

Form 3

PCDD/PCDF TOXICITY EQUIVALENCE SUMMARY
Use for Sample and Blank Results

CLIENT ID.

SA12-0.5

Lab Name: Columbia Analytical Services Episode No.:

Lab Code: CAS Method: Screen(2) Lab Sample ID: E0600825-001

Client Name: ENSR Sample Wt/Vol: 10.205 g or mL: g

Matrix (Aqueous/Solid/Leachate): solid Initial Calibration Date: 10/23/06

Sample Receipt Date: 11/14/06 Instrument ID: AutoSpec-Ultima

Ext. Date: 11/16/06 GC Column ID: db5

Ext.Vol(ul):20.0 Inj.Vol(ul):1.0 Sample Data Filename: U17917#1

Analysis Date: 21-NOV-06 Time: 20:20:58 Blank Data Filename: U17915#1

Dilution Factor: 1 Cal. Ver. Data Filename: U17914#1

Concentration Units (pg/L or ng/Kg dry weight): ng/Kg % Moisture: 11.20

	DETECTION LIMITS	CONCENTRATION	TEF(1)	TEF-ADJUSTED CONCENTRATION
2,3,7,8-TCDD	0.026	*	X 1.0	*
1,2,3,7,8-PeCDD	0.028	*	X 1.0	*
1,2,3,4,7,8-HxCDD	0.036	*	X 0.1	*
1,2,3,6,7,8-HxCDD	0.029	0.139	X 0.1	1.39e-02
1,2,3,7,8,9-HxCDD	0.031	0.198	X 0.1	1.98e-02
1,2,3,4,6,7,8-HpCDD	0.065	0.280	X 0.01	2.80e-03
OCDD	0.122	1.472	X 0.0001	1.47e-04
2,3,7,8-TCDF	0.033	*	X 0.1	*
1,2,3,7,8-PeCDF	0.022	0.068	X 0.05	3.40e-03
2,3,4,7,8-PeCDF	0.021	0.043	X 0.5	2.16e-02
1,2,3,4,7,8-HxCDF	0.037	0.146	X 0.1	1.46e-02
1,2,3,6,7,8-HxCDF	0.031	0.060	X 0.1	5.98e-03
1,2,3,7,8,9-HxCDF	0.044	*	X 0.1	*
2,3,4,6,7,8-HxCDF	0.037	*	X 0.1	*
1,2,3,4,6,7,8-HpCDF	0.051	0.471	X 0.01	4.71e-03
1,2,3,4,7,8,9-HpCDF	0.073	*	X 0.01	*
OCDF	0.084	1.212	X 0.0001	1.21e-04
Total:				8.71e-02

- (1) World Health Organization (WHO) adopted TEF's, taken from: Van der Berg, et al: Toxic Equivalency Factor (TEFs) for PCBs, PCCDD, PCDFs for Humans and Wildlife (Environ Health Perspect. 106:775-792 (1988)).
- (2) This is a high resolution GC/MS screening method for PCDDs/PCDFs.

SCF3w

Form 3

PCDD/PCDF TOXICITY EQUIVALENCE SUMMARY
Use for Sample and Blank Results

CLIENT ID.

SA3-0.5

Lab Name: Columbia Analytical Services Episode No.:

Lab Code: CAS Method: Screen(2) Lab Sample ID: E0600825-002

Client Name: ENSR Sample Wt/Vol: 10.673 g or mL: g

Matrix (Aqueous/Solid/Leachate): solid Initial Calibration Date: 10/23/06

Sample Receipt Date: 11/14/06 Instrument ID: AutoSpec-Ultima

Ext. Date: 11/16/06 GC Column ID: db5

Ext.Vol(ul):20.0 Inj.Vol(ul):1.0 Sample Data Filename: U17918#1

Analysis Date: 21-NOV-06 Time: 21:09:08 Blank Data Filename: U17915#1

Dilution Factor: 1 Cal. Ver. Data Filename: U17914#1

Concentration Units (pg/L or ng/Kg dry weight): ng/Kg % Moisture: 8.32

	DETECTION LIMITS	CONCENTRATION	TEF(1)	TEF-ADJUSTED CONCENTRATION
2,3,7,8-TCDD	0.027	8.039	X 1.0	8.04e+00
1,2,3,7,8-PeCDD	0.083	11.897	X 1.0	1.19e+01
1,2,3,4,7,8-HxCDD	0.142	6.265	X 0.1	6.27e-01
1,2,3,6,7,8-HxCDD	0.113	13.496	X 0.1	1.35e+00
1,2,3,7,8,9-HxCDD	0.124	15.276	X 0.1	1.53e+00
1,2,3,4,6,7,8-HpCDD	0.134	53.366	X 0.01	5.34e-01
OCDD	0.223	57.568	X 0.0001	5.76e-03
2,3,7,8-TCDF	2.450	298.648	X 0.1	2.99e+01
1,2,3,7,8-PeCDF	8.047	117.401	X 0.05	5.87e+00
2,3,4,7,8-PeCDF	7.647	57.175	X 0.5	2.86e+01
1,2,3,4,7,8-HxCDF	8.026	281.567	X 0.1	2.82e+01
1,2,3,6,7,8-HxCDF	6.626	157.518	X 0.1	1.58e+01
1,2,3,7,8,9-HxCDF	9.529	45.354	X 0.1	4.54e+00
2,3,4,6,7,8-HxCDF	7.950	50.697	X 0.1	5.07e+00
1,2,3,4,6,7,8-HpCDF	0.935	669.842	X 0.01	6.70e+00
1,2,3,4,7,8,9-HpCDF	1.352	269.014	X 0.01	2.69e+00
OCDF	0.135	1674.507	X 0.0001	1.67e-01
Total:				1.51e+02

(1) World Health Organization (WHO) adopted TEF's, taken from: Van der Berg, et al: Toxic Equivalency Factor (TEFs) for PCBs, PCCDD, PCDFs for Humans and Wildlife (Environ Health Perspect. 106:775-792 (1988)).

(2) This is a high resolution GC/MS screening method for PCDDs/PCDFs.

SCF3w

Form 3

PCDD/PCDF TOXICITY EQUIVALENCE SUMMARY
Use for Sample and Blank Results

CLIENT ID.

SA3-0.5D

Lab Name: Columbia Analytical Services Episode No.:

Lab Code: CAS Method: Screen(2) Lab Sample ID: E0600825-003

Client Name: ENSR Sample Wt/Vol: 10.421 g or mL: g

Matrix (Aqueous/Solid/Leachate): solid Initial Calibration Date: 10/23/06

Sample Receipt Date: 11/14/06 Instrument ID: AutoSpec-Ultima

Ext. Date: 11/16/06 GC Column ID: db5

Ext.Vol(ul):20.0 Inj.Vol(ul):1.0 Sample Data Filename: U17919#1

Analysis Date: 21-NOV-06 Time: 21:57:18 Blank Data Filename: U17915#1

Dilution Factor: 1 Cal. Ver. Data Filename: U17914#1

Concentration Units (pg/L or ng/Kg dry weight): ng/Kg % Moisture: 8.60

	DETECTION LIMITS	CONCENTRATION	TEF(1)	TEF-ADJUSTED CONCENTRATION
2,3,7,8-TCDD	0.039	8.466	X 1.0	8.47e+00
1,2,3,7,8-PeCDD	0.113	13.508	X 1.0	1.35e+01
1,2,3,4,7,8-HxCDD	0.182	8.512	X 0.1	8.51e-01
1,2,3,6,7,8-HxCDD	0.144	17.014	X 0.1	1.70e+00
1,2,3,7,8,9-HxCDD	0.158	19.467	X 0.1	1.95e+00
1,2,3,4,6,7,8-HpCDD	0.196	71.721	X 0.01	7.17e-01
OCDD	0.244	90.351	X 0.0001	9.04e-03
2,3,7,8-TCDF	2.342	320.832	X 0.1	3.21e+01
1,2,3,7,8-PeCDF	11.168	143.365	X 0.05	7.17e+00
2,3,4,7,8-PeCDF	10.612	65.924	X 0.5	3.30e+01
1,2,3,4,7,8-HxCDF	8.902	356.494	X 0.1	3.56e+01
1,2,3,6,7,8-HxCDF	7.350	196.405	X 0.1	1.96e+01
1,2,3,7,8,9-HxCDF	10.569	27.487	X 0.1	2.75e+00
2,3,4,6,7,8-HxCDF	8.818	60.179	X 0.1	6.02e+00
1,2,3,4,6,7,8-HpCDF	1.503	849.298	X 0.01	8.49e+00
1,2,3,4,7,8,9-HpCDF	2.174	344.266	X 0.01	3.44e+00
OCDF	0.100	2372.145	X 0.0001	2.37e-01

Total: 1.76e+02

(1) World Health Organization (WHO) adopted TEF's, taken from: Van der Berg, et al: Toxic Equivalency Factor (TEFs) for PCBs, PCCDD, PCDFs for Humans and Wildlife (Environ Health Perspect. 106:775-792 (1988)).

(2) This is a high resolution GC/MS screening method for PCDDs/PCDFs.

SCF3w

Form 3

PCDD/PCDF TOXICITY EQUIVALENCE SUMMARY
Use for Sample and Blank Results

CLIENT ID.

EB111306

Lab Name: Columbia Analytical Services Episode No.:

Lab Code: CAS Method: Screen(2) Lab Sample ID: E0600825-004

Client Name: ENSR Sample Wt/Vol: 1080 g or mL: mL

Matrix (Aqueous/Solid/Leachate): aqueous Initial Calibration Date: 11/04/04

Sample Receipt Date: 11/14/06 Instrument ID: AutoSpec-Ultima

Ext. Date: 11/15/06 GC Column ID: DB-5

Ext.Vol(ul):20.0 Inj.Vol(ul):1.0 Sample Data Filename: U27372#1

Analysis Date: 17-NOV-06 Time: 23:12:07 Blank Data Filename: U27368#1

Dilution Factor: 1 Cal. Ver. Data Filename: U27366#1

Concentration Units (pg/L or ng/Kg dry weight): pg/L % Moisture:

	DETECTION LIMITS	CONCENTRATION	TEF(1)	TEF-ADJUSTED CONCENTRATION
2,3,7,8-TCDD	0.439	*	X 1.0	*
1,2,3,7,8-PeCDD	0.452	*	X 1.0	*
1,2,3,4,7,8-HxCDD	0.620	*	X 0.1	*
1,2,3,6,7,8-HxCDD	0.551	*	X 0.1	*
1,2,3,7,8,9-HxCDD	0.595	*	X 0.1	*
1,2,3,4,6,7,8-HpCDD	0.737	4.455	X 0.01	4.45e-02
OCDD	1.498	16.425	X 0.0001	1.64e-03
2,3,7,8-TCDF	0.486	9.877	X 0.1	9.88e-01
1,2,3,7,8-PeCDF	0.683	6.630	X 0.05	3.32e-01
2,3,4,7,8-PeCDF	0.677	3.260	X 0.5	1.63e+00
1,2,3,4,7,8-HxCDF	0.644	14.908	X 0.1	1.49e+00
1,2,3,6,7,8-HxCDF	0.636	8.927	X 0.1	8.93e-01
1,2,3,7,8,9-HxCDF	0.843	0.951	X 0.1	9.51e-02
2,3,4,6,7,8-HxCDF	0.678	4.388	X 0.1	4.39e-01
1,2,3,4,6,7,8-HpCDF	0.506	35.004	X 0.01	3.50e-01
1,2,3,4,7,8,9-HpCDF	0.697	13.484	X 0.01	1.35e-01
OCDF	1.698	112.384	X 0.0001	1.12e-02

Total: 6.41e+00

(1) World Health Organization (WHO) adopted TEF's, taken from: Van der Berg, et al: Toxic Equivalency Factor (TEFs) for PCBs, PCCDD, PCDFs for Humans and Wildlife (Environ Health Perspect. 106:775-792 (1988)).

(2) This is a high resolution GC/MS screening method for PCDDs/PCDFs.

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