

AMBIENT GROUP

Dioxins/Furans, HRGC/HRMS (8290)

Client Sample ID: 211909-03D

Lot-Sample #...: G2D190191 - 003
 Date Sampled...: 04/18/02
 Prep Date...: 04/19/02
 Prep Batch #...: 2109509

Work Order #...: EX6VE1AA
 Date Received...: 04/19/02
 Analysis Date...: 04/24/02
 Dilution Factor: 1

Matrix...: SOLID
 Instrument: 5D5
 Units...: pg/g
 % Moisture:

PARAMETER	RESULT	DETECTION LIMIT	TEF FACTOR	TEQ CONCENTRATION
2,3,7,8-TCDD	570		1.000	570.000000
1,2,3,7,8-PeCDD	1700		0.500	850.000000
1,2,3,4,7,8-HxCDD	1500		0.100	150.000000
1,2,3,6,7,8-HxCDD	2900		0.100	290.000000
1,2,3,7,8,9-HxCDD	2700		0.100	270.000000
1,2,3,4,6,7,8-HpCDD	19000		0.010	190.000000
OCDD	46000		0.001	46.000000
2,3,7,8-TCDF	3100	CON	0.100	310.000000
1,2,3,7,8-PeCDF	4300		0.050	220.000000
2,3,4,7,8-PeCDF	6500		0.500	3,200.000000
1,2,3,4,7,8-HxCDF	6200		0.100	620.000000
1,2,3,6,7,8-HxCDF	6500		0.100	650.000000
2,3,4,6,7,8-HxCDF	7000		0.100	700.000000
1,2,3,7,8,9-HxCDF	500		0.100	50.000000
1,2,3,4,6,7,8-HpCDF	35000		0.010	350.000000
1,2,3,4,7,8,9-HpCDF	4100		0.010	41.000000
OCDF	25000		0.001	25.000000
Total TEQ Concentration				8,532.000000

INTERNAL STANDARDS	PERCENT RECOVERY	RECOVERY LIMITS
13C-2,3,7,8-TCDD	65	40 - 135
13C-1,2,3,7,8-PeCDD	58	40 - 135
13C-1,2,3,6,7,8-HxCDD	55	40 - 135
13C-1,2,3,4,6,7,8-HpCDD	73	40 - 135
13C-OCDD	92	40 - 135
13C-2,3,7,8-TCDF	80	40 - 135
13C-1,2,3,7,8-PeCDF	69	40 - 135
13C-1,2,3,4,7,8-HxCDF	65	40 - 135
13C-1,2,3,4,6,7,8-HpCDF	77	40 - 135

Notes:

TEF values are cited in U.S. Environmental Protection Agency, (1989) Interim procedures for estimating risks associated with exposures to mixtures of chlorinated dibenzo-p-dioxins and -dibenzofurans (CDDs and CDFs) and 1989 update. U.S. Environmental Protection Agency, Risk Assessment forum, Washington, DC; EPA/625/3-89/016.

CON

Confirmation analysis.

Std_Stnd_TEQ.RPT Rev. 0

11/10/2001

CITY_21MC100_002778484

AMBIENT GROUP
Dioxins/Furans, HRGC/HRMS (8290)
Client Sample ID: 211909-05D

Lot-Sample #...: G2D190191 - 005
 Date Sampled...: 04/18/02
 Prep Date...: 04/19/02
 Prep Batch #...: 2109509

Work Order #...: EX6VG1AA
 Date Received...: 04/19/02
 Analysis Date...: 04/24/02
 Dilution Factor: 1

Matrix...: SOLID
 Instrument: SD5
 Units...: pg/g
 % Moisture:

PARAMETER	RESULT	DETECTION LIMIT	TEF FACTOR	TEQ CONCENTRATION
2,3,7,8-TCDD	390		1.000	390.000000
1,2,3,7,8-PeCDD	1200		0.500	600.000000
1,2,3,4,7,8-HxCDD	1200		0.100	120.000000
1,2,3,6,7,8-HxCDD	2400		0.100	240.000000
1,2,3,7,8,9-HxCDD	1800		0.100	180.000000
1,2,3,4,6,7,8-HpCDD	14000		0.010	140.000000
OCDD	27000		0.001	27.000000
2,3,7,8-TCDF	2500	CON	0.100	250.000000
1,2,3,7,8-PeCDF	3500		0.050	180.000000
2,3,4,7,8-PeCDF	5500		0.500	2,800.000000
1,2,3,4,7,8-HxCDF	6000		0.100	600.000000
1,2,3,6,7,8-HxCDF	5400		0.100	540.000000
2,3,4,6,7,8-HxCDF	5800		0.100	580.000000
1,2,3,7,8,9-HxCDF	440		0.100	44.000000
1,2,3,4,6,7,8-HpCDF	26000		0.010	260.000000
1,2,3,4,7,8,9-HpCDF	3000		0.010	30.000000
OCDF	23000		0.001	23.000000
Total TEQ Concentration				7,004.000000

INTERNAL STANDARDS	PERCENT RECOVERY	RECOVERY LIMITS
13C-2,3,7,8-TCDD	62	40 - 135
13C-1,2,3,7,8-PeCDD	61	40 - 135
13C-1,2,3,6,7,8-HxCDD	57	40 - 135
13C-1,2,3,4,6,7,8-HpCDD	76	40 - 135
13C-OCDD	97	40 - 135
13C-2,3,7,8-TCDF	66	40 - 135
13C-1,2,3,7,8-PeCDF	71	40 - 135
13C-1,2,3,4,7,8-HxCDF	70	40 - 135
13C-1,2,3,4,6,7,8-HpCDF	98	40 - 135

Notes:

TEF values are cited in U.S. Environmental Protection Agency, (1989) Interim procedures for estimating risks associated with exposures to mixtures of chlorinated dibenzo-p-dioxins and -dibenzofurans (CDDs and CDFs) and 1989 update. U.S. Environmental Protection Agency, Risk Assessment forum, Washington, DC; EPA/625/J-89/016.

CON Confirmation analysis.

AMBIENT GROUP
Dioxins/Furans, HRGC/HRMS (8290)

Client Sample ID: 211909-10D

Lot-Sample #...: G2D190191 - 010
 Date Sampled...: 04/18/02
 Prep Date...: 04/19/02
 Prep Batch #...: 2109509

Work Order #...: EX6VM1AA
 Date Received...: 04/19/02
 Analysis Date...: 04/24/02
 Dilution Factor: 1

Matrix...: SOLID
 Instrument: SD5
 Units...: pg/g
 % Moisture:

PARAMETER	RESULT	DETECTION LIMIT	TEF FACTOR	TEQ CONCENTRATION
2,3,7,8-TCDD	840		1.000	840.000000
1,2,3,7,8-PeCDD	2200		0.500	1,100.000000
1,2,3,4,7,8-HxCDD	2000		0.100	200.000000
1,2,3,6,7,8-HxCDD	4200		0.100	420.000000
1,2,3,7,8,9-HxCDD	2600		0.100	260.000000
1,2,3,4,6,7,8-HpCDD	30000		0.010	300.000000
OCDD	72000		0.001	72.000000
2,3,7,8-TCDF	4600	CON	0.100	460.000000
1,2,3,7,8-PeCDF	5300		0.050	260.000000
2,3,4,7,8-PeCDF	6400		0.500	3,200.000000
1,2,3,4,7,8-HxCDF	13000		0.100	1,300.000000
1,2,3,6,7,8-HxCDF	8200		0.100	820.000000
2,3,4,6,7,8-HxCDF	10000		0.100	1,000.000000
1,2,3,7,8,9-HxCDF	510		0.100	51.000000
1,2,3,4,6,7,8-HpCDF	55000		0.010	550.000000
1,2,3,4,7,8,9-HpCDF	5200		0.010	52.000000
OCDF	45000		0.001	45.000000
Total TEQ Concentration				10,930.000000

INTERNAL STANDARDS	PERCENT RECOVERY	RECOVERY LIMITS
13C-2,3,7,8-TCDD	54	40 - 135
13C-1,2,3,7,8-PeCDD	53	40 - 135
13C-1,2,3,6,7,8-HxCDD	58	40 - 135
13C-1,2,3,4,6,7,8-HpCDD	60	40 - 135
13C-OCDD	61	40 - 135
13C-2,3,7,8-TCDF	42	40 - 135
13C-1,2,3,7,8-PeCDF	54	40 - 135
13C-1,2,3,4,7,8-HxCDF	48	40 - 135
13C-1,2,3,4,6,7,8-HpCDF	58	40 - 135

Notes:

TEF values are cited in U.S. Environmental Protection Agency, (1989) Interim procedures for estimating risks associated with exposures to mixtures of chlorinated dibenzo-p-dioxins and -dibenzofurans (CDDs and CDFs) and 1989 update. U.S. Environmental Protection Agency, Risk Assessment forum, Washington, DC; EPA/625/3-89/016.

CON Confirmation analysis.

Sec_Std_TEQ.RPT Rev.0

11/10/2001

CITY_21MC100_002778486

AMBIENT GROUP

Dioxins/Furans, HRGC/HRMS (8290)

Client Sample ID: 211909-11D

Lot-Sample #...: G2D190191 - 011
 Date Sampled...: 04/18/02
 Prep Date.....: 04/19/02
 Prep Batch #...: 2109509

Work Order #...: EX6VN1AA
 Date Received...: 04/19/02
 Analysis Date...: 04/24/02
 Dilution Factor: 1

Matrix....: SOLID
 Instrument: SDS
 Units.....: pg/g
 % Moisture:

PARAMETER	RESULT	DETECTION LIMIT	TEF FACTOR	TEQ CONCENTRATION
2,3,7,8-TCDD	530		1.000	530.000000
1,2,3,7,8-PeCDD	1500		0.500	750.000000
1,2,3,4,7,8-HxCDD	1100		0.100	110.000000
1,2,3,6,7,8-HxCDD	2600		0.100	260.000000
1,2,3,7,8,9-HxCDD	1800		0.100	180.000000
1,2,3,4,6,7,8-HpCDD	18000		0.010	180.000000
OCDD	56000	E	0.001	56.000000
2,3,7,8-TCDF	3700	CON	0.100	370.000000
1,2,3,7,8-PeCDF	4000		0.050	200.000000
2,3,4,7,8-PeCDF	6100		0.500	3,000.000000
1,2,3,4,7,8-HxCDF	6900		0.100	690.000000
1,2,3,6,7,8-HxCDF	5400		0.100	540.000000
2,3,4,6,7,8-HxCDF	5900		0.100	590.000000
1,2,3,7,8,9-HxCDF	430		0.100	43.000000
1,2,3,4,6,7,8-HpCDF	32000	E	0.010	320.000000
1,2,3,4,7,8,9-HpCDF	4000		0.010	40.000000
OCDF	26000		0.001	26.000000
Total TEQ Concentration				7,885.000000

INTERNAL STANDARDS	PERCENT RECOVERY	RECOVERY LIMITS
13C-2,3,7,8-TCDD	68	40 - 135
13C-1,2,3,7,8-PeCDD	68	40 - 135
13C-1,2,3,6,7,8-HxCDD	59	40 - 135
13C-1,2,3,4,6,7,8-HpCDD	62	40 - 135
13C-OCDD	65	40 - 135
13C-2,3,7,8-TCDF	59	40 - 135
13C-1,2,3,7,8-PeCDF	68	40 - 135
13C-1,2,3,4,7,8-HxCDF	58	40 - 135
13C-1,2,3,4,6,7,8-HpCDF	60	40 - 135

Notes:

TEF values are cited in U.S. Environmental Protection Agency, (1989) Interim procedures for estimating risks associated with exposures to mixtures of chlorinated dibenzo-p-dioxins and -dibenzofurans (CDDs and CDFs) and 1989 update. U.S. Environmental Protection Agency, Risk Assessment forum, Washington, DC, EPA/625/3-89/016.

CON Confirmation analysis.

E Estimated result. Result concentration exceeds the calibration range.

AMBIENT GROUP
Dioxins/Furans, HRGC/HRMS (8290)

Client Sample ID: 211909-12D

Lot-Sample #...: G2D190191 - 012
 Date Sampled...: 04/18/02
 Prep Date.....: 04/19/02
 Prep Batch #...: 2109509

Work Order #...: EX6VP1AA
 Date Received...: 04/19/02
 Analysis Date...: 04/24/02
 Dilution Factor: 1

Matrix....: SOLID
 Instrument: SD5
 Units.....: pg/g
 % Moisture:

PARAMETER	RESULT	DETECTION LIMIT	TEF FACTOR	TEQ CONCENTRATION
2,3,7,8-TCDD	1100		1.000	1,100.000000
1,2,3,7,8-PeCDD	4000		0.500	2,000.000000
1,2,3,4,7,8-HxCDD	3100		0.100	310.000000
1,2,3,6,7,8-HxCDD	5000		0.100	500.000000
1,2,3,7,8,9-HxCDD	4800		0.100	480.000000
1,2,3,4,6,7,8-HpCDD	27000		0.010	270.000000
OCDD	52000		0.001	52.000000
2,3,7,8-TCDF	5600	CON	0.100	560.000000
1,2,3,7,8-PeCDF	6900		0.050	340.000000
2,3,4,7,8-PeCDF	8900		0.500	4,400.000000
1,2,3,4,7,8-HxCDF	11000		0.100	1,100.000000
1,2,3,6,7,8-HxCDF	9600		0.100	960.000000
2,3,4,6,7,8-HxCDF	8800		0.100	880.000000
1,2,3,7,8,9-HxCDF	840		0.100	84.000000
1,2,3,4,6,7,8-HpCDF	38000		0.010	380.000000
1,2,3,4,7,8,9-HpCDF	4400		0.010	44.000000
OCDF	20000		0.001	20.000000
Total TEQ Concentration				13,480.000000

INTERNAL STANDARDS	PERCENT RECOVERY	RECOVERY LIMITS
13C-2,3,7,8-TCDD	57	40 - 135
13C-1,2,3,7,8-PeCDD	55	40 - 135
13C-1,2,3,6,7,8-HxCDD	50	40 - 135
13C-1,2,3,4,6,7,8-HpCDD	63	40 - 135
13C-OCDD	69	40 - 135
13C-2,3,7,8-TCDF	43	40 - 135
13C-1,2,3,7,8-PeCDF	61	40 - 135
13C-1,2,3,4,7,8-HxCDF	52	40 - 135
13C-1,2,3,4,6,7,8-HpCDF	63	40 - 135

Notes:

TEF values are cited in U.S. Environmental Protection Agency, (1989) Internal procedure for estimating risks associated with exposures to mixtures of chlorinated dibenzo-p-dioxins and dibenzofurans (CDDs and CDFs) and 1989 update. U.S. Environmental Protection Agency, Risk Assessment forum, Washington, DC; EPA/625/3-89/016.

CON Confirmation analysis.

Sac_Std_TEQ.RPT Rev. 0

11/10/2001

CITY_21MC100_002778488