDD	48.4	28 - 130	
1,2,3,7,8,9-HxCDD	547				13C-1,2,3,7,8,9-HxCDD	46.7	32 - 141	
1,2,3,4,6,7,8-HpCDD	1920				13C-1,2,3,4,6,7,8-HpCDD	48.3	23 - 140	
OCDD	2070				13C-OCDD	44.1	17 - 157	
2,3,7,8-TCDF	4070				13C-2,3,7,8-TCDF	65.6	24 - 169	
1,2,3,7,8-PeCDF	7180				13C-1,2,3,7,8-PeCDF	60.1	24 - 185	
2,3,4,7,8-PeCDF	4840				13C-2,3,4,7,8-PeCDF	59.9	21 - 178	
1,2,3,4,7,8-HxCDF	10700				13C-1,2,3,4,7,8-HxCDF	49.5	26 - 152	
1,2,3,6,7,8-HxCDF	8110				13C-1,2,3,6,7,8-HxCDF	50.5	26 - 123	
2,3,4,6,7,8-HxCDF	4920				13C-2,3,4,6,7,8-HxCDF	51.1	28 - 136	
1,2,3,7,8,9-HxCDF	3650				13C-1,2,3,7,8,9-HxCDF	53.3	29 - 147	
1,2,3,4,6,7,8-HpCDF	25300			E	13C-1,2,3,4,6,7,8-HpCDF	49.4	28 - 143	
1,2,3,4,7,8,9-HpCDF	9750				13C-1,2,3,4,7,8,9-HpCDF	57.2	26 - 138	
OCDF	50400			E	13C-OCDF	53.1	17 - 157	
					CRS 37Cl-2,3,7,8-TCDD	93.5	35 - 197	
Totals					Toxic Equivalent Quotient (TEQ) Data ^e			
Total TCDD	7420				TEQ (Min):	6010		
Total PeCDD	7070							
Total HxCDD	5170				a. Sample specific estimated detection limit.			
Total HpCDD	3010				b. Estimated maximum possible concentration.			
Total TCDF	71700				c. Method detection limit.			
Total PeCDF	65900				d. Lower control limit - upper control limit.			
Total HxCDF	65500				e. TEQ based on (2005) World Health Organization Toxic Equivalent Factors.(WHO)			
Total HpCDF	50100							

Analyst: MAS

Approved By: William J. Luksemburg 12-Apr-2010 17:17

Sample ID: SA167-0.0B-BIO-A					EPA Method 1613			
Client Data		Sample Data		Laboratory Data				
Name:	Exponent	Matrix:	Aqueous	Lab Sample:	32530-010	Date Received:	10-Mar-10	
Project:	2027.001	Sample Size:	1.04 L	QC Batch No.:	2909	Date Extracted:	31-Mar-10	
Date Collected:	8-Mar-10			Date Analyzed DB-5:	9-Apr-10	Dates Analyzed DB-225:	7-Apr-10	
Time Collected:	1455							
Analyte	Conc. (pg/L)	DL ^a	EMPC ^b	Qualifiers	Labeled Standard	%R	LCL-UCL ^d	Qualifiers
2,3,7,8-TCDD	112				IS 13C-2,3,7,8-TCDD	55.4	25 - 164	
1,2,3,7,8-PeCDD	406				13C-1,2,3,7,8-PeCDD	45.9	25 - 181	
1,2,3,4,7,8-HxCDD	268				13C-1,2,3,4,7,8-HxCDD	33.2	32 - 141	
1,2,3,6,7,8-HxCDD	570				13C-1,2,3,6,7,8-HxCDD	33.8	28 - 130	
1,2,3,7,8,9-HxCDD	435				13C-1,2,3,7,8,9-HxCDD	33.2	32 - 141	
1,2,3,4,6,7,8-HpCDD	1740				13C-1,2,3,4,6,7,8-HpCDD	29.2	23 - 140	
OCDD	2390				13C-OCDD	24.6	17 - 157	
2,3,7,8-TCDF	2480				13C-2,3,7,8-TCDF	59.5	24 - 169	
1,2,3,7,8-PeCDF	5220				13C-1,2,3,7,8-PeCDF	48.8	24 - 185	
2,3,4,7,8-PeCDF	3380				13C-2,3,4,7,8-PeCDF	49.7	21 - 178	
1,2,3,4,7,8-HxCDF	8290				13C-1,2,3,4,7,8-HxCDF	36.0	26 - 152	
1,2,3,6,7,8-HxCDF	6300				13C-1,2,3,6,7,8-HxCDF	35.9	26 - 123	
2,3,4,6,7,8-HxCDF	3710				13C-2,3,4,6,7,8-HxCDF	37.2	28 - 136	
1,2,3,7,8,9-HxCDF	2770				13C-1,2,3,7,8,9-HxCDF	39.9	29 - 147	
1,2,3,4,6,7,8-HpCDF	19400			E	13C-1,2,3,4,6,7,8-HpCDF	30.8	28 - 143	
1,2,3,4,7,8,9-HpCDF	7490				13C-1,2,3,4,7,8,9-HpCDF	36.7	26 - 138	
OCDF	38400				13C-OCDF	30.2	17 - 157	
					CRS 37Cl-2,3,7,8-TCDD	96.7	35 - 197	
Totals					Toxic Equivalent Quotient (TEQ) Data ^e			
Total TCDD	4780				TEQ (Min):	4470		
Total PeCDD	5190							
Total HxCDD	4080				a. Sample specific estimated detection limit.			
Total HpCDD	2660				b. Estimated maximum possible concentration.			
Total TCDF	46900				c. Method detection limit.			
Total PeCDF	45900				d. Lower control limit - upper control limit.			
Total HxCDF	50400				e. TEQ based on (2005) World Health Organization Toxic Equivalent Factors.(WHO)			
Total HpCDF	39100							

Analyst: MAS

Approved By: William J. Luksemburg 12-Apr-2010 17:17

Sample ID: SA167-0.0B-BIO-A DUP					EPA Method 1613			
Client Data		Sample Data		Laboratory Data				
Name:	Exponent	Matrix:	Aqueous	Lab Sample:	32530-011	Date Received:	10-Mar-10	
Project:	2027.001	Sample Size:	1.04 L	QC Batch No.:	2909	Date Extracted:	31-Mar-10	
Date Collected:	8-Mar-10			Date Analyzed DB-5:	9-Apr-10	Dates Analyzed DB-225:	7-Apr-10	
Time Collected:	1455							
Analyte	Conc. (pg/L)	DL ^a	EMPC ^b	Qualifiers	Labeled Standard	%R	LCL-UCL ^d	Qualifiers
2,3,7,8-TCDD	119				IS 13C-2,3,7,8-TCDD	48.2	25 - 164	
1,2,3,7,8-PeCDD	412				13C-1,2,3,7,8-PeCDD	41.5	25 - 181	
1,2,3,4,7,8-HxCDD	270				13C-1,2,3,4,7,8-HxCDD	29.7	32 - 141	H
1,2,3,6,7,8-HxCDD	576				13C-1,2,3,6,7,8-HxCDD	28.5	28 - 130	
1,2,3,7,8,9-HxCDD	468				13C-1,2,3,7,8,9-HxCDD	27.9	32 - 141	H
1,2,3,4,6,7,8-HpCDD	1660				13C-1,2,3,4,6,7,8-HpCDD	24.3	23 - 140	
OCDD	2240				13C-OCDD	18.4	17 - 157	
2,3,7,8-TCDF	2580				13C-2,3,7,8-TCDF	51.2	24 - 169	
1,2,3,7,8-PeCDF	5480				13C-1,2,3,7,8-PeCDF	43.4	24 - 185	
2,3,4,7,8-PeCDF	3490				13C-2,3,4,7,8-PeCDF	46.1	21 - 178	
1,2,3,4,7,8-HxCDF	8220				13C-1,2,3,4,7,8-HxCDF	32.0	26 - 152	
1,2,3,6,7,8-HxCDF	6350				13C-1,2,3,6,7,8-HxCDF	31.3	26 - 123	
2,3,4,6,7,8-HxCDF	3810				13C-2,3,4,6,7,8-HxCDF	31.2	28 - 136	
1,2,3,7,8,9-HxCDF	2730				13C-1,2,3,7,8,9-HxCDF	34.0	29 - 147	
1,2,3,4,6,7,8-HpCDF	18800				13C-1,2,3,4,6,7,8-HpCDF	25.9	28 - 143	H
1,2,3,4,7,8,9-HpCDF	7350				13C-1,2,3,4,7,8,9-HpCDF	30.2	26 - 138	
OCDF	36200				13C-OCDF	23.5	17 - 157	
					CRS 37Cl-2,3,7,8-TCDD	85.8	35 - 197	
Totals					Toxic Equivalent Quotient (TEQ) Data ^e			
Total TCDD	5070				TEQ (Min):	4540		
Total PeCDD	5430							
Total HxCDD	4250							
Total HpCDD	2600							
Total TCDF	48800							
Total PeCDF	47100							
Total HxCDF	51300							
Total HpCDF	38100							

Analyst: MAS

Approved By: William J. Luksemburg 13-Apr-2010 08:48

Sample ID: SA167-0.0B-BIO-A TRIP					EPA Method 1613			
Client Data		Sample Data		Laboratory Data				
Name:	Exponent	Matrix:	Aqueous	Lab Sample:	32530-012	Date Received:	10-Mar-10	
Project:	2027.001	Sample Size:	1.02 L	QC Batch No.:	2909	Date Extracted:	31-Mar-10	
Date Collected:	8-Mar-10			Date Analyzed DB-5:	9-Apr-10	Dates Analyzed DB-225:	8-Apr-10	
Time Collected:	1455							
Analyte	Conc. (pg/L)	DL ^a	EMPC ^b	Qualifiers	Labeled Standard	%R	LCL-UCL ^d	Qualifiers
2,3,7,8-TCDD	141				IS 13C-2,3,7,8-TCDD	45.0	25 - 164	
1,2,3,7,8-PeCDD	522				13C-1,2,3,7,8-PeCDD	39.3	25 - 181	
1,2,3,4,7,8-HxCDD	353				13C-1,2,3,4,7,8-HxCDD	28.2	32 - 141	H
1,2,3,6,7,8-HxCDD	713				13C-1,2,3,6,7,8-HxCDD	29.9	28 - 130	
1,2,3,7,8,9-HxCDD	601				13C-1,2,3,7,8,9-HxCDD	27.7	32 - 141	H
1,2,3,4,6,7,8-HpCDD	2260				13C-1,2,3,4,6,7,8-HpCDD	24.5	23 - 140	
OCDD	2850				13C-OCDD	19.7	17 - 157	
2,3,7,8-TCDF	3120				13C-2,3,7,8-TCDF	47.7	24 - 169	
1,2,3,7,8-PeCDF	6600				13C-1,2,3,7,8-PeCDF	43.4	24 - 185	
2,3,4,7,8-PeCDF	4370				13C-2,3,4,7,8-PeCDF	43.3	21 - 178	
1,2,3,4,7,8-HxCDF	11300				13C-1,2,3,4,7,8-HxCDF	31.3	26 - 152	
1,2,3,6,7,8-HxCDF	8260				13C-1,2,3,6,7,8-HxCDF	32.6	26 - 123	
2,3,4,6,7,8-HxCDF	4860				13C-2,3,4,6,7,8-HxCDF	32.0	28 - 136	
1,2,3,7,8,9-HxCDF	3550				13C-1,2,3,7,8,9-HxCDF	33.9	29 - 147	
1,2,3,4,6,7,8-HpCDF	26000			E	13C-1,2,3,4,6,7,8-HpCDF	27.0	28 - 143	H
1,2,3,4,7,8,9-HpCDF	10100				13C-1,2,3,4,7,8,9-HpCDF	31.2	26 - 138	
OCDF	52400			E	13C-OCDF	25.3	17 - 157	
					CRS 37Cl-2,3,7,8-TCDD	84.9	35 - 197	
Totals					Toxic Equivalent Quotient (TEQ) Data ^e			
Total TCDD	5890				TEQ (Min):	5850		
Total PeCDD	6820				a. Sample specific estimated detection limit.			
Total HxCDD	5560				b. Estimated maximum possible concentration.			
Total HpCDD	3540				c. Method detection limit.			
Total TCDF	59200				d. Lower control limit - upper control limit.			
Total PeCDF	58700				e. TEQ based on (2005) World Health Organization Toxic Equivalent Factors.(WHO)			
Total HxCDF	67700							
Total HpCDF	52700							

Analyst: MAS

Approved By: William J. Luksemburg 12-Apr-2010 17:17

Sample ID: SA84-0.0B-BIO-A					EPA Method 1613			
Client Data		Sample Data		Laboratory Data				
Name:	Exponent	Matrix:	Aqueous	Lab Sample:	32530-013	Date Received:	10-Mar-10	
Project:	2027.001	Sample Size:	0.946 L	QC Batch No.:	2909	Date Extracted:	31-Mar-10	
Date Collected:	8-Mar-10			Date Analyzed DB-5:	9-Apr-10	Dates Analyzed DB-225:	7-Apr-10	
Time Collected:	1031							
Analyte	Conc. (pg/L)	DL ^a	EMPC ^b	Qualifiers	Labeled Standard	%R	LCL-UCL ^d	Qualifiers
2,3,7,8-TCDD	123				IS 13C-2,3,7,8-TCDD	81.2	25 - 164	
1,2,3,7,8-PeCDD	218				13C-1,2,3,7,8-PeCDD	84.3	25 - 181	
1,2,3,4,7,8-HxCDD	103				13C-1,2,3,4,7,8-HxCDD	73.9	32 - 141	
1,2,3,6,7,8-HxCDD	208				13C-1,2,3,6,7,8-HxCDD	74.8	28 - 130	
1,2,3,7,8,9-HxCDD	168				13C-1,2,3,7,8,9-HxCDD	73.5	32 - 141	
1,2,3,4,6,7,8-HpCDD	588				13C-1,2,3,4,6,7,8-HpCDD	74.0	23 - 140	
OCDD	1010				13C-OCDD	66.3	17 - 157	
2,3,7,8-TCDF	3740				13C-2,3,7,8-TCDF	83.0	24 - 169	
1,2,3,7,8-PeCDF	2020				13C-1,2,3,7,8-PeCDF	88.6	24 - 185	
2,3,4,7,8-PeCDF	1530				13C-2,3,4,7,8-PeCDF	89.0	21 - 178	
1,2,3,4,7,8-HxCDF	2760				13C-1,2,3,4,7,8-HxCDF	78.0	26 - 152	
1,2,3,6,7,8-HxCDF	2010				13C-1,2,3,6,7,8-HxCDF	77.0	26 - 123	
2,3,4,6,7,8-HxCDF	1160				13C-2,3,4,6,7,8-HxCDF	76.0	28 - 136	
1,2,3,7,8,9-HxCDF	942				13C-1,2,3,7,8,9-HxCDF	77.1	29 - 147	
1,2,3,4,6,7,8-HpCDF	5880				13C-1,2,3,4,6,7,8-HpCDF	73.8	28 - 143	
1,2,3,4,7,8,9-HpCDF	2400				13C-1,2,3,4,7,8,9-HpCDF	80.5	26 - 138	
OCDF	14200				13C-OCDF	75.8	17 - 157	
					CRS 37Cl-2,3,7,8-TCDD	87.3	35 - 197	
Totals					Toxic Equivalent Quotient (TEQ) Data ^e			
Total TCDD	1680				TEQ (Min):	2060		
Total PeCDD	1880							
Total HxCDD	1400				a. Sample specific estimated detection limit.			
Total HpCDD	922				b. Estimated maximum possible concentration.			
Total TCDF	23100				c. Method detection limit.			
Total PeCDF	15600				d. Lower control limit - upper control limit.			
Total HxCDF	15700				e. TEQ based on (2005) World Health Organization Toxic Equivalent Factors.(WHO)			
Total HpCDF	12000							

Analyst: MAS

Approved By: William J. Luksemburg 12-Apr-2010 17:17

Sample ID: SA169-0.0B-BIO-A					EPA Method 1613			
Client Data		Sample Data		Laboratory Data				
Name:	Exponent	Matrix:	Aqueous	Lab Sample:	32530-014	Date Received:	10-Mar-10	
Project:	2027.001	Sample Size:	0.948 L	QC Batch No.:	2909	Date Extracted:	31-Mar-10	
Date Collected:	8-Mar-10			Date Analyzed DB-5:	9-Apr-10	Dates Analyzed DB-225:	7-Apr-10	
Time Collected:	0947							
Analyte	Conc. (pg/L)	DL ^a	EMPC ^b	Qualifiers	Labeled Standard	%R	LCL-UCL ^d	Qualifiers
2,3,7,8-TCDD	224				IS 13C-2,3,7,8-TCDD	64.5	25 - 164	
1,2,3,7,8-PeCDD	587				13C-1,2,3,7,8-PeCDD	64.5	25 - 181	
1,2,3,4,7,8-HxCDD	342				13C-1,2,3,4,7,8-HxCDD	51.1	32 - 141	
1,2,3,6,7,8-HxCDD	654				13C-1,2,3,6,7,8-HxCDD	52.9	28 - 130	
1,2,3,7,8,9-HxCDD	519				13C-1,2,3,7,8,9-HxCDD	50.7	32 - 141	
1,2,3,4,6,7,8-HpCDD	1840				13C-1,2,3,4,6,7,8-HpCDD	50.1	23 - 140	
OCDD	2010				13C-OCDD	43.2	17 - 157	
2,3,7,8-TCDF	4790			E	13C-2,3,7,8-TCDF	67.7	24 - 169	
1,2,3,7,8-PeCDF	6500				13C-1,2,3,7,8-PeCDF	65.8	24 - 185	
2,3,4,7,8-PeCDF	4450				13C-2,3,4,7,8-PeCDF	66.8	21 - 178	
1,2,3,4,7,8-HxCDF	9530				13C-1,2,3,4,7,8-HxCDF	55.7	26 - 152	
1,2,3,6,7,8-HxCDF	6970				13C-1,2,3,6,7,8-HxCDF	55.6	26 - 123	
2,3,4,6,7,8-HxCDF	4240				13C-2,3,4,6,7,8-HxCDF	54.0	28 - 136	
1,2,3,7,8,9-HxCDF	3220				13C-1,2,3,7,8,9-HxCDF	57.0	29 - 147	
1,2,3,4,6,7,8-HpCDF	20000				13C-1,2,3,4,6,7,8-HpCDF	52.0	28 - 143	
1,2,3,4,7,8,9-HpCDF	8220				13C-1,2,3,4,7,8,9-HpCDF	58.8	26 - 138	
OCDF	41600				13C-OCDF	53.6	17 - 157	
					CRS 37Cl-2,3,7,8-TCDD	94.6	35 - 197	
Totals					Toxic Equivalent Quotient (TEQ) Data ^e			
Total TCDD	6300				TEQ (Min):	5690		
Total PeCDD	6420							
Total HxCDD	4790				a. Sample specific estimated detection limit.			
Total HpCDD	2850				b. Estimated maximum possible concentration.			
Total TCDF	63200				c. Method detection limit.			
Total PeCDF	55600				d. Lower control limit - upper control limit.			
Total HxCDF	56500				e. TEQ based on (2005) World Health Organization Toxic Equivalent Factors.(WHO)			
Total HpCDF	41300							

Analyst: MAS

Approved By: William J. Luksemburg 12-Apr-2010 17:17

Sample ID: MATCHED SPIKE					EPA Method 1613			
Client Data		Sample Data		Laboratory Data				
Name:	Exponent	Matrix:	Aqueous	Lab Sample:	32530-015	Date Received:	10-Mar-10	
Project:	2027.001	Sample Size:	1.00 L	QC Batch No.:	2909	Date Extracted:	31-Mar-10	
Date Collected:	8-Mar-10			Date Analyzed DB-5:	9-Apr-10	Dates Analyzed DB-225:	7-Apr-10	
Time Collected:	NA							
Analyte	Conc. (pg/L)	DL ^a	EMPC ^b	Qualifiers	Labeled Standard	%R	LCL-UCL ^d	Qualifiers
2,3,7,8-TCDD	514				IS 13C-2,3,7,8-TCDD	60.4	25 - 164	
1,2,3,7,8-PeCDD	1990				13C-1,2,3,7,8-PeCDD	57.2	25 - 181	
1,2,3,4,7,8-HxCDD	1450				13C-1,2,3,4,7,8-HxCDD	48.2	32 - 141	
1,2,3,6,7,8-HxCDD	2800				13C-1,2,3,6,7,8-HxCDD	50.3	28 - 130	
1,2,3,7,8,9-HxCDD	2250				13C-1,2,3,7,8,9-HxCDD	46.8	32 - 141	
1,2,3,4,6,7,8-HpCDD	8360				13C-1,2,3,4,6,7,8-HpCDD	41.8	23 - 140	
OCDD	11900				13C-OCDD	31.8	17 - 157	
2,3,7,8-TCDF	10800			E	13C-2,3,7,8-TCDF	64.3	24 - 169	
1,2,3,7,8-PeCDF	23800			E	13C-1,2,3,7,8-PeCDF	63.2	24 - 185	
2,3,4,7,8-PeCDF	15400				13C-2,3,4,7,8-PeCDF	61.4	21 - 178	
1,2,3,4,7,8-HxCDF	43500			E	13C-1,2,3,4,7,8-HxCDF	52.3	26 - 152	
1,2,3,6,7,8-HxCDF	34200			E	13C-1,2,3,6,7,8-HxCDF	53.4	26 - 123	
2,3,4,6,7,8-HxCDF	19500				13C-2,3,4,6,7,8-HxCDF	51.2	28 - 136	
1,2,3,7,8,9-HxCDF	14600				13C-1,2,3,7,8,9-HxCDF	52.8	29 - 147	
1,2,3,4,6,7,8-HpCDF	96100			E	13C-1,2,3,4,6,7,8-HpCDF	48.0	28 - 143	
1,2,3,4,7,8,9-HpCDF	42500			E	13C-1,2,3,4,7,8,9-HpCDF	53.4	26 - 138	
OCDF	202000			E	13C-OCDF	46.2	17 - 157	
					CRS 37Cl-2,3,7,8-TCDD	85.9	35 - 197	
Totals					Toxic Equivalent Quotient (TEQ) Data ^e			
Total TCDD	520				TEQ (Min):	22300		
Total PeCDD	1990							
Total HxCDD	6520							
Total HpCDD	8430							
Total TCDF	10900							
Total PeCDF	40300							
Total HxCDF	112000							
Total HpCDF	140000							

Analyst: MAS

Approved By: William J. Luksemburg 12-Apr-2010 17:17

Method Blank					EPA Method 1613				
Matrix:	Solid	QC Batch No.:	2893	Lab Sample:	0-MB001	Date Analyzed DB-5:	8-Apr-10	Date Analyzed DB-225:	NA
Sample Size:	10.0 g	Date Extracted:	25-Mar-10						
Analyte	Conc. (pg/g)	DL ^a	EMPC ^b	Qualifiers	Labeled Standard	%R	LCL-UCL ^d	Qualifiers	
2,3,7,8-TCDD	ND	0.165			IS 13C-2,3,7,8-TCDD	91.8	25 - 164		
1,2,3,7,8-PeCDD	ND	0.181			13C-1,2,3,7,8-PeCDD	93.8	25 - 181		
1,2,3,4,7,8-HxCDD	ND	0.352			13C-1,2,3,4,7,8-HxCDD	84.3	32 - 141		
1,2,3,6,7,8-HxCDD	ND	0.364			13C-1,2,3,6,7,8-HxCDD	86.9	28 - 130		
1,2,3,7,8,9-HxCDD	ND	0.377			13C-1,2,3,7,8,9-HxCDD	83.3	32 - 141		
1,2,3,4,6,7,8-HpCDD	ND	0.586			13C-1,2,3,4,6,7,8-HpCDD	77.7	23 - 140		
OCDD	ND	0.753			13C-OCDD	68.3	17 - 157		
2,3,7,8-TCDF	ND	0.185			13C-2,3,7,8-TCDF	90.2	24 - 169		
1,2,3,7,8-PeCDF	ND	0.172			13C-1,2,3,7,8-PeCDF	94.6	24 - 185		
2,3,4,7,8-PeCDF	ND	0.181			13C-2,3,4,7,8-PeCDF	97.6	21 - 178		
1,2,3,4,7,8-HxCDF	ND	0.0836			13C-1,2,3,4,7,8-HxCDF	87.2	26 - 152		
1,2,3,6,7,8-HxCDF	ND	0.0876			13C-1,2,3,6,7,8-HxCDF	90.1	26 - 123		
2,3,4,6,7,8-HxCDF	ND	0.105			13C-2,3,4,6,7,8-HxCDF	88.6	28 - 136		
1,2,3,7,8,9-HxCDF	ND	0.152			13C-1,2,3,7,8,9-HxCDF	85.9	29 - 147		
1,2,3,4,6,7,8-HpCDF	ND	0.163			13C-1,2,3,4,6,7,8-HpCDF	81.8	28 - 143		
1,2,3,4,7,8,9-HpCDF	ND	0.177			13C-1,2,3,4,7,8,9-HpCDF	81.6	26 - 138		
OCDF	ND	0.537			13C-OCDF	72.8	17 - 157		
					CRS 37Cl-2,3,7,8-TCDD	82.9	35 - 197		
Totals					Toxic Equivalent Quotient (TEQ) Data ^e				
Total TCDD	ND	0.165			TEQ (Min):	0			
Total PeCDD	ND	0.181							
Total HxCDD	ND	0.365							
Total HpCDD	ND	0.586							
Total TCDF	ND	0.185							
Total PeCDF	ND	0.177							
Total HxCDF	ND	0.104							
Total HpCDF	ND	0.170							

Analyst: MAS

Approved By: William J. Luksemburg 12-Apr-2010 17:17

OPR Results				EPA Method 1613			
Matrix:	Solid	QC Batch No.:	2893	Lab Sample:	0-OPR001		
Sample Size:	10.0 g	Date Extracted:	25-Mar-10	Date Analyzed DB-5:	8-Apr-10	Date Analyzed DB-225:	NA
Analyte	Spike Conc.	Conc. (ng/mL)	OPR Limits	Labeled Standard	%R	LCL-UCL	Qualifier
2,3,7,8-TCDD	10.0	9.54	6.7 - 15.8	IS 13C-2,3,7,8-TCDD	92.0	25 - 164	
1,2,3,7,8-PeCDD	50.0	45.2	35 - 71	13C-1,2,3,7,8-PeCDD	94.1	25 - 181	
1,2,3,4,7,8-HxCDD	50.0	43.4	35 - 82	13C-1,2,3,4,7,8-HxCDD	86.8	32 - 141	
1,2,3,6,7,8-HxCDD	50.0	46.7	38 - 67	13C-1,2,3,6,7,8-HxCDD	87.5	28 - 130	
1,2,3,7,8,9-HxCDD	50.0	46.2	32 - 81	13C-1,2,3,7,8,9-HxCDD	85.2	32 - 141	
1,2,3,4,6,7,8-HpCDD	50.0	45.6	35 - 70	13C-1,2,3,4,6,7,8-HpCDD	81.2	23 - 140	
OCDD	100	92.8	78 - 144	13C-OCDD	70.1	17 - 157	
2,3,7,8-TCDF	10.0	8.92	7.5 - 15.8	13C-2,3,7,8-TCDF	95.2	24 - 169	
1,2,3,7,8-PeCDF	50.0	46.5	40 - 67	13C-1,2,3,7,8-PeCDF	96.4	24 - 185	
2,3,4,7,8-PeCDF	50.0	46.0	34 - 80	13C-2,3,4,7,8-PeCDF	97.3	21 - 178	
1,2,3,4,7,8-HxCDF	50.0	45.1	36 - 67	13C-1,2,3,4,7,8-HxCDF	88.9	26 - 152	
1,2,3,6,7,8-HxCDF	50.0	47.2	42 - 65	13C-1,2,3,6,7,8-HxCDF	88.6	26 - 123	
2,3,4,6,7,8-HxCDF	50.0	45.3	35 - 78	13C-2,3,4,6,7,8-HxCDF	87.5	28 - 136	
1,2,3,7,8,9-HxCDF	50.0	45.3	39 - 65	13C-1,2,3,7,8,9-HxCDF	86.1	29 - 147	
1,2,3,4,6,7,8-HpCDF	50.0	44.3	41 - 61	13C-1,2,3,4,6,7,8-HpCDF	81.3	28 - 143	
1,2,3,4,7,8,9-HpCDF	50.0	44.1	39 - 69	13C-1,2,3,4,7,8,9-HpCDF	85.5	26 - 138	
OCDF	100	90.1	63 - 170	13C-OCDF	75.4	17 - 157	
				CRS 37Cl-2,3,7,8-TCDD	84.5	35 - 197	

Analyst: MAS

Approved By: William J. Luksemburg 12-Apr-2010 17:17

Sample ID: SA167-0.0B-BIO-A					EPA Method 1613			
Client Data		Sample Data			Laboratory Data			
Name:	Exponent	Matrix:	Solid		Lab Sample:	32530-016	Date Received:	10-Mar-10
Project:	2027.001	Sample Size:	9.05 g		QC Batch No.:	2893	Date Extracted:	25-Mar-10
Date Collected:	8-Mar-10	%Solids:	95.6		Date Analyzed DB-5:	9-Apr-10	Dates Analyzed DB-225:	7-Apr-10
Time Collected:	1455							
Analyte	Conc. (pg/g)	DL ^a	EMPC ^b	Qualifiers	Labeled Standard	%R	LCL-UCL ^d	Qualifiers
2,3,7,8-TCDD	28.4				IS 13C-2,3,7,8-TCDD	92.2	25 - 164	
1,2,3,7,8-PeCDD	103				13C-1,2,3,7,8-PeCDD	102	25 - 181	
1,2,3,4,7,8-HxCDD	74.0				13C-1,2,3,4,7,8-HxCDD	89.2	32 - 141	
1,2,3,6,7,8-HxCDD	157				13C-1,2,3,6,7,8-HxCDD	88.0	28 - 130	
1,2,3,7,8,9-HxCDD	136				13C-1,2,3,7,8,9-HxCDD	87.7	32 - 141	
1,2,3,4,6,7,8-HpCDD	611				13C-1,2,3,4,6,7,8-HpCDD	99.6	23 - 140	
OCDD	936				13C-OCDD	97.2	17 - 157	
2,3,7,8-TCDF	643			E	13C-2,3,7,8-TCDF	92.7	24 - 169	
1,2,3,7,8-PeCDF	1290				13C-1,2,3,7,8-PeCDF	100	24 - 185	
2,3,4,7,8-PeCDF	827				13C-2,3,4,7,8-PeCDF	98.4	21 - 178	
1,2,3,4,7,8-HxCDF	2440			E	13C-1,2,3,4,7,8-HxCDF	90.9	26 - 152	
1,2,3,6,7,8-HxCDF	1900				13C-1,2,3,6,7,8-HxCDF	91.2	26 - 123	
2,3,4,6,7,8-HxCDF	1030				13C-2,3,4,6,7,8-HxCDF	90.2	28 - 136	
1,2,3,7,8,9-HxCDF	801				13C-1,2,3,7,8,9-HxCDF	90.2	29 - 147	
1,2,3,4,6,7,8-HpCDF	7090			E	13C-1,2,3,4,6,7,8-HpCDF	99.3	28 - 143	
1,2,3,4,7,8,9-HpCDF	2720			E	13C-1,2,3,4,7,8,9-HpCDF	112	26 - 138	
OCDF	17100			E	13C-OCDF	109	17 - 157	
					CRS 37Cl-2,3,7,8-TCDD	91.4	35 - 197	
Totals					Toxic Equivalent Quotient (TEQ) Data ^e			
Total TCDD	949				TEQ (Min):	1250		
Total PeCDD	1190							
Total HxCDD	1180							a. Sample specific estimated detection limit.
Total HpCDD	927							b. Estimated maximum possible concentration.
Total TCDF	9310							c. Method detection limit.
Total PeCDF	10800							d. Lower control limit - upper control limit.
Total HxCDF	14700							e. TEQ based on (2005) World Health Organization Toxic Equivalent Factors.(WHO)
Total HpCDF	13800							The results are reported in dry weight. The sample size is reported in wet weight.

Analyst: MAS

Approved By: William J. Luksemburg 12-Apr-2010 17:17

Sample ID: SA167-0.0B-BIO-A DUP					EPA Method 1613			
Client Data		Sample Data		Laboratory Data				
Name:	Exponent	Matrix:	Solid	Lab Sample:	32530-017	Date Received:	10-Mar-10	
Project:	2027.001	Sample Size:	8.43 g	QC Batch No.:	2893	Date Extracted:	25-Mar-10	
Date Collected:	8-Mar-10	%Solids:	93.0	Date Analyzed DB-5:	9-Apr-10	Dates Analyzed DB-225:	7-Apr-10	
Time Collected:	1455							
Analyte	Conc. (pg/g)	DL ^a	EMPC ^b	Qualifiers	Labeled Standard	%R	LCL-UCL ^d	Qualifiers
2,3,7,8-TCDD	26.0				IS 13C-2,3,7,8-TCDD	89.0	25 - 164	
1,2,3,7,8-PeCDD	95.8				13C-1,2,3,7,8-PeCDD	94.7	25 - 181	
1,2,3,4,7,8-HxCDD	70.1				13C-1,2,3,4,7,8-HxCDD	85.7	32 - 141	
1,2,3,6,7,8-HxCDD	146				13C-1,2,3,6,7,8-HxCDD	85.2	28 - 130	
1,2,3,7,8,9-HxCDD	124				13C-1,2,3,7,8,9-HxCDD	85.1	32 - 141	
1,2,3,4,6,7,8-HpCDD	574				13C-1,2,3,4,6,7,8-HpCDD	94.9	23 - 140	
OCDD	925				13C-OCDD	97.1	17 - 157	
2,3,7,8-TCDF	604			E	13C-2,3,7,8-TCDF	90.0	24 - 169	
1,2,3,7,8-PeCDF	1170				13C-1,2,3,7,8-PeCDF	98.3	24 - 185	
2,3,4,7,8-PeCDF	761				13C-2,3,4,7,8-PeCDF	96.6	21 - 178	
1,2,3,4,7,8-HxCDF	2260				13C-1,2,3,4,7,8-HxCDF	89.6	26 - 152	
1,2,3,6,7,8-HxCDF	1790				13C-1,2,3,6,7,8-HxCDF	86.5	26 - 123	
2,3,4,6,7,8-HxCDF	964				13C-2,3,4,6,7,8-HxCDF	86.7	28 - 136	
1,2,3,7,8,9-HxCDF	750				13C-1,2,3,7,8,9-HxCDF	86.6	29 - 147	
1,2,3,4,6,7,8-HpCDF	6860			E	13C-1,2,3,4,6,7,8-HpCDF	93.1	28 - 143	
1,2,3,4,7,8,9-HpCDF	2570			E	13C-1,2,3,4,7,8,9-HpCDF	104	26 - 138	
OCDF	16500			E	13C-OCDF	107	17 - 157	
					CRS 37Cl-2,3,7,8-TCDD	91.1	35 - 197	
Totals					Toxic Equivalent Quotient (TEQ) Data ^e			
Total TCDD	871				TEQ (Min):	1160		
Total PeCDD	1110							
Total HxCDD	1100							
Total HpCDD	883							
Total TCDF	8900							
Total PeCDF	10000							
Total HxCDF	13700							
Total HpCDF	13400							
					a. Sample specific estimated detection limit.			
					b. Estimated maximum possible concentration.			
					c. Method detection limit.			
					d. Lower control limit - upper control limit.			
					e. TEQ based on (2005) World Health Organization Toxic Equivalent Factors.(WHO)			
					The results are reported in dry weight. The sample size is reported in wet weight.			

Analyst: MAS

Approved By: William J. Luksemburg 12-Apr-2010 17:17

Sample ID: SA167-0.0B-BIO-A TRIP					EPA Method 1613			
Client Data		Sample Data		Laboratory Data				
Name:	Exponent	Matrix:	Solid	Lab Sample:	32530-018	Date Received:	10-Mar-10	
Project:	2027.001	Sample Size:	10.7 g	QC Batch No.:	2893	Date Extracted:	25-Mar-10	
Date Collected:	8-Mar-10	%Solids:	95.7	Date Analyzed DB-5:	9-Apr-10	Dates Analyzed DB-225:	7-Apr-10	
Time Collected:	1455							
Analyte	Conc. (pg/g)	DL ^a	EMPC ^b	Qualifiers	Labeled Standard	%R	LCL-UCL ^d	Qualifiers
2,3,7,8-TCDD	27.2				IS 13C-2,3,7,8-TCDD	89.9	25 - 164	
1,2,3,7,8-PeCDD	107				13C-1,2,3,7,8-PeCDD	99.4	25 - 181	
1,2,3,4,7,8-HxCDD	86.3				13C-1,2,3,4,7,8-HxCDD	88.5	32 - 141	
1,2,3,6,7,8-HxCDD	176				13C-1,2,3,6,7,8-HxCDD	90.3	28 - 130	
1,2,3,7,8,9-HxCDD	151				13C-1,2,3,7,8,9-HxCDD	88.5	32 - 141	
1,2,3,4,6,7,8-HpCDD	676				13C-1,2,3,4,6,7,8-HpCDD	104	23 - 140	
OCDD	976				13C-OCDD	100	17 - 157	
2,3,7,8-TCDF	586			E	13C-2,3,7,8-TCDF	90.7	24 - 169	
1,2,3,7,8-PeCDF	1350				13C-1,2,3,7,8-PeCDF	101	24 - 185	
2,3,4,7,8-PeCDF	857				13C-2,3,4,7,8-PeCDF	99.5	21 - 178	
1,2,3,4,7,8-HxCDF	2730			E	13C-1,2,3,4,7,8-HxCDF	93.4	26 - 152	
1,2,3,6,7,8-HxCDF	2110			E	13C-1,2,3,6,7,8-HxCDF	92.2	26 - 123	
2,3,4,6,7,8-HxCDF	1150				13C-2,3,4,6,7,8-HxCDF	87.9	28 - 136	
1,2,3,7,8,9-HxCDF	849				13C-1,2,3,7,8,9-HxCDF	93.0	29 - 147	
1,2,3,4,6,7,8-HpCDF	8160			E	13C-1,2,3,4,6,7,8-HpCDF	101	28 - 143	
1,2,3,4,7,8,9-HpCDF	3010			E	13C-1,2,3,4,7,8,9-HpCDF	113	26 - 138	
OCDF	19200			E	13C-OCDF	111	17 - 157	
					CRS 37Cl-2,3,7,8-TCDD	87.2	35 - 197	
Totals					Toxic Equivalent Quotient (TEQ) Data ^e			
Total TCDD	939				TEQ (Min):	1340		
Total PeCDD	1310							
Total HxCDD	1350							
Total HpCDD	1040							
Total TCDF	9480							
Total PeCDF	11600							
Total HxCDF	16400							
Total HpCDF	15800							

Analyst: MAS

Approved By: William J. Luksemburg 12-Apr-2010 17:17

APPENDIX

DATA QUALIFIERS & ABBREVIATIONS

B	This compound was also detected in the method blank.
D	Dilution
E	The amount detected is above the High Calibration Limit.
P	The amount reported is the maximum possible concentration due to possible chlorinated diphenylether interference.
H	Recovery was outside laboratory acceptance limits.
I	Chemical Interference
J	The amount detected is below the Low Calibration Limit.
*	See Cover Letter
Conc.	Concentration
DL	Sample-specific estimated detection limit
MDL	The minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero in the matrix tested.
EMPC	Estimated Maximum Possible Concentration
NA	Not applicable
RL	Reporting Limit – concentrations that correspond to low calibration point
ND	Not Detected
TEQ	Toxic Equivalency

Unless otherwise noted, solid sample results are reported in dry weight. Tissue samples are reported in wet weight.

CERTIFICATIONS

Accrediting Authority	Certificate Number
State of Alaska, DEC	CA413-2008
State of Arizona	AZ0639
State of Arkansas, DEQ	08-043-0
State of Arkansas, DOH	Reciprocity through CA
State of California – NELAP Primary AA	02102CA
State of Colorado	N/A
State of Connecticut	PH-0182
State of Florida, DEP	E87777
State of Indiana Department of Health	C-CA-02
Commonwealth of Kentucky	90063
State of Louisiana, Health and Hospitals	LA08000
State of Louisiana, DEQ	01977
State of Maine	2008024
State of Michigan	9932
State of Mississippi	Reciprocity through CA
Naval Facilities Engineering Service Center	NFESC413
State of Nevada	CA004132007A
State of New Jersey	CA003
State of New Mexico	Reciprocity through CA
State of New York, DOH	11411
State of North Carolina	06700
State of North Dakota, DOH	R-078
State of Oklahoma	D9919
State of Oregon	CA200001-006
State of Pennsylvania	68-00490
State of South Carolina	87002001
State of Tennessee	TN02996
State of Texas	T104704189-08-TX
U.S. Army Corps of Engineers	N/A
State of Utah	CA16400
Commonwealth of Virginia	00013
State of Washington	C1285
State of Wisconsin	998036160
State of Wyoming	8TMS-Q

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed and accurate.

COC No. 2027.001.1400
Page: 1 of 3
Cooler # 1 of 1

Collection Area:

32489
0.1°C, -0.7°C, 1.6°C, -0.6°C

Required Ship to Lab: Lab Name: Vista Analytical		Required Project Information: Site ID #: TRONOX LLC. HENDERSON		Required Invoice Information: Send Invoice to: Susan Crowley Tronox LLC		TAT: Standard 30 day <input checked="" type="checkbox"/> Rush <input type="checkbox"/> Mark One <input type="checkbox"/>	
Address: 1100 Windfield Way		Project #: 2027.001		Address: PO Box 55		If Rush, Date due	
El Dorado Hills, CA 95762-9622		Site Address: 560 W. Lake Mead Drive		City/State: Henderson, NV 89009		Phone #: (949) 260-9293	
Lab PM: William J. Luksemburg		City: Henderson State: NV		Reimbursement project? <input checked="" type="checkbox"/> Non-reimbursement project? <input type="checkbox"/> Mark one		QC level Required: Standard <input type="checkbox"/> Special <input type="checkbox"/> EPA Stage 4 <input type="checkbox"/> Mark one	
Phone/Fax: (916) 673-1520		Site PM Name: Derrick Willis		Send EDD to: Frank Hagar Northgate Environmental Management, Inc frank.hagar@ngem.com		MA MCP Cert? <input type="checkbox"/> CT RCP Cert? <input type="checkbox"/> Mark One <input type="checkbox"/>	
Lab PM email: billux@vista-analytical.com		Phone/Fax: (949) 375-7004		CC Hardcopy report to: PDF Electronic Version Only		Lab Project ID (lab use)	
Applicable Lab Quote #:		Site PM Email: derrick.willis@ngem.com		CC Hardcopy report to: see additional comments below			

ITEM #	SAMPLE ID One Character per box. (A-Z, 0-9 / , -) Samples IDs MUST BE UNIQUE	Valid Matrix Codes MATRIX DRINKING WATER WP GROUND WATER WGS WATER WATER WW FREE PRODUCT LP SOIL SO OIL OIL RINGSATE WH YURE AMBIDENT AIR AE SVE AIR AS SOL GAS GS	MATRIX WATER WS SURFACE WATER WBS WATER CC WBS SLUDGE SL OTHER OT ANIMAL TISSUE TA	MATRIX CODE	SAMPLE TYPE G=GRAB C=COMP	SAMPLE DATE	SAMPLE TIME	# OF CONTAINERS	FIELD FILTERED? (Y/N)	Preservatives								Requested Analyses	Comments/Lab Sample I.D.						
										Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other			EPA 1631	EPA 1631B	EPA 1631C	EPA 1631D	EPA 1631E	EPA 1631F
1	SA75-0.0B-BIO-A			SO	G	3/8/2010	14:35	1	N	X														1- L Amber	
2	SA75-0.0B-BIO-B *			SO	G	3/8/2010	14:43	1	N	X														Hold	
3	RSAH3-0.0B-BIO-A			SO	G	3/8/2010	16:30	1	N	X														1- L Amber	
4	RSAH3-0.0B-BIO-B *			SO	G	3/8/2010	16:44	1	N	X														Hold	
5	RSAL3-0.0B-BIO-A			SO	G	3/8/2010	15:55	1	N	X														1- L Amber	
6	RSAL3-0.0B-BIO-B *			SO	G	3/8/2010	16:05	1	N	X														Hold	
7	RSAK4-0.0B-BIO-A			SO	G	3/8/2010	15:15	1	N	X														1- L Amber	
8	RSAK4-0.0B-BIO-B *			SO	G	3/8/2010	15:25	1	N	X														Hold	
9	RSAK4009-0.0B-BIO-A			SO	G	3/8/2010	15:15	1	N	X														1- L Amber	
10	RSAK4009-0.0B-BIO-B *			SO	G	3/8/2010	15:25	1	N	X														Hold	
11	SA41-0.0B-BIO-A			SO	G	3/8/2010	11:08	1	N	X														1- L Amber	
12	SA41-0.0B-BIO-B *			SO	G	3/8/2010	11:16	1	N	X														Hold	

Additional Comments/Special Instructions: <input type="checkbox"/> TWO SAMPLES FOR EACH LOCATION SUBMITTED. HOLD THE "B" SAMPLE UNTIL NOTIFIED. All PDF reports and EDDs will be uploaded to: Northgate Environmental Management, Inc. FTP site address provided to labs Notifications provided to: cindy.arnold@ngem.com and frank.hagar@ngem.com * Project 32490	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	Sample Receipt Conditions			
	Dana R. Brown, Northgate Env. <i>DB</i>	8-Mar	18:00	<i>Dana R. Brown</i> Vista Ana	3/16/10	11:17	Y/N	Y/N	Y/N	
							Y/N	Y/N	Y/N	
							Y/N	Y/N	Y/N	
SHIPPING METHOD: (mark as appropriate)				SAMPLER NAME AND SIGNATURE			Temp in OC	Samples on Ice? <i>YES</i>	Sample intact? <i>YES</i>	Trip Blank?
UPS COURIER FEDEX		PRINT Name of SAMPLER:		Dana R. Brown						
US MAIL		SIGNATURE of SAMPLER:		DATE Signed		18:00				



CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed and accurate.

COC No. 2027.001.1400
 Page: 2 of 3
 Cooler # 1 of 1
 Collection Area:

1100 Quail Street, Suite 102, Newport Beach, CA 92660
 (949) 260-9293

32489

Required Ship to Lab:		Required Project Information:		Required Invoice Information:		TAT: Standard 30 day <input checked="" type="checkbox"/> Rush <input type="checkbox"/> Mark One <input type="checkbox"/>	
Lab Name:	Vista Analytical	Site ID #:	TRONOX LLC. HENDERSON	Send Invoice to:	Susan Crowley Tronox LLC	If Rush, Date due	
Address:	1100 Windfield Way	Project #:	2027.001	Address:	PO Box 55	QC level Required: Standard <input type="checkbox"/> Special <input type="checkbox"/> EPA Stage 4 <input type="checkbox"/> Mark one <input type="checkbox"/>	
El Dorado Hills, CA 95762-9622		Site Address:	560 W. Lake Mead Drive	City/State:	Henderson, NV 89009	Phone #:	(949) 260-9293
Lab PM:	William J. Luksemburg	City:	Henderson	State:	NV	Reimbursement project?	<input checked="" type="checkbox"/> Non-reimbursement project? <input type="checkbox"/> Mark one <input type="checkbox"/>
Phone/Fax:	(916) 673-1520	Site PM Name:	Derrick Willis	Send EDD to:	Frank Hagar Northgate Environmental Management, Inc frank.hagar@ngem.com	MA MCP Cert?	<input type="checkbox"/> CT RCP Cert? <input type="checkbox"/> Mark One <input type="checkbox"/>
Lab PM email:	billux@vista-analytical.com	Phone/Fax:	(949) 375-7004	CC Hardcopy report to:	PDF Electronic Version Only	Lab Project ID (lab use)	
Applicable Lab Quote #:		Site PM Email:	derrick.willis@ngem.com	CC Hardcopy report to:	see additional comments below		

ITEM #	SAMPLE ID One Character per box. (A-Z, 0-9 / , -) Samples IDs MUST BE UNIQUE	Valid Matrix Codes		MATRIX CODE	SAMPLE TYPE G-GRAB C-COMP	SAMPLE DATE	SAMPLE TIME	# OF CONTAINERS	FIELD FILTERED? (Y/N)	Preservatives										Requested Analyses	Comments/Lab Sample I.D.			
		MATRIX								WATER		Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other					
		DRINKING WATER	GROUND WATER							WV	WS													
1	SA114-0.0B-BIO-A	SO	G		G	3/8/2010	13:05	1	N	X														1- L Amber
2	SA114-0.0B-BIO-B *	SO	G		G	3/8/2010	13:11	1	N	X														Hold
3	SA150-0.0B-BIO-A	SO	G		G	3/8/2010	13:33	1	N	X														1- L Amber
4	SA150-0.0B-BIO-B *	SO	G		G	3/8/2010	13:39	1	N	X														Hold
5	SA167-0.0B-BIO-A	SO	G		G	3/8/2010	14:55	1	N	X														1- L Amber
6	SA167-0.0B-BIO-B *	SO	G		G	3/8/2010	15:05	1	N	X														Hold
7	SA84-0.0B-BIO-A	SO	G		G	3/8/2010	10:31	1	N	X														1- L Amber
8	SA84-0.0B-BIO-B *	SO	G		G	3/8/2010	10:36	1	N	X														Hold
9	SA169-0.0B-BIO-A	SO	G		G	3/8/2010	9:47	1	N	X														1- L Amber
10	SA169-0.0B-BIO-B *	SO	G		G	3/8/2010	10:12	1	N	X														Hold
11	0.29																							
12	3-8-2010																							

Additional Comments/Special Instructions: <input type="checkbox"/> TWO SAMPLES FOR EACH LOCATION SUBMITTED. HOLD THE "B" SAMPLE UNTIL NOTIFIED. All PDF reports and EDDs will be uploaded to: Northgate Environmental Management, Inc. FTP site address provided to labs Notifications provided to: cindy.arnold@ngem.com and frank.hagar@ngem.com * Project 32490	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	Sample Receipt Conditions			
	Dana R. Brown, Northgate Env.	8-Mar	18:00	<i>Dana R. Brown</i> Vista Analytical	3/10/10	1117	Y/N	Y/N	Y/N	
							Y/N	Y/N	Y/N	
							Y/N	Y/N	Y/N	
SHIPPING METHOD. (mark as appropriate)				SAMPLER NAME AND SIGNATURE			Temp in OC	Samples on Ice? <i>yes</i>	Sample intact? <i>yes</i>	Trip Blank?
UPS COURIER <input checked="" type="checkbox"/> FEDEX <input type="checkbox"/>				SIGNATURE of SAMPLER: <i>Dana R. Brown</i>						
US MAIL <input type="checkbox"/>				DATE Signed: 3/8/2010 Time: 18:00						



CHAIN-OF-CUSTODY / Analytical Request Document

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COC No. 2027.001.1400
 Page: 3 of 3
 Cooler # 1 of 1
 Collection Area:

1100 Quail Street, Suite 102, Newport Beach, CA 92660
 (949) 280-9293

32489

Required Ship to Lab:		Required Project Information:		Required Invoice Information:		TAT: Standard 30 day		<input checked="" type="checkbox"/> Rush		Mark One	
Lab Name:	Vista Analytical	Site ID #:	TRONOX LLC. HENDERSON	Send Invoice to:	Susan Crowley Tronox LLC	If Rush, Date due					
Address:	1100 Windfield Way	Project #:	2027.001	Address:	PO Box 55	QC level Required: Standard		Special		EPA Stage 4	
El Dorado Hills, CA 95762-9622		Site Address	560 W. Lake Mead Drive	City/State	Henderson, NV 89009	Phone #:	(949) 260-9293	NJ Reduced Deliverable Package?		Mark one	
Lab PM:	William J. Luksemburg	City	Henderson	State	NV	Reimbursement project?	<input checked="" type="checkbox"/>	Non-reimbursement project?			
Phone/Fax:	(916) 673-1520	Site PM Name	Derrick Willis	Send EDD to	Frank Hagar Northgate Environmental Management, Inc frank.hagar@ngem.com		MA MCP Cert?	CT RCP Cert?	Mark One		
Lab PM email	billux@vista-analytical.com	Phone/Fax:	(949) 375-7004	CC Hardcopy report to	PDF Electronic Version Only		Lab Project ID (lab use)				
Applicable Lab Quote #:		Site PM Email:	derrick.willis@ngem.com	CC Hardcopy report to	see additional comments below						

ITEM #	SAMPLE ID One Character per box. (A-Z, 0-9 / , -) Samples IDs MUST BE UNIQUE	Valid Matrix Codes		MATRIX CODE	SAMPLE TYPE G-GRAB C-COMP	SAMPLE DATE	SAMPLE TIME	# OF CONTAINERS	FIELD FILTERED? (Y/N)	Preservatives										Requested Analyses	Comments/Lab Sample I.D.
		MATRIX								MATRIX		Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other		
		DRINKING WATER	WP							WATER	W										
1	SA169-0.0B-BIO-AMS			SO	G	3/8/2010	9:47	1	N	X									X	1-L Amber	
2	SA169-0.0B-BIO-AMSD			SO	G	3/8/2010	9:47	1	N	X									X	1-L Amber	
3	EB-03082010-BIO			W	G	3/8/2010	13:57	2	N	X									X	2 - 1L Amber Glass	
4	FB-03082010-BIO			W	G	3/8/2010	12:40	2	N	X									X	2 - 1L Amber Glass	
5																					
6																					
7																					
8																					
9																					
10																					
11																					
12																					

DRB
3-8-2010

Additional Comments/Special Instructions: <input type="checkbox"/> TWO SAMPLES FOR EACH LOCATION SUBMITTED. HOLD THE "B" SAMPLE UNTIL NOTIFIED. All PDF reports and EDDs will be uploaded to: Northgate Environmental Management, Inc. FTP site address provided to labs Notifications provided to: cindy.arnold@ngem.com and frank.hagar@ngem.com	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	Sample Receipt Conditions				
	Dana R. Brown, Northgate Env.	08	8-Mar	18:00	<i>Dana R. Brown</i> Vista Analytical	3/10/10	11:10		Y/N	Y/N	Y/N
									Y/N	Y/N	Y/N
									Y/N	Y/N	Y/N
	SHIPPING METHOD: (mark as appropriate)		SAMPLER NAME AND SIGNATURE								
UPS COURIER (FEDEX)	SIGNATURE of SAMPLER:		Dana R. Brown			DATE Signed	3/8/2010		Time:	18:00	
US MAIL	SIGNATURE of SAMPLER:		<i>Dana R. Brown</i>			DATE Signed	3/8/2010		Time:	18:00	
	Temp in OC	Samples on Ice? <i>yes</i>	Sample intact? <i>yes</i>	Temp Blank?							

SAMPLE LOG-IN CHECKLIST



Vista Project #: 32489

TAT 30 (std)

Samples Arrival:	Date/Time <u>3/10/10 0948</u>	Initials: <u>UBB</u>	Location: <u>WR-2</u>
			Shelf/Rack: <u>N/A</u>
Logged In:	Date/Time <u>3/10/10 1049</u>	Initials: <u>UBB</u>	Location: <u>WR-2</u>
			Shelf/Rack: <u>G-4</u>
Delivered By:	<input checked="" type="checkbox"/> FedEx	<input type="checkbox"/> UPS	<input type="checkbox"/> Cal
	<input type="checkbox"/> DHL	<input type="checkbox"/> Hand Delivered	<input type="checkbox"/> Other
Preservation:	<input checked="" type="checkbox"/> Ice	<input type="checkbox"/> Blue Ice	<input type="checkbox"/> Dry Ice
	<input type="checkbox"/> None		
Temp °C	<u>0.1°C</u>	Time: <u>0903</u>	Thermometer ID: <u>IR-1</u>

	YES	NO	NA
Adequate Sample Volume Received?	<input checked="" type="checkbox"/>		
Holding Time Acceptable?	<input checked="" type="checkbox"/>		
Shipping Container(s) Intact?	<input checked="" type="checkbox"/>		
Shipping Custody Seals Intact?	<input checked="" type="checkbox"/>		
Shipping Documentation Present?	<input checked="" type="checkbox"/>		
Airbill	Trk # <u>7984 5915 4574</u>	<input checked="" type="checkbox"/>	
Sample Container Intact?	<input checked="" type="checkbox"/>		
Sample Custody Seals Intact?	<input checked="" type="checkbox"/>		
Chain of Custody / Sample Documentation Present?	<input checked="" type="checkbox"/>		
COC Anomaly/Sample Acceptance Form completed?		<input checked="" type="checkbox"/>	
If Chlorinated or Drinking Water Samples, Acceptable Preservation?			<input checked="" type="checkbox"/>
Na ₂ S ₂ O ₃ Preservation Documented?	COC	Sample Container	<input checked="" type="checkbox"/> None
Shipping Container	Vista	<input checked="" type="checkbox"/> Client	<input checked="" type="checkbox"/> Retain <input checked="" type="checkbox"/> Return <input type="checkbox"/> Dispose

Comments:

SA41-0.0B-B10-A

↓ 84 ↓
↓ 69 ↓

SA169-0.0B-B10-AMS
SA169-0.0B-B10-AMSD

SAMPLE LOG-IN CHECKLIST



Vista Project #: 32489

TAT Standard

Samples Arrival:	Date/Time 3/10/10 0848	Initials: BSB	Location: WR-2
			Shelf/Rack: N/A
Logged In:	Date/Time 3/10/10 1057	Initials: BSB	Location: WR-2
			Shelf/Rack: G-4
Delivered By:	<u>FedEx</u> UPS	Cal	DHL
			Hand Delivered Other
Preservation:	<u>Ice</u>	Blue Ice	Dry Ice
			None
Temp °C	-0.7 °C	Time: 0859	Thermometer ID: IR-1

	YES	NO	NA
Adequate Sample Volume Received?	✓		
Holding Time Acceptable?	✓		
Shipping Container(s) Intact?	✓		
Shipping Custody Seals Intact?	✓		
Shipping Documentation Present?	✓		
Airbill	Trk # 7933 3899 0020	✓	
Sample Container Intact?	✓		
Sample Custody Seals Intact?	✓		
Chain of Custody / Sample Documentation Present?	✓		
COC Anomaly/Sample Acceptance Form completed?		✓	
If Chlorinated or Drinking Water Samples, Acceptable Preservation?			✓
Na ₂ S ₂ O ₃ Preservation Documented?		COC	Sample Container <u>None</u>
Shipping Container	Vista	<u>Client</u>	Retain <u>Return</u> Dispose

Comments:

RSAK4-0.0B-B10-A
 RSAL3-0.0B-B10-A
 RSAK4009-0.0B-B10-A
 SA167-0.0B-B10-A
 SA114-0.0B-B10-A

SAMPLE LOG-IN CHECKLIST



Vista Project #: 32489

TAT Standard

Samples Arrival:	Date/Time <u>3/10/10 0848</u>	Initials: <u>WJB</u>	Location: <u>WR-2</u>
			Shelf/Rack: <u>N/A</u>
Logged In:	Date/Time <u>3/10/10 1115</u>	Initials: <u>WJB</u>	Location: <u>WR-2</u>
			Shelf/Rack: <u>G4</u>
Delivered By:	<input checked="" type="checkbox"/> FedEx	<input type="checkbox"/> UPS	<input type="checkbox"/> Cal
		<input type="checkbox"/> DHL	<input type="checkbox"/> Hand Delivered
	<input type="checkbox"/> Other		
Preservation:	<input checked="" type="checkbox"/> Ice	<input type="checkbox"/> Blue Ice	<input type="checkbox"/> Dry Ice
		<input type="checkbox"/> None	
Temp °C	<u>1.6°C</u>	Time:	<u>0907</u>
		Thermometer ID:	<u>IR-1</u>

	YES	NO	NA
Adequate Sample Volume Received?	✓		
Holding Time Acceptable?	✓		
Shipping Container(s) Intact?	✓		
Shipping Custody Seals Intact?	✓		
Shipping Documentation Present?	✓		
Airbill			
Trk #	<u>1933 3483 3474</u>		
Sample Container Intact?	✓		
Sample Custody Seals Intact?	✓		
Chain of Custody / Sample Documentation Present?	✓		
COC Anomaly/Sample Acceptance Form completed?		✓	
If Chlorinated or Drinking Water Samples, Acceptable Preservation?			✓
Na ₂ S ₂ O ₃ Preservation Documented?			<input checked="" type="checkbox"/> None
Shipping Container	Vista	<input checked="" type="checkbox"/> Client	Retain
		<input checked="" type="checkbox"/> Return	Dispose

Comments:

SA 75-0.0B-B10-A
RSA H3-0.0B-B10-A
SA 150-0.0B-B10-A

SAMPLE LOG-IN CHECKLIST



Vista Project #: 32489 TAT Standard (30)

Samples Arrival:	Date/Time <u>3/10/10 0848</u>	Initials: <u>WBB</u>	Location: <u>WR-2</u>
			Shelf/Rack: <u>N/A</u>
Logged In:	Date/Time <u>3/10/10 1129</u>	Initials: <u>WBB</u>	Location: <u>WR-2</u>
			Shelf/Rack: <u>C2</u>
Delivered By:	<input checked="" type="checkbox"/> FedEx	<input type="checkbox"/> UPS	<input type="checkbox"/> Cal
		<input type="checkbox"/> DHL	<input type="checkbox"/> Hand Delivered
		<input type="checkbox"/> Other	
Preservation:	<input checked="" type="checkbox"/> Ice	<input type="checkbox"/> Blue Ice	<input type="checkbox"/> Dry Ice
		<input type="checkbox"/> None	
Temp °C	<u>-0.6°C</u>	Time: <u>0909</u>	Thermometer ID: IR-1

	YES	NO	NA
Adequate Sample Volume Received? <u>A 3 B bottles</u>	<input checked="" type="checkbox"/>		
Holding Time Acceptable?	<input checked="" type="checkbox"/>		
Shipping Container(s) Intact?	<input checked="" type="checkbox"/>		
Shipping Custody Seals Intact?	<input checked="" type="checkbox"/>		
Shipping Documentation Present?	<input checked="" type="checkbox"/>		
Airbill Trk # <u>7984 5914 4746</u>	<input checked="" type="checkbox"/>		
Sample Container Intact?	<input checked="" type="checkbox"/>		
Sample Custody Seals Intact?	<input checked="" type="checkbox"/>		
Chain of Custody / Sample Documentation Present?	<input checked="" type="checkbox"/>		
COC Anomaly/Sample Acceptance Form completed?		<input checked="" type="checkbox"/>	
If Chlorinated or Drinking Water Samples, Acceptable Preservation?			<input checked="" type="checkbox"/>
Na ₂ S ₂ O ₃ Preservation Documented?			<input checked="" type="checkbox"/> None
Shipping Container	<input checked="" type="checkbox"/> Vista	<input type="checkbox"/> Client	<input checked="" type="checkbox"/> Retain
		<input type="checkbox"/> Return	<input type="checkbox"/> Dispose

Comments:

FB-03082010-B10 AQ
EB-03082010-B10 ↓